

Pima Environmental Services, LLC 1601 N. Turner Ste 500 Hobbs, NM 88240 575-964-7740

November 24, 2021

NMOCD District 2 811 S. First Street Artesia, NM 88210

Bureau of Land Management 620 East Green Street Carlsbad, NM 88220

Re: Site Assessment, Remediation, and Closure Report

Forty Niner Ridge Unit SWD #6

API No. 30-015-33637

GPS: Latitude 32.285913649 Longitude -103.86693

UL "O", Sec. 22, T23S, R30E

Eddy County, NM

NMOCD Ref. No. NAPP2114763615

Pima Environmental Services, LLC (Pima) has been contracted by Strata Production Company (Strata) to perform a spill assessment and submit this closure report for a produced water release that occurred at the Forty Niner Ridge Unit SWD #6 (FNRU). The initial C-141 was submitted on June 1st, 2021 (Appendix C). This incident was assigned Incident ID NAPP2114763615, by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The FNRU is located approximately thirteen (13) miles east of Loving, NM. This spill site is in Unit O, Section 22, Township 23S, Range 30E, Latitude 32.285913649, Longitude -103.86693, Eddy County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation — Eolian and piedmont deposits (Holocene to middle Pleistocene). Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits. The soil in this area is made up of Cacique loamy sand, 0 to 3 percent slopes, eroded according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well drained. There is a medium potential for karst geology to be present around the FNRU (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 105 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 226 feet BGS. The closest waterway is a Salt Playa located approximately 4.54 miles to the northwest of this location. See Appendix A for referenced water surveys.

	Table 1 NMAC and Closure Criteria 19.15.29								
Depth to Groundwater	Constituent & Limits								
(Appendix A)	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene				
<50'	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg				
51-100′	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg				
>100′	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg				

Reference Figure 2 for a Topographic map.

Release Information

<u>NAPP2114763615</u>: This release was identified by the NMOCD via site visit and Google satellite imagery on 5-27-21. Strata was not aware of any release at their facility that would have resulted in such a stain. A road was built that runs through this facility that is open to other producers in the area. It has been determined that there was an illegal dumping that had occurred on this pad without Strata's knowledge.

Site Assessment and Soil Sampling Results

On July 6th, 2021, Pima Environmental mobilized personnel to the site to assess the area. We sampled the affected area on the pad. Laboratory results of this sampling event can be found in the following data table.

7-6-21 Soil Sample Results

			Table 1 Clos							
-	-	STRATA	PRODUCTIO	ON COMPA	ANY - FRN	U 6 SWD				
7/6/20	21	NM Approved Laboratory Results								
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg		
S-1	0-6"	ND	ND	ND	ND	ND	0	320		
S-2	0-6"	ND	ND	ND	ND	ND	0	230		
S-3	0-6"	ND	ND	ND	ND	ND	0	100		
S-4	0-6"	ND	ND	ND	ND	ND	0	220		
C.F.	0-6"	ND	ND	ND	ND	ND	0	9200		
S-5	1'	ND	ND	ND	ND	ND	0	5000		
0.0	0-6"	ND	ND	ND	ND	ND	0	13000		
S-6	1'	ND	ND	ND	ND	ND	0	890		
C 7	0-6"	ND	ND	ND	ND	ND	0	12000		
S-7	1'	ND	ND	ND	ND	ND	0	450		
C 0	0-6"	ND	ND	ND	ND	ND	0	15000		
S-8	1'	ND	ND	ND	ND	ND	0	2500		
S-9	0-6"	ND	ND	ND	ND	ND	0	930		
C 10	0-6"	ND	ND	ND	ND	ND	0	2800		
S-10	1'	ND	ND	ND	ND	ND	0	2700		
C 11	0-6"	ND	ND	ND	ND	ND	0	9900		
S-11	1'	ND	ND	ND	ND	ND	0	4800		
S-12	0-6"	ND	ND	ND	ND	ND	0	2400		
BG-1	0-6"	ND	ND	ND	ND	ND	0	ND		
BG-2	0-6"	ND	ND	ND	ND	ND	0	ND		
BG-3	0-6"	ND	ND	ND	ND	ND	0	ND		

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Remediation Activities

On October 28th, 2021, Atkins Engineering was contracted to drill a borehole to verify the absence of groundwater in this area. The borehole was drilled to a depth of 101' BGS and was left open for over 72 hours. After verification that groundwater was never present, the borehole was plugged per NMAC 19.27.4. This information was logged and registered with the New Mexico Office of the State Engineer. A map of the monitoring well location can be found in figure 5. The borehole logs can be found in Appendix A.

Closure Request

After careful review, Pima requests that this incident, NAPP2114763615, be closed. All samples showed to be under closure criteria per Table 1 of 19.15.29 NMAC. Strata has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Tom Bynum at 575-964-7740 or tom@pimaoil.com.

Respectfully,

Tom Bynum

Tom Bynum Environmental Project Manager Pima Environmental Services, LLC

Attachments

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Site Map
- 5- Monitoring Well Map

Appendices:

Appendix A – Referenced Water Surveys

Appendix B - Soil Survey and Geological Data

Appendix C - C-141 Form

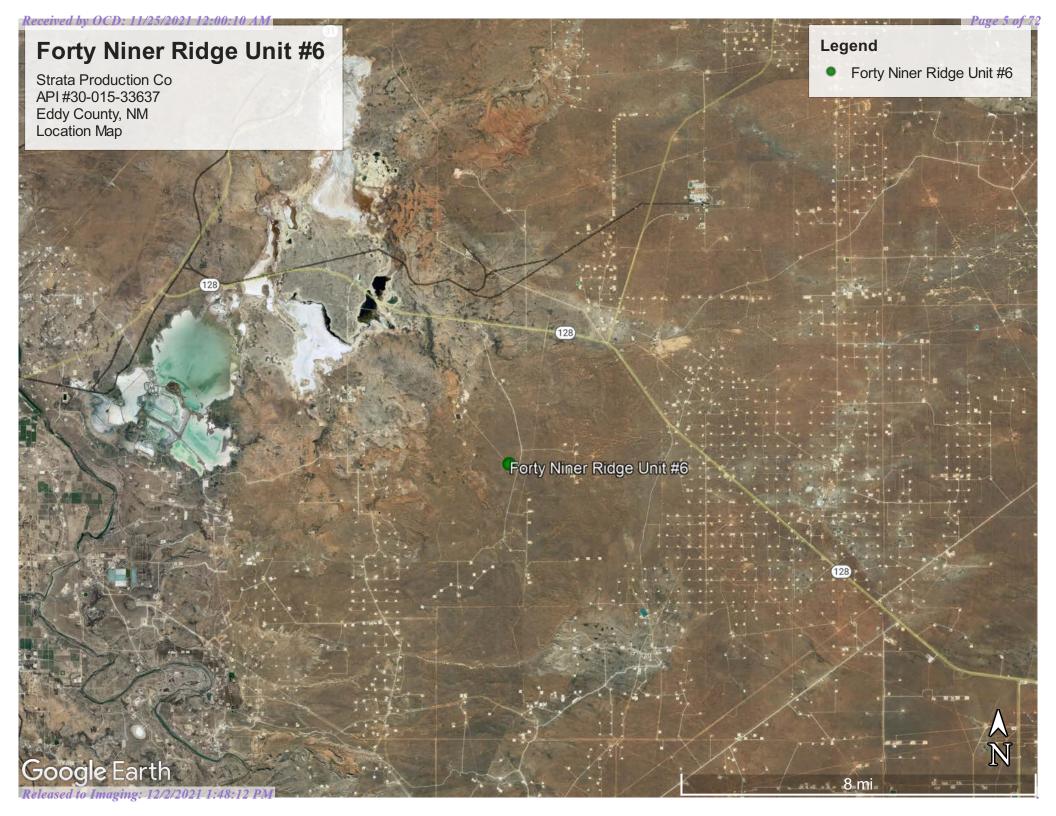
Appendix D - Photographic Documentation

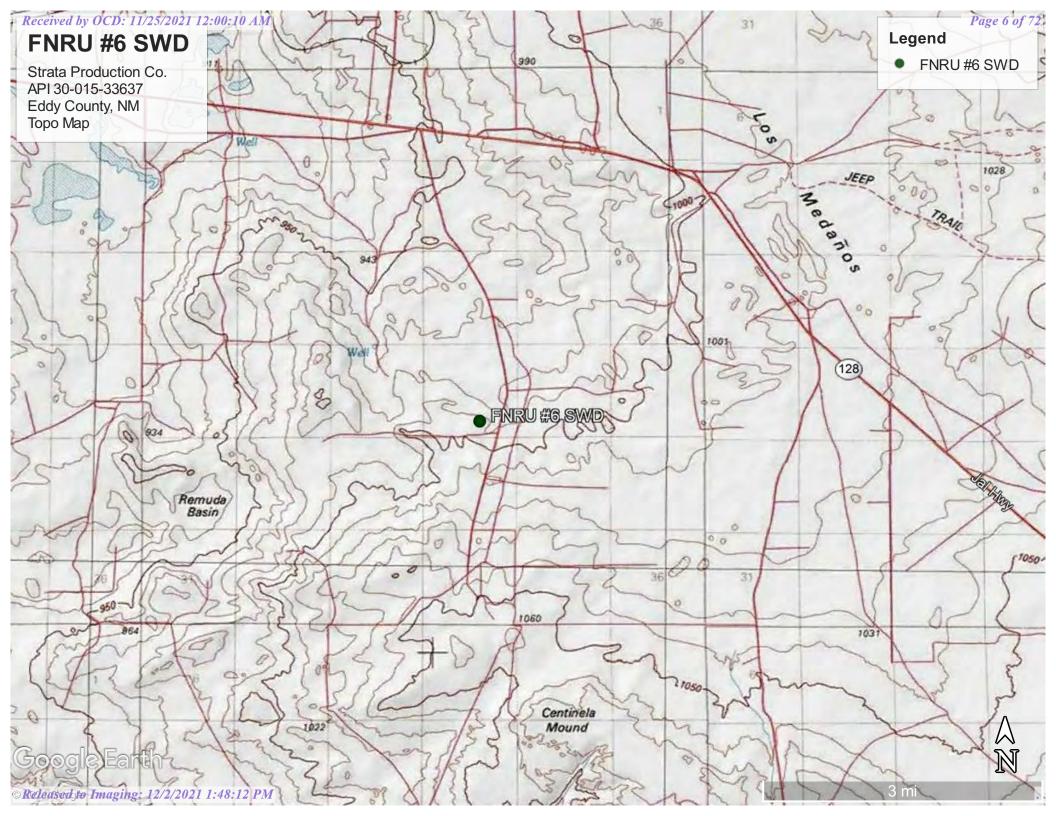
Appendix E - Laboratory Reports

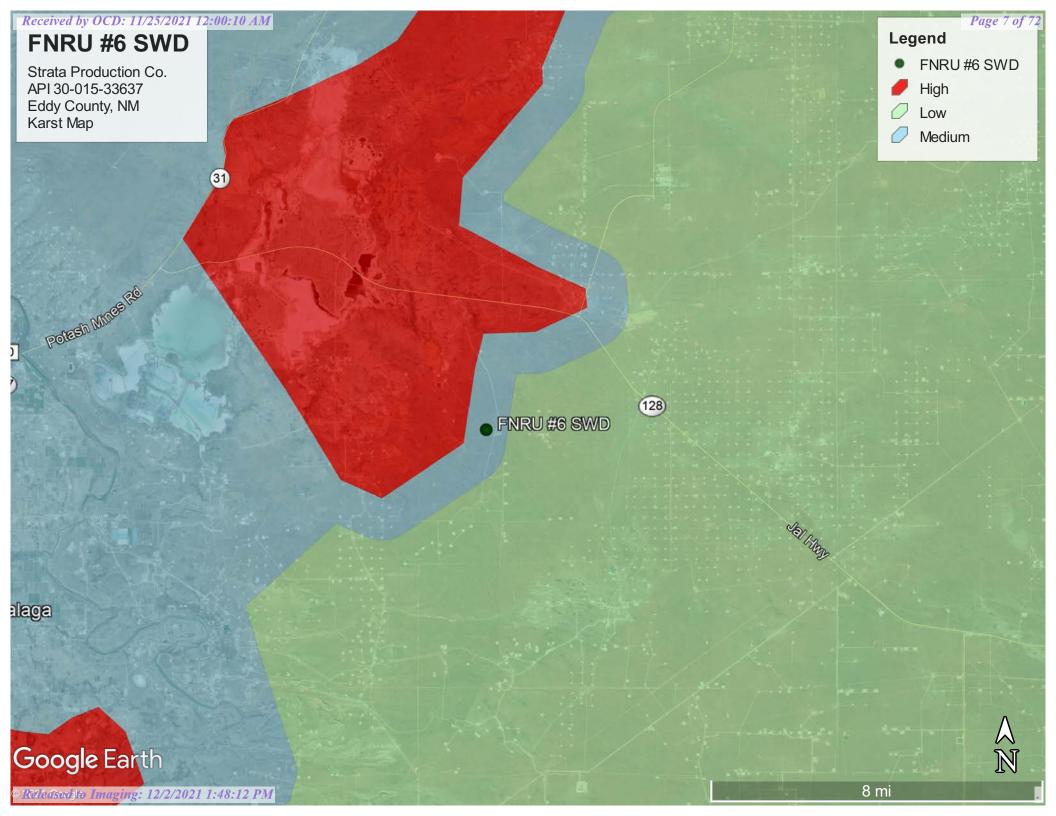


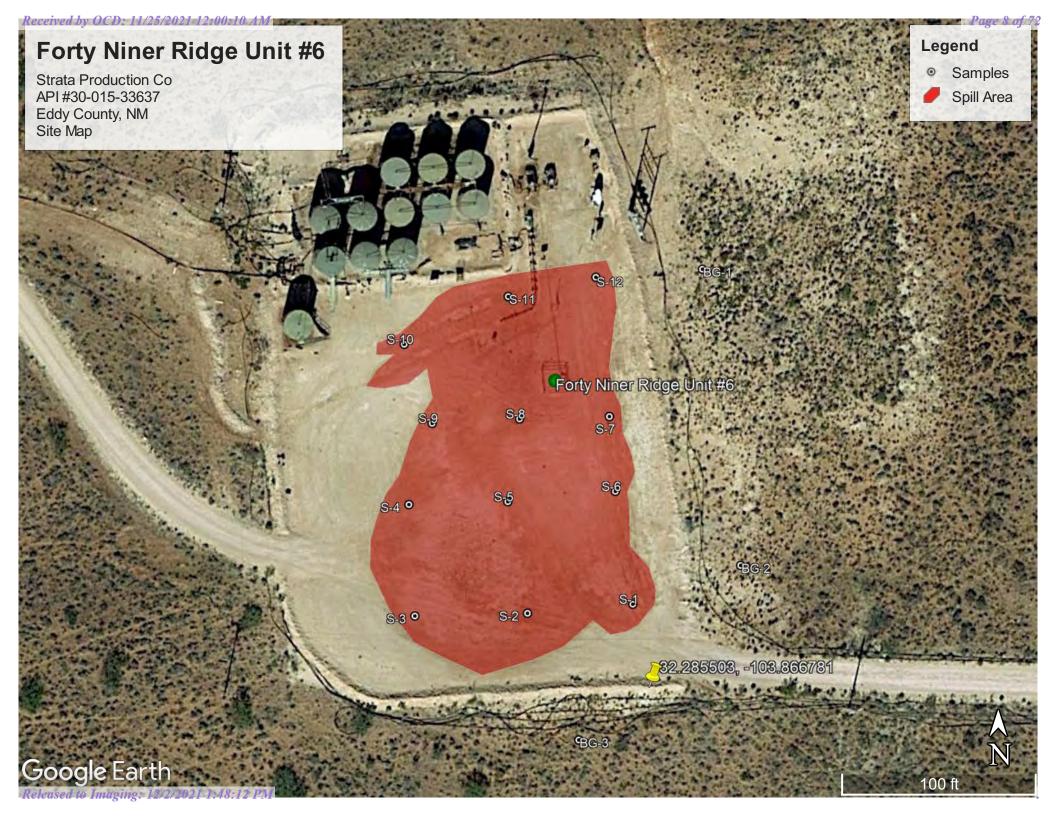
Figures:

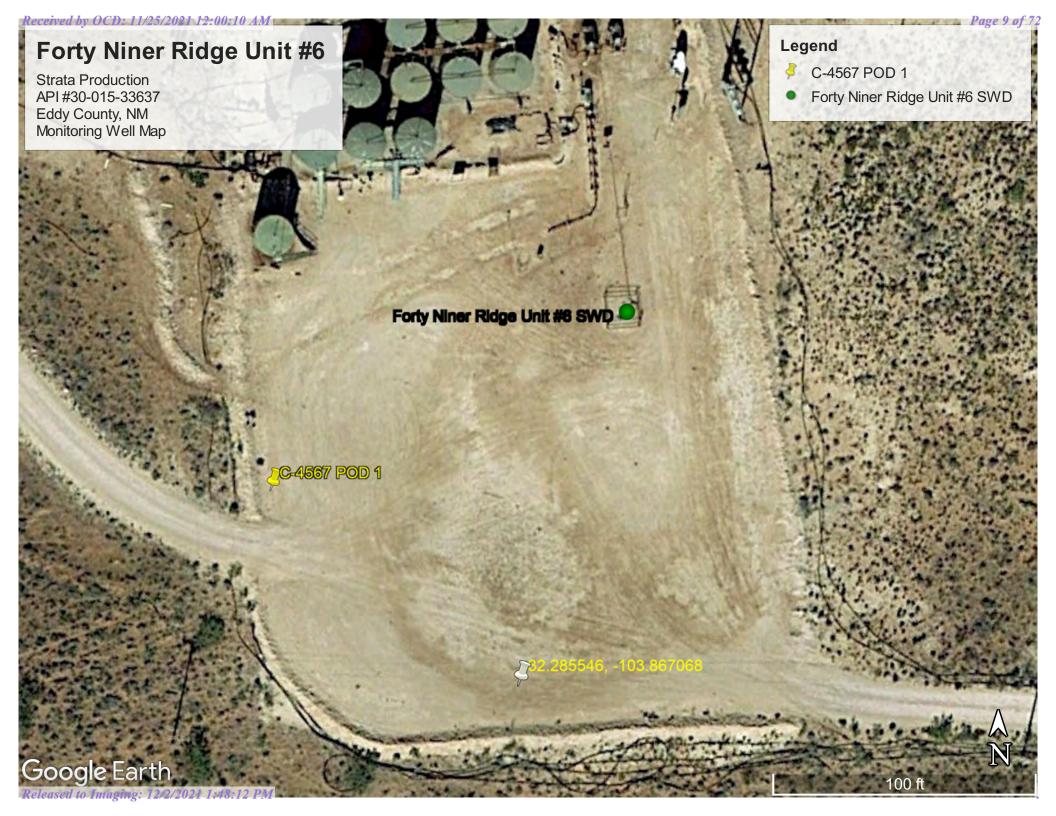
- 1 Location Map
 - 2 Topo Map
 - 3 Karst Map
 - 4 Site Map
- 5 Monitoring Well Map













Appendix A

Water Surveys:

OSE

USGS

Atkins Monitoring Well

Surface Water Map



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.) (R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

	POD Sub-		Q	Q (2						Depth	Depth	Water
POD Number	Code basin	County	64	16 4	4 Se	c Tws	Rng	X	Y	Distance	Well	Water	Column
C 03478 POD1	С	ED	3	2	1 2	1 23S	30E	604638	3573670 🌑	2278	230	105	125
C 02771	CUB	ED	1	2	3 1	4 23S	30E	607807	3574718* 🌕	2312	295		
C 04018 POD1	CUB	ED	2	2	1 2	1 23S	30E	604664	3573868 🌑	2348	380	179	201
C 02772 POD1	С	ED	4	4	1 1	4 23S	30E	608043	3574840 🌑	2537	300		
C 02770	CUB	ED	4	4	1 1	4 23S	30E	608004	3574921* 🌍	2586	286		
C 02095	CUB	ED		2	3 3	4 23S	30E	606337	3569759* 🌍	2953	554	440	114

Average Depth to Water: 241 feet

Minimum Depth: 105 feet

Maximum Depth: 440 feet

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 606695.13 Northing (Y): 3572690.52 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.



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:		Geographic Area:		
Groundwater	\	United States	~	GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

* IMPORTANT: <u>Next Generation Station Page</u>

Search Results -- 1 sites found

site_no list =

• 321726103513701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 321726103513701 23S.30E.22.24413

Available data for this site Groundwater: Field measurements V GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°17'26", Longitude 103°51'37" NAD27

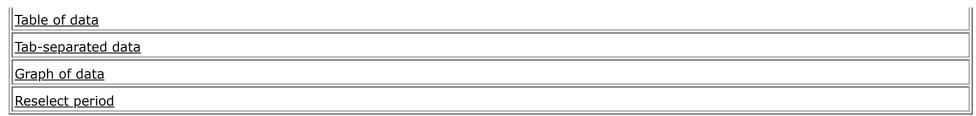
Land-surface elevation 3,231 feet above NAVD88

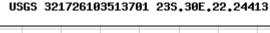
The depth of the well is 244 feet below land surface.

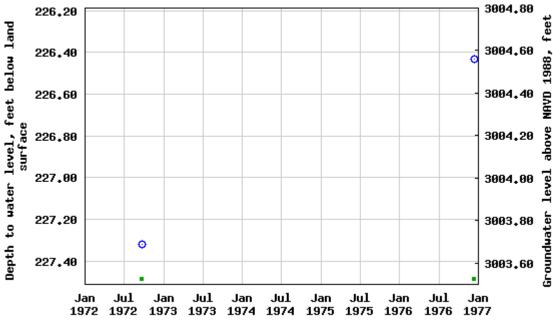
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats







- Period of approved data

Breaks in the plot represent a gap of at least one year between field measurements. <u>Download a presentation-quality graph</u>

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:		Geographic Area:		
Groundwater	~	United States	~	GC

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

site_no list =

• 321750103531101

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 321750103531101 23S.30E.21.12222

Available data for this site Groundwater: Field measurements V GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°17'50", Longitude 103°53'11" NAD27

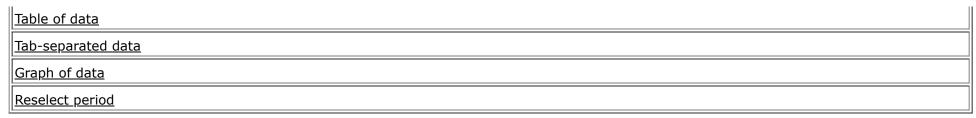
Land-surface elevation 3,169 feet above NAVD88

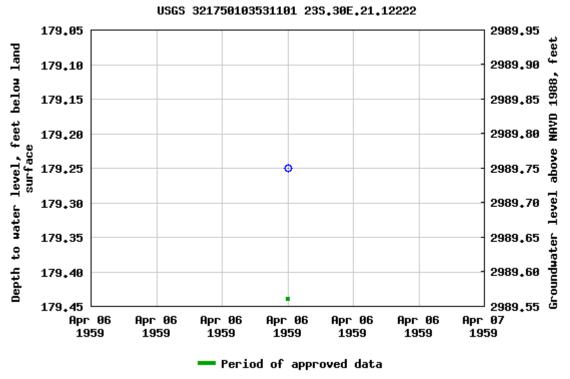
The depth of the well is 203 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats





Breaks in the plot represent a gap of at least one year between field measurements. <u>Download a presentation-quality graph</u>

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News



2904 W 2nd St. Roswell, NM 88201 voice: 575.624.2420 tax: 575.624.2421 www.atkinseng.com

11/15/2021

DII-NMOSE 1900 W 2nd Street Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4567 Pod1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, C-4567 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

Lucas Middleton

Enclosures: as noted above

Grown Whole

THE NEED A 24921 PM LOS



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

Z	OSE POD NO. POD1 (BI		.)	we n/a	LL TAG ID NO.			ose file no C-4567	(S).			
CATIO	WELL OWNE							PHONE (OPT 575-622-11				
GENERAL AND WELL LOCATION	WELL OWNE]	CITY Roswell		STATE NM	88201	ZIP
AND V	WELL			GREES 1	MINUTES 17	SECONDS 8.70	N	* ACCURAC	Y REQUIRED: ONE TEN	TH OF A SE	COND	
NERAL	(FROM GPS	0	TTUDE NGITUDE	103	52	2.55	W		QUIRED: WGS 84			
1. GE			IG WELL LOCATION TO T23S R30E, NMPN		AND COMMON	LANDMARKS	– PLSS	(SECTION, TO	OWNSHJIP, RANGE) WH	ERE AVAII	ABLE	
	LICENSE NO.		NAME OF LICENSED	DRILLER					NAME OF WELL DR	ILLING CO	MPANY	
	124			Jacki	ie D. Atkins						Associates, I	
	DRILLING STARTED DRILLING ENDED DEPTH OF COMPLETED WELL (FT) BORE 10/26/2021 temporary well material							E DEPTH (FT) 01	DEPTH WATER FIR	ST ENCOUR n/a	NTERED (FT)	
Z.	COMPLETED WELL IS: ARTESIAN ORY HOLE SHALLOW (UNCONFINED) STATIC WATER LEVEL IN COMPLETED WELL (FT) 1/2							LL (FT)				
ATIO	DRILLING FLUID: AIR MUD ADDITIVES – SPECIFY:											
ORM	DRILLING MI	ETHOD:	ROTARY	HAMMER	CABLE T	OOL (7	OTHER	- SPECIFY:	Hollo	w Stem	Auger	
SINE	DEPTH (feet bgl) BORE HOLE FROM TO DIAM		CASING MAT	TERIAL AND RADE			SING	CASING INSIDE DIAM.		G WALL	SLOT	
2. DRILLING & CASING INFORMATION	FROM	10	DIAM (inches)		(include each casing string, and		TY	ECTION PE ng diameter)	(inches)	1	ches)	(inches)
3 & C	0	101	±8.5	Boris	ng- HSA							
TING							_					
DRII												
.4												
	2											
	DEPTH (feet bgl)	BORE HOLE	LIST A	NNULAR SE	EAL MATERI	AL AN	ND	AMOUNT		METHO	D OF
MAI	FROM	то	DIAM. (inches)	GRAVEL	PACK SIZE-	RANGE BY	INTER	RVAL	(cubic feet)		PLACEM	IENT
ATE	-		-							-		
AR M												
NUL												
3. ANNULAR MATERIAL									JEE THER	100 302	11 8 1.0	A.
	OSE INTERI	NAL USE			POD NO			WR-2	NO WELL RECORD	& LOG (V	ersion 06/3	0/17)
_	NO. ATION				POD NO		u	VELL TAG			PAGE	1 OF 2
							V				_	

	DEPTH (f	eet bgl)		COLOR AN	D TYPE OF MATERIAL E	NCOUN	TERED -		WAT	CD.	ESTIMATED
	FROM	то	THICKNESS (feet)	INCLUDE WATE	R-BEARING CAVITIES Of plemental sheets to fully de	R FRAC	TURE ZONES	; В	EARI YES / I	NG?	YIELD FOR WATER- BEARING ZONES (gpm)
	0	19	19	Calic	he, with fine-grained sand, V	White/ Ta	an		Y	√ N	
	19	54	35	Sand, Fin	ne-grained Poorly-graded, R	eddish B	rown		Y	√ N	
	54	90	36	Clay, wit	h sand, fine-grained poorly-	graded,B	rown		Y	√N	
	90	101	11	Caliche, wit	h with sand, fine-grained po	orly-grad	ded, Tan		Y	√N	
								- 1	Y	N	
ų									Y	N	
WEL									Y	N	
OF									Y	N	
DO									Y	N	
CL									Y	N	
Q									Y	N	
EOI									Y	N	
ROG									Y	N	
4. HYDROGEOLOGIC LOG OF WELL									Y	N	
4. F									Y	N	
									Y	N	
									Y	N	
									Y	N	
									Y	N	
									Y	N	
									Y	N	
	METHOD U			OF WATER-BEARING	STRATA: HER – SPECIFY:			TOTAL E			0.00
Z	WELL TEST	TEST	RESULTS - ATT	ACH A COPY OF DAT	A COLLECTED DURING '	WELL T	ESTING, INC	LUDING E R THE TE	DISCH STING	ARGE N	METHOD, D.
ERVISIC	MISCELLAN	IEOUS IN	FORMATION: Te	emporary well materia	ls removed and the soil b	oring ba	ackfilled usin	g drill cut	tings t	from tot surface	al depth to ten
TEST; RIG SUPERVISION							Service of the servic	E OTI N	JU 11	6 2 02:	EPMLTU3
TEST	PRINT NAM	E(S) OF D	RILL RIG SUPER	VISOR(S) THAT PRO	VIDED ONSITE SUPERVI	SION OF	F WELL CONS	TRUCTIO	N OT	HER TH	AN LICENSEE:
v.	Shane Eldrid	ge, Came	eron Pruitt, Came	rlo Trevino							
TURE	CORRECT R	ECORD C	OF THE ABOVE D	ESCRIBED HOLE AN	EST OF HIS OR HER KNO D THAT HE OR SHE WILL PLETION OF WELL DRILL	L FILE 7	GE AND BELI THIS WELL R	EF, THE F ECORD W	OREG	OING I	S A TRUE AND ATE ENGINEER
6. SIGNATURE	Jack A	kins		Jac	kie D. Atkins			1	1/15/	2021	
		SIGNAT	TURE OF DRILLE	R / PRINT SIGNEE	NAME				I	DATE	
FOI	R OSE INTERN	IAL USE					WR-20 WEI	L RECOR	D&L	OG (Ver	rsion 06/30/2017)
	E NO.				POD NO.		TRN NO.				
LO	CATION					WELL	TAG ID NO.				PAGE 2 OF 2

C-4567-OSE_Well Record and Log_-forsign

Final Audit Report

2021-11-15

Created:

2021-11-15

Ву:

Lucas Middleton (lucas@atkinseng.com)

Status:

Signed

Transaction ID:

CBJCHBCAABAAd__cF033AUuQLHfBJ7Fvn99E3sXUtHhq

"C-4567-OSE_Well Record and Log_-forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2021-11-15 6:23:18 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-11-15 6:23:37 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com) 2021-11-15 6:48:01 PM GMT- IP address: 64.90.153.232
- Document e-signed by Jack Atkins (jack@atkinseng.com)

 Signature Date: 2021-11-15 7:35:14 PM GMT Time Source: server- IP address: 64.90.153.232
- Agreement completed. 2021-11-15 - 7:35:14 PM GMT

18SE 047 ABULLA 2021 PM : 613





PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

State	ENERAL / WELL OWNE Engineer Well Number: C-	567-POD1		
Well	owner: Strata Production C	ompany	Phone No.:	575-622-1127
Maili	ing address: 1301 N. Sycam	ore Ave		
City:	Roswell	State:	NM	Zip code: 88201
II. V	VELL PLUGGING INFOR	MATION:		
1)	Name of well drilling co	mpany that plugged well:	tie D. Atkins (Atkins Enginee	ering Associates Inc.)
2)	New Mexico Well Drille	r License No.: 1249	E	xpiration Date: 04/30/23
3)	Well plugging activities Shane Eldridge, Camero		ng well driller(s)/rig supervis	sor(s):
4)	Date well plugging bega	11/1/2021	Date well plugging conclud	ded: 11/1/2021
5)	GPS Well Location:	Latitude: 32 de Longitude: 103 de		.7 sec 55 sec, WGS 84
6)	Depth of well confirmed by the following manner	at initiation of plugging as: weighted tape	101 ft below ground le	vel (bgl),
7)	Static water level measur	ed at initiation of plugging:	n/a ft bgl	
8)	Date well plugging plan	of operations was approved by	the State Engineer: 8/17/2	2021
9)	Were all plugging activit differences between the	ies consistent with an approved approved plugging plan and the	plugging plan? Yes well as it was plugged (atta	If not, please describe ch additional pages as needed):
		-		
				SE ON NOU 18 2021 PALIO 3

Version: September 8, 2009 Page 1 of 2

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging <u>Material Used</u> (include any additives used)	Volume of <u>Material Placed</u> (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
-	0-10' Hydrated Bentonite	Approx. 15.6 gallons	15 gallons	Augers	
-					
_	10'-101' Drill Cuttings	Approx. 136 gallons	136 gallons	Boring	
_					
-					
			3		
-					
·					
-					
_					
		MULTIPLY E cubic feet x 7.4 cubic yards x 201.5	AND OBTAIN 1805 = gallons 17 = gallons	058 017	NOV 16 2021 PM 103

III. SIGNATURE:

I, Jackie D. Atkins , say that I am familiar with the rules o	f the Office of the State
Engineer pertaining to the plugging of wells and that each and all of the statements in this Pluggir are true to the best of my knowledge and belief.	ig Record and attachments
Jack Atkins	11-15-2021

Signature of Well Driller

Date

Version: September 8, 2009 Page 2 of 2

2021-11-1__WD-11 Plugging Record-forsigned

Final Audit Report

2021-11-15

Created:

2021-11-15

By:

Lucas Middleton (lucas@atkinseng.com)

Status:

Signed

Transaction ID:

CBJCHBCAABAAHVdyw1VBH71AX7xes6hC5ElXS0GPHg1v

"2021-11-1__WD-11 Plugging Record-forsigned" History

Document created by Lucas Middleton (lucas@atkinseng.com) 2021-11-15 - 6:23:05 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-11-15 - 6:23:45 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com) 2021-11-15 - 7:35:24 PM GMT- IP address: 64.90.153.232

Document e-signed by Jack Atkins (jack@atkinseng.com)

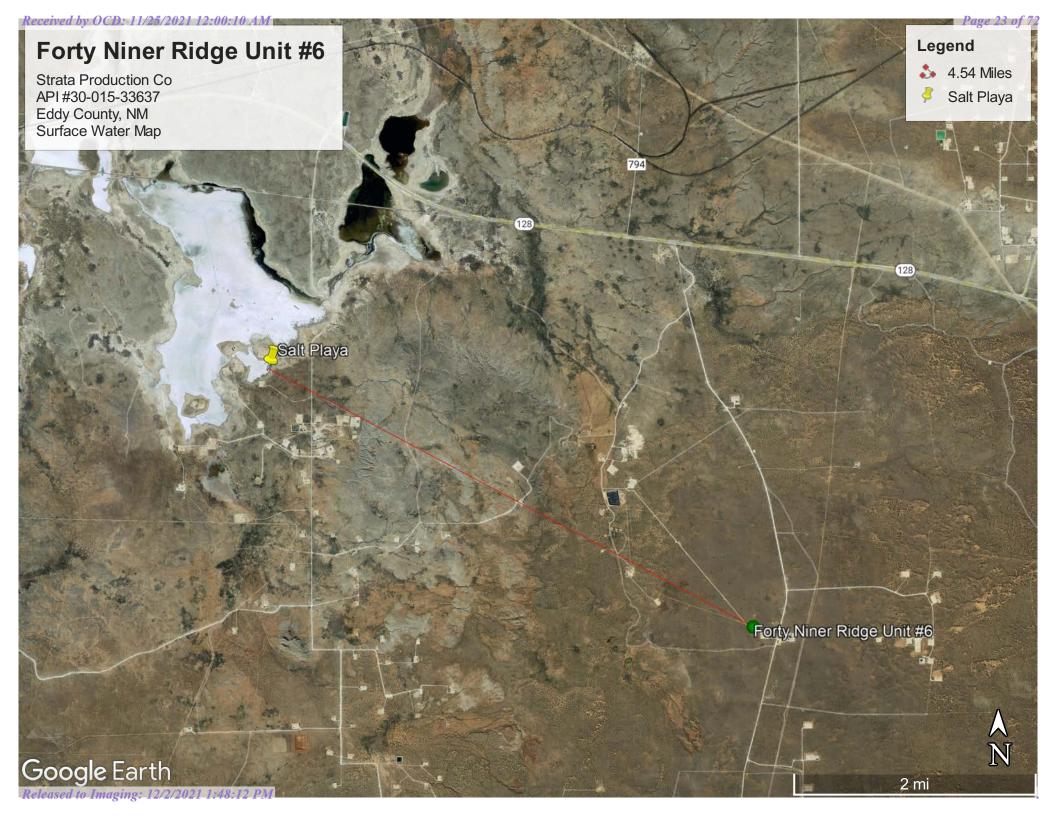
Signature Date: 2021-11-15 - 7:36:16 PM GMT - Time Source: server- IP address: 64.90.153.232

Agreement completed.

2021-11-15 - 7:36:16 PM GMT

USE DIT NOU 16 2021 PM1:03







Appendix B

Soil Survey & Geological Data FEMA Flood Map

Eddy Area, New Mexico

CA—Cacique loamy sand, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w46 Elevation: 3,000 to 5,500 feet

Mean annual precipitation: 7 to 14 inches

Mean annual air temperature: 57 to 68 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Cacique and similar soils: 97 percent Minor components: 3 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

Description of Cacique

Setting

Landform: Basin floors, plains

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Linear Parent material: Mixed alluvium

Typical profile

H1 - 0 to 5 inches: loamy sand H2 - 5 to 24 inches: sandy clay loam H3 - 24 to 60 inches: indurated

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 20 to 40 inches to petrocalcic

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0

mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water capacity: Low (about 3.2 inches)

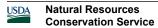
Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C

Ecological site: R042XC004NM - Sandy



Map Unit Description: Cacique loamy sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

Hydric soil rating: No

Minor Components

Dune land

Percent of map unit: 1 percent Hydric soil rating: No

Berino

Percent of map unit: 1 percent

Ecological site: R042XC007NM - Loamy

Hydric soil rating: No

Berino

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

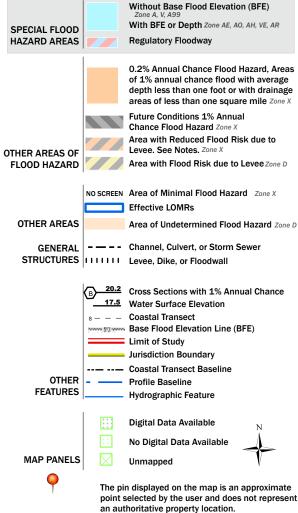
OReleas 250 Im 5 9 ng: 12/2/2021 P.98:12 PM

Received by OCD: 11/25/2021 12:00:10 AM National Flood Hazard Layer FIRMette





SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/30/2021 at 10:59 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





Appendix C

C-141's:

Initial

Final

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	NAPP2114763615
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible	Party: Strata	Production Com	pany		OGRID: 21712				
Contact Nam	ne: Matt Mu	rphy			Contact T	elephone: 720-468-3646			
Contact ema	il: matt@stra	atanm.com			Incident #	t (assigned by OCD)			
Contact mail	ing address:	PO Box 1030, R	oswell, NM 88202	2					
			Location	of R	Release S	ource			
Latitude 32.2	Latitude 32.28591 Longitude -103.86693 (NAD 83 in decimal degrees to 5 decimal places)								
Site Name: F	Site Name: Forty Niner Ridge Unit #6					SWD			
Date Release Discovered: Prior to 02/11/2017 (Per NMOCD)					API# (if ap	plicable) 30-015-33637			
Unit Letter Section Township Range					Cou	ntv			
0	22	23S	30E	Edd					
Surface 6 wife	Surface Owner: State Federal Tribal Private (Name: Nature and Volume of Release Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)								
Crude Oi		Volume Release			•	Volume Recovered (bbls) 0			
Produced	Water	Volume Release	ed (bbls) De mi	nimis		Volume Recovered (bbls) 0			
		Is the concentra produced water	tion of dissolved o	chloride	e in the	☐ Yes ☐ No			
Condensa	ite	Volume Release				Volume Recovered (bbls)			
Natural C	ias	Volume Release	ed (Mcf)			Volume Recovered (Mcf)			
Other (de	Other (describe) Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)			
Cause of Rel	ease :					1			

Page 30 of 72

Incident ID	NAPP2114763615
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?	
☐ Yes ⊠ No		
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?		

Initial Response

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

The source of the release has been stopped.
☐ The impacted area has been secured 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 removed and managed appropriately.
If all the actions described above have not been undertaken, explain why:

If all the actions described above have \underline{not} been undertaken, explain why 6/1/21

This C-141 is being filed as directed by NMOCD letter and attachments dated May 20, 2021. In general, Strata disputes the allegations, findings, and conclusions. Upon initial review and investigation, Strata disputes that any single event or accumulation of events resulted in a stain, leak or "release" which was of Minor or Major nature. We also dispute that any release was improperly "characterized" or "covered". Strata's personnel determined that the release was below the reporting thresholds. The allegation of "covering" is not accurate as Strata personnel used nearby soil or sand to absorb and stabilize non-reportable amounts of liquid. This facility has undergone upgrade, repairs, and remediation many times. This site either has been or will be addressed in the near term during routine maintenance and clean up or, as a result of scheduled remedial, recompletion or plugging and abandonment operations on this well or area wells.

Initial comments regarding pictures:

Page 14, Pic 1 &2 - Equipment removed (except pulley) and area remediated in early May 2021.

Pic 3 – Staining at sump area. Require additional NMOCD clarification.

Pic 4 – Staining inside lined containment area. Note tank repairs. Require additional NMOCD clarification.

Pic 5 & 6 – Inside lined containment area. Impermeable liner approximately 1"-2" below "surface" scrapings. Require additional NMOCD clarification.

Page 15, Pic 1, 2, & 3 – Inside lined containment area showing light staining below clean out connection. Require additional NMOCD clarification.

Pic 4 – Stain, a result of unknown origin. Does not appear to be a result from Strata facility. See comments on pics 5 and 6 below. Require additional NMOCD clarification.

Pic 5 & 6 – These areas are off of Strata's location on a public road shared by multiple operators, service companies and others. Source unknown but not believed to be a result of Strata's operations. Require additional NMOCD clarification.

Strata looks forward to additional clarification and discussion with NMOCD and remains committed to a prompt resolution of all legitimate concerns.

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

Received by OCD: 11/25/2021 12:00:10 AM State of New Mexico
Page 3 Oil Conservation Division

Page 31 of 72

Incident ID	NAPP2114763615
District RP	
Facility ID	
Application ID	

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: _Matt Murphy	Title: Operations Manager	
Signature:Matt Murphy	Date: <u>06/01/2021</u>	
email: matt@stratanm.com	Telephone: _720-468-3646	
OCD Only		
Received by:	Date:	

	Page 32 of	72
Incident ID	NAPP2114763615	
District RP		
Facility ID		
Application ID		

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
🔀 Field data
Data table of soil contaminant concentration data
Depth to water determination
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☐ Boring or excavation logs
Photographs including date and GIS information
☐ Topographic/Aerial maps
■ Laboratory data including chain of custody
NOTE: The above items (if required) will be provided after reclamation process is completed. An amended C-141 will be filed if

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

required.

Received by OCD: 11/25/2021 12:00:10 AM Form C-141 State of New Mexico Oil Conservation Division Page 5

Page 33 of 72

Incident ID	NAPP2114763615
District RP	
Facility ID	
Application ID	

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: Shammy Dennis Title: Administrative Support Signature: Shammy Dennis Date: 6/1/2021____ email: <u>sdennis@stratanm.com</u> Telephone: <u>575-622-1127 ext. 13</u> **OCD Only** Received by: _____

	Page 34 of	72
Incident ID	NAPP2114763615	
District RP		
Facility ID		
Application ID		

Remediation Plan

Remediation Plan Checklist: Each of the following items must	be included in the plan.	
 ☑ Detailed description of proposed remediation technique ☑ Scaled sitemap with GPS coordinates showing delineation points ☑ Estimated volume of material to be remediated ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) NOTE: The above items (if required) will be provided after reclamation process is completed. An amended C-141 will be filed if required. 		
<u>Deferral Requests Only</u> : Each of the following items must be co	onfirmed as part of any request for deferral of remediation.	
Contamination must be in areas immediately under or around p deconstruction.	production equipment where remediation could cause a major facility	
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health, the environment, or groundwater.		
rules and regulations all operators are required to report and/or file	Dacceptance of a C-141 report does not relieve the operator of	
Printed Name: Matt Murphy	Title: Operations Manager	
Signature: Matt Murphy	Date: _6/01/2021	
email: <u>matt@stratanm.com</u>	Telephone: <u>720-468-3646</u>	
OCD Only		
Received by:	Date:	
Approved	f Approval	
Signature:	Date:	

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Incident ID NAPP2114763615

District RP
Facility ID
Application ID

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

must be notified 2 days prior to liner inspection)	
■ Laboratory analyses of final sampling (Note: appropriate ODC Di	istrict office must be notified 2 days prior to final sampling)
□ Description of remediation activities NOTE: The above items (if required) will be provided after reclair required.	mation process is completed. An amended C-141 will be filed if
I hereby certify that the information given above is true and complete to and regulations all operators are required to report and/or file certain remay endanger public health or the environment. The acceptance of a C should their operations have failed to adequately investigate and remed human health or the environment. In addition, OCD acceptance of a C-compliance with any other federal, state, or local laws and/or regulation	lease notifications and perform corrective actions for releases which 2-141 report by the OCD does not relieve the operator of liability iate contamination that pose a threat to groundwater, surface water, 141 report does not relieve the operator of responsibility for is. The responsible party acknowledges they must substantially
restore, reclaim, and re-vegetate the impacted surface area to the condit accordance with 19.15.29.13 NMAC including notification to the OCD	
Printed Name: Shammy Dennis	Title: _Administrative Support
Signature: Shammy Dennís	Date: <u>6/1/2021</u>
email: <u>sdennis@stratanm.com</u>	Telephone: <u>575-622-1127 ext. 13</u>
OCD Only	
Received by: Chad Hensley	Date: 12/02/2021
	iability should their operations have failed to adequately investigate and er, human health, or the environment nor does not relieve the responsible egulations.
Closure Approved by:	Date: 12/02/2021
Printed Name: Chad Hensley	Title: Environmental Specialist Advanced
	



Appendix D

Photographic Documentation



SITE PHOTOGRAPHS STRATA PRODUCTION COMPANY FORTY NINER RIDGE UNIT #6 SWD



Release at pump area.



Surface gravel scraped away by traffic to reveal release.



Disturbance of top layer of soil due to traffic shows release in the area.



Gravel scraped away under drain valve.





Tank drain valve with gravel with light staining.



Gravel between tanks.



Release in front of tanks.









Appendix E

Laboratory Reports

Hall Environmental Analysis Laboratory

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

Website: clients.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



July 19, 2021

Chris Jones

Pima Environmental Services LLC 1601 N. Turner Ste 500

Hobbs, NM 88240

TEL: (575) 631-6977

FAX:

RE: FNRU 6 SWD OrderNo.: 2107272

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 21 sample(s) on 7/8/2021 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-001 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	320	60	mg/Kg	20	7/12/2021 6:00:59 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/9/2021 3:40:40 PM	61208
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/9/2021 3:40:40 PM	61208
Surr: DNOP	87.9	70-130	%Rec	1	7/9/2021 3:40:40 PM	61208
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2021 4:48:00 PM	61189
Surr: BFB	99.0	70-130	%Rec	1	7/9/2021 4:48:00 PM	61189
EPA METHOD 8021B: VOLATILES					Analyst	: CCM
Benzene	ND	0.023	mg/Kg	1	7/9/2021 4:48:00 PM	61189
Toluene	ND	0.047	mg/Kg	1	7/9/2021 4:48:00 PM	61189
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2021 4:48:00 PM	61189
Xylenes, Total	ND	0.093	mg/Kg	1	7/9/2021 4:48:00 PM	61189
Surr: 4-Bromofluorobenzene	92.8	70-130	%Rec	1	7/9/2021 4:48:00 PM	61189

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

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-002 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	230	61	mg/Kg	20	7/12/2021 6:38:13 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/10/2021 11:38:51 AM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 11:38:51 AM	61211
Surr: DNOP	112	70-130	%Rec	1	7/10/2021 11:38:51 AM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2021 5:09:00 PM	61189
Surr: BFB	102	70-130	%Rec	1	7/9/2021 5:09:00 PM	61189
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.023	mg/Kg	1	7/9/2021 5:09:00 PM	61189
Toluene	ND	0.047	mg/Kg	1	7/9/2021 5:09:00 PM	61189
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2021 5:09:00 PM	61189
Xylenes, Total	ND	0.094	mg/Kg	1	7/9/2021 5:09:00 PM	61189
Surr: 4-Bromofluorobenzene	96.2	70-130	%Rec	1	7/9/2021 5:09:00 PM	61189

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 2 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-003 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	100	60	mg/Kg	20	7/12/2021 7:15:25 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/10/2021 12:07:54 PM	61211
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/10/2021 12:07:54 PM	61211
Surr: DNOP	99.9	70-130	%Rec	1	7/10/2021 12:07:54 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2021 5:29:00 PM	61189
Surr: BFB	105	70-130	%Rec	1	7/9/2021 5:29:00 PM	61189
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.023	mg/Kg	1	7/9/2021 5:29:00 PM	61189
Toluene	ND	0.047	mg/Kg	1	7/9/2021 5:29:00 PM	61189
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2021 5:29:00 PM	61189
Xylenes, Total	ND	0.094	mg/Kg	1	7/9/2021 5:29:00 PM	61189
Surr: 4-Bromofluorobenzene	94.1	70-130	%Rec	1	7/9/2021 5:29:00 PM	61189

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 3 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-004 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	220	60	mg/Kg	20	7/12/2021 7:27:49 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/10/2021 12:17:39 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 12:17:39 PM	61211
Surr: DNOP	97.5	70-130	%Rec	1	7/10/2021 12:17:39 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2021 5:49:00 PM	61189
Surr: BFB	96.9	70-130	%Rec	1	7/9/2021 5:49:00 PM	61189
EPA METHOD 8021B: VOLATILES					Analyst	: CCM
Benzene	ND	0.024	mg/Kg	1	7/9/2021 5:49:00 PM	61189
Toluene	ND	0.047	mg/Kg	1	7/9/2021 5:49:00 PM	61189
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2021 5:49:00 PM	61189
Xylenes, Total	ND	0.094	mg/Kg	1	7/9/2021 5:49:00 PM	61189
Surr: 4-Bromofluorobenzene	91.8	70-130	%Rec	1	7/9/2021 5:49:00 PM	61189

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

- 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 28

Lab Order **2107272**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/19/2021

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-005 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	9200	300	mg/Kg	100	7/13/2021 9:59:45 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/10/2021 12:27:23 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 12:27:23 PM	61211
Surr: DNOP	99.6	70-130	%Rec	1	7/10/2021 12:27:23 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/9/2021 6:09:00 PM	61189
Surr: BFB	93.9	70-130	%Rec	1	7/9/2021 6:09:00 PM	61189
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.024	mg/Kg	1	7/9/2021 6:09:00 PM	61189
Toluene	ND	0.048	mg/Kg	1	7/9/2021 6:09:00 PM	61189
Ethylbenzene	ND	0.048	mg/Kg	1	7/9/2021 6:09:00 PM	61189
Xylenes, Total	ND	0.096	mg/Kg	1	7/9/2021 6:09:00 PM	61189
Surr: 4-Bromofluorobenzene	89.4	70-130	%Rec	1	7/9/2021 6:09:00 PM	61189

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

- 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 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-006 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	13000	600	mg/Kg	200	0 7/13/2021 10:12:09 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/10/2021 12:37:09 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 12:37:09 PM	61211
Surr: DNOP	99.4	70-130	%Rec	1	7/10/2021 12:37:09 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: CCM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/9/2021 6:30:00 PM	61189
Surr: BFB	96.7	70-130	%Rec	1	7/9/2021 6:30:00 PM	61189
EPA METHOD 8021B: VOLATILES					Analyst	: CCM
Benzene	ND	0.023	mg/Kg	1	7/9/2021 6:30:00 PM	61189
Toluene	ND	0.046	mg/Kg	1	7/9/2021 6:30:00 PM	61189
Ethylbenzene	ND	0.046	mg/Kg	1	7/9/2021 6:30:00 PM	61189
Xylenes, Total	ND	0.093	mg/Kg	1	7/9/2021 6:30:00 PM	61189
Surr: 4-Bromofluorobenzene	91.2	70-130	%Rec	1	7/9/2021 6:30:00 PM	61189

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 6 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-007 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	12000	600	mg/Kg	200	0 7/13/2021 10:49:22 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/10/2021 12:46:59 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 12:46:59 PM	61211
Surr: DNOP	101	70-130	%Rec	1	7/10/2021 12:46:59 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2021 9:19:37 PM	61194
Surr: BFB	105	70-130	%Rec	1	7/9/2021 9:19:37 PM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	7/9/2021 9:19:37 PM	61194
Toluene	ND	0.047	mg/Kg	1	7/9/2021 9:19:37 PM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2021 9:19:37 PM	61194
Xylenes, Total	ND	0.095	mg/Kg	1	7/9/2021 9:19:37 PM	61194
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	7/9/2021 9:19:37 PM	61194

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 7 of 28

Lab Order **2107272**

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-008 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	15000	600	mg/Kg	200	7/13/2021 11:01:47 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/10/2021 12:56:47 PM	61211
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/10/2021 12:56:47 PM	61211
Surr: DNOP	102	70-130	%Rec	1	7/10/2021 12:56:47 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2021 10:30:28 PM	61194
Surr: BFB	108	70-130	%Rec	1	7/9/2021 10:30:28 PM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/9/2021 10:30:28 PM	61194
Toluene	ND	0.047	mg/Kg	1	7/9/2021 10:30:28 PM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2021 10:30:28 PM	61194
Xylenes, Total	ND	0.094	mg/Kg	1	7/9/2021 10:30:28 PM	61194
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	7/9/2021 10:30:28 PM	61194

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 8 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-009 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	930	60	mg/Kg	20	7/12/2021 8:29:52 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/10/2021 1:06:36 PM	61211
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/10/2021 1:06:36 PM	61211
Surr: DNOP	97.3	70-130	%Rec	1	7/10/2021 1:06:36 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/9/2021 11:41:10 PM	61194
Surr: BFB	106	70-130	%Rec	1	7/9/2021 11:41:10 PM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	7/9/2021 11:41:10 PM	61194
Toluene	ND	0.049	mg/Kg	1	7/9/2021 11:41:10 PM	61194
Ethylbenzene	ND	0.049	mg/Kg	1	7/9/2021 11:41:10 PM	61194
Xylenes, Total	ND	0.099	mg/Kg	1	7/9/2021 11:41:10 PM	61194
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/9/2021 11:41:10 PM	61194

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

- 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 28

Project:

Analytical Report

Lab Order 2107272

Collection Date: 7/6/2021

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: S10- Surface FNRU 6 SWD

Lab ID: 2107272-010 Matrix: SOIL Received Date: 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	: VP
Chloride	2800	150	mg/Kg	50	7/13/2021 11:14:11 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst:	SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/10/2021 1:16:27 PM	61211
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/10/2021 1:16:27 PM	61211
Surr: DNOP	102	70-130	%Rec	1	7/10/2021 1:16:27 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/10/2021 12:04:38 AM	61194
Surr: BFB	106	70-130	%Rec	1	7/10/2021 12:04:38 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	7/10/2021 12:04:38 AM	61194
Toluene	ND	0.049	mg/Kg	1	7/10/2021 12:04:38 AM	61194
Ethylbenzene	ND	0.049	mg/Kg	1	7/10/2021 12:04:38 AM	61194
Xylenes, Total	ND	0.098	mg/Kg	1	7/10/2021 12:04:38 AM	61194
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/10/2021 12:04:38 AM	61194

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
- % Recovery outside of range due to dilution or matrix

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

Page 10 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: S11- Surface

Project: FNRU 6 SWD **Collection Date:** 7/6/2021

Lab ID: 2107272-011 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	9900	600	mg/Kg	200	7/13/2021 11:26:36 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/10/2021 1:26:18 PM	61211
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/10/2021 1:26:18 PM	61211
Surr: DNOP	103	70-130	%Rec	1	7/10/2021 1:26:18 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/10/2021 12:28:08 AM	61194
Surr: BFB	105	70-130	%Rec	1	7/10/2021 12:28:08 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/10/2021 12:28:08 AM	61194
Toluene	ND	0.047	mg/Kg	1	7/10/2021 12:28:08 AM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/10/2021 12:28:08 AM	61194
Xylenes, Total	ND	0.094	mg/Kg	1	7/10/2021 12:28:08 AM	61194
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	7/10/2021 12:28:08 AM	61194

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 11 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: S12- Surface

Project: FNRU 6 SWD **Collection Date:** 7/6/2021

Lab ID: 2107272-012 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	2400	61	mg/Kg	20	7/14/2021 3:52:59 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/10/2021 1:36:10 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 1:36:10 PM	61211
Surr: DNOP	123	70-130	%Rec	1	7/10/2021 1:36:10 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/10/2021 12:51:32 AM	61194
Surr: BFB	103	70-130	%Rec	1	7/10/2021 12:51:32 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	7/10/2021 12:51:32 AM	61194
Toluene	ND	0.047	mg/Kg	1	7/10/2021 12:51:32 AM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/10/2021 12:51:32 AM	61194
Xylenes, Total	ND	0.094	mg/Kg	1	7/10/2021 12:51:32 AM	61194
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	7/10/2021 12:51:32 AM	61194

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 12 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Lab ID: 2107272-013

Matrix: SOIL

Received Date: 7/8/2021 7:30:00 AM

Client Sample ID: S5-1'

Collection Date: 7/6/2021

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	5000	300	mg/Kg	100	7/13/2021 11:39:00 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/10/2021 1:46:02 PM	61211
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/10/2021 1:46:02 PM	61211
Surr: DNOP	96.6	70-130	%Rec	1	7/10/2021 1:46:02 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/10/2021 1:14:58 AM	61194
Surr: BFB	105	70-130	%Rec	1	7/10/2021 1:14:58 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/10/2021 1:14:58 AM	61194
Toluene	ND	0.049	mg/Kg	1	7/10/2021 1:14:58 AM	61194
Ethylbenzene	ND	0.049	mg/Kg	1	7/10/2021 1:14:58 AM	61194
Xylenes, Total	ND	0.098	mg/Kg	1	7/10/2021 1:14:58 AM	61194
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	7/10/2021 1:14:58 AM	61194

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

- 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 13 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-014 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	890	60	mg/Kg	20	7/12/2021 9:56:42 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/10/2021 1:55:55 PM	61211
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/10/2021 1:55:55 PM	61211
Surr: DNOP	98.0	70-130	%Rec	1	7/10/2021 1:55:55 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/10/2021 1:38:29 AM	61194
Surr: BFB	101	70-130	%Rec	1	7/10/2021 1:38:29 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/10/2021 1:38:29 AM	61194
Toluene	ND	0.046	mg/Kg	1	7/10/2021 1:38:29 AM	61194
Ethylbenzene	ND	0.046	mg/Kg	1	7/10/2021 1:38:29 AM	61194
Xylenes, Total	ND	0.093	mg/Kg	1	7/10/2021 1:38:29 AM	61194
Surr: 4-Bromofluorobenzene	97.7	70-130	%Rec	1	7/10/2021 1:38:29 AM	61194

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 14 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: S7-1'

Project: FNRU 6 SWD **Collection Date:** 7/6/2021

Lab ID: 2107272-015 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	450	60	mg/Kg	20	7/12/2021 10:09:06 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/10/2021 2:05:51 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 2:05:51 PM	61211
Surr: DNOP	96.5	70-130	%Rec	1	7/10/2021 2:05:51 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/10/2021 2:02:11 AM	61194
Surr: BFB	104	70-130	%Rec	1	7/10/2021 2:02:11 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/10/2021 2:02:11 AM	61194
Toluene	ND	0.046	mg/Kg	1	7/10/2021 2:02:11 AM	61194
Ethylbenzene	ND	0.046	mg/Kg	1	7/10/2021 2:02:11 AM	61194
Xylenes, Total	ND	0.092	mg/Kg	1	7/10/2021 2:02:11 AM	61194
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	7/10/2021 2:02:11 AM	61194

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 15 of 28

Project: FNRU 6 SWD

Analytical Report

Lab Order 2107272

Collection Date: 7/6/2021

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: S8-1'

Lab ID: 2107272-016 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	2500	150	mg/Kg	50	7/13/2021 11:51:25 PM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/10/2021 2:15:49 PM	61211
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/10/2021 2:15:49 PM	61211
Surr: DNOP	95.7	70-130	%Rec	1	7/10/2021 2:15:49 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/10/2021 2:25:37 AM	61194
Surr: BFB	105	70-130	%Rec	1	7/10/2021 2:25:37 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/10/2021 2:25:37 AM	61194
Toluene	ND	0.047	mg/Kg	1	7/10/2021 2:25:37 AM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/10/2021 2:25:37 AM	61194
Xylenes, Total	ND	0.093	mg/Kg	1	7/10/2021 2:25:37 AM	61194
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/10/2021 2:25:37 AM	61194

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

Project: FNRU 6 SWD

Analytical Report

Lab Order 2107272

Collection Date: 7/6/2021

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: S10-1'

Lab ID: 2107272-017 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	2700	150	mg/Kg	50	7/14/2021 12:03:49 AM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/10/2021 2:25:46 PM	61211
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/10/2021 2:25:46 PM	61211
Surr: DNOP	95.5	70-130	%Rec	1	7/10/2021 2:25:46 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/10/2021 3:35:59 AM	61194
Surr: BFB	107	70-130	%Rec	1	7/10/2021 3:35:59 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/10/2021 3:35:59 AM	61194
Toluene	ND	0.047	mg/Kg	1	7/10/2021 3:35:59 AM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/10/2021 3:35:59 AM	61194
Xylenes, Total	ND	0.094	mg/Kg	1	7/10/2021 3:35:59 AM	61194
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/10/2021 3:35:59 AM	61194

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 17 of 28

Lab Order 2107272

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-018 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	4800	150	mg/Kg	50	7/14/2021 12:16:13 AM	61238
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/10/2021 2:35:54 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 2:35:54 PM	61211
Surr: DNOP	98.1	70-130	%Rec	1	7/10/2021 2:35:54 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/10/2021 3:59:39 AM	61194
Surr: BFB	105	70-130	%Rec	1	7/10/2021 3:59:39 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	7/10/2021 3:59:39 AM	61194
Toluene	ND	0.048	mg/Kg	1	7/10/2021 3:59:39 AM	61194
Ethylbenzene	ND	0.048	mg/Kg	1	7/10/2021 3:59:39 AM	61194
Xylenes, Total	ND	0.095	mg/Kg	1	7/10/2021 3:59:39 AM	61194
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	7/10/2021 3:59:39 AM	61194

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 18 of 28

Lab Order **2107272**

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: BG-1

 Project:
 FNRU 6 SWD
 Collection Date: 7/6/2021

 Lab ID:
 2107272-019
 Matrix: SOIL
 Received Date: 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	7/12/2021 11:23:33 PM	61239
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	7/10/2021 2:46:03 PM	61211
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/10/2021 2:46:03 PM	61211
Surr: DNOP	95.0	70-130	%Rec	1	7/10/2021 2:46:03 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/10/2021 4:23:15 AM	61194
Surr: BFB	106	70-130	%Rec	1	7/10/2021 4:23:15 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	7/10/2021 4:23:15 AM	61194
Toluene	ND	0.049	mg/Kg	1	7/10/2021 4:23:15 AM	61194
Ethylbenzene	ND	0.049	mg/Kg	1	7/10/2021 4:23:15 AM	61194
Xylenes, Total	ND	0.099	mg/Kg	1	7/10/2021 4:23:15 AM	61194
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/10/2021 4:23:15 AM	61194

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 19 of 28

Lab Order **2107272**

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Project: FNRU 6 SWD

Collection Date: 7/6/2021

Lab ID: 2107272-020 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	7/12/2021 11:35:57 PM	61239
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/10/2021 2:56:11 PM	61211
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/10/2021 2:56:11 PM	61211
Surr: DNOP	97.2	70-130	%Rec	1	7/10/2021 2:56:11 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/10/2021 4:46:51 AM	61194
Surr: BFB	105	70-130	%Rec	1	7/10/2021 4:46:51 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/10/2021 4:46:51 AM	61194
Toluene	ND	0.047	mg/Kg	1	7/10/2021 4:46:51 AM	61194
Ethylbenzene	ND	0.047	mg/Kg	1	7/10/2021 4:46:51 AM	61194
Xylenes, Total	ND	0.093	mg/Kg	1	7/10/2021 4:46:51 AM	61194
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	7/10/2021 4:46:51 AM	61194

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 20 of 28

FNRU 6 SWD

Project:

Analytical Report

Lab Order 2107272

Collection Date: 7/6/2021

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC Client Sample ID: BG-3

Lab ID: 2107272-021 **Matrix:** SOIL **Received Date:** 7/8/2021 7:30:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	7/13/2021 12:13:10 AM	61239
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/10/2021 3:06:19 PM	61211
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/10/2021 3:06:19 PM	61211
Surr: DNOP	94.7	70-130	%Rec	1	7/10/2021 3:06:19 PM	61211
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/10/2021 5:10:25 AM	61194
Surr: BFB	106	70-130	%Rec	1	7/10/2021 5:10:25 AM	61194
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	7/10/2021 5:10:25 AM	61194
Toluene	ND	0.048	mg/Kg	1	7/10/2021 5:10:25 AM	61194
Ethylbenzene	ND	0.048	mg/Kg	1	7/10/2021 5:10:25 AM	61194
Xylenes, Total	ND	0.096	mg/Kg	1	7/10/2021 5:10:25 AM	61194
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	7/10/2021 5:10:25 AM	61194

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 21 of 28

Hall Environmental Analysis Laboratory, Inc.

WO#: **2107272**

19-Jul-21

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Sample ID: MB-61238 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **61238** RunNo: **79710**

Prep Date: 7/12/2021 Analysis Date: 7/12/2021 SeqNo: 2805043 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-61238 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 61238 RunNo: 79710

Prep Date: 7/12/2021 Analysis Date: 7/12/2021 SeqNo: 2805044 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.1 90 110

Sample ID: MB-61239 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 61239 RunNo: 79710

Prep Date: 7/12/2021 Analysis Date: 7/12/2021 SeqNo: 2805073 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-61239 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 61239 RunNo: 79769

Prep Date: 7/12/2021 Analysis Date: 7/13/2021 SeqNo: 2806179 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.2 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 22 of 28

Hall Environmental Analysis Laboratory, Inc.

2107272 19-Jul-21

WO#:

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Project: FNRU 6	SWD							
Sample ID: MB-61208	SampType: M	BLK	Tes	tCode: EPA Metho	d 8015M/D: Dies	el Range	Organics	
Client ID: PBS	Batch ID: 6	1208	F	RunNo: 79683				
Prep Date: 7/9/2021	Analysis Date: 7	/9/2021	9	SeqNo: 2802908	Units: mg/Kg			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC LowLimi	t HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10							
Motor Oil Range Organics (MRO) Surr: DNOP	ND 50 9.4	10.00		93.6 70	130			
Suil. Divoi	9.4	10.00		95.0	130			
Sample ID: LCS-61208	SampType: L	CS	Tes	tCode: EPA Metho	d 8015M/D: Dies	el Range	Organics	
Client ID: LCSS	Batch ID: 6	1208	F	RunNo: 79683				
Prep Date: 7/9/2021	Analysis Date: 7	/9/2021	5	SeqNo: 2802909	Units: mg/Kg			
Analyte	Result PQL		SPK Ref Val	%REC LowLimi	t HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43 10		0	87.0 68.9				
Surr: DNOP	4.8	5.000		96.1 70) 130			
Sample ID: LCS-61211	SampType: L	cs	Tes	tCode: EPA Metho	d 8015M/D: Dies	el Range	Organics	
Client ID: LCSS	Batch ID: 6	1211	F	RunNo: 79709				
Prep Date: 7/9/2021	Analysis Date: 7	/10/2021	5	SeqNo: 2803577	Units: mg/Kg			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC LowLimi	t HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51 10		0	102 68.9				
Surr: DNOP	5.3	5.000		105 70	130			
Sample ID: MB-61211	SampType: M	BLK	Tes	tCode: EPA Metho	d 8015M/D: Dies	el Range	Organics	
Client ID: PBS	Batch ID: 6	1211	F	RunNo: 79709				
Prep Date: 7/9/2021	Analysis Date: 7	/10/2021	9	SeqNo: 2803578	Units: mg/Kg			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC LowLimi	t HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10							
Motor Oil Range Organics (MRO)	ND 50			400				
Surr: DNOP	10	10.00		100 70) 130			
Sample ID: 2107272-002AMS	SampType: M	S	Tes	tCode: EPA Metho	d 8015M/D: Dies	el Range	Organics	
Client ID: S2- Surface	Batch ID: 6	1211	F	RunNo: 79709				
Prep Date: 7/9/2021	Analysis Date: 7	/10/2021	5	SeqNo: 2803580	Units: mg/Kg			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC LowLimi	t HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47 9.9		0	94.3				
Surr: DNOP	5.4	4.946		109 70	130			

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 23 of 28

Hall Environmental Analysis Laboratory, Inc.

2107272 19-Jul-21

WO#:

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Sample ID: 2107272-002AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: S2- Surface Batch ID: 61211 RunNo: 79709

Prep Date: 7/9/2021 Analysis Date: 7/10/2021 SeqNo: 2803581 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.4	46.86	0	99.0	15	184	0.532	23.9	
Surr: DNOP	5.1		4.686		109	70	130	0	0	

Qualifiers:

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

- 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 24 of 28

Hall Environmental Analysis Laboratory, Inc.

2107272 19-Jul-21

WO#:

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Sample ID: Ics-61189	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	n ID: 61	189	F	RunNo: 7 9	9700				
Prep Date: 7/8/2021	Analysis D	ate: 7/	/9/2021	9	SeqNo: 2	802952	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	78.6	131			
Surr: BFB	1200		1000		118	70	130			
Sample ID: mb-61189	SampT	уре: М І	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	n ID: 61	189	F	RunNo: 7	9700				
Prep Date: 7/8/2021	Analysis D	ate: 7/	9/2021	9	SeqNo: 2	802953	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	1000		1000		103	70	130			
Sample ID: mb-61194	SampT	уре: МІ	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	n ID: 61	194	F	RunNo: 7	9705				
Prep Date: 7/8/2021	Analysis D	ate: 7	/9/2021	8	SeqNo: 2	803225	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	1100		1000		111	70	130			
Sample ID: Ics-61194	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	n ID: 61	194	F	RunNo: 7 9	9705				
Prep Date: 7/8/2021	Analysis D	ate: 7 /	9/2021	5	SeqNo: 2	803226	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.8	78.6	131			
Surr: BFB	1200		1000		120	70	130			
Sample ID: 2107272-007ams	SampT	ype: M \$		Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: S7- Surface	Batch	n ID: 61	194	F	RunNo: 7 9	9705				
Prep Date: 7/8/2021	Analysis D	ate: 7 /	/9/2021	9	SeqNo: 2	803228	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%RFC	I owl imit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

Analyte

Surr: BFB

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

Gasoline Range Organics (GRO)

Client ID: S7- Surface

Prep Date: 7/8/2021

Sample ID: 2107272-007amsd

H Holding times for preparation or analysis exceeded

26

1100

Result

4.7

SampType: MSD

Batch ID: 61194

Analysis Date: 7/9/2021

23.56

942.5

SPK value SPK Ref Val

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

B Analyte detected in the associated Method Blank

110

115

RunNo: 79705

%REC

SeqNo: 2803229

61.3

LowLimit

70

TestCode: EPA Method 8015D: Gasoline Range

114

130

Units: mg/Kg

%RPD

HighLimit

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

0

Page 25 of 28

RPDLimit

Qual

Hall Environmental Analysis Laboratory, Inc.

2107272 19-Jul-21

WO#:

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Sample ID: 2107272-007amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: S7- Surface Batch ID: 61194 RunNo: 79705

Prep Date: 7/8/2021 Analysis Date: 7/9/2021 SeqNo: 2803229 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.56	0	108	61.3	114	2.56	20	
Surr: BFB	1200		982.3		117	70	130	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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 26 of 28

Hall Environmental Analysis Laboratory, Inc.

WO#: **2107272**

19-Jul-21

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Sample ID: Ics-61189	SampT	Гуре: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: 61 1	189	F	RunNo: 7 9	9700				
Prep Date: 7/8/2021	Analysis D)ate: 7/ 5	9/2021	S	SeqNo: 2	803000	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.8	80	120			
Toluene	0.96	0.050	1.000	0	96.1	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.7	70	130			
Sample ID: mb-61189	Samp7	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		

Sample ID: mb-61189	Samp1	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batc	h ID: 61	189	F	RunNo: 7 9	9700				
Prep Date: 7/8/2021	Analysis [Date: 7/	9/2021	9	SeqNo: 28	803001	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	70	130			

Sample ID: mb-61194	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: 61	194	F	RunNo: 7	9705				
Prep Date: 7/8/2021	Analysis D	oate: 7/	9/2021	8	SeqNo: 2	803278	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	70	130			

Sample ID: LCS-61194	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: 61 1	194	F	RunNo: 7 9	9705				
Prep Date: 7/8/2021	Analysis D	oate: 7/ 9	9/2021	S	SeqNo: 28	803279	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.2	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.6	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	70	130			

Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 27 of 28

Hall Environmental Analysis Laboratory, Inc.

WO#: **2107272**

19-Jul-21

Client: Pima Environmental Services LLC

Project: FNRU 6 SWD

Sample ID: 2107272-008ams	SampT	уре: МS	3	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: S8- Surface	Batch	n ID: 61 ′	194	F	RunNo: 7 9	9705				
Prep Date: 7/8/2021	Analysis D	ate: 7/ 9	9/2021	S	SeqNo: 2	803282	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9615	0	108	80	120			
Toluene	1.1	0.048	0.9615	0	110	80	120			
Ethylbenzene	1.1	0.048	0.9615	0	112	80	120			
Xylenes, Total	3.2	0.096	2.885	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.0		0.9615		105	70	130			

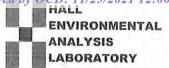
Sample ID: 2107272-008ams	sd Samp	Туре: МS	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: S8- Surface	Batc	h ID: 61	194	F	RunNo: 7	9705				
Prep Date: 7/8/2021	Analysis [Date: 7/	9/2021	\$	SeqNo: 2	803283	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9470	0	109	80	120	0.160	20	
Toluene	1.1	0.047	0.9470	0	112	80	120	0.387	20	
Ethylbenzene	1.1	0.047	0.9470	0	114	80	120	0.0266	20	
Xylenes, Total	3.2	0.095	2.841	0	114	80	120	0.533	20	
Surr: 4-Bromofluorobenzene	0.99		0.9470		105	70	130	0	0	

Qualifiers:

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

- 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 28 of 28



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

	Dominguez 8/2 /	7/8/2021 7:30:00 A 7/8/2021 9:28:21 A			Chine	1	
Reviewed By: JR 7 Chain of Custody 1. Is Chain of Custody comp	18/21	7/8/2021 9:28:21 A	М		1		
Chain of Custody 1. Is Chain of Custody comp					1	~	
1. Is Chain of Custody comp						*	
	10.0						
2. How was the sample deli	olete?		Yes	V	No		Not Present
	vered?		Cou	rier			
Log In							
3. Was an attempt made to	cool the samples	?	Yes	V	No		NA 🗆
4. Were all samples received	d at a temperatur	e of >0° C to 6.0°C	Yes	V	No		NA 🗆
5. Sample(s) in proper conta	ainer(s)?		Yes	V	No		
6. Sufficient sample volume	for indicated test	(s)?	Yes	~	No		
7. Are samples (except VOA	and ONG) prope	erly preserved?	Yes	V	No		
8. Was preservative added to	o bottles?		Yes		No	/	NA 🗌
9. Received at least 1 vial wi	th headspace <1	/4" for AQ VOA?	Yes		No		NA 🗹
0. Were any sample contain	ers received brok	ken?	Yes		No	~	
							# of preserved bottles checked
 Does paperwork match bo (Note discrepancies on ch 			Yes	V	No		for pH: (<2 or >12 unless noted)
2. Are matrices correctly ider		f Custody?	Yes	V	No		Adjusted?
3. Is it clear what analyses w		. Sustody :		V	No		
4. Were all holding times abl	e to be met?		Yes	V	No		Checked by: 5PA 18
(If no, notify customer for	authorization.)						
pecial Handling (if ap	plicable)						
15, Was client notified of all d	liscrepancies with	n this order?	Yes		No	П	NA 🗹
Person Notified:	[Date					
By Whom:		Via:	eM	ail 🗌	Phone [Fax	☐ In Person
Regarding:							
Client Instructions:							
16. Additional remarks:							
7. Cooler Information							
Cooler No Temp °C	Condition	Seal Intact Seal No	Seal D	ate	Signed E	Зу	

C	hain	-of-Cı	ustody Record	Turn-Arou	und Time:	A 10 - 1	٦.					1		a	1	,	2				Received
Client:	1		irronmental	Stand Project Na	ard □ Ru	t Davy sh				A	N	AL	YS	SIS	S L		301		NT	AL	. 6
Mailing A	Addres	s: (b01	N. Turner	FI	JRU #	6 SWD		49	01 H								om M 87	109			0: 11/
ste ?	500	flok	ibs, NM	Project #:					el. 50						Y2 (*)		-4107				25/20
Phone #	:								L			A	naly	/sis	Req	uest					21
email or	Fax#:			Project M	anager:		=	(Q)				7	SO4			ent)					12:0
QA/QC P			☐ Level 4 (Full Validation)	Chri	is Jor	es	TMB's (8021)	30 / MF	PCB's		OSIMS		PO ₄ ,			nt/Abse					12:00:10 AM
Accredita		☐ Az Co	ompliance	Sampler: On Ice:	© Yes	□ No	TME	JQ/C	/808	04.1)	r 827		NO ₂ ,		8	Prese					1
□ EDD		- Othe		# of Coole		LI NO	H H	GR	des	d 5(100	tals	03,		9	E E					
	(-)[/			A CONTRACTOR OF THE PARTY OF TH		.3+6.155.4 (°C)	Ψ	5D(stici	etho	/ 83	Me	۲, ۸	OA)	emi-	lifor					
Date -	Γime	Matrix	Sample Name	Container Type and	The second secon	HEAL No. 2107272	BTEX) MTBE	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl., F, Br, NO3,	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)					
7/6/21		Soil	SI-Surface	1-400	2 Caul	-001	X	X					X								
		1	52-Surface			-002							1								
			S3-Suifag			- 003															
			34 - Surface			-004															
			55 -Surface			-005															
			S6-Surface			-006															
			S7-Surface			-007															
			So-Surface			-008															
			Sa-Surface			-009															
			SIO-Surface			-010															
			SII - Surface		- 2)	-011															
7		1	Siz-Surface	-	1	-012	2	1	Ιş				1								
7/7/21	Fime:	Relinquish Relinquish	asterno.	Received by	uri	Date Time Date Time	-	nark Le		2	Or	go	an	20	2	6) (des	pth	٠.	Pag
7/1/21	1900	acu	hmitted to Hall Environmental may be su	cu	car	71812 0730	l need	sibility	Αργει	ıh con	tracto	d data	will be	o cloar	lu not	ated on	the an	alvtica	l report		Page 70 of 7

Client:	hain	-of-C	ustody Record	Turn-Around	Time:	Day				ŀ	ΙA	LL	E	NV	TE	20	NIN ,	1E	NT.	AI	ceived
- Cilent.		MA	, Pima	☐ Standard	d □ Rush												301				.0-
	6	V.C.	* /	Project Nam												tal.co		1000			(C)
Mailing	Addres	SINGI		FNR	2U # 6	SWD		10	01 L								M 87	100			9: 11
		1		Project #:		000	i		el. 50							46.1					/25/
Phone	#·							1.6	ei. ot	JO-34	10-0	-	-			uest	-4107		100	mir.	202
email o				Project Mana	ager:			<u></u>	200						teq					7	
	Package		☐ Level 4 (Full Validation)	Chris		5	TMB's (8021)	/ DRO / MRO)	PCB's		8270SIMS		PO ₄ , SO ₄			Total Coliform (Present/Absent)					2:00:10 AA
Accred		□ Az Co	ompliance	Sampler:	0		MB	/ DR	082	-	827(NO ₂ ,			eser		М			N
□ NEL		□ Other	· · · · · · · · · · · · · · · · · · ·	On Ice:	™ Yes	□ No	-	0	8/se	504.1)	9	2			OA)	(Pre					
	(Type)			# of Coolers:		- 1 (90)	IE I	D)(G	icide	por	310	leta	9	7)-ir	orm					
		1		Cooler Temp	O(including CF):	3+0,1=5.4 (°C)	M	015	Pest	Meth	by 8	8 8	Ŗ,	70/	Sen	Colif					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX WATBE	TPH:8015D(GRO	8081 Pesticides/8082	EDB (Method	PAHs by 8310	RCRA 8 Metals	CI)F, Br, NO ₃ ,	8260 (VOA)	8270 (Semi-VOA)	Total C					
7/6/21		Soil	35-11	1-402	Cool	-013	X	X					X								
			56-11			-014	(1										\top			
			57-1'			- 015							T								
			58-11			-016															
			510-1			-017							1								
			511-11			-018															
			B67-1			-019												-(
4			Bh-2			-020															
上		1	B6-3	+	4	-021		1	/				L								
										- 1											
Date:	Time:	Relinquish Relinquish	istean o ;	Received by:	Via:	Date Time	Ren	nark	s: [1									11		Page 7
172	1900 If necessary	, samples sub	mitted to Hall Environmental may be subo			8/2 673C es. This serves as notice of this	possi	bility.	Any su	b-cont	racted	l data v	will be	clearl	y nota	ted on	the ana	alytical	report.		71 of 72

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

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

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

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

CONDITIONS

Action 63615

CONDITIONS

Operator		OGRID:
	Pima Environmental Services, LLC	329999
	1601 N. Turner	Action Number:
	Hobbs, NM 88240	63615
		Action Type:
		[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	12/2/2021