



Hudson Federal Tank Battery #001

WORK PLAN

API No. 30-015-21052

Release Date: October 3, 2016

Unit Letter F, Section 1, Township 23 South, Range 30 East

NMOCD Case #: 2R-3956

June 26, 2017

Prepared by:

Michael Alves

Diversified Field Service, Inc.

206 W. Snyder

Hobbs, NM 88240

Phone: (575)964-8394

Fax: (575)393-8396

Mike Bratcher
Environmental Protection Specialist
New Mexico Oil Conservation District
811 S First St
Artesia, NM 88210

RE: **XTO – Hudson Federal Tank Battery #001
Remediation Work Plan**
UL/F, Section 1, T23S, R30E
API No. 30-015-31513
NMOCD Case #: 2R-3956
NMOCD Score: 0

Mr. Bratcher,

XTO Energy (XTO) has retained Diversified Environmental (DFSI) to address environmental issues for the site detailed herein.

The site is located northwest of Loving, NM, in Eddy County. The spill site resulted from a ruptured gasket, releasing a total of approximately 9 barrels of oil and 24 barrels of produced water, with 3 barrels of oil and 12 barrels of produced water recovered. An initial C-141 was submitted to NMOCD on October 21, 2016 and approved on October 24, 2016 (Appendix I).

Site Assessment

Beginning March 21, 2017 DFSI personnel were on site to obtain samples at regular intervals within the release area (Figure 1). Six samples were obtained and field tested for chloride levels, as well as BTEX (Appendix II). The samples were screened using a Mini Rae Photoionization Detector (PID). Clean field samples were submitted for laboratory analysis at Cardinal Laboratory of Hobbs, NM to obtain confirmation (Appendix III).

DFSI has conducted a groundwater study of the area and has determined, according to the New Mexico Office of the State Engineer, the average depth to groundwater beneath this site is approximately 105 ft (Appendix IV).

Conclusion

After careful review DFSI, on behalf of XTO, would like to propose the following:

In order to maintain tank integrity, the release area within the battery will be excavated to a depth of 1' bgs. The excavated soil will be properly disposed of at an approved NMOCD facility. The excavation will be backfilled with clean, imported soil to ground surface. The pasture release area will be tilled and seeded with a blend of native vegetation. Any remaining constituents will be addressed at time of site abandonment.

Following the approval and completion of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact with any questions concerning this remediation plan request.

Sincerely,

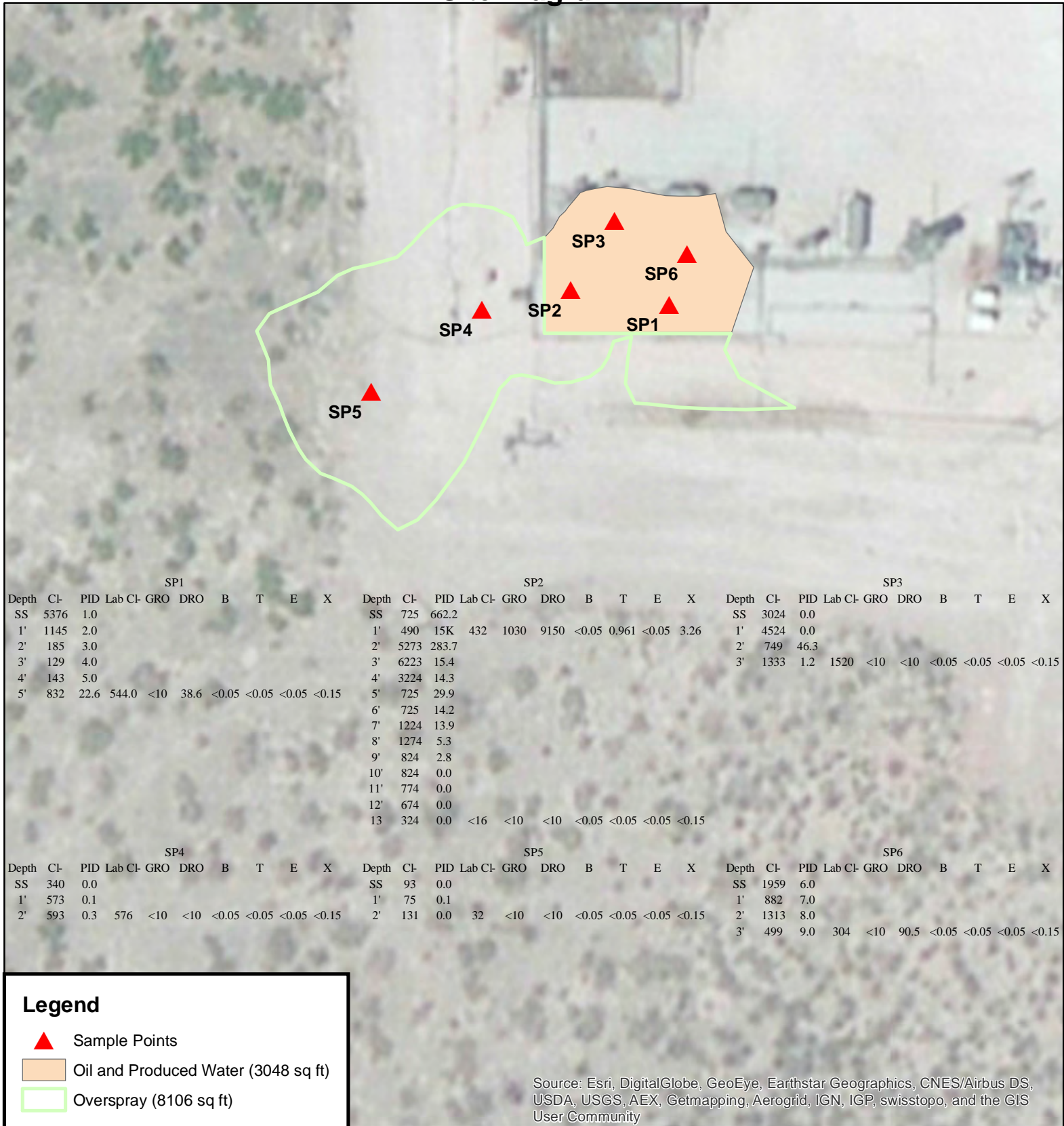
Michael Alves
Environmental Supervisor | Diversified Field Service, Inc.
206 West Snyder | Hobbs, NM 88240
Office: (575)964-8394 | Mobile: (575)631-3364
Fax: (575)964-8396 | Email: malves@diversifiedfsi.com

Cc: Shelly Tucker, BLM

Figures: Site Diagram
Proposed Work

Appendices: Initial C-141
Site Photos
Laboratory Analysis
Groundwater Study

Site Diagram



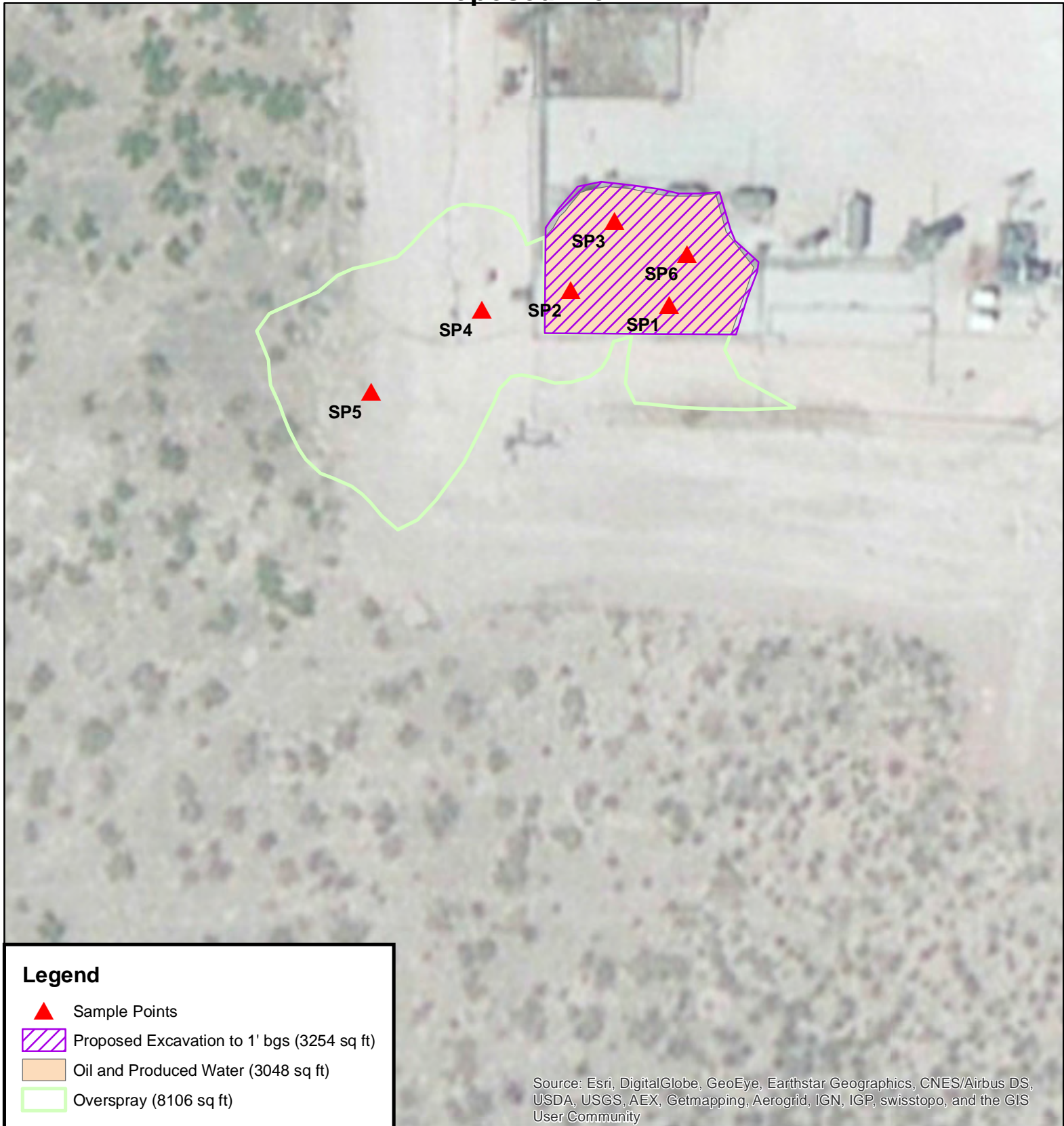
Hudson Federal Tank Battery #001
Unit Letter F, Section 1, T23S, R30E
Eddy County, NM
API #: 30-015-21052
NMOCD Case #: 2R-3956

Figure 1



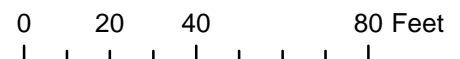
0 20 40 80 Feet

Proposed Work



Hudson Federal Tank Battery #001
Unit Letter F, Section 1, T23S, R30E
Eddy County, NM
API #: 30-015-21052
NMOCD Case #: 2R-3956

Figure 2



Appendix I

INITIAL C-141

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394

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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 21 2016

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

7AB1629852573 **OPERATOR** ☒ Initial Report ☐ Final Report

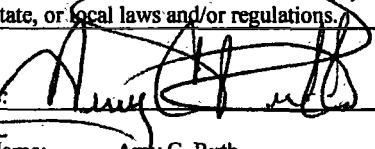
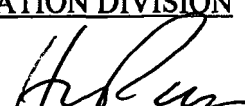
Name of Company: BOPCO, L.P.	Contact: Amy Ruth	
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No. 575-887-7329	
Facility Name: Hudson Federal Battery #1 (at Hudson Federal well #7)	Facility Type: Exploration and Production	
Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-31513

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	1	23S	30E	2000	North	1875	West	Eddy

Latitude 32.335761° Longitude -103.836860°

NATURE OF RELEASE

Type of Release	Crude oil and produced water	Volume of Release	9 bbls Oil 24 bbls PW	Volume Recovered	3 bbls Oil 12 bbls PW
Source of Release	Ruptured Gasket	Date and Hour of Occurrence	10/3/2016 time unknown	Date and Hour of Discovery	10/3/2016 approx. 10 am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher and Heather Patterson		
By Whom?	Amy Ruth	Date and Hour	10/3/2016 4:46 pm by email		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		
If a Watercourse was Impacted, Describe Fully.* N/A					
Describe Cause of Problem and Remedial Action Taken.* Release of fluids was the result of a ruptured gasket on a gas supply pot. The vessel was isolated for repairs.					
Describe Area Affected and Cleanup Action Taken.* Leak affected approximately 5,000 square feet of misted pasture area west of the battery and 3670 square feet of caliche pad and earthen containment. Free standing fluids within the earthen containment were recovered via vacuum truck and Micro-Blaze was applied to the pasture area.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.					
Signature: 		OIL CONSERVATION DIVISION			
Printed Name: Amy C. Ruth		Approved by Environmental Specialist: 			
Title: EHS Remediation Specialist		Approval Date: 10/24/16		Expiration Date: N/A	
E-mail Address: ACRuth@basspet.com		Conditions of Approval: Remediation per O.C.D. Rules & Guidelines <input type="checkbox"/> Attached <input type="checkbox"/>			
Date: 10/21/2016 Phone: 432-661-0571		SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 11/24/16			

* Attach Additional Sheets If Necessary

2RP-3956

Appendix II

SITE PHOTOS

HUDSON FEDERAL TANK BATTERY #001

PHOTO PAGE



Collecting sample



Collecting sample



Collecting sample



Collecting sample

Appendix III

LABORATORY ANALYSES

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

March 22, 2017

MICHAEL ALVES

DIVERSIFIED FIELD SERVICES, INC.

P. O. BOX 5966

HOBBS, NM 88241

RE: HUDSON 7 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 03/21/17 10:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC.
MICHAEL ALVES
P. O. BOX 5966
HOBBS NM, 88241
Fax To: (575) 393-2981

Received: 03/21/2017
Reported: 03/22/2017
Project Name: HUDSON 7 BATTERY
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 03/21/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP1 @ 5' (H700729-01)

BTEX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2017	ND	2.01	100	2.00	1.83	
Toluene*	<0.050	0.050	03/21/2017	ND	1.91	95.5	2.00	1.26	
Ethylbenzene*	<0.050	0.050	03/21/2017	ND	1.93	96.3	2.00	1.98	
Total Xylenes*	<0.150	0.150	03/21/2017	ND	5.52	91.9	6.00	2.10	
Total BTEX	<0.300	0.300	03/21/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	03/21/2017	ND	416	104	400	3.77	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/21/2017	ND	199	99.3	200	1.21	
DRO >C10-C28	38.6	10.0	03/21/2017	ND	204	102	200	2.04	

Surrogate: 1-Chlorooctane 84.8 % 25.1-158

Surrogate: 1-Chlorooctadecane 90.9 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC.
MICHAEL ALVES
P. O. BOX 5966
HOBBS NM, 88241
Fax To: (575) 393-2981

Received: 03/21/2017
Reported: 03/22/2017
Project Name: HUDSON 7 BATTERY
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 03/21/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP2 @ 1' (H700729-02)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2017	ND	2.01	100	2.00	1.83	
Toluene*	0.961	0.050	03/21/2017	ND	1.91	95.5	2.00	1.26	
Ethylbenzene*	<0.050	0.050	03/21/2017	ND	1.93	96.3	2.00	1.98	
Total Xylenes*	3.26	0.150	03/21/2017	ND	5.52	91.9	6.00	2.10	
Total BTX	4.22	0.300	03/21/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	03/21/2017	ND	416	104	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
									S-04

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1030	10.0	03/21/2017	ND	199	99.3	200	1.21	
DRO >C10-C28	9150	10.0	03/21/2017	ND	204	102	200	2.04	

Surrogate: 1-Chlorooctane 176 % 25.1-158

Surrogate: 1-Chlorooctadecane 218 % 26.8-170

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 DIVERSIFIED FIELD SERVICES, INC.
 MICHAEL ALVES
 P. O. BOX 5966
 HOBBS NM, 88241
 Fax To: (575) 393-2981

 Received: 03/21/2017
 Reported: 03/22/2017
 Project Name: HUDSON 7 BATTERY
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/21/2017
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP3 @ 3' (H700729-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2017	ND	2.01	100	2.00	1.83	
Toluene*	<0.050	0.050	03/21/2017	ND	1.91	95.5	2.00	1.26	
Ethylbenzene*	<0.050	0.050	03/21/2017	ND	1.93	96.3	2.00	1.98	
Total Xylenes*	<0.150	0.150	03/21/2017	ND	5.52	91.9	6.00	2.10	
Total BTX	<0.300	0.300	03/21/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	03/21/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/21/2017	ND	199	99.3	200	1.21	
DRO >C10-C28	<10.0	10.0	03/21/2017	ND	204	102	200	2.04	

Surrogate: 1-Chlorooctane 84.4 % 25.1-158

Surrogate: 1-Chlorooctadecane 87.7 % 26.8-170

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC.
MICHAEL ALVES
P. O. BOX 5966
HOBBS NM, 88241
Fax To: (575) 393-2981

Received: 03/21/2017
Reported: 03/22/2017
Project Name: HUDSON 7 BATTERY
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 03/21/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: SP4 @ 2' (H700729-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2017	ND	2.01	100	2.00	1.83	
Toluene*	<0.050	0.050	03/21/2017	ND	1.91	95.5	2.00	1.26	
Ethylbenzene*	<0.050	0.050	03/21/2017	ND	1.93	96.3	2.00	1.98	
Total Xylenes*	<0.150	0.150	03/21/2017	ND	5.52	91.9	6.00	2.10	
Total BTEX	<0.300	0.300	03/21/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	03/21/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/21/2017	ND	199	99.3	200	1.21	
DRO >C10-C28	<10.0	10.0	03/21/2017	ND	204	102	200	2.04	

Surrogate: 1-Chlorooctane 85.6 % 25.1-158

Surrogate: 1-Chlorooctadecane 87.4 % 26.8-170

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 DIVERSIFIED FIELD SERVICES, INC.
 MICHAEL ALVES
 P. O. BOX 5966
 HOBBS NM, 88241
 Fax To: (575) 393-2981

 Received: 03/21/2017
 Reported: 03/22/2017
 Project Name: HUDSON 7 BATTERY
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 03/21/2017
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: SP5 @ 2' (H700729-05)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/21/2017	ND	2.01	100	2.00	1.83	
Toluene*	<0.050	0.050	03/21/2017	ND	1.91	95.5	2.00	1.26	
Ethylbenzene*	<0.050	0.050	03/21/2017	ND	1.93	96.3	2.00	1.98	
Total Xylenes*	<0.150	0.150	03/21/2017	ND	5.52	91.9	6.00	2.10	
Total BTX	<0.300	0.300	03/21/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/21/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/21/2017	ND	199	99.3	200	1.21	
DRO >C10-C28	<10.0	10.0	03/21/2017	ND	204	102	200	2.04	

Surrogate: 1-Chlorooctane 75.5 % 25.1-158

Surrogate: 1-Chlorooctadecane 76.9 % 26.8-170

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

RUSH

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: <i>DFS1</i>				BILL TO				ANALYSIS REQUEST																											
Project Manager: <i>MICHAEL ALVES</i>				P.O. #: <i>8192</i>																															
Address: <i>* BILL LAB FEES TO XTO *</i>				Company: <i>DFS1</i>																															
City:		State:		Zip:		Attn:																													
Phone #:		Fax #:		Address: <i>* RUSH FEES *</i>		City:																													
Project #:		Project Owner:		State:		Zip:																													
Project Name:				Phone #:		Fax #:																													
Project Location: <i>HUDSON 7 BATT</i>																																			
Sampler Name: <i>EUSAN RASCON</i>																																			
FOR LAB USE ONLY																																			
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME		TPH		BTEX		CI-	
<i>H700729</i>		<i>SP1@5'</i>		<i>G</i>		<i>1</i>						<i>X</i>								<i>X</i>		<i>3-21-17</i>		<i>859</i>		<i>X</i>		<i>X</i>		<i>X</i>					
		<i>SP2@1'</i>																				<i>908</i>													
		<i>SP3@3'</i>																				<i>850</i>													
		<i>SP4@2'</i>																				<i>832</i>													
		<i>SP5@2'</i>																				<i>836</i>													

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Relinquished By: <i>[Signature]</i>		Date: <i>3-21-17</i>		Received By:		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Time: <i>1040</i>		Date: <i>3-21-17</i>		Received By: <i>Jamara Oldaker</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Time: <i>10:40</i>		Time: <i>10:40</i>		Sample Condition		REMARKS: <i>BILL RUSH FEES TO DFS1</i>			
Delivered By: (Circle One)		Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials)		<i>RUSH</i>			
Sampler - UPS - Bus - Other:		<i>22.8c</i>		<i>TD- #75</i>		<i>EMAIL ALL</i>			
						<i>* ERASCON@DIVERSIFIEDDFS1.COM</i>			
						<i>Brought Straight to Lab from Field</i>			



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 20, 2017

MICHAEL ALVES

DIVERSIFIED FIELD SERVICES, INC.

P. O. BOX 5966

HOBBS, NM 88241

RE: HUDSON TANK BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/19/17 8:26.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC.
MICHAEL ALVES
P. O. BOX 5966
HOBBS NM, 88241
Fax To: (575) 393-2981

Received:	06/19/2017	Sampling Date:	06/16/2017
Reported:	06/20/2017	Sampling Type:	Soil
Project Name:	HUDSON TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: SP 2 @ 13' (H701575-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/19/2017	ND	1.98	99.2	2.00	0.678	
Toluene*	<0.050	0.050	06/19/2017	ND	1.88	93.9	2.00	2.14	
Ethylbenzene*	<0.050	0.050	06/19/2017	ND	1.98	98.8	2.00	0.672	
Total Xylenes*	<0.150	0.150	06/19/2017	ND	5.31	88.4	6.00	0.551	
Total BTX	<0.300	0.300	06/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/19/2017	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/19/2017	ND	187	93.7	200	3.52	
DRO >C10-C28	<10.0	10.0	06/19/2017	ND	192	96.2	200	3.54	

Surrogate: 1-Chlorooctane 57.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 44.8 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

DIVERSIFIED FIELD SERVICES, INC.
MICHAEL ALVES
P. O. BOX 5966
HOBBS NM, 88241
Fax To: (575) 393-2981

Received:	06/19/2017	Sampling Date:	06/16/2017
Reported:	06/20/2017	Sampling Type:	Soil
Project Name:	HUDSON TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO NM		

Sample ID: SP 6 @ 3' (H701575-02)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/19/2017	ND	1.98	99.2	2.00	0.678		
Toluene*	<0.050	0.050	06/19/2017	ND	1.88	93.9	2.00	2.14		
Ethylbenzene*	<0.050	0.050	06/19/2017	ND	1.98	98.8	2.00	0.672		
Total Xylenes*	<0.150	0.150	06/19/2017	ND	5.31	88.4	6.00	0.551		
Total BTEx	<0.300	0.300	06/19/2017	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 72-148

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	06/19/2017	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/19/2017	ND	187	93.7	200	3.52	
DRO >C10-C28	90.5	10.0	06/19/2017	ND	192	96.2	200	3.54	

Surrogate: 1-Chlorooctane 68.7 % 28.3-164

Surrogate: 1-Chlorooctadecane 56.3 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

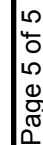
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Celey D. Keene, Lab Director/Quality Manager



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† Cardinal cannot accept verbal changes. Please fax written changes to (875) 902.2226

Appendix IV

GROUNDWATER STUDY

Diversified Field Service, Inc.
206 W. Snyder
Hobbs, NM 88240
(575) 964-8394



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 Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
C 02492			ED	4	4	4	06	23S	31E	612056	3577320*	135	85	50
C 02492 POD2		C	ED	3	2	2	07	23S	31E	611767	3576996	400	125	275
C 02865			ED	4	4	4	06	23S	31E	612056	3577320*	174		
C 03520 POD1		C	ED	3	1	1	07	23S	31E	610733	3576905	500		

Average Depth to Water: 105 feet

Minimum Depth: 85 feet

Maximum Depth: 125 feet

Record Count: 4

PLSS Search:

Section(s): 6, 7

Township: 23S

Range: 31E

*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.

6/21/17 9:25 AM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



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 Number	Code	POD Sub-basin	County	Q 6	Q 4	Q 3	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
C 02638			ED	4	3	3	35	22S	30E	607558	3578948*	528		
C 03561 POD1		CUB	ED	3	2	3	36	22S	30E	609288	3579393	30	0	30
C 03561 POD2		CUB	ED	3	2	3	36	22S	30E	609314	3579424	25	0	25
C 03561 POD3		CUB	ED	3	2	3	36	22S	30E	609393	3579425	25	0	25
C 03561 POD4		CUB	ED	3	2	3	36	22S	30E	609419	3579425	25	0	25
C 03561 POD5		CUB	ED	3	2	3	36	22S	30E	609419	3579425	20	0	20

Average Depth to Water: 0 feet

Minimum Depth: 0 feet

Maximum Depth: 0 feet

Record Count: 6

PLSS Search:

Section(s): 35, 36

Township: 22S

Range: 30E

*UTM location was derived from PLSS - see Help

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6/21/17 9:25 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

No records found.

PLSS Search:

Section(s): 31

Township: 22S

Range: 31E

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6/21/17 9:25 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER