OXY USA, Inc.
Cotton Draw Unit # 30
Delineation Report and Work Plan

Section 21, T25S, R32E
Lea County, New Mexico

November 11, 2014

Prepared for:

OXY USA, Inc.
1017 W Stanolind Road
Hobbs, New Mexico 88240

By:

Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240
(575) 397-0510

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I. Company Contacts

Representative	Company	Telephone	E-mail
Austin Tramell	OXY USA, INC.	575-499-4919	Austin_Tramell@oxy.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by OXY USA, INC to perform site assessment of a release area at the Cotton Draw Unit #30 located in Section 21 of Township 25 South, Range 32 East, Lea County, New Mexico. The cause of the release as stated in the C-141 located in Appendix B was corrosion. The line has been repaired and no fluid was recovered.

III. Surface and Ground Water

The nearest groundwater of record is approximately 3 miles Southeast of the site. The New Mexico Office of State Engineer record is in Section 05 Range 32 East and Township 24 South. The reported depth was 380 feet below ground surface (BGS).

IV. Characterization

The target cleanup levels are determined using the *Guidelines for Remediation of Leaks, Spills and Releases* published by the NMOCD (August 13, 1993). Based on the ranking criteria presented below, the applicable Recommended Remediation Action Levels (RRAL) are 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 5,000 ppm Total Petroleum Hydrocarbons (TPH).

Depth to Ground Water:			
(Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	20 points	
	50 feet to 99 feet	10 points	
	>100 feet	0 points	**X**
Wellhead Protection Area:			
(Less than 200 feet from a private domestic water source; or less than 1000 feet from all other water sources)	Yes	20 points	
	No	0 points	**X**
Distance to Surface Water:			
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	20 points	
	200 feet to 1000 feet	10 points	
	>1000 feet	0 points	**X**
RANKING SCORE (TOTAL POINTS)			**0**

V. Work Performed

On September 30, 2014 SESI was onsite to perform a site assessment. Site photos were taken.

On October 10, 2014, SESI was onsite to determine vertical extent of contamination using a hand auger to collect samples.

On October 23, 2014, SESI, along with Custom Welding were on site to install (2) two test trenches to determine vertical extent of contamination.

All samples were properly packaged, preserved and transported to Cardinal Laboratories, Hobbs New Mexico and analyzed for Chloride (Cl^-) (Method SM4500Cl-B). The results of the analysis are presented in the table below:

Lab ID	Sample ID	Cl (mg/kg)
Analysis Date:	**-**	
10-28-2014	SP-1	<16.0
10-28-2014	SP-2	<16.0
10-28-2014	SP-3	<16.0
10-28-2014	SP-5	<16.0
10-28-2014	SP-6	<16.0
10-28-2014	SP-7	<16.0
10-28-2014	SP-8	<16.0
10-28-2014	TT-1 @ 3' BGS	240
10-28-2014	TT-2 @ 3' BGS	<16.0

VI. Action Plan

Due to the extreme depth to groundwater the following action plan is proposed:

1. All contaminated soil with a chloride concentration over 1,000 PPM will be removed and transported to an approved NMOCD facility for disposal.
2. The excavated area will be backfilled with native soil and returned to natural grade.
3. No further action is necessary.

VII. Figures & Appendices

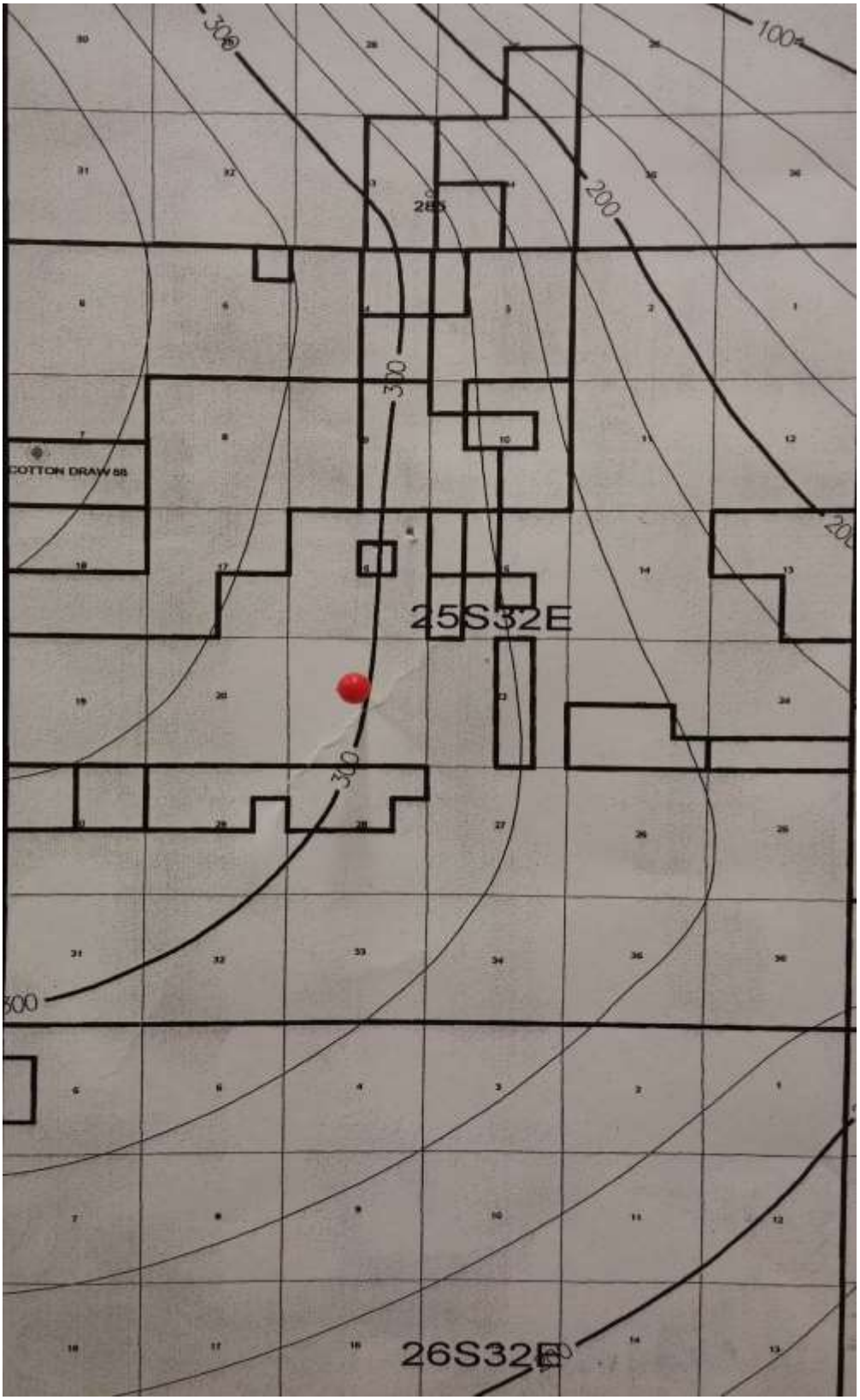
Figure 1 – Vicinity Map
Figure 2 – Site Plan
Figure 3 – NMOCD Trend Map
Appendix A – Analytical Results
Appendix B – C-141

Figure 1
Vicinity Map

Figure 2
Site Plan

Cotton Draw #30

Figure 3
NMOCD Trend Map


300
100
200
300
300
300
COTTON DRAW SS
25S32E
26S32E

Appendix A
Analytical Results

CARDINAL Laboratories

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

October 31, 2014

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: COTTON DRAW UNIT #30

Enclosed are the results of analyses for samples received by the laboratory on 10/28/14 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 accreditated through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	10/28/2014	Sampling Date:	10/23/2014
Reported:	10/31/2014	Sampling Type:	Soil
Project Name:	COTTON DRAW UNIT #30	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-0	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SP-1 (H403301-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: SP-2 (H403301-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: SP-3 (H403301-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: SP-5 (H403301-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	10/28/2014	Sampling Date:	10/23/2014
Reported:	10/31/2014	Sampling Type:	Soil
Project Name:	COTTON DRAW UNIT #30	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-0	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SP-6 (H403301-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: SP-7 (H403301-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: SP-8 (H403301-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: TT-1 3' BGS (H403301-08)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	10/28/2014	ND	400	100	400	0.00	

Sample ID: TT-2 3' BGS (H403301-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/28/2014	ND	400	100	400	0.00	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 Fax (505) 393-2476

Page ____ of ____

Company Name:	Safety & Environmental Solutions, Inc.	BILL TO	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton	Company:	~~Same~~ OXY
City:	Hobbs State: NM Zip: 88240	Attn:	Bacon, Jordan
Phone #:	575-397-0510 Fax #: 575-393-4388	Address:	6 Desta Dr. Suite 6000
Project #:	OXY-14-0 Project Owner: OXY	City:	Midland
Project Name:	Cotton Draw Unit #30	State:	TX Zip: 79710
Project Location:	Lea County	Phone #:	432-685-5932
Sampler Name:	Sosa, Jerry	Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV: ACID/BASE	ICE / COOL	OTHER	SAMPLING: DATE	TIME
H403301														
1	SP-1	G	1			X					X		10/23	1330
2	SP-2	G	1			X					X		10/23	1347
3	SP-3	G	1			X					X		10/23	1420
~~4~~	~~SP-4~~	G	1			X					X		10/23	1430
~~5~~ 4	SP-5	G	1			X					X		10/23	1440
~~6~~ 5	SP-6	G	1			X					X		10/23	1500
~~7~~ 6	SP-7	G	1			X					X		10/23	1510
~~8~~ 7	SP-8	G	1			X					X		10/23	1520
~~9~~ 8	TT-1 3' BGS	G	1			X					X		10/23	1150
~~10~~ 9	TT-2 3' BGS	G	1			X					X		10/23	1240

XXXXXXXXXX Cl Circles

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts over than 30 days past due at the rate of 18% per annum from the original date of invoice and all costs of collection, including attorney's fees.

Samples Relinquished:	Date: 10/28/14	Received By:	Jodi Henson
Sosa Jerry	Time: 0800		
Relinquished By:	Date:	Received By:	
	Time:		

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

Delivered By: (Circle One)	Temp.	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	5.2°	Cool / Intact ☑ Yes ☑ Yes ☐ No ☐ No	(Initials)

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

#54

Appendix B
C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Oxy USA Inc.	Contact Austin Tramell
Address 1017 W. Stanolind Rd, Hobbs, NM	Telephone No. (575) 499-4919
Facility Name Cotton Draw Unit 30	Facility Type Gathering

Surface Owner BLM	Mineral Owner	Lease No. 30-025-08213

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	21	25S	32E	1980'	North	660'	West	Lea

Latitude N 32.11768° **Longitude** W -103.68178°

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 10 bbls	Volume Recovered 0 bbls
Source of Release flowline leak	Date and Hour of Occurrence 09/11/14 08:00 AM	Date and Hour of Discovery 09/11/14 08:00AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Tomas, Oberding NMOCD, Sol Hughes BLM	
By Whom? Austin Tramell	Date and Hour 09/13/14 @ 12:00PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Leak in 2.5" injection flowline due to corrosion. Line was repaired. No fluid was able to be recovered
.

Describe Area Affected and Cleanup Action Taken.*

The affected area was approximately 50' x 50' in the pasture. Deleniation will take place at a later date by SESI according to NMOCD and BLM guidelines.

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: Austin Tramell	Approved by District Supervisor:
Title: HES Operations Specialist	Approval Date: / Expiration Date:
E-mail Address: Austin_Tramell@oxy.com	Conditions of Approval: / Attached ☐
Date: Phone: (575) 499-4919	

* Attach Additional Sheets If Necessary

Appendix C
Site Photographs

Appendix D
NMOSE Water Column/Average Depth to Water

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

No records found.

PLSS Search:

Section(s): 21 **Township:** 25S **Range:** 32E

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.

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

No records found.

PLSS Search:

Section(s): 15, 16, 17, 20, 22, 27, 28, 29 **Township:** 25S **Range:** 32E

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New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 7, 8, 9, 10, 11, 14, 18, 19, 23, 26, 30, 31, 32, 33, 34, 35 **Township:** 25S **Range:** 32E

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New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 1, 2, 3, 4, 5, 6, 12, 13, 24, 25, 36 **Township:** 25S **Range:** 32E

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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	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02568		ED	4	3	1	01	25S	31E	619103	3558892*	1025		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

PLSS Search:

Section(s): 1, 12, 13, 24, 25, 36 **Township:** 25S **Range:** 31E

***UTM location was derived from PLSS - see Help**

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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	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 03527 POD1	C	LE	1	2	3	03	24S	32E	625770	3568487	500		
C 03555 POD1	C	LE	2	2	1	05	24S	32E	622709	3569231	600	380	220

Average Depth to Water: **380 feet**

Minimum Depth: **380 feet**

Maximum Depth: **380 feet**

Record Count: 2

PLSS Search:

Section(s): 1, 2, 3, 4, 5, 6 **Township:** 24S **Range:** 32E

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