

NM OIL CONSERVATION
ARTESIA DISTRICT

Form 3160-4
(August 2007)

MAR 08 2018

UNITED STATES

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
GCD Artesia

FORM APPROVED
Form No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND

File Serial No.
NMNM88137

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other			6. If Indian, Allottee or Tribe Name		
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____			7. Unit or CA Agreement Name and No. NMNM137341		
2. Name of Operator OXY USA INCORPORATED			8. Lease Name and Well No. CEDAR CANYON 22-15 FEDERAL COM 34H		
3. Address 5 GREENWAY PLAZA SUITE 110 HOUSTON, TX 77046-0521			9. API Well No. 30-015-44055-00-S1		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 22 T24S R29E Mer NMP At surface NENE 1107FNL 1022FEL 32.207199 N Lat, 103.967055 W Lon Sec 22 T24S R29E Mer NMP At top prod interval reported below NENE 975FNL 405FEL 32.207541 N Lat, 103.964980 W Lon Sec 15 T24S R29E Mer NMP At total depth NENE 166FNL 399FEL 32.224331 N Lat, 103.964986 W Lon			10. Field and Pool, or Exploratory PIERCE CROSSING-BONE SPRING, E UNKNOWN		
14. Date Spudded 03/08/2017			15. Date T.D. Reached 03/31/2017		
16. Date Completed ☐ D & A ☒ Ready to Prod. 05/24/2017			17. Elevations (DF, KB, RT, GL)* 2936 GL		
18. Total Depth: MD 16100 TVD 9970		19. Plug Back T.D.: MD 16037 TVD 9970		20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) MUDLOG			22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)		

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
14.750	10.750 J55	45.5	0	441		625	183	0	
9.875	7.625 L80	29.7	0	9481	3076	1350	699	0	
6.750	4.500 P110	13.5	9355	16091		660	192	9355	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING 3RD	9980	15931	9980 TO 15931	0.420	696	ACTIVE
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9980 TO 15931	8933946G SLICK WATER + 44982G 7.5% HCL ACID + 89922G CROSSLINK + 1134G LINEAR GEL

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
05/25/2017	06/21/2017	24	→	1631.0	3378.0	3809.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
40/64	SI	1950.0	→	1631	3378	3809	2071	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
05/25/2017	06/21/2017	24	→	1631.0	3378.0	3809.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
40/64	SI	1950.0	→	1631	3378	3809	2071	POW	

ACCEPTED FOR RECORD

MAR 5 2018
musta Hugel
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #381669 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Reclamation Due by 11-24-2017

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
BELL CANYON	3057	3763	OIL, GAS, WATER	RUSTLER	186
CHERRY CANYON	3764	5169	OIL, GAS, WATER	SALADO	721
BRUSHY CANYON	5170	6741	OIL, GAS, WATER	CASTILE	1432
BONE SPRING	6742	7780	OIL, GAS, WATER	DELAWARE	3018
BONE SPRING 1ST	7781	8041	OIL, GAS, WATER	BELL CANYON	3057
BONE SPRING 2ND	8042	8933	OIL, GAS, WATER	CHERRY CANYON	3764
BONE SPRING 3RD	8934	9970	OIL, GAS, WATER	BRUSHY CANYON	5170
				BONE SPRING	6742

32. Additional remarks (include plugging procedure):
FORMATION (LOG) MARKERS CONTD:

1ST BONE SPRING 7781' MD
2ND BONE SPRING 8042' MD
3RD BONE SPRING 8934' MD

Logs were mailed 7/19/17.

Log Header, Directional Survey, As-Drilled Amended C-102 plat & WBD are attached.

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7. Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #381669 Verified by the BLM Well Information System.
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH HAM on 08/04/2017 (17DMH0150SE)

Name (please print) DAVID STEWART

Title REGULATORY ADVISOR

Signature _____ (Electronic Submission)

Date 07/18/2017

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

Additional data for transaction #381669 that would not fit on the form

32. Additional remarks, continued

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 08 2018

State of New Mexico
Energy, Minerals & Natural Resources Department
RECEIVED OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

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) 748-0720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

☒ AMENDED REPORT
(As-Drilled)

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-44055	Pool Code 96473	Pool Name Pierce Crossing Bone Spring, East
Property Code 317389	Property Name CEDAR CANYON "22-15" FEDERAL COM	Well Number 34H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 2935.6'

Surface Location

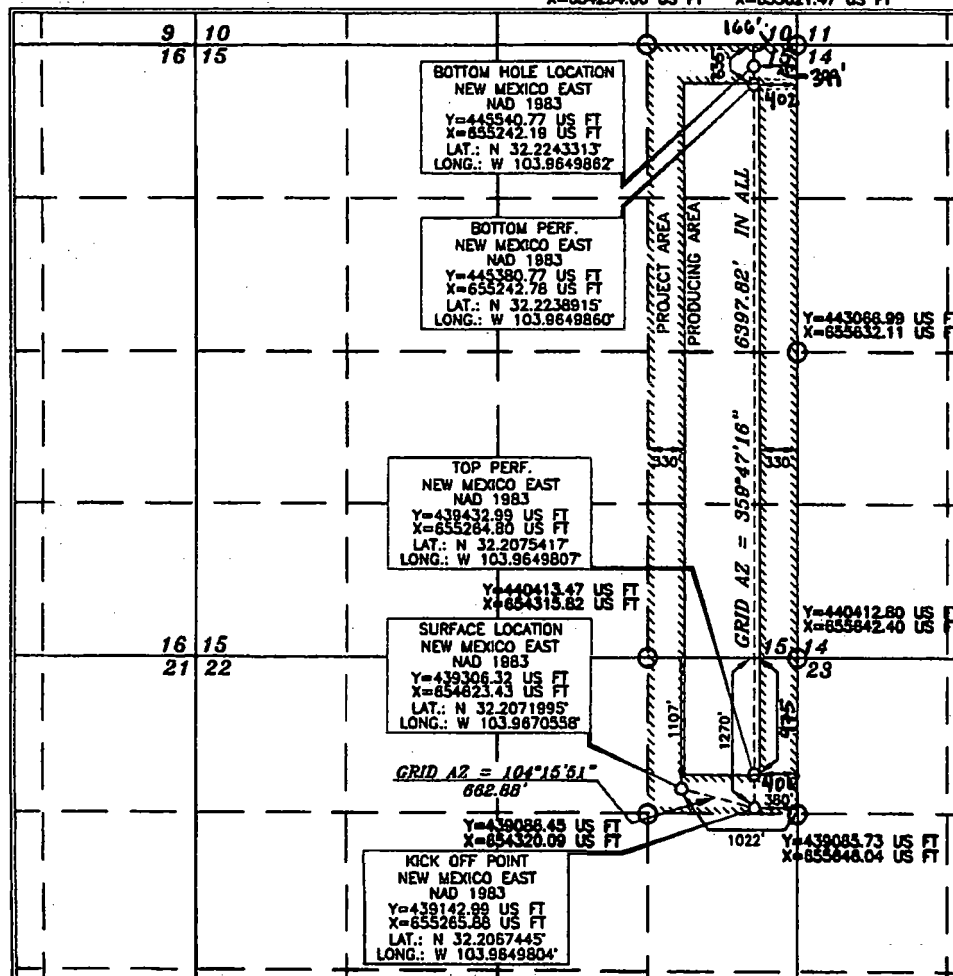
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	22	24 SOUTH	29 EAST, N.M.P.M.		1107'	NORTH	1022'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	15	24 SOUTH	29 EAST, N.M.P.M.		180' 166'	NORTH	399' 399'	EAST	EDDY
Dedicated Acres 200	Joint or Infill Y	Consolidation Code	Order No.	Bottom Perf - 335 FNL 402 FEL Top Perf - 975 FNL 405 FEL					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

Y=445722.18 US FT X=854284.66 US FT
Y=445720.21 US FT X=855621.47 US FT



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the Division.

Signature: [Signature] Date: 5/25/17
Printed Name: Jana Mendiola
Email Address: jana_mendiola@oxy.com

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from the best of my knowledge and belief, and that the same is true and correct to the best of my belief.

Date of Survey: APRIL 26, 2016
Signature and Seal: [Signature]
Professional Surveyor: 15079
Certificate Number: 15079

WEATHERFORD SLS

COMPANY: OXY USA, INC.

WELL: CEDAR CANYON 22-15 FED COM 34H

LOCATION: 1107' FNL & 1022' FEL SECTION 22, T24S R29E

COUNTY: EDDY STATE: NEW MEXICO

GL: 2936' KB: 2962.1'

Start Date 03/23/2017 End Date 04/03/2017

Start Depth 9500' End Depth 16100'

API NO: 30015440550000

FILE: OXY-CEDAR-CANYON-22-15-FED-COM-34H.mlw

LOGGERS: THOMAS L. RAWLS, BOB BEARD

GEOLOGIST: SUMIYAH AHMED

Sand	Dolo	Lime	Chert	Anhydrite
Shale	Carb Sh	Salt	Granite	Siltstone
Coal	Bentonite	Granite Wash	Quartz Wash	
Carb Wash	Conglomerate	Cement		

ACCESSORIES

GLAUC'C	PYRITE	FOSSILS	OOLITES	FRACTURES
---------	--------	---------	---------	-----------

TG ----- 1 to 10000

C1 _____

C2 _____

C3 -----

IC4 _____

NC4 _____

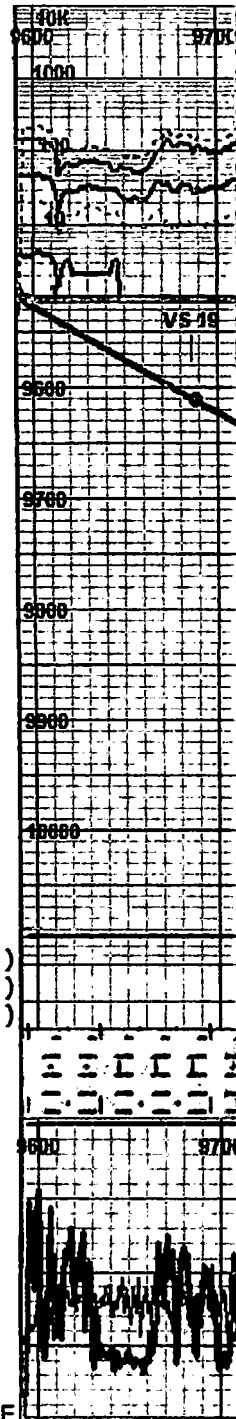
Horz _____

Rop _____ 1 to 2.5

Gamma _____ 1 to 150

CUT (PFG)
FLU 0-100% (PFG)
POR (PFG)

SLIDE



WEATHERFORD SLS

XY USA, INC.

EDAR CANYON 22-15 FED COM 34H

7' FNL & 1022' FEL. SECTION 22, T24S R29E

DDY STATE: NEW MEXICO

WB: 2962.1'

23/2017 End Date 04/03/2017

9500' End Depth 16100'

15440550000

-CEDAR-CANYON-22-15-FED-COM-34H.mlw

THOMAS L. RAWLS, BOB BEARD

SUMIYYAH AHMED

Lime Chert Anhydrite
 Sh Salt Granite Siltstone
 tonite Granite Wash Quartz Wash
 conglomerate Cement

FTE FOSSILS OOLITES FRACTURES
 1 1 1 1

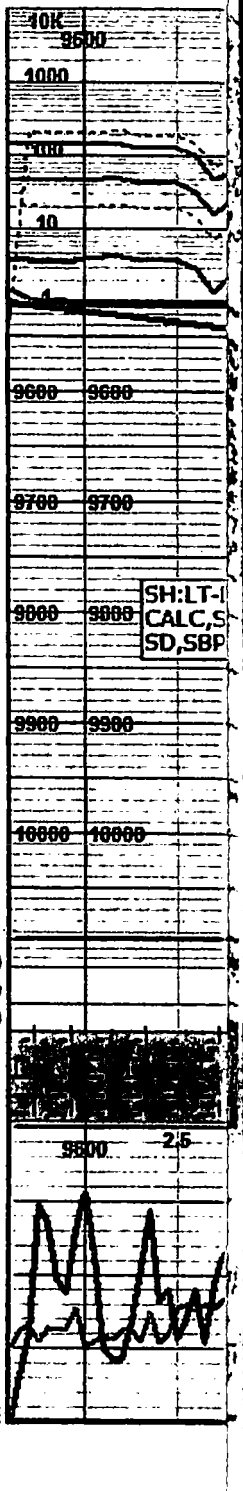
10000

CUT (P F G)
 FLU 0-100% (P F G)
 POR (P F G)

1 to 2.5

1 to 150

SLIDE





Weatherford®

Surface Logging Systems

10000 Pilot/P.O. Box 80531
Midland, TX/Midland, TX
79708/79708
432.561.8892 Main
432.561.8895 Fax

COMPANY: OXY USA, INC.

WELL: CEDAR CANYON 22-15 FED COM 34H

FIELD: CEDAR CANYON

COUNTY: EDDY STATE: NEW MEXICO

LOCATION: 1107' FNL & 1022' FEL. SECTION 22, T24S R29E

Spud Date: 03/08/2017

Started: 03/23/2017 At: 9500'

Ended: 04/03/2017 At: 16100'

Api No.: 30015440550000

G.L.: 2936'

K.B.: 2962.1'

Logging Personnel:

THOMAS L. RAWLS

BOB BEARD

Unit No.: SLS - 078

Rig: H&P 639

Filename: OXY-CEDAR-CANYON-22-15-FED-COM-34H.mlw

Geologist: SUMIYYAH AHMED

Abbreviations:

NB...New Bit	DST...Drill Stem Test
CO...Circ Out	DS...Directional Survey
NR...No Returns	CG...Connection gas
TG...Trip Gas	LAT...Logged After Trip
WOB...Wt on Bit	PP...Pump Pressure
RPM...Rev/Min	SPM...Strokes/Min
SG...Survey Gas	DTG...Down Time Gas

Mud Data

Lithology Symbols:

	Anhydrite		Salt		Granite
	Siltstone		Chert		Sandstone
	Dolomite		Conglomerate		Limestone
	Coal		Shale		Bentonite
	Carb Shale		Granite Wash		Quartz Wash
	Red Sh		Org Sh		Green Sh
	Cust Sh1		Cust Sh2		Cust Sh3
	Cust Sh4		Cust Sh5		Cust Sh6

Accessories

Gas Chromatograph Analysis:

TG	-----
C1	_____
C2	_____
C3	-----
IC4	_____
NC4	_____
IC5	_____
NC5	_____



Weatherford®

Surface Logging Systems

10000 Pilot/P.O. Box 80531
Midland, TX/Midland, TX
79706/79708
432.561.8892 Main
432.561.8895 Fax

Logging Personnel:

THOMAS L. RAWLS

BOB BEARD

Unit No.: SLS - 078

Rig: H&P 639

Filename: OXY-CEDAR-CANYON-22-15-FED-COM-34H.mtw

COMPANY: OXY USA, INC.

WELL: CEDAR CANYON 22-15 FED COM 34H

FIELD: CEDAR CANYON

COUNTY: EDDY STATE: NEW MEXICO

LOCATION: 1107' FNL & 1022' FEL. SECTION 22, T24S R29E

Spud Date: 03/08/2017

Started: 03/23/2017 At: 9500'

Ended: 04/03/2017 At: 16100'

Api No.: 30015440550000

G.L.: 2936'

K.B.: 2962.1'

Geologist: SUMIYYAH AHMED

Abbreviations:

NB...New Bit	DST...Drill Stem Test
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WOB...Wt on Bit	PP...Pump Pressure
RPM...Rev/Min	SPM...Strokes/Min
SG...Survey Gas	DTG...Down Time Gas

Mud Data

Lithology Symbols:



Accessories

Gas Chromatograph Analysis:

TG	-----
C1	_____
C2	_____
C3	-----
IC4	_____
NC4	_____
IC5	_____
NC5	-----

Schlumberger

Reservoir Development
Schlumberger Drilling and Measurements
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

Well Reference:
22, 24S, 29E, Eddy NM
-32.20720 -103.96706

I, Kalu Uga certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of March 18, 2017 through March 31, 2017, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 684.00 feet to a depth of 16058.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY USA INC. for the Cedar Canyon "22-15" Federal Com 34H Well (Original Hole) API No. 30-015-44055 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Kalu Uga
FS

Subscribed and Sworn to before me this

3rd

day of

April

(month)

2017

(yr)

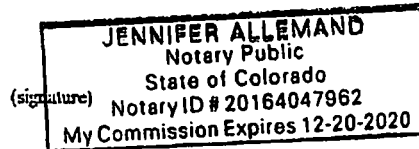
My Commission expires:

12-20-2020

Notary Public

(Country State)

J. Allemand
Blaine Co, Colorado



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Cedar Canyon 22-16 Federal Com 34H	NM Eddy County (NAD 83)	Oxy Cedar Canyon 22-16 Federal Com 34H

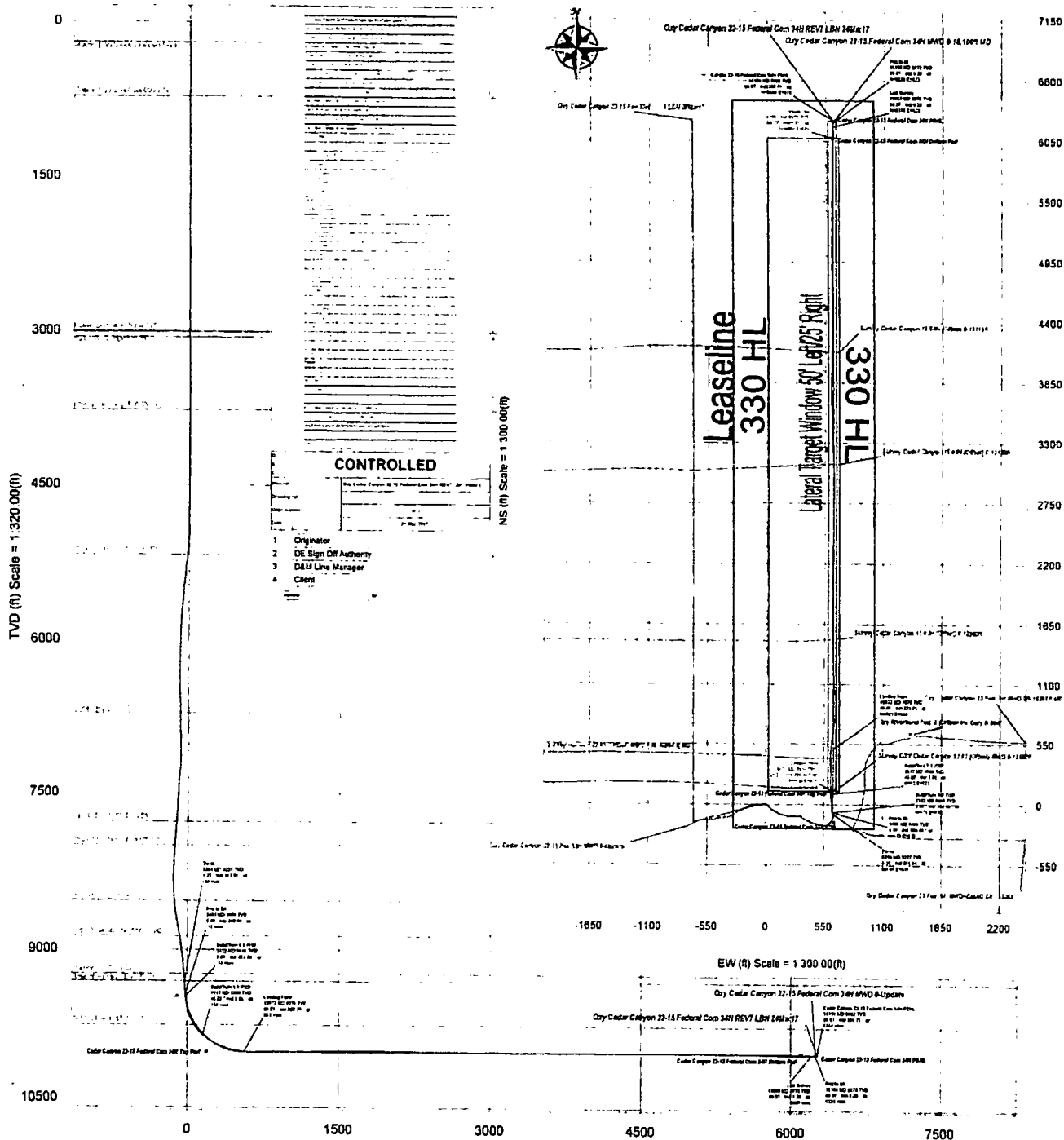
Gravity A Magnetometer	Survey Date	Survey Time	Survey Location	Survey Method	Survey Equipment	Survey Operator	Survey Notes
Model: H000 2016	06/25/2017	24-May-2017	Lat: N 32 12 35.83	Magnetic: 433308.32010	Old Core: 8.1952"	Survey: Oxy Cedar Canyon	Survey Notes: 22-16 Federal Com 34H Rev7 LBN 34H 17
MagDec: 7.149°	FB: 48143.203mT	Gravity FB: 958.87mgal (9.80665 m/s²)	Long: W 103 57 54.00	Easting: 654223.42010	Scale Fact: 0.9999373	Mag: 654223.42010	Survey Notes: 22-16 Federal Com 34H Rev7 LBN 34H 17

Critical Points

Comments	Survey MD (ft)	Inclination (deg)	Azimuth (deg)	TVL (ft)	VS (ft)	HS (ft)	EW (ft)	Latitude (deg)	Longitude (deg)	Easting (ftUS)	Northing (ftUS)	DLS (ft/100ft)	Foot Face (deg)
Tie In	9369.00	4.35	343.04	9297.39	-23.98	-87.14	635.12	N 32 12 25 034	W 103 57 54 013	655258.50	439219.19	0.29	350.00
Proj to Bd	9480.00	5.00	350.00	9406.02	-15.44	-78.35	633.05	N 32 12 25 122	W 103 57 54 036	655256.43	439227.98	0.78	350.00
Build/Turn 9.9°/100'	9512.00	5.00	350.00	9439.89	-12.76	-75.60	632.56	N 32 12 25 149	W 103 57 54 042	655255.94	439230.73	0.00	2.03
3rd BS Sand	9807.04	34.09	1.46	9715.00	84.20	21.85	632.43	N 32 12 26 113	W 103 57 54 039	655255.81	439328.17	9.90	2.00
Build/Turn 9.9°/100'	9917.25	45.00	2.00	9799.86	154.11	91.88	634.58	N 32 12 26 806	W 103 57 54 012	655257.96	439338.20	9.90	-3.12
Landing Point	10372.95	90.07	359.79	9969.54	562.89	502.17	639.64	N 32 12 30 866	W 103 57 53 936	655263.02	439808.45	9.90	0.00
Cedar Canyon 22-16 Federal Com 34H PBHL	16105.76	90.07	359.79	9962.35	6265.57	6234.94	618.81	N 32 13 27 593	W 103 57 53 950	655242.19	445540.77	0.00	

Grid
True
Mag

Grid North
Tot Corr (M→G 6.954")
Mag Dec (7.149°)
Grid Conv (0.195°)



Oxy Cedar Canyon 22-15 Federal Com 34H Gyro+ MWD 0-16,100ft MD

Survey Geodetic Report

(Dot Survey)



Report Date: April 07, 2017 - 09:42 AM
 Client: OXY
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Oxy Cedar Canyon 22-15 Federal Com 34H / Oxy Cedar Canyon 22-15 Federal Com 34H
 Well: Oxy Cedar Canyon 22-15 Federal Com 34H
 Borehole: Original Borehole
 UWI/API: Unknown / Unknown
 Survey Name: Oxy Cedar Canyon 22-15 Federal Com 34H Gyro+ MWD 0-16,100ft MD
 Survey Date: March 01, 2017
 Tors / AMD / DDI / ERO Ratio: 279.843° / 7119.025 h / 6.507 / 0.714
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone US Feet
 Location Lat / Long: N 32° 12' 25.91816" W 103° 58' 1.40079"
 Location Grid N/E Y/X: N 439306 320 RUS, E 654623 430 RUS
 CRS Grid Convergence Angle: 0.1652°
 Grid Scale Factor: 0.99992376
 Version / Patch: 2 10 254 0

Survey / DLS Computation: Minimum Curvature / Lubanov
 Vertical Section Azimuth: 9.568° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RXB=26.5'
 TVD Reference Elevation: 2962.100 ft above MSL
 Seabed / Ground Elevation: 2635.600 ft above MSL
 Magnetic Declination: 7.156°
 Total Gravity Field Strength: 998.4697 m/s² @ 80665 ft (Hatched)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48155.059 nT
 Magnetic Dip Angle: 60.051°
 Declination Date: March 01, 2017
 Magnetic Declination Model: IGM16 2016
 North Reference: Grid North
 Grid Convergence Used: 0.1652°
 Total Corr Mag North-Grid North: 6.9603°
 Local Coord Reference To: Well Head

Comments	Tool Type	MD (ft)	Measured Incl (°)	Measured Azim (°)	Incl (°)	Azim Grid (°)	TVD (ft)	VBEC (ft)	NS (ft)	EW (ft)	DLS (ft/1000)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	439306.32	654623.43	N 32 12 25.92	W 103 58 1.40
	INCL_ONLY	26.50	0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00	0.00	439306.32	654623.43	N 32 12 25.92	W 103 58 1.40
	INCL_ONLY	502.00	0.07	225.01	0.00	0.00	502.00	0.00	0.00	0.00	0.00	439306.32	654623.43	N 32 12 25.92	W 103 58 1.40
		684.00	0.08	194.74	0.08	194.74	684.00	-0.13	-0.12	-0.03	0.04	439306.20	654623.40	N 32 12 25.92	W 103 58 1.40
		776.00	0.08	209.05	0.08	209.05	776.00	-0.25	-0.24	-0.03	0.02	439306.08	654623.35	N 32 12 25.92	W 103 58 1.40
		865.00	0.08	315.27	0.08	315.27	865.00	-0.26	-0.25	-0.15	0.14	439306.07	654623.28	N 32 12 25.92	W 103 58 1.40
		958.00	0.08	87.11	0.08	87.11	958.00	-0.21	-0.20	-0.14	0.18	439306.12	654623.29	N 32 12 25.92	W 103 58 1.40
		1047.00	0.08	156.23	0.08	156.23	1047.00	-0.26	-0.26	-0.05	0.10	439306.06	654623.38	N 32 12 25.92	W 103 58 1.40
		1142.00	0.11	356.08	0.11	356.08	1142.00	-0.23	-0.23	-0.03	0.20	439306.09	654623.40	N 32 12 25.92	W 103 58 1.40
		1238.00	0.11	294.37	0.11	294.37	1238.00	-0.11	-0.10	-0.11	0.12	439306.02	654623.32	N 32 12 25.92	W 103 58 1.40
		1331.00	0.16	335.05	0.16	335.05	1331.00	0.03	0.06	-0.25	0.11	439306.33	654623.18	N 32 12 25.92	W 103 58 1.40
		1425.00	0.13	88.99	0.13	88.99	1425.00	0.16	0.19	-0.20	0.25	439306.50	654623.23	N 32 12 25.92	W 103 58 1.40
		1520.00	0.13	242.03	0.13	242.03	1520.00	0.12	0.14	-0.10	0.27	439303.46	654623.24	N 32 12 25.92	W 103 58 1.40
		1614.00	0.18	137.51	0.18	137.51	1614.00	-0.04	-0.02	-0.18	0.28	439306.30	654623.25	N 32 12 25.92	W 103 58 1.40
		1709.00	0.52	121.97	0.52	121.97	1709.00	-0.33	-0.33	0.29	0.37	439305.98	654623.72	N 32 12 25.91	W 103 58 1.40
		1896.00	0.22	4.04	0.22	4.04	1897.59	-0.34	-0.45	1.04	0.25	439305.07	654624.47	N 32 12 25.91	W 103 58 1.39
		2087.00	0.53	8.32	0.52	8.32	2088.09	0.69	0.78	1.19	0.16	439307.10	654624.82	N 32 12 25.93	W 103 58 1.39
		2278.00	0.26	130.65	0.20	130.65	2275.99	1.43	1.32	1.57	0.35	439307.75	654625.00	N 32 12 25.93	W 103 58 1.38
		2371.00	0.30	112.88	0.30	112.88	2370.99	1.41	1.22	1.92	0.13	439307.54	654625.35	N 32 12 25.93	W 103 58 1.38
		2560.00	0.33	165.65	0.33	165.65	2559.98	0.75	0.50	2.51	0.15	439306.82	654625.94	N 32 12 25.92	W 103 58 1.37
		2749.00	0.25	151.01	0.25	151.01	2748.98	-0.10	-0.38	2.85	0.05	439305.84	654626.28	N 32 12 25.91	W 103 58 1.37
		2844.00	0.08	90.52	0.05	90.52	2843.98	-0.27	-0.57	3.00	0.24	439305.75	654626.43	N 32 12 25.91	W 103 58 1.37
		3032.00	0.90	305.38	0.90	305.38	3031.97	0.47	0.29	1.89	0.51	439306.61	654626.32	N 32 12 25.92	W 103 58 1.39
		3223.00	1.10	301.02	1.10	301.02	3222.94	2.00	2.10	-0.60	0.11	439303.42	654627.55	N 32 12 25.94	W 103 58 1.41
		3317.00	1.11	296.60	1.11	296.60	3316.83	2.71	2.67	-4.49	0.09	439303.28	654628.94	N 32 12 25.95	W 103 58 1.43
		3506.00	1.14	297.68	1.14	297.68	3505.69	4.62	5.40	-5.79	0.02	439310.90	654631.64	N 32 12 25.96	W 103 58 1.47
		3601.00	1.19	287.24	1.19	287.24	3600.67	4.62	5.40	-7.57	0.23	439311.72	654631.15	N 32 12 25.96	W 103 58 1.47
		3696.00	1.03	279.77	1.03	279.77	3695.85	4.89	5.94	-4.35	0.23	439312.15	654631.15	N 32 12 25.96	W 103 58 1.47
		3790.00	1.00	289.42	1.00	289.42	3789.84	5.14	6.26	-10.98	0.18	439312.58	654631.15	N 32 12 25.96	W 103 58 1.47
		3885.00	1.14	284.63	1.14	284.63	3884.82	5.49	6.78	-12.70	0.15	439313.10	654631.10	N 32 12 25.96	W 103 58 1.47
		3980.00	1.13	273.48	1.13	273.48	3979.80	5.61	7.08	-14.55	0.23	439313.40	654631.10	N 32 12 25.96	W 103 58 1.47
		4075.00	0.69	285.53	0.69	285.53	4074.79	5.67	7.29	-16.04	0.50	439313.61	654631.10	N 32 12 25.96	W 103 58 1.47
		4169.00	0.33	91.11	0.33	91.11	4168.76	5.79	7.43	-16.31	1.02	439313.75	654631.12	N 32 12 25.96	W 103 58 1.47
		4264.00	1.21	108.81	1.21	108.81	4263.78	5.58	7.10	-15.07	0.61	439312.59	654631.68	N 32 12 25.96	W 103 58 1.48
		4359.00	1.79	110.24	1.79	110.24	4358.75	6.27	6.27	-12.76	0.61	439313.68	654631.68	N 32 12 25.97	W 103 58 1.48
		4453.00	2.09	106.58	2.09	106.58	4452.69	4.23	5.01	-4.78	0.32	439311.63	654631.68	N 32 12 25.97	W 103 58 1.48
		4548.00	2.06	106.60	2.06	106.60	4547.53	3.51	4.17	-10.98	0.08	439310.49	654631.68	N 32 12 25.97	W 103 58 1.48
		4642.00	2.09	113.85	2.09	113.85	4641.57	2.60	3.00	-12.28	0.28	439309.32	654632.15	N 32 12 25.95	W 103 58 1.48
		4736.00	2.02	114.87	2.02	114.87	4735.51	1.57	1.60	-0.21	0.08	439307.82	654632.22	N 32 12 25.95	W 103 58 1.48
		4830.00	2.22	116.25	2.22	116.25	4830.44	0.29	0.00	2.91	0.27	439308.32	654632.54	N 32 12 25.92	W 103 58 1.47
		4925.00	2.15	121.52	2.15	121.52	4924.38	-1.21	-1.81	6.00	0.12	439304.51	654632.43	N 32 12 25.92	W 103 58 1.47
		5020.00	5.21	128.63	5.21	128.63	5019.17	-4.23	-5.44	10.89	3.25	439303.08	654634.32	N 32 12 25.96	W 103 58 1.47
		5115.00	7.55	131.84	7.55	131.84	5113.57	-10.37	-12.29	18.81	2.48	439302.94	654634.40	N 32 12 25.96	W 103 58 1.47
		5210.00	10.21	130.45	10.21	130.45	5207.43	-18.85	-21.92	29.97	2.81	439304.40	654634.40	N 32 12 25.96	W 103 58 1.47
		5304.00	12.30	125.93	12.30	125.93	5299.62	-20.63	-33.20	44.42	2.41	439323.12	654667.85	N 32 12 25.99	W 103 58 0.80
		5399.00	12.58	125.54	12.58	125.54	5392.39	-38.60	-46.15	81.02	0.29	439251.18	654684.45	N 32 12 25.47	W 103 58 0.69
		5493.00	10.46	123.42	10.46	123.42	5494.49	-47.96	-55.79	78.48	2.29	439250.54	654699.29	N 32 12 25.36	W 103 58 0.51
		5588.00	9.85	119.63	9.85	119.63	5578.01	-55.29	-64.55	90.72	0.85	439241.77	654714.15	N 32 12 25.28	W 103 58 0.35
		5682.00	11.45	117.52	11.49	117.52	5670.38	-62.00	-72.86	106.02	1.79	439233.47	654729.64	N 32 12 25.19	W 103 58 0.17
		5777.00	11.73	113.95	11.73	113.95	5763.44	-68.50	-81.15	123.23	0.80	439225.18	654746.65	N 32 12 25.11	W 103 57 59.67
		5871.00	11.55	109.83	11.55	109.83	5865.50	-73.89	-84.02	140.62	0.90	439218.11	654764.24	N 32 12 25.04	W 103 57 59.77
		5965.00	10.17	107.21	10.17	107.21	5947.82	-81.33	-90.87	157.60	0.71	439212.48	654781.02	N 32 12 24.96	W 103 57 59.77
		6060.00	9.84	103.80	9.84	103.80	6041.37	-80.67	-88.28	173.49	0.80	439208.04	654796.91	N 32 12 24.94	W 103 57 59.77
		6155.00	10.18	102.05	10.18	102.05	6134.93	-82.75	-101.87	189.59	0.48	439204.35	654813.00	N 32 12 24.90	W 103 57 58.20
		6249.00	9.64	97.32	9.64	97.32	6227.53	-83.90	-104.71	206.52	1.04	439201.62	654828.93	N 32 12 24.88	W 103 57 59.01
		6344.00	9.28	93.31	9.29	93.31	6321.24	-83.82	-106.17	221.05	0.79	439200.16	654844.47	N 32 12 24.86	W 103 57 58.03
		6439.00	10.09	91.09	10.09	91.08	6414.88	-82.83	-106.77	237.02	0.94	439199.56	654860.43	N 32 12 24.85	W 103 57 58.05
		6533.00	9.65	89.66	9.65	89.66	6507.49	-81.35	-106.87	253.13	0.53	439199.45	654876.54	N 32 12 24.85	W 103 57 58.08
		6627.00	9.19	86.72	9.19	86.72	6601.21	-79.60	-106.68	269.68	0.51	439199.07	654892.09	N 32 12 24.85	W 103 57 58.28
		6722.00	8.37	90.03	8.37	90.03	6694.11	-78.03	-106.50	286.03	0.60	439196.83	654908.43	N 32 12 24.86	W 103 57 57.94
		6817.00	8.97	86.77	8.97	86.77	6708.02	-76.21	-106.09	297.33	0.82	439200.24	654920.74	N 32 12 24.87	W 103 57 57.79
		6911.00	6.98	85.34	6.98	85.34	6891.11	-74.05	-106.21	310.34	2.13	439201.11	654933.75	N 32 12 24.87	W 103 57 57.79
		7006.00	5.09	82.61	5.09	82.61	6975.59	-72.06	-104.20	320.27	2.02	439202.12	654943.		

Comments	Tool Type	MD (ft)	Measured Incl (°)	Measured Azim (°)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	N3 (ft)	EIV (ft)	DLS (ft/1000)	Horrbng (ft)	Easting (ft)	Latitude (N/S)	Longitude (E/W)
		8974.00	44.75	353.53	44.75	353.53	9768.48	112.76	51.68	620.91	14.74	439350.00	555244.29	N 32 12 28.41	W 103 57 54.17
		9968.00	53.24	358.25	53.24	358.25	9831.10	182.68	122.37	616.69	10.13	439428.68	555240.06	N 32 12 27.11	W 103 57 54.22
		10062.00	62.02	0.72	62.02	0.72	9801.38	261.61	201.68	616.71	9.43	439507.99	555240.09	N 32 12 27.29	W 103 57 54.22
		10155.00	69.67	358.35	69.67	358.35	9918.42	345.90	284.47	615.97	8.64	439582.77	555239.38	N 32 12 28.73	W 103 57 54.22
		10248.00	77.14	358.33	77.14	358.33	9948.24	435.18	376.45	613.37	7.95	439662.74	555238.76	N 32 12 29.62	W 103 57 54.25
		10343.00	82.48	2.19	82.48	2.19	9962.97	527.25	468.91	613.02	6.97	439775.20	555237.20	N 32 12 30.54	W 103 57 54.24
		10437.00	88.67	0.45	88.67	0.45	9969.08	620.08	562.15	612.52	6.08	439891.38	555236.58	N 32 12 31.46	W 103 57 54.13
		10541.00	90.00	7.75	90.00	7.75	9970.82	724.79	653.11	637.19	1.20	440054.68	555235.85	N 32 12 32.40	W 103 57 53.82
		10635.00	90.10	5.05	90.10	5.05	9970.74	818.76	752.42	648.48	1.80	440254.68	555235.85	N 32 12 34.22	W 103 57 53.74
		10728.00	91.24	2.64	91.24	2.64	9969.65	911.71	851.13	656.53	3.69	440457.39	555235.85	N 32 12 35.25	W 103 57 53.72
		10822.00	91.20	358.98	91.20	358.98	9967.65	1005.34	945.09	656.04	3.91	440251.33	555235.85	N 32 12 36.03	W 103 57 53.77
		10905.00	90.63	354.60	90.63	354.60	9966.16	1088.30	1028.82	652.13	5.21	440335.16	555235.85	N 32 12 37.00	W 103 57 53.67
		11000.00	91.31	354.88	91.31	354.88	9964.40	1180.57	1122.51	643.49	0.68	440428.74	555235.85	N 32 12 37.81	W 103 57 53.67
		11092.00	92.20	358.04	92.20	358.04	9961.58	1271.33	1214.27	637.00	3.89	440520.50	555235.85	N 32 12 38.54	W 103 57 53.67
		11186.00	91.44	358.63	91.44	358.63	9959.60	1364.51	1309.18	635.07	1.02	440614.40	555235.85	N 32 12 39.76	W 103 57 53.69
		11279.00	90.63	357.16	90.63	357.16	9956.30	1456.64	1401.10	627.51	1.77	440707.31	555235.85	N 32 12 40.70	W 103 57 54.04
		11374.00	90.00	357.04	90.00	357.04	9956.30	1550.67	1498.01	627.51	1.02	440802.21	555235.85	N 32 12 41.64	W 103 57 54.06
		11468.00	90.24	359.81	90.24	359.81	9956.10	1644.99	1590.88	625.56	2.03	440887.18	555235.85	N 32 12 42.57	W 103 57 54.06
		11563.00	89.59	0.01	89.59	0.01	9956.24	1738.51	1684.98	625.41	0.72	440991.17	555235.85	N 32 12 43.52	W 103 57 54.04
		11659.00	89.76	1.44	89.76	1.44	9956.78	1834.15	1780.97	626.63	1.50	441067.15	555235.85	N 32 12 44.46	W 103 57 54.03
		11754.00	89.38	359.34	89.38	359.34	9957.50	1928.74	1875.96	627.28	2.25	441182.14	555235.85	N 32 12 45.40	W 103 57 54.04
		11849.00	89.52	358.99	89.52	358.99	9958.41	2023.13	1970.95	625.88	0.41	441277.11	555235.85	N 32 12 46.33	W 103 57 54.04
		11943.00	89.24	0.31	89.24	0.31	9958.43	2116.60	2064.94	625.30	1.45	441371.10	555235.85	N 32 12 47.28	W 103 57 54.02
		12038.00	89.50	1.91	89.50	1.91	9960.41	2212.29	2160.91	627.16	1.71	441467.05	555235.85	N 32 12 48.22	W 103 57 54.00
		12134.00	89.24	359.01	89.24	359.01	9961.38	2308.93	2255.89	629.42	2.45	441562.03	555235.85	N 32 12 49.16	W 103 57 53.98
		12229.00	89.28	2.21	89.28	2.21	9962.03	2401.50	2350.95	629.83	2.74	441657.00	555235.85	N 32 12 50.08	W 103 57 53.95
		12322.00	89.21	359.72	89.21	359.72	9963.83	2494.26	2443.93	631.50	2.68	441749.83	555235.85	N 32 12 51.01	W 103 57 53.85
		12416.00	90.00	0.15	90.00	0.15	9964.45	2587.78	2537.83	631.39	0.98	441843.95	555235.85	N 32 12 51.94	W 103 57 53.94
		12510.00	89.83	0.36	89.83	0.36	9964.57	2681.38	2631.03	631.81	0.31	441937.94	555235.85	N 32 12 52.86	W 103 57 53.91
		12603.00	89.83	2.29	89.83	2.29	9964.84	2774.08	2724.80	632.96	2.08	442030.91	555235.85	N 32 12 53.79	W 103 57 53.87
		12697.00	89.83	1.46	89.83	1.46	9965.04	2867.58	2818.75	637.03	0.89	442124.85	555235.85	N 32 12 54.71	W 103 57 53.86
		12790.00	89.52	359.03	89.52	359.03	9965.49	2960.53	2911.74	638.16	1.70	442217.83	555235.85	N 32 12 55.63	W 103 57 53.89
		12883.00	89.78	358.99	89.78	358.99	9966.07	3052.74	3004.68	635.34	3.00	442310.77	555235.85	N 32 12 56.54	W 103 57 53.93
		12977.00	90.00	358.52	90.00	358.52	9966.27	3145.78	3098.59	631.33	2.67	442404.67	555235.85	N 32 12 57.49	W 103 57 53.95
		13071.00	90.10	357.50	90.10	357.50	9966.18	3238.95	3192.53	629.06	1.09	442498.50	555235.85	N 32 12 58.42	W 103 57 54.02
		13165.00	89.72	356.71	89.72	356.71	9966.33	3331.90	3286.41	623.32	0.83	442592.47	555235.85	N 32 12 59.34	W 103 57 54.04
		13258.00	90.03	0.07	90.03	0.07	9966.54	3424.14	3379.35	620.70	3.63	442686.42	555235.85	N 32 13 00.26	W 103 57 54.08
		13352.00	90.28	357.71	90.28	357.71	9968.02	3516.29	3466.31	617.08	1.27	442780.35	555235.85	N 32 13 01.19	W 103 57 54.08
		13445.00	89.72	357.81	89.72	357.81	9968.02	3609.02	3556.31	613.53	0.64	442874.28	555235.85	N 32 13 02.11	W 103 57 54.11
		13538.00	90.31	357.52	90.31	357.52	9968.01	3701.95	3649.24	609.78	0.75	442968.15	555235.85	N 32 13 03.04	W 103 57 54.15
		13632.00	90.00	1.87	90.00	1.87	9968.05	3795.04	3783.17	609.78	0.75	443059.19	555235.85	N 32 13 03.97	W 103 57 54.18
		13726.00	89.78	1.53	89.78	1.53	9968.54	3888.50	3847.14	609.28	4.66	443153.16	555235.85	N 32 13 04.90	W 103 57 54.12
		13820.00	89.11	358.09	89.11	358.09	9968.45	3982.29	3941.09	612.07	1.22	443247.11	555235.85	N 32 13 05.82	W 103 57 54.11
		13914.00	90.02	3.25	90.02	3.25	9968.68	4074.85	4034.08	612.57	2.72	443340.09	555235.85	N 32 13 06.75	W 103 57 54.08
		14008.00	89.38	0.40	89.38	0.40	9968.68	4167.55	4129.03	614.59	4.76	443434.05	555235.85	N 32 13 07.68	W 103 57 54.04
		14102.00	90.58	0.79	90.58	0.79	9968.71	4260.33	4222.97	617.67	3.40	443528.06	555235.85	N 32 13 08.60	W 103 57 54.03
		14196.00	91.03	1.13	91.03	1.13	9968.71	4353.06	4315.97	618.63	1.35	443621.95	555235.85	N 32 13 09.53	W 103 57 54.01
		14290.00	90.41	359.33	90.41	359.33	9968.71	4445.84	4408.94	620.21	0.60	443715.92	555235.85	N 32 13 10.46	W 103 57 54.00
		14384.00	90.34	358.31	90.34	358.31	9968.71	4538.62	4501.74	620.57	2.09	443809.80	555235.85	N 32 13 11.38	W 103 57 54.02
		14478.00	89.04	358.93	89.04	358.93	9968.71	4631.40	4594.91	618.64	1.09	443903.77	555235.85	N 32 13 12.30	W 103 57 54.04
		14572.00	89.80	358.47	89.80	358.47	9968.71	4724.18	4687.69	618.40	1.56	443997.64	555235.85	N 32 13 13.22	W 103 57 54.08
		14666.00	90.53	358.07	90.53	358.07	9968.71	4816.96	4780.47	618.18	0.52	444091.51	555235.85	N 32 13 14.14	W 103 57 54.10
		14760.00	89.85	358.68	89.85	358.68	9968.71	4909.74	4873.25	618.18	0.18	444185.38	555235.85	N 32 13 15.06	W 103 57 54.12
		14854.00	90.65	1.09	90.65	1.09	9968.71	5002.52	4964.79	618.18	1.14	444279.25	555235.85	N 32 13 15.97	W 103 57 54.12
		14948.00	89.04	1.24	89.04	1.24	9968.71	5095.30	5057.77	618.18	1.26	444373.12	555235.85	N 32 13 16.89	W 103 57 54.11
		15042.00	89.42	359.64	89.42	359.64	9968.71	5188.08	5150.55	618.18	1.07	444466.99	555235.85	N 32 13 17.81	W 103 57 54.09
		15136.00	89.45	360.00	89.45	360.00	9968.71	5280.86	5243.33	618.18	0.49	444560.86	555235.85	N 32 13 18.73	W 103 57 54.08
		15230.00	89.24	1.80	89.24	1.80	9968.71	5373.64	5336.10	618.18	0.83	444654.73	555235.85	N 32 13 19.65	W 103 57 54.07
		15324.00	89.11	1.27	89.11	1.27	9968.71	5466.42	5428.88	618.18	1.73	444748.60	555235.85	N 32 13 20.57	W 103 57 54.05
		15418.00	89.03	1.15	89.03	1.15	9968.71	5559.20	5521.66	618.18	0.58	444842.47	555235.85	N 32 13 21.49	W 103 57 54.02
		15512.00	89.03	1.83	89.03	1.83	9968.71	5651.98	5614.44	618.18	0.16	444936.34	555235.85	N 32 13 22.41	W 103 57 53.99
		15606.00	89.67	0.25	89.67	0.25	9968.71	5744.76	5707.22	618.18	0.84	445030.21	555235.85	N 32 13 23.33	W 103 57 53.91
		15700.00	89.67	0.25	89.67	0.25	9968.71	5837.54	5800.00	618.18	1.84	445124.08	555235.85	N 32 13 24.25	W 103 57 53.91
		15794.00	89.67	0.25	89.67	0.25	9968.71	5930.32	5892.78	618.18	0.00	445217.95	555235.85	N 32 13 25.17	W 103 57 53.90
		15888.00	89.67	0.25	89.67	0.25	9968.71	6023.10	5985.56	618.18	0.00	445311.82	555235.85	N 32 13 26.09	W 103 57 53.89
		15982.00	89.67	0.25	89.67	0.25	9968.71	6115.88	6078.34	618.18	0.00	445405.69	555235.85		

OXY USA Inc.
Cedar Canyon 22-15 Federal Com 34H
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