

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

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

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 09 2019

Submit one copy to appropriate District Office

RECEIVED

Form C-104
Revised August 1, 2011

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address OXY USA INC. P.O. BOX 4294 HOUSTON, TX 77210		² OGRID Number 16696
⁴ API Number 30-015-44931		⁶ Pool Code 98220
⁵ Pool Name PURPLE SAGE WOLFCAMP	³ Reason for Filing Code/ Effective Date - NW	
⁷ Property Code: 318492	⁸ Property Name: SUNRISE MDP1 8-5 FEDERAL COM	⁹ Well Number: 173H

II. ¹⁰ Surface Location

Ul or lot no. C	Section 17	Township 24S	Range 31E	Lot Idn	Feet from the 194	North/South Line NORTH	Feet from the 1614	East/West line WEST	County EDDY
¹¹ Bottom Hole Location FTP - 587' FSL 2200' FWL LTP - 145' FNL 2178' FWL									
UL or lot no. 4	Section 5	Township 24S	Range 31E	Lot Idn	Feet from the 19	North/South line NORTH	Feet from the 2178	East/West line WEST	County EDDY
¹² Lse Code F	¹³ Producing Method Code : F	¹⁴ Gas Connection Date: 06/07/2019	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
237722	CENTURION PIPELINE L.P.	O
151618	ENTERPRISE FIELD SERVICES LLC	G

IV. Well Completion Data

²¹ Spud Date 02/06/2019	²² Ready Date 06/01/2019	²³ TD 21715' 11603' V/21705' M	²⁴ PBDT 11603' V/21664' M	²⁵ Perforations 11725'-21589'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set	³⁰ Sacks Cement
14-3/4"		10-3/4"		690'	745
9-7/8"		7/5/8"		11067'	1899
6-3/4"		5-1/2"		21705'	775

V. Well Test Data

³¹ Date New Oil 06/08/2019	³² Gas Delivery Date 06/08/2019	³³ Test Date 06/19/2019	³⁴ Test Length 24-HOUR	³⁵ Tbg. Pressure	³⁶ Csg. Pressure 2375
³⁷ Choke Size 33/64	³⁸ Oil 3701	³⁹ Water 8132	⁴⁰ Gas 7473		⁴¹ Test Method FLOWING

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: Sarah Chapman

Printed name:
SARAH CHAPMAN

Title:
REGULATORY SPECIALIST

E-mail Address:
sarah_chapman@oxy.com

Date: 05/30/2019 Phone: 713-350-4997

Approved by:

Raymond H. Padmy

Title: Geologist

Approval Date: 10/16/19

Pending BLM approvals will
subsequently be reviewed and
scanned.

✓ AB

As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

Surface Location

Bottom Hole Location If Different From Surface

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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WO# 171106WL-C (KA)

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 09 2019

Intent ☐ As Drilled ☒

API # 30-015-44931			RECEIVED					
Operator Name: Oxy USA Inc.						Property Name: Dunbar HDX 85 Federal Com		

Kick Off Point (KOP)

UL N	Section 8	Township 24S	Range 31E	Lot	Feet 402	From N/S South	Feet 2164	From E/W West	County EDDY
Latitude 32.22569					Longitude 103.801138				NAD NAD83

First Take Point (FTP)

UL N	Section 8	Township 24S	Range 31E	Lot	Feet 587	From N/S South	Feet 2200	From E/W West	County EDDY
Latitude 32.22620					Longitude 103.80126				NAD NAD83

Last Take Point (LTP)

UL	Section 5	Township 24S	Range 31E	Lot 3	Feet 145	From N/S North	Feet 2178	From E/W West	County EDDY
Latitude 32.25325					Longitude 103.80118				NAD NAD83

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

**NM OIL CONSERVATION
ARTESIA DISTRICT**

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 09 2019

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

WELL COMPLETION OR RECOMPLETION REPORT AND RECEIVED

5. Lease Serial No. NMNM89172
6. If Indian, Allottee or Tribe Name
7. Unit or CA Agreement Name and No.
8. Lease Name and Well No. SUNRISE MDP1 8-5 FEDERAL COM 173H
9. API Well No. 30-015-44931
10. Field and Pool, or Exploratory PURPLE SAGE WOLFCAMP
11. Sec., T., R., M., or Block and Survey or Area Sec 17 T24S R31E Mer NMP
12. County or Parish EDDY
13. State NM
17. Elevations (DF, KB, RT, GL)* 3534 GL
16. Date Completed ☐ D & A ☒ Ready to Prod. 05/30/2019
15. Date T.D. Reached 05/02/2019
14. Date Spudded 02/06/2019
18. Total Depth: MD 21915 22395 TVD 11604 11751
19. Plug Back T.D.: MD 21664 22357 TVD 11604 11751
20. Depth Bridge Plug Set: MD TVD
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

2. Name of Operator
OXY USA INC. Contact: SARAH CHAPMAN
E-Mail: SARAH_CHAPMAN@OXY.COM

3. Address P.O. BOX 4294
HOUSTON, TX 77210

3a. Phone No. (include area code)
Ph: 713-350-4997

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
Sec 17 T24S R31E Mer NMP
At surface NENW 194FNL 1614FWL 32.224059 N Lat, 103.807171 W Lon
Sec 8 T24S R31E Mer NMP
At top prod interval reported below SESW 587FSL 2200FWL 32.226200 N Lat, 103.801260 W Lon
Sec 5 T24S R31E Mer NMP
At total depth NWNW Lot 3 19FNL 2178FWL 32.253480 N Lat, 103.801180 W Lon

14. Date Spudded
02/06/2019

15. Date T.D. Reached
05/02/2019

16. Date Completed
☐ D & A ☒ Ready to Prod.
05/30/2019

17. Elevations (DF, KB, RT, GL)*
3534 GL

18. Total Depth: MD 21915 22395
TVD 11604 11751

19. Plug Back T.D.: MD 21664 22357
TVD 11604 11751

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
GAMMA RAY, MUD LOG

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
14.750	10.750 J-55	45.5	0	690		C 745	172	0	
9.875	7.625 L-80	26.4	0	11067		H 1899	577	0	
6.750	5.500 SF TORQ	20.0	0	21705		H 775	199	10550	

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) WOLFCAMP	11725	21589	11725 TO 21589	0.420	1150	ACTIVE
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
11725 TO 21589	14349510G SLICKWATER AND 1000G 7.5%HCL ACID W/ 19294757#SAND

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
06/08/2019	06/19/2019	24	→	3701.0	7473.0	8132.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press. SI	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
33		2375.0	→	3701	7473	8132		POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity		
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press. SI	24 Hr. Rate	Oil BBL	Gas MCF				
			→						

Pending BLM approvals will subsequently be reviewed and scanned.

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #486816 VERIFIED BY THE BLM W
** OPERATOR-SUBMITTED ** OPER

OPERATOR-SUBMITTED **

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	4374	5289	OIL, GAS, WATER	RUSTLER	654
CHERRY CANYON	5290	6487	OIL, GAS, WATER	SALADO	1017
BRUSHY CANYON	6488	8240	OIL, GAS, WATER	CASTILE	2846
BONE SPRING	8241	9039	OIL, GAS, WATER	DELAWARE	4345
1ST BONE SPRING	9040	9536	OIL, GAS, WATER	BELL CANYON	4374
2ND BONE SPRING	9537	10406	OIL, GAS, WATER	CHERRY CANYON	5290
3RD BONE SPRING	10407	11664	OIL, GAS, WATER	BRUSHY CANYON	6488
WOLFCAMP	11645	11850	OIL, GAS, WATER	BONE SPRING	8241

32. Additional remarks (include plugging procedure):

LOG HEADER, DIIRECTIONAL SURVEY, AS DRILLED C-102, SUPPLEMENTAL AND WBD ATTACHED.

This EC Tran is to correct Number 486771 that had the incorrect well number and API information. Thank you.

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 #486816 Verified by the BLM Well Information System.
For OXY USA INC., sent to the Carlsbad

Name (please print) SARAH CHAPMAN

Title REGULATORY SPECIALIST

Signature (Electronic Submission)

Date 10/07/2019

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.

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **



Sunrise MDP1 8-5 Federal Com 173H Wellbore Diagram

Elevation: GL 3534'

API: 30-015-44931

14-3/4" hole – 10-3/4" 45.5# J-55 csg
Set @ 690'

9-7/8" hole – 7-5/8" 26.4# L-80 BTC csg
Set @ 11067'

6-3/4" hole – 5-1/2" 20# P-110 SF
TORQ/DQX csg
Set @ 21705'

Frac'd 11725'-21589'
46 stages

*Note: Diagram not to scale

PBTD – 21664' MD
TD – 21705' MD/11603' TVD

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

May 2, 2019

OXY USA Inc.

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 09 2019

RECEIVED

Re:

17, 24S, 31E, Eddy NM
N 32.22406 W 103.80317

CLIENT: OXY USA Inc.
WELL: Sunrise MDP1 8-5 Federal Com 173H
FIELD: Purple Sage Wolfcamp

RIG: H&P 657
COUNTY: Eddy
API NO: 30-015-44931
JOB NO: 19MLD4350

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jude Omokwale FS	Sunrise MDP1 8-5 Federal Com 173H Original Hole	737.00 Ft to 21673.00 Ft	March 6, 2019 to April 30, 2019	SlimPulse Third Party Corrected

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Andrew Salomon
Field Service Manager

Schlumberger-Private

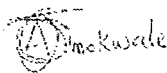
Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

Well Reference:
17, 24S, 31E, Eddy NM
N 32.22406 W 103.80317

I, Jude Omokwale certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of March 06, 2019 through April 30, 2019, conduct or supervise the taking of the SlimPulse & Third Party Corrected surveys from a depth of 737.00 feet to a depth of 21673.00 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 Sunrise MDPI 8-5 Federal Com 173H Well (Original Hole) API No. 30-015-44931 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
Jude Omokwale
FS



Subscribed and Sworn to before me this 2nd day of May (month) 2019 (yr)

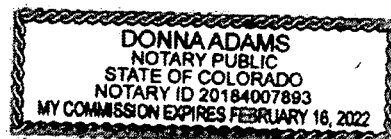
My Commission expires:

2-16-2022

D. Adams
Notary Public

(signature)

Adams County Colorado
(County State)



Schlumberger

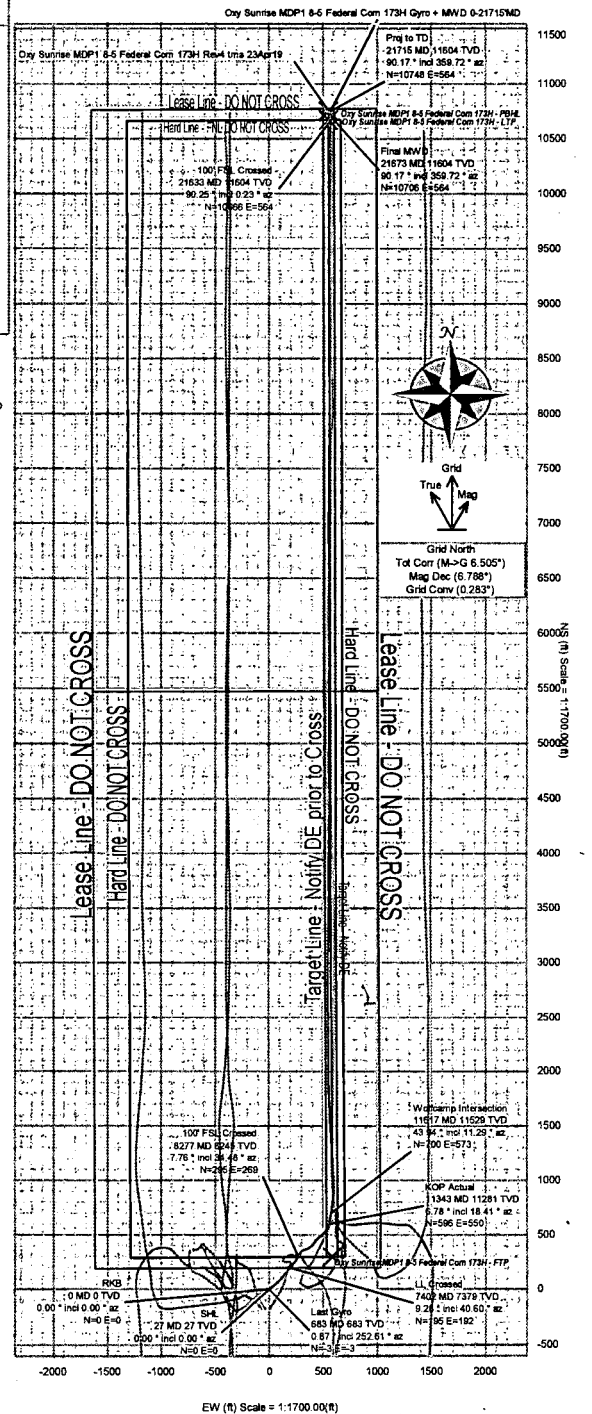
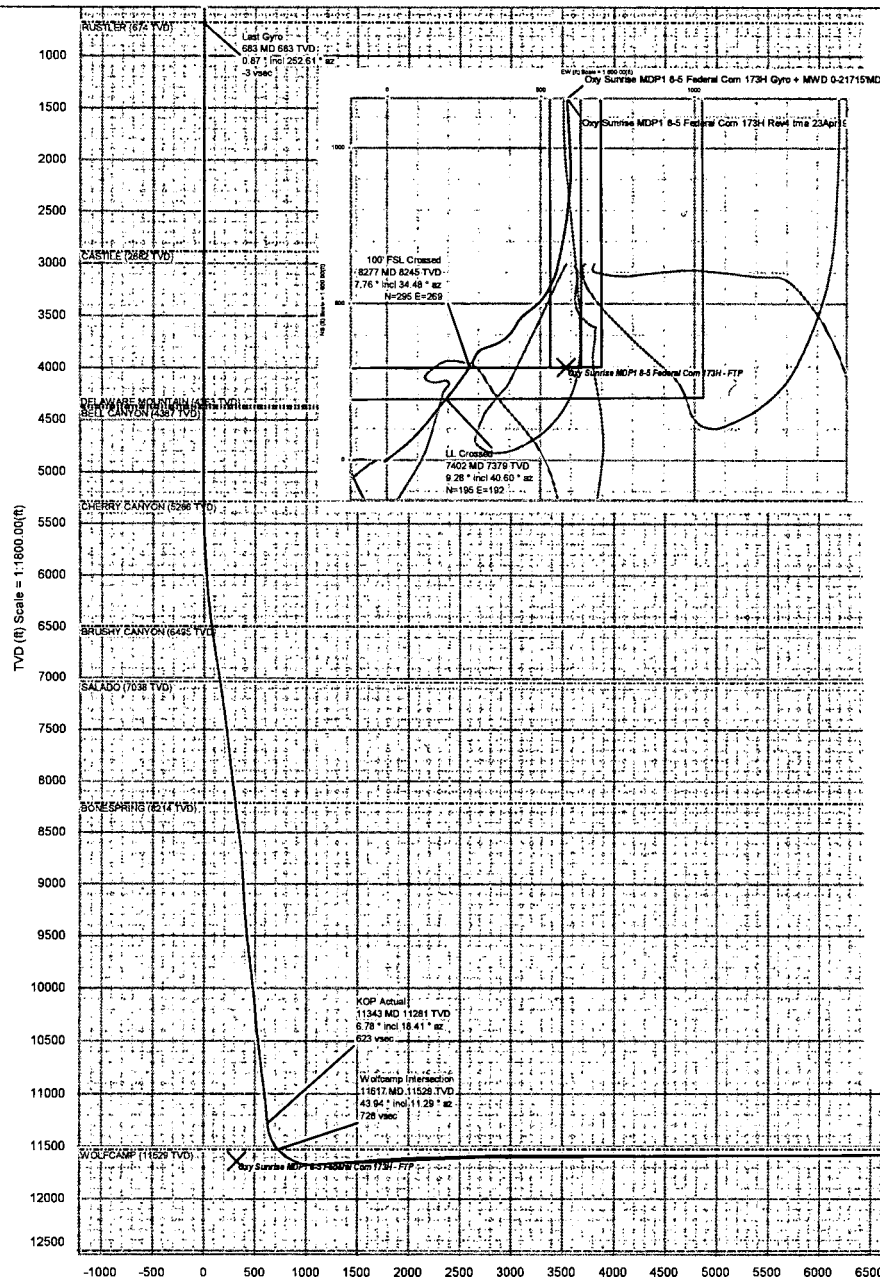
OXY



Borehole:	Well:	Field:	Structure:
Original Borehole	Oxy Sunrise MDP1 8-5 Federal Com 173H	NM Eddy County (NAD 83)	Oxy Sunrise MDP1 8-5 Federal Com 173H

Gravity & Magnetic Parameters				Surface Location				Miscellaneous			
Model:	IFR1	Dip:	59.82°	Date:	17-Apr-2019	Lat:	N 32 13 26.82	Northing:	445651.26RUS	Grid Conv:	0.2827°
MagDec:	6.788°	FS:	47937nT	Gravity FS:	998.428mg (7.80565 Based)	Lon:	W 103 48 11.42	Easting:	705281.43RUS	Scale Fact:	0.9993387
								MDP1 8-5 Federal Com			
								TVD Ref: RKB=26.5'(3560.5ft above MSL)			
								Plan: Oxy Sunrise MDP1 8-5 Federal Com 173H Gyro + MWD 0-21715MD			

Critical Points									
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(°)/S(-)	E(°)/W(-)	DLS	
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	
Last Gyro	683.30	0.87	252.61	683.28	-3.18	-3.03	-3.03	0.30	
LL Crossed	7402.00	9.28	40.60	7379.31	204.60	195.05	192.50	0.32	
100' FSL Crossed	8277.00	7.76	34.48	8245.14	308.70	295.38	269.00	0.26	
KOP Actual	11343.00	6.78	18.41	11281.29	623.31	596.05	550.33	1.28	
Wolfcamp Intersection	11617.22	43.94	11.29	11528.50	728.31	700.01	573.43	16.21	
100' FNL Crossed	21633.00	90.25	0.23	11603.85	10680.91	10666.00	564.38	1.29	
Final MWD	21673.00	90.17	359.72	11603.70	10720.85	10706.00	564.36	1.29	
Proj to TD	21715.00	90.17	359.72	11603.58	10762.79	10748.00	564.15	0.00	



Vertical Section (ft) Azim = 2.92° Scale = 1:1800.00(ft) Origin = 0N/-S, 0E/-W

Oxy Sunrise MDP1 8-5 Federal Com 173H Gyro + MWD 0-21715' MD Survey

Geodetic Report

(Def Survey)



Report Date: April 30, 2019 - 09:44 PM Client: OXY Field: NM Eddy County (NAD 83) Structure / Slot: Oxy Sunrise MDP1 8-5 Federal Com 173H / Oxy Sunrise MDP1 8-5 Federal Com 173H Well: Oxy Sunrise MDP1 8-5 Federal Com 173H Borehole: Original Borehole UWI / APH: Unknown / 30-015-44931 Survey Name: Oxy Sunrise MDP1 8-5 Federal Com 173H Gyro + MWD 0-21715' MD Survey Date: February 26, 2019 Tort / AHD / DDI / ERD Ratio: 262.362 * / 11016.387 ft / 6.730 / 0.944 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet Location Lat / Long: N 32° 13' 26.61554", W 103° 48' 11.41761" Location Grid N/E Y/X: N 445651.260 ftUS, E 705281.430 ftUS CRS Grid Convergence Angle: 0.2827 * Grid Scale Factor: 0.99993987 Version / Patch: 2.10.753.0	Survey / DLS Computation: Minimum Curvature / Lubinski Vertical Section Azimuth: 2.920 * (Grid North) Vertical Section Origin: 0.000 ft, 0.000 ft TVD Reference Datum: RKB=26.5' TVD Reference Elevation: 3560.500 ft above MSL Seabed / Ground Elevation: 3534.000 ft above MSL Magnetic Declination: 6.788 * Total Gravity Field Strength: 998.4282mgn (9.80665 Based) Gravity Model: GARM Total Magnetic Field Strength: 47937.000 nT Magnetic Dip Angle: 59.920 * Declination Date: April 17, 2019 Magnetic Declination Model: IFR1 North Reference: Grid North Grid Convergence Used: 0.2827 * Total Corr Mag North->Grid North: 6.5053 * Local Coord Referenced To: Well Head	
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Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	445651.26	705281.43	N 32 13 26.62	W 103 48 11.42
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	445651.26	705281.43	N 32 13 26.62	W 103 48 11.42
	119.70	0.25	192.59	119.70	-0.20	-0.20	-0.04	0.27	445651.06	705281.39	N 32 13 26.61	W 103 48 11.42
	146.90	0.27	192.32	146.90	-0.32	-0.32	-0.07	0.07	445650.94	705281.36	N 32 13 26.61	W 103 48 11.42
	229.70	0.42	207.16	229.70	-0.79	-0.78	-0.25	0.21	445650.48	705281.18	N 32 13 26.61	W 103 48 11.42
	324.40	0.30	210.70	324.40	-1.33	-1.30	-0.54	0.13	445649.96	705280.89	N 32 13 26.60	W 103 48 11.42
	418.50	0.41	208.83	418.49	-1.85	-1.81	-0.82	0.12	445649.45	705280.61	N 32 13 26.60	W 103 48 11.43
	513.70	0.44	233.92	513.69	-2.38	-2.32	-1.28	0.20	445648.94	705280.15	N 32 13 26.59	W 103 48 11.43
	608.50	0.65	250.30	608.49	-2.82	-2.72	-2.08	0.27	445648.54	705279.35	N 32 13 26.59	W 103 48 11.44
	683.30	0.87	252.61	683.28	-3.18	-3.03	-3.03	0.30	445648.23	705278.40	N 32 13 26.59	W 103 48 11.45
	737.00	1.80	230.57	736.97	-3.89	-3.69	-4.07	1.95	445647.57	705277.36	N 32 13 26.58	W 103 48 11.47
	830.00	0.41	208.79	829.95	-5.17	-4.91	-5.35	1.53	445646.35	705276.08	N 32 13 26.57	W 103 48 11.48
	922.00	0.11	91.35	921.95	-5.47	-5.20	-5.42	0.51	445646.06	705276.01	N 32 13 26.56	W 103 48 11.48
	1015.00	0.10	58.82	1014.95	-5.42	-5.16	-5.27	0.06	445646.10	705276.16	N 32 13 26.56	W 103 48 11.48
	1107.00	0.10	290.45	1106.95	-5.35	-5.09	-5.27	0.20	445646.17	705276.16	N 32 13 26.57	W 103 48 11.48
	1199.00	0.06	80.95	1198.95	-5.32	-5.05	-5.30	0.17	445646.21	705276.13	N 32 13 26.57	W 103 48 11.48
	1292.00	0.10	58.18	1291.95	-5.26	-5.00	-5.18	0.05	445646.26	705276.25	N 32 13 26.57	W 103 48 11.48
	1386.00	0.06	66.77	1385.95	-5.18	-4.93	-5.04	0.02	445646.33	705276.39	N 32 13 26.57	W 103 48 11.48
	1481.00	0.06	92.34	1480.95	-5.14	-4.90	-4.91	0.06	445646.36	705276.52	N 32 13 26.57	W 103 48 11.48
	1575.00	0.10	136.10	1574.95	-5.20	-4.96	-4.81	0.07	445646.30	705276.62	N 32 13 26.57	W 103 48 11.47
	1670.00	0.10	125.14	1669.95	-5.30	-5.06	-4.68	0.02	445646.20	705276.75	N 32 13 26.57	W 103 48 11.47
	1859.00	0.06	342.58	1858.94	-5.29	-5.07	-4.58	0.08	445646.20	705276.85	N 32 13 26.57	W 103 48 11.47
	1953.00	0.08	336.51	1952.94	-5.19	-4.66	-4.62	0.02	445646.30	705276.81	N 32 13 26.57	W 103 48 11.47
	2048.00	0.10	47.89	2047.94	-5.07	-4.84	-4.58	0.11	445646.42	705276.85	N 32 13 26.57	W 103 48 11.47
	2143.00	0.10	254.31	2142.94	-5.04	-4.81	-4.60	0.20	445646.45	705276.83	N 32 13 26.57	W 103 48 11.47
	2237.00	0.03	256.91	2236.94	-5.07	-4.84	-4.70	0.07	445646.42	705276.73	N 32 13 26.57	W 103 48 11.47
	2332.00	0.10	291.67	2331.94	-5.05	-4.81	-4.80	0.08	445646.45	705276.63	N 32 13 26.57	W 103 48 11.47
	2426.00	0.13	151.57	2425.94	-5.11	-4.87	-4.83	0.23	445646.39	705276.60	N 32 13 26.57	W 103 48 11.47
	2521.00	0.05	237.34	2520.94	-5.23	-4.99	-4.81	0.14	445646.27	705276.62	N 32 13 26.57	W 103 48 11.47
	2615.00	0.04	54.48	2614.94	-5.23	-4.99	-4.82	0.10	445646.27	705276.61	N 32 13 26.57	W 103 48 11.47
	2710.00	0.06	256.45	2709.94	-5.23	-4.99	-4.84	0.10	445646.27	705276.59	N 32 13 26.57	W 103 48 11.47
	2805.00	0.26	251.16	2804.94	-5.32	-5.07	-5.09	0.21	445646.19	705276.34	N 32 13 26.57	W 103 48 11.48
	2899.00	0.42	235.48	2898.94	-5.61	-5.33	-5.58	0.20	445645.93	705275.85	N 32 13 26.56	W 103 48 11.48
	2994.00	0.96	202.81	2993.94	-6.57	-6.26	-6.18	0.68	445645.00	705275.25	N 32 13 26.55	W 103 48 11.49
	3088.00	0.15	29.59	3087.93	-7.20	-6.88	-6.42	1.18	445644.38	705275.01	N 32 13 26.55	W 103 48 11.49
	3183.00	0.12	353.45	3182.93	-6.99	-6.68	-6.37	0.09	445644.59	705275.06	N 32 13 26.55	W 103 48 11.49
	3372.00	0.37	252.04	3371.93	-7.01	-6.67	-6.97	0.22	445644.59	705274.46	N 32 13 26.55	W 103 48 11.50
	3467.00	0.24	273.54	3466.93	-7.12	-6.75	-7.46	0.18	445644.51	705273.97	N 32 13 26.55	W 103 48 11.50
	3566.00	0.12	124.02	3565.93	-7.22	-6.84	-7.69	0.18	445644.42	705273.74	N 32 13 26.55	W 103 48 11.51
	3750.00	0.14	221.51	3749.93	-7.36	-6.98	-7.69	0.21	445644.28	705273.74	N 32 13 26.55	W 103 48 11.51
	3939.00	0.14	195.69	3938.93	-7.76	-7.37	-7.90	0.03	445643.89	705273.53	N 32 13 26.54	W 103 48 11.51
	4033.00	0.14	227.73	4032.93	-7.96	-7.56	-8.02	0.08	445643.70	705273.41	N 32 13 26.54	W 103 48 11.51
	4127.00	0.09	168.59	4126.93	-8.11	-7.71	-8.09	0.13	445643.55	705273.34	N 32 13 26.54	W 103 48 11.51
	4221.00	0.28	359.78	4220.93	-7.95	-7.55	-8.08	0.39	445643.71	705273.35	N 32 13 26.54	W 103 48 11.51
	4315.00	0.13	84.21	4314.93	-7.71	-7.31	-7.97	0.32	445643.95	705273.46	N 32 13 26.54	W 103 48 11.51
	4410.00	0.06	209.98	4409.93	-7.74	-7.34	-7.89	0.18	445643.92	705273.54	N 32 13 26.54	W 103 48 11.51
	4598.00	0.06	17.92	4597.93	-7.73	-7.34	-7.91	0.06	445643.93	705273.52	N 32 13 26.54	W 103 48 11.51
	4693.00	0.10	179.04	4692.93	-7.76	-7.37	-7.89	0.17	445643.89	705273.54	N 32 13 26.54	W 103 48 11.51
	4787.00	0.05	196.41	4786.93	-7.89	-7.49	-7.90	0.06	445643.77	705273.53	N 32 13 26.54	W 103 48 11.51
	4881.00	0.07	84.92	4880.93	-7.92	-7.53	-7.86	0.11	445643.73	705273.57	N 32 13 26.54	W 103 48 11.51
	5070.00	0.65	281.73	5069.92	-7.74	-7.30	-8.79	0.38	445643.96	705272.64	N 32 13 26.54	W 103 48 11.52
	5164.00	0.65	14.30	5163.92	-7.13	-6.67	-9.18	1.00	445644.59	705272.25	N 32 13 26.55	W 103 48 11.52
	5259.00	1.19	30.41	5258.91	-5.73	-5.30	-8.55	0.62	445645.96	705272.88	N 32 13 26.56	W 103 48 11.52
	5353.00	1.67	50.46	5352.88	-3.94	-3.59	-7.00	0.73	445647.67	705274.43	N 32 13 26.58	W 103 48 11.50
	5447.00	2.37	54.35	5446.82	-1.80	-1.58	-4.36	0.76	445649.68	705277.07	N 32 13 26.60	W 103 48 11.47
	5542.00	3.11	57.65	5541.71	0.91	0.94	-0.59	0.80	445652.20	705280.84	N 32 13 26.62	W 103 48 11.42
	5636.00	3.92	58.19	5635.53	4.21	4.00	4.29	0.86	445655.26	705285.72	N 32 13 26.65	W 103 48 11.37
	5730.00	4.86	54.88	5729.25	8.50	7.98	10.28	1.04	445659.24	705291.71	N 32 13 26.69	W 103 48 11.30
	5824.00	5.36	53.96	5822.88	13.71	12.86	17.09	0.54	445664.12	705298.52	N 32 13 26.74	W 103 48 11.22
	5919.00	5.84	51.50	5917.43	19.70	18.48	24.46	0.56	445669.74	705305.89	N 32 13 26.80	W 103 48 11.13
	6014.00	5.58	49.91	6011.96	26.05	24.46	31.78	0.32	445675.72	705313.20	N 32 13 26.86	W 103 48 11.05
	6108.00	5.89	51.87	6105.49	32.33	30.38	39.07	0.39	445681.64	705320.49	N 32 13 26.91	W 103 48 10.96
	6203.00	7.37	51.90	6199.85	39.53	37.15	47.70	1.56	445688.41	705329.12	N 32 13 26.98	W 103 48 10.86
	6297.00	9.11	49.95	6292.87	48.56	45.66	58.14	1.87	445696.92	705339.56	N 32 13 27.06	W 103 48 10.74
	6392.00	10.16	48.55	6386.53	59.55	56.05	70.17	1.13	445707.30	705351.60	N 32 13 27.17	W 103 48 10.60
	6486.00	10.83	46.93	6478.96	71.70	67.57	82.84	0.78	445718.82	705364.27	N 32 13 27.28	W 103 48 10.45
	6581.00	10.97	44.37	6572.25	84.89	80.12	95.68	0.53	445731.38	705377.11	N 32 13 27.40	W 103 48 10.30
	6676.00	11.82	43.21	6665.41	98.97	93.56	108.55	0.72	445744.81	705389.98	N 32 13 27.54	W 103 48 10.15
	6770.00	11.04	40.97	6757.57	113.27	107.25	120.94	0.77	445758.51	705402.36	N 32 13 27.67	W 103 48 10.00
	6865.00	10.58	37.55	6843.22	141.80	134.67	143.38	0.42	445785.92	705424.80	N 32 13 27.94	W 103 48 9.74
	7054.00	10.62	37.84	7036.60	156.16	148.50	154.06	0.07	445799.75	705435.48	N 32 13 28.08	W 103 48 9.62
	7149.00	10.17	38.86	7130.04	170.12	161.95	164.69	0.51	445813.19	705446.11	N 32 13 28.21	W 103 48 9.49
	7243.00	10.17	39.90	7222.56	183.47	174.77	175.22	0.20	445826.02	705456.64	N 32 13 28.34	W 103 48 9.37
	7338.00	9.48	40.70	7316.17	196.36	187.14	185.71	0.74	445839.38	705467.12	N 32 13 28.46	W 103 48 9.25
	7402.00	9.28	40.60	7379.31	204.60	195.05	192.50	0.32	445846.30	705473.92	N 32 13 28.54	W 103 48 9.17
	7432.00	9.18	40.55	7408.93	2							

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northings (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
100' FSL Crossed	7810.00	8.30	37.61	7782.70	253.93	242.47	231.12	0.12	445893.72	705512.54	N 32 13 29.00 W 103 48	8.71
	8000.00	8.01	36.06	7970.78	276.29	264.04	247.29	0.19	445915.28	705528.70	N 32 13 29.22 W 103 48	8.52
	8094.00	7.87	34.70	8063.87	287.25	274.62	254.80	0.25	445925.87	705536.22	N 32 13 29.32 W 103 48	8.44
	8189.00	7.98	34.13	8157.97	298.41	285.43	262.21	0.14	445936.67	705543.62	N 32 13 29.43 W 103 48	8.35
	8277.00	7.76	34.48	8245.14	308.70	295.38	269.00	0.26	445946.62	705550.41	N 32 13 29.53 W 103 48	8.27
	8281.00	7.75	34.50	8249.10	309.16	295.83	269.30	0.26	445947.07	705550.72	N 32 13 29.53 W 103 48	8.27
	8375.00	7.94	29.70	8342.22	320.36	306.69	276.11	0.73	445957.93	705557.52	N 32 13 29.84 W 103 48	8.19
	8470.00	7.86	23.33	8436.32	332.30	318.35	281.93	0.92	445969.59	705563.35	N 32 13 29.75 W 103 48	8.12
	8564.00	7.92	26.90	8529.43	344.24	330.03	287.41	0.53	445981.27	705568.82	N 32 13 29.87 W 103 48	8.05
	8659.00	7.84	33.71	8623.54	355.79	341.26	293.97	0.99	445992.50	705575.38	N 32 13 29.98 W 103 48	7.98
KOP Actual	8753.00	7.63	54.59	8716.70	365.17	350.21	302.61	2.98	446001.45	705584.02	N 32 13 30.07 W 103 48	7.87
	8848.00	7.62	69.08	8810.87	371.63	356.11	313.64	2.02	446007.35	705595.05	N 32 13 30.12 W 103 48	7.75
	8942.00	7.80	74.45	8904.02	376.17	360.05	325.60	0.79	446011.29	705607.01	N 32 13 30.16 W 103 48	7.61
	9036.00	8.11	71.84	8997.12	380.57	363.82	338.05	0.51	446015.06	705619.46	N 32 13 30.20 W 103 48	7.46
	9131.00	7.81	66.65	9091.20	385.84	366.47	350.34	0.82	446019.71	705631.75	N 32 13 30.24 W 103 48	7.32
	9225.00	8.78	63.35	9184.22	392.21	374.22	362.62	1.15	446025.46	705644.03	N 32 13 30.30 W 103 48	7.17
	9319.00	7.87	58.26	9277.23	399.41	380.82	374.50	1.24	446032.06	705655.91	N 32 13 30.37 W 103 48	7.04
	9508.00	7.84	46.56	9464.47	416.10	396.50	394.87	0.84	446047.73	705676.28	N 32 13 30.52 W 103 48	6.80
	9603.00	7.99	38.86	9558.57	426.13	406.09	403.72	1.13	446057.33	705685.12	N 32 13 30.61 W 103 48	6.69
	9697.00	8.23	35.93	9651.63	437.06	416.63	411.76	0.51	446067.86	705693.17	N 32 13 30.72 W 103 48	6.51
Wolfcamp Intersection	9791.00	8.41	30.16	9744.64	448.82	428.02	419.17	0.91	446079.25	705700.57	N 32 13 30.83 W 103 48	6.43
	9886.00	8.19	31.29	9838.64	460.95	439.81	426.17	0.29	446091.04	705707.57	N 32 13 30.95 W 103 48	6.43
	10075.00	8.34	48.88	10025.71	482.32	460.33	443.49	1.34	446111.56	705724.89	N 32 13 31.15 W 103 48	6.23
	10263.00	8.42	53.83	10211.71	500.48	477.42	464.87	0.39	446128.65	705746.28	N 32 13 31.32 W 103 48	5.98
	10452.00	8.73	49.67	10398.59	519.03	494.87	486.98	0.37	446146.10	705768.38	N 32 13 31.49 W 103 48	5.72
	10547.00	8.43	44.41	10492.53	529.19	504.51	497.35	0.88	446155.74	705778.75	N 32 13 31.58 W 103 48	5.60
	10736.00	8.41	34.18	10679.51	551.38	525.84	514.81	0.79	446177.07	705796.21	N 32 13 31.79 W 103 48	5.39
	10925.00	8.24	26.76	10866.52	575.59	549.37	528.67	0.58	446200.60	705810.07	N 32 13 32.03 W 103 48	5.23
	11032.00	8.12	26.32	10972.43	589.54	562.99	535.47	0.13	446214.21	705816.87	N 32 13 32.16 W 103 48	5.15
	11153.00	6.64	24.57	11092.43	603.88	577.01	542.17	1.24	446228.24	705823.57	N 32 13 32.30 W 103 48	5.07
KOP Actual	11248.00	5.82	25.17	11186.86	613.44	586.37	546.51	0.87	446237.59	705827.90	N 32 13 32.39 W 103 48	5.02
	11343.00	6.78	18.41	11281.29	623.31	596.05	550.33	1.28	446247.27	705831.72	N 32 13 32.49 W 103 48	4.98
	11438.00	15.91	13.07	11374.34	641.57	614.09	555.05	9.66	446265.31	705836.45	N 32 13 32.66 W 103 48	4.92
	11532.00	30.13	12.30	11460.63	677.71	649.87	563.03	15.13	446301.09	705844.43	N 32 13 33.02 W 103 48	4.83
	11617.22	43.94	11.29	11528.50	728.31	700.01	573.43	16.21	446351.23	705854.82	N 32 13 33.51 W 103 48	4.70
	11627.00	45.52	11.21	11535.45	735.12	706.76	574.77	16.21	446357.97	705856.16	N 32 13 33.58 W 103 48	4.69
	11722.00	55.66	7.01	11595.70	807.99	779.14	586.18	11.20	446430.35	705867.57	N 32 13 34.30 W 103 48	4.55
	11760.00	62.13	6.52	11615.32	840.43	811.43	590.00	17.06	446462.64	705871.40	N 32 13 34.62 W 103 48	4.50
	11795.00	63.80	6.11	11631.22	871.55	842.42	593.43	4.88	446493.62	705874.83	N 32 13 34.92 W 103 48	4.46
	11820.00	65.04	5.40	11642.02	894.08	864.85	595.69	5.58	446516.06	705877.09	N 32 13 35.14 W 103 48	4.43
KOP Actual	11914.00	81.51	358.01	11669.01	983.69	954.46	598.11	19.06	446605.66	705879.50	N 32 13 36.03 W 103 48	4.40
	12009.00	92.93	356.19	11673.61	1077.93	1049.07	593.31	12.17	446700.26	705874.70	N 32 13 36.97 W 103 48	4.45
	12051.00	94.64	355.68	11670.84	1119.52	1090.87	590.34	4.25	446742.06	705871.73	N 32 13 37.38 W 103 48	4.48
	12146.00	94.88	355.86	11662.96	1213.46	1185.28	583.35	0.32	446836.47	705864.75	N 32 13 38.32 W 103 48	4.56
	12241.00	94.54	356.79	11655.15	1307.51	1279.77	577.29	1.04	446930.95	705858.68	N 32 13 39.25 W 103 48	4.62
	12335.00	93.81	356.72	11648.31	1400.72	1373.37	571.98	0.78	447024.54	705853.37	N 32 13 40.18 W 103 48	4.68
	12430.00	93.26	356.01	11642.45	1494.92	1467.99	565.97	0.94	447119.16	705847.36	N 32 13 41.11 W 103 48	4.74
	12525.00	93.75	358.00	11636.65	1589.23	1562.68	561.01	2.15	447213.84	705842.41	N 32 13 42.05 W 103 48	4.80
	12620.00	93.71	357.75	11630.47	1683.66	1657.41	557.50	0.27	447308.57	705838.89	N 32 13 42.99 W 103 48	4.83
	12714.00	92.71	357.37	11625.20	1777.10	1751.18	553.50	1.14	447402.33	705834.90	N 32 13 43.92 W 103 48	4.87
KOP Actual	12809.00	92.88	357.70	11620.57	1871.57	1845.98	549.42	0.39	447497.12	705830.82	N 32 13 44.85 W 103 48	4.92
	12904.00	93.20	359.59	11615.53	1966.17	1940.81	547.18	2.02	447591.95	705828.57	N 32 13 45.79 W 103 48	4.94
	12998.00	92.99	0.19	11610.46	2059.90	2034.68	547.00	0.68	447685.81	705828.39	N 32 13 46.72 W 103 48	4.93
	13093.00	92.92	359.90	11605.56	2154.65	2129.95	547.07	0.31	447780.68	705828.47	N 32 13 47.66 W 103 48	4.93
	13188.00	90.17	359.25	11603.00	2249.45	2224.50	546.37	2.97	447875.63	705827.76	N 32 13 48.60 W 103 48	4.93
	13277.00	91.65	0.49	11600.00	2346.15	2313.47	545.94	1.02	448064.58	705827.33	N 32 13 50.47 W 103 48	4.92
	13372.00	91.30	359.29	11597.55	2532.98	2508.44	545.76	1.32	448159.54	705827.15	N 32 13 51.41 W 103 48	4.92
	13467.00	91.34	359.66	11595.36	2627.78	2603.41	544.89	0.39	448254.51	705826.28	N 32 13 52.35 W 103 48	4.92
	13562.00	91.61	0.19	11590.50	2816.46	2792.34	544.64	0.31	448443.43	705826.03	N 32 13 54.22 W 103 48	4.92
	13657.00	91.40	0.32	11588.03	2910.33	2886.31	545.06	0.26	448537.39	705826.45	N 32 13 55.15 W 103 48	4.91
KOP Actual	13945.00	90.44	359.89	11586.50	3005.20	2981.30	545.23	1.11	448632.37	705826.63	N 32 13 56.09 W 103 48	4.90
	14040.00	89.65	0.27	11586.43	3100.08	3076.30	545.36	0.92	448727.36	705826.76	N 32 13 57.03 W 103 48	4.89
	14134.00	89.79	0.71	11586.89	3194.00	3170.29	546.17	0.49	448821.35	705827.56	N 32 13 57.96 W 103 48	4.88
	14229.00	89.72	0.98	11587.29	3288.93	3265.28	547.57	0.29	448916.34	705828.96	N 32 13 58.90 W 103 48	4.86
	14419.00	89.72	0.85	11588.22	3478.82	3455.25	550.60	0.07	449106.30	705832.00	N 32 14 0.78 W 103 48	4.81
	14513.00	89.82	0.21	11588.60	3572.73	3549.25	551.47	0.69	449200.29	705832.87	N 32 14 1.71 W 103 48	4.79
	14608.00											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	18862.00	93.13	4.58	11560.05	7916.04	7896.99	575.23	3.17	453547.76	705856.63	N 32 14 44.73 W 103 48	4.27
	18957.00	89.82	1.29	11557.61	8010.98	7991.81	580.09	4.91	453642.57	705861.48	N 32 14 45.67 W 103 48	4.20
	19052.00	86.52	358.94	11560.84	8105.80	8086.74	580.28	4.26	453737.49	705861.68	N 32 14 46.61 W 103 48	4.20
	19147.00	87.17	358.67	11565.87	8200.41	8181.57	578.30	0.74	453832.32	705859.70	N 32 14 47.54 W 103 48	4.21
	19241.00	87.41	357.98	11570.31	8294.00	8275.43	575.56	0.78	453926.17	705856.95	N 32 14 48.47 W 103 48	4.24
	19335.00	87.17	357.82	11574.76	8387.54	8369.26	572.12	0.31	454020.00	705853.51	N 32 14 49.40 W 103 48	4.28
	19430.00	87.55	357.21	11579.13	8482.01	8464.07	568.00	0.76	454114.80	705849.40	N 32 14 50.34 W 103 48	4.32
	19525.00	88.07	358.03	11582.76	8576.54	8558.91	564.06	1.02	454209.64	705845.46	N 32 14 51.28 W 103 48	4.36
	19620.00	89.24	358.17	11584.99	8671.17	8653.83	560.91	1.24	454304.56	705842.31	N 32 14 52.22 W 103 48	4.39
	19715.00	89.48	357.61	11586.05	8765.80	8748.76	557.42	0.64	454399.48	705838.81	N 32 14 53.16 W 103 48	4.42
	19810.00	89.68	358.23	11586.75	8860.44	8843.70	553.97	0.69	454494.41	705835.36	N 32 14 54.10 W 103 48	4.46
	19904.00	89.75	358.54	11587.22	8954.16	8937.67	551.56	0.65	454588.37	705832.96	N 32 14 55.03 W 103 48	4.48
	19999.00	89.65	358.54	11587.71	9048.90	9032.64	549.39	0.33	454683.34	705830.79	N 32 14 55.97 W 103 48	4.50
	20094.00	89.62	0.42	11588.32	9143.72	9127.63	548.53	1.98	454778.32	705829.93	N 32 14 56.91 W 103 48	4.51
	20189.00	90.03	0.21	11588.61	9238.62	9222.63	548.05	0.48	454873.31	705830.45	N 32 14 57.85 W 103 48	4.49
	20284.00	91.37	0.08	11587.45	9333.50	9317.62	548.29	1.42	454968.30	705830.69	N 32 14 58.79 W 103 48	4.49
	20379.00	89.72	0.67	11586.55	9428.40	9412.61	548.92	1.84	455063.28	705831.31	N 32 14 59.73 W 103 48	4.47
	20473.00	91.89	1.44	11585.23	9522.33	9506.58	551.65	2.45	455157.25	705833.04	N 32 15 0.66 W 103 48	4.45
	20568.00	92.61	1.25	11581.50	9617.22	9601.48	553.87	0.78	455252.14	705835.27	N 32 15 1.60 W 103 48	4.42
	20663.00	89.03	0.94	11580.14	9712.15	9696.43	555.69	3.78	455347.09	705837.08	N 32 15 2.53 W 103 48	4.39
	20758.00	88.07	0.33	11582.54	9807.04	9791.40	556.74	1.20	455442.05	705838.14	N 32 15 3.47 W 103 48	4.37
	20852.00	88.31	0.88	11585.51	9900.92	9885.34	557.73	0.64	455535.99	705839.13	N 32 15 4.40 W 103 48	4.36
	20947.00	88.07	0.53	11588.51	9995.80	9980.29	558.90	0.45	455630.93	705840.30	N 32 15 5.34 W 103 48	4.34
	21042.00	87.96	0.44	11591.80	10090.66	10075.23	559.71	0.15	455725.86	705841.10	N 32 15 6.28 W 103 48	4.32
	21136.00	87.93	359.17	11595.17	10184.46	10169.16	559.39	1.35	455819.79	705840.78	N 32 15 7.21 W 103 48	4.32
	21230.00	88.03	1.36	11598.49	10278.29	10263.10	558.82	2.33	455913.72	705841.22	N 32 15 8.14 W 103 48	4.31
	21419.00	89.17	0.37	11603.10	10467.11	10452.02	562.67	0.80	456102.63	705844.07	N 32 15 10.01 W 103 48	4.26
	21607.00	90.30	0.56	11603.97	10654.93	10640.00	564.20	0.61	456290.60	705845.59	N 32 15 11.87 W 103 48	4.24
100' FNL Crossed	21633.00	90.25	0.23	11603.85	10680.91	10666.00	564.38	1.29	456316.60	705845.77	N 32 15 12.13 W 103 48	4.23
Final MWD	21673.00	90.17	359.72	11603.70	10720.85	10706.00	564.36	1.29	456356.60	705845.75	N 32 15 12.52 W 103 48	4.23
Proj to TD	21715.00	90.17	359.72	11603.58	10762.79	10748.00	564.15	0.00	456398.59	705845.55	N 32 15 12.94 W 103 48	4.23

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H Gyro + MWD 0-21715MD
	1	26.500	26.500	Act Stns	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H Gyro + MWD 0-21715MD
	1	26.500	683.300	Act Stns	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H
	1	683.300	11032.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H
	1	11032.000	11438.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H
	1	11438.000	11795.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H
	1	11795.000	12009.000	Act Stns	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H
	1	12009.000	21715.000	Act Stns	30.000	30.000	NAL_MWD_IFR1+MS	Original Borehole / Oxy Sunrise MDP1 8-5 Federal Com 173H

...Original Borehole/Oxy Sunrise MDP1 8-5 Federal Com 173H Gyro + MWD 0-21715MD