

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NNNM86024
2. Name of Operator OXY USA INC. Contact: DAVID STEWART E-Mail: david_stewart@oxy.com		6. If Indian, Allottee or Tribe Name
3a. Address P.O. BOX 50250 MIDLAND, TX 79710	3b. Phone No. (include area code) Ph: 432-685-5717 Fx: 432-685-5742	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T23S R29E SESW 330FSL 2000FWL 32.269380 N Lat, 103.992520 W Lon		8. Well Name and No. CYPRESS 28 FEDERAL 6H
		9. API Well No. 30-015-41138
		10. Field and Pool, or Exploratory HARROUN RANCH DELAWARE, NE
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

OXY USA Inc. respectfully requests approval for the following changes to the drilling plan:

1. Extend the BHL approximately 150' past the north hardline to allow for our shoe track and perforating guns, see attached for amended C-102 plat and amended directional drilling plan.

Proposed TD - 11480'M 6583'V

2. Adjust production casing and cementing to amended TMD.

Production Casing
5-1/2" 17# L-80 BT&C new csg @ 0-11480'M, 7-7/8" hole w/ 9.2# mud

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 29 2015

RECEIVED

Accepted for record

ND NMOC 6/30/2015

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #284857 verified by the BLM Well Information System
For OXY USA INC., sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH HAM on 06/12/2015

Name (Printed/Typed) DAVID STEWART

Title SR. REGULATORY ADVISOR

Signature (Electronic Submission)

Date 12/11/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

ACCEPTED FOR RECORD	
JUN 22 2015	
BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE	

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #284857 that would not fit on the form

32. Additional remarks, continued

Coll Rating (psi)-6290 Burst Rating (psi)-7740
SF Coll-1.99 SF Burst-1.20 SF Ten-2.02

Production - Circulate Cement w/ 540sx Tuned Light (TM) system.cmt w/ 3#/sx Kol-Seal + .125#/sx Poly-E-Flake + .8% HR-601, 10.2ppg 3.06 yield 555# 24hr CS 100% Excess followed by 810sx PP H cmt w/ 3#/sx salt + .3% CFR-3 + .5% Halad-344 + .4% HR-800 + 3#/sx Kol-Seal, 13.2ppg 1.66 yield 1162# 24hr CS 40% Excess.

DV tool @ +/-3100'. If returns are not lost during first stage cement job and cement is circulated to surface, we will drop the cancelation cone for the DV tool.

Contingency 2nd Stage - Circulate Cement w/ 240sx Light PPC w/ 3% salt, 12.4ppg 2.07 yield 500# 28hr CS 10% Excess followed by 100sx PP cmt, 14.8ppg 1.33 yield 1849# 24hr CS 50# excess.

Description of Cement Additives: Salt (Accelerator); CFR-3 (Dispersant); Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Halad-344 (Low Fluid Loss Control); HR-601 (Retarder)

The above cement volumes could be revised pending the caliper measurement.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-6720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1383 Fax: (575) 748-9720
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) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-41138	Pool Code 96878	Pool Name Harron Ranch Delaware, NE
Property Code 37803	Property Name CYPRESS "28" FEDERAL	Well Number 6H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3020.8'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	28	23 SOUTH	29 EAST, N.M.P.M.		330'	SOUTH	2000'	WEST	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
C	28	23 SOUTH	29 EAST, N.M.P.M.		180'	NORTH	1690'	WEST	EDDY
Dedicated Acres 160	Joint or Infill No	Consolidation Code	Order No.						

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.

Diagram showing well location and acreage dedication plat. The diagram includes a grid with dimensions: 1690' and 1700' horizontally, and 330' and 4822.14' vertically. It also shows a 2000' horizontal distance. The diagram is divided into a PRODUCING AREA and a PROJECT AREA. The grid is labeled GRID AZ = 355°54'.	BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1927 Y=468544.7 X=605324.9 LAT.: N 32.2826006° LONG.: W 103.9925211°	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: <i>[Signature]</i> Date: 12/11/14 Printed Name: David Stewart Sr. Pres. HCU. E-mail Address: david_stewart@oxy.com
	BOTTOM PERF. NEW MEXICO EAST NAD 1927 Y=468544.7 X=605324.9 LAT.: N 32.2821882° LONG.: W 103.9924879°	SURVEYOR CERTIFICATION I hereby certify that the information shown on this plat was plotted from original survey data and that the same is true and correct to the best of my knowledge. Date of Survey: SEPTEMBER 27, 2014 Signature and Seal of Professional Surveyor: <i>[Signature]</i> 15079
	SURFACE LOCATION NEW MEXICO EAST NAD 1927 Y=468544.0 X=605324.0 LAT.: N 32.2893780° LONG.: W 103.9914569°	WOP 120525WL-a (Rev. C) (N)

C28 F6H
Eddy County, NM (NAD 27 NME)
Northing: 461885.00
Easting: 605669.20
Plan #1



Azimuths to Grid North
True North: -0.18°
Magnetic North: 7.34°

Magnetic Field
Strength: 46202.1nT
Dip Angle: 60.06°
Date: 12/10/2014
Model: BGGM2014

To convert Magnetic North to Grid, Add 7.34°
To convert True North to Grid, Subtract 0.18°

KB @ 3045.80usft
Gr @ 3020.80

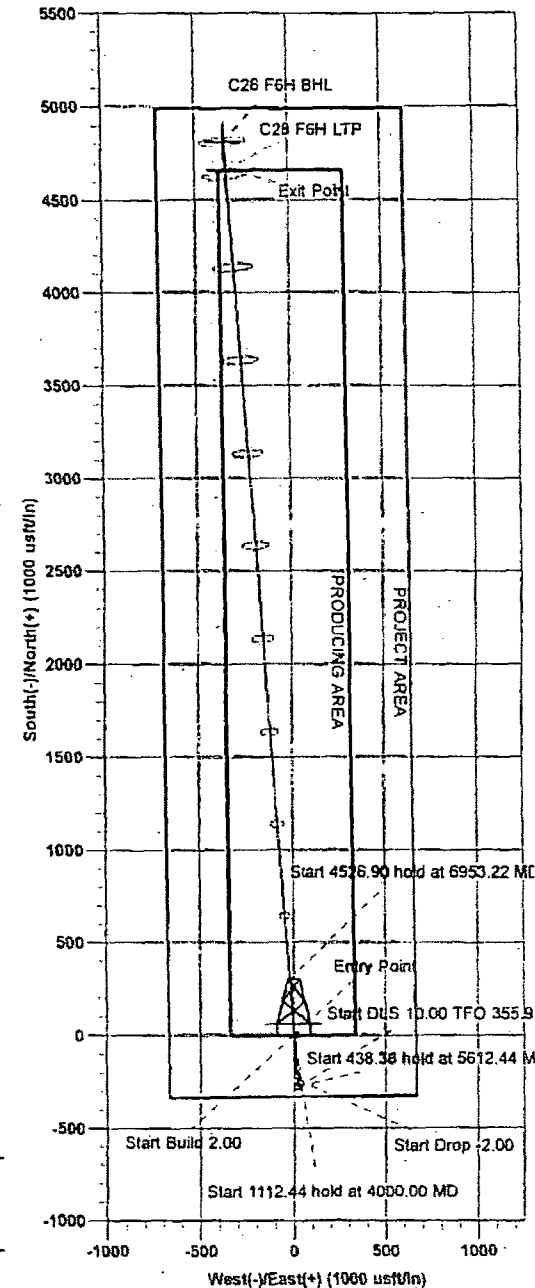
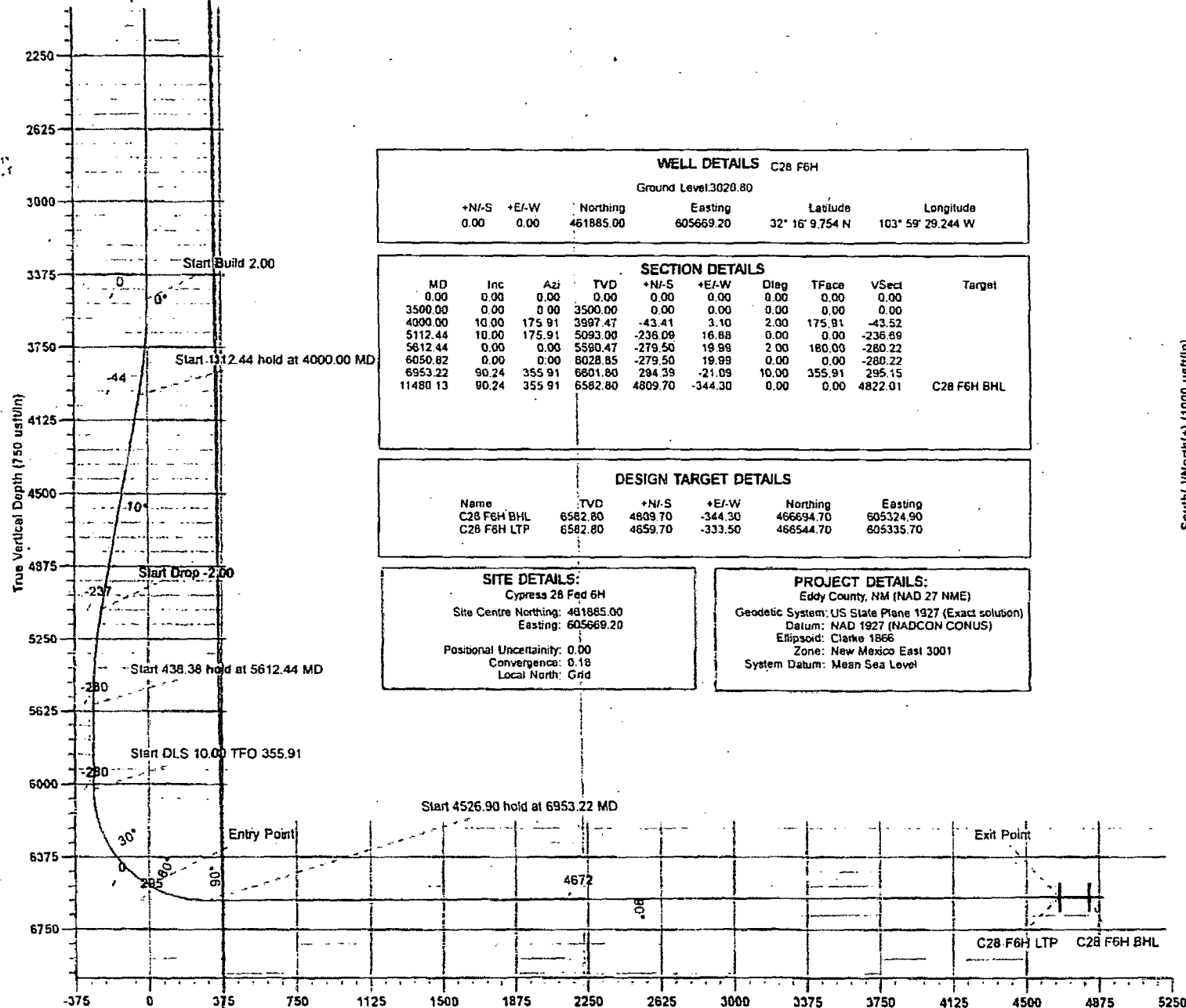
WELL DETAILS C28 F6H						
Ground Level: 3020.80						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	461885.00	605669.20	32° 16' 9.754 N	103° 59' 29.244 W	

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	
4000.00	10.00	175.91	3997.47	-43.41	3.10	2.00	175.91	-43.52	
5112.44	10.00	175.91	5093.00	-236.09	16.88	0.00	0.00	-236.69	
5612.44	0.00	0.00	5590.47	-279.50	19.99	2.00	180.00	-280.22	
6050.82	0.00	0.00	6028.85	-279.50	19.99	0.00	0.00	-280.22	
6953.22	90.24	355.91	6801.80	294.39	-21.09	10.00	355.91	295.15	
11480.13	90.24	355.91	6582.80	4809.70	-344.30	0.00	0.00	4822.01	C28 F6H BHL

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
C28 F6H BHL	6582.80	4809.70	-344.30	466694.70	605324.90
C28 F6H LTP	6582.80	4659.70	-333.50	466544.70	605335.70

SITE DETAILS:
Cypress 28 Fed 6H
Site Centre Northing: 461885.00
Easting: 605669.20
Positional Uncertainty: 0.00
Convergence: 0.18
Local North: Grid

PROJECT DETAILS:
Eddy County, NM (NAD 27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level



Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C28 F6H
Company:	OXY	TVD Reference:	KB @ 3045.80usft
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	KB @ 3045.80usft
Site:	Cypress 28 Fed 6H	North Reference:	Grid
Well:	C28 F6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project:	Eddy County, NM (NAD 27 NME), New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Cypress 28 Fed 6H		
Site Position:	From: Map	Northing: 461,885.00 usft	Latitude: 32° 16' 9.754 N
		Easting: 605,669.20 usft	Longitude: 103° 59' 29.244 W
Position Uncertainty:	0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.18 "

Well:	C28 F6H		
Well Position	+N/-S 0.00 usft	Northing: 461,885.00 usft	Latitude: 32° 16' 9.754 N
	+E/-W 0.00 usft	Easting: 605,669.20 usft	Longitude: 103° 59' 29.244 W
Position Uncertainty	0.00 usft	Wellhead Elevation: 0.00 usft	Ground Level: 3,020.80 usft

Wellbore:	OH		
Magnetics:	Model Name	Sample Date	Declination
	BGGM2014	12/10/2014	7.53
			60.06
			48.202

Design:	Plan #1		
Audit Notes:			
Version:	Phase: PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			355.91

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(bearing)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,000.00	10.00	175.91	3,997.47	-43.41	3.10	2.00	2.00	0.00	175.91	
5,112.44	10.00	175.91	5,093.00	-236.09	16.88	0.00	0.00	0.00	0.00	
5,612.44	0.00	0.00	5,590.47	-279.50	19.99	2.00	-2.00	0.00	180.00	
6,050.82	0.00	0.00	6,028.85	-279.50	19.99	0.00	0.00	0.00	0.00	
6,953.22	90.24	355.91	6,601.80	294.39	-21.09	10.00	10.00	-0.45	355.91	
11,480.13	90.24	355.91	6,582.80	4,809.70	-344.30	0.00	0.00	0.00	0.00	C28 F6H BHL

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C28 F6H
Company:	OXY	TVD Reference:	KB @ 3045.80usft
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	KB @ 3045.80usft
Site:	Cypress 28 Fed 6H	North Reference:	Grid
Well:	C28 F6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
3,600.00	2.00	175.91	3,599.98	-1.74	0.12	-1.75	2.00	2.00	0.00	
3,700.00	4.00	175.91	3,699.84	-6.96	0.50	-6.98	2.00	2.00	0.00	
3,800.00	6.00	175.91	3,799.45	-15.65	1.12	-15.69	2.00	2.00	0.00	
3,900.00	8.00	175.91	3,898.70	-27.81	1.99	-27.88	2.00	2.00	0.00	
4,000.00	10.00	175.91	3,997.47	-43.41	3.10	-43.52	2.00	2.00	0.00	
Start 1112.44 hold at 4000.00 MD										
4,100.00	10.00	175.91	4,095.95	-60.73	4.34	-60.89	0.00	0.00	0.00	
4,200.00	10.00	175.91	4,194.43	-78.05	5.58	-78.25	0.00	0.00	0.00	
4,300.00	10.00	175.91	4,292.91	-95.37	6.82	-95.62	0.00	0.00	0.00	
4,400.00	10.00	175.91	4,391.39	-112.69	8.06	-112.98	0.00	0.00	0.00	
4,500.00	10.00	175.91	4,489.87	-130.01	9.30	-130.35	0.00	0.00	0.00	
4,600.00	10.00	175.91	4,588.35	-147.34	10.54	-147.71	0.00	0.00	0.00	
4,700.00	10.00	175.91	4,686.83	-164.66	11.77	-165.08	0.00	0.00	0.00	
4,800.00	10.00	175.91	4,785.31	-181.98	13.01	-182.44	0.00	0.00	0.00	
4,900.00	10.00	175.91	4,883.79	-199.30	14.25	-199.81	0.00	0.00	0.00	
5,000.00	10.00	175.91	4,982.27	-216.62	15.49	-217.17	0.00	0.00	0.00	
5,100.00	10.00	175.91	5,080.75	-233.94	16.73	-234.54	0.00	0.00	0.00	

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C28 F6H
Company:	OXY	TVD Reference:	KB @ 3045.80usft
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	KB @ 3045.80usft
Site:	Cypress 28 Fed 6H	North Reference:	Grid
Well:	C28 F6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,112.44	10.00	175.91	5,093.00	-236.09	16.88	-236.69	0.00	0.00	0.00	
Start Drop -2.00										
5,200.00	8.25	175.91	5,179.45	-249.94	17.87	-250.58	2.00	-2.00	0.00	
5,300.00	6.25	175.91	5,278.65	-262.53	18.77	-263.20	2.00	-2.00	0.00	
5,400.00	4.25	175.91	5,378.23	-271.65	19.42	-272.34	2.00	-2.00	0.00	
5,500.00	2.25	175.91	5,478.06	-277.30	19.83	-278.01	2.00	-2.00	0.00	
5,600.00	0.25	175.91	5,578.03	-279.48	19.98	-280.19	2.00	-2.00	0.00	
5,612.44	0.00	0.00	5,590.47	-279.50	19.99	-280.22	2.00	-2.00	0.00	
Start 438.38 hold at 5612.44 MD										
5,700.00	0.00	0.00	5,678.03	-279.50	19.99	-280.22	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,778.03	-279.50	19.99	-280.22	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,878.03	-279.50	19.99	-280.22	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,978.03	-279.50	19.99	-280.22	0.00	0.00	0.00	
6,050.82	0.00	0.00	6,028.85	-279.50	19.99	-280.22	0.00	0.00	0.00	
Start DLS 10.00 TFO 355.91										
6,100.00	4.92	355.91	6,077.97	-277.40	19.84	-278.11	10.00	10.00	0.00	
6,150.00	9.92	355.91	6,127.54	-270.96	19.37	-271.65	10.00	10.00	0.00	
6,200.00	14.92	355.91	6,176.35	-260.24	18.61	-260.91	10.00	10.00	0.00	
6,250.00	19.92	355.91	6,224.04	-245.32	17.54	-245.94	10.00	10.00	0.00	
6,300.00	24.92	355.91	6,270.25	-226.30	16.18	-226.88	10.00	10.00	0.00	
6,350.00	29.92	355.91	6,314.62	-203.35	14.53	-203.86	10.00	10.00	0.00	
6,400.00	34.92	355.91	6,356.81	-176.62	12.62	-177.07	10.00	10.00	0.00	
6,450.00	39.92	355.91	6,396.51	-146.32	10.45	-146.70	10.00	10.00	0.00	
6,500.00	44.92	355.91	6,433.41	-112.69	8.05	-112.98	10.00	10.00	0.00	
6,550.00	49.92	355.91	6,467.23	-75.98	5.42	-76.18	10.00	10.00	0.00	
6,600.00	54.92	355.91	6,497.72	-36.47	2.59	-36.57	10.00	10.00	0.00	
6,643.61	59.28	355.91	6,521.40	0.04	-0.02	0.04	10.00	10.00	0.00	
Entry Point										
6,650.00	59.92	355.91	6,524.64	5.54	-0.42	5.55	10.00	10.00	0.00	
6,700.00	64.92	355.91	6,547.78	49.73	-3.58	49.86	10.00	10.00	0.00	
6,750.00	69.92	355.91	6,566.97	95.76	-6.88	96.01	10.00	10.00	0.00	
6,800.00	74.92	355.91	6,582.07	143.29	-10.28	143.66	10.00	10.00	0.00	
6,850.00	79.92	355.91	6,592.96	191.95	-13.76	192.44	10.00	10.00	0.00	
6,900.00	84.92	355.91	6,599.56	241.37	-17.30	241.99	10.00	10.00	0.00	
6,953.22	90.24	355.91	6,601.80	294.39	-21.09	295.15	10.00	10.00	0.00	
Start 4526.90 hold at 6953.22 MD										
7,000.00	90.24	355.91	6,601.61	341.05	-24.43	341.92	0.00	0.00	0.00	
7,100.00	90.24	355.91	6,601.19	440.79	-31.57	441.92	0.00	0.00	0.00	
7,200.00	90.24	355.91	6,600.77	540.53	-38.71	541.92	0.00	0.00	0.00	
7,300.00	90.24	355.91	6,600.35	640.28	-45.85	641.92	0.00	0.00	0.00	
7,400.00	90.24	355.91	6,599.93	740.02	-52.99	741.92	0.00	0.00	0.00	
7,500.00	90.24	355.91	6,599.51	839.77	-60.13	841.92	0.00	0.00	0.00	
7,600.00	90.24	355.91	6,599.09	939.51	-67.27	941.92	0.00	0.00	0.00	
7,700.00	90.24	355.91	6,598.67	1,039.25	-74.41	1,041.91	0.00	0.00	0.00	
7,800.00	90.24	355.91	6,598.25	1,139.00	-81.55	1,141.91	0.00	0.00	0.00	
7,900.00	90.24	355.91	6,597.83	1,238.74	-88.69	1,241.91	0.00	0.00	0.00	
8,000.00	90.24	355.91	6,597.41	1,338.49	-95.83	1,341.91	0.00	0.00	0.00	
8,100.00	90.24	355.91	6,596.99	1,438.23	-102.97	1,441.91	0.00	0.00	0.00	
8,200.00	90.24	355.91	6,596.57	1,537.97	-110.11	1,541.91	0.00	0.00	0.00	
8,300.00	90.24	355.91	6,596.15	1,637.72	-117.25	1,641.91	0.00	0.00	0.00	
8,400.00	90.24	355.91	6,595.73	1,737.46	-124.39	1,741.91	0.00	0.00	0.00	
8,500.00	90.24	355.91	6,595.31	1,837.20	-131.53	1,841.91	0.00	0.00	0.00	
8,600.00	90.24	355.91	6,594.89	1,936.95	-138.67	1,941.91	0.00	0.00	0.00	

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C28 F6H
Company:	OXY	TVD Reference:	KB @ 3045.80usft
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	KB @ 3045.80usft
Site:	Cypress 28 Fed 6H	North Reference:	Grid
Well:	C28 F6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,700.00	90.24	355.91	6,594.47	2,036.69	-145.81	2,041.91	0.00	0.00	0.00	
8,800.00	90.24	355.91	6,594.05	2,136.44	-152.95	2,141.90	0.00	0.00	0.00	
8,900.00	90.24	355.91	6,593.63	2,236.18	-160.09	2,241.90	0.00	0.00	0.00	
9,000.00	90.24	355.91	6,593.21	2,335.92	-167.23	2,341.90	0.00	0.00	0.00	
9,100.00	90.24	355.91	6,592.79	2,435.67	-174.37	2,441.90	0.00	0.00	0.00	
9,200.00	90.24	355.91	6,592.37	2,535.41	-181.51	2,541.90	0.00	0.00	0.00	
9,300.00	90.24	355.91	6,591.95	2,635.16	-188.65	2,641.90	0.00	0.00	0.00	
9,400.00	90.24	355.91	6,591.53	2,734.90	-195.79	2,741.90	0.00	0.00	0.00	
9,500.00	90.24	355.91	6,591.11	2,834.64	-202.93	2,841.90	0.00	0.00	0.00	
9,600.00	90.24	355.91	6,590.69	2,934.39	-210.06	2,941.90	0.00	0.00	0.00	
9,700.00	90.24	355.91	6,590.27	3,034.13	-217.20	3,041.90	0.00	0.00	0.00	
9,800.00	90.24	355.91	6,589.85	3,133.88	-224.34	3,141.90	0.00	0.00	0.00	
9,900.00	90.24	355.91	6,589.43	3,233.62	-231.48	3,241.89	0.00	0.00	0.00	
10,000.00	90.24	355.91	6,589.01	3,333.36	-238.62	3,341.89	0.00	0.00	0.00	
10,100.00	90.24	355.91	6,588.59	3,433.11	-245.76	3,441.89	0.00	0.00	0.00	
10,200.00	90.24	355.91	6,588.17	3,532.85	-252.90	3,541.89	0.00	0.00	0.00	
10,300.00	90.24	355.91	6,587.75	3,632.60	-260.04	3,641.89	0.00	0.00	0.00	
10,400.00	90.24	355.91	6,587.33	3,732.34	-267.18	3,741.89	0.00	0.00	0.00	
10,500.00	90.24	355.91	6,586.91	3,832.08	-274.32	3,841.89	0.00	0.00	0.00	
10,600.00	90.24	355.91	6,586.49	3,931.83	-281.46	3,941.89	0.00	0.00	0.00	
10,700.00	90.24	355.91	6,586.07	4,031.57	-288.60	4,041.89	0.00	0.00	0.00	
10,800.00	90.24	355.91	6,585.66	4,131.32	-295.74	4,141.89	0.00	0.00	0.00	
10,900.00	90.24	355.91	6,585.24	4,231.06	-302.88	4,241.89	0.00	0.00	0.00	
11,000.00	90.24	355.91	6,584.82	4,330.80	-310.02	4,341.89	0.00	0.00	0.00	
11,100.00	90.24	355.91	6,584.40	4,430.55	-317.16	4,441.88	0.00	0.00	0.00	
11,200.00	90.24	355.91	6,583.98	4,530.29	-324.30	4,541.88	0.00	0.00	0.00	
11,300.00	90.24	355.91	6,583.56	4,630.03	-331.44	4,641.88	0.00	0.00	0.00	
11,329.76	90.24	355.91	6,583.43	4,659.72	-333.56	4,671.64	0.00	0.00	0.00	
Exit Point										
11,400.00	90.24	355.91	6,583.14	4,729.78	-338.58	4,741.88	0.00	0.00	0.00	
11,480.13	90.24	355.91	6,582.80	4,809.70	-344.30	4,822.01	0.00	0.00	0.00	
TD at 11480.13										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir (bearing)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
C28 F6H BHL	0.00	0.00	6,582.80	4,809.70	-344.30	466,694.70	605,324.90	32° 16' 57.362 N	103° 59' 33.076 W	
- plan hits target center										
- Point										
C28 F6H LTP	0.00	0.00	6,582.80	4,659.70	-333.50	466,544.70	605,335.70	32° 16' 55.877 N	103° 59' 32.956 W	
- plan misses target center by 0.63usft at 11329.74usft MD (6583.43 TVD, 4659.70 N, -333.56 E)										
- Point										

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well: C28 F6H
Company:	OXY	TVD Reference:	KB @ 3045.80usft
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	KB @ 3045.80usft
Site:	Cypress 28 Fed 6H	North Reference:	Grid
Well:	C28 F6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
3,500.00	3,500.00	0.00	0.00	Start Build 2.00
4,000.00	3,997.47	-43.41	3.10	Start 1112.44 hold at 4000.00 MD
5,112.44	5,093.00	-236.09	16.88	Start Drop -2.00
5,612.44	5,590.47	-279.50	19.99	Start 438.38 hold at 5612.44 MD
6,050.82	6,028.85	-279.50	19.99	Start DLS 10.00 TFO 355.91
6,643.61	6,521.40	0.04	-0.02	Entry Point
6,953.22	6,601.80	294.39	-21.09	Start 4526.90 hold at 6953.22 MD
11,329.76	6,583.43	4,659.72	-333.56	Exit Point
11,480.13	6,582.80	4,609.70	-344.30	TD at 11480.13