

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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.*5. Lease Serial No.
NMNM88139

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
CORRAL FLY 35-26 FEDERAL COM 21H9. API Well No.
30-015-44702-00-X110. Field and Pool or Exploratory Area
PIERCE CROSSING-BONE SPRING, E11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
OXY USA INCORPORATEDContact: DAVID STEWART
E-Mail: david_stewart@oxy.com3a. Address
5 GREENWAY PLAZA SUITE 110
HOUSTON, TX 77046-05213b. Phone No. (include area code)
Ph: 432.685.5717

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 2 T25S R29E 694FNL 1248FWL
32.164627 N Lat, 103.959663 W Lon

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original APD
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must 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 to amend the APD with the following changes

GC 4-18-18
Accepted for record - NMOCD

RECEIVED

1. Due to lease (NMNM137803) in the NW4/NW4 of Sec 26 T24S R29E being approved, the horizontal lateral length will be extended, see attached for an amended C-102 plat, directional plan and plot.

MAY 16 2018

2. Amend the casings size, type, and depth to reflect the longer horizontal lateral, slim-hole design, and annular clearance request, see attached.

DISTRICT II-ARTESIA O.C.D.

3. Amend the cementing program, see attached.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

4. Amend the pressure control equipment due to casing size and BOP Break Testing request, see

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

Electronic Submission #410348 verified by the BLM Well Information System
For OXY USA INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 04/06/2018 (18PP1445SE)

Name (Printed/Typed) DAVID STEWART

Title REGULATORY ADVISOR

Signature (Electronic Submission)

Date 04/04/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE

Title PETROLEUM ENGINEER

Date 05/14/2018

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 Carlsbad

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.

(Instructions on page 2)

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

Additional data for EC transaction #410348 that would not fit on the form

32. Additional remarks, continued

attached.

5. Amend the mud program, depth and type, see attached.

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) 748-9720
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 30-015-44702	Pool Code 96473	Pool Name Pierce Crossing Bone Springs, East
Property Code 320767	Property Name CORRAL FLY "35-26" FEDERAL COM	Well Number 21H
OGRID No 16696	Operator Name OXY USA INC.	Elevation 3016.0'

Surface Location

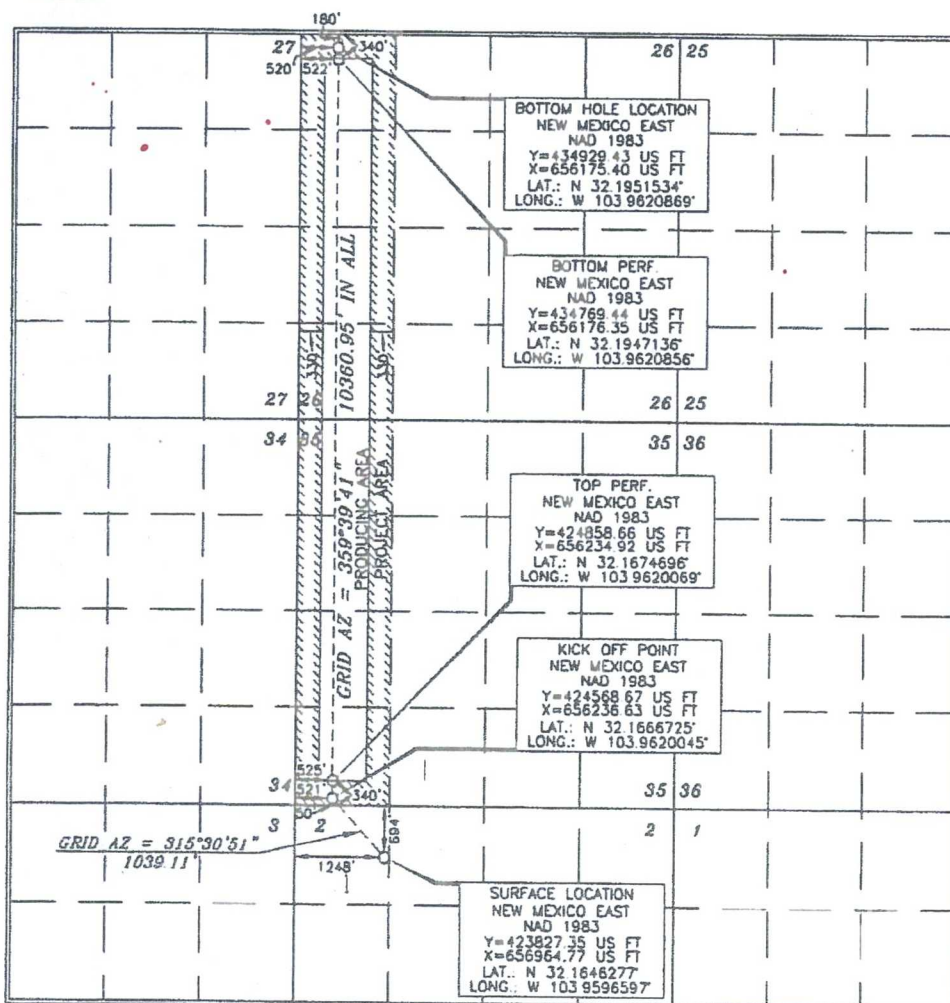
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	2	25 SOUTH	29 EAST, N.M.P.M.		694'	NORTH	1248'	WEST	EDDY

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
D	26	24 SOUTH	29 EAST, N.M.P.M.		180'	NORTH	520'	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No
320	Y		

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



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 retained 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

hereby entered by the division
Signature: *David Stewart* Date: 4/3/18
Printed Name: David Stewart
E-mail Address: david_stewart@oxy.com

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes and/or actual surveys made by me or under my supervision and that the same is accurate correct to the best of my belief

Date of Survey: MAY 15, 2017
Signature and Seal of Professional Surveyor: *Terry J. Asch*
Certificate Number: 15079

Oxy Corral Fly 35-26 Federal Com 21H Rev0 APS 30Mar18 Proposal

Geodetic Report

(Def Plan)



Report Date: March 30, 2018 - 06:03 PM
Client: OXY
Field: NM Eddy County (NAD 83)
Structure / Slot: Oxy Corral Fly 35-26 Federal Com 21H / Oxy Corral Fly 35-26 Federal Com 21H
Well: Oxy Corral Fly 35-26 Federal Com 21H
Borehole: Original Borehole
UWI / API#: Unknown / 30-015-44702
Survey Name: Oxy Corral Fly 35-26 Federal Com 21H Rev0 APS 30Mar18
Survey Date: March 30, 2018
Tort / AHD / DDI / ERD Ratio: 95.147 ° / 11441.339 ft / 6.374 / 1.283
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 9' 52.65985", W 103° 57' 34.77500"
Location Grid N/E Y/X: N 423827.350 ftUS, E 656964.770 ftUS
CRS Grid Convergence Angle: 0.1989 °
Grid Scale Factor: 0.9999244
Version / Patch: 2.10.715.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 355.933 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=26.5'
TVD Reference Elevation: 3042.500 ft above MSL
Seabed / Ground Elevation: 3016.000 ft above MSL
Magnetic Declination: 7.015 °
Total Gravity Field Strength: 998.4576mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48010.967 nT
Magnetic Dip Angle: 59.930 °
Declination Date: March 30, 2018
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: 0.1989 °
Total Corr Mag North->Grid North: 6.8157 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	100.00	0.00	306.20	100.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	200.00	0.00	306.20	200.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	300.00	0.00	306.20	300.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	400.00	0.00	306.20	400.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	500.00	0.00	306.20	500.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	600.00	0.00	306.20	600.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	700.00	0.00	306.20	700.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	800.00	0.00	306.20	800.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	900.00	0.00	306.20	900.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1000.00	0.00	306.20	1000.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1100.00	0.00	306.20	1100.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1200.00	0.00	306.20	1200.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1300.00	0.00	306.20	1300.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1400.00	0.00	306.20	1400.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1500.00	0.00	306.20	1500.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1600.00	0.00	306.20	1600.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1700.00	0.00	306.20	1700.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1800.00	0.00	306.20	1800.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	1900.00	0.00	306.20	1900.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2000.00	0.00	306.20	2000.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2100.00	0.00	306.20	2100.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2200.00	0.00	306.20	2200.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2300.00	0.00	306.20	2300.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2400.00	0.00	306.20	2400.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2500.00	0.00	306.20	2500.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2600.00	0.00	306.20	2600.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2700.00	0.00	306.20	2700.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2800.00	0.00	306.20	2800.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	2900.00	0.00	306.20	2900.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3000.00	0.00	306.20	3000.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3100.00	0.00	306.20	3100.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3200.00	0.00	306.20	3200.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3300.00	0.00	306.20	3300.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3400.00	0.00	306.20	3400.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3500.00	0.00	306.20	3500.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3600.00	0.00	306.20	3600.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3700.00	0.00	306.20	3700.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3800.00	0.00	306.20	3800.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	3900.00	0.00	306.20	3900.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4000.00	0.00	306.20	4000.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4100.00	0.00	306.20	4100.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4200.00	0.00	306.20	4200.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4300.00	0.00	306.20	4300.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4400.00	0.00	306.20	4400.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4500.00	0.00	306.20	4500.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4600.00	0.00	306.20	4600.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
Build 2"/100"	4658.00	0.00	306.20	4658.00	0.00	0.00	0.00	0.00	423827.35	656964.77	N 32° 9' 52.66"	W 103° 57' 34.77"
	4700.00	0.84	306.20	4700.00	0.20	0.18	-0.25	2.00	423827.53	656964.52	N 32° 52.66"	W 103° 57' 34.78"
	4800.00	2.84	306.20	4799.94	2.27	2.08	-2.84	2.00	423829.43	656961.93	N 32° 52.68"	W 103° 57' 34.81"
	4900.00	4.84	306.20	4899.71	6.60	6.03	-8.24	2.00	423833.38	656956.53	N 32° 52.72"	W 103° 57' 34.87"
	5000.00	6.84	306.20	4999.19	13.18	12.04	-16.45	2.00	423839.39	656948.32	N 32° 52.78"	W 103° 57' 34.97"
	5100.00	8.84	306.20	5098.25	21.99	20.10	-27.46	2.00	423847.45	656937.31	N 32° 52.86"	W 103° 57' 35.09"
	5200.00	10.84	306.20	5196.77	33.04	30.19	-41.25	2.00	423857.54	656923.52	N 32° 52.96"	W 103° 57' 35.25"
	5300.00	12.84	306.20	5294.64	46.30	42.31	-57.81	2.00	423869.65	656906.97	N 32° 53.08"	W 103° 57' 35.45"
Hold Tangent	5307.97	13.00	306.20	5302.40	47.45	43.36	-59.24	2.00	423870.71	656905.53	N 32° 53.09"	W 103° 57' 35.46"
	5400.00	13.00	306.20	5392.08	60.83	55.59	-75.95	0.00	423882.93	656888.83	N 32° 53.21"	W 103° 57' 35.66"
	5500.00	13.00	306.20	5489.52	75.37	68.87	-94.10	0.00	423896.22	656870.67	N 32° 53.34"	W 103° 57' 35.87"
	5600.00	13.00	306.20	5586.95	89.91	82.16	-112.25	0.00	423909.50	656852.52	N 32° 53.48"	W 103° 57' 36.08"
	5700.00	13.00	306.20	5684.39	104.45	95.44	-130.41	0.00	423922.78	656834.37	N 32° 53.61"	W 103° 57' 36.29"
	5800.00	13.00	306.20	5781.83	118.99	108.73	-148.56	0.00	423936.07	656816.22	N 32° 53.74"	W 103° 57' 36.50"
	5900.00	13.00	306.20	5879.27	133.53	122.01	-166.71	0.00	423949.35	656798.07	N 32° 53.87"	W 103° 57' 36.71"
	6000.00	13.00	306.20	5976.70	148.07	135.30	-184.86	0.00	423962.64	656779.92	N 32° 54.00"	W 103° 57' 36.92"
	6100.00	13.00	306.20	6074.14	162.60	148.58	-203.01	0.00	423975.92	656761.77	N 32° 54.14"	W 103° 57' 37.13"
	6200.00	13.00	306.20	6171.58	177.14	161.87	-221.17	0.00	423989.20	656743.62	N 32° 54.27"	W 103° 57' 37.34"
	6300.00	13.00	306.20	6269.02	191.68	175.15	-239.32	0.00	424002.49	656725.47	N 32° 54.40"	W 103° 57' 37.55"
	6400.00	13.00	306.20	6366.45	206.22	188.44	-257.47	0.00	424015.77	656707.32	N 32° 54.53"	W 103° 57' 37.76"
	6500.00	13.00	306.20	6463.89	220.76	201.72	-275.62	0.00	424029.05	656689.17	N 32° 54.67"	W 103° 57' 37.97"
	6600.00	13.00	306.20	6561.33	235.30	215.01	-293.77	0.00	424042.34	656671.02	N 32° 54.80"	W 103° 57' 38.18"
	6700.00	13.00	306.20	6658.76	249.84	228.29	-311.92	0.00	424055.62	656652.87	N 32° 54.93"	W 103° 57' 38.39"
	6800.00	13.00	306.20	6756.20	264.38	241.58	-330.08	0.00	424068.91	656634.72	N 32° 55.06"	W 103° 57' 38.61"
	6900.00	13.00	306.20	6853.64	278.92	254.86	-348.23	0.00	424082.19	656616.57	N 32° 55.19"	W 103° 57' 38.82"
	7000.00	13.00	306.20	6951.08	293.45	268.15	-366.38	0.00	424095.47	656598.42	N 32° 55.33"	W 103° 57' 39.03"
	7100.00											

Comments	MD	Ind	Adm Grid	TVD	VSEC	NS	EW	DLS	Nothing	Easting	Latitude	Longitude
	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(N/S °.')	(E/W °.')
	7800.00	13.00	308.20	7535.70	380.89	347.85	-475.29	0.00	42475.18	650469.52	N 32 0 56.612 W 103 57 42.10	
	7700.00	13.00	308.20	7753.14	395.23	381.14	-483.44	0.00	424188.48	650471.37	N 32 0 56.625 W 103 57 40.50	
	7600.00	13.00	308.20	7920.57	409.78	374.42	-511.59	0.00	424201.75	650473.22	N 32 0 56.638 W 103 57 40.71	
	8000.00	13.00	308.20	7728.41	424.30	387.71	-559.75	0.00	424215.03	650475.06	N 32 0 56.651 W 103 57 40.92	
	8100.00	13.00	308.20	7925.45	438.84	387.13	-547.80	0.00	424229.31	650476.91	N 32 0 56.665 W 103 57 41.13	
	8200.00	13.00	308.20	8022.88	453.38	400.89	-568.05	0.00	424244.44	650478.76	N 32 0 56.678 W 103 57 41.34	
	8300.00	13.00	308.20	8120.32	467.92	414.28	-584.20	0.00	424254.88	650480.61	N 32 0 56.691 W 103 57 41.55	
	8400.00	13.00	308.20	8217.76	482.46	427.58	-602.35	0.00	424268.16	650482.46	N 32 0 57.04 W 103 57 41.76	
	8400.00	13.00	308.20	8315.20	497.00	454.13	-620.51	0.00	424281.45	650484.31	N 32 0 57.17 W 103 57 41.98	
Build/Turn 10°/100'	8487.08	13.00	308.20	8400.05	508.88	465.70	-636.31	0.00	424293.02	650486.16	N 32 0 57.29 W 103 57 42.16	
	8500.00	13.79	310.80	8412.81	511.88	487.58	-638.65	10.00	424294.88	650488.01	N 32 0 57.31 W 103 57 42.19	
	8600.00	21.80	331.75	8507.80	538.82	480.60	-656.47	0.00	424318.91	650490.36	N 32 0 57.55 W 103 57 42.39	
	8700.00	30.87	341.46	8597.02	578.32	532.10	-673.33	10.00	424350.41	650492.19	N 32 0 57.95 W 103 57 42.58	
	8800.00	40.18	346.89	8679.05	635.11	587.84	-688.74	10.00	424415.15	650494.08	N 32 0 58.650 W 103 57 42.76	
	8900.00	46.81	350.87	8740.71	695.13	657.13	-702.23	10.00	424444.44	650495.91	N 32 0 58.618 W 103 57 42.92	
	9000.00	55.56	353.43	8807.45	768.58	737.65	-713.38	10.00	424466.14	650497.76	N 32 0 58.608 W 103 57 43.04	
	9100.00	62.35	355.88	8860.52	876.67	827.58	-721.65	10.00	424485.84	650499.61	N 32 0 58.677 W 103 57 43.14	
	9200.00	78.17	357.86	8877.82	972.79	892.52	-727.40	10.00	424495.80	650501.46	N 32 0 58.77 W 103 57 43.20	
	9300.58	88.84	358.51	8887.81	1072.82	1022.83	-729.84	10.00	424495.10	650503.32	N 32 0 58.81 W 103 57 43.22	
	9400.00	88.84	358.88	8888.00	1080.68	1031.38	-729.81	10.00	424495.06	650505.16	N 32 0 58.81 W 103 57 43.25	
	9500.00	88.84	358.88	8888.53	1171.81	1122.83	-730.45	0.00	424505.08	650507.01	N 32 0 58.81 W 103 57 43.23	
	9600.00	88.84	358.88	8889.08	1271.81	1222.83	-731.63	0.00	424515.07	650508.86	N 32 0 58.81 W 103 57 43.25	
	9700.00	88.84	358.88	8889.37	1371.38	1322.83	-732.22	0.00	424525.06	650510.71	N 32 0 58.81 W 103 57 43.24	
	9800.00	88.84	358.88	8889.64	1570.86	1522.82	-732.81	0.00	424535.05	650512.56	N 32 0 58.81 W 103 57 43.24	
	9900.00	88.84	358.88	8889.92	1670.75	1622.82	-733.40	0.00	424545.04	650514.41	N 32 0 58.81 W 103 57 43.24	
	10000.00	88.84	358.88	8890.20	1770.54	1722.82	-733.98	0.00	424555.03	650516.26	N 32 0 58.81 W 103 57 43.24	
	10100.00	88.84	358.88	8890.48	1870.32	1822.82	-734.58	0.00	424565.03	650518.11	N 32 0 58.81 W 103 57 43.24	
	10200.00	88.84	358.88	8890.76	1970.11	1922.81	-735.17	0.00	424575.02	650520.00	N 32 0 58.81 W 103 57 43.25	
	10300.00	88.84	358.88	8891.04	2069.80	2022.81	-735.77	0.00	424585.01	650521.85	N 32 0 58.81 W 103 57 43.25	
	10400.00	88.84	358.88	8891.31	2169.69	2122.81	-736.36	0.00	424595.00	650523.70	N 32 0 58.81 W 103 57 43.26	
	10500.00	88.84	358.88	8891.59	2269.48	2222.81	-736.95	0.00	424605.00	650525.55	N 32 0 58.81 W 103 57 43.26	
	10600.00	88.84	358.88	8891.87	2469.26	2322.81	-737.54	0.00	424615.00	650527.40	N 32 0 58.81 W 103 57 43.26	
	10700.00	88.84	358.88	8892.15	2669.04	2422.80	-738.13	0.00	424625.00	650529.25	N 32 0 58.81 W 103 57 43.26	
	10800.00	88.84	358.88	8892.42	2868.83	2522.80	-738.72	0.00	424635.00	650531.10	N 32 0 58.81 W 103 57 43.26	
	10900.00	88.84	358.88	8892.70	3068.61	2622.80	-739.31	0.00	424645.00	650532.95	N 32 0 58.81 W 103 57 43.27	
	11000.00	88.84	358.88	8892.98	3268.40	2722.80	-739.90	0.00	424655.00	650534.80	N 32 0 58.81 W 103 57 43.27	
	11100.00	88.84	358.88	8893.26	3468.19	2822.80	-740.49	0.00	424665.00	650536.65	N 32 0 58.81 W 103 57 43.28	
	11200.00	88.84	358.88	8893.54	3667.98	2922.79	-741.08	0.00	424675.00	650538.50	N 32 0 58.81 W 103 57 43.28	
	11300.00	88.84	358.88	8893.81	3867.76	3022.78	-741.68	0.00	424685.00	650540.35	N 32 0 58.81 W 103 57 43.28	
	11400.00	88.84	358.88	8894.09	4067.55	3122.78	-742.27	0.00	424695.00	650542.20	N 32 0 58.81 W 103 57 43.28	
	11500.00	88.84	358.88	8894.37	4267.34	3222.78	-742.86	0.00	424705.00	650544.05	N 32 0 58.81 W 103 57 43.28	
	11600.00	88.84	358.88	8894.65	4467.13	3322.78	-743.45	0.00	424715.00	650545.90	N 32 0 58.81 W 103 57 43.29	
	11700.00	88.84	358.88	8894.93	4666.92	3422.78	-744.04	0.00	424725.00	650547.75	N 32 0 58.81 W 103 57 43.29	
	11800.00	88.84	358.88	8895.21	4866.71	3522.78	-744.63	0.00	424735.00	650549.60	N 32 0 58.81 W 103 57 43.30	
	11900.00	88.84	358.88	8895.49	5066.50	3622.78	-745.22	0.00	424745.00	650551.45	N 32 0 58.81 W 103 57 43.30	
	12000.00	88.84	358.88	8895.77	5266.29	3722.78	-745.81	0.00	424755.00	650553.30	N 32 0 58.81 W 103 57 43.31	
	12100.00	88.84	358.88	8896.05	5466.08	3822.77	-746.40	0.00	424765.00	650555.15	N 32 0 58.81 W 103 57 43.31	
	12200.00	88.84	358.88	8896.33	5665.87	3922.77	-746.99	0.00	424775.00	650557.00	N 32 0 58.81 W 103 57 43.31	
	12300.00	88.84	358.88	8896.61	5865.66	4022.77	-747.58	0.00	424785.00	650558.85	N 32 0 58.81 W 103 57 43.31	
	12400.00	88.84	358.88	8896.89	6065.45	4122.77	-748.17	0.00	424795.00	650560.70	N 32 0 58.81 W 103 57 43.32	
	12500.00	88.84	358.88	8897.17	6265.24	4222.76	-748.76	0.00	424805.00	650562.55	N 32 0 58.81 W 103 57 43.32	
	12600.00	88.84	358.88	8897.45	6465.03	4322.76	-749.35	0.00	424815.00	650564.40	N 32 0 58.81 W 103 57 43.32	
	12700.00	88.84	358.88	8897.73	6664.82	4422.76	-749.94	0.00	424825.00	650566.25	N 32 0 58.81 W 103 57 43.32	
	12800.00	88.84	358.88	8898.01	6864.61	4522.76	-750.53	0.00	424835.00	650568.10	N 32 0 58.81 W 103 57 43.33	
	12900.00	88.84	358.88	8898.29	7064.40	4622.76	-751.13	0.00	424845.00	650569.95	N 32 0 58.81 W 103 57 43.33	
	13000.00	88.84	358.88	8898.57	7264.19	4722.75	-751.72	0.00	424855.00	650571.80	N 32 0 58.81 W 103 57 43.33	
	13100.00	88.84	358.88	8898.85	7463.98	4822.75	-752.31	0.00	424865.00	650573.65	N 32 0 58.81 W 103 57 43.33	
	13200.00	88.84	358.88	8899.13	7663.77	4922.75	-752.90	0.00	424875.00	650575.50	N 32 0 58.81 W 103 57 43.34	
	13300.00	88.84	358.88	8899.41	7863.56	5022.75	-753.49	0.00	424885.00	650577.35	N 32 0 58.81 W 103 57 43.34	
	13400.00	88.84	358.88	8899.69	8063.35	5122.75	-754.08	0.00	424895.00	650579.20	N 32 0 58.81 W 103 57 43.34	
	13500.00	88.84	358.88	8899.97	8263.14	5222.74	-754.68	0.00	424905.00	650581.05	N 32 0 58.81 W 103 57 43.34	
	13600.00	88.84	358.88	8900.25	8462.93	5322.74	-755.27	0.00	424915.00	650582.90	N 32 0 58.81 W 103 57 43.35	
	13700.00	88.84	358.88	8900.53	8662.72	5422.74	-755.86	0.00	424925.00	650584.75	N 32 0 58.81 W 103 57 43.35	
	13800.00	88.84	358.88	8900.81	8862.51	5522.74	-756.45	0.00	424935.00	650586.60	N 32 0 58.81 W 103 57 43.35	
	13900.00	88.84	358.88	8901.09	9062.30	5622.74	-757.04	0.00	424945.00	650588.45	N 32 0 58.81 W 103 57 43.36	
	14000.00	88.84	358.88	8901.37	9262.09	5722.73	-757.63	0.00	424955.00	650590.30	N 32 0 58.81 W 103 57 43.36	
	14100.00	88.84	358.88	8901.65	9461.88	5822.73	-758.22	0.00	424965.00	650592.15	N 32 0 58.81 W 103 57 43.36	
	14200.00	88.84	358.88	8901.93	9661.67	5922.73	-758.81	0.00	424975.00	650594.00	N 32 0 58.81 W 103 57 43.36	
	14300.00	88.84	358.88	8902.21	9861.46	6022.73	-759.40	0.00	424985.00	650595.85	N 32 0 58.81 W 103 57 43.37	
	14400.00	88.84	358.88	8902.49	10061.25	6122.72	-760.00	0.00	424995.00	650597.70	N 32 0 58.81 W 103 57 43.37	
	14500.00	88.84	358.88	8902.77	10261.04	6222.72	-760.59	0.00	425005.00	650599.55	N 32 0 58.81 W 103 57 43.37	
	14600.00	88.84	358.88	8903.05	10460.83	6322.72	-761.18	0.00	425015.00	650601.40	N 32 0 58.81 W 103 57 43.37	
	14700.00	88.84	358.88	8903.33	10660.62	6422.72	-761.77	0.00	425025.00	650603.25	N 32 0 58.81 W 103 57 43.38	
	14800.00	88.84	358.88	8903.61	10860.41	6522.72	-762.36	0.00	425035.00	650605.10	N 32 0 58.81 W 103 57 43.38	
	14900.00	88.84	358.88	8903.89	11060.20	6622.72	-762.95	0.00	425045.00	650606.95	N 32 0 58.81 W 103 57 43.38	
	15000.00	88.84	358.88	8904.17								

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	18200.00	89.84	359.66	8912.72	9953.15	9922.64	-782.46	0.00	433749.22	656182.38	N 32 11 30.87	W 103 57 43.48
	18300.00	89.84	359.66	8913.00	10052.94	10022.64	-783.05	0.00	433849.21	656181.78	N 32 11 31.86	W 103 57 43.48
	18400.00	89.84	359.66	8913.27	10152.73	10122.64	-783.64	0.00	433949.20	656181.19	N 32 11 32.85	W 103 57 43.48
	18500.00	89.84	359.66	8913.55	10252.51	10222.64	-784.23	0.00	434049.19	656180.60	N 32 11 33.84	W 103 57 43.49
	18600.00	89.84	359.66	8913.83	10352.30	10322.64	-784.82	0.00	434149.18	656180.01	N 32 11 34.83	W 103 57 43.49
	18700.00	89.84	359.66	8914.11	10452.09	10422.63	-785.41	0.00	434249.17	656179.42	N 32 11 35.82	W 103 57 43.49
	18800.00	89.84	359.66	8914.39	10551.88	10522.63	-786.00	0.00	434349.16	656178.83	N 32 11 36.81	W 103 57 43.50
	18900.00	89.84	359.66	8914.66	10651.67	10622.63	-786.59	0.00	434449.15	656178.24	N 32 11 37.80	W 103 57 43.50
	19000.00	89.84	359.66	8914.94	10751.45	10722.63	-787.18	0.00	434549.14	656177.65	N 32 11 38.79	W 103 57 43.50
	19100.00	89.84	359.66	8915.22	10851.24	10822.62	-787.77	0.00	434649.13	656177.06	N 32 11 39.78	W 103 57 43.50
	19200.00	89.84	359.66	8915.50	10951.03	10922.62	-788.37	0.00	434749.12	656176.47	N 32 11 40.77	W 103 57 43.51
	19300.00	89.84	359.66	8915.78	11050.82	11022.62	-788.96	0.00	434849.11	656175.87	N 32 11 41.76	W 103 57 43.51
Corral Fly 35-26 Federal Com 21H PBHL	19380.32	89.84	359.66	8918.00	11130.97	11102.94	-789.43	0.00	434929.43	656175.40	N 32 11 42.56	W 103 57 43.51

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7855 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	28.500	1/100.000	30.000	30.000	NAL_MWD_PLUS_0.5_DEG- Depth Only	Original Borehole / Oxy Corral Fly 35-26 Federal Com 21H Rev0 APS 30Mar18
	1	28.500	19380.323	1/100.000	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Corral Fly 35-26 Federal Com 21H Rev0

Schlumberger

OXY



Borehole: Original Borehole Well: Oxy Corral Fly 35-26 Federal Com 21H Field: NM Eddy County (NAD 83) Structure: Oxy Corral Fly 35-26 Federal Com 21H

Gravity & Magnetic Parameters

Model: HDGM 2018 Dip: 69.93° Date: 30-Mar-2018
MagDec: 7.015° PS: 48010.987nT Gravity FS: 999.458mgn (9.80665 Based)

Surface Location

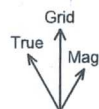
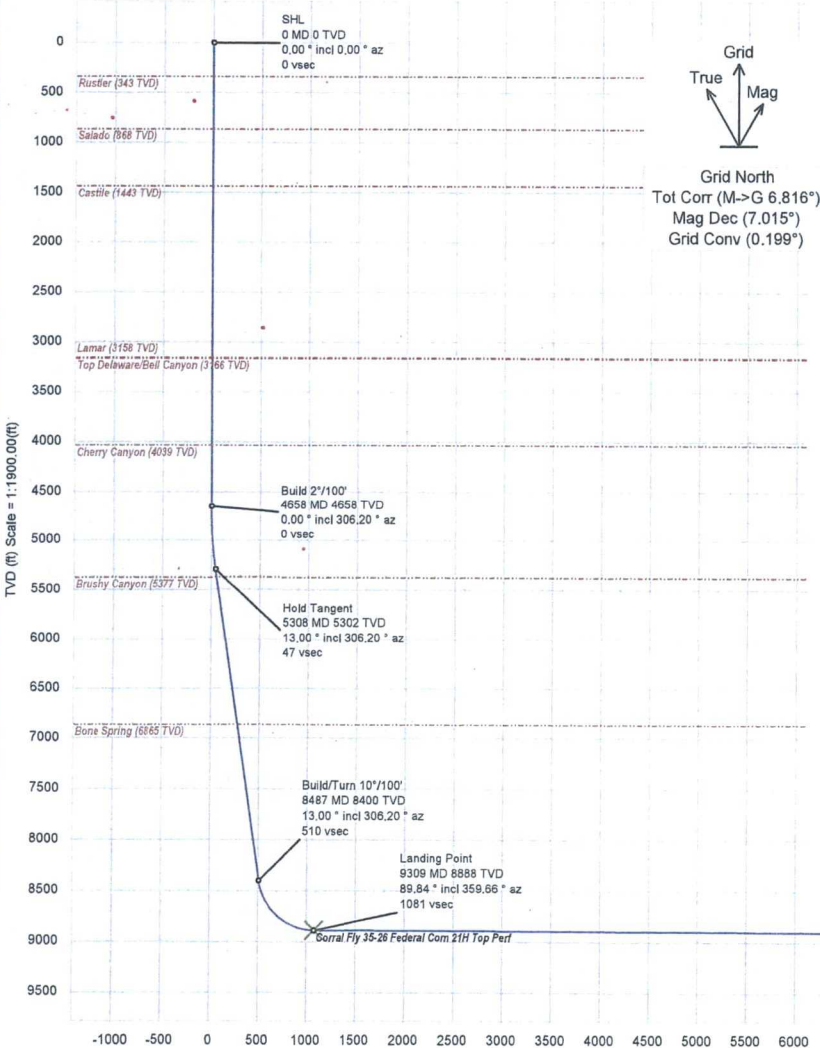
NAD83 New Mexico State Plane, Eastern Zone, US Feet
Lat: N 32 9 62.66 Northing: 423827.360US
Lon: W 103 87 34.77 Easting: 656964.770US

Miscellaneous

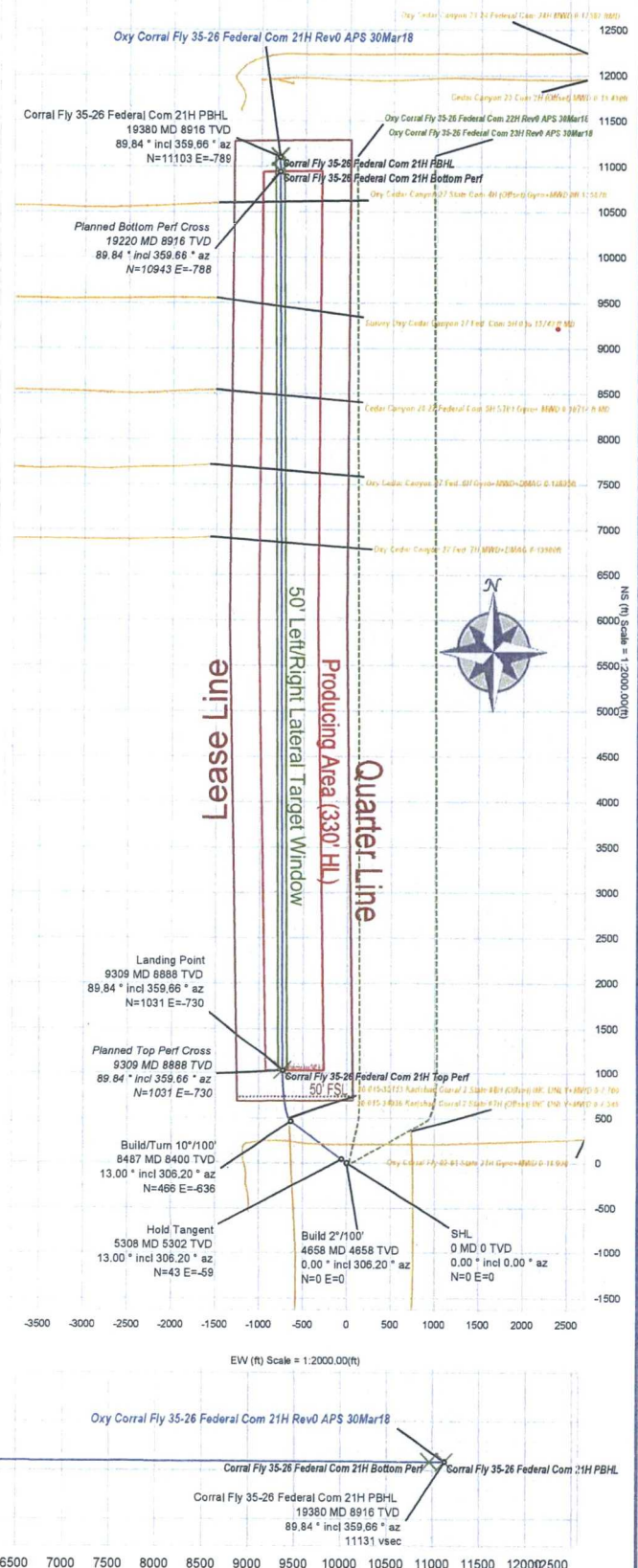
Slot: Oxy Corral Fly 35-26 Federal Com 21H TVD Ref: RKB-26.5' (2042.61' above MSL)
Plan: Oxy Corral Fly 35-26 Federal Com 21H Rev0 APS 30Mar18

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(°)/S(-)	E(°)/W(-)	DLS
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler	343.00	0.00	306.20	343.00	0.00	0.00	0.00	
Salado	868.00	0.00	306.20	868.00	0.00	0.00	0.00	
Castile	1443.00	0.00	306.20	1443.00	0.00	0.00	0.00	
Lamar	3158.00	0.00	306.20	3158.00	0.00	0.00	0.00	
Top Delaware/Bell Canyon	3166.00	0.00	306.20	3166.00	0.00	0.00	0.00	
Cherry Canyon	4039.00	0.00	306.20	4039.00	0.00	0.00	0.00	
Build 2°/100'	4658.00	0.00	306.20	4658.00	0.00	0.00	0.00	
Hold Tangent	5307.97	13.00	306.20	5302.40	47.45	43.36	-59.24	2.00
Brushy Canyon	5384.52	13.00	306.20	5377.00	58.58	53.53	-73.14	0.00
Bone Spring	6911.66	13.00	306.20	6865.00	280.61	256.41	-350.34	0.00
Build/Turn 10°/100'	8487.08	13.00	306.20	8400.05	509.66	465.70	-636.31	0.00
Planned Top Perf Cross	9308.56	89.84	359.66	8888.00	1080.56	1031.39	-729.91	10.00
Landing Point	9308.56	89.84	359.66	8888.00	1080.56	1031.39	-729.91	10.00
Planned Bottom Perf	19220.32	89.84	359.66	8915.56	10971.31	10942.94	-788.49	0.00
Corral Fly 35-26 Federal Com 21H PBHL	19380.32	89.84	359.66	8916.00	11130.97	11102.94	-789.43	0.00
Wolfcamp	NaN			10092.00				



Grid North
Tot Corr (M→G 6.816°)
Mag Dec (7.015°)
Grid Conv (0.199°)



OXY USA Inc. - Corral Fly 35-26 Federal Com 21H – Amended Drilling Plan

Due to lease (NMNM137803) in the NW4/NW4 of Sec 26 T24S R29E being approved, a longer horizontal lateral length and slim-hole casing design, this APD is being amended. An amended C-102 plat, directional plan and plot are also attached.

1. Geologic Formations

TVD of Target	8888ft	Pilot Hole Depth:	N/A
MD at TD:	19,380ft	Deepest Expected fresh Water	343ft

Delaware Basin

Formation Name	TVD (ft)	Expected Fluids
Rustler	343	Brine
Salado	868	Losses
Castile	1443	
Lamar	3158	
Bell Canyon	3166	Water
Cherry Canyon	4039	Oil/Gas
Brushy Canyon	5384	Oil/Gas/Losses
Bone Spring	6911	Oil/Gas
1st Bone Spring	7780	Oil/Gas
2nd Bone Spring	8172	Oil/Gas

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Hole Size	Casing Interval		Csg. Size (in)	Weight (lbs/ft)	Grade	Conn.	Safety Factor			
	From (ft)	To (ft)					Collapse	Burst	Body Tension	Joint Tension
14.75	0	412	10.75	45.5	J-55	BTC	> 1.125	> 1.2	> 1.4	> 1.4
9.875	0	8,337	7.625	26.4	L-80	BTC	> 1.125	> 1.2	> 1.4	> 1.4
6.75	0	19,380	5.5	20	P-110	DQX	> 1.125	> 1.2	> 1.4	> 1.4
Designs will meet or exceed										

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

*OXY requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run in case hole conditions merit pumping a second stage cement job to comply with permitted top of cement. If cement circulated to surface during first stage we will drop a cancellation cone and not pump the second stage.

OXY would like to request a variance for annular clearance around production tubular couplings in the open hole interval comprised of the curve and lateral portions of the well. The production string clearance inside the intermediate string meets the requirements for >0.422in clearance as shown in the table below. The clearances for the production string are as follows:

Description	Csg/Hole ID	Coupl. OD	Clearance
DQX Coupling in 7-5/8" Casing	6.969	6.05	0.4595
DQX Coupling in 6.75in OH	6.75	6.05	0.35

OXY USA Inc. - Corral Fly 35-26 Federal Com 21H – Amended Drilling Plan

2. Cementing Program

Casing	Slurry	#Sks	Wt. (Lb/gal)	Yld ft ³ /sack	H2O gal/sk	500# Comp. Strength	Slurry Description
Surface	Surface already set by spudder rig						
1st Stage	Lead	422	10.2	2.58	11.568	6:59	Pozzolan Cement, Retarder
Intermediate	Tail	160	13.2	1.61	7.804	7:11	Class H Cement, Retarder, Dispersant, Salt
DV/ECP Tool @ 3208ft							
2nd Stage	Tail	954	13.6	1.67	8.765	7:32	Class C Cement, Accelerator, Dispersant
Intermediate	Tail	805	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top of Lead (ft)	Bottom of Lead (ft)	Top of Tail (ft)	Bottom of Tail (ft)	% Excess Lead	% Excess Tail
Surface	N/A	N/A	0	412	N/A	100%
1st Stage Intermediate Casing	3108	7337	7337	8337	20%	20%
2nd Stage Intermediate Casing	N/A	N/A	0	3208	N/A	150%
Production Casing	N/A	N/A	7837	19380	N/A	15%

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size	Min. Required WP	Type		Tested to:
9.875" Hole	13-5/8"	5M	Annular	x	70 % of working Pressure
			Blind Ram	x	250/5000 psi
			Pipe Ram		
			Double Ram	x	
			Other*		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

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	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
Y	Are anchors required by manufacturer?
	A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.

BOP Break Testing Request

As per the agreement reached in the Oxy/BLM meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

1. Only after a full BOP is conducted to the first well on the pad.
2. Only when skidding from an intermediate to another intermediate section. Exception will be an intermediate followed by a production hole. In that case a full BOP test will be conducted.
3. Only applicable for intermediates that do not penetrate into the Wolfcamp.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	412	Water-Based Mud	8.4-8.6	40-60	N/C
412	3208	WBM or OBM	9.2-10	35-45	N/C
3208	8,337	WBM or OBM	8.8-9.6	38-50	N/C
8,337	19,380	OBM	8.8-9.6	35-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
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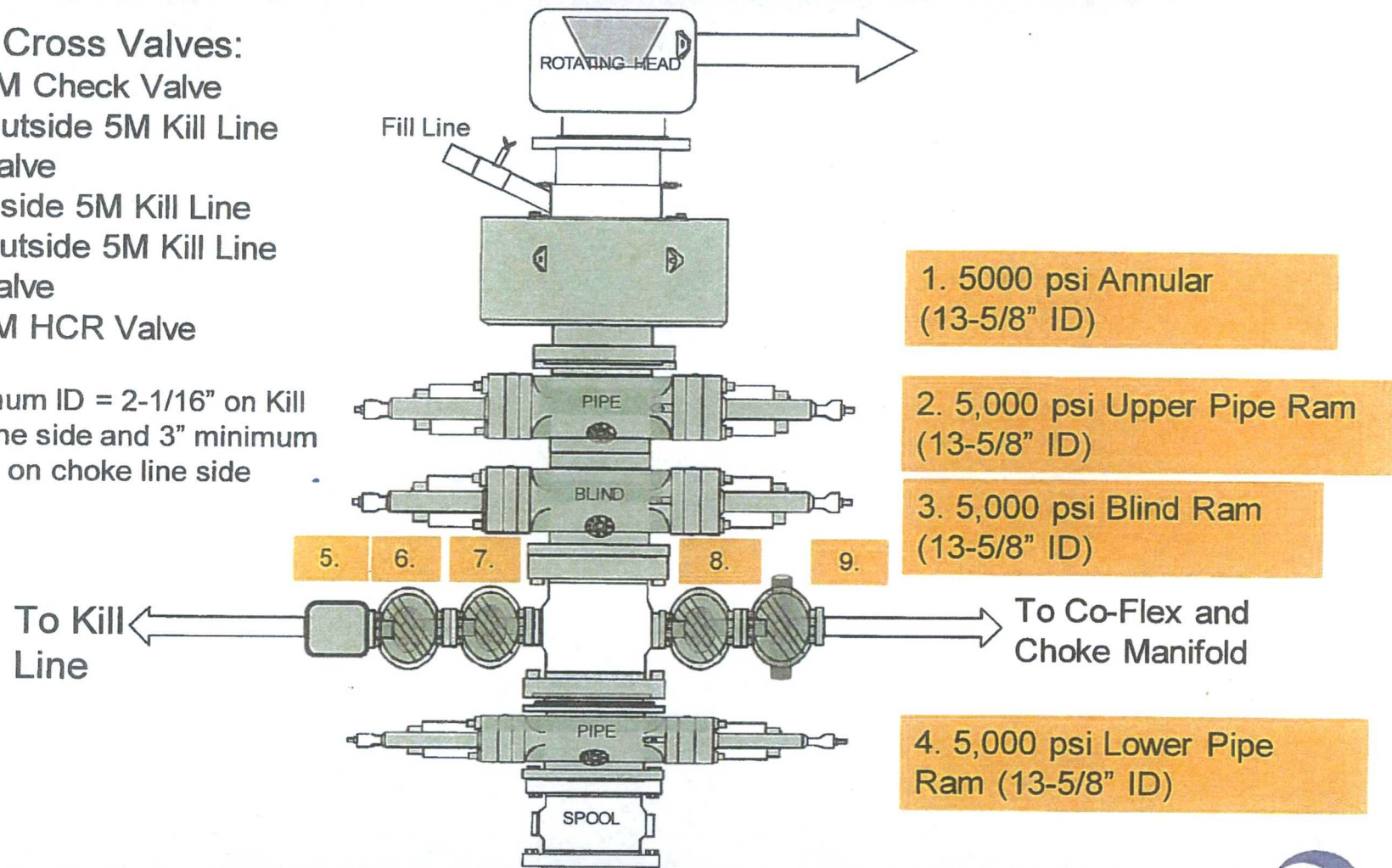
Total estimated cuttings volume: 1326.0 bbls.

5M BOP Stack

Mud Cross Valves:

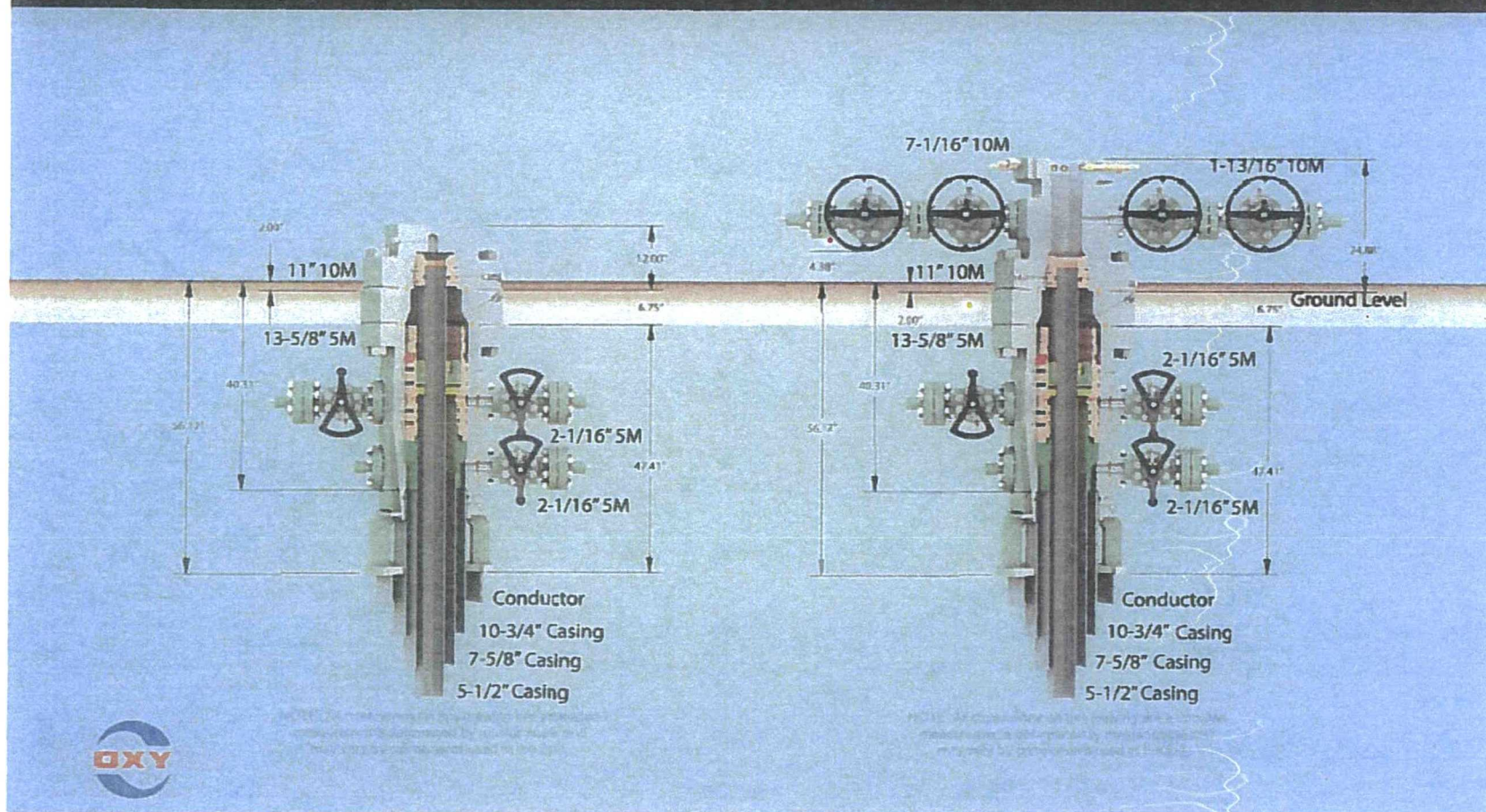
5. 5M Check Valve
6. Outside 5M Kill Line Valve
7. Inside 5M Kill Line Valve
8. Outside 5M Kill Line Valve
9. 5M HCR Valve

*Minimum ID = 2-1/16" on Kill Line side and 3" minimum ID on choke line side





Slips



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	OXY USA INC.
LEASE NO.:	NMNM88139
WELL NAME & NO.:	21H – CORRAL FLY 35-26 FEDERAL
SURFACE HOLE FOOTAGE:	694'/N & 1248'/W
BOTTOM HOLE FOOTAGE:	180'/N & 520'/W
LOCATION:	Section 2., T25S., R.29E., NMP
COUNTY:	EDDY County, New Mexico

Potash	☒ None	☒ Secretary	☒ R-111-P
Cave/Karst Potential	☒ Low	☒ Medium	☒ High
Variance	☒ None	☒ Flex Hose	☒ Other
Wellhead	☒ Conventional	☒ Multibowl	
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP

All previous COAs still apply except for the following:

A. CASING

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

1. The minimum required fill of cement behind the 7 5/8 inch production casing is:

Operator has proposed DV tool at a depth of 3208', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If operator circulates cement on the first stage, operator is approved to inflate the ACP and run the DV tool cancellation plug and cancel the second stage of the proposed cement plan. If cement does not circulate, operator will inflate ACP and proceed with the second stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**
 - ❖ In **Medium Karst Areas** if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
2. The minimum required fill of cement behind the 5 1/2 inch production casing is:
- Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. Excess calculate to 14% - additional cement might be required.

MHH 05142018

GENERAL REQUIREMENTS

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.