Submit 1 Copy To Appropriate District Office
District I – (575) 393 6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-44513	
5. Indicate Type of Lease STATE ☑ FEE ☐	
6. State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name: Corral Fly 02-01 State
1. Type of Well: Oil Well ☑ Gas Well ☐ Other	8. Well Number 26H
2. Name of Operator: OXY USA Inc.	9. OGRID Number: 16696
3. Address of Operator: P.O. Box 50250 Midland, TX 79710	10. Pool name or Wildcat: Purple Sage; Wolfcamp, East
4. Well Location: Unit Letter M : 1205 feet from the South line and 420 feet from the West line; Section 2 Township 25S Range 29E NMPM County Eddy	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3029'	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER: Amend APD	☑			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

OXY USA Inc. respectfully requests to amend the APD for the Corral Fly 02-01 State #26H - API No. 30-015-44513.

1. Amend the proposed TD to 16394'M 8885'V.
2. Amend the intermediate hole size, casing size/type/depth and cementing program, see attached.
3. Amend the production hole size, casing size/type/depth and cementing program, see attached.
4. Request a variance for the annular clearance around production casing coupling, see attached.
5. Amend the mud program, depth and type, see attached.

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 10 2018
RECEIVED

Spud Date: _____ Rig Release Date: _____

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE _____ TITLE Sr. Regulatory Advisor DATE 1/10/18

Type or print name David Stewart E-mail address: david_stewart@oxy.com PHONE: 432-685-5717

For State Use Only

APPROVED BY: _____ TITLE Staff Mgr DATE 1-10-18

Conditions of Approval (if any):

OXY USA Inc. - Corral Fly 02-01 State #26H – Amended Drill Plan

1. Geologic Formations

TVD of Target	8,885ft	Pilot Hole Depth:	N/A
MD at TD:	16,394ft	Deepest Expected fresh Water	356ft

Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	356	Brine
Salado	881	Losses
Castile	1456	
Lamar/Delaware	3148	
Bell Canyon	3175	
Cherry Canyon	4045	Water
Brushy Canyon	5355	Oil/Gas
Bone Spring	6903	Oil/Gas
1st Bone Spring	7759	Oil/Gas
2nd Bone Spring	**8115**	**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
17.5	0	425	13.375	54.5	J-55	BTC	> 1.125	> 1.2	> 1.4	> 1.4
9.875	0	8,387	7.625	26.4	L-80	BTC	> 1.125	> 1.2	> 1.4	> 1.4
6.75	0	9,500	5.5	23	P-110	JFE Bear CR	> 1.125	> 1.2	> 1.4	> 1.4
6.75	9,500	16,394	5.5	20	P-110	DQX	> 1.125	> 1.2	> 1.4	> 1.4

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 cancelation cone and not pump the second stage.

Oxy would like to request a variance for annular clearance around production tubular couplings. The clearances for the production string are as follows:

Description	ID	Coupl. OD	Clearance
JFE Bear Coupling in 7-5/8" csg	6.969	6.135	0.417
JFE Bear Coupling in OH	6.75	6.135	0.3075
DQX Coupling in 6.75	6.75	6.05	0.35

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	Slurry	#Sks	Wt. (Lb/gal)	Yld ft3/sack	H20 gal/sk	500# Comp. Strength	Slurry Description
Surface	Already cemented with spudder rig						
1st Stage Intermediate	Lead	428	10.2	2.58	11.568	6:59	Pozzolan Cement, Retarder
	Tail	160	13.2	1.61	7.804	7:11	Class H Cement, Retarder, Dispersant, Salt
DV/ECP Tool @ 3198ft							
2nd Stage Intermediate	Tail	1,242	13.6	1.67	8.765	7:32	Class C Cement, Accelerator, Dispersant
Production Casing	Tail	599	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	425	N/A	100%
1st Stage Intermediate Casing	3098	7387	7387	8387	20%	20%
2nd Stage Intermediate Casing	N/A	N/A	0	3198	N/A	150%
Production Casing	N/A	N/A	7887	16394	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.

	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.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	425	Water-Based Mud	8.4-8.6	40-60	N/C
425	3198	DEWBM	9.8 - 10	35-45	N/C
3198	8,387	DEWBM	8.8-9.6	38-50	N/C
8,387	16,394	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.

OXY proposes to drill out the 13.375" surface casing shoe with Direct Emulsion Water Based Mud (DEWBM) to intermediate casing point.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
No	Logs are planned based on well control or offset log information.
No	Drill stem test? If yes, explain
No	Coring? If yes, explain

Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4495 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	153°F

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. • We plan to drill the three well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. • Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total estimated cuttings volume: 1841.8 bbls.

9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Philippe Haffner	Drilling Engineer	713-985-6379	832-767-9047
Diego Tellez	Drilling Engineer Supervisor	713-350-4602	713-303-4932
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
John Willis	Drilling Manager	713-366-5556	713-259-1417