

Form 3160-3  
(June 2015)FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No.  6. If Indian, Allottee or Tribe Name  7. If Unit or CA Agreement, Name and No.  8. Lease Name and Well No.
2. Name of Operator		9. API Well No. <div style="text-align: right;">30 015 47560 <span style="color: red;">Pierce Crossing Bone Spring</span></div>
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory <hr style="border: 1px solid red;"/>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish 13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.<br>2. A Drilling Plan.<br>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).<br>5. Operator certification.<br>6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		

Application approval 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.  
 Conditions of approval, if any, are attached.

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.

Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system

- Will require a directional survey with the C-104

SL

(Continued on page 2)

APPROVED WITH CONDITIONS

Approval Date: 09/30/2020

Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

KP 10/8/2020 GEO Review

\*(Instructions on page 2)

Entered - KMS NMOCD

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: (505) 748-1283 Fax: (505) 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 <b>47560</b>	Pool Code <b>50371</b>	Pool Name <b>PIERCE CROSSING; BONE SPRING</b>
Property Code <b>321601</b>	Property Name <b>SALT FLAT CC "20_29" FEDERAL COM</b>	Well Number <b>5H</b>
OGRID No.	Operator Name <b>OXY USA INC.</b>	Elevation <b>2924.6'</b>

Surface Location

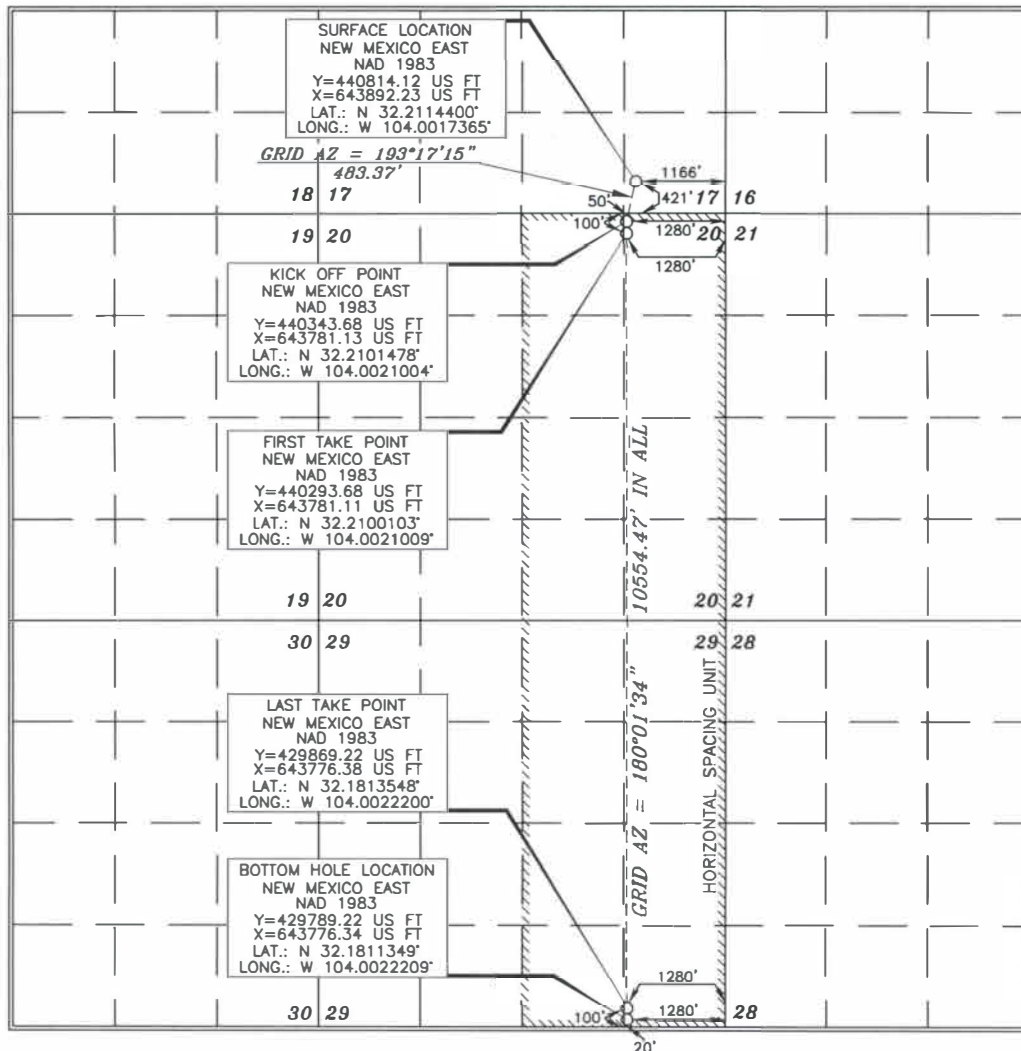
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	24 SOUTH	29 EAST, N.M.P.M.		421'	SOUTH	1166'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	24 SOUTH	29 EAST, N.M.P.M.		20'	SOUTH	1280'	EAST	EDDY

Dedicated Acres	Joint or Infill <b>defining</b>	Consolidation Code	Order No.
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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 unleased 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.

*Leslie T. Reeves*

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

SURVEYOR CERTIFICATION

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

**OCTOBER 10, 2019**  
Date of Survey

Signature and Seal of Professional Surveyor

*Terry J. Asst*  
Certificate Number **15079**

# PECOS DISTRICT

## DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	OXY USA INC.
<b>LEASE NO.:</b>	NMNM094651
<b>WELL NAME &amp; NO.:</b>	SALTY FLAT CC 20-29 FEDERAL COM 5H
<b>SURFACE HOLE FOOTAGE:</b>	421'S & 1166'E
<b>BOTTOM HOLE FOOTAGE:</b>	20'S & 1280'E
<b>LOCATION:</b>	SECTION 17, T24S, R29E, NMPM
<b>COUNTY:</b>	EDDY COUNTY, NEW MEXICO

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### B. CASING

#### Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **547** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

- completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **10-3/4** inch intermediate casing shall be set at approximately **6666** feet. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

**Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first 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 or potash.**
- ❖ In **Medium Cave/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.

**Operator has proposed to pump down 10-3/4" X 7-5/8" annulus. Operator must run a CBL/ ECHO-METER from TD of the 7-5/8" casing to surface. Submit results to BLM.**

3. The minimum required fill of cement behind the **5-1/2 X 4-1/2** inch production casing is:

**Option 1 (Single Stage):**

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

**Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first 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 should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

**C. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2.

**Option 1:**

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **3000 (3M)** psi.

**Option 2:**

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

#### **D. SPECIAL REQUIREMENT (S)**

##### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

##### **Offline Cementing**

- Contact the BLM prior to the commencement of any offline cementing procedure.

##### **BOP Break Testing Variance**

- BOP break testing is not permitted on this well.

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
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. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
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.



B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**NMK09282020**



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

# Operator Certification Data Report

10/05/2020



APD ID: 10400055105

Submission Date: 03/18/2020

Highlighted data  
reflects the most  
recent changes

Operator Name: OXY USA INCORPORATED

Well Name: SALT FLAT CC 20-29 FEDERAL COM

Well Number: 5H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - General

APD ID: 10400055105

Tie to previous NOS? N

Submission Date: 03/18/2020

BLM Office: CARLSBAD

User: Leslie Reeves

Title: Advisor Regulatory

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM102914

Lease Acres: 150

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? N

Permitting Agent? NO

APD Operator: OXY USA INCORPORATED

Operator letter of designation:

## Operator Info

Operator Organization Name: OXY USA INCORPORATED

Operator Address: 5 Greenway Plaza, Suite 110

Zip: 77046

Operator PO Box:

Operator City: Houston

State: TX

Operator Phone: (713)366-5716

Operator Internet Address:

## Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: SALT FLAT CC 20-29 FEDERAL COM

Well Number: 5H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: CORRAL DRAW  
BONE SPRING

Pool Name: CORRAL DRAW  
BONE SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER,NATURAL GAS,OIL

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Is the proposed well in an area containing other mineral resources?** USEABLE WATER,NATURAL GAS,OIL

**Is the proposed well in a Helium production area?** N

**Use Existing Well Pad?** N

**New surface disturbance?**

**Type of Well Pad:** MULTIPLE WELL

**Multiple Well Pad Name:**  
OXBOW CC 17-8 FEDERAL  
COM & SALT FLAT CC 20-29  
FEDERAL COM  
**Number of Legs:** 1

**Number:** 34H,35H, 36H & 5H,  
6H, 34H, 35H, 313H, 314H

**Well Class:** HORIZONTAL

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** INFILL

**Describe sub-type:**

**Distance to town:** 8 Miles

**Distance to nearest well:** 35 FT

**Distance to lease line:** 20 FT

**Reservoir well spacing assigned acres Measurement:** 640 Acres

**Well plat:** SaltFlatCC20\_29FdCom5H\_C102\_20200317130425.pdf

SaltFlatCC20\_29FdCom5H\_SitePlan\_20200317130433.pdf

**Well work start Date:** 01/01/2021

**Duration:** 45 DAYS

### Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83

**Vertical Datum:** NAVD88

**Survey number:**

**Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	421	FSL	1166	FEL	24S	29E	17	Aliquot SESE	32.21144	-104.0017365	EDD Y	NEW MEXI CO	NEW MEXI CO	F	FEE	2925	0	0	N
KOP Leg #1	50	FNL	1280	FEL	24S	29E	20	Aliquot NENE	32.2101478	-104.0021004	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 102914	-3919	6872	6844	N

**Operator Name:** OXY USA INCORPORATED

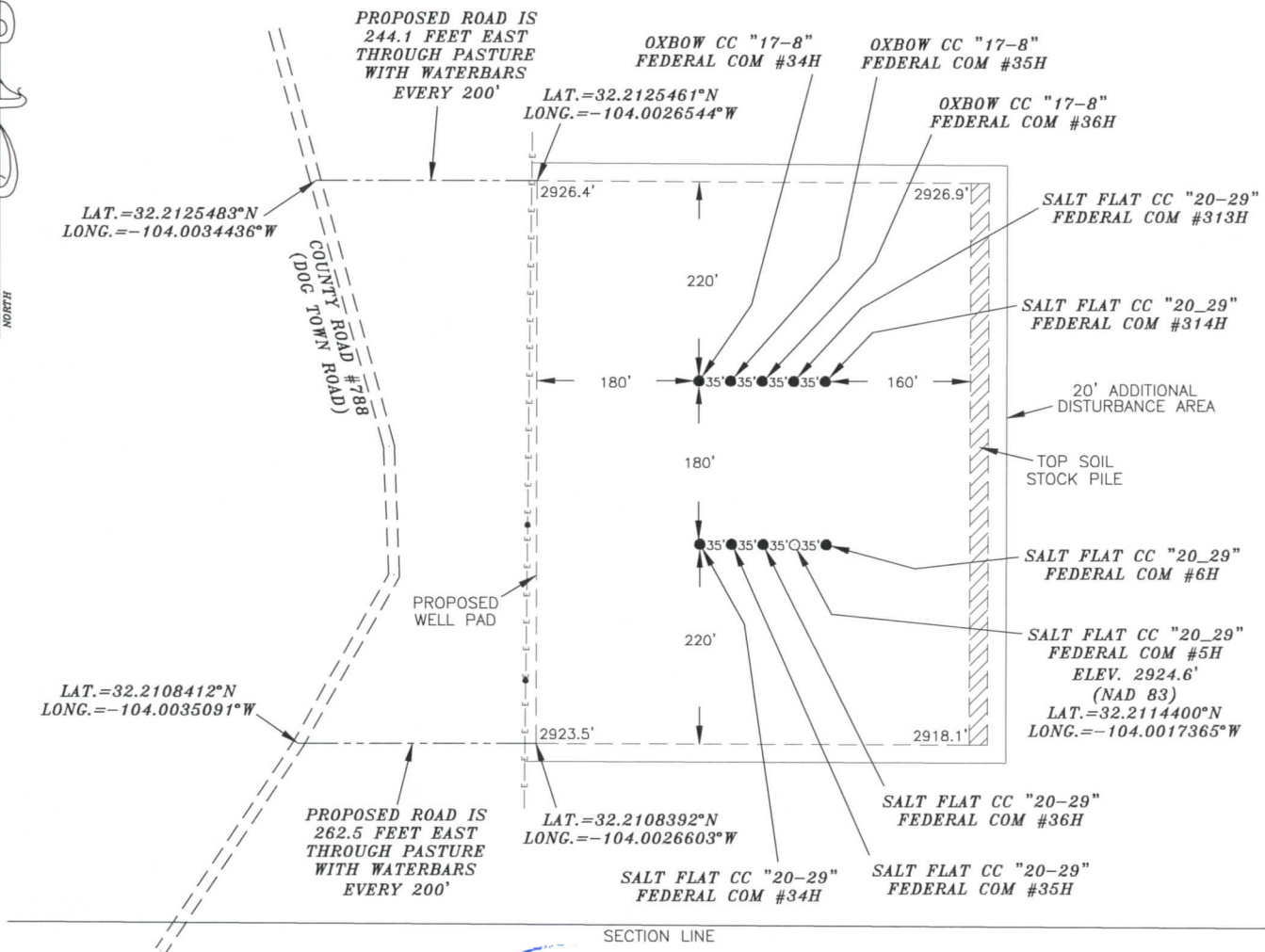
**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-1	100	FNL	1280	FEL	24S	29E	20	Aliquot NENE	32.2100103	- 104.0021009	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 102914	- 4396	7672	7321	Y
PPP Leg #1-2	2650	FNL	1272	FEL	24S	29E	20	Aliquot NESE	32.202997	- 104.002129	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 096222	- 4409	9868	7334	Y
PPP Leg #1-3	2	FNL	1265	FEL	24S	29E	29	Aliquot NENE	32.195702	- 104.002159	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 121952	- 4426	12522	7351	Y
PPP Leg #1-4	1325	FNL	1269	FEL	24S	29E	29	Aliquot SWNE	32.192054	- 104.002174	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 094651	- 4434	13849	7359	Y
PPP Leg #1-5	2652	FNL	1272	FEL	24S	29E	29	Aliquot NESE	32.188406	- 104.00219	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 054289	- 4442	15176	7367	Y
PPP Leg #1-6	1336	FSL	1276	FEL	24S	29E	29	Aliquot SESE	32.184754	- 104.002205	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 053229	- 4452	16504	7377	Y
EXIT Leg #1	100	FSL	1280	FEL	24S	29E	29	Aliquot SESE	32.1813548	- 104.00222	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 053229	- 4457	17742	7382	N
BHL Leg #1	20	FSL	1280	FEL	24S	29E	29	Aliquot SESE	32.1811349	- 104.0022209	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 053229	- 4458	17822	7383	N

# OXY USA INC. SALT FLAT CC "20\_29" FEDERAL COM #5H SITE PLAN

FAA PERMIT: NO



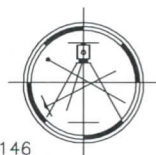
## SURVEYORS CERTIFICATE

I, TERRY J. ASEL, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

*Terry J. Asel* 10/31/2019  
 Terry J. Asel, N.M. R.P.L.S. No. 15079

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR  
 HOBBS, NEW MEXICO - 575-393-9146



## LEGEND

- DENOTES PROPOSED WELL PAD
- DENOTES PROPOSED ROAD
- ▨ DENOTES STOCK PILE AREA



OXY USA INC.

SALT FLAT CC "20\_29" FEDERAL COM #5H  
 LOCATED AT 421' FSL & 1166' FEL IN  
 SECTION 17, TOWNSHIP 24 SOUTH, RANGE 29  
 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 10/10/19	Sheet 1 of 1 Sheets
W.O. Number: 191010WL-a (Rev. B)	Drawn By: KA Rev: B
Date: 10/30/19	191010WL-a Scale: 1"=200'





APD ID: 10400055105

Submission Date: 03/18/2020

Highlighted data  
reflects the most  
recent changes

Operator Name: OXY USA INCORPORATED

Well Name: SALT FLAT CC 20-29 FEDERAL COM

Well Number: 5H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
688195	RUSTLER	2925	291	291	ANHYDRITE, DOLOMITE, SHALE	USEABLE WATER	N
688196	SALADO	2317	608	608	ANHYDRITE, DOLOMITE, HALITE, SHALE	OTHER : SALT	N
688193	CASTILE	1663	1262	1262	ANHYDRITE	OTHER : salt	N
688197	LAMAR	106	2819	2819	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
688188	BELL CANYON	35	2890	2890	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
688199	CHERRY CANYON	-822	3747	3747	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
688200	BRUSHY CANYON	-2076	5001	5001	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	N
688194	BONE SPRING	-3671	6596	6619	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	N

## Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 7383

Equipment: 13-5/8" 3M - Annular, Blind Ram, Double Ram

Requesting Variance? YES

Variance request: Request for the use of a flexible choke line from the BOP to Choke Manifold.

**Testing Procedure:** 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. A multibowl wellhead 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 will 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. BOP Break Testing Request Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. A separate sundry will be sent prior to spud that reflects the pad based break

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

testing plan. BOP break test under the following conditions: After a full BOP test is conducted When skidding to drill an intermediate section where ICP is set into the third Bone Spring or shallower. When skidding to drill a production section that does not penetrate into the third Bone Spring or deeper. If the kill line is broken prior to skid, two tests will be performed. 1) Wellhead flange, co-flex hose, kill line connections and upper pipe rams 2) Wellhead flange, HCR valve, check valve, upper pipe rams If the kill line is not broken prior to skid, only one test will be performed. 1) Wellhead flange, co-flex hose, check valve, upper pipe rams

**Choke Diagram Attachment:**

SaltFlatCC20\_29FdCom5H\_ChokeManifold\_20200317145142.pdf

**BOP Diagram Attachment:**

SaltFlatCC20\_29FdCom5H\_BOP\_20200317145204.PDF

SaltFlatCC20\_29FdCom5H\_FlexHoseCert\_20200317145216.pdf

### Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	548	0	548	2925	2377	548	J-55	40.5	BUTT	1.125	1.2	BUOY	1.4	BUOY	1.4
2	INTERMEDIATE	9.875	7.625	NEW	API	N	0	6771	0	6745		-3820	6771	HCL-80	26.4	BUTT	1.125	1.2	BUOY	1.4	BUOY	1.4
3	PRODUCTION	6.75	5.5	NEW	API	Y	0	7321	0	7214		-4289	7321	P-110	20	OTHER - DQX/SFTORQ/DQW	1.125	1.2	BUOY	1.4	BUOY	1.4
4	PRODUCTION	6.75	4.5	NEW	API	Y	7321	17822	7214	7383	-4289	-4458	10501	P-110	13.5	OTHER - DQX/SQW/SFTORQ	1.125	1.2	BUOY	1.4	BUOY	1.4

### Casing Attachments

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

### Casing Attachments

---

**Casing ID:** 1      **String Type:** SURFACE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

SaltFlatCC20\_29FdCom5H\_CsgCriteria\_20200317145947.pdf

---

**Casing ID:** 2      **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

SaltFlatCC20\_29FdCom5H\_CsgCriteria\_20200317150231.pdf

---

**Casing ID:** 3      **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

SaltFlatCC20\_29FdCom5H\_5.500in\_x\_20\_20200317150426.00

SaltFlatCC20\_29FdCom5H\_5.500in\_x\_20\_20200317150441.00

SaltFlatCC20\_29FdCom5H\_5.500in\_x\_20\_20200317150456.00

**Casing Design Assumptions and Worksheet(s):**

SaltFlatCC20\_29FdCom5H\_CsgCriteria\_20200317150514.pdf

---

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

## Casing Attachments

**Casing ID:** 4      **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

SaltFlatCC20\_29FdCom5H\_4.5\_x\_13.5\_P110\_CY\_TMK\_UP\_\_TORQ\_DQW\_20200317151338.pdf

**Casing Design Assumptions and Worksheet(s):**

SaltFlatCC20\_29FdCom5H\_CsgCriteria\_20200317151402.pdf

## Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	548	445	1.33	14.8	592	100	CI C	Accelerator

INTERMEDIATE	Lead	2	0	5251	646	1.92	12.9	1240	10	CI C	Accelerator
--------------	------	---	---	------	-----	------	------	------	----	------	-------------

INTERMEDIATE	Lead	2	5251	6771	215	1.65	13.2	355	5	CI H	Retarder, Dispersant, Salt
--------------	------	---	------	------	-----	------	------	-----	---	------	----------------------------

PRODUCTION	Lead		6271	1782 1	1342	1.38	13.2	1852	20	CI H	Retarder, Dispersant, Salt
------------	------	--	------	-----------	------	------	------	------	----	------	----------------------------

PRODUCTION	Lead		6271	1782 1	1342	1.38	13.2	1852	20	CI H	Retarder, Dispersant, Salt
------------	------	--	------	-----------	------	------	------	------	----	------	----------------------------

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

## Section 5 - Circulating Medium

**Mud System Type:** Closed

**Will an air or gas system be Used?** NO

**Description of the equipment for the circulating system in accordance with Onshore Order #2:**

**Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

**Describe what will be on location to control well or mitigate other conditions:** Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements. 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, CaCl<sub>2</sub>.

**Describe the mud monitoring system utilized:** PVT/MD Totco/Visual Monitoring

## Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
548	6771	OTHER : Saturated Brine-Based or Oil-Based Mud	8	10							
6771	1782 1	OTHER : Water-Based or Oil-Based Mud	8	9.6							
0	548	WATER-BASED MUD	8.6	8.8							

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

## Section 6 - Test, Logging, Coring

**List of production tests including testing procedures, equipment and safety measures:**

GR from TD to surface (horizontal well – vertical portion of hole). Mud Log from intermediate shoe to TD.

**List of open and cased hole logs run in the well:**

GAMMA RAY LOG, MUD LOG/GEOLOGIC LITHOLOGY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG, DIRECTIONAL SURVEY,

**Coring operation description for the well:**

No coring is planned at this time.

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 3686

**Anticipated Surface Pressure:** 2061

**Anticipated Bottom Hole Temperature(F):** 140

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

SaltFlatCC20\_29FdCom5H\_H2S1\_20200318084953.pdf

SaltFlatCC20\_29FdCom5H\_H2S2\_20200318085001.pdf

SaltFlatCC20\_29FdCom5H\_H2SEmerCont\_20200318085009.pdf

## Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

SaltFlatCC20\_29FdCom5H\_DirectPlot\_20200318085033.pdf

SaltFlatCC20\_29FdCom5H\_DirectPlan\_20200318085044.pdf

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

SaltFlatCC20\_29FdCom5H\_DrillPlan\_20200318085053.pdf

SaltFlatCC20\_29FdCom5H\_SpudRigData\_20200318085100.pdf

**Other Variance attachment:**



Project: PRD NM DIRECTIONAL PLANS (NAD 1983)  
Site: Salt Flat CC 20-29 Federal Com  
Well: Salt Flat CC 20\_29 Federal Com 5H  
Wellbore: Wellbore #1  
Design: Permitting Plan

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

WELL DETAILS: Salt Flat CC 20\_29 Federal Com 5H

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude
0.00	0.00	440814.12	2924.60	643892.23	32° 12' 41.183930 N	104° 0' 6.251289 W

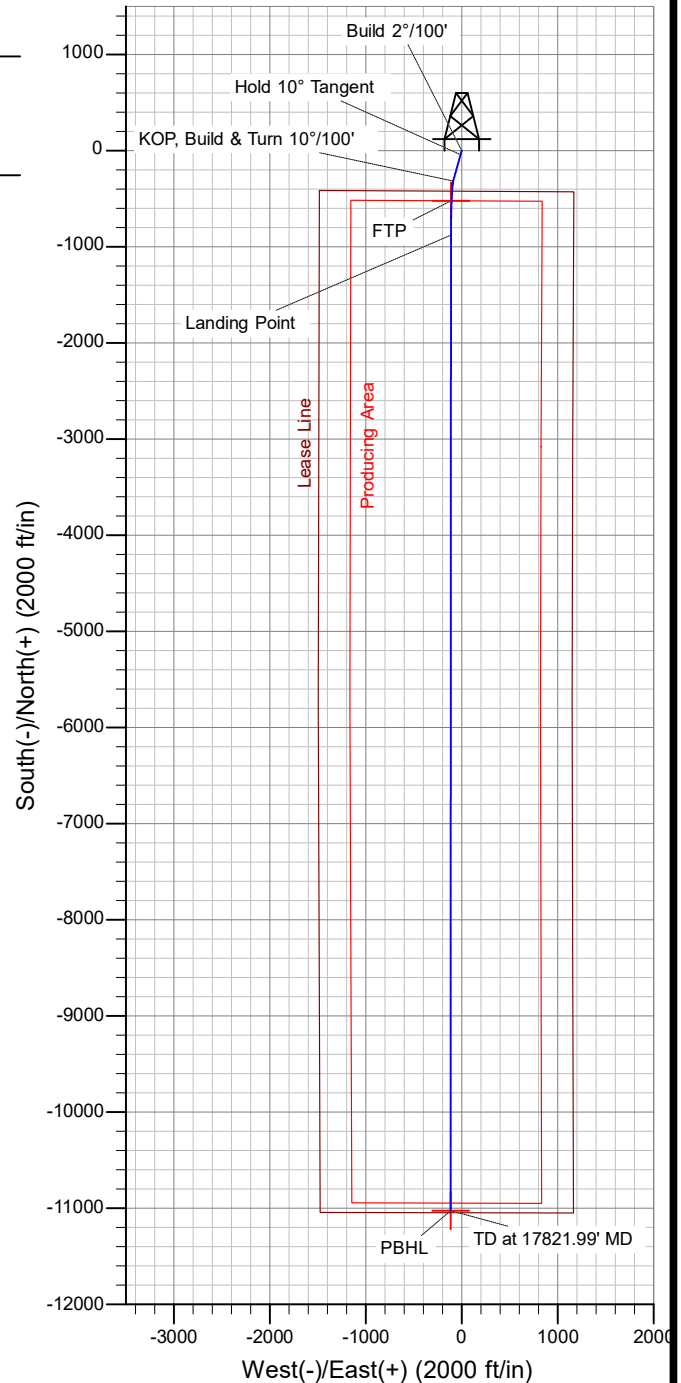
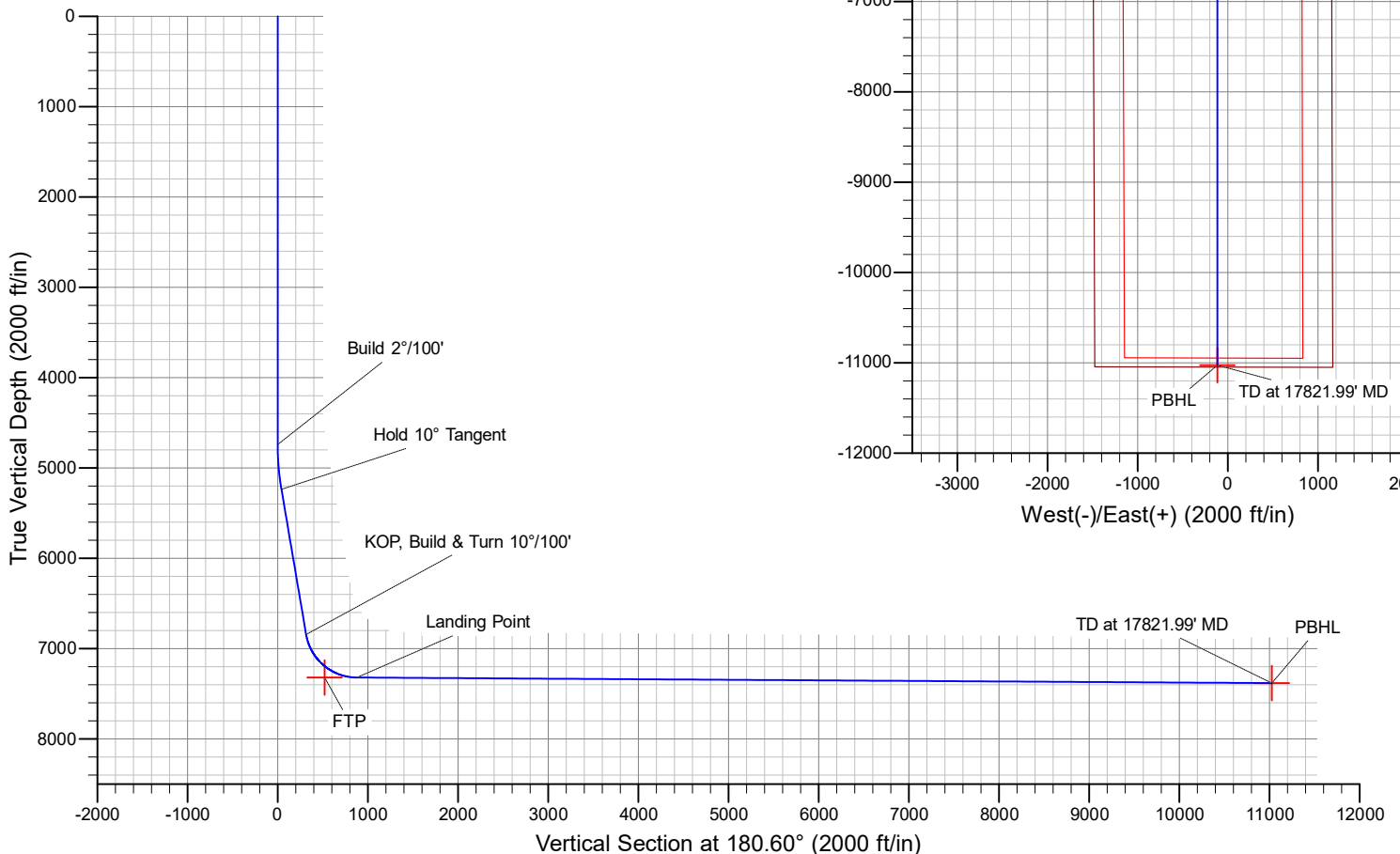
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSeet	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4740.00	0.00	0.00	4740.00	0.00	0.00	0.00	0.00	0.00	Build 2°/100'
5240.00	10.00	195.71	5237.47	-41.90	-11.78	2.00	195.71	42.02	Hold 10° Tangent
6871.80	10.00	195.71	6844.47	-314.67	-88.51	0.00	0.00	315.58	KOP, Build & Turn 10°/100'
7672.06	89.65	180.03	7321.10	-876.06	-111.34	10.00	-15.93	877.18	Landing Point
17821.99	89.65	180.03	7383.10	-11025.79	-115.90	0.00	0.00	11026.40	TD at 17821.99' MD



Azimuths to Grid North  
True North: -0.18°  
Magnetic North: 6.72°

Magnetic Field  
Strength: 47854.3nT  
Dip Angle: 59.90°  
Date: 12/3/2019  
Model: HDGM\_FILE



**OXY**

**PRD NM DIRECTIONAL PLANS (NAD 1983)**

**Salt Flat CC 20-29 Federal Com**

**Salt Flat CC 20\_29 Federal Com 5H**

**Wellbore #1**

**Plan: Permitting Plan**

## **Standard Planning Report**

**03 December, 2019**



**Oxy Inc.**  
Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Salt Flat CC 20_29 Federal Com 5H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Site:</b>	Salt Flat CC 20-29 Federal Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Salt Flat CC 20_29 Federal Com 5H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

<b>Project</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		Using geodetic scale factor

Site		Salt Flat CC 20-29 Federal Com			
Site Position:		Northing:	440,814.67 usft	Latitude:	32° 12' 41.192577 N
From:	Map	Easting:	643,787.23 usft	Longitude:	104° 0' 7.473464 W
Position Uncertainty:	50.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.18 °

Well	Salt Flat CC 20_29 Federal Com 5H					
Well Position	+N/-S	-0.55 ft	Northing:	440,814.12 usft	Latitude:	32° 12' 41.183930 N
	+E/-W	105.01 ft	Easting:	643,892.23 usft	Longitude:	104° 0' 6.251289 W
Position Uncertainty		1.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	2,924.60 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM_FILE	12/3/2019	6.90	59.90	47,854.30000000

<b>Design</b>	Permitting Plan			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	180.60

<b>Plan Survey Tool Program</b>	<b>Date</b>	12/3/2019		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	17,821.99	Permitting Plan (Wellbore #1)	B001Mb_MWD+HRGM OWSG MWD + HRGM

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,740.00	0.00	0.00	4,740.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,240.00	10.00	195.71	5,237.47	-41.90	-11.78	2.00	2.00	0.00	195.71	
6,871.80	10.00	195.71	6,844.47	-314.67	-88.51	0.00	0.00	0.00	0.00	
7,672.06	89.65	180.03	7,321.10	-876.06	-111.34	10.00	9.95	-1.96	-15.93	
17,821.99	89.65	180.03	7,383.10	-11,025.79	-115.90	0.00	0.00	0.00	0.00	PBHL (Salt Flat CC)

# Oxy Inc.

## Planning Report

<b>Database:</b>	HOPSP	<b>Local Co-ordinate Reference:</b>	Well Salt Flat CC 20_29 Federal Com 5H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Site:</b>	Salt Flat CC 20-29 Federal Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Salt Flat CC 20_29 Federal Com 5H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
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
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,740.00	0.00	0.00	4,740.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	1.20	195.71	4,800.00	-0.60	-0.17	0.61	2.00	2.00	0.00
4,900.00	3.20	195.71	4,899.92	-4.30	-1.21	4.31	2.00	2.00	0.00
5,000.00	5.20	195.71	4,999.64	-11.35	-3.19	11.38	2.00	2.00	0.00
5,100.00	7.20	195.71	5,099.05	-21.75	-6.12	21.81	2.00	2.00	0.00
5,200.00	9.20	195.71	5,198.03	-35.48	-9.98	35.58	2.00	2.00	0.00

**Oxy Inc.**  
Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Salt Flat CC 20_29 Federal Com 5H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Site:</b>	Salt Flat CC 20-29 Federal Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Salt Flat CC 20_29 Federal Com 5H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,240.00	10.00	195.71	5,237.47	-41.90	-11.78	42.02	2.00	2.00	0.00
5,300.00	10.00	195.71	5,296.55	-51.93	-14.61	52.08	0.00	0.00	0.00
5,400.00	10.00	195.71	5,395.03	-68.64	-19.31	68.84	0.00	0.00	0.00
5,500.00	10.00	195.71	5,493.52	-85.36	-24.01	85.61	0.00	0.00	0.00
5,600.00	10.00	195.71	5,592.00	-102.07	-28.71	102.37	0.00	0.00	0.00
5,700.00	10.00	195.71	5,690.48	-118.79	-33.41	119.14	0.00	0.00	0.00
5,800.00	10.00	195.71	5,788.96	-135.51	-38.11	135.90	0.00	0.00	0.00
5,900.00	10.00	195.71	5,887.44	-152.22	-42.82	152.66	0.00	0.00	0.00
6,000.00	10.00	195.71	5,985.92	-168.94	-47.52	169.43	0.00	0.00	0.00
6,100.00	10.00	195.71	6,084.40	-185.66	-52.22	186.19	0.00	0.00	0.00
6,200.00	10.00	195.71	6,182.88	-202.37	-56.92	202.96	0.00	0.00	0.00
6,300.00	10.00	195.71	6,281.36	-219.09	-61.62	219.72	0.00	0.00	0.00
6,400.00	10.00	195.71	6,379.84	-235.80	-66.33	236.49	0.00	0.00	0.00
6,500.00	10.00	195.71	6,478.32	-252.52	-71.03	253.25	0.00	0.00	0.00
6,600.00	10.00	195.71	6,576.80	-269.24	-75.73	270.02	0.00	0.00	0.00
6,700.00	10.00	195.71	6,675.28	-285.95	-80.43	286.78	0.00	0.00	0.00
6,800.00	10.00	195.71	6,773.77	-302.67	-85.13	303.55	0.00	0.00	0.00
6,871.80	10.00	195.71	6,844.47	-314.67	-88.51	315.58	0.00	0.00	0.00
6,900.00	12.73	192.20	6,872.12	-320.07	-89.83	320.99	10.00	9.70	-12.45
7,000.00	22.60	186.59	6,967.29	-350.00	-94.38	350.98	10.00	9.87	-5.61
7,100.00	32.55	184.30	7,055.82	-396.03	-98.61	397.05	10.00	9.95	-2.29
7,200.00	42.51	182.99	7,135.03	-456.75	-102.40	457.80	10.00	9.97	-1.30
7,300.00	52.49	182.11	7,202.50	-530.32	-105.63	531.40	10.00	9.98	-0.88
7,400.00	62.48	181.43	7,256.18	-614.50	-108.20	615.60	10.00	9.98	-0.67
7,500.00	72.46	180.87	7,294.45	-706.73	-110.04	707.85	10.00	9.99	-0.56
7,600.00	82.45	180.37	7,316.14	-804.21	-111.09	805.34	10.00	9.99	-0.50
7,672.06	89.65	180.03	7,321.10	-876.06	-111.34	877.18	10.00	9.99	-0.48
7,700.00	89.65	180.03	7,321.27	-903.99	-111.35	905.12	0.00	0.00	0.00
7,800.00	89.65	180.03	7,321.88	-1,003.99	-111.40	1,005.11	0.00	0.00	0.00
7,900.00	89.65	180.03	7,322.49	-1,103.99	-111.44	1,105.10	0.00	0.00	0.00
8,000.00	89.65	180.03	7,323.10	-1,203.99	-111.49	1,205.09	0.00	0.00	0.00
8,100.00	89.65	180.03	7,323.71	-1,303.99	-111.53	1,305.09	0.00	0.00	0.00
8,200.00	89.65	180.03	7,324.32	-1,403.99	-111.58	1,405.08	0.00	0.00	0.00
8,300.00	89.65	180.03	7,324.93	-1,503.98	-111.62	1,505.07	0.00	0.00	0.00
8,400.00	89.65	180.03	7,325.55	-1,603.98	-111.67	1,605.07	0.00	0.00	0.00
8,500.00	89.65	180.03	7,326.16	-1,703.98	-111.71	1,705.06	0.00	0.00	0.00
8,600.00	89.65	180.03	7,326.77	-1,803.98	-111.76	1,805.05	0.00	0.00	0.00
8,700.00	89.65	180.03	7,327.38	-1,903.98	-111.80	1,905.05	0.00	0.00	0.00
8,800.00	89.65	180.03	7,327.99	-2,003.97	-111.85	2,005.04	0.00	0.00	0.00
8,900.00	89.65	180.03	7,328.60	-2,103.97	-111.89	2,105.03	0.00	0.00	0.00
9,000.00	89.65	180.03	7,329.21	-2,203.97	-111.94	2,205.03	0.00	0.00	0.00
9,100.00	89.65	180.03	7,329.82	-2,303.97	-111.98	2,305.02	0.00	0.00	0.00
9,200.00	89.65	180.03	7,330.43	-2,403.97	-112.03	2,405.01	0.00	0.00	0.00
9,300.00	89.65	180.03	7,331.04	-2,503.96	-112.07	2,505.00	0.00	0.00	0.00
9,400.00	89.65	180.03	7,331.65	-2,603.96	-112.12	2,605.00	0.00	0.00	0.00
9,500.00	89.65	180.03	7,332.26	-2,703.96	-112.16	2,704.99	0.00	0.00	0.00
9,600.00	89.65	180.03	7,332.88	-2,803.96	-112.21	2,804.98	0.00	0.00	0.00
9,700.00	89.65	180.03	7,333.49	-2,903.96	-112.25	2,904.98	0.00	0.00	0.00
9,800.00	89.65	180.03	7,334.10	-3,003.96	-112.30	3,004.97	0.00	0.00	0.00
9,900.00	89.65	180.03	7,334.71	-3,103.95	-112.34	3,104.96	0.00	0.00	0.00
10,000.00	89.65	180.03	7,335.32	-3,203.95	-112.39	3,204.96	0.00	0.00	0.00
10,100.00	89.65	180.03	7,335.93	-3,303.95	-112.43	3,304.95	0.00	0.00	0.00
10,200.00	89.65	180.03	7,336.54	-3,403.95	-112.48	3,404.94	0.00	0.00	0.00
10,300.00	89.65	180.03	7,337.15	-3,503.95	-112.52	3,504.94	0.00	0.00	0.00

**Oxy Inc.**  
Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Salt Flat CC 20_29 Federal Com 5H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Site:</b>	Salt Flat CC 20-29 Federal Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Salt Flat CC 20_29 Federal Com 5H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,400.00	89.65	180.03	7,337.76	-3,603.94	-112.57	3,604.93	0.00	0.00	0.00
10,500.00	89.65	180.03	7,338.37	-3,703.94	-112.61	3,704.92	0.00	0.00	0.00
10,600.00	89.65	180.03	7,338.98	-3,803.94	-112.66	3,804.91	0.00	0.00	0.00
10,700.00	89.65	180.03	7,339.60	-3,903.94	-112.70	3,904.91	0.00	0.00	0.00
10,800.00	89.65	180.03	7,340.21	-4,003.94	-112.75	4,004.90	0.00	0.00	0.00
10,900.00	89.65	180.03	7,340.82	-4,103.93	-112.79	4,104.89	0.00	0.00	0.00
11,000.00	89.65	180.03	7,341.43	-4,203.93	-112.84	4,204.89	0.00	0.00	0.00
11,100.00	89.65	180.03	7,342.04	-4,303.93	-112.88	4,304.88	0.00	0.00	0.00
11,200.00	89.65	180.03	7,342.65	-4,403.93	-112.93	4,404.87	0.00	0.00	0.00
11,300.00	89.65	180.03	7,343.26	-4,503.93	-112.97	4,504.87	0.00	0.00	0.00
11,400.00	89.65	180.03	7,343.87	-4,603.93	-113.02	4,604.86	0.00	0.00	0.00
11,500.00	89.65	180.03	7,344.48	-4,703.92	-113.06	4,704.85	0.00	0.00	0.00
11,600.00	89.65	180.03	7,345.09	-4,803.92	-113.10	4,804.84	0.00	0.00	0.00
11,700.00	89.65	180.03	7,345.70	-4,903.92	-113.15	4,904.84	0.00	0.00	0.00
11,800.00	89.65	180.03	7,346.31	-5,003.92	-113.19	5,004.83	0.00	0.00	0.00
11,900.00	89.65	180.03	7,346.93	-5,103.92	-113.24	5,104.82	0.00	0.00	0.00
12,000.00	89.65	180.03	7,347.54	-5,203.91	-113.28	5,204.82	0.00	0.00	0.00
12,100.00	89.65	180.03	7,348.15	-5,303.91	-113.33	5,304.81	0.00	0.00	0.00
12,200.00	89.65	180.03	7,348.76	-5,403.91	-113.37	5,404.80	0.00	0.00	0.00
12,300.00	89.65	180.03	7,349.37	-5,503.91	-113.42	5,504.80	0.00	0.00	0.00
12,400.00	89.65	180.03	7,349.98	-5,603.91	-113.46	5,604.79	0.00	0.00	0.00
12,500.00	89.65	180.03	7,350.59	-5,703.90	-113.51	5,704.78	0.00	0.00	0.00
12,600.00	89.65	180.03	7,351.20	-5,803.90	-113.55	5,804.78	0.00	0.00	0.00
12,700.00	89.65	180.03	7,351.81	-5,903.90	-113.60	5,904.77	0.00	0.00	0.00
12,800.00	89.65	180.03	7,352.42	-6,003.90	-113.64	6,004.76	0.00	0.00	0.00
12,900.00	89.65	180.03	7,353.03	-6,103.90	-113.69	6,104.75	0.00	0.00	0.00
13,000.00	89.65	180.03	7,353.64	-6,203.90	-113.73	6,204.75	0.00	0.00	0.00
13,100.00	89.65	180.03	7,354.26	-6,303.89	-113.78	6,304.74	0.00	0.00	0.00
13,200.00	89.65	180.03	7,354.87	-6,403.89	-113.82	6,404.73	0.00	0.00	0.00
13,300.00	89.65	180.03	7,355.48	-6,503.89	-113.87	6,504.73	0.00	0.00	0.00
13,400.00	89.65	180.03	7,356.09	-6,603.89	-113.91	6,604.72	0.00	0.00	0.00
13,500.00	89.65	180.03	7,356.70	-6,703.89	-113.96	6,704.71	0.00	0.00	0.00
13,600.00	89.65	180.03	7,357.31	-6,803.88	-114.00	6,804.71	0.00	0.00	0.00
13,700.00	89.65	180.03	7,357.92	-6,903.88	-114.05	6,904.70	0.00	0.00	0.00
13,800.00	89.65	180.03	7,358.53	-7,003.88	-114.09	7,004.69	0.00	0.00	0.00
13,900.00	89.65	180.03	7,359.14	-7,103.88	-114.14	7,104.69	0.00	0.00	0.00
14,000.00	89.65	180.03	7,359.75	-7,203.88	-114.18	7,204.68	0.00	0.00	0.00
14,100.00	89.65	180.03	7,360.36	-7,303.87	-114.23	7,304.67	0.00	0.00	0.00
14,200.00	89.65	180.03	7,360.98	-7,403.87	-114.27	7,404.66	0.00	0.00	0.00
14,300.00	89.65	180.03	7,361.59	-7,503.87	-114.32	7,504.66	0.00	0.00	0.00
14,400.00	89.65	180.03	7,362.20	-7,603.87	-114.36	7,604.65	0.00	0.00	0.00
14,500.00	89.65	180.03	7,362.81	-7,703.87	-114.41	7,704.64	0.00	0.00	0.00
14,600.00	89.65	180.03	7,363.42	-7,803.87	-114.45	7,804.64	0.00	0.00	0.00
14,700.00	89.65	180.03	7,364.03	-7,903.86	-114.50	7,904.63	0.00	0.00	0.00
14,800.00	89.65	180.03	7,364.64	-8,003.86	-114.54	8,004.62	0.00	0.00	0.00
14,900.00	89.65	180.03	7,365.25	-8,103.86	-114.59	8,104.62	0.00	0.00	0.00
15,000.00	89.65	180.03	7,365.86	-8,203.86	-114.63	8,204.61	0.00	0.00	0.00
15,100.00	89.65	180.03	7,366.47	-8,303.86	-114.68	8,304.60	0.00	0.00	0.00
15,200.00	89.65	180.03	7,367.08	-8,403.85	-114.72	8,404.60	0.00	0.00	0.00
15,300.00	89.65	180.03	7,367.69	-8,503.85	-114.77	8,504.59	0.00	0.00	0.00
15,400.00	89.65	180.03	7,368.31	-8,603.85	-114.81	8,604.58	0.00	0.00	0.00
15,500.00	89.65	180.03	7,368.92	-8,703.85	-114.86	8,704.57	0.00	0.00	0.00
15,600.00	89.65	180.03	7,369.53	-8,803.85	-114.90	8,804.57	0.00	0.00	0.00
15,700.00	89.65	180.03	7,370.14	-8,903.84	-114.95	8,904.56	0.00	0.00	0.00

# Oxy Inc.

## Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well Salt Flat CC 20_29 Federal Com 5H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=26.5' @ 2951.10ft
<b>Site:</b>	Salt Flat CC 20-29 Federal Com	<b>North Reference:</b>	Grid
<b>Well:</b>	Salt Flat CC 20_29 Federal Com 5H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
15,800.00	89.65	180.03	7,370.75	-9,003.84	-114.99	9,004.55	0.00	0.00	0.00	
15,900.00	89.65	180.03	7,371.36	-9,103.84	-115.04	9,104.55	0.00	0.00	0.00	
16,000.00	89.65	180.03	7,371.97	-9,203.84	-115.08	9,204.54	0.00	0.00	0.00	
16,100.00	89.65	180.03	7,372.58	-9,303.84	-115.13	9,304.53	0.00	0.00	0.00	
16,200.00	89.65	180.03	7,373.19	-9,403.84	-115.17	9,404.53	0.00	0.00	0.00	
16,300.00	89.65	180.03	7,373.80	-9,503.83	-115.22	9,504.52	0.00	0.00	0.00	
16,400.00	89.65	180.03	7,374.41	-9,603.83	-115.26	9,604.51	0.00	0.00	0.00	
16,500.00	89.65	180.03	7,375.02	-9,703.83	-115.31	9,704.51	0.00	0.00	0.00	
16,600.00	89.65	180.03	7,375.64	-9,803.83	-115.35	9,804.50	0.00	0.00	0.00	
16,700.00	89.65	180.03	7,376.25	-9,903.83	-115.40	9,904.49	0.00	0.00	0.00	
16,800.00	89.65	180.03	7,376.86	-10,003.82	-115.44	10,004.48	0.00	0.00	0.00	
16,900.00	89.65	180.03	7,377.47	-10,103.82	-115.49	10,104.48	0.00	0.00	0.00	
17,000.00	89.65	180.03	7,378.08	-10,203.82	-115.53	10,204.47	0.00	0.00	0.00	
17,100.00	89.65	180.03	7,378.69	-10,303.82	-115.58	10,304.46	0.00	0.00	0.00	
17,200.00	89.65	180.03	7,379.30	-10,403.82	-115.62	10,404.46	0.00	0.00	0.00	
17,300.00	89.65	180.03	7,379.91	-10,503.81	-115.66	10,504.45	0.00	0.00	0.00	
17,400.00	89.65	180.03	7,380.52	-10,603.81	-115.71	10,604.44	0.00	0.00	0.00	
17,500.00	89.65	180.03	7,381.13	-10,703.81	-115.75	10,704.44	0.00	0.00	0.00	
17,600.00	89.65	180.03	7,381.74	-10,803.81	-115.80	10,804.43	0.00	0.00	0.00	
17,700.00	89.65	180.03	7,382.36	-10,903.81	-115.84	10,904.42	0.00	0.00	0.00	
17,800.00	89.65	180.03	7,382.97	-11,003.81	-115.89	11,004.42	0.00	0.00	0.00	
17,821.99	89.65	180.03	7,383.10	-11,025.79	-115.90	11,026.40	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
FTP (Salt Flat CC - hit/miss target - Shape - Point	0.00	0.00	7,321.10	-520.48	-111.13	440,293.68	643,781.11	32° 12' 36.037088 N	104° 0' 7.563388 W	- plan misses target center by 103.21ft at 7355.67ft MD (7234.20 TVD, -576.03 N, -107.15 E)
PBHL (Salt Flat CC - plan hits target center - Point	0.00	0.00	7,383.10	-11,025.79	-115.90	429,789.22	643,776.34	32° 10' 52.085688 N	104° 0' 7.995395 W	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
4,740.00	4,740.00	0.00	0.00	Build 2°/100'	
5,240.00	5,237.47	-41.90	-11.78	Hold 10° Tangent	
6,871.80	6,844.47	-314.67	-88.51	KOP, Build & Turn 10°/100'	
7,672.06	7,321.10	-876.06	-111.34	Landing Point	
17,821.99	7,383.10	-11,025.79	-115.90	TD at 17821.99' MD	

## Oxy USA Inc. - Salt Flat CC 20\_29 Federal Com 5H

### 1. Geologic Formations

TVD of target	7383'	Pilot Hole Depth	N/A
MD at TD:	17821'	Deepest Expected fresh water:	397'

#### Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	291	
Salado	608	Salt
Castile	1,262	Salt
Lamar/Delaware	2,819	Oil/Gas/Brine
Bell Canyon	2,890	Oil/Gas/Brine
Cherry Canyon	3,747	Oil/Gas/Brine
Brushy Canyon	5,001	Losses
<b>Bone Spring</b>	<b>6,596</b>	<b>Oil/Gas</b>

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

### 2. Casing Program

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	Buoyant	Buoyant
	From (ft)	To (ft)							Body SF Tension	Joint SF Tension
14.75	0	548	10.75	40.5	J-55	BTC	1.125	1.2	1.4	1.4
9.875	0	6771	7.625	26.4	L-80 HC	BTC	1.125	1.2	1.4	1.4
6.75	0	7321	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
6.75	7321	17821	4.5	13.5	P-110	DQX	1.125	1.2	1.4	1.4
SF Values 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 requests the option to run production casing with DQX, SF TORQ, and/or DQW TORQ connections to accommodate hole conditions or drilling operations.

#### Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

	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

## Oxy USA Inc. - Salt Flat CC 20\_29 Federal Com 5H

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 3 <sup>rd</sup> 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 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Y
(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 String	# Sks	Wt. (lb/gal)	Yld (ft <sup>3</sup> /sack)	H2O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	445	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate 1st Stage (Tail)	215	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Intermediate annulus						
Intermediate 2nd Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate 2nd Stage (Tail)	646	12.9	1.92	10.41	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	1342	13.2	1.38	6.686	3:39	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	548	100%
Intermediate 1st Stage (Lead)	N/A	N/A	N/A
Intermediate 1st Stage (Tail)	5251	6771	5%
Intermediate 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate 2nd Stage (Tail)	0	5251	10%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	6271	17821	20%

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).
2. Land casing.
3. Fill pipe with kill weight fluid, and confirm well is static.

## Oxy USA Inc. - Salt Flat CC 20\_29 Federal Com 5H

- a. If well is not static notify BLM and kill well.
  - b. Once well is static notify BLM with intent to proceed with nipple down and offline cementing.
4. Set and pressure test annular packoff.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed.
6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange.
8. If well is not static notify BLM and kill well prior to cementing or nipping up for further remediation.
9. Install offline cement tool.
10. Rig up cement equipment.
  - a. Notify BLM prior to cement job.
11. Perform cement job.
12. Confirm well is static and floats are holding after cement job.
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019.

### Three string wells:

- CBL will be required on one well per pad
- If the pumped volume of cement is less than permitted in the APD, BLM will be notified and a CBL may be run
- Echometer will be used after bradenhead cement job to determine TOC before pumping top-out cement

### 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"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
6.75" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		

\*Specify if additional ram is utilized.

Oxy will utilize a 5M annular with a 10M BOPE stack. The 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.



### Oxy USA Inc. - Salt Flat CC 20\_29 Federal Com 5H

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.

### BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. A separate sundry will be sent prior to spud that reflects the pad based break testing plan.

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill an intermediate section where ICP is set into the third Bone Spring or shallower.
- When skidding to drill a production section that does not penetrate into the third Bone Spring or deeper.

If the kill line is broken prior to skid, two tests will be performed.

- 1) Wellhead flange, co-flex hose, kill line connections and upper pipe rams
- 2) Wellhead flange, HCR valve, check valve, upper pipe rams

If the kill line is not broken prior to skid, only one test will be performed.

- 1) Wellhead flange, co-flex hose, check valve, upper pipe rams

### 5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	548	Water-Based Mud	8.6-8.8	40-60	N/C
548	6771	Saturated Brine-Based or Oil-Based Mud	8.0-10.0	35-45	N/C
6771	17821	Water-Based or Oil-Based Mud	8.0-9.6	38-50	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,

## Oxy USA Inc. - Salt Flat CC 20\_29 Federal Com 5H

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
---	--------------------------------

### 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	3686 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	140°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. <ul style="list-style-type: none"><li>We plan to drill the two 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.</li></ul>	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. <ul style="list-style-type: none"><li>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</li></ul>	Yes

**Oxy USA Inc. - Salt Flat CC 20\_29 Federal Com 5H**

its entirety per the APD. Please see the attached document for information on the spudder rig.	
--	--

**Total estimated cuttings volume:** 1194.4 bbls.

**9. Company Personnel**

<u>Name</u>	<u>Title</u>	<u>Office Phone</u>	<u>Mobile Phone</u>
Christopher Hollis	Drilling Engineer	713-350-4754	713-380-7754
William Turner	Drilling Engineer Supervisor	713-350-4951	661-817-4586
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932



APD ID: 10400055105

Submission Date: 03/18/2020

Highlighted data  
reflects the most  
recent changes

Operator Name: OXY USA INCORPORATED

Well Name: SALT FLAT CC 20-29 FEDERAL COM

Well Number: 5H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

SaltFlatCC20\_29FdCom5H\_ExistRoads\_20200318085142.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

## Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

SaltFlatCC20\_29FdCom5H\_NewRoads\_20200318085210.pdf

New road type: LOCAL

Length: 768.5

Feet

Width (ft.): 30

Max slope (%): 0

Max grade (%): 0

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Watershed Diversion every 200' if needed.

New road access plan or profile prepared? Y

New road access plan attachment:

SaltFlatCC20\_29FdCom5H\_NewRoads\_20200318085307.pdf

Access road engineering design? N

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Access road engineering design attachment:**

**Turnout?** N

**Access surfacing type:** OTHER

**Access topsoil source:** ONSITE

**Access surfacing type description:** Caliche

**Access onsite topsoil source depth:** 0

**Offsite topsoil source description:**

**Onsite topsoil removal process:** If available

**Access other construction information:**

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

### Drainage Control

**New road drainage crossing:** CULVERT

**Drainage Control comments:** Watershed Diversion every 200' if needed.

**Road Drainage Control Structures (DCS) description:** Watershed Diversion every 200' if needed.

**Road Drainage Control Structures (DCS) attachment:**

### Access Additional Attachments

### Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

SaltFlatCC20\_29FdCom5H\_ExistWells\_20200318090421.pdf

### Section 4 - Location of Existing and/or Proposed Production Facilities

**Submit or defer a Proposed Production Facilities plan?** SUBMIT

**Production Facilities description:**

**Production Facilities map:**

SaltFlatCC20\_29FdCom5H\_LeaseFacilityInfo\_20200318090459.pdf

### Section 5 - Location and Types of Water Supply

#### Water Source Table

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Water source type:** GW WELL

**Water source use type:**

SURFACE CASING

INTERMEDIATE/PRODUCTION  
CASING

OTHER

**Describe use type:** Drilling

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:**

WATER WELL

**Water source transport method:**

PIPELINE

TRUCKING

**Source land ownership:** COMMERCIAL

**Source transportation land ownership:** COMMERCIAL

**Water source volume (barrels):** 2000

**Source volume (acre-feet):** 0.25778618

**Source volume (gal):** 84000

#### Water source and transportation map:

SaltFlatCC20\_29FdCom5H\_GRRWtrSrc\_20200318090757.pdf

SaltFlatCC20\_29FdCom5H\_MesqWtrSrc\_20200318090807.pdf

**Water source comments:** This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations (Gregory Rockhouse, Mesquite) in the area and will be hauled to location by transport truck using existing and proposed roads.

**New water well?** N

#### New Water Well Info

**Well latitude:**

**Well Longitude:**

**Well datum:**

**Well target aquifer:**

**Est. depth to top of aquifer(ft):**

**Est thickness of aquifer:**

**Aquifer comments:**

**Aquifer documentation:**

**Well depth (ft):**

**Well casing type:**

**Well casing outside diameter (in.):**

**Well casing inside diameter (in.):**

**New water well casing?**

**Used casing source:**

**Drilling method:**

**Drill material:**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Grout material:**

**Grout depth:**

**Casing length (ft.):**

**Casing top depth (ft.):**

**Well Production type:**

**Completion Method:**

**Water well additional information:**

**State appropriation permit:**

**Additional information attachment:**

## Section 6 - Construction Materials

**Using any construction materials:** YES

**Construction Materials description:** Primary - All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM/State/Fee approved pit or from prevailing deposits found on the location. Will use BLM recommended extra caliche from other locations close by for roads, if available. Secondary - The secondary way of obtaining caliche to build locations and roads will be by "turning over" the location. This means, caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cubic yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel: a. The top 6" of topsoil is pushed off and stockpiled along the side of the location. b. An approximate 120' X 120' area is used within the proposed well site to remove caliche. c. Subsoil is removed and piled alongside the 120' X 120' within the pad site. d. When caliche is found, material will be stockpiled within the pad site to build the location and road. e. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road. f. Once the well is drilled the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad. Caliche will be provided from one of the following three pits located in Section 6, 20, 22 T24S R29E. Water will be provided from one of three frac ponds located in Sections 15, 21, 22 T24S R29E.

**Construction Materials source location attachment:**

## Section 7 - Methods for Handling Waste

**Waste type:** DRILLING

**Waste content description:** Water-Based Cuttings, Water-Based Mud, Oil-Based Cuttings, Oil-Based Mud, Produced Water

**Amount of waste:** 1194.4 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** Haul-Off Bins

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY

**Disposal location ownership:** COMMERCIAL

**Disposal type description:**

**Disposal location description:** An approved facility that can process drill cuttings, drill fluids, flowback water, produced water, contaminated soils, and other non-hazardous wastes.

## Reserve Pit

**Reserve Pit being used?** NO

**Temporary disposal of produced water into reserve pit?** NO

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Reserve pit length (ft.)**

**Reserve pit width (ft.)**

**Reserve pit depth (ft.)**

**Reserve pit volume (cu. yd.)**

**Is at least 50% of the reserve pit in cut?**

**Reserve pit liner**

**Reserve pit liner specifications and installation description**

### Cuttings Area

**Cuttings Area being used?** NO

**Are you storing cuttings on location?** Y

**Description of cuttings location** A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

**Cuttings area length (ft.)**

**Cuttings area width (ft.)**

**Cuttings area depth (ft.)**

**Cuttings area volume (cu. yd.)**

**Is at least 50% of the cuttings area in cut?**

**WCuttings area liner**

**Cuttings area liner specifications and installation description**

### Section 8 - Ancillary Facilities

**Are you requesting any Ancillary Facilities?:** N

**Ancillary Facilities attachment:**

**Comments:**

### Section 9 - Well Site Layout

**Well Site Layout Diagram:**

SaltFlatCC20\_29FdCom5H\_WellSiteCL\_20200318090953.pdf

**Comments:**



**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

## Section 10 - Plans for Surface Reclamation

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:** OXBOW CC 17-8 FEDERAL COM & SALT FLAT CC 20-29 FEDERAL COM

**Recontouring attachment:**

**Multiple Well Pad Number:** 34H, 35H, 36H & 5H, 6H, 34H, 35H, 313H, 314H

**Drainage/Erosion control construction:** Reclamation to be wind rowed as needed to control erosion

**Drainage/Erosion control reclamation:** Reclamation to be wind rowed as needed to control erosion

**Well pad proposed disturbance (acres):** 6.83

**Well pad interim reclamation (acres):** 1.99

**Well pad long term disturbance (acres):** 4.84

**Road proposed disturbance (acres):** 0.53

**Road interim reclamation (acres):** 0.28

**Road long term disturbance (acres):** 0.25

**Powerline proposed disturbance (acres):** 10.52

**Powerline interim reclamation (acres):** 10.52

**Powerline long term disturbance (acres):** 0

**Pipeline proposed disturbance (acres):** 12.43

**Pipeline interim reclamation (acres):** 8.29

**Pipeline long term disturbance (acres):** 4.14

**Other proposed disturbance (acres):** 0

**Other interim reclamation (acres):** 0

**Other long term disturbance (acres):** 0

**Total proposed disturbance:** 30.31

**Total interim reclamation:** 21.08

**Total long term disturbance:** 9.23

**Disturbance Comments:** See Below

**Reconstruction method:** If the well is deemed commercially productive, caliche from the areas of the pad site not required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original topsoil will again be returned to the pad and contoured, as close as possible, to the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.

**Topsoil redistribution:** The original topsoil will be returned to the area of the drill pad not necessary to operate the well.

**Soil treatment:** To be determined by the BLM.

**Existing Vegetation at the well pad:** To be determined by the BLM at Onsite.

**Existing Vegetation at the well pad attachment:**

**Existing Vegetation Community at the road:** To be determined by the BLM at Onsite.

**Existing Vegetation Community at the road attachment:**

**Existing Vegetation Community at the pipeline:** To be determined by the BLM at Onsite.

**Existing Vegetation Community at the pipeline attachment:**

**Existing Vegetation Community at other disturbances:** To be determined by the BLM at Onsite.

**Existing Vegetation Community at other disturbances attachment:**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Non native seed used?** N

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** N

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?** N

**Seed harvest description:**

**Seed harvest description attachment:**

### Seed Management

#### Seed Table

#### Seed Summary

**Total pounds/Acre:**

Seed Type	Pounds/Acre
-----------	-------------

**Seed reclamation attachment:**

### Operator Contact/Responsible Official Contact Info

**First Name:** Mike

**Last Name:** Wilson

**Phone:** (575)631-6618

**Email:** Michael\_Wilson@oxy.com

**Seedbed prep:**

**Seed BMP:**

**Seed method:**

**Existing invasive species?** N

**Existing invasive species treatment description:**

**Existing invasive species treatment attachment:**

**Weed treatment plan description:** To be determined by the BLM.

**Weed treatment plan attachment:**

**Monitoring plan description:** To be determined by the BLM.

**Monitoring plan attachment:**

**Success standards:** To be determined by the BLM.

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Pit closure description:** NA

**Pit closure attachment:**

## Section 11 - Surface Ownership

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** OTHER

**Other surface owner description:** Fee - Private Surface Agreement will be provided upon request.

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Disturbance type:** PIPELINE

**Describe:**

**Surface Owner:** OTHER

**Other surface owner description:** Fee – Private Surface Agreement will be provided upon request.

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Disturbance type:** OTHER

**Describe:** Electric Line

**Surface Owner:** OTHER

**Other surface owner description:** Fee – Private Surface Agreement will be provided upon request.

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Disturbance type:** NEW ACCESS ROAD

**Describe:**

**Surface Owner:** OTHER

**Other surface owner description:** Fee – Private Surface Agreement will be provided upon request.

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

## Section 12 - Other Information

**Right of Way needed?** Y

**Use APD as ROW?** Y

**ROW Type(s):** 281001 ROW - ROADS,285003 ROW – POWER TRANS,288100 ROW – O&G Pipeline,288101 ROW – O&G Facility Sites,289001 ROW- O&G Well Pad

## ROW Applications

**SUPO Additional Information:** Permian Basin MOA - see attached SUPO and to be submitted after APD acceptance. GIS Shapefiles available for BLM download from shared FTP site after APD submittal.

**Use a previously conducted onsite?** N

**Previous Onsite information:**

## Other SUPO Attachment

SaltFlatCC20\_29FdCom5H\_AM\_20200318091251.pdf

SaltFlatCC20\_29FdCom5H\_GasCapPlan\_20200318091304.pdf

SaltFlatCC20\_29FdCom5H\_Loc\_20200318091322.pdf

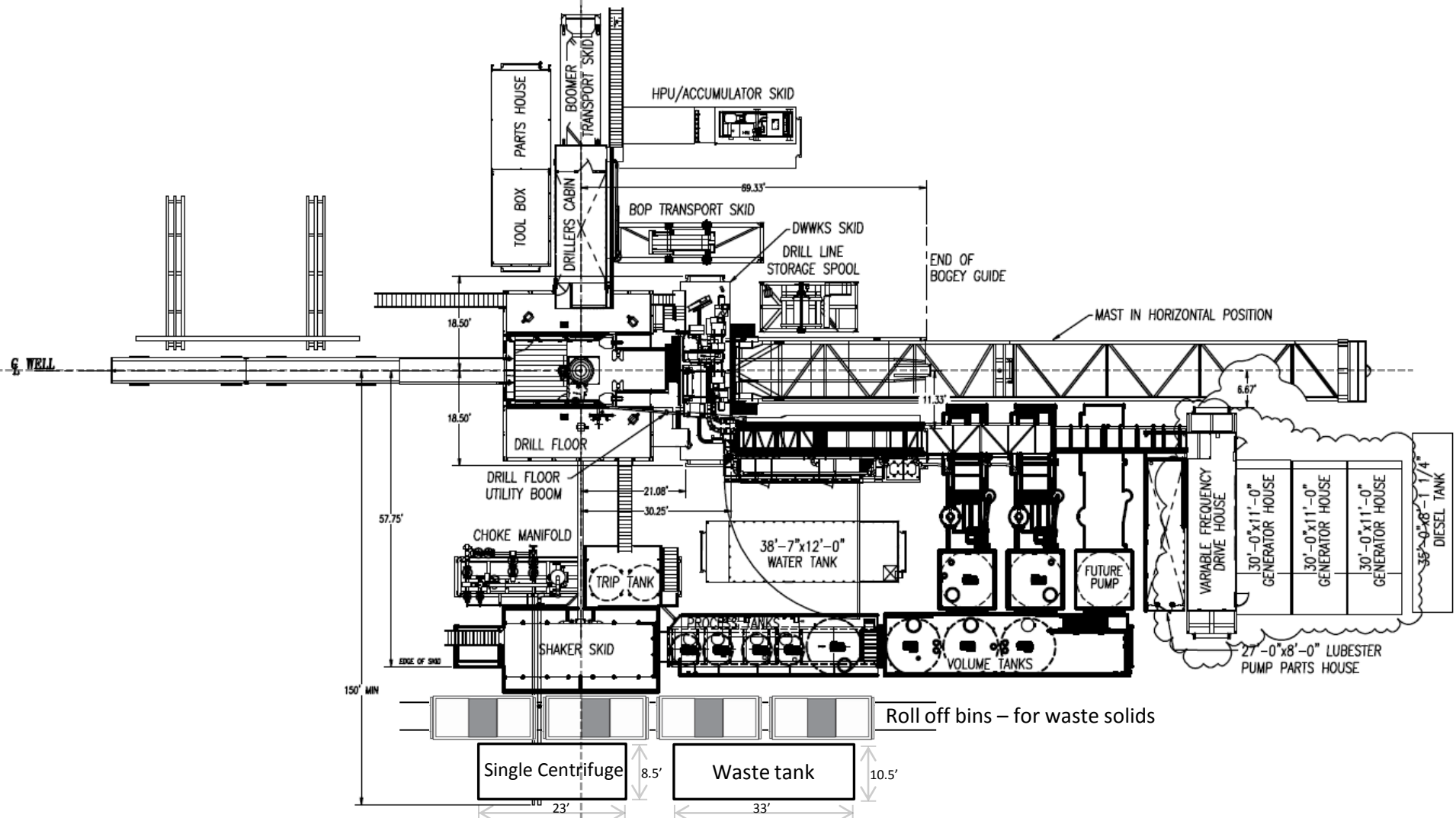
SaltFlatCC20\_29FdCom5H\_LVM\_20200318091333.pdf

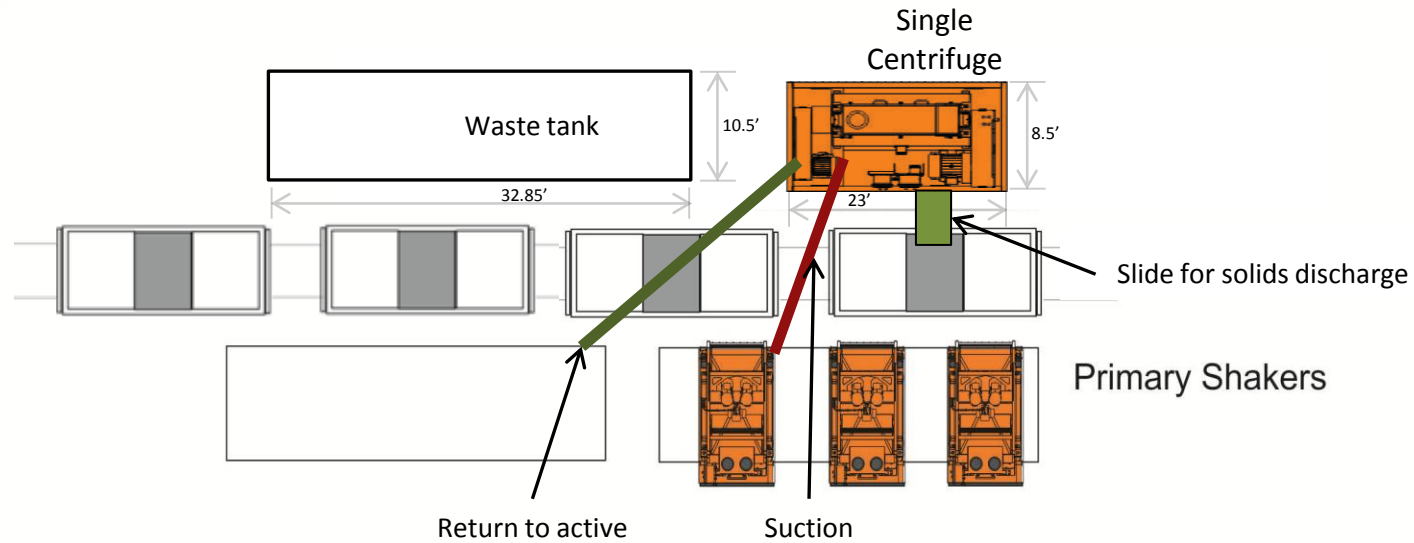
SaltFlatCC20\_29FdCom5H\_StakeForm\_20200318091351.pdf

SaltFlatCC20\_29FdCom5H\_SUPO\_20200318092801.pdf

# Oxy Single Centrifuge Closed Loop System – New Mexico Flex III

May 28, 2013





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

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit Original  
to Appropriate  
District Office

## GAS CAPTURE PLAN

Date: 3/12/20

☒ Original

Operator & OGRID No.: OXY USA INC. - 16696

☐ Amended - Reason for Amendment: \_\_\_\_\_

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

*Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).*

### Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
SALT FLAT CC 20-29 FED COM 313H	Pending	P-17-T24S-R29E	601' FSL 1166' FEL	5,500	0	
SALT FLAT CC 20-29 FED COM 314H	Pending	P-17-T24S-R29E	601' FSL 1131' FEL	5,500	0	
SALT FLAT CC 20-29 FED COM 5H	Pending	P-17-T24S-R29E	421' FSL 1166' FEL	5,500	0	
SALT FLAT CC 20-29 FED COM 6H	Pending	P-17-R24S-R29E	421' FSL 1131' FEL	5,500	0	

### Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, where a gas transporter system is in place. The gas produced from production facility is dedicated to DCP Midstream, LP ("DCP") and will be connected to DCP's low/high pressure gathering system located in Lea County, New Mexico. OXY USA INC. ("OXY") provides (periodically) to DCP a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, OXY and DCP have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at DCP's Zia Processing Plant located in Sec. 19, Twn. 19S, Rng. 32E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on DCP's system at that time. Based on current information, it is OXY's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

### Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines





**APD ID:** 10400055105

**Submission Date:** 03/18/2020

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Well Type:** OIL WELL

**Well Work Type:** Drill

## Section 1 - General

**Would you like to address long-term produced water disposal?** NO

## Section 2 - Lined Pits

**Would you like to utilize Lined Pit PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Lined pit PWD on or off channel:**

**Lined pit PWD discharge volume (bbl/day):**

**Lined pit specifications:**

**Pit liner description:**

**Pit liner manufacturers information:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Lined pit precipitated solids disposal schedule:**

**Lined pit precipitated solids disposal schedule attachment:**

**Lined pit reclamation description:**

**Lined pit reclamation attachment:**

**Leak detection system description:**

**Leak detection system attachment:**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Lined pit Monitor description:**

**Lined pit Monitor attachment:**

**Lined pit: do you have a reclamation bond for the pit?**

**Is the reclamation bond a rider under the BLM bond?**

**Lined pit bond number:**

**Lined pit bond amount:**

**Additional bond information attachment:**

### Section 3 - Unlined Pits

**Would you like to utilize Unlined Pit PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD disturbance (acres):**

**PWD surface owner:**

**Unlined pit PWD on or off channel:**

**Unlined pit PWD discharge volume (bbl/day):**

**Unlined pit specifications:**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal permit:**

**Unlined pit precipitated solids disposal schedule:**

**Unlined pit precipitated solids disposal schedule attachment:**

**Unlined pit reclamation description:**

**Unlined pit reclamation attachment:**

**Unlined pit Monitor description:**

**Unlined pit Monitor attachment:**

**Do you propose to put the produced water to beneficial use?**

**Beneficial use user confirmation:**

**Estimated depth of the shallowest aquifer (feet):**

**Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?**

**TDS lab results:**

**Geologic and hydrologic evidence:**

**State authorization:**

**Unlined Produced Water Pit Estimated percolation:**

**Unlined pit: do you have a reclamation bond for the pit?**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Is the reclamation bond a rider under the BLM bond?**

**Unlined pit bond number:**

**Unlined pit bond amount:**

**Additional bond information attachment:**

#### Section 4 - Injection

**Would you like to utilize Injection PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Injection PWD discharge volume (bbl/day):**

**Injection well mineral owner:**

**Injection well type:**

**Injection well number:**

**Injection well name:**

**Assigned injection well API number?**

**Injection well API number:**

**Injection well new surface disturbance (acres):**

**Minerals protection information:**

**Mineral protection attachment:**

**Underground Injection Control (UIC) Permit?**

**UIC Permit attachment:**

#### Section 5 - Surface Discharge

**Would you like to utilize Surface Discharge PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Surface discharge PWD discharge volume (bbl/day):**

**Surface Discharge NPDES Permit?**

**Surface Discharge NPDES Permit attachment:**

**Surface Discharge site facilities information:**

**Surface discharge site facilities map:**

#### Section 6 - Other

**Would you like to utilize Other PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Other PWD discharge volume (bbl/day):**

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

**Other PWD type description:**

**Other PWD type attachment:**

**Have other regulatory requirements been met?**

**Other regulatory requirements attachment:**



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Bond Info Data Report

10/05/2020

**APD ID:** 10400055105

**Submission Date:** 03/18/2020

Highlighted data  
reflects the most  
recent changes

**Operator Name:** OXY USA INCORPORATED

**Well Name:** SALT FLAT CC 20-29 FEDERAL COM

**Well Number:** 5H

[Show Final Text](#)

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Bond Information

**Federal/Indian APD:** FED

**BLM Bond number:** ESB000226

**BIA Bond number:**

**Do you have a reclamation bond?** NO

**Is the reclamation bond a rider under the BLM bond?**

**Is the reclamation bond BLM or Forest Service?**

**BLM reclamation bond number:**

**Forest Service reclamation bond number:**

**Forest Service reclamation bond attachment:**

**Reclamation bond number:**

**Reclamation bond amount:**

**Reclamation bond rider amount:**

**Additional reclamation bond information attachment:**