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

Sundry Print Report 06/10/2024

Well Name: SAKER 6-7 FEDERAL

COM

Well Location: T24S / R35E / SEC 6 /

LOT 2 / 32.251867 / -103.402643

County or Parish/State: LEA /

NM

Well Number: 13H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM014164

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549461

Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2790849

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 05/16/2024

Time Sundry Submitted: 12:33

Date proposed operation will begin: 07/18/2024

Procedure Description: Oxy USA Inc., respectfully requests approval to amend the subject well AAPD to change the BHL and amend the casing to our 3-string slim w/ T95 Production Casing design. See attached APD sundry change overview worksheet along with the updated well plat and drilling documents. Please note: The well pad did not change. It is renamed Falcon_T24SR35E_6_Pad 2. "NO CHANGE TO SHL AND NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"

NOI Attachments

Procedure Description

SAKER6_7FEDCOM13H_OfflineCementVariance_20240516123227.pdf

SAKER6_7FEDCOM13H_BradenheadCBLVariance_20240516123216.pdf

SAKER6_7FEDCOM13H_BOPBreakTestingVariance_20240516123207.pdf

SAKER6_7FEDCOM13H_VAMEdgeSFPlus_5.500in_23.00ppf_T95_20240516123142.pdf

SAKER6_7FEDCOM13H_13inADAPT_10.75in_7.625in_10x10_20240516123120.pdf

SAKER6_7FEDCOM13H_DirectPlan_20240516123102.pdf

SAKER6_7FEDCOM13H_C102_20240516123048.pdf

SAKER6_7FEDCOM13H_DrillPlan_20240516123032.pdf

SAKER6_7FEDCOM13H_OXY_APD_CHANGE_SUNDRY_LIST_20240516123020.pdf

Received by OCD: WINDARD 5458ERGAMEDERAL

Well Location: T24S / R35E / SEC 6 / LOT 2 / 32.251867 / -103.402643

County or Parish/State: LEA /

Page 2 of 53

Well Number: 13H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM014164

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549461

Operator: OXY USA INCORPORATED

Conditions of Approval

Additional

SAKER_6_7_FEDERAL_COM_13H___SUNDRY_COA_20240609153058.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: MELISSA GUIDRY Signed on: MAY 16, 2024 12:32 PM

Name: OXY USA INCORPORATED

Title: Advisor Regulatory Sr.

Street Address: 5 GREENWAY PLAZA SUITE 110

City: HOUSTON State: TX

Phone: (713) 497-2481

Email address: MELISSA_GUIDRY@OXY.COM

Field

Representative Name:

Street Address:

City: State: Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KEITH P IMMATTY BLM POC Title: ENGINEER

BLM POC Phone: 5759884722 BLM POC Email Address: KIMMATTY@BLM.GOV

Disposition: Approved Disposition Date: 06/09/2024

Signature: Keith Immatty

Page 2 of 2

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

DEF	ANTWIENT OF THE I	NIERIOR			2.	.p	
BUR	EAU OF LAND MANA	AGEMENT			5. Lease Serial No.	NMNM0	14164
Do not use this t	IOTICES AND REPO form for proposals to Use Form 3160-3 (Al	o drill or to i	re-enter an		6. If Indian, Allottee	or Tribe	Name
SUBMIT IN	TRIPLICATE - Other instru	ctions on page .	2		7. If Unit of CA/Agr	eement, l	Name and/or No.
1. Type of Well					0 W-11 N 1 N		
Oil Well Gas V					8. Well Name and IN	SAKE	R 6-7 FEDERAL COM/13H
2. Name of Operator OXY USA INCC	RPORATED				9. API Well No. 300	254946 <i>°</i>	1
3a. Address P.O. BOX 1002, TUPM.	AN, CA 93276-1002	3b. Phone No. <i>(ir</i> (661) 763-6046		e)	10. Field and Pool of ANTELOPE RIDG		tory Area NE SPRING/ANTELOPE RIDO
4. Location of Well (Footage, Sec., T., F SEC 6/T24S/R35E/NMP	R.,M., or Survey Description)				11. Country or Parisl LEA/NM	n, State	
12. CHE	CK THE APPROPRIATE BO	OX(ES) TO INDI	CATE NATURE	E OF NOTIO	CE, REPORT OR OT	HER DA	ATA
TYPE OF SUBMISSION			TY	PE OF ACT	TION		
✓ Notice of Intent	Acidize Alter Casing		lic Fracturing	Recla	uction (Start/Resume)		Water Shut-Off Well Integrity
Subsequent Report	Casing Repair Change Plans	Plug an	onstruction ad Abandon	Temp	mplete oorarily Abandon	Ш	Other
Final Abandonment Notice 13. Describe Proposed or Completed O	Convert to Injection Operation: Clearly state all per	Plug Ba			r Disposal ate of any proposed w	ork and	approximate duration thereof. If
completion of the involved operation completed. Final Abandonment No is ready for final inspection.) Oxy USA Inc., respectfully required T95 Production Casing design Please note: The well pad did "NO CHANGE TO SHL AND N	uests approval to amend to be attached APD sundrated and change. It is renamed NO ADDITIONAL SURFACTIONAL SUR	all requirements, he subject well / y change overvi Falcon_T24SR3	AAPD to chang worksheet 35E_6_Pad 2.	nation, have	been completed and amend the ca the updated well p	the oper	ator has detennined that the site
14. I hereby certify that the foregoing is MELISSA GUIDRY / Ph: (713) 497		,		egulatory	Sr.		
WILLIOOA GOIDINT /TH. (110) 407	-2401	Т	Title				
Signature (Electronic Submission	on)	Г	Date		05/16/	2024	
	THE SPACE	FOR FEDE	RAL OR ST	ATE OF	ICE USE		
Approved by				MILES			00/00/000
KEITH P IMMATTY / Ph: (575) 988	8-4722 / Approved		Title	INEER		Date	06/09/2024
Conditions of approval, if any, are attact certify that the applicant holds legal or e which would entitle the applicant to con	equitable title to those rights i			RLSBAD			
Ed 10 H C C C C 1001 1 Ed 4	2 11 0 0 0 - 4 1212 - 1 - 1	·	1 .	1	C-11414-	1	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

Additional Information

Location of Well

0. SHL: LOT 2 / 710 FNL / 1393 FEL / TWSP: 248 / RANGE: 35E / SECTION: 6 / LAT: 32.251867 / LONG: -103.402643 (TVD: 0 feet, MD: 0 feet)

PPP: LOT 2 / 100 FNL / 2306 FEL / TWSP: 24S / RANGE: 35E / SECTION: 6 / LAT: 32.253541 / LONG: -103.405604 (TVD: 9990 feet, MD: 10409 feet)

PPP: NWNE / 4 FNL / 2311 FEL / TWSP: 24S / RANGE: 35E / SECTION: 7 / LAT: 32.23931 / LONG: -103.405566 (TVD: 10118 feet, MD: 15079 feet)

PPP: NWSE / 2636 FNL / 2309 FEL / TWSP: 24S / RANGE: 35E / SECTION: 7 / LAT: 32.232054 / LONG: -103.405545 (TVD: 10190 feet, MD: 17720 feet)

BHL: SWSE / 20 FSL / 2306 FEL / TWSP: 24S / RANGE: 35E / SECTION: 7 / LAT: 32.224839 / LONG: -103.405521 (TVD: 10262 feet, MD: 20346 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: OXY USA INCORPORATED
WELL NAME & NO.: SAKER 6-7 FEDERAL COM 13H
SURFACE HOLE FOOTAGE: 710'/N & 1393'/E
BOTTOM HOLE FOOTAGE 20'/S & 450'/E
LOCATION: Section 6, T.24 S., R.35 E.
COUNTY: Lea County, New Mexico

COA

H2S	• Yes	O No	
Potash	None	O Secretary	O R-111-P
Cave/Karst Potential	• Low	O Medium	O High
Cave/Karst Potential	O Critical		
Variance	O None	• Flex Hose	O Other
Wellhead	Conventional	Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□4 String	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	✓ Primary Cement
	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	☑ Break Testing	☑ Offline	✓ Casing
Variance		Cementing	Clearance

A. CASING

Primary Casing Design:

- 1. The 10-3/4 inch surface casing shall be set at approximately 835 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. Operator has also requested to use 13-3/8" casing instead of 10-3/4" casing. Reviewed and is OK.
 - 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 7-5/8 inch intermediate casing shall be set at approximately 8567 feet. Keep casing minimum half full during run for collapse SF. Keep hole full during run for well control and tensile SF. 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.

Option 2:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the **Brushy** Canyon
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

Operator has proposed to pump down 10-3/4"/ 13-3/8" X 7-5/8" annulus. Operator must top out cement after the bradenhead squeeze and verify cement to surface.

Operator can also check TOC with Echo-meter. CBL must be run from TD of the 7-5/8" casing to surface if confidence is lacking on the quality of the bradenhead squeeze cement job. Submit results to BLM.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

Bradenhead squeeze in the production interval is only as an edge case remediation measure and is NOT approved in this COA. If production cement job experiences losses and a bradenhead squeeze is needed for tie-back, BLM Engineering should be notified prior to job with volumes and planned wellbore schematic. CBL will be needed when this occurs.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

3. The 5-1/2 inch production casing shall be set at approximately 19,603 feet. The minimum required fill of cement behind the 5-1/2 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.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system) BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR part 3170 Subpart 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at Lea County: 575-689-5981.

Casing Clearance:

- Overlap clearance OK in design A
- Casing clearance variance in place for liner overlap in design B. Clearance only not met at connections. Successfully pressure tested liner top will serve as zonal isolation barrier. CBL required if pool top is across liner interval.

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are adequate "coffee ground or less" before cementing.

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)
 - If well located in Eddy County
 EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

 BLM_NM_CFO_DrillingNotifications@BLM.GOV (575) 361-2822
 - If well located in Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981
- 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 2nd 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 **43 CFR part 3170 Subpart 3172** 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 intergrity 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 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 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 43 CFR part 3170 Subpart 3172 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** 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 43 CFR part 3170 Subpart 3172.

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.

KPI 6/9/2024

Offline Cementing Variance Request

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.

1. Cement Program

No changes to the cement program will take place for offline cementing.

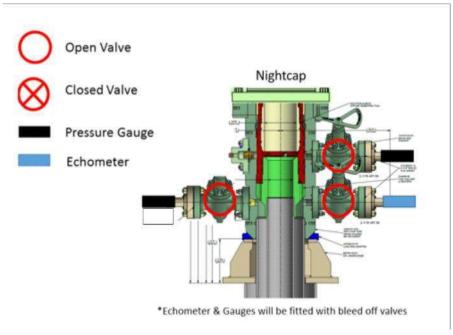
2. Offline Cementing Procedure

The 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 with mandrel
- 3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
- 4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi

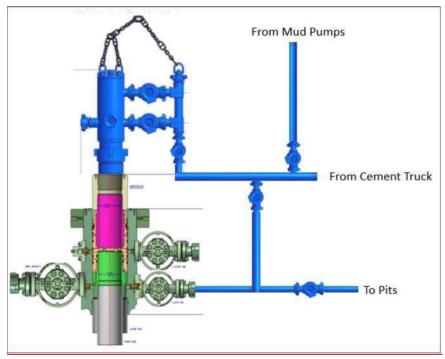
Annular packoff with both external and internal seals





Wellhead diagram during skidding operations

- 5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
 - a. If any barrier fails to test, the BOP stack will not be nippled down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50 psi compressive strength if cannot be verified.
- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
 - a. Well Control Plan
 - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
 - ii. Rig pumps or a 3^{rd} party pump will be tied into the upper casing valve to pump down the casing ID
 - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
 - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
 - v. Well will be confirmed static
 - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
- 8. Install offline cement tool
- 9. Rig up cement equipment



Wellhead diagram during offline cementing operations

- 10. Circulate bottoms up with cement truck
 - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
 - b. Max anticipated time before circulating with cement truck is 6 hrs
- 11. Perform cement job taking returns from the annulus wellhead valve
- 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.

Bradenhead Cement CBL Variance Request

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

Four string wells:

- CBL is not required
- 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

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.

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

See supporting information below:

Subject: Request for a Variance Allowing Break Testing of a Blowout Preventer Stack

OXY USA Inc. (OXY) requests a variance to allow break testing of the Blowout Preventer (BOP) stack when skidding a drilling rig between wells on multi-well pads. This practice entails retesting only the connections of the **BOP** stack that have been disconnected during this operation and not a complete **BOP** test.

Background

43 CFR part 3170 Subpart 3172 states that a **BOP** test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) is this requires a complete **BOP** test and not just a test of the affected component. 43 CFR part 3170 Subpart 3172, Section I.D.2. states, "Some situations may exist either on a well-by-well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this Order. This situation can be resolved by requesting a variance...". OXY feels the practice of break testing the **BOP** stack is such a situation. Therefore, as per 43 CFR part 3170 Subpart 3172, Section IV., OXY submits this request for the variance.

Supporting Rationale

43 CFR part 3170 Subpart 3172 became effective on December 19, 1988, and has remained the standard for regulating BLM onshore drilling operations for almost 30 years. During this time there have been significant changes in drilling technology. **BLM** continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since 43 CFR part 3170 Subpart 3172 was originally released. The drilling rig fleet OXY utilizes in New Mexico was built with many modern upgrades. One of which allows the rigs to skid between wells on multi-well pads. A part of this rig package is a hydraulic winch system which safely installs and removes the BOP from the wellhead and carries it during skidding operations. This technology has made break testing a safe and reliable procldure.

American Petroleum Institute (API) standards, specifications and recommended practices are considered industry standards and are consistently utilized and referenced by the industry. 43 CFR part 3170 Subpart 3172 recognized API Recommended Practices (RP) 53 in its original development. API Standard 53,

Blowout Prevention Equipment Systems for Drilling Wells (Fourth Edition, November 2012, Addendum 1, July 2016) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 6.5.3.4.1.b states "Pressure tests on the well control equipment shall be conducted after the disconnection or repair of any pressure containment seal in the **BOP** stack, choke line, kill line, choke manifold, or wellhead assembly but limited to the affected component."

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specifications and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations. BSEE issued new offshore regulations under 30 CFR Part 250, *Oil and Gas and Sulphur Operations in the Outer Continental Shelf - Blowout Preventer Systems and Well Control*, which became effective on July 28, 2016. Section 250.737(d.1) states "Follow the testing requirements of API Standard 53". In addition, Section 250.737(d.8) has adopted language from **API** Standard 53 as it states "Pressure test affected **BOP** components following the disconnection or repair of any well-pressure containment seal in the wellhead or **BOP** stack assembly".

Break testing has been approved by the BLM in the past. See the Appendix for a Sundry Notice that was approved in 2015 by the Farmington Field Office. This approval granted permission for the operator to break test when skidding its Aztec 1000 rig on multi-well pads.

Oxy feels break testing and our current procedures meet the intent of 43 CFR part 3170 Subpart 3172 and often exceed it. We have not seen any evidence that break testing results in more components failing tests than seen on full BOP tests. As skidding operations take place within the 30-day full BOPE test window, the BOP shell and components such as the pipe rams and check valve get tested to the full rated working pressure more often. Therefore, there are more opportunities to ensure components are in good working order. Also, Oxy's standard requires complete BOP tests more often than that of 43 CFR part 3170 Subpart 3172. In addition to function testing the annular at least weekly and the pipe and blind rams on each trip, Oxy also performs a choke drill prior to drilling out every casing shoe. As a crew's training is a vital part of well control, this procedure to simulate step one of the Driller's Method exceeds the requirements of 43 CFR part 3170 Subpart 3172.

Procedures

- 1) OXY to submit the break testing plan in the APD or Sundry Notice (SN) and receive approval prior to implementing (See Appendix for examples)
- 2) OXY would perform BOP break testing on multi-well pads where multiple intermediate sections can be drilled and cased within the 30-day BOP test window
- 3) After performing a complete BOP test on the first well and drilling and casing the hole section, three breaks would be made on the BOP.
 - > Between the check valve and the kill line
 - > Between the HCR valve and the co-flex hose or the co-flex hose and the manifold
 - > Between the BOP flange and the wellhead
- 4) The BOP is then lifted and removed from the wellhead by the hydraulic winch system
- 5) After skidding to the next well, the BOP is moved to the wellhead by the hydraulic winch system and installed
- 6) The choke line and kill line are reconnected
- 7) A test plug is installed in the wellhead with a joint of drill pipe and the internal parts of the check valve are removed
- 8) A shell teit is performed against the upper pipe rams testing all thlee breaks
- 9) The internal parts of the check valve are reinstalled and the HCR valve is closed. A second test is performed on them
- 10) These tests consist of a 250 psi low test and a high test to the value submitted in the APD or SN (e.g., 5000 psi)
- Perform a function test of components not pressure tested to include the lower pipe rams, the blind rams and the annular
- 12) If this were a three well pad, the same three breaks on the BOP would be made and steps 4 through 11 would be repeated
- 13) A second break test would only be done if the third hole section could be completed within the 30-day BOP test window
- 14) If a second break test is performed, additional components that were not tested on the initial break test will be tested on this break test

Notes:

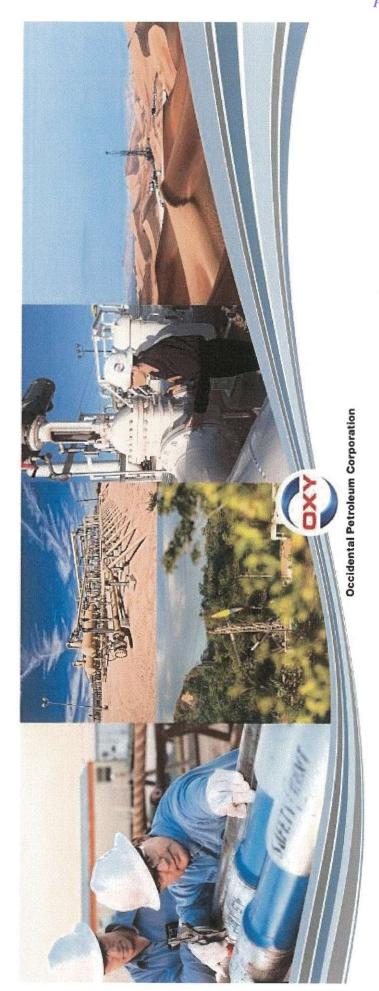
- a. If any parts of the BOP are changed out or any additional breaks are made during the skidding operation, these affected components would also be tested as in step 10.
- b. As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested in step 8 above, no further testing of the manifold is done until the next full BOP test.

Summary

OXY requests a variance to allow break testing of the BOP stack when skidding drilling rigs between wells on multi-well pads. API standards, specifications and recommended practices are considered industry standards and are consistently utilized and referenced by the industry and the BLM. API Standard 53 recognizes break testing as an acceptable practice and BSEE adopted language from this standard into its newly created 30 CFR Part 250 which also supports break testing. Due to this, OXY feels this request meets the intent of 43 CFR part 3170

REQUEST FOR A VARIANCE TO BREAK TEST THE BOP

Permian Resources New Mexico



Request for Variance

Preventer (BOP) stack when skidding a drilling rig between wells on multi-well pads OXY USA Inc. (OXY) requests a variance to allow break testing of the Blowout

- This practice entails retesting only the connections of the BOP stack that have been disconnected during this operation and not a complete BOP test.
- As the choke manifold remains stationary during the skidding operation and the only break to the manifold is tested, no further testing of the manifold is done until the next full BOP test.
- This request is being made as per Section IV of the Onshore Oil and Gas Order (00GO) No. 2 1



Rationale for Allowing BOP Break Testing

American Petroleum Institute (API) standards, specifications and recommended practices are considered industry standards and are consistently utilized and referenced by the industry

- (Fourth Edition, November 2012, Addendum 1, July 2016) recognizes break API Standard 53, Blowout Prevention Equipment Systems for Drilling Wells testing as an acceptable practice.
- Specifically, API Standard 53, Section 6.5.3.4.1.b states "Pressure tests on the well control equipment shall be conducted after the disconnection or repair of any pressure containment seal in the BOP stack, choke line, kill line, choke manifold, or wellhead assembly but limited to the affected component."



Rationale for Allowing BOP Break Testing

Interior, has also utilized the API standards, specifications and best practices in the The Bureau of Safety and Environmental Enforcement (BSEE), Department of development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

- BSEE issued new offshore regulations in July 2016 under 30 CFR Part 250, Oil Preventer Systems and Well Control. Within these regulations is language and Gas and Sulphur Operations in the Outer Continental Shelf - Blowout adopted from API Standard 53 which also supports break testing.
- components following the disconnection or repair of any well-pressure Specifically, Section 250.737(d.8) states "Pressure test affected BOP containment seal in the wellhead or BOP stack assembly."



Rationale for Allowing BOP Break Testing

Break testing has been approved by the BLM in the past

- The Farmington Field Office approved a Sundry Notice (SN) to allow break testing in 2015
- This SN granted permission for the operator to break test when skidding its Aztec 1000 rig on multi-well pads

Oxy feels break testing and our current procedures meet or exceed the intent of OOGO

- BOP shell and components such as the pipe rams and check valve get tested to As skidding operations take place within the 30-day full BOPE test window, the the full rated working pressure more often
- Oxy's standard requires complete BOP tests more often than that of OOGO No. 2
- training is a vital part of well control, this procedure to simulate step one of the - Oxy performs a choke drill prior to drilling out every casing shoe. As a crew's Driller's Method exceeds the requirements of OOGO No. 2



Break Testing Procedures

- 1) OXY to submit the break testing plan in the APD or Sundry Notice (SN) and receive approval prior to implementing
- OXY would perform BOP break testing on multi-well pads where multiple intermediate sections can be drilled and cased within the full BOP test window 5
- After performing a complete BOP test on the first well and drilling and casing the hole section, three breaks would be made on the BOP. 3
 - Between the check valve and the kill line
- Between the HCR valve and the co-flex hose or the co-flex hose and the manifold
 - Between the BOP flange and the wellhead
- The BOP is then lifted and removed from the wellhead by the hydraulic winch system 4
- After skidding to the next well, the BOP is moved to the wellhead by the hydraulic winch system and installed 2
- 6) The choke line and kill line are reconnected
- 7) A test plug is installed in the wellhead with a joint of drill pipe and the internal parts of the check valve are removed



Break Testing Procedures

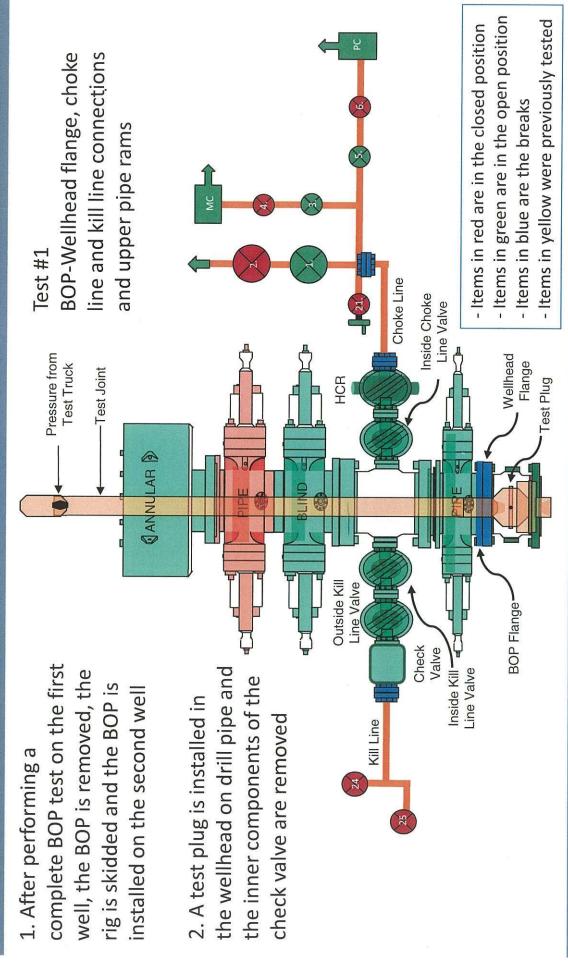
- 8) A shell test is performed against the upper pipe rams testing all three breaks
- 9) The internal parts of the check valve are reinstalled and the HCR valve is closed. A second test is performed on them
- 10) These tests consist of a 250 psi low test and a high test to the value submitted in the APD or SN (e.g., 5000 psi)
- 11) Perform a function test of components not pressure tested to include the lower pipe rams, the blind rams and the annular
- 12) If this were a three well pad, the same three breaks on the BOP would be made and steps 4 through 11 would be repeated
- 13) A second break test would only be done if the third hole section could be completed within the 30-day BOP test window
- 14) If a second break test is performed, additional components that were not tested on the first break test will be tested



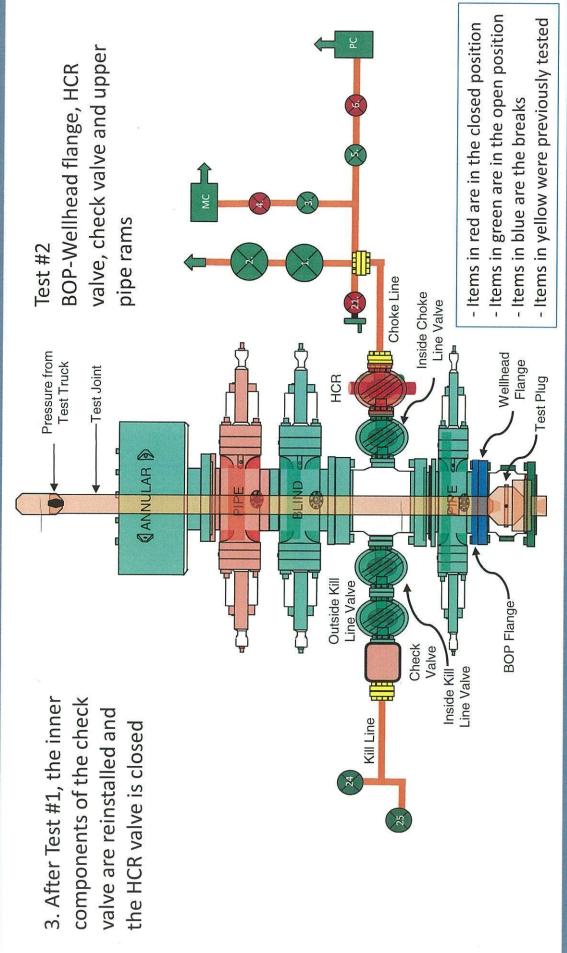
Š

 ∞

Break Testing Procedures and Tests

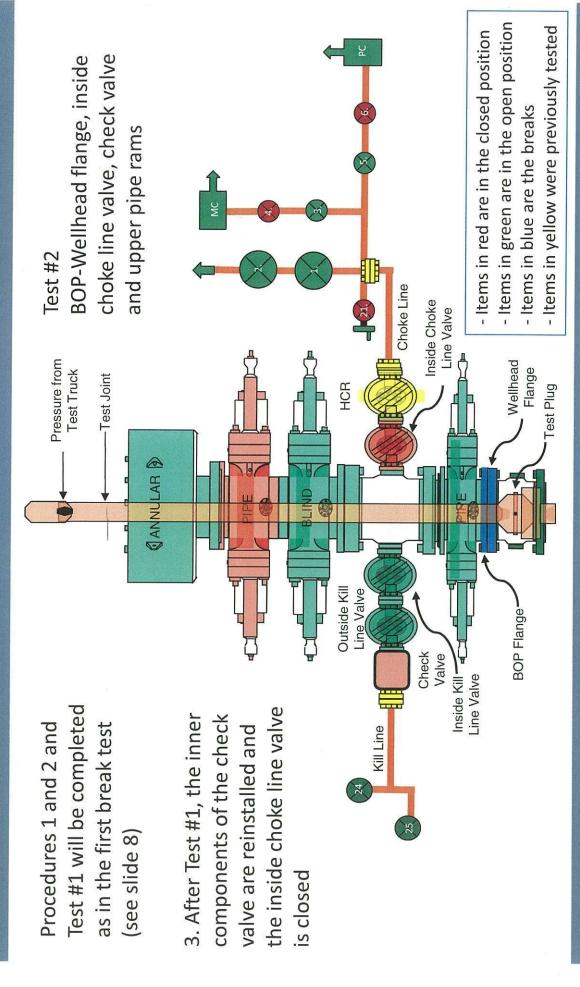


Break Testing Procedures and Tests



10

Second Break Testing Procedures and Tests



=

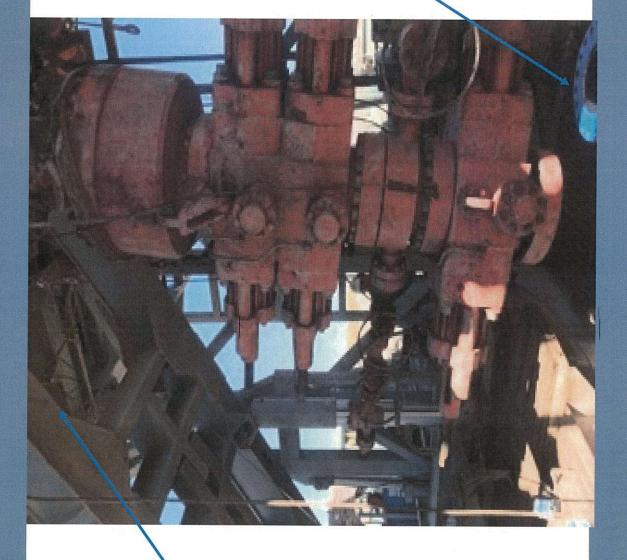
BOP standing in its carrier



BOP Handling System



Wellhead



BOP Handling System

Released to Imaging: 6/17/2024 9:59:42 AM

system moving the BOP over to

the wellhead

Hydraulic winch

Summary for Variance Request for Break Testing

- API standards, specifications and recommended practices are considered industry standards
- OOGO No. 2 recognized API Recommended Practices (RP) 53 in its original development
- API Standard 53 recognizes break testing as an acceptable practice
- standards, specifications and best practices in the development of its offshore The Bureau of Safety and Environmental Enforcement has utilized API oil and gas regulations
- API Standard 53 recognizes break testing as an acceptable practice
- OXY feels break testing meets the intent of OOGO No. 2 to protect public health and safety and the environment





CONNECTION DATA SHEET



PIPE BODY PROPERTIES

Nominal OD	5.500	in.
Nominal ID	4.670	in.
Nominal Wall Thickness	0.415	in.
Minimum Wall Thickness	87.5	%
Nominal Weight (API)	23.00	lb/ft
Plain End Weight	22.56	lb/ft
Drift	4.545	in.
Grade Type	API 5CT	
Minimum Yield Strength	95	ksi
Maximum Yield Strength	110	ksi
Minimum Ultimate Tensile Strength	105	ksi
Pipe Body Yield Strength	630	klb
Internal Yield Pressure	12,540	psi
Collapse Pressure	12,940	psi

CONNECTION PROPERTIES

Connection Type	Premiur	n Integral Semi-
Nominal Connection OD	5.765	in.
Nominal Connection ID	4.598	in.
Make-up Loss	5.213	in.
Tension Efficiency, with Sealability(1)	84	% Pipe Body
Compression Efficiency, with Sealability(1)	84	% Pipe Body
Internal Pressure Efficiency Water	100	% MIYP
Internal Pressure Efficiency Gas	70	% MIYP
External Pressure Efficiency	70	% Pipe Body

(1) Sealability rating demonstrated as per API RP 5C5 / ISO 13679

JOINT PERFORMANCES =

Tension Strength, with Sealability(1)	529	klb
Compression Strength, with Sealability(1)	529	klb
Internal Yield Pressure Water	12,540	psi
Internal Yield Pressure Gas	8,780	psi
External Pressure Resistance (Uniaxial)	12,940	psi
External Pressure Resistance, with Sealability	psi	
Maximum Bending, Structural	63	°/100 ft
Maximum Bending, with Sealability(1)	40	°/100 ft

(1) Sealability rating demonstrated as per API RP 5C5 / ISO 13679

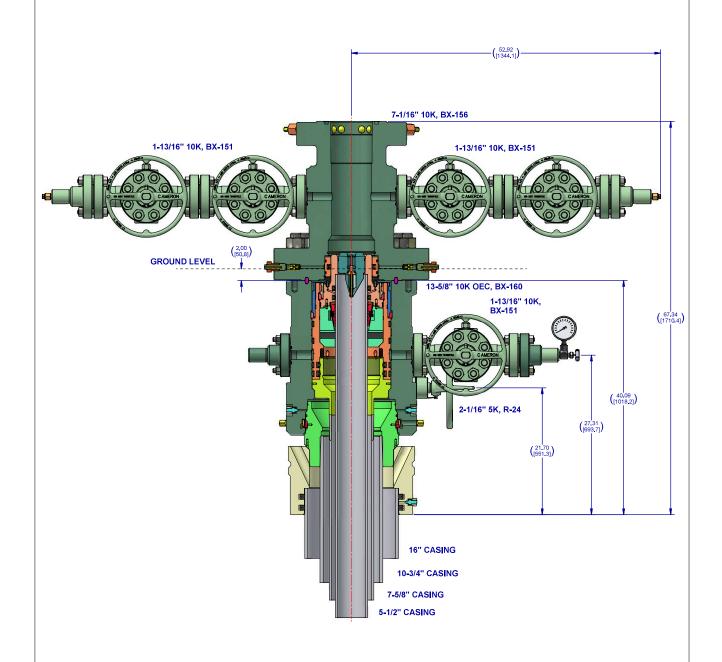


(3) MTV: Maximum Torsional Value only valid with Vallourec P110 EC material.

BOOST YOUR EFFICIENCY, REDUCE COSTS AND ENSURE 100% WELL INTEGRITY WITH VAM® FIELD SERVICE

Scan the QR code to contact us





Notes:

1. THIS IS A PROPOSAL DRAWING AND DIMENSIONS SHOWN ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PROCESS.

		CONF	IDEN	ITIAL	
SURFACE TREATMENT	DO NOT SCALE			CAMERON	SURFACE
	DRAWN BY:	DATE	W;	A Schlumberger Company	SYSTEMS
	D. GOTTUNG	2 Dec 21		A Screamberger Company	
MATERIAL & HEAT TREAT CHECKED BY: D. GOTTUNG		DATE			
		2 Dec 21	1	OXY 13-5/8" 10K AD	APT
	APPROVED BY:	DATE	1	16" X 10 3/4" X 7 5/8" 3	K 5-1/2"
	D. GOTTUNG	2 Dec 21			
	5.617 LBS INTIAL USE BAY		SHEET	SD-053434-94-	OF REV:
WEIGHT: 29	55,434 KG		4 or 4	5D-053434-94-	-05 01

PRD NM DIRECTIONAL PLANS (NAD 1983) Saker 6_7 Saker 6_7 Fed Com 13H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

14 May, 2024

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6 7

Well: Saker 6 7 Fed Com 13H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Saker 6_7 Fed Com 13H

RKB=25' @ 3473.70ft RKB=25' @ 3473.70ft

Grid

Minimum Curvature

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983

Geo Datum: North American Datum 1983

Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Using geodetic scale factor

Site Saker 6_7

 Site Position:
 Northing:
 457,094.74 usft
 Latitude:
 32.253262

 From:
 Map
 Easting:
 826,474.44 usft
 Longitude:
 -103.410974

Position Uncertainty: 0.89 ft Slot Radius: 13.200 in

Well Saker 6 7 Fed Com 13H **Well Position** +N/-S Northing: 456,609.59 usf Latitude: 32.251867 0.00 ft 829,054.48 usf +E/-W 0.00 ft Easting: Longitude: -103.402643 **Position Uncertainty** 2.00 ft Wellhead Elevation: ft Ground Level: 3,448.70 ft

Grid Convergence: 0.50 °

Wellbore #1 Wellbore **Model Name** Declination Field Strength Magnetics Sample Date Dip Angle (°) (°) (nT) HDGM_FILE 47,829.30000000 12/31/2019 6.60 59.87

Design Permitting Plan Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 173.89

Plan Survey Tool Program

Date 5/14/2024

Depth From (ft) (ft) Survey (Wellbore)

Tool Name Remarks

1 0.00 19,602.82 Permitting Plan (Wellbore #1) B001Mc_MWD+HRGM_R5

MWD+HRGM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
6,299.85	18.00	49.64	6,270.39	181.56	213.66	1.00	1.00	0.00	49.64	
8,666.72	18.00	49.64	8,521.45	655.13	770.97	0.00	0.00	0.00	0.00	
9,671.82	89.09	179.36	9,187.65	104.10	940.84	10.00	7.07	12.91	128.54	
19,602.82	89.09	179.36	9,344.65	-9,825 . 05	1,050.92	0.00	0.00	0.00	0.00	PBHL (Saker 6_7

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 13H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method: Well Saker 6_7 Fed Com 13H

RKB=25' @ 3473.70ft RKB=25' @ 3473.70ft

Grid

		an							
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
2,000.00	0.00 0.00	0.00 0.00	2,000.00	0.00	0.00	0.00 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
2,300.00	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 2,800.00	0.00 0.00	0.00 0.00	2,700.00 2,800.00	0.00 0.00	0.00 0.00	0.00 0.00	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 3,400.00	0.00 0.00	0.00 0.00	3,300.00 3,400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
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 3,900 . 00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00
•	0.00	0.00	3,900.00	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	1.00	49.64	4,600.00	0.57	0.66	-0.49	1.00	1.00	0.00
4,700.00	2.00	49.64	4,699.96	2.26	2.66	-1.96	1.00	1.00	0.00
4,800.00	3.00	49.64	4,799.86	5.08	5.98	-4.42	1.00	1.00	0.00
4,900.00	4.00	49.64	4,899.68	9.04	10.64	-7.86	1.00	1.00	0.00
5,000.00	5.00	49.64	4,999.37	14.12	16.61	-12.27	1.00	1.00	0.00
5,100.00	6.00	49.64	5,098.90	20.32	23.92	-17.67	1.00	1.00	0.00
5,200.00	7.00	49.64	5,198.26	27.65	32.54	-24.04	1.00	1.00	0.00
5,300.00	8.00	49.64	5,297.40	36.11	42.49	-31.38	1.00	1.00	0.00
5,400.00	9.00	49.64	5,396.30	45.68	53.75	-39.70	1.00	1.00	0.00

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 13H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Saker 6_7 Fed Com 13H

RKB=25' @ 3473.70ft RKB=25' @ 3473.70ft

Grid

Design:	Permitting Pla	an							
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)
5,500.00	10.00	49.64	5,494.93	56.37	66.33	-48.99	1.00	1.00	0.00
5,600.00	11.00	49.64	5,593.26	68.17	80.22	-59.25	1.00	1.00	0.00
5,700.00	12.00	49.64	5,691.25	81.08	95.41	-70.47	1.00	1.00	0.00
5,800.00	13.00	49.64	5,788.87	95.09	111.90	-82.65	1.00	1.00	0.00
5,900.00	14.00	49.64	5,886.11	110.21	129.69	-95.79	1.00	1.00	0.00
6,000.00	15.00	49.64	5,982.92	126.42	148.77	-109.88	1.00	1.00	0.00
6,100.00	16.00	49.64	6.079.29	143.72	169.14	-124.92	1.00	1.00	0.00
6,200.00	17.00	49.64	6,175.17	162.11	190.78	-140.90	1.00	1.00	0.00
6,299.85	18.00	49.64	6,270.39	181.56	213.66	-157.80	1.00	1.00	0.00
6,300.00	18.00	49.64	6,270.54	181.59	213.69	-157.83	0.00	0.00	0.00
·									
6,400.00	18.00	49.64	6,365.64	201.59	237.24	-175.22	0.00	0.00	0.00
6,500.00	18.00	49.64	6,460.75	221.60	260.79	-192.61	0.00	0.00	0.00
6,600.00	18.00	49.64	6,555.86	241.61	284.33	-210.00	0.00	0.00	0.00
6,700.00	18.00	49.64	6,650.96	261.62	307.88	-227.39	0.00	0.00	0.00
6,800.00	18.00	49.64	6,746.07	281.63	331.42	-244.78	0.00	0.00	0.00
6,900.00	18.00	49.64	6,841.18	301.64	354.97	-262.17	0.00	0.00	0.00
7.000.00	18.00	49.64	6,936.28	321.65	378.52	-279.56	0.00	0.00	0.00
7,100.00	18.00	49.64	7,031.39	341.65	402.06	-296.95	0.00	0.00	0.00
7,200.00	18.00	49.64	7,126.50	361.66	425.61	-314.34	0.00	0.00	0.00
7,300.00	18.00	49.64	7,221.60	381.67	449.16	-331.74	0.00	0.00	0.00
7,400.00	18.00	49.64	7,316.71	401.68	472.70	-349.13	0.00	0.00	0.00
7,500.00	18.00	49.64	7,411.81	421.69	496.25	-366.52	0.00	0.00	0.00
7,600.00	18.00	49.64	7,506.92	441.70	519.79	-383.91	0.00	0.00	0.00
7,700.00	18.00	49.64	7,602.03	461.70	543.34	-401.30	0.00	0.00	0.00
7,800.00	18.00	49.64	7,697.13	481.71	566.89	418.69	0.00	0.00	0.00
7,900.00	18.00	49.64	7,792.24	501.72	590.43	-436.08	0.00	0.00	0.00
8,000.00	18.00	49.64	7,887.35	521.73	613.98	-453.47	0.00	0.00	0.00
8,100.00	18.00	49.64	7,982.45	541.74	637.52	-470.86	0.00	0.00	0.00
8,200.00	18.00	49.64	8,077.56	561.75	661.07	-488.25	0.00	0.00	0.00
8,300.00	18.00	49.64	8,172.67	581.76	684.62	-505.64	0.00	0.00	0.00
8,400.00	18.00	49.64	8,267.77	601.76	708.16	-523.03	0.00	0.00	0.00
8,500.00	18.00	49.64	8,362.88	621.77	731.71	-540.42	0.00	0.00	0.00
8,600.00	18.00	49.64	8,457.99	641.78	755.26	-557.81	0.00	0.00	0.00
8,666.72	18.00	49.64	8,521,45	655.13	770.97	-569.42	0.00	0.00	0.00
8,700.00	16.13	59.05	8,553.26	660.84	778.85	-574.25	10.00	-5.62	28.27
8,800.00	14.11	97.34	8,650.03	666.44	802.91	-577.26	10.00	-2.02	38.29
8,900.00	18.28	130.64	8,746.24	654.64	826.96	-562.97	10.00	4.17	33.30
9,000.00	25.79	148.56	8,838.98	625.80	850.27	-531.82	10.00	7.51	17.92
9,100.00	34.52	158.36	8,925.42	580.79	872.12	-484.74 422.19	10.00	8.73	9.80 6.15
9,200.00	43.75	164.51	9,002.93	520.99	891.85	-423.18	10.00	9.23	6.15
9,300.00	53.21	168.85	9,069.17	448.20	908.87	-348.99	10.00	9.46	4.35
9,400.00	62.79	172.23	9,122.11	364.65	922.66	-264.45	10.00	9.58	3.38
9,500.00	72.44	175.07	9,160.16	272.86	932.79	-172.11	10.00	9.65	2.84
9,600.00	82.13	177.62	9,182.15	175.64	938.96	-74.78	10.00	9.69	2.55
9,671.82	89.09	179.36	9,187.65	104.10	940.84	-3.44	10.00	9.70	2.43
9,700.00	89.09	179.36	9.188.09	75.92	941.15	24.60	0.00	0.00	0.00
9,800.00	89.09	179.36	9,189.67	-24.06	942.26	124.14	0.00	0.00	0.00
9,900.00	89.09	179.36	9,191.25	-124.04	943.37	223.67	0.00	0.00	0.00
10,000.00	89.09	179.36	9,192.83	-224.02	944.48	323.20	0.00	0.00	0.00
10,100.00	89.09	179.36	9,194.41	-324.00	945.59	422.73	0.00	0.00	0.00
10,200.00	89.09	179.36	9,196.00	-423.98	946.70	522.27	0.00	0.00	0.00
10,300.00	89.09	179.36	9,197.58	-523.96	947.81	621.80	0.00	0.00	0.00
10,400.00	89.09	179.36	9,199.16	-623.95	948.91	721.33	0.00	0.00	0.00
10,500.00	89.09	179.36	9,200.74	-723.93	950.02	820.86	0.00	0.00	0.00
10,600.00	89.09	179.36	9,202.32	-823.91	951.13	920.39	0.00	0.00	0.00

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 13H

Wellbore: Wellbore #1 Permitting Plan Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Saker 6_7 Fed Com 13H

RKB=25' @ 3473.70ft RKB=25' @ 3473.70ft

Design:	Permitting Pla	an							
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)
10,700.00	89.09	179.36	9,203.90	-923.89	952.24	1,019.93	0.00	0.00	0.00
10,800.00	89.09	179.36	9,205.48	-1,023.87	953.35	1,119 . 46	0.00	0.00	0.00
10,900.00	89.09	179.36	9,207.06	-1,123.85	954.46	1,218 . 99	0.00	0.00	0.00
11,000.00	89.09	179.36	9,208.64	-1,223.83	955.56	1,318.52	0.00	0.00	0.00
11,100.00	89.09	179.36	9,210.22	-1,323.82	956.67	1,418.06	0.00	0.00	0.00
11,200.00	89.09	179.36	9,211.81	-1,423.80	957.78	1,517.59	0.00	0.00	0.00
11,300.00	89.09	179.36	9,213.39	-1,523.78	958.89	1,617.12	0.00	0.00	0.00
11,400.00	89.09	179.36	9,214.97	-1,623.76	960.00	1,716.65	0.00	0.00	0.00
11,500.00	89.09	179.36	9,216.55	-1,723.74	961.11	1,816.18	0.00	0.00	0.00
11,600.00	89.09	179.36	9,218.13	-1,823.72	962.21	1,915.72	0.00	0.00	0.00
11,700.00	89.09	179.36	9,219.71	-1,923.70	963.32	2,015.25	0.00	0.00	0.00
11,800.00	89.09	179.36	9,221.29	-2,023.69	964.43	2,114.78	0.00	0.00	0.00
11,900.00	89.09	179.36	9,222.87	-2,123.67	965.54	2,214.31	0.00	0.00	0.00
12,000.00	89.09	179.36	9,224.45	-2,223.65	966.65	2,313.84	0.00	0.00	0.00
12,100.00	89.09	179.36	9,226.03	-2,323.63	967.76	2,413.38	0.00	0.00	0.00
12,200.00	89.09	179.36	9,227.61	-2,423.61	968.86	2,512.91	0.00	0.00	0.00
12,300.00	89.09	179.36	9,229.20	-2,523.59	969.97	2,612.44	0.00	0.00	0.00
12,400.00	89.09	179.36	9,230.78	-2,623.57	971.08	2,711.97	0.00	0.00	0.00
12,500.00	89.09	179.36	9,232.36	-2,723.55	972.19	2,811.51	0.00	0.00	0.00
12,600.00	89.09	179.36	9,233.94	-2,823 . 54	973.30	2,911.04	0.00	0.00	0.00
12,700.00	89.09	179.36	9,235.52	-2,923.52	974.41	3,010.57	0.00	0.00	0.00
12,800.00	89.09	179.36	9,237.10	-3,023.50	975.52	3,110.10	0.00	0.00	0.00
12,900.00	89.09	179.36	9,238.68	-3,123.48	976.62	3,209.63	0.00	0.00	0.00
13,000.00	89.09	179.36	9,240.26	-3,223.46	977.73	3,309.17	0.00	0.00	0.00
13,100.00	89.09	179.36	9,241.84	-3,323.44	978.84	3,408.70	0.00	0.00	0.00
13,200.00	89.09	179.36	9,243.42	-3,423.42	979.95	3,508.23	0.00	0.00	0.00
13,300.00	89.09	179.36	9,245.01	-3,523.41	981.06	3,607.76	0.00	0.00	0.00
13,400.00	89.09	179.36	9,246.59	-3,623.39	982.17	3,707.29	0.00	0.00	0.00
13,500.00	89.09	179.36	9,248.17	-3,723.37	983.27	3,806.83	0.00	0.00	0.00
13,600.00	89.09	179.36	9,249.75	-3,823.35	984.38	3,906.36	0.00	0.00	0.00
13,700.00	89.09	179.36	9,251.33	-3,923.33	985.49	4,005.89	0.00	0.00	0.00
13,800.00	89.09	179.36	9,252.91	-4,023.31	986.60	4,105.42	0.00	0.00	0.00
13,900.00	89.09	179.36	9,254.49	-4,123.29	987.71	4,204.96	0.00	0.00	0.00
14,000.00	89.09	179.36	9,256.07	-4,223.27	988.82	4,304.49	0.00	0.00	0.00
14,100.00	89.09	179.36	9,257.65	-4,323.26	989.92	4,404.02	0.00	0.00	0.00
14,200.00	89.09	179.36	9,259.23	-4,423.24	991.03	4,503.55	0.00	0.00	0.00
14,300.00	89.09	179.36	9,260.81	-4,523.22	992.14	4,603.08	0.00	0.00	0.00
14,400.00	89.09	179.36	9,262.40	-4,623.20 4.723.40	993.25	4,702.62	0.00	0.00	0.00
14,500.00	89.09	179.36	9,263.98	-4,723.18	994.36	4,802.15	0.00	0.00	0.00
14,600.00	89.09	179.36	9,265.56	-4,823.16	995.47	4,901.68	0.00	0.00	0.00
14,700.00	89.09	179.36	9,267.14	-4,923.14	996.58	5,001.21	0.00	0.00	0.00
14,800.00	89.09	179.36	9,268.72	-5,023.13	997.68	5,100.75	0.00	0.00	0.00
14,900.00	89.09	179.36	9,270.30	-5,123.11 5,222.00	998.79	5,200.28	0.00	0.00	0.00
15,000.00	89.09 89.09	179.36 179.36	9,271.88	-5,223.09 5.323.07	999.90	5,299.81 5,399.34	0.00	0.00	0.00
15,100.00	89.09	179.36	9,273.46	-5,323.07	1,001.01	,	0.00	0.00	0.00
15,200.00	89.09	179.36	9,275.04	-5,423.05	1,002.12	5,498.87	0.00	0.00	0.00
15,300.00	89.09	179.36	9,276.62	-5,523.03	1,003.23	5,598.41	0.00	0.00	0.00
15,400.00 15.500.00	89.09	179.36	9,278.21	-5,623.01 5.723.00	1,004.33	5,697 . 94	0.00	0.00	0.00
15,600.00	89.09 89.09	179.36 179.36	9,279.79 9,281.37	-5,723.00 -5,822.98	1,005 . 44 1,006 . 55	5,797.47 5,897.00	0.00 0.00	0.00 0.00	0.00 0.00
· ·									
15,700.00	89.09	179.36	9,282.95	-5,922.96	1,007.66	5,996.53	0.00	0.00	0.00
15,800.00	89.09	179.36	9,284.53	-6,022.94	1,008.77	6,096.07	0.00	0.00	0.00
15,900.00 16,000.00	89.09 89.09	179.36 179.36	9,286.11 9,287.69	-6,122.92 -6,222.90	1,009.88 1,010.98	6,195.60 6,295.13	0.00 0.00	0.00 0.00	0.00 0.00
16,100.00	89.09	179.36	9,289.27	-6,222.90 -6,322.88	1,010.98	6,394.66	0.00	0.00	0.00
10,100.00		170.00	5,200.21	5,522.00	1,012100	3,00-100	0.00	0.00	

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 13H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Saker 6_7 Fed Com 13H

RKB=25' @ 3473.70ft RKB=25' @ 3473.70ft

Grid

esign:	Permitting Pl	an							
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)
16,200.00 16,300.00 16,400.00 16,500.00 16,600.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,290.85 9,292.43 9,294.01 9,295.60 9,297.18	-6,422.86 -6,522.85 -6,622.83 -6,722.81 -6,822.79	1,013.20 1,014.31 1,015.42 1,016.53 1,017.63	6,494.20 6,593.73 6,693.26 6,792.79 6,892.32	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
16,700.00 16,800.00 16,900.00 17,000.00 17,100.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,298.76 9,300.34 9,301.92 9,303.50 9,305.08	-6,922.77 -7,022.75 -7,122.73 -7,222.72 -7,322.70	1,018.74 1,019.85 1,020.96 1,022.07 1,023.18	6,991.86 7,091.39 7,190.92 7,290.45 7,389.98	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,200.00 17,300.00 17,400.00 17,500.00 17,600.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,306.66 9,308.24 9,309.82 9,311.41 9,312.99	-7,422.68 -7,522.66 -7,622.64 -7,722.62 -7,822.60	1,024.29 1,025.39 1,026.50 1,027.61 1,028.72	7,489.52 7,589.05 7,688.58 7,788.11 7,887.65	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
17,700.00 17,800.00 17,900.00 18,000.00 18,100.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,314.57 9,316.15 9,317.73 9,319.31 9,320.89	-7,922.59 -8,022.57 -8,122.55 -8,222.53 -8,322.51	1,029.83 1,030.94 1,032.04 1,033.15 1,034.26	7,987.18 8,086.71 8,186.24 8,285.77 8,385.31	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
18,200.00 18,300.00 18,400.00 18,500.00 18,600.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,322.47 9,324.05 9,325.63 9,327.21 9,328.80	-8,422.49 -8,522.47 -8,622.45 -8,722.44 -8,822.42	1,035.37 1,036.48 1,037.59 1,038.69 1,039.80	8,484.84 8,584.37 8,683.90 8,783.43 8,882.97	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
18,700.00 18,800.00 18,900.00 19,000.00 19,100.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,330.38 9,331.96 9,333.54 9,335.12 9,336.70	-8,922.40 -9,022.38 -9,122.36 -9,222.34 -9,322.32	1,040.91 1,042.02 1,043.13 1,044.24 1,045.34	8,982.50 9,082.03 9,181.56 9,281.10 9,380.63	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,200.00 19,300.00 19,400.00 19,500.00 19,600.00	89.09 89.09 89.09 89.09	179.36 179.36 179.36 179.36 179.36	9,338.28 9,339.86 9,341.44 9,343.02 9,344.61	-9,422.31 -9,522.29 -9,622.27 -9,722.25 -9,822.23	1,046.45 1,047.56 1,048.67 1,049.78 1,050.89	9,480.16 9,579.69 9,679.22 9,778.76 9,878.29	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,602.82	89.09	179.36	9,344.65	-9,825.05	1,050.92	9,881.10	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Saker 6_7 Fed - plan misses targe - Point	0.00 t center by 11	0.00 49.11ft at 0	0.00 .00ft MD (0.	668.63 .00 TVD, 0.00	934.55 N, 0.00 E)	457,278.22	829,989.03	32.253683	-103.399602
FTP (Saker 6_7 Fed - plan misses targe - Point	0.00 t center by 19		9,179.51 53.39ft MD	618.64 (9039.83 TVD	935.14), 483.61 N, 9	457,228.23 901.31 E)	829,989.62	32.253545	-103.399601
PBHL (Saker 6_7 Fed - plan hits target ce - Point	0.00 nter	0.00	9,344.65	-9,825.05	1,050.92	446,784.52	830,105.40	32,224837	-103.399520

Planning Report

Database: Company: HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 13H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method: Well Saker 6_7 Fed Com 13H

RKB=25' @ 3473.70ft RKB=25' @ 3473.70ft

Grid

mations							
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	774.70	774.70	RUSTLER				
	1,117.70	1,117.70	SALADO				
	3,425.70	3,425.70	CASTILE				
	5,289.19	5,286.70	DELAWARE				
	5,337.68	5,334.70	BELL CANYON				
	6,244.53	6,217.70	CHERRY CANYON				
	7,692.30	7,594.70	BRUSHY CANYON				
	8,917.39	8,762.70	BONE SPRING				

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
4,500.00	4,500.00	0.00	0.00	Build 1°/100'
6,299.85	6,270.39	181.56	213.66	Hold 18° Tangent
8,666.72	8,521.45	655.13	770.97	KOP, Build & Turn 10°/100'
9,671.82	9,187.65	104.10	940.84	Landing Point
19,602.82	9,344.65	-9,825.05	1,050.92	TD at 19602.82' MD

Released to Imaging: 6/17/2024 9:59:42 AM

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

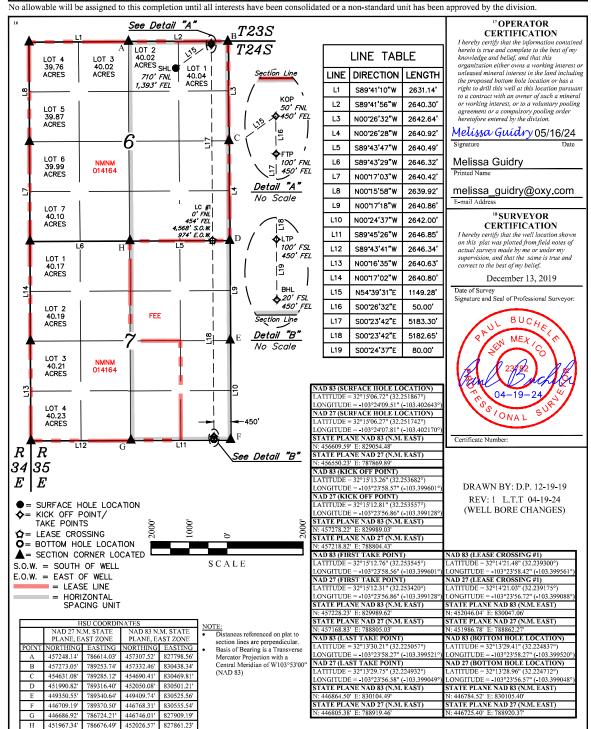
¹ API Number	•	² Pool Code	³ Pool Name	
30-025-49461		2200	ANTELOPE RIDGE; BONE SPRING	
4 Property Code		5 Pr	operty Name	6 Well Number
330848		SAKER	6_7 FED COM	13H
7 OGRID No.		8 Op	perator Name	9 Elevation
16696		OX	Y USA INC.	3448.7'

¹⁰Surface Location

2 6 24S 35E 710 NORTH 1393 EAST LEA		710		Feet from the 1393	HACT	County LEA
-------------------------------------	--	-----	--	-----------------------	------	---------------

¹¹ 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	7	24S	35E		20	SOUTH	450	EAST	LEA
12 Dedicated Acr 640.06	es 13	Joint or Infill	14 Conso	olidation Code	15 Order No.				



Oxy USA Inc. - SAKER 6_7 FED COM 13H Drill Plan

1. Geologic Formations

TVD of Target (ft):	9345	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	19603	Deepest Expected Fresh Water (ft):	775

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	775	775	
Salado	1118	1118	Salt
Castile	3426	3426	Salt
Delaware	5289	5287	Oil/Gas/Brine
Bell Canyon	5338	5335	Oil/Gas/Brine
Cherry Canyon	6245	6218	Oil/Gas/Brine
Brushy Canyon	7692	7595	Losses
Bone Spring	8917	8763	Oil/Gas
Bone Spring 1st			Oil/Gas
Bone Spring 2nd			Oil/Gas
Bone Spring 3rd			Oil/Gas
Wolfcamp			Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

MD TVD									
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	14.75	0	835	0	835	10.75	45.5	J-55	втс
Intermediate	9.875	0	8567	0	8421	7.625	26.4	L-80 HC	втс
Production	6.75	0	19603	0	9345	5.5	23	T-95	Edge SF+

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172 $\,$

Occidental - Permian New Mexico

All Casing SF Values will meet or exceed					
those below					
SF SF		Body SF	Joint SF		
Collapse	Burst	Tension	Tension		
1.00	1.100	1.4	1.4		

	Y or N
Is casing new? If used, attach certification as required in 43 CFR 3160	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?	Y
If not provide justification (loading assumptions, casing design criteria).	1
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y
the collapse pressure rating of the casing?	1
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 rd 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 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Created On: 5/14/2024 at 1:40 PM

Occidental - Permian New Mexico SAKER 6_7 FED COM 13H

3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	699	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	84	1.68	13.2	5%	7,942	Circulate	Class C+Ret., Disper.
Int.	2	Intermediate 2S - Tail BH	1230	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	653	1.84	13.3	25%	8,067	Circulate	Class C+Ret.

Offline Cementing Request

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. Please see Offline Cementing Variance attachment for further details.

Bradenhead CBL Request

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. Please see Bradenhead CBL Variance attachment for further details.

Created On: 5/14/2024 at 1:40 PM

Occidental - Permian New Mexico SAKER 6_7 FED COM 13H

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP		Туре	•	Tested to:	Deepest TVD Depth (ft) per Section:			
		5M		Annu l ar	✓	70% of working pressure				
				Blind Ram	✓					
9.875" Hole	13-5/8"	5M		Pipe Ram	250 psi / 5000 psi		8421			
		Sivi	Double Ram		✓	230 psi / 3000 psi				
			Other*							
		5M		Annu l ar	√	70% of working pressure				
	13-5/8"						Blind Ram			
6.75" Hole		5M		Pipe Ram		250 psi / 5000 psi	9345			
		SIVI		Double Ram	√	230 psi / 3000 psi				
			Other*							

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 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.

^{*}Specify if additional ram is utilized

Occidental - Permian New Mexico

SAKER 6_7 FED COM 13H

Created On: 5/14/2024 at 1:40 PM

Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.

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 43 CFR part 3170 Subpart 3172.

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.

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 43 CFR part 3170 Subpart 3172 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. Please see BOP Break Testing Variance attachment for further details.

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

Occidental - Permian New Mexico SAKER 6_7 FED COM 13H

5. Mud Program

Section	Depth - MD		Depth - TVD		Tymo	Weight	Viscosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss
Surface	0	835	0	835	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	835	8567	835	8421	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	8567	19603	8421	9345	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, 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	207/207 - 65 - 124 - 11	ĺ
loss or gain of fluid?	PVT/MD Totco/Visual Monitoring	ı

6. Logging and Testing Procedures

Loggi	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				

Addit	ional logs planned	Interval
No	Resistivity	
No	Density	
Yes	CBL	Production string
Yes	Mud log	Bone Spring – TD
No	PEX	

Created On: 5/14/2024 at 1:40 PM

Occidental - Permian New Mexico SAKER 6_7 FED COM 13H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4666 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	155°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

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 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N	H2S is present			
Υ	H2S Plan attached			

8. Other facets of operation

·	Yes/No	
Will the well be drilled with a walking/skidding operation? If yes, describe.		
We plan to drill the 3 well pad in batch by section: all surface sections, intermediate	Yes	
sections and production sections. The wellhead will be secured with a night cap whenever		
the rig is not over the well.		
Will more than one drilling rig be used for drilling operations? If yes, describe.		
Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for		
this well. If the timing between rigs is such that Oxy would not be able to preset surface,	Yes	
the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the		
attached document for information on the spudder rig.		

Total Estimated Cuttings Volume: 1398 bbls

OXY APD CHANGE SUNDRY LIST

CHANGE DATE	5/16/2024
WELL NAME	SAKER 6_7 FED COM 13H
API NUMBER	30-025-49461
SPUD DATE	7/18/2024

	ITEM	PREVIOUS PLAN	UPDATED PLAN
Surface Planning	NAME	SAKER 6_7 FEDERAL COM 13H	N/A
	NSL	N/A	N/A
	SHL	710 FNL 1393 FEL	N/A
	PAD	Falcon Ridge 0606 PAD	Pad Renamed - FALCON_T24SR35E_6_Pad 2
	BHL	21 FSL 2306 FEL	20 FSL 450 FEL
	HSU SIZE, ACRES	640.06	N/A
ช	POOL	Bone Spring	N/A
	TARGET FORMATION	First Bone Spring Sandstone	Avalon
	TVD	20346'	19603'
Drilling	SURFACE CASING	17.5 in, 13.375 in, 54.5 lbs, J-55 BTC	14.75 in, 10.75 in, 45.5 lbs, J-55 BTC
	INTERMEDIATE CASING	12.25 in, 9.625 in, 40 lbs, L-80 BTC	9.875 in, 7.625 in, 26.4 lbs, L-80 HC BTC
	INTERMEDIATE 2 CASING	NA	N/A
	PRODUCTION CASING	8.5 in, 5.5 in, 20 lbs, P-110 DQX	6.75 in, 5.5 in, 23 lbs, T-95 Edge SF+
	LINER OR TIE BACK	NA	N/A
	CEMENT - SURFACE (TAIL)	894 sxs, 14.8 lb, 1.33 yld, Class C + Accel	699 sxs, 14.8 lb, 1.33 yld, Class C + Accel
	CEMENT - INTERM (TAIL)	155 sxs, 14.8 lb, 1.33 yld, Class C + Accel	84 sxs, 13.2 lb, 1.68 yld, Class C + Ret., Disper
	CEMENT - INTERM (Lead)	1252 sxs, 12.9 lb, 1.73 yld, Pozz + Ret	1230 sxs, 13.3 lb, 1.71 yld, Class C + Accel
	CEMENT - PROD 1st (LEAD)	164 sxs 13.2 lb, 1.38 yld, Class H, Ret, Disper, Salt	Removed
	CEMENT - PROD 1st (TAIL)	2031 sxs, 13.2 lb, 1.38 yld, Class H, Ret, Disper, Salt	653 sxs, 13.3 lb, 1.84 yld, Class C + Ret
	CEMENT - PROD 2nd (TAIL)	1122 sxs, 12.9 lb, 1.87 yld, Class C + Accel	Removed
Facilities	FACILITIES	NA	N/A
Other	OTHER	NA	N/A

OTHER COMMENTS

THE BHL TARGET FORMATION, TVD, SURFACE CASING, INTERMEDIATE CASING, AND PRODUCTION CASING ARE CHANGING.

ATTACHEMENTS

The C-102, DRILL PLAN, CASING CONNECTIONS AND DIRECTIONAL PLAN ARE ATTACHED. UPDATED VARIANCE REQUESTS FOR BOP BREAK TESTING, BRADENHEAD CBL, AND OFFLINE CEMENT ARE ATTACHED. THE WELL PAD WAS RENAMED FALCON_T24SR35E_6_PAD 2 BUT DID NOT CHANGE "NO CHANGE TO SHL AND NO ADDITIONAL SURFACE DISTURBANCE RELATED TO THIS SUNDRY"

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 352340

CONDITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	352340
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Crea	ated By		Condition Date
wa	ırd.rikala	All original COA's still apply. Additionally, if cement is not circulated during cementing operations, then a CBL is required.	6/17/2024