

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

Well Number: 33H

Sundry Print Report?
08/11/2022

County or Parish/State:

Well Name: SAKER 6-7 FEDERAL Well Location: T24S / R35E / SEC 6 /

COM LOT 1 /

Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM14164 Unit or CA Name: Unit or CA Number:

US Well Number: 3002548934 Well Status: Approved Application for Operator: OXY USA

Permit to Drill INCORPORATED

Notice of Intent

Sundry ID: 2628026

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 08/09/2021 Time Sundry Submitted: 08:43

Date proposed operation will begin: 08/08/2022

Procedure Description: OXY USA Inc. respectfully requests approval to amend the casing, cement, BOP break testing language, and mud programs in the APD for the subject well. Also note the downhole wellbore points have moved, but the surface hole remains the same. Attached is the updated C-102 plat, drill plan, and directional plan/plot.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

 $Saker 6_7 Fed Com 33 H_Drill Plan_Sundry 8.9.21_20210809204127. pdf$

 $Saker 6_7 Fed Com 33 H_C 102_S undry 8.9. 21_202 1080 920 4126. pdf$

Saker6_7FedCom33H_DirectPlot_Sundry8.9.21_20210809204124.pdf

Saker6_7FedCom33H_DirectPlan_Sundry8.9.21_20210809204124.pdf

eceived by OCD: \$/11/2022 1:12:18 PM Well Name: SAKER 6-7 FEDERAL

COM

Well Location: T24S / R35E / SEC 6 /

LOT 1/

Well Number: 33H

Type of Well: OIL WELL

Allottee or Tribe Name:

County or Parish/State:

Page 2 of

Lease Number: NMNM14164

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002548934

Well Status: Approved Application for

Permit to Drill

Operator: OXY USA INCORPORATED

Conditions of Approval

Additional

SAKER_6_7_FED_COM_33H___SUNDRY_COA_20220627143733.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: RONI MATHEW Signed on: AUG 09, 2021 08:42 PM

Name: OXY USA INCORPORATED

Title: REGULATORY SPECIALIST

Street Address: 5 Greenway Plaza, Suite 110

City: Houston State: TX

Phone: (713) 215-7827

Email address: RONI_MATHEW@OXY.COM

Field

Representative Name: JIM WILSON

Street Address: 6001 DEAUVILLE BLVD.

City: MIDLAND State: TX Zip: 79710

Phone: (575)631-2442

Email address: JIM_WILSON@OXY.COM

BLM Point of Contact

Signature: Chris Walls

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234 BLM POC Email Address: cwalls@blm.gov

Disposition: Approved **Disposition Date:** 07/28/2022

isposition. Approved bisposition bate: 07/20/20/

Page 2 of 2

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

All previous COAs still apply.

OPERATOR'S NAME: OXY USA INC.

LEASE NO.: NMNM14164

WELL NAME & NO.: | SAKER 6-7 FEDERAL COM 33H

SURFACE HOLE FOOTAGE: 180'/N & 885'/E BOTTOM HOLE FOOTAGE 20'/S & 1000'/E

LOCATION: Section 6, T.24 S., R.35 E., NMP

COUNTY: Lea County, New Mexico

COA

H2S	• Yes	O No	
Potash	None	Secretary	© R-111-P
Cave/Karst Potential	• Low	Medium	O High
Cave/Karst Potential	Critical		
Variance	O None	Flex Hose	Other
Wellhead	Conventional	• Multibowl	O Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled		☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	□ Unit

A. CASING

Alternate Casing Design:

- 1. The 10-3/4 inch surface casing shall be set at approximately 836 feet (a minimum of 25 feet (Lea 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 **7-5/8** inch intermediate casing shall be set at approximately **10,951** feet. **Ensure** casing is atleast half full during run for collapse safety factor. 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.

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

3. The 5-1/2 inch production casing shall be set at approximately 21,901 feet. Ensure cement excess in the open hole is 25%. 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.

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.

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)
 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 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 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 intergrity 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.

KPI - 06/27/2022

Received by OCD: 8/11/2022 1:12:18 PM

<u>District I</u> 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

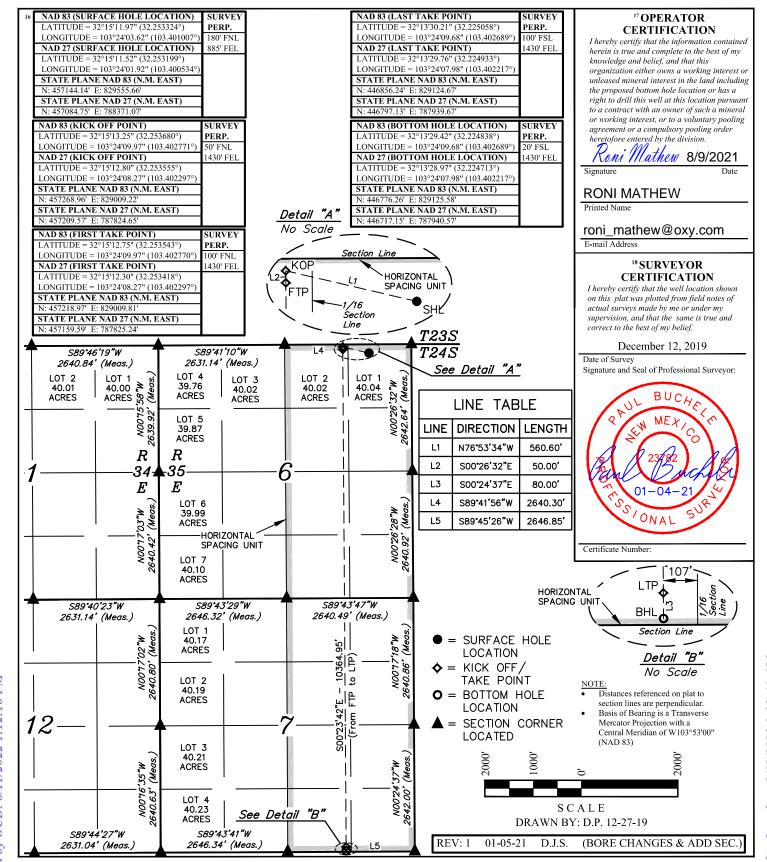
¹ API Number	•	² Pool Code	³ Pool Name	
30-025-48934		2200	Antelope Ridge, Bone Spring	
4 Property Code		5 Pro	operty Name	6 Well Number
330848		SAKER	33H	
⁷ OGRID No.		8 Op	perator Name	⁹ Elevation
16696		OXY	Y USA INC.	3450.4' (NAVD 88)

¹⁰ Surface Location

	UL or lot no. 1	Section 6	Township 24S	Range 35E	Lot Idn	Feet from the 180	North/South line NORTH	Feet from the 885	East/West line EAST	County LEA
				11	Bottom H	ole Location I	f Different From	Surface		
г	TIT 1	6 4	T 1:	,		F . 6 . 4	N: 41.60 (1.1)	E (C ()	T2 4/55/ 4 15	

35Ĕ SOUTH LEA 24S 20 1430 **EAST** Dedicated Acres Joint or Infil 14 Consolidation 5 Order No 640.06

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.



Released to Imaging: 8/12/2022 8:32:40 AM

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983) Saker 6_7 Saker 6_7 Fed Com 33H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

11 February, 2021

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

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 33H

RKB=26.5' @ 3476.90ft RKB=26.5' @ 3476.90ft

Grid

Minimum Curvature

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System: US State Plane 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

Plan Survey Tool Program

0.00

Site Position: Northing: 457,094.74 usft Latitude: 32° 15' 11.741857 N From: Мар Easting: 826,474.44 usft Longitude: 103° 24' 39.507225 W **Position Uncertainty:** 1.00 ft Slot Radius: **Grid Convergence:** 0.49° 13.200 in

Well Saker 6_7 Fed Com 33H

 Well Position
 +N/-S
 49.40 ft
 Northing:
 457,144.14 usft
 Latitude:
 32° 15' 11.967296 N

 +E/-W
 3,081.22 ft
 Easting:
 829,555.66 usft
 Longitude:
 103° 24' 3.624690 W

Position Uncertainty 1.00 ft Wellhead Elevation: Ground Level: 3,450.40 ft

 Wellbore
 Wellbore #1

 Magnetics
 Model Name
 Sample Date (°)
 Declination (°)
 Dip Angle (°)
 Field Strength (nT)

 HDGM FILE
 12/31/2019
 6.60
 59.87
 47,831.20000000

Permitting Plan Design Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 182.38 0.00 0.00 0.00

Depth From Depth To
(ft) (ft) Survey (Wellbore) Tool Name Remarks

OWSG MWD + HRGM

Date 2/11/2021

21,900.82 Permitting Plan (Wellbore #1)

Plan Sections Measured Vertical Build Dogleg Turn Depth Depth Rate Rate Inclination **Azimuth** +N/-S +E/-W Rate **TFO** (ft) (ft) (°/100ft) (°/100ft) (°/100ft) (°) (°) (ft) (ft) **Target** (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 7,870.00 0.00 0.00 7,870.00 0.00 0.00 0.00 0.00 0.00 0.00 285.50 8,870.00 10.00 285.50 8,864.93 23.26 -83.88 1.00 1.00 0.00 11.050.69 10.00 285.50 11.012.49 124.46 -448.78 0.00 0.00 0.00 0.00 11,604.90 -435.29 -540 51 10.00 8.60 -11.61 11,964.76 88 62 179 36 -106 13 21,900.82 88.62 179.36 11,843.90 -10,367.86 -430.08 0.00 0.00 0.00 0.00 PBHL (Saker 6_7

B001Mb MWD+HRGM

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

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 33H

RKB=26.5' @ 3476.90ft RKB=26.5' @ 3476.90ft

Grid

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
400.00 500.00	0.00	0.00	400.00 500.00	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
2,500.00 2,600.00 2,700.00 2,800.00	0.00 0.00 0.00	0.00 0.00 0.00 0.00	2,500.00 2,600.00 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	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	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
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

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 33H

RKB=26.5' @ 3476.90ft RKB=26.5' @ 3476.90ft

Grid

Design.	remining Fig	411							
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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00 6,400.00	0.00 0.00	0.00 0.00	6,300.00 6,400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00 6,900.00	0.00 0.00	0.00	6,800.00 6,900.00	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							
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00 7.300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00 7,400.00	0.00 0.00	0.00 0.00	7,300.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
1									
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00 7,800.00	0.00 0.00	0.00 0.00	7,700.00 7,800.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.30	285.50	7,900.00	0.02	-0.08	-0.02	1.00	1.00	0.00
8,000.00 8,100.00	1.30 2.30	285.50 285.50	7,999.99 8,099.94	0.39 1.23	-1.42 -4.45	-0.33 -1.05	1.00 1.00	1.00 1.00	0.00 0.00
8,200.00	3.30	285.50	8,199.82	2.54	- 4 .43	-2.16	1.00	1.00	0.00
8,300.00	4.30	285.50	8,299.60	4.31	-15.54	-3.66	1.00	1.00	0.00
8,400.00	5.30	285.50	8,399.24	6.55	-23.60	-5.56	1.00	1.00	0.00
8,500.00	6.30	285.50	8,498.73	9.25	-33.34	-7.86	1.00	1.00	0.00
8,600.00	7.30	285.50	8,598.03	12.41	-44.75	-10.55	1.00	1.00	0.00
8,700.00	8.30	285.50	8,697.10	16.04	-57.83	-13.63	1.00	1.00	0.00
8,800.00	9.30	285.50	8,795.92	20.13	-72.57	-17.10	1.00	1.00	0.00
8,870.00	10.00	285.50	8,864.93	23.26	-83.88	-19.77	1.00	1.00	0.00
8,900.00	10.00	285.50	8,894.48	24.65	-88.90	-20.95	0.00	0.00	0.00
9,000.00	10.00	285.50	8,992.96	29.29	-105.63	-24.89	0.00	0.00	0.00
9,100.00	10.00	285.50	9,091.44	33.94	-122.37	-28.83	0.00	0.00	0.00
9,200.00	10.00	285.50	9,189.92	38.58	-139.10	-32.78	0.00	0.00	0.00
9,300.00	10.00	285.50	9,288.40	43.22	-155.83	-36.72	0.00	0.00	0.00
9,400.00	10.00	285.50	9,386.88	47.86	-172.57	-40.66	0.00	0.00	0.00
9,500.00	10.00	285.50	9,485.36	52.50	-189.30	-44.61	0.00	0.00	0.00
9,600.00	10.00	285.50	9,583.84	57.14	-206.03	-48.55 53.40	0.00	0.00	0.00
9,700.00	10.00	285.50	9,682.32	61.78	-222.77	-52.49	0.00	0.00	0.00
9,800.00	10.00	285.50	9,780.80	66.42	-239.50	-56.44	0.00	0.00	0.00
9,900.00	10.00	285.50	9,879.28	71.06	-256.23	-60.38	0.00	0.00	0.00
10,000.00	10.00	285.50	9,977.76	75.70	-272.97	-64.32	0.00	0.00	0.00
10,100.00 10,200.00	10.00 10.00	285.50 285.50	10,076.24 10,174.73	80.34 84.98	-289.70 -306.43	-68.26 -72.21	0.00 0.00	0.00 0.00	0.00 0.00
10,300.00	10.00	285.50	10,273.21	89.62	-323.17	-76.15	0.00	0.00	0.00
10,400.00	10.00	285.50	10,371.69	94.26	-339.90 356.63	-80.09 84.04	0.00	0.00	0.00
10,500.00	10.00	285.50	10,470.17	98.90	-356.63	-84.04	0.00	0.00	0.00

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

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 33H

RKB=26.5' @ 3476.90ft RKB=26.5' @ 3476.90ft

Grid

Design.	remining Fig	un							
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)
10,600.00 10,700.00	10.00 10.00	285.50 285.50	10,568.65 10,667.13	103.54 108.18	-373.36 -390.10	-87.98 -91.92	0.00 0.00	0.00 0.00	0.00 0.00
10,800.00	10.00	285.50	10,765.61	112.82	-406.83	-95.87	0.00	0.00	0.00
10,900.00	10.00	285.50	10,864.09	117.46	-423.56	-99.81	0.00	0.00	0.00
11,000.00	10.00	285.50	10,962.57	122.11	-440.30	-103.75	0.00	0.00	0.00
11,050.69	10.00	285.50	11,012.49	124.46	-448.78	-105.75	0.00	0.00	0.00
11,100.00	9.83	256.58	11,061.09	124.63	-457.01	-105.58	10.00	-0.34	-58.64
11,200.00	15.42	216.96	11,158.81	111.99	-473.35	-92.27	10.00	5.59	-39.63
11,300.00 11,400.00	24.02 33.38	201.44 194.01	11,252.92 11,340.56	82.34 36.58	-488.82 -502.95	-62.01 -15.70	10.00 10.00	8.60 9.36	-15.52 -7.43
11,500.00	43.01	189.58	11,419.07	-23.89	-502.95	45.23	10.00	9.62	-4.43 -4.43
11,600.00	52.75	186.52	11,486.07	-97.25	-525.54	118.95	10.00	9.74	-3.06
11,700.00	62.55	184.17	11,539.52	-181.26	-533.31	203.20	10.00	9.80	-2.35
11,800.00	72.38	182.21	11,539.52	-273.36	-538.39	295.44	10.00	9.83	-2.33 -1.96
11,900.00	82.24	180.45	11,599.74	-370.77	-540.62	392.86	10.00	9.85	-1.76
11,964.76	88.62	179.36	11,604.90	-435.29	-540.51	457.32	10.00	9.86	-1.68
12,000.00	88.62	179.36	11,605.75	-470.52	-540.12	492.50	0.00	0.00	0.00
12,100.00	88.62	179.36	11,608.16	-570.48	-539.01	592.33	0.00	0.00	0.00
12,200.00	88.62	179.36	11,610.56	-670.45	-537.90	692.17	0.00	0.00	0.00
12,300.00	88.62	179.36	11,612.97	-770.41	-536.79	792.00	0.00	0.00	0.00
12,400.00	88.62	179.36	11,615.37	-870.38	-535.68	891.83	0.00	0.00	0.00
12,500.00	88.62	179.36	11,617.78	-970.34	-534.56	991.66	0.00	0.00	0.00
12,600.00	88.62	179.36	11,620.18	-1,070.31	-533.45	1,091.50	0.00	0.00	0.00
12,700.00	88.62	179.36	11,622.59	-1,170.27	-532.34	1,191.33	0.00	0.00	0.00
12,800.00 12,900.00	88.62 88.62	179.36 179.36	11,624.99 11,627.40	-1,270.24 -1,370.20	-531.23 -530.12	1,291.16 1,391.00	0.00 0.00	0.00 0.00	0.00 0.00
13,000.00	88.62	179.36	11,629.80	-1,470.17	-529.01	1,490.83	0.00	0.00	0.00
13,100.00	88.62	179.36	11,632.21	-1,570.13	-527.90	1,590.66	0.00	0.00	0.00
13,200.00	88.62	179.36	11,634.61	-1,670.10	-526.78	1,690.49	0.00	0.00	0.00
13,300.00	88.62	179.36	11,637.02	-1,770.06	-525.67	1,790.33	0.00	0.00	0.00
13,400.00 13,500.00	88.62 88.62	179.36 179.36	11,639.42 11,641.83	-1,870.03 -1,969.99	-524.56 -523.45	1,890.16 1,989.99	0.00 0.00	0.00 0.00	0.00 0.00
13,600.00	88.62	179.36	11,644.24	-2,069.96	-522.34	2,089.83	0.00	0.00	0.00
13,700.00 13,800.00	88.62 88.62	179.36 179.36	11,646.64 11,649.05	-2,169.92 -2,269.89	-521.23 -520.11	2,189.66 2,289.49	0.00 0.00	0.00 0.00	0.00 0.00
13,900.00	88.62	179.36	11,651.45	-2,369.85	-519.00	2,389.33	0.00	0.00	0.00
14,000.00	88.62	179.36	11,653.86	-2,469.82	-517.89	2,489.16	0.00	0.00	0.00
14,100.00	88.62	179.36	11,656.26	-2.569.78	-516.78	2,588.99	0.00	0.00	0.00
14,200.00	88.62	179.36	11,658.67	-2,669.75	-515.67	2,688.82	0.00	0.00	0.00
14,300.00	88.62	179.36	11,661.07	-2,769.71	-514.56	2,788.66	0.00	0.00	0.00
14,400.00	88.62	179.36	11,663.48	-2,869.68	-513.45	2,888.49	0.00	0.00	0.00
14,500.00	88.62	179.36	11,665.88	-2,969.64	-512.33	2,988.32	0.00	0.00	0.00
14,600.00	88.62	179.36	11,668.29	-3,069.60	-511.22	3,088.16	0.00	0.00	0.00
14,700.00	88.62	179.36	11,670.69	-3,169.57	-510.11	3,187.99	0.00	0.00	0.00
14,800.00	88.62	179.36	11,673.10	-3,269.53	-509.00	3,287.82	0.00	0.00	0.00
14,900.00 15,000.00	88.62 88.62	179.36 179.36	11,675.51 11,677.91	-3,369.50 -3,469.46	-507.89 -506.78	3,387.65 3,487.49	0.00 0.00	0.00 0.00	0.00 0.00
15,100.00	88.62	179.36	11,680.32	-3,569.43	-505.67	3,587.32	0.00	0.00	0.00
15,200.00 15,300.00	88.62 88.62	179.36 179.36	11,682.72 11,685.13	-3,669.39 -3,769.36	-504.55 -503.44	3,687.15 3,786.99	0.00 0.00	0.00 0.00	0.00 0.00
15,400.00	88.62	179.36	11,687.53	-3,869.32	-502.33	3,886.82	0.00	0.00	0.00
15,500.00	88.62	179.36	11,689.94	-3,969.29	-501.22	3,986.65	0.00	0.00	0.00
15,600.00	88.62	179.36	11,692.34	-4,069.25	-500.11	4,086.48	0.00	0.00	0.00
15,700.00	88.62	179.36	11,694.75	-4,169.22	-499.00	4,186.32	0.00	0.00	0.00
.5,.55.00	00.02		, - • •	.,	.00.00	.,	0.00	0.00	

Oxy Inc. Planning Report

HOPSPP

Database: Company: **ENGINEERING DESIGNS**

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

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 33H

RKB=26.5' @ 3476.90ft RKB=26.5' @ 3476.90ft

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	88.62	179.36	11,697.15	-4,269.18	-497.89	4,286.15	0.00	0.00	0.00
15,900.00	88.62	179.36	11,699.56	-4,369.15	-496.77	4,385.98	0.00	0.00	0.00
16,000.00	88.62	179.36	11,701.96	-4,469.11	-495.66	4,485.82	0.00	0.00	0.00
16,100.00	88.62	179.36	11,704.37	-4,569.08	-494.55	4,585.65	0.00	0.00	0.00
16,200.00	88.62	179.36	11,706.77	-4,669.04	-493.44	4,685.48	0.00	0.00	0.00
16,300.00	88.62	179.36	11,709.18	-4,769.01	-492.33	4,785.32	0.00	0.00	0.00
16,400.00	88.62	179.36	11,711.59	-4,868.97	-491.22	4,885.15	0.00	0.00	0.00
16,500.00	88.62	179.36	11,713.99	-4,968.94	-490.11	4,984.98	0.00	0.00	0.00
16,600.00	88.62	179.36	11,716.40	-5,068.90	-488.99	5,084.81	0.00	0.00	0.00
16,700.00	88.62	179.36	11,718.80	-5,168.87	-487.88	5,184.65	0.00	0.00	0.00
16,800.00	88.62	179.36	11,721.21	-5,268.83	-486.77	5,284.48	0.00	0.00	0.00
16,900.00	88.62	179.36	11,723.61	-5,368.80	-485.66	5,384.31	0.00	0.00	0.00
17,000.00	88.62	179.36	11,726.02	-5,468.76	-484.55	5,484.15	0.00	0.00	0.00
17,100.00	88.62	179.36	11,728.42	-5,568.73	-483.44	5,583.98	0.00	0.00	0.00
17,200.00	88.62	179.36	11,730.83	-5,668.69	-482.33	5,683.81	0.00	0.00	0.00
17,300.00	88.62	179.36	11,733.23	-5,768.66	-481.21	5,783.64	0.00	0.00	0.00
17,400.00	88.62	179.36	11,735.64	-5,868.62	-480.10	5,883.48	0.00	0.00	0.00
17,500.00	88.62	179.36	11,738.04	-5,968.59	-478.99	5,983.31	0.00	0.00	0.00
17,600.00	88.62	179.36	11,740.45	-6,068.55	-477.88	6,083.14	0.00	0.00	0.00
17,700.00	88.62	179.36	11,742.86	-6,168.52	-476.77	6,182.98	0.00	0.00	0.00
17,800.00	88.62	179.36	11,745.26	-6,268.48	-475.66	6,282.81	0.00	0.00	0.00
17,900.00	88.62	179.36	11,747.67	-6,368.45	-474.55	6,382.64	0.00	0.00	0.00
18,000.00	88.62	179.36	11,750.07	-6,468.41	-473.43	6,482.48	0.00	0.00	0.00
18,100.00	88.62	179.36	11,752.48	-6,568.38	-472.32	6,582.31	0.00	0.00	0.00
18,200.00	88.62	179.36	11,754.88	-6,668.34	-471.21	6,682.14	0.00	0.00	0.00
18,300.00	88.62	179.36	11,757.29	-6,768.31	-470.10	6,781.97	0.00	0.00	0.00
18,400.00	88.62	179.36	11,759.69	-6,868.27	-468.99	6,881.81	0.00	0.00	0.00
18,500.00	88.62	179.36	11,762.10	-6,968.24	-467.88	6,981.64	0.00	0.00	0.00
18,600.00	88.62	179.36	11,764.50	-7,068.20	-466.77	7,081.47	0.00	0.00	0.00
18,700.00	88.62	179.36	11,766.91	-7,168.17	-465.65	7,181.31	0.00	0.00	0.00
18,800.00	88.62	179.36	11,769.31	-7,268.13	-464.54	7,281.14	0.00	0.00	0.00
18,900.00	88.62	179.36	11,771.72	-7,368.10	-463.43	7,380.97	0.00	0.00	0.00
19,000.00	88.62	179.36	11,774.13	-7,468.06	-462.32	7,480.80	0.00	0.00	0.00
19,100.00	88.62	179.36	11,776.53	-7,568.02	-461.21	7,580.64	0.00	0.00	0.00
19,200.00	88.62	179.36	11,778.94	-7,667.99	-460.10	7,680.47	0.00	0.00	0.00
19,300.00	88.62	179.36	11,781.34	-7,767.95	-458.99	7,780.30	0.00	0.00	0.00
19,400.00	88.62	179.36	11,783.75	-7,867.92	-457.87	7,880.14	0.00	0.00	0.00
19,500.00	88.62	179.36	11,786.15	-7,967.88	-456.76	7,979.97	0.00	0.00	0.00
19,600.00	88.62	179.36	11,788.56	-8,067.85	-455.65	8,079.80	0.00	0.00	0.00
19,700.00	88.62	179.36	11,790.96	-8,167.81	-454.54	8,179.63	0.00	0.00	0.00
19,800.00	88.62	179.36	11,793.37	-8,267.78	-453.43	8,279.47	0.00	0.00	0.00
19,900.00	88.62	179.36	11,795.77	-8,367.74	-452.32	8,379.30	0.00	0.00	0.00
20,000.00	88.62	179.36	11,798.18	-8,467.71	-451.21	8,479.13	0.00	0.00	0.00
20,100.00	88.62	179.36	11,800.58	-8,567.67	-450.09	8,578.97	0.00	0.00	0.00
20,200.00	88.62	179.36	11,802.99	-8,667.64	-448.98	8,678.80	0.00	0.00	0.00
20,300.00	88.62	179.36	11,805.39	-8,767.60	-447.87	8,778.63	0.00	0.00	0.00
20,400.00	88.62	179.36	11,807.80	-8,867.57	-446.76	8,878.47	0.00	0.00	0.00
20,500.00	88.62	179.36	11,810.21	-8,967.53	-445.65	8,978.30	0.00	0.00	0.00
20,600.00	88.62	179.36	11,812.61	-9,067.50	-444.54	9,078.13	0.00	0.00	0.00
20,700.00	88.62	179.36	11,815.02	-9,167.46	-443.43	9,177.96	0.00	0.00	0.00
20,800.00	88.62	179.36	11,817.42	-9,267.43	-442.31	9,277.80	0.00	0.00	0.00
20,900.00	88.62	179.36	11,819.83	-9,367.39	-441.20	9,377.63	0.00	0.00	0.00
21,000.00	88.62	179.36	11,822.23	-9,467.36	-440.09	9,477.46	0.00	0.00	0.00
21,100.00	88.62	179.36	11,824.64	-9,567.32	-438.98	9,577.30	0.00	0.00	0.00

Planning Report

Database: HOPSPP

Company: ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

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 33H

RKB=26.5' @ 3476.90ft RKB=26.5' @ 3476.90ft

Grid

anned 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)
21,200.00	88.62	179.36	11,827.04	-9,667.29	-437.87	9,677.13	0.00	0.00	0.00
21,300.00	88.62	179.36	11,829.45	-9,767.25	-436.76	9,776.96	0.00	0.00	0.00
21,400.00	88.62	179.36	11,831.85	-9,867.22	-435.65	9,876.79	0.00	0.00	0.00
21,500.00	88.62	179.36	11,834.26	-9,967.18	-434.53	9,976.63	0.00	0.00	0.00
21,600.00	88.62	179.36	11,836.66	-10,067.15	-433.42	10,076.46	0.00	0.00	0.00
21,700.00	88.62	179.36	11,839.07	-10,167.11	-432.31	10,176.29	0.00	0.00	0.00
21,800.00	88.62	179.36	11,841.48	-10,267.08	-431.20	10,276.13	0.00	0.00	0.00
21,900.00	88.62	179.36	11,843.88	-10,367.04	-430.09	10,375.96	0.00	0.00	0.00
21,900.82	88.62	179.36	11.843.90	-10.367.86	-430.08	10.376.77	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
FTP (Saker 6_7 Fed - plan misses target - Point	0.00 center by 20		11,604.90 555.35ft ME	74.83) (11457.72 T	-545.85 VD, -63.04 N	457,218.97 , -521.26 E)	829,009.81	32° 15' 12.754579 N	103° 24' 9.972982
PBHL (Saker 6_7 Fed - plan hits target cer - Point	0.00 nter	0.00	11,843.90	-10,367.86	-430.08	446,776.26	829,125.58	32° 13' 29.416841 N	103° 24' 9.678647

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	775.90	775.90	RUSTLER			
	1,082.90	1,082.90	SALADO			
	3,401.90	3,401.90	CASTILE			
	5,272.90	5,272.90	DELAWARE			
	5,321.90	5,321.90	BELL CANYON			
	6,208.90	6,208.90	CHERRY CANYON			
	7,578.90	7,578.90	BRUSHY CANYON			
	8,758.46	8,754.90	BONE SPRING			
	9,932.11	9,910.90	BONE SPRING 1ST			
	10,393.11	10,364.90	BONE SPRING 2ND			
	11,456.11	11,385.90	BONE SPRING 3RD			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Cod +N/-S (ft)	ordinates +E/-W (ft)	Comment
7,870.00 8.870.00	,	0.00 23.26	0.00 -83.88	Build 1°/100' Hold 10° Tangent
11,050.69 11.964.76	11,012.49	124.46 -435.29	-448.78	KOP, Build & Turn 10°/100'
21,900.82	,	-10,367.86	-540.51 -430.08	Landing Point TD at 21900.82' MD

Released to Imaging: 8/12/2022 8:32:40 AM

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

OXY

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Saker 6_7

Well: Saker 6_7 Fed Com 33H

Wellbore: Wellbore #1
Design: Permitting Plan

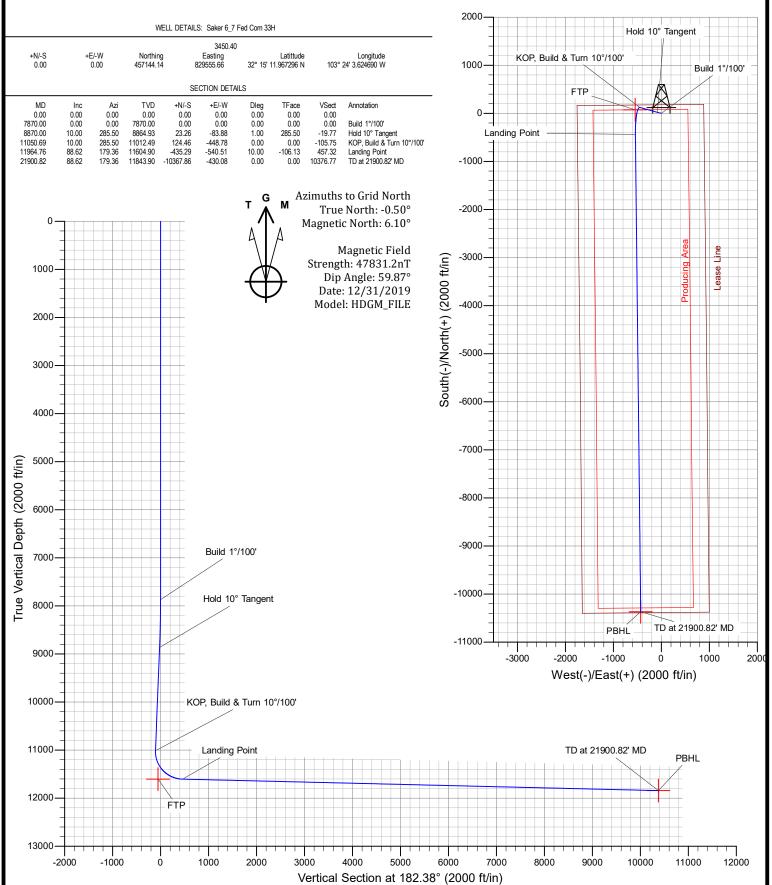
Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level



Oxy USA Inc. - Saker 6_7 Fed Com 33H Drill Plan

1. Geologic Formations

TVD of Target (ft):	11844	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	21901	Deepest Expected Fresh Water (ft):	776

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	776	776	
Salado	1083	1083	Salt
Castile	3402	3402	Salt
Delaware	5273	5273	Oil/Gas/Brine
Bell Canyon	5322	5322	Oil/Gas/Brine
Cherry Canyon	6209	6209	Oil/Gas/Brine
Brushy Canyon	7579	7579	Losses
Bone Spring	8758	8755	Oil/Gas
Bone Spring 1st	9932	9911	Oil/Gas
Bone Spring 2nd	10393	10365	Oil/Gas
Bone Spring 3rd	11456	11386	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	836	0	836	10.75	45.5	J-55	ВТС
Intermediate	9.875	0	10951	0	10912	7.625	26.4	L-80 HC	ВТС
Production	6.75	0	21901	0	11844	5.5	20	P-110	DQX

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

^{*}Oxy requests the option to run the 7.625" Intermediate II as a contingency string to be run only if severe hole conditions dictate an additional casing string necessary.

^{*}Oxy requests the option to run production casing with DQX, TORQ DQW and/or TORQ SFW connections to accommodate hole conditions or drilling operations.

All Casing SF Values will meet or exceed						
those below						
SF	SF	Body SF	Joint SF			
Collapse Burst		Tension	Tension			
1.125	1.2	1.4	1.4			

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face 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?	V
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	Y
the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
300 into previous easing.	
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?	
T 11.1 - 1.1 1 C /TZ 10	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Section	Stage	Slurry:	Capacities	ft^3/ft	Excess:	From	То	Sacks	Volume (ft^3)	Placement
Surface	1	Surface - Tail	OH x Csg	0.5563	100%	836	-	699	930	Circulate
Int.	1	Intermediate 1S - Tail	OH x Csg	0.2148	5%	10,951	7,829	427	704	Circulate
Int.	2	Intermediate 2S - Tail BH	OH x Csg	0.2148	25%	7,829	836	978	1877	Bradenhead
Int.	2	Intermediate 2S - Tail BH	Csg x Csg	0.2338	0%	836	-	102	195	Bradenhead
Prod.	1	Production - Tail	OH x Csg	0.0835	15%	21,901	10,951	762	1052	Circulate
Prod.	1	Production - Tail	Csg x Csg	0.0999	0%	10,951	10,451	36	50	Circulate

Description	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)	500psi Time (hh:mm)	Cmt. Class	Accelerator	Retarder	Dispersant	Salt
Surface - Tail	14.8	1.33	6.365	5:26	С	Х			
Intermediate 1S - Tail	13.2	1.65	8.64	11:54	Н	Х	Х	Х	Х
Intermediate 2S - Tail BH	12.9	1.92	10.41	23:10	C	Х			
Production - Tail	13.2	1.38	6.686	3:39	Н		Х	Х	Х

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Offline Cementing

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:

Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).

Land casing.

Fill pipe with kill weight fluid, and confirm well is static.

If well 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.
 - 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.
- 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 nippled 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 nippling 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		Туре	1	Tested to:	Deepest TVD Depth (ft) per Section:	
		5M		Annular	✓	70% of working pressure		
				Blind Ram	✓		10912	
9.875" Hole	13-5/8"	5M		Pipe Ram		250 psi / 5000 psi		
		SIVI		Double Ram	√			
			Other*					
		5M		Annular	√	70% of working pressure		
				Blind Ram				
6.75" Hole	13-5/8"	5N4		Pipe Ram		250 poi / 5000 poi	11844	
		5M		Double Ram		250 psi / 5000 psi		
			Other*					

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

^{*}Specify if additional ram is utilized

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Formation integrity test will be performed per Onshore Order #2.

On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Y Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

See attached schematics.

BOP Break Testing Request

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.

5. Mud Program

Saction	Depth -	- MD	Depth -	TVD	Tyma	Weight	Viceosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Type	(ppg)	Viscosity	Loss
Surface	0	836	0	836	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	836	10951	836	10912	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	10951	21901	10912	11844	Water-Based or Oil- Based Mud	9.5 - 12	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	DVT/NAD Totas (Visual Manitoring
loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

6. Logging and Testing Procedures

Logg	Logging, Coring and Testing.						
Vac	Will run GR from TD to surface (horizontal well – vertical portion of hole).						
Yes	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						

Add	itional logs planned	Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	Bone Spring – TD
No	PEX	

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7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7391 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	175°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

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

<u> </u>		
١	7	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	1 es
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: 1620 bbls

Attachments

- _x__ Directional Plan
- _x__ H2S Contingency Plan
- _x__ Flex III Attachments
- _x__ Spudder Rig Attachment

9. Company Personnel

Name	<u>Title</u>	Office Phone	Mobile Phone
Garrett Granier	Drilling Engineer	713-513-6633	832-265-0581
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

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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 133197

CONDITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	133197
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	PREVIOUS COA'S APPLY	8/12/2022