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

Sundry Print Report

09/15/2022

Well Name: DEPTH CC 6-7 FEDERAL COM

Well Location: T24S / R29E / SEC 6 / LOT 4 / 32.2538209 / -104.0283039

County or Parish/State: EDDY / NM

Well Number: 41H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM013996, NMNM13996

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001546777

Well Status: Approved Application for Permit to Drill

Operator: OXY USA INCORPORATED

Notice of Intent

Sundry ID: 2684532

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 07/28/2022

Time Sundry Submitted: 11:04

Date proposed operation will begin: 10/03/2022

Procedure Description: The subject well has two aspects changing in the APD: 1) SHL change and 2) drill plan change. The new SHL is going to be an expansion of an existing pad. Two site plans are submitted to show the existing pad and the pad expansion. Also, the drill plan has been redesigned with a pilot hole, new casing, and new cement. The old SHL was Lot 4 – Sec 6 – T24S R29E – 170 ft FNL – 1250 FT FWL. The new SHL is Lot 4 – Sec 6 – T24S R29E – 203 ft FNL – 602 FT FWL.

NOI Attachments

Procedure Description

DepthCC6_7FederalCom41H_TNSWedge461_7.000in_32.00__P110CY_20220728110254.pdf

DepthCC6_7FederalCom41H_TNSWedge461_5.500in_20.00__P110CY_20220728110254.pdf

DepthCC6_7FederalCom41H_TNSWedge425_5.500in_20.00__P110CY_20220728110254.pdf

DepthCC6_7FederalCom41H_TNSWedge441_5.500in_20.00__P110CY_20220728110254.pdf

DepthCC6_7FederalCom41H_TMKUPTORQDQW_5.500in_20.00__P110CY_20220728110253.pdf

DepthCC6_7FederalCom41H_DirectPlot_20220728110247.pdf

DepthCC6_7FederalCom41H_TMKUPDQX_5.500in_20.00__P110_20220728110247.pdf

DepthCC6_7FederalCom41H_DirectPlan_ST_20220728110247.pdf

DepthCC6_7FederalCom41H_13inADAPT_13.375in_7.000in_10x10_20220728110248.pdf

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DepthCC6_7FederalCom41H_DrillPlan_20220728110248.pdf

DepthCC6_7FederalCom41H_DirectPlan_Pilot_20220728110247.pdf

Depth_CC_6_7_Fed__Com__41H_VM__Rev__C__20220728110152.pdf

Depth_CC_6_7_Fed__Com__41H_c_102__Rev__C__FLAT_20220728110147.pdf

Depth_CC_6_7_Fed__Com__41H_AM__Rev__C__20220728110149.pdf

Depth_CC_6_7_Fed__Com__41H__Rev__C__20220728110149.pdf

Depth_CC_6_7_Fed__Com__41H_LVM__Rev__C__20220728110149.pdf

Depth_CC_6_7_Fed__Com__41H_SP1__Rev__D__20220728110149.pdf

Depth_CC_6_7_Fed__Com__41H_SP2__Rev__D__20220728110149.pdf

Conditions of Approval

Additional

COAs_Depth_41H_Radius_51H_20220913140417.pdf

DEPTH_CC_6_7_FEDERAL_COM_41H___SUNDRY_COA_20220812095253.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: STEPHEN JANACEK

Signed on: SEP 07, 2022 09:14 AM

Name: OXY USA INCORPORATED

Title: Regulatory Engineer

Street Address: 5 Greenway Plaza, Suite 110

City: Houston **State:** TX

Phone: (713) 497-2417

Email address: stephen_janacek@oxy.com

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

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BLM Point of Contact

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: 09/14/2022

Signature: Chris Walls

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OXY USA Incorporated
NMNM13996
Section 6, T24S, R29E, NMPM
Eddy County, New Mexico

RADIUS CC 6-7 FEDERAL COM 51H
DEPTH CC 6-7 FEDERAL COM 41H

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Cave/Karst Mitigation Measures for project portions occurring on BLM Surface or intersecting Federal Minerals:

The following stipulations will be applied to minimize impacts during construction, drilling and production:

Construction:
In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:
No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

Tank Battery Liners and Berms:
Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:
Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:
Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.
Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:
Upon well abandonment in cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:
The operator will perform annual pressure monitoring on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

BURIED PIPELINES:

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.

- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

FLOWLINES (SURFACE):

- Flowlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize the possibility of leaks and spills from entering karst systems.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

POWERLINES:

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

EXHIBIT NO. 1

Date of Issue: 9/24/2018

NM-13996

Bureau of Land Management, Carlsbad Field Office
620 E. Greene Street Carlsbad, NM 88220

BLM Report No. 18-5436

Cultural and Archaeological Resources

NOTICE OF STIPULATIONS

Historic properties in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.

Project Name:	Crawford Buried Pipeline Right-of-Way
	1). A 3-day preconstruction call-in notification. Contact BLM Inspection and Enforcement at
Required	***2. Professional archaeological monitoring***. Contact your BLM project archaeologist at (575) 234-5917 for assistance.
A. ☒	These stipulations must be given to your monitor at least **5 days** prior to the start of construction.
B. ☒	No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.
	3. Cultural site barrier fencing. (Your monitor will assist you).
A. ☐	**A temporary site protection barrier**(s) shall be erected prior to all ground-disturbing activities. The minimum barrier(s) shall consist of upright wooden survey lath spaced no more than ten (10) feet apart and marked with blue ribbon flagging or blue paint. There shall be no construction activities or vehicular traffic past the barrier(s) at any time.
B. ☐	**A permanent, 4-strand barbed wire fence** strung on standard "T-posts" shall be erected prior to all ground-disturbing activities. No construction activities or vehicle traffic are allowed past the fence.
Required	***4. The archaeological monitor shall:***
A. ☒	Insure that the proposed project bores under HCIP-40428.
B. ☒	Observe all ground-disturbing activities within 100 feet of cultural site.
C. ☒	Submit a brief monitoring report within 30 days of completion of monitoring.
D. ☐	
E. ☐	
	If subsurface cultural resources are encountered during the monitoring, all activities shall cease and a BLM-CFO archaeologist shall be notified immediately.
Other:	**IF THE CONTRACT ARCHAEOLOGIST DOES NOT KNOW WHERE THE SITE(S) ARE LOCATED AT PLEASE COME BY THE CARLSBAD BLM AND MAPS AND OTHER DATA WILL BE PROVIDED UPON REQUEST TO THE CONTRACT ARCHAEOLOGIST**

Site Protection and Employee Education: It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect, damage, or disturb cultural resources on Public Lands.

For assistance contact: Aaron Whaley (575) 234-5986

Elia Perez (575)-234-6231
Garrett Leitermann (575) 234-2239
Bruce Boeke (575) 234-5917

- The entirety of the well pads and CTB would be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pads. Topsoil should not be used to construct the berm.
  No water flow from the uphill side(s) of the pads should be allowed to enter the well pads. The berm should be maintained through the life of the wells and after interim reclamation has been completed.
- Any water erosion that may occur due to the construction of the well pads or facilities during the life of the project would be quickly corrected and proper measures would be taken to prevent future erosion.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials.

Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

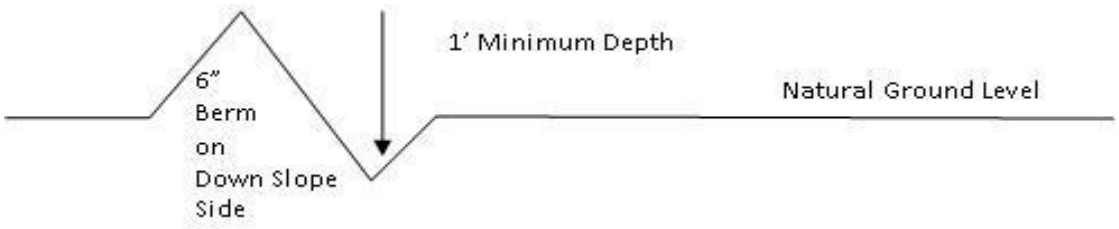
Ditching shall be required on both sides of the road.

Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Cattle guards
An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

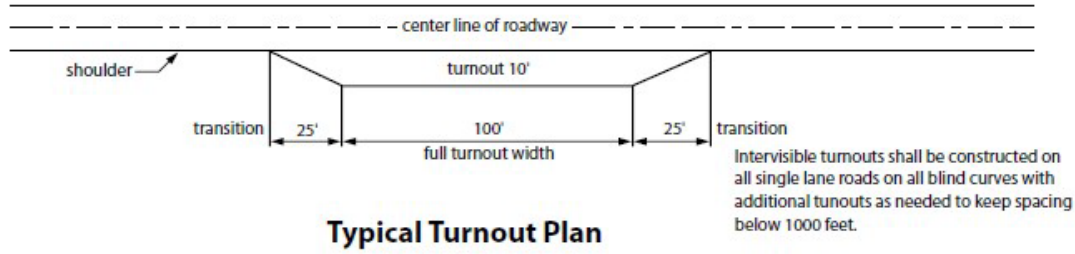
Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access
Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

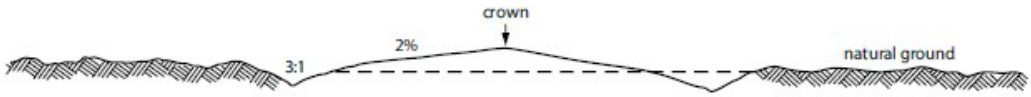
Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

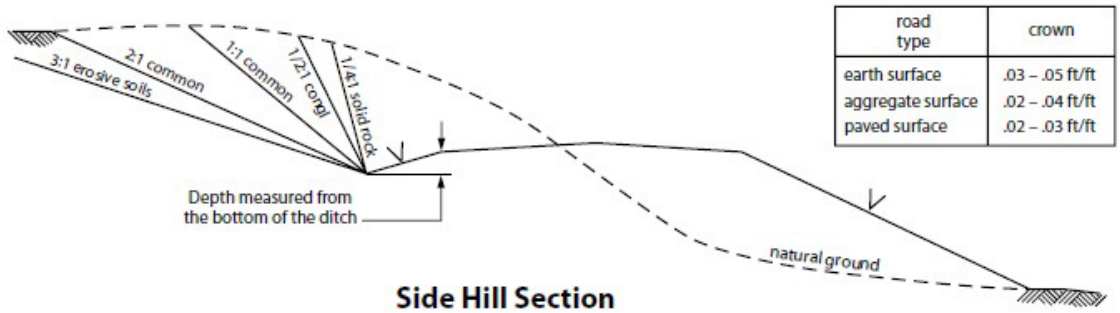


Intervisible turnouts shall be constructed on all single lane roads on all blind curves with additional turnouts as needed to keep spacing below 1000 feet.

Typical Turnout Plan

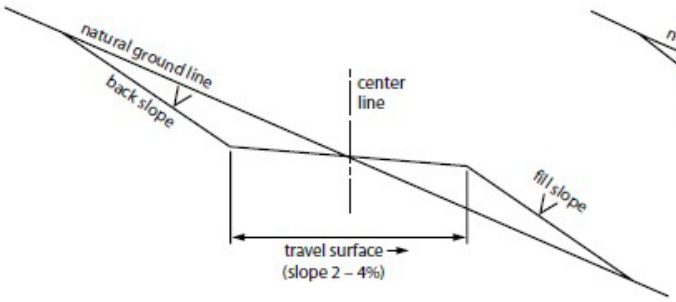


Level Ground Section

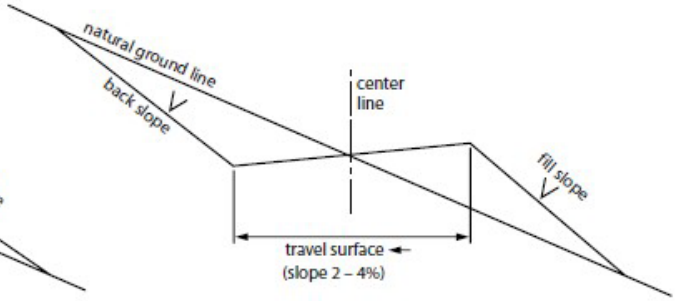


road type	crown
earth surface	.03 – .05 ft/ft
aggregate surface	.02 – .04 ft/ft
paved surface	.02 – .03 ft/ft

Side Hill Section



Typical Outsloped Section



Typical Inslope Section

Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone*.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the application (Grant, Sundry Notice, APD) and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third

parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
b. Activities of other parties including, but not limited to:
    (1) Land clearing.
    (2) Earth-disturbing and earth-moving work.
    (3) Blasting.
    (4) Vandalism and sabotage.
c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline must be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline must be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity will be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation will be allowed unless approved in writing

by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the

authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)

- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless

otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

(X) seed mixture 1	( ) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
( ) seed mixture 2/LPC	( ) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches that are not otherwise fenced, screened, or netted to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to

whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to

proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:
    - For reclamation remove poles, lines, transformer, etc. and dispose of properly.
    - Fill in any holes from the poles removed.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 1 for Loamy Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☑ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-46777	98220	PURPLE SAGE WOLFCAMP (GAS)

Property Code	Property Name	Well Number
327181	DEPTH CC "6_7" FEDERAL COM	41H

OGRID No.	Operator Name	Elevation
16696	OXY USA INC.	2967.0'

Surface Location

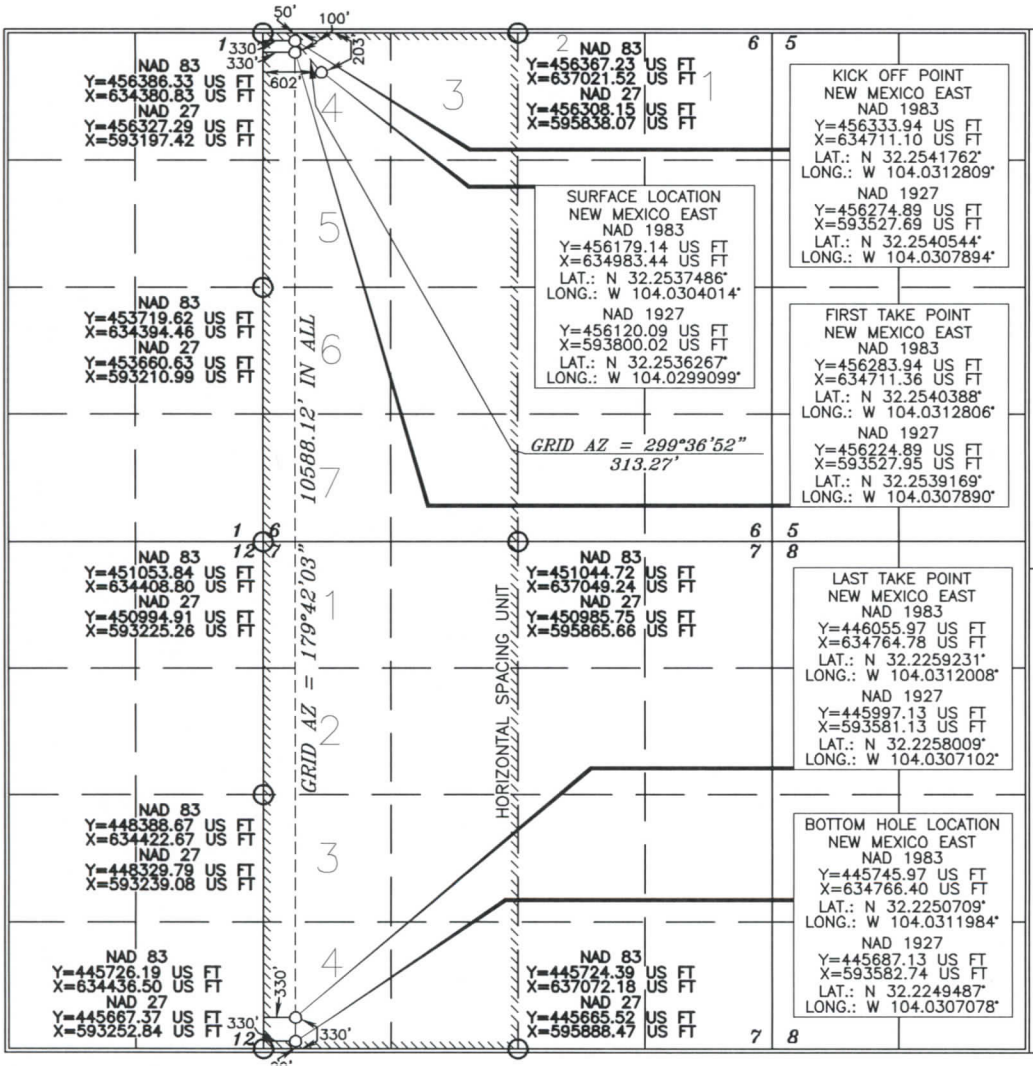
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	6	24 SOUTH	29 EAST, N.M.P.M.		203'	NORTH	602'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	7	24 SOUTH	29 EAST, N.M.P.M.		20'	SOUTH	330'	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
637.33	Y		

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stephen Janacek 7/28/2022
Signature Date

STEPHEN JANACEK
Printed Name

STEPHEN_JANACEK@OXY.COM
E-mail Address

SURVEYOR CERTIFICATION

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

MAY 3, 2019
Date of Survey

Signature and Seal of Professional Surveyor:

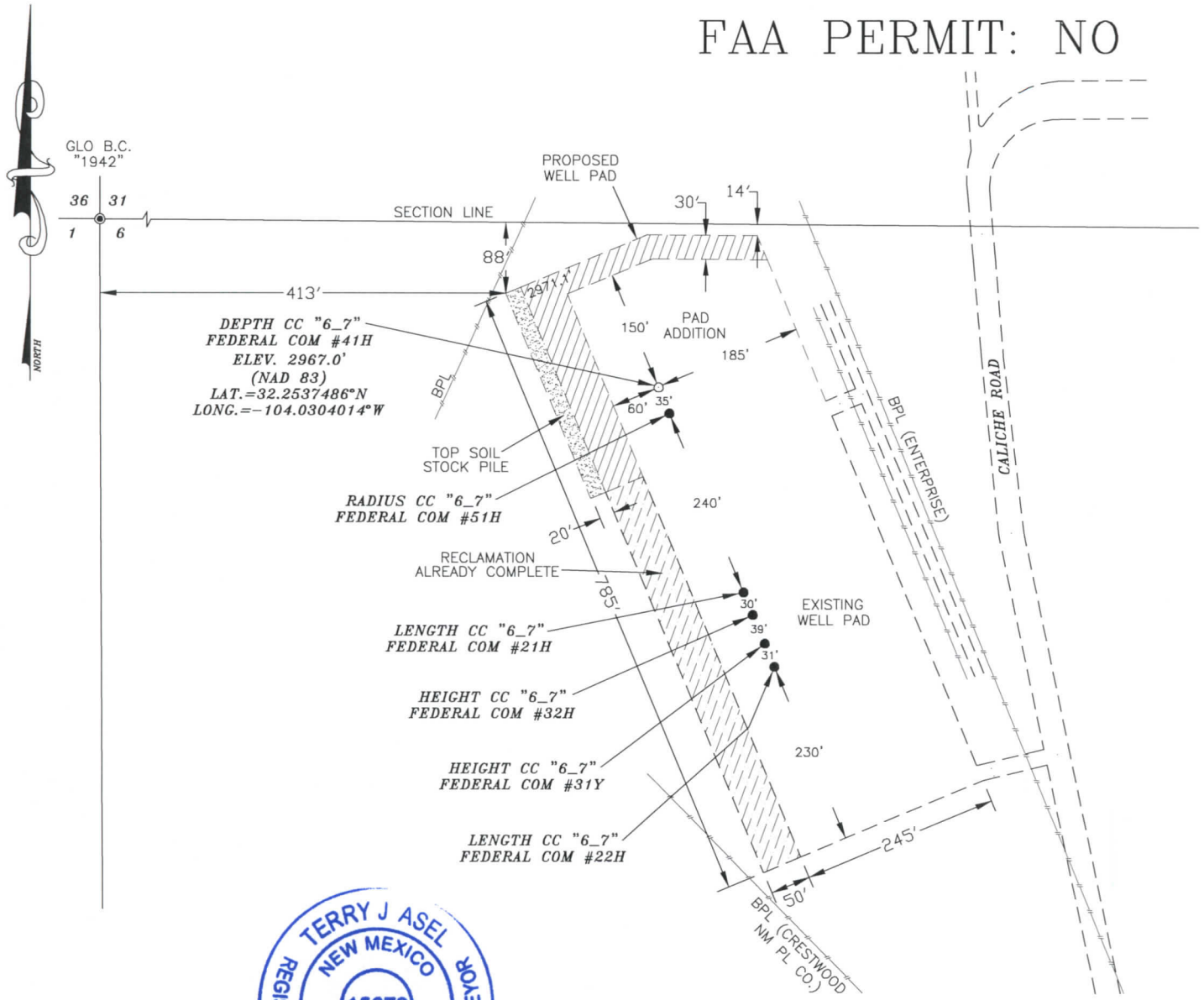
GARY L. JONES NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number 15079

WO# 190226WL-a (Rev. C) (KA)

OXY USA INC.
DEPTH CC "6_7" FEDERAL COM #41H
SITE PLAN 1

FAA PERMIT: NO



TERRY J ASEL
NEW MEXICO
15079
REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEYORS CERTIFICATE

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

Terry J. Asel 7/12/2022

Terry J. Asel N.M. R.P.L.S. No. 15079

Asel Surveying, LLC

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

LEGEND

- – – – – DENOTES PROPOSED WELL PAD
- —·—·— DENOTES PROPOSED ROAD
- DENOTES STOCK PILE AREA
- DENOTES INTERIM RECLAMATION
- DENOTES ALREADY COMPLETE RECLAMATION

200' 0 200' 400' FEET

SCALE: 1"=200'

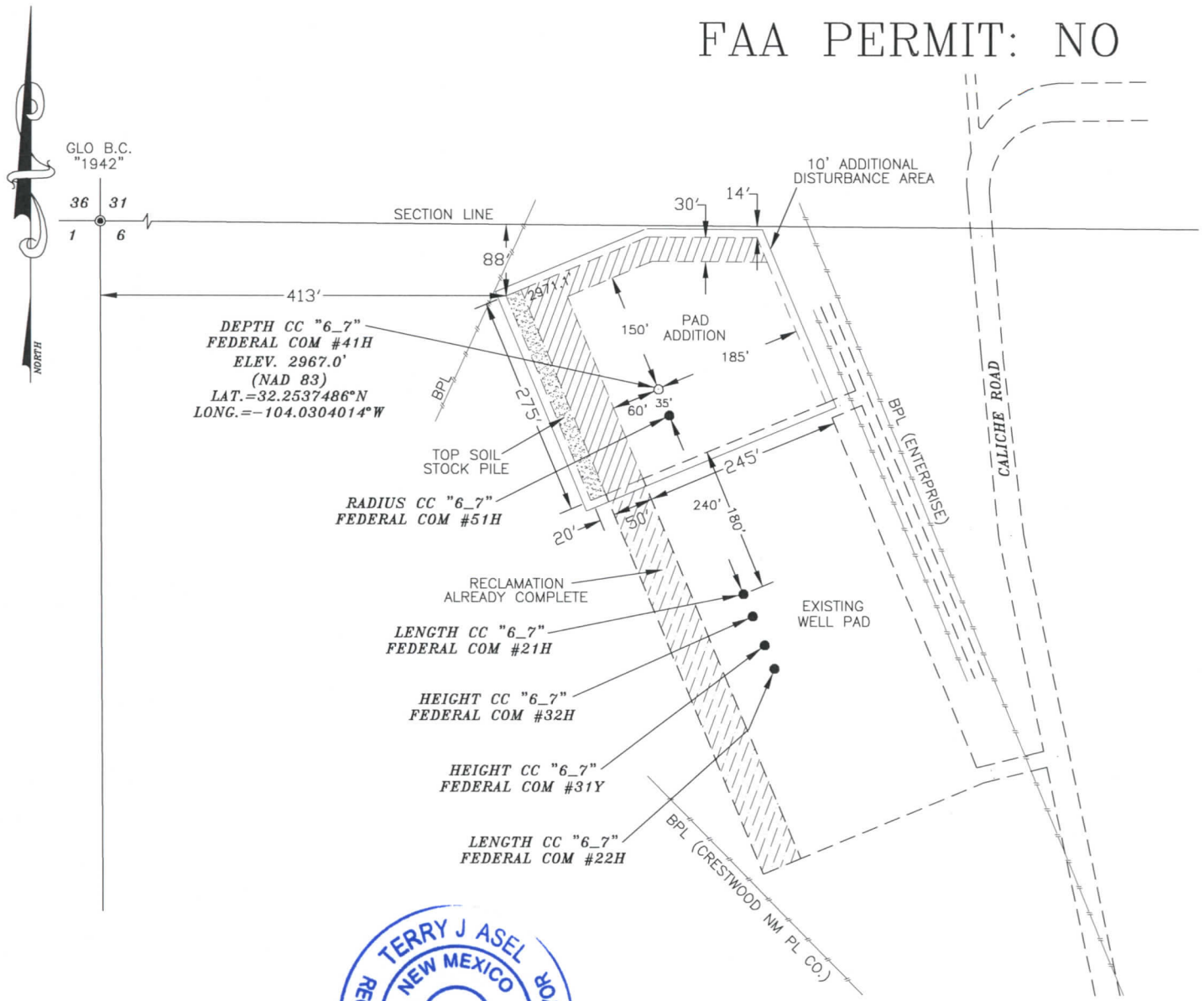
OXY USA INC.

DEPTH CC "6_7" FEDERAL COM #41H
LOCATED AT 203' FNL & 602' FWL IN
SECTION 6, TOWNSHIP 24 SOUTH, RANGE 29
EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 05/03/19	Sheet 1 of 1 Sheets	
W.O. Number: 190226WL-a (Rev. D)	Drawn By: KA	Rev: D
Date: 07/12/22	190226WL-a	Scale:1"=200'

OXY USA INC.
DEPTH CC "6_7" FEDERAL COM #41H
SITE PLAN 2

FAA PERMIT: NO



TERRY J ASEL NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

SURVEYORS CERTIFICATE

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

Terry J. Asel 7/12/2022

Terry J. Asel, N.M. R.P.L.S. No. 15079

LEGEND

- – – – DENOTES PROPOSED WELL PAD
- —·—·— DENOTES PROPOSED ROAD
- DENOTES STOCK PILE AREA
- DENOTES INTERIM RECLAMATION
- DENOTES ALREADY COMPLETE RECLAMATION

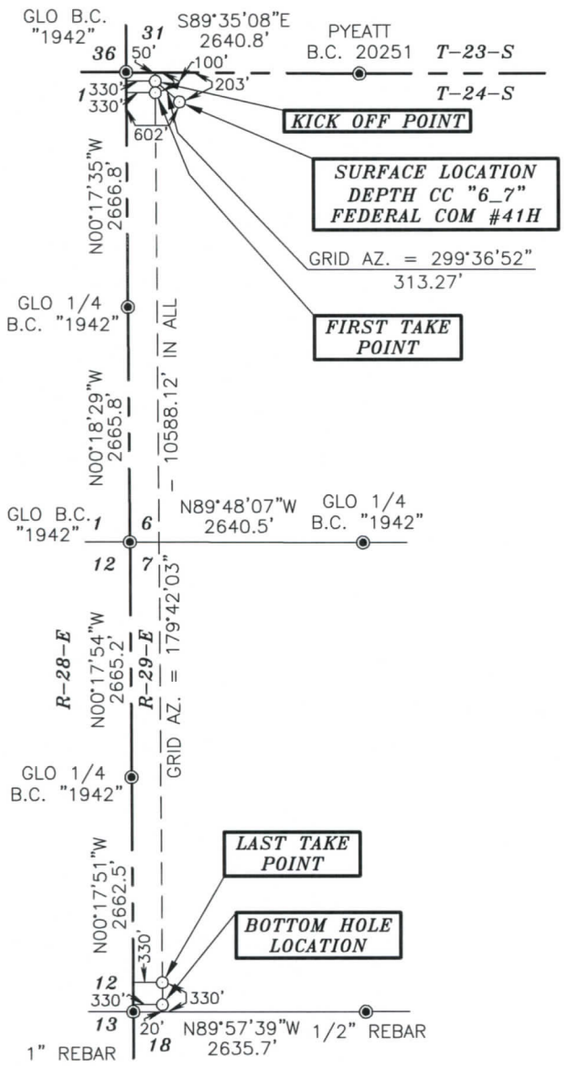
200' 0 200' 400' FEET

SCALE: 1"=200'

Asel Surveying, LLC
P.O. BOX 393 – 310 W. TAYLOR
HOBBS, NEW MEXICO – 575-393-9146

OXY USA INC.		
DEPTH CC "6_7" FEDERAL COM #41H LOCATED AT 203' FNL & 602' FWL IN SECTION 6, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO		
Survey Date: 05/03/19	Sheet 1 of 1 Sheets	
W.O. Number: 190226WL-a (Rev. D)	Drawn By: KA	Rev: D
Date: 07/12/22	190226WL-a	Scale:1"=200'

SECTIONS 6 & 7, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY NEW MEXICO



Basis of Bearings – GPS Geodetic Measurements NM East Zone (83) North American Datum of 1983

DRIVING DIRECTIONS:
FROM THE INTERSECTION OF U.S. HWY. #285 AND COUNTY ROAD #731 (ONSUREZ ROAD) IN MALAGA, GO NORTH ON COUNTY ROAD #731 FOR 0.6 MILES, TURN RIGHT ON COUNTY ROAD #743 (BRUMBLE ROAD) AND GO EAST FOR 1.0 MILES, CONTINUE EAST ON COUNTY ROAD #745 (HARROUN ROAD) FOR 2.0 MILES, TURN LEFT AND GO NORTH FOR 0.5 MILES TO LOCATION.

LEGEND

◉ – DENOTES FOUND MONUMENT AS NOTED

2000' 0 2000' 4000' FEET

SCALE: 1"=2000'

SURVEYORS CERTIFICATE

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

Terry J. Asel 7/1/2022

Terry J. Asel N.M. R.P.L.S. No. 15079

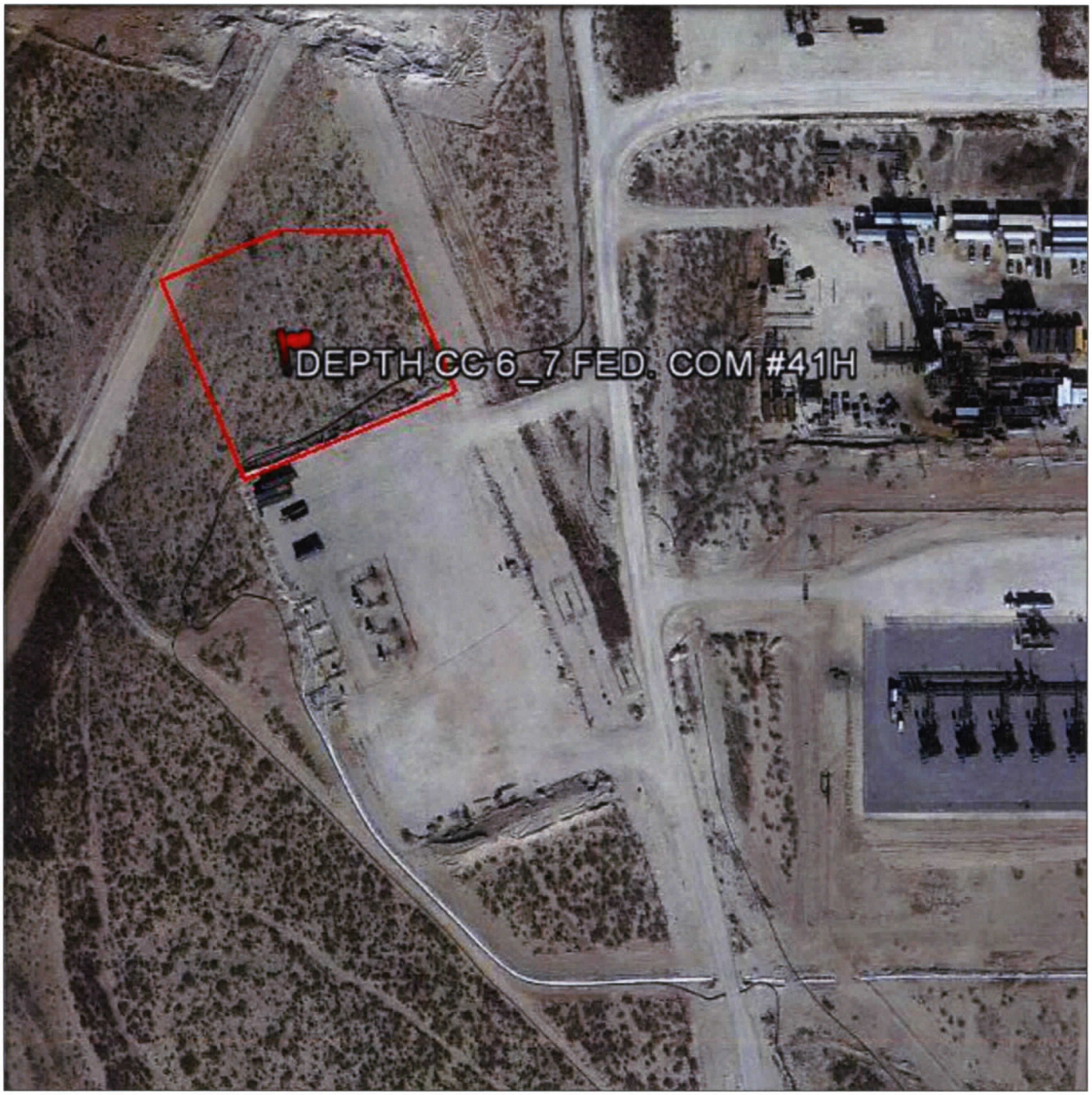
Asel Surveying, LLC
P.O. BOX 393 – 310 W. TAYLOR
HOBBS, NEW MEXICO – 575-393-9146

OXY USA INC.

DEPTH CC "6_7" FEDERAL COM #41H LOCATED AT 203' FNL & 602' FWL IN SECTION 6, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 05/03/19	Sheet 1 of 1 Sheets	
W.O. Number: 190226WL-a (Rev. C)	Drawn By: KA	Rev: C
Date: 06/29/22	190226WL-a	Scale: 1"=2000'

AERIAL MAP



NORTH

SCALE: NOT TO SCALE

SEC. 6 TWP. 24-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 203' FNL & 602' FWL

ELEVATION 2967.0'

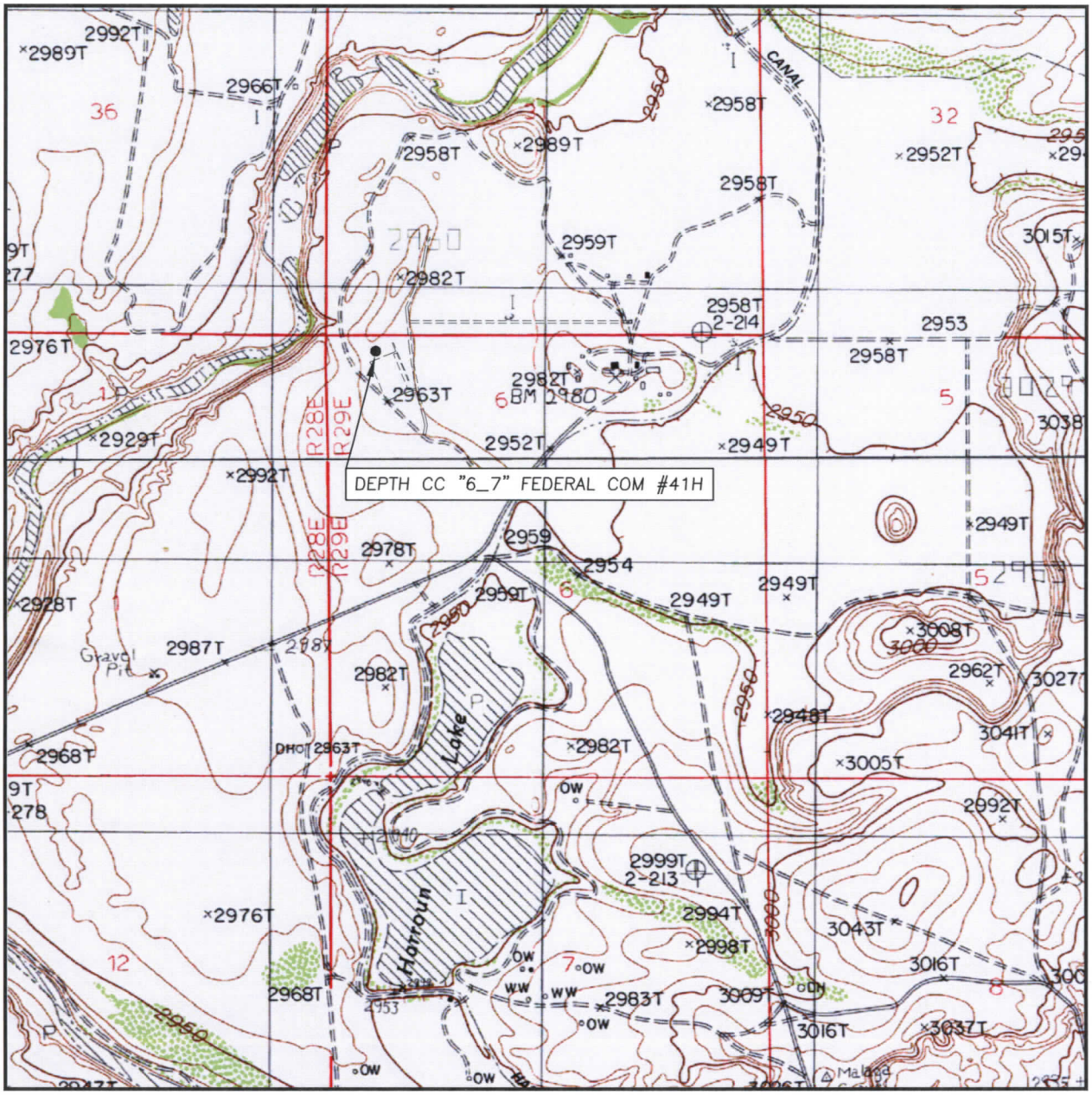
OPERATOR OXY USA INC.

LEASE DEPTH CC "6_7" FEDERAL COM #41H

Asel Surveying, LLC

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 6 TWP. 24-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 203' FNL & 602' FWL

ELEVATION 2967.0'

OPERATOR OXY USA INC.

LEASE DEPTH CC "6_7" FEDERAL COM #41H

U.S.G.S. TOPOGRAPHIC MAP

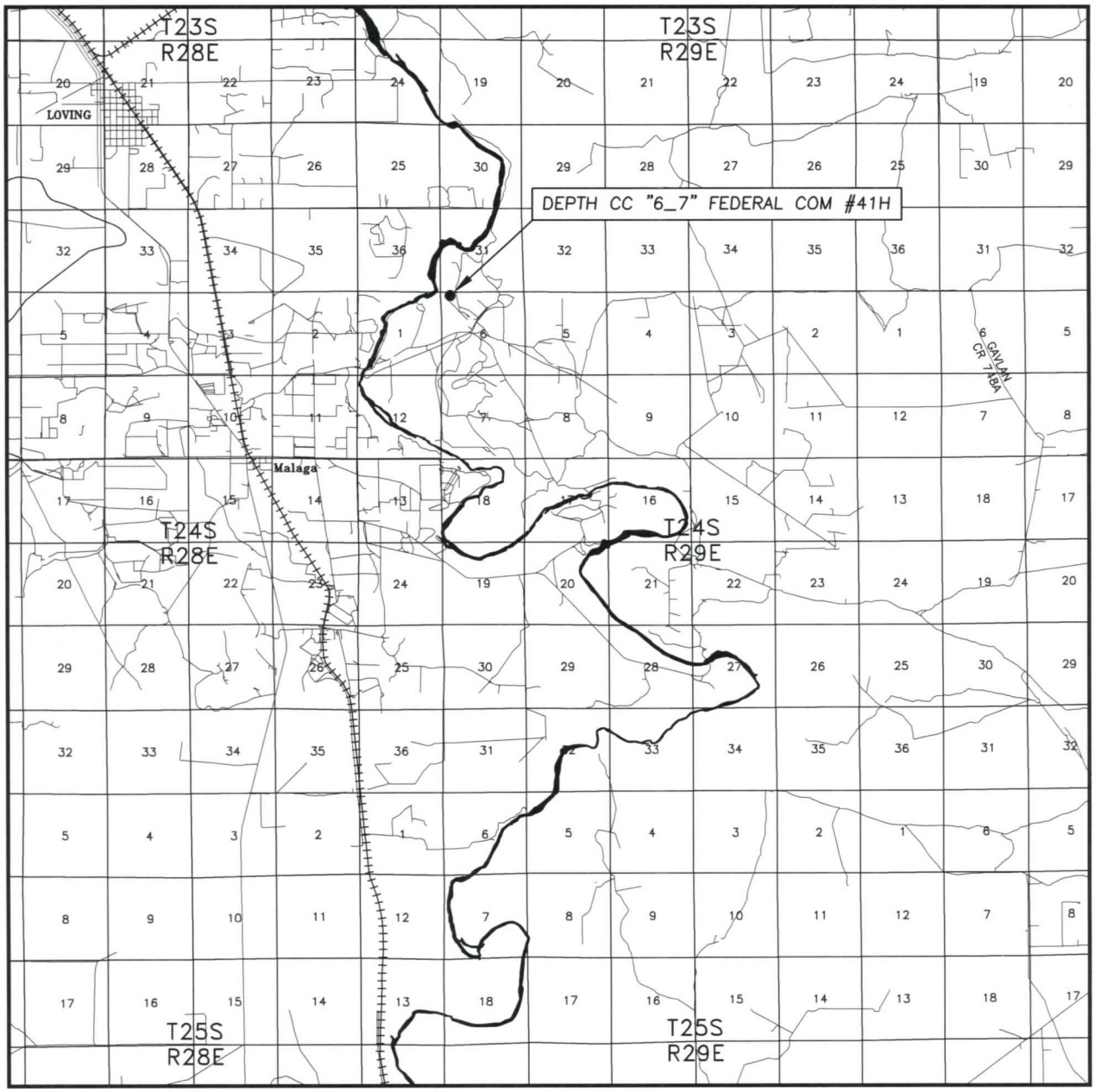
LOVING, N.M.

Asel Surveying, LLC

P.O. BOX 393 – 310 W. TAYLOR

HOBBS, NEW MEXICO – 575-393-9146

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 6 TWP. 24-S RGE. 29-E
SURVEY N.M.P.M.
COUNTY EDDY
DESCRIPTION 203' FNL & 602' FWL
ELEVATION 2967.0'
OPERATOR OXY USA INC.
LEASE DEPTH CC "6_7" FEDERAL COM #41H

Asel Surveying, LLC
P.O. BOX 393 – 310 W. TAYLOR
HOBBS, NEW MEXICO – 575-393-9146

DIRECTIONS FROM THE INTERSECTION OF U.S. HWY. #285 AND COUNTY ROAD #731 (ONSUREZ ROAD) IN MALAGA, GO NORTH ON COUNTY ROAD #731 FOR 0.6 MILES, TURN RIGHT ON COUNTY ROAD #743 (BRUMBLE ROAD) AND GO EAST FOR 1.0 MILES, CONTINUE EAST ON COUNTY ROAD #745 (HARROUN ROAD) FOR 2.0 MILES, TURN LEFT AND GO NORTH FOR 0.5 MILES TO LOCATION.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

All previous COAs still apply.

OPERATOR'S NAME:	OXY USA INCORPORATED
LEASE NO.:	NMNM13996
WELL NAME & NO.:	Depth CC 6-7 Federal COM / 41H
SURFACE HOLE FOOTAGE:	203'/N & 602'/W
BOTTOM HOLE FOOTAGE	20'/N & 330'/W
LOCATION:	Section 6, T.24 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

COA

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

A. CASING

Alternate Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **455** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The **9-5/8** inch intermediate casing shall be set at approximately **9,831** feet The minimum required fill of cement behind the **9-5/8** 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 9-5/8" X 13-3/8" annulus. Operator must run a CBL OR ECHO-METER from TD of the 9-5/8" casing to surface. Submit results to BLM. OVERALL EXCESS IS ONLY 14%. ADJUST BRADENHEAD VOLUME IF NECESSARY TO ACHIVE CEMENT TO SURFACE.

The pilot hole plugging procedure is approved as written. Proposed pilot plug top is **9,731'**. Note plug tops on subsequent drilling report. The BLM is to be contacted (575-361-2822 Eddy County) when tagging the plugs.

3. The **5-1/2** inch production casing shall be set at approximately **20,848** 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.

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

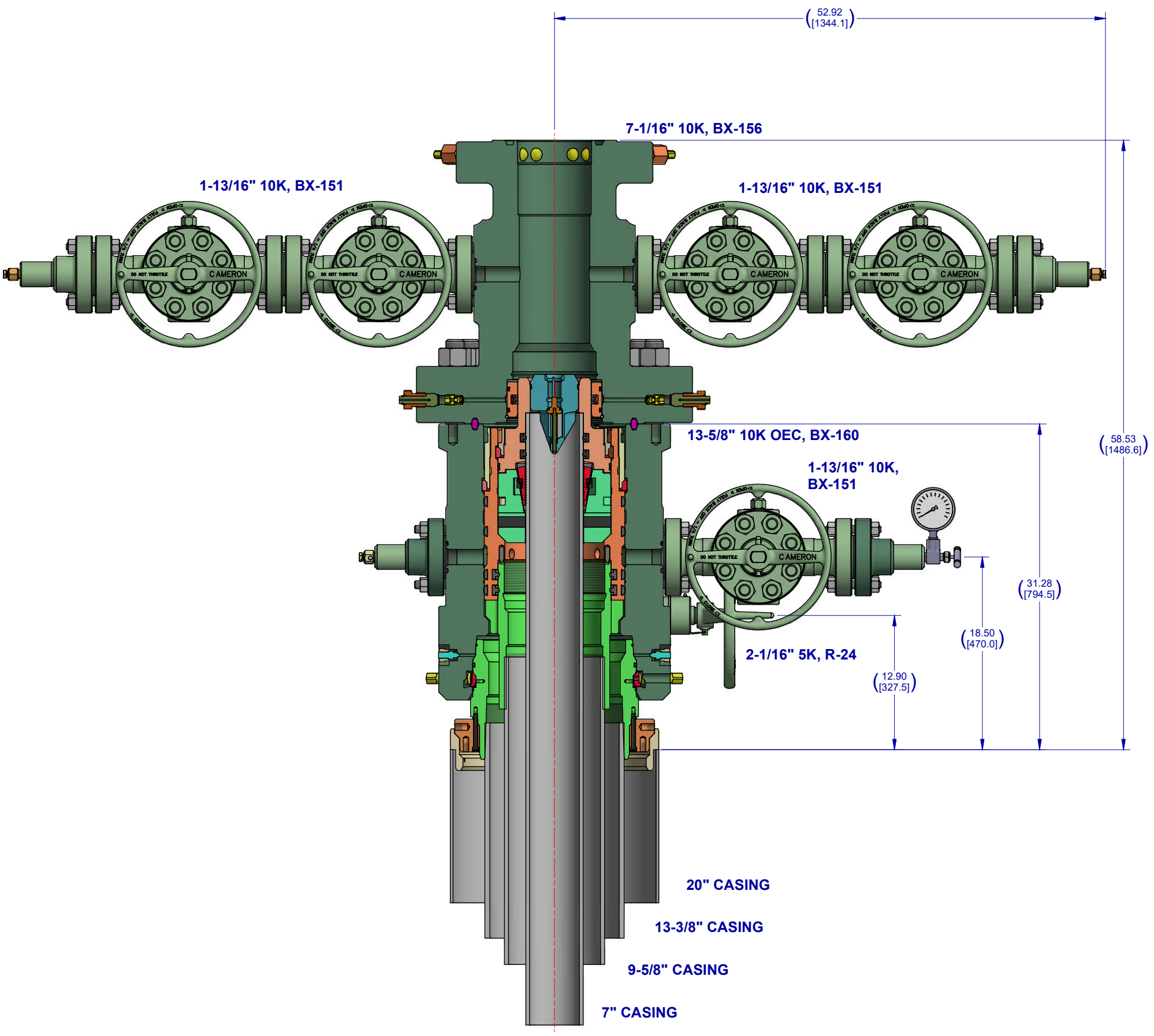
Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

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 – 08/12/2022



Notes:

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

2. DIGITALLY ENABLED SOLUTIONS, CHOKES AND ESD'S AVAILABLE ON REQUEST

CONFIDENTIAL

SURFACE TREATMENT	DO NOT SCALE		CAMERON A Schlumberger Company	SURFACE SYSTEMS
	DRAWN BY: D. GOTTUNG	DATE 18 Feb 22		
MATERIAL & HEAT TREAT	CHECKED BY: D. GOTTUNG	DATE 18 Feb 22	OXY 13-5/8" 10K ADAPT 20" X 13-3/8" X 9-5/8" X 7"	
	APPROVED BY: D. GOTTUNG	DATE 18 Feb 22		
ESTIMATED WEIGHT: 6115.068 LBS 2773.748 KG	INITIAL USE B/M:		SHEET 1 OF 1	SD-053434-94-12 REV: 01

INVENTOR - D

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
Depth CC 6_7
Depth CC 6_7 Federal Com 41H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

27 July, 2022

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site Depth CC 6_7

Site Position:		**Northing:**	456,207.91 usft	**Latitude:**	32.253823
From:	Map	**Easting:**	635,546.67 usft	**Longitude:**	-104.028579
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.16 °

Well Depth CC 6_7 Federal Com 41H

Well Position	**+N/-S**	-28.77 ft	**Northing:**	456,179.14 usft	**Latitude:**	32.253749
	+E/-W	-563.28 ft	**Easting:**	634,983.44 usft	**Longitude:**	-104.030402
Position Uncertainty		2.00 ft	**Wellhead Elevation:**	0.00 ft	**Ground Level:**	2,967.00 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	7/8/2019	7.02	59.98	47,907.10000000
	HDGM_FILE	7/25/2022	6.73	59.90	47,595.50000000

Design Permitting Plan

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	184.73

Plan Survey Tool Program **Date** 7/27/2022

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,022.01	Permitting Plan (Wellbore #1)	B001Mb_MWD+HRGM	
				OWSG 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	
8,221.00	0.00	0.00	8,221.00	0.00	0.00	0.00	0.00	0.00	0.00	
9,221.35	10.00	299.61	9,216.28	43.04	-75.73	1.00	1.00	0.00	299.61	
10,021.97	10.00	299.61	10,004.72	111.77	-196.64	0.00	0.00	0.00	0.00	
11,022.32	0.00	0.00	11,000.00	154.81	-272.36	1.00	-1.00	0.00	180.00	Pilot BHL (Depth

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	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
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,500.00	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	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	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	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	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	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	7,700.00	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	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,221.00	0.00	0.00	8,221.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.79	299.61	8,300.00	0.27	-0.47	-0.23	1.00	1.00	0.00
8,400.00	1.79	299.61	8,399.97	1.38	-2.43	-1.18	1.00	1.00	0.00
8,500.00	2.79	299.61	8,499.89	3.36	-5.90	-2.86	1.00	1.00	0.00
8,600.00	3.79	299.61	8,599.72	6.19	-10.89	-5.27	1.00	1.00	0.00
8,700.00	4.79	299.61	8,699.44	9.89	-17.40	-8.42	1.00	1.00	0.00
8,800.00	5.79	299.61	8,799.02	14.44	-25.41	-12.30	1.00	1.00	0.00
8,900.00	6.79	299.61	8,898.41	19.86	-34.94	-16.91	1.00	1.00	0.00
9,000.00	7.79	299.61	8,997.60	26.13	-45.97	-22.25	1.00	1.00	0.00
9,100.00	8.79	299.61	9,096.56	33.25	-58.50	-28.32	1.00	1.00	0.00
9,200.00	9.79	299.61	9,195.24	41.23	-72.54	-35.11	1.00	1.00	0.00
9,221.35	10.00	299.61	9,216.28	43.04	-75.73	-36.65	1.00	1.00	0.00
9,300.00	10.00	299.61	9,293.73	49.80	-87.61	-42.40	0.00	0.00	0.00
9,400.00	10.00	299.61	9,392.21	58.38	-102.71	-49.71	0.00	0.00	0.00
9,500.00	10.00	299.61	9,490.69	66.96	-117.81	-57.02	0.00	0.00	0.00
9,600.00	10.00	299.61	9,589.17	75.55	-132.91	-64.33	0.00	0.00	0.00
9,700.00	10.00	299.61	9,687.65	84.13	-148.01	-71.64	0.00	0.00	0.00
9,800.00	10.00	299.61	9,786.13	92.71	-163.11	-78.95	0.00	0.00	0.00
9,900.00	10.00	299.61	9,884.61	101.30	-178.22	-86.26	0.00	0.00	0.00
10,000.00	10.00	299.61	9,983.09	109.88	-193.32	-93.57	0.00	0.00	0.00
10,021.97	10.00	299.61	10,004.72	111.77	-196.64	-95.18	0.00	0.00	0.00
10,100.00	9.22	299.61	10,081.66	118.21	-207.96	-100.66	1.00	-1.00	0.00
10,200.00	8.22	299.61	10,180.50	125.70	-221.15	-107.04	1.00	-1.00	0.00
10,300.00	7.22	299.61	10,279.59	132.34	-232.83	-112.70	1.00	-1.00	0.00
10,400.00	6.22	299.61	10,378.90	138.13	-243.01	-117.62	1.00	-1.00	0.00
10,500.00	5.22	299.61	10,478.40	143.06	-251.68	-121.82	1.00	-1.00	0.00
10,600.00	4.22	299.61	10,578.06	147.13	-258.84	-125.29	1.00	-1.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,700.00	3.22	299.61	10,677.85	150.33	-264.48	-128.02	1.00	-1.00	0.00
10,800.00	2.22	299.61	10,777.74	152.68	-268.61	-130.02	1.00	-1.00	0.00
10,900.00	1.22	299.61	10,877.69	154.17	-271.23	-131.28	1.00	-1.00	0.00
11,000.00	0.22	299.61	10,977.68	154.79	-272.32	-131.81	1.00	-1.00	0.00
11,022.32	0.00	0.00	11,000.00	154.81	-272.36	-131.83	1.00	-1.00	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
PBHL (Depth CC 6_7	0.00	0.00	10,528.00	-10,434.03	-217.06	445,745.97	634,766.40	32.225071	-104.031199
- plan misses target center by 10551.71ft at 9635.13ft MD (9623.77 TVD, 78.56 N, -138.22 E)									
- Point									
FTP (Depth CC 6_7	0.00	0.00	10,538.00	104.81	-272.10	456,283.94	634,711.36	32.254039	-104.031281
- plan misses target center by 43.79ft at 10559.30ft MD (10537.48 TVD, 145.57 N, -256.11 E)									
- Point									
Pilot BHL (Depth CC	0.00	0.00	11,000.00	154.81	-272.36	456,333.94	634,711.10	32.254176	-104.031281
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
109.00	109.00	RUSTLER			
522.00	522.00	SALADO			
1,270.00	1,270.00	CASTILE			
2,736.00	2,736.00	DELAWARE			
2,785.00	2,785.00	BELL CANYON			
3,636.00	3,636.00	CHERRY CANYON			
4,875.00	4,875.00	BRUSHY CANYON			
6,457.00	6,457.00	BONE SPRING			
7,434.00	7,434.00	BONE SPRING 1ST			
8,191.00	8,191.00	BONE SPRING 2ND			
9,316.52	9,310.00	BONE SPRING 3RD			
9,685.13	9,673.00	WOLFCAMP			
9,809.01	9,795.00	WOLFCAMP A			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
8,221.00	8,221.00	0.00	0.00	Build 1°/100'
9,221.35	9,216.28	43.04	-75.73	Hold 10° Tangent
10,021.97	10,004.72	111.77	-196.63	Drop 1°/100'
11,022.32	11,000.00	154.81	-272.36	TD at 11022.32' MD

OXY

PRD NM DIRECTIONAL PLANS (NAD 1983)
Depth CC 6_7
Depth CC 6_7 Federal Com 41H

Wellbore #2

Plan: Permitting Plan

Standard Planning Report

27 July, 2022

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Permitting Plan		

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site Depth CC 6_7

Site Position:		**Northing:**	456,207.91 usft	**Latitude:**	32.253823
From:	Map	**Easting:**	635,546.67 usft	**Longitude:**	-104.028579
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.16 °

Well Depth CC 6_7 Federal Com 41H

Well Position	**+N/-S**	-28.77 ft	**Northing:**	456,179.14 usft	**Latitude:**	32.253749
	+E/-W	-563.28 ft	**Easting:**	634,983.44 usft	**Longitude:**	-104.030402
Position Uncertainty		2.00 ft	**Wellhead Elevation:**	0.00 ft	**Ground Level:**	2,967.00 ft

Wellbore Wellbore #2

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	4/26/2021	6.85	59.93	47,719.30000000
	HDGM_FILE	7/25/2022	6.73	59.90	47,595.50000000

Design Permitting Plan

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	9,937.59

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	181.19

Plan Survey Tool Program **Date** 7/27/2022

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	9,937.59	20,854.78	Permitting Plan (Wellbore #2)	B001Mb_MWD+HRGM	
				OWSG 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
9,937.59	10.00	299.61	9,921.63	104.53	-183.89	0.00	0.00	0.00	0.00	
10,432.09	45.00	187.50	10,368.00	-57.79	-248.09	10.00	7.08	-22.67	-120.44	
10,887.93	90.06	179.70	10,538.00	-467.33	-269.05	10.00	9.88	-1.71	-10.95	
20,854.78	90.06	179.70	10,528.00	-10,434.03	-217.06	0.00	0.00	0.00	0.00	PBHL (Depth CC

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	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
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,500.00	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	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	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	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	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	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	7,700.00	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	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.79	299.61	8,300.00	0.27	-0.47	-0.26	0.79	0.79	0.00
8,400.00	1.79	299.61	8,399.97	1.38	-2.43	-1.33	1.00	1.00	0.00
8,500.00	2.79	299.61	8,499.89	3.36	-5.90	-3.23	1.00	1.00	0.00
8,600.00	3.79	299.61	8,599.72	6.19	-10.89	-5.96	1.00	1.00	0.00
8,700.00	4.79	299.61	8,699.44	9.89	-17.40	-9.52	1.00	1.00	0.00
8,800.00	5.79	299.61	8,799.02	14.44	-25.41	-13.91	1.00	1.00	0.00
8,900.00	6.79	299.61	8,898.41	19.86	-34.94	-19.13	1.00	1.00	0.00
9,000.00	7.79	299.61	8,997.60	26.13	-45.97	-25.17	1.00	1.00	0.00
9,100.00	8.79	299.61	9,096.56	33.25	-58.50	-32.03	1.00	1.00	0.00
9,200.00	9.79	299.61	9,195.24	41.23	-72.54	-39.71	1.00	1.00	0.00
9,300.00	10.00	299.61	9,293.73	49.80	-87.61	-47.96	0.21	0.21	0.00
9,400.00	10.00	299.61	9,392.21	58.38	-102.71	-56.23	0.00	0.00	0.00
9,500.00	10.00	299.61	9,490.69	66.96	-117.81	-64.50	0.00	0.00	0.00
9,600.00	10.00	299.61	9,589.17	75.55	-132.91	-72.77	0.00	0.00	0.00
9,700.00	10.00	299.61	9,687.65	84.13	-148.01	-81.03	0.00	0.00	0.00
9,800.00	10.00	299.61	9,786.13	92.71	-163.11	-89.30	0.00	0.00	0.00
9,900.00	10.00	299.61	9,884.61	101.30	-178.22	-97.57	0.00	0.00	0.00
9,937.59	10.00	299.61	9,921.63	104.53	-183.89	-100.68	0.00	0.00	0.00
10,000.00	8.69	261.26	9,983.27	106.49	-193.27	-102.45	10.00	-2.11	-61.46
10,100.00	14.04	216.06	10,081.45	95.51	-207.91	-91.16	10.00	5.36	-45.20
10,200.00	22.75	199.97	10,176.30	67.45	-221.69	-62.83	10.00	8.70	-16.09
10,300.00	32.19	192.71	10,264.96	23.19	-234.19	-18.31	10.00	9.44	-7.25
10,400.00	41.87	188.52	10,344.71	-35.95	-245.02	41.03	10.00	9.68	-4.19
10,432.09	45.00	187.50	10,368.00	-57.79	-248.09	62.94	10.00	9.76	-3.17
10,500.00	51.68	185.86	10,413.12	-108.16	-253.95	113.41	10.00	9.84	-2.42
10,600.00	61.55	183.92	10,468.09	-191.25	-260.98	196.63	10.00	9.87	-1.94
10,700.00	71.44	182.32	10,507.92	-282.70	-265.91	288.17	10.00	9.89	-1.60

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,800.00	81.34	180.89	10,531.42	-379.73	-268.60	385.24	10.00	9.90	-1.43
10,887.93	90.06	179.70	10,538.00	-467.33	-269.05	472.82	10.00	9.91	-1.35
10,900.00	90.06	179.70	10,537.99	-479.40	-268.99	484.89	0.00	0.00	0.00
11,000.00	90.06	179.70	10,537.89	-579.40	-268.47	584.85	0.00	0.00	0.00
11,100.00	90.06	179.70	10,537.79	-679.39	-267.94	684.82	0.00	0.00	0.00
11,200.00	90.06	179.70	10,537.69	-779.39	-267.42	784.79	0.00	0.00	0.00
11,300.00	90.06	179.70	10,537.59	-879.39	-266.90	884.75	0.00	0.00	0.00
11,400.00	90.06	179.70	10,537.49	-979.39	-266.38	984.72	0.00	0.00	0.00
11,500.00	90.06	179.70	10,537.39	-1,079.39	-265.86	1,084.68	0.00	0.00	0.00
11,600.00	90.06	179.70	10,537.29	-1,179.39	-265.34	1,184.65	0.00	0.00	0.00
11,700.00	90.06	179.70	10,537.19	-1,279.39	-264.81	1,284.62	0.00	0.00	0.00
11,800.00	90.06	179.70	10,537.09	-1,379.38	-264.29	1,384.58	0.00	0.00	0.00
11,900.00	90.06	179.70	10,536.99	-1,479.38	-263.77	1,484.55	0.00	0.00	0.00
12,000.00	90.06	179.70	10,536.89	-1,579.38	-263.25	1,584.52	0.00	0.00	0.00
12,100.00	90.06	179.70	10,536.79	-1,679.38	-262.73	1,684.48	0.00	0.00	0.00
12,200.00	90.06	179.70	10,536.69	-1,779.38	-262.21	1,784.45	0.00	0.00	0.00
12,300.00	90.06	179.70	10,536.59	-1,879.38	-261.68	1,884.41	0.00	0.00	0.00
12,400.00	90.06	179.70	10,536.49	-1,979.38	-261.16	1,984.38	0.00	0.00	0.00
12,500.00	90.06	179.70	10,536.39	-2,079.37	-260.64	2,084.35	0.00	0.00	0.00
12,600.00	90.06	179.70	10,536.29	-2,179.37	-260.12	2,184.31	0.00	0.00	0.00
12,700.00	90.06	179.70	10,536.19	-2,279.37	-259.60	2,284.28	0.00	0.00	0.00
12,800.00	90.06	179.70	10,536.09	-2,379.37	-259.08	2,384.24	0.00	0.00	0.00
12,900.00	90.06	179.70	10,535.99	-2,479.37	-258.55	2,484.21	0.00	0.00	0.00
13,000.00	90.06	179.70	10,535.88	-2,579.37	-258.03	2,584.18	0.00	0.00	0.00
13,100.00	90.06	179.70	10,535.78	-2,679.37	-257.51	2,684.14	0.00	0.00	0.00
13,200.00	90.06	179.70	10,535.68	-2,779.36	-256.99	2,784.11	0.00	0.00	0.00
13,300.00	90.06	179.70	10,535.58	-2,879.36	-256.47	2,884.07	0.00	0.00	0.00
13,400.00	90.06	179.70	10,535.48	-2,979.36	-255.95	2,984.04	0.00	0.00	0.00
13,500.00	90.06	179.70	10,535.38	-3,079.36	-255.42	3,084.01	0.00	0.00	0.00
13,600.00	90.06	179.70	10,535.28	-3,179.36	-254.90	3,183.97	0.00	0.00	0.00
13,700.00	90.06	179.70	10,535.18	-3,279.36	-254.38	3,283.94	0.00	0.00	0.00
13,800.00	90.06	179.70	10,535.08	-3,379.36	-253.86	3,383.91	0.00	0.00	0.00
13,900.00	90.06	179.70	10,534.98	-3,479.35	-253.34	3,483.87	0.00	0.00	0.00
14,000.00	90.06	179.70	10,534.88	-3,579.35	-252.82	3,583.84	0.00	0.00	0.00
14,100.00	90.06	179.70	10,534.78	-3,679.35	-252.29	3,683.80	0.00	0.00	0.00
14,200.00	90.06	179.70	10,534.68	-3,779.35	-251.77	3,783.77	0.00	0.00	0.00
14,300.00	90.06	179.70	10,534.58	-3,879.35	-251.25	3,883.74	0.00	0.00	0.00
14,400.00	90.06	179.70	10,534.48	-3,979.35	-250.73	3,983.70	0.00	0.00	0.00
14,500.00	90.06	179.70	10,534.38	-4,079.35	-250.21	4,083.67	0.00	0.00	0.00
14,600.00	90.06	179.70	10,534.28	-4,179.35	-249.69	4,183.63	0.00	0.00	0.00
14,700.00	90.06	179.70	10,534.18	-4,279.34	-249.16	4,283.60	0.00	0.00	0.00
14,800.00	90.06	179.70	10,534.08	-4,379.34	-248.64	4,383.57	0.00	0.00	0.00
14,900.00	90.06	179.70	10,533.98	-4,479.34	-248.12	4,483.53	0.00	0.00	0.00
15,000.00	90.06	179.70	10,533.88	-4,579.34	-247.60	4,583.50	0.00	0.00	0.00
15,100.00	90.06	179.70	10,533.78	-4,679.34	-247.08	4,683.46	0.00	0.00	0.00
15,200.00	90.06	179.70	10,533.68	-4,779.34	-246.56	4,783.43	0.00	0.00	0.00
15,300.00	90.06	179.70	10,533.58	-4,879.34	-246.03	4,883.40	0.00	0.00	0.00
15,400.00	90.06	179.70	10,533.48	-4,979.33	-245.51	4,983.36	0.00	0.00	0.00
15,500.00	90.06	179.70	10,533.38	-5,079.33	-244.99	5,083.33	0.00	0.00	0.00
15,600.00	90.06	179.70	10,533.27	-5,179.33	-244.47	5,183.30	0.00	0.00	0.00
15,700.00	90.06	179.70	10,533.17	-5,279.33	-243.95	5,283.26	0.00	0.00	0.00
15,800.00	90.06	179.70	10,533.07	-5,379.33	-243.43	5,383.23	0.00	0.00	0.00
15,900.00	90.06	179.70	10,532.97	-5,479.33	-242.91	5,483.19	0.00	0.00	0.00
16,000.00	90.06	179.70	10,532.87	-5,579.33	-242.38	5,583.16	0.00	0.00	0.00
16,100.00	90.06	179.70	10,532.77	-5,679.32	-241.86	5,683.13	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,200.00	90.06	179.70	10,532.67	-5,779.32	-241.34	5,783.09	0.00	0.00	0.00
16,300.00	90.06	179.70	10,532.57	-5,879.32	-240.82	5,883.06	0.00	0.00	0.00
16,400.00	90.06	179.70	10,532.47	-5,979.32	-240.30	5,983.02	0.00	0.00	0.00
16,500.00	90.06	179.70	10,532.37	-6,079.32	-239.78	6,082.99	0.00	0.00	0.00
16,600.00	90.06	179.70	10,532.27	-6,179.32	-239.25	6,182.96	0.00	0.00	0.00
16,700.00	90.06	179.70	10,532.17	-6,279.32	-238.73	6,282.92	0.00	0.00	0.00
16,800.00	90.06	179.70	10,532.07	-6,379.31	-238.21	6,382.89	0.00	0.00	0.00
16,900.00	90.06	179.70	10,531.97	-6,479.31	-237.69	6,482.85	0.00	0.00	0.00
17,000.00	90.06	179.70	10,531.87	-6,579.31	-237.17	6,582.82	0.00	0.00	0.00
17,100.00	90.06	179.70	10,531.77	-6,679.31	-236.65	6,682.79	0.00	0.00	0.00
17,200.00	90.06	179.70	10,531.67	-6,779.31	-236.12	6,782.75	0.00	0.00	0.00
17,300.00	90.06	179.70	10,531.57	-6,879.31	-235.60	6,882.72	0.00	0.00	0.00
17,400.00	90.06	179.70	10,531.47	-6,979.31	-235.08	6,982.69	0.00	0.00	0.00
17,500.00	90.06	179.70	10,531.37	-7,079.30	-234.56	7,082.65	0.00	0.00	0.00
17,600.00	90.06	179.70	10,531.27	-7,179.30	-234.04	7,182.62	0.00	0.00	0.00
17,700.00	90.06	179.70	10,531.17	-7,279.30	-233.52	7,282.58	0.00	0.00	0.00
17,800.00	90.06	179.70	10,531.07	-7,379.30	-232.99	7,382.55	0.00	0.00	0.00
17,900.00	90.06	179.70	10,530.97	-7,479.30	-232.47	7,482.52	0.00	0.00	0.00
18,000.00	90.06	179.70	10,530.87	-7,579.30	-231.95	7,582.48	0.00	0.00	0.00
18,100.00	90.06	179.70	10,530.77	-7,679.30	-231.43	7,682.45	0.00	0.00	0.00
18,200.00	90.06	179.70	10,530.67	-7,779.29	-230.91	7,782.41	0.00	0.00	0.00
18,300.00	90.06	179.70	10,530.56	-7,879.29	-230.39	7,882.38	0.00	0.00	0.00
18,400.00	90.06	179.70	10,530.46	-7,979.29	-229.86	7,982.35	0.00	0.00	0.00
18,500.00	90.06	179.70	10,530.36	-8,079.29	-229.34	8,082.31	0.00	0.00	0.00
18,600.00	90.06	179.70	10,530.26	-8,179.29	-228.82	8,182.28	0.00	0.00	0.00
18,700.00	90.06	179.70	10,530.16	-8,279.29	-228.30	8,282.24	0.00	0.00	0.00
18,800.00	90.06	179.70	10,530.06	-8,379.29	-227.78	8,382.21	0.00	0.00	0.00
18,900.00	90.06	179.70	10,529.96	-8,479.28	-227.26	8,482.18	0.00	0.00	0.00
19,000.00	90.06	179.70	10,529.86	-8,579.28	-226.73	8,582.14	0.00	0.00	0.00
19,100.00	90.06	179.70	10,529.76	-8,679.28	-226.21	8,682.11	0.00	0.00	0.00
19,200.00	90.06	179.70	10,529.66	-8,779.28	-225.69	8,782.08	0.00	0.00	0.00
19,300.00	90.06	179.70	10,529.56	-8,879.28	-225.17	8,882.04	0.00	0.00	0.00
19,400.00	90.06	179.70	10,529.46	-8,979.28	-224.65	8,982.01	0.00	0.00	0.00
19,500.00	90.06	179.70	10,529.36	-9,079.28	-224.13	9,081.97	0.00	0.00	0.00
19,600.00	90.06	179.70	10,529.26	-9,179.27	-223.60	9,181.94	0.00	0.00	0.00
19,700.00	90.06	179.70	10,529.16	-9,279.27	-223.08	9,281.91	0.00	0.00	0.00
19,800.00	90.06	179.70	10,529.06	-9,379.27	-222.56	9,381.87	0.00	0.00	0.00
19,900.00	90.06	179.70	10,528.96	-9,479.27	-222.04	9,481.84	0.00	0.00	0.00
20,000.00	90.06	179.70	10,528.86	-9,579.27	-221.52	9,581.80	0.00	0.00	0.00
20,100.00	90.06	179.70	10,528.76	-9,679.27	-221.00	9,681.77	0.00	0.00	0.00
20,200.00	90.06	179.70	10,528.66	-9,779.27	-220.47	9,781.74	0.00	0.00	0.00
20,300.00	90.06	179.70	10,528.56	-9,879.26	-219.95	9,881.70	0.00	0.00	0.00
20,400.00	90.06	179.70	10,528.46	-9,979.26	-219.43	9,981.67	0.00	0.00	0.00
20,500.00	90.06	179.70	10,528.36	-10,079.26	-218.91	10,081.63	0.00	0.00	0.00
20,600.00	90.06	179.70	10,528.26	-10,179.26	-218.39	10,181.60	0.00	0.00	0.00
20,700.00	90.06	179.70	10,528.16	-10,279.26	-217.87	10,281.57	0.00	0.00	0.00
20,800.00	90.06	179.70	10,528.06	-10,379.26	-217.34	10,381.53	0.00	0.00	0.00
20,854.78	90.06	179.70	10,528.00	-10,434.03	-217.06	10,436.29	0.00	0.00	0.00

OXY
Planning Report

Database:	HOPSPP	**Local Co-ordinate Reference:**	Well Depth CC 6_7 Federal Com 41H
Company:	ENGINEERING DESIGNS	**TVD Reference:**	RKB=25' @ 2992.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	**MD Reference:**	RKB=25' @ 2992.00ft
Site:	Depth CC 6_7	**North Reference:**	Grid
Well:	Depth CC 6_7 Federal Com 41H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Permitting Plan		

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
PBHL (Depth CC 6_7 - plan hits target center - Point	0.00	0.00	10,528.00	-10,434.03	-217.06	445,745.97	634,766.40	32.225071	-104.031199
FTP (Depth CC 6_7 - plan misses target center by 236.46ft at 10432.09ft MD (10368.00 TVD, -57.79 N, -248.09 E) - Point	0.00	0.00	10,538.00	104.81	-272.10	456,283.94	634,711.36	32.254039	-104.031281

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
109.00	109.00	RUSTLER			
522.00	522.00	SALADO			
1,270.00	1,270.00	CASTILE			
2,736.00	2,736.00	DELAWARE			
2,785.00	2,785.00	BELL CANYON			
3,636.00	3,636.00	CHERRY CANYON			
4,875.00	4,875.00	BRUSHY CANYON			
6,457.00	6,457.00	BONE SPRING			
7,434.00	7,434.00	BONE SPRING 1ST			
8,191.00	8,191.00	BONE SPRING 2ND			
9,316.52	9,310.00	BONE SPRING 3RD			
9,685.13	9,673.00	WOLFCAMP			
9,809.01	9,795.00	WOLFCAMP A			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
9,937.59	9,921.63	104.53	-183.89	Tie In, KOP Build & Turn 10°/100'
10,432.09	10,368.01	-57.79	-248.09	Continue 10°/100'
10,887.93	10,538.00	-467.33	-269.05	Landing Point
20,854.78	10,528.00	-10,434.03	-217.06	TD at 20854.78' MD

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)
Site: Depth CC 6_7
Well: Depth CC 6_7 Federal Com 41H
Wellbore: Wellbore #2
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

WELL DETAILS: Depth CC 6_7 Federal Com 41H

Ground Level: 2967.00

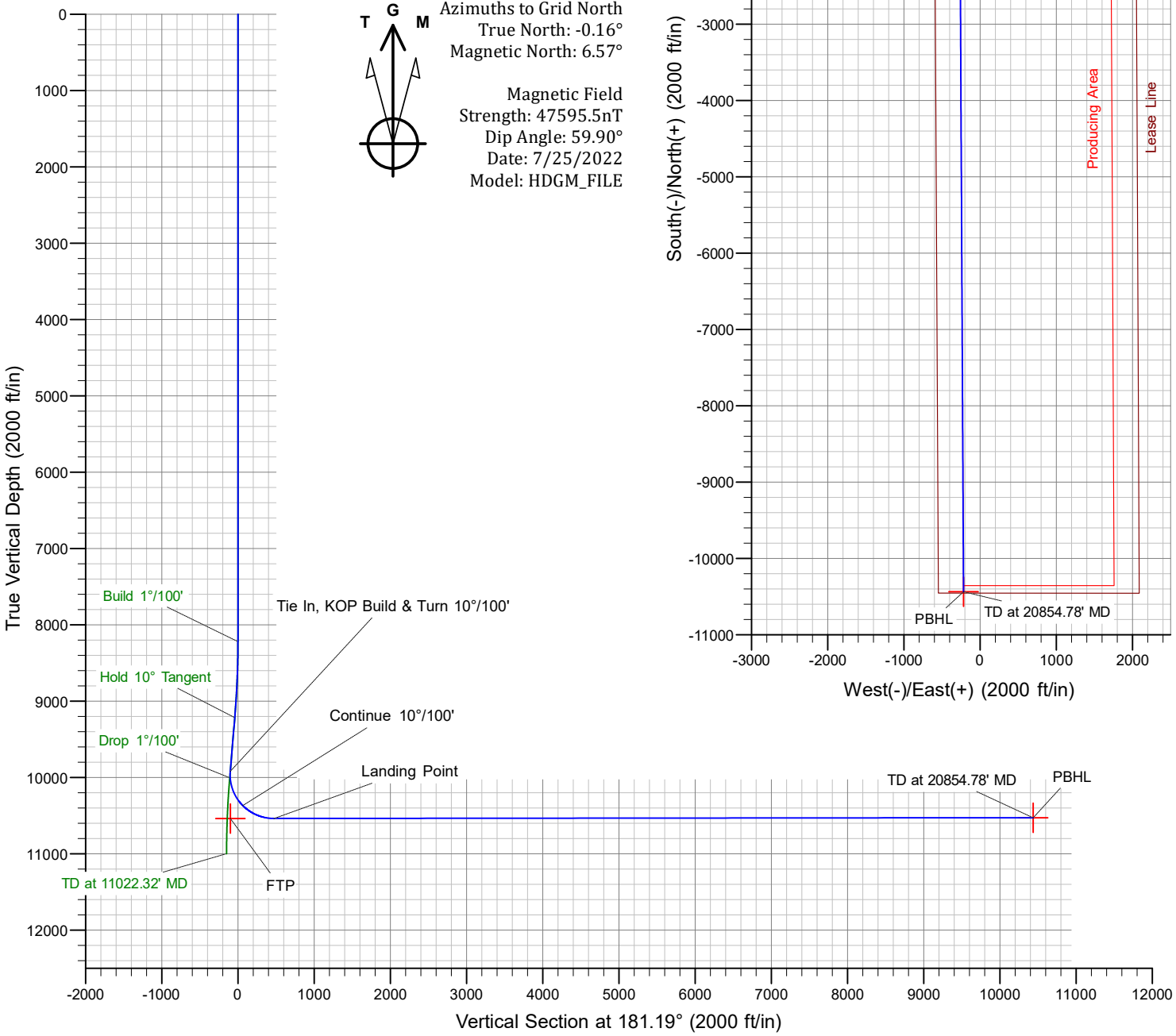
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	456179.14	634983.44	32.253749	-104.030401

PILOT HOLE SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8221.00	0.00	0.00	8221.00	0.00	0.00	0.00	0.00	0.00	Build 1°/100'
9221.35	10.00	299.61	9216.28	43.04	-75.73	1.00	299.61	-36.65	Hold 10° Tangent
10021.97	10.00	299.61	10004.72	111.77	-196.64	0.00	0.00	-95.18	Drop 1°/100'
11022.32	0.00	0.00	11000.00	154.81	-272.36	1.00	180.00	-131.83	TD at 11022.32' MD

ST SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
9937.59	10.00	299.61	9921.63	104.53	-183.89	0.00	0.00	-100.68	Tie In, KOP Build & Turn 10°/100'
10432.09	45.00	187.50	10368.00	-57.79	-248.09	10.00	-120.44	62.94	Continue 10°/100'
10887.93	90.06	179.70	10538.00	-467.33	-269.05	10.00	-10.95	472.82	Landing Point
20854.78	90.06	179.70	10528.00	-10434.03	-217.06	0.00	0.00	10436.29	TD at 20854.78' MD



Azimuths to Grid North
True North: -0.16°
Magnetic North: 6.57°

Magnetic Field
Strength: 47595.5nT
Dip Angle: 59.90°
Date: 7/25/2022
Model: HDGM_FILE

Oxy USA Inc. - Depth CC 6_7 Federal Com 41H

Drill Plan

1. Geologic Formations

TVD of Target (ft):	10531	Pilot Hole Depth (ft):	11016
Total Measured Depth (ft):	20848	Deepest Expected Fresh Water (ft):	102

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	102	102	
Salado	515	515	Salt
Castile	1263	1263	Salt
Delaware	2736	2736	Oil/Gas/Brine
Bell Canyon	2778	2778	Oil/Gas/Brine
Cherry Canyon	3636	3636	Oil/Gas/Brine
Brushy Canyon	4868	4868	Losses
Bone Spring	6450	6450	Oil/Gas
Bone Spring 1st	7427	7427	Oil/Gas
Bone Spring 2nd	8184	8184	Oil/Gas
Bone Spring 3rd	9317	9310	Oil/Gas
Wolfcamp	9685	9673	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

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

2. Casing Program

		MD		TVD					
Section	Hole Size (in)	From (ft)	To (ft)	From (ft)	To (ft)	Csg. OD (in)	Csg Wt. (ppf)	Grade	Conn.
Surface	17.5	0	455	0	455	13.375	54.5	J-55	BTC
Intermediate	12.25	0	9831	0	9815	9.625	40	L-80 HC	BTC
Production	8.5	0	10381	0	10223	7	32	P-110	DQX
Production	8.5	10381	20848	10223	10531	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 production casing with DQX, TORQ DQW, Wedge 425, Wedge 461, and/or Wedge 441 connections to accommodate hole conditions or drilling operations.

All Casing SF Values will meet or exceed those below			
SF Collapse	**SF Burst**	**Body SF Tension**	**Joint SF 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? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Section	Stage	Slurry:	Capacities	ft^3/ft	Excess:	From	To	Sacks	Volume (ft^3)	Placement
Surface	1	Surface - Tail	OH x Csg	0.6946	100%	455	-	475	632	Circulate
Int.	1	Intermediate 1S - Tail	OH x Csg	0.3132	5%	9,831	5,118	939	1550	Circulate
Int.	2	Intermediate 2S - Tail BH	OH x Csg	0.3132	25%	5,118	455	1068	1826	Bradenhead
Int.	2	Intermediate 2S - Tail BH	Csg x Csg	0.3627	0%	455	-	97	165	Bradenhead
Prod.	1	Production - Tail	OH x Csg2	0.2291	20%	20,848	10,381	2085	2877	Circulate
Prod.	1	Production - Tail	OH x Csg1	0.1268	20%	10,381	9,831	61	84	Circulate
Prod.	1	Production - Tail	Csg x Csg	0.1585	0%	9,831	9,331	57	79	Circulate
Pilot	1	Pilot - KO Base Plug	OH	0.3941	10%	11,016	10,374	270	279	Circulate
Pilot	2	Pilot - ST KO Plug	OH	0.3941	10%	10,374	9,831	247	235	Circulate
Pilot	2	Pilot - ST KO Plug	CSG	0.4257	10%	9,831	9,731	49	47	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	C	x			
Intermediate 1S - Tail	13.2	1.65	8.64	11:54	H	x	x	x	x
Intermediate 2S - Tail BH	13.3	1.71	8.86	23:10	C	x			
Production - Tail	13.2	1.38	6.686	3:39	H		x	x	x
Pilot - ST KO Plug	17.5	0.952	3.51		H		x		
Pilot - KO Base Plug	16.4	1.032	4.13		H				

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.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be 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	Type	✔	Tested to:	Deepest TVD Depth (ft) per Section:
12.25" Hole	13-5/8"	5M	Annular	✔	70% of working pressure	9815
		5M	Blind Ram	✔	250 psi / 5000 psi	
			Pipe Ram			
			Double Ram	✔		
			Other*			
8.5" Hole (Pilot)	13-5/8"	5M	Annular	✔	100% of working pressure	10993
		10M	Blind Ram	✔	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✔		
			Other*			
8.5" Hole (Lateral)	13-5/8"	5M	Annular	✔	100% of working pressure	#N/A
		10M	Blind Ram	✔	250 psi / 10000 psi	
			Pipe Ram			
			Double Ram	✔		
			Other*			

*Specify if additional ram is utilized

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see attached Well Control Plan.

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

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

	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.

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.

If the kill line is broken prior to skid, two tests will be performed.
1) Wellhead flange, co-flex hose, kill line connections and upper pipe rams
2) Wellhead flange, HCR valve, check valve, upper pipe rams

If the kill line is not broken prior to skid, only one test will be performed.
1)Wellhead flange, co-flex hose, check valve, upper pipe rams

5. Mud Program

Section	Depth - MD		Depth - TVD		Type	Weight (ppg)	Viscosity	Water Loss
	From (ft)	To (ft)	From (ft)	To (ft)				
Surface	0	455	0	455	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	455	9831	455	9815	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Pilot	9831	11016	9815	10993	Water-Based or Oil-Based Mud	9.5 - 13 (Pilot)	38-50	N/C
Production	9931	20848	9915	10531	Water-Based or Oil-Based Mud	9.5 - 13	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 loss or gain of fluid?	PVT/MD Totco/Visual Monitoring

6. Logging and Testing Procedures

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

Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	Bone Spring – TD
Yes	Triple Combo (Spectral Gamma, Dipole Sonic, CMR)	Intermediate and Pilot

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7432 psi (Pilot), 7119 psi (Lateral)
Abnormal Temperature	No
BH Temperature at deepest TVD	168°F (Pilot), 165°F (Lateral)

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 Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. We plan to drill the 2 well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Total Estimated Cuttings Volume: 1560 bbls

Attachments
_x__ Directional Plan
_x__ H2S Contingency Plan
_x__ Flex III Attachments
_x__ Spudder Rig Attachment
_x__ Premium Connection Specs

9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Garrett Granier	Drilling Engineer	713-513-6633	832-265-0581
Filip Krneta	Drilling Engineer Supervisor	713-350-4751	832-244-4980
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932

PERFORMANCE DATA

TMK UP DQX **5.500 in** **20.00 lbs/ft** **P-110**
Technical Data Sheet

Tubular Parameters

Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P-110		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,600	psi
Nominal ID	4.778	in	Collapse Pressure	11,100	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in²			

Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.122	in
Critical Section Area	5.828	in²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi

Make-Up Torques

Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs

Printed on: July-29-2014

NOTE:
The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-258-2000.

TMK IPSCO

PERFORMANCE DATA

TMK UP TORQ™ DQW **5.500 in** **20.00 lbs/ft** **P110 CY**

Technical Data Sheet

Tubular Parameters

Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P110 CY		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640	psi
Nominal ID	4.778	in	Collapse Pressure	11,110	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in²			

Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.324	in
Critical Section Area	5.828	in²
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi
Uniaxial Bending	92	°/ 100 ft

Make-Up Torques

Min. Make-Up Torque	14,000	ft-lbs
Opt. Make-Up Torque	16,000	ft-lbs
Max. Make-Up Torque	18,000	ft-lbs
Operating Torque	36,800	ft-lbs
Yield Torque	46,000	ft-lbs

Printed on: March-05-2019

NOTE:
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TMK IPSCO

Tenaris

TenarisHydril Wedge 425®

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.361 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.361 in.	**Body Yield Strength**	641 x1000 lb
Nominal Weight	20 lb/ft	**Plain End Weight**	19.83 lb/ft	**Min. Internal Yield Pressure**	12,640 psi
Drift	4.653 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.778 in.			**Collapse Pressure**	11,100 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.777 in.	**Tension Efficiency**	90 %	**Minimum**	15,700 ft-lb
Connection ID	4.734 in.	**Joint Yield Strength**	577 x1000 lb	**Optimum**	19,600 ft-lb
Make-up Loss	5.823 in.	**Internal Pressure Capacity**	12,640 psi	**Maximum**	21,600 ft-lb
Threads per inch	3.77	**Compression Efficiency**	90 %		
Connection OD Option	Regular	**Compression Strength**	577 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	82 °/100 ft	**Operating Torque**	29,000 ft-lb
		External Pressure Capacity	11,100 psi	**Yield Torque**	36,000 ft-lb

Notes

This connection is fully interchangeable with:
TORQ® SFW™ - 5.5 in. - 0.361 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the lastest performance data, always visit our website: www.tenaris.com

Tenaris

TenarisHydril Wedge 441®

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.361 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.361 in.	**Body Yield Strength**	641 x1000 lb
Nominal Weight	20 lb/ft	**Plain End Weight**	19.83 lb/ft	**Min. Internal Yield Pressure**	12,640 psi
Drift	4.653 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.778 in.			**Collapse Pressure**	11,100 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.852 in.	**Tension Efficiency**	81.50 %	**Minimum**	15,000 ft-lb
Coupling Length	8.714 in.	**Joint Yield Strength**	522 x1000 lb	**Optimum**	16,000 ft-lb
Connection ID	4.778 in.	**Internal Pressure Capacity**	12,640 psi	**Maximum**	19,200 ft-lb
Make-up Loss	3.780 in.	**Compression Efficiency**	81.50 %		
Threads per inch	3.40	**Compression Strength**	522 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	71 °/100 ft	**Operating Torque**	32,000 ft-lb
		External Pressure Capacity	11,100 psi	**Yield Torque**	38,000 ft-lb
				Buck-On	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.304 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the lastest performance data, always visit our website: www.tenaris.com

Tenaris

TenarisHydril Wedge 461®

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.361 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.361 in.	**Body Yield Strength**	641 x1000 lb
Nominal Weight	20 lb/ft	**Plain End Weight**	19.83 lb/ft	**Min. Internal Yield Pressure**	12,640 psi
Drift	4.653 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.778 in.			**Collapse Pressure**	11,100 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.300 in.	**Tension Efficiency**	100 %	**Minimum**	17,000 ft-lb
Coupling Length	7.714 in.	**Joint Yield Strength**	641 x1000 lb	**Optimum**	18,000 ft-lb
Connection ID	4.778 in.	**Internal Pressure Capacity**	12,640 psi	**Maximum**	21,600 ft-lb
Make-up Loss	3.775 in.	**Compression Efficiency**	100 %		
Threads per inch	3.40	**Compression Strength**	641 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	92 °/100 ft	**Operating Torque**	39,000 ft-lb
		External Pressure Capacity	11,100 psi	**Yield Torque**	46,000 ft-lb
		Coupling Face Load	290,000 lb	**Buck-On**	
				Minimum	21,600 ft-lb
				Maximum	23,100 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 461® - 5.5 in. - 0.304 / 0.415 / 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
In October 2019, TenarisHydril Wedge XP® 2.0 was renamed TenarisHydril Wedge 461™. Product dimensions and properties remain identical and both connections are fully interchangeable

For the lastest performance data, always visit our website: www.tenaris.com

Tenaris

TenarisHydril Wedge 461®

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.000 in.	**Wall Thickness**	0.453 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.000 in.	**Wall Thickness**	0.453 in.	**Body Yield Strength**	1025 x1000 lb
Nominal Weight	32 lb/ft	**Plain End Weight**	31.70 lb/ft	**Min. Internal Yield Pressure**	12,460 psi
Drift	5.969 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	6.094 in.			**Collapse Pressure**	10,780 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.750 in.	**Tension Efficiency**	100 %	**Minimum**	20,000 ft-lb
Coupling Length	8.914 in.	**Joint Yield Strength**	1025 x1000 lb	**Optimum**	21,000 ft-lb
Connection ID	6.094 in.	**Internal Pressure Capacity**	12,460 psi	**Maximum**	25,200 ft-lb
Make-up Loss	4.375 in.	**Compression Efficiency**	100 %		
Threads per inch	3.40	**Compression Strength**	1025 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	72 °/100 ft	**Operating Torque**	61,000 ft-lb
		External Pressure Capacity	10,780 psi	**Yield Torque**	72,000 ft-lb
		Coupling Face Load	269,000 lb	**Buck-On**	
				Minimum	25,200 ft-lb
				Maximum	26,700 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 461® - 7 in. - 0.317 / 0.362 / 0.408 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
In October 2019, TenarisHydril Wedge XP® 2.0 was renamed TenarisHydril Wedge 461™. Product dimensions and properties remain identical and both connections are fully interchangeable

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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
District IV
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 143866

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 143866
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	9/19/2022