Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM114998

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
SIOUX 25-36 STATE FED COM
[326483]
15H

2. Name of Operator
CAZA OPERATING LLC [249099]

9. API Well No.
30-025-51570

3a. Address
200 N. Loraine Street, Suite 1550, Midland , TX 79701

3b. Phone No. *(include area code)*
(432) 682-7424

10. Field and Pool, or Exploratory [97088]
WC-025 G-08 S263412K/WC-025 G-08 S

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NENW / 260 FNL / 1740 FWL / LAT 32.1079026 / LONG -103.3241615
At proposed prod. zone SESE / 20 FSL / 790 FWL / LAT 32.0796272 / LONG -103.3272357

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 25/T25S/R35E/NMP

14. Distance in miles and direction from nearest town or post office*
7 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
260 feet

16. No of acres in lease

17. Spacing Unit dedicated to this well
320.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
60 feet

19. Proposed Depth
10058 feet / 20353 feet

20. BLM/BIA Bond No. in file
FED: NMB000471

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3082 feet

22. Approximate date work will start*
07/31/2021

23. Estimated duration
35 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	STEVE MORRIS / Ph: (432) 682-7424	01/20/2021

Title
Engineer

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	12/02/2021

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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

NGMP Rec 06/01/2023

KZ
06/06/2023

SL

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 12/02/2021

INSTRUCTIONS

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

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

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

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

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Additional Operator Remarks

Location of Well

0. SHL: NENW / 260 FNL / 1740 FWL / TWSP: 25S / RANGE: 35E / SECTION: 25 / LAT: 32.1079026 / LONG: -103.3241615 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 0 FNL / 790 FWL / TWSP: 25S / RANGE: 35E / SECTION: 36 / LAT: 32.094114 / LONG: -103.327232 (TVD: 10027 feet, MD: 15082 feet)

PPP: NWNW / 100 FNL / 790 FWL / TWSP: 25S / RANGE: 35E / SECTION: 25 / LAT: 32.1083382 / LONG: -103.3272293 (TVD: 10000 feet, MD: 10396 feet)

BHL: SESE / 20 FSL / 790 FWL / TWSP: 25S / RANGE: 35E / SECTION: 36 / LAT: 32.0796272 / LONG: -103.3272357 (TVD: 10058 feet, MD: 20353 feet)

BLM Point of Contact

Name: Priscilla Perez

Title: Legal Instruments Examiner

Phone: (575) 234-5934

Email: pperez@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Caza Operating LLC
LEASE NO.:	NMNM114998
LOCATION:	T25S R35E S25
COUNTY:	Lea County, NM

Wells:

Sioux 25-36 State Fed Com 15H
Surface Hole Location: 260' FNL & 1740' FWL, Section 25, T. 25 S., R. 35 E.
Bottom Hole Location: 20' FSL & 790' FWL, Section 36, T. 25 S, R 35 E.

Sioux 25-36 State Fed Com 17H
Surface Hole Location: 260' FNL & 1780' FWL, Section 25, T. 25 S., R. 35 E.
Bottom Hole Location: 20' FSL & 2110' FWL, Section 36, T. 25 S, R 35 E.

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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.

Approval Date: 12/02/2021

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)

Watershed:
The entire well pad(s) 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 with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. 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 water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. 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.

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves 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.

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Timing Limitation Exceptions:
The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

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.

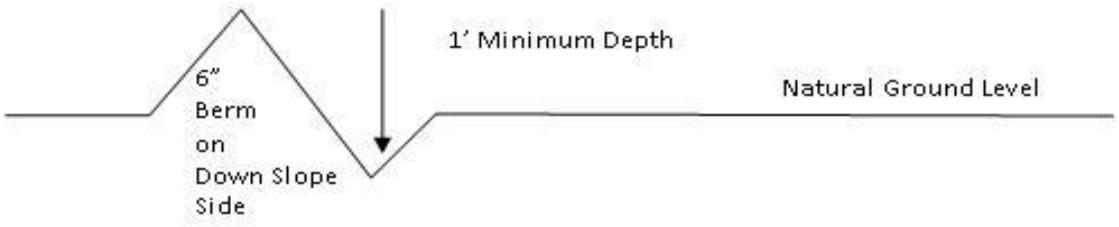
Ditching
Ditching shall be required on both sides of the road.

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.

Approval Date: 12/02/2021

Construction Steps

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

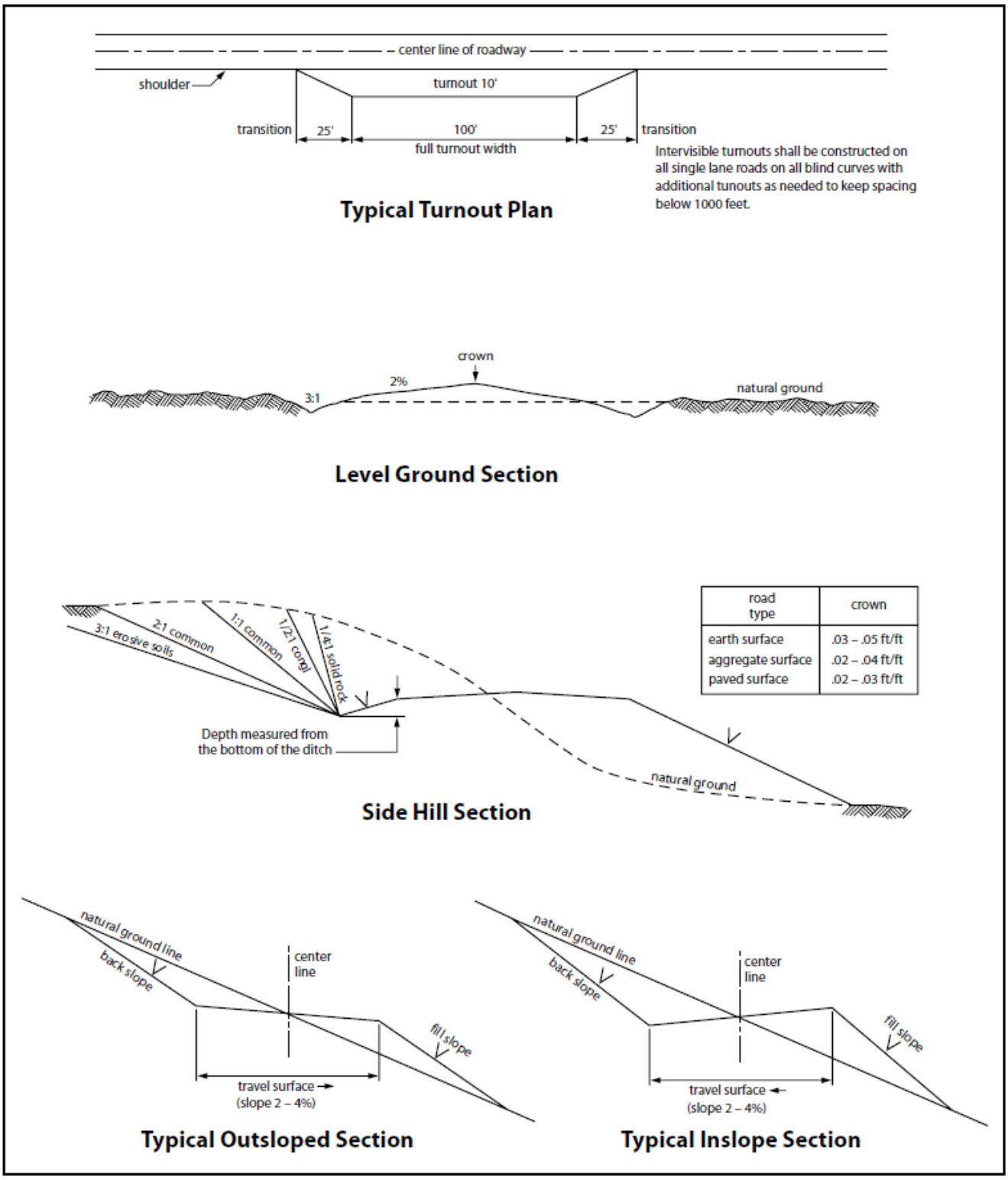


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Approval Date: 12/02/2021

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

- 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.

C. ELECTRIC LINES

- 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.

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).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 2, for Sandy Sites

The 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 will 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 will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will 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
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

Approval Date: 12/02/2021

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CAZA OPERATING LLC
WELL NAME & NO.:	Sioux 25-36 State Fed Com 15H
LOCATION:	SECTION 25, T25S, R35E, NMPM
COUNTY:	LEA

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. HYDROGEN SULFIDE

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

B. CASING

1. The **20** inch conductor casing shall be set at approximately 120 feet and cemented to the surface.

2. The **13-3/8** inch surface casing shall be set at approximately 1100 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

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

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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.

3. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

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

- Cement should tie-back at least **50 feet** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.

C. PRESSURE CONTROL

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

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

casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

(575) 361-2822

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 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.

Approval Date: 12/02/2021

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.

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-51570	97088	WC-025 G-08 S253534O; BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
317657	SIOUX 25-36 STATE FED COM	15H

[7] OGRID No.	[8] Operator Name	[9] Elevation
249099	CAZA OPERATING LLC	3082'

[10] Surface Location

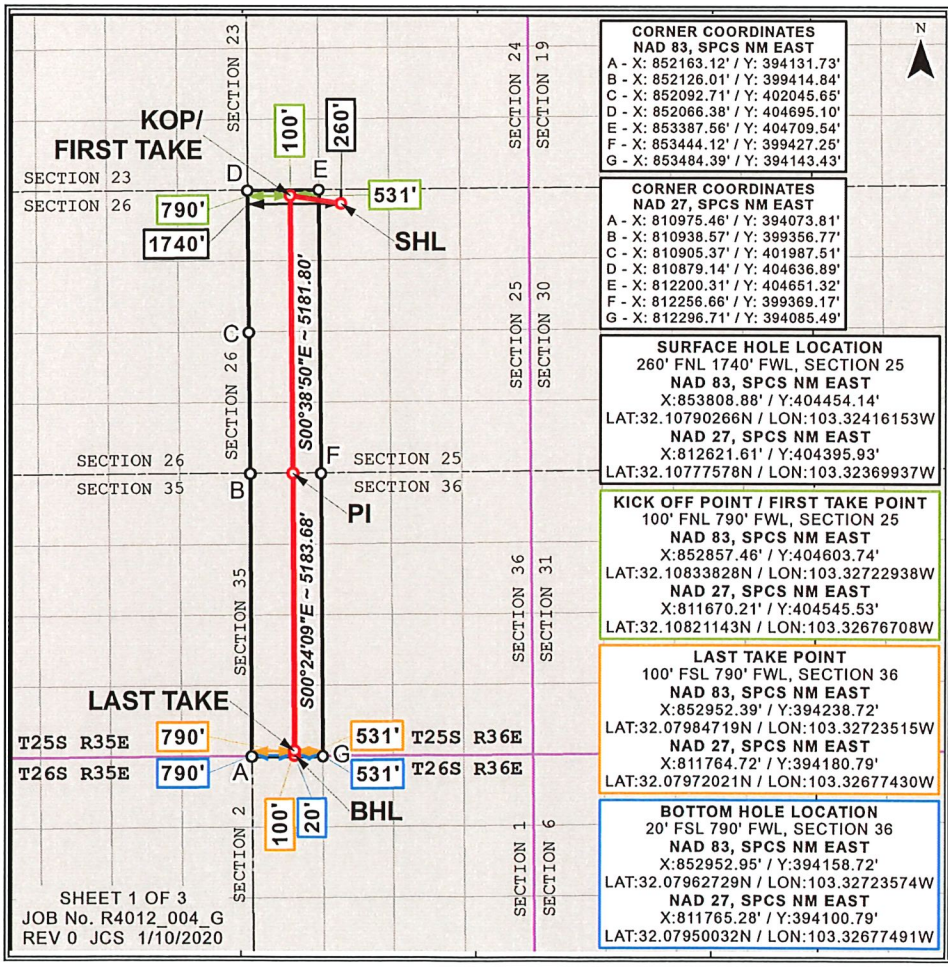
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	25	25S	35E		260	NORTH	1740	WEST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	25S	35E		20	SOUTH	790	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320.0			

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.



CORNER COORDINATES NAD 83, SPCS NM EAST
A - X: 852163.12' / Y: 394131.73'
B - X: 852126.01' / Y: 399414.84'
C - X: 852092.71' / Y: 402045.65'
D - X: 852066.38' / Y: 404695.10'
E - X: 853387.56' / Y: 404709.54'
F - X: 853444.12' / Y: 399427.25'
G - X: 853484.39' / Y: 394143.43'

CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 810975.46' / Y: 394073.81'
B - X: 810938.57' / Y: 399356.77'
C - X: 810905.37' / Y: 401987.51'
D - X: 810879.14' / Y: 404636.89'
E - X: 812200.31' / Y: 404651.32'
F - X: 812256.66' / Y: 399369.17'
G - X: 812296.71' / Y: 394085.49'

SURFACE HOLE LOCATION
260' FNL 1740' FWL, SECTION 25
NAD 83, SPCS NM EAST
X:853808.88' / Y:404454.14'
LAT:32.10790266N / LON:103.32416153W
NAD 27, SPCS NM EAST
X:812621.61' / Y:404395.93'
LAT:32.10777578N / LON:103.32369937W

KICK OFF POINT / FIRST TAKE POINT
100' FNL 790' FWL, SECTION 25
NAD 83, SPCS NM EAST
X:852857.46' / Y:404603.74'
LAT:32.10833828N / LON:103.32722938W
NAD 27, SPCS NM EAST
X:811670.21' / Y:404545.53'
LAT:32.10821143N / LON:103.32676708W

LAST TAKE POINT
100' FSL 790' FWL, SECTION 36
NAD 83, SPCS NM EAST
X:852952.39' / Y:394238.72'
LAT:32.07984719N / LON:103.32723515W
NAD 27, SPCS NM EAST
X:811764.72' / Y:394180.79'
LAT:32.07972021N / LON:103.32677430W

BOTTOM HOLE LOCATION
20' FSL 790' FWL, SECTION 36
NAD 83, SPCS NM EAST
X:852952.95' / Y:394158.72'
LAT:32.07962729N / LON:103.32723574W
NAD 27, SPCS NM EAST
X:811765.28' / Y:394100.79'
LAT:32.07950032N / LON:103.32677491W

[17] 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.

Signature — Date: 10/8/2020

Steve Morris
Printed Name

steve.morris@morcorengineering.com
E-mail Address

[18] 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.

JANUARY 17, 2020
Date of Survey

Signature and Seal of Professional Surveyor:

LLOYD P. SHORT NEW MEXICO 21653 PROFESSIONAL SURVEYOR

Certificate Number
LLOYD P. SHORT 21653

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99987673 Convergence: 00°32'19.77000"

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Caza Operating LLC **OGRID:** 249099 **Date:** 6 / 17 / 2022

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Sioux 25-36 State Fed Com 17H		C-25-25S-35E	260FNL 1780FWL	750	1200	800
Sioux 25-36 State Fed Com 17H	30-025-51570	C-25-25S-35E	260'FNL 1740'FWL	750	1200	800

IV. Central Delivery Point Name: Sioux 25-36 State Fed CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Sioux 25-36 State Fed Com 17H	30-025-51570	12/01/2022	01/01/2023	02/01/2023	02/02/2023	02/15/2023
		12/15/2022	01/31/2023	02/01/2023	02/02/2023	02/15/2023

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

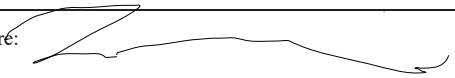
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Steve Morris
Title: Engineer
E-mail Address: steve.morris@morcorengineering.com
Date: 06/17/2022
Phone: 985-415-9729

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

Natural Gas Management Plan
Items VI-VIII

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid – Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

Drilling Operations

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

Production Operations

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All plunger lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.

Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 Mcfd.

Measurement & Estimation

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses with be installed.

- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- During downhole well maintenance,Caza will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

Operator	Caza Operating LLC
Well Name & No.	Sioux 25 Fed Com 2H
County	Lea
Location (S/T/R/Ali)	
Lease Number	
ATS or EC #	APD### or EC###

Colors:
Choose casings
Fill in, if applicable

Name	
Date	
Version	

Remarks

Type of Casing	Size of Hole (in)	Size of Casing (in)	Weight per Foot (lbs/ft)	Grade	Yield	Coupling #:	Top (ft)	Bottom (MD) (ft)	Setting Depth (TVD) (TVD of entire string) (ft)	Min Mud Weight (ppg)	Max Mud Weight (ppg)	ID	Drift ID	Cplg OD
Surface	17.500	13.375	54.50	j	55	stc	0	1100	1100	8.40	8.90	12.6150	12.4900	14.3750
Int 1	12.250	9.625	40.00	hcl	80	btc	0	4934	4900	9.20	10.00	8.8350	8.7500	10.6250
Int 1 Taper 1														
<Choose Casing>														
Prod 1	8.500	6.000	24.50	p	110	btc	0	20353	10058	9.20	10.00	5.2000	5.0750	6.8750
<Choose Casing>														
<Choose Casing>														

Cement

Surface			Int 1			Prod 1			<Choose Casing>			<Choose Casing>		
TOC	0		TOC	0		TOC	0		TOC			TOC		
DV Depth			DV Depth			DV Depth			DV Depth			DV Depth		
	Sacks	Yield (ft3/sx)			Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)		Sacks	Yield (ft3/sx)
Lead	575	1.93	Lead	1350	2.13	Lead 1	1550	2.38	Lead 1			Lead 1		
Tail	309	1.35	Tail	232	1.35	Tail 1	2880	1.62	Tail 1			Tail 1		
DV Lead			DV Lead			DV Lead			DV Lead			DV Lead		
DV Tail			DV Tail			DV Tail			DV Tail			DV Tail		
Cmt Added	1526.90	cuft	Cement Added	3188.70	cuft	Cement Added	8354.60	cuft	Cement Added	#N/A	cuft	Cement Added	#N/A	cuft
Cmt Req.	764	cuft	Cement Req.	1600	cuft	Cement Req.	4180	cuft	Cement Req.	0	cuft	Cement Req.	0	cuft
Excess	99.83%		Excess	99.33%		Excess	99.85%		Excess	#N/A		Excess	#N/A	

Clearances	in Hole	In Surface	In Int 1	In Int 1 Taper 1		In Prod 1		
Surface	Pass = 1.5625							
Int 1	Pass = 0.8125	Pass = 0.995						
Int 1 Taper 1								
Prod 1	Pass = 0.8125	Pass = 2.87	Pass = 0.98	No Overlap	No Overlap			

Safety Factors	Joint/Body	Collapse	Burst	Alt Burst
Surface	8.57	2.22	1.07	1.86
Int 1	4.68	1.66	1.10	1.91
Int 1 Taper 1				
Prod 1	3.25	2.19	2.46	4.27

BOP Requirements After the Shoe

Surface		Int 1		Prod 1	
Max. Surf. Pressure	1467 psi	Max. Surf. Pressure	3012 psi	Max. Surf. Pressur	psi
BOP Required	2M System	BOP Required	5M System	BOP Required	System
<Choose Casing>					
Max. Surf. Pressure	psi				
BOP Required	System				

Caza Operating LLC

Sioux 25-36 State Fed Com 15H
Sioux 25-36 State Fed Com 15H
Sioux 25-36 State Fed Com 15H
Sioux 25-36 State Fed Com 15H

Plan: 201209 Sioux 25-36 State Fed Com 15H

Morcor Standard Plan

09 December, 2020

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Site:	Sioux 25-36 State Fed Com 15H	**MD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Project Sioux 25-36 State Fed Com 15H

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

Site Sioux 25-36 State Fed Com 15H

Site Position:		**Northing:**	404,454.14 usft	**Latitude:**	32° 6' 28.450 N
From:	Map	**Easting:**	853,808.89 usft	**Longitude:**	103° 19' 26.981 W
Position Uncertainty:	1.0 usft	**Slot Radius:**	17-1/2 "	**Grid Convergence:**	0.54 °

Well Sioux 25-36 State Fed Com 15H

Well Position	**+N/-S**	0.0 usft	**Northing:**	404,454.14 usft	**Latitude:**	32° 6' 28.450 N
	+E/-W	0.0 usft	**Easting:**	853,808.89 usft	**Longitude:**	103° 19' 26.981 W
Position Uncertainty		1.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,082.0 usft

Wellbore Sioux 25-36 State Fed Com 15H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/9/2020	6.60	59.86	47,614

Design 201209 Sioux 25-36 State Fed Com 15H

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	184.75

Survey Tool Program **Date** 12/9/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	20,352.9	201209 Sioux 25-36 State Fed Com 15H (	MWD	MWD - Standard

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

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Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	-3,103.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
100.0	0.00	0.00	100.0	-3,003.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
120.0	0.00	0.00	120.0	-2,983.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
20" Conductor										
200.0	0.00	0.00	200.0	-2,903.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
300.0	0.00	0.00	300.0	-2,803.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
400.0	0.00	0.00	400.0	-2,703.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
500.0	0.00	0.00	500.0	-2,603.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
600.0	0.00	0.00	600.0	-2,503.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
700.0	0.00	0.00	700.0	-2,403.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
735.0	0.00	0.00	735.0	-2,368.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
Rustler										
800.0	0.00	0.00	800.0	-2,303.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
900.0	0.00	0.00	900.0	-2,203.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
1,000.0	0.00	0.00	1,000.0	-2,103.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
1,100.0	0.00	0.00	1,100.0	-2,003.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
13 3/8" Surface Casing										
1,125.0	0.00	0.00	1,125.0	-1,978.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
Top of Salt										
1,200.0	0.00	0.00	1,200.0	-1,903.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
1,300.0	0.00	0.00	1,300.0	-1,803.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
1,400.0	0.00	0.00	1,400.0	-1,703.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
1,500.0	0.00	0.00	1,500.0	-1,603.0	0.0	0.0	853,808.89	404,454.14	0.00	0.00
1,600.0	1.00	283.56	1,600.0	-1,503.0	0.2	-0.8	853,808.04	404,454.34	-0.13	1.00
1,700.0	2.00	283.56	1,700.0	-1,403.0	0.8	-3.4	853,805.50	404,454.96	-0.53	1.00
1,800.0	3.00	283.56	1,799.9	-1,303.1	1.8	-7.6	853,801.26	404,455.98	-1.20	1.00
1,900.0	4.00	283.56	1,899.7	-1,203.3	3.3	-13.6	853,795.32	404,457.41	-2.14	1.00
2,000.0	5.00	283.56	1,999.4	-1,103.6	5.1	-21.2	853,787.69	404,459.25	-3.34	1.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
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Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
2,100.0	6.00	283.56	2,098.9	-1,004.1	7.4	-30.5	853,778.38	404,461.50	-4.80	1.00
2,200.0	7.00	283.56	2,198.3	-904.7	10.0	-41.5	853,767.37	404,464.15	-6.54	1.00
2,300.0	8.00	283.56	2,297.4	-805.6	13.1	-54.2	853,754.68	404,467.21	-8.53	1.00
2,389.6	8.90	283.56	2,386.1	-716.9	16.2	-67.0	853,741.88	404,470.30	-10.55	1.00
2,400.0	8.90	283.56	2,396.3	-706.7	16.5	-68.6	853,740.32	404,470.67	-10.80	0.00
2,427.0	8.90	283.56	2,423.0	-680.0	17.5	-72.6	853,736.26	404,471.65	-11.44	0.00
Base of Salt										
2,500.0	8.90	283.56	2,495.1	-607.9	20.2	-83.6	853,725.29	404,474.30	-13.16	0.00
2,600.0	8.90	283.56	2,593.9	-509.1	23.8	-98.6	853,710.26	404,477.92	-15.53	0.00
2,700.0	8.90	283.56	2,692.7	-410.3	27.4	-113.7	853,695.22	404,481.55	-17.90	0.00
2,800.0	8.90	283.56	2,791.5	-311.5	31.0	-128.7	853,680.19	404,485.17	-20.26	0.00
2,900.0	8.90	283.56	2,890.3	-212.7	34.7	-143.7	853,665.15	404,488.80	-22.63	0.00
3,000.0	8.90	283.56	2,989.1	-113.9	38.3	-158.8	853,650.12	404,492.42	-25.00	0.00
3,059.6	8.90	283.56	3,048.0	-55.0	40.4	-167.7	853,641.16	404,494.59	-26.41	0.00
Tansil										
3,100.0	8.90	283.56	3,087.9	-15.1	41.9	-173.8	853,635.09	404,496.05	-27.37	0.00
3,200.0	8.90	283.56	3,186.7	83.7	45.5	-188.8	853,620.05	404,499.67	-29.73	0.00
3,203.4	8.90	283.56	3,190.0	87.0	45.7	-189.3	853,619.55	404,499.80	-29.81	0.00
Yates										
3,300.0	8.90	283.56	3,285.5	182.5	49.2	-203.9	853,605.02	404,503.30	-32.10	0.00
3,400.0	8.90	283.56	3,384.3	281.3	52.8	-218.9	853,589.98	404,506.92	-34.47	0.00
3,480.7	8.90	283.56	3,464.0	361.0	55.7	-231.0	853,577.85	404,509.85	-36.38	0.00
Seven Rivers										
3,500.0	8.90	283.56	3,483.1	380.1	56.4	-233.9	853,574.95	404,510.55	-36.83	0.00
3,600.0	8.90	283.56	3,581.9	478.9	60.0	-249.0	853,559.92	404,514.17	-39.20	0.00
3,700.0	8.90	283.56	3,680.7	577.7	63.7	-264.0	853,544.88	404,517.80	-41.57	0.00
3,702.4	8.90	283.56	3,683.0	580.0	63.7	-264.4	853,544.53	404,517.89	-41.62	0.00
Queen										

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

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3,800.0	8.90	283.56	3,779.5	676.5	67.3	-279.0	853,529.85	404,521.43	-43.93	0.00
3,900.0	8.90	283.56	3,878.3	775.3	70.9	-294.1	853,514.81	404,525.05	-46.30	0.00
4,000.0	8.90	283.56	3,977.1	874.1	74.5	-309.1	853,499.78	404,528.68	-48.67	0.00
4,039.4	8.90	283.56	4,016.0	913.0	76.0	-315.0	853,493.85	404,530.10	-49.60	0.00
Grayburg										
4,100.0	8.90	283.56	4,075.9	972.9	78.2	-324.1	853,484.75	404,532.30	-51.04	0.00
4,200.0	8.90	283.56	4,174.7	1,071.7	81.8	-339.2	853,469.71	404,535.93	-53.40	0.00
4,300.0	8.90	283.56	4,273.4	1,170.4	85.4	-354.2	853,454.68	404,539.55	-55.77	0.00
4,400.0	8.90	283.56	4,372.2	1,269.2	89.0	-369.2	853,439.64	404,543.18	-58.14	0.00
4,500.0	8.90	283.56	4,471.0	1,368.0	92.7	-384.3	853,424.61	404,546.80	-60.50	0.00
4,555.6	8.90	283.56	4,526.0	1,423.0	94.7	-392.6	853,416.25	404,548.82	-61.82	0.00
San Andres										
4,600.0	8.90	283.56	4,569.8	1,466.8	96.3	-399.3	853,409.58	404,550.43	-62.87	0.00
4,700.0	8.90	283.56	4,668.6	1,565.6	99.9	-414.3	853,394.54	404,554.05	-65.24	0.00
4,800.0	8.90	283.56	4,767.4	1,664.4	103.5	-429.4	853,379.51	404,557.68	-67.61	0.00
4,900.0	8.90	283.56	4,866.2	1,763.2	107.2	-444.4	853,364.48	404,561.30	-69.97	0.00
4,934.2	8.90	283.56	4,900.0	1,797.0	108.4	-449.6	853,359.34	404,562.54	-70.78	0.00
9 5/8" Intermediate Casing										
4,959.5	8.90	283.56	4,925.0	1,822.0	109.3	-453.4	853,355.53	404,563.46	-71.38	0.00
Delaware										
5,000.0	8.90	283.56	4,965.0	1,862.0	110.8	-459.4	853,349.44	404,564.93	-72.34	0.00
5,100.0	8.90	283.56	5,063.8	1,960.8	114.4	-474.5	853,334.41	404,568.55	-74.71	0.00
5,200.0	8.90	283.56	5,162.6	2,059.6	118.0	-489.5	853,319.37	404,572.18	-77.07	0.00
5,300.0	8.90	283.56	5,261.4	2,158.4	121.7	-504.6	853,304.34	404,575.80	-79.44	0.00
5,400.0	8.90	283.56	5,360.2	2,257.2	125.3	-519.6	853,289.31	404,579.43	-81.81	0.00
5,500.0	8.90	283.56	5,459.0	2,356.0	128.9	-534.6	853,274.27	404,583.05	-84.18	0.00
5,600.0	8.90	283.56	5,557.8	2,454.8	132.5	-549.7	853,259.24	404,586.68	-86.54	0.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Site:	Sioux 25-36 State Fed Com 15H	**MD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
5,688.3	8.90	283.56	5,645.0	2,542.0	135.7	-562.9	853,245.97	404,589.88	-88.63	0.00
Cherry Canyon										
5,700.0	8.90	283.56	5,656.6	2,553.6	136.2	-564.7	853,244.20	404,590.30	-88.91	0.00
5,800.0	8.90	283.56	5,755.4	2,652.4	139.8	-579.7	853,229.17	404,593.93	-91.28	0.00
5,900.0	8.90	283.56	5,854.2	2,751.2	143.4	-594.8	853,214.14	404,597.55	-93.64	0.00
6,000.0	8.90	283.56	5,953.0	2,850.0	147.0	-609.8	853,199.10	404,601.18	-96.01	0.00
6,100.0	8.90	283.56	6,051.8	2,948.8	150.7	-624.8	853,184.07	404,604.80	-98.38	0.00
6,200.0	8.90	283.56	6,150.6	3,047.6	154.3	-639.9	853,169.03	404,608.43	-100.75	0.00
6,300.0	8.90	283.56	6,249.4	3,146.4	157.9	-654.9	853,154.00	404,612.05	-103.11	0.00
6,400.0	8.90	283.56	6,348.2	3,245.2	161.5	-669.9	853,138.97	404,615.68	-105.48	0.00
6,500.0	8.90	283.56	6,447.0	3,344.0	165.2	-685.0	853,123.93	404,619.30	-107.85	0.00
6,600.0	8.90	283.56	6,545.8	3,442.8	168.8	-700.0	853,108.90	404,622.93	-110.21	0.00
6,700.0	8.90	283.56	6,644.6	3,541.6	172.4	-715.0	853,093.86	404,626.55	-112.58	0.00
6,800.0	8.90	283.56	6,743.4	3,640.4	176.0	-730.1	853,078.83	404,630.18	-114.95	0.00
6,900.0	8.90	283.56	6,842.2	3,739.2	179.7	-745.1	853,063.80	404,633.80	-117.31	0.00
7,000.0	8.90	283.56	6,941.0	3,838.0	183.3	-760.1	853,048.76	404,637.43	-119.68	0.00
7,100.0	8.90	283.56	7,039.8	3,936.8	186.9	-775.2	853,033.73	404,641.05	-122.05	0.00
7,200.0	8.90	283.56	7,138.6	4,035.6	190.5	-790.2	853,018.69	404,644.68	-124.42	0.00
7,300.0	8.90	283.56	7,237.4	4,134.4	194.2	-805.2	853,003.66	404,648.30	-126.78	0.00
7,368.5	8.90	283.56	7,305.0	4,202.0	196.6	-815.5	852,993.37	404,650.79	-128.40	0.00
Brushy Canyon										
7,400.0	8.90	283.56	7,336.2	4,233.2	197.8	-820.3	852,988.63	404,651.93	-129.15	0.00
7,500.0	8.90	283.56	7,434.9	4,331.9	201.4	-835.3	852,973.59	404,655.55	-131.52	0.00
7,600.0	8.90	283.56	7,533.7	4,430.7	205.0	-850.3	852,958.56	404,659.18	-133.88	0.00
7,700.0	8.90	283.56	7,632.5	4,529.5	208.7	-865.4	852,943.52	404,662.80	-136.25	0.00
7,800.0	8.90	283.56	7,731.3	4,628.3	212.3	-880.4	852,928.49	404,666.43	-138.62	0.00
7,900.0	8.90	283.56	7,830.1	4,727.1	215.9	-895.4	852,913.46	404,670.06	-140.99	0.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Site:	Sioux 25-36 State Fed Com 15H	**MD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
7,980.1	8.90	283.56	7,909.3	4,806.3	218.8	-907.5	852,901.41	404,672.96	-142.88	0.00
8,000.0	8.60	283.56	7,928.9	4,825.9	219.5	-910.4	852,898.47	404,673.67	-143.34	1.50
8,100.0	7.10	283.56	8,028.0	4,925.0	222.7	-923.7	852,885.20	404,676.87	-145.43	1.50
8,200.0	5.60	283.56	8,127.4	5,024.4	225.3	-934.4	852,874.45	404,679.46	-147.13	1.50
8,300.0	4.10	283.56	8,227.0	5,124.0	227.3	-942.7	852,866.23	404,681.44	-148.42	1.50
8,400.0	2.60	283.56	8,326.9	5,223.9	228.7	-948.3	852,860.56	404,682.81	-149.31	1.50
8,412.2	2.42	283.56	8,339.0	5,236.0	228.8	-948.8	852,860.04	404,682.94	-149.40	1.50
8,500.0	1.10	283.56	8,426.8	5,323.8	229.4	-951.5	852,857.42	404,683.57	-149.81	1.50
8,573.2	0.00	0.00	8,500.0	5,397.0	229.6	-952.1	852,856.74	404,683.73	-149.92	1.50
8,600.0	0.00	0.00	8,526.8	5,423.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
8,633.2	0.00	0.00	8,560.0	5,457.0	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
Bone Spring										
8,700.0	0.00	0.00	8,626.8	5,523.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
8,800.0	0.00	0.00	8,726.8	5,623.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
8,900.0	0.00	0.00	8,826.8	5,723.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,000.0	0.00	0.00	8,926.8	5,823.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,100.0	0.00	0.00	9,026.8	5,923.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,200.0	0.00	0.00	9,126.8	6,023.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,300.0	0.00	0.00	9,226.8	6,123.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,400.0	0.00	0.00	9,326.8	6,223.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,500.0	0.00	0.00	9,426.8	6,323.8	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,500.3	0.00	0.00	9,427.0	6,324.0	229.6	-952.1	852,856.74	404,683.73	-149.92	0.00
9,522.2	2.20	179.48	9,449.0	6,346.0	229.2	-952.1	852,856.74	404,683.31	-149.50	10.00
9,550.0	4.97	179.48	9,476.7	6,373.7	227.4	-952.1	852,856.76	404,681.57	-147.77	10.00
9,600.0	9.97	179.48	9,526.3	6,423.3	220.9	-952.1	852,856.82	404,675.07	-141.29	10.00
9,650.0	14.97	179.48	9,575.1	6,472.1	210.1	-952.0	852,856.92	404,664.28	-130.54	10.00
9,700.0	19.97	179.48	9,622.8	6,519.8	195.1	-951.8	852,857.06	404,649.27	-115.60	10.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Site:	Sioux 25-36 State Fed Com 15H	**MD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
9,750.0	24.97	179.48	9,669.0	6,566.0	176.0	-951.7	852,857.23	404,630.16	-96.57	10.00
9,790.5	29.02	179.48	9,705.0	6,602.0	157.7	-951.5	852,857.40	404,611.80	-78.29	10.00
1st Bone Spring										
9,800.0	29.97	179.48	9,713.3	6,610.3	153.0	-951.4	852,857.44	404,607.10	-73.61	10.00
9,818.3	31.80	179.48	9,729.0	6,626.0	143.6	-951.4	852,857.53	404,597.71	-64.26	10.00
9,850.0	34.97	179.48	9,755.5	6,652.5	126.1	-951.2	852,857.69	404,580.26	-46.88	10.00
9,900.0	39.97	179.48	9,795.1	6,692.1	95.7	-950.9	852,857.96	404,549.85	-16.60	10.00
9,950.0	44.97	179.48	9,832.0	6,729.0	62.0	-950.6	852,858.27	404,516.10	17.01	10.00
10,000.0	49.97	179.48	9,865.8	6,762.8	25.1	-950.3	852,858.61	404,479.27	53.69	10.00
10,050.0	54.97	179.48	9,896.2	6,793.2	-14.5	-949.9	852,858.97	404,439.63	93.16	10.00
10,100.0	59.97	179.48	9,923.1	6,820.1	-56.7	-949.5	852,859.36	404,397.49	135.13	10.00
10,150.0	64.97	179.48	9,946.2	6,843.2	-101.0	-949.1	852,859.76	404,353.16	179.27	10.00
10,200.0	69.97	179.48	9,965.4	6,862.4	-147.1	-948.7	852,860.18	404,306.99	225.24	10.00
10,210.9	71.06	179.48	9,969.0	6,866.0	-157.4	-948.6	852,860.28	404,296.72	235.47	10.00
10,250.0	74.97	179.48	9,980.4	6,877.4	-194.8	-948.3	852,860.62	404,259.33	272.70	10.00
10,300.0	79.97	179.48	9,991.3	6,888.3	-243.6	-947.8	852,861.07	404,210.54	321.29	10.00
10,350.0	84.97	179.48	9,997.8	6,894.8	-293.2	-947.4	852,861.52	404,160.99	370.64	10.00
10,396.9	89.67	179.48	10,000.0	6,897.0	-340.0	-946.9	852,861.95	404,114.14	417.29	10.00
10,400.0	89.67	179.48	10,000.0	6,897.0	-343.1	-946.9	852,861.98	404,111.05	420.36	0.00
10,500.0	89.67	179.48	10,000.6	6,897.6	-443.1	-946.0	852,862.89	404,011.06	519.93	0.00
10,600.0	89.67	179.48	10,001.2	6,898.2	-543.1	-945.1	852,863.80	403,911.07	619.51	0.00
10,700.0	89.67	179.48	10,001.8	6,898.8	-643.1	-944.2	852,864.72	403,811.07	719.08	0.00
10,800.0	89.67	179.48	10,002.3	6,899.3	-743.1	-943.3	852,865.63	403,711.08	818.66	0.00
10,900.0	89.67	179.48	10,002.9	6,899.9	-843.1	-942.3	852,866.55	403,611.08	918.23	0.00
11,000.0	89.67	179.48	10,003.5	6,900.5	-943.1	-941.4	852,867.46	403,511.09	1,017.81	0.00
11,100.0	89.67	179.48	10,004.1	6,901.1	-1,043.0	-940.5	852,868.38	403,411.09	1,117.38	0.00
11,200.0	89.67	179.48	10,004.7	6,901.7	-1,143.0	-939.6	852,869.29	403,311.10	1,216.96	0.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Site:	Sioux 25-36 State Fed Com 15H	**MD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
11,300.0	89.67	179.48	10,005.3	6,902.3	-1,243.0	-938.7	852,870.20	403,211.11	1,316.53	0.00
11,400.0	89.67	179.48	10,005.8	6,902.8	-1,343.0	-937.8	852,871.12	403,111.11	1,416.11	0.00
11,500.0	89.67	179.48	10,006.4	6,903.4	-1,443.0	-936.9	852,872.03	403,011.12	1,515.68	0.00
11,600.0	89.67	179.48	10,007.0	6,904.0	-1,543.0	-935.9	852,872.95	402,911.12	1,615.25	0.00
11,700.0	89.67	179.48	10,007.6	6,904.6	-1,643.0	-935.0	852,873.86	402,811.13	1,714.83	0.00
11,800.0	89.67	179.48	10,008.2	6,905.2	-1,743.0	-934.1	852,874.77	402,711.14	1,814.40	0.00
11,900.0	89.67	179.48	10,008.8	6,905.8	-1,843.0	-933.2	852,875.69	402,611.14	1,913.98	0.00
12,000.0	89.67	179.48	10,009.3	6,906.3	-1,943.0	-932.3	852,876.60	402,511.15	2,013.55	0.00
12,100.0	89.67	179.48	10,009.9	6,906.9	-2,043.0	-931.4	852,877.52	402,411.15	2,113.13	0.00
12,200.0	89.67	179.48	10,010.5	6,907.5	-2,143.0	-930.5	852,878.43	402,311.16	2,212.70	0.00
12,300.0	89.67	179.48	10,011.1	6,908.1	-2,243.0	-929.5	852,879.35	402,211.17	2,312.28	0.00
12,400.0	89.67	179.48	10,011.7	6,908.7	-2,343.0	-928.6	852,880.26	402,111.17	2,411.85	0.00
12,500.0	89.67	179.48	10,012.2	6,909.2	-2,443.0	-927.7	852,881.17	402,011.18	2,511.43	0.00
12,600.0	89.67	179.48	10,012.8	6,909.8	-2,543.0	-926.8	852,882.09	401,911.18	2,611.00	0.00
12,700.0	89.67	179.48	10,013.4	6,910.4	-2,643.0	-925.9	852,883.00	401,811.19	2,710.58	0.00
12,800.0	89.67	179.48	10,014.0	6,911.0	-2,742.9	-925.0	852,883.92	401,711.19	2,810.15	0.00
12,900.0	89.67	179.48	10,014.6	6,911.6	-2,842.9	-924.1	852,884.83	401,611.20	2,909.72	0.00
13,000.0	89.67	179.48	10,015.2	6,912.2	-2,942.9	-923.1	852,885.74	401,511.21	3,009.30	0.00
13,100.0	89.67	179.48	10,015.7	6,912.7	-3,042.9	-922.2	852,886.66	401,411.21	3,108.87	0.00
13,200.0	89.67	179.48	10,016.3	6,913.3	-3,142.9	-921.3	852,887.57	401,311.22	3,208.45	0.00
13,300.0	89.67	179.48	10,016.9	6,913.9	-3,242.9	-920.4	852,888.49	401,211.22	3,308.02	0.00
13,400.0	89.67	179.48	10,017.5	6,914.5	-3,342.9	-919.5	852,889.40	401,111.23	3,407.60	0.00
13,500.0	89.67	179.48	10,018.1	6,915.1	-3,442.9	-918.6	852,890.32	401,011.24	3,507.17	0.00
13,600.0	89.67	179.48	10,018.7	6,915.7	-3,542.9	-917.7	852,891.23	400,911.24	3,606.75	0.00
13,700.0	89.67	179.48	10,019.2	6,916.2	-3,642.9	-916.7	852,892.14	400,811.25	3,706.32	0.00
13,800.0	89.67	179.48	10,019.8	6,916.8	-3,742.9	-915.8	852,893.06	400,711.25	3,805.90	0.00
13,900.0	89.67	179.48	10,020.4	6,917.4	-3,842.9	-914.9	852,893.97	400,611.26	3,905.47	0.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Site:	Sioux 25-36 State Fed Com 15H	**MD Reference:**	WELL @ 3103.0usft (Original Well Elev)
Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
14,000.0	89.67	179.48	10,021.0	6,918.0	-3,942.9	-914.0	852,894.89	400,511.26	4,005.05	0.00
14,100.0	89.67	179.48	10,021.6	6,918.6	-4,042.9	-913.1	852,895.80	400,411.27	4,104.62	0.00
14,200.0	89.67	179.48	10,022.2	6,919.2	-4,142.9	-912.2	852,896.71	400,311.28	4,204.19	0.00
14,300.0	89.67	179.48	10,022.7	6,919.7	-4,242.9	-911.3	852,897.63	400,211.28	4,303.77	0.00
14,400.0	89.67	179.48	10,023.3	6,920.3	-4,342.9	-910.3	852,898.54	400,111.29	4,403.34	0.00
14,500.0	89.67	179.48	10,023.9	6,920.9	-4,442.8	-909.4	852,899.46	400,011.29	4,502.92	0.00
14,600.0	89.67	179.48	10,024.5	6,921.5	-4,542.8	-908.5	852,900.37	399,911.30	4,602.49	0.00
14,700.0	89.67	179.48	10,025.1	6,922.1	-4,642.8	-907.6	852,901.29	399,811.31	4,702.07	0.00
14,800.0	89.67	179.48	10,025.6	6,922.6	-4,742.8	-906.7	852,902.20	399,711.31	4,801.64	0.00
14,900.0	89.67	179.48	10,026.2	6,923.2	-4,842.8	-905.8	852,903.11	399,611.32	4,901.22	0.00
15,000.0	89.67	179.48	10,026.8	6,923.8	-4,942.8	-904.9	852,904.03	399,511.32	5,000.79	0.00
15,100.0	89.67	179.48	10,027.4	6,924.4	-5,042.8	-903.9	852,904.94	399,411.33	5,100.37	0.00
15,200.0	89.67	179.48	10,028.0	6,925.0	-5,142.8	-903.0	852,905.86	399,311.34	5,199.94	0.00
15,300.0	89.67	179.48	10,028.6	6,925.6	-5,242.8	-902.1	852,906.77	399,211.34	5,299.52	0.00
15,400.0	89.67	179.48	10,029.1	6,926.1	-5,342.8	-901.2	852,907.68	399,111.35	5,399.09	0.00
15,500.0	89.67	179.48	10,029.7	6,926.7	-5,442.8	-900.3	852,908.60	399,011.35	5,498.66	0.00
15,600.0	89.67	179.48	10,030.3	6,927.3	-5,542.8	-899.4	852,909.51	398,911.36	5,598.24	0.00
15,700.0	89.67	179.48	10,030.9	6,927.9	-5,642.8	-898.5	852,910.43	398,811.36	5,697.81	0.00
15,800.0	89.67	179.48	10,031.5	6,928.5	-5,742.8	-897.5	852,911.34	398,711.37	5,797.39	0.00
15,900.0	89.67	179.48	10,032.1	6,929.1	-5,842.8	-896.6	852,912.26	398,611.38	5,896.96	0.00
16,000.0	89.67	179.48	10,032.6	6,929.6	-5,942.8	-895.7	852,913.17	398,511.38	5,996.54	0.00
16,100.0	89.67	179.48	10,033.2	6,930.2	-6,042.8	-894.8	852,914.08	398,411.39	6,096.11	0.00
16,200.0	89.67	179.48	10,033.8	6,930.8	-6,142.7	-893.9	852,915.00	398,311.39	6,195.69	0.00
16,300.0	89.67	179.48	10,034.4	6,931.4	-6,242.7	-893.0	852,915.91	398,211.40	6,295.26	0.00
16,400.0	89.67	179.48	10,035.0	6,932.0	-6,342.7	-892.1	852,916.83	398,111.41	6,394.84	0.00
16,500.0	89.67	179.48	10,035.6	6,932.6	-6,442.7	-891.1	852,917.74	398,011.41	6,494.41	0.00
16,600.0	89.67	179.48	10,036.1	6,933.1	-6,542.7	-890.2	852,918.65	397,911.42	6,593.98	0.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

Company:	Caza Operating LLC	**Local Co-ordinate Reference:**	Well Sioux 25-36 State Fed Com 15H
Project:	Sioux 25-36 State Fed Com 15H	**TVD Reference:**	WELL @ 3103.0usft (Original Well Elev)
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Well:	Sioux 25-36 State Fed Com 15H	**North Reference:**	Grid
Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
16,700.0	89.67	179.48	10,036.7	6,933.7	-6,642.7	-889.3	852,919.57	397,811.42	6,693.56	0.00
16,800.0	89.67	179.48	10,037.3	6,934.3	-6,742.7	-888.4	852,920.48	397,711.43	6,793.13	0.00
16,900.0	89.67	179.48	10,037.9	6,934.9	-6,842.7	-887.5	852,921.40	397,611.44	6,892.71	0.00
17,000.0	89.67	179.48	10,038.5	6,935.5	-6,942.7	-886.6	852,922.31	397,511.44	6,992.28	0.00
17,100.0	89.67	179.48	10,039.0	6,936.0	-7,042.7	-885.7	852,923.23	397,411.45	7,091.86	0.00
17,200.0	89.67	179.48	10,039.6	6,936.6	-7,142.7	-884.8	852,924.14	397,311.45	7,191.43	0.00
17,300.0	89.67	179.48	10,040.2	6,937.2	-7,242.7	-883.8	852,925.05	397,211.46	7,291.01	0.00
17,400.0	89.67	179.48	10,040.8	6,937.8	-7,342.7	-882.9	852,925.97	397,111.46	7,390.58	0.00
17,500.0	89.67	179.48	10,041.4	6,938.4	-7,442.7	-882.0	852,926.88	397,011.47	7,490.16	0.00
17,600.0	89.67	179.48	10,042.0	6,939.0	-7,542.7	-881.1	852,927.80	396,911.48	7,589.73	0.00
17,700.0	89.67	179.48	10,042.5	6,939.5	-7,642.7	-880.2	852,928.71	396,811.48	7,689.31	0.00
17,800.0	89.67	179.48	10,043.1	6,940.1	-7,742.7	-879.3	852,929.62	396,711.49	7,788.88	0.00
17,900.0	89.67	179.48	10,043.7	6,940.7	-7,842.6	-878.4	852,930.54	396,611.49	7,888.45	0.00
18,000.0	89.67	179.48	10,044.3	6,941.3	-7,942.6	-877.4	852,931.45	396,511.50	7,988.03	0.00
18,100.0	89.67	179.48	10,044.9	6,941.9	-8,042.6	-876.5	852,932.37	396,411.51	8,087.60	0.00
18,200.0	89.67	179.48	10,045.5	6,942.5	-8,142.6	-875.6	852,933.28	396,311.51	8,187.18	0.00
18,300.0	89.67	179.48	10,046.0	6,943.0	-8,242.6	-874.7	852,934.20	396,211.52	8,286.75	0.00
18,400.0	89.67	179.48	10,046.6	6,943.6	-8,342.6	-873.8	852,935.11	396,111.52	8,386.33	0.00
18,500.0	89.67	179.48	10,047.2	6,944.2	-8,442.6	-872.9	852,936.02	396,011.53	8,485.90	0.00
18,600.0	89.67	179.48	10,047.8	6,944.8	-8,542.6	-872.0	852,936.94	395,911.54	8,585.48	0.00
18,700.0	89.67	179.48	10,048.4	6,945.4	-8,642.6	-871.0	852,937.85	395,811.54	8,685.05	0.00
18,800.0	89.67	179.48	10,049.0	6,946.0	-8,742.6	-870.1	852,938.77	395,711.55	8,784.63	0.00
18,900.0	89.67	179.48	10,049.5	6,946.5	-8,842.6	-869.2	852,939.68	395,611.55	8,884.20	0.00
19,000.0	89.67	179.48	10,050.1	6,947.1	-8,942.6	-868.3	852,940.59	395,511.56	8,983.78	0.00
19,100.0	89.67	179.48	10,050.7	6,947.7	-9,042.6	-867.4	852,941.51	395,411.56	9,083.35	0.00
19,200.0	89.67	179.48	10,051.3	6,948.3	-9,142.6	-866.5	852,942.42	395,311.57	9,182.92	0.00
19,300.0	89.67	179.48	10,051.9	6,948.9	-9,242.6	-865.6	852,943.34	395,211.58	9,282.50	0.00

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

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Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Easting (usft)	Northing (usft)	V. Sec (usft)	DLeg (°/100usft)
19,400.0	89.67	179.48	10,052.4	6,949.4	-9,342.6	-864.6	852,944.25	395,111.58	9,382.07	0.00
19,500.0	89.67	179.48	10,053.0	6,950.0	-9,442.6	-863.7	852,945.17	395,011.59	9,481.65	0.00
19,600.0	89.67	179.48	10,053.6	6,950.6	-9,542.5	-862.8	852,946.08	394,911.59	9,581.22	0.00
19,700.0	89.67	179.48	10,054.2	6,951.2	-9,642.5	-861.9	852,946.99	394,811.60	9,680.80	0.00
19,800.0	89.67	179.48	10,054.8	6,951.8	-9,742.5	-861.0	852,947.91	394,711.61	9,780.37	0.00
19,900.0	89.67	179.48	10,055.4	6,952.4	-9,842.5	-860.1	852,948.82	394,611.61	9,879.95	0.00
20,000.0	89.67	179.48	10,055.9	6,952.9	-9,942.5	-859.2	852,949.74	394,511.62	9,979.52	0.00
20,100.0	89.67	179.48	10,056.5	6,953.5	-10,042.5	-858.2	852,950.65	394,411.62	10,079.10	0.00
20,200.0	89.67	179.48	10,057.1	6,954.1	-10,142.5	-857.3	852,951.57	394,311.63	10,178.67	0.00
20,300.0	89.67	179.48	10,057.7	6,954.7	-10,242.5	-856.4	852,952.48	394,211.64	10,278.25	0.00
20,352.9	89.67	179.48	10,058.0	6,955.0	-10,295.4	-855.9	852,952.96	394,158.74	10,330.92	0.00
6" Production Casing										

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
120.0	120.0	20" Conductor	20	26
1,100.0	1,100.0	13 3/8" Surface Casing	13-3/8	17-1/2
4,934.2	4,900.0	9 5/8" Intermediate Casing	9-5/8	12-1/4
20,352.9	10,058.0	6" Production Casing	6	8-1/2

Caza Petroleum

Morcor Engineering

Morcor Standard Plan

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Wellbore:	Sioux 25-36 State Fed Com 15H	**Survey Calculation Method:**	Minimum Curvature
Design:	201209 Sioux 25-36 State Fed Com 15H	**Database:**	EDM 5000.1 Single User Db

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
735.0	735.0	Rustler		0.00	
3,480.7	3,464.0	Seven Rivers		0.00	
4,039.4	4,016.0	Grayburg		0.00	
4,555.6	4,526.0	San Andres		0.00	
8,633.2	8,560.0	Bone Spring		0.00	
9,790.5	9,705.0	1st Bone Spring		0.00	
1,125.0	1,125.0	Top of Salt		0.00	
3,702.4	3,683.0	Queen		0.00	
2,427.0	2,423.0	Base of Salt		0.00	
3,203.4	3,190.0	Yates		0.00	
3,059.6	3,048.0	Tansil		0.00	
4,959.5	4,925.0	Delaware		0.00	
5,688.3	5,645.0	Cherry Canyon		0.00	
7,368.5	7,305.0	Brushy Canyon		0.00	

Checked By: _____ Approved By: _____ Date: _____

Caza Oil and Gas, Inc

H2S Drilling Operations Plan

Sioux 25-36 State Fed Com 9H

Lea County, New Mexico

Prepared by: Steve Morris Date: 06/27/2018

Table of Contents

H2S Contingency Plan Section

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, of following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H2S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H2S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Implementation: This plan, with all details, is to be fully implemented 1000’ before drilling into the first sour zone.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 1000’ before drilling into the first sour zone.

Emergency Call Lists: Included are the telephone numbers of all persons that would need to be contacted, should an H2S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public safety personnel will be made aware of the drilling of this well.

Check Lists: Status check lists and procedural check lists have been included to ensure adherence to the plan.

General Information: A general information section has been included to supply support information.

Emergency Procedures Section

Emergency Procedures

I. **In the event of any evidence of H2S level above 10 ppm, take the following steps immediately:**
   A. Secure breathing apparatus.
   B. Order non-essential personnel out of the danger zone.
   C. Take steps to determine if the H2S level can be corrected or suppressed, and if so, proceed with normal operations.

II. **If uncontrollable conditions occur, proceed with the following:**
   A. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the New Mexico Oil & Gas of the situation.
   B. Remove all personnel to the safe briefing area.
   C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.
   D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.

III. **Responsibility:**
   A. The company approved supervisor shall be responsible for the total implementation of the plan.
   B. The company approved supervisor shall be in complete command during any emergency.
   C. The company approved supervisor shall designate a backup supervisor in the event that he/she is not available.

Emergency Procedure Implementation

I. **Drilling or Tripping:**
   A. All Personnel
      1. When alarm sounds, don escape unit and report to upwind safe briefing area.
      2. Check status of other personnel (buddy system).
      3. Secure breathing apparatus.
      4. Wait for orders from supervisor.
   B. Drilling Foreman
      1. Report to the upwind safe briefing area.
      2. Don breathing apparatus and return to the point of release with the Tool pusher of Driller (buddy system).
      3. Determine the concentration of H2S.
      4. Address the situation and take appropriate control measures.
   C. Tool Pusher
      1. Report to the upwind safe briefing area.
      2. Don breathing apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).

3. Determine the concentration.
4. Address the situation and take appropriate control measures.

D. Driller
1. Check the status of other personnel (in a rescue attempt, always use the buddy system).
2. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.
3. Assume the responsibility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.

E. Derrick Man and Floor Hands
1. Remain in the upwind safe briefing area until otherwise instructed by a supervisor.

F. Mud Engineer
1. Report to the upwind safe briefing area.
2. When instructed, begin check of mud for PH level and H2S level.

G. Safety Personnel
1. Don breathing apparatus.
2. Check the status of all personnel.
3. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick:

A. All personnel report to the upwind safe briefing area.
B. Follow standard BOP procedures.

III. Open Hole Logging:

A. All unnecessary personnel should leave the rig floor.
B. Drilling Foreman and Safety personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging:

A. Follow “Drilling or Tripping” procedures.
B. Assure that all personnel have access to protective equipment.

Simulated Blowout Control Drills

All drills will be initiated by activating alarm devices (air horn). One long blast on the air horn for ACTUAL and SIMULATED blowout control drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

Drill #1	On-bottom Drilling
Drill #2	Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire put drill assignment. The times must be recorded on the IADC Driller’s log as “Blowout Control Drill”.

Drill No.:		
Reaction Time to Shut-in:	minutes,	seconds.
Total Time to Complete Assignment:	minutes,	seconds.

I. Drill Overviews:
   A. Drill No. 1 – On-bottom Drilling
      1. Sound the alarm immediately.
      2. Stop the rotary and hoist the Kelly joint above the rotary table.
      3. Stop the circulatory pump.
      4. Close the drill pipe rams.
      5. Record casing and drill pipe shut-in pressures and pit volume increases.
   B. Drill No. 2 – Tripping Drill Pipe:
      1. Sound the alarm immediately.
      2. Position the upper tool joint just above the rotary table and set the slips.
      3. Install a full opening valve inside blowout preventer tool in order to close the drill pipe.
      4. Close the drill pipe rams.
      5. Record the shut-in annular pressure.

II. Crew Assignments
   A. Drill No. 1 – On-bottom Drilling:
      1. Driller
         a) Stop the rotary and hoist the Kelly joint above the rotary table.
         b) Stop the circulatory pump.
         c) Check flow.
         d) If flowing, sound the alarm immediately.
         e) Record the shut-in drill pipe pressure.
         f) Determine the mud weight increase needed or other courses of action.
      2. Derrick Man
         a) Open choke line valve at BOP.
         b) Signal Floor Man #1 at accumulator that choke line is open.
         c) Close choke upstream valve after pipe rams have been closed.
         d) Read the shut-in annular pressure and report readings to Driller.
      3. Floor Man #1
         a) Close the pipe rams after receiving the signal from the Derrick Man.
         b) Report to Driller for further instructions.
      4. Floor Man #2
         a) Notify the Tool Pusher and Operator Representative of the H2S alarms.
         b) Check for open fires and, if safe to do so, extinguish them.
         c) Stop all welding operations.
         d) Turn-off all non-explosive proof lights and instruments.

e) Report to Driller for further instructions.

5. Tool Pusher
   a) Report to the rig floor.
   b) Have a meeting with all crews.
   c) Compile and summarize all information.
   d) Calculate the proper kill weight.
   e) Ensure that proper well procedures are put into action.
6. Operator Representative
   a) Notify the Drilling Superintendent.
   b) Determine if an emergency exists and if so, activate the contingency plan.

B. Drill No. 2 – Tripping Pipe:
1. Driller
   a) Sound the alarm immediately when mud volume increase has been detected.
   b) Position the upper tool joint just above the rotary table and set slips.
   c) Install a full opening valve or inside blowout preventer tool to close the drill pipe.
   d) Check flow.
   e) Record all data reported by the crew.
   f) Determine the course of action.
2. Derrick Man
   a) Come down out of derrick.
   b) Notify Tool Pusher and Operator Representative.
   c) Check for open fires and, if safe to do so, extinguish them.
   d) Stop all welding operations.
   e) Report to Driller for further instructions.

3. Floor Man #1
   a) Pick up full opening valve or inside blowout preventer tool and slab into tool join above rotary table (with Floor Man #2)
   b) Tighten valve with back-up tongs.
   c) Close pipe rams after signal from Floor Man #2.
   d) Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.
   e) Report to Driller for further instructions.
4. Floor Man #2
   a) Pick-up full opening valve or inside blowout preventer tool and tab into tool joint above rotary table (with Floor Man #1)
   b) Position back-up tongs on drill pipe.
   c) Open choke line valve at BOP.
   d) Signal Floor Man #1 at accumulator that choke line is open.
   e) Close choke and upstream valve after pipe rams have been closed.
   f) Check for leaks on BOP stack and choke manifold.

g) Read annular pressure.
h) Report readings to the Driller.

5. Tool Pusher
   a) Report to the rig floor.
   b) Have a meeting with all of the crews.
   c) Compile and summarize all information.
   d) See that proper well kill procedures are put into action.
6. Operator Representative
   a) Notify Drilling Superintendent.
   b) Determine if an emergency exists, and if so, activate the contingency plan

Ignition Procedures

Responsibility:

The decision to ignite the well is responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event of the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.
2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.
2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
3. Ignite from upwind and do not approach any closer than is warranted.
4. Select the ignition site best suited for protection and which offers an easy escape route.
5. Before igniting, check for the presence of combustible gases.
6. After igniting, continue emergency actions and procedures as before.
7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

Training Program

When working in an area where Hydrogen Sulfide (H2S) might be encountered, definite training requirements for all personnel must be carried out. The Company Supervisor will ensure that all personnel at the well site have had adequate training in the following:

1. Hazards and Characteristics of Hydrogen Sulfide.
2. Physicals effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H2S detection, emergency alarm and sensor location.
5. Emergency rescue.
6. Resuscitators.
7. First aid and artificial resuscitation.
8. The effects of Hydrogen Sulfide on metals.
9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H2S, and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

Emergency Equipment Requirements

Lease Entrance Sign:

Should be located at the lease entrance with the following information:

CAUTION- POTENTIAL POISON GAS HYDROGEN SULFIDE

Well Control Equipment:

- A flare line will be located a minimum of 150' from the wellhead to be ignited by a flare gun.
- The choke manifold will include a remotely operated choke.
- A mud/gas separator will be installed to separate gas from the drilling mud.

Mud Program:

The drilling mud program has been designed to minimize the volume of hydrogen sulfide (H2S) circulated to surface. The operator will have the necessary mud products on location to minimize the hazards while drilling in H2S-bearing zones.

Metallurgy:

- All drill strings , casings, tubing, wellhead equipment , the blowout preventer , the drilling spool, kill lines, choke manifold and lines, and all valves shall be suitable for H2S service.
- All elastomers used for packing and seals shall be H2S trim.

Respiratory Equipment:

- Fresh air breathing equipment should be placed at the safe briefing areas and should include the following: Two SCBA's will be placed at each briefing area. A moveable breathing air trailer with 2 SCBA's, 5 work/escape units, ample breathing air hose and manifolds will be on location. The breathing air hose will be installed on the rig floor and derrick along with breathing air manifolds so that it will not restrict work activity. All employees that may wear respiratory will complete a MEQ and be quantitative fit tested 1000' prior to the 1st zone that may contain H2S.

Windsocks or Wind Streamers:

- A minimum of two 10" windsocks located at strategic locations so that they may be seen from any point on location. More will be used if necessary for wind consciousness.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).

Hydrogen Sulfide Detector and Alarms:

- 1 - Four channel H2S monitor with audible and visual alarms, strategically located to be seen and heard by all employees working on the well site. All sensors will be bump tested or calibrated if necessary on a weekly basis. The alarms will be set to visually alarm at 10 PPM and audible at 14 PPM.
- Four (4) sensors located as follows: #1 -Rig Floor, #2 & #3- Bell Nipple, #4- End of flow line where wellbore fluid is discharged.
- Portable color metric tube detector with tubes will be stored in the Tool Pusher trailer.

Well Condition Sign and Flags:

The Well Condition Sign with flags should be placed a minimum of 150' before entry to the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN - Normal Operating Conditions

YELLOW - Potential Danger

RED - Danger, H2S Gas Present

Auxiliary Rescue Equipment:

- Stretcher (drilling contractor)
- 2- 100' OSHA approved Rescue lines (drilling contractor)
- First Aid Kit properly stocked (drilling contractor)

Mud Inspection Equipment:

Garret Gas Train or Hach Tester for inspection of Hydrogen Sulfide in the drilling mud system.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations (provided by drilling contractor)

Blowout Preventer:

- The well shall have hydraulic BOP equipment for the anticipated BHP.
- The BOP should be tested upon installation.
- BOP, Choke Line and Kill Line will be tested as specified by Operator.

Confined Space Monitor:

There should be a portable multi-gas monitor with at least 3 sensors (02, LEL & H2S). This instrument should be used to test the atmosphere of any confined space before entering. It should also be used for atmospheric testing for LEL gas before beginning any type of Hot Work. Proper calibration documentation will need to be provided. (Supplied by Drilling Contractor)

Communication Equipment:

- Proper communication equipment such as cell phones or 2 -way radios should be available at the rig.
- Radio communication shall be available for communication between the company man's trailer, rig floor and the tool pusher's trailer.
- Communication equipment shall be available on the vehicles.

Special Control Equipment:

- Hydraulic BOP equipment with remote control on the ground.
- Rotating head at the surface casing point.
- BOP, Choke Manifold and Process Flow Diagrams (see the attached - previously submitted)
- Patriot Rig #5 SM Choke Manifold Equipment (see the attached - previously submitted)

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- Designated smoking area.

Safe Briefing Areas:

- Two safe briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

NOTES:

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- Additional personal H2S monitors are available for all employees on location.
- Automatic Flare Igniters are recommended for installation on the rig.

CHECK LISTS

Status Check List

Note: Date each item as they are implemented.

1. Sign at location entrance.
2. Two (2) wind socks (in required locations).
3. Wind Streamers (if required).
4. SCBA's on location for all rig personnel and mud loggers.
5. Air packs, inspected and ready for use.
6. Spare bottles for each air pack (if required).
7. Cascade system for refilling air bottles.
8. Cascade system and hose line hook up.
9. Choke manifold hooked-up and tested. (Before drilling out surface casing.)
10. Remote Hydraulic BOP control (hooked-up and tested before drilling out surface casing).
11. BOP tested (before drilling out surface casing).
12. Mud engineer on location with equipment to test mud for H2S.
13. Safe Briefing Areas set-up.
14. Well Condition sign and flags on location and ready.
15. Hydrogen Sulfide detection system hooked-up & tested.
16. Hydrogen Sulfide alarm system hooked-up & tested.
17. Stretcher on location at Safe Briefing Area.
18. 2-100' OSHA Approved Life Lines on location.
19. 1-20# Fire Extinguisher in safety trailer.
20. Confined Space Monitor on location and tested.
21. All rig crews and supervisor trained (as required).
22. Access restricted for unauthorized personnel.
23. Drills on H2S and well control procedures.
24. All outside service contractors advised of potential H2S on the well.
25. NO SMOKING sign posted.
26. H2S Detector Pump w/tubes on location.
27. 25mm Flare Gun on location w/flares.
28. Automatic Flare Igniter installed on rig.

Procedural Check List

Perform the following on each tour:

1. Check fire extinguishers to see that they have the proper charge.
2. Check breathing equipment to insure that they have not been tampered with.
3. Check pressure on the supply air bottles to make sure they are capable of recharging.
4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that they are fully charged and operational. This requires that the air cylinder be opened and the mask assembly be put on and tested to make sure that the regulators and

masks are properly working. Negative and positive pressure should be conducted on all masks.
2. BOP skills.
3. Check supply pressure on BOP accumulator stand-by source.
4. Check all breathing air mask assemblies to see that straps are loosened and turned back, ready to use.
5. Check pressure on cascade air cylinders to make sure they are fully charged and ready to use for refill purposes if necessary.
6. Check all cascade system regulators to make sure they work properly.
7. Perform breathing drills with on-site personnel.
8. Check the following supplies for availability:
    - Stretcher
    - Safety Belts and ropes.
    - Spare air bottles.
    - Spare oxygen bottles (if resuscitator required).
    - Gas Detector Pump and tubes.
    - Emergency telephone lists.
9. Test the Confined Space Monitor to verify the batteries are good and that the unit is in good working condition and has been properly calibrated according to manufacturer's recommendations.

Briefing Procedures

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well.

Attendance: Drilling Supervisor
Drilling Engineer
Drilling Foreman
Rig Tool Pushers
Mud Engineer
All Safety Personnel
Key Service Company Personnel

Purpose: Review and discuss the well program, step-by-step, to ensure complete understanding of assignments and responsibilities.

Evacuation Plan

General Plan

The direct lines of action prepared by Caza SAFETY, to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foremen, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.
2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation needs to be implemented.
3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.
4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

Emergency Assistance Telephone List

PUBLIC SAFETY: 911 or

Lea County Sheriff or Police..... (575) 396-3611

Fire Department .....(575) 397-9308

Hospital ..... (575) 492-5000

Ambulance 911

Department of Public Safety..... (392) 392-5588

Oil Conservation Division .....(575) 748-1823

New Mexico Energy, Minerals & Natural Resources Department .....(575) 748-1283

Caza Oil and Gas, Inc:

Office .....(423) 682-7424

VP Operations: Tony Sam

Office .....(423) 682-7424

Cell .....(432) 556-6708

Project Manager: Steve Morris

Cell .....(972) 835-3315

Project Manager: Joel Stockford

Cell .....(972) 835-3349

The geologic zones that will be encountered during drilling may contain hazardous quantities of H2S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, and conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

Evacuee Description:

Residents: THERE ARE NO RESIDENTS WITHIN 3000' ROE.

Notification Process:

A continuous siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

Evacuation Plan:

All evacuees will migrate laterally toward the wind direction.

Caza Oil and Gas, Inc. will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local and emergency medical service as necessary.

MAPS AND PLATS

See the attached map showing the 3000' ROE clarification.

Design Plan, Operating Plan and Maintenance Plan, and Closure Plan for the OCD form C-144

Design Plan:

Fluid and cuttings coming from drilling operations will pass over the shale shaker with the cuttings going to the haul off bin and the cleaned fluid returning to the working steel pits.

Equipment Includes:

1-670bbl steel working pit
2-100bbl steel working suction pits
2-500bbl steel tanks
2-20yd^3 steel haul off bins
2-pumps (HHF-1600)
2-Shale shakers
1-Centrifuge
1-Desilter/Desander

Operating and Maintenance Plan:

Inspection to occur every tour for proper operation of system and individual components. If any problems are found they will be repaired and/or corrected immediately.

Closure Plan:

All haul off bins containing cuttings will be removed from location and hauled to R-360 (NM-01-0006) disposal site located 30 miles east of Carlsbad.

Operator Name: CAZA OPERATING LLC

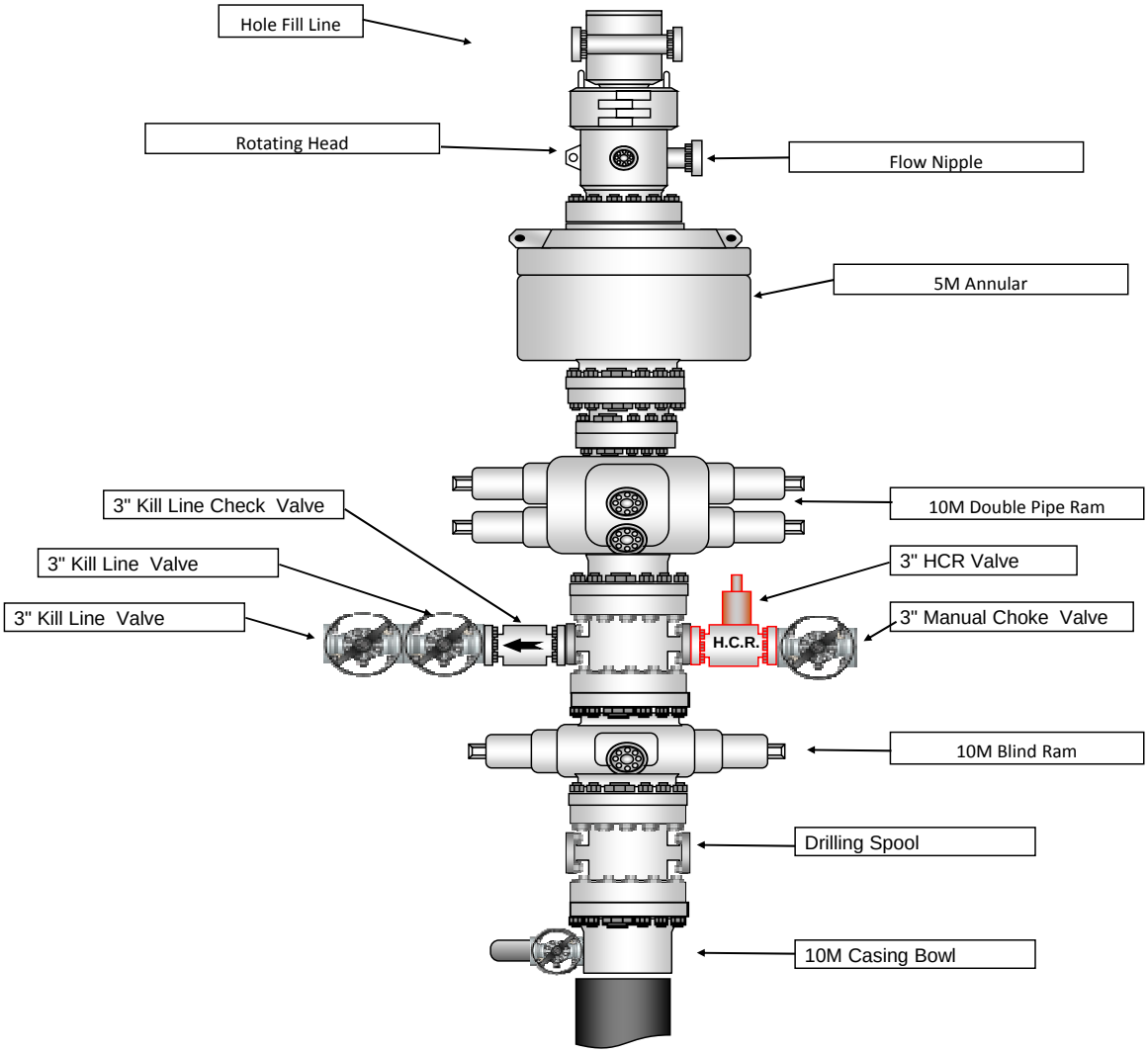
Well Name: SIOUX 25-36 STATE FED COM **Well Number:** 15H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-1	100	FNL	790	FWL	25S	35E	25	Aliquot NWNW	32.1083382	-103.3272293	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 114998	-6918	10396	10000	Y

Drilling Plan

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1226187	---	3082	0	0	ALLUVIUM	NONE	N
1226188	RUSTLER	2348	734	734	DOLOMITE, LIMESTONE, SILTSTONE	USEABLE WATER	N
1226189	TOP SALT	1958	1124	1124	SALT	NONE	N
1226190	BASE OF SALT	660	2422	2426	SALT	NONE	N
1226191	TANSILL	35	3047	3058	ANHYDRITE, DOLOMITE	NONE	N
1226192	YATES	-107	3189	3202	ANHYDRITE, DOLOMITE	NONE	N
1226193	SEVEN RIVERS	-381	3463	3480	ANHYDRITE, DOLOMITE	NONE	N
1226194	QUEEN	-600	3682	3701	ANHYDRITE, DOLOMITE	NONE	N
1226195	GRAYBURG	-933	4015	4038	ANHYDRITE, DOLOMITE	NONE	N
1226196	SAN ANDRES	-1443	4525	4555	ANHYDRITE, DOLOMITE	NONE	N
1226197	DELAWARE	-1842	4924	4959	CONGLOMERATE, LIMESTONE, SANDSTONE	NONE	N
1226198	CHERRY CANYON	-2562	5644	5687	CONGLOMERATE, LIMESTONE, SANDSTONE	NONE	N
1226199	BRUSHY CANYON	-4222	7304	7368	CONGLOMERATE, LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
1226200	BONE SPRING	-5477	8559	8632	CONGLOMERATE, LIMESTONE, SANDSTONE	NONE	N


Hole Fill Line
Rotating Head
Flow Nipple
5M Annular
3" Kill Line Check Valve
10M Double Pipe Ram
3" Kill Line Valve
3" HCR Valve
3" Kill Line Valve
3" Manual Choke Valve
H.C.R.
10M Blind Ram
Drilling Spool
10M Casing Bowl

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 222488

CONDITIONS

Operator: CAZA OPERATING, LLC 200 N Loraine St Midland, TX 79701	OGRID: 249099
	Action Number: 222488
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	6/6/2023
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	6/6/2023
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	6/6/2023
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	6/6/2023