Form 3160-3
(June 2015)

OCD – HOBBS
09/29/2020
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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.
NMNM132951

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.
GREEN BERET FEDERAL COM
[329742]
501H

2. Name of Operator
COG OPERATING LLC [229137]

9. API Well No. 30-025-47819

3a. Address
600 West Illinois Ave, Midland, TX 79701

3b. Phone No. *(include area code)*
(432) 683-7443

10. Field and Pool, or Exploratory [97088]
MALAGA/PURPLE SAGE WOLFCAMP G

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NWNE / 465 FNL / 2095 FEL / LAT 32.121857 / LONG -103.387787
At proposed prod. zone SWNE / 2590 FNL / 1980 FEL / LAT 32.101497 / LONG -103.387404

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 20/T25S/R35E/NMP

14. Distance in miles and direction from nearest town or post office*
11 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)
100 feet

16. No of acres in lease
560

17. Spacing Unit dedicated to this well
480.0

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

19. Proposed Depth
10998 feet / 18589 feet

20. BLM/BIA Bond No. in file
FED: NMB000215

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3281 feet

22. Approximate date work will start*
07/01/2020

23. Estimated duration
30 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)	STAN WAGNER / Ph: (432) 683-7443	02/20/2020

Title: Regulatory Advisor

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	09/28/2020

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.

GCP Rec 09/29/2020

SL

APPROVED WITH CONDITIONS

KZ 10/18/2020

Approval Date: 09/28/2020

(Continued on page 2)

*(Instructions on page 2)

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: NWNE / 465 FNL / 2095 FEL / TWSP: 25S / RANGE: 35E / SECTION: 20 / LAT: 32.121857 / LONG: -103.387787 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 1321 FNL / 1980 FEL / TWSP: 25S / RANGE: 35E / SECTION: 20 / LAT: 32.1195 / LONG: -103.387414 (TVD: 10962 feet, MD: 12121 feet)

PPP: NWNE / 100 FNL / 1980 FEL / TWSP: 25S / RANGE: 35E / SECTION: 20 / LAT: 32.122859 / LONG: -103.387416 (TVD: 10836 feet, MD: 10900 feet)

BHL: SWNE / 2590 FNL / 1980 FEL / TWSP: 25S / RANGE: 35E / SECTION: 29 / LAT: 32.101497 / LONG: -103.387404 (TVD: 10998 feet, MD: 18589 feet)

BLM Point of Contact

Name: Deborah Ham
Title: Legal Landlaw Examiner
Phone: (575) 234-5965
Email: dham@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:	COG Operating LLC
LEASE NO.:	Lease Number NMNM132951
LOCATION:	Section 20, T. 25 S., R. 35 E.
COUNTY:	Lea

Legal Description:

Well Pad 1

Green Beret Federal Com 702H
Surface Hole Location: 465' FNL & 2125' FEL, Section 20, T. 25 S., R. 35 E.
Bottom Hole Location: 2590' FNL & 2310' FEL, Section 29, T. 25 S, R 35 E.

Green Beret Federal Com 501H
Surface Hole Location: 465' FNL & 2095' FEL, Section 20, T. 25 S., R. 35 E.
Bottom Hole Location: 2590' FNL & 1980' FEL, Section 29, T. 25 S, R 35 E.

Green Beret Federal Com 801H
Surface Hole Location: 465' FNL & 2065' FEL, Section 20, T. 25 S., R. 35 E.
Bottom Hole Location: 2590' FNL & 1760' FEL, Section 29, T. 25 S, R 35 E.

Green Beret Federal Com 602H
Surface Hole Location: 465' FNL & 2035' FEL, Section 20, T. 25 S., R. 35 E.
Bottom Hole Location: 2590' FNL & 1640' FEL, Section 29, T. 25 S, R 35 E.

Well Pad 2

Green Beret Federal Com 701H
Surface Hole Location: 370' FNL & 790' FEL, Section 20, T. 25 S., R. 35 E.
Bottom Hole Location: 2590' FNL & 1210' FEL, Section 29, T. 25 S, R 35 E.

Green Beret Federal Com 601H
Surface Hole Location: 370' FNL & 760' FEL, Section 20, T. 25 S., R. 35 E.
Bottom Hole Location: 2590' FNL & 660' FEL, Section 29, T. 25 S, R 35 E.

Tank Battery Facilities: 842' FNL & 2124' FEL, Sec. 20-T25S-R35E

Approval Date: 09/28/2020

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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.

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☐ **Noxious Weeds**
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- Hydrology

☐ **Construction**
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- Well Structures & Facilities
- Pipelines
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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)

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.

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.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

Hydrology:

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. The berm would be maintained through the life of the wells and after interim reclamation has been completed.

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.

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

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

G. ON LEASE ACCESS ROADS

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

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

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

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

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

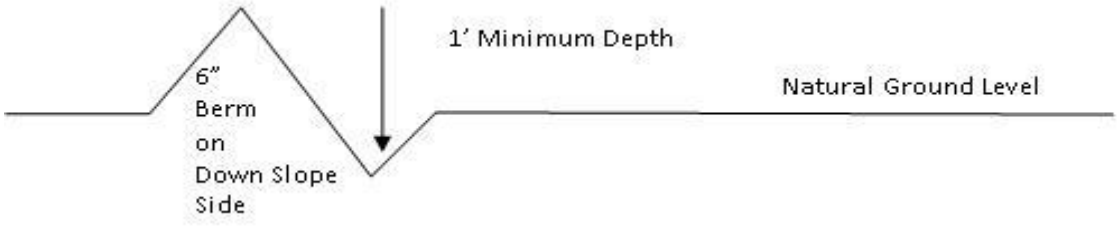
Ditching
Ditching shall be required on both sides of the road.

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

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

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

Fence Requirement

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

Public Access

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

Construction Steps

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

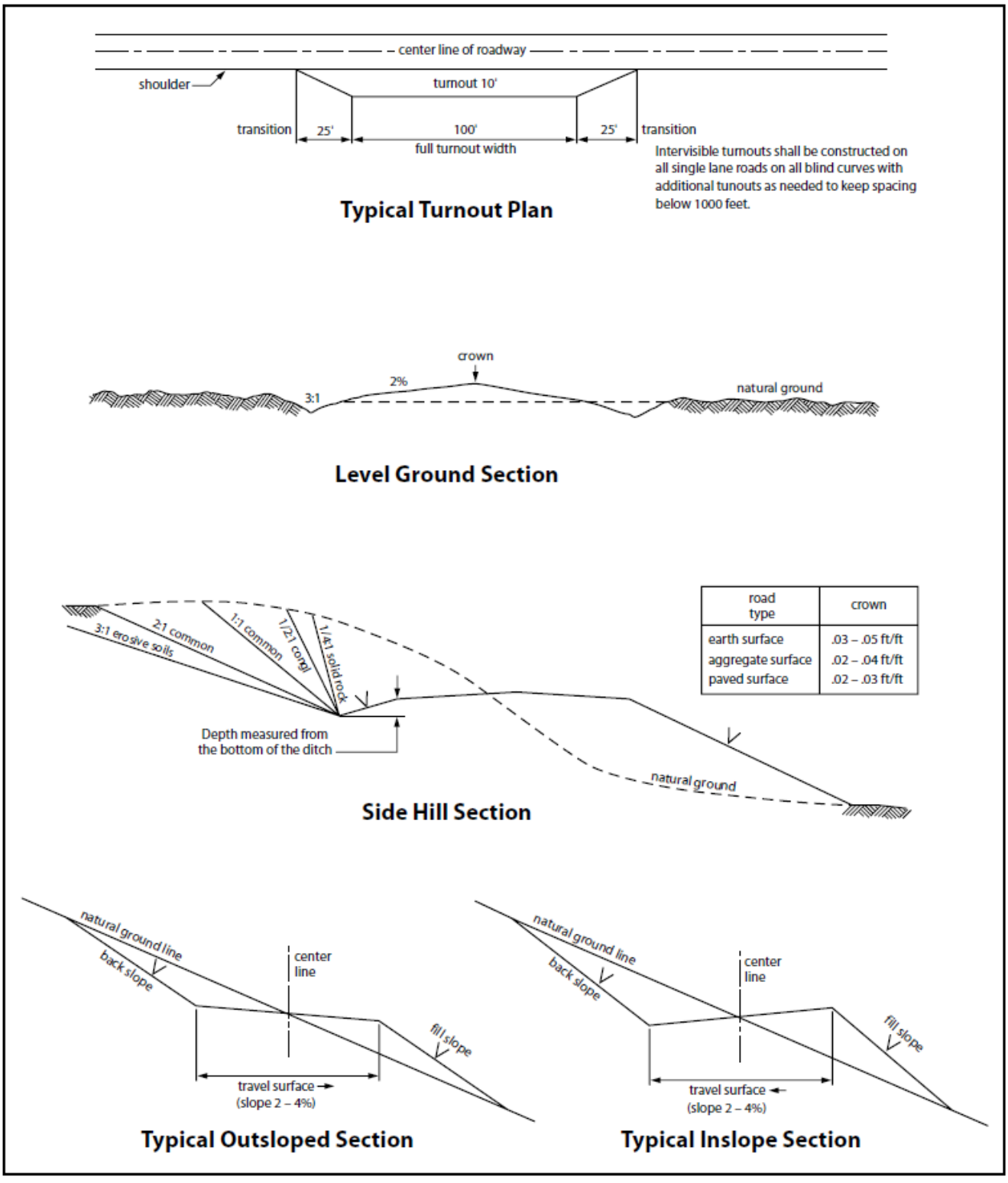


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

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

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

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

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

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

B. PIPELINES

BURIED PIPELINE STIPULATIONS

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

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

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

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

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

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

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

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

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

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

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

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

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

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

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

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

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

( ) seed mixture 1 ( ) seed mixture 3

(X) seed mixture 2 ( ) seed mixture 4

( ) seed mixture 2/LPC ( ) Aplomado Falcon Mixture

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

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

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

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

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 17 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

17. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

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

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

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

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

21. Special Stipulations:

Lesser Prairie-Chicken

Oil and gas activities 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, geophysical exploration other than 3-D operations, and 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. 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 ft. from the source of the noise.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

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

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

Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

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

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

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

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

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

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

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

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

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

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 11 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

11. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation.

In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

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

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

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, geophysical exploration other than 3-D operations, and 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 ft. from the source of the noise.

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

PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**COG Operating LLC**
LEASE NO.:	**NMNM132951**
WELL NAME & NO.:	**Green Beret Federal Com 501H**
SURFACE HOLE FOOTAGE:	**465' FNL & 2095' FEL**
BOTTOM HOLE FOOTAGE	**2590' FNL & 1980' FEL**
LOCATION:	**Section 20, T 25S, R 35E, NMPM**
COUNTY:	**Lea County, New Mexico**

H2S	◉ Yes	○ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
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

1. 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 **13-3/8"** surface casing shall be set at approximately **985'** (or a minimum of 25' into the Rustler Anhydrite and above the salt) and cemented to surface.
   a. **If cement does not circulate to 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 **6 hours** after pumping cement, ideally between 8-10 hours after.
   b. WOC time for a primary cement job will be a minimum of **8 hours** or **500 psi** compressive strength, whichever is greater. This is to include the lead cement.
   c. If cement falls back, remedial cementing will be done prior to drilling out the shoe.
   d. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.

2. The **9-5/8"** intermediate casing shall be cemented to surface.
   a. **If cement does not circulate to surface,** see B.1.a, c & d.
   b. This casing must be kept at least 1/3 full at all times in order to meet BLM collapse requirements.
3. The **5-1/2"** production casing shall be cemented with at least **200' tie-back** into the previous casing. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
2. Required safety valves, with appropriate wrenches and subs for the drill string being utilized, will be in the open position and accessible on the rig floor.

D. SPECIAL REQUIREMENTS

1. 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.
   a. The well sign on location shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

DR 09/28/2020

GENERAL REQUIREMENTS

1. The BLM is to be notified in advance for a representative to witness:
   a. Spudding the well (minimum of 24 hours)
   b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
   c. BOP/BOPE tests (minimum of 4 hours)

      ☒ Eddy County: Call the Carlsbad Field Office, (575) 361-2822

      ☒ Lea County: Call the Hobbs Field Station, (575) 393-3612
2. 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:
      i. Notify the BLM when moving in and removing the Spudder Rig.
      ii. 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.
      iii. BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
3. 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.
4. 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 available upon request. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the

following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well-specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On the portion of 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. If the operator has proposed a multi-bowl wellhead assembly in the APD, it must meet or exceed the pressure rating of the BOP system. Additionally, 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. 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 Onshore Order 2 III.A.2.i must be followed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the BOP/BOPE 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 which 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. The results of the test shall be made available upon request.
    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 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. This test shall be performed prior

to the test at full stack pressure.

f. BOP/BOPE must be tested 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

1. 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

1. 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.
2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

COG Production, LLC - Green Beret Federal Com 501H

1. Geologic Formations

TVD of target	10,958' EOL	Pilot hole depth	NA
MD at TD:	18,589'	Deepest expected fresh water:	207'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	959	Water	
Top of Salt	1348	Salt	
Base of Salt	5060	Salt	
Lamar	5389	Salt Water	
Bell Canyon	5417	Salt Water	
Cherry Canyon	6352	Oil/Gas	
Brushy Canyon	7921	Oil/Gas	
Bone Spring Lime	9158	Oil/Gas	
1st Bone Spring Sand	10388	Oil/Gas	
2nd Bone Spring Sand	10908	Target Zone	
3rd Bone Spring Sand	11993	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5”	0	985	13.375”	54.5	J55	STC	2.51	1.12	9.57
12.25”	0	4000	9.625”	40	J55	LTC	1.22	0.94	3.25
12.25"	4000	5409	9.625"	40	L80	LTC	1.09	1.37	5.73
8.75”	0	18,589	5.5”	17	P110	LTC	1.41	2.53	2.39
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface.
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

COG Production, LLC - Green Beret Federal Com 501H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	400	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Inter.	1060	12.7	2.0	9.6	16	Lead: 35:65:6 C Blend
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl
5.5 Prod	770	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	2070	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results
Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0’	50%
1st Intermediate	0’	50%
Production	4,909'	25% OH in Lateral (KOP to EOL) – 40% OH in Vertical

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
12-1/4"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5M
			Pipe Ram	x	
			Double Ram	x	
			Other*		
8-3/4"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5M
			Pipe Ram	x	
			Double Ram	x	
			Other*		

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

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

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	N Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Saturated Brine	10 - 10.1	28-34	N/C
9-5/8" Int shoe	Lateral TD	Cut Brine	8.6 - 9.3	28-34	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

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

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5300 psi at 10958' TVD
Abnormal Temperature	NO 165 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other Facets of Operation

Y	Is it a walking operation?
Y	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

NORTHERN DELAWARE BASIN

LEA COUNTY, NM
GREEN BERET FED COM PROJECT
GREEN BERET FED COM #501H

OWB
PWP1

Anticollision Report

17 February, 2020

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference PWP1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.0 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 2/17/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,589.2	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
GREEN BERET FED COM PROJECT						
DUO SONIC 29 FED 4H - OWB - OWB						Out of range
GREEN BERET FED COM #601H - OWB - PWP1						Out of range
GREEN BERET FED COM #602H - OWB - PWP1	2,500.0	2,498.7	60.0	47.3	4.730	CC, ES
GREEN BERET FED COM #602H - OWB - PWP1	2,600.0	2,597.3	61.1	48.1	4.682	SF
GREEN BERET FED COM #701H - OWB - PWP1	10,870.0	10,859.2	882.7	835.2	18.574	CC, ES, SF
GREEN BERET FED COM #702H - OWB - PWP1	2,416.4	2,417.3	30.0	17.6	2.424	CC
GREEN BERET FED COM #702H - OWB - PWP1	2,500.0	2,500.9	30.0	17.3	2.365	ES
GREEN BERET FED COM #702H - OWB - PWP1	2,600.0	2,600.4	30.7	17.7	2.353	SF
GREEN BERET FED COM #801H - OWB - PWP1	5,500.0	5,500.0	30.0	5.4	1.222	Shut in Produces, CC, ES

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #602H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 11880-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	89.71	0.3	60.0	60.0				
100.0	100.0	98.7	98.7	3.0	3.0	89.71	0.3	60.0	60.0	54.0	6.00	9.995	
200.0	200.0	198.7	198.7	3.0	3.0	89.71	0.3	60.0	60.0	54.0	6.04	9.932	
300.0	300.0	298.7	298.7	3.1	3.0	89.71	0.3	60.0	60.0	53.9	6.12	9.800	
400.0	400.0	398.7	398.7	3.2	3.0	89.71	0.3	60.0	60.0	53.8	6.24	9.611	
500.0	500.0	498.7	498.7	3.4	3.1	89.71	0.3	60.0	60.0	53.6	6.40	9.375	
600.0	600.0	598.7	598.7	3.6	3.1	89.71	0.3	60.0	60.0	53.4	6.59	9.108	
700.0	700.0	698.7	698.7	3.8	3.1	89.71	0.3	60.0	60.0	53.2	6.80	8.820	
800.0	800.0	798.7	798.7	4.0	3.2	89.71	0.3	60.0	60.0	53.0	7.04	8.521	
900.0	900.0	898.7	898.7	4.2	3.2	89.71	0.3	60.0	60.0	52.7	7.30	8.220	
1,000.0	1,000.0	998.7	998.7	4.5	3.2	89.71	0.3	60.0	60.0	52.4	7.57	7.922	
1,100.0	1,100.0	1,098.7	1,098.7	4.8	3.3	89.71	0.3	60.0	60.0	52.1	7.86	7.631	
1,200.0	1,200.0	1,198.7	1,198.7	5.1	3.4	89.71	0.3	60.0	60.0	51.8	8.16	7.350	
1,300.0	1,300.0	1,298.7	1,298.7	5.4	3.4	89.71	0.3	60.0	60.0	51.5	8.48	7.079	
1,400.0	1,400.0	1,398.7	1,398.7	5.7	3.5	89.71	0.3	60.0	60.0	51.2	8.80	6.821	
1,500.0	1,500.0	1,498.7	1,498.7	6.0	3.5	89.71	0.3	60.0	60.0	50.9	9.12	6.576	
1,600.0	1,600.0	1,598.7	1,598.7	6.3	3.6	89.71	0.3	60.0	60.0	50.5	9.46	6.343	
1,700.0	1,700.0	1,698.7	1,698.7	6.6	3.7	89.71	0.3	60.0	60.0	50.2	9.80	6.122	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

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Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #602H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 11880-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,800.0	1,800.0	1,798.7	1,798.7	6.9	3.8	89.71	0.3	60.0	60.0	49.9	10.15	5.913	
1,900.0	1,900.0	1,898.7	1,898.7	7.2	3.9	89.71	0.3	60.0	60.0	49.5	10.50	5.715	
2,000.0	2,000.0	1,998.7	1,998.7	7.6	3.9	89.71	0.3	60.0	60.0	49.1	10.85	5.528	
2,100.0	2,100.0	2,098.7	2,098.7	7.9	4.0	89.71	0.3	60.0	60.0	48.8	11.21	5.351	
2,200.0	2,200.0	2,198.7	2,198.7	8.2	4.1	89.71	0.3	60.0	60.0	48.4	11.58	5.183	
2,300.0	2,300.0	2,298.7	2,298.7	8.6	4.2	89.71	0.3	60.0	60.0	48.1	11.94	5.024	
2,400.0	2,400.0	2,398.7	2,398.7	8.9	4.3	89.71	0.3	60.0	60.0	47.7	12.31	4.873	
2,500.0	2,500.0	2,498.7	2,498.7	9.2	4.4	89.71	0.3	60.0	60.0	47.3	12.69	4.730	CC, ES
2,600.0	2,600.0	2,597.3	2,597.3	9.6	4.5	88.56	1.5	61.1	61.1	48.1	13.06	4.682	SF
2,700.0	2,700.0	2,696.0	2,695.9	9.9	4.6	85.36	5.2	64.4	64.7	51.2	13.44	4.811	
2,800.0	2,800.0	2,795.9	2,795.5	10.3	4.6	81.94	9.7	68.4	69.1	55.3	13.85	4.990	
2,900.0	2,900.0	2,895.7	2,895.2	10.6	4.7	78.95	14.1	72.4	73.8	59.5	14.28	5.170	
3,000.0	3,000.0	2,995.5	2,994.8	10.9	4.8	76.31	18.6	76.4	78.7	64.0	14.72	5.346	
3,100.0	3,100.0	3,095.3	3,094.5	11.3	4.9	73.99	23.1	80.3	83.7	68.5	15.16	5.519	
3,200.0	3,200.0	3,195.1	3,194.1	11.6	5.0	71.93	27.5	84.3	88.8	73.2	15.62	5.688	
3,300.0	3,300.0	3,295.0	3,293.7	12.0	5.1	70.10	32.0	88.3	94.0	78.0	16.07	5.851	
3,400.0	3,400.0	3,394.8	3,393.4	12.3	5.2	68.46	36.4	92.3	99.4	82.8	16.53	6.009	
3,500.0	3,500.0	3,494.6	3,493.0	12.7	5.3	66.99	40.9	96.3	104.8	87.8	17.00	6.162	
3,600.0	3,600.0	3,594.4	3,592.7	13.0	5.4	65.67	45.3	100.3	110.2	92.7	17.46	6.310	
3,700.0	3,700.0	3,694.2	3,692.3	13.4	5.5	64.47	49.8	104.2	115.7	97.8	17.93	6.452	
3,800.0	3,800.0	3,794.1	3,791.9	13.7	5.6	63.38	54.3	108.2	121.3	102.9	18.40	6.589	
3,900.0	3,900.0	3,893.9	3,891.6	14.1	5.7	62.38	58.7	112.2	126.8	108.0	18.87	6.721	
4,000.0	4,000.0	3,993.7	3,991.2	14.4	5.8	61.47	63.2	116.2	132.5	113.1	19.34	6.848	
4,100.0	4,100.0	4,093.5	4,090.9	14.8	5.9	60.63	67.6	120.2	138.1	118.3	19.82	6.970	
4,200.0	4,200.0	4,193.3	4,190.5	15.1	6.0	59.86	72.1	124.2	143.8	123.5	20.29	7.088	
4,300.0	4,300.0	4,293.2	4,290.2	15.5	6.1	59.15	76.5	128.2	149.5	128.8	20.76	7.201	
4,400.0	4,400.0	4,393.0	4,389.8	15.8	6.2	58.49	81.0	132.1	155.2	134.0	21.24	7.309	
4,500.0	4,500.0	4,492.8	4,489.4	16.2	6.3	57.88	85.5	136.1	161.0	139.3	21.71	7.414	
4,600.0	4,600.0	4,592.6	4,589.1	16.5	6.4	57.31	89.9	140.1	166.8	144.6	22.19	7.515	
4,700.0	4,700.0	4,692.4	4,688.7	16.9	6.5	56.78	94.4	144.1	172.5	149.9	22.67	7.612	
4,800.0	4,800.0	4,792.3	4,788.4	17.2	6.6	56.28	98.8	148.1	178.3	155.2	23.14	7.706	
4,900.0	4,900.0	4,892.1	4,888.0	17.6	6.7	55.82	103.3	152.1	184.1	160.5	23.62	7.796	
5,000.0	5,000.0	4,991.9	4,987.6	18.0	6.8	55.38	107.7	156.1	190.0	165.9	24.09	7.884	
5,100.0	5,100.0	5,091.7	5,087.3	18.3	6.9	54.97	112.2	160.0	195.8	171.2	24.57	7.968	
5,200.0	5,200.0	5,191.5	5,186.9	18.7	7.0	54.58	116.7	164.0	201.6	176.6	25.05	8.049	
5,300.0	5,300.0	5,291.4	5,286.6	19.0	7.2	54.21	121.1	168.0	207.5	181.9	25.53	8.127	
5,400.0	5,400.0	5,391.2	5,386.2	19.4	7.3	53.87	125.6	172.0	213.3	187.3	26.01	8.203	
5,500.0	5,500.0	5,491.0	5,485.8	19.7	7.4	53.54	130.0	176.0	219.2	192.7	26.48	8.276	
5,600.0	5,600.0	5,590.9	5,585.6	20.1	7.5	39.75	134.5	180.0	223.7	196.8	26.95	8.300	
5,700.0	5,699.8	5,690.9	5,685.3	20.4	7.6	40.27	139.0	184.0	225.6	198.2	27.40	8.232	
5,750.4	5,750.1	5,741.3	5,735.7	20.6	7.7	40.76	141.2	186.0	225.5	197.9	27.62	8.165	
5,800.0	5,799.5	5,790.8	5,785.1	20.8	7.7	41.31	143.4	187.9	225.1	197.3	27.83	8.090	
5,900.0	5,899.1	5,890.7	5,884.8	21.1	7.8	42.43	147.9	191.9	224.4	196.2	28.25	7.944	
6,000.0	5,998.7	5,990.6	5,984.5	21.5	8.0	43.56	152.3	195.9	223.8	195.2	28.67	7.806	
6,100.0	6,098.3	6,090.5	6,084.2	21.8	8.1	44.69	156.8	199.9	223.3	194.2	29.09	7.676	
6,200.0	6,198.0	6,190.4	6,184.0	22.2	8.2	45.83	161.3	203.9	222.9	193.4	29.51	7.553	
6,300.0	6,297.6	6,290.3	6,283.7	22.5	8.3	46.97	165.7	207.9	222.6	192.6	29.93	7.436	
6,400.0	6,397.2	6,390.2	6,383.4	22.9	8.4	48.12	170.2	211.9	222.3	192.0	30.34	7.326	
6,500.0	6,496.8	6,490.1	6,483.1	23.3	8.5	49.27	174.6	215.9	222.1	191.4	30.76	7.222	
6,600.0	6,596.4	6,590.0	6,582.8	23.6	8.7	50.41	179.1	219.8	222.1	190.9	31.17	7.125	
6,629.1	6,625.5	6,619.1	6,611.9	23.7	8.7	50.75	180.4	221.0	222.1	190.8	31.29	7.097	
6,700.0	6,696.1	6,689.9	6,682.6	24.0	8.8	51.56	183.6	223.8	222.1	190.5	31.58	7.033	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #602H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 11880-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,800.0	6,795.7	6,789.8	6,782.3	24.3	8.9	52.71	188.0	227.8	222.2	190.2	31.99	6.946	
6,900.0	6,895.3	6,889.7	6,882.0	24.7	9.0	53.86	192.5	231.8	222.4	190.0	32.39	6.865	
7,000.0	6,994.9	6,989.6	6,981.7	25.0	9.1	55.00	196.9	235.8	222.7	189.9	32.80	6.789	
7,100.0	7,094.5	7,089.5	7,081.4	25.4	9.3	56.14	201.4	239.8	223.1	189.9	33.20	6.718	
7,200.0	7,194.1	7,189.4	7,181.2	25.7	9.4	57.28	205.9	243.8	223.5	189.9	33.61	6.651	
7,300.0	7,293.8	7,289.3	7,280.9	26.1	9.5	58.41	210.3	247.8	224.1	190.1	34.01	6.589	
7,400.0	7,393.4	7,389.2	7,380.6	26.5	9.6	59.53	214.8	251.7	224.7	190.3	34.41	6.531	
7,500.0	7,493.0	7,489.1	7,480.3	26.8	9.7	60.65	219.3	255.7	225.4	190.6	34.80	6.477	
7,600.0	7,592.6	7,589.0	7,580.1	27.2	9.9	61.76	223.7	259.7	226.2	191.0	35.20	6.427	
7,700.0	7,692.2	7,688.9	7,679.8	27.5	10.0	62.87	228.2	263.7	227.1	191.5	35.60	6.381	
7,800.0	7,791.9	7,788.8	7,779.5	27.9	10.1	63.96	232.6	267.7	228.1	192.1	35.99	6.338	
7,900.0	7,891.5	7,888.7	7,879.2	28.2	10.2	65.04	237.1	271.7	229.2	192.8	36.39	6.298	
8,000.0	7,991.1	7,988.6	7,978.9	28.6	10.3	66.12	241.6	275.7	230.3	193.5	36.78	6.262	
8,100.0	8,090.7	8,088.5	8,078.7	28.9	10.5	67.18	246.0	279.7	231.5	194.4	37.18	6.228	
8,200.0	8,190.3	8,188.4	8,178.4	29.3	10.6	68.23	250.5	283.7	232.8	195.3	37.57	6.197	
8,300.0	8,289.9	8,288.3	8,278.1	29.7	10.7	69.27	254.9	287.6	234.2	196.3	37.97	6.170	
8,400.0	8,389.6	8,388.2	8,377.8	30.0	10.8	70.30	259.4	291.6	235.7	197.3	38.36	6.144	
8,500.0	8,489.2	8,488.1	8,477.5	30.4	11.0	71.31	263.9	295.6	237.2	198.5	38.75	6.121	
8,600.0	8,588.8	8,588.0	8,577.3	30.7	11.1	72.31	268.3	299.6	238.8	199.7	39.15	6.100	
8,700.0	8,688.4	8,687.9	8,677.0	31.1	11.2	73.30	272.8	303.6	240.5	200.9	39.54	6.082	
8,800.0	8,788.0	8,787.8	8,776.7	31.5	11.3	74.27	277.2	307.6	242.2	202.3	39.94	6.066	
8,900.0	8,887.7	8,887.7	8,876.4	31.8	11.4	75.23	281.7	311.6	244.0	203.7	40.33	6.051	
9,000.0	8,987.3	8,987.6	8,976.1	32.2	11.6	76.17	286.2	315.6	245.9	205.2	40.73	6.038	
9,100.0	9,086.9	9,087.5	9,075.9	32.5	11.7	77.10	290.6	319.5	247.9	206.8	41.13	6.027	
9,200.0	9,186.5	9,187.4	9,175.6	32.9	11.8	78.02	295.1	323.5	249.9	208.4	41.52	6.018	
9,300.0	9,286.1	9,287.3	9,275.3	33.2	11.9	78.92	299.5	327.5	252.0	210.0	41.92	6.010	
9,400.0	9,385.7	9,387.2	9,375.0	33.6	12.1	79.80	304.0	331.5	254.1	211.8	42.32	6.004	
9,500.0	9,485.4	9,487.1	9,474.8	34.0	12.2	80.67	308.5	335.5	256.3	213.6	42.72	5.999	
9,600.0	9,585.0	9,587.0	9,574.5	34.3	12.3	81.53	312.9	339.5	258.6	215.4	43.13	5.995	
9,700.0	9,684.6	9,686.9	9,674.2	34.7	12.4	82.37	317.4	343.5	260.9	217.3	43.53	5.993	
9,800.0	9,784.2	9,786.8	9,773.9	35.0	12.6	83.20	321.9	347.5	263.2	219.3	43.94	5.991	
9,900.0	9,883.8	9,886.7	9,873.6	35.4	12.7	84.01	326.3	351.5	265.6	221.3	44.34	5.991	
10,000.0	9,983.5	9,986.6	9,973.4	35.8	12.8	84.80	330.8	355.4	268.1	223.4	44.75	5.992	
10,100.0	10,083.1	10,086.5	10,073.1	36.1	12.9	85.58	335.2	359.4	270.6	225.5	45.16	5.993	
10,200.0	10,182.7	10,186.4	10,172.8	36.5	13.1	86.35	339.7	363.4	273.2	227.6	45.57	5.995	
10,300.0	10,282.3	10,286.3	10,272.5	36.8	13.2	87.10	344.2	367.4	275.8	229.9	45.98	5.999	
10,400.0	10,381.9	10,386.2	10,372.2	37.2	13.3	87.84	348.6	371.4	278.5	232.1	46.40	6.003	
10,458.6	10,440.3	10,444.7	10,430.7	37.4	13.4	88.27	351.2	373.7	280.1	233.4	46.64	6.005	
10,475.0	10,456.7	10,461.1	10,447.0	37.5	13.4	79.50	352.0	374.4	280.5	233.8	46.71	6.004	
10,500.0	10,481.6	10,486.1	10,472.0	37.6	13.4	7.34	353.1	375.4	280.8	234.0	46.83	5.997	
10,525.0	10,506.6	10,511.0	10,496.9	37.6	13.5	-56.16	354.2	376.4	280.9	233.9	46.96	5.982	
10,550.0	10,531.5	10,535.8	10,521.6	37.7	13.5	-67.01	355.3	377.4	280.7	233.6	47.10	5.960	
10,575.0	10,556.3	10,560.4	10,546.2	37.8	13.5	-71.64	356.4	378.3	280.3	233.1	47.26	5.932	
10,600.0	10,580.9	10,584.8	10,570.5	37.9	13.6	-74.72	357.5	379.3	279.8	232.3	47.43	5.899	
10,625.0	10,605.2	10,608.8	10,594.4	37.9	13.6	-77.30	358.6	380.3	279.2	231.5	47.62	5.862	
10,650.0	10,629.1	10,632.4	10,618.0	38.0	13.6	-79.72	359.6	381.2	278.6	230.7	47.83	5.824	
10,675.0	10,652.6	10,655.5	10,641.1	38.1	13.7	-82.11	360.6	382.1	278.1	230.1	48.07	5.786	
10,700.0	10,675.7	10,678.2	10,663.7	38.1	13.7	-84.52	361.7	383.0	277.9	229.6	48.32	5.752	
10,700.9	10,676.5	10,678.9	10,664.5	38.1	13.7	-84.60	361.7	383.1	277.9	229.6	48.33	5.751	
10,725.0	10,698.3	10,700.2	10,685.7	38.2	13.7	-86.95	362.6	383.9	278.2	229.6	48.60	5.723	
10,750.0	10,720.2	10,721.6	10,707.0	38.3	13.7	-89.38	363.6	384.8	278.9	230.0	48.90	5.704	
10,775.0	10,741.5	10,742.3	10,727.7	38.3	13.8	-91.78	364.5	385.6	280.3	231.1	49.22	5.696	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #602H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 11880-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,800.0	10,762.0	10,762.2	10,747.6	38.4	13.8	-94.11	365.4	386.4	282.6	233.1	49.55	5.704	
10,825.0	10,781.8	10,781.3	10,766.6	38.4	13.8	-96.34	366.3	387.2	285.9	236.0	49.89	5.731	
10,850.0	10,800.8	10,799.5	10,784.8	38.5	13.8	-98.40	367.1	387.9	290.2	240.0	50.23	5.778	
10,875.0	10,818.9	10,816.8	10,802.1	38.5	13.9	-100.27	367.9	388.6	295.8	245.2	50.56	5.850	
10,900.0	10,836.1	10,833.2	10,818.4	38.5	13.9	-101.91	368.6	389.2	302.6	251.8	50.89	5.948	
10,925.0	10,852.3	10,848.5	10,833.7	38.6	13.9	-103.28	369.3	389.8	310.8	259.6	51.19	6.072	
10,950.0	10,867.4	10,862.8	10,848.0	38.6	13.9	-104.35	369.9	390.4	320.4	268.9	51.47	6.225	
10,975.0	10,881.6	10,876.0	10,861.2	38.7	13.9	-105.10	370.5	390.9	331.3	279.6	51.72	6.406	
11,000.0	10,894.6	10,888.1	10,873.2	38.7	13.9	-105.49	371.0	391.4	343.5	291.6	51.94	6.614	
11,025.0	10,906.5	10,899.0	10,884.1	38.7	14.0	-105.49	371.5	391.9	357.0	304.9	52.13	6.850	
11,050.0	10,917.2	10,908.7	10,893.8	38.7	14.0	-105.09	372.0	392.2	371.8	319.5	52.29	7.110	
11,075.0	10,926.7	10,917.1	10,902.2	38.8	14.0	-104.24	372.3	392.6	387.6	335.2	52.42	7.395	
11,100.0	10,935.0	10,924.4	10,909.5	38.8	14.0	-102.92	372.7	392.9	404.5	352.0	52.52	7.701	
11,125.0	10,942.0	10,930.4	10,915.4	38.8	14.0	-101.09	372.9	393.1	422.3	369.7	52.61	8.027	
11,150.0	10,947.8	10,935.1	10,920.1	38.8	14.0	-98.72	373.1	393.3	440.9	388.2	52.67	8.371	
11,175.0	10,952.3	10,938.5	10,923.5	38.9	14.0	-95.79	373.3	393.4	460.2	407.5	52.72	8.730	
11,200.0	10,955.5	10,940.6	10,925.6	38.9	14.0	-92.27	373.4	393.5	480.1	427.4	52.75	9.102	
11,225.0	10,957.4	10,941.4	10,926.5	38.9	14.0	-88.19	373.4	393.6	500.5	447.8	52.77	9.486	
11,246.5	10,958.0	10,941.1	10,926.1	38.9	14.0	-84.27	373.4	393.5	518.4	465.6	52.77	9.823	
11,300.0	10,958.3	10,939.0	10,924.0	38.9	14.0	-83.86	373.3	393.5	564.0	511.2	52.78	10.686	
11,400.0	10,958.9	10,935.1	10,920.1	38.9	14.0	-83.07	373.1	393.3	652.3	599.6	52.74	12.368	
11,500.0	10,959.4	10,931.2	10,916.3	39.0	14.0	-82.29	373.0	393.1	743.6	690.9	52.69	14.112	
11,600.0	10,960.0	10,927.3	10,912.4	39.1	14.0	-81.52	372.8	393.0	836.9	784.3	52.64	15.899	
11,700.0	10,960.5	10,923.4	10,908.5	39.2	14.0	-80.74	372.6	392.8	931.6	879.0	52.59	17.714	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #701H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 12121-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,400.0	9,385.7	9,437.8	9,426.6	33.6	11.8	78.69	284.7	1,073.0	997.5	955.9	41.61	23.970	
9,500.0	9,485.4	9,537.4	9,525.9	34.0	11.9	78.92	289.4	1,067.0	989.6	947.5	42.09	23.513	
9,600.0	9,585.0	9,637.0	9,625.2	34.3	12.0	79.16	294.1	1,061.0	981.6	939.1	42.56	23.066	
9,700.0	9,684.6	9,736.6	9,724.5	34.7	12.2	79.40	298.9	1,055.0	973.7	930.7	43.03	22.628	
9,800.0	9,784.2	9,836.2	9,823.8	35.0	12.3	79.65	303.6	1,049.0	965.9	922.3	43.51	22.199	
9,900.0	9,883.8	9,935.8	9,923.1	35.4	12.4	79.90	308.4	1,043.0	958.0	914.0	43.99	21.780	
10,000.0	9,983.5	10,035.4	10,022.4	35.8	12.5	80.15	313.1	1,037.0	950.1	905.7	44.46	21.369	
10,100.0	10,083.1	10,135.0	10,121.7	36.1	12.6	80.41	317.9	1,031.0	942.3	897.4	44.94	20.966	
10,200.0	10,182.7	10,234.6	10,221.0	36.5	12.7	80.67	322.6	1,024.9	934.5	889.1	45.43	20.572	
10,300.0	10,282.3	10,334.2	10,320.3	36.8	12.9	80.94	327.3	1,018.9	926.7	880.8	45.91	20.186	
10,400.0	10,381.9	10,433.8	10,419.7	37.2	13.0	81.21	332.1	1,012.9	918.9	872.5	46.39	19.808	
10,458.6	10,440.3	10,492.2	10,477.8	37.4	13.0	81.37	334.9	1,009.4	914.4	867.7	46.68	19.590	
10,475.0	10,456.7	10,508.5	10,494.1	37.5	13.1	72.36	335.6	1,008.4	913.1	866.3	46.75	19.529	
10,500.0	10,481.6	10,533.4	10,519.0	37.6	13.1	0.01	336.8	1,006.9	911.0	864.1	46.87	19.438	
10,525.0	10,506.6	10,558.3	10,543.7	37.6	13.1	-63.49	338.0	1,005.4	908.8	861.8	46.97	19.350	
10,550.0	10,531.5	10,583.0	10,568.4	37.7	13.1	-74.15	339.2	1,003.9	906.5	859.4	47.06	19.263	
10,575.0	10,556.3	10,607.5	10,592.8	37.8	13.2	-78.40	340.4	1,002.4	904.1	857.0	47.14	19.179	
10,600.0	10,580.9	10,631.7	10,617.0	37.9	13.2	-80.93	341.5	1,001.0	901.7	854.4	47.22	19.096	
10,625.0	10,605.2	10,655.6	10,640.8	37.9	13.2	-82.79	342.6	999.5	899.2	851.9	47.28	19.017	
10,650.0	10,629.1	10,679.1	10,664.2	38.0	13.3	-84.34	343.8	998.1	896.7	849.4	47.34	18.942	
10,675.0	10,652.6	10,702.2	10,687.2	38.1	13.3	-85.73	344.9	996.7	894.3	846.9	47.39	18.871	
10,700.0	10,675.7	10,724.7	10,709.7	38.1	13.3	-87.03	345.9	995.4	892.0	844.5	47.43	18.805	
10,725.0	10,698.3	10,746.6	10,731.5	38.2	13.3	-88.28	347.0	994.0	889.8	842.3	47.47	18.745	
10,750.0	10,720.2	10,767.9	10,752.7	38.3	13.4	-89.49	348.0	992.8	887.8	840.3	47.49	18.693	
10,775.0	10,741.5	10,788.4	10,773.2	38.3	13.4	-90.65	349.0	991.5	886.0	838.5	47.51	18.649	
10,800.0	10,762.0	10,808.2	10,793.0	38.4	13.4	-91.77	349.9	990.3	884.6	837.1	47.52	18.615	
10,825.0	10,781.8	10,827.2	10,811.9	38.4	13.4	-92.83	350.8	989.2	883.5	836.0	47.53	18.590	
10,850.0	10,800.8	10,845.3	10,829.9	38.5	13.5	-93.83	351.7	988.1	882.9	835.4	47.53	18.576	
10,870.0	10,815.4	10,859.2	10,843.7	38.5	13.5	-94.58	352.3	987.2	882.7	835.2	47.53	18.574	CC, ES, SF
10,875.0	10,818.9	10,862.5	10,847.1	38.5	13.5	-94.76	352.5	987.0	882.7	835.2	47.52	18.575	
10,900.0	10,836.1	10,878.7	10,863.2	38.5	13.5	-95.60	353.3	986.1	883.1	835.6	47.52	18.586	
10,925.0	10,852.3	10,893.9	10,878.4	38.6	13.5	-96.34	354.0	985.1	884.1	836.6	47.51	18.610	
10,950.0	10,867.4	10,908.1	10,892.5	38.6	13.5	-96.96	354.7	984.3	885.7	838.2	47.49	18.649	
10,975.0	10,881.6	10,921.1	10,905.5	38.7	13.5	-97.46	355.3	983.5	888.0	840.5	47.48	18.703	
11,000.0	10,894.6	10,933.1	10,917.4	38.7	13.6	-97.83	355.9	982.8	891.1	843.6	47.47	18.772	
11,025.0	10,906.5	10,943.8	10,928.2	38.7	13.6	-98.04	356.4	982.1	894.8	847.4	47.46	18.856	
11,050.0	10,917.2	10,953.4	10,937.7	38.7	13.6	-98.10	356.8	981.6	899.4	851.9	47.45	18.956	
11,075.0	10,926.7	10,961.8	10,946.1	38.8	13.6	-98.00	357.2	981.0	904.7	857.3	47.44	19.071	
11,100.0	10,935.0	10,968.9	10,953.2	38.8	13.6	-97.71	357.6	980.6	910.8	863.4	47.44	19.202	
11,125.0	10,942.0	10,974.8	10,959.0	38.8	13.6	-97.25	357.8	980.3	917.8	870.3	47.43	19.348	
11,150.0	10,947.8	10,979.4	10,963.6	38.8	13.6	-96.60	358.1	980.0	925.5	878.0	47.44	19.509	
11,175.0	10,952.3	10,982.7	10,966.9	38.9	13.6	-95.76	358.2	979.8	933.9	886.5	47.44	19.685	
11,200.0	10,955.5	10,984.7	10,968.9	38.9	13.6	-94.72	358.3	979.7	943.1	895.7	47.45	19.874	
11,225.0	10,957.4	10,985.4	10,969.6	38.9	13.6	-93.48	358.3	979.6	953.0	905.5	47.47	20.077	
11,246.5	10,958.0	10,984.9	10,969.1	38.9	13.6	-92.27	358.3	979.7	962.0	914.5	47.48	20.260	
11,300.0	10,958.3	10,982.7	10,966.9	38.9	13.6	-92.12	358.2	979.8	986.1	938.6	47.54	20.746	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #702H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 12135-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.9	0.9	3.0	3.0	-90.32	-0.2	-30.0	30.0				
100.0	100.0	100.9	100.9	3.0	3.0	-90.32	-0.2	-30.0	30.0	24.0	6.00	4.998	
200.0	200.0	200.9	200.9	3.0	3.0	-90.32	-0.2	-30.0	30.0	24.0	6.04	4.966	
300.0	300.0	300.9	300.9	3.1	3.0	-90.32	-0.2	-30.0	30.0	23.9	6.12	4.900	
400.0	400.0	400.9	400.9	3.2	3.0	-90.32	-0.2	-30.0	30.0	23.8	6.24	4.805	
500.0	500.0	500.9	500.9	3.4	3.1	-90.32	-0.2	-30.0	30.0	23.6	6.40	4.688	
600.0	600.0	600.9	600.9	3.6	3.1	-90.32	-0.2	-30.0	30.0	23.4	6.59	4.554	
700.0	700.0	700.9	700.9	3.8	3.1	-90.32	-0.2	-30.0	30.0	23.2	6.80	4.410	
800.0	800.0	800.9	800.9	4.0	3.2	-90.32	-0.2	-30.0	30.0	23.0	7.04	4.261	
900.0	900.0	900.9	900.9	4.2	3.2	-90.32	-0.2	-30.0	30.0	22.7	7.30	4.110	
1,000.0	1,000.0	1,000.9	1,000.9	4.5	3.2	-90.32	-0.2	-30.0	30.0	22.4	7.57	3.961	
1,100.0	1,100.0	1,100.9	1,100.9	4.8	3.3	-90.32	-0.2	-30.0	30.0	22.1	7.86	3.815	
1,200.0	1,200.0	1,200.9	1,200.9	5.1	3.4	-90.32	-0.2	-30.0	30.0	21.8	8.16	3.675	
1,300.0	1,300.0	1,300.9	1,300.9	5.4	3.4	-90.32	-0.2	-30.0	30.0	21.5	8.48	3.540	
1,400.0	1,400.0	1,400.9	1,400.9	5.7	3.5	-90.32	-0.2	-30.0	30.0	21.2	8.80	3.411	
1,500.0	1,500.0	1,500.9	1,500.9	6.0	3.5	-90.32	-0.2	-30.0	30.0	20.9	9.12	3.288	
1,600.0	1,600.0	1,600.9	1,600.9	6.3	3.6	-90.32	-0.2	-30.0	30.0	20.5	9.46	3.171	
1,700.0	1,700.0	1,700.9	1,700.9	6.6	3.7	-90.32	-0.2	-30.0	30.0	20.2	9.80	3.061	
1,800.0	1,800.0	1,800.9	1,800.9	6.9	3.8	-90.32	-0.2	-30.0	30.0	19.9	10.15	2.956	
1,900.0	1,900.0	1,900.9	1,900.9	7.2	3.9	-90.32	-0.2	-30.0	30.0	19.5	10.50	2.857	
2,000.0	2,000.0	2,000.9	2,000.9	7.6	3.9	-90.32	-0.2	-30.0	30.0	19.1	10.85	2.764	
2,100.0	2,100.0	2,100.9	2,100.9	7.9	4.0	-90.32	-0.2	-30.0	30.0	18.8	11.21	2.675	
2,200.0	2,200.0	2,200.9	2,200.9	8.2	4.1	-90.32	-0.2	-30.0	30.0	18.4	11.58	2.591	
2,300.0	2,300.0	2,300.9	2,300.9	8.6	4.2	-90.32	-0.2	-30.0	30.0	18.1	11.94	2.512	
2,400.0	2,400.0	2,400.9	2,400.9	8.9	4.3	-90.32	-0.2	-30.0	30.0	17.7	12.31	2.436	
2,416.4	2,416.4	2,417.3	2,417.3	9.0	4.3	-90.32	-0.2	-30.0	30.0	17.6	12.37	2.424	CC
2,500.0	2,500.0	2,500.9	2,500.9	9.2	4.4	-90.32	-0.2	-30.0	30.0	17.3	12.69	2.365	ES
2,600.0	2,600.0	2,600.4	2,600.4	9.6	4.5	-87.30	1.4	-30.7	30.7	17.7	13.06	2.353	SF
2,700.0	2,700.0	2,700.2	2,700.0	9.9	4.6	-80.29	5.6	-32.5	33.0	19.5	13.48	2.447	
2,800.0	2,800.0	2,800.1	2,799.8	10.3	4.7	-73.98	9.9	-34.4	35.8	21.8	13.93	2.568	
2,900.0	2,900.0	2,899.9	2,899.6	10.6	4.8	-68.64	14.2	-36.3	39.0	24.5	14.41	2.702	
3,000.0	3,000.0	2,999.8	2,999.4	10.9	4.9	-64.14	18.5	-38.1	42.4	27.5	14.91	2.845	
3,100.0	3,100.0	3,099.7	3,099.2	11.3	5.0	-60.33	22.8	-40.0	46.1	30.7	15.40	2.992	
3,200.0	3,200.0	3,199.6	3,198.9	11.6	5.1	-57.10	27.1	-41.9	49.9	34.0	15.90	3.141	
3,300.0	3,300.0	3,299.5	3,298.7	12.0	5.2	-54.34	31.4	-43.8	53.9	37.5	16.39	3.289	
3,400.0	3,400.0	3,399.4	3,398.5	12.3	5.3	-51.96	35.7	-45.7	58.0	41.1	16.88	3.436	
3,500.0	3,500.0	3,499.3	3,498.3	12.7	5.4	-49.90	40.0	-47.5	62.2	44.8	17.38	3.580	
3,600.0	3,600.0	3,599.2	3,598.1	13.0	5.5	-48.10	44.3	-49.4	66.4	48.6	17.86	3.720	
3,700.0	3,700.0	3,699.1	3,697.8	13.4	5.6	-46.52	48.6	-51.3	70.8	52.4	18.35	3.856	
3,800.0	3,800.0	3,799.0	3,797.6	13.7	5.7	-45.12	53.0	-53.2	75.1	56.3	18.84	3.988	
3,900.0	3,900.0	3,898.8	3,897.4	14.1	5.8	-43.87	57.3	-55.0	79.5	60.2	19.32	4.115	
4,000.0	4,000.0	3,998.7	3,997.2	14.4	5.9	-42.76	61.6	-56.9	83.9	64.1	19.80	4.239	
4,100.0	4,100.0	4,098.6	4,096.9	14.8	6.0	-41.75	65.9	-58.8	88.4	68.1	20.28	4.358	
4,200.0	4,200.0	4,198.5	4,196.7	15.1	6.1	-40.85	70.2	-60.7	92.9	72.1	20.76	4.473	
4,300.0	4,300.0	4,298.4	4,296.5	15.5	6.2	-40.02	74.5	-62.6	97.4	76.1	21.25	4.584	
4,400.0	4,400.0	4,398.3	4,396.3	15.8	6.3	-39.28	78.8	-64.4	101.9	80.2	21.73	4.691	
4,500.0	4,500.0	4,498.2	4,496.1	16.2	6.5	-38.59	83.1	-66.3	106.4	84.2	22.20	4.794	
4,600.0	4,600.0	4,598.1	4,595.8	16.5	6.6	-37.96	87.4	-68.2	111.0	88.3	22.68	4.893	
4,700.0	4,700.0	4,698.0	4,695.6	16.9	6.7	-37.38	91.7	-70.1	115.6	92.4	23.16	4.989	
4,800.0	4,800.0	4,797.8	4,795.4	17.2	6.8	-36.84	96.0	-72.0	120.1	96.5	23.64	5.081	
4,900.0	4,900.0	4,897.7	4,895.2	17.6	6.9	-36.35	100.3	-73.8	124.7	100.6	24.12	5.170	
5,000.0	5,000.0	4,997.6	4,995.0	18.0	7.0	-35.89	104.7	-75.7	129.3	104.7	24.60	5.256	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #702H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 12135-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,100.0	5,097.5	5,094.7	18.3	7.1	-35.46	109.0	-77.6	133.9	108.8	25.08	5.340	
5,200.0	5,200.0	5,197.4	5,194.5	18.7	7.3	-35.06	113.3	-79.5	138.5	113.0	25.56	5.420	
5,300.0	5,300.0	5,297.3	5,294.3	19.0	7.4	-34.68	117.6	-81.4	143.1	117.1	26.04	5.497	
5,400.0	5,400.0	5,397.2	5,394.1	19.4	7.5	-34.33	121.9	-83.2	147.8	121.2	26.52	5.572	
5,500.0	5,500.0	5,497.1	5,493.8	19.7	7.6	-34.00	126.2	-85.1	152.4	125.4	27.00	5.645	
5,600.0	5,600.0	5,597.0	5,593.7	20.1	7.7	-47.82	130.5	-87.0	155.8	128.4	27.46	5.675	
5,700.0	5,699.8	5,696.9	5,693.5	20.4	7.8	-48.90	134.8	-88.9	157.0	129.1	27.90	5.626	
5,750.4	5,750.1	5,747.3	5,743.8	20.6	7.9	-49.82	137.0	-89.8	156.7	128.6	28.11	5.575	
5,800.0	5,799.5	5,796.8	5,793.2	20.8	8.0	-50.84	139.1	-90.8	156.2	127.9	28.31	5.519	
5,900.0	5,899.1	5,896.6	5,893.0	21.1	8.1	-52.93	143.4	-92.6	155.4	126.7	28.70	5.413	
6,000.0	5,998.7	5,996.5	5,992.7	21.5	8.2	-55.04	147.7	-94.5	154.8	125.7	29.09	5.319	
6,100.0	6,098.3	6,096.3	6,092.4	21.8	8.3	-57.16	152.0	-96.4	154.3	124.9	29.48	5.236	
6,200.0	6,198.0	6,196.1	6,192.1	22.2	8.4	-59.29	156.4	-98.3	154.1	124.3	29.85	5.163	
6,246.1	6,243.9	6,242.2	6,238.1	22.4	8.5	-60.28	158.3	-99.1	154.1	124.1	30.02	5.133	
6,300.0	6,297.6	6,296.0	6,291.9	22.5	8.6	-61.42	160.7	-100.1	154.1	123.9	30.22	5.101	
6,400.0	6,397.2	6,395.8	6,391.6	22.9	8.7	-63.55	165.0	-102.0	154.4	123.8	30.58	5.048	
6,500.0	6,496.8	6,495.6	6,491.3	23.3	8.8	-65.68	169.3	-103.9	154.8	123.9	30.93	5.004	
6,600.0	6,596.4	6,595.5	6,591.0	23.6	8.9	-67.78	173.6	-105.8	155.4	124.2	31.28	4.969	
6,700.0	6,696.1	6,695.3	6,690.8	24.0	9.0	-69.87	177.9	-107.7	156.3	124.7	31.63	4.942	
6,800.0	6,795.7	6,795.1	6,790.5	24.3	9.2	-71.93	182.2	-109.5	157.4	125.4	31.96	4.923	
6,900.0	6,895.3	6,895.0	6,890.2	24.7	9.3	-73.96	186.5	-111.4	158.6	126.3	32.30	4.911	
7,000.0	6,994.9	6,994.8	6,989.9	25.0	9.4	-75.95	190.8	-113.3	160.1	127.5	32.63	4.906	
7,100.0	7,094.5	7,094.7	7,089.7	25.4	9.5	-77.91	195.1	-115.2	161.7	128.8	32.96	4.907	
7,200.0	7,194.1	7,194.5	7,189.4	25.7	9.6	-79.83	199.4	-117.0	163.6	130.3	33.28	4.914	
7,300.0	7,293.8	7,294.3	7,289.1	26.1	9.8	-81.70	203.7	-118.9	165.6	132.0	33.61	4.926	
7,400.0	7,393.4	7,394.2	7,388.8	26.5	9.9	-83.53	208.0	-120.8	167.8	133.8	33.94	4.944	
7,500.0	7,493.0	7,494.0	7,488.6	26.8	10.0	-85.30	212.3	-122.7	170.1	135.9	34.26	4.965	
7,600.0	7,592.6	7,593.8	7,588.3	27.2	10.1	-87.03	216.6	-124.6	172.6	138.0	34.59	4.991	
7,700.0	7,692.2	7,693.7	7,688.0	27.5	10.3	-88.70	220.9	-126.4	175.3	140.4	34.92	5.020	
7,800.0	7,791.9	7,793.5	7,787.7	27.9	10.4	-90.33	225.2	-128.3	178.1	142.9	35.25	5.053	
7,900.0	7,891.5	7,893.3	7,887.5	28.2	10.5	-91.90	229.6	-130.2	181.1	145.5	35.58	5.089	
8,000.0	7,991.1	7,993.2	7,987.2	28.6	10.6	-93.42	233.9	-132.1	184.1	148.2	35.92	5.127	
8,100.0	8,090.7	8,093.0	8,086.9	28.9	10.8	-94.89	238.2	-134.0	187.4	151.1	36.26	5.167	
8,200.0	8,190.3	8,192.8	8,186.6	29.3	10.9	-96.31	242.5	-135.8	190.7	154.1	36.60	5.210	
8,300.0	8,289.9	8,292.7	8,286.3	29.7	11.0	-97.68	246.8	-137.7	194.1	157.2	36.95	5.254	
8,400.0	8,389.6	8,392.5	8,386.1	30.0	11.1	-99.00	251.1	-139.6	197.7	160.4	37.30	5.300	
8,500.0	8,489.2	8,492.3	8,485.8	30.4	11.2	-100.28	255.4	-141.5	201.3	163.7	37.65	5.347	
8,600.0	8,588.8	8,592.2	8,585.5	30.7	11.4	-101.51	259.7	-143.3	205.1	167.1	38.01	5.395	
8,700.0	8,688.4	8,692.0	8,685.2	31.1	11.5	-102.69	264.0	-145.2	208.9	170.5	38.37	5.444	
8,800.0	8,788.0	8,791.8	8,785.0	31.5	11.6	-103.83	268.3	-147.1	212.8	174.1	38.74	5.494	
8,900.0	8,887.7	8,891.7	8,884.7	31.8	11.7	-104.93	272.6	-149.0	216.8	177.7	39.11	5.544	
9,000.0	8,987.3	8,991.5	8,984.4	32.2	11.9	-105.99	276.9	-150.9	220.9	181.4	39.48	5.595	
9,100.0	9,086.9	9,091.3	9,084.1	32.5	12.0	-107.01	281.2	-152.7	225.1	185.2	39.86	5.647	
9,200.0	9,186.5	9,191.2	9,183.9	32.9	12.1	-108.00	285.5	-154.6	229.3	189.0	40.24	5.698	
9,300.0	9,286.1	9,291.0	9,283.6	33.2	12.2	-108.95	289.8	-156.5	233.6	192.9	40.62	5.750	
9,400.0	9,385.7	9,390.8	9,383.3	33.6	12.4	-109.86	294.1	-158.4	237.9	196.9	41.01	5.801	
9,500.0	9,485.4	9,490.7	9,483.0	34.0	12.5	-110.74	298.5	-160.2	242.3	200.9	41.40	5.853	
9,600.0	9,585.0	9,590.5	9,582.8	34.3	12.6	-111.59	302.8	-162.1	246.8	205.0	41.79	5.905	
9,700.0	9,684.6	9,690.4	9,682.5	34.7	12.7	-112.41	307.1	-164.0	251.3	209.1	42.19	5.956	
9,800.0	9,784.2	9,790.2	9,782.2	35.0	12.9	-113.20	311.4	-165.9	255.9	213.3	42.59	6.008	
9,900.0	9,883.8	9,890.0	9,881.9	35.4	13.0	-113.96	315.7	-167.8	260.5	217.5	42.99	6.059	
10,000.0	9,983.5	9,989.9	9,981.7	35.8	13.1	-114.69	320.0	-169.6	265.1	221.7	43.40	6.110	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #702H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 12135-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.0	10,083.1	10,089.7	10,081.4	36.1	13.3	-115.40	324.3	-171.5	269.8	226.0	43.80	6.160	
10,200.0	10,182.7	10,189.5	10,181.1	36.5	13.4	-116.09	328.6	-173.4	274.6	230.4	44.21	6.210	
10,300.0	10,282.3	10,289.4	10,280.8	36.8	13.5	-116.75	332.9	-175.3	279.3	234.7	44.62	6.260	
10,400.0	10,381.9	10,389.2	10,380.6	37.2	13.6	-117.39	337.2	-177.1	284.2	239.1	45.04	6.310	
10,458.6	10,440.3	10,447.7	10,439.0	37.4	13.7	-117.75	339.7	-178.2	287.0	241.7	45.28	6.338	
10,475.0	10,456.7	10,464.1	10,455.4	37.5	13.7	-126.76	340.4	-178.6	287.7	242.4	45.35	6.345	
10,500.0	10,481.6	10,489.1	10,480.3	37.6	13.8	161.20	341.5	-179.0	288.6	243.1	45.45	6.349	
10,525.0	10,506.6	10,514.0	10,505.2	37.6	13.8	98.40	342.6	-179.5	289.1	243.6	45.56	6.346	
10,550.0	10,531.5	10,538.8	10,529.9	37.7	13.8	88.80	343.7	-180.0	289.4	243.8	45.67	6.337	
10,575.0	10,556.3	10,563.3	10,554.5	37.8	13.8	85.97	344.7	-180.4	289.5	243.7	45.78	6.323	
10,600.0	10,580.9	10,587.7	10,578.8	37.9	13.9	85.21	345.8	-180.9	289.3	243.4	45.91	6.303	
10,625.0	10,605.2	10,611.7	10,602.8	37.9	13.9	85.43	346.8	-181.3	289.1	243.1	46.05	6.279	
10,650.0	10,629.1	10,635.3	10,626.4	38.0	13.9	86.24	347.8	-181.8	288.9	242.7	46.21	6.252	
10,675.0	10,652.6	10,658.4	10,649.5	38.1	14.0	87.45	348.8	-182.2	288.7	242.4	46.38	6.225	
10,680.8	10,658.0	10,663.7	10,654.7	38.1	14.0	87.77	349.0	-182.3	288.7	242.3	46.43	6.219	
10,700.0	10,675.7	10,681.0	10,672.1	38.1	14.0	88.94	349.8	-182.6	288.8	242.2	46.59	6.199	
10,725.0	10,698.3	10,703.1	10,694.1	38.2	14.0	90.64	350.7	-183.1	289.2	242.4	46.83	6.177	
10,750.0	10,720.2	10,724.5	10,715.4	38.3	14.1	92.47	351.7	-183.5	290.1	243.0	47.10	6.161	
10,775.0	10,741.5	10,745.1	10,736.1	38.3	14.1	94.37	352.6	-183.8	291.7	244.3	47.40	6.153	
10,800.0	10,762.0	10,765.1	10,756.0	38.4	14.1	96.28	353.4	-184.2	294.0	246.2	47.73	6.158	
10,825.0	10,781.8	10,784.2	10,775.1	38.4	14.1	98.14	354.2	-184.6	297.1	249.0	48.10	6.178	
10,850.0	10,800.8	10,802.4	10,793.3	38.5	14.2	99.90	355.0	-184.9	301.4	252.9	48.48	6.216	
10,875.0	10,818.9	10,819.7	10,810.6	38.5	14.2	101.51	355.8	-185.2	306.7	257.8	48.88	6.274	
10,900.0	10,836.1	10,836.1	10,826.9	38.5	14.2	102.92	356.5	-185.6	313.2	264.0	49.28	6.356	
10,925.0	10,852.3	10,851.4	10,842.3	38.6	14.2	104.11	357.1	-185.8	321.1	271.4	49.68	6.462	
10,950.0	10,867.4	10,865.7	10,856.5	38.6	14.2	105.04	357.8	-186.1	330.2	280.1	50.07	6.595	
10,975.0	10,881.6	10,878.9	10,869.7	38.7	14.2	105.67	358.3	-186.4	340.6	290.2	50.43	6.754	
11,000.0	10,894.6	10,891.0	10,881.8	38.7	14.3	105.97	358.9	-186.6	352.3	301.6	50.77	6.939	
11,025.0	10,906.5	10,901.9	10,892.7	38.7	14.3	105.92	359.3	-186.8	365.3	314.2	51.09	7.151	
11,050.0	10,917.2	10,911.6	10,902.4	38.7	14.3	105.49	359.7	-187.0	379.5	328.1	51.37	7.387	
11,075.0	10,926.7	10,920.1	10,910.9	38.8	14.3	104.64	360.1	-187.1	394.7	343.1	51.62	7.648	
11,100.0	10,935.0	10,927.4	10,918.1	38.8	14.3	103.36	360.4	-187.3	411.0	359.2	51.83	7.930	
11,125.0	10,942.0	10,933.4	10,924.1	38.8	14.3	101.61	360.7	-187.4	428.3	376.2	52.02	8.232	
11,150.0	10,947.8	10,938.1	10,928.9	38.8	14.3	99.36	360.9	-187.5	446.3	394.1	52.19	8.553	
11,175.0	10,952.3	10,941.5	10,932.3	38.9	14.3	96.59	361.0	-187.5	465.1	412.8	52.32	8.889	
11,200.0	10,955.5	10,943.7	10,934.4	38.9	14.3	93.30	361.1	-187.6	484.5	432.1	52.44	9.239	
11,225.0	10,957.4	10,944.5	10,935.3	38.9	14.3	89.50	361.2	-187.6	504.4	451.9	52.54	9.602	
11,246.5	10,958.0	10,944.2	10,934.9	38.9	14.3	85.85	361.1	-187.6	521.9	469.3	52.61	9.920	
11,300.0	10,958.3	10,942.1	10,932.9	38.9	14.3	85.46	361.1	-187.6	566.5	513.8	52.74	10.742	
11,400.0	10,958.9	10,938.4	10,929.1	38.9	14.3	84.74	360.9	-187.5	653.5	600.6	52.90	12.354	
11,500.0	10,959.4	10,934.6	10,925.3	39.0	14.3	84.02	360.7	-187.4	743.7	690.7	52.98	14.037	
11,600.0	10,960.0	10,930.8	10,921.5	39.1	14.3	83.31	360.6	-187.3	836.2	783.1	53.03	15.769	
11,700.0	10,960.5	10,927.0	10,917.8	39.2	14.3	82.59	360.4	-187.3	930.1	877.1	53.05	17.534	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #801H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 12378-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	89.81	0.1	30.0	30.0				
100.0	100.0	100.0	100.0	3.0	3.0	89.81	0.1	30.0	30.0	24.0	6.00	4.997	
200.0	200.0	200.0	200.0	3.0	3.0	89.81	0.1	30.0	30.0	24.0	6.04	4.966	
300.0	300.0	300.0	300.0	3.1	3.0	89.81	0.1	30.0	30.0	23.9	6.12	4.900	
400.0	400.0	400.0	400.0	3.2	3.0	89.81	0.1	30.0	30.0	23.8	6.24	4.805	
500.0	500.0	500.0	500.0	3.4	3.1	89.81	0.1	30.0	30.0	23.6	6.40	4.688	
600.0	600.0	600.0	600.0	3.6	3.1	89.81	0.1	30.0	30.0	23.4	6.59	4.554	
700.0	700.0	700.0	700.0	3.8	3.1	89.81	0.1	30.0	30.0	23.2	6.80	4.410	
800.0	800.0	800.0	800.0	4.0	3.2	89.81	0.1	30.0	30.0	23.0	7.04	4.261	
900.0	900.0	900.0	900.0	4.2	3.2	89.81	0.1	30.0	30.0	22.7	7.30	4.110	
1,000.0	1,000.0	1,000.0	1,000.0	4.5	3.2	89.81	0.1	30.0	30.0	22.4	7.57	3.961	
1,100.0	1,100.0	1,100.0	1,100.0	4.8	3.3	89.81	0.1	30.0	30.0	22.1	7.86	3.815	
1,200.0	1,200.0	1,200.0	1,200.0	5.1	3.4	89.81	0.1	30.0	30.0	21.8	8.16	3.675	
1,300.0	1,300.0	1,300.0	1,300.0	5.4	3.4	89.81	0.1	30.0	30.0	21.5	8.48	3.540	
1,400.0	1,400.0	1,400.0	1,400.0	5.7	3.5	89.81	0.1	30.0	30.0	21.2	8.80	3.411	
1,500.0	1,500.0	1,500.0	1,500.0	6.0	3.5	89.81	0.1	30.0	30.0	20.9	9.12	3.288	
1,600.0	1,600.0	1,600.0	1,600.0	6.3	3.6	89.81	0.1	30.0	30.0	20.5	9.46	3.171	
1,700.0	1,700.0	1,700.0	1,700.0	6.6	3.7	89.81	0.1	30.0	30.0	20.2	9.80	3.061	
1,800.0	1,800.0	1,800.0	1,800.0	6.9	3.8	89.81	0.1	30.0	30.0	19.9	10.15	2.956	
1,900.0	1,900.0	1,900.0	1,900.0	7.2	3.9	89.81	0.1	30.0	30.0	19.5	10.50	2.857	
2,000.0	2,000.0	2,000.0	2,000.0	7.6	3.9	89.81	0.1	30.0	30.0	19.1	10.85	2.764	
2,100.0	2,100.0	2,100.0	2,100.0	7.9	4.0	89.81	0.1	30.0	30.0	18.8	11.21	2.675	
2,200.0	2,200.0	2,200.0	2,200.0	8.2	4.1	89.81	0.1	30.0	30.0	18.4	11.58	2.591	
2,300.0	2,300.0	2,300.0	2,300.0	8.6	4.2	89.81	0.1	30.0	30.0	18.1	11.94	2.512	
2,400.0	2,400.0	2,400.0	2,400.0	8.9	4.3	89.81	0.1	30.0	30.0	17.7	12.31	2.436	
2,500.0	2,500.0	2,500.0	2,500.0	9.2	4.4	89.81	0.1	30.0	30.0	17.3	12.69	2.365	
2,600.0	2,600.0	2,600.0	2,600.0	9.6	4.5	89.81	0.1	30.0	30.0	16.9	13.06	2.297	
2,700.0	2,700.0	2,700.0	2,700.0	9.9	4.6	89.81	0.1	30.0	30.0	16.6	13.44	2.233	
2,800.0	2,800.0	2,800.0	2,800.0	10.3	4.7	89.81	0.1	30.0	30.0	16.2	13.82	2.171	
2,900.0	2,900.0	2,900.0	2,900.0	10.6	4.8	89.81	0.1	30.0	30.0	15.8	14.20	2.113	
3,000.0	3,000.0	3,000.0	3,000.0	10.9	4.9	89.81	0.1	30.0	30.0	15.4	14.58	2.057	
3,100.0	3,100.0	3,100.0	3,100.0	11.3	5.0	89.81	0.1	30.0	30.0	15.0	14.97	2.005	
3,200.0	3,200.0	3,200.0	3,200.0	11.6	5.1	89.81	0.1	30.0	30.0	14.6	15.35	1.954	Advise and Monitor
3,300.0	3,300.0	3,300.0	3,300.0	12.0	5.2	89.81	0.1	30.0	30.0	14.3	15.74	1.906	Advise and Monitor
3,400.0	3,400.0	3,400.0	3,400.0	12.3	5.3	89.81	0.1	30.0	30.0	13.9	16.13	1.860	Advise and Monitor
3,500.0	3,500.0	3,500.0	3,500.0	12.7	5.4	89.81	0.1	30.0	30.0	13.5	16.52	1.816	Advise and Monitor
3,600.0	3,600.0	3,600.0	3,600.0	13.0	5.5	89.81	0.1	30.0	30.0	13.1	16.91	1.774	Advise and Monitor
3,700.0	3,700.0	3,700.0	3,700.0	13.4	5.7	89.81	0.1	30.0	30.0	12.7	17.31	1.733	Advise and Monitor
3,800.0	3,800.0	3,800.0	3,800.0	13.7	5.8	89.81	0.1	30.0	30.0	12.3	17.70	1.695	Advise and Monitor
3,900.0	3,900.0	3,900.0	3,900.0	14.1	5.9	89.81	0.1	30.0	30.0	11.9	18.10	1.657	Advise and Monitor
4,000.0	4,000.0	4,000.0	4,000.0	14.4	6.0	89.81	0.1	30.0	30.0	11.5	18.50	1.622	Advise and Monitor
4,100.0	4,100.0	4,100.0	4,100.0	14.8	6.1	89.81	0.1	30.0	30.0	11.1	18.90	1.588	Advise and Monitor
4,200.0	4,200.0	4,200.0	4,200.0	15.1	6.2	89.81	0.1	30.0	30.0	10.7	19.29	1.555	Advise and Monitor
4,300.0	4,300.0	4,300.0	4,300.0	15.5	6.3	89.81	0.1	30.0	30.0	10.3	19.69	1.523	Advise and Monitor
4,400.0	4,400.0	4,400.0	4,400.0	15.8	6.5	89.81	0.1	30.0	30.0	9.9	20.10	1.493	Shut in Produces
4,500.0	4,500.0	4,500.0	4,500.0	16.2	6.6	89.81	0.1	30.0	30.0	9.5	20.50	1.464	Shut in Produces
4,600.0	4,600.0	4,600.0	4,600.0	16.5	6.7	89.81	0.1	30.0	30.0	9.1	20.90	1.435	Shut in Produces
4,700.0	4,700.0	4,700.0	4,700.0	16.9	6.8	89.81	0.1	30.0	30.0	8.7	21.30	1.408	Shut in Produces
4,800.0	4,800.0	4,800.0	4,800.0	17.2	6.9	89.81	0.1	30.0	30.0	8.3	21.71	1.382	Shut in Produces
4,900.0	4,900.0	4,900.0	4,900.0	17.6	7.0	89.81	0.1	30.0	30.0	7.9	22.11	1.357	Shut in Produces
5,000.0	5,000.0	5,000.0	5,000.0	18.0	7.2	89.81	0.1	30.0	30.0	7.5	22.52	1.332	Shut in Produces
5,100.0	5,100.0	5,100.0	5,100.0	18.3	7.3	89.81	0.1	30.0	30.0	7.1	22.93	1.309	Shut in Produces

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #801H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 12378-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,200.0	5,200.0	5,200.0	18.7	7.4	89.81	0.1	30.0	30.0	6.7	23.33	1.286	Shut in Produces
5,300.0	5,300.0	5,300.0	5,300.0	19.0	7.5	89.81	0.1	30.0	30.0	6.3	23.74	1.264	Shut in Produces
5,400.0	5,400.0	5,400.0	5,400.0	19.4	7.6	89.81	0.1	30.0	30.0	5.9	24.15	1.242	Shut in Produces
5,500.0	5,500.0	5,500.0	5,500.0	19.7	7.8	89.81	0.1	30.0	30.0	5.4	24.56	1.222	Shut in Produces, CC, ES, SF
5,600.0	5,600.0	5,599.4	5,599.4	20.1	7.9	76.57	1.5	31.0	30.6	5.6	24.96	1.224	Shut in Produces
5,700.0	5,699.8	5,698.8	5,698.6	20.4	8.0	77.88	5.8	33.9	32.2	6.9	25.37	1.271	Shut in Produces
5,750.4	5,750.1	5,749.2	5,748.9	20.6	8.0	79.14	8.9	35.9	33.4	7.8	25.58	1.306	Shut in Produces
5,800.0	5,799.5	5,798.7	5,798.2	20.8	8.1	80.98	11.9	38.0	34.5	8.7	25.79	1.337	Shut in Produces
5,900.0	5,899.1	5,898.6	5,897.9	21.1	8.2	84.34	18.1	42.1	36.8	10.6	26.23	1.403	Shut in Produces
6,000.0	5,998.7	5,998.6	5,997.6	21.5	8.3	87.30	24.2	46.2	39.2	12.5	26.69	1.470	Shut in Produces
6,100.0	6,098.3	6,098.5	6,097.3	21.8	8.4	89.91	30.4	50.4	41.8	14.6	27.15	1.538	Advise and Monitor
6,200.0	6,198.0	6,198.5	6,197.0	22.2	8.5	92.22	36.5	54.5	44.3	16.7	27.62	1.606	Advise and Monitor
6,300.0	6,297.6	6,298.4	6,296.6	22.5	8.6	94.27	42.6	58.6	47.0	18.9	28.08	1.674	Advise and Monitor
6,400.0	6,397.2	6,398.4	6,396.3	22.9	8.7	96.10	48.8	62.8	49.7	21.2	28.55	1.742	Advise and Monitor
6,500.0	6,496.8	6,498.3	6,496.0	23.3	8.8	97.74	54.9	66.9	52.5	23.5	29.02	1.809	Advise and Monitor
6,600.0	6,596.4	6,598.3	6,595.7	23.6	9.0	99.22	61.1	71.0	55.3	25.8	29.48	1.875	Advise and Monitor
6,700.0	6,696.1	6,698.2	6,695.3	24.0	9.1	100.55	67.2	75.2	58.1	28.2	29.94	1.941	Advise and Monitor
6,800.0	6,795.7	6,798.2	6,795.0	24.3	9.2	101.75	73.4	79.3	61.0	30.6	30.40	2.005	
6,900.0	6,895.3	6,898.1	6,894.7	24.7	9.3	102.85	79.5	83.4	63.9	33.0	30.86	2.069	
7,000.0	6,994.9	6,998.1	6,994.4	25.0	9.4	103.85	85.6	87.6	66.8	35.4	31.32	2.132	
7,100.0	7,094.5	7,098.0	7,094.0	25.4	9.5	104.77	91.8	91.7	69.7	37.9	31.77	2.193	
7,200.0	7,194.1	7,198.0	7,193.7	25.7	9.6	105.62	97.9	95.8	72.6	40.4	32.23	2.253	
7,300.0	7,293.8	7,297.9	7,293.4	26.1	9.7	106.40	104.1	100.0	75.6	42.9	32.68	2.313	
7,400.0	7,393.4	7,397.9	7,393.1	26.5	9.9	107.12	110.2	104.1	78.5	45.4	33.13	2.371	
7,500.0	7,493.0	7,497.8	7,492.7	26.8	10.0	107.78	116.4	108.2	81.5	47.9	33.58	2.428	
7,600.0	7,592.6	7,597.8	7,592.4	27.2	10.1	108.40	122.5	112.4	84.5	50.5	34.03	2.483	
7,700.0	7,692.2	7,697.8	7,692.1	27.5	10.2	108.98	128.6	116.5	87.5	53.0	34.48	2.538	
7,800.0	7,791.9	7,797.7	7,791.8	27.9	10.3	109.52	134.8	120.7	90.5	55.6	34.93	2.592	
7,900.0	7,891.5	7,897.7	7,891.5	28.2	10.4	110.03	140.9	124.8	93.5	58.2	35.37	2.644	
8,000.0	7,991.1	7,997.6	7,991.1	28.6	10.5	110.50	147.1	128.9	96.6	60.7	35.82	2.696	
8,100.0	8,090.7	8,097.6	8,090.8	28.9	10.7	110.95	153.2	133.1	99.6	63.3	36.27	2.746	
8,200.0	8,190.3	8,197.5	8,190.5	29.3	10.8	111.36	159.4	137.2	102.6	65.9	36.71	2.795	
8,300.0	8,289.9	8,297.5	8,290.2	29.7	10.9	111.76	165.5	141.3	105.7	68.5	37.16	2.843	
8,400.0	8,389.6	8,397.4	8,389.8	30.0	11.0	112.13	171.6	145.5	108.7	71.1	37.60	2.891	
8,500.0	8,489.2	8,497.4	8,489.5	30.4	11.1	112.48	177.8	149.6	111.7	73.7	38.05	2.937	
8,600.0	8,588.8	8,597.3	8,589.2	30.7	11.2	112.82	183.9	153.7	114.8	76.3	38.49	2.982	
8,700.0	8,688.4	8,697.3	8,688.9	31.1	11.4	113.13	190.1	157.9	117.9	78.9	38.94	3.027	
8,800.0	8,788.0	8,797.2	8,788.5	31.5	11.5	113.43	196.2	162.0	120.9	81.5	39.38	3.070	
8,900.0	8,887.7	8,897.2	8,888.2	31.8	11.6	113.72	202.3	166.1	124.0	84.1	39.83	3.113	
9,000.0	8,987.3	8,997.1	8,987.9	32.2	11.7	113.99	208.5	170.3	127.0	86.8	40.27	3.154	
9,100.0	9,086.9	9,097.1	9,087.6	32.5	11.8	114.25	214.6	174.4	130.1	89.4	40.72	3.195	
9,200.0	9,186.5	9,197.0	9,187.3	32.9	12.0	114.49	220.8	178.5	133.2	92.0	41.17	3.235	
9,300.0	9,286.1	9,297.0	9,286.9	33.2	12.1	114.73	226.9	182.7	136.2	94.6	41.61	3.274	
9,400.0	9,385.7	9,396.9	9,386.6	33.6	12.2	114.95	233.1	186.8	139.3	97.3	42.06	3.313	
9,500.0	9,485.4	9,496.9	9,486.3	34.0	12.3	115.17	239.2	190.9	142.4	99.9	42.50	3.350	
9,600.0	9,585.0	9,596.8	9,586.0	34.3	12.4	115.38	245.3	195.1	145.5	102.5	42.95	3.387	
9,700.0	9,684.6	9,696.8	9,685.6	34.7	12.6	115.57	251.5	199.2	148.6	105.2	43.40	3.423	
9,800.0	9,784.2	9,796.7	9,785.3	35.0	12.7	115.76	257.6	203.3	151.6	107.8	43.84	3.459	
9,900.0	9,883.8	9,896.7	9,885.0	35.4	12.8	115.95	263.8	207.5	154.7	110.4	44.29	3.493	
10,000.0	9,983.5	9,996.6	9,984.7	35.8	12.9	116.12	269.9	211.6	157.8	113.1	44.74	3.527	
10,100.0	10,083.1	10,096.6	10,084.3	36.1	13.0	116.29	276.1	215.7	160.9	115.7	45.18	3.561	
10,200.0	10,182.7	10,196.5	10,184.0	36.5	13.2	116.45	282.2	219.9	164.0	118.3	45.63	3.594	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design GREEN BERET FED COM PROJECT - GREEN BERET FED COM #801H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

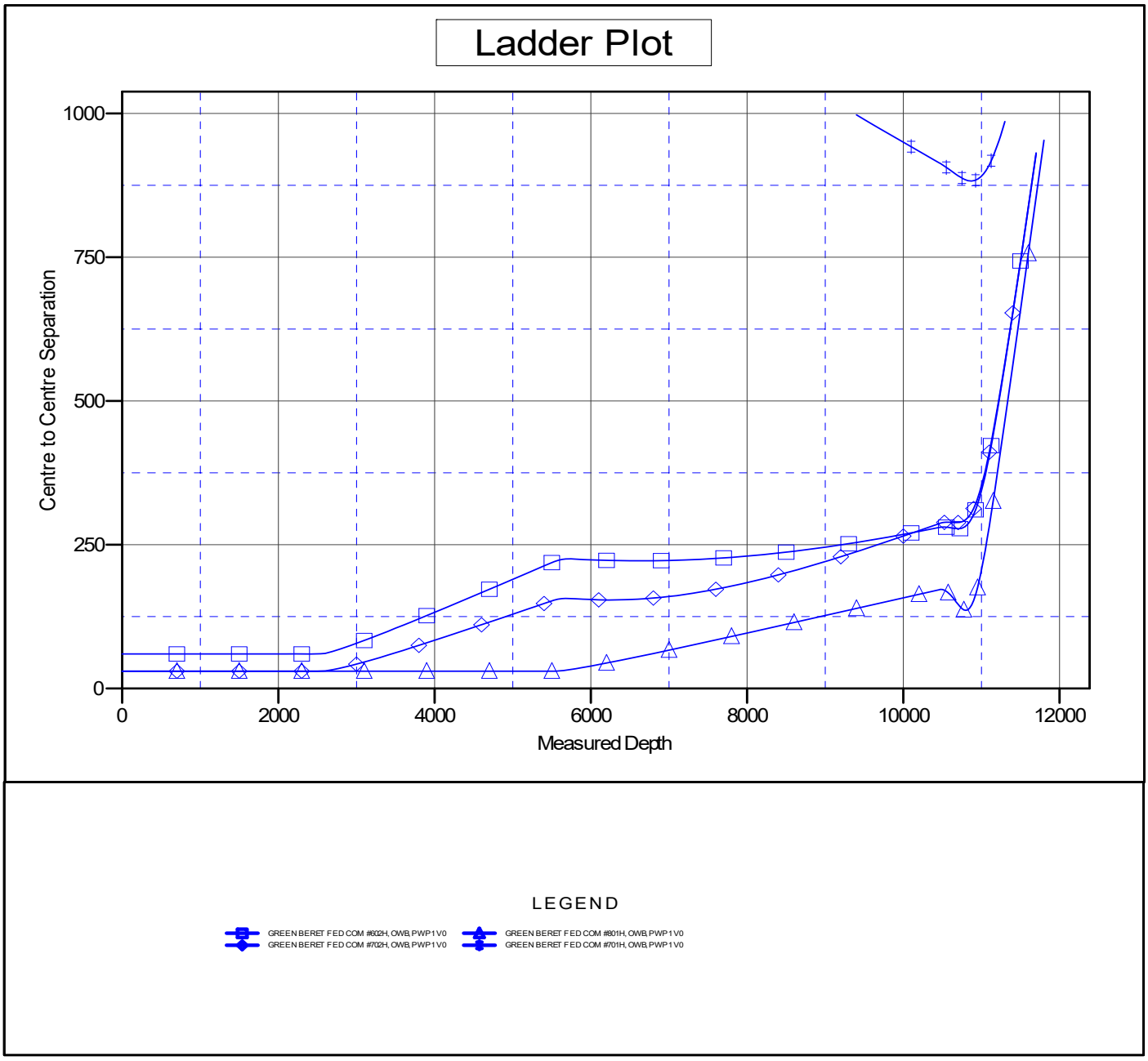
Survey Program: 0-Standard Keeper 104, 12378-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,300.0	10,282.3	10,296.5	10,283.7	36.8	13.3	116.61	288.3	224.0	167.1	121.0	46.08	3.626	
10,400.0	10,381.9	10,396.4	10,383.4	37.2	13.4	116.76	294.5	228.1	170.2	123.6	46.53	3.657	
10,458.6	10,440.3	10,455.0	10,441.8	37.4	13.5	116.84	298.1	230.6	172.0	125.2	46.79	3.675	
10,475.0	10,456.7	10,471.4	10,458.1	37.5	13.5	107.95	299.1	231.2	172.3	125.4	46.86	3.677	
10,500.0	10,481.6	10,496.4	10,483.0	37.6	13.5	35.51	300.6	232.3	172.1	125.1	46.94	3.666	
10,525.0	10,506.6	10,521.3	10,507.9	37.6	13.6	-28.39	302.2	233.3	171.0	124.0	46.98	3.640	
10,550.0	10,531.5	10,546.0	10,532.5	37.7	13.6	-39.78	303.7	234.3	169.2	122.2	47.00	3.599	
10,575.0	10,556.3	10,570.5	10,557.0	37.8	13.6	-45.10	305.2	235.3	166.6	119.6	46.98	3.545	
10,600.0	10,580.9	10,594.8	10,581.2	37.9	13.7	-49.08	306.7	236.3	163.3	116.4	46.94	3.479	
10,625.0	10,605.2	10,618.7	10,605.0	37.9	13.7	-52.80	308.1	237.3	159.5	112.7	46.87	3.404	
10,650.0	10,629.1	10,642.1	10,628.4	38.0	13.7	-56.64	309.6	238.3	155.3	108.6	46.78	3.321	
10,675.0	10,652.6	10,665.1	10,651.3	38.1	13.7	-60.77	311.0	239.3	151.0	104.3	46.69	3.233	
10,700.0	10,675.7	10,687.6	10,673.7	38.1	13.8	-65.27	312.4	240.2	146.6	100.0	46.61	3.146	
10,725.0	10,698.3	10,709.4	10,695.5	38.2	13.8	-70.12	313.7	241.1	142.6	96.0	46.57	3.062	
10,750.0	10,720.2	10,730.6	10,716.6	38.3	13.8	-75.28	315.0	242.0	139.2	92.6	46.63	2.986	
10,775.0	10,741.5	10,751.0	10,737.0	38.3	13.8	-80.61	316.3	242.8	136.9	90.1	46.82	2.924	
10,800.0	10,762.0	10,770.7	10,756.6	38.4	13.9	-85.98	317.5	243.6	136.0	88.8	47.18	2.882	
10,800.4	10,762.4	10,771.0	10,756.9	38.4	13.9	-86.08	317.5	243.6	136.0	88.8	47.19	2.882	
10,825.0	10,781.8	10,789.5	10,775.3	38.4	13.9	-91.21	318.6	244.4	136.9	89.2	47.72	2.870	
10,850.0	10,800.8	10,807.4	10,793.2	38.5	13.9	-96.13	319.7	245.1	140.0	91.6	48.37	2.894	
10,875.0	10,818.9	10,824.4	10,810.2	38.5	13.9	-100.60	320.8	245.8	145.4	96.3	49.09	2.962	
10,900.0	10,836.1	10,840.5	10,826.2	38.5	14.0	-104.52	321.8	246.5	153.2	103.4	49.79	3.076	
10,925.0	10,852.3	10,855.5	10,841.1	38.6	14.0	-107.82	322.7	247.1	163.2	112.8	50.43	3.237	
10,950.0	10,867.4	10,869.4	10,855.0	38.6	14.0	-110.47	323.6	247.7	175.5	124.5	50.97	3.443	
10,975.0	10,881.6	10,882.2	10,867.8	38.7	14.0	-112.44	324.3	248.2	189.7	138.3	51.41	3.690	
11,000.0	10,894.6	10,893.9	10,879.5	38.7	14.0	-113.73	325.1	248.7	205.6	153.9	51.76	3.973	
11,025.0	10,906.5	10,904.4	10,890.0	38.7	14.0	-114.31	325.7	249.2	223.0	171.0	52.03	4.287	
11,050.0	10,917.2	10,913.7	10,899.3	38.7	14.0	-114.16	326.3	249.5	241.7	189.5	52.24	4.628	
11,075.0	10,926.7	10,921.8	10,907.3	38.8	14.1	-113.22	326.8	249.9	261.5	209.1	52.40	4.991	
11,100.0	10,935.0	10,928.7	10,914.1	38.8	14.1	-111.42	327.2	250.2	282.3	229.7	52.52	5.375	
11,125.0	10,942.0	10,934.2	10,919.7	38.8	14.1	-108.65	327.5	250.4	303.8	251.2	52.61	5.774	
11,150.0	10,947.8	10,938.5	10,924.0	38.8	14.1	-104.80	327.8	250.6	325.9	273.2	52.67	6.187	
11,175.0	10,952.3	10,941.5	10,927.0	38.9	14.1	-99.76	328.0	250.7	348.5	295.8	52.72	6.610	
11,200.0	10,955.5	10,943.2	10,928.7	38.9	14.1	-93.46	328.1	250.8	371.5	318.7	52.75	7.042	
11,225.0	10,957.4	10,943.6	10,929.0	38.9	14.1	-85.97	328.1	250.8	394.8	342.0	52.77	7.481	
11,246.5	10,958.0	10,942.9	10,928.3	38.9	14.1	-78.76	328.1	250.7	414.9	362.1	52.79	7.860	
11,300.0	10,958.3	10,939.9	10,925.4	38.9	14.1	-77.58	327.9	250.6	465.6	412.8	52.80	8.817	
11,400.0	10,958.9	10,934.4	10,919.8	38.9	14.1	-75.39	327.5	250.4	561.6	508.8	52.81	10.636	
11,500.0	10,959.4	10,928.8	10,914.3	39.0	14.1	-73.23	327.2	250.2	658.8	606.0	52.80	12.478	
11,600.0	10,960.0	10,923.2	10,908.7	39.1	14.1	-71.12	326.9	249.9	756.6	703.9	52.78	14.335	
11,700.0	10,960.5	10,917.7	10,903.2	39.2	14.1	-69.05	326.5	249.7	855.0	802.2	52.77	16.201	
11,800.0	10,961.1	10,912.1	10,897.6	39.3	14.0	-67.03	326.2	249.5	953.6	900.8	52.76	18.073	

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB=26' @ 3307.5usft (MCVAY 8)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: GREEN BERET FED COM #501H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.50°

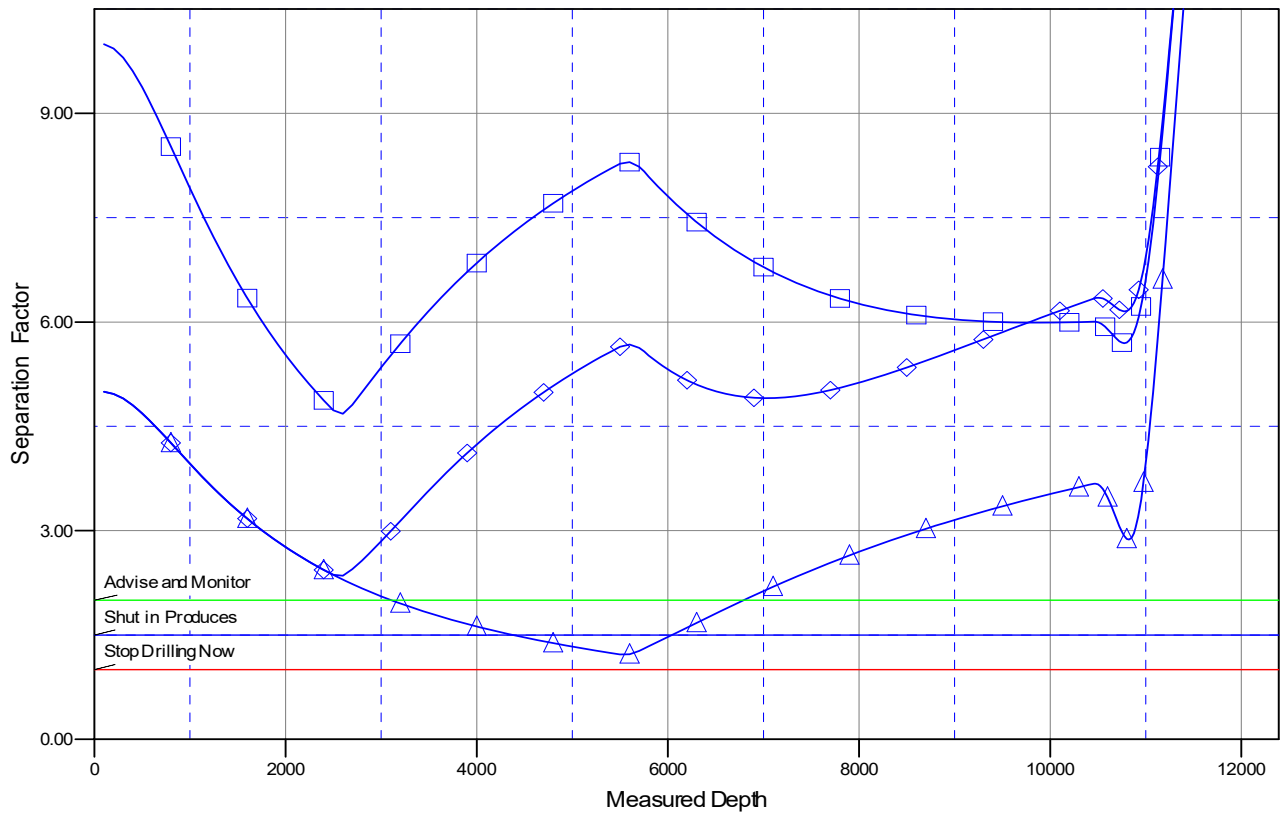


Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Reference Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	GREEN BERET FED COM #501H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB=26' @ 3307.5usft (MCVAY 8)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: GREEN BERET FED COM #501H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.50°

Separation Factor Plot



LEGEND

GREEN BERET FED COM #602H, OWB, PWP1 V0
GREEN BERET FED COM #702H, OWB, PWP1 V0
GREEN BERET FED COM #801H, OWB, PWP1 V0
GREEN BERET FED COM #701H, OWB, PWP1 V0

NORTHERN DELAWARE BASIN

LEA COUNTY, NM
GREEN BERET FED COM PROJECT
GREEN BERET FED COM #501H

OWB

Plan: PWP1

Standard Survey Report

17 February, 2020

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Well:	GREEN BERET FED COM #501H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Project	LEA COUNTY, NM		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	GREEN BERET FED COM #501H				
Well Position	**+N/-S**	0.0 usft	**Northing:**	409,293.80 usft	**Latitude:**	32° 7' 18.231 N
	+E/-W	0.0 usft	**Easting:**	792,876.20 usft	**Longitude:**	103° 23' 14.359 W
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,281.5 usft

Wellbore OWB

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	2/17/2020	6.57	59.96	47,623.05225559

Design PWP1

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	178.58

Survey Tool Program **Date** 2/17/2020

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.0	18,589.2	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

Planned Survey

Measured Depth (usft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Vertical Section (usft)**	**Dogleg Rate (°/100usft)**	**Build Rate (°/100usft)**	**Turn Rate (°/100usft)**
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Well:	GREEN BERET FED COM #501H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
5,600.0	2.00	13.71	5,600.0	1.7	0.4	-1.7	2.00	2.00	0.00
5,700.0	4.00	13.71	5,699.8	6.8	1.7	-6.7	2.00	2.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Well:	GREEN BERET FED COM #501H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,750.4	5.01	13.71	5,750.1	10.6	2.6	-10.6	2.00	2.00	0.00
Start 4708.1 hold at 5750.4 MD									
5,800.0	5.01	13.71	5,799.5	14.8	3.6	-14.7	0.00	0.00	0.00
5,900.0	5.01	13.71	5,899.1	23.3	5.7	-23.2	0.00	0.00	0.00
6,000.0	5.01	13.71	5,998.7	31.8	7.8	-31.6	0.00	0.00	0.00
6,100.0	5.01	13.71	6,098.3	40.3	9.8	-40.0	0.00	0.00	0.00
6,200.0	5.01	13.71	6,198.0	48.8	11.9	-48.5	0.00	0.00	0.00
6,300.0	5.01	13.71	6,297.6	57.2	14.0	-56.9	0.00	0.00	0.00
6,400.0	5.01	13.71	6,397.2	65.7	16.0	-65.3	0.00	0.00	0.00
6,500.0	5.01	13.71	6,496.8	74.2	18.1	-73.7	0.00	0.00	0.00
6,600.0	5.01	13.71	6,596.4	82.7	20.2	-82.2	0.00	0.00	0.00
6,700.0	5.01	13.71	6,696.1	91.2	22.2	-90.6	0.00	0.00	0.00
6,800.0	5.01	13.71	6,795.7	99.7	24.3	-99.0	0.00	0.00	0.00
6,900.0	5.01	13.71	6,895.3	108.1	26.4	-107.5	0.00	0.00	0.00
7,000.0	5.01	13.71	6,994.9	116.6	28.4	-115.9	0.00	0.00	0.00
7,100.0	5.01	13.71	7,094.5	125.1	30.5	-124.3	0.00	0.00	0.00
7,200.0	5.01	13.71	7,194.1	133.6	32.6	-132.7	0.00	0.00	0.00
7,300.0	5.01	13.71	7,293.8	142.1	34.7	-141.2	0.00	0.00	0.00
7,400.0	5.01	13.71	7,393.4	150.6	36.7	-149.6	0.00	0.00	0.00
7,500.0	5.01	13.71	7,493.0	159.0	38.8	-158.0	0.00	0.00	0.00
7,600.0	5.01	13.71	7,592.6	167.5	40.9	-166.5	0.00	0.00	0.00
7,700.0	5.01	13.71	7,692.2	176.0	42.9	-174.9	0.00	0.00	0.00
7,800.0	5.01	13.71	7,791.9	184.5	45.0	-183.3	0.00	0.00	0.00
7,900.0	5.01	13.71	7,891.5	193.0	47.1	-191.7	0.00	0.00	0.00
8,000.0	5.01	13.71	7,991.1	201.4	49.1	-200.2	0.00	0.00	0.00
8,100.0	5.01	13.71	8,090.7	209.9	51.2	-208.6	0.00	0.00	0.00
8,200.0	5.01	13.71	8,190.3	218.4	53.3	-217.0	0.00	0.00	0.00
8,300.0	5.01	13.71	8,289.9	226.9	55.3	-225.5	0.00	0.00	0.00
8,400.0	5.01	13.71	8,389.6	235.4	57.4	-233.9	0.00	0.00	0.00
8,500.0	5.01	13.71	8,489.2	243.9	59.5	-242.3	0.00	0.00	0.00
8,600.0	5.01	13.71	8,588.8	252.3	61.5	-250.7	0.00	0.00	0.00
8,700.0	5.01	13.71	8,688.4	260.8	63.6	-259.2	0.00	0.00	0.00
8,800.0	5.01	13.71	8,788.0	269.3	65.7	-267.6	0.00	0.00	0.00
8,900.0	5.01	13.71	8,887.7	277.8	67.8	-276.0	0.00	0.00	0.00
9,000.0	5.01	13.71	8,987.3	286.3	69.8	-284.5	0.00	0.00	0.00
9,100.0	5.01	13.71	9,086.9	294.8	71.9	-292.9	0.00	0.00	0.00
9,200.0	5.01	13.71	9,186.5	303.2	74.0	-301.3	0.00	0.00	0.00
9,300.0	5.01	13.71	9,286.1	311.7	76.0	-309.7	0.00	0.00	0.00
9,400.0	5.01	13.71	9,385.7	320.2	78.1	-318.2	0.00	0.00	0.00
9,500.0	5.01	13.71	9,485.4	328.7	80.2	-326.6	0.00	0.00	0.00
9,600.0	5.01	13.71	9,585.0	337.2	82.2	-335.0	0.00	0.00	0.00
9,700.0	5.01	13.71	9,684.6	345.7	84.3	-343.5	0.00	0.00	0.00
9,800.0	5.01	13.71	9,784.2	354.1	86.4	-351.9	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Well:	GREEN BERET FED COM #501H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,900.0	5.01	13.71	9,883.8	362.6	88.4	-360.3	0.00	0.00	0.00
10,000.0	5.01	13.71	9,983.5	371.1	90.5	-368.7	0.00	0.00	0.00
10,100.0	5.01	13.71	10,083.1	379.6	92.6	-377.2	0.00	0.00	0.00
10,200.0	5.01	13.71	10,182.7	388.1	94.6	-385.6	0.00	0.00	0.00
10,300.0	5.01	13.71	10,282.3	396.5	96.7	-394.0	0.00	0.00	0.00
10,400.0	5.01	13.71	10,381.9	405.0	98.8	-402.5	0.00	0.00	0.00
10,458.6	5.01	13.71	10,440.3	410.0	100.0	-407.4	0.00	0.00	0.00
Start DLS 12.00 TFO 165.72									
10,500.0	1.24	94.72	10,481.6	411.7	100.9	-409.1	12.00	-9.11	195.67
10,600.0	12.17	173.75	10,580.9	401.1	103.1	-398.4	12.00	10.94	79.03
10,700.0	24.14	176.72	10,675.7	370.1	105.4	-367.4	12.00	11.97	2.98
10,800.0	36.13	177.79	10,762.0	320.0	107.8	-317.3	12.00	11.99	1.06
10,900.0	48.13	178.37	10,836.1	253.1	110.0	-250.3	12.00	11.99	0.58
11,000.0	60.12	178.77	10,894.6	172.3	112.0	-169.4	12.00	12.00	0.40
11,100.0	72.12	179.08	10,935.0	81.0	113.7	-78.2	12.00	12.00	0.31
11,200.0	84.11	179.35	10,955.5	-16.7	115.0	19.5	12.00	12.00	0.27
11,246.5	89.69	179.47	10,958.0	-63.0	115.5	65.9	12.00	12.00	0.26
Start 7343.0 hold at 11246.5 MD									
11,300.0	89.69	179.47	10,958.3	-116.6	116.0	119.4	0.00	0.00	0.00
11,400.0	89.69	179.47	10,958.9	-216.6	116.9	219.4	0.00	0.00	0.00
11,500.0	89.69	179.47	10,959.4	-316.6	117.8	319.4	0.00	0.00	0.00
11,600.0	89.69	179.47	10,960.0	-416.6	118.7	419.4	0.00	0.00	0.00
11,700.0	89.69	179.47	10,960.5	-516.5	119.7	519.4	0.00	0.00	0.00
11,800.0	89.69	179.47	10,961.1	-616.5	120.6	619.3	0.00	0.00	0.00
11,900.0	89.69	179.47	10,961.6	-716.5	121.5	719.3	0.00	0.00	0.00
12,000.0	89.69	179.47	10,962.1	-816.5	122.4	819.3	0.00	0.00	0.00
12,100.0	89.69	179.47	10,962.7	-916.5	123.4	919.3	0.00	0.00	0.00
12,200.0	89.69	179.47	10,963.2	-1,016.5	124.3	1,019.3	0.00	0.00	0.00
12,300.0	89.69	179.47	10,963.8	-1,116.5	125.2	1,119.3	0.00	0.00	0.00
12,400.0	89.69	179.47	10,964.3	-1,216.5	126.1	1,219.3	0.00	0.00	0.00
12,500.0	89.69	179.47	10,964.9	-1,316.5	127.1	1,319.2	0.00	0.00	0.00
12,600.0	89.69	179.47	10,965.4	-1,416.5	128.0	1,419.2	0.00	0.00	0.00
12,700.0	89.69	179.47	10,966.0	-1,516.5	128.9	1,519.2	0.00	0.00	0.00
12,800.0	89.69	179.47	10,966.5	-1,616.5	129.8	1,619.2	0.00	0.00	0.00
12,900.0	89.69	179.47	10,967.0	-1,716.5	130.8	1,719.2	0.00	0.00	0.00
13,000.0	89.69	179.47	10,967.6	-1,816.5	131.7	1,819.2	0.00	0.00	0.00
13,100.0	89.69	179.47	10,968.1	-1,916.5	132.6	1,919.2	0.00	0.00	0.00
13,200.0	89.69	179.47	10,968.7	-2,016.5	133.5	2,019.1	0.00	0.00	0.00
13,300.0	89.69	179.47	10,969.2	-2,116.5	134.5	2,119.1	0.00	0.00	0.00
13,400.0	89.69	179.47	10,969.8	-2,216.4	135.4	2,219.1	0.00	0.00	0.00
13,500.0	89.69	179.47	10,970.3	-2,316.4	136.3	2,319.1	0.00	0.00	0.00
13,600.0	89.69	179.47	10,970.9	-2,416.4	137.2	2,419.1	0.00	0.00	0.00
13,700.0	89.69	179.47	10,971.4	-2,516.4	138.2	2,519.1	0.00	0.00	0.00
13,800.0	89.69	179.47	10,971.9	-2,616.4	139.1	2,619.1	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Well:	GREEN BERET FED COM #501H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,900.0	89.69	179.47	10,972.5	-2,716.4	140.0	2,719.1	0.00	0.00	0.00
14,000.0	89.69	179.47	10,973.0	-2,816.4	140.9	2,819.0	0.00	0.00	0.00
14,100.0	89.69	179.47	10,973.6	-2,916.4	141.9	2,919.0	0.00	0.00	0.00
14,200.0	89.69	179.47	10,974.1	-3,016.4	142.8	3,019.0	0.00	0.00	0.00
14,300.0	89.69	179.47	10,974.7	-3,116.4	143.7	3,119.0	0.00	0.00	0.00
14,400.0	89.69	179.47	10,975.2	-3,216.4	144.6	3,219.0	0.00	0.00	0.00
14,500.0	89.69	179.47	10,975.7	-3,316.4	145.6	3,319.0	0.00	0.00	0.00
14,600.0	89.69	179.47	10,976.3	-3,416.4	146.5	3,419.0	0.00	0.00	0.00
14,700.0	89.69	179.47	10,976.8	-3,516.4	147.4	3,518.9	0.00	0.00	0.00
14,800.0	89.69	179.47	10,977.4	-3,616.4	148.3	3,618.9	0.00	0.00	0.00
14,900.0	89.69	179.47	10,977.9	-3,716.4	149.3	3,718.9	0.00	0.00	0.00
15,000.0	89.69	179.47	10,978.5	-3,816.4	150.2	3,818.9	0.00	0.00	0.00
15,100.0	89.69	179.47	10,979.0	-3,916.4	151.1	3,918.9	0.00	0.00	0.00
15,200.0	89.69	179.47	10,979.6	-4,016.3	152.0	4,018.9	0.00	0.00	0.00
15,300.0	89.69	179.47	10,980.1	-4,116.3	153.0	4,118.9	0.00	0.00	0.00
15,400.0	89.69	179.47	10,980.6	-4,216.3	153.9	4,218.9	0.00	0.00	0.00
15,500.0	89.69	179.47	10,981.2	-4,316.3	154.8	4,318.8	0.00	0.00	0.00
15,600.0	89.69	179.47	10,981.7	-4,416.3	155.7	4,418.8	0.00	0.00	0.00
15,700.0	89.69	179.47	10,982.3	-4,516.3	156.7	4,518.8	0.00	0.00	0.00
15,800.0	89.69	179.47	10,982.8	-4,616.3	157.6	4,618.8	0.00	0.00	0.00
15,900.0	89.69	179.47	10,983.4	-4,716.3	158.5	4,718.8	0.00	0.00	0.00
16,000.0	89.69	179.47	10,983.9	-4,816.3	159.4	4,818.8	0.00	0.00	0.00
16,100.0	89.69	179.47	10,984.5	-4,916.3	160.4	4,918.8	0.00	0.00	0.00
16,200.0	89.69	179.47	10,985.0	-5,016.3	161.3	5,018.7	0.00	0.00	0.00
16,300.0	89.69	179.47	10,985.5	-5,116.3	162.2	5,118.7	0.00	0.00	0.00
16,400.0	89.69	179.47	10,986.1	-5,216.3	163.1	5,218.7	0.00	0.00	0.00
16,500.0	89.69	179.47	10,986.6	-5,316.3	164.1	5,318.7	0.00	0.00	0.00
16,600.0	89.69	179.47	10,987.2	-5,416.3	165.0	5,418.7	0.00	0.00	0.00
16,700.0	89.69	179.47	10,987.7	-5,516.3	165.9	5,518.7	0.00	0.00	0.00
16,800.0	89.69	179.47	10,988.3	-5,616.3	166.8	5,618.7	0.00	0.00	0.00
16,900.0	89.69	179.47	10,988.8	-5,716.2	167.8	5,718.6	0.00	0.00	0.00
17,000.0	89.69	179.47	10,989.4	-5,816.2	168.7	5,818.6	0.00	0.00	0.00
17,100.0	89.69	179.47	10,989.9	-5,916.2	169.6	5,918.6	0.00	0.00	0.00
17,200.0	89.69	179.47	10,990.4	-6,016.2	170.5	6,018.6	0.00	0.00	0.00
17,300.0	89.69	179.47	10,991.0	-6,116.2	171.5	6,118.6	0.00	0.00	0.00
17,400.0	89.69	179.47	10,991.5	-6,216.2	172.4	6,218.6	0.00	0.00	0.00
17,500.0	89.69	179.47	10,992.1	-6,316.2	173.3	6,318.6	0.00	0.00	0.00
17,600.0	89.69	179.47	10,992.6	-6,416.2	174.2	6,418.6	0.00	0.00	0.00
17,700.0	89.69	179.47	10,993.2	-6,516.2	175.2	6,518.5	0.00	0.00	0.00
17,800.0	89.69	179.47	10,993.7	-6,616.2	176.1	6,618.5	0.00	0.00	0.00
17,900.0	89.69	179.47	10,994.2	-6,716.2	177.0	6,718.5	0.00	0.00	0.00
18,000.0	89.69	179.47	10,994.8	-6,816.2	177.9	6,818.5	0.00	0.00	0.00
18,100.0	89.69	179.47	10,995.3	-6,916.2	178.9	6,918.5	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	**Local Co-ordinate Reference:**	Well GREEN BERET FED COM #501H
Project:	LEA COUNTY, NM	**TVD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Site:	GREEN BERET FED COM PROJECT	**MD Reference:**	KB=26' @ 3307.5usft (MCVAY 8)
Well:	GREEN BERET FED COM #501H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,200.0	89.69	179.47	10,995.9	-7,016.2	179.8	7,018.5	0.00	0.00	0.00
18,300.0	89.69	179.47	10,996.4	-7,116.2	180.7	7,118.5	0.00	0.00	0.00
18,400.0	89.69	179.47	10,997.0	-7,216.2	181.6	7,218.4	0.00	0.00	0.00
18,500.0	89.69	179.47	10,997.5	-7,316.2	182.6	7,318.4	0.00	0.00	0.00
18,589.4	89.69	179.47	10,998.0	-7,405.6	183.4	7,407.9	0.00	0.00	0.00
TD at 18589.4									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (GREEN BERET - plan misses target center by 165.9usft at 10900.0usft MD (10836.1 TVD, 253.1 N, 110.0 E) - Circle (radius 50.0)	0.00	0.00	10,958.0	365.6	111.6	409,659.40	792,987.80	32° 7' 21.839 N	103° 23' 13.024 W
PBHL (GREEN BERE - plan hits target center - Rectangle (sides W100.0 H7,771.5 D20.0)	-0.29	359.47	10,998.0	-7,405.6	183.4	401,888.20	793,059.60	32° 6' 4.935 N	103° 23' 12.983 W
LTP (GREEN BERET - plan misses target center by 39.4usft at 18500.0usft MD (10997.5 TVD, -7316.2 N, 182.6 E) - Point	0.00	0.00	10,998.0	-7,355.6	183.0	401,938.20	793,059.20	32° 6' 5.430 N	103° 23' 12.983 W

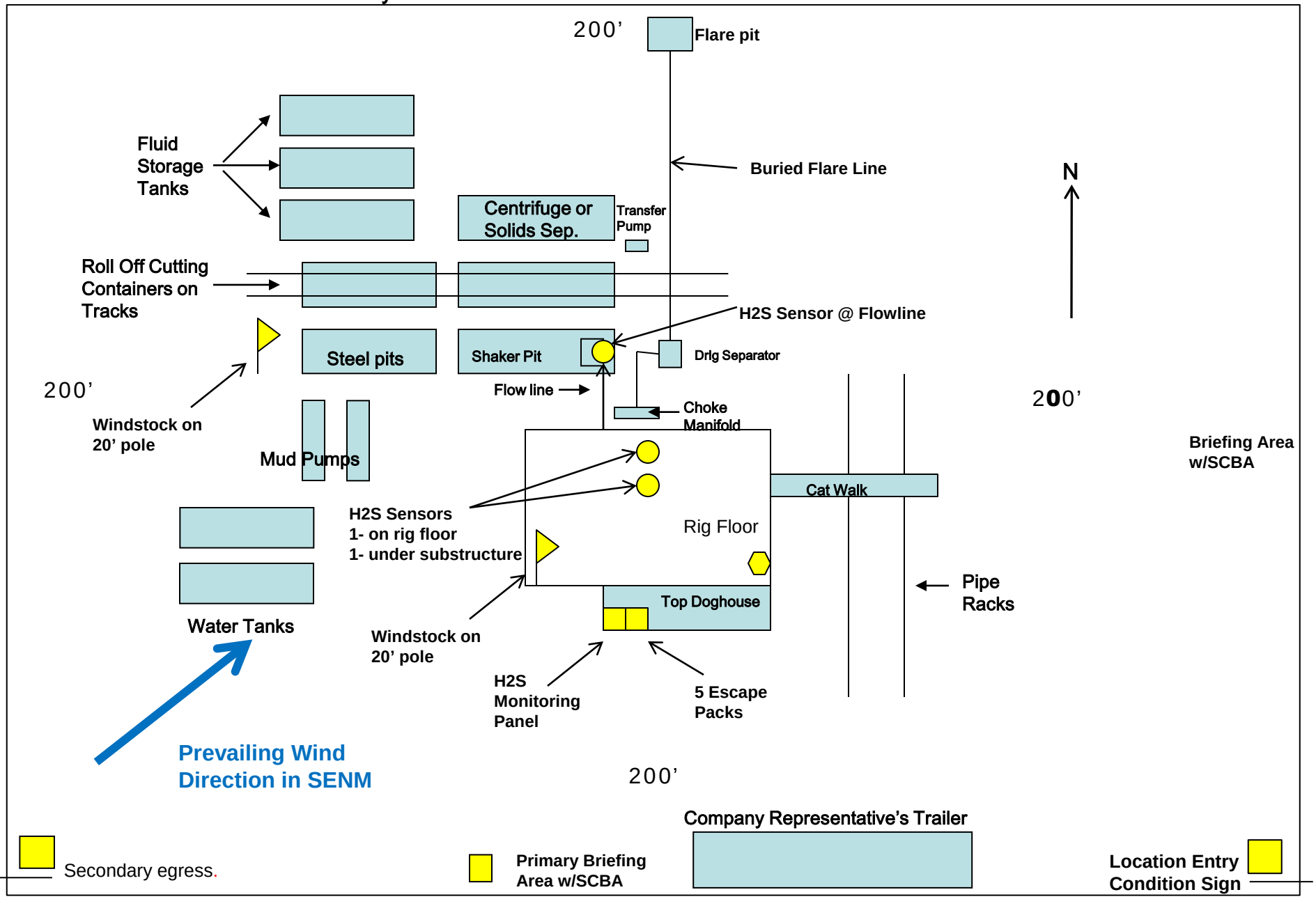
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
5500	5500	0	0	Start Build 2.00
5750	5750	11	3	Start 4708.1 hold at 5750.4 MD
10,459	10,440	410	100	Start DLS 12.00 TFO 165.72
11,246	10,958	-63	115	Start 7343.0 hold at 11246.5 MD
18,589	10,998	-7406	183	TD at 18589.4

Checked By: _____ Approved By: _____ Date: _____

COG Operating LLC
H_2S Equipment Schematic
Terrain: Shinnery sand hills.

Well pad will be 400' x 400' with cellar in center of pad



COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

a. The hazards and characteristics of hydrogen sulfide (H_2S).
b. The proper use and maintenance of personal protective equipment and life support systems.
c. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

a. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
c. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S. If H2S greater than 100 ppm is encountered in the gas stream we will shut in and install H2S equipment.

a. Well Control Equipment:
   Flare line.
   Choke manifold with remotely operated choke.
   Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
   Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

c. H2S detection and monitoring equipment:
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.

d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.

f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

g. Communication:
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

W A R N I N G

YOU ARE ENTERING AN H_2S AREA
AUTHORIZED PERSONNEL ONLY

1. ***BEARDS OR CONTACT LENSES NOT ALLOWED***
2. ***HARD HATS REQUIRED***
3. ***SMOKING IN DESIGNATED AREAS ONLY***
4. ***BE WIND CONSCIOUS AT ALL TIMES***
5. ***CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE***

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

	OFFICE	MOBILE
COG OPERATING LLC OFFICE	575-748-6940	
SETH WILD	432-683-7443	432-528-3633
WALTER ROYE	575-748-6940	432-934-1886

EMERGENCY RESPONSE NUMBERS

	OFFICE
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451

COG Operating LLC

Rig Plat & Closed Loop Equipment Diagram

Well pad will be 400' X 400' with cellar in center of pad

Flare Lines will be from both Choke Manifold & Separator to edge of location.

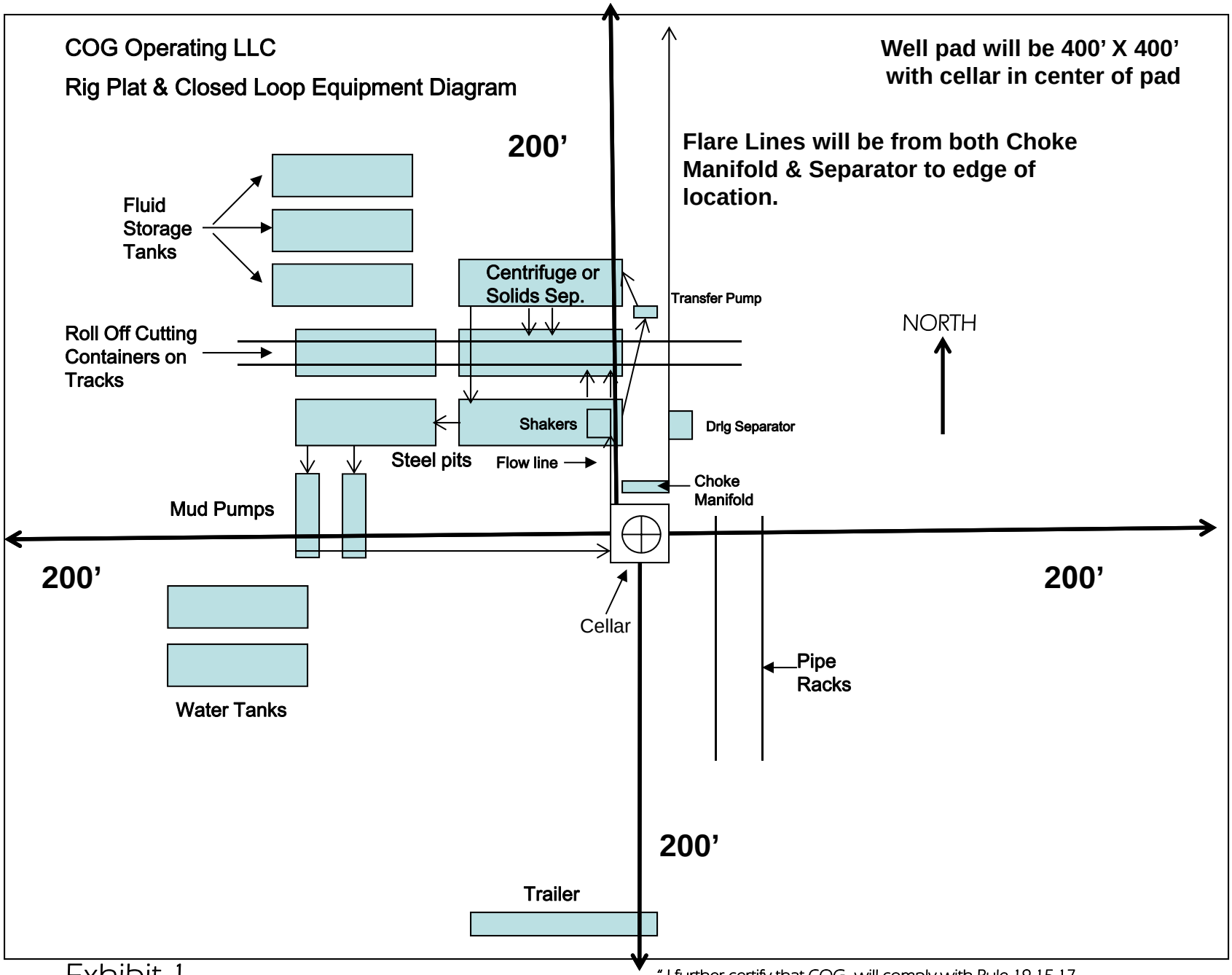


Exhibit 1

" I further certify that COG will comply with Rule 19.15.17 NMAC by using a Closed Loop System."

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

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

OCD – HOBBS
09/29/2020
RECEIVED

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-47819	97088	WC-025 G-08 S253534O; Bone Spring

Property Code	Property Name	Well Number
329742	GREEN BERET FEDERAL COM	501H

OGRID No.	Operator Name	Elevation
229137	COG OPERATING, LLC	3281.5'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	20	25-S	35-E		465	NORTH	2095	EAST	LEA

Bottom Hole Location If Different From Surface

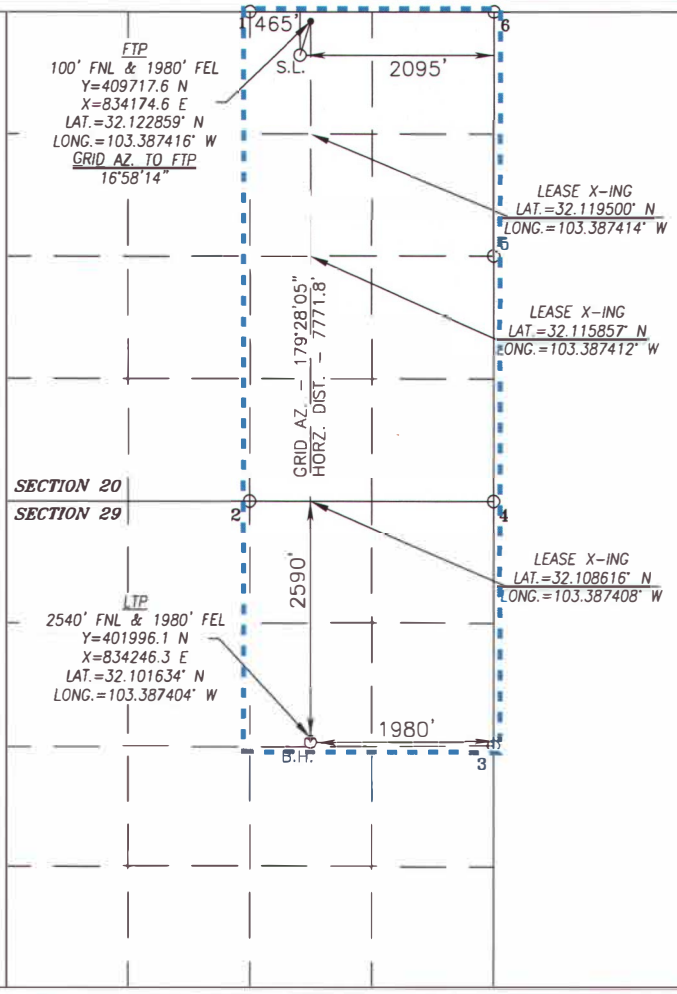
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	29	25-S	35-E		2590	NORTH	1980	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
480			

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

NAD 83 NME
SURFACE LOCATION
Y=409351.9 N
X=834063.0 E
LAT.=32.121857° N
LONG.=103.387787° W

POINT LEGEND	
1	Y=409813.8 N X=833511.7 E
2	Y=404531.4 N X=833559.7 E
3	Y=401910.4 N X=836227.2 E
4	Y=404549.9 N X=836202.0 E
5	Y=407189.2 N X=836178.2 E
6	Y=409828.9 N X=836153.7 E



NAD 83 NME
PROPOSED BOTTOM HOLE LOCATION
Y=401946.1 N
X=834246.8 E
LAT.=32.101497° N
LONG.=103.387404° W

OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stan Wagner 2/20/20
Signature Date

Stan Wagner
Printed Name

E-mail Address

SURVEYOR CERTIFICATION

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

JANUARY 22, 2020
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 1/27/20
Certificate No. CHAD HARCROW 17777

W.O. # 20-102 DRAWN BY: AH

Intent [X] As Drilled [ ]

API # 30-025-47819
30-025-

Operator Name:	Property Name:	Well Number
COG Operating LLC	Green Beret Federal Com	501H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	20	25S	35E						Lea

Latitude	Longitude	NAD
		83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	20	25S	35E		100	North	1980	East	Lea

Latitude	Longitude	NAD
32.122859	-103.387416	NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
G	29	25S	35E		2540	North	1980	East	Lea

Latitude	Longitude	NAD
32.101634	-103.387404	NAD 83

Is this well the defining well for the Horizontal Spacing Unit? [No]

Is this well an infill well? [Yes]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #
30-025-

Operator Name:	Property Name:	Well Number
COG Operating LLC	Green Beret Federal Com	602H

KZ 06/29/2018

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

OCD – HOBBS
09/29/2020
RECEIVED

GAS CAPTURE PLAN

Date: 2/12/20

☒ Original

Operator & OGRID No.: COG Operating LLC, (229137)

☐ Amended - Reason for Amendment:

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

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

Well(s)/Production Facility – Name of facility

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Green Beret Federal Com 501H	30-025-**30-025-47819**	B-20-25S-35E	465' FNL & 2095' FEL	±2830	None Planned	APD Submission Plan Subject to change
Green Beret Federal Com 601H	30-025-	A-20-25S-35E	370' FNL & 760' FEL	±1500	None Planned	APD Submission Plan Subject to change
Green Beret Federal Com 602H	30-025-	B-20-25S-35E	465' FNL & 2035' FEL	±1500	None Planned	APD Submission Plan Subject to change
Green Beret Federal Com 701H	30-025-	A-20-25S-35E	370' FNL & 790' FEL	±1500	None Planned	APD Submission Plan Subject to change
Green Beret Federal Com 702H	30-025-	B-20-25S-35E	465' FNL & 2125' FEL	±1500	None Planned	APD Submission Plan Subject to change
Green Beret Federal Com 801H	30-025-	B-20-25S-35E	465' FNL & 2065' FEL	±3350	None Planned	APD Submission Plan Subject to change

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to **Versado Gas Processors** and will be connected to **Eunice** low pressure gathering system located in **Lea** County, New Mexico. **COG Operating LLC** provides (periodically) to **Versado Gas Processors** a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, **COG Operating LLC** and **Versado Gas Processors** have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at **Versado Gas Processors** Processing Plant located in Sec. **3**, Twn. **22S**, Rng **37E**, **Lea** County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

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