Form 3160-3
(June 2015)

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 28 2018
RECEIVED

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.: NMNM0404441

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.: BELLOQ 11-2 FED STATE COM 223H 323487

2. Name of Operator: DEVON ENERGY PRODUCTION COMPANY LP 6137

9. API Well No.: 30-015-45276

3a. Address: 333 West Sheridan Avenue Oklahoma City OK 73102

3b. Phone No. *(include area code)*: (405)552-6571

10. Field and Pool, or Exploratory: LIVINGSTON RIDGE / BONESPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: SESE / 500 FSL / 730 FEL / LAT 32.3130811 / LONG -103.7423889

At proposed prod. zone: LOT 2 / 100 FNL / 1750 FEL / LAT 32.3404537 / LONG -103.7457198

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 11 / T23S / R31E / NMP

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

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 500 feet

16. No of acres in lease: 1440

17. Spacing Unit dedicated to this well: 319.78

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 1375 feet

19. Proposed Depth: 10200 feet / 20465 feet

20. BLM/BIA Bond No. in file: FED: CO1104

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3487 feet

22. Approximate date work will start*: 12/15/2018

23. Estimated duration: 45 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)	Jenny Harms / Ph: (405)552-6560	08/25/2017

Title: Regulatory Compliance Professional

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	09/24/2018

Title	Office
Assistant Field Manager Lands & Minerals	CARLSBAD

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 09/24/2018 RWP 9-28-18

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

1. SHL: SESE / 500 FSL / 730 FEL / TWSP: 23S / RANGE: 31E / SECTION: 11 / LAT: 32.3130811 / LONG: -103.7423889 (TVD: 0 feet, MD: 0 feet)
   PPP: SESE / 100 FSL / 1750 FEL / TWSP: 23S / RANGE: 31E / SECTION: 11 / LAT: 32.311997 / LONG: -103.745699 (TVD: 9861 feet, MD: 9977 feet)
   BHL: LOT 2 / 100 FNL / 1750 FEL / TWSP: 23S / RANGE: 31E / SECTION: 2 / LAT: 32.3404537 / LONG: -103.7457198 (TVD: 10200 feet, MD: 20465 feet)

BLM Point of Contact

Name: Tenille Ortiz
Title: Legal Instruments Examiner
Phone: 5752342224
Email: tortiz@blm.gov

PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Devon Energy Production Company, L.P>**
LEASE NO.:	**NMNM-0404441**
WELL NAME & NO.:	**Belloq 11-2 Fed State Com 213H**
SURFACE HOLE FOOTAGE:	**0500' FSL & 2130' FEL**
BOTTOM HOLE FOOTAGE	**0290' FNL & 1750' FEL Sec. 02, T. 23 S., R 31 E.,**
LOCATION:	**Section 11, T. 23 S., R 31 E., NMPM**
COUNTY:	**County, New Mexico**

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

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

☐ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

Communitization Agreement

· The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

· If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

· In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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.**

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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

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 is 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 submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

A. CASING

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.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

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.

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.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

R-111-P Potash/WIPP
Possible water flows in the Salado and Castile.
Possible lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressures may exist within the 3rd Bone Spring Sandstone and subsequent formations.

1. The **13-3/8** inch surface casing shall be set at approximately **764** feet (**in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt**) and cemented to the surface.

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

    b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

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

    ☐ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash. Excess calculates to 21% - Additional cement may be required.**

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

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

   ☐ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to negative 4% - Additional cement will be required.**

4. 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.

5. 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 53.

2. Variance approved to use flex line from BOP to choke manifold. 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.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi.**
    a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
    b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
    c. **Manufacturer representative shall install the test plug for the initial BOP test.**
    d. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
    e. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**

4. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.

    a. 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.

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

    c. 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.

    d. The results of the test shall be reported to the appropriate BLM office.

    e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

C. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

E. WIPP Requirements

The proposed well is located within 330' of the WIPP Land Withdrawal Area boundary. As a result, Devon Energy Production Company, L. P. is required to submit daily drilling reports, logs and deviation survey information to the Bureau of Land Management and the Department of Energy per requirements of the Joint Powers Agreement until a total vertical depth of 7,000 feet is reached. These reports will have at a minimum the rate of penetration and a clearly marked section showing the deviation for each 500 foot interval. Operator may be required to do more frequent deviation surveys based on the daily information submitted and may be required to take other corrective measures. Information from this well will be included in the Quarterly Drilling Report. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed. Upon completion of the well, the operator shall submit a complete directional survey. Any future entry into the well for purposes of completing additional drilling will require supplemental information.

Devon Energy Production Company, L. P. can email the required information to Mr. Melvin Balderrama at Melvin.Balderama@wipp.ws or Mr. J. Neatherlin at Jimmy.Neatherlin@wipp.ws fax to his attention at 575-234-6062.

JAM 012918

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY PRODUCTION
LEASE NO.:	NMNM0404441
WELL NAME & NO.:	BELLOQ 11-2 FED STATE COM 223H
SURFACE HOLE FOOTAGE:	500'/S & 2130'/E
BOTTOM HOLE FOOTAGE	290'/N & 1750'/E
LOCATION:	SECTION 11, T23S, R31E
COUNTY:	EDDY

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

Approval Date: 09/24/2018

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 leve 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.

Livestock Watering Requirement

Devon must contact the allotment holder prior to construction to identify the location of the pipeline. Devon must take measures to protect the pipeline from compression or other damages. If the pipeline is damaged or compromised in any way near the proposed project as a result of oil and gas activity, Devon is responsible for repairing the pipeline immediately. Devon must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

During construction, Devon shall minimize disturbance to existing fences, water lines, troughs, windmills, and other improvements on public lands. Devon 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 grazing permittee/allottee prior to disturbing any range improvement projects. 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.

Wildlife Corridors

Two 330 x 1,400-foot protected wildlife corridors would be designated within the Uber North Drill Island 11-14. One corridor would be located along the west section edge (0' FWL extending 330' east) and the second corridor would be located 1645' FEL extending 330' west. This area would encompass the draw (riparian habitat) and dunes within the drill island area. No oil and gas development or construction activities would be allowed within this corridor.

Escape Ramps

Devon would need to construct and maintain escape ramps according to the following criteria:

- Earthen escape ramps would be required to be constructed to sufficiently support livestock at no more than a 30-degree slope and spaced no more than 500 feet apart.
- If trench is left open under an 8-hour time period, it would not be required to have an escape ramp; however, before the trench is backfilled, Lucid would inspect the trench for wildlife and remove any species that are trapped at a distance of at least 100 yards away from the trench.

During the onsite examination, Devon worked with the BLM to locate the proposed pads off of dune features and out of riparian habitat identified within the drill island area. Devon would be required to keep all oil and gas development and construction activities out of these areas.

Wildlife Corridors

Two 330 x 1,400-foot protected wildlife corridors would be designated within the Uber North Drill Island 11-14. One corridor would be located along the west section edge (0' FWL extending 330' east) and the second corridor would be located 1645' FEL extending 330' west. This area would encompass the draw (riparian habitat) and dunes within the drill island area. No oil and gas development or construction activities would be allowed within this corridor.

Raptor Nest Mitigation

- A BLM Wildlife Biologist must be contacted by the operator prior to construction activities to determine if the raptor nest is active.
- Raptor nests on special, natural habitat features, such as trees, large brush, cliff faces and escarpments, will be protected by not allowing surface disturbance within up to 200 meters of nests or by delaying activity for up to 90 days, or a combination of both. Exceptions to this requirement for raptor nests will be considered if the nests expected to be disturbed are inactive, the proposed activity is of short duration (e.g. habitat enhancement projects, fences, pipelines), and will not result in continuing activity in proximity to the nest.
- 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.

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 power line structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. The holder without liability or expense shall make such modifications and/or additions to the United States.

Permitted Exceptions for Drilling in the Designated Potash Area

1. Drilling within the Designated Potash Area. It is the intent of the Department of the Interior to administer oil and gas operations throughout the Designated Potash Area in a manner which promotes safe, orderly co-development of oil, gas, and potash resources. It is the policy of the Department of the Interior to deny approval of most applications for permits to drill oil and gas wells from surface locations within the Designated Potash Area. Three exceptions to this policy will be permitted if the drilling will occur under the following conditions from:

    a. A Drilling Island associated with a Development Area established under this Order or a Drilling Island established under a prior Order;

b. A Barren Area and the Authorized Officer determines that such operations will not adversely affect active or planned potash mining operations in the immediate vicinity of the proposed drill-site; or

c. A Drilling Island, not covered by (a) above or single well site established under this Order by the approval and in the sole discretion of the Authorized Officer, provided that such site was jointly recommended to the Authorized Officer by the oil and gas lessee(s) and the nearest potash lessee(s).

Development Areas

2. When processing an application for permit to drill (APD) an oil or gas well in the Designated Potash Area that complies with regulatory requirements, the Authorized Officer will determine whether to establish a Development Area in connection with the application, and if so, will determine the boundaries of the Development Area and the location within the Development Area of one or more Drilling Islands from which drilling will be permitted. The BLM may also designate a Development Area outside of the APD process based on information in its possession, and may modify the boundaries of a Development Area. Existing wells may be included within the boundaries of a Development Area. A Development Area may include Federal oil and gas leases and other Federal and non-Federal lands.

    a. After designating or modifying a Development Area, the BLM will issue a Notice to Lessees, consistent with its authorities under 43 CFR Subpart 3105 and part 3180, information lessees that future drilling on lands under an oil and gas lease within that Development Area will:

        i. occur, under most circumstances, from a Barren Area or A Drilling Island within the Development Area; and

        ii. be managed under a unit or communitization agreement, generally by a single operator, consistent with BLM regulations and this Order. Unit and communitization agreements will be negotiated among lessees. The BLM will consider whether a specific plan of development is necessary or advisable for a particular Drilling Island.

    b. The Authorized Officer reserves the right to approve an operator or successor operator of a Development Area and/or a Drilling Island, if applicable, to ensure that the operator has the resources to operate and extract the oil and gas resources consistent with the requirements of this Order and all applicable laws and regulations, and has provided financial assurance in the amount required by the Authorized Officer.

    c. The Authorized Officer will determine the appropriate designation of a Development Area in terms of location, shape and size. In most cases, a single Drilling Island will be established for each Development Area. In establishing the location, shape and size of a Development Area and an associated Drilling Island, the Authorized Officer will consider:

        i. the appropriate location, shape, and size of a Development Area and associated Drillings Island to allow effective extraction of oil and gas resources while managing the impact on potash resources;

        ii. the application of available oil and gas drilling and production technology in the Permian Basin;

iii. the applicable geology of the Designated Potash Area and optimal locations to minimize loss of potash ore while considering co-development of both resources;

iv. any long term exploration and/or mining plans provided by the potash industry;

v. whether a Barren Area may be the most appropriate area for a Drilling Island;

vi. the requirements of this Order; and

vii. any other relevant factors

d. As the Authorized Officer establishes a Development Area, the Authorized Officer will more strictly apply the factors listed in Section 6.e.(2)(d), especially the appropriate application of the available oil and gas drilling and production technology in the Permian Basin, when closer to current traditional (non-solution) potash mining operations. Greater flexibility in the application of the factors listed in Section 6.e(2)(d) will be applied further from current and near-term traditional (non-solution) potash mining operations. No Drilling Islands will be established within one mile of any area where approved potash mining operations will be conducted within 3 years consistent with the 3-year mine plan referenced above (Section 6.d.(8)) without the consent of the affected potash lessee(s).

e. The Authorized Officer may establish a Development Area associated with a wel or wells drilled from a Barren Area as appropriate and necessary.

f. As part of the consideration for establishing Development Areas and Drilling Islands, the BLM will consider input from the potash lessees and the oil and gas lessees or mineral right owner who would be potentially subject to a unitization agreement supporting the Development Are, provided that the input is given timely.

Buffer Zones

3. Buffer Zones of ¼ mile for oil wells and ½ mile for gas wells are hereby established. These Buffer Zones will stay in effect until such time as revised distances are adopted by the BLM Director or other BLM official, as delegated. However, the Authorized Officer may adjust the Buffer Zones in an individual case, when the facts and circumstances demonstrate that such adjustment would enhance conservation and would not compromise safety. The Director will base revised Buffer Zones on science, engineering, and new technology and will consider comments and reports from the Joint Industry Technical Committee and other interested parties in adopting any revisions.

Unitization and Communitization

4. To more properly conserve the potash, oil and gas resources in the Designated Potash Area and to adequately protect the rights of all parties in interest, including the United States, it is the policy of the Department of the Interior that all Federal oil and gas leases within a Development Area should be unitized or subject to an approved communitization agreement unless there is a compelling reason for another operating system. The Authorized Officer will make full use of his/her authorities wherever necessary or advisable to require unitization and/or communitization pursuant to the regulations in 43 CFR Subparts 3105 and 3180. The Authorized Officer will use his/her discretion to the fullest extent possible to assure that any communitization agreement and any unit plan o operations hereafter approved or prescribed within the Designated Potash Area will

adhere to the provisions of this Order. The Authorized Officer will work with Federal lessees, and with the State Of New Mexico as provided below, to include non-Federal mineral rights owners in unit or communitization agreements to the extent possible.

5. Coordination with the State of New Mexico.

    a. If the effective operation of any Development Area requires that the New Mexico Oil Conservation Division (NMOCD) revise the State's mandatory well spacing requirements, the BLM will participate as needed in such a process. The BLM may adopt the NMOCD spacing requirements and require lessees to enter into communitization agreements based on those requirements.

    b. The BLM will cooperate with the NMOCD in the implementation of that agency's rules and regulations.

    c. In taking any action under Section 6.e. of this Order, the Authorized Officer will take into consideration the applicable rules and regulations of the NMOCD.

To minimize impacts to potash resources, the proposed well is confined within the boundaries of the established Uber North Drill Island (See Potash Memo and Map in attached file for Drill Island description).

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.

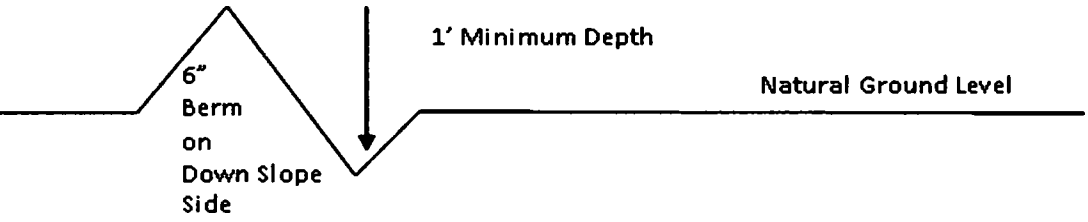
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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 percen 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

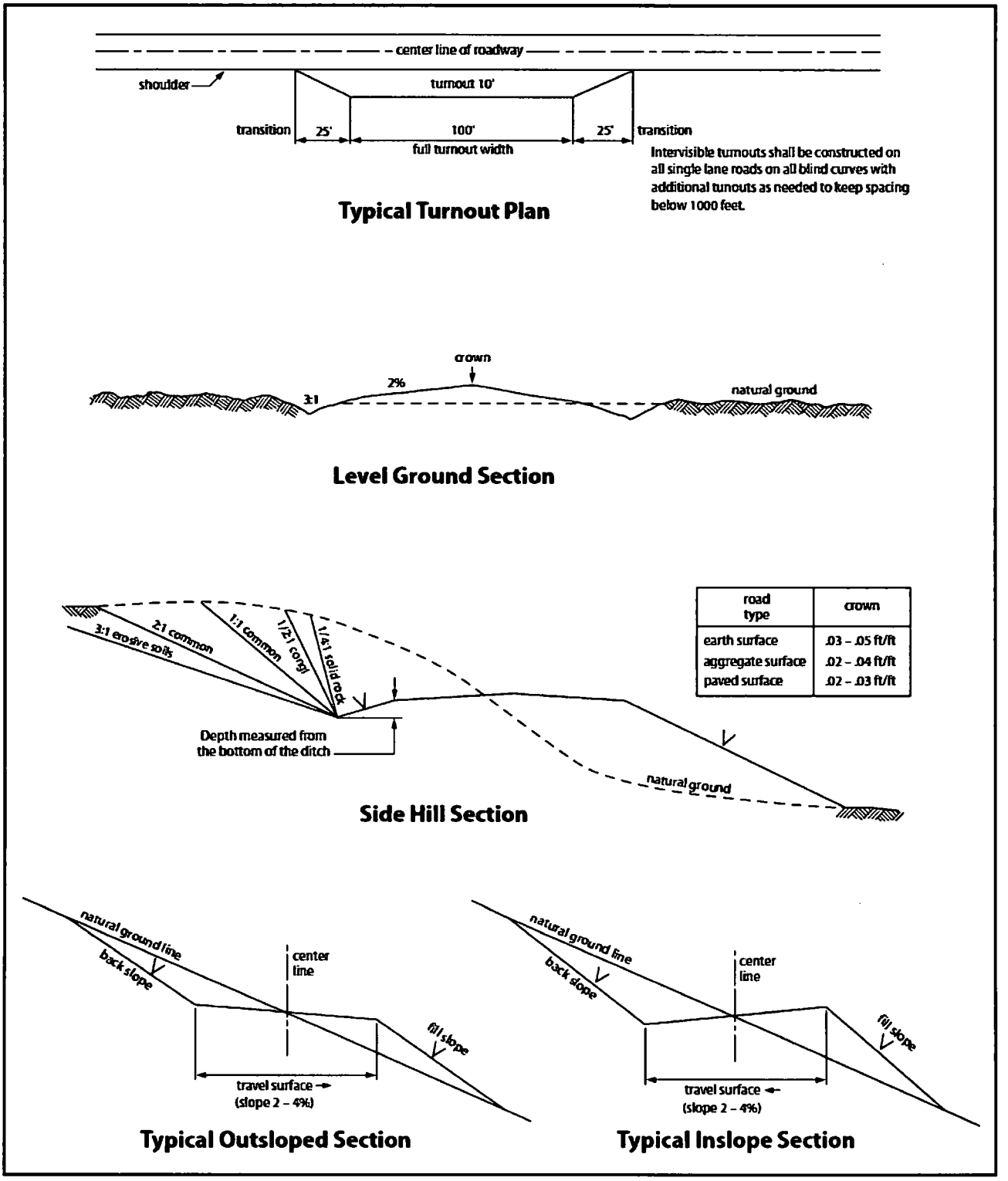


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

STANDARD STIPULATIONS FOR OIL AND GAS RELATED SITES

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

The holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.

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 and for all response costs, penalties, damages, claims, and other costs arising from the provisions of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Chap. 82, Section 6901 et. seq., from the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Chap. 109, Section 9601 et. seq., and from other applicable environmental statues.

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 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this 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). 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 site or related pipeline(s), any oil or other pollutant should be discharged from site facilities, the pipeline(s) or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

5. Sites shall be maintained in an orderly, sanitary condition at all times. Waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, brines, chemicals, oil drums, ashes, and equipment.

6. The operator will notify the Bureau of Land Management (BLM) authorized officer and nearest Fish and Wildlife Service (FWS) Law Enforcement office within 24 hours, if the operator discovers a dead or injured federally protected species (i.e., migratory bird species, bald or golden eagle, or species listed by the FWS as threatened or endangered) in or adjacent to a pit, trench, tank, exhaust stack, or fence. (If the operator is unable to contact the FWS Law Enforcement office, the operator must contact the nearest FWS Ecological Services office.)

7. 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 a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is **Shale Green**, Munsell Soil Color Chart Number 5Y 4/2.

8. Any cultural and/or 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.

9. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. There are several options available for purchasing mineral material: contact the BLM office (575-234-5972).

10. 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.

11. Once the site is no longer in service or use, the site must undergo final abandonment. At final abandonment, the site 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 the abandonment of the site. All pads and 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. 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).

12. The holder shall stockpile an adequate amount of topsoil where blading occurs. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles. The topsoil will be used for final reclamation.

13. 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

( ) seed mixture 2 ( ) seed mixture 4

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

14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.

15. Open-topped Tanks - 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

16. 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.

17. 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.

18. 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.

19. 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 permanent engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

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.

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

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

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

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

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

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

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches that are not otherwise fenced, screened, or netted to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or

other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

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

19. 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.

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.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

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

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to

any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

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

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

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

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

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

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

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

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

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

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

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.

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.

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).

Below 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 for LPC Sand/Shinnery Sites

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

Seed 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). 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. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

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

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

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

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Jenny Harms **Signed on:** 08/25/2017

Title: Regulatory Compliance Professional

Street Address: 333 W Sheridan Ave

City: Oklahoma City **State:** OK **Zip:** 73102

Phone: (405)552-6560

Email address: jenny.harms@dvn.com

Field Representative

Representative Name: Ray Vaz

Street Address: 6488 Seven rivers Hwy

City: Artesia **State:** NM **Zip:** 88210

Phone: (575)748-1871

Email address: ray.vaz@dvn.com

AFMSS

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

Application Data Report

09/26/2018

APD ID: 10400020763 **Submission Date:** 08/25/2017

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM [redacted]

Well Type: OIL WELL **Well Work Type:** Drill

[redacted] Show Final Text

Section 1 - General

APD ID: 10400020763 **Tie to previous NOS?** **Submission Date:** 08/25/2017

BLM Office: CARLSBAD **User:** Jenny Harms **Title:** Regulatory Compliance Professional

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM0404441 **Lease Acres:** 1440

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO **APD Operator:** DEVON ENERGY PRODUCTION COMPANY LP

Operator letter of designation:

Operator Info

Operator Organization Name: DEVON ENERGY PRODUCTION COMPANY LP

Operator Address: 333 West Sheridan Avenue **Zip:** 73102

Operator PO Box:

Operator City: Oklahoma City **State:** OK

Operator Phone: (405)552-6571

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Mater Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: BELLOQ 11-2 FED STATE COM [redacted] **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** LIVINGSTON RIDGE **Pool Name:** BONESPRING

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM [redacted]

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** YES **New surface disturbance?** Y

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: BELLOQ WELL PAD [redacted]

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

[redacted]

Describe sub-type:

Distance to town: [redacted] **Distance to lease line:** 500 FT

[redacted]

Well plat: BELLOQ_11_2_FED_STATE_COM_223H_C102_1_20180814125119.pdf

[redacted] **Duration:** 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

[redacted]

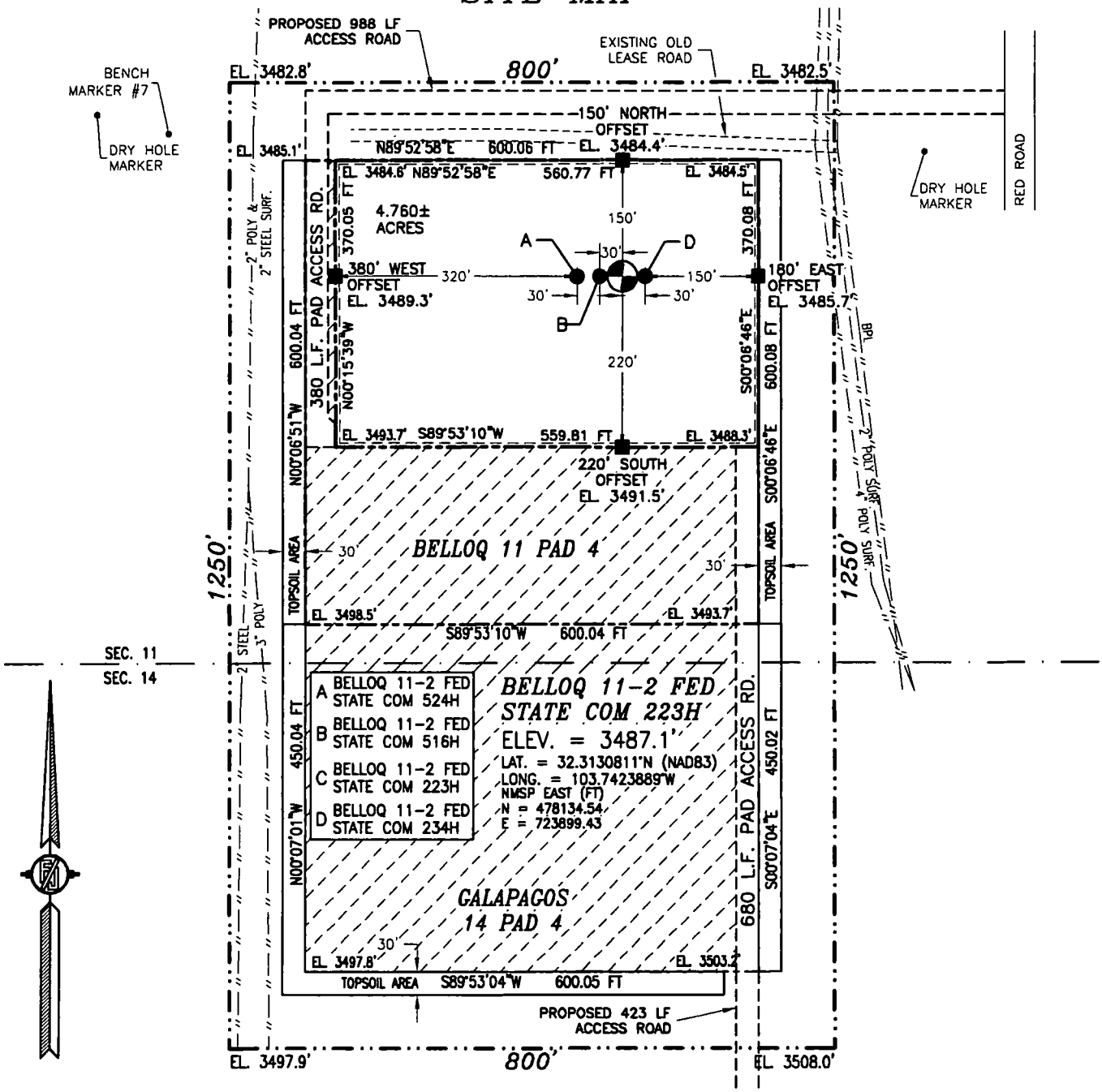
	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	[redacted]	FSL	[redacted]	FEL	23S	31E	11	Aliquot SESE	[redacted]	[redacted]	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 040444 1	[redacted]	[redacted]	[redacted]
KOP Leg #1	[redacted]	FSL	[redacted]	FEL	23S	31E	11	Aliquot SESE	[redacted]	[redacted]	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 040444 1	[redacted]	[redacted]	[redacted]
PPP Leg #1	[redacted]	FSL	[redacted]	FEL	23S	31E	11	Aliquot SESE	[redacted]	[redacted]	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 040444 1	[redacted]	[redacted]	[redacted]

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM [redacted]

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	[redacted]	FNL	[redacted]	FEL	23S	31E	2	Lot 2	[redacted]	[redacted]	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	[redacted]	[redacted]	[redacted]
BHL Leg #1	[redacted]	FNL	[redacted]	FEL	23S	31E	2	Lot 2	[redacted]	[redacted]	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	[redacted]	[redacted]	[redacted]

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SITE MAP



020 100 200 400

SCALE 1" = 200'

DIRECTIONS TO LOCATION

FROM STATE HIGHWAY 128 AND CR 798 (RED ROAD) GO NORTH ON CR 798 APPROX. 4.0 MILES TO A ROAD LATH WITH RED & WHITE FLAGGING ON LEFT SIDE (WEST) OF CR 798, TURN WEST FOLLOW ROAD LATH APPROX. 0.2 OF A MILE, TURN LEFT (SOUTH) GO 455' TO THE SOUTHWEST PAD CORNER FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

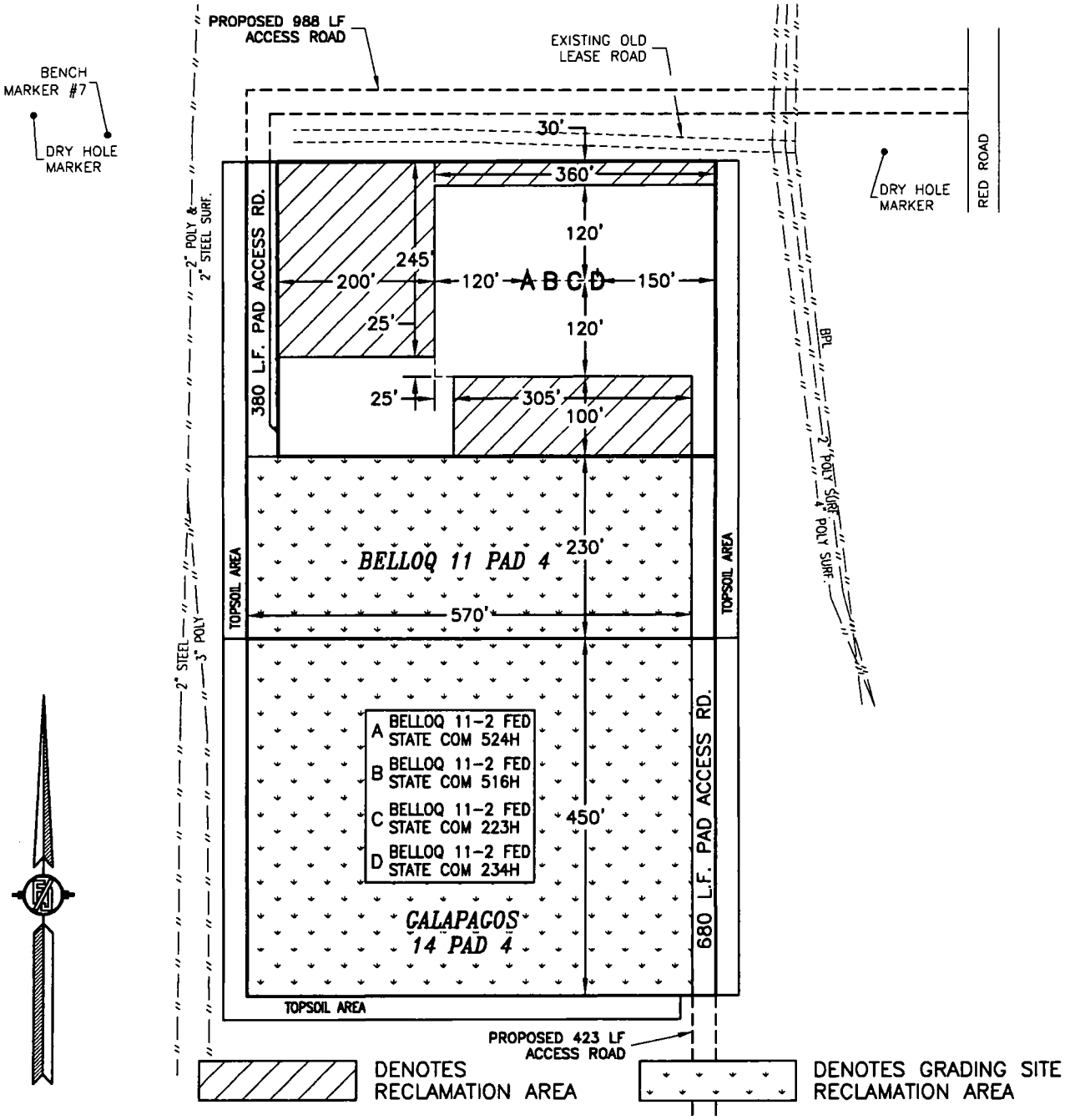
LOCATED 500 FT. FROM THE SOUTH LINE AND 730 FT. FROM THE EAST LINE OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
INTERIM SITE RECLAMATION



020 100 200 400
SCALE 1" = 200'

2.076± ACRES INTERIM PAD RECLAMATION AREA
8.971± ACRES GRADING SITE RECLAMATION AREA
3.418± ACRES NON-RECLAIMED AREA
14.465± ACRES BELLOQ & GALAPAGOS WELL PAD

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

LOCATED 500 FT. FROM THE SOUTH LINE AND 730 FT. FROM THE EAST LINE OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

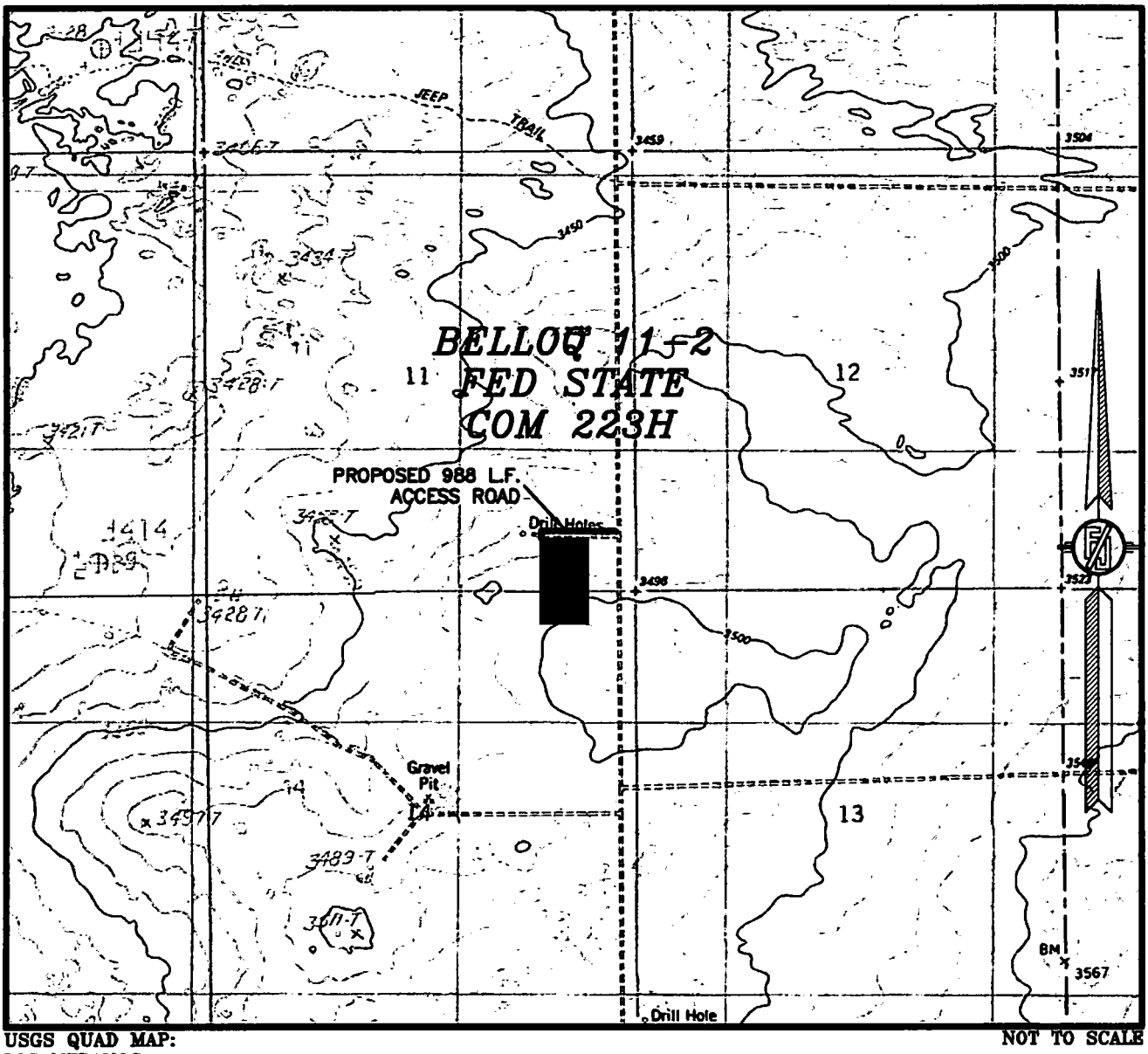
JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

LOCATION VERIFICATION MAP



USGS QUAD MAP:
LOS MEDANOS
BOOTLEG RIDGE

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

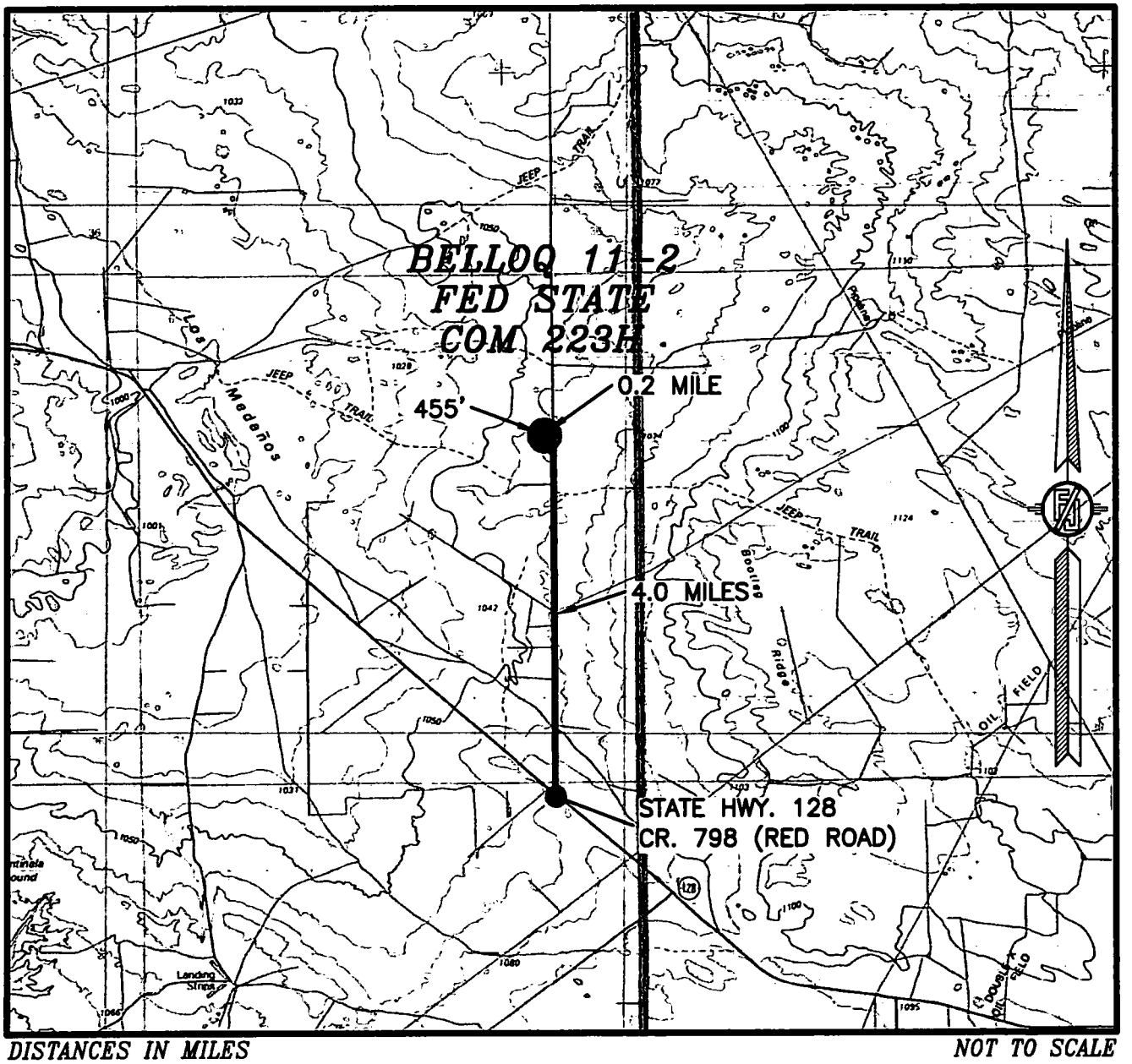
LOCATED 500 FT. FROM THE SOUTH LINE
AND 730 FT. FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES *NOT TO SCALE*

DIRECTIONS TO LOCATION
FROM STATE HIGHWAY 128 AND CR 798 (RED ROAD) GO NORTH ON CR 798 APPROX. 4.0 MILES TO A ROAD LATH WITH RED & WHITE FLAGGING ON LEFT SIDE (WEST) OF CR 798, TURN WEST FOLLOW ROAD LATH APPROX. 0.2 OF A MILE, TURN LEFT (SOUTH) GO 455' TO THE SOUTHWEST PAD CORNER FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.
BELLOQ 11-2 FED STATE COM 223H
LOCATED 500 FT. FROM THE SOUTH LINE AND 730 FT. FROM THE EAST LINE OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

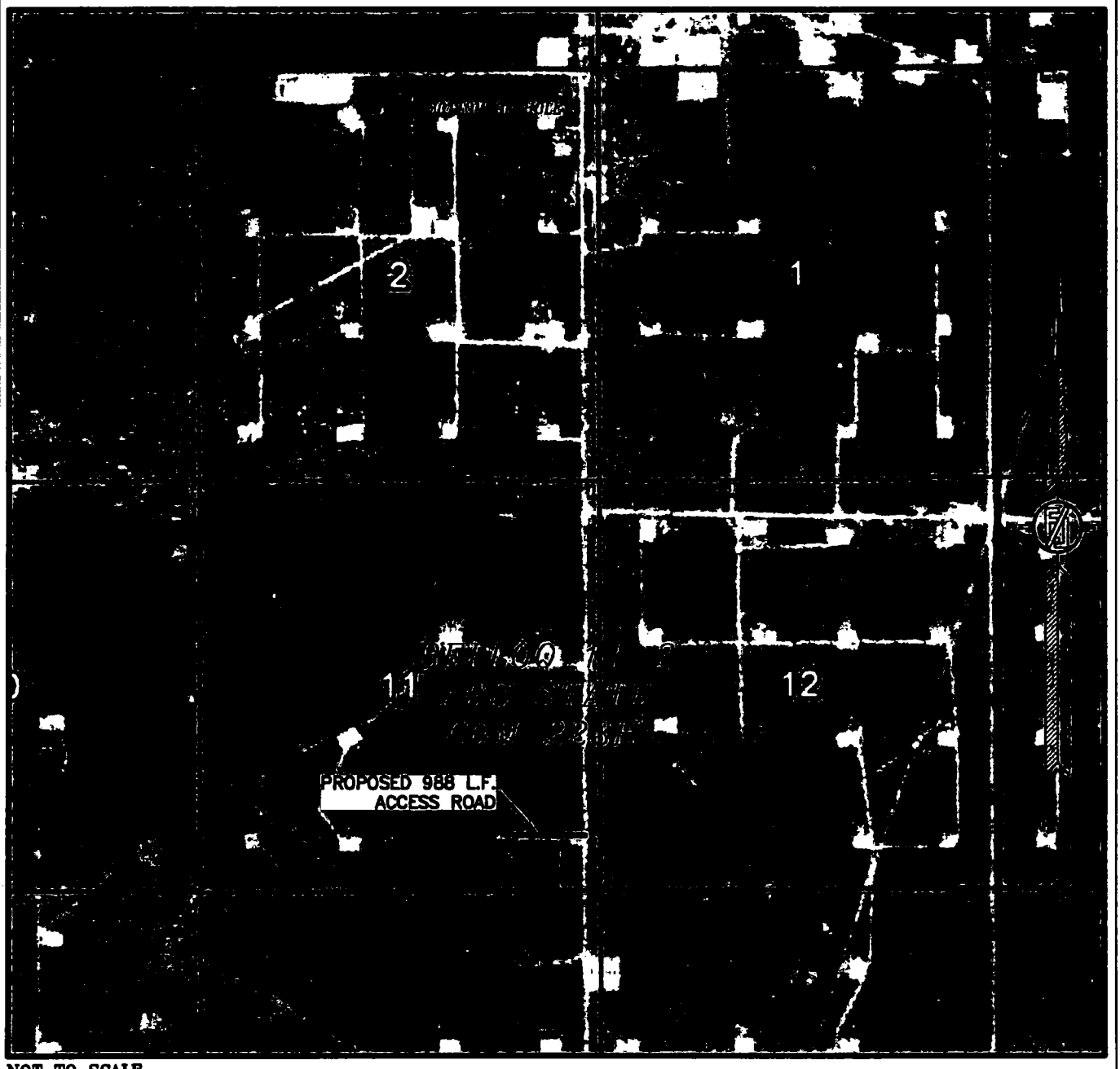
JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

LOCATED 500 FT. FROM THE SOUTH LINE
AND 730 FT. FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

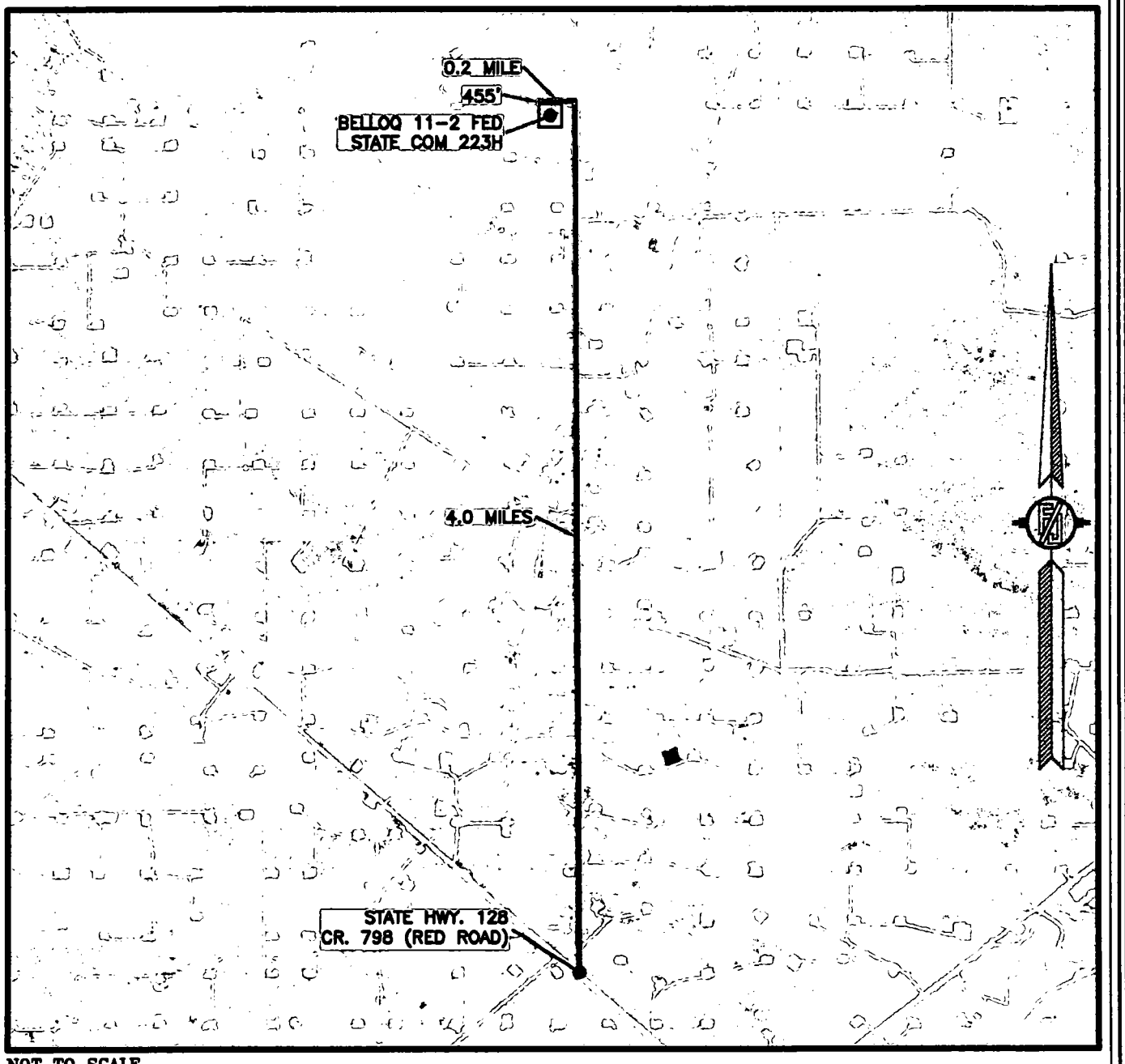
JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

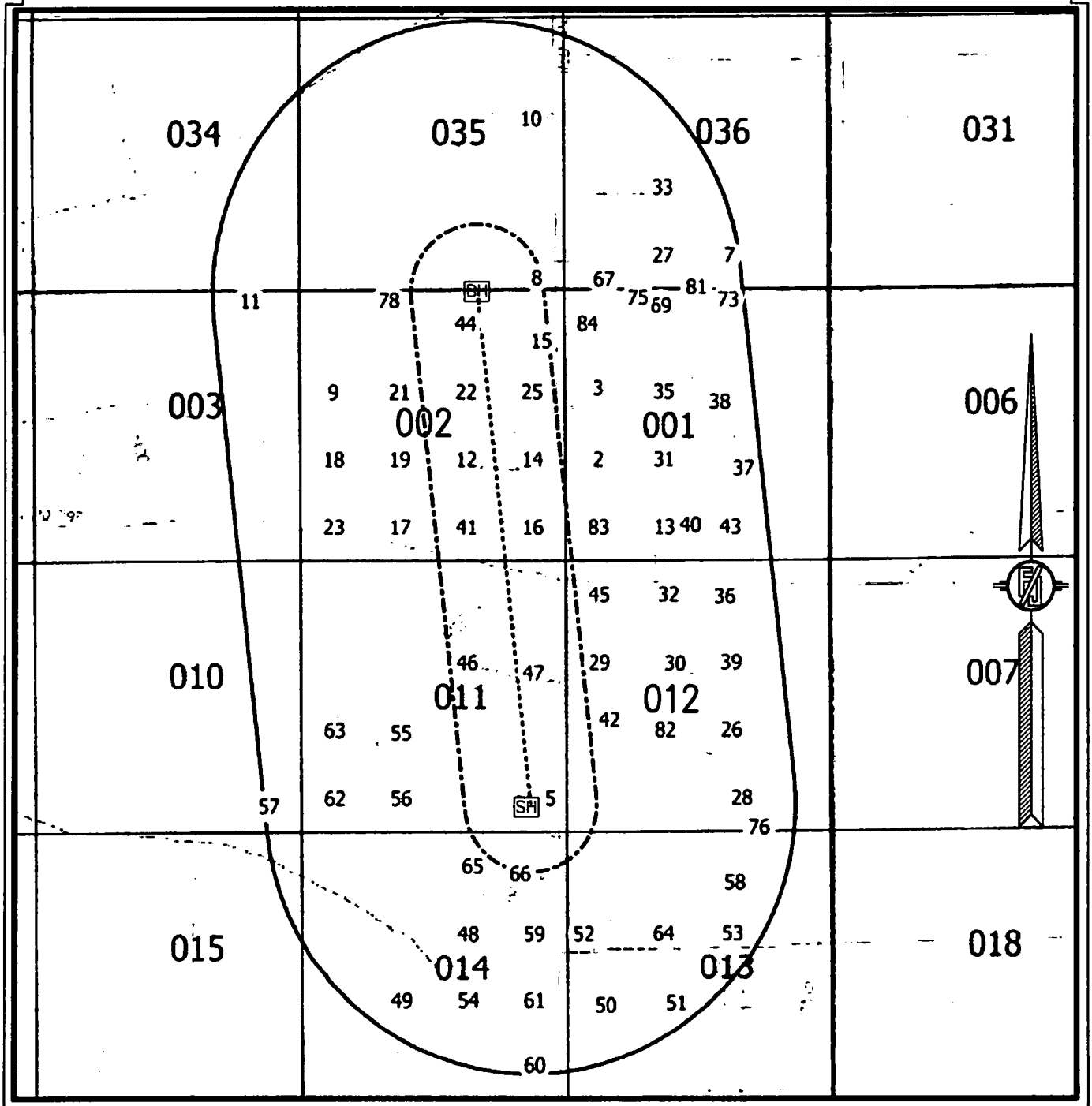
LOCATED 500 FT. FROM THE SOUTH LINE
AND 730 FT. FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

1-MILE WELL MAP



WELL DATA FROM NMOCD GIS – 4/18/18

[SH] SURFACE LOCATION

[BH] BOTTOM OF HOLE

(XX) WELLS WITHIN 1 MILE

WELL PATH

1/4 MILE BOUNDARY

1-MILE BOUNDARY

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

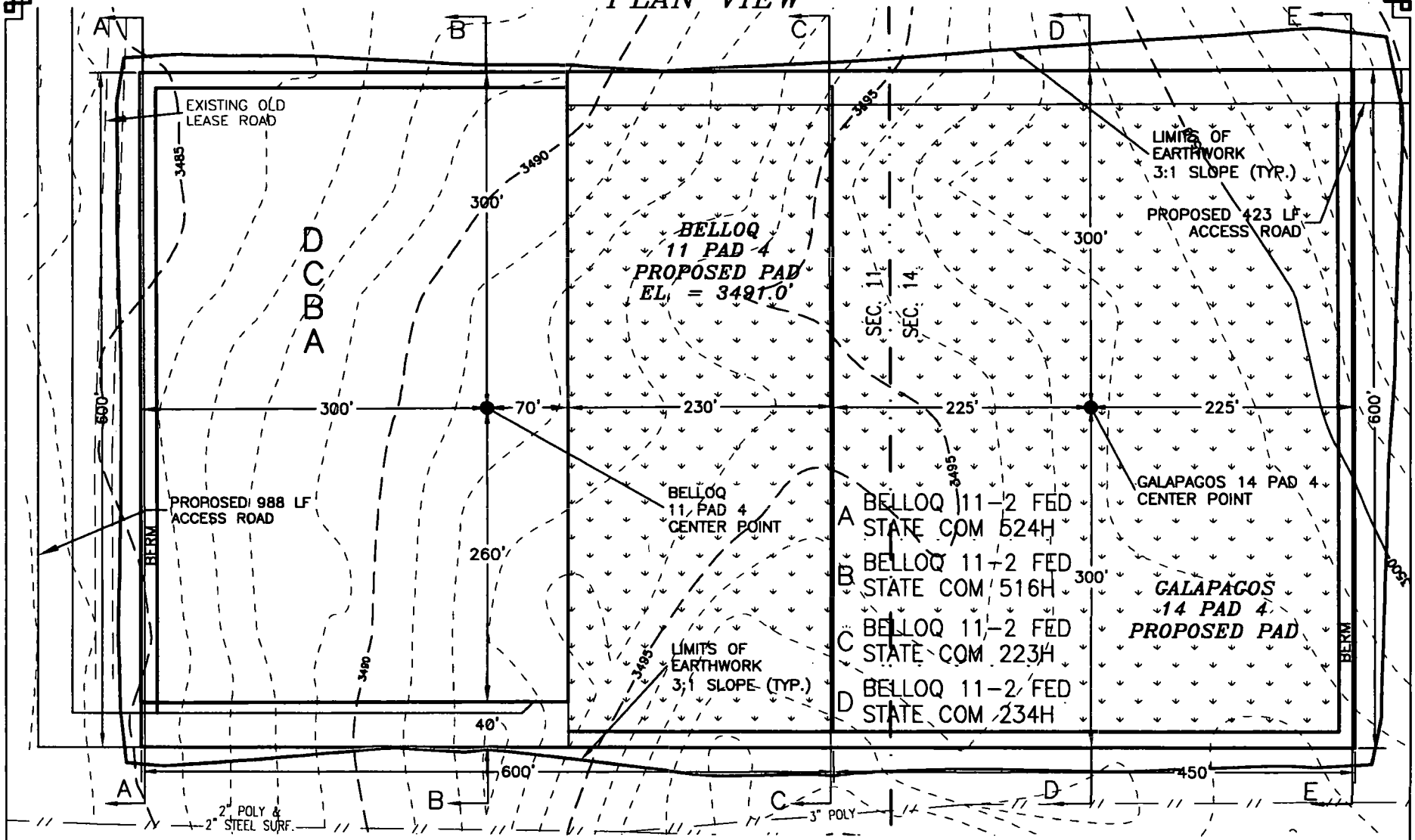
LOCATED 500 FT. FROM THE SOUTH LINE AND 730 FT. FROM THE EAST LINE OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

PLAN VIEW



DEVON ENERGY PRODUCTION COMPANY, L.P.
PAD GRADING AND CROSS SECTIONS
FOR BELLOQ 11-2 FED STATE COM 223H
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

012 60 120 240
SCALE 1" = 120'

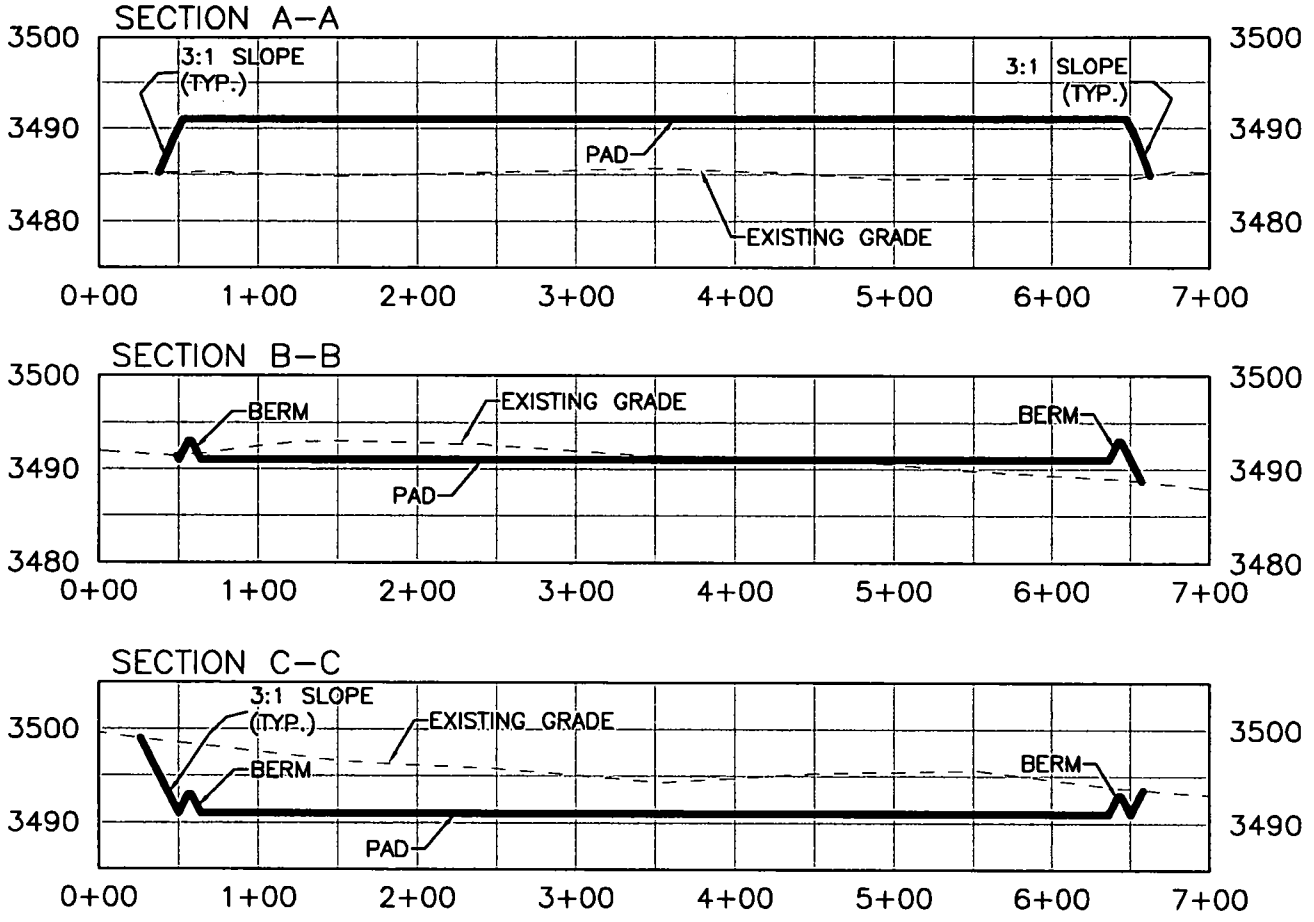
EARTHWORK QUANTITIES

CUT	FILL	NET
91716 CU. YD	22659 CU. YD	69058 CU. YD (CUT)

EARTHWORK QUANTITIES ARE ESTIMATED

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

CROSS SECTIONS



DEVON ENERGY PRODUCTION COMPANY, L.P.
PAD GRADING AND CROSS SECTIONS
FOR BELLOQ 11–2 FED STATE COM 223H
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

012 60 120 240
SCALE 1" = 120' – 1" = 20' VER

EARTHWORK QUANTITIES

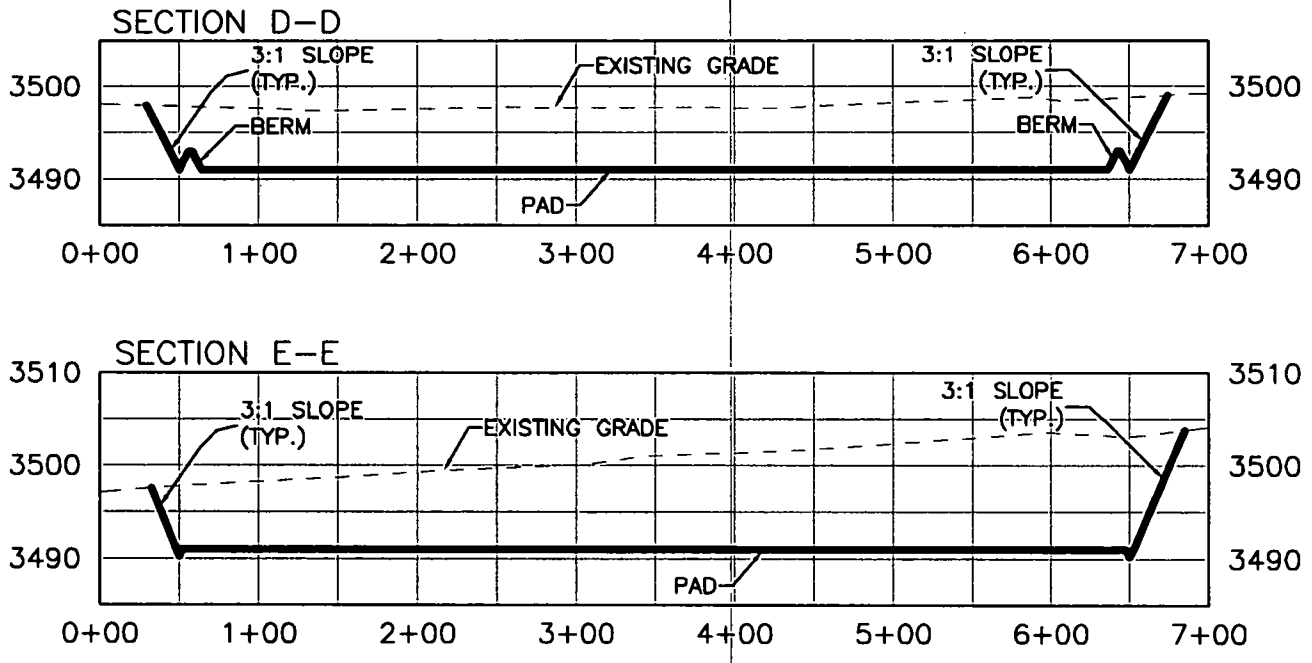
CUT	FILL	NET
91716 CU. YD	22659 CU. YD	69058 CU. YD (CUT)

EARTHWORK QUANTITIES ARE ESTIMATED

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SHEET 2–3
SURVEY NO. 6188B

CROSS SECTIONS



DEVON ENERGY PRODUCTION COMPANY, L.P.
PAD GRADING AND CROSS SECTIONS
FOR BELLOQ 11-2 FED STATE COM 223H
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

012 60 120 240
SCALE 1" = 120' - 1" = 20' VER

EARTHWORK QUANTITIES

CUT	FILL	NET
91716 CU. YD	22659 CU. YD	69058 CU. YD (CUT)

EARTHWORK QUANTITIES ARE ESTIMATED

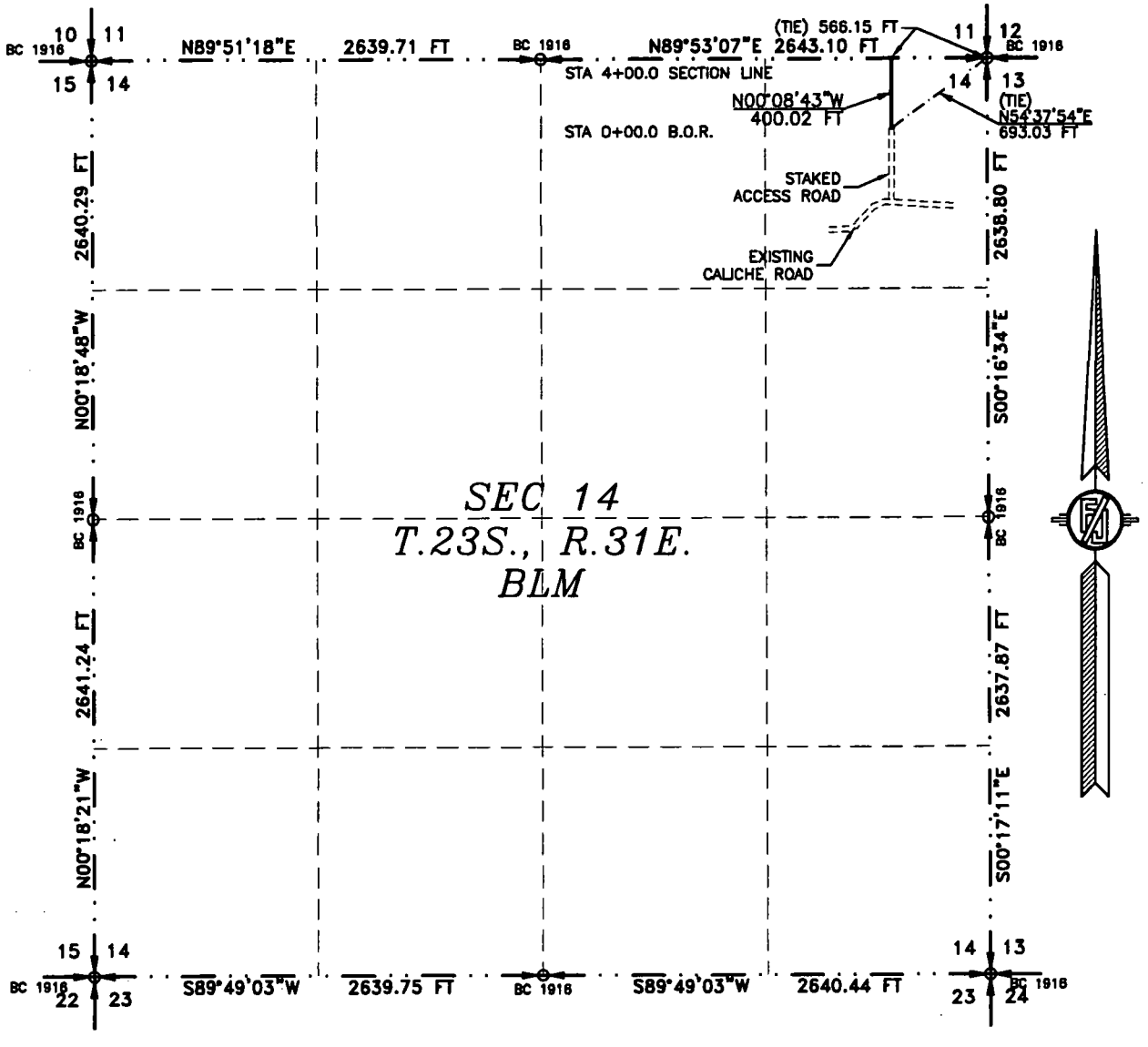
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018



SEE NEXT SHEET (2-4) FOR DESCRIPTION

1000 0 1000

Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 16 DAY OF JULY 2018.

FILIMON F. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

FILIMON F. JARAMILLO P.L.S. 12797

301 SOUTH CANAL
(575) 234-3341

SHEET: 1-4

SURVEY NO. 6188B

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NE/4 NE/4 OF SAID SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE NORTHEAST CORNER OF SAID SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N54°37'54"E, A DISTANCE OF 693.03 FEET;
THENCE N00°08'43"W A DISTANCE OF 400.02 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N89°53'07"E, A DISTANCE OF 566.15 FEET;

SAID STRIP OF LAND BEING 400.02 FEET OR 24.24 RODS IN LENGTH, CONTAINING 0.275 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NE/4	400.02 L.F.	24.24 RODS	0.275 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12TH DAY OF JULY 2018.

FILIMON F. JARAMILLO 12797 REGISTERED PROFESSIONAL SURVEYOR

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

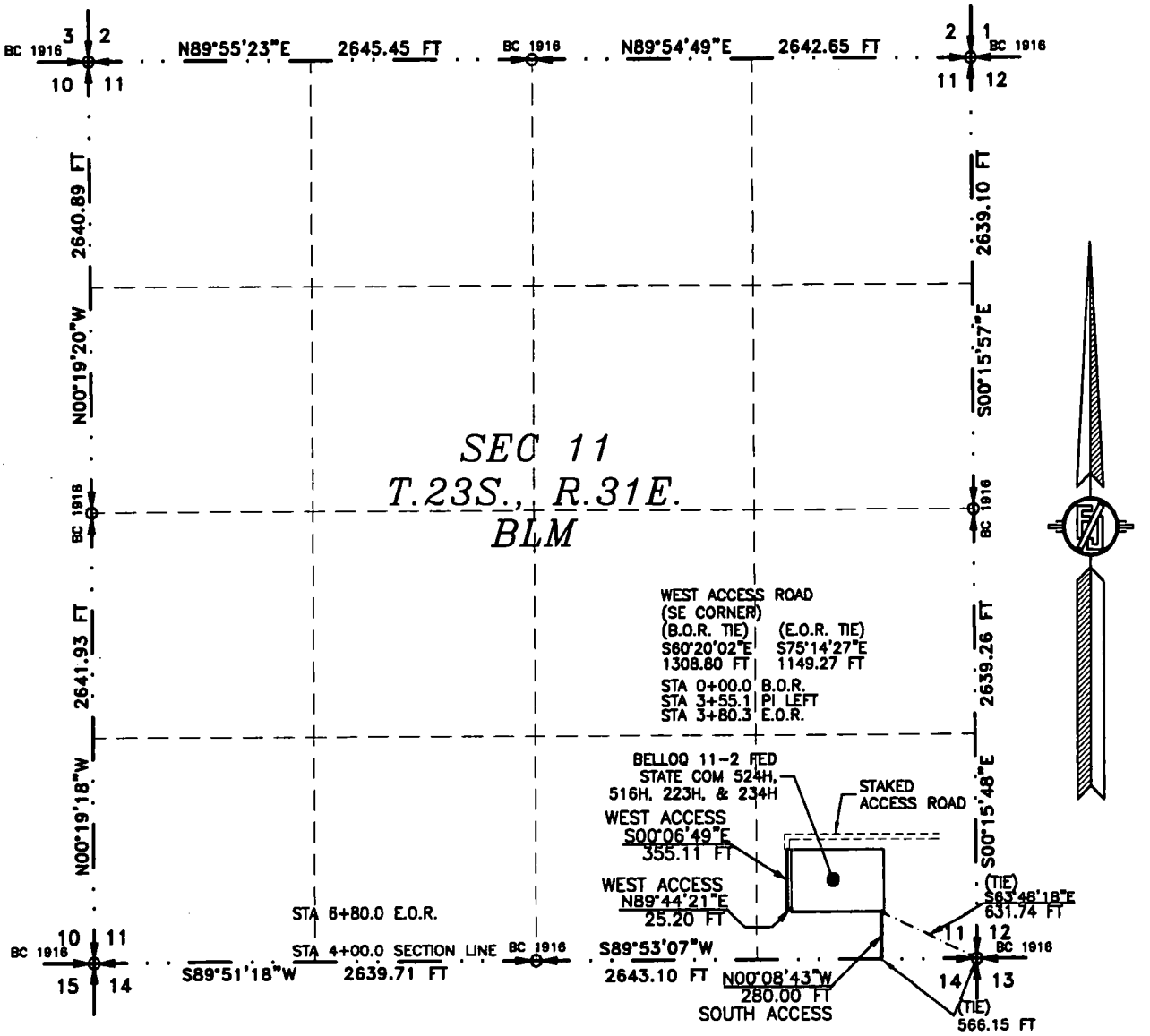
FILIMON F. JARAMILLO PLS # 12797

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018



SEE NEXT SHEET (4-4) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 11TH DAY OF JULY 2018.

FILIMON F. JARAMILLO, PLS 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 3-4

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

SOUTH ACCESS
BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N89°53'07"E, A DISTANCE OF 566.15 FEET;
THENCE N00°08'43"W A DISTANCE OF 280.00 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S63°48'18"E, A DISTANCE OF 631.74 FEET;

SAID STRIP OF LAND BEING 280.00 FEET OR 16.97 RODS IN LENGTH, CONTAINING 0.193 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	280.00 L.F.	16.97 RODS	0.193 ACRES

WEST ACCESS
BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S60°20'02"E, A DISTANCE OF 1308.80 FEET;
THENCE S00°06'49"E A DISTANCE OF 355.11 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N89°44'21"E A DISTANCE OF 25.20 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S75°14'27"E, A DISTANCE OF 1149.27 FEET;

SAID STRIP OF LAND BEING 380.31 FEET OR 23.05 RODS IN LENGTH, CONTAINING 0.262 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	380.31 L.F.	23.05 RODS	0.262 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12TH DAY OF JULY 2018.

FILIMON F. JARAMILLO, PLS 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 6188B

APD ID: 10400020763 **Submission Date:** 08/25/2017

Highlighted data reflects the most recent changes

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Show Final Text

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3487	0	0	ALLUVIUM	NONE	No
2	RUSTLER	2723	764	764	SALT	NONE	No
3	BASE OF SALT	-756	4243	4243	SALT	NONE	No
4	DELAWARE	-995	4482	4482	SANDSTONE	NATURAL GAS,OIL	No
5	BONE SPRING	-6442	9929	9929	SANDSTONE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M **Rating Depth:** 6000

Equipment: BOP/BOPE will be installed per Onshore Oil & Gas Order #2 requirements prior to drilling below 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system. BOP/BOPE will be tested by an independent service company per Onshore Oil & Gas Order #2 requirements and MASP (Maximum Anticipated Surface Pressure) calculations. If the system is upgraded, all the components installed will be functional and tested.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP stack to the choke manifold. See attached for specs for hydrostatic test chart.

Testing Procedure: A multibowl wellhead may be 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.

Choke Diagram Attachment:

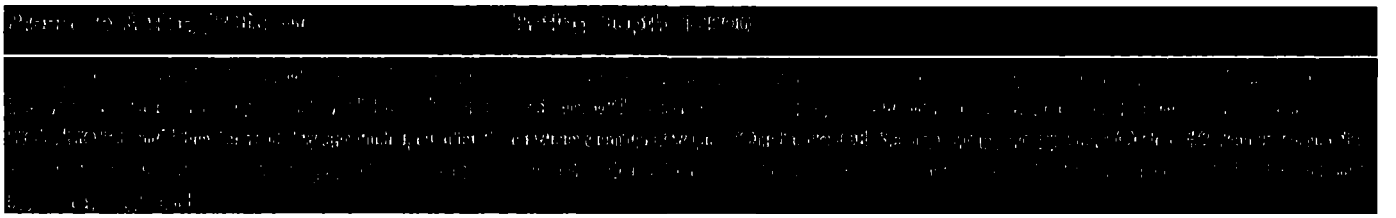
BELLOQ_11_2_FED_STATE_COM_223H_3M_BOPE_20180814130210.pdf

BOP Diagram Attachment:

BELLOQ_11_2_FED_STATE_COM_223H_3M_BOPE_20180814130224.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H



Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP stack to the choke manifold. See attached for specs for hydrostatic test chart.
Testing Procedure: A multibowl wellhead may be 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.

Choke Diagram Attachment:

BELLOQ_11_2_FED_STATE_COM_223H_5M_BOPE_20180814130233.pdf

BOP Diagram Attachment:

BELLOQ_11_2_FED_STATE_COM_223H_5M_BOPE_20180814130240.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	800	0	800	-6802	-7566	800	H-40	48	STC	1.125	1	BUOY	1.6	BUOY	1.6
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	6000	0	6000	-6802	-11052	6000	J-55	40	OTHER - BTC	1.125	1	BUOY	1.6	BUOY	1.6
3	PRODUCTION	8.75	5.5	NEW	API	N	0	20465	0	10200	-6802	-16802	20465	P-110	17	OTHER - BTC	1.125	1	BUOY	1.6	BUOY	1.6

Casing Attachments

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BELLOQ_11_2_FED_STATE_COM_223H_Surf_Csg_Ass_20180814130557.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BELLOQ_11_2_FED_STATE_COM_223H_Int_Csg_Ass_20180814130623.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

BELLOQ_11_2_FED_STATE_COM_223H_Prod_Csg_Ass_20180814130641.pdf

Section 4 - Cement

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead					1.33				C	
INTERMEDIATE	Lead					1.94				C	
INTERMEDIATE	Tail									C	
PRODUCTION	Lead					3.27				TUNED	
PRODUCTION	Tail									H	

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	800	OTHER : FRESH WATER	8.5	9				2			
800	6000	OTHER : BRINE	10	10.5				2			
6000	10200	WATER-BASED MUD	8.5	9							

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Will run GRMWD from TD to from KOP. Cement bond logs will be run in vertical to determine top of cement. Stated logs run will be in the completion report and submitted to the BLM.

List of open and cased hole logs run in the well:

CALIPER,CBL,DS,GR,MUDLOG

Coring operation description for the well:

N/A

Section 7 - Pressure

[redacted]

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Belloq_11_2_Fed_State_Com_223H_H2S_PLAN__20180814131433.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Devon_Belloq_11_2_Fed_State_Com_223H__AC_Report_Permit_Plan_1_20180814131508.pdf

Devon_Belloq_11_2_Fed_State_Com_223H__Permit_Plan_1_20180814131509.pdf

Devon_Belloq_11_2_Fed_State_Com_223H__Plot_Permit_Plan_1_20180814131510.pdf

Other proposed operations facets description:

[redacted]

Other proposed operations facets attachment:

Belloq_11_2_Fed_State_Com_223H_Drilling_Plan_20180814131527.pdf

Belloq_11_2_Fed_State_Com_223h_Gas_Capture_20180814131549.pdf

BELLOQ_11_2_FED_STATE_COM_223H_Clsd_Loop_20180814131550.pdf

BELLOQ_11_2_FED_STATE_COM_223H_MB_Verb_20180814131551.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

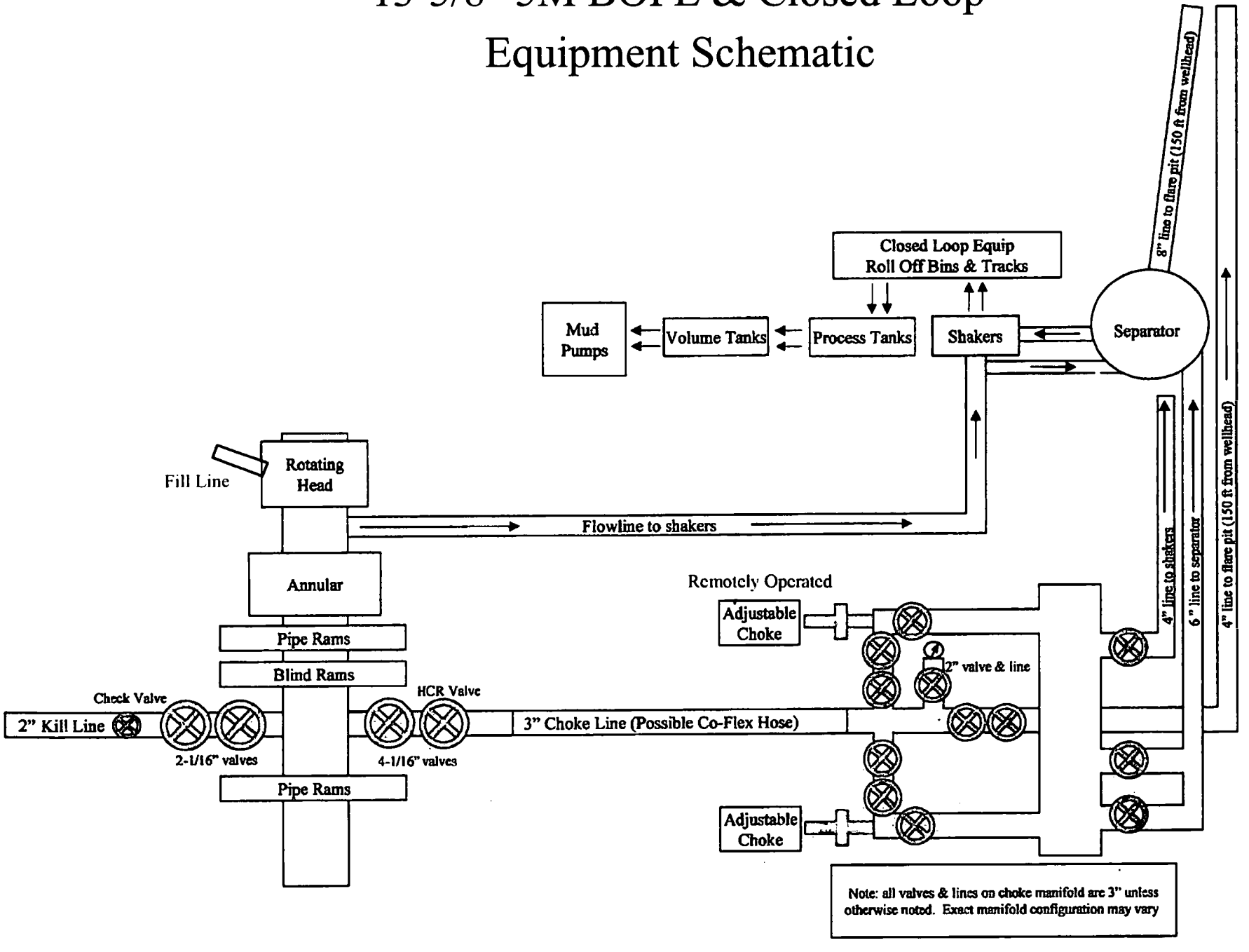
Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

BELLOQ_11_2_FED_STATE_COM_223H_MB_Wellhd_20180814131552.pdf

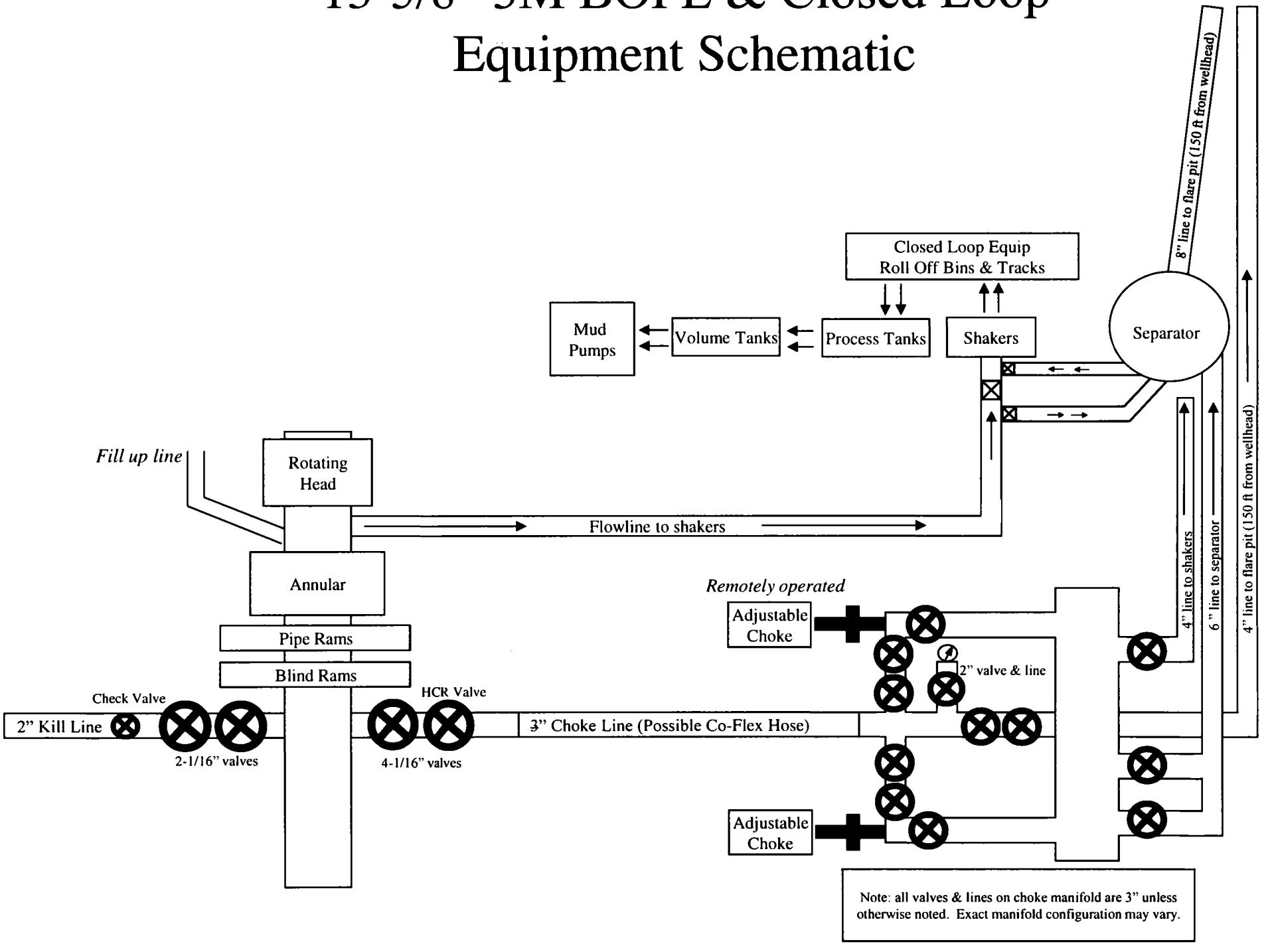
Other Variance attachment:

BELLOQ_11_2_FED_STATE_COM_223H_Co_flex_20180814131600.pdf

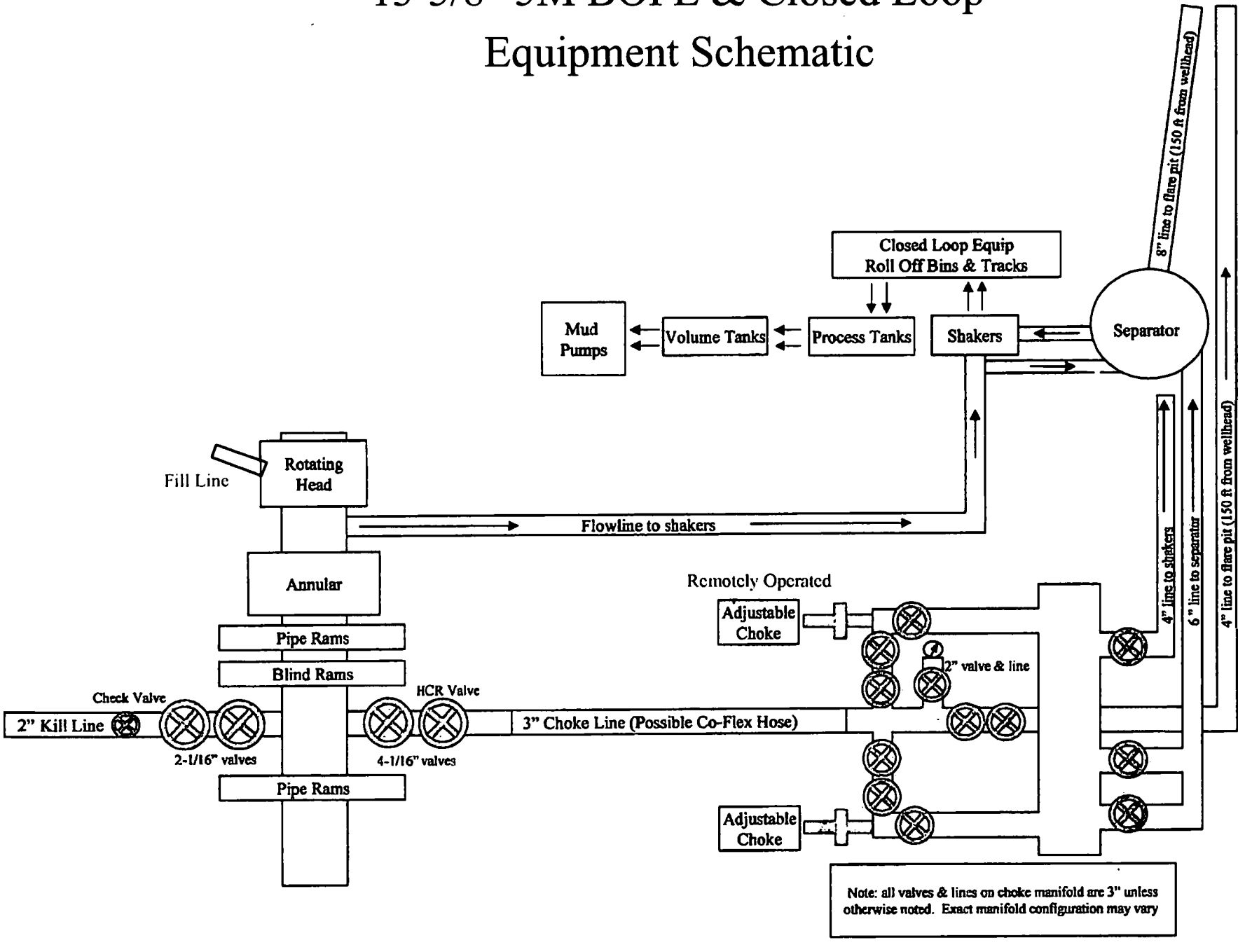
13-5/8" 5M BOPE & Closed Loop Equipment Schematic



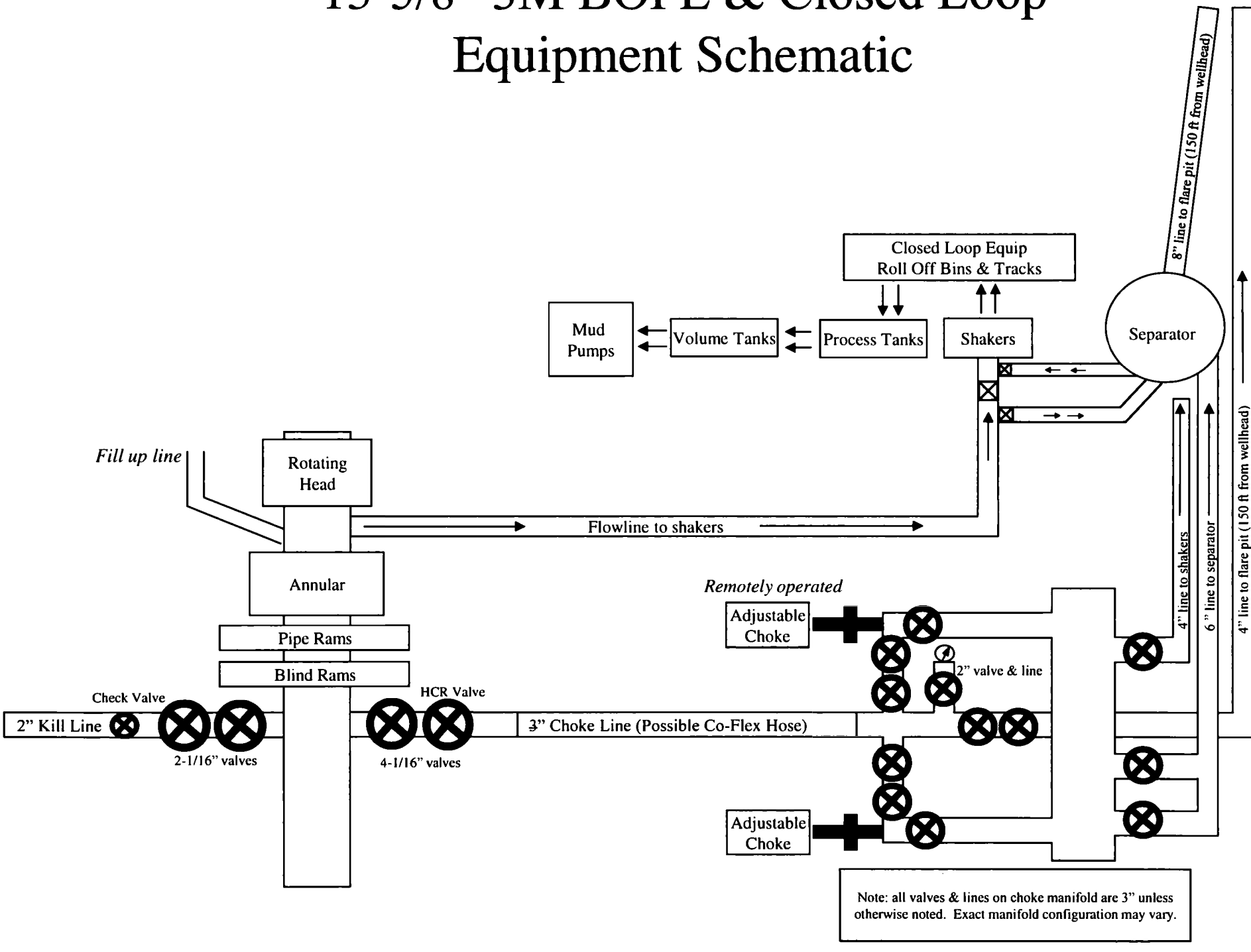
13-5/8" 3M BOPE & Closed Loop Equipment Schematic



13-5/8" 5M BOPE & Closed Loop Equipment Schematic



13-5/8" 3M BOPE & Closed Loop Equipment Schematic



Casing Assumptions and Load Cases

Surface

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Surface Casing Burst Design		
Load Case	**External Pressure**	**Internal Pressure**
Pressure Test	Formation Pore Pressure	Max mud weight of next hole-section plus Test psi
Drill Ahead	Formation Pore Pressure	Max mud weight of next hole section
Displace to Gas	Formation Pore Pressure	Dry gas from next casing point

Surface Casing Collapse Design		
Load Case	**External Pressure**	**Internal Pressure**
Full Evacuation	Water gradient in cement, mud above TOC	None
Cementing	Wet cement weight	Water (8.33ppg)

Surface Casing Tension Design	
Load Case	**Assumptions**
Overpull	100kips
Runing in hole	3 ft/s
Service Loads	N/A

Casing Assumptions and Load Cases

Intermediate

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Intermediate Casing Burst Design		
Load Case	**External Pressure**	**Internal Pressure**
Pressure Test	Formation Pore Pressure	Max mud weight of next hole-section plus Test psi
Drill Ahead	Formation Pore Pressure	Max mud weight of next hole section
Fracture @ Shoe	Formation Pore Pressure	Dry gas

Intermediate Casing Collapse Design		
Load Case	**External Pressure**	**Internal Pressure**
Full Evacuation	Water gradient in cement, mud above TOC	None
Cementing	Wet cement weight	Water (8.33ppg)

Intermediate Casing Tension Design	
Load Case	**Assumptions**
Overpull	100kips
Runing in hole	2 ft/s
Service Loads	N/A

Casing Assumptions and Load Cases

Production

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Production Casing Burst Design		
Load Case	**External Pressure**	**Internal Pressure**
Pressure Test	Formation Pore Pressure	Fluid in hole (water or produced water) + test psi
Tubing Leak	Formation Pore Pressure	Packer @ KOP, leak below surface 8.6 ppg packer fluid
Stimulation	Formation Pore Pressure	Max frac pressure with heaviest frac fluid

Production Casing Collapse Design		
Load Case	**External Pressure**	**Internal Pressure**
Full Evacuation	Water gradient in cement, mud above TOC.	None
Cementing	Wet cement weight	Water (8.33ppg)

Production Casing Tension Design	
Load Case	**Assumptions**
Overpull	100kips
Runing in hole	2 ft/s
Service Loads	N/A

devon

Devon Energy Center
333 West Sheridan Avenue
Oklahoma City, Oklahoma 73102-5015

Hydrogen Sulfide (H_2S) Contingency Plan

For

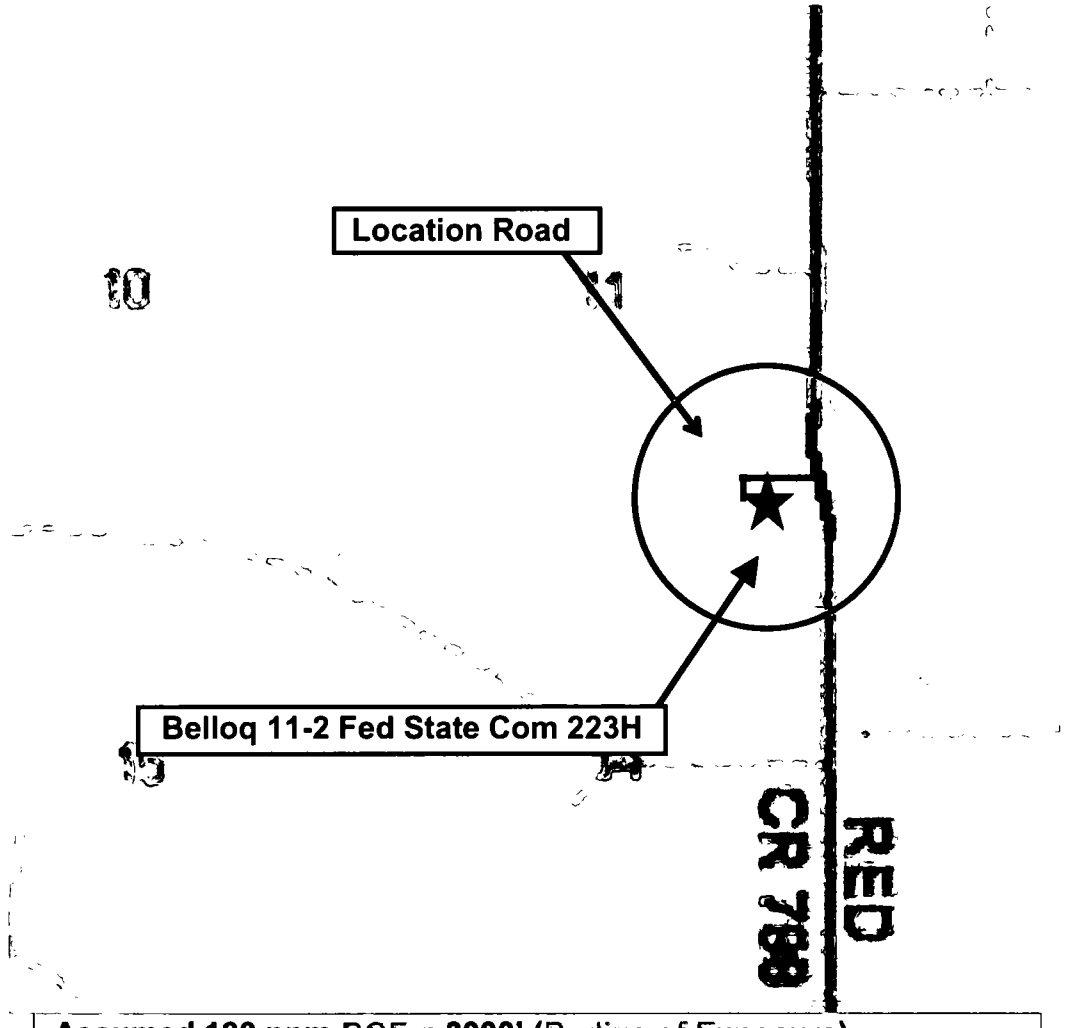
Belloq 11-2 Fed State Com 223H

Sec-11 T-23S R-31E
500' FSL & 730 FEL
LAT. = 32.3130811' N (NAD83)
LONG = 103.7423889' W

Eddy County NM

Belloq 11-2 Fed State Com 223H

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.



Assumed 100 ppm ROE = **3000'** (Radius of Exposure)
100 ppm H2S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crews should then block the entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H_2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must

- **Isolate the area and prevent entry by other persons into the 100 ppm ROE.**
- **Evacuate any public places encomp8assed by the 100 ppm ROE.**
- **Be equipped with H_2S monitors and air packs in order to control the release.**
- **Use the "buddy system" to ensure no injuries occur during the response**
- **Take precautions to avoid personal injury during this operation.**
- **Contact operator and/or local officials to aid in operation. See list of phone numbers attached.**
- **Have received training in the**
  - **Detection of H_2S, and**
  - **Measures for protection against the gas,**
  - **Equipment used for protection and emergency response.**

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H_2S) 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:

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

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

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

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

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 H_2S.

1. **Well Control Equipment**

   A. Flare line

   B. Choke manifold – Remotely Operated

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit

   D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

   E. Mud/Gas Separator

2. **Protective equipment for essential personnel:**

   30-minute SCBA units located at briefing areas, as indicated on well site diagram, with escape units available in the top doghouse. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. **H_2S detection and monitoring equipment:**

   Portable H_2S monitors positioned on location for best coverage and response. These units have warning lights which activate when H_2S levels reach 10 ppm and audible sirens which activate at 15 ppm. Sensor locations:

   - **Bell nipple**
   - **Rig floor**
   - **Cellar**
   - **Possum Belly/Shale shaker**
   - **Choke manifold**

   Visual warning systems:

   A. Wind direction indicators as shown on well site diagram

   B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

4. **Mud program:**

   The mud program has been designed to minimize the volume of H_2S circulated to surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

5. **Metallurgy:**

   A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H_2S trim.

   B. All elastomers used for packing and seals shall be H_2S trim.

6. **Communication:**

   A. Company personnel have/use cellular telephones in the field.

   B. Land line (telephone) communications at Office

7. **Well testing:**

   A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H_2S environment will use the closed chamber method of testing.

   B. There will be no drill stem testing.

Devon Energy Corp. Company Call List		
Drilling Supervisor – Basin – Jonathan Fisher		405-228-8976
Randy Gladden –	Day 575-748-1805 Cell 575-513-9463	
EHS Professional – Jason Robison		405-541-2841

Agency Call List

Lea County (575)	**Hobbs**		
	Lea County Communication Authority		393-3981
	State Police		392-5588
	City Police		397-9265
	Sheriff's Office		393-2515
	Ambulance		**911**
	Fire Department		397-9308
	LEPC (Local Emergency Planning Committee)		393-2870
	NMOCD		393-6161
	US Bureau of Land Management		393-3612
Eddy County (575)	**Carlsbad**		
	State Police		885-3137
	City Police		885-2111
	Sheriff's Office		887-7551
	Ambulance		**911**
	Fire Department		885-3125
	LEPC (Local Emergency Planning Committee)		887-3798
	US Bureau of Land Management		887-6544
	NM Emergency Response Commission (Santa Fe)		(505) 476-9600
	24 HR		(505) 827-9126
	National Emergency Response Center		(800) 424-8802
	National Pollution Control Center: Direct		(703) 872-6000
	For Oil Spills		(800) 280-7118
	Emergency Services		
	Wild Well Control		(281) 784-4700
	Cudd Pressure Control	(915) 699-0139	(915) 563-3356
	Halliburton		(575) 746-2757
	B. J. Services		(575) 746-3569
Give GPS position:	Native Air – Emergency Helicopter – Hobbs		(575) 392-6429
	Flight For Life - Lubbock, TX		(806) 743-9911
	Aerocare - Lubbock, TX		(806) 747-8923
	Med Flight Air Amb - Albuquerque, NM		(575) 842-4433
	Lifeguard Air Med Svc. Albuquerque, NM		(800) 222-1222
	Poison Control (24/7)		(575) 272-3115
	Oil & Gas Pipeline 24 Hour Service		(800) 364-4366
	NOAA – Website - www.nhc.noaa.gov		

Prepared in conjunction with
Dave Small SHARP communications and consulting

WCDSC Permian NM

Eddy County (NAD 83 NM Eastern)
Sec 11-T23S-R31E
Belloq 11-2 Fed State Com 223H

Wellbore #1
Permit Plan 1

Anticollision Report

31 July, 2018

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Reference	Permit Plan 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 50.00ft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,500.00 ft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 7/31/2018

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	20,465.87	Permit Plan 1 (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Sec 02-T23S-R31E						
Barclay State #001 (P&A) - Wellbore #1 - Wellbore #1	17,226.22	10,158.90	1,084.27	825.88	4.196	Alert, CC, ES
Barclay State #001 (P&A) - Wellbore #1 - Wellbore #1	17,250.00	10,158.90	1,084.53	826.04	4.196	Alert, SF
Barclay State #002 (P&A) - Wellbore #1 - Wellbore #1						Out of range
Barclay State #003 (Active) - Wellbore #1 - Wellbore #1						Out of range
Barclay State #004 SWD (Active) - Wellbore #1 - Wellbo						Out of range
Barclay State #007 (P&A) - Wellbore #1 - Blind Projectio						Out of range
Barclay State #008 (P&A) - Wellbore #1 - Wellbore #1						Out of range
Barclay State #009 (Active) - Wellbore #1 - Wellbore #1						Out of range
Belloq 2 State 2H - Original Hole - Actuals						Out of range
Belloq 2 State 2H - Original Hole - Plan #10						Out of range
Belloq 2 State 2H - Original Hole - Plan #4						Out of range
Belloq 2 State 2H - Original Hole - Plan 11						Out of range
Belloq 2 State 2H - Original Hole - Plan 3						Out of range
Belloq 2 State 2H - Original Hole - Plan 5						Out of range
Belloq 2 State 2H - Original Hole - Plan 5a						Out of range
Belloq 2 State 2H - Original Hole - Plan 6						Out of range
Belloq 2 State 2H - Original Hole - Plan 7						Out of range
Belloq 2 State 2H - Original Hole - Plan 8						Out of range
Belloq 2 State 2H - Original Hole - Plan 9						Out of range
Belloq 2 State 2H - Original Hole - PTL						Out of range
Belloq 2 State 2H - Original Hole - T&D						Out of range
Belloq 2 State 5H - Wellbore #1 - Wellbore #1						Out of range
Belloq 2 State 6H - Original Hole - Actual	15,600.00	14,954.89	1,371.57	1,190.07	7.557	ES, SF
Belloq 2 State 6H - Original Hole - Actual	15,712.23	14,846.35	1,371.32	1,190.23	7.572	CC
Belloq 2 State 6H - Original Hole - Plan #3	15,625.77	14,934.19	1,334.67	1,153.14	7.353	CC
Belloq 2 State 6H - Original Hole - Plan #3	15,650.00	14,934.19	1,334.89	1,152.79	7.330	ES
Belloq 2 State 6H - Original Hole - Plan #3	15,700.00	14,934.19	1,336.73	1,153.60	7.299	SF
Belloq 2 State 6H - Original Hole - Plan 2	15,625.78	14,950.51	1,333.01	1,245.09	15.161	CC
Belloq 2 State 6H - Original Hole - Plan 2	15,650.00	14,950.51	1,333.23	1,244.86	15.086	ES
Belloq 2 State 6H - Original Hole - Plan 2	17,950.00	12,728.33	1,496.93	1,377.14	12.496	SF
Belloq 2 State 6H - Original Hole - PTL						Out of range
Belloq 2 State 6H - Original Hole - T&D	15,749.46	14,917.09	1,314.73	1,224.92	14.638	CC, ES
Belloq 2 State 6H - Original Hole - T&D	18,050.00	12,623.97	1,497.28	1,376.21	12.367	SF
State 2 #001 (P&A) - Wellbore #1 - Wellbore #1						Out of range
State 2 #002 (Temp Abandoned) - Wellbore #1 - Wellbor						Out of range
State 2 #003 (Temp Abandoned) - Wellbore #1 - Wellbor						Out of range
State 2 #004 (P&A) - Wellbore #1 - Wellbore #1						Out of range

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Sec 02-T23S-R31E						
State 2 #005 (Temp Abandoned) - Wellbore #1 - Wellbor						Out of range
State 2 #007C - Wellbore #1 - Wellbore #1						Out of range
State 2 #009 (Temp Abandoned) - Wellbore #1 - Wellbor						Out of range
State AA-2 #001 SWD (Active) - Wellbore #1 - Wellbore						Out of range
Sweet Pea SWD #001 (Active) - Wellbore #1 - Wellbore						Out of range
Tomb Raider 1-12 Fed 62H - Original Hole - P1v4						Out of range
Sec 11-T23S-R31E						
Barclay 11 G Federal #007 (P&A) - Wellbore #1 - Wellbo						Out of range
Barclay 11 H Federal #001 SWD - Wellbore #1 - Wellbor	13,065.61	9,204.00	1,483.60	1,339.36	10.285	CC, ES
Barclay 11 H Federal #001 SWD - Wellbore #1 - Wellbor	13,250.00	9,204.00	1,495.01	1,349.01	10.240	SF
Barclay 11 K Federal #011 (Active) - Wellbore #1 - Wellb						Out of range
Barclay 11 M Federal #013 (Shut in) - Wellbore #1 - Well						Out of range
Barclay 11 N Federal #014 - Wellbore #1 - Wellbore #1						Out of range
Belloq 11 Fed 222H - Wellbore #1 - Permit Plan 1						Out of range
Belloq 11-2 Fed State Com 511H - Wellbore #1 - Permit						Out of range
Belloq 11-2 Fed State com 512H - Wellbore #1 - Permit P	8,857.56	8,607.68	1,281.60	1,219.09	20.502	CC, ES
Belloq 11-2 Fed State com 512H - Wellbore #1 - Permit P	8,950.00	8,650.00	1,284.50	1,221.68	20.447	SF
Belloq 11-2 Fed State Com 521H - Wellbore #1 - Permit						Out of range
Belloq 11-2 Fed State Com 522H - Wellbore #1 - Permit						Out of range
Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit	8,903.24	8,741.81	612.39	548.72	9.619	CC, ES
Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit	20,350.00	18,929.00	1,219.50	1,016.59	6.010	SF

Offset Design Sec 02-T23S-R31E - Barclay State #001 (P&A) - Wellbore #1 - Wellbore #1 — Offset Site Error: 5.00 ft

Survey Program: 15136-INC-ONLY — Offset Well Error: 10.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
16,200.00	10,200.00	10,158.90	10,158.90	92.50	152.50	90.00	6,719.43	20.42	1,492.91	1,262.81	230.10	6.488	
16,250.00	10,200.00	10,158.90	10,158.90	93.17	152.50	90.00	6,719.43	20.42	1,458.99	1,227.34	231.65	6.298	
16,300.00	10,200.00	10,158.90	10,158.90	93.84	152.50	90.00	6,719.43	20.42	1,426.02	1,192.78	233.25	6.114	
16,350.00	10,200.00	10,158.90	10,158.90	94.50	152.50	90.00	6,719.43	20.42	1,394.07	1,159.19	234.88	5.935	
16,400.00	10,200.00	10,158.90	10,158.90	95.17	152.50	90.00	6,719.43	20.42	1,363.19	1,126.65	236.54	5.763	
16,450.00	10,200.00	10,158.90	10,158.90	95.84	152.50	90.00	6,719.43	20.42	1,333.48	1,095.25	238.24	5.597	
16,500.00	10,200.00	10,158.90	10,158.90	96.51	152.50	90.00	6,719.43	20.42	1,305.01	1,065.07	239.94	5.439	
16,550.00	10,200.00	10,158.90	10,158.90	97.18	152.50	90.00	6,719.43	20.42	1,277.86	1,036.20	241.66	5.288	
16,600.00	10,200.00	10,158.90	10,158.90	97.86	152.50	90.00	6,719.43	20.42	1,252.12	1,008.74	243.38	5.145	
16,650.00	10,200.00	10,158.90	10,158.90	98.53	152.50	90.00	6,719.43	20.42	1,227.88	982.79	245.08	5.010	
16,700.00	10,200.00	10,158.90	10,158.90	99.20	152.50	90.00	6,719.43	20.42	1,205.22	958.46	246.76	4.884	Alert
16,750.00	10,200.00	10,158.90	10,158.90	99.88	152.50	90.00	6,719.43	20.42	1,184.25	935.86	248.39	4.768	Alert
16,800.00	10,200.00	10,158.90	10,158.90	100.55	152.50	90.00	6,719.43	20.42	1,165.04	915.08	249.96	4.661	Alert
16,850.00	10,200.00	10,158.90	10,158.90	101.23	152.50	90.00	6,719.43	20.42	1,147.69	896.24	251.45	4.564	Alert
16,900.00	10,200.00	10,158.90	10,158.90	101.91	152.50	90.00	6,719.43	20.42	1,132.29	879.44	252.85	4.478	Alert
16,950.00	10,200.00	10,158.90	10,158.90	102.58	152.50	90.00	6,719.43	20.42	1,118.91	864.78	254.13	4.403	Alert
17,000.00	10,200.00	10,158.90	10,158.90	103.26	152.50	90.00	6,719.43	20.42	1,107.62	852.35	255.27	4.339	Alert
17,050.00	10,200.00	10,158.90	10,158.90	103.94	152.50	90.00	6,719.43	20.42	1,098.50	842.23	256.27	4.287	Alert
17,100.00	10,200.00	10,158.90	10,158.90	104.62	152.50	90.00	6,719.43	20.42	1,091.60	834.50	257.10	4.246	Alert
17,150.00	10,200.00	10,158.90	10,158.90	105.30	152.50	90.00	6,719.43	20.42	1,086.95	829.19	257.75	4.217	Alert
17,200.00	10,200.00	10,158.90	10,158.90	105.98	152.50	90.00	6,719.43	20.42	1,084.59	826.37	258.22	4.200	Alert
17,226.22	10,200.00	10,158.90	10,158.90	106.34	152.50	90.00	6,719.43	20.42	1,084.27	825.88	258.39	4.196	Alert, CC, ES

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Barclay State #001 (P&A) - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 5.00 ft

Survey Program: 15136-INC-ONLY — **Offset Well Error:** 10.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,250.00	10,200.00	10,158.90	10,158.90	106.66	152.50	90.00	6,719.43	20.42	1,084.53	826.04	258.50	4.196	Alert, SF
17,300.00	10,200.00	10,158.90	10,158.90	107.34	152.50	90.00	6,719.43	20.42	1,086.78	828.20	258.58	4.203	Alert
17,350.00	10,200.00	10,158.90	10,158.90	108.03	152.50	90.00	6,719.43	20.42	1,091.32	832.85	258.47	4.222	Alert
17,400.00	10,200.00	10,158.90	10,158.90	108.71	152.50	90.00	6,719.43	20.42	1,098.11	839.94	258.17	4.253	Alert
17,450.00	10,200.00	10,158.90	10,158.90	109.39	152.50	90.00	6,719.43	20.42	1,107.12	849.43	257.70	4.296	Alert
17,500.00	10,200.00	10,158.90	10,158.90	110.08	152.50	90.00	6,719.43	20.42	1,118.30	861.25	257.06	4.350	Alert
17,550.00	10,200.00	10,158.90	10,158.90	110.76	152.50	90.00	6,719.43	20.42	1,131.58	875.32	256.26	4.416	Alert
17,600.00	10,200.00	10,158.90	10,158.90	111.45	152.50	90.00	6,719.43	20.42	1,146.89	891.55	255.34	4.492	Alert
17,650.00	10,200.00	10,158.90	10,158.90	112.13	152.50	90.00	6,719.43	20.42	1,164.15	909.85	254.29	4.578	Alert
17,700.00	10,200.00	10,158.90	10,158.90	112.82	152.50	90.00	6,719.43	20.42	1,183.26	930.12	253.15	4.674	Alert
17,750.00	10,200.00	10,158.90	10,158.90	113.51	152.50	90.00	6,719.43	20.42	1,204.16	952.24	251.92	4.780	Alert
17,800.00	10,200.00	10,158.90	10,158.90	114.20	152.50	90.00	6,719.43	20.42	1,226.73	976.11	250.62	4.895	Alert
17,850.00	10,200.00	10,158.90	10,158.90	114.88	152.50	90.00	6,719.43	20.42	1,250.90	1,001.63	249.27	5.018	
17,900.00	10,200.00	10,158.90	10,158.90	115.57	152.50	90.00	6,719.43	20.42	1,276.57	1,028.68	247.89	5.150	
17,950.00	10,200.00	10,158.90	10,158.90	116.26	152.50	90.00	6,719.43	20.42	1,303.65	1,057.17	246.48	5.289	
18,000.00	10,200.00	10,158.90	10,158.90	116.95	152.50	90.00	6,719.43	20.42	1,332.06	1,087.00	245.06	5.436	
18,050.00	10,200.00	10,158.90	10,158.90	117.64	152.50	90.00	6,719.43	20.42	1,361.71	1,118.08	243.63	5.589	
18,100.00	10,200.00	10,158.90	10,158.90	118.33	152.50	90.00	6,719.43	20.42	1,392.53	1,150.31	242.22	5.749	
18,150.00	10,200.00	10,158.90	10,158.90	119.02	152.50	90.00	6,719.43	20.42	1,424.43	1,183.62	240.81	5.915	
18,200.00	10,200.00	10,158.90	10,158.90	119.71	152.50	90.00	6,719.43	20.42	1,457.36	1,217.93	239.43	6.087	
18,250.00	10,200.00	10,158.90	10,158.90	120.41	152.50	90.00	6,719.43	20.42	1,491.23	1,253.16	238.07	6.264	

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - Actual — **Offset Site Error:** 5.00 ft

Survey Program: 109-GYRO, 744-MWD+IGRF — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,000.00	10,200.00	14,955.00	10,353.19	76.86	100.12	-98.82	5,081.89	-2,409.23	1,498.50	1,342.36	156.14	9.597	
15,050.00	10,200.00	14,955.00	10,353.19	77.50	100.12	-98.82	5,081.89	-2,409.23	1,479.07	1,320.29	158.77	9.316	
15,100.00	10,200.00	14,955.00	10,353.19	78.13	100.12	-98.82	5,081.89	-2,409.23	1,461.09	1,299.72	161.37	9.055	
15,150.00	10,200.00	14,955.00	10,353.19	78.77	100.12	-98.82	5,081.89	-2,409.23	1,444.62	1,280.71	163.90	8.814	
15,200.00	10,200.00	14,955.00	10,353.19	79.41	100.12	-98.82	5,081.89	-2,409.23	1,429.71	1,263.34	166.37	8.594	
15,250.00	10,200.00	14,955.00	10,353.19	80.06	100.12	-98.82	5,081.89	-2,409.23	1,416.41	1,247.66	168.74	8.394	
15,300.00	10,200.00	14,955.00	10,353.19	80.70	100.12	-98.82	5,081.89	-2,409.23	1,404.76	1,233.75	171.01	8.214	
15,350.00	10,200.00	14,955.00	10,353.19	81.35	100.12	-98.82	5,081.89	-2,409.23	1,394.81	1,221.65	173.16	8.055	
15,400.00	10,200.00	14,955.00	10,353.19	81.99	100.12	-98.82	5,081.89	-2,409.23	1,386.59	1,211.43	175.16	7.916	
15,450.00	10,200.00	14,955.00	10,353.19	82.64	100.12	-98.82	5,081.89	-2,409.23	1,380.14	1,203.13	177.01	7.797	
15,500.00	10,200.00	14,955.00	10,353.19	83.29	100.12	-98.82	5,081.89	-2,409.23	1,375.47	1,196.78	178.69	7.698	
15,550.00	10,200.00	14,955.00	10,353.19	83.94	100.12	-98.82	5,081.89	-2,409.23	1,372.61	1,192.42	180.19	7.618	
15,600.00	10,200.00	14,954.89	10,353.19	84.59	100.12	-98.82	5,082.00	-2,409.23	1,371.57	1,190.07	181.49	7.557	ES, SF
15,650.00	10,200.00	14,904.89	10,352.58	85.25	99.22	-98.79	5,131.99	-2,409.49	1,371.43	1,190.17	181.27	7.566	
15,700.00	10,200.00	14,857.46	10,351.96	85.90	98.37	-98.77	5,179.42	-2,409.77	1,371.33	1,190.21	181.12	7.571	
15,712.23	10,200.00	14,846.35	10,351.79	86.06	98.17	-98.76	5,190.53	-2,409.86	1,371.32	1,190.23	181.09	7.572	CC
15,750.00	10,200.00	14,812.03	10,351.17	86.56	97.56	-98.74	5,224.84	-2,410.21	1,371.37	1,190.34	181.03	7.575	
15,800.00	10,200.00	14,767.98	10,350.21	87.21	96.77	-98.69	5,268.87	-2,410.82	1,371.59	1,190.61	180.98	7.579	
15,850.00	10,200.00	14,725.62	10,349.28	87.87	96.01	-98.65	5,311.21	-2,411.64	1,372.07	1,191.10	180.98	7.581	
15,900.00	10,200.00	14,682.72	10,348.37	88.53	95.24	-98.61	5,354.09	-2,412.70	1,372.83	1,191.88	180.95	7.587	
15,950.00	10,200.00	14,637.99	10,347.38	89.19	94.43	-98.56	5,398.79	-2,414.01	1,373.81	1,192.93	180.88	7.595	
16,000.00	10,200.00	14,598.00	10,346.43	89.85	93.71	-98.52	5,438.75	-2,415.33	1,374.99	1,194.06	180.93	7.600	
16,050.00	10,200.00	14,557.89	10,345.64	90.51	92.99	-98.48	5,478.82	-2,416.93	1,376.53	1,195.56	180.97	7.607	
16,100.00	10,200.00	14,521.64	10,345.27	91.17	92.34	-98.45	5,515.03	-2,418.70	1,378.57	1,197.49	181.08	7.613	
16,150.00	10,200.00	14,479.93	10,345.14	91.84	91.59	-98.43	5,556.67	-2,421.08	1,381.06	1,200.01	181.05	7.628	
16,200.00	10,200.00	14,433.04	10,344.94	92.50	90.74	-98.41	5,603.46	-2,423.91	1,383.71	1,202.81	180.90	7.649	
16,250.00	10,200.00	14,388.97	10,344.62	93.17	89.94	-98.38	5,647.45	-2,426.70	1,386.49	1,205.68	180.81	7.668	
16,300.00	10,200.00	14,347.63	10,344.14	93.84	89.20	-98.34	5,688.68	-2,429.59	1,389.56	1,208.77	180.79	7.686	
16,350.00	10,200.00	14,306.66	10,343.48	94.50	88.45	-98.30	5,729.53	-2,432.73	1,392.93	1,212.16	180.77	7.706	
16,400.00	10,200.00	14,266.76	10,342.89	95.17	87.73	-98.26	5,769.29	-2,436.05	1,396.65	1,215.89	180.76	7.726	
16,450.00	10,200.00	14,227.84	10,342.47	95.84	87.03	-98.22	5,808.04	-2,439.55	1,400.73	1,219.96	180.77	7.749	
16,500.00	10,200.00	14,180.30	10,342.25	96.51	86.17	-98.19	5,855.37	-2,444.03	1,405.05	1,224.46	180.60	7.780	
16,550.00	10,200.00	14,134.02	10,342.57	97.18	85.33	-98.18	5,901.45	-2,448.38	1,409.46	1,229.01	180.44	7.811	
16,600.00	10,200.00	14,076.06	10,343.64	97.86	84.29	-98.19	5,959.15	-2,453.67	1,413.81	1,233.74	180.06	7.852	
16,650.00	10,200.00	14,021.30	10,345.25	98.53	83.30	-98.23	6,013.70	-2,458.29	1,417.88	1,238.15	179.73	7.889	
16,700.00	10,200.00	13,975.86	10,346.50	99.20	82.49	-98.26	6,058.96	-2,462.16	1,421.99	1,242.40	179.59	7.918	
16,750.00	10,200.00	13,929.88	10,347.42	99.88	81.67	-98.28	6,104.74	-2,466.26	1,426.25	1,246.80	179.45	7.948	
16,800.00	10,200.00	13,881.53	10,348.50	100.55	80.80	-98.29	6,152.88	-2,470.65	1,430.60	1,251.34	179.26	7.981	
16,850.00	10,200.00	13,825.91	10,350.13	101.23	79.81	-98.33	6,208.25	-2,475.65	1,434.96	1,256.04	178.93	8.020	
16,900.00	10,200.00	13,745.41	10,352.31	101.91	78.39	-98.39	6,288.49	-2,481.73	1,438.59	1,260.50	178.10	8.078	
16,950.00	10,200.00	13,672.89	10,353.70	102.58	77.12	-98.42	6,360.88	-2,485.94	1,441.31	1,263.90	177.41	8.124	
17,000.00	10,200.00	13,621.23	10,354.28	103.26	76.22	-98.43	6,412.47	-2,488.48	1,443.51	1,266.33	177.18	8.147	
17,050.00	10,200.00	13,576.94	10,354.46	103.94	75.45	-98.42	6,456.69	-2,490.84	1,445.87	1,268.75	177.12	8.163	
17,100.00	10,200.00	13,529.65	10,354.43	104.62	74.64	-98.41	6,503.90	-2,493.54	1,448.40	1,271.39	177.01	8.183	
17,150.00	10,200.00	13,480.49	10,354.55	105.30	73.79	-98.40	6,552.98	-2,496.38	1,450.96	1,274.11	176.85	8.204	
17,200.00	10,200.00	13,436.43	10,354.78	105.98	73.03	-98.39	6,596.97	-2,498.97	1,453.61	1,276.81	176.80	8.222	
17,250.00	10,200.00	13,394.52	10,355.04	106.66	72.31	-98.39	6,638.79	-2,501.66	1,456.53	1,279.74	176.80	8.238	
17,300.00	10,200.00	13,352.71	10,355.29	107.34	71.59	-98.38	6,680.50	-2,504.58	1,459.72	1,282.93	176.79	8.257	
17,350.00	10,200.00	13,311.01	10,355.24	108.03	70.87	-98.37	6,722.07	-2,507.76	1,463.19	1,286.41	176.79	8.277	
17,400.00	10,200.00	13,268.75	10,354.84	108.71	70.14	-98.33	6,764.19	-2,511.28	1,466.94	1,290.17	176.77	8.298	
17,450.00	10,200.00	13,223.79	10,354.47	109.39	69.38	-98.30	6,808.97	-2,515.20	1,470.89	1,294.18	176.71	8.324	
17,500.00	10,200.00	13,178.90	10,354.37	110.08	68.61	-98.27	6,853.68	-2,519.23	1,475.01	1,298.37	176.65	8.350	

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - Actual

Offset Site Error: 5.00 ft

Survey Program: 109-GYRO, 744-MWD+IGRF

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,550.00	10,200.00	13,134.53	10,354.30	110.76	67.85	-98.25	6,897.86	-2,523.36	1,479.31	1,302.71	176.59	8.377	
17,600.00	10,200.00	13,091.89	10,354.14	111.45	67.13	-98.22	6,940.30	-2,527.49	1,483.78	1,307.22	176.57	8.404	
17,650.00	10,200.00	13,013.22	10,353.88	112.13	65.80	-98.17	7,018.64	-2,534.60	1,487.93	1,312.00	175.93	8.457	
17,700.00	10,200.00	12,961.53	10,353.90	112.82	64.94	-98.15	7,070.19	-2,538.58	1,491.44	1,315.68	175.76	8.486	
17,750.00	10,200.00	12,919.22	10,354.07	113.51	64.23	-98.14	7,112.36	-2,542.00	1,495.17	1,319.40	175.76	8.507	
17,800.00	10,200.00	12,875.45	10,354.38	114.20	63.51	-98.14	7,155.96	-2,545.73	1,499.13	1,323.39	175.74	8.530	

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - Plan #3 — **Offset Site Error:** 5.00 ft

Survey Program: 109-GYRO, 744-MWD+IGRF, 10511- — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
14,950.00	10,200.00	14,934.19	10,353.81	76.23	99.96	-99.09	5,104.30	-2,371.92	1,496.00	1,344.86	151.14	9.898	
15,000.00	10,200.00	14,934.19	10,353.81	76.86	99.96	-99.09	5,104.30	-2,371.92	1,474.09	1,320.20	153.89	9.579	
15,050.00	10,200.00	14,934.19	10,353.81	77.50	99.96	-99.09	5,104.30	-2,371.92	1,453.57	1,296.95	156.62	9.281	
15,100.00	10,200.00	14,934.19	10,353.81	78.13	99.96	-99.09	5,104.30	-2,371.92	1,434.50	1,275.17	159.33	9.004	
15,150.00	10,200.00	14,934.19	10,353.81	78.77	99.96	-99.09	5,104.30	-2,371.92	1,416.94	1,254.95	161.99	8.747	
15,200.00	10,200.00	14,934.19	10,353.81	79.41	99.96	-99.09	5,104.30	-2,371.92	1,400.94	1,236.36	164.58	8.512	
15,250.00	10,200.00	14,934.19	10,353.81	80.06	99.96	-99.09	5,104.30	-2,371.92	1,386.56	1,219.47	167.09	8.298	
15,300.00	10,200.00	14,934.19	10,353.81	80.70	99.96	-99.09	5,104.30	-2,371.92	1,373.85	1,204.35	169.50	8.105	
15,350.00	10,200.00	14,934.19	10,353.81	81.35	99.96	-99.09	5,104.30	-2,371.92	1,362.86	1,191.07	171.79	7.933	
15,400.00	10,200.00	14,934.19	10,353.81	81.99	99.96	-99.09	5,104.30	-2,371.92	1,353.63	1,179.69	173.94	7.782	
15,450.00	10,200.00	14,934.19	10,353.81	82.64	99.96	-99.09	5,104.30	-2,371.92	1,346.20	1,170.25	175.94	7.651	
15,500.00	10,200.00	14,934.19	10,353.81	83.29	99.96	-99.09	5,104.30	-2,371.92	1,340.58	1,162.81	177.77	7.541	
15,550.00	10,200.00	14,934.19	10,353.81	83.94	99.96	-99.09	5,104.30	-2,371.92	1,336.82	1,157.41	179.41	7.451	
15,600.00	10,200.00	14,934.19	10,353.81	84.59	99.96	-99.09	5,104.30	-2,371.92	1,334.92	1,154.06	180.86	7.381	
15,625.77	10,200.00	14,934.19	10,353.81	84.93	99.96	-99.09	5,104.30	-2,371.92	1,334.67	1,153.14	181.53	7.353 CC	
15,650.00	10,200.00	14,934.19	10,353.81	85.25	99.96	-99.09	5,104.30	-2,371.92	1,334.89	1,152.79	182.10	7.330 ES	
15,700.00	10,200.00	14,934.19	10,353.81	85.90	99.96	-99.09	5,104.30	-2,371.92	1,336.73	1,153.60	183.13	7.299 SF	
15,750.00	10,200.00	14,908.95	10,353.81	86.56	99.49	-99.08	5,129.46	-2,373.96	1,340.20	1,156.76	183.44	7.306	
15,800.00	10,200.00	14,859.09	10,353.81	87.21	98.57	-99.05	5,179.16	-2,378.00	1,343.90	1,160.70	183.20	7.336	
15,850.00	10,200.00	14,809.23	10,353.81	87.87	97.66	-99.03	5,228.85	-2,382.03	1,347.59	1,164.64	182.96	7.366	
15,900.00	10,200.00	14,759.37	10,353.81	88.53	96.74	-99.00	5,278.55	-2,386.07	1,351.29	1,168.57	182.72	7.395	
15,950.00	10,200.00	14,709.51	10,353.81	89.19	95.83	-98.98	5,328.25	-2,390.10	1,354.99	1,172.50	182.48	7.425	
16,000.00	10,200.00	14,659.65	10,353.81	89.85	94.91	-98.95	5,377.94	-2,394.14	1,358.68	1,176.43	182.25	7.455	
16,050.00	10,200.00	14,609.79	10,353.81	90.51	94.00	-98.93	5,427.64	-2,398.18	1,362.38	1,180.36	182.02	7.485	
16,100.00	10,200.00	14,559.93	10,353.81	91.17	93.09	-98.91	5,477.33	-2,402.21	1,366.08	1,184.29	181.79	7.515	
16,150.00	10,200.00	14,510.07	10,353.81	91.84	92.18	-98.88	5,527.03	-2,406.25	1,369.77	1,188.22	181.56	7.545	
16,200.00	10,200.00	14,460.21	10,353.81	92.50	91.27	-98.86	5,576.73	-2,410.28	1,373.47	1,192.14	181.33	7.574	
16,250.00	10,200.00	14,410.35	10,353.81	93.17	90.37	-98.83	5,626.42	-2,414.32	1,377.17	1,196.06	181.11	7.604	
16,300.00	10,200.00	14,360.49	10,353.81	93.84	89.46	-98.81	5,676.12	-2,418.36	1,380.87	1,199.98	180.89	7.634	
16,350.00	10,200.00	14,310.63	10,353.81	94.50	88.56	-98.79	5,725.81	-2,422.39	1,384.57	1,203.90	180.67	7.663	
16,400.00	10,200.00	14,260.77	10,353.81	95.17	87.66	-98.76	5,775.51	-2,426.43	1,388.27	1,207.81	180.45	7.693	
16,450.00	10,200.00	14,210.92	10,353.81	95.84	86.76	-98.74	5,825.21	-2,430.46	1,391.96	1,211.72	180.24	7.723	
16,500.00	10,200.00	14,161.06	10,353.81	96.51	85.86	-98.72	5,874.90	-2,434.50	1,395.66	1,215.64	180.03	7.752	
16,550.00	10,200.00	14,111.20	10,353.81	97.18	84.96	-98.69	5,924.60	-2,438.54	1,399.36	1,219.54	179.82	7.782	
16,600.00	10,200.00	14,061.34	10,353.81	97.86	84.07	-98.67	5,974.29	-2,442.57	1,403.06	1,223.45	179.61	7.812	
16,650.00	10,200.00	14,011.48	10,353.81	98.53	83.17	-98.65	6,023.99	-2,446.61	1,406.76	1,227.35	179.41	7.841	
16,700.00	10,200.00	13,961.62	10,353.81	99.20	82.28	-98.62	6,073.69	-2,450.64	1,410.46	1,231.26	179.21	7.871	
16,750.00	10,200.00	13,911.76	10,353.81	99.88	81.39	-98.60	6,123.38	-2,454.68	1,414.16	1,235.16	179.01	7.900	
16,800.00	10,200.00	13,861.90	10,353.81	100.55	80.51	-98.58	6,173.08	-2,458.72	1,417.86	1,239.05	178.81	7.929	
16,850.00	10,200.00	13,812.04	10,353.81	101.23	79.62	-98.56	6,222.78	-2,462.75	1,421.56	1,242.95	178.62	7.959	
16,900.00	10,200.00	13,762.18	10,353.81	101.91	78.74	-98.53	6,272.47	-2,466.79	1,425.27	1,246.84	178.43	7.988	
16,950.00	10,200.00	13,712.32	10,353.81	102.58	77.86	-98.51	6,322.17	-2,470.82	1,428.97	1,250.73	178.24	8.017	
17,000.00	10,200.00	13,662.46	10,353.81	103.26	76.98	-98.49	6,371.86	-2,474.86	1,432.67	1,254.61	178.05	8.046	
17,050.00	10,200.00	13,612.60	10,353.81	103.94	76.11	-98.47	6,421.56	-2,478.90	1,436.37	1,258.50	177.87	8.075	
17,100.00	10,200.00	13,562.74	10,353.81	104.62	75.24	-98.45	6,471.26	-2,482.93	1,440.07	1,262.38	177.69	8.104	
17,150.00	10,200.00	13,512.88	10,353.81	105.30	74.37	-98.42	6,520.95	-2,486.97	1,443.77	1,266.26	177.52	8.133	
17,200.00	10,200.00	13,463.02	10,353.81	105.98	73.50	-98.40	6,570.65	-2,491.00	1,447.48	1,270.13	177.34	8.162	
17,250.00	10,200.00	13,413.16	10,353.81	106.66	72.63	-98.38	6,620.34	-2,495.04	1,451.18	1,274.00	177.17	8.191	
17,300.00	10,200.00	13,363.30	10,353.81	107.34	71.77	-98.36	6,670.04	-2,499.08	1,454.88	1,277.87	177.01	8.219	
17,350.00	10,200.00	13,313.44	10,353.81	108.03	70.91	-98.34	6,719.74	-2,503.11	1,458.58	1,281.74	176.84	8.248	
17,400.00	10,200.00	13,263.58	10,353.81	108.71	70.06	-98.32	6,769.43	-2,507.15	1,462.29	1,285.60	176.69	8.276	
17,450.00	10,200.00	13,213.72	10,353.81	109.39	69.21	-98.29	6,819.13	-2,511.18	1,465.99	1,289.46	176.53	8.304	

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

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - Plan #3 — **Offset Site Error:** 5.00 ft

Survey Program: 109-GYRO, 744-MWD+IGRF, 10511- — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,500.00	10,200.00	13,163.86	10,353.81	110.08	68.36	-98.27	6,868.83	-2,515.22	1,469.69	1,293.31	176.38	8.333	
17,550.00	10,200.00	13,114.00	10,353.81	110.76	67.51	-98.25	6,918.52	-2,519.26	1,473.40	1,297.17	176.23	8.361	
17,600.00	10,200.00	13,064.14	10,353.81	111.45	66.67	-98.23	6,968.22	-2,523.29	1,477.10	1,301.01	176.09	8.388	
17,650.00	10,200.00	13,014.28	10,353.81	112.13	65.83	-98.21	7,017.91	-2,527.33	1,480.80	1,304.86	175.95	8.416	
17,700.00	10,200.00	12,964.42	10,353.81	112.82	65.00	-98.19	7,067.61	-2,531.36	1,484.51	1,308.70	175.81	8.444	
17,750.00	10,200.00	12,914.56	10,353.81	113.51	64.17	-98.17	7,117.31	-2,535.40	1,488.21	1,312.53	175.68	8.471	
17,800.00	10,200.00	12,864.70	10,353.81	114.20	63.34	-98.15	7,167.00	-2,539.44	1,491.92	1,316.36	175.56	8.498	
17,850.00	10,200.00	12,814.84	10,353.81	114.88	62.52	-98.13	7,216.70	-2,543.47	1,495.62	1,320.19	175.43	8.525	
17,900.00	10,200.00	12,764.98	10,353.81	115.57	61.71	-98.11	7,266.39	-2,547.51	1,499.33	1,324.01	175.32	8.552	

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - Plan 2 — **Offset Site Error:** 5.00 ft

Survey Program: 0-GYRO — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
14,950.00	10,200.00	14,950.51	10,344.00	76.23	5.00	-98.68	5,104.31	-2,371.77	1,494.53	1,424.40	70.13	21.311	
15,000.00	10,200.00	14,950.51	10,344.00	76.86	5.00	-98.68	5,104.31	-2,371.77	1,472.59	1,401.04	71.56	20.579	
15,050.00	10,200.00	14,950.51	10,344.00	77.50	5.00	-98.68	5,104.31	-2,371.77	1,452.05	1,379.05	73.00	19.891	
15,100.00	10,200.00	14,950.51	10,344.00	78.13	5.00	-98.68	5,104.31	-2,371.77	1,432.96	1,358.51	74.45	19.248	
15,150.00	10,200.00	14,950.51	10,344.00	78.77	5.00	-98.68	5,104.31	-2,371.77	1,415.38	1,339.48	75.90	18.649	
15,200.00	10,200.00	14,950.51	10,344.00	79.41	5.00	-98.68	5,104.31	-2,371.77	1,399.36	1,322.03	77.33	18.095	
15,250.00	10,200.00	14,950.51	10,344.00	80.06	5.00	-98.68	5,104.31	-2,371.77	1,384.97	1,306.21	78.76	17.586	
15,300.00	10,200.00	14,950.51	10,344.00	80.70	5.00	-98.68	5,104.31	-2,371.77	1,372.25	1,292.10	80.15	17.121	
15,350.00	10,200.00	14,950.51	10,344.00	81.35	5.00	-98.68	5,104.31	-2,371.77	1,361.24	1,279.74	81.51	16.701	
15,400.00	10,200.00	14,950.51	10,344.00	81.99	5.00	-98.68	5,104.31	-2,371.77	1,352.00	1,269.18	82.81	16.326	
15,450.00	10,200.00	14,950.51	10,344.00	82.64	5.00	-98.68	5,104.31	-2,371.77	1,344.55	1,260.48	84.07	15.993	
15,500.00	10,200.00	14,950.51	10,344.00	83.29	5.00	-98.68	5,104.31	-2,371.77	1,338.93	1,253.67	85.26	15.704	
15,550.00	10,200.00	14,950.51	10,344.00	83.94	5.00	-98.68	5,104.31	-2,371.77	1,335.16	1,248.79	86.38	15.457	
15,600.00	10,200.00	14,950.51	10,344.00	84.59	5.00	-98.68	5,104.31	-2,371.77	1,333.26	1,245.84	87.42	15.252	
15,625.78	10,200.00	14,950.51	10,344.00	84.93	5.00	-98.68	5,104.31	-2,371.77	1,333.01	1,245.09	87.92	15.161	CC
15,650.00	10,200.00	14,950.51	10,344.00	85.25	5.00	-98.68	5,104.31	-2,371.77	1,333.23	1,244.86	88.37	15.086	ES
15,700.00	10,200.00	14,950.51	10,344.00	85.90	5.00	-98.68	5,104.31	-2,371.77	1,335.08	1,245.84	89.24	14.961	
15,750.00	10,200.00	14,922.50	10,344.00	86.56	5.00	-98.66	5,132.24	-2,373.98	1,338.49	1,248.54	89.96	14.879	
15,800.00	10,200.00	14,872.63	10,344.00	87.21	5.00	-98.64	5,181.95	-2,377.91	1,342.09	1,251.47	90.62	14.811	
15,850.00	10,200.00	14,822.76	10,344.00	87.87	5.00	-98.62	5,231.66	-2,381.85	1,345.69	1,254.41	91.28	14.742	
15,900.00	10,200.00	14,772.90	10,344.00	88.53	5.00	-98.59	5,281.38	-2,385.78	1,349.28	1,257.34	91.94	14.675	
15,950.00	10,200.00	14,723.03	10,344.00	89.19	5.00	-98.57	5,331.09	-2,389.71	1,352.88	1,260.28	92.61	14.609	
16,000.00	10,200.00	14,673.16	10,344.00	89.85	5.00	-98.55	5,380.80	-2,393.64	1,356.48	1,263.21	93.27	14.543	
16,050.00	10,200.00	14,623.29	10,344.00	90.51	5.00	-98.53	5,430.51	-2,397.58	1,360.08	1,266.14	93.94	14.479	
16,100.00	10,200.00	14,573.43	10,344.00	91.17	5.00	-98.50	5,480.22	-2,401.51	1,363.68	1,269.07	94.60	14.415	
16,150.00	10,200.00	14,523.56	10,344.00	91.84	5.00	-98.48	5,529.94	-2,405.44	1,367.27	1,272.00	95.27	14.351	
16,200.00	10,200.00	14,473.69	10,344.00	92.50	5.00	-98.46	5,579.65	-2,409.37	1,370.87	1,274.93	95.94	14.289	
16,250.00	10,200.00	14,423.82	10,344.00	93.17	5.00	-98.44	5,629.36	-2,413.31	1,374.47	1,277.86	96.61	14.227	
16,300.00	10,200.00	14,373.96	10,344.00	93.84	5.00	-98.41	5,679.07	-2,417.24	1,378.07	1,280.79	97.28	14.166	
16,350.00	10,200.00	14,324.09	10,344.00	94.50	5.00	-98.39	5,728.79	-2,421.17	1,381.67	1,283.72	97.95	14.106	
16,400.00	10,200.00	14,274.22	10,344.00	95.17	5.00	-98.37	5,778.50	-2,425.10	1,385.27	1,286.64	98.62	14.046	
16,450.00	10,200.00	14,224.35	10,344.00	95.84	5.00	-98.35	5,828.21	-2,429.04	1,388.87	1,289.57	99.30	13.987	
16,500.00	10,200.00	14,174.49	10,344.00	96.51	5.00	-98.33	5,877.92	-2,432.97	1,392.47	1,292.50	99.97	13.929	
16,550.00	10,200.00	14,124.62	10,344.00	97.18	5.00	-98.30	5,927.63	-2,436.90	1,396.07	1,295.42	100.65	13.871	
16,600.00	10,200.00	14,074.75	10,344.00	97.86	5.00	-98.28	5,977.35	-2,440.83	1,399.67	1,298.35	101.32	13.814	
16,650.00	10,200.00	14,024.88	10,344.00	98.53	5.00	-98.26	6,027.06	-2,444.77	1,403.27	1,301.27	102.00	13.758	
16,700.00	10,200.00	13,975.02	10,344.00	99.20	5.00	-98.24	6,076.77	-2,448.70	1,406.87	1,304.19	102.67	13.702	
16,750.00	10,200.00	13,925.15	10,344.00	99.88	5.00	-98.22	6,126.48	-2,452.63	1,410.47	1,307.12	103.35	13.647	
16,800.00	10,200.00	13,875.28	10,344.00	100.55	5.00	-98.20	6,176.20	-2,456.56	1,414.07	1,310.04	104.03	13.593	
16,850.00	10,200.00	13,825.41	10,344.00	101.23	5.00	-98.18	6,225.91	-2,460.50	1,417.67	1,312.96	104.71	13.539	
16,900.00	10,200.00	13,775.55	10,344.00	101.91	5.00	-98.16	6,275.62	-2,464.43	1,421.27	1,315.88	105.39	13.486	
16,950.00	10,200.00	13,725.68	10,344.00	102.58	5.00	-98.14	6,325.33	-2,468.36	1,424.87	1,318.80	106.07	13.434	
17,000.00	10,200.00	13,675.81	10,344.00	103.26	5.00	-98.11	6,375.04	-2,472.29	1,428.47	1,321.72	106.75	13.382	
17,050.00	10,200.00	13,625.94	10,344.00	103.94	5.00	-98.09	6,424.76	-2,476.23	1,432.07	1,324.64	107.43	13.330	
17,100.00	10,200.00	13,576.08	10,344.00	104.62	5.00	-98.07	6,474.47	-2,480.16	1,435.68	1,327.56	108.11	13.279	
17,150.00	10,200.00	13,526.21	10,344.00	105.30	5.00	-98.05	6,524.18	-2,484.09	1,439.28	1,330.48	108.80	13.229	
17,200.00	10,200.00	13,476.34	10,344.00	105.98	5.00	-98.03	6,573.89	-2,488.02	1,442.88	1,333.40	109.48	13.180	
17,250.00	10,200.00	13,426.47	10,344.00	106.66	5.00	-98.01	6,623.61	-2,491.96	1,446.48	1,336.32	110.16	13.130	
17,300.00	10,200.00	13,376.61	10,344.00	107.34	5.00	-97.99	6,673.32	-2,495.89	1,450.09	1,339.24	110.85	13.082	
17,350.00	10,200.00	13,326.74	10,344.00	108.03	5.00	-97.97	6,723.03	-2,499.82	1,453.69	1,342.16	111.53	13.034	
17,400.00	10,200.00	13,276.87	10,344.00	108.71	5.00	-97.95	6,772.74	-2,503.75	1,457.29	1,345.07	112.22	12.986	
17,450.00	10,200.00	13,227.00	10,344.00	109.39	5.00	-97.93	6,822.45	-2,507.69	1,460.89	1,347.99	112.91	12.939	

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

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - Plan 2 — **Offset Site Error:** 5.00 ft

Survey Program: 0-GYRO — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
17,500.00	10,200.00	13,177.14	10,344.00	110.08	5.00	-97.91	6,872.17	-2,511.62	1,464.50	1,350.91	113.59	12.893	
17,550.00	10,200.00	13,127.27	10,344.00	110.76	5.00	-97.89	6,921.88	-2,515.55	1,468.10	1,353.82	114.28	12.847	
17,600.00	10,200.00	13,077.40	10,344.00	111.45	5.00	-97.87	6,971.59	-2,519.48	1,471.71	1,356.74	114.97	12.801	
17,650.00	10,200.00	13,027.53	10,344.00	112.13	5.00	-97.86	7,021.30	-2,523.42	1,475.31	1,359.65	115.66	12.756	
17,700.00	10,200.00	12,977.67	10,344.00	112.82	5.00	-97.84	7,071.01	-2,527.35	1,478.91	1,362.57	116.34	12.711	
17,750.00	10,200.00	12,927.80	10,344.00	113.51	5.00	-97.82	7,120.73	-2,531.28	1,482.52	1,365.48	117.03	12.667	
17,800.00	10,200.00	12,877.93	10,344.00	114.20	5.00	-97.80	7,170.44	-2,535.21	1,486.12	1,368.40	117.72	12.624	
17,850.00	10,200.00	12,828.06	10,344.00	114.88	5.00	-97.78	7,220.15	-2,539.15	1,489.73	1,371.31	118.41	12.581	
17,900.00	10,200.00	12,778.20	10,344.00	115.57	5.00	-97.76	7,269.86	-2,543.08	1,493.33	1,374.22	119.11	12.538	
17,950.00	10,200.00	12,728.33	10,344.00	116.26	5.00	-97.74	7,319.58	-2,547.01	1,496.93	1,377.14	119.80	12.496 SF	

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 02-T23S-R31E - Belloq 2 State 6H - Original Hole - T&D — **Offset Site Error:** 5.00 ft

Survey Program: — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,749.46	10,200.00	14,917.09	10,353.80	86.55		-99.26	5,123.98	-2,347.66	1,314.73	1,224.92	89.82	14.638	CC, ES
15,750.00	10,200.00	14,916.55	10,353.80	86.56		-99.26	5,124.52	-2,347.70	1,314.78	1,224.95	89.82	14.637	
15,800.00	10,200.00	14,866.71	10,353.80	87.21		-99.23	5,174.17	-2,352.01	1,318.74	1,228.25	90.48	14.574	
15,850.00	10,200.00	14,816.88	10,353.80	87.87		-99.20	5,223.83	-2,356.31	1,322.70	1,231.55	91.15	14.512	
15,900.00	10,200.00	14,767.04	10,353.80	88.53		-99.18	5,273.48	-2,360.62	1,326.66	1,234.85	91.81	14.450	
15,950.00	10,200.00	14,717.20	10,353.80	89.19		-99.15	5,323.13	-2,364.92	1,330.62	1,238.15	92.48	14.389	
16,000.00	10,200.00	14,667.36	10,353.80	89.85		-99.12	5,372.78	-2,369.22	1,334.59	1,241.45	93.14	14.329	
16,050.00	10,200.00	14,617.52	10,353.80	90.51		-99.09	5,422.44	-2,373.53	1,338.55	1,244.74	93.81	14.269	
16,100.00	10,200.00	14,567.68	10,353.80	91.17		-99.07	5,472.09	-2,377.83	1,342.51	1,248.04	94.47	14.210	
16,150.00	10,200.00	14,517.84	10,353.80	91.84		-99.04	5,521.74	-2,382.14	1,346.47	1,251.33	95.14	14.152	
16,200.00	10,200.00	14,468.01	10,353.80	92.50		-99.01	5,571.39	-2,386.44	1,350.44	1,254.63	95.81	14.095	
16,250.00	10,200.00	14,418.17	10,353.80	93.17		-98.99	5,621.05	-2,390.74	1,354.40	1,257.92	96.48	14.038	
16,300.00	10,200.00	14,368.33	10,353.80	93.84		-98.96	5,670.70	-2,395.05	1,358.37	1,261.21	97.15	13.982	
16,350.00	10,200.00	14,318.49	10,353.80	94.50		-98.93	5,720.35	-2,399.35	1,362.33	1,264.51	97.82	13.926	
16,400.00	10,200.00	14,268.65	10,353.80	95.17		-98.91	5,770.00	-2,403.66	1,366.30	1,267.80	98.50	13.872	
16,450.00	10,200.00	14,218.81	10,353.80	95.84		-98.88	5,819.66	-2,407.96	1,370.26	1,271.09	99.17	13.817	
16,500.00	10,200.00	14,168.97	10,353.80	96.51		-98.86	5,869.31	-2,412.26	1,374.23	1,274.38	99.84	13.764	
16,550.00	10,200.00	14,119.13	10,353.80	97.18		-98.83	5,918.96	-2,416.57	1,378.19	1,277.67	100.52	13.711	
16,600.00	10,200.00	14,069.30	10,353.80	97.86		-98.81	5,968.61	-2,420.87	1,382.16	1,280.96	101.19	13.658	
16,650.00	10,200.00	14,019.46	10,353.80	98.53		-98.78	6,018.27	-2,425.18	1,386.12	1,284.25	101.87	13.607	
16,700.00	10,200.00	13,969.62	10,353.80	99.20		-98.75	6,067.92	-2,429.48	1,390.09	1,287.54	102.55	13.555	
16,750.00	10,200.00	13,919.78	10,353.80	99.88		-98.73	6,117.57	-2,433.78	1,394.06	1,290.83	103.23	13.505	
16,800.00	10,200.00	13,869.94	10,353.80	100.55		-98.70	6,167.22	-2,438.09	1,398.02	1,294.12	103.91	13.455	
16,850.00	10,200.00	13,820.10	10,353.80	101.23		-98.68	6,216.88	-2,442.39	1,401.99	1,297.41	104.58	13.405	
16,900.00	10,200.00	13,770.26	10,353.80	101.91		-98.65	6,266.53	-2,446.70	1,405.96	1,300.69	105.26	13.356	
16,950.00	10,200.00	13,720.42	10,353.80	102.58		-98.63	6,316.18	-2,451.00	1,409.93	1,303.98	105.95	13.308	
17,000.00	10,200.00	13,670.59	10,353.80	103.26		-98.61	6,365.84	-2,455.30	1,413.89	1,307.27	106.63	13.260	
17,050.00	10,200.00	13,620.75	10,353.80	103.94		-98.58	6,415.49	-2,459.61	1,417.86	1,310.55	107.31	13.213	
17,100.00	10,200.00	13,570.91	10,353.80	104.62		-98.56	6,465.14	-2,463.91	1,421.83	1,313.84	107.99	13.166	
17,150.00	10,200.00	13,521.07	10,353.80	105.30		-98.53	6,514.79	-2,468.22	1,425.80	1,317.12	108.67	13.120	
17,200.00	10,200.00	13,471.23	10,353.80	105.98		-98.51	6,564.45	-2,472.52	1,429.77	1,320.41	109.36	13.074	
17,250.00	10,200.00	13,421.39	10,353.80	106.66		-98.49	6,614.10	-2,476.82	1,433.74	1,323.69	110.04	13.029	
17,300.00	10,200.00	13,371.55	10,353.80	107.34		-98.46	6,663.75	-2,481.13	1,437.71	1,326.98	110.73	12.984	
17,350.00	10,200.00	13,321.72	10,353.80	108.03		-98.44	6,713.40	-2,485.43	1,441.68	1,330.26	111.41	12.940	
17,400.00	10,200.00	13,271.88	10,353.80	108.71		-98.42	6,763.06	-2,489.74	1,445.65	1,333.55	112.10	12.896	
17,450.00	10,200.00	13,222.04	10,353.80	109.39		-98.39	6,812.71	-2,494.04	1,449.62	1,336.83	112.79	12.853	
17,500.00	10,200.00	13,172.20	10,353.80	110.08		-98.37	6,862.36	-2,498.34	1,453.59	1,340.11	113.47	12.810	
17,550.00	10,200.00	13,122.36	10,353.80	110.76		-98.35	6,912.01	-2,502.65	1,457.56	1,343.40	114.16	12.767	
17,600.00	10,200.00	13,072.52	10,353.80	111.45		-98.32	6,961.67	-2,506.95	1,461.53	1,346.68	114.85	12.726	
17,650.00	10,200.00	13,022.68	10,353.80	112.13		-98.30	7,011.32	-2,511.26	1,465.50	1,349.96	115.54	12.684	
17,700.00	10,200.00	12,972.84	10,353.80	112.82		-98.28	7,060.97	-2,515.56	1,469.47	1,353.24	116.23	12.643	
17,750.00	10,200.00	12,923.01	10,353.80	113.51		-98.26	7,110.62	-2,519.86	1,473.44	1,356.52	116.92	12.602	
17,800.00	10,200.00	12,873.17	10,353.80	114.20		-98.23	7,160.28	-2,524.17	1,477.41	1,359.81	117.61	12.562	
17,850.00	10,200.00	12,823.33	10,353.80	114.88		-98.21	7,209.93	-2,528.47	1,481.39	1,363.09	118.30	12.522	
17,900.00	10,200.00	12,773.49	10,353.80	115.57		-98.19	7,259.58	-2,532.78	1,485.36	1,366.37	118.99	12.483	
17,950.00	10,200.00	12,723.65	10,353.80	116.26		-98.17	7,309.23	-2,537.08	1,489.33	1,369.65	119.68	12.444	
18,000.00	10,200.00	12,673.81	10,353.80	116.95		-98.15	7,358.89	-2,541.38	1,493.30	1,372.93	120.37	12.406	
18,050.00	10,200.00	12,623.97	10,353.80	117.64		-98.12	7,408.54	-2,545.69	1,497.28	1,376.21	121.07	12.367	SF

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Barclay 11 H Federal #001 SWD - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 ft

Survey Program: 9204-INC-ONLY — **Offset Well Error:** 10.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
12,850.00	10,200.00	9,204.00	9,202.13	51.83	138.08	46.95	2,558.89	45.75	1,499.18	1,355.50	143.68	10.434	
12,900.00	10,200.00	9,204.00	9,202.13	52.34	138.08	46.95	2,558.89	45.75	1,492.81	1,349.15	143.66	10.391	
12,950.00	10,200.00	9,204.00	9,202.13	52.85	138.08	46.95	2,558.89	45.75	1,488.10	1,344.36	143.74	10.353	
13,000.00	10,200.00	9,204.00	9,202.13	53.36	138.08	46.95	2,558.89	45.75	1,485.05	1,341.15	143.90	10.320	
13,050.00	10,200.00	9,204.00	9,202.13	53.89	138.08	46.95	2,558.89	45.75	1,483.68	1,339.54	144.15	10.293	
13,065.61	10,200.00	9,204.00	9,202.13	54.05	138.08	46.95	2,558.89	45.75	1,483.60	1,339.36	144.24	10.285	CC, ES
13,100.00	10,200.00	9,204.00	9,202.13	54.41	138.08	46.95	2,558.89	45.75	1,484.00	1,339.52	144.48	10.271	
13,150.00	10,200.00	9,204.00	9,202.13	54.94	138.08	46.95	2,558.89	45.75	1,486.00	1,341.09	144.91	10.255	
13,200.00	10,200.00	9,204.00	9,202.13	55.48	138.08	46.95	2,558.89	45.75	1,489.67	1,344.26	145.41	10.244	
13,250.00	10,200.00	9,204.00	9,202.13	56.02	138.08	46.95	2,558.89	45.75	1,495.01	1,349.01	146.00	10.240	SF

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State com 512H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,600.00	7,517.89	7,618.91	7,601.15	29.09	27.18	25.90	-302.53	-2,251.10	1,498.54	1,444.75	53.79	27.859	
7,650.00	7,566.82	7,653.84	7,636.00	29.32	27.30	26.00	-303.20	-2,248.61	1,485.71	1,431.56	54.15	27.438	
7,700.00	7,615.74	7,688.93	7,671.01	29.54	27.43	26.11	-303.79	-2,246.42	1,473.31	1,418.81	54.50	27.032	
7,750.00	7,664.66	7,724.17	7,706.19	29.76	27.56	26.22	-304.29	-2,244.54	1,461.36	1,406.50	54.86	26.639	
7,800.00	7,713.58	7,759.55	7,741.53	29.99	27.69	26.33	-304.72	-2,242.96	1,449.85	1,394.65	55.21	26.261	
7,850.00	7,762.50	7,800.00	7,781.96	30.21	27.83	26.47	-305.10	-2,241.55	1,438.81	1,383.24	55.57	25.894	
7,900.00	7,811.42	7,830.71	7,812.66	30.44	27.94	26.58	-305.31	-2,240.75	1,428.20	1,372.29	55.90	25.547	
7,950.00	7,860.34	7,866.48	7,848.42	30.66	28.06	26.71	-305.48	-2,240.12	1,418.05	1,361.80	56.25	25.210	
8,000.00	7,909.27	7,902.37	7,884.31	30.88	28.19	26.85	-305.56	-2,239.82	1,408.36	1,351.77	56.59	24.887	
8,050.00	7,958.19	7,945.65	7,927.59	31.11	28.34	27.01	-305.57	-2,239.79	1,399.07	1,342.12	56.95	24.567	
8,100.00	8,007.11	8,005.43	7,976.51	31.33	28.55	27.21	-305.57	-2,239.79	1,389.83	1,332.47	57.36	24.231	
8,150.00	8,056.03	8,043.49	8,025.43	31.56	28.68	27.40	-305.57	-2,239.79	1,380.61	1,322.92	57.69	23.930	
8,200.00	8,104.95	8,107.59	8,074.35	31.78	28.90	27.60	-305.57	-2,239.79	1,371.41	1,313.29	58.12	23.597	
8,250.00	8,153.87	8,141.33	8,123.27	32.01	29.02	27.80	-305.57	-2,239.79	1,362.22	1,303.78	58.44	23.310	
8,300.00	8,202.79	8,190.25	8,172.19	32.23	29.19	28.00	-305.57	-2,239.79	1,353.05	1,294.23	58.81	23.006	
8,350.00	8,251.71	8,239.17	8,221.11	32.46	29.35	28.21	-305.57	-2,239.79	1,343.89	1,284.70	59.19	22.705	
8,400.00	8,300.64	8,288.09	8,270.04	32.68	29.52	28.42	-305.57	-2,239.79	1,334.75	1,275.19	59.56	22.409	
8,450.00	8,349.56	8,327.87	8,309.76	32.91	29.66	28.67	-303.58	-2,239.80	1,325.83	1,265.91	59.92	22.127	
8,500.00	8,398.48	8,367.91	8,349.51	33.14	29.80	29.06	-298.85	-2,239.83	1,317.25	1,256.97	60.28	21.854	
8,550.00	8,447.40	8,406.65	8,387.56	33.36	29.92	29.54	-291.65	-2,239.88	1,309.08	1,248.45	60.63	21.591	
8,600.00	8,496.32	8,443.81	8,423.53	33.59	30.04	30.10	-282.34	-2,239.94	1,301.43	1,240.45	60.98	21.342	
8,650.00	8,545.33	8,479.30	8,457.25	33.81	30.15	30.69	-271.29	-2,240.01	1,294.75	1,233.43	61.32	21.115	
8,700.00	8,594.47	8,513.06	8,488.64	34.03	30.25	31.33	-258.86	-2,240.10	1,289.33	1,227.69	61.64	20.916	
8,750.00	8,643.72	8,545.03	8,517.63	34.24	30.34	32.01	-245.41	-2,240.18	1,285.27	1,223.32	61.95	20.748	
8,800.00	8,693.08	8,575.18	8,544.25	34.45	30.43	32.71	-231.25	-2,240.28	1,282.67	1,220.44	62.23	20.613	
8,850.00	8,742.54	8,600.00	8,565.58	34.66	30.49	33.34	-218.56	-2,240.36	1,281.63	1,219.17	62.45	20.522	
8,857.56	8,750.03	8,607.68	8,572.06	34.69	30.51	33.54	-214.45	-2,240.39	1,281.60	1,219.09	62.51	20.502	CC, ES
8,900.00	8,792.09	8,630.17	8,590.73	34.86	30.56	34.16	-201.92	-2,240.47	1,282.20	1,219.51	62.69	20.453	
8,950.00	8,841.73	8,650.00	8,606.78	35.06	30.61	34.74	-190.26	-2,240.55	1,284.50	1,221.68	62.82	20.447	SF
9,000.00	8,891.44	8,678.51	8,629.11	35.25	30.67	35.61	-172.54	-2,240.66	1,288.52	1,225.53	62.99	20.455	
9,050.00	8,941.22	8,700.00	8,645.35	35.44	30.72	36.31	-158.47	-2,240.76	1,294.36	1,231.29	63.07	20.522	
9,100.00	8,991.05	8,720.93	8,660.64	35.62	30.76	37.04	-144.19	-2,240.85	1,302.03	1,238.92	63.11	20.631	
9,150.00	9,040.93	8,740.15	8,674.22	35.80	30.79	37.74	-130.59	-2,240.94	1,311.55	1,248.46	63.09	20.788	
9,200.00	9,090.86	8,750.00	8,681.01	35.98	30.81	38.17	-123.45	-2,240.99	1,322.97	1,260.03	62.94	21.020	
9,250.00	9,140.81	8,775.09	8,697.71	36.15	30.85	39.12	-104.73	-2,241.11	1,336.12	1,273.21	62.91	21.238	
9,300.00	9,190.79	8,800.00	8,713.48	36.32	30.89	40.11	-85.44	-2,241.24	1,351.21	1,288.35	62.86	21.496	
9,350.00	9,240.78	8,800.00	8,713.48	36.48	30.89	40.29	-85.44	-2,241.24	1,367.98	1,305.50	62.48	21.896	
9,400.00	9,290.78	8,820.02	8,725.53	36.64	30.92	-72.69	-69.46	-2,241.34	1,386.49	1,324.18	62.31	22.253	
9,450.00	9,340.78	8,833.23	8,733.17	36.79	30.94	-72.24	-58.68	-2,241.41	1,406.39	1,344.36	62.02	22.675	
9,500.00	9,390.78	8,850.00	8,742.51	36.95	30.96	-71.65	-44.76	-2,241.50	1,427.52	1,365.75	61.77	23.111	
9,550.00	9,440.78	8,850.00	8,742.51	37.10	30.96	-71.65	-44.76	-2,241.50	1,449.86	1,388.58	61.28	23.660	
9,600.00	9,490.78	8,868.18	8,752.17	37.26	30.98	-71.00	-29.36	-2,241.60	1,473.28	1,412.27	61.01	24.149	
9,650.00	9,540.78	8,878.45	8,757.41	37.41	30.99	-70.63	-20.52	-2,241.66	1,497.86	1,437.23	60.62	24.708	

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.50	0.50	-89.13	22.06	-1,459.80	1,460.02				
50.00	50.00	37.40	37.40	0.50	0.50	-89.13	22.06	-1,459.80	1,459.97	1,458.97	1.00	1,453.393	
100.00	100.00	87.40	87.40	0.52	0.51	-89.13	22.06	-1,459.80	1,459.97	1,458.94	1.03	1,415.558	
150.00	150.00	137.40	137.40	0.59	0.57	-89.13	22.06	-1,459.80	1,459.97	1,458.81	1.16	1,261.018	
200.00	200.00	187.40	187.40	0.70	0.67	-89.13	22.06	-1,459.80	1,459.97	1,458.60	1.37	1,063.135	
250.00	250.00	237.40	237.40	0.84	0.80	-89.13	22.06	-1,459.80	1,459.97	1,458.33	1.64	890.420	
300.00	300.00	287.40	287.40	0.99	0.95	-89.13	22.06	-1,459.80	1,459.97	1,458.03	1.94	754.117	
350.00	350.00	337.40	337.40	1.15	1.11	-89.13	22.06	-1,459.80	1,459.97	1,457.72	2.25	648.726	
400.00	400.00	387.40	387.40	1.31	1.27	-89.13	22.06	-1,459.80	1,459.97	1,457.39	2.58	566.636	
450.00	450.00	437.40	437.40	1.48	1.43	-89.13	22.06	-1,459.80	1,459.97	1,457.06	2.91	501.667	
500.00	500.00	487.40	487.40	1.65	1.60	-89.13	22.06	-1,459.80	1,459.97	1,456.72	3.25	449.332	
550.00	550.00	537.40	537.40	1.82	1.77	-89.13	22.06	-1,459.80	1,459.97	1,456.38	3.59	406.455	
600.00	600.00	587.40	587.40	1.99	1.95	-89.13	22.06	-1,459.80	1,459.97	1,456.03	3.94	370.784	
650.00	650.00	637.40	637.40	2.16	2.12	-89.13	22.06	-1,459.80	1,459.97	1,455.68	4.29	340.700	
700.00	700.00	687.40	687.40	2.34	2.30	-89.13	22.06	-1,459.80	1,459.97	1,455.34	4.63	315.020	
750.00	750.00	737.40	737.40	2.51	2.47	-89.13	22.06	-1,459.80	1,459.97	1,454.98	4.99	292.864	
800.00	800.00	787.40	787.40	2.69	2.65	-89.13	22.06	-1,459.80	1,459.97	1,454.63	5.34	273.565	
850.00	850.00	837.40	837.40	2.87	2.82	-89.13	22.06	-1,459.80	1,459.97	1,454.28	5.69	256.615	
900.00	900.00	887.40	887.40	3.04	3.00	-89.13	22.06	-1,459.80	1,459.97	1,453.93	6.04	241.615	
950.00	950.00	937.40	937.40	3.22	3.18	-89.13	22.06	-1,459.80	1,459.97	1,453.57	6.40	228.250	
1,000.00	1,000.00	987.40	987.40	3.40	3.35	-89.13	22.06	-1,459.80	1,459.97	1,453.22	6.75	216.271	
1,050.00	1,050.00	1,037.40	1,037.40	3.58	3.53	-89.13	22.06	-1,459.80	1,459.97	1,452.86	7.11	205.474	
1,100.00	1,100.00	1,087.40	1,087.40	3.75	3.71	-89.13	22.06	-1,459.80	1,459.97	1,452.51	7.46	195.695	
1,150.00	1,150.00	1,137.40	1,137.40	3.93	3.89	-89.13	22.06	-1,459.80	1,459.97	1,452.15	7.82	186.797	
1,200.00	1,200.00	1,187.40	1,187.40	4.11	4.06	-89.13	22.06	-1,459.80	1,459.97	1,451.80	8.17	178.666	
1,250.00	1,250.00	1,237.40	1,237.40	4.29	4.24	-89.13	22.06	-1,459.80	1,459.97	1,451.44	8.53	171.210	
1,300.00	1,300.00	1,287.40	1,287.40	4.46	4.42	-89.13	22.06	-1,459.80	1,459.97	1,451.09	8.88	164.347	
1,350.00	1,350.00	1,337.40	1,337.40	4.64	4.60	-89.13	22.06	-1,459.80	1,459.97	1,450.73	9.24	158.010	
1,400.00	1,400.00	1,387.40	1,387.40	4.82	4.78	-89.13	22.06	-1,459.80	1,459.97	1,450.37	9.60	152.140	
1,450.00	1,450.00	1,437.40	1,437.40	5.00	4.95	-89.13	22.06	-1,459.80	1,459.97	1,450.02	9.95	146.690	
1,500.00	1,500.00	1,487.40	1,487.40	5.18	5.13	-89.13	22.06	-1,459.80	1,459.97	1,449.66	10.31	141.614	
1,550.00	1,550.00	1,537.40	1,537.40	5.36	5.31	-89.13	22.06	-1,459.80	1,459.97	1,449.30	10.67	136.876	
1,600.00	1,600.00	1,587.40	1,587.40	5.53	5.49	-89.13	22.06	-1,459.80	1,459.97	1,448.95	11.02	132.444	
1,650.00	1,650.00	1,637.40	1,637.40	5.71	5.67	-89.13	22.06	-1,459.80	1,459.97	1,448.59	11.38	128.289	
1,700.00	1,700.00	1,687.40	1,687.40	5.89	5.85	-89.13	22.06	-1,459.80	1,459.97	1,448.23	11.74	124.386	
1,750.00	1,750.00	1,737.40	1,737.40	6.07	6.02	-89.13	22.06	-1,459.80	1,459.97	1,447.87	12.09	120.712	
1,800.00	1,800.00	1,787.40	1,787.40	6.25	6.20	-89.13	22.06	-1,459.80	1,459.97	1,447.52	12.45	117.248	
1,850.00	1,850.00	1,837.40	1,837.40	6.43	6.38	-89.13	22.06	-1,459.80	1,459.97	1,447.16	12.81	113.977	
1,900.00	1,900.00	1,887.40	1,887.40	6.61	6.56	-89.13	22.06	-1,459.80	1,459.97	1,446.80	13.17	110.884	
1,950.00	1,950.00	1,937.40	1,937.40	6.78	6.74	-89.13	22.06	-1,459.80	1,459.97	1,446.45	13.52	107.953	
2,000.00	2,000.00	1,987.40	1,987.40	6.96	6.92	-89.13	22.06	-1,459.80	1,459.97	1,446.09	13.88	105.172	
2,050.00	2,050.00	2,037.40	2,037.40	7.14	7.10	-89.13	22.06	-1,459.80	1,459.97	1,445.73	14.24	102.531	
2,100.00	2,100.00	2,087.40	2,087.40	7.32	7.28	-89.13	22.06	-1,459.80	1,459.97	1,445.37	14.60	100.020	
2,150.00	2,150.00	2,137.40	2,137.40	7.50	7.45	-89.13	22.06	-1,459.80	1,459.97	1,445.02	14.95	97.627	
2,200.00	2,200.00	2,187.40	2,187.40	7.68	7.63	-89.13	22.06	-1,459.80	1,459.97	1,444.66	15.31	95.347	
2,250.00	2,250.00	2,237.40	2,237.40	7.86	7.81	-89.13	22.06	-1,459.80	1,459.97	1,444.30	15.67	93.170	
2,300.00	2,300.00	2,287.40	2,287.40	8.04	7.99	-89.13	22.06	-1,459.80	1,459.97	1,443.94	16.03	91.091	
2,350.00	2,350.00	2,337.40	2,337.40	8.22	8.17	-89.13	22.06	-1,459.80	1,459.97	1,443.58	16.39	89.102	
2,400.00	2,400.00	2,387.40	2,387.40	8.39	8.35	-89.13	22.06	-1,459.80	1,459.97	1,443.23	16.74	87.197	
2,450.00	2,450.00	2,437.40	2,437.40	8.57	8.53	-89.13	22.06	-1,459.80	1,459.97	1,442.87	17.10	85.373	
2,500.00	2,500.00	2,487.40	2,487.40	8.75	8.71	-89.13	22.06	-1,459.80	1,459.97	1,442.51	17.46	83.623	
2,550.00	2,550.00	2,537.40	2,537.40	8.93	8.89	-89.13	22.06	-1,459.80	1,459.97	1,442.15	17.82	81.943	

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD+HDGM

Offset Well Error: 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,600.00	2,600.00	2,587.40	2,587.40	9.11	9.06	-89.13	22.06	-1,459.80	1,459.97	1,441.79	18.17	80.329	
2,650.00	2,650.00	2,637.40	2,637.40	9.29	9.24	-89.13	22.06	-1,459.80	1,459.97	1,441.44	18.53	78.778	
2,700.00	2,700.00	2,687.40	2,687.40	9.47	9.42	-89.13	22.06	-1,459.80	1,459.97	1,441.08	18.89	77.285	
2,750.00	2,750.00	2,737.40	2,737.40	9.65	9.60	-89.13	22.06	-1,459.80	1,459.97	1,440.72	19.25	75.848	
2,800.00	2,800.00	2,787.40	2,787.40	9.83	9.78	-89.13	22.06	-1,459.80	1,459.97	1,440.36	19.61	74.463	
2,850.00	2,850.00	2,837.40	2,837.40	10.00	9.96	-89.13	22.06	-1,459.80	1,459.97	1,440.00	19.96	73.128	
2,900.00	2,900.00	2,887.40	2,887.40	10.18	10.14	-89.13	22.06	-1,459.80	1,459.97	1,439.65	20.32	71.839	
2,950.00	2,950.00	2,937.40	2,937.40	10.36	10.32	-89.13	22.06	-1,459.80	1,459.97	1,439.29	20.68	70.596	
3,000.00	3,000.00	2,987.40	2,987.40	10.54	10.50	-89.13	22.06	-1,459.80	1,459.97	1,438.93	21.04	69.394	
3,050.00	3,050.00	3,037.40	3,037.40	10.71	10.68	24.68	22.06	-1,459.80	1,459.77	1,438.38	21.39	68.244	
3,100.00	3,099.99	3,087.39	3,087.39	10.89	10.85	24.69	22.06	-1,459.80	1,459.18	1,437.43	21.74	67.113	
3,150.00	3,149.98	3,137.38	3,137.38	11.05	11.03	24.71	22.06	-1,459.80	1,458.19	1,436.10	22.09	66.018	
3,200.00	3,199.96	3,187.36	3,187.36	11.22	11.21	24.74	22.06	-1,459.80	1,456.80	1,434.37	22.43	64.938	
3,250.00	3,249.92	3,237.32	3,237.32	11.39	11.39	24.78	22.06	-1,459.80	1,455.02	1,432.24	22.78	63.873	
3,300.00	3,299.86	3,287.26	3,287.26	11.56	11.57	24.83	22.06	-1,459.80	1,452.84	1,429.71	23.13	62.822	
3,350.00	3,349.78	3,337.18	3,337.18	11.73	11.75	24.89	22.06	-1,459.80	1,450.27	1,426.79	23.47	61.785	
3,400.00	3,399.68	3,387.08	3,387.08	11.90	11.93	24.96	22.06	-1,459.80	1,447.30	1,423.48	23.82	60.761	
3,450.00	3,449.54	3,436.94	3,436.94	12.07	12.11	25.03	22.06	-1,459.80	1,443.94	1,419.77	24.17	59.749	
3,500.00	3,499.37	3,486.77	3,486.77	12.24	12.29	25.12	22.06	-1,459.80	1,440.19	1,415.67	24.51	58.750	
3,550.00	3,549.16	3,536.56	3,536.56	12.41	12.46	25.21	22.06	-1,459.80	1,436.04	1,411.18	24.86	57.763	
3,600.00	3,598.90	3,586.30	3,586.30	12.58	12.64	25.32	22.06	-1,459.80	1,431.51	1,406.30	25.21	56.787	
3,650.00	3,648.61	3,636.01	3,636.01	12.75	12.82	25.43	22.06	-1,459.80	1,426.58	1,401.03	25.56	55.822	
3,700.00	3,698.26	3,685.66	3,685.66	12.93	13.00	25.56	22.06	-1,459.80	1,421.27	1,395.37	25.90	54.868	
3,750.00	3,747.86	3,735.26	3,735.26	13.10	13.18	25.69	22.06	-1,459.80	1,415.57	1,389.32	26.25	53.924	
3,800.00	3,797.40	3,784.80	3,784.80	13.28	13.35	25.84	22.06	-1,459.80	1,409.49	1,382.89	26.60	52.990	
3,850.00	3,846.89	3,834.29	3,834.29	13.45	13.53	25.99	22.06	-1,459.80	1,403.03	1,376.08	26.95	52.066	
3,900.00	3,896.30	3,883.70	3,883.70	13.63	13.71	26.16	22.06	-1,459.80	1,396.18	1,368.88	27.30	51.151	
3,950.00	3,945.65	3,933.05	3,933.05	13.81	13.88	26.34	22.06	-1,459.80	1,388.95	1,361.31	27.64	50.245	
4,000.00	3,994.93	3,982.33	3,982.33	13.99	14.06	26.53	22.06	-1,459.80	1,381.35	1,353.36	27.99	49.349	
4,050.00	4,044.13	4,028.93	4,028.93	14.17	14.22	26.72	21.97	-1,459.83	1,373.40	1,345.07	28.33	48.485	
4,100.00	4,093.26	4,074.09	4,074.09	14.35	14.38	26.89	21.50	-1,460.01	1,365.21	1,336.56	28.65	47.647	
4,150.00	4,142.29	4,119.28	4,119.27	14.54	14.53	27.07	20.60	-1,460.33	1,356.79	1,327.82	28.98	46.823	
4,200.00	4,191.25	4,164.51	4,164.47	14.73	14.67	27.22	19.29	-1,460.81	1,348.15	1,318.85	29.30	46.016	
4,250.00	4,240.17	4,209.80	4,209.73	14.92	14.82	27.33	17.55	-1,461.44	1,339.52	1,309.90	29.62	45.226	
4,300.00	4,289.09	4,255.18	4,255.05	15.10	14.97	27.42	15.39	-1,462.23	1,331.03	1,301.09	29.94	44.456	
4,350.00	4,338.01	4,300.65	4,300.43	15.30	15.12	27.50	12.80	-1,463.17	1,322.69	1,292.42	30.26	43.706	
4,400.00	4,386.93	4,346.18	4,345.85	15.49	15.26	27.55	9.78	-1,464.27	1,314.49	1,283.90	30.59	42.975	
4,450.00	4,435.85	4,391.78	4,391.31	15.68	15.41	27.59	6.34	-1,465.53	1,306.43	1,275.52	30.91	42.262	
4,500.00	4,484.78	4,439.35	4,438.68	15.88	15.57	27.61	2.36	-1,466.97	1,298.49	1,267.25	31.25	41.558	
4,550.00	4,533.70	4,488.72	4,487.85	16.07	15.73	27.64	-1.83	-1,468.50	1,290.57	1,258.99	31.59	40.859	
4,600.00	4,582.62	4,538.08	4,537.01	16.27	15.89	27.66	-6.01	-1,470.02	1,282.66	1,250.73	31.93	40.175	
4,650.00	4,631.54	4,587.45	4,586.18	16.46	16.06	27.68	-10.19	-1,471.54	1,274.74	1,242.47	32.27	39.503	
4,700.00	4,680.46	4,636.82	4,635.35	16.66	16.22	27.70	-14.37	-1,473.06	1,266.82	1,234.21	32.61	38.844	
4,750.00	4,729.38	4,686.18	4,684.51	16.86	16.38	27.72	-18.56	-1,474.59	1,258.90	1,225.94	32.96	38.197	
4,800.00	4,778.30	4,735.55	4,733.68	17.06	16.55	27.74	-22.74	-1,476.11	1,250.98	1,217.68	33.30	37.563	
4,850.00	4,827.22	4,784.92	4,782.84	17.26	16.71	27.77	-26.92	-1,477.63	1,243.07	1,209.42	33.65	36.941	
4,900.00	4,876.15	4,834.28	4,832.01	17.46	16.88	27.79	-31.10	-1,479.15	1,235.15	1,201.15	34.00	36.331	
4,950.00	4,925.07	4,883.65	4,881.17	17.67	17.04	27.81	-35.29	-1,480.68	1,227.23	1,192.88	34.35	35.731	
5,000.00	4,973.99	4,933.02	4,930.34	17.87	17.21	27.84	-39.47	-1,482.20	1,219.31	1,184.62	34.70	35.143	
5,050.00	5,022.91	4,982.38	4,979.51	18.08	17.38	27.86	-43.65	-1,483.72	1,211.40	1,176.35	35.05	34.566	
5,100.00	5,071.83	5,031.75	5,028.67	18.28	17.55	27.88	-47.83	-1,485.24	1,203.48	1,168.08	35.40	34.000	
5,150.00	5,120.75	5,081.12	5,077.84	18.49	17.71	27.91	-52.02	-1,486.77	1,195.56	1,159.81	35.75	33.443	

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

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,200.00	5,169.67	5,130.48	5,127.00	18.69	17.88	27.93	-56.20	-1,488.29	1,187.65	1,151.55	36.10	32.897	
5,250.00	5,218.59	5,179.85	5,176.17	18.90	18.05	27.96	-60.38	-1,489.81	1,179.73	1,143.28	36.46	32.361	
5,300.00	5,267.52	5,229.22	5,225.33	19.11	18.22	27.98	-64.56	-1,491.33	1,171.81	1,135.01	36.81	31.835	
5,350.00	5,316.44	5,278.58	5,274.50	19.31	18.39	28.01	-68.75	-1,492.85	1,163.90	1,126.73	37.16	31.317	
5,400.00	5,365.36	5,327.95	5,323.67	19.52	18.56	28.03	-72.93	-1,494.38	1,155.98	1,118.46	37.52	30.809	
5,450.00	5,414.28	5,377.32	5,372.83	19.73	18.73	28.06	-77.11	-1,495.90	1,148.07	1,110.19	37.88	30.310	
5,500.00	5,463.20	5,426.68	5,422.00	19.94	18.90	28.09	-81.29	-1,497.42	1,140.15	1,101.92	38.23	29.820	
5,550.00	5,512.12	5,476.05	5,471.16	20.15	19.07	28.11	-85.48	-1,498.94	1,132.24	1,093.65	38.59	29.338	
5,600.00	5,561.04	5,525.42	5,520.33	20.36	19.24	28.14	-89.66	-1,500.47	1,124.32	1,085.37	38.95	28.865	
5,650.00	5,609.96	5,574.78	5,569.49	20.58	19.41	28.17	-93.84	-1,501.99	1,116.41	1,077.10	39.31	28.400	
5,700.00	5,658.89	5,624.15	5,618.66	20.79	19.58	28.20	-98.02	-1,503.51	1,108.50	1,068.83	39.67	27.943	
5,750.00	5,707.81	5,673.52	5,667.83	21.00	19.76	28.23	-102.21	-1,505.03	1,100.58	1,060.55	40.03	27.494	
5,800.00	5,756.73	5,722.88	5,716.99	21.21	19.93	28.26	-106.39	-1,506.56	1,092.67	1,052.28	40.39	27.052	
5,850.00	5,805.65	5,772.25	5,766.16	21.43	20.10	28.29	-110.57	-1,508.08	1,084.76	1,044.00	40.75	26.618	
5,900.00	5,854.57	5,821.62	5,815.32	21.64	20.27	28.32	-114.75	-1,509.60	1,076.84	1,035.73	41.12	26.191	
5,950.00	5,903.49	5,870.98	5,864.49	21.85	20.45	28.35	-118.94	-1,511.12	1,068.93	1,027.45	41.48	25.771	
6,000.00	5,952.41	5,920.35	5,913.65	22.07	20.62	28.38	-123.12	-1,512.64	1,061.02	1,019.18	41.84	25.358	
6,050.00	6,001.34	5,969.72	5,962.82	22.28	20.79	28.41	-127.30	-1,514.17	1,053.11	1,010.90	42.21	24.952	
6,100.00	6,050.26	6,019.08	6,011.99	22.50	20.97	28.44	-131.48	-1,515.69	1,045.19	1,002.63	42.57	24.553	
6,150.00	6,099.18	6,068.45	6,061.15	22.71	21.14	28.47	-135.67	-1,517.21	1,037.28	994.35	42.93	24.160	
6,200.00	6,148.10	6,117.82	6,110.32	22.93	21.32	28.51	-139.85	-1,518.73	1,029.37	986.07	43.30	23.773	
6,250.00	6,197.02	6,167.19	6,159.48	23.15	21.49	28.54	-144.03	-1,520.26	1,021.46	977.80	43.67	23.393	
6,300.00	6,245.94	6,216.55	6,208.65	23.36	21.67	28.57	-148.21	-1,521.78	1,013.55	969.52	44.03	23.018	
6,350.00	6,294.86	6,265.92	6,257.81	23.58	21.84	28.61	-152.40	-1,523.30	1,005.64	961.24	44.40	22.650	
6,400.00	6,343.78	6,315.29	6,306.98	23.80	22.02	28.64	-156.58	-1,524.82	997.73	952.97	44.77	22.288	
6,450.00	6,392.71	6,364.65	6,356.14	24.02	22.19	28.68	-160.76	-1,526.35	989.82	944.69	45.13	21.931	
6,500.00	6,441.63	6,414.02	6,405.31	24.23	22.37	28.71	-164.94	-1,527.87	981.91	936.41	45.50	21.579	
6,550.00	6,490.55	6,463.39	6,454.48	24.45	22.55	28.75	-169.13	-1,529.39	974.01	928.13	45.87	21.233	
6,600.00	6,539.47	6,512.75	6,503.64	24.67	22.72	28.79	-173.31	-1,530.91	966.10	919.86	46.24	20.893	
6,650.00	6,588.39	6,562.12	6,552.81	24.89	22.90	28.82	-177.49	-1,532.43	958.19	911.58	46.61	20.558	
6,700.00	6,637.31	6,611.49	6,601.97	25.11	23.07	28.86	-181.67	-1,533.96	950.28	903.30	46.98	20.227	
6,750.00	6,686.23	6,660.85	6,651.14	25.33	23.25	28.90	-185.86	-1,535.48	942.38	895.03	47.35	19.902	
6,800.00	6,735.15	6,710.22	6,700.30	25.55	23.43	28.94	-190.04	-1,537.00	934.47	886.75	47.72	19.582	
6,850.00	6,784.08	6,759.59	6,749.47	25.77	23.61	28.98	-194.22	-1,538.52	926.56	878.47	48.09	19.266	
6,900.00	6,833.00	6,808.95	6,798.64	25.99	23.78	29.02	-198.40	-1,540.05	918.66	870.19	48.46	18.956	
6,950.00	6,881.92	6,858.32	6,847.80	26.21	23.96	29.07	-202.59	-1,541.57	910.75	861.92	48.84	18.649	
7,000.00	6,930.84	6,907.69	6,896.97	26.43	24.14	29.11	-206.77	-1,543.09	902.85	853.64	49.21	18.348	
7,050.00	6,979.76	6,957.05	6,946.13	26.65	24.32	29.15	-210.95	-1,544.61	894.94	845.36	49.58	18.050	
7,100.00	7,028.68	7,006.42	6,995.30	26.87	24.49	29.20	-215.13	-1,546.14	887.04	837.09	49.95	17.757	
7,150.00	7,077.60	7,055.79	7,044.46	27.09	24.67	29.24	-219.32	-1,547.66	879.14	828.81	50.33	17.468	
7,200.00	7,126.52	7,105.15	7,093.63	27.31	24.85	29.29	-223.50	-1,549.18	871.24	820.53	50.70	17.184	
7,250.00	7,175.45	7,154.52	7,142.80	27.54	25.03	29.33	-227.68	-1,550.70	863.33	812.26	51.08	16.903	
7,300.00	7,224.37	7,203.89	7,191.96	27.76	25.21	29.38	-231.86	-1,552.23	855.43	803.98	51.45	16.626	
7,350.00	7,273.29	7,253.25	7,241.13	27.98	25.39	29.43	-236.05	-1,553.75	847.53	795.71	51.83	16.354	
7,400.00	7,322.21	7,302.62	7,290.29	28.20	25.56	29.48	-240.23	-1,555.27	839.63	787.43	52.20	16.085	
7,450.00	7,371.13	7,351.99	7,339.46	28.43	25.74	29.53	-244.41	-1,556.79	831.73	779.15	52.58	15.819	
7,500.00	7,420.05	7,401.35	7,388.62	28.65	25.92	29.58	-248.59	-1,558.31	823.83	770.88	52.95	15.558	
7,550.00	7,468.97	7,450.72	7,437.79	28.87	26.10	29.63	-252.78	-1,559.84	815.93	762.61	53.33	15.300	
7,600.00	7,517.89	7,500.09	7,486.96	29.09	26.28	29.68	-256.96	-1,561.36	808.04	754.33	53.71	15.046	
7,650.00	7,566.82	7,549.45	7,536.12	29.32	26.46	29.74	-261.14	-1,562.88	800.14	746.06	54.08	14.795	
7,700.00	7,615.74	7,601.18	7,585.29	29.54	26.65	29.79	-265.32	-1,564.40	792.24	737.77	54.47	14.545	
7,750.00	7,664.66	7,648.19	7,634.45	29.76	26.82	29.85	-269.51	-1,565.93	784.35	729.51	54.84	14.303	

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,800.00	7,713.58	7,697.55	7,683.62	29.99	27.00	29.91	-273.69	-1,567.45	776.45	721.24	55.22	14.062	
7,850.00	7,762.50	7,746.92	7,732.78	30.21	27.18	29.97	-277.87	-1,568.97	768.56	712.96	55.59	13.824	
7,900.00	7,811.42	7,803.71	7,781.95	30.44	27.39	30.03	-282.05	-1,570.49	760.67	704.67	56.00	13.583	
7,950.00	7,860.34	7,845.65	7,831.12	30.66	27.54	30.09	-286.24	-1,572.02	752.77	696.42	56.35	13.358	
8,000.00	7,909.27	7,896.26	7,881.52	30.88	27.73	30.16	-290.44	-1,573.55	744.86	688.13	56.73	13.129	
8,050.00	7,958.19	7,948.02	7,933.13	31.11	27.91	30.28	-294.17	-1,574.90	736.81	679.69	57.12	12.900	
8,100.00	8,007.11	7,999.68	7,984.69	31.33	28.10	30.46	-297.23	-1,576.02	728.60	671.10	57.50	12.671	
8,150.00	8,056.03	8,051.22	8,036.16	31.56	28.28	30.69	-299.64	-1,576.89	720.24	662.35	57.88	12.443	
8,200.00	8,104.95	8,102.61	8,087.52	31.78	28.46	30.99	-301.38	-1,577.53	711.74	653.47	58.27	12.214	
8,250.00	8,153.87	8,153.84	8,138.74	32.01	28.64	31.34	-302.48	-1,577.93	703.10	644.45	58.66	11.987	
8,300.00	8,202.79	8,204.90	8,189.79	32.23	28.82	31.77	-302.93	-1,578.09	694.35	635.31	59.04	11.760	
8,350.00	8,251.71	8,254.22	8,239.11	32.46	28.99	32.22	-302.94	-1,578.09	685.54	626.11	59.43	11.535	
8,400.00	8,300.64	8,303.14	8,288.04	32.68	29.16	32.68	-302.94	-1,578.09	676.77	616.95	59.82	11.313	
8,450.00	8,349.56	8,352.06	8,336.96	32.91	29.33	33.16	-302.94	-1,578.09	668.04	607.83	60.21	11.095	
8,500.00	8,398.48	8,400.99	8,385.88	33.14	29.50	33.65	-302.94	-1,578.09	659.36	598.76	60.60	10.880	
8,550.00	8,447.40	8,449.91	8,434.80	33.36	29.66	34.15	-302.94	-1,578.09	650.73	589.73	61.00	10.668	
8,600.00	8,496.32	8,501.17	8,483.72	33.59	29.84	34.65	-302.94	-1,578.09	642.16	580.76	61.40	10.459	
8,650.00	8,545.33	8,547.84	8,532.73	33.81	30.00	35.08	-302.94	-1,578.09	633.98	572.20	61.79	10.261	
8,700.00	8,594.47	8,588.28	8,573.15	34.03	30.14	35.54	-301.60	-1,578.10	626.71	564.53	62.18	10.078	
8,750.00	8,643.72	8,627.83	8,612.47	34.24	30.27	36.22	-297.55	-1,578.13	620.78	558.21	62.58	9.921	
8,800.00	8,693.08	8,666.38	8,650.46	34.45	30.39	37.10	-290.99	-1,578.17	616.32	553.36	62.96	9.789	
8,850.00	8,742.54	8,703.69	8,686.71	34.66	30.50	38.17	-282.22	-1,578.23	613.46	550.14	63.32	9.688	
8,900.00	8,792.09	8,739.54	8,720.95	34.86	30.61	39.38	-271.60	-1,578.29	612.39	548.74	63.65	9.622	
8,903.24	8,795.31	8,741.81	8,723.10	34.87	30.61	39.47	-270.85	-1,578.30	612.39	548.72	63.67	9.619	CC, ES
8,950.00	8,841.73	8,773.79	8,752.97	35.06	30.70	40.71	-259.46	-1,578.37	613.27	549.35	63.92	9.595	
9,000.00	8,891.44	8,806.35	8,782.69	35.25	30.79	42.12	-246.17	-1,578.45	616.25	552.13	64.12	9.611	
9,050.00	8,941.22	8,837.17	8,810.08	35.44	30.87	43.57	-232.06	-1,578.54	621.49	557.25	64.24	9.675	
9,100.00	8,991.05	8,866.24	8,835.20	35.62	30.94	45.05	-217.41	-1,578.64	629.09	564.84	64.25	9.791	
9,150.00	9,040.93	8,893.61	8,858.12	35.80	31.01	46.54	-202.48	-1,578.73	639.12	574.97	64.15	9.962	
9,200.00	9,090.86	8,919.32	8,878.99	35.98	31.07	48.02	-187.47	-1,578.83	651.63	587.68	63.94	10.191	
9,250.00	9,140.81	8,950.00	8,902.98	36.15	31.14	49.84	-168.35	-1,578.95	666.65	602.88	63.77	10.455	
9,300.00	9,190.79	8,966.07	8,915.13	36.32	31.18	50.92	-157.83	-1,579.02	683.98	620.79	63.19	10.824	
9,350.00	9,240.78	8,987.29	8,930.71	36.48	31.22	52.33	-143.43	-1,579.11	703.71	641.05	62.67	11.229	
9,400.00	9,290.78	9,000.00	8,939.79	36.64	31.25	-60.57	-134.52	-1,579.16	725.74	663.86	61.88	11.728	
9,450.00	9,340.78	9,025.78	8,957.57	36.79	31.31	-59.14	-115.87	-1,579.28	749.53	688.13	61.40	12.207	
9,500.00	9,390.78	9,050.00	8,973.50	36.95	31.36	-57.79	-97.62	-1,579.40	775.15	714.28	60.87	12.734	
9,550.00	9,440.78	9,050.00	8,973.50	37.10	31.36	-57.79	-97.62	-1,579.40	802.39	742.71	59.68	13.444	
9,600.00	9,490.78	9,074.50	8,988.81	37.26	31.41	-56.42	-78.50	-1,579.52	831.00	771.83	59.17	14.045	
9,650.00	9,540.78	9,088.67	8,997.29	37.41	31.44	-55.62	-67.15	-1,579.59	861.14	802.75	58.38	14.749	
9,700.00	9,590.78	9,100.00	9,003.87	37.57	31.46	-54.99	-57.92	-1,579.65	892.62	835.07	57.55	15.510	
9,750.00	9,640.78	9,114.44	9,011.98	37.73	31.49	-52.87	-45.98	-1,579.72	925.25	868.42	56.83	16.281	
9,800.00	9,690.65	9,127.30	9,018.95	37.88	31.52	-48.95	-35.18	-1,579.79	957.55	901.49	56.06	17.081	
9,850.00	9,740.04	9,150.00	9,030.66	38.02	31.57	-45.09	-15.73	-1,579.92	988.87	933.36	55.51	17.813	
9,900.00	9,788.56	9,150.00	9,030.66	38.15	31.57	-42.52	-15.73	-1,579.92	1,018.71	964.31	54.40	18.725	
9,950.00	9,835.86	9,169.61	9,040.15	38.27	31.61	-39.66	1.44	-1,580.03	1,047.08	993.31	53.77	19.473	
10,000.00	9,881.57	9,184.72	9,047.05	38.38	31.64	-37.31	14.87	-1,580.11	1,073.81	1,020.77	53.04	20.247	
10,050.00	9,925.34	9,200.00	9,053.68	38.47	31.67	-35.29	28.64	-1,580.20	1,098.71	1,046.39	52.32	21.000	
10,100.00	9,966.84	9,216.05	9,060.23	38.54	31.71	-33.55	43.29	-1,580.29	1,121.64	1,070.00	51.64	21.721	
10,150.00	10,005.75	9,232.18	9,066.41	38.61	31.74	-32.08	58.19	-1,580.39	1,142.48	1,091.50	50.99	22.407	
10,200.00	10,041.78	9,250.00	9,072.74	38.65	31.78	-30.82	74.85	-1,580.49	1,161.15	1,110.75	50.41	23.036	
10,250.00	10,074.66	9,265.17	9,077.71	38.68	31.82	-29.79	89.17	-1,580.58	1,177.54	1,127.72	49.82	23.636	
10,300.00	10,104.13	9,281.94	9,082.77	38.70	31.85	-28.94	105.17	-1,580.68	1,191.59	1,142.28	49.31	24.163	

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

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD+HDGM

Offset Well Error: 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,350.00	10,129.96	9,300.00	9,087.70	38.70	31.89	-28.26	122.54	-1,580.79	1,203.24	1,154.35	48.89	24.612	
10,400.00	10,151.97	9,315.90	9,091.57	38.70	31.93	-27.75	137.96	-1,580.89	1,212.43	1,163.93	48.50	25.000	
10,450.00	10,169.99	9,333.02	9,095.27	38.68	31.97	-27.38	154.68	-1,581.00	1,219.12	1,170.92	48.20	25.293	
10,500.00	10,183.87	9,350.00	9,098.44	38.65	32.01	-27.15	171.35	-1,581.10	1,223.29	1,175.31	47.98	25.495	
10,550.00	10,193.52	9,367.42	9,101.18	38.62	32.05	-27.06	188.55	-1,581.21	1,224.92	1,177.06	47.85	25.597	
10,600.00	10,198.85	9,384.63	9,103.37	38.59	32.09	-27.11	205.63	-1,581.32	1,224.00	1,176.19	47.81	25.599	
10,650.00	10,200.00	9,400.00	9,104.89	38.57	32.12	-27.24	220.92	-1,581.42	1,220.69	1,172.83	47.86	25.506	
10,700.00	10,200.00	9,419.08	9,106.21	38.55	32.17	-27.27	239.95	-1,581.54	1,217.69	1,169.71	47.99	25.376	
10,750.00	10,200.00	9,449.15	9,107.00	38.54	32.24	-27.29	270.01	-1,581.73	1,216.23	1,168.05	48.18	25.243	
10,781.97	10,200.00	9,454.04	9,107.00	38.54	32.25	-27.29	265.12	-1,581.70	1,215.67	1,167.36	48.31	25.163	
10,800.00	10,200.00	9,462.29	9,107.00	38.54	32.28	-27.29	283.15	-1,581.81	1,215.67	1,167.29	48.38	25.127	
10,850.00	10,200.00	9,512.29	9,107.00	38.55	32.41	-27.29	333.15	-1,582.13	1,215.68	1,167.03	48.65	24.987	
10,900.00	10,200.00	9,562.29	9,107.00	38.59	32.56	-27.29	383.15	-1,582.45	1,215.68	1,166.75	48.93	24.843	
10,950.00	10,200.00	9,612.29	9,107.00	38.64	32.73	-27.29	433.15	-1,582.76	1,215.69	1,166.45	49.24	24.691	
11,000.00	10,200.00	9,662.29	9,107.00	38.72	32.91	-27.29	483.15	-1,583.08	1,215.69	1,166.14	49.55	24.533	
11,050.00	10,200.00	9,712.29	9,107.00	38.82	33.10	-27.29	533.15	-1,583.40	1,215.70	1,165.81	49.89	24.368	
11,100.00	10,200.00	9,762.29	9,107.00	38.95	33.31	-27.29	583.14	-1,583.72	1,215.71	1,165.47	50.24	24.198	
11,150.00	10,200.00	9,812.29	9,107.00	39.11	33.54	-27.29	633.14	-1,584.03	1,215.71	1,165.10	50.61	24.022	
11,200.00	10,200.00	9,862.29	9,107.00	39.29	33.78	-27.29	683.14	-1,584.35	1,215.72	1,164.72	50.99	23.841	
11,250.00	10,200.00	9,912.29	9,107.00	39.50	34.03	-27.29	733.14	-1,584.67	1,215.72	1,164.33	51.39	23.656	
11,300.00	10,200.00	9,962.29	9,107.00	39.72	34.30	-27.29	783.14	-1,584.98	1,215.73	1,163.92	51.81	23.467	
11,350.00	10,200.00	10,012.29	9,107.00	39.96	34.57	-27.29	833.14	-1,585.30	1,215.73	1,163.49	52.24	23.273	
11,400.00	10,200.00	10,062.29	9,107.00	40.21	34.87	-27.29	883.14	-1,585.62	1,215.74	1,163.06	52.68	23.078	
11,450.00	10,200.00	10,112.29	9,107.00	40.48	35.17	-27.29	933.14	-1,585.94	1,215.74	1,162.60	53.14	22.879	
11,500.00	10,200.00	10,162.29	9,107.00	40.76	35.49	-27.29	983.14	-1,586.25	1,215.75	1,162.14	53.61	22.678	
11,550.00	10,200.00	10,212.29	9,107.00	41.05	35.82	-27.29	1,033.14	-1,586.57	1,215.75	1,161.66	54.10	22.474	
11,600.00	10,200.00	10,262.29	9,107.00	41.36	36.17	-27.29	1,083.13	-1,586.89	1,215.76	1,161.16	54.59	22.269	
11,650.00	10,200.00	10,312.29	9,107.00	41.68	36.52	-27.29	1,133.13	-1,587.20	1,215.76	1,160.66	55.10	22.063	
11,700.00	10,200.00	10,362.29	9,107.00	42.00	36.88	-27.29	1,183.13	-1,587.52	1,215.77	1,160.14	55.63	21.856	
11,750.00	10,200.00	10,412.29	9,107.00	42.34	37.25	-27.30	1,233.13	-1,587.84	1,215.77	1,159.61	56.16	21.647	
11,800.00	10,200.00	10,462.29	9,107.00	42.69	37.64	-27.30	1,283.13	-1,588.16	1,215.78	1,159.07	56.71	21.439	
11,850.00	10,200.00	10,512.29	9,107.00	43.05	38.03	-27.30	1,333.13	-1,588.47	1,215.78	1,158.52	57.27	21.230	
11,900.00	10,200.00	10,562.29	9,107.00	43.41	38.44	-27.30	1,383.13	-1,588.79	1,215.79	1,157.95	57.83	21.022	
11,950.00	10,200.00	10,612.29	9,107.00	43.79	38.85	-27.30	1,433.13	-1,589.11	1,215.79	1,157.38	58.41	20.813	
12,000.00	10,200.00	10,662.29	9,107.00	44.17	39.28	-27.30	1,483.13	-1,589.42	1,215.80	1,156.79	59.00	20.606	
12,050.00	10,200.00	10,712.29	9,107.00	44.56	39.71	-27.30	1,533.13	-1,589.74	1,215.80	1,156.20	59.60	20.398	
12,100.00	10,200.00	10,762.29	9,107.00	44.96	40.15	-27.30	1,583.12	-1,590.06	1,215.81	1,155.60	60.21	20.192	
12,150.00	10,200.00	10,812.29	9,107.00	45.37	40.60	-27.30	1,633.12	-1,590.38	1,215.81	1,154.98	60.83	19.987	
12,200.00	10,200.00	10,862.29	9,107.00	45.79	41.06	-27.30	1,683.12	-1,590.69	1,215.82	1,154.36	61.46	19.783	
12,250.00	10,200.00	10,912.29	9,107.00	46.22	41.52	-27.30	1,733.12	-1,591.01	1,215.82	1,153.73	62.09	19.580	
12,300.00	10,200.00	10,962.29	9,107.00	46.65	42.00	-27.30	1,783.12	-1,591.33	1,215.83	1,153.09	62.74	19.379	
12,350.00	10,200.00	11,012.29	9,107.00	47.09	42.47	-27.30	1,833.12	-1,591.64	1,215.83	1,152.44	63.39	19.179	
12,400.00	10,200.00	11,062.29	9,107.00	47.53	42.96	-27.30	1,883.12	-1,591.96	1,215.84	1,151.79	64.05	18.982	
12,450.00	10,200.00	11,112.29	9,107.00	47.99	43.46	-27.30	1,933.12	-1,592.28	1,215.84	1,151.12	64.72	18.786	
12,500.00	10,200.00	11,162.29	9,107.00	48.44	43.96	-27.30	1,983.12	-1,592.60	1,215.85	1,150.45	65.40	18.592	
12,550.00	10,200.00	11,212.29	9,107.00	48.91	44.46	-27.30	2,033.12	-1,592.91	1,215.85	1,149.77	66.08	18.399	
12,600.00	10,200.00	11,262.29	9,107.00	49.38	44.98	-27.30	2,083.11	-1,593.23	1,215.86	1,149.09	66.77	18.209	
12,650.00	10,200.00	11,312.29	9,107.00	49.86	45.49	-27.30	2,133.11	-1,593.55	1,215.86	1,148.39	67.47	18.021	
12,700.00	10,200.00	11,362.29	9,107.00	50.34	46.02	-27.30	2,183.11	-1,593.86	1,215.87	1,147.70	68.17	17.835	
12,750.00	10,200.00	11,412.29	9,107.00	50.84	46.55	-27.30	2,233.11	-1,594.18	1,215.87	1,146.99	68.88	17.651	
12,800.00	10,200.00	11,462.29	9,107.00	51.33	47.08	-27.31	2,283.11	-1,594.50	1,215.88	1,146.28	69.60	17.470	
12,850.00	10,200.00	11,512.29	9,107.00	51.83	47.62	-27.31	2,333.11	-1,594.82	1,215.88	1,145.56	70.32	17.290	

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

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
12,900.00	10,200.00	11,562.29	9,107.00	52.34	48.17	-27.31	2,383.11	-1,595.13	1,215.89	1,144.84	71.05	17.113	
12,950.00	10,200.00	11,612.29	9,107.00	52.85	48.72	-27.31	2,433.11	-1,595.45	1,215.89	1,144.11	71.79	16.938	
13,000.00	10,200.00	11,662.29	9,107.00	53.36	49.27	-27.31	2,483.11	-1,595.77	1,215.90	1,143.38	72.52	16.765	
13,050.00	10,200.00	11,712.29	9,107.00	53.89	49.83	-27.31	2,533.11	-1,596.09	1,215.91	1,142.64	73.27	16.595	
13,100.00	10,200.00	11,762.29	9,107.00	54.41	50.40	-27.31	2,583.10	-1,596.40	1,215.91	1,141.89	74.02	16.427	
13,150.00	10,200.00	11,812.29	9,107.00	54.94	50.96	-27.31	2,633.10	-1,596.72	1,215.92	1,141.14	74.77	16.261	
13,200.00	10,200.00	11,862.29	9,107.00	55.48	51.53	-27.31	2,683.10	-1,597.04	1,215.92	1,140.39	75.53	16.098	
13,250.00	10,200.00	11,912.29	9,107.00	56.02	52.11	-27.31	2,733.10	-1,597.35	1,215.93	1,139.63	76.30	15.937	
13,300.00	10,200.00	11,962.29	9,107.00	56.56	52.69	-27.31	2,783.10	-1,597.67	1,215.93	1,138.86	77.07	15.778	
13,350.00	10,200.00	12,012.29	9,107.00	57.11	53.27	-27.31	2,833.10	-1,597.99	1,215.94	1,138.10	77.84	15.621	
13,400.00	10,200.00	12,062.29	9,107.00	57.66	53.86	-27.31	2,883.10	-1,598.31	1,215.94	1,137.32	78.62	15.467	
13,450.00	10,200.00	12,112.29	9,107.00	58.21	54.45	-27.31	2,933.10	-1,598.62	1,215.95	1,136.55	79.40	15.314	
13,500.00	10,200.00	12,162.29	9,107.00	58.77	55.04	-27.31	2,983.10	-1,598.94	1,215.95	1,135.77	80.18	15.164	
13,550.00	10,200.00	12,212.29	9,107.00	59.34	55.64	-27.31	3,033.10	-1,599.26	1,215.96	1,134.98	80.97	15.016	
13,600.00	10,200.00	12,262.29	9,107.00	59.90	56.24	-27.31	3,083.09	-1,599.57	1,215.96	1,134.19	81.77	14.871	
13,650.00	10,200.00	12,312.29	9,107.00	60.47	56.84	-27.31	3,133.09	-1,599.89	1,215.97	1,133.40	82.57	14.727	
13,700.00	10,200.00	12,362.29	9,107.00	61.04	57.45	-27.31	3,183.09	-1,600.21	1,215.97	1,132.61	83.37	14.586	
13,750.00	10,200.00	12,412.29	9,107.00	61.62	58.06	-27.31	3,233.09	-1,600.53	1,215.98	1,131.81	84.17	14.447	
13,800.00	10,200.00	12,462.29	9,107.00	62.20	58.67	-27.31	3,283.09	-1,600.84	1,215.98	1,131.00	84.98	14.309	
13,850.00	10,200.00	12,512.29	9,107.00	62.78	59.28	-27.32	3,333.09	-1,601.16	1,215.99	1,130.20	85.79	14.174	
13,900.00	10,200.00	12,562.29	9,107.00	63.37	59.90	-27.32	3,383.09	-1,601.48	1,215.99	1,129.39	86.60	14.041	
13,950.00	10,200.00	12,612.29	9,107.00	63.96	60.52	-27.32	3,433.09	-1,601.79	1,216.00	1,128.58	87.42	13.910	
14,000.00	10,200.00	12,662.29	9,107.00	64.54	61.14	-27.32	3,483.09	-1,602.11	1,216.00	1,127.76	88.24	13.781	
14,050.00	10,200.00	12,712.29	9,107.00	65.14	61.76	-27.32	3,533.09	-1,602.43	1,216.01	1,126.94	89.06	13.653	
14,100.00	10,200.00	12,762.29	9,107.00	65.74	62.39	-27.32	3,583.08	-1,602.75	1,216.01	1,126.12	89.89	13.528	
14,150.00	10,200.00	12,812.29	9,107.00	66.34	63.02	-27.32	3,633.08	-1,603.06	1,216.02	1,125.30	90.72	13.404	
14,200.00	10,200.00	12,862.29	9,107.00	66.94	63.65	-27.32	3,683.08	-1,603.38	1,216.02	1,124.47	91.55	13.283	
14,250.00	10,200.00	12,912.29	9,107.00	67.54	64.28	-27.32	3,733.08	-1,603.70	1,216.03	1,123.64	92.38	13.163	
14,300.00	10,200.00	12,962.29	9,107.00	68.15	64.91	-27.32	3,783.08	-1,604.01	1,216.03	1,122.81	93.22	13.045	
14,350.00	10,200.00	13,012.29	9,107.00	68.76	65.55	-27.32	3,833.08	-1,604.33	1,216.04	1,121.98	94.06	12.928	
14,400.00	10,200.00	13,062.29	9,107.00	69.37	66.19	-27.32	3,883.08	-1,604.65	1,216.04	1,121.14	94.90	12.814	
14,450.00	10,200.00	13,112.29	9,107.00	69.98	66.83	-27.32	3,933.08	-1,604.97	1,216.05	1,120.30	95.74	12.701	
14,500.00	10,200.00	13,162.29	9,107.00	70.60	67.47	-27.32	3,983.08	-1,605.28	1,216.05	1,119.46	96.59	12.590	
14,550.00	10,200.00	13,212.29	9,107.00	71.21	68.11	-27.32	4,033.08	-1,605.60	1,216.06	1,118.62	97.44	12.480	
14,600.00	10,200.00	13,262.29	9,107.00	71.83	68.76	-27.32	4,083.07	-1,605.92	1,216.06	1,117.77	98.29	12.372	
14,650.00	10,200.00	13,312.29	9,107.00	72.46	69.41	-27.32	4,133.07	-1,606.23	1,216.07	1,116.93	99.14	12.266	
14,700.00	10,200.00	13,362.29	9,107.00	73.08	70.06	-27.32	4,183.07	-1,606.55	1,216.07	1,116.08	100.00	12.161	
14,750.00	10,200.00	13,412.29	9,107.00	73.71	70.71	-27.32	4,233.07	-1,606.87	1,216.08	1,115.23	100.85	12.058	
14,800.00	10,200.00	13,462.29	9,107.00	74.33	71.36	-27.32	4,283.07	-1,607.19	1,216.08	1,114.37	101.71	11.956	
14,850.00	10,200.00	13,512.29	9,107.00	74.96	72.01	-27.32	4,333.07	-1,607.50	1,216.09	1,113.52	102.57	11.856	
14,900.00	10,200.00	13,562.29	9,107.00	75.59	72.67	-27.32	4,383.07	-1,607.82	1,216.09	1,112.66	103.44	11.757	
14,950.00	10,200.00	13,612.29	9,107.00	76.23	73.32	-27.33	4,433.07	-1,608.14	1,216.10	1,111.80	104.30	11.660	
15,000.00	10,200.00	13,662.29	9,107.00	76.86	73.98	-27.33	4,483.07	-1,608.45	1,216.11	1,110.94	105.17	11.564	
15,050.00	10,200.00	13,712.29	9,107.00	77.50	74.64	-27.33	4,533.07	-1,608.77	1,216.11	1,110.08	106.03	11.469	
15,100.00	10,200.00	13,762.29	9,107.00	78.13	75.30	-27.33	4,583.06	-1,609.09	1,216.12	1,109.21	106.90	11.376	
15,150.00	10,200.00	13,812.29	9,107.00	78.77	75.96	-27.33	4,633.06	-1,609.41	1,216.12	1,108.35	107.77	11.284	
15,200.00	10,200.00	13,862.29	9,107.00	79.41	76.62	-27.33	4,683.06	-1,609.72	1,216.13	1,107.48	108.65	11.193	
15,250.00	10,200.00	13,912.29	9,107.00	80.06	77.29	-27.33	4,733.06	-1,610.04	1,216.13	1,106.61	109.52	11.104	
15,300.00	10,200.00	13,962.29	9,107.00	80.70	77.95	-27.33	4,783.06	-1,610.36	1,216.14	1,105.74	110.40	11.016	
15,350.00	10,200.00	14,012.29	9,107.00	81.35	78.62	-27.33	4,833.06	-1,610.67	1,216.14	1,104.87	111.28	10.929	
15,400.00	10,200.00	14,062.29	9,107.00	81.99	79.29	-27.33	4,883.06	-1,610.99	1,216.15	1,103.99	112.15	10.844	
15,450.00	10,200.00	14,112.29	9,107.00	82.64	79.95	-27.33	4,933.06	-1,611.31	1,216.15	1,103.12	113.03	10.759	

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
15,500.00	10,200.00	14,162.29	9,107.00	83.29	80.62	-27.33	4,983.06	-1,611.63	1,216.16	1,102.24	113.92	10.676	
15,550.00	10,200.00	14,212.29	9,107.00	83.94	81.29	-27.33	5,033.06	-1,611.94	1,216.16	1,101.36	114.80	10.594	
15,600.00	10,200.00	14,262.29	9,107.00	84.59	81.97	-27.33	5,083.05	-1,612.26	1,216.17	1,100.48	115.68	10.513	
15,650.00	10,200.00	14,312.29	9,107.00	85.25	82.64	-27.33	5,133.05	-1,612.58	1,216.17	1,099.60	116.57	10.433	
15,700.00	10,200.00	14,362.29	9,107.00	85.90	83.31	-27.33	5,183.05	-1,612.89	1,216.18	1,098.72	117.46	10.354	
15,750.00	10,200.00	14,412.29	9,107.00	86.56	83.99	-27.33	5,233.05	-1,613.21	1,216.18	1,097.84	118.34	10.277	
15,800.00	10,200.00	14,462.29	9,107.00	87.21	84.66	-27.33	5,283.05	-1,613.53	1,216.19	1,096.95	119.23	10.200	
15,850.00	10,200.00	14,512.29	9,107.00	87.87	85.34	-27.33	5,333.05	-1,613.85	1,216.19	1,096.07	120.12	10.124	
15,900.00	10,200.00	14,562.29	9,107.00	88.53	86.01	-27.33	5,383.05	-1,614.16	1,216.20	1,095.18	121.02	10.050	
15,950.00	10,200.00	14,612.29	9,107.00	89.19	86.69	-27.33	5,433.05	-1,614.48	1,216.20	1,094.29	121.91	9.976	
16,000.00	10,200.00	14,662.29	9,107.00	89.85	87.37	-27.34	5,483.05	-1,614.80	1,216.21	1,093.40	122.80	9.904	
16,050.00	10,200.00	14,712.29	9,107.00	90.51	88.05	-27.34	5,533.05	-1,615.12	1,216.21	1,092.51	123.70	9.832	
16,100.00	10,200.00	14,762.29	9,107.00	91.17	88.73	-27.34	5,583.04	-1,615.43	1,216.22	1,091.62	124.60	9.761	
16,150.00	10,200.00	14,812.29	9,107.00	91.84	89.41	-27.34	5,633.04	-1,615.75	1,216.22	1,090.73	125.49	9.692	
16,200.00	10,200.00	14,862.29	9,107.00	92.50	90.09	-27.34	5,683.04	-1,616.07	1,216.23	1,089.84	126.39	9.623	
16,250.00	10,200.00	14,912.29	9,107.00	93.17	90.77	-27.34	5,733.04	-1,616.38	1,216.23	1,088.94	127.29	9.555	
16,300.00	10,200.00	14,962.29	9,107.00	93.84	91.46	-27.34	5,783.04	-1,616.70	1,216.24	1,088.05	128.19	9.488	
16,350.00	10,200.00	15,012.29	9,107.00	94.50	92.14	-27.34	5,833.04	-1,617.02	1,216.24	1,087.15	129.09	9.422	
16,400.00	10,200.00	15,062.29	9,107.00	95.17	92.83	-27.34	5,883.04	-1,617.34	1,216.25	1,086.25	129.99	9.356	
16,450.00	10,200.00	15,112.29	9,107.00	95.84	93.51	-27.34	5,933.04	-1,617.65	1,216.25	1,085.36	130.90	9.292	
16,500.00	10,200.00	15,162.29	9,107.00	96.51	94.20	-27.34	5,983.04	-1,617.97	1,216.26	1,084.46	131.80	9.228	
16,550.00	10,200.00	15,212.29	9,107.00	97.18	94.88	-27.34	6,033.04	-1,618.29	1,216.26	1,083.56	132.71	9.165	
16,600.00	10,200.00	15,262.29	9,107.00	97.86	95.57	-27.34	6,083.03	-1,618.60	1,216.27	1,082.66	133.61	9.103	
16,650.00	10,200.00	15,312.29	9,107.00	98.53	96.26	-27.34	6,133.03	-1,618.92	1,216.27	1,081.76	134.52	9.042	
16,700.00	10,200.00	15,362.29	9,107.00	99.20	96.95	-27.34	6,183.03	-1,619.24	1,216.28	1,080.85	135.43	8.981	
16,750.00	10,200.00	15,412.29	9,107.00	99.88	97.64	-27.34	6,233.03	-1,619.56	1,216.28	1,079.95	136.33	8.921	
16,800.00	10,200.00	15,462.29	9,107.00	100.55	98.33	-27.34	6,283.03	-1,619.87	1,216.29	1,079.05	137.24	8.862	
16,850.00	10,200.00	15,512.29	9,107.00	101.23	99.02	-27.34	6,333.03	-1,620.19	1,216.30	1,078.14	138.15	8.804	
16,900.00	10,200.00	15,562.29	9,107.00	101.91	99.71	-27.34	6,383.03	-1,620.51	1,216.30	1,077.24	139.06	8.746	
16,950.00	10,200.00	15,612.29	9,107.00	102.58	100.40	-27.34	6,433.03	-1,620.82	1,216.31	1,076.33	139.98	8.689	
17,000.00	10,200.00	15,662.29	9,107.00	103.26	101.09	-27.34	6,483.03	-1,621.14	1,216.31	1,075.42	140.89	8.633	
17,050.00	10,200.00	15,712.29	9,107.00	103.94	101.78	-27.35	6,533.02	-1,621.46	1,216.32	1,074.51	141.80	8.578	
17,100.00	10,200.00	15,762.29	9,107.00	104.62	102.47	-27.35	6,583.02	-1,621.78	1,216.32	1,073.61	142.71	8.523	
17,150.00	10,200.00	15,812.29	9,107.00	105.30	103.17	-27.35	6,633.02	-1,622.09	1,216.33	1,072.70	143.63	8.469	
17,200.00	10,200.00	15,862.29	9,107.00	105.98	103.86	-27.35	6,683.02	-1,622.41	1,216.33	1,071.79	144.54	8.415	
17,250.00	10,200.00	15,912.29	9,107.00	106.66	104.56	-27.35	6,733.02	-1,622.73	1,216.34	1,070.88	145.46	8.362	
17,300.00	10,200.00	15,962.29	9,107.00	107.34	105.25	-27.35	6,783.02	-1,623.04	1,216.34	1,069.97	146.38	8.310	
17,350.00	10,200.00	16,012.29	9,107.00	108.03	105.95	-27.35	6,833.02	-1,623.36	1,216.35	1,069.05	147.29	8.258	
17,400.00	10,200.00	16,062.29	9,107.00	108.71	106.64	-27.35	6,883.02	-1,623.68	1,216.35	1,068.14	148.21	8.207	
17,450.00	10,200.00	16,112.29	9,107.00	109.39	107.34	-27.35	6,933.02	-1,624.00	1,216.36	1,067.23	149.13	8.156	
17,500.00	10,200.00	16,162.29	9,107.00	110.08	108.03	-27.35	6,983.02	-1,624.31	1,216.36	1,066.31	150.05	8.106	
17,550.00	10,200.00	16,212.29	9,107.00	110.76	108.73	-27.35	7,033.01	-1,624.63	1,216.37	1,065.40	150.97	8.057	
17,600.00	10,200.00	16,262.29	9,107.00	111.45	109.43	-27.35	7,083.01	-1,624.95	1,216.37	1,064.48	151.89	8.008	
17,650.00	10,200.00	16,312.29	9,107.00	112.13	110.13	-27.35	7,133.01	-1,625.26	1,216.38	1,063.57	152.81	7.960	
17,700.00	10,200.00	16,362.29	9,107.00	112.82	110.82	-27.35	7,183.01	-1,625.58	1,216.38	1,062.65	153.73	7.912	
17,750.00	10,200.00	16,412.29	9,107.00	113.51	111.52	-27.35	7,233.01	-1,625.90	1,216.39	1,061.74	154.65	7.865	
17,800.00	10,200.00	16,462.29	9,107.00	114.20	112.22	-27.35	7,283.01	-1,626.22	1,216.39	1,060.82	155.57	7.819	
17,850.00	10,200.00	16,512.29	9,107.00	114.88	112.92	-27.35	7,333.01	-1,626.53	1,216.40	1,059.90	156.50	7.773	
17,900.00	10,200.00	16,562.29	9,107.00	115.57	113.62	-27.35	7,383.01	-1,626.85	1,216.40	1,058.98	157.42	7.727	
17,950.00	10,200.00	16,612.29	9,107.00	116.26	114.32	-27.35	7,433.01	-1,627.17	1,216.41	1,058.06	158.34	7.682	
18,000.00	10,200.00	16,662.29	9,107.00	116.95	115.02	-27.35	7,483.01	-1,627.48	1,216.41	1,057.14	159.27	7.637	
18,050.00	10,200.00	16,712.29	9,107.00	117.64	115.72	-27.35	7,533.00	-1,627.80	1,216.42	1,056.22	160.19	7.593	

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

Anticollision Report

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

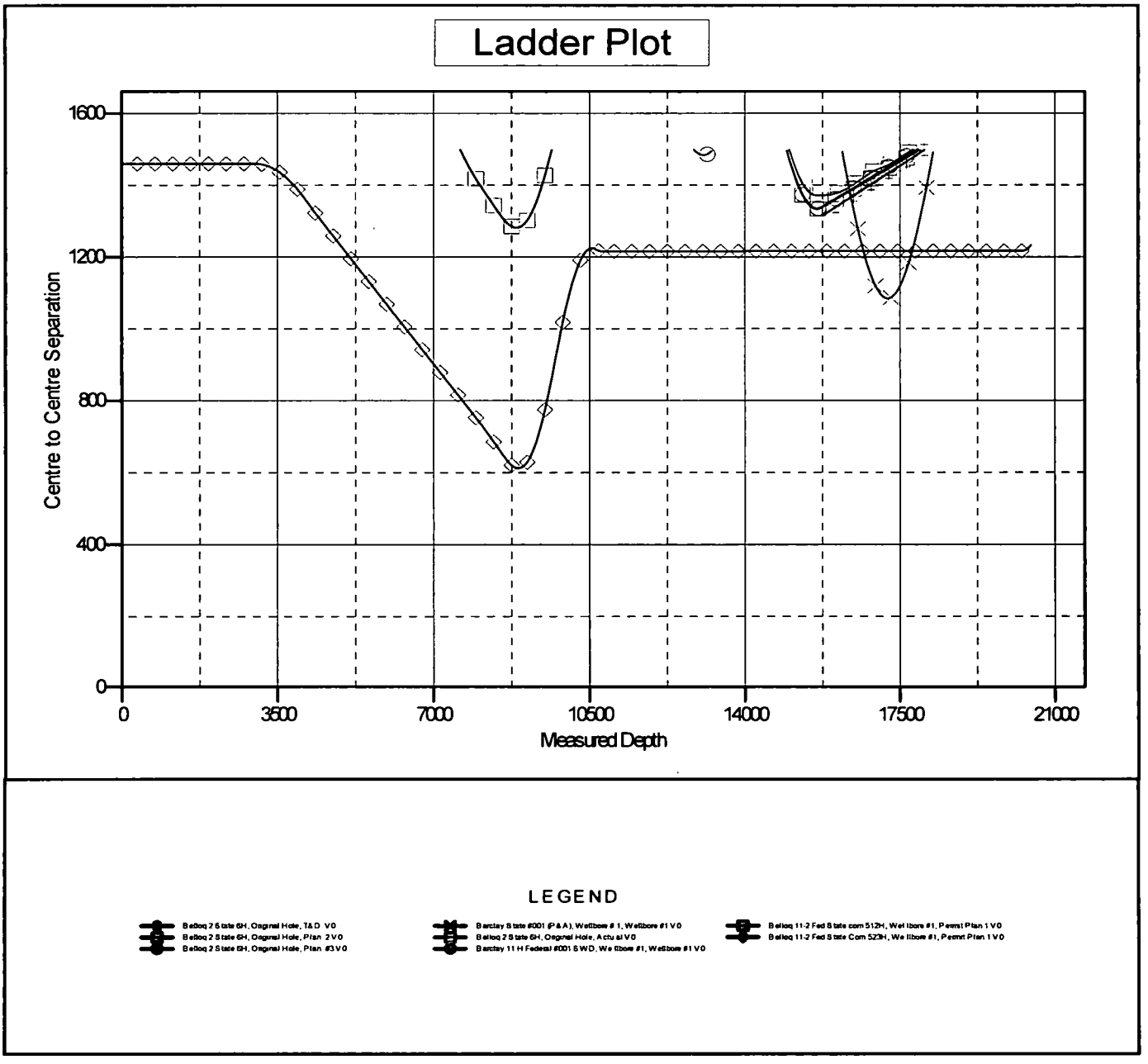
Offset Design Sec 11-T23S-R31E - Belloq 11-2 Fed State Com 523H - Wellbore #1 - Permit Plan 1 — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD+HDGM — **Offset Well Error:** 0.50 ft

Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
18,100.00	10,200.00	16,762.29	9,107.00	118.33	116.42	-27.35	7,583.00	-1,628.12	1,216.42	1,055.30	161.12	7.550	
18,150.00	10,200.00	16,812.29	9,107.00	119.02	117.12	-27.36	7,633.00	-1,628.44	1,216.43	1,054.38	162.05	7.507	
18,200.00	10,200.00	16,862.29	9,107.00	119.71	117.83	-27.36	7,683.00	-1,628.75	1,216.43	1,053.46	162.97	7.464	
18,250.00	10,200.00	16,912.29	9,107.00	120.41	118.53	-27.36	7,733.00	-1,629.07	1,216.44	1,052.54	163.90	7.422	
18,300.00	10,200.00	16,962.29	9,107.00	121.10	119.23	-27.36	7,783.00	-1,629.39	1,216.44	1,051.62	164.83	7.380	
18,350.00	10,200.00	17,012.29	9,107.00	121.79	119.93	-27.36	7,833.00	-1,629.70	1,216.45	1,050.70	165.75	7.338	
18,400.00	10,200.00	17,062.29	9,107.00	122.48	120.64	-27.36	7,883.00	-1,630.02	1,216.45	1,049.77	166.68	7.298	
18,450.00	10,200.00	17,112.29	9,107.00	123.18	121.34	-27.36	7,933.00	-1,630.34	1,216.46	1,048.85	167.61	7.258	
18,500.00	10,200.00	17,162.29	9,107.00	123.87	122.04	-27.36	7,983.00	-1,630.66	1,216.46	1,047.92	168.54	7.218	
18,550.00	10,200.00	17,212.29	9,107.00	124.57	122.75	-27.36	8,032.99	-1,630.97	1,216.47	1,047.00	169.47	7.178	
18,600.00	10,200.00	17,262.29	9,107.00	125.26	123.45	-27.36	8,082.99	-1,631.29	1,216.47	1,046.07	170.40	7.139	
18,650.00	10,200.00	17,312.29	9,107.00	125.96	124.16	-27.36	8,132.99	-1,631.61	1,216.48	1,045.15	171.33	7.100	
18,700.00	10,200.00	17,362.29	9,107.00	126.65	124.86	-27.36	8,182.99	-1,631.93	1,216.49	1,044.22	172.26	7.062	
18,750.00	10,200.00	17,412.29	9,107.00	127.35	125.57	-27.36	8,232.99	-1,632.24	1,216.49	1,043.30	173.19	7.024	
18,800.00	10,200.00	17,462.29	9,107.00	128.04	126.27	-27.36	8,282.99	-1,632.56	1,216.50	1,042.37	174.12	6.986	
18,850.00	10,200.00	17,512.29	9,107.00	128.74	126.98	-27.36	8,332.99	-1,632.88	1,216.50	1,041.44	175.06	6.949	
18,900.00	10,200.00	17,562.29	9,107.00	129.44	127.68	-27.36	8,382.99	-1,633.19	1,216.51	1,040.52	175.99	6.912	
18,950.00	10,200.00	17,612.29	9,107.00	130.13	128.39	-27.36	8,432.99	-1,633.51	1,216.51	1,039.59	176.92	6.876	
19,000.00	10,200.00	17,662.29	9,107.00	130.83	129.10	-27.36	8,482.99	-1,633.83	1,216.52	1,038.66	177.86	6.840	
19,050.00	10,200.00	17,712.29	9,107.00	131.53	129.80	-27.36	8,532.98	-1,634.15	1,216.52	1,037.73	178.79	6.804	
19,100.00	10,200.00	17,762.29	9,107.00	132.23	130.51	-27.36	8,582.98	-1,634.46	1,216.53	1,036.80	179.72	6.769	
19,150.00	10,200.00	17,812.29	9,107.00	132.93	131.22	-27.36	8,632.98	-1,634.78	1,216.53	1,035.87	180.66	6.734	
19,200.00	10,200.00	17,862.29	9,107.00	133.62	131.92	-27.37	8,682.98	-1,635.10	1,216.54	1,034.94	181.59	6.699	
19,250.00	10,200.00	17,912.29	9,107.00	134.32	132.63	-27.37	8,732.98	-1,635.41	1,216.54	1,034.01	182.53	6.665	
19,300.00	10,200.00	17,962.29	9,107.00	135.02	133.34	-27.37	8,782.98	-1,635.73	1,216.55	1,033.08	183.46	6.631	
19,350.00	10,200.00	18,012.29	9,107.00	135.72	134.05	-27.37	8,832.98	-1,636.05	1,216.55	1,032.15	184.40	6.597	
19,400.00	10,200.00	18,062.29	9,107.00	136.42	134.76	-27.37	8,882.98	-1,636.37	1,216.56	1,031.22	185.33	6.564	
19,450.00	10,200.00	18,112.29	9,107.00	137.12	135.46	-27.37	8,932.98	-1,636.68	1,216.56	1,030.29	186.27	6.531	
19,500.00	10,200.00	18,162.29	9,107.00	137.83	136.17	-27.37	8,982.98	-1,637.00	1,216.57	1,029.36	187.21	6.499	
19,550.00	10,200.00	18,212.29	9,107.00	138.53	136.88	-27.37	9,032.97	-1,637.32	1,216.57	1,028.43	188.14	6.466	
19,600.00	10,200.00	18,262.29	9,107.00	139.23	137.59	-27.37	9,082.97	-1,637.63	1,216.58	1,027.50	189.08	6.434	
19,650.00	10,200.00	18,312.29	9,107.00	139.93	138.30	-27.37	9,132.97	-1,637.95	1,216.58	1,026.56	190.02	6.402	
19,700.00	10,200.00	18,362.29	9,107.00	140.63	139.01	-27.37	9,182.97	-1,638.27	1,216.59	1,025.63	190.96	6.371	
19,750.00	10,200.00	18,412.29	9,107.00	141.33	139.72	-27.37	9,232.97	-1,638.59	1,216.59	1,024.70	191.90	6.340	
19,800.00	10,200.00	18,462.29	9,107.00	142.04	140.43	-27.37	9,282.97	-1,638.90	1,216.60	1,023.76	192.83	6.309	
19,850.00	10,200.00	18,512.29	9,107.00	142.74	141.14	-27.37	9,332.97	-1,639.22	1,216.60	1,022.83	193.77	6.279	
19,900.00	10,200.00	18,562.29	9,107.00	143.44	141.85	-27.37	9,382.97	-1,639.54	1,216.61	1,021.90	194.71	6.248	
19,950.00	10,200.00	18,612.29	9,107.00	144.14	142.56	-27.37	9,432.97	-1,639.85	1,216.61	1,020.96	195.65	6.218	
20,000.00	10,200.00	18,662.29	9,107.00	144.85	143.27	-27.37	9,482.97	-1,640.17	1,216.62	1,020.03	196.59	6.189	
20,050.00	10,200.00	18,712.29	9,107.00	145.55	143.98	-27.37	9,532.96	-1,640.49	1,216.62	1,019.09	197.53	6.159	
20,100.00	10,200.00	18,762.29	9,107.00	146.26	144.69	-27.37	9,582.96	-1,640.81	1,216.63	1,018.16	198.47	6.130	
20,150.00	10,200.00	18,812.29	9,107.00	146.96	145.41	-27.37	9,632.96	-1,641.12	1,216.63	1,017.22	199.41	6.101	
20,200.00	10,200.00	18,862.29	9,107.00	147.66	146.12	-27.37	9,682.96	-1,641.44	1,216.64	1,016.29	200.35	6.072	
20,250.00	10,200.00	18,912.29	9,107.00	148.37	146.83	-27.37	9,732.96	-1,641.76	1,216.64	1,015.35	201.29	6.044	
20,300.00	10,200.00	18,929.00	9,107.00	149.07	147.07	-27.38	9,749.67	-1,641.86	1,217.10	1,014.88	202.23	6.018	
20,350.00	10,200.00	18,929.00	9,107.00	149.78	147.07	-27.38	9,749.67	-1,641.86	1,219.50	1,016.59	202.91	6.010 SF	
20,400.00	10,200.00	18,929.00	9,107.00	150.48	147.07	-27.38	9,749.67	-1,641.86	1,223.94	1,020.63	203.31	6.020	
20,450.00	10,200.00	18,929.00	9,107.00	151.19	147.07	-27.38	9,749.67	-1,641.86	1,230.39	1,026.98	203.41	6.049	
20,465.87	10,200.00	18,929.00	9,107.00	151.41	147.07	-27.38	9,749.67	-1,641.86	1,232.86	1,029.47	203.39	6.062	

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB @ 3512.10ft	Coordinates are relative to: Belloq 11-2 Fed State Com 223H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is -104.333334	Grid Convergence at Surface is: 0.32°



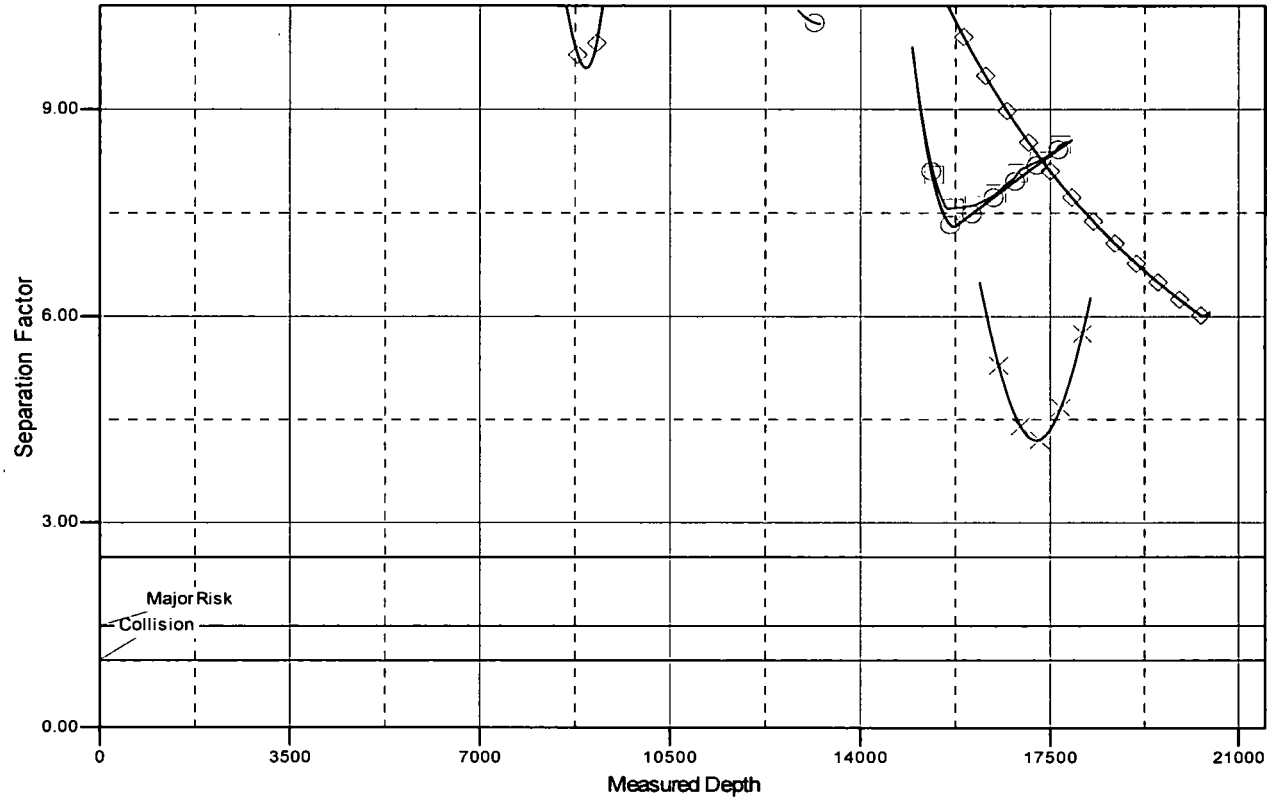
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	WCDSC Permian NM	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Project:	Eddy County (NAD 83 NM Eastern)	**TVD Reference:**	RKB @ 3512.10ft
Reference Site:	Sec 11-T23S-R31E	**MD Reference:**	RKB @ 3512.10ft
Site Error:	0.00 ft	**North Reference:**	Grid
Reference Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.50 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	EDM r5000.141_Prod US
Reference Design:	Permit Plan 1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB @ 3512.10ft
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Belloq 11-2 Fed State Com 223H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.32°

Separation Factor Plot



LEGEND

Belloq 2 State 6H, Original Hole, T&D V0
Belloq 2 State 6H, Original Hole, Plan 2 V0
Belloq 2 State 6H, Original Hole, Plan #3 V0
Barclay State #001 (P&A), Wellbore # 1, Wellbore #1 V0
Belloq 2 State 6H, Original Hole, Actual V0
Barclay 11 H Federal #001 SWD, We llbore #1, Wellbore #1 V0
Belloq 11-2 Fed State com 512H, Wel llbore #1, Permit Plan 1 V0
Belloq 11-2 Fed State Com 523H, We llbore #1, Permit Plan 1 V0

WCDSC Permian NM

Eddy County (NAD 83 NM Eastern)
Sec 11-T23S-R31E
Belloq 11-2 Fed State Com 223H

Wellbore #1

Plan: Permit Plan 1

Standard Planning Report - Geographic

31 July, 2018

Database:	EDM r5000.141_Prod US	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Company:	WCDSC Permian NM	**TVD Reference:**	RKB @ 3512.10ft
Project:	Eddy County (NAD 83 NM Eastern)	**MD Reference:**	RKB @ 3512.10ft
Site:	Sec 11-T23S-R31E	**North Reference:**	Grid
Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Project	Eddy County (NAD 83 NM Eastern)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 11-T23S-R31E				
Site Position:		**Northing:**	488,170.26 usft	**Latitude:**	32.340736
From:	Map	**Easting:**	719,281.88 usft	**Longitude:**	-103.757161
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.31 °

Well	Belloq 11-2 Fed State Com 223H					
Well Position	**+N/-S**	0.00 ft	**Northing:**	478,134.54 usft	**Latitude:**	32.313081
	+E/-W	0.00 ft	**Easting:**	723,899.43 usft	**Longitude:**	-103.742389
Position Uncertainty		0.50 ft	**Wellhead Elevation:**		**Ground Level:**	3,487.10 ft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	7/31/2018	6.92	60.10	47,857.23511112

Design	Permit Plan 1				
Audit Notes:					
Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.00	0.00	0.00	353.79	

Plan Survey Tool Program **Date** 7/31/2018

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,465.87	Permit Plan 1 (Wellbore #1)	MWD+HDGM	
				OWSG MWD + HDGM	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,192.31	11.92	246.19	4,183.73	-49.89	-113.09	1.00	1.00	0.00	246.19	
8,591.34	11.92	246.19	8,487.85	-416.74	-944.60	0.00	0.00	0.00	0.00	
9,386.22	0.00	0.00	9,277.00	-450.00	-1,020.00	1.50	-1.50	0.00	180.00	
9,736.26	0.00	0.00	9,627.04	-450.00	-1,020.00	0.00	0.00	0.00	0.00	
10,636.26	90.00	359.65	10,200.00	122.95	-1,023.51	10.00	10.00	0.00	359.65	PBHL - Belloq 11-2 Fe
20,465.87	90.00	359.65	10,200.00	9,952.37	-1,083.66	0.00	0.00	0.00	0.00	PBHL - Belloq 11-2 Fe

Database:	EDM r5000.141_Prod US	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Company:	WCDSC Permian NM	**TVD Reference:**	RKB @ 3512.10ft
Project:	Eddy County (NAD 83 NM Eastern)	**MD Reference:**	RKB @ 3512.10ft
Site:	Sec 11-T23S-R31E	**North Reference:**	Grid
Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
100.00	0.00	0.00	100.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
200.00	0.00	0.00	200.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
300.00	0.00	0.00	300.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
400.00	0.00	0.00	400.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
500.00	0.00	0.00	500.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
600.00	0.00	0.00	600.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
700.00	0.00	0.00	700.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
800.00	0.00	0.00	800.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
900.00	0.00	0.00	900.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,000.00	0.00	0.00	1,000.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,100.00	0.00	0.00	1,100.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,200.00	0.00	0.00	1,200.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,300.00	0.00	0.00	1,300.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,400.00	0.00	0.00	1,400.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,500.00	0.00	0.00	1,500.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,600.00	0.00	0.00	1,600.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,700.00	0.00	0.00	1,700.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,800.00	0.00	0.00	1,800.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
1,900.00	0.00	0.00	1,900.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,000.00	0.00	0.00	2,000.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,100.00	0.00	0.00	2,100.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,200.00	0.00	0.00	2,200.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,300.00	0.00	0.00	2,300.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,400.00	0.00	0.00	2,400.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,500.00	0.00	0.00	2,500.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,600.00	0.00	0.00	2,600.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,700.00	0.00	0.00	2,700.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,800.00	0.00	0.00	2,800.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
2,900.00	0.00	0.00	2,900.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
3,000.00	0.00	0.00	3,000.00	0.00	0.00	478,134.54	723,899.43	32.313081	-103.742389
3,100.00	1.00	246.19	3,099.99	-0.35	-0.80	478,134.19	723,898.63	32.313080	-103.742392
3,200.00	2.00	246.19	3,199.96	-1.41	-3.19	478,133.13	723,896.23	32.313077	-103.742399
3,300.00	3.00	246.19	3,299.86	-3.17	-7.18	478,131.37	723,892.24	32.313073	-103.742412
3,400.00	4.00	246.19	3,399.68	-5.63	-12.77	478,128.91	723,886.66	32.313066	-103.742431
3,500.00	5.00	246.19	3,499.37	-8.80	-19.95	478,125.74	723,879.48	32.313057	-103.742454
3,600.00	6.00	246.19	3,598.90	-12.67	-28.72	478,121.87	723,870.71	32.313047	-103.742482
3,700.00	7.00	246.19	3,698.26	-17.24	-39.07	478,117.30	723,860.35	32.313034	-103.742516
3,800.00	8.00	246.19	3,797.40	-22.51	-51.02	478,112.03	723,848.41	32.313020	-103.742555
3,900.00	9.00	246.19	3,896.30	-28.47	-64.54	478,106.07	723,834.89	32.313004	-103.742599
4,000.00	10.00	246.19	3,994.93	-35.13	-79.64	478,099.41	723,819.79	32.312986	-103.742648
4,100.00	11.00	246.19	4,093.26	-42.49	-96.31	478,092.05	723,803.11	32.312966	-103.742702
4,192.31	11.92	246.19	4,183.73	-49.89	-113.09	478,084.65	723,786.33	32.312946	-103.742756
4,200.00	11.92	246.19	4,191.25	-50.54	-114.55	478,084.01	723,784.88	32.312944	-103.742761
4,300.00	11.92	246.19	4,289.09	-58.87	-133.45	478,075.67	723,765.98	32.312921	-103.742822
4,400.00	11.92	246.19	4,386.93	-67.21	-152.35	478,067.33	723,747.07	32.312899	-103.742883
4,500.00	11.92	246.19	4,484.78	-75.55	-171.25	478,058.99	723,728.17	32.312876	-103.742945
4,600.00	11.92	246.19	4,582.62	-83.89	-190.16	478,050.65	723,709.27	32.312854	-103.743006
4,700.00	11.92	246.19	4,680.46	-92.23	-209.06	478,042.31	723,690.37	32.312831	-103.743067
4,800.00	11.92	246.19	4,778.30	-100.57	-227.96	478,033.97	723,671.47	32.312808	-103.743129
4,900.00	11.92	246.19	4,876.15	-108.91	-246.86	478,025.63	723,652.56	32.312786	-103.743190
5,000.00	11.92	246.19	4,973.99	-117.25	-265.76	478,017.29	723,633.66	32.312763	-103.743251
5,100.00	11.92	246.19	5,071.83	-125.59	-284.67	478,008.95	723,614.76	32.312740	-103.743313
5,200.00	11.92	246.19	5,169.67	-133.93	-303.57	478,000.61	723,595.86	32.312718	-103.743374
5,300.00	11.92	246.19	5,267.52	-142.27	-322.47	477,992.27	723,576.96	32.312695	-103.743435

Database:	EDM r5000.141_Prod US	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Company:	WCDSC Permian NM	**TVD Reference:**	RKB @ 3512.10ft
Project:	Eddy County (NAD 83 NM Eastern)	**MD Reference:**	RKB @ 3512.10ft
Site:	Sec 11-T23S-R31E	**North Reference:**	Grid
Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,400.00	11.92	246.19	5,365.36	-150.61	-341.37	477,983.94	723,558.05	32.312672	-103.743497
5,500.00	11.92	246.19	5,463.20	-158.94	-360.27	477,975.60	723,539.15	32.312650	-103.743558
5,600.00	11.92	246.19	5,561.04	-167.28	-379.18	477,967.26	723,520.25	32.312627	-103.743619
5,700.00	11.92	246.19	5,658.89	-175.62	-398.08	477,958.92	723,501.35	32.312605	-103.743681
5,800.00	11.92	246.19	5,756.73	-183.96	-416.98	477,950.58	723,482.45	32.312582	-103.743742
5,900.00	11.92	246.19	5,854.57	-192.30	-435.88	477,942.24	723,463.54	32.312559	-103.743803
6,000.00	11.92	246.19	5,952.41	-200.64	-454.79	477,933.90	723,444.64	32.312537	-103.743865
6,100.00	11.92	246.19	6,050.26	-208.98	-473.69	477,925.56	723,425.74	32.312514	-103.743926
6,200.00	11.92	246.19	6,148.10	-217.32	-492.59	477,917.22	723,406.84	32.312491	-103.743987
6,300.00	11.92	246.19	6,245.94	-225.66	-511.49	477,908.88	723,387.94	32.312469	-103.744049
6,400.00	11.92	246.19	6,343.78	-234.00	-530.39	477,900.54	723,369.03	32.312446	-103.744110
6,500.00	11.92	246.19	6,441.63	-242.34	-549.30	477,892.20	723,350.13	32.312423	-103.744171
6,600.00	11.92	246.19	6,539.47	-250.68	-568.20	477,883.87	723,331.23	32.312401	-103.744233
6,700.00	11.92	246.19	6,637.31	-259.01	-587.10	477,875.53	723,312.33	32.312378	-103.744294
6,800.00	11.92	246.19	6,735.15	-267.35	-606.00	477,867.19	723,293.43	32.312356	-103.744355
6,900.00	11.92	246.19	6,833.00	-275.69	-624.90	477,858.85	723,274.52	32.312333	-103.744417
7,000.00	11.92	246.19	6,930.84	-284.03	-643.81	477,850.51	723,255.62	32.312310	-103.744478
7,100.00	11.92	246.19	7,028.68	-292.37	-662.71	477,842.17	723,236.72	32.312288	-103.744539
7,200.00	11.92	246.19	7,126.52	-300.71	-681.61	477,833.83	723,217.82	32.312265	-103.744601
7,300.00	11.92	246.19	7,224.37	-309.05	-700.51	477,825.49	723,198.91	32.312242	-103.744662
7,400.00	11.92	246.19	7,322.21	-317.39	-719.41	477,817.15	723,180.01	32.312220	-103.744723
7,500.00	11.92	246.19	7,420.05	-325.73	-738.32	477,808.81	723,161.11	32.312197	-103.744785
7,600.00	11.92	246.19	7,517.89	-334.07	-757.22	477,800.47	723,142.21	32.312174	-103.744846
7,700.00	11.92	246.19	7,615.74	-342.41	-776.12	477,792.13	723,123.31	32.312152	-103.744907
7,800.00	11.92	246.19	7,713.58	-350.75	-795.02	477,783.80	723,104.40	32.312129	-103.744969
7,900.00	11.92	246.19	7,811.42	-359.08	-813.93	477,775.46	723,085.50	32.312107	-103.745030
8,000.00	11.92	246.19	7,909.27	-367.42	-832.83	477,767.12	723,066.60	32.312084	-103.745091
8,100.00	11.92	246.19	8,007.11	-375.76	-851.73	477,758.78	723,047.70	32.312061	-103.745153
8,200.00	11.92	246.19	8,104.95	-384.10	-870.63	477,750.44	723,028.80	32.312039	-103.745214
8,300.00	11.92	246.19	8,202.79	-392.44	-889.53	477,742.10	723,009.89	32.312016	-103.745275
8,400.00	11.92	246.19	8,300.64	-400.78	-908.44	477,733.76	722,990.99	32.311993	-103.745337
8,500.00	11.92	246.19	8,398.48	-409.12	-927.34	477,725.42	722,972.09	32.311971	-103.745398
8,591.34	11.92	246.19	8,487.85	-416.74	-944.60	477,717.80	722,954.82	32.311950	-103.745454
8,600.00	11.79	246.19	8,496.32	-417.46	-946.23	477,717.09	722,953.20	32.311948	-103.745459
8,700.00	10.29	246.19	8,594.47	-425.19	-963.76	477,709.35	722,935.67	32.311927	-103.745516
8,800.00	8.79	246.19	8,693.08	-431.88	-978.92	477,702.66	722,920.50	32.311909	-103.745565
8,900.00	7.29	246.19	8,792.09	-437.53	-991.73	477,697.02	722,907.70	32.311894	-103.745607
9,000.00	5.79	246.19	8,891.44	-442.13	-1,002.15	477,692.42	722,897.28	32.311881	-103.745641
9,100.00	4.29	246.19	8,991.05	-445.67	-1,010.19	477,688.87	722,889.23	32.311871	-103.745667
9,200.00	2.79	246.19	9,090.86	-448.17	-1,015.85	477,686.37	722,883.58	32.311865	-103.745685
9,300.00	1.29	246.19	9,190.79	-449.61	-1,019.11	477,684.93	722,880.32	32.311861	-103.745696
9,386.22	0.00	0.00	9,277.00	-450.00	-1,020.00	477,684.54	722,879.43	32.311860	-103.745699
9,400.00	0.00	0.00	9,290.78	-450.00	-1,020.00	477,684.54	722,879.43	32.311860	-103.745699
9,500.00	0.00	0.00	9,390.78	-450.00	-1,020.00	477,684.54	722,879.43	32.311860	-103.745699
9,600.00	0.00	0.00	9,490.78	-450.00	-1,020.00	477,684.54	722,879.43	32.311860	-103.745699
9,700.00	0.00	0.00	9,590.78	-450.00	-1,020.00	477,684.54	722,879.43	32.311860	-103.745699
9,736.26	0.00	0.00	9,627.04	-450.00	-1,020.00	477,684.54	722,879.43	32.311860	-103.745699
KOP @ 9736' MD, 50' FSL, 1750' FEL									
9,800.00	6.37	359.65	9,690.65	-446.46	-1,020.02	477,688.08	722,879.41	32.311869	-103.745699
9,900.00	16.37	359.65	9,788.56	-426.76	-1,020.14	477,707.78	722,879.29	32.311924	-103.745699
9,977.40	24.11	359.65	9,861.13	-400.00	-1,020.31	477,734.54	722,879.12	32.311997	-103.745699
First Take Point @ 9977' MD, 100' FSL, 1750' FEL									
10,000.00	26.37	359.65	9,881.57	-390.36	-1,020.37	477,744.18	722,879.06	32.312024	-103.745699
10,100.00	36.37	359.65	9,966.84	-338.37	-1,020.68	477,796.17	722,878.75	32.312167	-103.745699

Database:	EDM r5000.141_Prod US	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Company:	WCDSC Permian NM	**TVD Reference:**	RKB @ 3512.10ft
Project:	Eddy County (NAD 83 NM Eastern)	**MD Reference:**	RKB @ 3512.10ft
Site:	Sec 11-T23S-R31E	**North Reference:**	Grid
Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,200.00	46.37	359.65	10,041.78	-272.36	-1,021.09	477,862.19	722,878.34	32.312348	-103.745699
10,300.00	56.37	359.65	10,104.13	-194.33	-1,021.56	477,940.21	722,877.86	32.312563	-103.745699
10,400.00	66.37	359.65	10,151.97	-106.67	-1,022.10	478,027.87	722,877.33	32.312803	-103.745699
10,500.00	76.37	359.65	10,183.87	-12.03	-1,022.68	478,122.51	722,876.75	32.313064	-103.745700
10,600.00	86.37	359.65	10,198.85	86.71	-1,023.28	478,221.25	722,876.14	32.313335	-103.745700
10,636.26	90.00	359.65	10,200.00	122.95	-1,023.51	478,257.49	722,875.92	32.313435	-103.745700
10,700.00	90.00	359.65	10,200.00	186.69	-1,023.90	478,321.23	722,875.53	32.313610	-103.745700
10,800.00	90.00	359.65	10,200.00	286.69	-1,024.51	478,421.23	722,874.92	32.313885	-103.745700
10,900.00	90.00	359.65	10,200.00	386.68	-1,025.12	478,521.22	722,874.31	32.314160	-103.745700
11,000.00	90.00	359.65	10,200.00	486.68	-1,025.73	478,621.22	722,873.70	32.314434	-103.745701
11,100.00	90.00	359.65	10,200.00	586.68	-1,026.34	478,721.22	722,873.08	32.314709	-103.745701
11,200.00	90.00	359.65	10,200.00	686.68	-1,026.96	478,821.22	722,872.47	32.314984	-103.745701
11,300.00	90.00	359.65	10,200.00	786.68	-1,027.57	478,921.22	722,871.86	32.315259	-103.745701
11,400.00	90.00	359.65	10,200.00	886.67	-1,028.18	479,021.21	722,871.25	32.315534	-103.745701
11,500.00	90.00	359.65	10,200.00	986.67	-1,028.79	479,121.21	722,870.64	32.315809	-103.745702
11,600.00	90.00	359.65	10,200.00	1,086.67	-1,029.40	479,221.21	722,870.02	32.316084	-103.745702
11,700.00	90.00	359.65	10,200.00	1,186.67	-1,030.02	479,321.21	722,869.41	32.316359	-103.745702
11,800.00	90.00	359.65	10,200.00	1,286.67	-1,030.63	479,421.21	722,868.80	32.316633	-103.745702
11,900.00	90.00	359.65	10,200.00	1,386.67	-1,031.24	479,521.20	722,868.19	32.316908	-103.745702
12,000.00	90.00	359.65	10,200.00	1,486.66	-1,031.85	479,621.20	722,867.58	32.317183	-103.745703
12,100.00	90.00	359.65	10,200.00	1,586.66	-1,032.46	479,721.20	722,866.96	32.317458	-103.745703
12,200.00	90.00	359.65	10,200.00	1,686.66	-1,033.08	479,821.20	722,866.35	32.317733	-103.745703
12,300.00	90.00	359.65	10,200.00	1,786.66	-1,033.69	479,921.20	722,865.74	32.318008	-103.745703
12,400.00	90.00	359.65	10,200.00	1,886.66	-1,034.30	480,021.19	722,865.13	32.318283	-103.745703
12,500.00	90.00	359.65	10,200.00	1,986.65	-1,034.91	480,121.19	722,864.52	32.318558	-103.745704
12,600.00	90.00	359.65	10,200.00	2,086.65	-1,035.52	480,221.19	722,863.90	32.318832	-103.745704
12,700.00	90.00	359.65	10,200.00	2,186.65	-1,036.14	480,321.19	722,863.29	32.319107	-103.745704
12,800.00	90.00	359.65	10,200.00	2,286.65	-1,036.75	480,421.18	722,862.68	32.319382	-103.745704
12,900.00	90.00	359.65	10,200.00	2,386.65	-1,037.36	480,521.18	722,862.07	32.319657	-103.745705
13,000.00	90.00	359.65	10,200.00	2,486.64	-1,037.97	480,621.18	722,861.46	32.319932	-103.745705
13,100.00	90.00	359.65	10,200.00	2,586.64	-1,038.58	480,721.18	722,860.84	32.320207	-103.745705
13,200.00	90.00	359.65	10,200.00	2,686.64	-1,039.20	480,821.18	722,860.23	32.320482	-103.745705
13,300.00	90.00	359.65	10,200.00	2,786.64	-1,039.81	480,921.17	722,859.62	32.320757	-103.745705
13,400.00	90.00	359.65	10,200.00	2,886.64	-1,040.42	481,021.17	722,859.01	32.321031	-103.745706
13,500.00	90.00	359.65	10,200.00	2,986.64	-1,041.03	481,121.17	722,858.40	32.321306	-103.745706
13,600.00	90.00	359.65	10,200.00	3,086.63	-1,041.64	481,221.17	722,857.78	32.321581	-103.745706
13,700.00	90.00	359.65	10,200.00	3,186.63	-1,042.26	481,321.17	722,857.17	32.321856	-103.745706
13,800.00	90.00	359.65	10,200.00	3,286.63	-1,042.87	481,421.16	722,856.56	32.322131	-103.745706
13,900.00	90.00	359.65	10,200.00	3,386.63	-1,043.48	481,521.16	722,855.95	32.322406	-103.745707
14,000.00	90.00	359.65	10,200.00	3,486.63	-1,044.09	481,621.16	722,855.34	32.322681	-103.745707
14,100.00	90.00	359.65	10,200.00	3,586.62	-1,044.70	481,721.16	722,854.72	32.322956	-103.745707
14,200.00	90.00	359.65	10,200.00	3,686.62	-1,045.32	481,821.16	722,854.11	32.323230	-103.745707
14,300.00	90.00	359.65	10,200.00	3,786.62	-1,045.93	481,921.15	722,853.50	32.323505	-103.745707
14,400.00	90.00	359.65	10,200.00	3,886.62	-1,046.54	482,021.15	722,852.89	32.323780	-103.745708
14,500.00	90.00	359.65	10,200.00	3,986.62	-1,047.15	482,121.15	722,852.28	32.324055	-103.745708
14,600.00	90.00	359.65	10,200.00	4,086.61	-1,047.76	482,221.15	722,851.66	32.324330	-103.745708
14,700.00	90.00	359.65	10,200.00	4,186.61	-1,048.38	482,321.15	722,851.05	32.324605	-103.745708
14,800.00	90.00	359.65	10,200.00	4,286.61	-1,048.99	482,421.14	722,850.44	32.324880	-103.745708
14,900.00	90.00	359.65	10,200.00	4,386.61	-1,049.60	482,521.14	722,849.83	32.325155	-103.745709
15,000.00	90.00	359.65	10,200.00	4,486.61	-1,050.21	482,621.14	722,849.22	32.325430	-103.745709
15,100.00	90.00	359.65	10,200.00	4,586.61	-1,050.82	482,721.14	722,848.60	32.325704	-103.745709
15,200.00	90.00	359.65	10,200.00	4,686.60	-1,051.44	482,821.14	722,847.99	32.325979	-103.745709
15,300.00	90.00	359.65	10,200.00	4,786.60	-1,052.05	482,921.13	722,847.38	32.326254	-103.745709
15,400.00	90.00	359.65	10,200.00	4,886.60	-1,052.66	483,021.13	722,846.77	32.326529	-103.745710
15,500.00	90.00	359.65	10,200.00	4,986.60	-1,053.27	483,121.13	722,846.16	32.326804	-103.745710

Database:	EDM r5000.141_Prod US	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Company:	WCDSC Permian NM	**TVD Reference:**	RKB @ 3512.10ft
Project:	Eddy County (NAD 83 NM Eastern)	**MD Reference:**	RKB @ 3512.10ft
Site:	Sec 11-T23S-R31E	**North Reference:**	Grid
Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,600.00	90.00	359.65	10,200.00	5,086.60	-1,053.88	483,221.13	722,845.54	32.327079	-103.745710
15,700.00	90.00	359.65	10,200.00	5,186.59	-1,054.50	483,321.12	722,844.93	32.327354	-103.745710
15,800.00	90.00	359.65	10,200.00	5,286.59	-1,055.11	483,421.12	722,844.32	32.327629	-103.745710
15,900.00	90.00	359.65	10,200.00	5,386.59	-1,055.72	483,521.12	722,843.71	32.327903	-103.745711
16,000.00	90.00	359.65	10,200.00	5,486.59	-1,056.33	483,621.12	722,843.10	32.328178	-103.745711
16,100.00	90.00	359.65	10,200.00	5,586.59	-1,056.94	483,721.12	722,842.48	32.328453	-103.745711
16,200.00	90.00	359.65	10,200.00	5,686.59	-1,057.56	483,821.11	722,841.87	32.328728	-103.745711
16,300.00	90.00	359.65	10,200.00	5,786.58	-1,058.17	483,921.11	722,841.26	32.329003	-103.745712
16,400.00	90.00	359.65	10,200.00	5,886.58	-1,058.78	484,021.11	722,840.65	32.329278	-103.745712
16,500.00	90.00	359.65	10,200.00	5,986.58	-1,059.39	484,121.11	722,840.04	32.329553	-103.745712
16,600.00	90.00	359.65	10,200.00	6,086.58	-1,060.00	484,221.11	722,839.42	32.329828	-103.745712
16,700.00	90.00	359.65	10,200.00	6,186.58	-1,060.62	484,321.10	722,838.81	32.330102	-103.745712
16,800.00	90.00	359.65	10,200.00	6,286.57	-1,061.23	484,421.10	722,838.20	32.330377	-103.745713
16,900.00	90.00	359.65	10,200.00	6,386.57	-1,061.84	484,521.10	722,837.59	32.330652	-103.745713
17,000.00	90.00	359.65	10,200.00	6,486.57	-1,062.45	484,621.10	722,836.98	32.330927	-103.745713
17,100.00	90.00	359.65	10,200.00	6,586.57	-1,063.06	484,721.10	722,836.36	32.331202	-103.745713
17,200.00	90.00	359.65	10,200.00	6,686.57	-1,063.68	484,821.09	722,835.75	32.331477	-103.745713
17,300.00	90.00	359.65	10,200.00	6,786.56	-1,064.29	484,921.09	722,835.14	32.331752	-103.745714
17,400.00	90.00	359.65	10,200.00	6,886.56	-1,064.90	485,021.09	722,834.53	32.332027	-103.745714
17,500.00	90.00	359.65	10,200.00	6,986.56	-1,065.51	485,121.09	722,833.92	32.332301	-103.745714
17,600.00	90.00	359.65	10,200.00	7,086.56	-1,066.12	485,221.09	722,833.30	32.332576	-103.745714
17,700.00	90.00	359.65	10,200.00	7,186.56	-1,066.74	485,321.08	722,832.69	32.332851	-103.745714
17,800.00	90.00	359.65	10,200.00	7,286.56	-1,067.35	485,421.08	722,832.08	32.333126	-103.745715
17,900.00	90.00	359.65	10,200.00	7,386.55	-1,067.96	485,521.08	722,831.47	32.333401	-103.745715
18,000.00	90.00	359.65	10,200.00	7,486.55	-1,068.57	485,621.08	722,830.86	32.333676	-103.745715
18,100.00	90.00	359.65	10,200.00	7,586.55	-1,069.18	485,721.07	722,830.24	32.333951	-103.745715
18,200.00	90.00	359.65	10,200.00	7,686.55	-1,069.80	485,821.07	722,829.63	32.334226	-103.745715
18,300.00	90.00	359.65	10,200.00	7,786.55	-1,070.41	485,921.07	722,829.02	32.334500	-103.745716
18,400.00	90.00	359.65	10,200.00	7,886.54	-1,071.02	486,021.07	722,828.41	32.334775	-103.745716
18,500.00	90.00	359.65	10,200.00	7,986.54	-1,071.63	486,121.07	722,827.80	32.335050	-103.745716
18,600.00	90.00	359.65	10,200.00	8,086.54	-1,072.24	486,221.06	722,827.18	32.335325	-103.745716
18,700.00	90.00	359.65	10,200.00	8,186.54	-1,072.86	486,321.06	722,826.57	32.335600	-103.745716
18,800.00	90.00	359.65	10,200.00	8,286.54	-1,073.47	486,421.06	722,825.96	32.335875	-103.745717
18,900.00	90.00	359.65	10,200.00	8,386.53	-1,074.08	486,521.06	722,825.35	32.336150	-103.745717
19,000.00	90.00	359.65	10,200.00	8,486.53	-1,074.69	486,621.06	722,824.74	32.336425	-103.745717
19,100.00	90.00	359.65	10,200.00	8,586.53	-1,075.30	486,721.05	722,824.13	32.336699	-103.745717
19,200.00	90.00	359.65	10,200.00	8,686.53	-1,075.92	486,821.05	722,823.51	32.336974	-103.745717
19,300.00	90.00	359.65	10,200.00	8,786.53	-1,076.53	486,921.05	722,822.90	32.337249	-103.745718
19,400.00	90.00	359.65	10,200.00	8,886.53	-1,077.14	487,021.05	722,822.29	32.337524	-103.745718
19,500.00	90.00	359.65	10,200.00	8,986.52	-1,077.75	487,121.05	722,821.68	32.337799	-103.745718
19,600.00	90.00	359.65	10,200.00	9,086.52	-1,078.36	487,221.04	722,821.07	32.338074	-103.745718
19,700.00	90.00	359.65	10,200.00	9,186.52	-1,078.98	487,321.04	722,820.45	32.338349	-103.745718
19,800.00	90.00	359.65	10,200.00	9,286.52	-1,079.59	487,421.04	722,819.84	32.338624	-103.745719
19,900.00	90.00	359.65	10,200.00	9,386.52	-1,080.20	487,521.04	722,819.23	32.338898	-103.745719
20,000.00	90.00	359.65	10,200.00	9,486.51	-1,080.81	487,621.04	722,818.62	32.339173	-103.745719
20,100.00	90.00	359.65	10,200.00	9,586.51	-1,081.42	487,721.03	722,818.01	32.339448	-103.745719
20,200.00	90.00	359.65	10,200.00	9,686.51	-1,082.04	487,821.03	722,817.39	32.339723	-103.745720
20,300.00	90.00	359.65	10,200.00	9,786.51	-1,082.65	487,921.03	722,816.78	32.339998	-103.745720
20,400.00	90.00	359.65	10,200.00	9,886.51	-1,083.26	488,021.03	722,816.17	32.340273	-103.745720
20,464.50	90.00	359.65	10,200.00	9,951.01	-1,083.65	488,085.53	722,815.77	32.340450	-103.745720
Last Take Point @ 20465' MD, 100' FNL, 1750' FEL									
20,465.86	90.00	359.65	10,200.00	9,952.37	-1,083.66	488,086.89	722,815.77	32.340454	-103.745720
PBHL; 100' FNL, 1750' FEL									

Database:	EDM r5000.141_Prod US	**Local Co-ordinate Reference:**	Well Belloq 11-2 Fed State Com 223H
Company:	WCDSC Permian NM	**TVD Reference:**	RKB @ 3512.10ft
Project:	Eddy County (NAD 83 NM Eastern)	**MD Reference:**	RKB @ 3512.10ft
Site:	Sec 11-T23S-R31E	**North Reference:**	Grid
Well:	Belloq 11-2 Fed State Com 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Belloq 11-2 Fed	0.00	0.00	0.00	9,952.37	-1,083.66	488,086.89	722,815.77	32.340454	-103.745720
- plan misses target center by 10011.19ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
9,736.26	9,627.04	-450.00	-1,020.00	KOP @ 9736' MD, 50' FSL, 1750' FEL
9,977.40	9,861.13	-400.00	-1,020.31	First Take Point @ 9977' MD, 100' FSL, 1750' FEL
20,464.50	10,200.00	9,951.01	-1,083.65	Last Take Point @ 20465' MD, 100' FNL, 1750' FEL
20,465.86	10,200.00	9,952.37	-1,083.66	PBHL; 100' FNL, 1750' FEL

Devon Energy

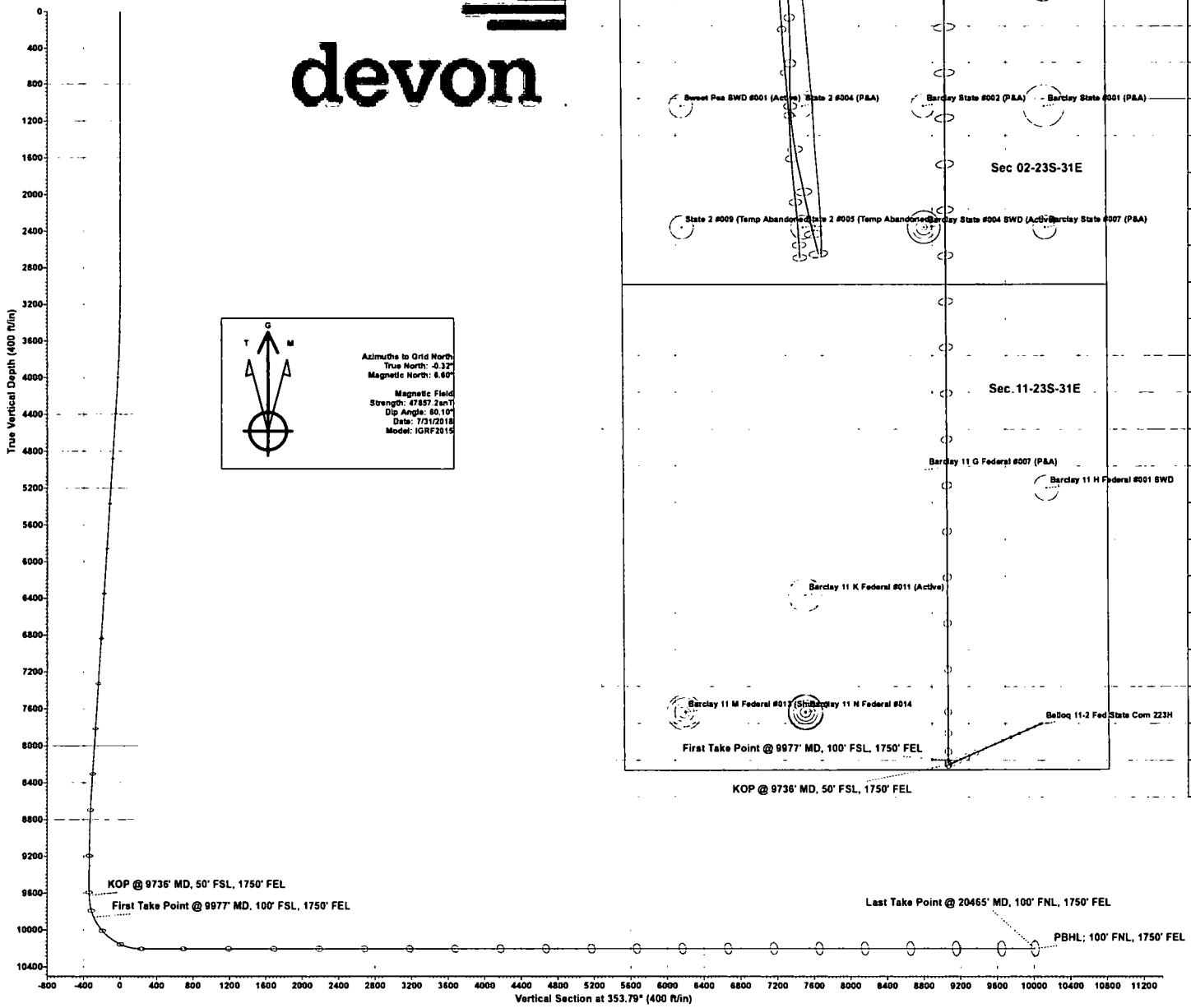
WELL DETAILS: Belloq 11-2 Fed State Com 223H

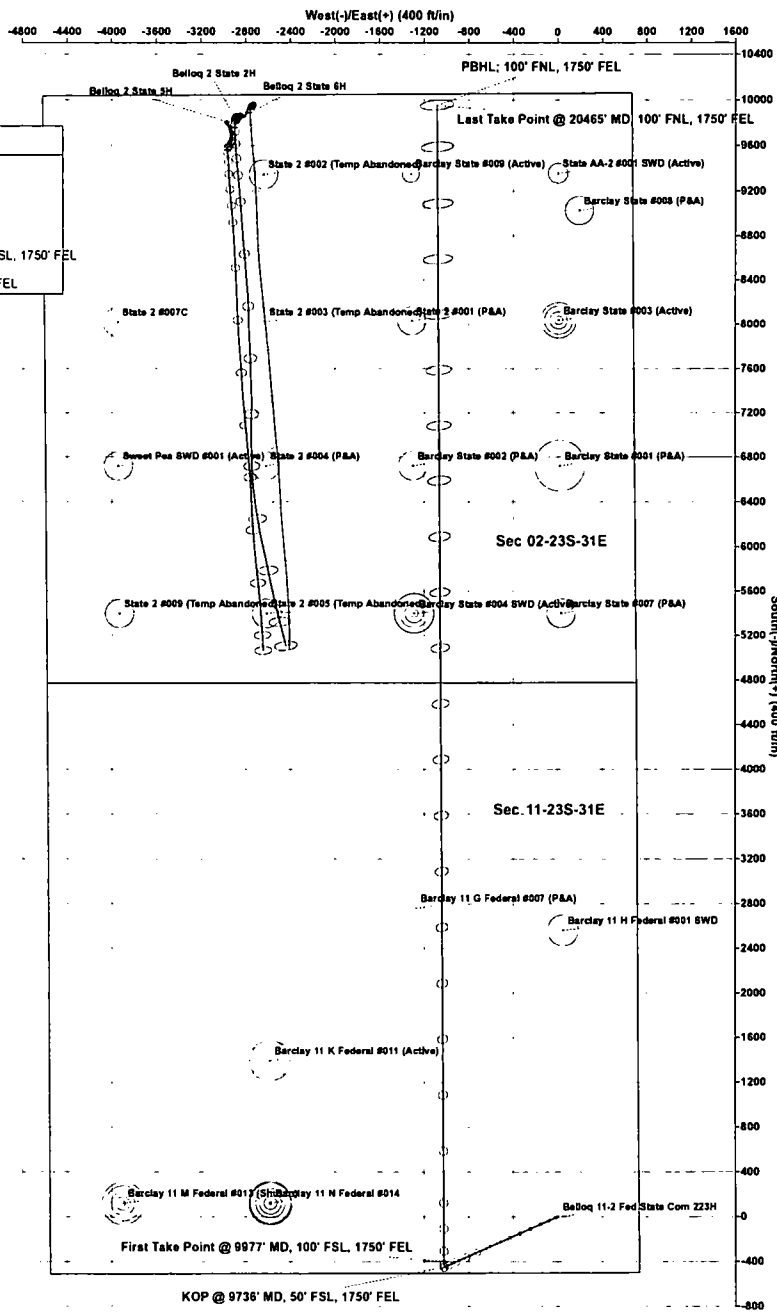
RKB @ 3512.10ft
3487.10

Northing	Easting	Latitude	Longitude
478134.54	723899.43	32.313081	-103.742389

SECTION DETAILS Permit Plan 1

	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect	Annotation
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	
	4192.31	11.92	246.19	4183.73	-49.89	-113.09	1.00	-37.36	
	8591.34	11.92	246.19	8487.85	-416.74	-944.60	0.00	-312.04	
5	9386.22	0.00	0.00	9277.00	-450.00	-1020.00	1.50	-336.95	
6	9736.26	0.00	0.00	9627.04	-450.00	-1020.00	0.00	-336.95	KOP @ 9736' MD, 50' FSL, 1750' FEL
7	10636.26	90.00	359.65	10200.00	122.95	-1023.51	10.00	233.02	
8	20465.86	90.00	359.65	10200.00	9952.37	-1083.66	0.00	10011.19	PBHL; 100' FNL, 1750' FEL





Devon Energy, Belloq 11-2 Fed State Com 223H

1. Geologic Formations

TVD of target	10200	Pilot hole depth	N/A
MD at TD:	20465	Deepest expected fresh water:	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	764		
Salado	1129		
Base of Salt	4243		
Delaware	4482		
Bell Canyon	4519		
Cherry Canyon	5412		
Brushy Canyon	6659		
Lower Brushy	8059		
1BSLM	8354		
1BSSS	9429		
2BSLM	9644		
2BSSS	9929		
2BSSS UPR	10114		
2BSSS MID	10234		
2BSSS LWR	10376		

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

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (PPF)	Grade	Conn.
	From	To				
17.5"	0	800'	13.375"	48	H-40	STC
12.25"	0	6,000'	9.625"	40	J-55	BTC
8.75"	0	TD	5.5"	17	P-110	BTC
BLM Minimum Safety Factor				Collapse: 1.125	Burst: 1.00	Tension: 1.6 Dry 1.8 Wet

- All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h Must have table for contingency casing
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed.
- Variance is requested for collapse rating on intermediate casing. Operator will keep pipe full while running casing. No losses are expected in subsequent hole section.
- Int casing shoe will be selected based on drilling data, gamma, and flows experienced while drilling. Setting depth with be revised accordingly if needed.
- A variance is requested to wave the centralizer requirement for the intermediate and production casing strings if drilling conditions dictate

Devon Energy, Belloq 11-2 Fed State Com 223H

	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 (3-String Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	H_20 (gal/sk)	Yld (ft3/sack)	Slurry Description
Surface	835	Surf	13.2	6.33	1.33	Lead: Class C Cement + additives
Int	1287	Surf	9	20.6	1.94	Lead: Class C Cement + additives
	190	500' above shoe	13.2	6.42	1.33	Tail: Class H / C + additives
Production	437	500' tieback	9	20.6	1.94	Lead: Class H / C + additives
	1871	KOP	13.2	5.31	1.6	Tail: Class H / C + additives

If a DV tool is ran the depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Slurry weights will be adjusted based on estimated fracture gradient of the formation. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. If cement is not returned to surface during the primary cement job on the surface casing string, a planned top job will be conducted immediately after completion of the primary job.

Casing String	% Excess
Surface	100%
Intermediate	50%
Production	10%

4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
Int 1	13-5/8"	3M	Annular	X	50% of rated working pressure
			Blind Ram		5M
			Pipe Ram		
			Double Ram		
			Other*		
Production	13-5/8"	5M	Annular (5M)	X	50% of rated working pressure
			Blind Ram		5M
			Pipe Ram		
			Double Ram	X	
			Other *		
			Annular		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other *		

5. Mud Program

6. Depth		Type	Weight (ppg)	Vis	Water Loss
From	To				
0	800'	FW	8.5 – 9.0	28-34	N/C
800'	6000'	Brine	10 – 10.5	28-34	N/C
6,000'	TD	WBM	8.5 – 9.0	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.	
X	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.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned		Interval
	Resistivity	
	Density	
X	CBL	Production casing
X	Mud log	KOP to TD

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4774 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

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

Is this a walking operation? Potentially

1. If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
2. The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
3. The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

1. Spudder rig will move in and drill surface hole.
    a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.
2. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
3. The wellhead will be installed and tested once the 10 ¾" surface casing is cut off and the WOC time has been reached.
4. A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
5. Spudder rig operations is expected to take 4-5 days per well on a multi well pad.
6. The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
7. Drilling operations will be performed with the drilling rig. At that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
    a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

_x_ Directional Plan

___ Other, describe

devon

Commitment Runs Deep

Design Plan
Operation and Maintenance Plan
Closure Plan

SENM - Closed Loop Systems
June 2010

I. Design Plan

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

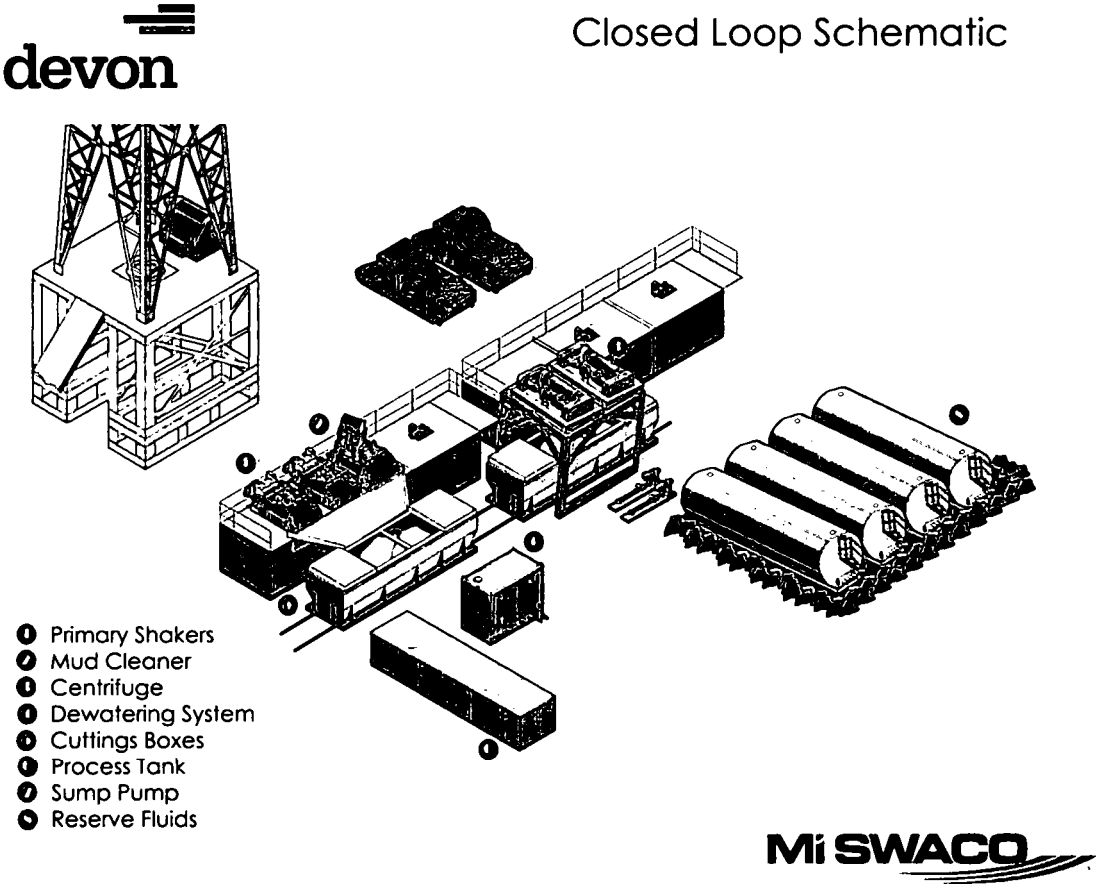
Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

II. Operations and Maintenance Plan

Primary Shakers: The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

Mud Cleaner: The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



Centrifuges: The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

Dewatering System: The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

Cuttings Boxes: Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

Process Tank: (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

Sump and Sump Pump: The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

Reserve Fluids (Tank Farm): A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

III. Closure Plan

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.

A multibowl wellhead may be 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.

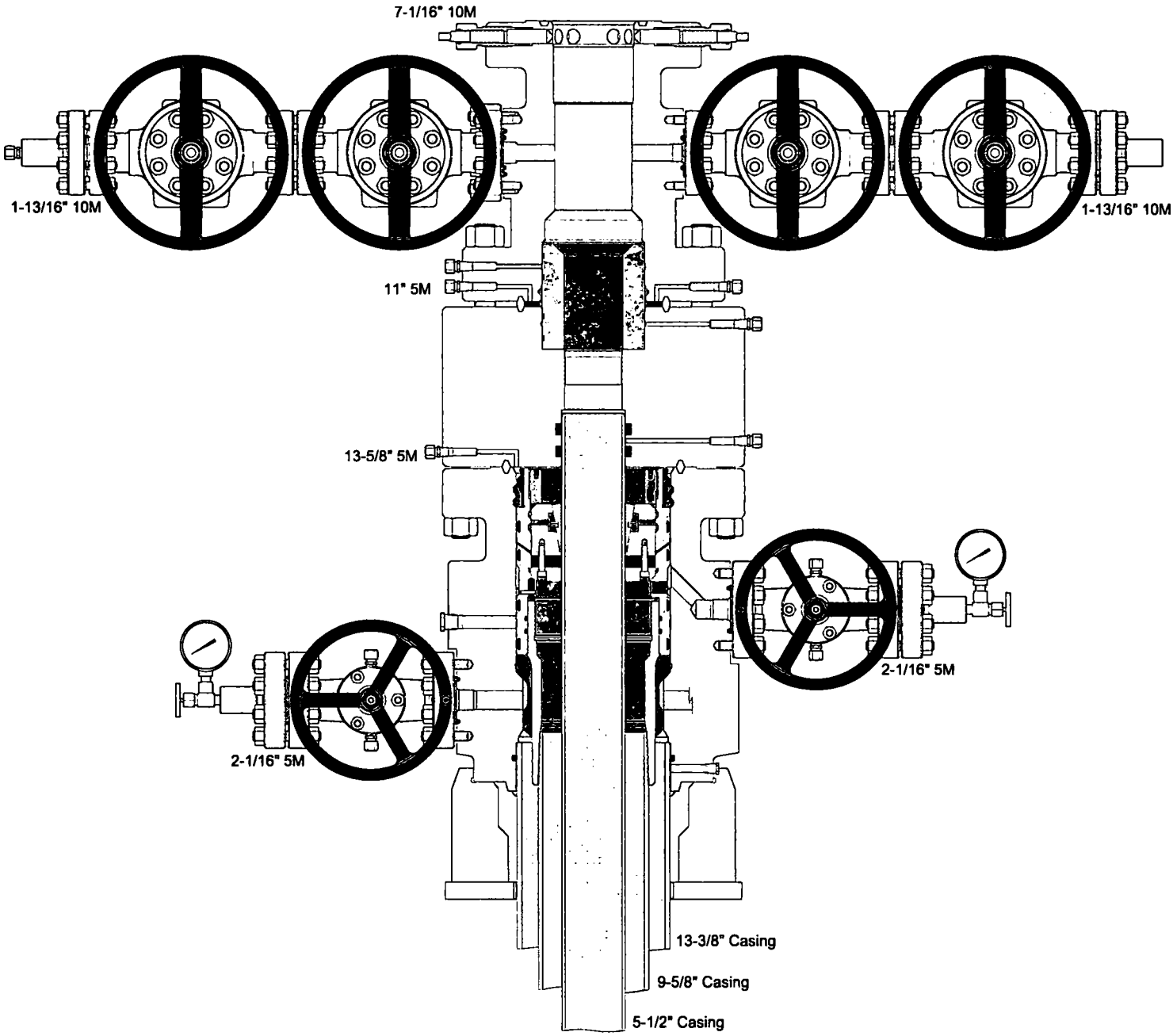
Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.

- Wellhead will be installed by wellhead representatives.
- If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- Wellhead representative will install the test plug for the initial BOP test.
- Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 3M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time.
- If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted.
- Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating.
- Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.
After running the 9-5/8' intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon's proposed wellhead manufactures will be FMC Technologies, Cactus Wellhead, or Cameron.


7-1/16" 10M
1-13/16" 10M
1-13/16" 10M
11" 5M
13-5/8" 5M
2-1/16" 5M
2-1/16" 5M
13-3/8" Casing
9-5/8" Casing
5-1/2" Casing

Continental CONTITECH

Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly It is good practice to use lifting & safety equipment but not mandatory

Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

Robin Hodgson
Sales Manager
ContiTech Beattie Corp

ContiTech Beattie Corp,
11535 Brittmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
www.contitechbeattie.com

RIG 212

PHOENIX

QUALITY DOCUMENT

PHOENIX RUBBER INDUSTRIAL LTD.

6728 Szeged, Budapesti út 10. Hungary • H-6701 Szeged, P. O. Box 152
Phone: (3662) 566-737 • Fax: (3662) 566-738

SALES & MARKETING: H-1092 Budapest, Ráday u. 42-44. Hungary • H-1440 Budapest, P. O. Box 26
Phone: (361) 456-4200 · Fax: (361) 217-2972, 456-4273 · www.taurusemerge.hu

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	552	
PURCHASER:	Phoenix Beattie Co.			P.O. N°:	1519FA-871	
PHOENIX RUBBER order N°:	170466	HOSE TYPE:	3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	34128	NOMINAL / ACTUAL LENGTH:		11,43 m		
W.P. 68,96 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration:	60	min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 25 MPa

COUPLINGS

Type	Serial N°	Quality	Heat N°
3" coupling with	720 719	AISI 4130	C7626
4 1/16" Flange end		AISI 4130	47357

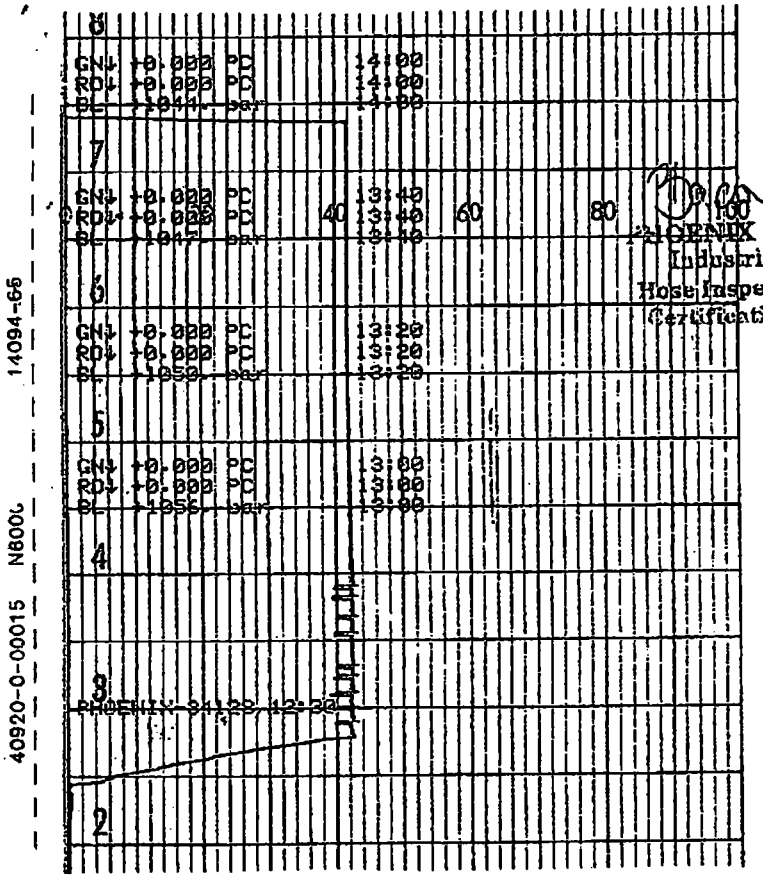
API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

Date:	Inspector	Quality Control
29. April. 2002.		PHOENIX RUBBER Industrial Ltd. Hose Inspection and Verification Dept.

VERIFIED TRUE COPY
PHOENIX RUBBER Q.C.



PHOENIX RUBBER
Industrial Ltd.
Hose Inspection and
Certification Dept.

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PHOENIX RUBBER Q.C.

APD ID: 10400020763 **Submission Date:** 08/25/2017

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

BELLOQ_11_2_FED_STATE_COM_223H_EXISITING_RD_20180814131633.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT **Row(s) Exist?** NO

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

Existing Road Improvement Description: Improve road to accommodate Drilling and Completion operations.

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

BELLOQ_11_2_FED_STATE_COM_223H_ACCESS_RD_20180814131703.pdf

New road type: LOCAL

Length: 1420 Feet **Width (ft.):** 30

Max slope (%): 6 **Max grade (%):** 4

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Water Drainage Ditch

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: GRAVEL

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: See attached Interim reclamation diagram.

Access other construction information:

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: na

Road Drainage Control Structures (DCS) description: na

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

BELLOQ_FED_STATE_COM_223H_1mile_20180814131810.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Wells will go to BELLOQ 11 CTB 1 production facility. Please refer to CTB plat.

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Water source use type: STIMULATION **Water source type:** OTHER

Describe type: Fresh Water

Source latitude: **Source longitude:**

Source datum:

Water source permit type: OTHER

Source land ownership: FEDERAL

Water source transport method: PIPELINE

Source transportation land ownership: STATE

Water source volume (barrels): 135000 **Source volume (acre-feet):** 17.400568

Source volume (gal): 5670000

Water source and transportation map:

BELLOQ_11_2_FED_STATE_COM_223H_WATER_X_MAP_20180814131921.pdf

Water source comments: The attached Water Transfer Map is a proposal only and the final route and documentation will be provided by a Devon contractor prior to installation. When available Devon will always follow existing disturbance.
New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Section 6 - Construction Materials

Construction Materials description: Dirt fill and caliche will be used to construct well pad. Map attached.

Construction Materials source location attachment:

BELLOQ_11_2_FED_STATE_COM_223H_Caliche_Map_20180814131940.pdf

Section 7 - Methods for Handling Waste

Waste type: PRODUCED WATER

Waste content description: Average produced BWPD over the first year of production

Amount of waste: 1000 barrels

Waste disposal frequency : Daily

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: OFF-LEASE INJECTION **Disposal location ownership:** PRIVATE

Disposal type description:

Disposal location description: Multiple methods for handling waste will be utilized. Via trucking, Dvn owned disposal system and or third party pipeline take away.

Waste type: COMPLETIONS/STIMULATION

Waste content description: Flow back water during completion operations.

Amount of waste: 3000 barrels

Waste disposal frequency : One Time Only

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Various disposal locations in Lea and Eddy counties.

Waste type: FLOWBACK

Waste content description: Average produced BWPD over the flowback period (first 30 days of production).

Amount of waste: 2000 barrels

Waste disposal frequency : Daily

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: OFF-LEASE INJECTION **Disposal location ownership:** STATE

Disposal type description:

Disposal location description: Produced water during flowback will be disposed of at various disposals in Lea and Eddy County.

Waste type: DRILLING

Waste content description: Water Based Cuttings

Amount of waste: 2073 barrels

Waste disposal frequency : Daily

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL **Disposal location ownership:** COMMERCIAL FACILITY

Disposal type description:

Disposal location description: All cuttings will disposed of at R360, Sundance, or equivalent.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Belloq_11_2_Fed_State_Com_223H_RIG_LAYOUT_20180814132035.pdf

Comments:

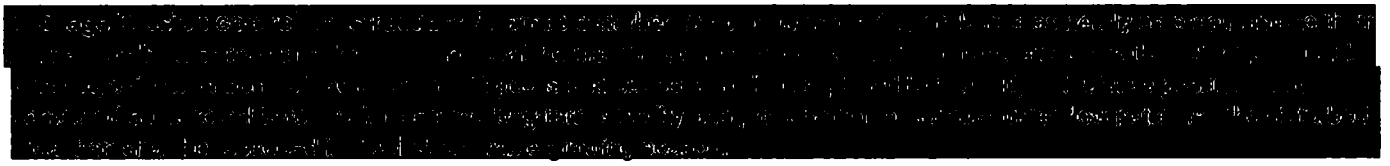
Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:** BELLOQ WELL PAD

Multiple Well Pad Number: 4

Recontouring attachment:

BELLOQ_11_2_FED_STATE_COM_223H_RECLAMATION_20180814132053.pdf



Wellpad long term disturbance (acres): 2.684 **Wellpad short term disturbance (acres):** 2.076

Access road long term disturbance (acres): 0.978 **Access road short term disturbance (acres):** 0

Pipeline long term disturbance (acres): 5.74 **Pipeline short term disturbance (acres):** 0

Other long term disturbance (acres): 0 **Other short term disturbance (acres):** 0

Total long term disturbance: 9.402 **Total short term disturbance:** 2.076

Disturbance Comments:

Reconstruction method: Operator will use Best Management Practices"BMP" to mechanically recontour to obtain the desired outcome.
Topsoil redistribution: Topsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns.
Soil treatment: Topsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns.
Existing Vegetation at the well pad: Shinnery, yucca, grasses and mesquite.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Shinnery, yucca, grasses and mesquite.

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: Shinnery, yucca, grasses and mesquite.

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Shinnery, yucca, grasses and mesquite.

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

First Name: JACOB **Last Name:** OCHOA

Phone: (575)748-9934 **Email:** JACOB.OCHOA@DVN.COM

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: Maintain weeds on an as need basis.

Weed treatment plan attachment:

Monitoring plan description: Monitor as needed.

Monitoring plan attachment:

Success standards: N/A

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: PIPELINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: BELLOQ 11-2 FED STATE COM **Well Number:** 223H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

[redacted]

ROW Type(s):

ROW Applications

[redacted]

Use a previously conducted onsite? YES

[redacted]

Other SUPO Attachment

Belloq_11_2_Fed_State_Com_223H_FLOWLINES_20180814133126.pdf

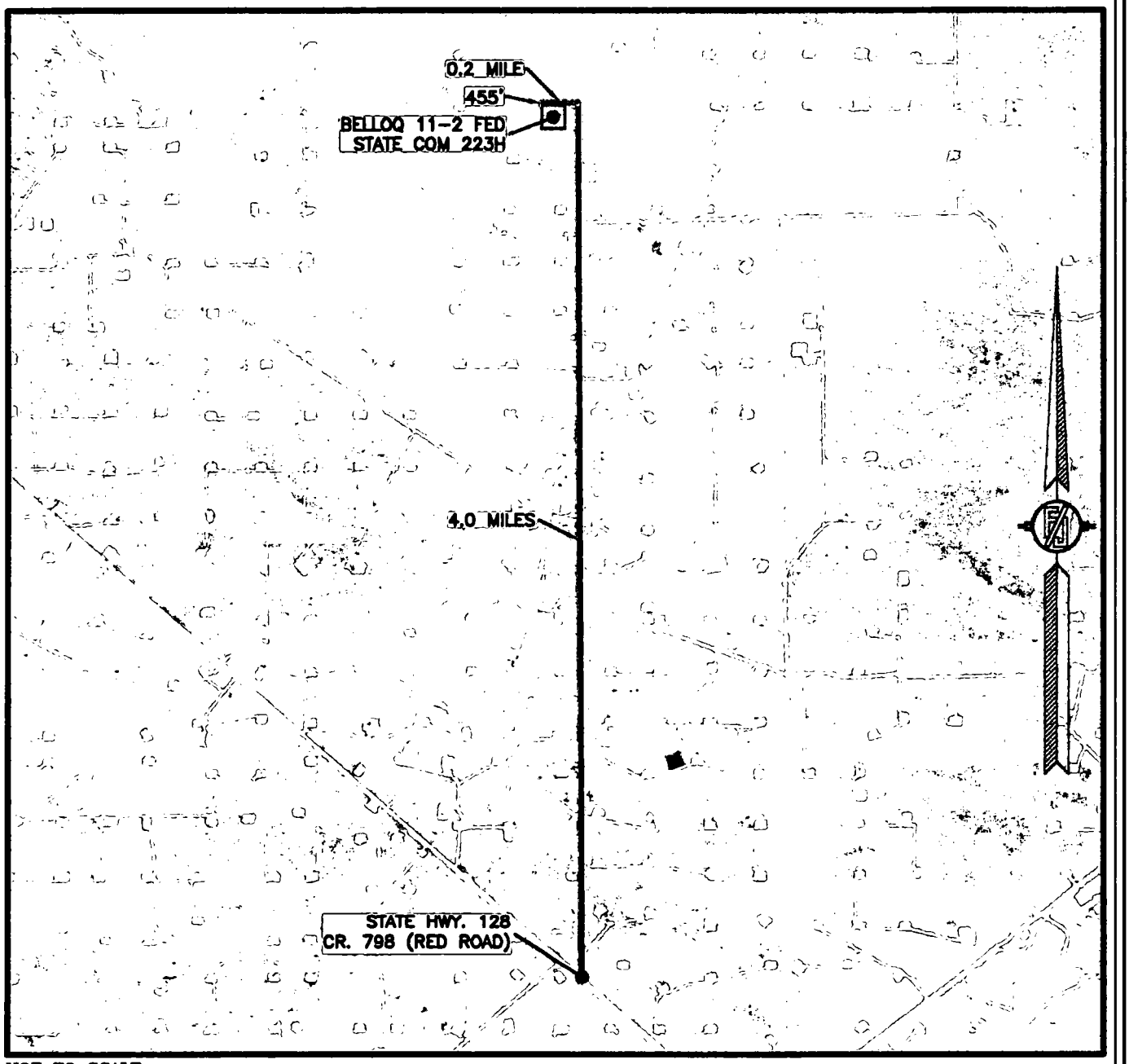
BELLOQ_234H___CTB_ACCESS_20180814133133.pdf

BELLOQ_11_CTB_1_20180814133140.pdf

BELLOQ_11_2_FED_STATE_COM_223H_EL_20180814133142.pdf

SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL ACCESS ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
NOV. 2017

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

LOCATED 500 FT. FROM THE SOUTH LINE
AND 730 FT. FROM THE EAST LINE OF
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

SURVEY NO. 6188B

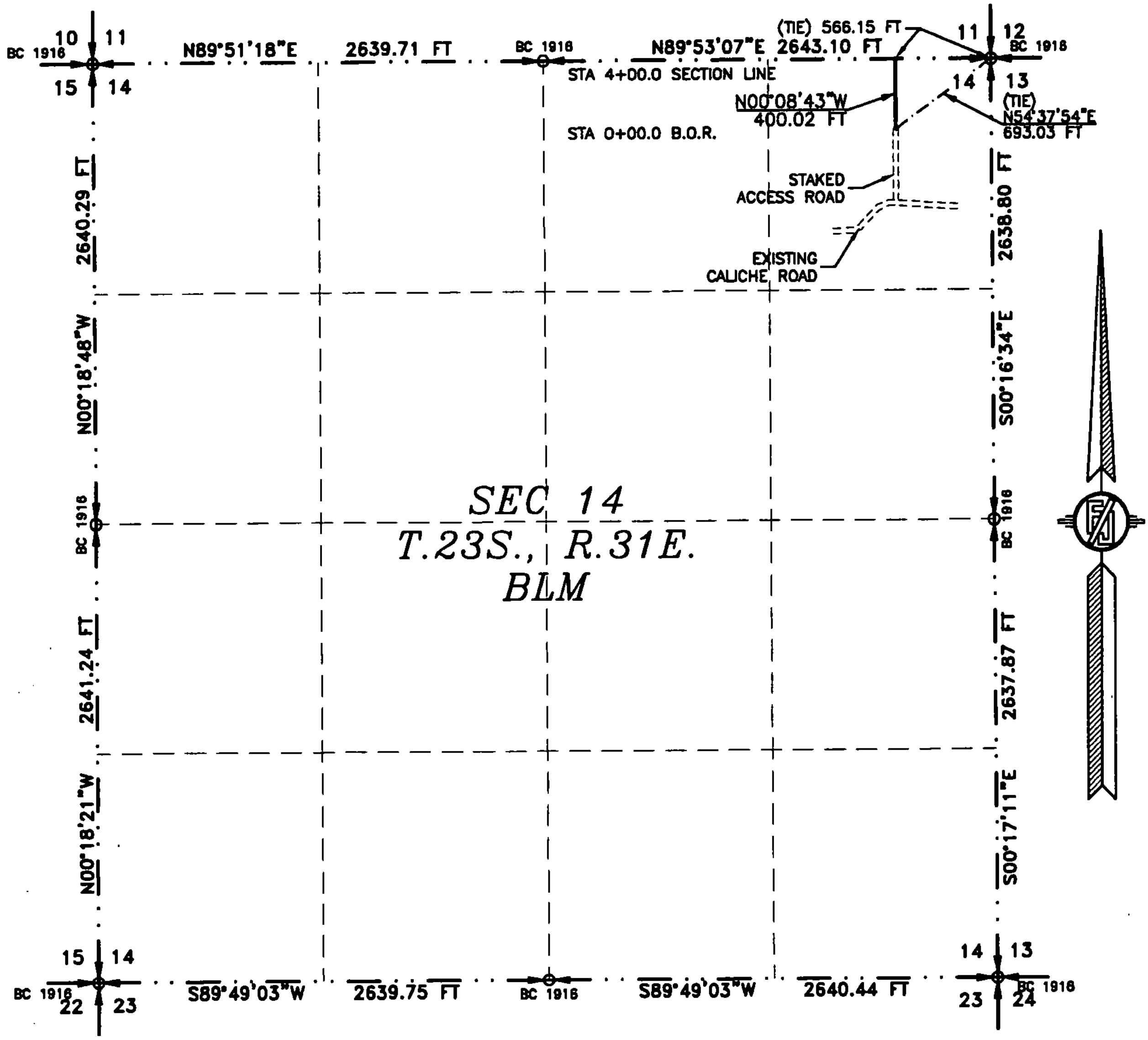
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018



SEE NEXT SHEET (2-4) FOR DESCRIPTION

1000 0 1000

Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12 DAY OF JULY 2018

FILIMON F. JARAMILLO PLS. 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-4

SURVEY NO. 6188B

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NE/4 NE/4 OF SAID SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE NORTHEAST CORNER OF SAID SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N54°37'54"E, A DISTANCE OF 693.03 FEET;
THENCE N00°08'43"W A DISTANCE OF 400.02 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTHEAST CORNER OF SAID SECTION 14, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N89°53'07"E, A DISTANCE OF 566.15 FEET;

SAID STRIP OF LAND BEING 400.02 FEET OR 24.24 RODS IN LENGTH, CONTAINING 0.275 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NE/4	400.02 L.F.	24.24 RODS	0.275 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 16 DAY OF JULY 2018.

FILIMON F. JARAMILLO NEW MEXICO 12797 REGISTERED PROFESSIONAL SURVEYOR

FILIMON F. JARAMILLO PLS # 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 2-4

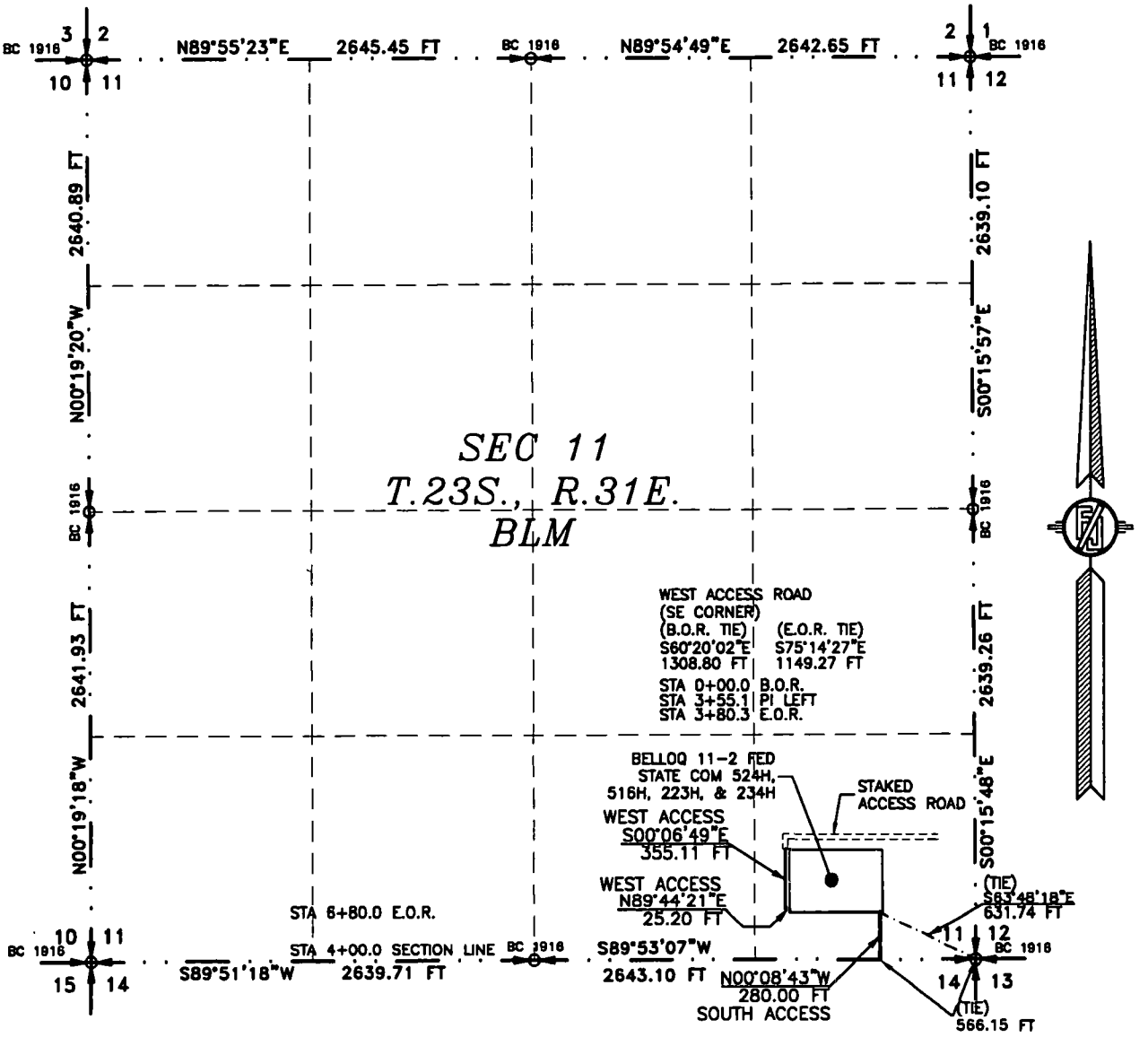
SURVEY NO. 6188B

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018



SEE NEXT SHEET (4-4) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12 DAY OF JULY 2018.

FILIMON F. JARAMILLO PLS 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 3-4

SURVEY NO. 6188B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD FOR BELLOQ 11-2 FED STATE COM 524H, 516H, 223H, & 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JULY 11, 2018

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

SOUTH ACCESS
BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N89°53'07"E, A DISTANCE OF 566.15 FEET;
THENCE N00°08'43"W A DISTANCE OF 280.00 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S63°48'18"E, A DISTANCE OF 631.74 FEET;

SAID STRIP OF LAND BEING 280.00 FEET OR 16.97 RODS IN LENGTH, CONTAINING 0.193 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	280.00 L.F.	16.97 RODS	0.193 ACRES

WEST ACCESS
BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S60°20'02"E, A DISTANCE OF 1308.80 FEET;
THENCE S00°06'49"E A DISTANCE OF 355.11 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N89°44'21"E A DISTANCE OF 25.20 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S75°14'27"E, A DISTANCE OF 1149.27 FEET;

SAID STRIP OF LAND BEING 380.31 FEET OR 23.05 RODS IN LENGTH, CONTAINING 0.262 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	380.31 L.F.	23.05 RODS	0.262 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12 DAY OF JULY 2018.

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

FILIMON F. JARAMILLO, P.S. 12797
301 SOUTH CANAL
(575) 234-3341

SHEET: 4-4

SURVEY NO. 6188B

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

PLAT

One Mile Radius Map

BELLOQ FED STATE COM 223H
WA017392937

devon

This map is for illustrative purposes only and is neither a legally recorded map nor a survey and is not intended to be used as one. Devon makes no warranty, representation, or guarantee of any kind regarding this map.

USA Contiguous Equidistant Conic
Datum: North American 1983
Created by: FME Server
Map is current as of 8/6/2018

N

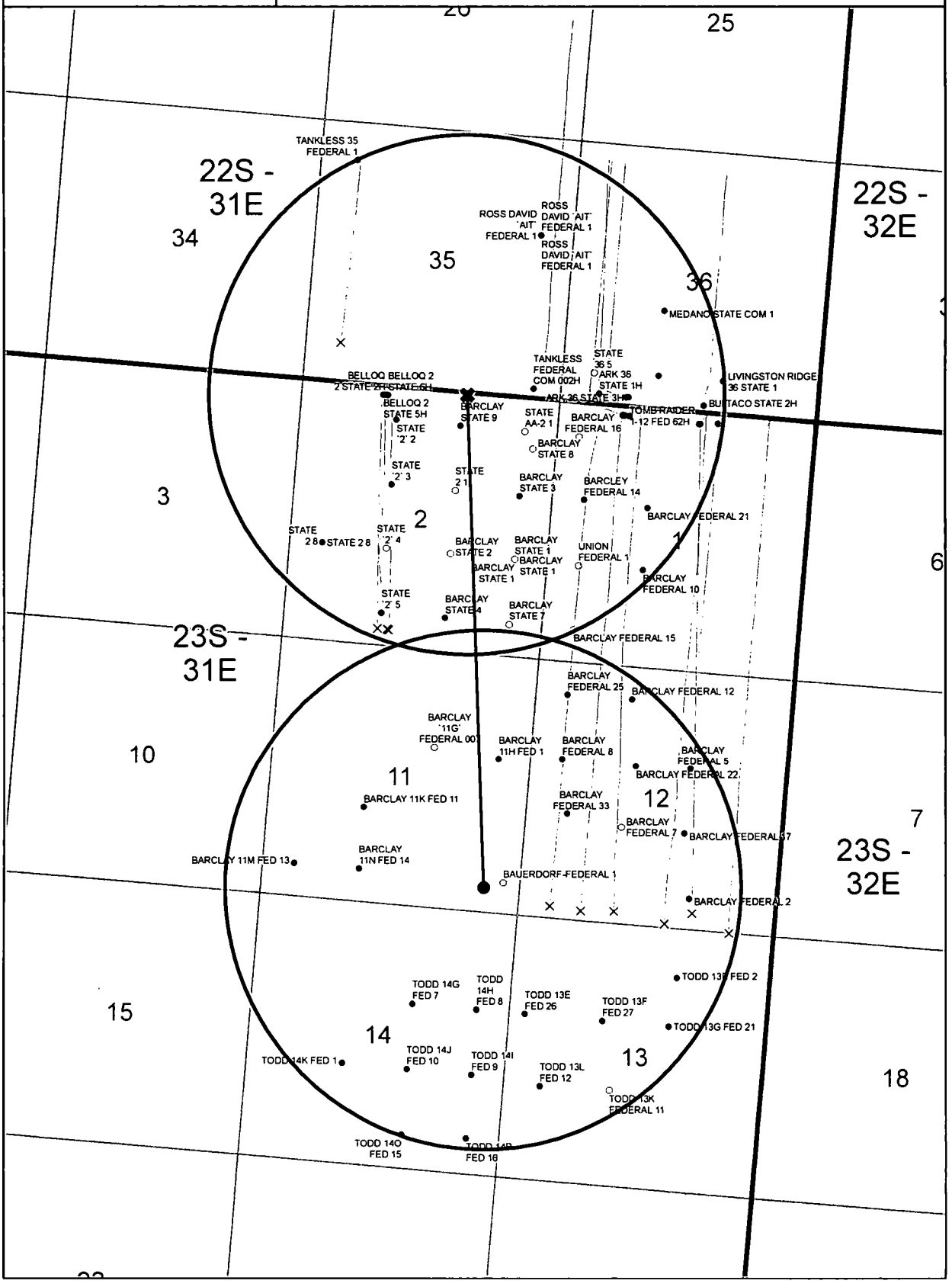
0 0.3 Miles

1 inch = 0.44 miles

TOMB RAIDER 1-12 FED 61H
Nearest wellbore to SHL: 1385 ft.

TANKLESS FEDERAL COM 002H
Nearest wellbore to BHL: 1353 ft.

- ○ Unknown SHL
- • Active SHL
- ○ Inactive SHL
- × BHL



BELLOQ 11-2 FED STATE COM 223H

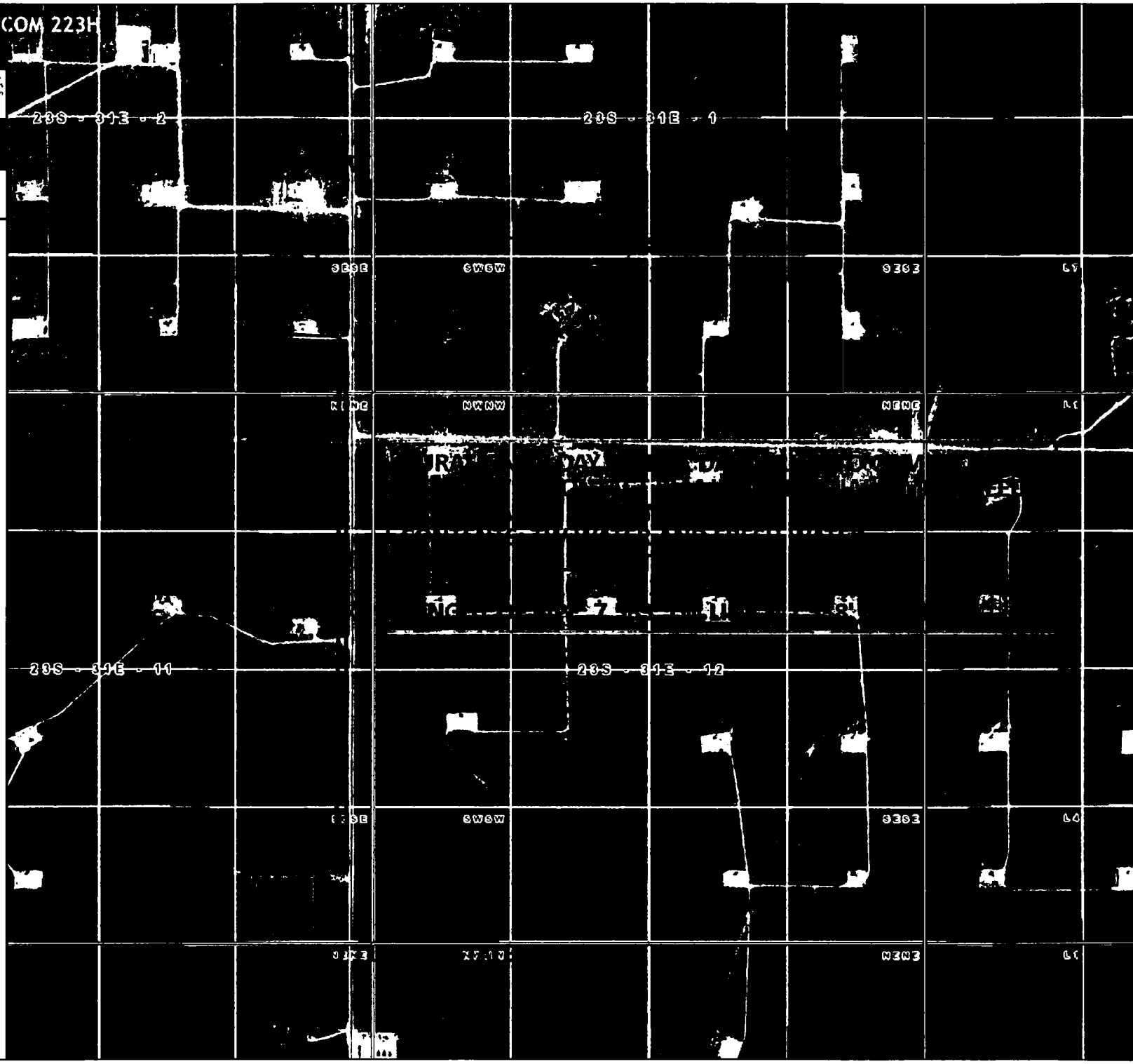
devon

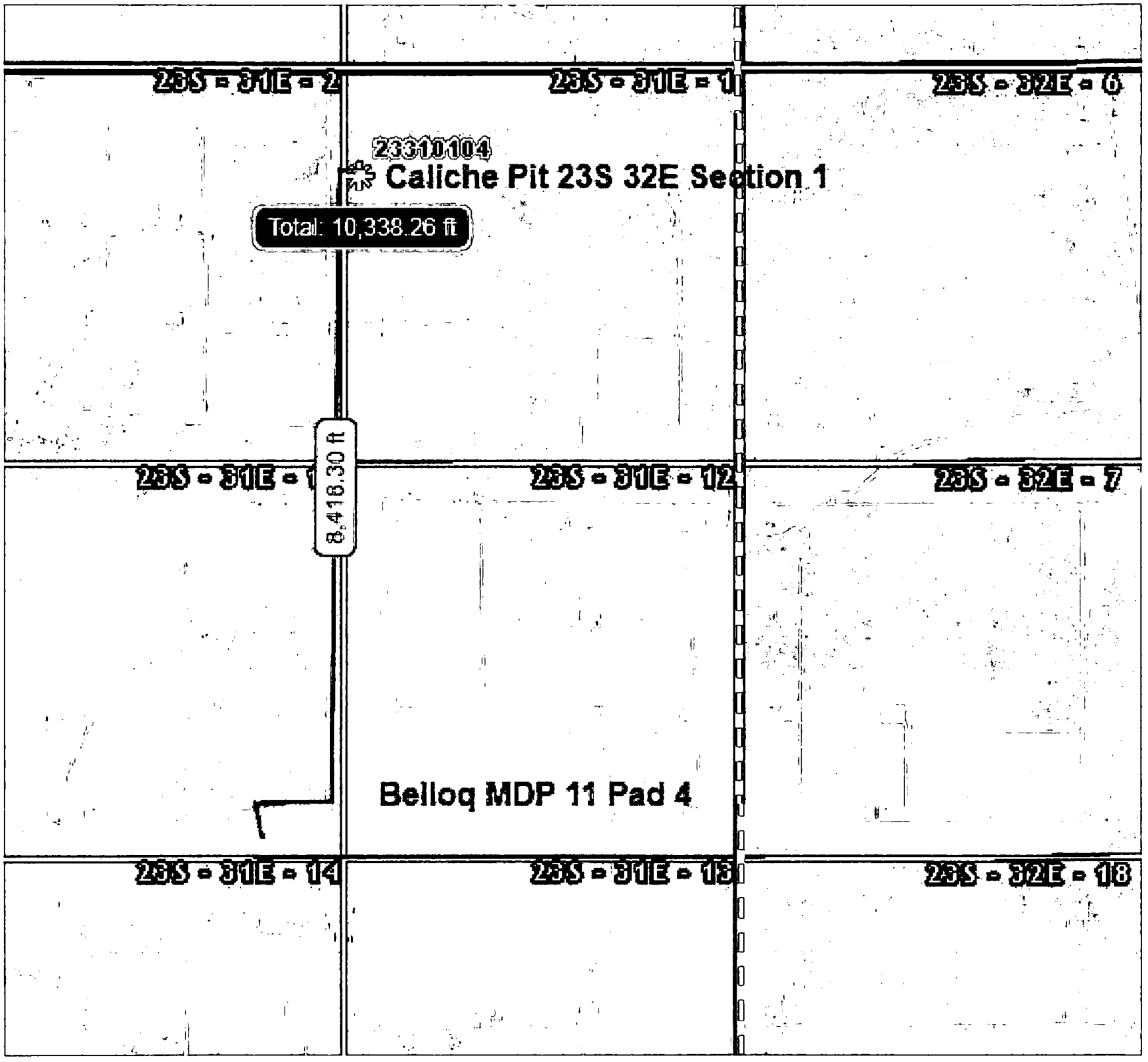
This map is for illustrative purposes only and is neither a legally recorded map nor survey and is not intended to be used as one. Devon makes no warranty, representation, or guarantee of any kind regarding this map.

WGS_1984_Web_Mercator_Auxiliary_Sphere
Prepared by: _User
Map is current as of: 01-Aug-2018

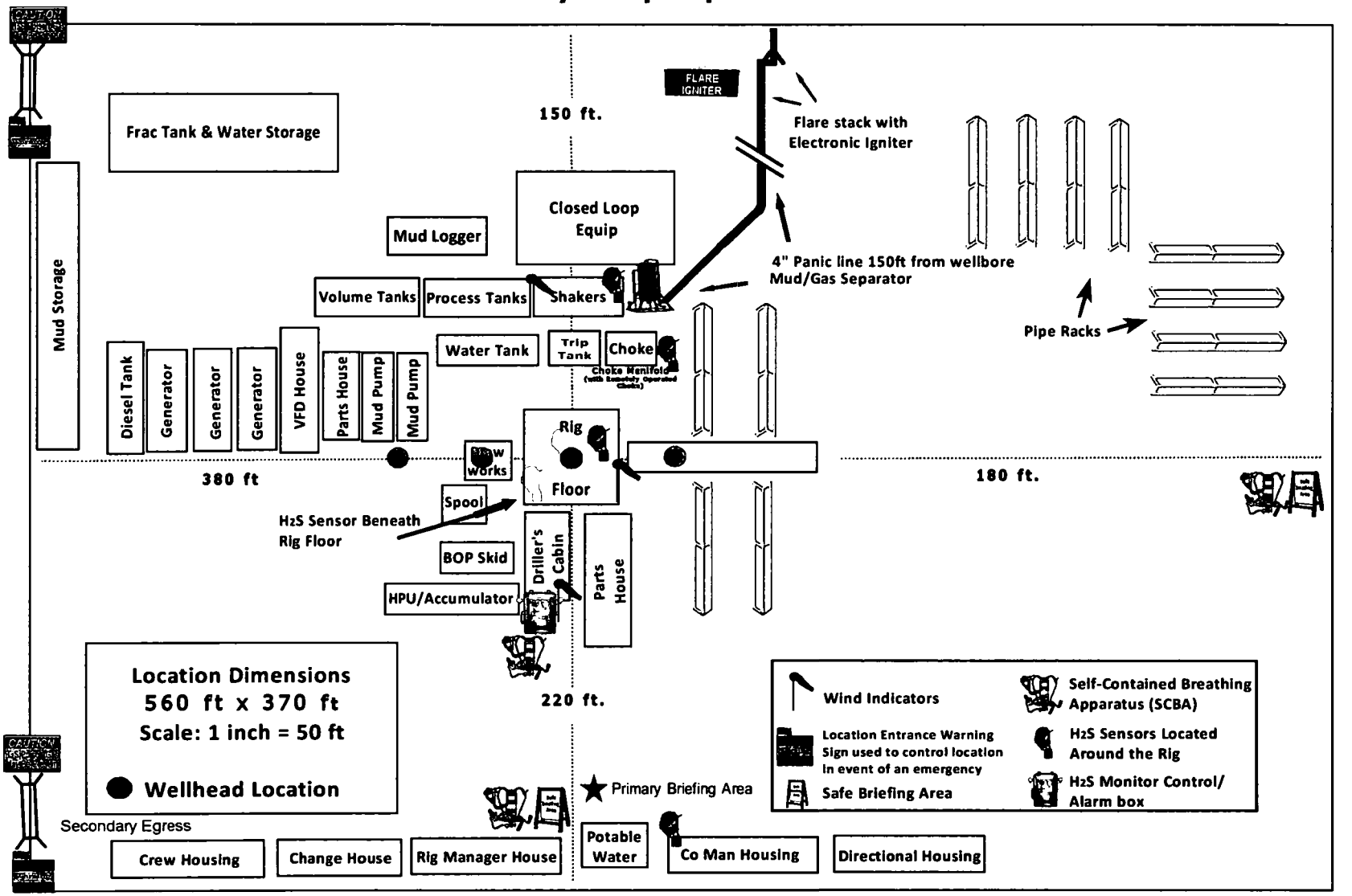
N

Miles
0 0.07 0.14 0.28 1: 14,228

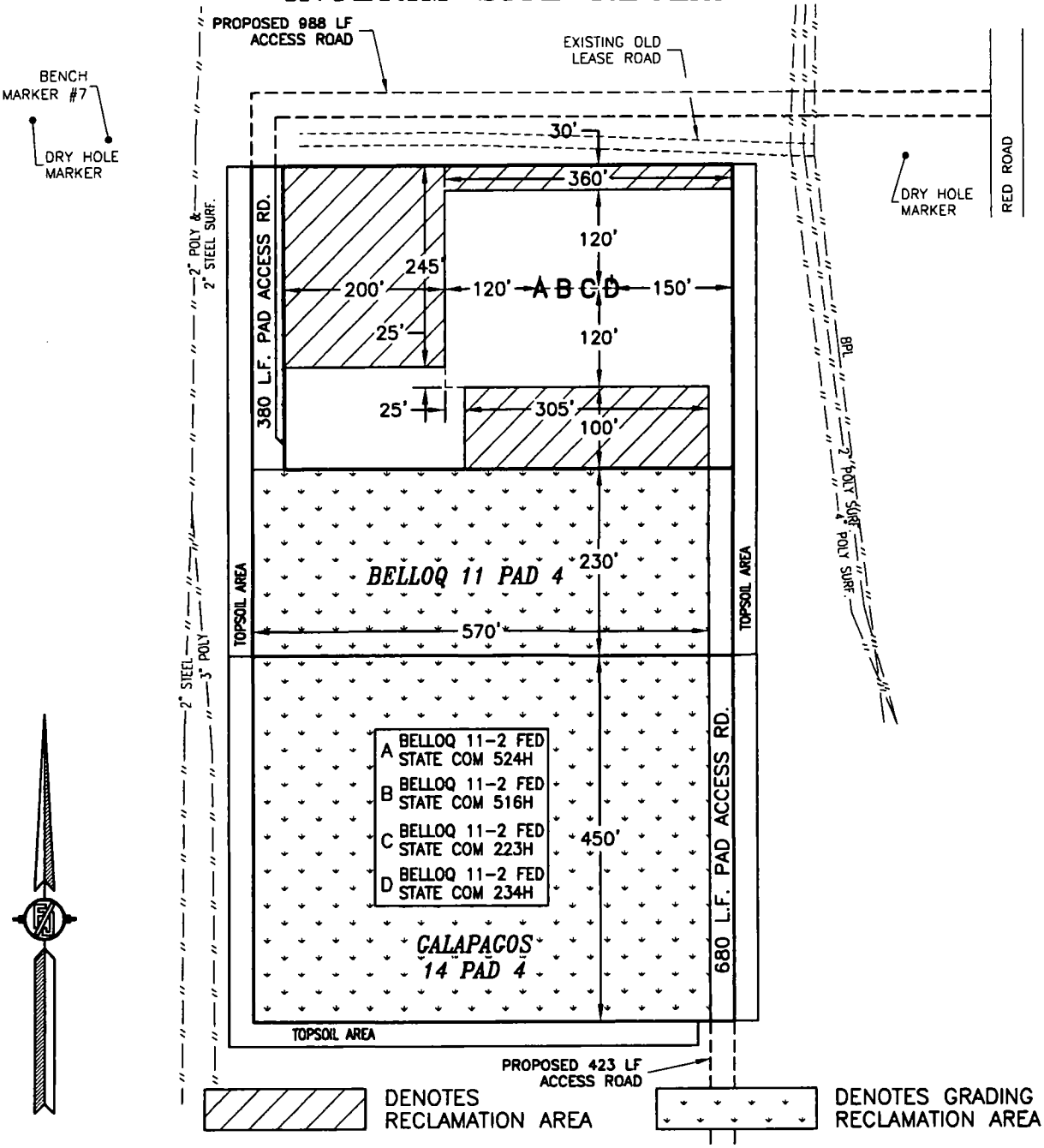



23S - 31E - 2
23S - 31E - 1
23S - 32E - 6
23310104
Caliche Pit 23S 32E Section 1
Total: 10,338.26 ft
8,418.30 ft
23S - 31E - 12
23S - 32E - 7
Belloq MDP 11 Pad 4
23S - 31E - 14
23S - 31E - 13
23S - 32E - 18

Devon Energy - Well Pad
Rig Location Layout
Safety Equipment Location



SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
INTERIM SITE RECLAMATION



020 100 200 400
SCALE 1" = 200'

2.076± ACRES INTERIM PAD RECLAMATION AREA
8.971± ACRES GRADING SITE RECLAMATION AREA
3.418± ACRES NON-RECLAIMED AREA
14.465± ACRES BELLOQ & GALAPAGOS WELL PAD

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ 11-2 FED STATE COM 223H

LOCATED 500 FT. FROM THE SOUTH LINE AND 730 FT. FROM THE EAST LINE OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

JULY 11, 2018

SURVEY NO. 6188B

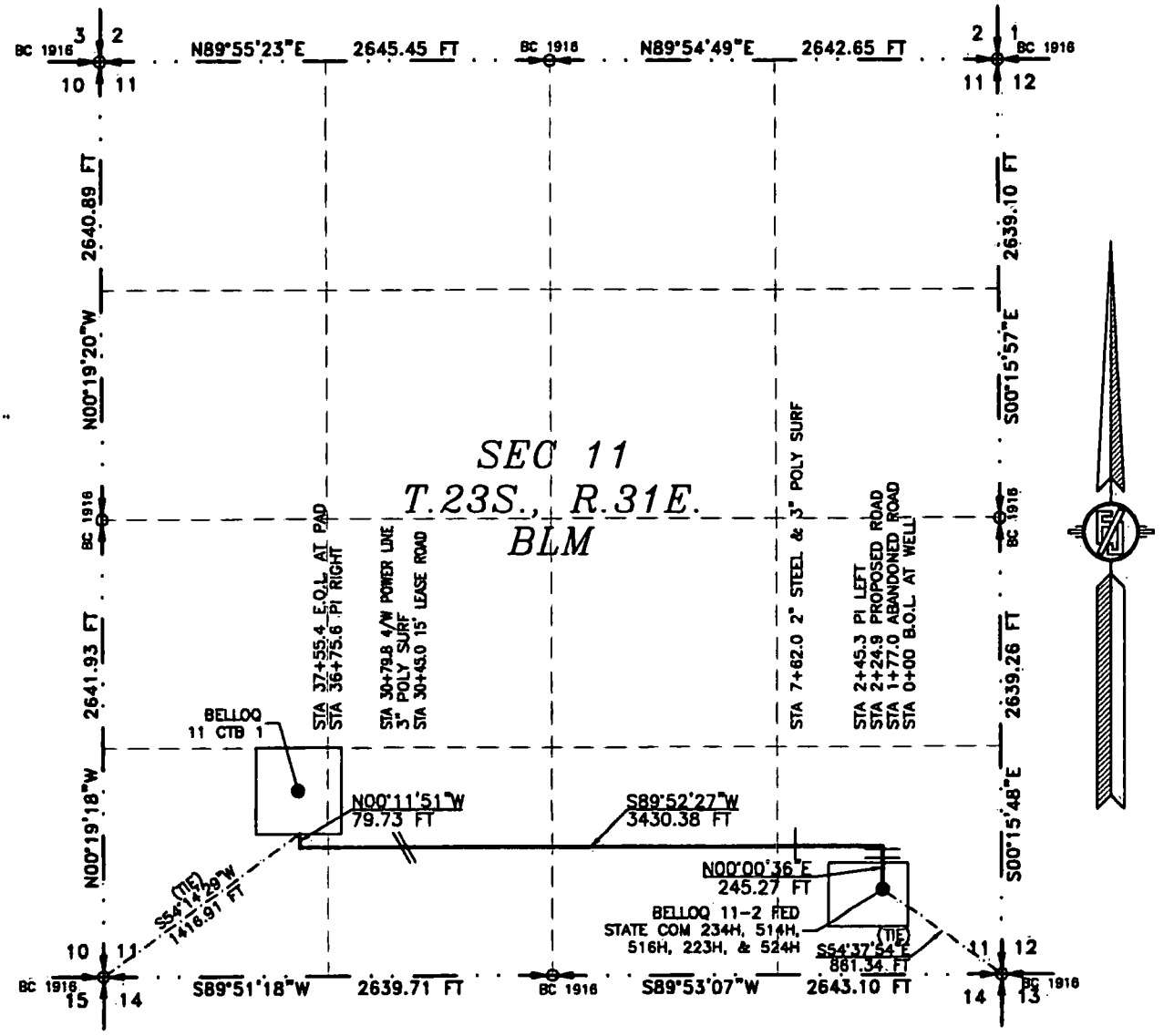
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

FLOWLINE PLAT

FIVE-8" POLY FLOWLINES AND ONE-8" POLY FLEX GAS LIFT LINE BURIED IN THE SAME DITCH FROM BELLOQ 11-2 FED STATE COM 234H, 514H, 516H, 223H, & 524H TO BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AUGUST 6, 2018



SEE NEXT SHEET (2-4) FOR DESCRIPTION

1000 0 1000

Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO: 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 22 DAY OF AUGUST 2018

FILIMON F. JARAMILLO PLS 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-4

SURVEY NO. 5317B

FLOWLINE PLAT

FIVE-8" POLY FLOWLINES AND ONE-8" POLY FLEX GAS LIFT LINE BURIED IN THE SAME DITCH FROM BELLOQ 11-2 FED STATE COM 234H, 514H, 516H, 223H, & 524H TO BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AUGUST 6, 2018

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S54°37'54"E, A DISTANCE OF 861.34 FEET;
THENCE N00°00'36"E A DISTANCE OF 245.27 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S89°52'27"W A DISTANCE OF 3430.38 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N00°11'51"W A DISTANCE OF 79.73 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S54°14'29"W, A DISTANCE OF 1416.91 FEET;

SAID STRIP OF LAND BEING 3755.38 FEET OR 227.60 RODS IN LENGTH, CONTAINING 2.586 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	867.89 L.F.	52.60 RODS	0.598 ACRES
SW/4 SE/4	1321.51 L.F.	80.09 RODS	0.910 ACRES
SE/4 SW/4	1320.26 L.F.	80.02 RODS	0.909 ACRES
SW/4 SW/4	245.72 L.F.	14.89 RODS	0.169 ACRES

GENERAL NOTES

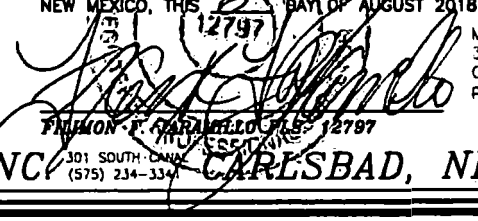
1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 6 DAY OF AUGUST 2018



MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

FILIMON F. JARAMILLO PLS 12797
301 SOUTH CANAL
(575) 234-3341

SHEET: 2-4

SURVEY NO. 5317B

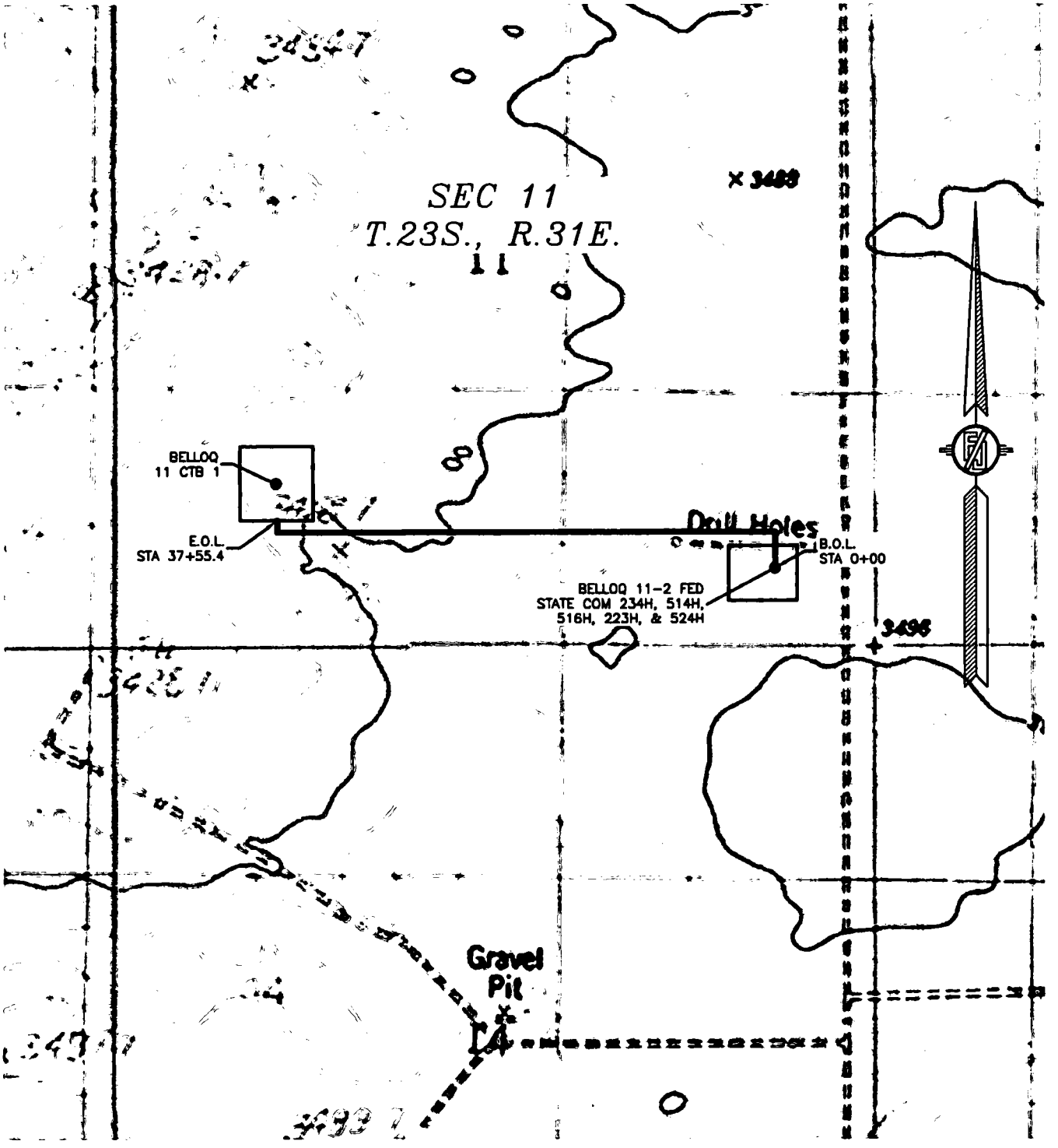
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

FLOWLINE PLAT

FIVE-8" POLY FLOWLINES AND ONE-8" POLY FLEX GAS LIFT LINE BURIED IN THE SAME DITCH FROM BELLOQ 11-2 FED STATE COM 234H, 514H, 516H, 223H, & 524H TO BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AUGUST 6, 2018



SHEET: 3-4 *SURVEY NO. 5317B*

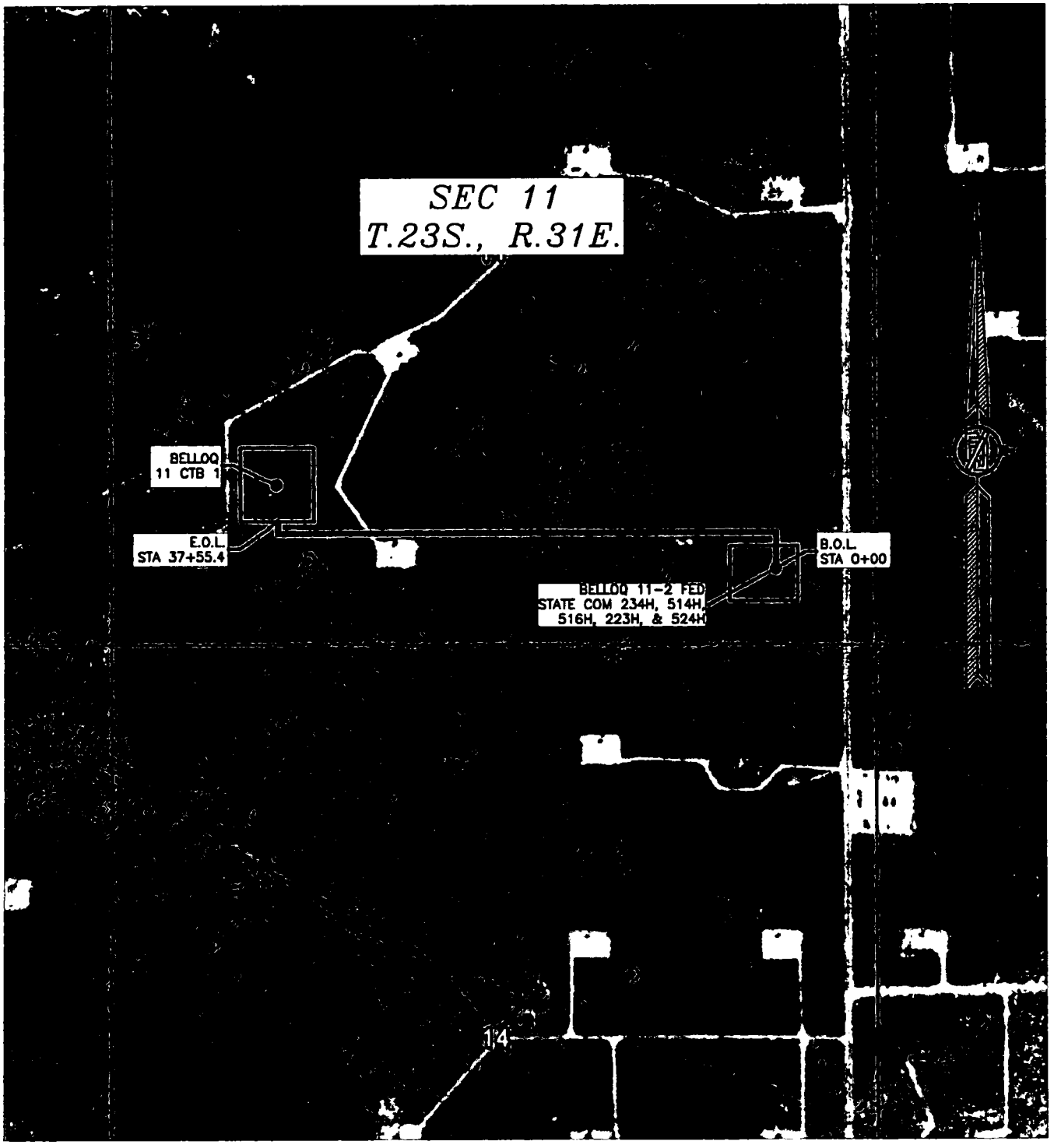
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

FLOWLINE PLAT

FIVE-8" POLY FLOWLINES AND ONE-8" POLY FLEX GAS LIFT LINE BURIED IN THE SAME DITCH FROM BELLOQ 11-2 FED STATE COM 234H, 514H, 516H, 223H, & 524H TO BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF A PIPELINE CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AUGUST 6, 2018



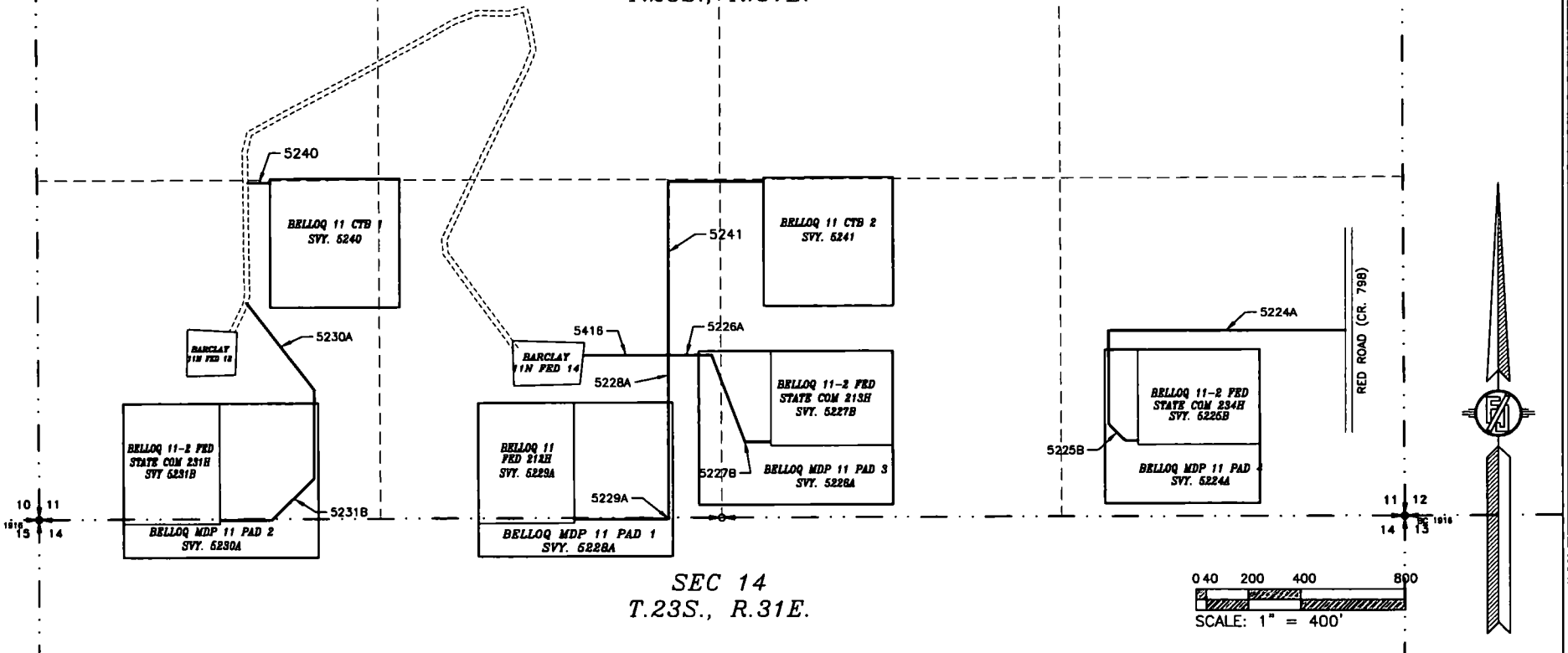
SHEET: 4-4 *SURVEY NO. 5317B*

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

DEVON ENERGY PRODUCTION COMPANY, L.P.

BELLOQ MDP 11 PADS, CTBS, WELLS AND ACCESS ROADS
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

OCTOBER 23, 2017



MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

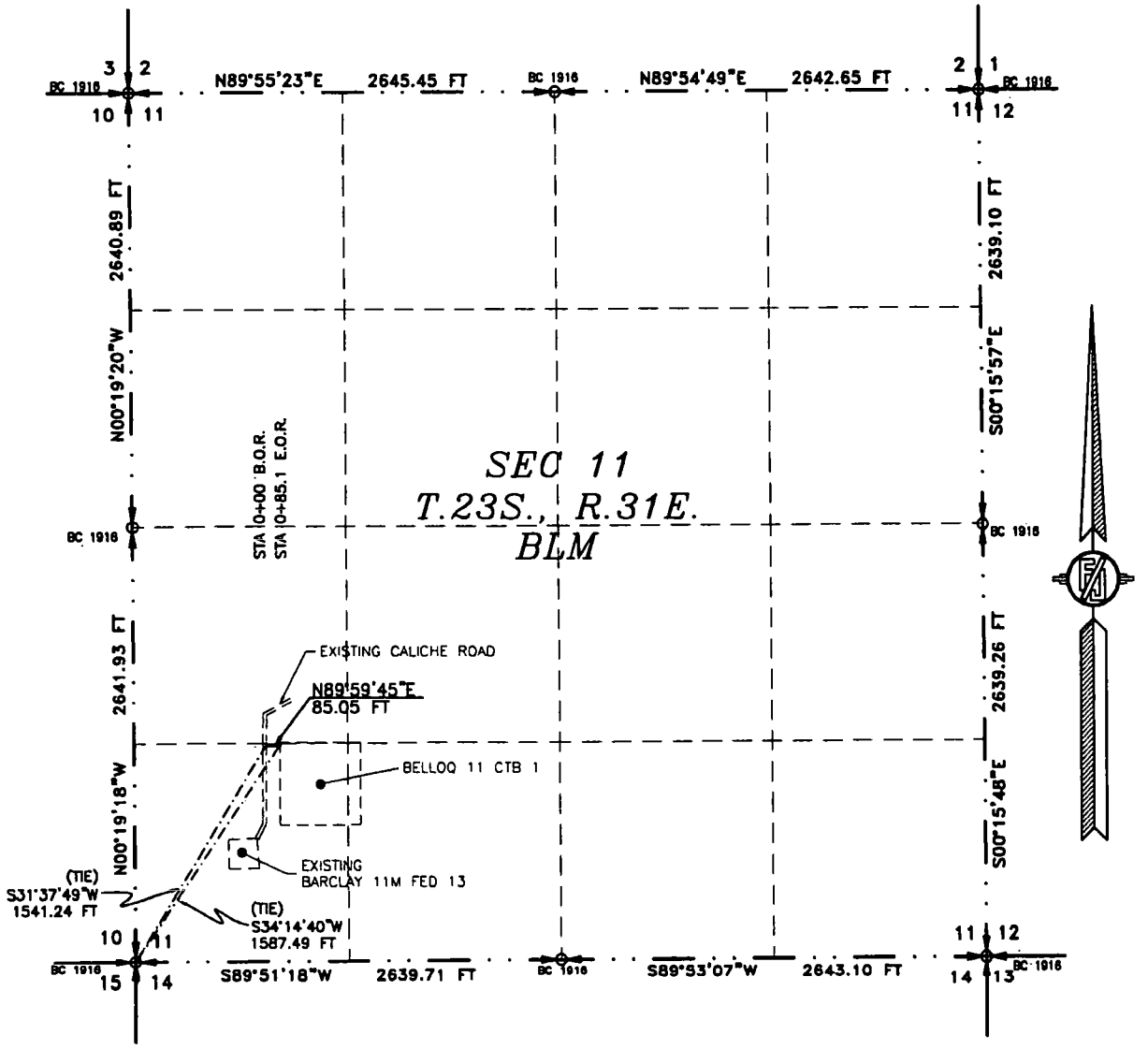
SVY. 5228

ACCESS ROAD PLAT

ACCESS ROAD TO THE BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
MAY 15, 2017



SEE NEXT SHEET (2-2) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 22nd DAY OF MAY, 2017

FILIMON F. JARAMILLO, P.S. 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-2

SURVEY NO. 5240

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT
ACCESS ROAD TO THE BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
MAY 15, 2017

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SW/4 SW/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S31°37'49"W, A DISTANCE OF 1541.24 FEET;
THENCE N89°59'45"E A DISTANCE OF 85.05 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S34°14'40"W, A DISTANCE OF 1587.49 FEET;

SAID STRIP OF LAND BEING 85.05 FEET OR 5.15 RODS IN LENGTH, CONTAINING 0.059 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SW/4 SW/4	85.05 L.F.	5.15 RODS	0.059 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 16 DAY OF MAY 2017

FILIMON F. JARAMILLO PLS 12797

301 SOUTH CANAL
(575) 234-3341

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 5240

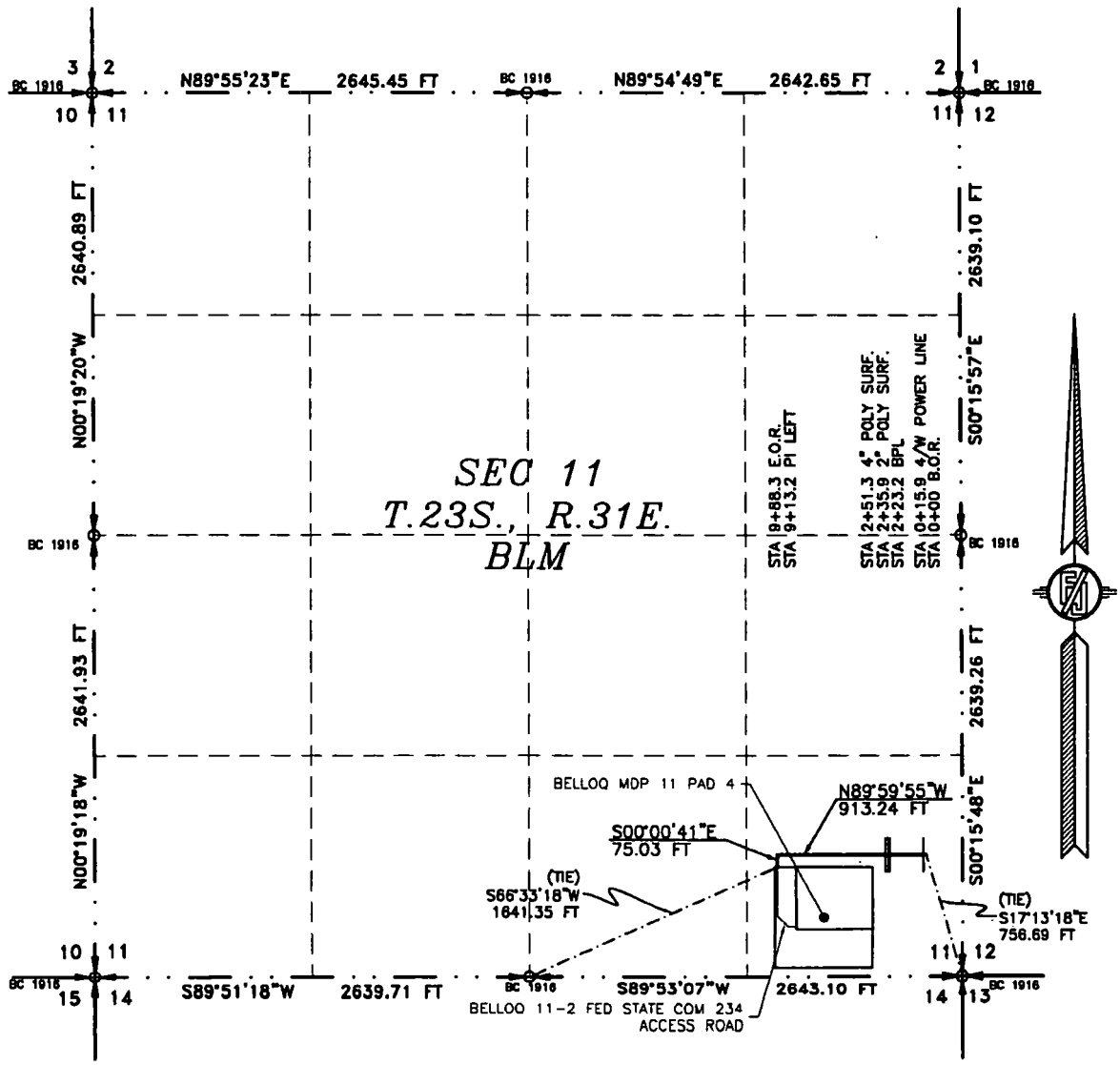
MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD TO THE BELLOQ MDP 11 PAD 4

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 12, 2017



SEE NEXT SHEET (2-2) FOR DESCRIPTION

1000 0 1000

Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12 DAY OF JUNE, 2017

FILIMON F. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

FILIMON F. JARAMILLO, PLS 12797
301 SOUTH CANAL
(575) 234-3341

ACCESS ROAD PLAT

ACCESS ROAD TO THE BELLOQ MDP 11 PAD 4

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 12, 2017

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S17°13'18"E, A DISTANCE OF 756.69 FEET;
THENCE N89°59'55"W A DISTANCE OF 913.24 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S00°00'41"E A DISTANCE OF 75.03 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S66°33'18"W, A DISTANCE OF 1641.35 FEET;

SAID STRIP OF LAND BEING 988.27 FEET OR 59.90 RODS IN LENGTH, CONTAINING 0.681 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	988.27 L.F.	59.90 RODS	0.681 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12TH DAY OF JUNE 2017

FILIMON F. JARAMILLO, 12797

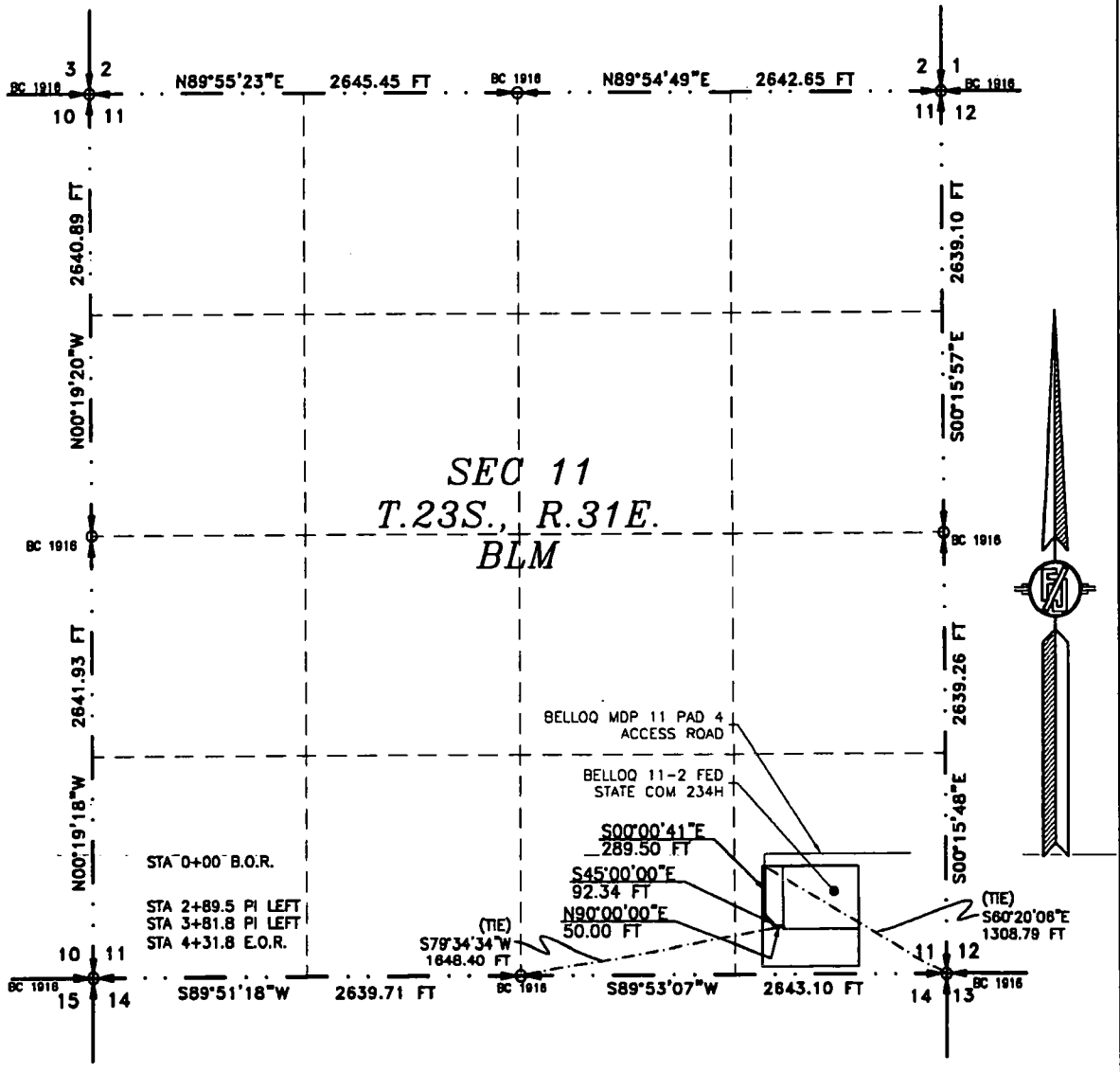
MADRON SURVEYING, INC.
501 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

ACCESS ROAD PLAT

ACCESS ROAD TO THE BELLOQ 11-2 FED STATE COM 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 12, 2017



SEE NEXT SHEET (2-2) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 12TH DAY OF JUNE 2017

FILIMON F. JARAMILLO PLS 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-2

SURVEY NO. 5225B

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT

ACCESS ROAD TO THE BELLOQ 11-2 FED STATE COM 234H

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
JUNE 12, 2017

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHEAST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S60°20'06"E, A DISTANCE OF 1308.79 FEET;
THENCE S00°00'41"E A DISTANCE OF 289.50 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE S45°00'00"E A DISTANCE OF 92.34 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N90°00'00"E A DISTANCE OF 50.00 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S79°34'34"W, A DISTANCE OF 1648.40 FEET;

SAID STRIP OF LAND BEING 431.84 FEET OR 26.17 RODS IN LENGTH, CONTAINING 0.297 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4	431.84 L.F.	26.17 RODS	0.297 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 14 DAY OF JUNE, 2017.

FILIMON F. JARAMILLO, PLS 12797

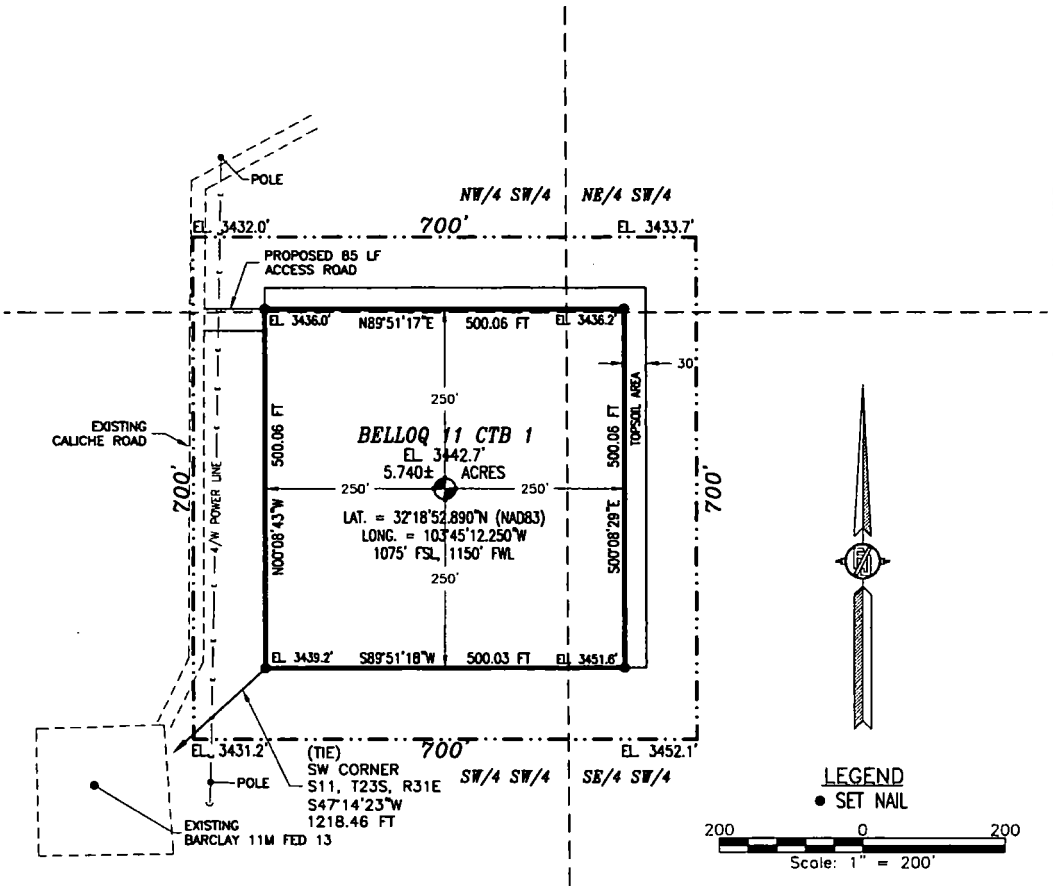
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

IN THE SW/4 SW/4 & SE/4 SW/4 & NW/4 SW/4 & NE/4 SW/4 OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

MAY 15, 2017



DESCRIPTION

A CERTAIN PIECE OR PARCEL OF LAND AND REAL ESTATE LYING IN THE SW/4 SW/4 & SE/4 SW/4 & NW/4 SW/4 & NE/4 SW/4 OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST N.M.P.M., EDDY COUNTY, NEW MEXICO.

BEGINNING AT THE SOUTHWEST CORNER OF THE PARCEL, WHENCE THE SOUTHWEST CORNER OF SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S47°14'23"W, A DISTANCE OF 1218.46 FEET;
THENCE N00°08'43"W A DISTANCE OF 500.06 FEET TO THE NORTHWEST CORNER OF THE PARCEL;
THENCE N89°51'17"E A DISTANCE OF 500.06 FEET TO THE NORTHEAST CORNER OF THE PARCEL;
THENCE S00°08'29"E A DISTANCE OF 500.06 FEET TO THE SOUTHEAST CORNER OF THE PARCEL;
THENCE S89°51'18"W A DISTANCE OF 500.03 FEET TO THE SOUTHWEST CORNER OF THE PARCEL, TO THE POINT OF BEGINNING;
CONTAINING 4.783 ACRES IN THE SW/4 SW/4 & 0.905 ACRES IN THE SE/4 SW/4 & 0.044 ACRES IN THE NW/4 SW/4 & 0.008 ACRES IN THE NE/4 SW/4 FOR A TOTAL OF 5.740 ACRES MORE OR LESS.

GENERAL NOTES

1.) THE INTENT OF THIS SURVEY IS TO ACQUIRE A BUSINESS LEASE FOR THE PURPOSE OF BUILDING A CENTRAL TANK BATTERY

2.) BASIS OF BEARING IS NEW MEXICO STATE PLANE EAST ZONE MODIFIED TO THE SURFACE (NAD83)

DRIVING DIRECTIONS: FROM STATE HIGHWAY 128 AND CR 798 (RED ROAD) GO NORTH ON CR 798 4.7 MILES, TURN LEFT ON CALICHE ROAD AND GO WEST 0.15 OF A MILE, BEND RIGHT AND GO NORTHWEST 0.2 OF A MILE, TURN LEFT AND GO SOUTHWEST 0.6 OF A MILE, TURN LEFT AND GO SOUTH 188', TURN LEFT GO EAST 85' TO THE NORTHWEST PAD CORNER.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 17 DAY OF MAY 2017.

FILIMON F. JARAMILLO
NEW MEXICO
12797
PROFESSIONAL SURVEYOR

FILIMON F. JARAMILLO, NEW MEXICO 12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-3

SURVEY NO. 5240

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

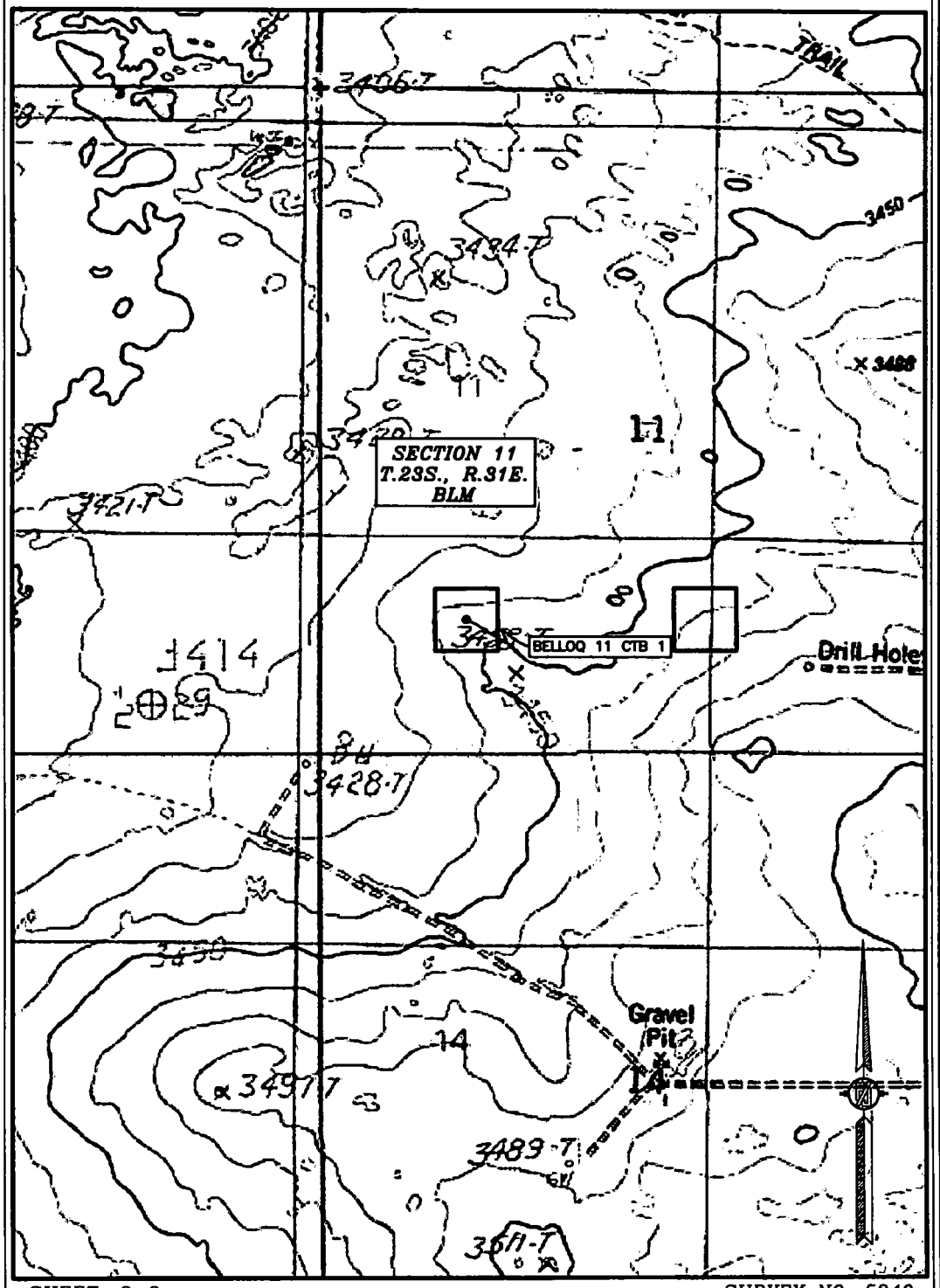
BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

IN THE SW/4 SW/4 & SE/4 SW/4 & NW/4 SW/4 & NE/4 SW/4 OF
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 15, 2017

QUAD MAP



SHEET: 2-3 SURVEY NO. 5240

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

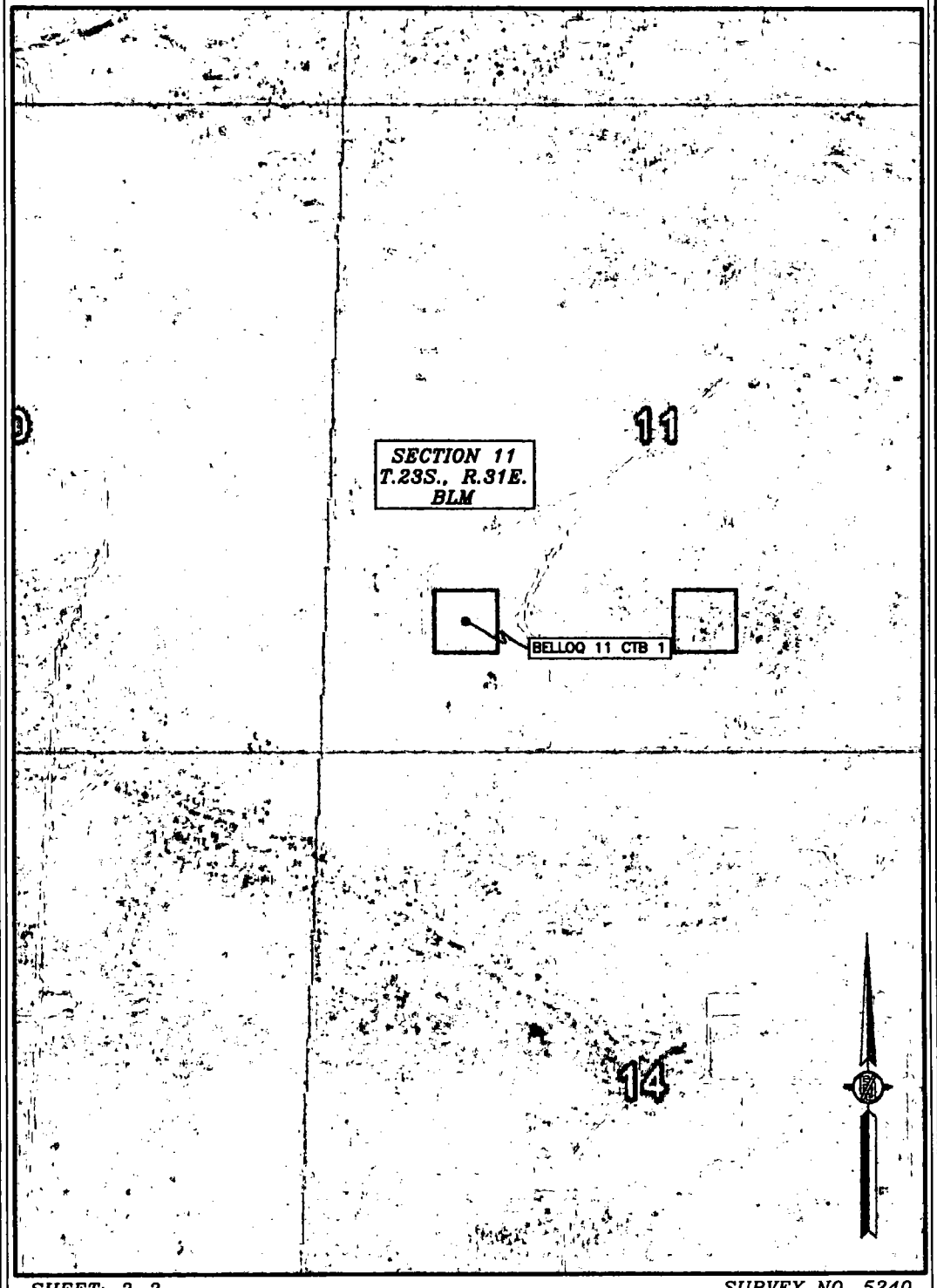
BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

IN THE SW/4 SW/4 & SE/4 SW/4 & NW/4 SW/4 & NE/4 SW/4 OF
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 15, 2017

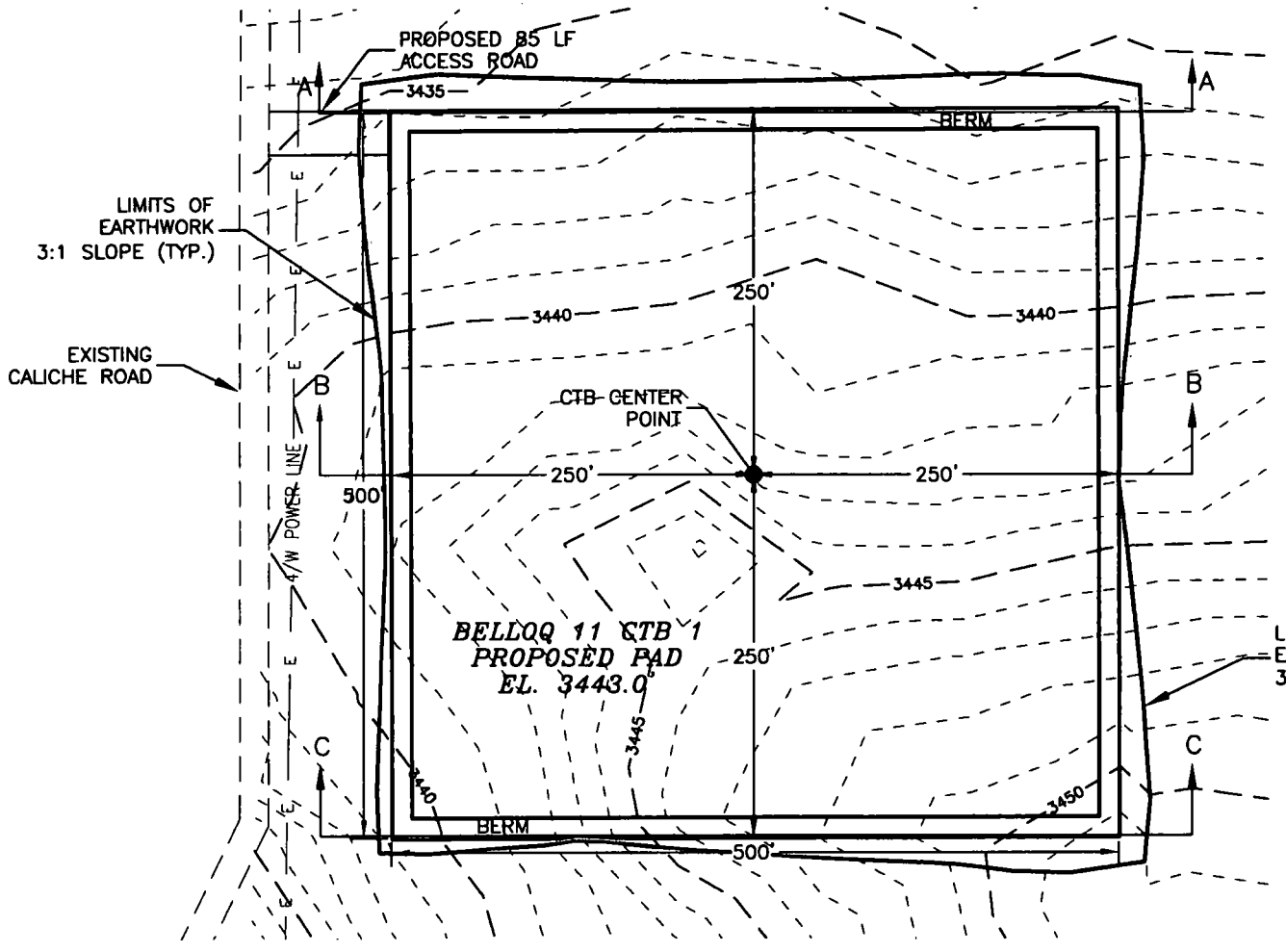
AERIAL PHOTO



SHEET: 3-3 SURVEY NO. 5240

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

PLAN VIEW



DEVON ENERGY PRODUCTION COMPANY, L.P.
GRADING PLAN AND CROSS SECTIONS
FOR BELLOQ 11 CTB 1
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

MAY 15, 2017

012 60 120 240
SCALE 1" = 120'

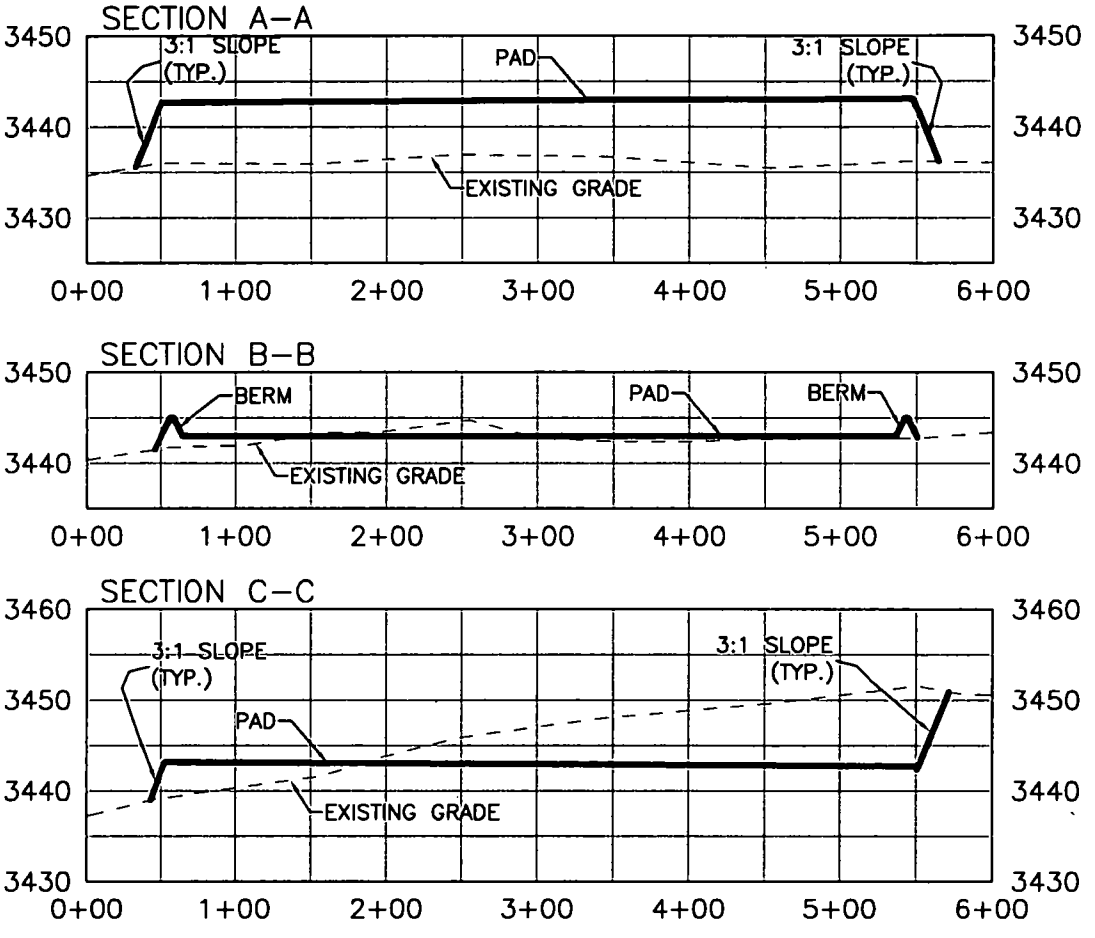
CUT	FILL	NET
11766 CU. YD	20087 CU. YD	8321 CU. YD (FILL)

EARTHWORK QUANTITIES ARE ESTIMATED

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

SHEET 1-2
SURVEY NO. 5240

CROSS SECTIONS



DEVON ENERGY PRODUCTION COMPANY, L.P.
GRADING PLAN AND CROSS SECTIONS
FOR BELLOQ 11 CTB 1
SECTION 11, TOWNSHIP 23 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

012 60 120 240
SCALE 1" = 120' – 1" = 20' VER

MAY 15, 2017

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

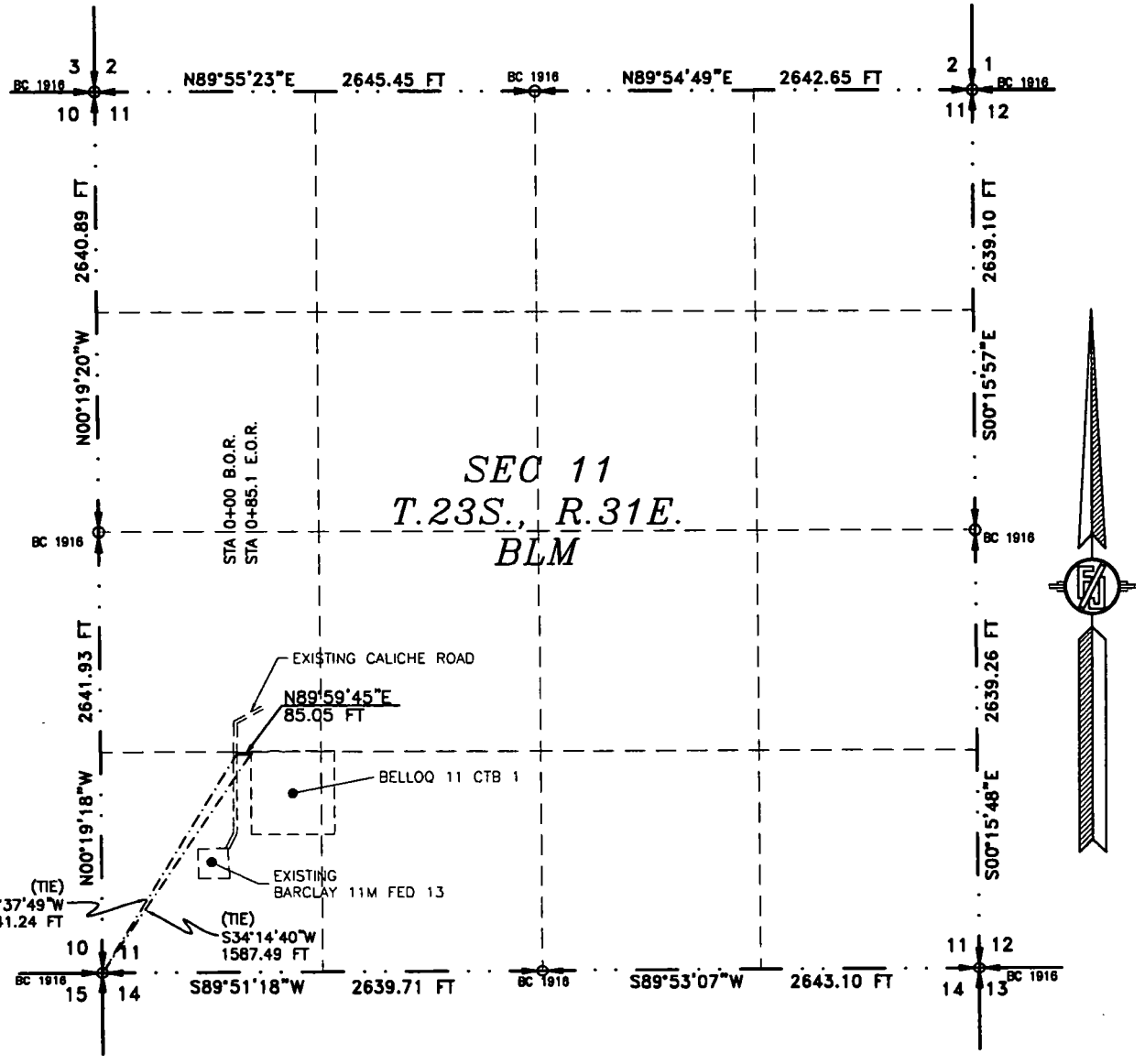
SHEET 2–2
SURVEY NO. 5240

ACCESS ROAD PLAT

ACCESS ROAD TO THE BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.

CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
MAY 15, 2017



SEE NEXT SHEET (2-2) FOR DESCRIPTION

1000 0 1000
Scale: 1" = 1000'

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 29TH DAY OF MAY 2017

FILIMON F. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

FILIMON F. JARAMILLO P.S. 12797
301 SOUTH CANAL
(575) 234-3341

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SHEET: 1-2

SURVEY NO. 5240

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

ACCESS ROAD PLAT
ACCESS ROAD TO THE BELLOQ 11 CTB 1

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
MAY 15, 2017

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SW/4 SW/4 OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S31°37'49"W, A DISTANCE OF 1541.24 FEET;
THENCE N89°59'45"E A DISTANCE OF 85.05 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHWEST CORNER OF SAID SECTION 11, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S34°14'40"W, A DISTANCE OF 1587.49 FEET;

SAID STRIP OF LAND BEING 85.05 FEET OR 5.15 RODS IN LENGTH, CONTAINING 0.059 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SW/4 SW/4	85.05 L.F.	5.15 RODS	0.059 ACRES

GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 22 DAY OF MAY 2017

FILIMON F. JARAMILLO 12797 REGISTERED PROFESSIONAL SURVEYOR

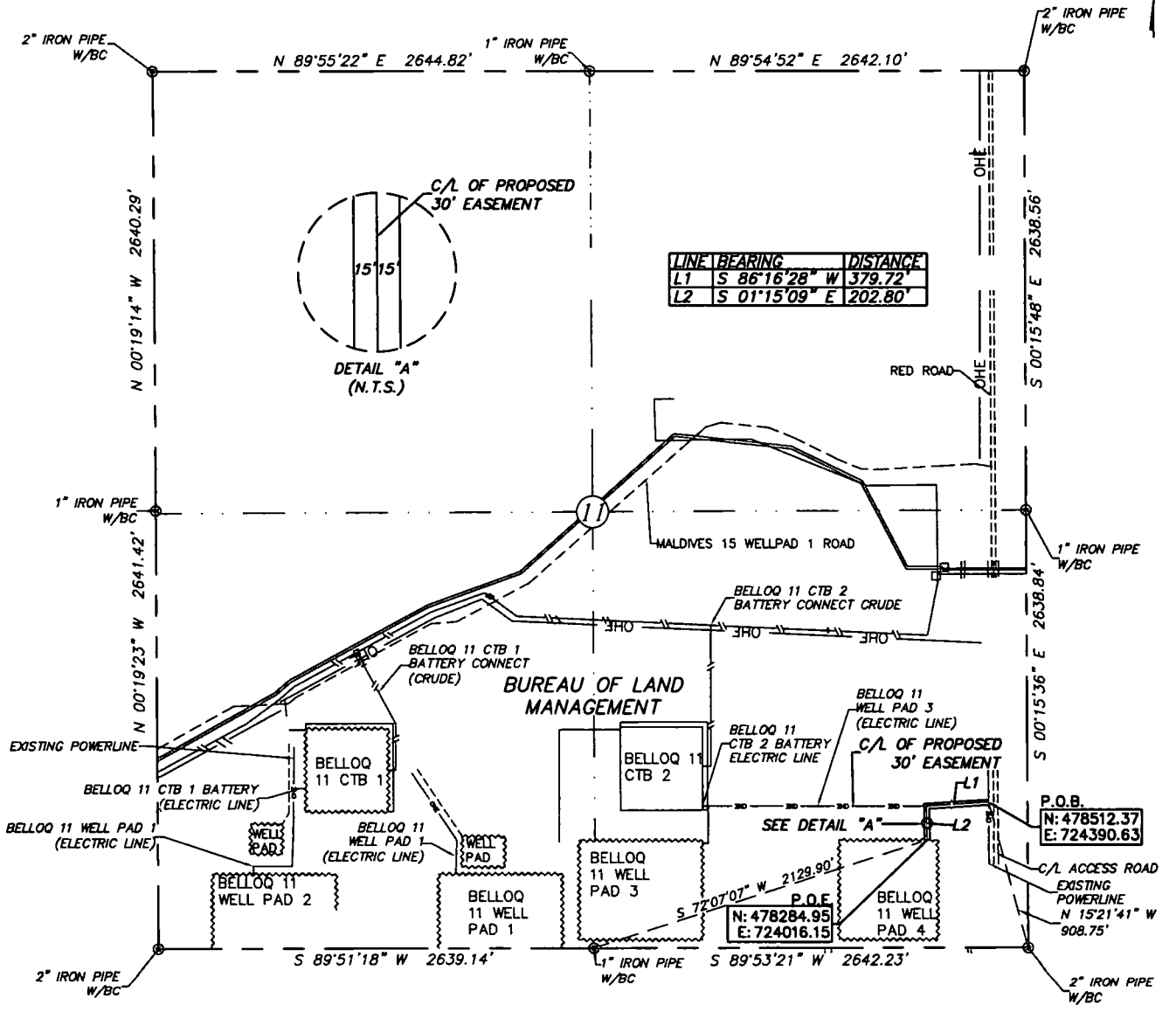
FILIMON F. JARAMILLO PLS 12797

MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

SURVEY NO. 5240

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

EXHIBIT "A"
PAGE 1 of 4
ELECTRIC LINE PLAT
SECTION 11, T23S–R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



30' EASEMENT AREA = 0.401 ACRE(S)
582.52 FEET OR 35.30 RODS

SEE THE ATTACHED LEGAL DESCRIPTION

Note: All bearings recited herein are based on the New Mexico State Plane Coordinate System, NAD 83, New Mexico East Zone 3001, US Survey Feet, all distances are grid.

0+00.0 P.O.B./EXISTING POWERLINE
2+24.2 EXISTING PIPELINE
3+79.7 P.O.E./BELLOQ 11 CTB 2 BATTERY ELECTRIC LINE
5+82.5 P.O.E./BELLOQ 11 WELL PAD 4

0 1000 2000

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.

LAMAN NEW MEXICO 22404 PROFESSIONAL SURVEYOR

B.L. Laman PLS #22404
Date Signed: 03-22-2018
Horizonrow, LLC
P.O. Box 548, Dry Creek, LA.
(903) 388-3045 70637
Employee of Horizonrow, LLC

HORIZON ROW LLC
Drawn for: devon
Drawn by: JEANNIE PERRY
Date: 03/12/2018

DEVON ENERGY PRODUCTION COMPANY, L.P.
BELLOQ 11 WELL PAD 4
ELECTRIC LINE
PROPOSED 30' EASEMENT
ON THE PROPERTY OF
BUREAU OF LAND MANAGEMENT
SECTION 11, T23S–R31E, N.M.P.M.

LINE NUMBER: EL8031
WBS NUMBER: CC-127671.01.FAC
SCALE: 1" = 1000'
REVISIONS:
SHEET: 1 OF 4

SECTION 11, T23S-R31E, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

ELECTRIC LINE PLAT

LEGAL DESCRIPTION

FOR

DEVON ENERGY PRODUCTION COMPANY, L.P.

BUREAU OF LAND MANAGEMENT

30' EASEMENT DESCRIPTION:

BEING an easement thirty (30) feet in width lying fifteen (15) feet on the right side and fifteen (15) feet or the left side of the survey centerline described below, being out of Section 11, Township 23 South, Range 31 East, N.M.P.M., Eddy County, New Mexico, and being out of a parcel of land owned by the Bureau of Land Management. Said centerline of easement being more particularly described as follows:

Commencing from a 2" iron pipe w/ BC found for the southeast corner of Section 11, T23S-R31E, N.M.P.M., Eddy County, New Mexico;

Thence N 15°21'41" W, a distance of 908.75' to the **Point of Beginning** of this easement, having coordinates of Northing=478512.37 feet, Easting=724390.63 feet, and continuing the following courses;

Thence S 86°16'28" W, a distance of 379.72' to an angle point;

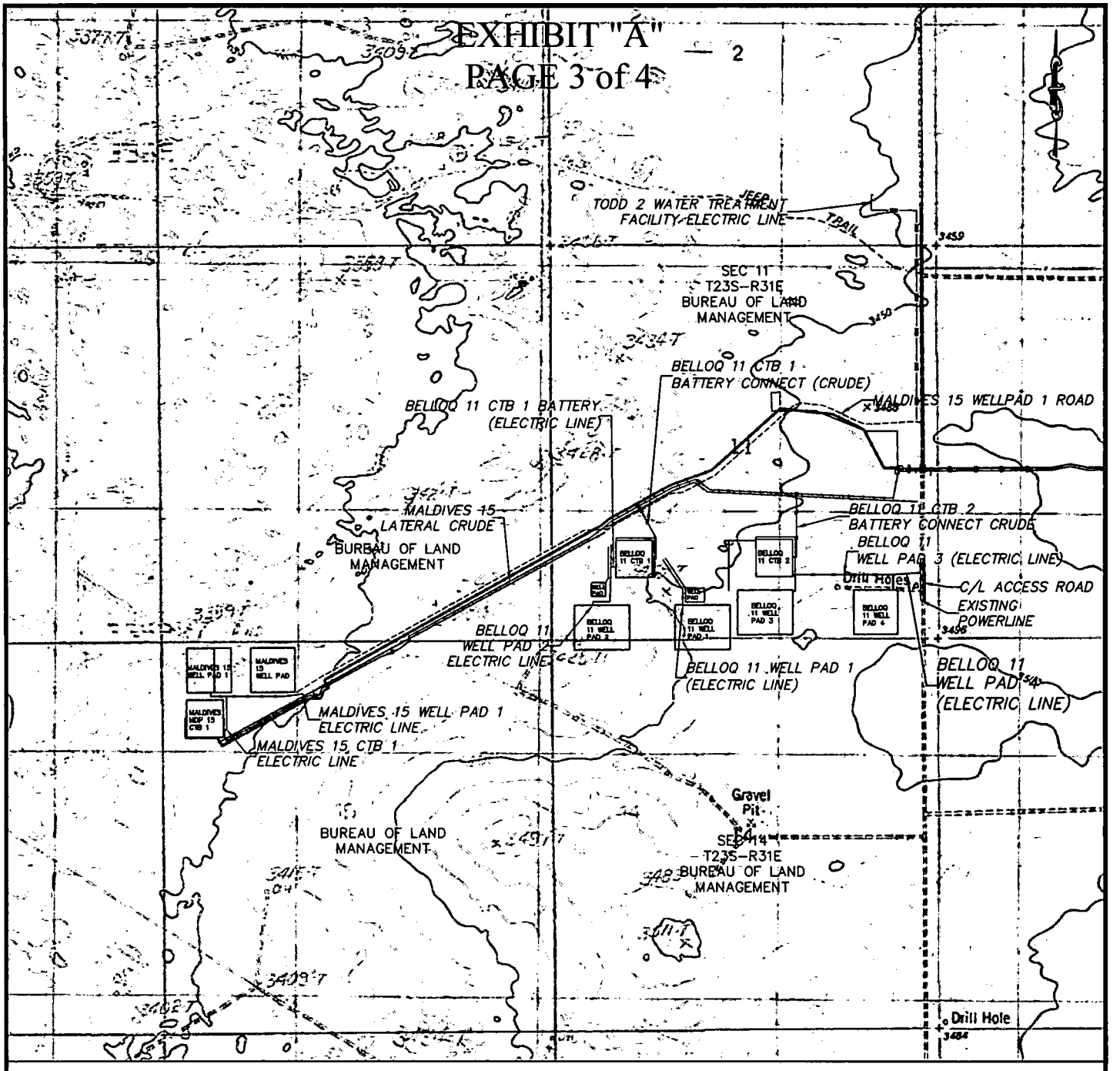
Thence S 01°15'09" E, a distance of 202.80' to the **Point of Ending**, having coordinates of Northing=478284.95 feet, Easting=724016.15 feet, from said point a 1" iron pipe w/ BC found for the south quarter corner of Section 11, T23S-R31E, N.M.P.M., Eddy County, New Mexico bears S 72°07'07" W a distance of 2129.90', covering a total of **582.52' or 35.30 rods** and having an area of **0.401 acres**.

NOTES:

Bearings, distances and coordinates shown herein are based on New Mexico State Plane Coordinate System, NAD 83, East Zone 3001, US Survey Feet, all distances are grid.

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico

B.L. Laman PLS 22404
Date Signed: 03/22/2018
Horizon Row, LLC
P.O. Box 548, Dry Creek, LA
(903) 388-3045 70637
Employee of Horizon Row, LLC

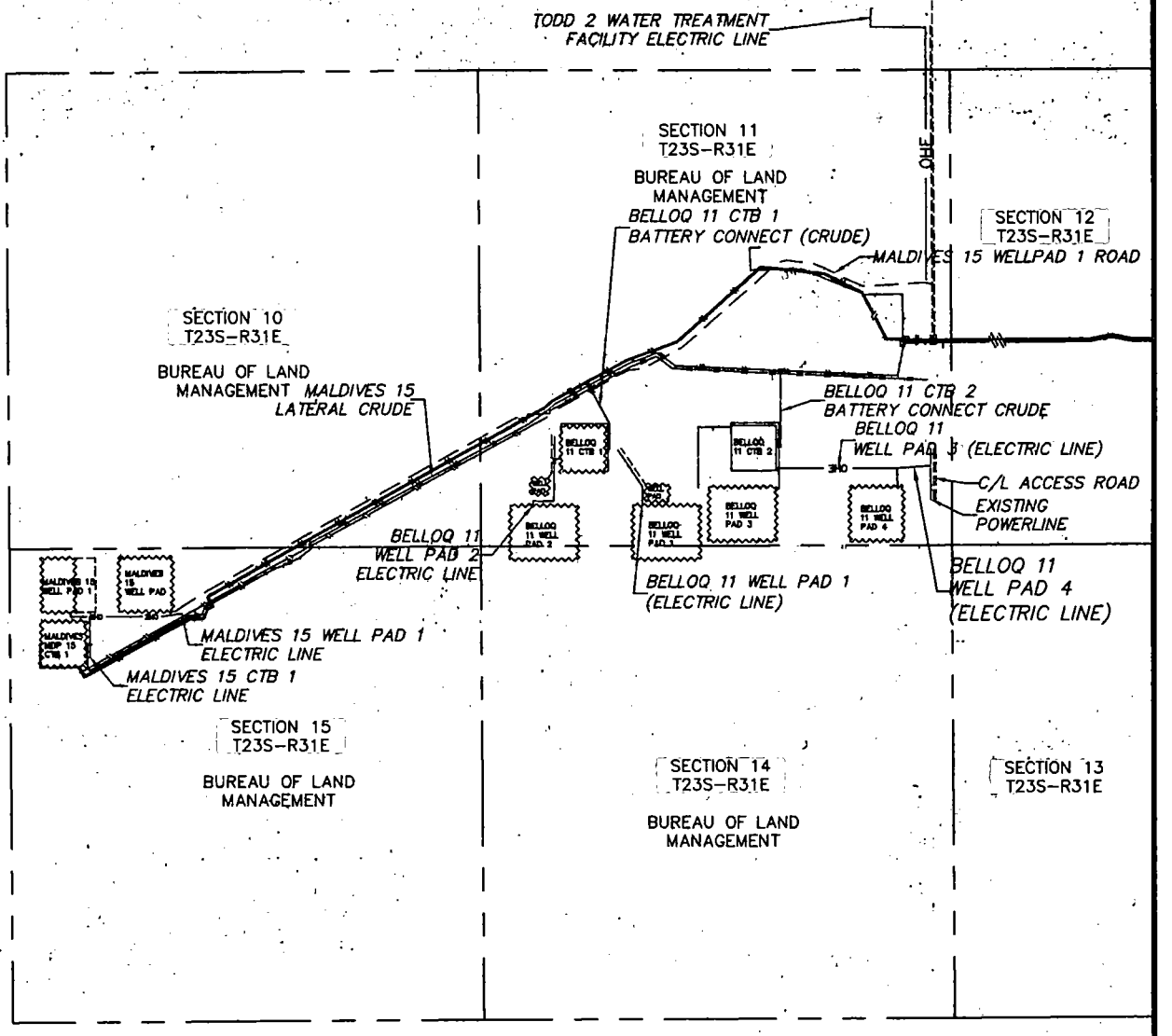


QUAD MAP

SECTION 11, T23S-R31E, N.M.P.M.;
EDDY COUNTY, NEW MEXICO

HORIZON ROW LLC	Drawn for:		LINE NUMBER: EL8031
DEVON ENERGY PRODUCTION CO., L.P.			WBS NUMBER: CC-127671.01.FAC
PROPOSED 30' EASEMENT			SCALE: 1" = 2000'
Drawn by: JEANNIE PERRY	Date: 03/12/2018	devon	REVISIONS:
			SHEET: 3 OF 4

EXHIBIT "A"
PAGE 4 of 4



AERIAL MAP

SECTION 11, T23S-R31E, N.M.P.M.;
EDDY COUNTY, NEW MEXICO

HORIZON ROW LLC	Drawn for: devon	LINE NUMBER: EL8031
DEVON ENERGY PRODUCTION CO., L.P.		WBS NUMBER: CC-127671.01.FAC
PROPOSED 30' EASEMENT		SCALE: 1" = 2000'
Drawn by: JEANNIE PERRY / Date: 03/12/2018		REVISIONS:
		SHEET: 4 OF 4

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

09/26/2018

Bond Information

Federal/Indian APD: FED

BLM Bond number: CO1104

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: