HOBBS OCD

MAR 08 2018

RECEIVED

Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

| | |
|---|---|
| 1a. Type of work: ☑ DRILL ☐ REENTER | 5. Lease Serial No. NMNM100568 |
| | 6. If Indian, Allotee or Tribe Name |
| | 7. If Unit or CA Agreement, Name and No. |
| 1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone | 8. Lease Name and Well No. (320992) MEAN GREEN 23-35 FED COM 3H |
| 2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP (6137) | 9. API Well No. 30-025-44597 |
| 3a. Address 333 West Sheridan Avenue Oklahoma City OK | 3b. Phone No. *(include area code)* (405)552-6571 |
| | 10. Field and Pool, or Exploratory (96776) JABALINA / WOLFCAMP; SOUTHWEST |
| 4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface NESE / 2449 FSL / 830 FEL / LAT 32.028338 / LONG -103.4350287 At proposed prod. zone LOT 1 / 200 FSL / 380 FEL / LAT 32.0008431 / LONG -103.43337 | 11. Sec., T. R. M. or Blk. and Survey or Area SEC 23 / T26S / R34E / NMP |
| 14. Distance in miles and direction from nearest town or post office* | 12. County or Parish LEA / 13. State NM |

| | | |
|---|---|---|
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 830 feet | 16. No. of acres in lease 1920 | 17. Spacing Unit dedicated to this well 315.2 |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1900 feet | 19. Proposed Depth 12789 feet / 22661 feet | 20. BLM/BIA Bond No. on file FED: CO1104 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 9194 feet | 22. Approximate date work will start* 08/01/2018 | 23. Estimated duration 45 days |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

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 required by the BLM.

| | | |
|---|---|---|
| 25. Signature (Electronic Submission) | Name *(Printed/Typed)* Rebecca Deal / Ph: (405)228-8429 | Date 09/26/2017 |
| Title Regulatory Compliance Professional | | |
| Approved by *(Signature)* (Electronic Submission) | Name *(Printed/Typed)* Cody Layton / Ph: (575)234-5959 | Date 01/30/2018 |
| Title Supervisor Multiple Resources | Office 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.

(Continued on page 2)

GCP Rec 03/08/18

*(Instructions on page 2)

APPROVED WITH CONDITIONS

Approval Date: 01/29/2018

KZ
03/12/18

## 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 1: 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 well, 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 directionally 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.



## 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 well 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 will 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 collects this information to allow 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 Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

## Additional Operator Remarks

### Location of Well

1. SHL: NESE / 2449 FSL / 830 FEL / TWSP: 26S / RANGE: 34E / SECTION: 23 / LAT: 32.028338 / LONG: -103.4350287 ( TVD: 0 feet, MD: 0 feet )
   PPP: NESE / 2640 FSL / 380 FEL / TWSP: 26S / RANGE: 34E / SECTION: 23 / LAT: 32.02896 / LONG: -103.433216 ( TVD: 12841 feet, MD: 13000 feet )
   BHL: LOT 1 / 200 FSL / 380 FEL / TWSP: 26S / RANGE: 34E / SECTION: 35 / LAT: 32.0008431 / LONG: -103.43337 ( TVD: 12789 feet, MD: 22661 feet )

## BLM Point of Contact

Name: Judith Yeager
Title: Legal Instruments Examiner
Phone: 5752345936
Email: jyeager@blm.gov





**Approval Date: 01/29/2018**

## Review and Appeal Rights

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

AFMSS

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

# Application Data Report

02/02/2018

**APD ID:** 10400022423 **Submission Date:** 09/26/2017

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

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

Highlighted data reflects the most recent changes

Show Final Text

## Section 1 - General

**APD ID:** 10400022423 **Tie to previous NOS?** **Submission Date:** 09/26/2017

**BLM Office:** CARLSBAD **User:** Rebecca Deal **Title:** Regulatory Compliance Professional

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

**Lease number:** NMNM100568 **Lease Acres:** 1920

**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:** aletha.dewbre@dvn.com

## 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:** MEAN GREEN 23-35 FED COM **Well Number:** 3H **Well API Number:**

**Field/Pool or Exploratory?** Field and Pool **Field Name:** JABALINA **Pool Name:** WOLFCAMP; SOUTHWEST

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

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

**Describe other minerals:**

**Is the proposed well in a Helium production area?** N **Use Existing Well Pad?** NO **New surface disturbance?**

**Type of Well Pad:** MULTIPLE WELL **Multiple Well Pad Name:** MEAN GREEN 23-35 **Number:** 1H-4H

**Well Class:** HORIZONTAL **Number of Legs:** 1

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** APPRAISAL

**Describe sub-type:**

**Distance to town:** **Distance to nearest well:** 1900 FT **Distance to lease line:** 830 FT

**Reservoir well spacing assigned acres Measurement:** 315.2 Acres

**Well plat:** Mean_Green_23_35_Fed_Com_3H_C102_Sign_20171116105740.pdf

**Well work start Date:** 08/01/2018 **Duration:** 45 DAYS

## Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83 **Vertical Datum:** NAVD88

**Survey number:**

| | 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 | 2449 | FSL | 830 | FEL | 26S | 34E | 23 | Aliquot NESE | 32.028338 | -103.4350287 | LEA | NEW MEXICO | NEW MEXICO | F | NMNM 100568 | 9194 | 0 | 0 |
| KOP Leg #1 | 2640 | FSL | 380 | FEL | 26S | 34E | 23 | Aliquot NESE | 32.02896 | -103.433216 | LEA | NEW MEXICO | NEW MEXICO | F | NMNM 100568 | -3122 | 12335 | 12316 |
| PPP Leg #1 | 2640 | FSL | 380 | FEL | 26S | 34E | 23 | Aliquot NESE | 32.02896 | -103.433216 | LEA | NEW MEXICO | NEW MEXICO | F | NMNM 100568 | -3647 | 13000 | 12841 |

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

| | 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 | 330 | FSL | 380 | FEL | 26S | 34E | 35 | Lot 1 | 32.0012 | -103.43367 | LEA | NEW MEXICO | NEW MEXICO | F | NMNM 110840 | -3595 | 22661 | 12789 |
| BHL Leg #1 | 200 | FSL | 380 | FEL | 26S | 34E | 35 | Lot 1 | 32.000843 1 | -103.43337 | LEA | NEW MEXICO | NEW MEXICO | F | NMNM 110840 | -3595 | 22661 | 12789 |

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

# OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

HOBBS OCD
MAR 08 2018
RECEIVED

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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number | Pool Code | Pool Name |
|---|---|---|
| 30-025- | 96776 | JABALINA;WOLFCAMP, SOUTHWEST |

| Property Code | Property Name | Well Number |
|---|---|---|
| 320992 | MEAN GREEN 23-35 FED COM | 3H |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 6137 | DEVON ENERGY PRODUCTION COMPANY, L.P. | 3192.7' |

### Surface Location

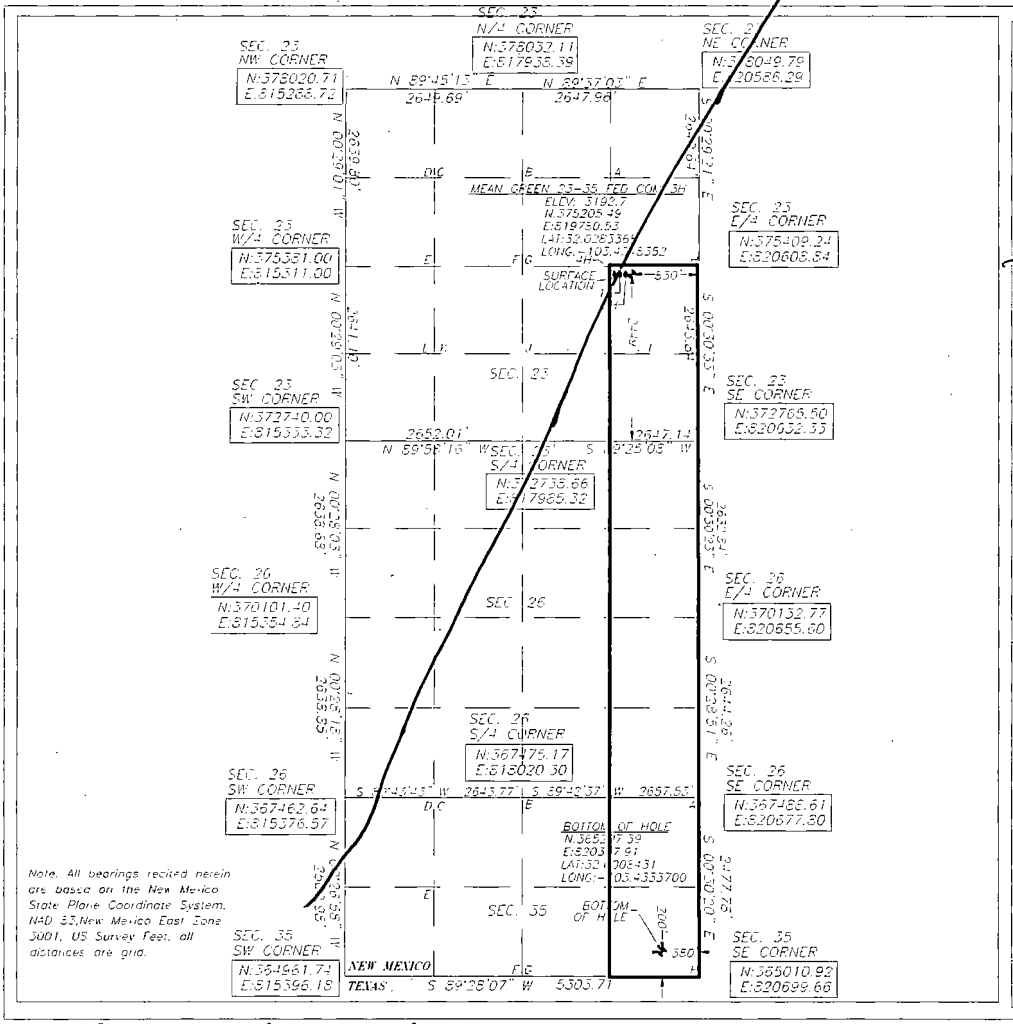
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| I | 23 | 26-S | 34-E | | 2449 | SOUTH | 830 | EAST | LEA |

### Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 35 | 26-S | 34-E | | 200 | SOUTH | 380 | EAST | LEA |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 320 | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION




### OPERATOR CERTIFICATION

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

Rebecca Deal 7/25/2017
Signature Date

Rebecca Deal, Regulatory Analyst
Printed Name

rebecca.deal@dvn.com
E-mail Address

### SURVEYOR CERTIFICATION

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

Signature & Seal of Professional Surveyor

B. L. LAMAN
NEW MEXICO
22404
PROFESSIONAL SURVEYOR

05/25/17

Certificate No. 22404 B.L. LAMAN
W.O. # DRAWN BY: CM

**Last Take Point: 330' FSL & 380' FWL**

**APD ID:** 10400022423 **Submission Date:** 09/26/2017

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

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

Highlighted data reflects the most recent changes

Show Final Text

## Section 1 - Geologic Formations

| Formation ID | Formation Name | Elevation | True Vertical Depth | Measured Depth | Lithologies | Mineral Resources | Producing Formation |
|---|---|---|---|---|---|---|---|
| 1 | — | 3194 | 0 | 0 | OTHER : Surface | NONE | No |
| 2 | RUSTLER | 2212 | 982 | 982 | SANDSTONE | NONE | No |
| 3 | TOP SALT | 1797 | 1397 | 1397 | SALT | NONE | No |
| 4 | BASE OF SALT | -1843 | 5037 | 5037 | LIMESTONE | NONE | No |
| 5 | BELL CANYON | -2233 | 5427 | 5427 | SANDSTONE | NATURAL GAS,OIL | No |
| 6 | CHERRY CANYON | -3173 | 6367 | 6367 | SANDSTONE | NATURAL GAS,OIL | No |
| 7 | BRUSHY CANYON | -4768 | 7962 | 7962 | SANDSTONE | NATURAL GAS,OIL | No |
| 8 | BONE SPRINGS | -6133 | 9327 | 9327 | SHALE | NATURAL GAS,OIL | No |
| 9 | BONE SPRING 1ST | -7433 | 10627 | 10627 | SANDSTONE | NATURAL GAS,OIL | No |
| 10 | BONE SPRING 2ND | -7958 | 11152 | 11152 | SANDSTONE | NATURAL GAS,OIL | No |
| 11 | BONE SPRING 3RD | -8993 | 12187 | 12187 | SANDSTONE | NATURAL GAS,OIL | No |
| 12 | WOLFCAMP | -9433 | 12627 | 12627 | SHALE | NATURAL GAS,OIL | Yes |

## Section 2 - Blowout Prevention

**Pressure Rating (PSI):** 10M **Rating Depth:** 12841

**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 10M 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. Requesting annular variance. See attached annular preventor & 10M BOPE

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

Double Ram & CLS Exception Schematic in section 8

**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:**

Mean_Green_23_35_Fed_Com_3H_10M_BOPE_CK_20170919083509.pdf

**BOP Diagram Attachment:**

Mean_Green_23_35_Fed_Com_3H_10M_BOPE_CK_20170919083529.pdf

---

**Pressure Rating (PSI):** 5M **Rating Depth:** 12775

**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 5M 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:**

Mean_Green_23_35_Fed_Com_3H_5M_BOPE__CK_20170919083616.pdf

**BOP Diagram Attachment:**

Mean_Green_23_35_Fed_Com_3H_5M_BOPE__CK_20170919083649.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 | 14.75 | 10.75 | NEW | API | N | 0 | 1050 | 0 | 1050 | | | 1050 | J-55 | 40.5 | STC | 1.125 | 1.25 | BUOY | 1.6 | BUOY | 1.6 |
| 2 | INTERMEDIATE | 9.875 | 7.625 | NEW | API | N | 0 | 9345 | 0 | 9325 | | | 9345 | P-110 | 29.7 | OTHER - BTC | 1.125 | 1.25 | BUOY | 1.6 | BUOY | 1.6 |
| 3 | INTERMEDIATE | 8.75 | 7.625 | NEW | API | N | 9345 | 12883 | 9325 | 12775 | | | 3538 | P-110 | 29.7 | OTHER - FLUSHMAX | 1.125 | 1.25 | BUOY | 1.6 | BUOY | 1.6 |

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | PRODUCTION | 6.75 | 5.5 | NEW | API | N | 0 | 22661 | 0 | 12789 | | | 22661 | P-110 | 20 | OTHER - VAM SG | 1.125 | 1.25 | BUOY | 1.6 | BUOY | 1.6 |

**Casing Attachments**

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Mean_Green_23_35_Fed_Com_3H_Surf_Csg_Ass_20170919083729.pdf

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Mean_Green_23_35_Fed_Com_3H_Int_Csg_Ass_20170919083758.pdf

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

**Casing Attachments**

**Casing ID:** 3 **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Mean_Green_23_35_Fed_Com_3H_Int_Csg_Ass_20170919083832.pdf

**Casing ID:** 4 **String Type:** PRODUCTION

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Mean_Green_23_35_Fed_Com_3H_Prod_Csg_Ass_20170919083905.pdf

## Section 4 - Cement

| String Type | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|---|---|---|---|---|---|---|---|---|---|---|---|
| INTERMEDIATE | Lead | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | X (SEE INTERMEDIATE CMT CONTINGENCY ATTACHMENT) | X |
| SURFACE | Lead | | 0 | 1050 | 529 | 1.34 | 14.8 | 708.86 | 50 | C | 1% Calcium Chloride |

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

| String Type | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|---|---|---|---|---|---|---|---|---|---|---|---|
| INTERMEDIATE | Lead | | 0 | 11383 | 899 | 3.27 | 9 | 2939 | 30 | TUNED | TUNED LIGHT |
| INTERMEDIATE | Tail | | 11383 | 12883 | 163 | 1.2 | 14.5 | 196 | 30 | H | Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite |
| PRODUCTION | Lead | | 12683 | 22661 | 869 | 1.33 | 14.8 | 1156 | 25 | C | 0.125 lbs/sack Poly-E-Flake |

## 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 | 1050 | SPUD MUD | 8.33 | 9.1 | | | | 2 | | | |
| 0 | 12697 | SALT SATURATED | 8.6 | 10 | | | | 2 | | | |
| 1050 | 12883 | SALT SATURATED | 8.6 | 10 | | | | 2 | | | |

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12883 | 22661 | OIL-BASED MUD | 10.5 | 12.5 | | | | 12 | | | |

## 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

**Anticipated Bottom Hole Pressure:** 7313 **Anticipated Surface Pressure:** 4487.97

**Anticipated Bottom Hole Temperature(F):** 165

**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:**

Mean_Green_23_35_Fed_Com_3H_H2S_Plan_20170919084239.pdf

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

## Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Mean_Green_23_35_Fed_Com_3H_Dir_Plan_20170919084437.pdf

**Other proposed operations facets description:**

MULTI-BOWL VERBIAGE
MULTI-BOWL WELLHEAD
CLOSED-LOOP DESIGN PLAN
DRILLING CONTINGENCY PLAN
SPUDDER RIG VARIANCE REQUEST
GCP FORM
ANTI-COLLISION REPORT
CO-FLEX
ANNULAR PREVENTOR VARIANCE DOCUMENT
10M BOPE Double Ram & CLS Exception Schematic

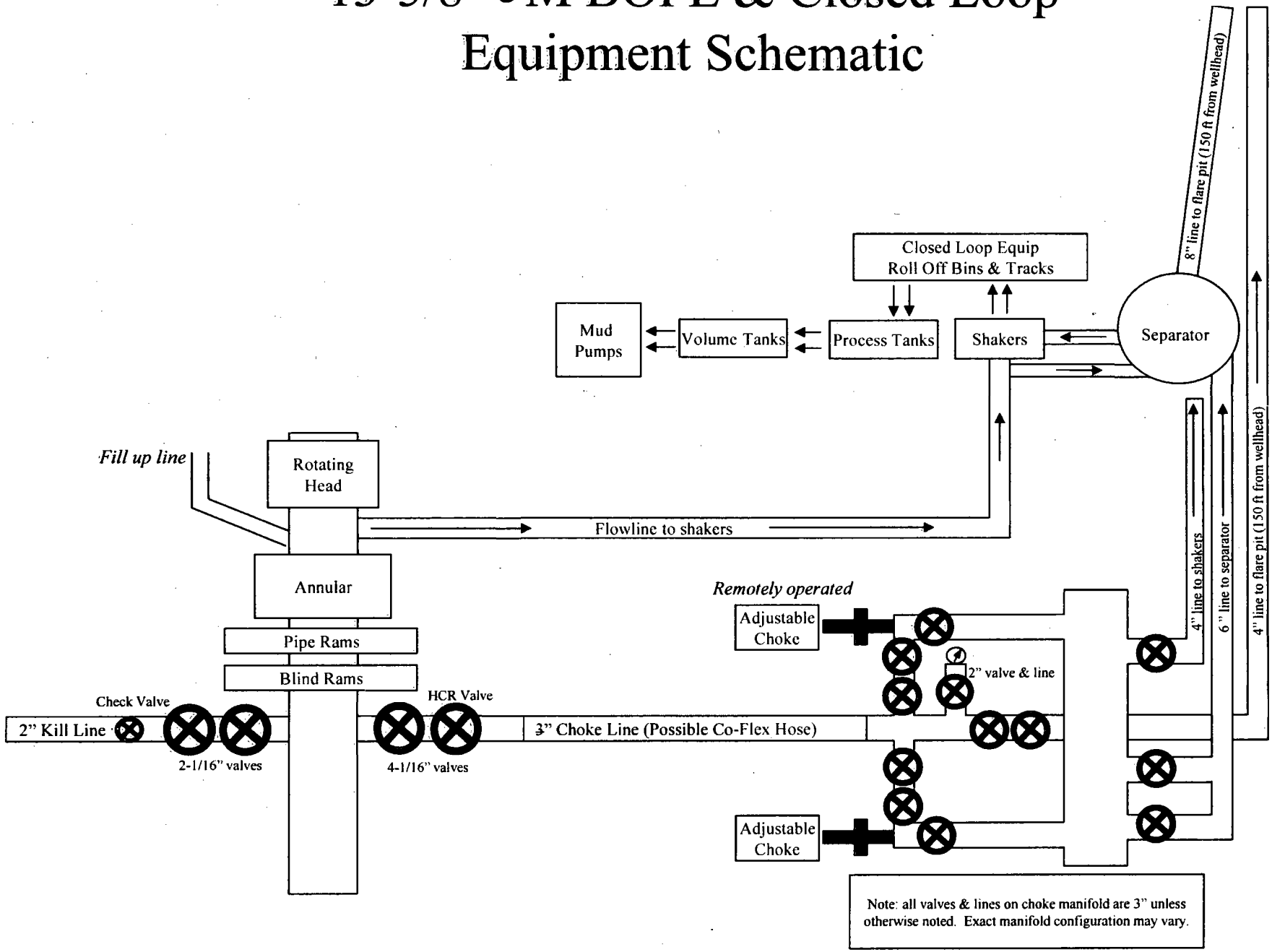
**Other proposed operations facets attachment:**

Mean_Green_23_35_Fed_Com_3H_AC_Report_20170919084817.pdf
Mean_Green_23_35_Fed_Com_3H_GCP_20170919084818.pdf
Mean_Green_23_35_Fed_Com_3H_Clsd_Loop_20170919084817.pdf
Mean_Green_23_35_Fed_Com_3H_MB_Verb_20170919084819.pdf
Mean_Green_23_35_Fed_Com_3H_MB_Wellhd_20170919084820.pdf
Mean_Green_23_35_Fed_Com_3H_DRLG_Contingency_20170919084916.pdf

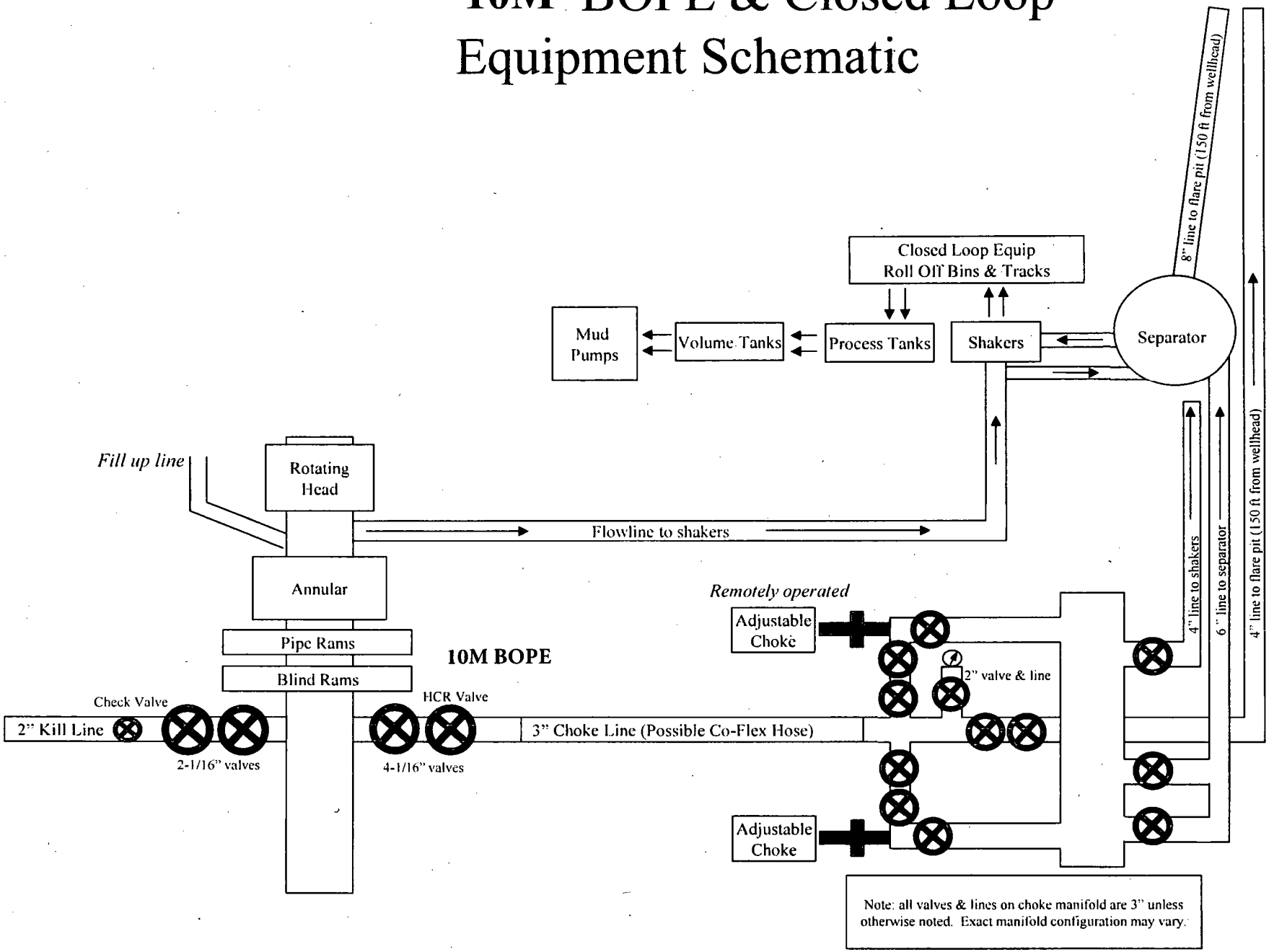
**Other Variance attachment:**

Mean_Green_23_35_Fed_Com_3H_Co_flex_20170919084932.pdf
Mean_Green_23_35_Fed_Com_3H_Spudder_Rig_Info_20170919084933.pdf
Mean_Green_23_35_Fed_Com_3H_Annular_Preventer_20171116110200.pdf
Mean_Green_23_35_Fed_Com_3H_10M_BOPE_DR_CLS_Except_Schem_20171116110214.pdf

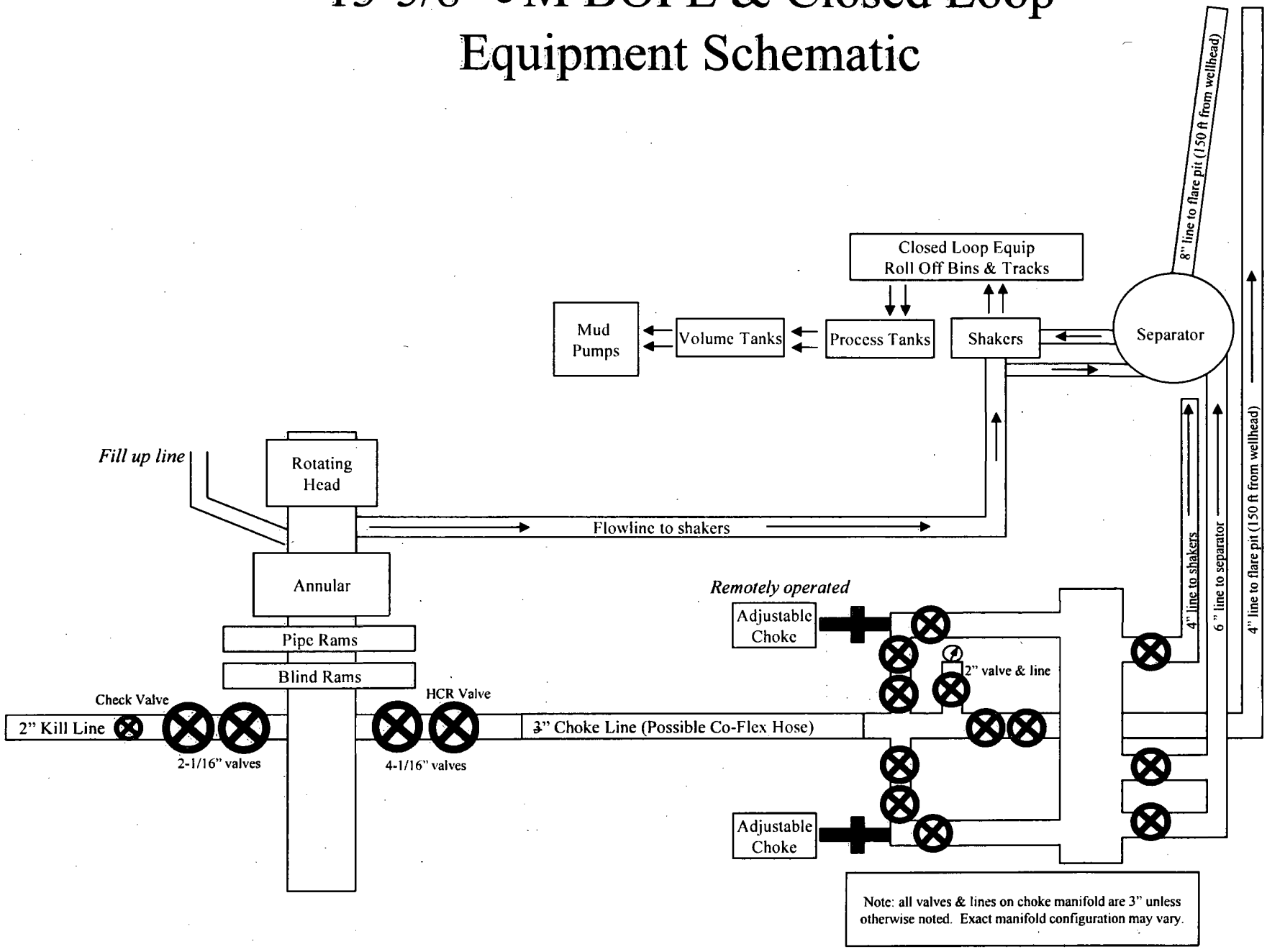
# 13-5/8" 5M BOPE & Closed Loop Equipment Schematic



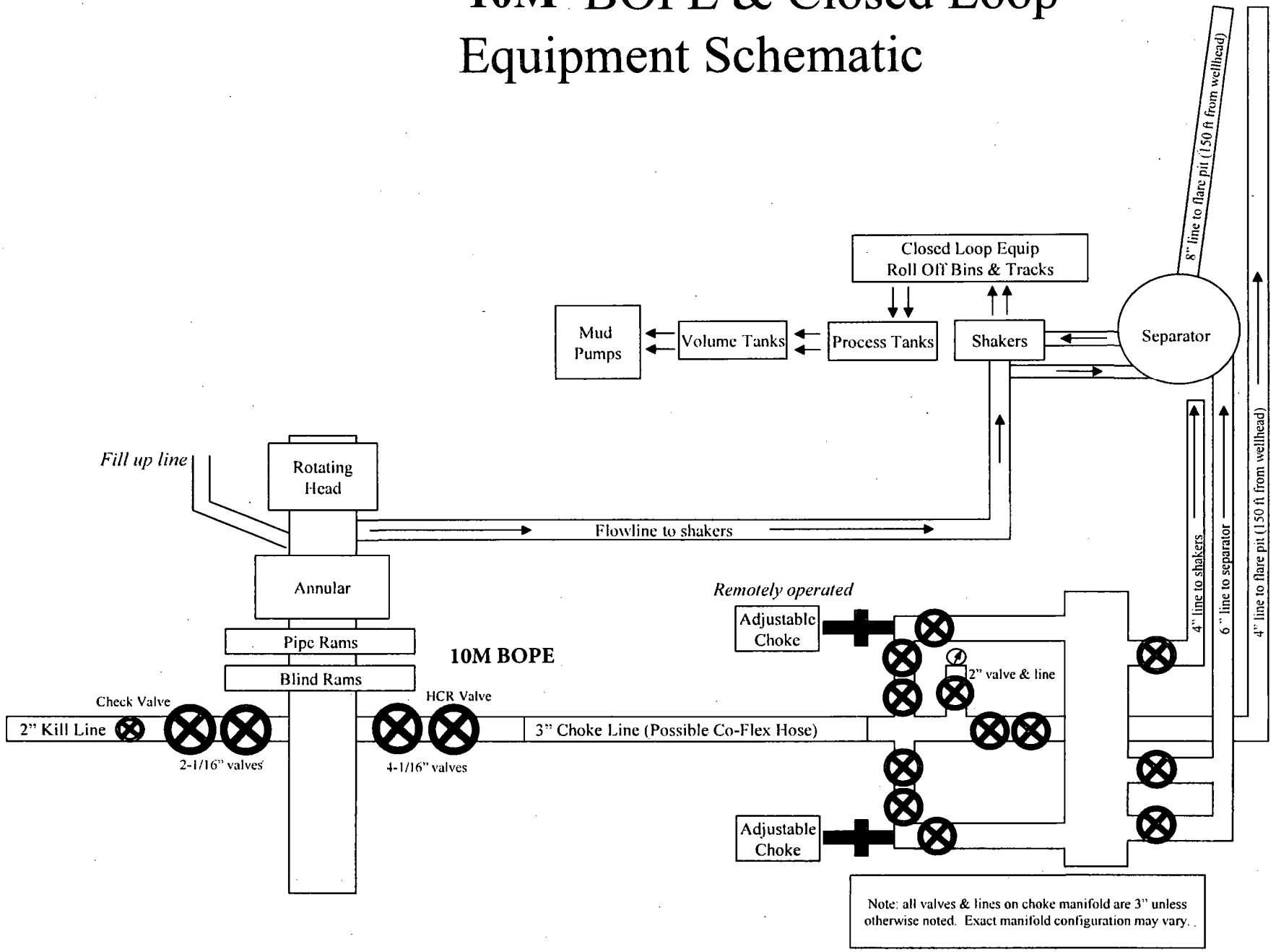
# 10M BOPE & Closed Loop Equipment Schematic



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



# 10M 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

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 |

## Contingency Intermediate Cement

| | | | |
|---|---|---|---|
| Additional Info for String | 3 | Additional String Description | Intermediate squeeze cement |
| Stage Tool Depth | | | |

*Lead*

| | | | | | |
|---|---|---|---|---|---|
| Top MD of Segment | 0 | Btm MD of Segment | 9000 | Cement Type | Class C |
| Additives | 0.125 lbs/sack Poly-E-Flake | Quanity (sks) | 1450 | Yield (cu.ft./sk) | 1.3 |
| Density (lbs/gal) | 14.5 | Volume (cu.ft.) | 1900 | Percent Excess | 0 |

*Tail*

| | | | | | |
|---|---|---|---|---|---|
| Top MD of Segment | | Top MD of Segment | | Cement Type | |
| Additives | | Quanity (sks) | | Yield (cu.ft./sk) | |
| Density (lbs/gal) | | Volume (cu.ft.) | | Percent Excess | |

## Contingency Production Cement

| | | | |
|---|---|---|---|
| Additional Info for String | | Additional String Description | |
| Stage Tool Depth | | | |

*Lead*

| | | | | | |
|---|---|---|---|---|---|
| Top MD of Segment | | Btm MD of Segment | | Cement Type | |
| Additives | | Quanity (sks) | | Yield (cu.ft./sk) | |
| Density (lbs/gal) | | Volume (cu.ft.) | | Percent Excess | |

*Tail*

| | | | | | |
|---|---|---|---|---|---|
| Top MD of Segment | | Top MD of Segment | | Cement Type | |
| Additives | | Quanity (sks) | | Yield (cu.ft./sk) | |
| Density (lbs/gal) | | Volume (cu.ft.) | | Percent Excess | |

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

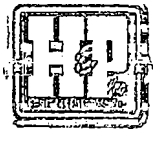
Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

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) 556-737 • Fax: (3662) 568-738

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

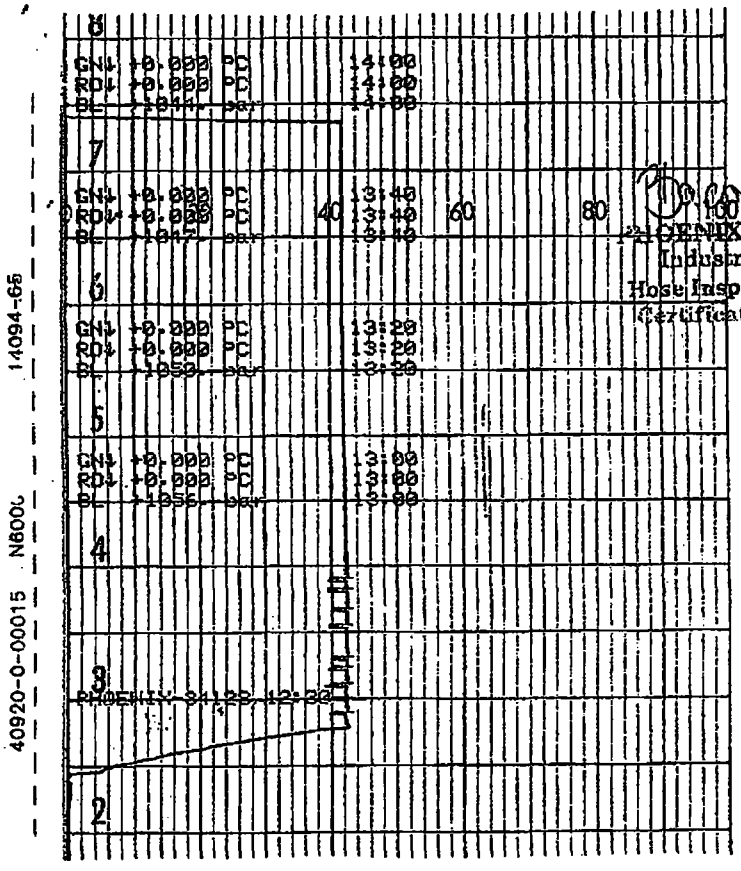
| Type | Serial N° | Quality | Heat N° |
|---|---|---|---|
| 3" coupling with | 720 719 | AISI 4130 | C7626 |
| 4 1/16" Flange end | | AISI 4130 | 47357 |
| | | | |
| | | | |

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 Certification Dept. CERTIFIED TRUE COPY PHOENIX RUBBER Q.C. |




PHOENIX RUBBER
Industrial Ltd.
Hose Inspection and
Certification Dept.

VERIFIED TRUE CO.
PHOENIX RUBBER CO.

## Devon Energy Annular Preventer Summary

### 1. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the 10M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

6-3/4" Production hole section, 10M requirement

| Component | OD | Preventer | RWP |
|---|---|---|---|
| Drillpipe | 4.5" | Fixed lower 4.5"<br>Upper 4.5-7" VBR | 10M |
| HWDP | 4.5" | Fixed lower 4.5"<br>Upper 4.5-7" VBR | 10M |
| Drill collars and MWD tools | 4.75" | Upper 4.5-7" VBR | 10M |
| Mud Motor | 4.75" | Upper 4.5-7" VBR | 10M |
| Production casing | 5.5" | Upper 4.5-7" VBR | 10M |
| ALL | 0-13-5/8" | Annular | 5M |
| Open-hole | - | Blind Rams | 10M |

VBR = Variable Bore Ram. Compatible range listed in chart.

### 2. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. The pressure at which control is swapped from the annular to another compatible ram is variable, but the operator will document in the submission their operating pressure limit. The operator may chose an operating pressure less than or equal to RWP, but in no case will it exceed the RWP of the annular preventer.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram.

# Devon Energy
## APD VARIANCE DATA

**OPERATOR NAME:** Devon Energy

**1. SUMMARY OF Variance:**

Devon Energy respectfully requests approval for the following additions to the drilling plan:

1. Potential utilization of a spudder rig to pre-set surface casing.

**2. Description of Operations**

1. A spudder rig contractor may move in their rig to drill the surface hole section and pre-set surface casing on this well.
    a. After drilling the surface hole section, the rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
    b. Rig will utilize fresh water based mud to drill surface hole to TD.
2. The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
3. A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.
    a. A means for intervention will be maintained while the drilling rig is not over the well.
4. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
5. Drilling operation will be performed with the big 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 BLM will be contacted / notified 24 hours before the big rig moves back on to the pad with the pre-set surface casing.
6. Devon Energy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
7. Once the rig is removed, Devon Energy will secure the wellhead area by placing a guard rail around the cellar area.

## Devon Energy Annular Preventer Summary

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram.

General Procedure While Running Casing

1. Sound alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. HCR and choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP and SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams or BSR. (HCR and choke will already be in the closed position.)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
    a. SICP
    b. Pit gain
    c. Time
6. Regroup and identify forward plan

## Devon Energy Annular Preventer Summary

General Procedures While Pulling BHA thru Stack

1. PRIOR to pulling last joint of drillpipe thru the stack.
    a. Perform flowcheck, if flowing:
    b. Sound alarm (alert crew)
    c. Stab full opening safety valve and close
    d. Space out drill string with tool joint just beneath the upper pipe ram.
    e. Shut-in using upper pipe ram. (HCR and choke will already be in the closed position.)
    f. Confirm shut-in
    g. Notify toolpusher/company representative
    h. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
    i. Regroup and identify forward plan

2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. Stab crossover and full opening safety valve and close
    c. Space out drill string with upset just beneath the compatible pipe ram.
    d. Shut-in using compatible pipe ram. (HCR and choke will already be in the closed position.)
    e. Confirm shut-in
    f. Notify toolpusher/company representative
    g. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
    h. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
    a. Sound alarm (alert crew)
    b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario.
    c. If impossible to pick up high enough to pull the string clear of the stack:
    d. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
    e. Space out drill string with tooljoint just beneath the upper pipe ram.
    f. Shut-in using upper pipe ram. (HCR and choke will already be in the closed position.)
    g. Confirm shut-in
    h. Notify toolpusher/company representative
    i. Read and record the following:
        i. SIDPP and SICP
        ii. Pit gain
        iii. Time
    j. Regroup and identify forward plan

**APD ID:** 10400022423 **Submission Date:** 09/26/2017

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

**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:**

Mean_Green_23_35_Fed_Com_3H_Access_Rd_20170919085017.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:**

Mean_Green_23_35_Fed_Com_3H_New_Road_Map_20170919085101.pdf

**New road type:** LOCAL

**Length:** 2755 Feet **Width (ft.):** 30

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

**Army Corp of Engineers (ACOE) permit required?** NO

**ACOE Permit Number(s):**

**New road travel width:** 14

**New road access erosion control:** Water drainage ditch.

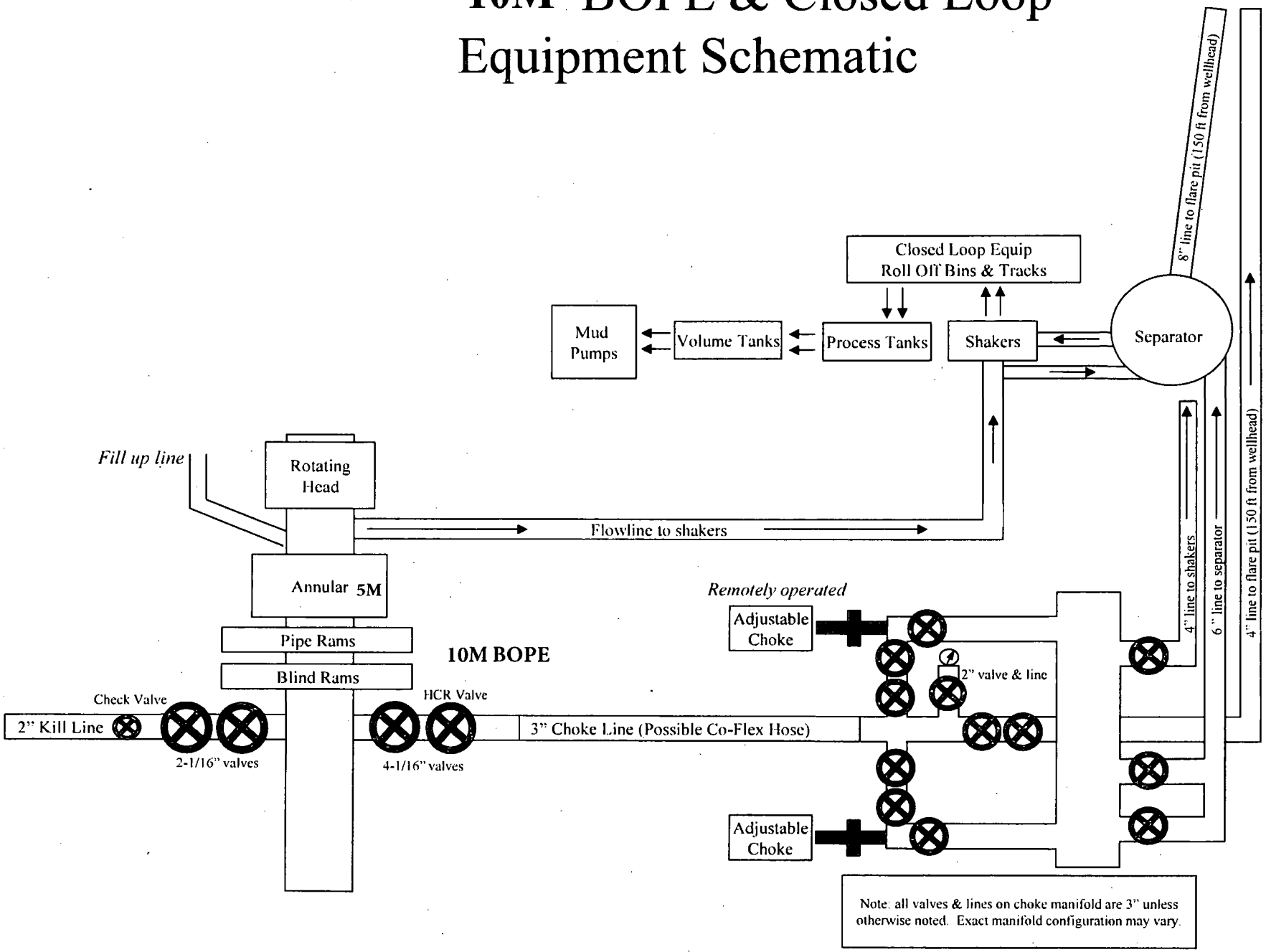
**New road access plan or profile prepared?** YES

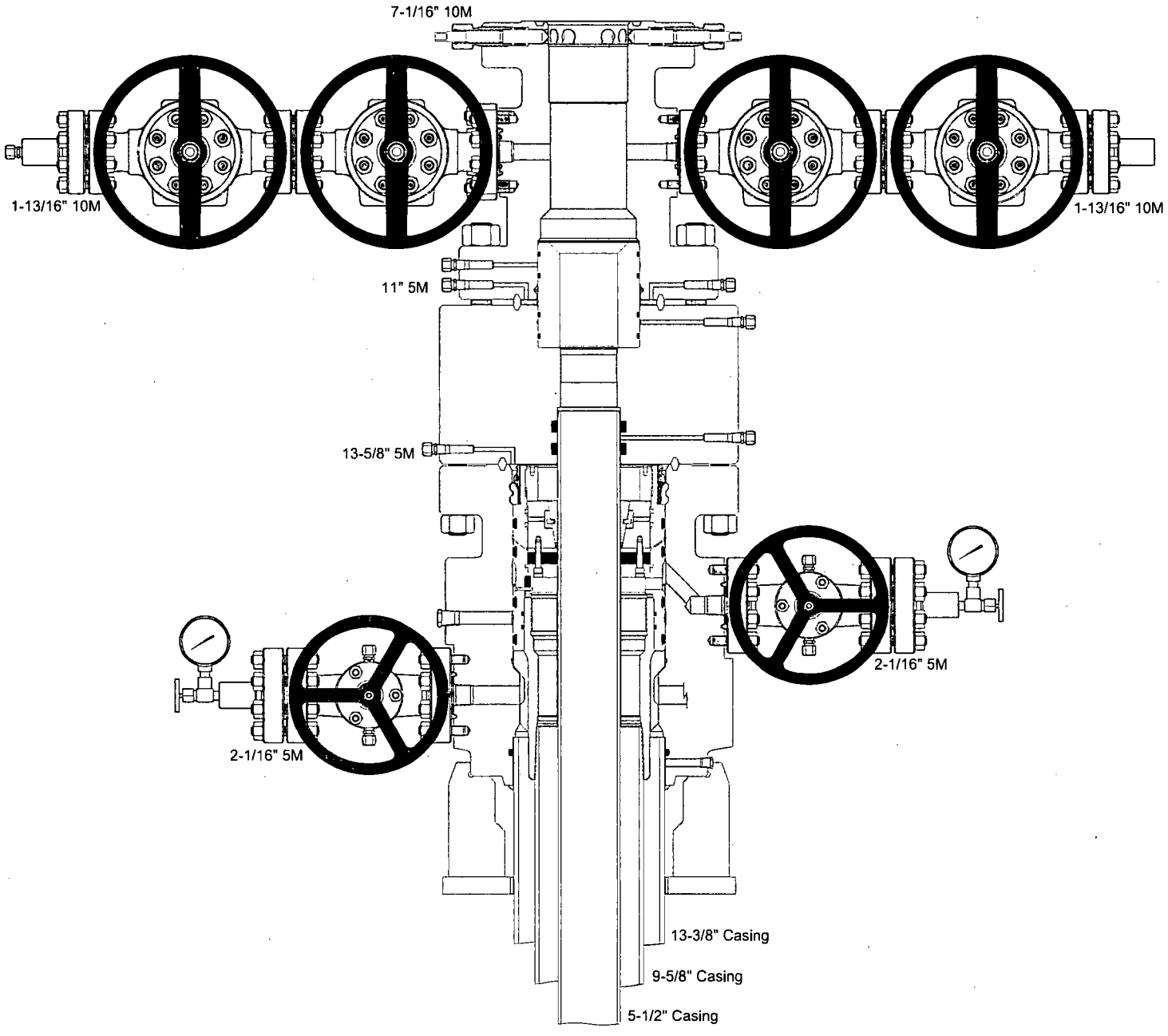
**New road access plan attachment:**

Mean_Green_23_35_Fed_Com_3H_New_Road_Map_20170919085124.pdf

**Access road engineering design?** YES

# 10M BOPE & Closed Loop Equipment Schematic




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

**Access road engineering design attachment:**

Mean_Green_23_35_Fed_Com_3H_New_Road_Map_20170919085134.pdf

**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:** N/A

**Road Drainage Control Structures (DCS) description:** N/A

**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:**

Mean_Green_23_35_Fed_Com_3H_1Mi_Radius_Map_20170920093302.pdf

**Existing Wells description:**

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

**Submit or defer a Proposed Production Facilities plan?** SUBMIT

**Production Facilities description:** Five attachments - Flowline Plat (buried), Wellpad Electric Plat, CTB Plat, CTB Electric Plat, CTB Battery Connect Plat

**Production Facilities map:**

Mean_Green_23_35_Fed_Com_3H_Flowlines_20170919085422.PDF

Mean_Green_23_35_Fed_Com_3H_MG_23_CTB_2_BATCON_20170919085423.PDF

Mean_Green_23_35_Fed_Com_3H_MG_23_CTB_2_Elect_20170919085425.PDF

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

Mean_Green_23_35_Fed_Com_3H_MG_23_CTB_2_Plat_20170919085426.pdf
Mean_Green_23_35_Fed_Com_3H_WELLPAD_ELEC_20170919085428.PDF

## Section 5 - Location and Types of Water Supply

### Water Source Table

**Water source use type:** STIMULATION

**Water source type:** RECYCLED

**Describe type:**

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** OTHER

**Source land ownership:** FEDERAL

**Water source transport method:** PIPELINE

**Source transportation land ownership:** FEDERAL

**Water source volume (barrels):** 350000

**Source volume (acre-feet):** 45.112583

**Source volume (gal):** 14700000

**Water source and transportation map:**

MEAN_GREEN_23_35_FED_COM_3H_Water_Map_20170919085559.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:**

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

**State appropriation permit:**

**Additional information attachment:**

## Section 6 - Construction Materials

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

**Construction Materials source location attachment:**

Mean_Green_23_35_Fed_Com_3H_Caliche_Map_2_20170919085715.pdf
Mean_Green_23_35_Fed_Com_3H_Caliche_Map_20170919085715.pdf

## Section 7 - Methods for Handling Waste

**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:** DRILLING

**Waste content description:** Water Based and Oil Based Cuttings

**Amount of waste:** 1740 barrels

**Waste disposal frequency :** Daily

**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:** All cuttings will disposed of at R360, Sundance, or equivalent.

**Waste type:** PRODUCED WATER

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

**Amount of waste:** 1600 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 will be primarily disposed of at our Rattlesnake 16 SWD. At certain times during the year, some of the water will be recycled and used for completions.

**Waste type:** FLOWBACK

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

**Amount of waste:** 3800 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 our Rattlesnake 16 SWD.

## 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:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

## Section 8 - Ancillary Facilities

**Are you requesting any Ancillary Facilities?:** NO

**Ancillary Facilities attachment:**

**Comments:**

## Section 9 - Well Site Layout

**Well Site Layout Diagram:**

Mean_Green_23_35_Fed_Com_3H_Well_Layout_20170919090244.pdf

**Comments:**

## Section 10 - Plans for Surface Reclamation

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:** MEAN GREEN 23-35

**Multiple Well Pad Number:** 1H-4H

**Recontouring attachment:**

Mean_Green_23_35_Fed_Com_3H_Interim_Recl_20170919090312.pdf

**Drainage/Erosion control construction:** N/A

**Drainage/Erosion control reclamation:** N/A

**Wellpad long term disturbance (acres):** 1.62

**Wellpad short term disturbance (acres):** 8.264

**Access road long term disturbance (acres):** 1.898

**Access road short term disturbance (acres):** 1.898

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

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

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

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

**Total long term disturbance:** 3.518

**Total short term disturbance:** 10.162

**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:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

**First Name:** TRAVIS **Last Name:** PHIBBS

**Phone:** (575)748-9929 **Email:** TRAVIS.PHIBBS@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:** 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:**

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

**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:**

**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:**

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

**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:**

## Section 12 - Other Information

**Right of Way needed?** YES **Use APD as ROW?** YES

**ROW Type(s):** 281001 ROW - ROADS,Other

## ROW Applications

**SUPO Additional Information:** Six attachments - Flowline Plat (buried), Wellpad Electric Plat, CTB Plat, CTB Electric Plat, CTB Battery Connect Plat, Miscellaneous Plats
**Use a previously conducted onsite?** YES

**Previous Onsite information:** Onsite Conducted 4-27-17.

## Other SUPO Attachment

Mean_Green_23_35_Fed_Com_3H_Flowlines_20170919090434.PDF
Mean_Green_23_35_Fed_Com_3H_MG_23_CTB_2_BATCON_20170919090435.PDF
Mean_Green_23_35_Fed_Com_3H_MG_23_CTB_2_Elect_20170919090436.PDF
Mean_Green_23_35_Fed_Com_3H_Misc_Plats_20170919090440.pdf

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Well Name:** MEAN GREEN 23-35 FED COM **Well Number:** 3H

Mean_Green_23_35_Fed_Com_3H_MG_23_CTB_2_Plat_20170919090437.pdf

Mean_Green_23_35_Fed_Com_3H_WELLPAD_ELEC_20170919090443.PDF

## 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?**

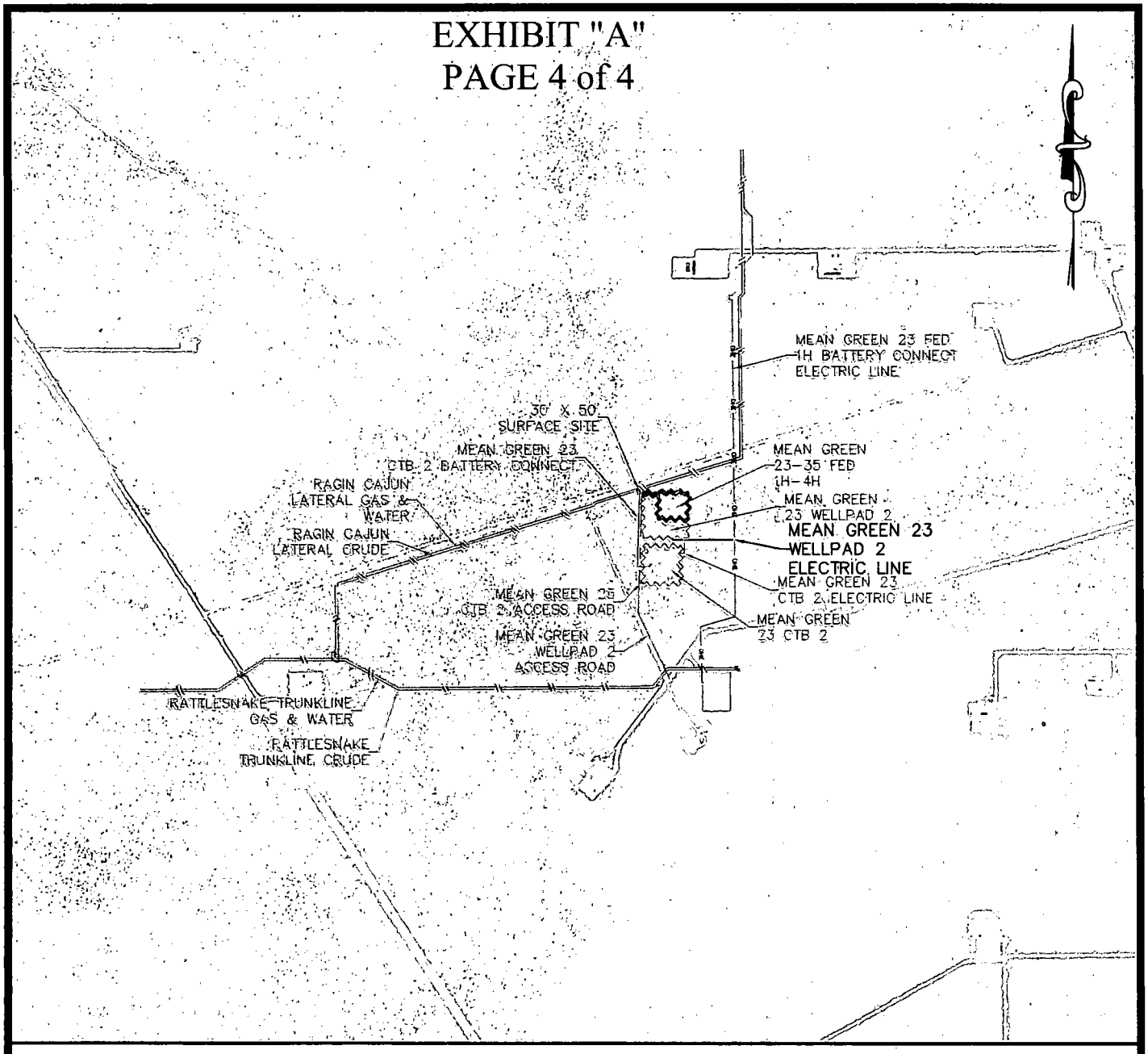
**Is the reclamation bond a rider under the BLM bond?**

**Lined pit bond number:**

**Lined pit bond amount:**

**Additional bond information attachment:**

# EXHIBIT "A"
# PAGE 4 of 4




AERIAL MAP

SECTION 23, T26S-R34E, N.M.P.M.;

| | | | |
|---|---|---|---|
| *HORIZON ROW LLC* | Drawn for: devon | | LINE NUMBER: EL-7999 |
| DEVON ENERGY PRODUCTION CO., L.P. | | | WBS NUMBER: XX.123790.01 |
| PROPOSED 30' EASEMENT | | | SCALE: 1" = 2000' |
| Drawn by: JEANNIE PERRY | Date: 06/05/2017 | | REVISIONS: |
| | | | SHEET: 4 OF 4 |

## 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

02/02/2018

## 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:**

AFMSS

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

# Operator Certification Data Report

02/02/2018

## 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:** Rebecca Deal **Signed on:** 09/26/2017

**Title:** Regulatory Compliance Professional

**Street Address:** 333 West Sheridan Avenue

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

**Phone:** (405)228-8429

**Email address:** Rebecca.Deal@dvn.com

## Field Representative

**Representative Name:** TRAVIS PHIBBS

**Street Address:** 6488 SEVEN RIVERS HWY

**City:** ARTESIA **State:** NM **Zip:** 88210

**Phone:** (575)748-9929

**Email address:** TRAVIS.PHIBBS@DVN.COM