# Carlsbad Field Office
# OCD Hobbs

HOBBS OCD

FEB 13 2017

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Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

## APPLICATION FOR PERMIT TO DRILL OR REENTER

| | |
|---|---|
| 1a. Type of work: ☑ DRILL ☐ REENTER | 5. Lease Serial No. NMNM 94186 |
| 1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone | 6. If Indian, Allotee or Tribe Name |
| 2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP (6137) | 7. If Unit or CA Agreement, Name and No. |
| 3a. Address 333 West Sheridan Avenue Oklahoma City OK | 8. Lease Name and Well No. THISTLE UNIT 156H (30884) |
| 3b. Phone No. *(include area code)* (405)552-6571 | 9. API Well No. 30-025-43599 |
| 4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* | 10. Field and Pool, or Exploratory TRIPLE X / BONE SPRING (59900) |
| At surface SESE / 124 FSL / 933 FEL / LAT 32.2542459 / LONG -103.5717584 | 11. Sec., T. R. M. or Blk. and Survey or Area |
| At proposed prod. zone NWSE / 2630 FSL / 1340 FEL / LAT 32.2756742 / LONG -103.5730888 | SEC 33 / T23S / R33E / 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) 124 feet | 16. No. of acres in lease 960 | 17. Spacing Unit dedicated to this well 240 |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 200 feet | 19. Proposed Depth 9655 feet / 17074 feet | 20. BLM/BIA Bond No. on file FED: CO1104 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3651 feet | 22. Approximate date work will start* 01/25/2018 | 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 09/08/2016 |
| Title Regulatory Compliance Professional | | |
| Approved by *(Signature)* (Electronic Submission) | Name *(Printed/Typed)* Cody Layton / Ph: (575)234-5959 | Date 02/02/2017 |
| Title Supervisor Multiple Resources | Office HOBBS | |

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)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

KZ 02/03/17

**APD ID:** 10400005394 **Submission Date:** 09/08/2016 Highlight All Changes

**Operator Name:** DEVON ENERGY PRODUCTION COMPANY LP **Federal/Indian APD:** FED

**Well Name:** THISTLE UNIT **Well Number:** 156H

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

## Application

### Section 1 - General

**APD ID:** 10400005394 **Tie to previous NOS?** **Submission Date:** 09/08/2016

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

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

**Lease number:** NMNM 94186 **Lease Acres:** 960

**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:**

**Keep application confidential?** YES

### 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:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Well Name:** THISTLE UNIT **Well Number:** 156H **Well API Number:**

**Field/Pool or Exploratory?** Field and Pool **Field Name:** TRIPLE X **Pool Name:** BONE SPRING

**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:** THISTLE UNIT **Number:** 144H, 145H, & 156H

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

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** INFILL

**Describe sub-type:**

**Distance to town:** **Distance to nearest well:** 200 FT **Distance to lease line:** 124 FT

**Reservoir well spacing assigned acres Measurement:** 240 Acres

**Well plat:** Thistle Unit 156H _C-102 Signed_09-08-2016.pdf

**Well work start Date:** 01/25/2018 **Duration:** 45 DAYS

## Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

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

**Survey number:** 4716

| | | | |
|---|---|---|---|
| | **STATE:** NEW MEXICO | **Meridian:** NEW MEXICO PRINCIPAL | **County:** LEA |
| | **Latitude:** 32.2542459 | **Longitude:** -103.5717584 | |
| SHL | **Elevation:** 3651 | **MD:** 0 | **TVD:** 0 |
| **Leg #:** 1 | **Lease Type:** STATE | **Lease #:** STATE | |
| | **NS-Foot:** 124 | **NS Indicator:** FSL | |
| | **EW-Foot:** 933 | **EW Indicator:** FEL | |
| | **Twsp:** 23S | **Range:** 33E | **Section:** 33 |
| | **Aliquot:** SESE | **Lot:** | **Tract:** |

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

| | | | |
|---|---|---|---|
| | **STATE:** NEW MEXICO | **Meridian:** NEW MEXICO PRINCIPAL | **County:** LEA |
| | **Latitude:** 32.2542459 | **Longitude:** -103.5717584 | |
| KOP | **Elevation:** -5546 | **MD:** 9215 | **TVD:** 9197 |
| **Leg #:** 1 | **Lease Type:** STATE | **Lease #:** STATE | |
| | **NS-Foot:** 200 | **NS Indicator:** FSL | |
| | **EW-Foot:** 1340 | **EW Indicator:** FEL | |
| | **Twsp:** 23S | **Range:** 33E | **Section:** 33 |
| | **Aliquot:** NWNE | **Lot:** | **Tract:** |
| | **STATE:** NEW MEXICO | **Meridian:** NEW MEXICO PRINCIPAL | **County:** LEA |
| | **Latitude:** 32.2542459 | **Longitude:** -103.5717584 | |
| PPP | **Elevation:** -6024 | **MD:** 9966 | **TVD:** 9675 |
| **Leg #:** 1 | **Lease Type:** STATE | **Lease #:** STATE | |
| | **NS-Foot:** 330 | **NS Indicator:** FSL | |
| | **EW-Foot:** 1340 | **EW Indicator:** FEL | |
| | **Twsp:** 23S | **Range:** 33E | **Section:** 33 |
| | **Aliquot:** NWNE | **Lot:** | **Tract:** |
| | **STATE:** NEW MEXICO | **Meridian:** NEW MEXICO PRINCIPAL | **County:** LEA |
| | **Latitude:** 32.2756742 | **Longitude:** -103.5730888 | |
| EXIT | **Elevation:** -6004 | **MD:** 17074 | **TVD:** 9655 |
| **Leg #:** 1 | **Lease Type:** FEDERAL | **Lease #:** NMNM94186 | |
| | **NS-Foot:** 2630 | **NS Indicator:** FSL | |
| | **EW-Foot:** 1340 | **EW Indicator:** FEL | |
| | **Twsp:** 23S | **Range:** 33E | **Section:** 28 |
| | **Aliquot:** NWSE | **Lot:** | **Tract:** |
| | **STATE:** NEW MEXICO | **Meridian:** NEW MEXICO PRINCIPAL | **County:** LEA |
| | **Latitude:** 32.2756742 | **Longitude:** -103.5730888 | |
| BHL | **Elevation:** -6004 | **MD:** 17074 | **TVD:** 9655 |
| **Leg #:** 1 | **Lease Type:** FEDERAL | **Lease #:** NMNM94186 | |
| | **NS-Foot:** 2630 | **NS Indicator:** FSL | |
| | **EW-Foot:** 1340 | **EW Indicator:** FEL | |

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Twsp:** 23S **Range:** 33E **Section:** 28

**Aliquot:** NWSE **Lot:** **Tract:**

## Drilling Plan

### Section 1 - Geologic Formations

**ID:** Surface formation **Name:** UNKNOWN

**Lithology(ies):**

OTHER - Surface

**Elevation:** 3651 **True Vertical Depth:** 0 **Measured Depth:** 0

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 1 **Name:** RUSTLER

**Lithology(ies):**

ANHYDRITE

**Elevation:** 2316 **True Vertical Depth:** 1335 **Measured Depth:** 1335

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 2 **Name:** TOP OF SALT

**Lithology(ies):**

SALT

**Elevation:** 1811 **True Vertical Depth:** 1840 **Measured Depth:** 1840

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 3 **Name:** BASE OF SALT

**Lithology(ies):**

SALT

**Elevation:** -1299 **True Vertical Depth:** 4950 **Measured Depth:** 4950

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 4 **Name:** DELAWARE

**Lithology(ies):**

SANDSTONE

**Elevation:** -1559 **True Vertical Depth:** 5210 **Measured Depth:** 5210

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 5 **Name:** BRUSHY CANYON LOWER

**Lithology(ies):**

SANDSTONE

**Elevation:** -5234 **True Vertical Depth:** 8885 **Measured Depth:** 8885

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 6 **Name:** BONE SPRING 1ST

**Lithology(ies):**

LIMESTONE

**Elevation:** -5434 **True Vertical Depth:** 9085 **Measured Depth:** 9085

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 7 **Name:** BONE SPRING

**Lithology(ies):**

SILTSTONE

**Elevation:** -5592 **True Vertical Depth:** 9243 **Measured Depth:** 9243

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 8 **Name:** BONE SPRING

**Lithology(ies):**

SILTSTONE

**Elevation:** -5943 **True Vertical Depth:** 9594 **Measured Depth:** 9594

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** Y

**ID:** Formation 9 **Name:** BONE SPRING

**Lithology(ies):**

SILTSTONE

**Elevation:** -6288 **True Vertical Depth:** 9939 **Measured Depth:** 9939

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

## Section 2 - Blowout Prevention

**Pressure Rating (PSI):** 3M **Rating Depth:** 9675

**Equipment:** 3M rotating head, mud-gas seperator, panic line, and flare will be rigged up prior to drilling out surface casing.

**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:**

Thistle Unit 156H_3M BOPE Double Ram and CLS Schematic_09-08-2016.pdf

**BOP Diagram Attachment:**

Thistle Unit 156H_3M BOPE Double Ram and CLS Schematic_09-08-2016.pdf

**Pressure Rating (PSI):** 3M **Rating Depth:** 5100

**Equipment:** 3M rotating head, mud-gas seperator, panic line, and flare will be rigged up prior to drilling out surface casing.

**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:**

Thistle Unit 156H_3M BOPE Double Ram and CLS Schematic_09-08-2016.pdf

**BOP Diagram Attachment:**

Thistle Unit 156H_3M BOPE Double Ram and CLS Schematic_09-08-2016.pdf

## Section 3 - Casing

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**String Type:** PRODUCTION **Other String Type:**

**Hole Size:** 8.75

**Top setting depth MD:** 0 **Top setting depth TVD:** 0

**Top setting depth MSL:** 3651

**Bottom setting depth MD:** 17073 **Bottom setting depth TVD:** 9655

**Bottom setting depth MSL:** -6004

**Calculated casing length MD:** 17073

**Casing Size:** 5.5 **Other Size**

**Grade:** P-110 **Other Grade:**

**Weight:** 17

**Joint Type:** OTHER **Other Joint Type:** btc

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

## Safety Factors

**Collapse Design Safety Factor:** 1.56 **Burst Design Safety Factor:** 1.93

**Joint Tensile Design Safety Factor type:** BUOYANT **Joint Tensile Design Safety Factor:** 2.09

**Body Tensile Design Safety Factor type:** BUOYANT **Body Tensile Design Safety Factor:** 2.09

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

Thistle Unit 156H_Production Casing Assumptions_09-08-2016.docx

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**String Type:** INTERMEDIATE **Other String Type:**

**Hole Size:** 12.25

**Top setting depth MD:** 0 **Top setting depth TVD:** 0

**Top setting depth MSL:** -6024

**Bottom setting depth MD:** 5100 **Bottom setting depth TVD:** 5100

**Bottom setting depth MSL:** -11124

**Calculated casing length MD:** 5100

**Casing Size:** 9.625 **Other Size**

**Grade:** J-55 **Other Grade:**

**Weight:** 40

**Joint Type:** OTHER **Other Joint Type:** btc

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

## Safety Factors

**Collapse Design Safety Factor:** 1.15 **Burst Design Safety Factor:** 1.77

**Joint Tensile Design Safety Factor type:** BUOYANT **Joint Tensile Design Safety Factor:** 3.98

**Body Tensile Design Safety Factor type:** BUOYANT **Body Tensile Design Safety Factor:** 3.98

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

Thistle Unit 156H_Intermediate Casing Assumptions_09-08-2016.docx

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**String Type:** SURFACE **Other String Type:**

**Hole Size:** 17.5

**Top setting depth MD:** 0 **Top setting depth TVD:** 0

**Top setting depth MSL:** -6024

**Bottom setting depth MD:** 1400 **Bottom setting depth TVD:** 1400

**Bottom setting depth MSL:** -7424

**Calculated casing length MD:** 1400

**Casing Size:** 13.375 **Other Size**

**Grade:** H-40 **Other Grade:**

**Weight:** 48

**Joint Type:** STC **Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

## Safety Factors

**Collapse Design Safety Factor:** 1.18 **Burst Design Safety Factor:** 2.64

**Joint Tensile Design Safety Factor type:** BUOYANT **Joint Tensile Design Safety Factor:** 8.05

**Body Tensile Design Safety Factor type:** BUOYANT **Body Tensile Design Safety Factor:** 8.05

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

Thistle Unit 156H_Surface Casing Assumptions_09-08-2016.docx

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**String Type:** INTERMEDIATE **Other String Type:**

**Hole Size:** 12.25

**Top setting depth MD:** 4300 **Top setting depth TVD:** 4300

**Top setting depth MSL:** -649

**Bottom setting depth MD:** 5100 **Bottom setting depth TVD:** 5100

**Bottom setting depth MSL:** -1449

**Calculated casing length MD:** 800

**Casing Size:** 9.625 **Other Size**

**Grade:** HCK-55 **Other Grade:**

**Weight:** 40

**Joint Type:** OTHER **Other Joint Type:** BTC

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

## Safety Factors

**Collapse Design Safety Factor:** 1.58 **Burst Design Safety Factor:** 1.47

**Joint Tensile Design Safety Factor type:** BUOYANT **Joint Tensile Design Safety Factor:** 4.5

**Body Tensile Design Safety Factor type:** BUOYANT **Body Tensile Design Safety Factor:** 4.5

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

Thistle Unit 156H_Intermediate Casing Assumptions_09-08-2016.docx

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## Section 4 - Cement

**Casing String Type:** INTERMEDIATE

**Stage Tool Depth:**

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 0 | **Bottom MD Segment:** 0 | **Cement Type:** N/A |
| **Additives:** N/A | **Quantity (sks):** 0 | **Yield (cu.ff./sk):** 0 |
| **Density:** 0 | **Volume (cu.ft.):** 0 | **Percent Excess:** |

**Casing String Type:** SURFACE

**Stage Tool Depth:** 300

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 0 | **Bottom MD Segment:** 300 | **Cement Type:** C |
| **Additives:** N/A | **Quantity (sks):** 185 | **Yield (cu.ff./sk):** 1.72 |
| **Density:** 13.5 | **Volume (cu.ft.):** 312 | **Percent Excess:** 50 |

*Tail*

| | | |
|---|---|---|
| **Top MD of Segment:** 300 | **Bottom MD Segment:** 1400 | **Cement Type:** C |
| **Additives:** | **Quantity (sks):** 865 | **Yield (cu.ff./sk):** 1.33 |
| **Density:** 14.8 | **Volume (cu.ft.):** 1146 | **Percent Excess:** 50 |

**Stage Tool Depth:** 300

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 0 | **Bottom MD Segment:** 300 | **Cement Type:** C |
| **Additives:** N/A | **Quantity (sks):** 235 | **Yield (cu.ff./sk):** 1.33 |
| **Density:** 14.8 | **Volume (cu.ft.):** 312 | **Percent Excess:** 50 |

**Stage Tool Depth:**

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 0 | **Bottom MD Segment:** 1400 | **Cement Type:** C |
| **Additives:** 1% Calcium Chloride | **Quantity (sks):** 1090 | **Yield (cu.ff./sk):** 1.34 |
| **Density:** 14.8 | **Volume (cu.ft.):** 1458 | **Percent Excess:** 50 |

**Casing String Type:** INTERMEDIATE

**Stage Tool Depth:**

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 0 | **Bottom MD Segment:** 4100 | **Cement Type:** C |
| **Additives:** Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sks Poly-E-Flake | **Quantity (sks):** 905 | **Yield (cu.ff./sk):** 1.85 |
| **Density:** 12.9 | **Volume (cu.ft.):** 1669 | **Percent Excess:** 30 |

*Tail*

| | | |
|---|---|---|
| | **Bottom MD Segment:** 5100 | **Cement Type:** H |
| **Top MD of Segment:** 4100 | **Quantity (sks):** 320 | **Yield (cu.ff./sk):** 1.33 |
| **Additives:** 0.125 lbs/sks Poly-R-Flake | **Volume (cu.ft.):** 426 | **Percent Excess:** 30 |
| **Density:** 14.8 | | |

**Casing String Type:** PRODUCTION

**Stage Tool Depth:** 5500

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 4800 | **Bottom MD Segment:** 4900 | **Cement Type:** C |
| **Additives:** Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5 lb/sk D-Air 5000 | **Quantity (sks):** 20 | **Yield (cu.ff./sk):** 3.31 |
| | **Volume (cu.ft.):** 66 | **Percent Excess:** 25 |
| **Density:** 10.9 | | |

*Tail*

| | | |
|---|---|---|
| | **Bottom MD Segment:** 5000 | **Cement Type:** H |
| | **Quantity (sks):** 30 | **Yield (cu.ff./sk):** 1.33 |
| **Top MD of Segment:** 4900 | **Volume (cu.ft.):** 39 | **Percent Excess:** 25 |
| **Additives:** 0.125 lbs/sack Poly-E-Flake | | |
| **Density:** 14.8 | | |

**Stage Tool Depth:**

*Lead*

| | | |
|---|---|---|
| **Top MD of Segment:** 4900 | **Bottom MD Segment:** 9500 | **Cement Type:** H |
| **Additives:** Poz (Fly Ash) + 0.3% BWOC HR-601 + 10% bwoc Bentonite | **Quantity (sks):** 580 | **Yield (cu.ff./sk):** 2.31 |
| **Density:** 11.9 | **Volume (cu.ft.):** 1336 | **Percent Excess:** 25 |

*Tail*

| | | |
|---|---|---|
| **Top MD of Segment:** 9500 | **Bottom MD Segment:** 17073 | **Cement Type:** H |
| **Additives:** Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite | **Quantity (sks):** 1850 | **Yield (cu.ff./sk):** 1.2 |
| | **Volume (cu.ft.):** 2215 | **Percent Excess:** 25 |
| **Density:** 14.5 | | |

**Stage Tool Depth:** 5500

*Lead*

**Top MD of Segment:** 5000 **Bottom MD Segment:** 9500 **Cement Type:** C

**Additives:** Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5 lb/sk D-Air 5000 **Quantity (sks):** 405 **Yield (cu.ff./sk):** 3.31

**Volume (cu.ft.):** 1336 **Percent Excess:** 25

*Tail*

**Density:** 10.9 **Bottom MD Segment:** 17073 **Cement Type:** H

**Quantity (sks):** 1850 **Yield (cu.ff./sk):** 1.2

**Top MD of Segment:** 9500 **Volume (cu.ft.):** 2215 **Percent Excess:** 25

**Additives:** Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite

**Density:** 14.5

## 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:** 0 **Bottom Depth:** 1400

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.5 **Max Weight (lbs./gal.):** 9

**Density (lbs/cu.ft.):** **Gel Strength (lbs/100 sq.ft.):**

**PH:** **Viscosity (CP):** 2

**Filtration (cc):** **Salinity (ppm):**

**Additional Characteristics:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Top Depth:** 0 **Bottom Depth:** 5100

**Mud Type:** SALT SATURATED

**Min Weight (lbs./gal.):** 10 **Max Weight (lbs./gal.):** 11

**Density (lbs/cu.ft.):** **Gel Strength (lbs/100 sq.ft.):**

**PH:** **Viscosity (CP):** 2

**Filtration (cc):** **Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 5100 **Bottom Depth:** 17103

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.5 **Max Weight (lbs./gal.):** 9.3

**Density (lbs/cu.ft.):** **Gel Strength (lbs/100 sq.ft.):**

**PH:** **Viscosity (CP):** 12

**Filtration (cc):** **Salinity (ppm):**

**Additional Characteristics:**

---

## Section 6 - Test, Logging, Coring

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

Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). 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:**

GR

**Coring operation description for the well:**

N/A

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 4223 **Anticipated Surface Pressure:** 2094.5

**Anticipated Bottom Hole Temperature(F):** 150

**Anticipated abnormal proessures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geoharzards description:**

**Contingency Plans geohazards attachment:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

Thistle Unit 156H_H2S Plan_09-08-2016.pdf

## Section 8 - Other Information

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

Thistle Unit 156H_Directional Survey_09-08-2016.pdf

**Other proposed operations facets description:**

MULTI-BOWL VERBIAGE
MULTI-BOWL WELLHEAD
CLOSED LOOP DESIGN PLAN
ANTICOLLISION

**Other proposed operations facets attachment:**

Thistle Unit 156H_Multi-Bowl Verbiage_3M_09-08-2016.pdf
Thistle Unit 156H_Closed Loop Design Plan_09-08-2016.pdf
Thistle Unit 156H_Multi-Bowl Wellhead_09-08-2016.pdf
Thistle Unit 156H_AC Report_09-15-2016.pdf

**Other Variance attachment:**

Thistle Unit 156H_H_P Co-flex hose_09-08-2016.pdf

# SUPO

## Section 1 - Existing Roads

**Will existing roads be used?** YES

**Existing Road Map:**

THISTLE UNIT 156H_Access Route Map_09-08-2016.pdf

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

### ROW ID(s)

**ID:**

**Do the existing roads need to be improved?** NO

**Existing Road Improvement Description:**

**Existing Road Improvement Attachment:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

## Section 2 - New or Reconstructed Access Roads

**Will new roads be needed?** NO

## Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

Thistle Unit 156H one mile map_09-08-2016.pdf

**Existing Wells description:**

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

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

**Estimated Production Facilities description:** THISTLE UNIT 33 CTB 1

**Production Facilities description:** Thistle Unit 33 CTB 1. CTB Plat, Battery Connect, Battery Connect Electric, Flowline Plat (flowlines buried) - Four 4" lowliness and one 4" gaslift line buried in the same trench from Thistle Unit 1H, 156H, 144H & 145H to Thistle Unit 33 CTB 1.

**Production Facilities map:**

Thistle Unit 156H_THISTLE_UNIT_33_CTB_1_BAT_ELE_11-16-2016.PDF

Thistle Unit 156H_THISTLE_UNIT_33_CTB_1_BATCON_P_R1_11-16-2016.pdf

Thistle Unit 156H_THISTLE_UNIT_33_CTB_1_P_R1_11-16-2016.pdf

Thistle Unit 156H_Flowline_12-20-2016.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

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Source land ownership:** STATE

**Water source transport method:** PIPELINE

**Source transportation land ownership:** STATE

**Water source volume (barrels):** 202500 **Source volume (acre-feet):** 26.100851

**Source volume (gal):** 8505000

**Water source and transportation map:**

Thistle Unit 156H_Water Source Map_12-20-2016.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. Reason for showing two routes: 10" or 12" layflat hose. Preference is for 12", based on availability. The treated water is the preferred line. If we can't get enough volume we would supplement with fresh water.
**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:**

## Section 6 - Construction Materials

**Construction Materials description:** Dirt fill and caliche will be used to construct well pad. Caliche will be coming from the Brininstool Caliche Pit in the NENE of Section 20 - T23S-R33E. Map attached.
**Construction Materials source location attachment:**

Thistle Unit 156H_Caliche map_12-20-2016.pdf

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

## Section 7 - Methods for Handling Waste

**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:** RECYCLE **Disposal location ownership:** STATE

**Disposal type description:**

**Disposal location description:** All produced water will be recycled at our Thistle water reuse facility. Any excess water that cannot be recycled will be sent to one of our 3 SWD's (Caballo 9 St 1, Rio Blanco 33 Fed 2, Rio Blanco 4 Fed Com 3) or to OWL (third-party; state tie-in).

**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 Cuttings

**Amount of waste:** 1650 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.

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Waste type:** PRODUCED WATER

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

**Amount of waste:** 500 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** N/A

**Safe containmant attachment:**

**Waste disposal type:** RECYCLE **Disposal location ownership:** STATE

**Disposal type description:**

**Disposal location description:** All produced water will be recycled at our Thistle water reuse facility. Any excess water that cannot be recycled will be sent to one of our 3 SWD's (Caballo 9 St 1, Rio Blanco 33 Fed 2, Rio Blanco 4 Fed Com 3) or to OWL (third-party; state tie-in).

## 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**

## Section 8 - Ancillary Facilities

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

**Ancillary Facilities attachment:**

**Comments:**

## Section 9 - Well Site Layout

**Well Site Layout Diagram:**

Thistle Unit 156H_Well Pad Layout_12-20-2016.pdf

**Comments:**

## Section 10 - Plans for Surface Reclamation

**Type of disturbance:** NEW

**Recontouring attachment:**

THISTLE UNIT 156H_Interim Reclamation_09-08-2016.pdf

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

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

**Wellpad long term disturbance (acres):** 4.556

**Wellpad short term disturbance (acres):** 5.482

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

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

**Pipeline long term disturbance (acres):** 0.6965427

**Pipeline short term disturbance (acres):** 0.6965427

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

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

**Total long term disturbance:** 5.2525425

**Total short term disturbance:** 6.1785426

**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:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**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

**First Name:** JAMES **Last Name:** CRITTENDEN

**Phone:** (575)748-1854 **Email:** JAMES.CRITTENDEN@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:** STATE GOVERNMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:** HOBBS FIELD OFFICE OCD

**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:** STATE GOVERNMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:** HOBBS FIELD OFFICE OCD

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

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

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** STATE GOVERNMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:** HOBBS FIELD OFFICE OCD

**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:** THISTLE UNIT **Well Number:** 156H

**Disturbance type:** PIPELINE

**Describe:**

**Surface Owner:** STATE GOVERNMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:** HOBBS FIELD OFFICE OCD

**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?** NO **Use APD as ROW?**

**ROW Type(s):**

### ROW Applications

**SUPO Additional Information:** Thistle Unit 33 CTB 1. CTB Plat, Battery Connect, Battery Connect Electric, Flowline Plat (flowlines buried). Four 4" lowliness and one 4" gaslift line buried in the same trench from Thistle Unit 1H, 156H, 144H & 145H to Thistle Unit 33 CTB 1.

**Use a previously conducted onsite?** YES

**Previous Onsite information:** ONSITE CONDUCTED 6/14/16 FOR THISTLE UNIT 156H, 145H, & 144H

### Other SUPO Attachment

Thistle Unit 156H_THISTLE_UNIT_33_CTB_1_BAT_ELE_11-16-2016.PDF

Thistle Unit 156H_THISTLE_UNIT_33_CTB_1_BATCON_P_R1_11-16-2016.pdf

Thistle Unit 156H_THISTLE_UNIT_33_CTB_1_P_R1_11-16-2016.pdf

Thistle Unit 156H_Flowline_12-20-2016.pdf

PWD

## 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:**

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Have other regulatory requirements been met?**

**Other regulatory requirements attachment:**

## Bond Info

### 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:**

## Operator Certification

### 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:** 09/08/2016

**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:** JAMES CRITTENDEN

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

**Well Name:** THISTLE UNIT **Well Number:** 156H

**Street Address:** 6488 SEVEN RIVERS HWY

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

**Phone:** (575)748-1854

**Email address:** JAMES.CRITTENDEN@DVN.COM

## Payment Info

### Payment

**APD Fee Payment Method:** PAY.GOV

**pay.gov Tracking ID:** 25TP9LEU