

17-161

OCD Hobbs

Form 3160-3
(March 2012)

HOBBS OCD

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 01 2017

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC061869
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee 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. (316128) MORAB 29-20 FED COM 3H
3b. Phone No. (include area code) (405)552-6571		9. API Well No. 30-025-47776
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SWNE / 2455 FNL / 2642 FEL / LAT 32.1018626 / LONG -103.6971721 At proposed prod. zone NWNE / 290 FNL / 1980 FEL / LAT 32.1231073 / LONG -103.6972821		10. Field and Pool, or Exploratory WC-025G-08 42532346
11. Sec., T. R. M. or Blk. and Survey or Area SEC 29 / T25S / R32E / NMP LOWERS AS		12. County or Parish LEA
13. State NM		14. Distance in miles and direction from nearest town or post office*
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 185 feet	16. No. of acres in lease 2398.96	17. Spacing Unit dedicated to this well 240
18. Distance from proposed location* to nearest well, drilling, completed, 50 feet applied for, on this lease, ft.	19. Proposed Depth 10496 feet / 17828 feet	20. BLM/BIA Bond No. on file FED: CO1104
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3361 feet	22. Approximate date work will start* 09/16/2018	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:

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

25. Signature (Electronic Submission)	Name (Printed/Typed) Linda Good / Ph: (405)552-6558	Date 11/15/2016
Title Regulatory Compliance Professional		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Ty Allen / Ph: (575)234-5978	Date 04/25/2017
Title Wildlife Biologist		
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

K2
09/01/17



APD ID: 10400007298

Submission Date: 11/15/2016

Highlight
All Changes

Operator Name: DEVON ENERGY PRODUCTION COMPANY
LP

Federal/Indian APD: FED

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Well Type: OIL WELL

Well Work Type: Drill

Application

Section 1 - General

APD ID: 10400007298

Tie to previous NOS?

Submission Date: 11/15/2016

BLM Office: HOBBS

User: Linda Good

Title: Regulatory Compliance
Professional

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMLC061869

Lease Acres: 2398.96

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

Master 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: MORAB 29-20 FED COM

Well Number: 3H

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: PADUCA

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? NO

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:

Number: 2H & 3H

Well Class: HORIZONTAL

MORAB 29-20 FED COM

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: 50 FT

Distance to lease line: 185 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: Morab 29-20 Fed Com 3H_C-102_signed_10-28-2016.pdf

Well work start Date: 09/16/2018

Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 3991A

STATE: NEW MEXICO

Meridian: NEW MEXICO PRINCIPAL **County:** LEA

Latitude: 32.1018626

Longitude: -103.6971721

SHL

Elevation: 3361

MD: 0

TVD: 0

Leg #: 1

Lease Type: FEDERAL

Lease #: NMLC062300

NS-Foot: 2455

NS Indicator: FNL

EW-Foot: 2642

EW Indicator: FEL

Twsp: 25S

Range: 32E

Section: 29

Aliquot: SWNE

Lot:

Tract:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.1018626	Longitude: -103.6971721	
KOP	Elevation: -6665	MD: 10036	TVD: 10026
Leg #: 1	Lease Type: FEDERAL	Lease #: NMLC062300	
	NS-Foot: 2475	NS Indicator: FNL	
	EW-Foot: 2259	EW Indicator: FEL	
	Twsp: 25S	Range: 32E	Section: 29
	Aliquot: SWNE	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.1018626	Longitude: -103.6971721	
PPP	Elevation: -7135	MD: 10633	TVD: 10496
Leg #: 1	Lease Type: FEDERAL	Lease #: NMLC062300	
	NS-Foot: 2184	NS Indicator: FNL	
	EW-Foot: 2255	EW Indicator: FEL	
	Twsp: 25S	Range: 32E	Section: 29
	Aliquot: SWNE	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.1231073	Longitude: -103.6972821	
EXIT	Elevation: -7135	MD: 17828	TVD: 10496
Leg #: 1	Lease Type: FEDERAL	Lease #: NMLC061869	
	NS-Foot: 290	NS Indicator: FNL	
	EW-Foot: 1980	EW Indicator: FEL	
	Twsp: 25S	Range: 32E	Section: 20
	Aliquot: NWNE	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL	County: LEA
	Latitude: 32.1231073	Longitude: -103.6972821	
BHL	Elevation: -7135	MD: 17828	TVD: 10496
Leg #: 1	Lease Type: FEDERAL	Lease #: NMLC061869	
	NS-Foot: 290	NS Indicator: FNL	
	EW-Foot: 1980	EW Indicator: FEL	

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Twsp: 25S

Range: 32E

Section: 20

Aliquot: NWNE

Lot:

Tract:

Drilling Plan

Section 1 - Geologic Formations

ID: Surface formation

Name: UNKNOWN

Lithology(ies):

ALLUVIUM

Elevation: 3361

True Vertical Depth: 0

Measured Depth: 0

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1

Name: RUSTLER

Lithology(ies):

DOLOMITE

Elevation: 2383

True Vertical Depth: 978

Measured Depth: 978

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2

Name: SALADO

Lithology(ies):

SALT

Elevation: 2130

True Vertical Depth: 1231

Measured Depth: 1231

Mineral Resource(s):

NONE

Is this a producing formation? N

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

ID: Formation 3

Name: BASE OF SALT

Lithology(ies):

ANHYDRITE

Elevation: -930

True Vertical Depth: 4291

Measured Depth: 4291

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 4

Name: DELAWARE

Lithology(ies):

SANDSTONE

Elevation: -1168

True Vertical Depth: 4529

Measured Depth: 4529

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 5

Name: BELL CANYON

Lithology(ies):

SANDSTONE

Elevation: -1203

True Vertical Depth: 4564

Measured Depth: 4564

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 6

Name: CHERRY CANYON

Lithology(ies):

SANDSTONE

Elevation: -2091

True Vertical Depth: 5452

Measured Depth: 5452

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 7

Name: BRUSHY CANYON

Lithology(ies):

SANDSTONE

Elevation: -3238

True Vertical Depth: 6599

Measured Depth: 6599

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 8

Name: BONE SPRING

Lithology(ies):

LIMESTONE

Elevation: -5042

True Vertical Depth: 8403

Measured Depth: 8403

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

ID: Formation 9

Name: BONE SPRING 1ST

Lithology(ies):

SANDSTONE

Elevation: -6124

True Vertical Depth: 9485

Measured Depth: 9485

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

ID: Formation 10

Name: BONE SPRING 2ND

Lithology(ies):

LIMESTONE

Elevation: -6365

True Vertical Depth: 9726

Measured Depth: 9726

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 11

Name: BONE SPRING 2ND

Lithology(ies):

SANDSTONE

Elevation: -6722

True Vertical Depth: 10083

Measured Depth: 10083

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M

Rating Depth: 10496

Equipment: 3M rotating head, mud-gas separator, 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:

Morab 29-20 Fed Com 3H_3M BOPE_Ck_10-28-2016.pdf

BOP Diagram Attachment:

Morab 29-20 Fed Com 3H_3M BOPE_Ck_10-28-2016.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Pressure Rating (PSI): 3M

Rating Depth: 4315

Equipment: 3M rotating head, mud-gas separator, 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:

Morab 29-20 Fed Com 3H_3M BOPE_Ck_10-28-2016.pdf

BOP Diagram Attachment:

Morab 29-20 Fed Com 3H_3M BOPE_Ck_10-28-2016.pdf

Section 3 - Casing

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

String Type: SURFACE

Other String Type:

Hole Size: 17.5

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: 3361

Bottom setting depth MD: 1000

Bottom setting depth TVD: 1000

Bottom setting depth MSL: 2361

Calculated casing length MD: 1000

Casing Size: 13.375

Other Size

Grade: J-55

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: 1.74

Burst Design Safety Factor: 2.45

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 4.13

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 4.13

Casing Design Assumptions and Worksheet(s):

Morab 29-20 Fed Com 3H_SurfCsg Ass_10-28-2016.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

String Type: INTERMEDIATE

Other String Type:

Hole Size: 12.25

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: 3361

Bottom setting depth MD: 4315

Bottom setting depth TVD: 4315

Bottom setting depth MSL: -954

Calculated casing length MD: 4315

Casing Size: 9.625

Other Size

Grade: J-55

Other Grade:

Weight: 40

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.19

Burst Design Safety Factor: 1.42

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):

Morab 29-20 Fed Com 3H_Int Csg Ass_10-28-2016.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: 3361

Bottom setting depth MD: 17828

Bottom setting depth TVD: 10496

Bottom setting depth MSL: -7135

Calculated casing length MD: 17828

Casing Size: 5.5

Other Size

Grade: P-110

Other Grade:

Weight: 17

Joint Type: BUTT

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 2.18

Burst Design Safety Factor: 2.7

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 3.21

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 3.21

Casing Design Assumptions and Worksheet(s):

Morab 29-20 Fed Com 3H_ProdCsg Ass_10-28-2016.pdf

Section 4 - Cement

Casing String Type: SURFACE

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 1000

Cement Type: C

Additives: 1% Calcium Chloride

Quantity (sks): 778

Yield (cu.ff./sk): 1.34

Density: 14.8

Volume (cu.ft.): 1042

Percent Excess: 50

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 3315

Cement Type: C

Additives: Poz (Fly Ash): 6% BWOC
Bentonite + 5% BWOW Sodium
Chloride + 0.125 lbs/sks Poly-E-Flake

Quantity (sks): 730

Yield (cu.ff./sk): 1.85

Density: 12.9

Volume (cu.ft.): 1350

Percent Excess: 30

Tail

Top MD of Segment: 3315

Bottom MD Segment: 4315

Cement Type: H

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:

Lead

Top MD of Segment: 4115

Bottom MD Segment: 10350

Cement Type: TUNED

Additives: N/A

Quantity (sks): 612

Yield (cu.ff./sk): 3.27

Density: 9

Volume (cu.ft.): 2000

Percent Excess: 25

Tail

Top MD of Segment: 10350

Bottom MD Segment: 17828

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): 1967

Yield (cu.ff./sk): 1.2

Density: 14.5

Volume (cu.ft.): 2360

Percent Excess: 25

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

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: 1000

Bottom Depth: 4315

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: 0

Bottom Depth: 1000

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: MORAB 29-20 FED COM

Well Number: 3H

Top Depth: 4315

Bottom Depth: 17828

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 from TD to Delaware (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:

CALIPER, CBL, DS, GR, MWD, MUDLOG

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4725

Anticipated Surface Pressure: 2415.88

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Morab 29-20 Fed Com 3H_H2S Plan_10-28-2016.pdf

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Morab 29-20 Fed Com 3H_Dir Plan_10-28-2016.pdf

Other proposed operations facets description:

Multi-Bowl Verbiage
Multi-Bowl Wellhead
Closed Loop Design Plan
Contingency Production Cement

Other proposed operations facets attachment:

Morab 29-20 Fed Com 3H_MB Verb 3M_10-28-2016.pdf
Morab 29-20 Fed Com 3H_MB Wellhd_10-28-2016.pdf
Morab 29-20 Fed Com 3H_Clsd Loop_10-28-2016.pdf
Morab 29-20 Fed Com 3H_ConProdCmt_10-28-2016.pdf

Other Variance attachment:

Morab 29-20 Fed Com 3H_Co-flex_10-28-2016.pdf

SUPO

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Morab 29-20 Fed Com 3H_Ex AccessRd_10-31-2016.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:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Morab 29-20 Fed Com 3H_Access Rd_10-31-2016.pdf

New road type: COLLECTOR,RESOURCE

Length: 42

Feet

Width (ft.): 16

Max slope (%): 6

Max grade (%): 4

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:

Morab 29-20 Fed Com 3H_Access Rd_10-31-2016.pdf

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: GRAVEL

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: See attached Interim reclamation diagram.

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: N/A

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

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Morab 29-20 Fed Com 3H_1Mile Map_10-31-2016.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: All flowlines will be buried going to the CD 29-30 CTB.

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,TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 202500

Source volume (acre-feet): 26.100851

Source volume (gal): 8505000

Water source and transportation map:

Morab 29-20 Fed Com 3H_Wtr Xfr Map rev_11-15-2016.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

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

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.

Construction Materials source location attachment:

Morab 29-20 Fed Com 2H_Caliche Pit_12-20-2016.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Water Based Cuttings.

Amount of waste: 1810 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: COMPLETIONS/STIMULATION

Waste content description: Flow back water during completion operations.

Amount of waste: 3000 barrels

Waste disposal frequency : One Time Only

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Safe containment description: Flow back water during completion operations.

Safe containmant attachment:

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

Disposal type description:

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

Waste type: FLOWBACK

Waste content description: Produced water during flowback operations. This amount is a daily average during flowback (BWPD).

Amount of waste: 1500 barrels

Waste disposal frequency : Daily

Safe containment description: N/A

Safe containmant attachment:

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

Disposal type description:

Disposal location description: One of three company owned SWD facilities in the area: CDU 181, CDU 89, CDU 84.

Waste type: PRODUCED WATER

Waste content description: Produced water during production operations. This amount is a daily average during the first year of production (BWPD).

Amount of waste: 1000 barrels

Waste disposal frequency : Daily

Safe containment description: N/A

Safe containmant attachment:

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

Disposal type description:

Disposal location description: One of three company owned SWD facilities in the area: CDU 181, CDU 89, CDU 84.

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

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

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:

Morab 29-20 Fed Com 3H_Rig Layout_10-31-2016.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Morab 29-20 Fed Com 3H_Reclamation_12-19-2016.pdf

Drainage/Erosion control construction: All areas disturbed shall be reclaimed as early and as nearly as practicable to their original condition or their final land use and shall be maintained to control dust and minimize erosion to the extent practicable.

Drainage/Erosion control reclamation: Topsoils and subsoils 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. The disturbed area then shall be reseeded in the first favorable growing season.

Wellpad long term disturbance (acres): 1.888

Wellpad short term disturbance (acres): 4.157

Access road long term disturbance (acres): 0.015

Access road short term disturbance (acres): 0.015

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Pipeline long term disturbance (acres): 2.95927

Pipeline short term disturbance (acres): 4.9321165

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 4.86227

Total short term disturbance: 9.104116

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:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Seed Type

Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: MARK

Last Name: SMITH

Phone: (575)746-5559

Email: mark.smith@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: 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:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

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:

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:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

SUPO Additional Information: CTB Survey Electric Survey Flowline Survey

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

Morab 29-20 Fed Com 3H_CTB_10-31-2016.pdf

Morab 29-20 Fed Com 3H_Electric_10-31-2016.PDF

Morab 29-20 Fed Com 3H_Flowline_10-31-2016.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:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

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:

Describe 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?

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

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:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

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:

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.

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: MORAB 29-20 FED COM

Well Number: 3H

NAME: Linda Good

Signed on: 11/15/2016

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City

State: OK

Zip: 73102

Phone: (405)552-6558

Email address: Linda.Good@dvn.com

Field Representative

Representative Name: Ray Vaz

Street Address: 6488 Seven Rivers Hwy

City: Artesia

State: NM

Zip: 88210

Phone: (575)748-1871

Email address: ray.vaz@dvn.com

Payment Info

Payment

APD Fee Payment Method: PAY.GOV

pay.gov Tracking ID: 25V110K6