

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

HOBBS OCD  
APR 26 2017  
RECEIVED

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM114988
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 (6197)		7. If Unit or CA Agreement, Name and No.
3a. Address 333 West Sheridan Avenue Oklahoma City OK		8. Lease Name and Well No. (317671) SEAWOLF 1-12 FED 82H
3b. Phone No. (include area code) (405)552-6571		9. API Well No. 30-025-43763
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW / 200 FNL / 390 FWL / LAT 32.0791864 / LONG -103.5333332 At proposed prod. zone SWSW / 330 FSL / 1284 FWL / LAT 32.0516121 / LONG -103.5304487		10. Field and Pool, or Exploratory (98094) WC-025 G-09 S253336D / UPPER WOL
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area SEC 1 / T26S / R33E / NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200 feet		12. County or Parish LEA
16. No. of acres in lease 1280		13. State NM
17. Spacing Unit dedicated to this well 320		
18. Distance from proposed location* to nearest well, drilling, completed, 450 feet applied for, on this lease, ft.		19. Proposed Depth 12574 feet / 22434 feet
20. BLM/BIA Bond No. on file FED: CO1104		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3319 feet		22. Approximate date work will start* 07/25/2017
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 10/12/2016
Title Regulatory Compliance Professional		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 04/17/2017
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)

KZ  
07/26/17  
**APPROVED WITH CONDITIONS**

REQUIRES NSL



## 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:

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?

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:



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

## Bond Info Data Report

04/19/2017

### 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:

## 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

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

See COA

String Type: SURFACE

Other String Type:

Hole Size: 17.5

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -9280

Bottom setting depth MD: 1000

Bottom setting depth TVD: 1000

Bottom setting depth MSL: -10280

Calculated casing length MD: 1000

Casing Size: 13.75

Other Size

Grade: ~~H-40~~ J-55

Other Grade:

Weight: 48 ~~54.5~~

Joint Type: ~~STG~~ BTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

### Safety Factors

Collapse Design Safety Factor: 1.59

Burst Design Safety Factor: 3.46

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 2.11

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 2.11

Casing Design Assumptions and Worksheet(s):

Seawolf 1-12 Fed 82\_Surf Csg Ass\_10-12-2016.docx

**APD ID:** 10400005875

**Submission Date:** 10/12/2016

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Well Type:** OIL WELL

**Well Work Type:** Drill

## Section 1 - Existing Roads

**Will existing roads be used?** YES

**Existing Road Map:**

Seawolf 1-12 Fed 82H\_Access Rd\_01-24-2017.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:**

Seawolf 1-12 Fed 82H\_New Access Rd\_01-30-2017.pdf

**New road type:** COLLECTOR,RESOURCE

**Length:** 929

Feet

**Width (ft.):** 20

**Max slope (%):** 6

**Max grade (%):** 4

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

**ACOE Permit Number(s):**
**New road travel width:** 20

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

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

**New road access plan attachment:**

Seawolf 1-12 Fed 82H\_New Access Rd\_01-30-2017.pdf

**Access road engineering design?** YES

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Access road engineering design attachment:**

Seawolf 1-12 Fed 82H\_New Access Rd\_01-30-2017.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:**

Seawolf 1-12 Fed 82H\_one mile map\_10-12-2016.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:**

**Production Facilities description:** Seawolf 1-12 BS CTB 1 Plat, Battery Connect, Battery Connect Electric, Pad Connect Electric, Flowline (buried).

**Production Facilities map:**

Seawolf 1-12 Fed 82H\_CTB\_1\_BAT\_CON\_01-30-2017.pdf

SEAWOLF 1-12 FED 82H\_Flowline\_01-30-2017.pdf

Seawolf 1-12 Fed 82H\_PAD\_CONNECT\_01-30-2017.PDF

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

Seawolf 1-12 Fed 82H\_SW\_1-12\_BS\_CTB\_1 Batt Conn\_01-30-2017.PDF

Seawolf 1-12 Fed 82H\_SW\_1-12\_BS\_CTB\_1\_Plat\_01-30-2017.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:**

Seawolf 1-12 Fed 82H\_Water Map\_01-24-2017.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:** SEAWOLF 1-12 FED

**Well Number:** 82H

**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 from the Federal Pit on Section 7-26S-34E; SWNE & SENE

**Construction Materials source location attachment:**

SEAWOLF 1-12 FED 82H\_CALICHE MAP\_01-30-2017.pdf

## **Section 7 - Methods for Handling Waste**

**Waste type:** DRILLING

**Waste content description:** Water and oil based cuttings

**Amount of waste:** 1600 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** N/A

**Safe containmant attachment:**

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

**Disposal type description:**

**Disposal location description:** All cutting will be disposed of at R360, Sundance, or equivalent.

**Waste type:** FLOWBACK

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

**Amount of waste:** 4000 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.

**Waste type:** PRODUCED WATER

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

**Amount of waste:** 1200 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** N/A

**Safe containmant attachment:**

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**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 drilling/completion operations. This recycle facility is at the same location as the SWD (state).

**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      **Disposal location ownership:** COMMERCIAL  
FACILITY

**Disposal type description:**

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

### 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:** SEAWOLF 1-12 FED

**Well Number:** 82H

## Section 8 - Ancillary Facilities

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

**Ancillary Facilities attachment:**

**Comments:**

## Section 9 - Well Site Layout

**Well Site Layout Diagram:**

Seawolf 1-12 Fed 82H\_Rig Layout\_01-24-2017.pdf

**Comments:**

## Section 10 - Plans for Surface Reclamation

**Type of disturbance:** NEW

**Recontouring attachment:**

SEAWOLF 1-12 FED 82H\_Interim Reclamation\_01-24-2017.pdf

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

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

**Wellpad long term disturbance (acres):** 2.438

**Wellpad short term disturbance (acres):** 4.7015

**Access road long term disturbance (acres):** 0.4265

**Access road short term disturbance (acres):** 0.4265

**Pipeline long term disturbance (acres):** 2.5981405

**Pipeline short term disturbance (acres):** 2.5981405

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

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

**Total long term disturbance:** 5.4626403

**Total short term disturbance:** 7.7261405

**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.

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**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

**First Name:** Cole

**Last Name:** Metcalf

**Phone:** (575)748-1872

**Email:** cole.metcalf@dvn.com

**Seedbed prep:**

**Seed BMP:**

**Seed method:**

**Existing invasive species?** NO

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**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:**

**Disturbance type:** EXISTING ACCESS ROAD

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**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:** PIPELINE

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

## Section 12 - Other Information

**Right of Way needed?** YES

**Use APD as ROW?** YES

**ROW Type(s):** 281001 ROW - ROADS,288100 ROW – O&G Pipeline,Other

## ROW Applications

**SUPO Additional Information:** Seawolf 1-12 BS CTB 1 Plat, Battery Connect, Battery Connect Electric, Pad Connect Electric, Flowline (buried).

**Use a previously conducted onsite?** YES

**Previous Onsite information:** On site conducted 5/26/2015

## Other SUPO Attachment

SEAWOLF 1-12 FED 82H\_Flowline\_01-30-2017.pdf

Seawolf 1-12 Fed 82H\_CTB\_1\_BAT\_CON\_01-30-2017.pdf

Seawolf 1-12 Fed 82H\_PAD\_CONNECT\_01-30-2017.PDF

Seawolf 1-12 Fed 82H\_SW\_1-12\_BS\_CTB\_1 Batt Conn\_01-30-2017.PDF

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

Seawolf 1-12 Fed 82H\_SW\_1-12\_BS\_CTB\_1\_Plat\_01-30-2017.PDF

See  
COA

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

String Type: INTERMEDIATE

Other String Type:

Hole Size: 12.25

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -9280

Bottom setting depth MD: 11300

Bottom setting depth TVD: 11300

Bottom setting depth MSL: -20580

Calculated casing length MD: 11300

Casing Size: 9.625

Other Size

Grade: P-110 EC

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: 1.25

Burst Design Safety Factor: 1.59

Joint Tensile Design Safety Factor type: BUOYANT

Joint Tensile Design Safety Factor: 2.58

Body Tensile Design Safety Factor type: BUOYANT

Body Tensile Design Safety Factor: 2.58

Casing Design Assumptions and Worksheet(s):

Seawolf 1-12 Fed 82\_Int Csg Ass\_10-12-2016.docx



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

## Operator Certification Data Report

04/19/2017

### 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:** 10/12/2016

**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:** RICHARD WEDMAN

**Street Address:** 6488 SEVEN RIVERS HWY

**City:** ARTESIA

**State:** NM

**Zip:** 88210

**Phone:** (575)748-1819

**Email address:** RICHARD.WEDMAN@DVN.COM



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

## Application Data Report

04/19/2017

APD ID: 10400005875

Submission Date: 10/12/2016

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - General

APD ID: 10400005875

Tie to previous NOS?

Submission Date: 10/12/2016

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: NMNM114988

Lease Acres: 1280

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:

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WC-025 G-09  
S253336D

Pool Name: UPPER  
WOLFCAMP

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

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? NO

Use Existing Well Pad? NO

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:

Number: 81H, 82H, 91H, 92H,

Well Class: HORIZONTAL

SEAWOLF 1-12 FED

102H

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: 450 FT

Distance to lease line: 200 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Seawolf 1-12 Fed 82H\_C-102 Rev Signed\_02-14-2017.pdf

Well work start Date: 07/25/2017

Duration: 45 DAYS

### Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 3919F

STATE: NEW MEXICO

Meridian: NEW MEXICO PRINCIPAL County: LEA

Latitude: 32.0791864

Longitude: -103.5333332

SHL

Elevation: 3319

MD: 0

TVD: 0

Leg #: 1

Lease Type: FEDERAL

Lease #: NMNM114988

NS-Foot: 200

NS Indicator: FNL

EW-Foot: 390

EW Indicator: FWL

Twsp: 26S

Range: 33E

Section: 1

Aliquot: NWNW

Lot:

Tract:

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA	
	Latitude: 32.0791866	Longitude: -103.532808	
KOP	Elevation: -8707	MD: 12083	TVD: 12026
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM114988	
	NS-Foot: 207	NS Indicator: FNL	
	EW-Foot: 1357	EW Indicator: FWL	
	Twsp: 26S	Range: 33E	Section: 1
	Aliquot: NENW	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA	
	Latitude: 32.0791864	Longitude: -103.5333332	
PPP	Elevation: -9280	MD: 12984	TVD: 12599
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM114988	
	NS-Foot: 330	NS Indicator: FNL	
	EW-Foot: 1356	EW Indicator: FWL	
	Twsp: 26S	Range: 33E	Section: 1
	Aliquot: NENW	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA	
	Latitude: 32.0516121	Longitude: -103.5304487	
EXIT	Elevation: -9255	MD: 22434	TVD: 12574
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM114988	
	NS-Foot: 330	NS Indicator: FSL	
	EW-Foot: 1284	EW Indicator: FWL	
	Twsp: 26S	Range: 33E	Section: 12
	Aliquot: SWSW	Lot:	Tract:
	STATE: NEW MEXICO	Meridian: NEW MEXICO PRINCIPAL County: LEA	
	Latitude: 32.0516121	Longitude: -103.5304487	
BHL	Elevation: -9255	MD: 22434	TVD: 12574
Leg #: 1	Lease Type: FEDERAL	Lease #: NMNM114988	
	NS-Foot: 330	NS Indicator: FSL	
	EW-Foot: 1284	EW Indicator: FWL	

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Twsp:** 26S

**Range:** 33E

**Section:** 12

**Aliquot:** SWSW

**Lot:**

**Tract:**



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

## Drilling Plan Data Report

04/19/2017

APD ID: 10400005875

Submission Date: 10/12/2016

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - Geologic Formations

ID: Surface formation

Name: UNKNOWN

Lithology(ies):

OTHER - SURFACE

Elevation: 3319

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: 2356

True Vertical Depth: 963

Measured Depth: 963

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2

Name: TOP OF SALT

Lithology(ies):

SALT

Elevation: 1987

True Vertical Depth: 1332

Measured Depth: 1332

Mineral Resource(s):

NONE

Is this a producing formation? N

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**ID:** Formation 3

**Name:** BASE OF SALT

**Lithology(ies):**

SALT

**Elevation:** -1560

**True Vertical Depth:** 4879

**Measured Depth:** 4879

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 4

**Name:** DELAWARE

**Lithology(ies):**

SANDSTONE

**Elevation:** -1802

**True Vertical Depth:** 5121

**Measured Depth:** 5121

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 5

**Name:** BRUSHY CANYON LOWER

**Lithology(ies):**

SANDSTONE

**Elevation:** -5802

**True Vertical Depth:** 9121

**Measured Depth:** 9121

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 6

**Name:** BONE SPRING LIME

**Lithology(ies):**

LIMESTONE

**Elevation:** -5973

**True Vertical Depth:** 9292

**Measured Depth:** 9292

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 7

**Name:** BONE SPRING

**Lithology(ies):**

SANDSTONE

**Elevation:** -6928

**True Vertical Depth:** 10247

**Measured Depth:** 10247

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 8

**Name:** BONE SPRING LIME

**Lithology(ies):**

LIMESTONE

**Elevation:** -7192

**True Vertical Depth:** 10511

**Measured Depth:** 10511

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 9

**Name:** BONE SPRING 2ND

**Lithology(ies):**

SANDSTONE

**Elevation:** -7494

**True Vertical Depth:** 10813

**Measured Depth:** 10813

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**ID:** Formation 10

**Name:** BONE SPRING 3RD

**Lithology(ies):**

LIMESTONE

**Elevation:** -7864

**True Vertical Depth:** 11183

**Measured Depth:** 11183

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 11

**Name:** BONE SPRING 3RD

**Lithology(ies):**

SANDSTONE

**Elevation:** -8599

**True Vertical Depth:** 11918

**Measured Depth:** 11918

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 12

**Name:** WOLFCAMP

**Lithology(ies):**

SHALE

**Elevation:** -9034

**True Vertical Depth:** 12353

**Measured Depth:** 12353

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** Y

**ID:** Formation 13

**Name:** WOLFCAMP

**Lithology(ies):**

SHALE

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Elevation:** -9284

**True Vertical Depth:** 12603

**Measured Depth:** 12603

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** Y

## Section 2 - Blowout Prevention

---

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

**Rating Depth:** 12574

**Equipment:** 5M 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 to Choke Manifold. See attached for specs and 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. Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi. • Wellhead will be installed by wellhead representatives. • If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal. • Wellhead representative will install the test plug for the initial BOP test. • Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 3M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time. • If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted. • Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating. • Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2. After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2. After running the 9-5/8" intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead. The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

**Choke Diagram Attachment:**

Seawolf 1-12 Fed 82H\_5M BOPE\_CK\_10-12-2016.pdf

**BOP Diagram Attachment:**

Seawolf 1-12 Fed 82H\_5M BOPE\_CK\_10-12-2016.pdf

---

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

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

**Rating Depth:** 12574

**Equipment:** 5M 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 to Choke Manifold. See attached for specs and 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. Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi. • Wellhead will be installed by wellhead representatives. • If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal. • Wellhead representative will install the test plug for the initial BOP test. • Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 3M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time. • If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted. • Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating. • Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2. After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2. After running the 9-5/8" intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead. The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

**Choke Diagram Attachment:**

Seawolf 1-12 Fed 82H\_5M BOPE\_CK\_10-12-2016.pdf

**BOP Diagram Attachment:**

Seawolf 1-12 Fed 82H\_5M BOPE\_CK\_10-12-2016.pdf

---

## Section 3 - Casing

---

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**String Type:** SURFACE

**Other String Type:**

**Hole Size:** 17.5

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -9280

**Bottom setting depth MD:** 1000

**Bottom setting depth TVD:** 1000

**Bottom setting depth MSL:** -10280

**Calculated casing length MD:** 1000

**Casing Size:** 13.75

**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:** 1.59

**Burst Design Safety Factor:** 3.46

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

**Joint Tensile Design Safety Factor:** 2.11

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

**Body Tensile Design Safety Factor:** 2.11

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

Seawolf 1-12 Fed 82\_Surf Csg Ass\_10-12-2016.docx

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 12.25

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -9280

**Bottom setting depth MD:** 11300

**Bottom setting depth TVD:** 11300

**Bottom setting depth MSL:** -20580

**Calculated casing length MD:** 11300

**Casing Size:** 9.625

**Other Size**

**Grade:** P-110

**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:** 1.25

**Burst Design Safety Factor:** 1.59

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

**Joint Tensile Design Safety Factor:** 2.58

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

**Body Tensile Design Safety Factor:** 2.58

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

Seawolf 1-12 Fed 82\_Int Csg Ass\_10-12-2016.docx

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 8.75

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -9280

**Bottom setting depth MD:** 22434

**Bottom setting depth TVD:** 12574

**Bottom setting depth MSL:** -21854

**Calculated casing length MD:** 22434

**Casing Size:** 5.5

**Other Size**

**Grade:** P-110

**Other Grade:**

**Weight:** 20

**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:** 1.27

**Burst Design Safety Factor:** 1.26

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

**Joint Tensile Design Safety Factor:** 1.83

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

**Body Tensile Design Safety Factor:** 1.83

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

Seawolf 1-12 Fed 82\_Prod Csg Ass\_10-12-2016.docx

---

### Section 4 - Cement

**Casing String Type:** SURFACE

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 82H

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: 9300

Cement Type: C

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

Quantity (sks): 1580

Yield (cu.ff./sk): 2.31

~~Full~~ Density: 11.9

Volume (cu.ft.): 3640

Percent Excess: 30

Top MD of Segment: 9400

Bottom MD Segment: 11300

Cement Type: C

Quantity (sks): 590

Yield (cu.ff./sk): 1.33

Additives: 0.125 lbs/sks Poly-R-Flake

Volume (cu.ft.): 783

Percent Excess: 30

Density: 14.8

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 11100

Bottom MD Segment: 12300

Cement Type: C

Additives: Enhancer 923 + 10% BWOC  
Bentonite + 0.05% BWOC SA-1015 +  
0.3% BWOC HR-800 + 0.2% BWOC  
~~Full~~ FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5  
lb/sk D-Air 5000

Quantity (sks): 144

Yield (cu.ff./sk): 2.31

Density: 11.9

Volume (cu.ft.): 333

Percent Excess: 25

Top MD of Segment: 12300

Bottom MD Segment: 22434

Cement Type: H

Quantity (sks): 2347

Yield (cu.ff./sk): 1.2

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

Volume (cu.ft.): 2816

Percent Excess: 25

Density: 14.5

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

## 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:** 1000

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.4

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

**Density (lbs/cu.ft.):**

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

**PH:**

**Viscosity (CP):** 2

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

**Top Depth:** 1000

**Bottom Depth:** 11300

**Mud Type:** OIL-BASED MUD

**Min Weight (lbs./gal.):** 8.4

**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:** SEAWOLF 1-12 FED

**Well Number:** 82H

**Top Depth:** 11300

**Bottom Depth:** 12434

**Mud Type:** OIL-BASED MUD

**Min Weight (lbs./gal.):** 10.5

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

**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 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:** 7200

**Anticipated Surface Pressure:** 4428.21

**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:**

Seawolf 1-12 Fed 82H\_H2S Plan\_10-12-2016.pdf

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

**Well Name:** SEAWOLF 1-12 FED

**Well Number:** 82H

## **Section 8 - Other Information**

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

Seawolf 1-12 Fed 82H\_Directional Plan\_01-24-2017.pdf

**Other proposed operations facets description:**

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

**Other proposed operations facets attachment:**

Seawolf 1-12 Fed 82H\_AC Report\_10-12-2016.pdf  
Seawolf 1-12 Fed 82\_Multi-Bowl Verbiage\_3M\_10-12-2016.pdf  
Seawolf 1-12 Fed 82\_Multi-Bowl Wellhead\_10-12-2016.pdf  
Seawolf 1-12 Fed 82\_Clsd Loop Design Plan\_10-12-2016.pdf

**Other Variance attachment:**

Seawolf 1-12 Fed 82\_Co-flex hose\_10-12-2016.pdf



Fluid Technology

ContiTech Beattie Corp.  
Website: [www.contitechbeattie.com](http://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.

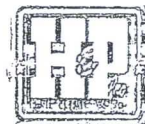
Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

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

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Houston, TX 77041  
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RIG 212



## QUALITY DOCUMENT

**PHOENIX RUBBER  
INDUSTRIAL LTD.**

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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  <div style="text-align: center;">See attachment. (1 page)</div>					
↑ 10 mm = 10 Min. → 10 mm = 25 MPa					
COUPLINGS					
Type	Serial N°		Quality	Heat N°	
3" coupling with 4 1/16" Flange end	720	719	AISI 4130	C7626	
			AISI 4130	47357	
API Spec 16 C Temperature rate: "B"					
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
Date:		Inspector		Quality Control	
29. April. 2002.				PHOENIX RUBBER Industrial Ltd. Hose Inspection and Verification Dept. PHOENIX RUBBER Q.C.	

40920-0-00015 N800G

8	GNL +0.000	PC	14:00		
	RDV +0.000	PC	14:00		
	BL +1041	BR	14:00		
7	GNL +0.000	PC	13:40	40	60
	RDV +0.000	PC	13:40		
	BL +1047	BR	13:40		
6	GNL +0.000	PC	13:20		
	RDV +0.000	PC	13:20		
	BL +1050	BR	13:20		
5	GNL +0.000	PC	13:00		
	RDV +0.000	PC	13:00		
	BL +1056	BR	13:00		
4					
3					
2					

*Don Lee*  
100  
GENIX RUBBER  
Industrial Ltd.  
Hose Inspection and  
Certification Dept.

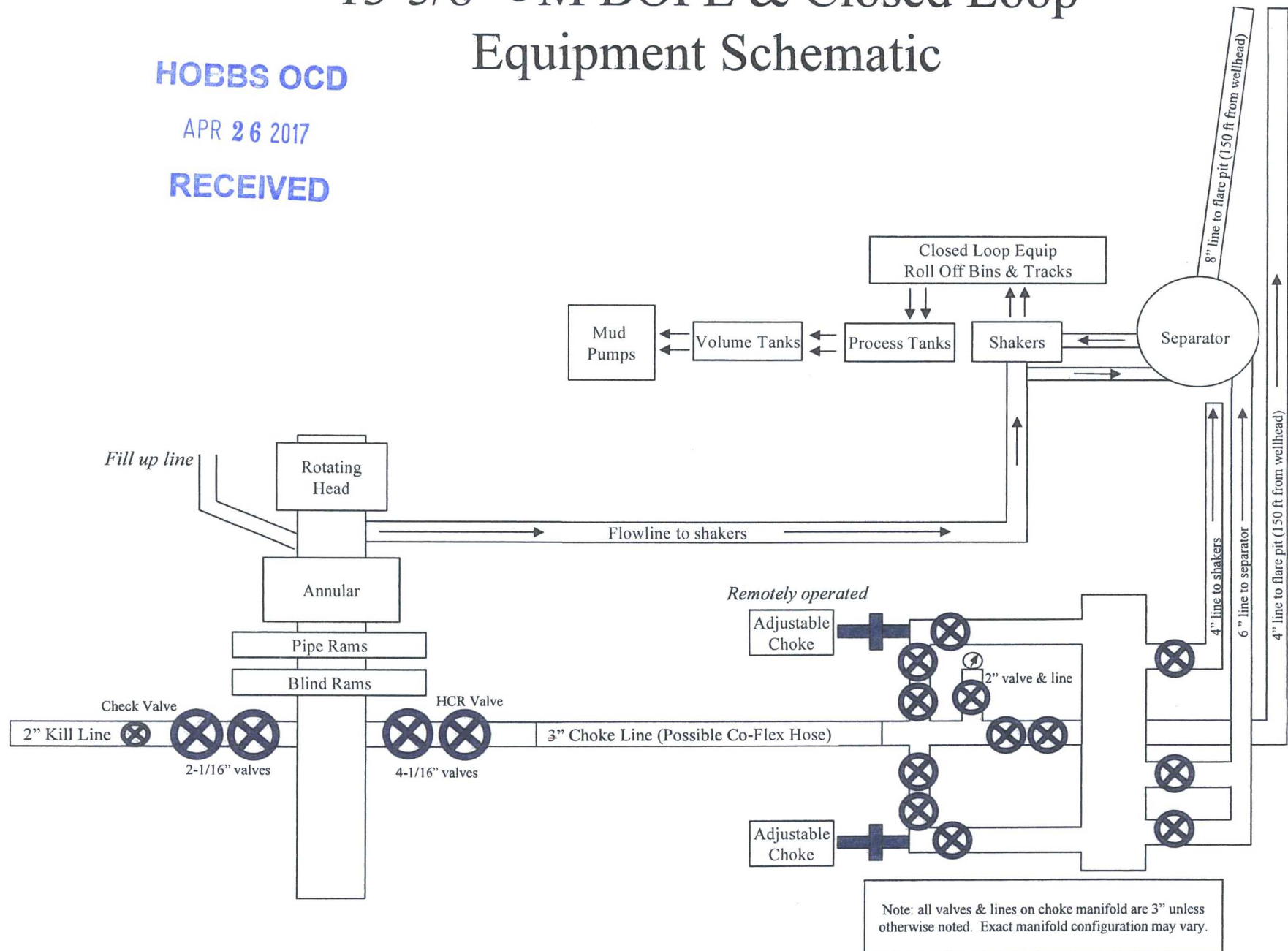
VERIFIED TRUE CO.  
PHOENIX RUBBER CO.

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

HOBBS OCD

APR 26 2017

RECEIVED



A multibowl wellhead may be used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

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

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

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

After running the 9-5/8" intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead.

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

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