#### HOBBS CCD

Form 3160 -3 (March 2012)

APR 26 2017

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

# UNITED STATES DEPARTMENT OF THE INTERIOR RECEIVED BUREAU OF LAND MANAGEMENT

#### APPLICATION FOR PERMIT TO DRILL OR REENTER

Expires October 31, 2

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

NMNM114988

APPLICATION FOR PERMIT TO DRILL OR REENTER						
Type of work:				7. If Unit or CA Agreement, Name and No.		
lb. Type of Well: Oil Well Gas Well Other		Single Zone Multip	le Zone	8. Lease Name and W SEAWOLF 1-12 FEI		(31767
Name of Operator     DEVON ENERGY PRODUCTION COM	PANY L	P (6137)	L	9. API Well No.	137	621
000 141 101 111 1 011 111 011 011		e No. (include drea code) 52-6571	4	10. Field and Pool, or Ex WC-025 G-09 S253		
4. Location of Well (Report location clearly and in accordance with any State requirements.*)			Q <sub>2</sub>	11. Sec., T. R. M. or Bl	c. and Sui	rvey or Area
At surface NWNW / 200 FNL / 360 FWL / LAT 32.0791863 / LONG -103.5334299			All Division in the second	SEC 1 / T26S / R33E / NMP		
At proposed prod. zone SWSW / 330 FSL / 380 FWL / LAT 3	32.0516	6152 / LONG -103.5333	659	DE0 17 1200 7 100	_ / 141411	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish LEA		13. State NM
15. Distance from proposed* location to nearest 200 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. 1280	of acres in lease	17. Spacin 320	g Unit dedicated to this w	ell	
18. Distance from proposed location* to nearest well, drilling, completed, 450 feet applied for, on this lease, ft.	19. Proposed Depth 20. BLM/BIA Bond No. on file FED: CO1104					
(		22. Approximate date work will start* 07/01/2017		23. Estimated duration 45 days		
30.10.1001	1,000	attachments		, o dayo		
The following, completed in accordance with the requirements of Onshore	100		tached to thi	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	Lands, th	Item 20 above). e 5. Operator certific	ation	ormation and/or plans as		,
25. Signature (Electronic Submission)		Name (Printed/Typed) Rebecca Deal / Ph: (405)228-8429		Date 10/11/2016		2016
Title Regulatory Compliance Professional						
Approved by (Signature)		Name (Printed/Typed)		Date		
(Electronic Submission) Cody Layton / Ph: (575)234-5959			04/17/	2017		
itle Office Supervisor Multiple Resources HOBBS						
Application approval does not warrant or certify that the applicant holds conduct operations thereon.  Conditions of approval, if any, are attached.	legalor	equitable title to those right	ts in the sub	ject lease which would en	title the	applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cri	ime for a	ny person knowingly and w	illfully to m	ake to any department or	agency	of the United

(Continued on page 2)

\*(Instructions on page 2)



#### INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

#### **NOTICES**

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

(Form 3160-3, page 2)

#### **Additional Operator Remarks**

#### **Location of Well**

1. SHL: NWNW / 200 FNL / 360 FWL / TWSP: 26S / RANGE: 33E / SECTION: 1 / LAT: 32.0791863 / LONG: -103.5334299 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNW / 330 FNL / 380 FWL / TWSP: 26S / RANGE: 33E / SECTION: 1 / LAT: 32.0791863 / LONG: -103.5334299 ( TVD: 12592 feet, MD: 12929 feet )

BHL: SWSW / 330 FSL / 380 FWL / TWSP: 26S / RANGE: 33E / SECTION: 12 / LAT: 32.0516152 / LONG: -103.5333659 ( TVD: 12557 feet, MD: 12574 feet )

#### **BLM Point of Contact**

Name: Alana Baker

Title: Legal Instruments Examiner

Phone: 5752345922 Email: abaker@blm.gov

#### Review and Appeal Rights

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



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

# erator Certification Data Report 04/18/2017

#### **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: 10/11/2016

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

#### 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:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

PWD disturbance (acres):

#### **Section 3 - Unlined Pits**

Injection well mineral owner:

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Unlined pit PWD on or off channel:	
Unlined pit PWD discharge volume (bbl/day):	
Unlined pit specifications:	
Precipitated solids disposal:	
Decribe precipitated solids disposal:	
Precipitated solids disposal permit:	
Unlined pit precipitated solids disposal schedule:	
Unlined pit precipitated solids disposal schedule attachment:	
Unlined pit reclamation description:	
Unlined pit reclamation attachment:	
Unlined pit Monitor description:	
Unlined pit Monitor attachment:	
Do you propose to put the produced water to beneficial use?	
Beneficial use user confirmation:	
Estimated depth of the shallowest aquifer (feet):	
Does the produced water have an annual average Total Dissolutat of the existing water to be protected?	ved Solids (TDS) concentration equal to or less than
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	
Trouid you like to dulize injection FWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Injection PWD discharge volume (bbl/day):	

Injection well type:
Injection well number:

Assistant injection well ADI num

Assigned 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):

Injection well name:

Injection well API number:

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 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:



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

SUPO Data Report
04/18/2017

APD ID: 10400003275

Submission Date: 10/11/2016

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

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 81H\_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 102H\_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 81H New Access Rd 01-30-2017.pdf

Access road engineering design? YES

Well Name: SEAWOLF 1-12 FED Well Number: 81H

Access road engineering design attachment:

Seawolf 1-12 Fed 81H\_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 81H\_One Mile Map\_09-06-2016.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 CTB 1 Plat, Battery Connect, Battery Connect Electric, Pad Connect, Flowlines (buried).

Production Facilities map:

Seawolf 1-12 Fed 81H\_CTB\_1\_BAT\_CON\_01-30-2017.pdf

Seawolf 1-12 Fed 81H\_Seawolf\_1-12\_BS\_CTB\_1\_Plat\_01-30-2017.PDF

Seawolf 1-12 Fed 81H\_SEAWOLF\_1-12\_BS\_CTB\_1\_R1\_P Batt Conn\_01-30-2017,PDF

Well Name: SEAWOLF 1-12 FED Well Number: 81H

Seawolf 1-12 Fed 81H\_PAD\_CONNECT\_01-30-2017.PDF SEAWOLF 1-12 Fed 81H\_Flowlines\_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 81H 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:

Well Name: SEAWOLF 1-12 FED Well Number: 81H

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 81H\_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

Disposal location ownership: PRIVATE

**FACILITY** 

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 containment 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 containment attachment:

Well Name: SEAWOLF 1-12 FED Well Number: 81H

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:

**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

Well Name: SEAWOLF 1-12 FED Well Number: 81H

#### 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 81H Well Layout 01-24-2017.pdf

Comments:

#### Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Seawolf 1-12 Fed 81H 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

Access road long term disturbance (acres): 0.04265

Pipeline long term disturbance (acres): 2.5981405

Other long term disturbance (acres): 0

Total long term disturbance: 5.0787907

Wellpad short term disturbance (acres): 4.7015

Access road short term disturbance (acres): 0.04265

Pipeline short term disturbance (acres): 2.5981405

Other short term disturbance (acres): 0

Total short term disturbance: 7.3422904

**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.

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

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

Well Name: SEAWOLF 1-12 FED Well Number: 81H

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:** 

Well Name: SEAWOLF 1-12 FED Well Number: 81H **BOR Local Office: COE Local Office:** DOD Local Office: **NPS Local Office:** State Local Office: Military Local Office: **USFWS Local Office:** Other Local Office: **USFS** Region: **USFS** Forest/Grassland: **USFS Ranger District:** Disturbance type: WELL PAD Describe: Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: **BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office:** State Local Office: Military Local Office: **USFWS Local Office:** Other Local Office: **USFS** Region: USFS Forest/Grassland: **USFS Ranger District:** 

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

Disturbance type: PIPELINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

**State Local Office:** 

Military Local Office:

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

USFS Forest/Grassland:

**USFS** Ranger District:

#### Section 12 - Other Information

Right of Way needed? YES

Use APD as ROW? YES

 $\textbf{ROW Type(s):} \ 281001 \ \mathsf{ROW-ROADS}, 288100 \ \mathsf{ROW-O\&G Pipeline}, Other$ 

#### **ROW Applications**

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

Use a previously conducted onsite? YES

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

#### **Other SUPO Attachment**

SEAWOLF 1-12 Fed 81H Flowlines 01-30-2017.pdf

Seawolf 1-12 Fed 81H\_PAD\_CONNECT\_01-30-2017.PDF

Seawolf 1-12 Fed 81H\_CTB\_1\_BAT\_CON\_01-30-2017.pdf

Seawolf 1-12 Fed 81H\_SW\_1-12\_BS\_CTB\_1\_R1\_P Batt Conn\_01-30-2017.PDF

Well Name: SEAWOLF 1-12 FED Well Number: 81H

Seawolf 1-12 Fed 81H\_Seawolf\_1-12\_BS\_CTB\_1\_Plat\_01-30-2017.PDF



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

#### **Application Data Report** 04/18/2017

APD ID: 10400003275 Submission Date: 10/11/2016

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

Well Type: OIL WELL

Well Work Type: Drill

#### Section 1 - General

APD ID: 10400003275 Tie to previous NOS?

Submission Date: 10/11/2016

**BLM Office: HOBBS** 

User: Rebecca Deal

Title: Regulatory Compliance

Federal/Indian APD: FED

Professional 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

Field/Pool or Exploratory? Field and Pool

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Well API Number:

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

Pool Name: UPPER

Field Name: WC-025 G-09

Master Drilling Plan name:

S253336D

WOLFCAMP

Well Name: SEAWOLF 1-12 FED Well Number: 81H

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: SEAWOLF 1-12 FED Well Class: HORIZONTAL

Number of Legs:

& 102H

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

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 81H\_C-102 Rev Signed\_02-14-2017.pdf

Well work start Date: 07/01/2017 **Duration: 45 DAYS** 

#### Section 3 - Well Location Table

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83 Vertical Datum: NAVD88

Survey number: 3918F

Leg #: 1

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

Lease #: NMNM114988

Latitude: 32.0791863 Longitude: -103.5334299

SHL Elevation: 3319 MD: 0 TVD: 0

NS-Foot: 200 NS Indicator: FNL

Lease Type: FEDERAL

EW-Foot: 360 EW Indicator: FWL

Section: 1 Twsp: 26S Range: 33E

Aliquot: NWNW Lot: Tract:

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: LEA

**Latitude:** 32.0791863 **Longitude:** -103.5334299

KOP **Elevation:** -8700 **MD:** 12027 **TVD:** 12019

Leg #: 1 Lease Type: FEDERAL Lease #: NMNM114988

NS-Foot: 11 NS Indicator: FNL

EW-Foot: 380 EW Indicator: FWL

Twsp: 26S Range: 33E Section: 1

Aliquot: NWNW Lot: Tract:

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: LEA

**Latitude:** 32.0791863 **Longitude:** -103.5334299

PPP **Elevation:** -9273 **MD:** 12929 **TVD:** 12592

Leg #: 1 Lease Type: FEDERAL Lease #: NMNM114988

NS-Foot: 330

NS Indicator: FNL

EW-Foot: 380

EW Indicator: FWL

Twsp: 26S Range: 33E Section: 1

Aliquot: NWNW Lot: Tract:

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: LEA

**Latitude:** 32.0516152 **Longitude:** -103.5333659

EXIT **Elevation:** -9238 **MD:** 12574 **TVD:** 12557

Leg #: 1 Lease Type: FEDERAL Lease #: NMNM114988

NS-Foot: 330

NS Indicator: FSL

EW-Foot: 380

EW Indicator: FWL

Twsp: 26S Range: 33E Section: 12

Aliquot: SWSW Lot: Tract:

STATE: NEW MEXICO Meridian: NEW MEXICO PRINCIPAL County: LEA

**Latitude:** 32.0516152 **Longitude:** -103.5333659

BHL **Elevation:** -9238 **MD:** 12574 **TVD:** 12557

. . . .

Leg #: 1 Lease Type: FEDERAL Lease #: NMNM114988

NS-Foot: 330 NS Indicator: FSL

EW-Foot: 380 EW Indicator: FWL

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

Twsp: 26S

Range: 33E

Section: 12

Aliquot: SWSW

Lot:

Tract:



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

### Drilling Plan Data Report

Submission Date: 10/11/2016

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

Well Type: OIL WELL

APD ID: 10400003275

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

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

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

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

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

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

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: -9026

True Vertical Depth: 12345

Measured Depth: 12345

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

ID: Formation 13

Name: WOLFCAMP

Lithology(ies):

SHALE

Well Name: SEAWOLF 1-12 FED Well Number: 81H

Elevation: -9277

True Vertical Depth: 12596

Measured Depth: 12596

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

#### Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 12557

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 81H\_5M BOPE Double Ram and CLS Schematic 09-06-2016.pdf

#### **BOP Diagram Attachment:**

Seawolf 1-12 Fed 81H\_5M BOPE Double Ram and CLS Schematic 09-06-2016.pdf

Well Name: SEAWOLF 1-12 FED Well Number: 81H

Pressure Rating (PSI): 5M

Rating Depth: 12557

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 81H 5M BOPE Double Ram and CLS Schematic 09-06-2016.pdf

#### **BOP Diagram Attachment:**

Seawolf 1-12 Fed 81H\_5M BOPE Double Ram and CLS Schematic\_09-06-2016.pdf

Section 3 - Casing

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

See

String Type: SURFACE

Other String Type:

Hole Size: 17.5

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -9238

Bottom setting depth MD: 1000

Bottom setting depth TVD: 1000

Bottom setting depth MSL: -10038 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 81H\_Surface Casing Assumptions\_09-16-2016.docx

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

String Type: INTERMEDIATE

Other String Type:

Hole Size: 12.25

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -9238

Bottom setting depth MD: 11300

Bottom setting depth TVD: 11300

Bottom setting depth MSL: -20538
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 81H\_Intermediate Casing Assumptions 09-16-2016.docx

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 0

Top setting depth TVD: 0

Top setting depth MSL: -9238

Bottom setting depth MD: 22574

Bottom setting depth TVD: 12557

Bottom setting depth MSL: -21799 Calculated casing length MD: 22574

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 81H Production Casing Assumptions 09-16-2016.docx

Section 4 - Cement

Casing String Type: SURFACE

Well Name: SEAWOLF 1-12 FED

Well Number: 81H

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

Quantity (sks): 1580

Yield (cu.ff./sk): 2.31

Chloride + 0.125 lbs/sks Poly-E-Flake

Volume (cu.ft.): 3640

Percent Excess: 30

Pensity: 11.9

Bottom MD Segment: 11300

Cement Type: C

Top MD of Segment: 9400

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:

<u>Lead</u>

Top MD of Segment: 11100

Bottom MD Segment: 12300

Cement Type: C

Additives: Enhancer 923 + 10% BWOC Quantity (sks): 144

Yield (cu.ff./sk): 2.31

Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC

Volume (cu.ft.): 333

Percent Excess: 25

FE<sub>1</sub>2 + 0.125 lb/sk Pol-E-Flake + 0.5

lb/sk D-Air 5000

Density: 11.9

Bottom MD Segment: 22574

Cement Type: H

Quantity (sks): 2379

Yield (cu.ff./sk): 1.2

Top MD of Segment: 12300

Volume (cu.ft.): 2842

Percent Excess: 25

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

Bentonite Density: 14.5

Well Name: SEAWOLF 1-12 FED Well Number: 81H

#### 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 Salinity (ppm): Filtration (cc):

**Additional Characteristics:** 

Well Name: SEAWOLF 1-12 FED Well Number: 81H

Top Depth: 11300 Bottom Depth: 22574

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 fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.

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

GR

Coring operation description for the well:

N/A

#### Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7200 Anticipated Surface Pressure: 4429.76

Anticipated Bottom Hole Temperature(F): 165

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Seawolf 1-12 Fed 81H\_H2S Plan\_09-06-2016.pdf

Well Name: SEAWOLF 1-12 FED Well Number: 81H

#### Section 8 - Other Information

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

Seawolf 1-12 Fed 81H\_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 81H\_Multi-Bowl Wellhead\_09-06-2016.pdf
Seawolf 1-12 Fed 81H\_Multi-Bowl Verbiage\_3M\_09-06-2016.DOCX
Seawolf 1-12 Fed 81H\_Closed Loop Design Plan\_09-06-2016.pdf
Seawolf 1-12 Fed 81H\_AC Report\_09-06-2016.pdf

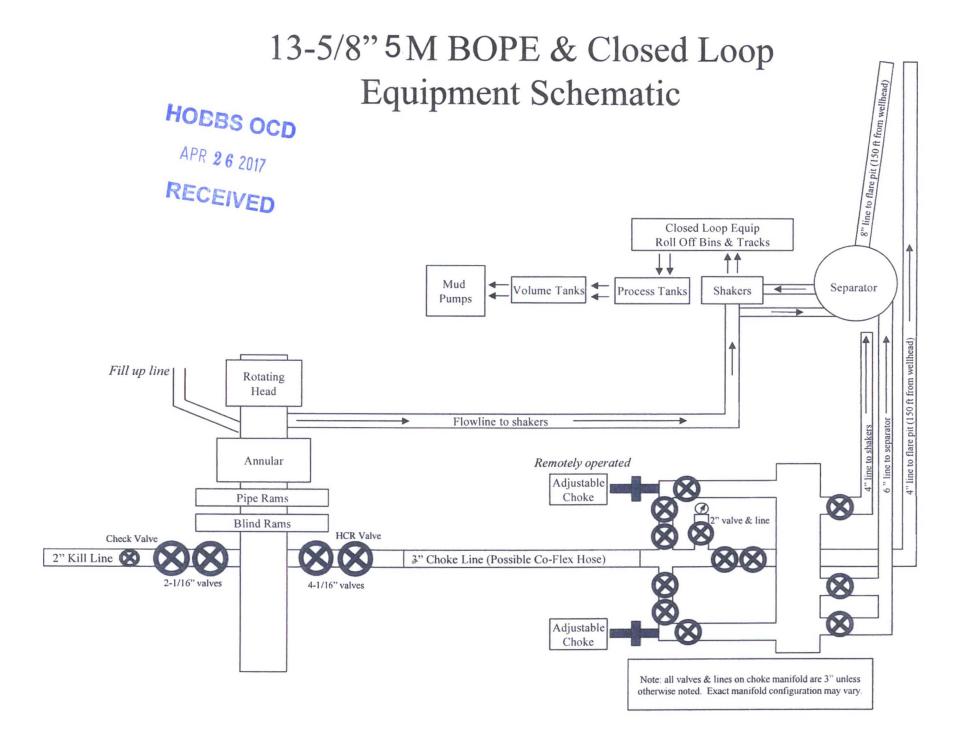
#### Other Variance attachment:

Seawolf 1-12 Fed 81H\_H\_P Co-flex hose\_09-06-2016.pdf

#### OCTG Casing



O.D. 9.625	T&C LB FT 40.00	PE LB FT 38.97	GRADE P110 EC	
	Grade - Materia	l Properties ==		
	num Yield Strength:	125.0	ksi	
	num Yield Strength:	140	ksi	
Minimu	m Tensile Strength:	135	ksı	
	Pipe Body D	ata (PE)		
	Geome	etry		
	Nominal ID:	8.835	inch	
	Wall:	0.395	inch	
	Nominal Area:	11.454	inch <sup>2</sup>	
	API Drift:	8.679	inch	
	Alternate Drift:	8.750	inch	
	Perform	ance		
	Body Yield Strength:	1,432	kips	
	ollapse Resistance:	4,230	psi	
Internal Yield Press	ure (API Historical):	8,980	psi	
	Lame - Internal Y	ield Pressure		
	Lamé open:	8,950	psi	
	Lamé capped:	9,970	psi	
L	amé ductile rupture:	9,700	psi	
	API Connect	tion Data		
ST	C Internal Pressure:	8,980	psi	
	STC Joint Strength:	861	kips	
L	C Internal Pressure:	8,980	psi	
	LC Joint Strength:	988	kips	
Ri	C Internal Pressure:	8,980	psi	
	BC Joint Strength:	1,266	kips	
	LC Torque			
minimum: 7.410	optimum:		imum: 12,350	





Fluid Technology

ContiTech Beattle Corp. Website: www.contitechbeattle.com

Monday, June 14, 2010

RE:

Drilling & Production Hoses Lifting & Safety Equipment

To Helmerich & Payne,

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

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

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

Best regards,

Robin Hodgson Sales Manager ContiTech Beattie Corp

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



## R16212



#### **QUALITY DOCUMENT**

PHOENIX RUBBER INDUSTRIAL LTD.

5728 Szeged, Budapesti út 10. Hungary • H-6701 Szeged, P. O. Box 152 none: (3662) 556-737 • Fax: (3662) 566-738 SALES & MARKETING: H-1092 Budapest, Ráday u. 42-44, Hungary +H-1440 Budapest, P. O. Box 26 Phone: (361) 456-4200 · Fax: (361) 217-2972, 456-4273 · www.taurusemerga.hu

QUALITY CONTRÓL INSPECTION AND TEST CERTIFICATE				CERT. N°: 552				
PURCHASER: Phoenix Beattie Co.				P.O. N°	1519	FA-871		
PHOENIX RUBBER order № 170466 HOSE TYPE: 3" ID Choke and Kill Hose								
HOSE SERIAL Nº	34128	NOMINAL / ACT	UAL LENGTH		11,43 m			
W.P. 68,96 MPa 1	0000 psi	T.P. 103,4	MPa 1500	0 psi	Duration:	60	min.	
Pressure test with water at ambient temperature	See att	achment. (1 <sub> </sub>	page)				the capitality	
↑ 10 mm = 10 Min.  → 10 mm = 25 MPa, , /  COUPLINGS								
Туре		Serial N°		Quality		Heat N°		
3" coupling with 73		20 719 A		AISI 4130		C7626		
4 1/16" Flange end	4 1/16" Flange end		A		NSI 4130		47357	
				:				
All metal parts are flawless WE CERTIFY THAT THE ABOVE	E HOSE HAS BEE	N MANUFACTURE	API Spec 1 Temperatur	re rate:"E		OF THE ORDE	R AND	
PRESSURE TESTED AS ABOVE	1	ORY RESULT.	1				-	
29. April. 2002.	Inspector		Da Con	HOE Ind	NIX RUB dustrial Ltd Inspection MENIA RUB	i. and favo	in .	

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VERIFIED TRUE CG.
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# H&P Flex Rig Location Layout 5 Well Pad

