Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO.
30-025-42283

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
SEA SNAKE 35 STATE

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

8. Well Number 3H

2. Name of Operator
Devon Energy Production Company, L.P.

9. OGRID Number
6137

3. Address of Operator
333 West Sheridan Ave. Oklahoma City, Oklahoma 73102-5010 (405) 552-7848

10. Pool name or Wildcat
Triple X; Bone Spring (59900)

4. Well Location
Unit Letter O : 200 feet from the S line and 2132 feet from the E line
Section 35 Township 23S Range 33E NMPM Lea County New Mexico

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3647'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|---|---|---|---|---|---|---|---|
| PERFORM REMEDIAL WORK | ☐ | PLUG AND ABANDON | ☐ | REMEDIAL WORK | ☐ | ALTERING CASING | ☐ |
| TEMPORARILY ABANDON | ☐ | CHANGE PLANS | ☒ | COMMENCE DRILLING OPNS. | ☐ | P AND A | ☐ |
| PULL OR ALTER CASING | ☐ | MULTIPLE COMPL | ☐ | CASING/CEMENT JOB | ☐ | | |
| DOWNHOLE COMMINGLE | ☐ | | | | | | |
| OTHER: | ☐ | | | OTHER: | | | ☐ |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Devon Energy Production Co., L.P. respectfully requests approval to change the approved APD as follows:

- Change projected TD of well from 15,553'MD to 15,645' MD.
- Change production casing to 7" x 5.5" mixed string.
- Change to BOP 3M system for entire duration of well.

See attached revised Drill Plan and directional survey.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE _____ TITLE Regulatory Specialist DATE 3/25/2015

Type or print name David H. Cook E-mail address: david.cook@dvn.com PHONE: (405) 552-7848

**For State Use Only**

APPROVED BY: _____ TITLE Petroleum Engineer DATE 03/25/15

Conditions of Approval (if any):

MAR 26 2015

**Devon Energy, Sea Snake 35 State 3H**

## 1. Geologic Formations

| | | | |
|---|---|---|---|
| TVD of target | 11,102 | Pilot hole depth | N/A |
| MD at TD: | 15,645 | Deepest expected fresh water: | N/A |

**Basin**

| Formation | Depth (TVD) from KB | Water/Mineral Bearing/ Target Zone? | Hazards* |
|---|---|---|---|
| Quaternary Fill | Surface | Water | |
| Rustler | 1334 | | |
| Top of Salt | 1582 | Salt | |
| Base of Salt | 5002 | Salt | |
| Delaware | 5272 | Oil/Gas | |
| Cherry Canyon | 6235 | Oil/Gas | |
| Brushy Canyon | 7517 | Oil/Gas | |
| 1st BSPG Lime | 9027 | Oil/Gas | |
| 2nd BSPG Sand | 10852 | Target Zone | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

*H2S, water flows, loss of circulation, abnormal pressures, etc.

## 2. Casing Program

| Hole Size | Casing Interval From | To | Csg. Size | Weight (lbs) | Grade | Conn. | SF Collapse | SF Burst | SF Tension |
|---|---|---|---|---|---|---|---|---|---|
| 17.5" | 0 | 1400 | 13.375" | 48 | H40 | STC | 1.18 | 2.64 | 8.05 |
| 12.25" | 0 | 4300 | 9.625" | 40 | J55 | BTC | 1.15 | 1.77 | 4.15 |
| 12.25" | 4300 | 5200 | 9.625" | 40 | HCK55 | BTC | 1.56 | 1.46 | 4.45 |
| Option #1 | | | | | | | | | |
| 8.75" | 0 | 15645 | 5.5" | 17 | P110 | BTC | 1.93 | 2.40 | 2.15 |
| Option # 2 | | | | | | | | | |
| 8.75" | 0 | 10550 | 7" | 29 | P110 | BTC | 1.84 | 2.25 | 3.16 |
| 8.75" | 10550 | 15645 | 5.5" | 17 | P110 | BTC | 1.93 | 2.40 | 6.52 |
| | | | | | BLM Minimum Safety Factor | | 1.125 | 1 | 1.6 Dry<br>1.8 Wet |

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

| | Y or N |
|---|---|
| Is casing new? If used, attach certification as required in Onshore Order #1 | Y |
| Does casing meet API specifications? If no, attach casing specification sheet. | Y |
| Is premium or uncommon casing planned? If yes attach casing specification sheet. | N |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing? | Y |
| Is well located within Capitan Reef? | N |
| If yes, does production casing cement tie back a minimum of 50' above the Reef? | |
| Is well within the designated 4 string boundary. | |
| Is well located in SOPA but not in R-111-P? | N |
| If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing? | |
| Is well located in R-111-P and SOPA? | N |
| If yes, are the first three strings cemented to surface? | |
| Is 2nd string set 100' to 600' below the base of salt? | |
| Is well located in high Cave/Karst? | N |
| If yes, are there two strings cemented to surface? | |
| (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs? | |
| Is well located in critical Cave/Karst? | N |
| If yes, are there three strings cemented to surface? | |

## 3. Cementing Program

| Casing | # Sks | Wt. lb/ gal | H.0 gal/sk | Yld ft3/ sack | 500# Comp. Strength (hours) | Slurry Description |
|---|---|---|---|---|---|---|
| Surf. | 680 | 12.9 | 9.81 | 1.85 | 15 | Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 560 | 14.8 | 6.34 | 1.34 | 6 | Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake + 1% BWOC Calcium Chloride |
| Surf. Two Stage | 460 | 12.9 | 9.81 | 1.85 | 15 | 1st Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 560 | 14.8 | 6.34 | 1.34 | 6 | 1st Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake + 1% BWOC Calcium Chloride |
| | DV Tool = 300ft | | | | | |
| | 320 | 14.8 | 6.34 | 1.34 | 6 | 2nd Stage Primary: Class C Cement + 0.125 lbs/sack Poly-E-Flake + 1% BWOC Calcium Chloride |
| Inter. | 1120 | 12.9 | 9.81 | 1.85 | 15 | Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 430 | 14.8 | 1.33 | 6.32 | 7 | Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake |
| Inter. Two Stage | 950 | 12.9 | 9.81 | 1.85 | 15 | 1st Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 220 | 14.8 | 1.33 | 6.32 | 7 | 1st Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake |
| | DV Tool = 1500ft | | | | | |
| | 210 | 12.9 | 9.81 | 1.85 | 17 | 2nd Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake |
| | 160 | 14.8 | 1.33 | 6.32 | 7 | 2nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake |

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

| Casing | # Sks | Wt. lb/ gal | H2O gal/sk | Yld ft3/ sack | 500# Comp. Strength (hours) | Slurry Description |
|---|---|---|---|---|---|---|
| 5.5" Prod | 510 | 11.9 | 12.89 | 2.26 | n/a | 1st Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 |
| | 330 | 12.5 | 10.86 | 1.96 | 30 | 2nd Lead: (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake |
| | 1340 | 14.5 | 5.31 | 1.2 | 25 | Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite |
| 7 x 5.5" Combo Prod | 530 | 10.4 | 16.8 | 3.17 | 25 | Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake |
| | 1060 | 14.5 | 5.31 | 1.2 | 25 | Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite |

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

| Casing String | TOC | % Excess |
|---|---|---|
| Surface | 0' | 100% |
| Surface Two Stage | 1st Stage =300' / 2nd Stage =0' | 100% |
| Intermediate | 0' | 75% |
| Intermediate Two Stage | 1st Stage =1500' / 2nd Stage =0' | 75% |
| 5.5" Production | 4700' | 25% |
| 7 x 5.5" Combo Prod. | 4700' | 25% |

## 4. Pressure Control Equipment

| | |
|---|---|
| | A variance is requested for the use of a diverter on the surface casing. See attached for schematic. |

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Type | ✓ | Tested to: |
|---|---|---|---|---|---|
| 12-1/4" | 13-5/8" | 3M | Annular | x | 50% of working pressure |
| | | | Blind Ram | | 3M |
| | | | Pipe Ram | | |
| | | | Double Ram | | |
| | | | Other* | | |
| 8-3/4" | 11" | 3M | Annular | x | 50% testing pressure |
| | | | Blind Ram | x | 3M |
| | | | Pipe Ram | x | |
| | | | Double Ram | | |
| | | | Other * | | |
| | | | Annular | | |
| | | | Blind Ram | | |
| | | | Pipe Ram | | |
| | | | Double Ram | | |
| | | | Other * | | |

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

| | |
|---|---|
| Y | Formation integrity test will be performed per Onshore Order #2.<br>On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. |

| | |
|---|---|
| Y | 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. |
| | Y Are anchors required by manufacturer? |
| Y | A multibowl wellhead is being 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.<br><br>Devon proposes using a multi-bowl wellhead assembly (FMC Uni-head). 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.<br>• Wellhead will be installed by FMC's representatives.<br>• If the welding is performed by a third party, the FMC's representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.<br>• FMC representative will install the test plug for the initial BOP test.<br>• FMC 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 5M, 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.<br>• 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.<br>• Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating.<br>• Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2.<br><br>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 FMC Uni-head 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.<br>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 FMC Uni-head.<br><br>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 requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.<br><br>See attached schematic. |

**5. Mud Program**

| Depth | | Type | Weight (ppg) | Viscosity | Water Loss |
|---|---|---|---|---|---|
| From | To | | | | |
| 0 | 1,400' | FW Gel | 8.6-8.8 | 28-34 | N/C |
| 1,400' | 5,200' | Saturated Brine | 10.0-10.2 | 28-34 | N/C |
| 5,200' | 15,645' | Cut Brine | 8.5-9.3 | 28-34 | N/C |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

| | |
|---|---|
| What will be used to monitor the loss or gain of fluid? | PVT/Pason/Visual Monitoring |

**6. Logging and Testing Procedures**

| Logging, Coring and Testing. | |
|---|---|
| x | 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. |
| | No Logs are planned based on well control or offset log information. |
| | Drill stem test? If yes, explain |
| | Coring? If yes, explain |

| Additional logs planned | | Interval |
|---|---|---|
| X | Resistivity | Int. shoe to KOP |
| X | Density | Int. shoe to KOP |
| X | CBL | Production casing |
| X | Mud log | Intermediate shoe to TD |
| | PEX | |

## 7. Drilling Conditions

| Condition | Specify what type and where? |
|---|---|
| BH Pressure at deepest TVD | 4981 psi |
| Abnormal Temperature | No |

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

| Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM. | |
|---|---|
| N | H2S is present |
| Y | H2S Plan attached |

## 8. Other facets of operation

Is this a walking operation? If yes, describe.
Will be pre-setting casing? If yes, describe.

Attachments
___ Directional Plan
___ Other, describe

devon

Weatherford

# Sea Snake 35 State 3H
## Lea Co, NM

**Plan Data for Sea Snake 35 State 3H**

Plan Point Information:
DogLeg Severity Unit: °/100.00ft  Position offsets from Slot centre

| MD (USft) | Inc (°) | Az (°) | TVD (USft) | +N/-S (USft) | +E/-W (USft) | Northing (USft) | Easting (USft) | VSec (USft) | DLS (DLSU) |
|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 457194.41 | 786121.75 | 0.00 | 0.00 |
| 10624.54 | 0.00 | 0.00 | 10624.54 | 0.00 | 0.00 | 457194.41 | 786121.75 | 0.00 | 0.00 |
| 11374.54 | 90.00 | 359.58 | 11102.00 | 477.45 | -3.50 | 457671.86 | 786118.25 | 477.47 | 12.00 |
| 15645.22 | 90.00 | 359.58 | 11102.00 | 4748.02 | -34.82 | 461942.43 | 786086.93 | 4748.15 | 0.00 |

**Plan Data for Sea Snake 35 State 3H**

Slot: Sea Snake 35 State 3H
Position:
Offset is from Site centre
+N/-S: 0.00USft  Northing: 457194.41USft  Latitude: 32°15'15.9"
+E/-W: 0.00USft  Easting: 786121.75USft  Longitude: -103°32'29.4"
Elevation Above VRD: 3647.00USft

**Plan Data for Sea Snake 35 State 3H**

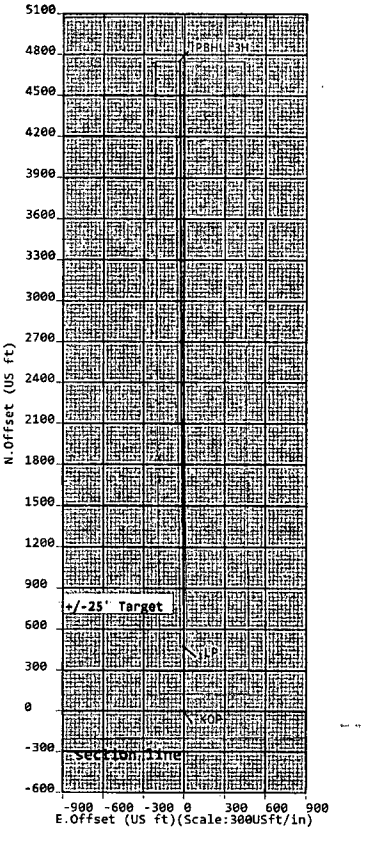
Target Set Information:
Name: Sea Snake 35 State 3H
Position offsets from Slot centre

| Name | TVD (USft) | +N/-S (USft) | +E/-W (USft) | Northing (USft) | Easting (USft) | Shape | Comment |
|---|---|---|---|---|---|---|---|
| PBHL 3H | 11102.00 | 4748.02 | -34.82 | 461942.43 | 786086.93 | Cuboid | |

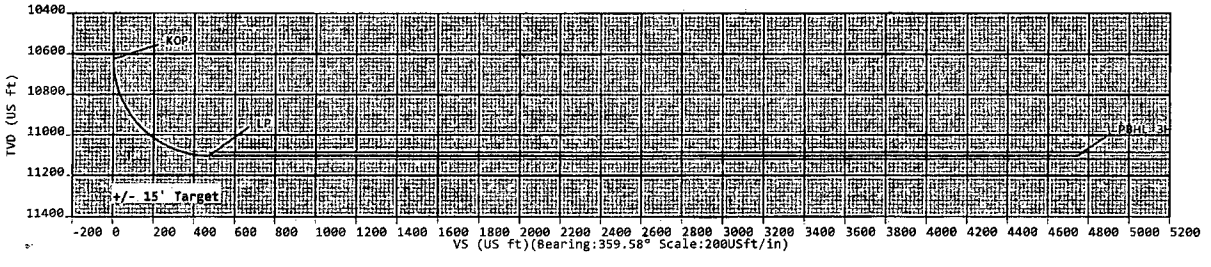
**Plan Data for Sea Snake 35 State 3H**

Well: Sea Snake 35 State 3H
Type: Main-Well
File Number:
Plan Folder: P1  Plan: P1:V1
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft  Azimuth: 359.58°
+E/-W: 0.00USft
Magnetic Parameters:

| Model: | Field Strength: | Declination: | Dip: | Date: |
|---|---|---|---|---|
| BGGM | 48229(nT) | 7.28° | 60.12° | 2015-04-10 |




Sea Snake 35 State 3H


Sign Off: Russell Joyner

# 5D Plan Report

## Devon Energy

**Field Name:** *Lea Co, NM Nad 83 NMEZ*
**Site Name:** *Sea Snake 35 State 3H*
**Well Name:** *Sea Snake 35 State 3H*
**Plan:** *P1:V1*

23 March 2015

# Sea Snake 35 State 3H

**Field Name**
Lea Co, NM Nad 83 NMEZ

**Map Units :** US ft
**Company Name :** Devon Energy
**Vertical Reference Datum (VRD) :** Mean Sea Level
**Projected Coordinate System :** NAD83 / New Mexico East (ftUS)
**Comment :**

**Site Name**
Sea Snake 35 State 3H

**Units :** US ft
**North Reference** : Grid
**Convergence Angle :** 0.42

**Position**
**Northing :** 457194.41 US ft
**Latitude :** 32°15'15.92"
**Easting :** 786121.75 US ft
**Longitude :** -103°32'29.37"

**Elevation above Mean Sea Level:** 3647.00 US ft
**Comment :**

**Slot Name**
Sea Snake 35 State 3H

**Position (Offsets relative to Site Centre)**
**+N / -S :** 0.00 US ft
**Northing :** 457194.41 US ft
**Latitude :** 32°15'15.92"
**+E / -W :** 0.00 US ft
**Easting :** 786121.75 US ft
**Longitude :** -103°32'29.37"

**Slot TVD Reference :** Ground Elevation
**Elevation above Mean Sea Level :** 3647.00 US ft
**Comment :**

**Well Name**
Sea Snake 35 State 3H

**Type :** Main well
**UWI :**
**Plan :** P1:V1
**Rig Height *Kelly Bushing* :** 25.00 US ft
**Relative to Mean Sea Level:** 3672.00 US ft
**Comment :**
**Closure Distance :** 4748.15 US ft
**Closure Azimuth :** 359.58°
**Vertical Section (Position of Origin Relative to Slot )**
**+N / -S :** 0.00 US ft
**+E / -W :** 0.00 US ft
**Az :** 359.58°
**Magnetic Parameters**
**Model :** BGGM
**Field Strength :** 48229.6nT
**Dec :** 7.28°
**Dip :** 60.12°
**Date :** 10/Apr/2015

## Target Set

**Name :** Sea Snake 35 State 3H
**Number of Targets :** 1

**Comment :**

**Target Name:**
PBHL 3H

**Shape:**
Cuboid

**Position (Relative to Slot centre)**
**+N / -S :** 4748.02 US ft
**Northing :** 461942.43 US ft
**Latitude :** 32°16'2.90"
**+E / -W :** -34.82 US ft
**Easting :** 786086.93 US ft
**Longitude :** -103°32'29.37"

**TVD (Kelly Bushing) :** 11102.00 US ft

**Orientation** **Azimuth :** 359.58°
**Inclination :** 0.00°
**Dimensions** **Length :** 8540.00 US ft
**Breadth :** 50.00 US ft
**Height :** 30.00 US ft

Well path created using minimum curvature

5D Plan Report

**Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)**

| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | VS (US ft) | DLS (°/100 US ft) | B.Rate (°/100 US ft) | T.Rate (°/100 US ft) | T.Face (°) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 10624.54 | 0.00 | 0.00 | 10624.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | KOP |
| 11374.54 | 90.00 | 359.58 | 11102.00 | 477.45 | -3.50 | 477.47 | 12.00 | 12.00 | 0.00 | 359.58 | LP |
| 15645.22 | 90.00 | 359.58 | 11102.00 | 4748.02 | -34.82 | 4748.15 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL 3H |

**Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)**

| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N.Offset (US ft) | E.Offset (US ft) | VS (US ft) | DLS (°/100 US ft) | Northing (US ft) | Easting (US ft) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| 10600.00 | 0.00 | 0.00 | 10600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 457194.41 | 786121.75 | |
| 10624.54 | 0.00 | 0.00 | 10624.54 | 0.00 | 0.00 | 0.00 | 0.00 | 457194.41 | 786121.75 | KOP |
| 10700.00 | 9.06 | 359.58 | 10699.69 | 5.95 | -0.04 | 5.95 | 12.00 | 457200.36 | 786121.71 | |
| 10800.00 | 21.06 | 359.58 | 10796.08 | 31.88 | -0.23 | 31.88 | 12.00 | 457226.29 | 786121.52 | |
| 10900.00 | 33.06 | 359.58 | 10884.97 | 77.28 | -0.57 | 77.28 | 12.00 | 457271.69 | 786121.18 | |
| 11000.00 | 45.06 | 359.58 | 10962.48 | 140.17 | -1.03 | 140.17 | 12.00 | 457334.58 | 786120.72 | |
| 11100.00 | 57.06 | 359.58 | 11025.23 | 217.80 | -1.60 | 217.80 | 12.00 | 457412.21 | 786120.15 | |
| 11200.00 | 69.06 | 359.58 | 11070.46 | 306.78 | -2.25 | 306.79 | 12.00 | 457501.19 | 786119.50 | |
| 11300.00 | 81.06 | 359.58 | 11096.20 | 403.22 | -2.96 | 403.23 | 12.00 | 457597.63 | 786118.79 | |
| 11374.54 | 90.00 | 359.58 | 11102.00 | 477.45 | -3.50 | 477.47 | 12.00 | 457671.86 | 786118.25 | LP |
| 11400.00 | 90.00 | 359.58 | 11102.00 | 502.91 | -3.69 | 502.92 | 0.00 | 457697.32 | 786118.06 | |
| 11500.00 | 90.00 | 359.58 | 11102.00 | 602.91 | -4.42 | 602.92 | 0.00 | 457797.32 | 786117.33 | |
| 11600.00 | 90.00 | 359.58 | 11102.00 | 702.91 | -5.15 | 702.92 | 0.00 | 457897.32 | 786116.60 | |
| 11700.00 | 90.00 | 359.58 | 11102.00 | 802.90 | -5.89 | 802.92 | 0.00 | 457997.31 | 786115.86 | |
| 11800.00 | 90.00 | 359.58 | 11102.00 | 902.90 | -6.62 | 902.92 | 0.00 | 458097.31 | 786115.13 | |
| 11900.00 | 90.00 | 359.58 | 11102.00 | 1002.90 | -7.35 | 1002.92 | 0.00 | 458197.31 | 786114.40 | |
| 12000.00 | 90.00 | 359.58 | 11102.00 | 1102.90 | -8.09 | 1102.92 | 0.00 | 458297.31 | 786113.66 | |
| 12100.00 | 90.00 | 359.58 | 11102.00 | 1202.89 | -8.82 | 1202.92 | 0.00 | 458397.30 | 786112.93 | |
| 12200.00 | 90.00 | 359.58 | 11102.00 | 1302.89 | -9.55 | 1302.92 | 0.00 | 458497.30 | 786112.20 | |
| 12300.00 | 90.00 | 359.58 | 11102.00 | 1402.89 | -10.29 | 1402.92 | 0.00 | 458597.30 | 786111.46 | |
| 12400.00 | 90.00 | 359.58 | 11102.00 | 1502.88 | -11.02 | 1502.92 | 0.00 | 458697.29 | 786110.73 | |
| 12500.00 | 90.00 | 359.58 | 11102.00 | 1602.88 | -11.75 | 1602.92 | 0.00 | 458797.29 | 786110.00 | |
| 12600.00 | 90.00 | 359.58 | 11102.00 | 1702.88 | -12.49 | 1702.92 | 0.00 | 458897.29 | 786109.26 | |
| 12700.00 | 90.00 | 359.58 | 11102.00 | 1802.88 | -13.22 | 1802.92 | 0.00 | 458997.29 | 786108.53 | |
| 12800.00 | 90.00 | 359.58 | 11102.00 | 1902.87 | -13.95 | 1902.92 | 0.00 | 459097.28 | 786107.80 | |
| 12900.00 | 90.00 | 359.58 | 11102.00 | 2002.87 | -14.69 | 2002.92 | 0.00 | 459197.28 | 786107.06 | |
| 13000.00 | 90.00 | 359.58 | 11102.00 | 2102.87 | -15.42 | 2102.92 | 0.00 | 459297.28 | 786106.33 | |
| 13100.00 | 90.00 | 359.58 | 11102.00 | 2202.87 | -16.15 | 2202.92 | 0.00 | 459397.28 | 786105.60 | |
| 13200.00 | 90.00 | 359.58 | 11102.00 | 2302.86 | -16.89 | 2302.92 | 0.00 | 459497.27 | 786104.86 | |
| 13300.00 | 90.00 | 359.58 | 11102.00 | 2402.86 | -17.62 | 2402.92 | 0.00 | 459597.27 | 786104.13 | |
| 13400.00 | 90.00 | 359.58 | 11102.00 | 2502.86 | -18.35 | 2502.92 | 0.00 | 459697.27 | 786103.40 | |
| 13500.00 | 90.00 | 359.58 | 11102.00 | 2602.85 | -19.09 | 2602.92 | 0.00 | 459797.26 | 786102.66 | |
| 13600.00 | 90.00 | 359.58 | 11102.00 | 2702.85 | -19.82 | 2702.92 | 0.00 | 459897.26 | 786101.93 | |
| 13700.00 | 90.00 | 359.58 | 11102.00 | 2802.85 | -20.55 | 2802.92 | 0.00 | 459997.26 | 786101.20 | |
| 13800.00 | 90.00 | 359.58 | 11102.00 | 2902.85 | -21.29 | 2902.92 | 0.00 | 460097.26 | 786100.46 | |
| 13900.00 | 90.00 | 359.58 | 11102.00 | 3002.84 | -22.02 | 3002.92 | 0.00 | 460197.25 | 786099.73 | |
| 14000.00 | 90.00 | 359.58 | 11102.00 | 3102.84 | -22.75 | 3102.92 | 0.00 | 460297.25 | 786099.00 | |
| 14100.00 | 90.00 | 359.58 | 11102.00 | 3202.84 | -23.49 | 3202.92 | 0.00 | 460397.25 | 786098.26 | |
| 14200.00 | 90.00 | 359.58 | 11102.00 | 3302.84 | -24.22 | 3302.92 | 0.00 | 460497.25 | 786097.53 | |
| 14300.00 | 90.00 | 359.58 | 11102.00 | 3402.83 | -24.95 | 3402.92 | 0.00 | 460597.24 | 786096.80 | |
| 14400.00 | 90.00 | 359.58 | 11102.00 | 3502.83 | -25.69 | 3502.92 | 0.00 | 460697.24 | 786096.06 | |
| 14500.00 | 90.00 | 359.58 | 11102.00 | 3602.83 | -26.42 | 3602.92 | 0.00 | 460797.24 | 786095.33 | |
| 14600.00 | 90.00 | 359.58 | 11102.00 | 3702.83 | -27.15 | 3702.92 | 0.00 | 460897.24 | 786094.60 | |
| 14700.00 | 90.00 | 359.58 | 11102.00 | 3802.82 | -27.89 | 3802.92 | 0.00 | 460997.23 | 786093.86 | |
| 14800.00 | 90.00 | 359.58 | 11102.00 | 3902.82 | -28.62 | 3902.92 | 0.00 | 461097.23 | 786093.13 | |
| 14900.00 | 90.00 | 359.58 | 11102.00 | 4002.82 | -29.35 | 4002.92 | 0.00 | 461197.23 | 786092.40 | |
| 15000.00 | 90.00 | 359.58 | 11102.00 | 4102.81 | -30.09 | 4102.92 | 0.00 | 461297.22 | 786091.66 | |
| 15100.00 | 90.00 | 359.58 | 11102.00 | 4202.81 | -30.82 | 4202.92 | 0.00 | 461397.22 | 786090.93 | |
| 15200.00 | 90.00 | 359.58 | 11102.00 | 4302.81 | -31.56 | 4302.92 | 0.00 | 461497.22 | 786090.19 | |
| 15300.00 | 90.00 | 359.58 | 11102.00 | 4402.81 | -32.29 | 4402.92 | 0.00 | 461597.22 | 786089.46 | |
| 15400.00 | 90.00 | 359.58 | 11102.00 | 4502.80 | -33.02 | 4502.92 | 0.00 | 461697.21 | 786088.73 | |

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)

| MD (US ft) | Inc (°) | Az (°) | TVD (US ft) | N Offset (US ft) | E Offset (US ft) | VS (US ft) | DLS (°/100 US ft) | Northing (US ft) | Easting (US ft) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| 15500.00 | 90.00 | 359.58 | 11102.00 | 4602.80 | -33.76 | 4602.92 | 0.00 | 461797.21 | 786087.99 | |
| 15600.00 | 90.00 | 359.58 | 11102.00 | 4702.80 | -34.49 | 4702.92 | 0.00 | 461897.21 | 786087.26 | |
| 15645.22 | 90.00 | 359.58 | 11102.00 | 4748.02 | -34.82 | 4748.15 | 0.00 | 461942.43 | 786086.93 | PBHL 3H |

Weatherford

# Weatherford Drilling Services

GeoDec4 v2.1.0.0

| | |
|---|---|
| Report Date: | March 23, 2015 |
| Job Number: | |
| Customer: | Devon Energy |
| Well Name: | Sea Snake 35 State 3H |
| API Number: | |
| Rig Name: | |
| Location: | Lea Co, NM Nad83 NME |
| Block: | |
| Engineer: | RWJ |

| | |
|---|---|
| NAD83 / New Mexico East (ftUS) | NAD83 (1986) |
| Projected Coordinate System | Geodetic Coordinate System |
| Datum: North American Datum 1983 (1986) | Datum: North American Datum 1983 (1986) |
| Ellipsoid: GRS 1980 | Ellipsoid: GRS 1980 |
| EPSG: 2257 | EPSG: 4269 |
| North: 457194.41 US Survey Foot | Latitude: 32.254421 Degree |
| East: 786121.75 US Survey Foot | Longitude: -103.541493 Degree |
| Convergence: 0.42° | |
| Declination: 7.28° | |
| Total Correction: 6.86° | |
| Datum Transformation: none | |

Geodetic Location WGS84

| | | |
|---|---|---|
| MSL Elevation | = | 0 m |
| Latitude | = | 32° 15' 15.92" N |
| Longitude | = | 103° 32' 29.37" W |

| | | | | | |
|---|---|---|---|---|---|
| Magnetic Declination | = | 7.28 deg | [True North Offset] | | |
| Local Gravity | = | .9988 g | CheckSum | = | 6543 |
| Local Field Strength | = | 48230 nT | Magnetic Vector X | = | 23836 nT |
| Magnetic Dip | = | 60.12 deg | Magnetic Vector Y | = | 3045 nT |
| Magnetic Model | = | bggm2014.dat | Magnetic Vector Z | = | 41817 nT |
| Run Date | = | April 10, 2015 | Magnetic Vector H | = | 24030 nT |

Signed:_____ Date:_____