

NOV 25 2014

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

District III  
1000 Rio Bruzos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV  
1220 S., St. Francis Dr., Santa Fe, NM 87503  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-025-42285</b>		<sup>2</sup> Pool Code <b>59900</b>	<sup>3</sup> Pool Name <b>TRIPLE X; BONE SPRING</b>
<sup>4</sup> Property Code <b>40329</b>	<sup>5</sup> Property Name <b>SEA SNAKE 35 STATE</b>		<sup>6</sup> Well Number <b>4H</b>
<sup>7</sup> OGRID No. <b>6137</b>	<sup>8</sup> Operator Name <b>DEVON ENERGY PRODUCTION COMPANY, L.P.</b>		<sup>9</sup> Elevation <b>3642.6</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>P</b>	<b>35</b>	<b>23 S</b>	<b>33 E</b>		<b>350</b>	<b>SOUTH</b>	<b>832</b>	<b>EAST</b>	<b>LEA</b>

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>A</b>	<b>35</b>	<b>23 S</b>	<b>33 E</b>		<b>330</b>	<b>NORTH</b>	<b>832</b>	<b>EAST</b>	<b>LEA</b>

<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
			<b>S</b>

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

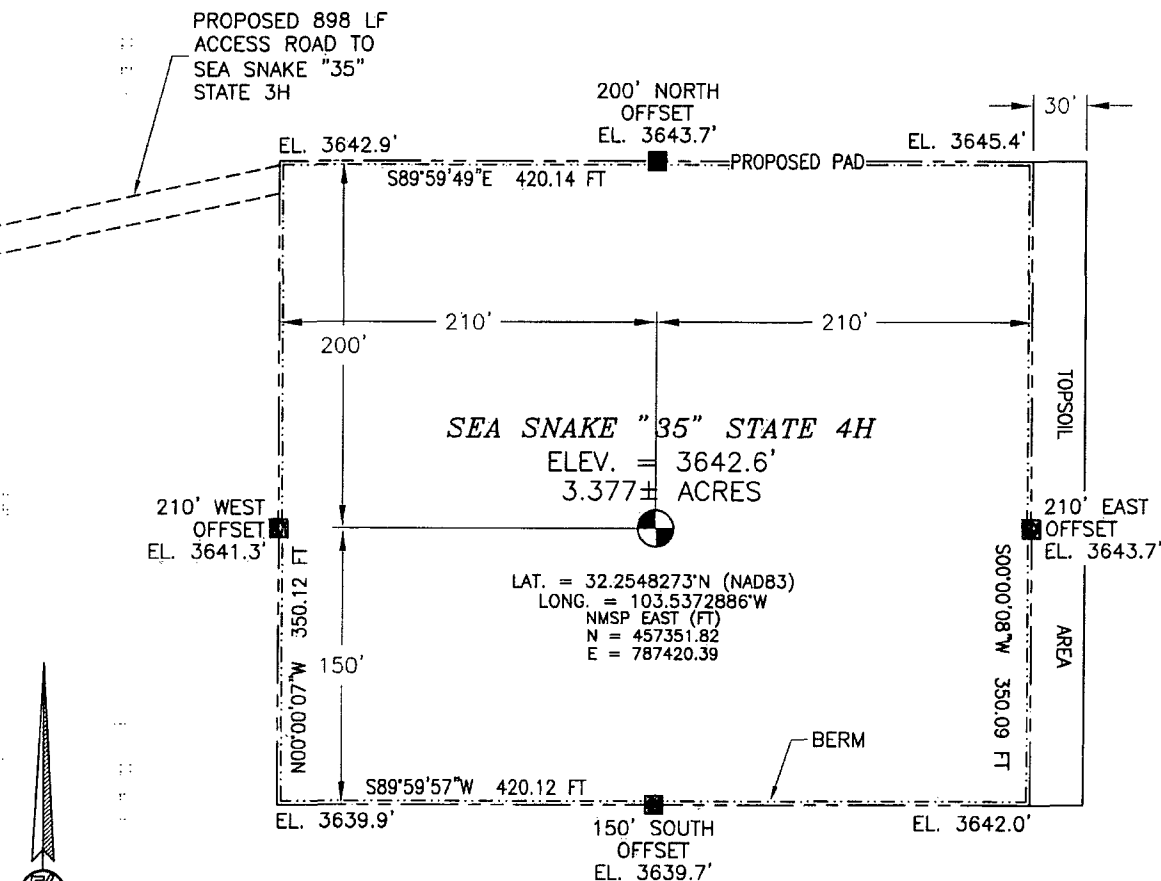
<p>N89°49'05"E 2638.95 FT</p> <p>NW CORNER SEC. 35 LAT. = 32.2684152°N LONG. = 103.5516675°W</p> <p>NMSP EAST (FT) N = 462262.37 E = 782939.28</p> <p>DNF</p> <p>NE CORNER SEC. 35 LAT. = 32.2683544°N LONG. = 103.5345961°W</p> <p>NMSP EAST (FT) N = 462279.13 E = 788216.11</p> <p>BOTTOM OF HOLE LAT. = 32.2674572°N LONG. = 103.5372873°W</p> <p>NMSP EAST (FT) N = 461946.55 E = 787386.69</p> <p>500'25'14"E 2636.82 FT</p>		<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>[Signature]</i> 11/24/2014 Signature Date David H. Cook Regulatory Compliance Printed Name david.cook@dv.com E-mail Address</p>
<p>DNF</p> <p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.</p> <p>SEA SNAKE "35" STATE 4H ELEV. = 3642.6' LAT. = 32.2548273°N (NAD83) LONG. = 103.5372886°W</p> <p>NMSP EAST (FT) N = 457351.82 E = 787420.39</p> <p>SURFACE LOCATION</p> <p>SW CORNER SEC. 35 LAT. = 32.2538795°N LONG. = 103.5516653°W</p> <p>NMSP EAST (FT) N = 456974.34 E = 782978.47</p> <p>S O CORNER SEC. 35 LAT. = 32.2538736°N LONG. = 103.5431297°W</p> <p>NMSP EAST (FT) N = 456991.51 E = 785617.22</p> <p>SE CORNER SEC. 35 LAT. = 32.2538616°N LONG. = 103.5345979°W</p> <p>NMSP EAST (FT) N = 457006.67 E = 788254.80</p> <p>500'25'14"E 2636.82 FT</p>		<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 26 2014</p> <p>Date of Survey (12797)</p> <p><i>[Signature]</i> Signature and Seal of Professional Surveyor Certificate Number: FILLAMON F. JARAMILLO, PLS 12797 SURVEY NO. 3352</p>

PP: 800 FSL &amp; 832 FEL

DEC 01 2014

SECTION 35, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO  
**SITE MAP**

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE



010 50 100 200

SCALE 1" = 100'

**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF STATE HIGHWAY 128 AND CR J2 (BRININSTOOL ROAD) GO NORTHWEST ON CR J2 ABOUT 3.2 MILES TO CALICHE LEASE ROAD ON RIGHT PAST FRAC POND, GO EAST (RIGHT) ABOUT 0.46 MILES, TURN NORTH GO ABOUT 450', TURN RIGHT ABOUT 0.41 MILES TAKE ROAD NORTH SIDE OF PAD GO ABOUT 0.42 MILES TO EXISTING PAD FOR SEA SNAKE "35" STATE 1H & 2H, FROM NORTHEAST CORNER OF PAD GO EAST FOLLOW FLAGS ABOUT 1369' TO NORTHWEST CORNER OF PROPOSED PAD FOR SEA SNAKE "35" STATE 3, FROM THE NORTHEAST CORNER OF PAD GO EAST 898' TO THE NORTHWEST CORNER OF PROPOSED PAD.

DEVON ENERGY PRODUCTION COMPANY, L.P.  
**SEA SNAKE "35" STATE 4H**  
LOCATED 350 FT. FROM THE SOUTH LINE  
AND 832 FT. FROM THE EAST LINE OF  
SECTION 35, TOWNSHIP 23 SOUTH,  
RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO

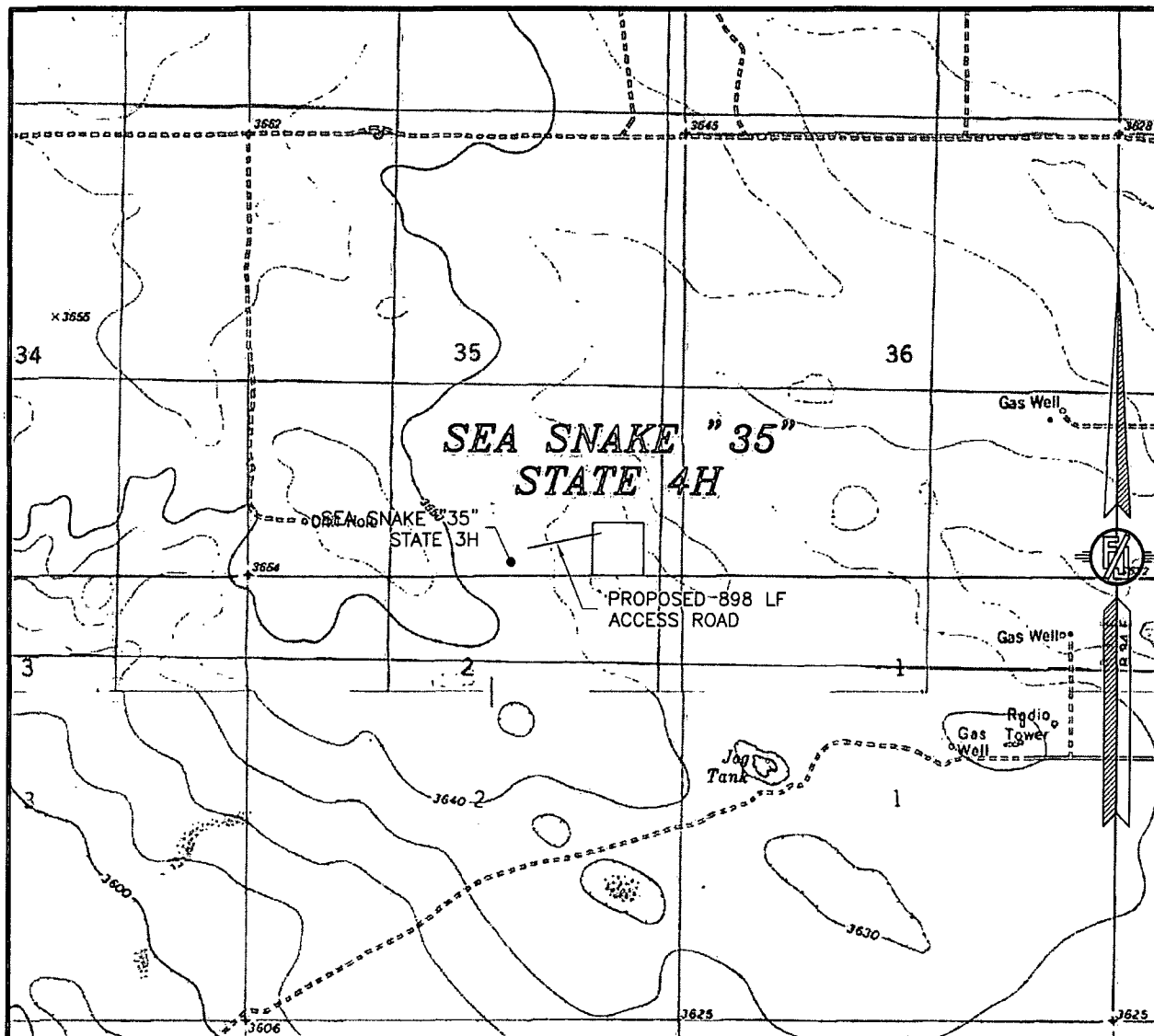
SEPTEMBER 26, 2014

SURVEY NO. 3352

MADRON SURVEYING, INC. 301 SOUTH CANAL  
(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 35, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO  
LOCATION VERIFICATION MAP



USGS QUAD MAP:  
TIP TOP WELLS

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

**SEA SNAKE "35" STATE 4H**

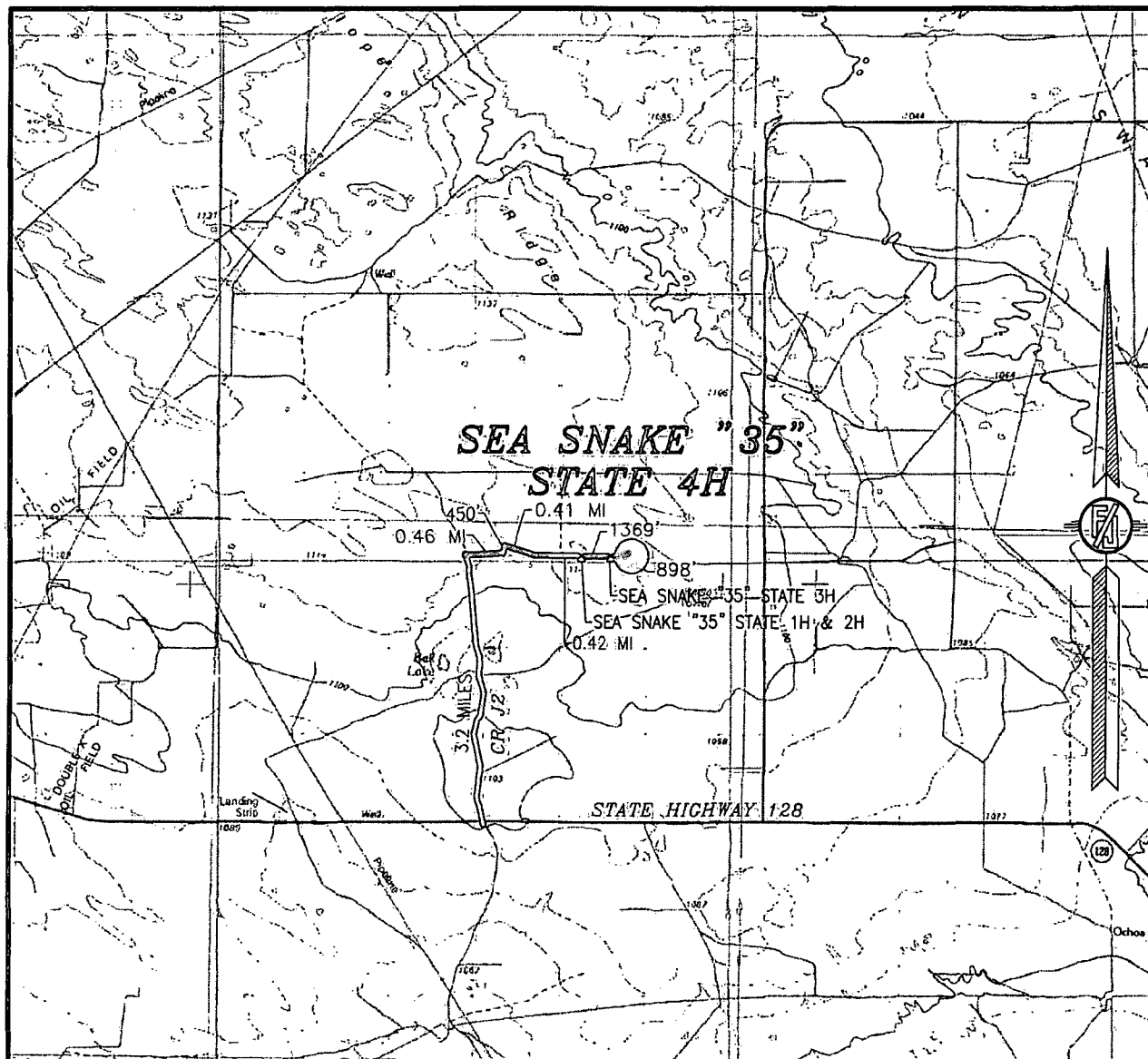
LOCATED 350 FT. FROM THE SOUTH LINE  
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SECTION 35, TOWNSHIP 23 SOUTH,  
RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 26, 2014

SURVEY NO. 3352

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
(575) 234-3341

SECTION 35, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO  
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

SEA SNAKE "35" STATE 4H

LOCATED 350 FT. FROM THE SOUTH LINE  
AND 832 FT. FROM THE EAST LINE OF  
SECTION 35, TOWNSHIP 23 SOUTH,  
RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 26, 2014

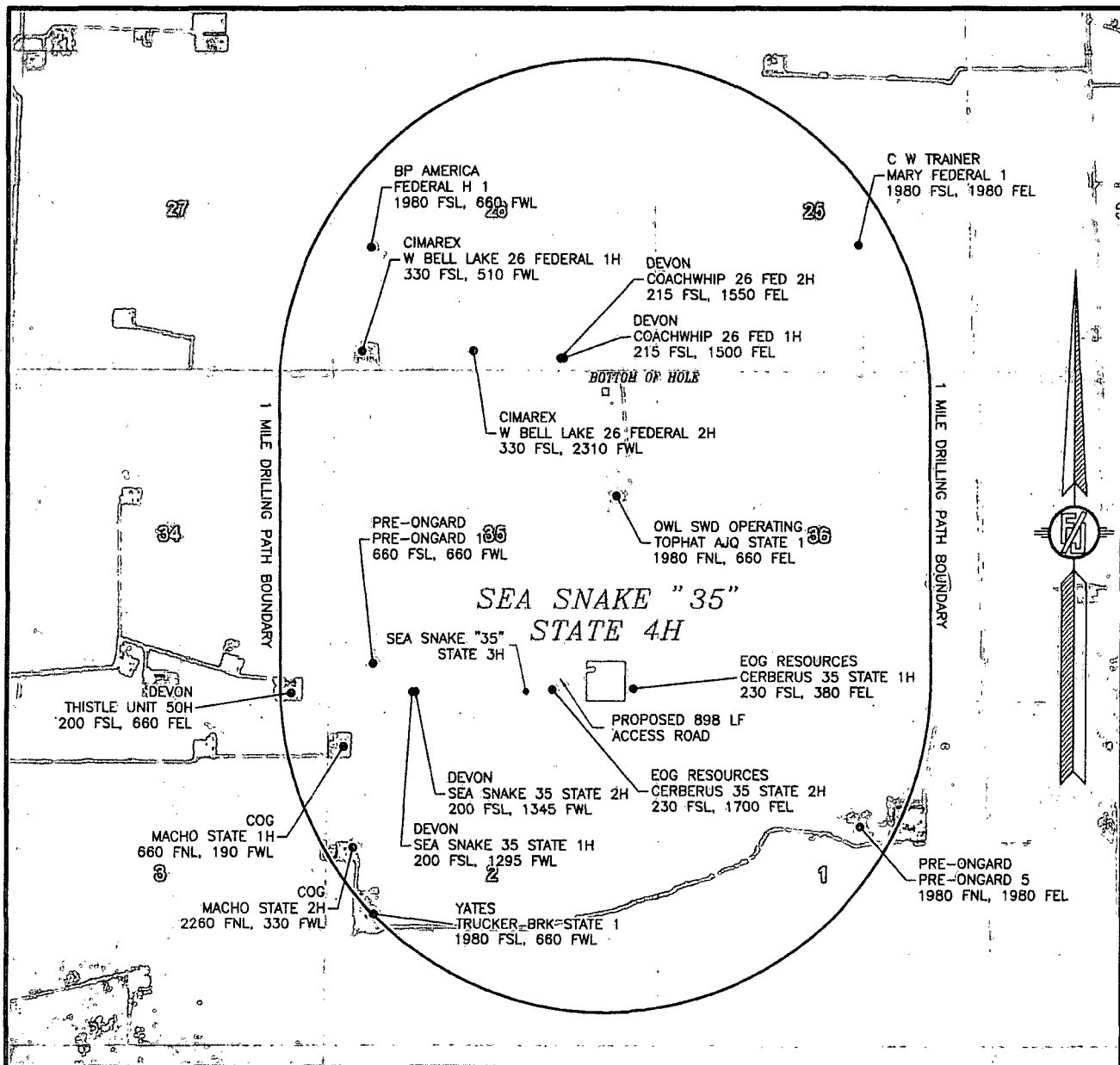
DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HIGHWAY 128 AND CR J2  
(BRINSTOOL ROAD) GO NORTHWEST ON CR J2 ABOUT 3.2 MILES TO  
CALICHE LEASE ROAD ON RIGHT PAST FRAC POND, GO EAST (RIGHT)  
ABOUT 0.46 MILES, TURN NORTH GO ABOUT 450', TURN RIGHT ABOUT  
0.41 MILES TAKE ROAD NORTH SIDE OF PAD GO ABOUT 0.42 MILES  
TO EXISTING PAD FOR SEA SNAKE "35" STATE 1H & 2H. FROM  
NORTHEAST CORNER OF PAD GO EAST FOLLOW FLAGS ABOUT 1369'  
TO NORTHWEST CORNER OF PROPOSED PAD FOR SEA SNAKE "35"  
STATE 3, FROM THE NORTHEAST CORNER OF PAD GO EAST 898' TO  
THE NORTHWEST CORNER OF PROPOSED PAD.

SURVEY NO. 3352

MADRON SURVEYING, INC. 301 SOUTH CANAL, CARLSBAD, NEW MEXICO  
(575) 234-3341

SECTION 35, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO  
**AERIAL PHOTO**



NOT TO SCALE  
AERIAL PHOTO:  
GOOGLE EARTH  
FEBRUARY 2014

DEVON ENERGY PRODUCTION COMPANY, L.P.

**SEA SNAKE "35" STATE 4H**

LOCATED 350 FT. FROM THE SOUTH LINE  
AND 832 FT. FROM THE EAST LINE OF  
SECTION 35, TOWNSHIP 23 SOUTH,  
RANGE 33 EAST, N.M.P.M.  
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 26, 2014

SURVEY NO. 3352

MADRON SURVEYING, INC. 301 SOUTH CANAL  
(575) 234-3341

CARLSBAD, NEW MEXICO

# ACCESS AERIAL ROUTE MAP



**SEA SNAKE "35" STATE 4H**

SEPTEMBER 26, 2014

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
(575) 234-3341

301 SOUTH CANAL  
(575) 234-3341

# devon

Sea Snake 35 State 4H  
Lea Co, NM



## Plan Data for Sea Snake 35 State 4H

Plan Point Information:

Dogleg Severity Unit:  $^{\circ}/100.00\text{ft}$  Position offsets from Slot centre

MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	( $^{\circ}$ )	( $^{\circ}$ )	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	457351.82	787420.39	0.00	0.00
10509.71	0.00	0.00	10509.71	0.00	0.00	457351.82	787420.39	0.00	0.00
11246.96	88.47	359.58	10987.00	464.70	-3.41	457816.52	787416.98	464.72	12.00
13654.42	88.47	359.58	11051.28	2871.24	-21.06	460223.06	787399.33	2871.32	0.00
13868.12	90.61	359.58	11053.00	3084.92	-22.63	460436.74	787397.76	3085.00	1.00
15378.06	90.61	359.58	11037.00	4594.73	-33.70	461946.55	787386.69	4594.85	0.00

## Plan Data for Sea Snake 35 State 4H

Slot: Sea Snake 35 State 4H  
Position:  
Offset is from Site centre  
Northing: 457351.82USft Latitude:  $32^{\circ}15'17.4''$   
+N/-S: 0.00USft Easting: 787420.39USft Longitude:  $-103^{\circ}32'14.2''$   
+E/-W: 0.00USft Elevation Above VRD: 3643.00USft

## Plan Data for Sea Snake 35 State 4H

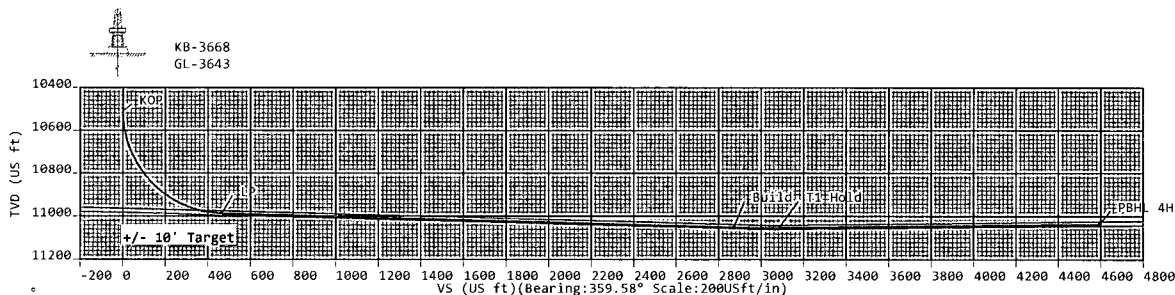
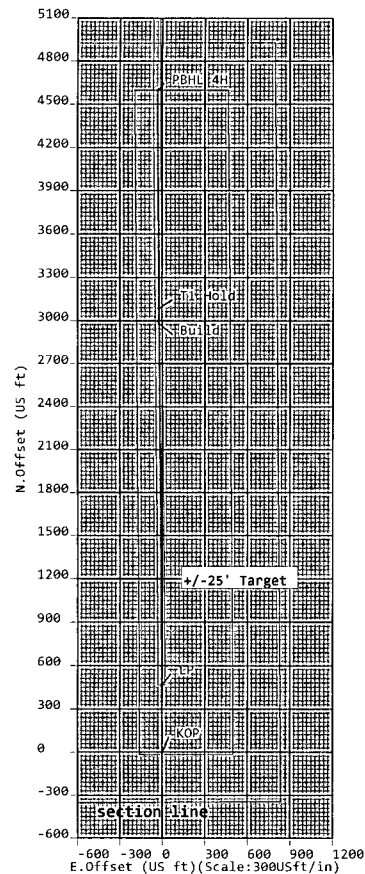
Target Set Information:  
Name: Sea Snake 35 State 4H  
Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment
	(USft)	(USft)	(USft)	(USft)	(USft)		
LP	10987.00	465.00	-3.41	457816.90	787416.98	Cuboid	
T1	11053.00	3084.92	-22.63	460436.74	787397.76	Cuboid	
PBHL 4H	11037.00	4594.73	-33.70	461946.55	787386.69	Cuboid	

## Plan Data for Sea Snake 35 State 4H

Well: Sea Snake 35 State 4H  
Type: Main-Well  
File Number:  
Plan Folder: P1 Plan: P1:V2  
Vertical Section: Position offset of origin from Slot centre:  
+N/-S: 0.00USft Azimuth:  $359.58^{\circ}$   
+E/-W: 0.00USft  
Magnetic Parameters:  
Model: Field Strength: Declination: Dip: Date:  
BGGH 48248(nT) 7.29 $^{\circ}$  60.12 $^{\circ}$  2015-02-15

Sea Snake 35 State 4H



Sign Off: Russell Joyner

5D Plan Report

## 5D Plan Report

### **Devon Energy**

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

**Site Name:** *Sea Snake 35 State 4H*

**Well Name:** *Sea Snake 35 State 4H*

**Plan:** *P1:V2*

20 November 2014





## Sea Snake 35 State 4H

<b>Field Name</b> Lea Co, NM Nad 83 NMEZ	<b>Map Units :</b> US ft <b>Company Name :</b> Devon Energy <b>Vertical Reference Datum (VRD) :</b> Mean Sea Level <b>Projected Coordinate System :</b> NAD83 / New Mexico East (ftUS) <b>Comment :</b>										
<b>Site Name</b> Sea Snake 35 State 4H	<b>Units :</b> US ft <b>North Reference :</b> Grid <b>Convergence Angle :</b> 0.42 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"><b>Position</b></td> <td style="width: 33%;"><b>Northing :</b> 457351.82 US ft</td> <td style="width: 33%;"><b>Latitude :</b> 32° 15' 17.38"</td> </tr> <tr> <td></td> <td><b>Easting :</b> 787420.39 US ft</td> <td><b>Longitude :</b> -103° 32' 14.24"</td> </tr> </table> <b>Elevation above Mean Sea Level:</b> 3643.00 US ft <b>Comment :</b>		<b>Position</b>	<b>Northing :</b> 457351.82 US ft	<b>Latitude :</b> 32° 15' 17.38"		<b>Easting :</b> 787420.39 US ft	<b>Longitude :</b> -103° 32' 14.24"			
<b>Position</b>	<b>Northing :</b> 457351.82 US ft	<b>Latitude :</b> 32° 15' 17.38"									
	<b>Easting :</b> 787420.39 US ft	<b>Longitude :</b> -103° 32' 14.24"									
<b>Slot Name</b> Sea Snake 35 State 4H	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">Position (Offsets relative to Site Centre)</th> </tr> <tr> <td style="width: 33%;">+N / -S : 0.00 US ft</td> <td style="width: 33%;"><b>Northing :</b> 457351.82 US ft</td> <td style="width: 33%;"><b>Latitude :</b> 32° 15' 17.38"</td> </tr> <tr> <td>+E / -W : 0.00 US ft</td> <td><b>Easting :</b> 787420.39 US ft</td> <td><b>Longitude :</b> -103° 32' 14.24"</td> </tr> </table> <b>Slot TVD Reference :</b> Ground Elevation <b>Elevation above Mean Sea Level :</b> 3643.00 US ft <b>Comment :</b>		Position (Offsets relative to Site Centre)			+N / -S : 0.00 US ft	<b>Northing :</b> 457351.82 US ft	<b>Latitude :</b> 32° 15' 17.38"	+E / -W : 0.00 US ft	<b>Easting :</b> 787420.39 US ft	<b>Longitude :</b> -103° 32' 14.24"
Position (Offsets relative to Site Centre)											
+N / -S : 0.00 US ft	<b>Northing :</b> 457351.82 US ft	<b>Latitude :</b> 32° 15' 17.38"									
+E / -W : 0.00 US ft	<b>Easting :</b> 787420.39 US ft	<b>Longitude :</b> -103° 32' 14.24"									
<b>Well Name</b> Sea Snake 35 State 4H	<b>Type :</b> Main well <b>UWI :</b> <b>Plan :</b> P1:V2 <b>Rig Height <i>Kelly Bushing</i> :</b> 25.00 US ft <b>Comment :</b> <b>Relative to Mean Sea Level:</b> 3668.00 US ft <b>Closure Distance :</b> 4594.85 US ft <b>Closure Azimuth :</b> 359.58° <b>Vertical Section (Position of Origin Relative to Slot )</b> <div style="text-align: center;">+N / -S : 0.00 US ft    +E / -W : 0.00 US ft    <b>Az :</b> 359.58°</div> <b>Magnetic Parameters</b> <b>Model :</b> BGGM <b>Field Strength :</b> 48248.7nT <b>Dec :</b> 7.29° <b>Dip :</b> 60.12° <b>Date :</b> 15/Feb/2015										
<b>Target Set</b>											
<b>Name :</b> Sea Snake 35 State <b>Number of Targets :</b> 3 <div style="text-align: center;">4H</div>											
<b>Comment :</b>											
<b>Target Name:</b> LP  <b>Shape:</b> Cuboid	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">Position (Relative to Slot centre)</th> </tr> <tr> <td style="width: 33%;">+N / -S : 465.08US ft</td> <td style="width: 33%;"><b>Northing :</b> 457816.90 US ft</td> <td style="width: 33%;"><b>Latitude :</b> 32° 15' 21.98"</td> </tr> <tr> <td>+E / -W : -3.41 US ft</td> <td><b>Easting :</b> 787416.98US ft</td> <td><b>Longitude :</b> -103° 32' 14.24"</td> </tr> </table> <b>TVD (Kelly Bushing) :</b> 10987.00 US ft <b>Orientation</b> <b>Azimuth :</b> 359.58° <b>Inclination :</b> -1.47° <b>Dimensions</b> <b>Length :</b> 5230.00 US ft <b>Breadth :</b> 50.00 US ft <b>Height :</b> 20.00 US ft		Position (Relative to Slot centre)			+N / -S : 465.08US ft	<b>Northing :</b> 457816.90 US ft	<b>Latitude :</b> 32° 15' 21.98"	+E / -W : -3.41 US ft	<b>Easting :</b> 787416.98US ft	<b>Longitude :</b> -103° 32' 14.24"
Position (Relative to Slot centre)											
+N / -S : 465.08US ft	<b>Northing :</b> 457816.90 US ft	<b>Latitude :</b> 32° 15' 21.98"									
+E / -W : -3.41 US ft	<b>Easting :</b> 787416.98US ft	<b>Longitude :</b> -103° 32' 14.24"									

## 5D Plan Report

<b>Target Name:</b> T1	<b>Position (Relative to Slot centre)</b>		
<b>Shape:</b> Cuboid	<b>+N / -S :</b> 3084.92US ft	<b>Northing :</b> 460436.74 US ft	<b>Latitude :</b> 32°15'47.91"
	<b>+E / -W :</b> -22.63 US ft	<b>Easting :</b> 787397.76US ft	<b>Longitude :</b> -103°32'14.24"
	<b>TVD (Kelly Bushing) :</b> 11053.00 US ft		
	<b>Orientation Azimuth :</b> 0.00°	<b>Inclination :</b> 0.00°	
	<b>Dimensions Length :</b> 0.00 US ft	<b>Breadth :</b> 0.00 US ft	<b>Height :</b> 0.00 US ft

<b>Target Name:</b> PBHL 4H	<b>Position (Relative to Slot centre)</b>		
<b>Shape:</b> Cuboid	<b>+N / -S :</b> 4594.73US ft	<b>Northing :</b> 461946.55 US ft	<b>Latitude :</b> 32°16'2.85"
	<b>+E / -W :</b> -33.70 US ft	<b>Easting :</b> 787386.69US ft	<b>Longitude :</b> -103°32'14.23"
	<b>TVD (Kelly Bushing) :</b> 11037.00 US ft		
	<b>Orientation Azimuth :</b> 359.58°	<b>Inclination :</b> 0.61°	
	<b>Dimensions Length :</b> 3300.00 US ft	<b>Breadth :</b> 50.00 US ft	<b>Height :</b> 20.00 US ft

## Well path created using minimum curvature

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	
10509.71	0.00	0.00	10509.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
11246.96	88.47	359.58	10987.00	464.70	-3.41	464.72	12.00	12.00	0.00	359.58	LP
13654.42	88.47	359.58	11051.28	2871.24	-21.06	2871.32	0.00	0.00	0.00	0.00	Build
13868.12	90.61	359.58	11053.00	3084.92	-22.63	3085.00	1.00	1.00	0.00	0.01	T1 Hold
15378.06	90.61	359.58	11037.00	4594.73	-33.70	4594.85	0.00	0.00	0.00	0.00	PBHL 4H

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	
10500.00	0.00	0.00	10500.00	0.00	0.00	0.00	0.00	457351.82	787420.39		
10509.71	0.00	0.00	10509.71	0.00	0.00	0.00	0.00	457351.82	787420.39	KOP	
10600.00	10.83	359.58	10599.46	8.51	-0.06	8.51	12.00	457360.33	787420.33		
10700.00	22.83	359.58	10695.00	37.42	-0.27	37.42	12.00	457389.24	787420.12		
10800.00	34.83	359.58	10782.44	85.56	-0.63	85.56	12.00	457437.38	787419.76		
10900.00	46.83	359.58	10857.97	150.83	-1.11	150.83	12.00	457502.65	787419.28		
11000.00	58.83	359.58	10918.27	230.37	-1.69	230.37	12.00	457582.19	787418.70		
11100.00	70.83	359.58	10960.71	320.71	-2.35	320.72	12.00	457672.53	787418.04		
11200.00	82.83	359.58	10983.45	417.90	-3.07	417.91	12.00	457769.72	787417.32		
11246.96	88.47	359.58	10987.00	464.70	-3.41	464.72	12.00	457816.52	787416.98	LP	
11300.00	88.47	359.58	10988.42	517.72	-3.80	517.74	0.00	457869.54	787416.59		
11400.00	88.47	359.58	10991.09	617.69	-4.53	617.70	0.00	457969.51	787415.86		
11500.00	88.47	359.58	10993.76	717.65	-5.26	717.67	0.00	458069.47	787415.13		
11600.00	88.47	359.58	10996.43	817.61	-6.00	817.63	0.00	458169.43	787414.39		
11700.00	88.47	359.58	10999.10	917.57	-6.73	917.59	0.00	458269.39	787413.66		
11800.00	88.47	359.58	11001.77	1017.53	-7.46	1017.56	0.00	458369.35	787412.93		
11900.00	88.47	359.58	11004.44	1117.49	-8.20	1117.52	0.00	458469.31	787412.19		
12000.00	88.47	359.58	11007.11	1217.46	-8.93	1217.49	0.00	458569.28	787411.46		
12100.00	88.47	359.58	11009.78	1317.42	-9.66	1317.45	0.00	458669.24	787410.73		
12200.00	88.47	359.58	11012.45	1417.38	-10.40	1417.42	0.00	458769.20	787409.99		
12300.00	88.47	359.58	11015.12	1517.34	-11.13	1517.38	0.00	458869.16	787409.26		
12400.00	88.47	359.58	11017.79	1617.30	-11.86	1617.35	0.00	458969.12	787408.53		
12500.00	88.47	359.58	11020.46	1717.26	-12.60	1717.31	0.00	459069.08	787407.79		

## 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
12600.00	88.47	359.58	11023.13	1817.23	-13.33	1817.27	0.00	459169.05	787407.06	
12700.00	88.47	359.58	11025.80	1917.19	-14.06	1917.24	0.00	459269.01	787406.33	
12800.00	88.47	359.58	11028.47	2017.15	-14.80	2017.20	0.00	459368.97	787405.59	
12900.00	88.47	359.58	11031.14	2117.11	-15.53	2117.17	0.00	459468.93	787404.86	
13000.00	88.47	359.58	11033.81	2217.07	-16.26	2217.13	0.00	459568.89	787404.13	
13100.00	88.47	359.58	11036.48	2317.03	-17.00	2317.10	0.00	459668.85	787403.39	
13200.00	88.47	359.58	11039.15	2417.00	-17.73	2417.06	0.00	459768.82	787402.66	
13300.00	88.47	359.58	11041.82	2516.96	-18.46	2517.02	0.00	459868.78	787401.93	
13400.00	88.47	359.58	11044.49	2616.92	-19.20	2616.99	0.00	459968.74	787401.19	
13500.00	88.47	359.58	11047.16	2716.88	-19.93	2716.95	0.00	460068.70	787400.46	
13600.00	88.47	359.58	11049.83	2816.84	-20.66	2816.92	0.00	460168.66	787399.73	
13654.42	88.47	359.58	11051.28	2871.24	-21.06	2871.32	0.00	460223.06	787399.33	Build
13700.00	88.93	359.58	11052.31	2916.81	-21.40	2916.89	1.00	460268.63	787398.99	
13800.00	89.93	359.58	11053.32	3016.80	-22.13	3016.88	1.00	460368.62	787398.26	
13868.12	90.61	359.58	11053.00	3084.92	-22.63	3085.00	1.00	460436.74	787397.76	T1 Hold
13900.00	90.61	359.58	11052.66	3116.79	-22.86	3116.88	0.00	460468.61	787397.53	
14000.00	90.61	359.58	11051.60	3216.78	-23.60	3216.87	0.00	460568.60	787396.79	
14100.00	90.61	359.58	11050.54	3316.78	-24.33	3316.87	0.00	460668.60	787396.06	
14200.00	90.61	359.58	11049.48	3416.77	-25.06	3416.86	0.00	460768.59	787395.33	
14300.00	90.61	359.58	11048.42	3516.76	-25.80	3516.85	0.00	460868.58	787394.59	
14400.00	90.61	359.58	11047.36	3616.75	-26.53	3616.85	0.00	460968.57	787393.86	
14500.00	90.61	359.58	11046.30	3716.74	-27.26	3716.84	0.00	461068.56	787393.13	
14600.00	90.61	359.58	11045.24	3816.74	-28.00	3816.84	0.00	461168.56	787392.39	
14700.00	90.61	359.58	11044.18	3916.73	-28.73	3916.83	0.00	461268.55	787391.66	
14800.00	90.61	359.58	11043.13	4016.72	-29.46	4016.83	0.00	461368.54	787390.93	
14900.00	90.61	359.58	11042.07	4116.71	-30.20	4116.82	0.00	461468.53	787390.19	
15000.00	90.61	359.58	11041.01	4216.70	-30.93	4216.82	0.00	461568.52	787389.46	
15100.00	90.61	359.58	11039.95	4316.69	-31.66	4316.81	0.00	461668.51	787388.73	
15200.00	90.61	359.58	11038.89	4416.69	-32.39	4416.80	0.00	461768.51	787388.00	
15300.00	90.61	359.58	11037.83	4516.68	-33.13	4516.80	0.00	461868.50	787387.26	
15378.06	90.61	359.58	11037.00	4594.73	-33.70	4594.85	0.00	461946.55	787386.69	PBHL 4H

**Weatherford®**

## Weatherford Drilling Services

GeoDec4 v2.1.0.0

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Report Date: November 20, 2014  
Job Number: \_\_\_\_\_  
Customer: Devon Energy  
Well Name: Sea Snake 35 State 4H  
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: 457351.82 US Survey Foot	Latitude: 32.254827 Degree
East: 787420.39 US Survey Foot	Longitude: -103.537289 Degree
Convergence: 0.42°	
Declination: 7.29°	
Total Correction: 6.87°	
Datum Transformation: none	

---

**Geodetic Location WGS84**

MSL Elevation = 0 m  
Latitude = 32° 15' 17.38" N  
Longitude = 103° 32' 14.24" W

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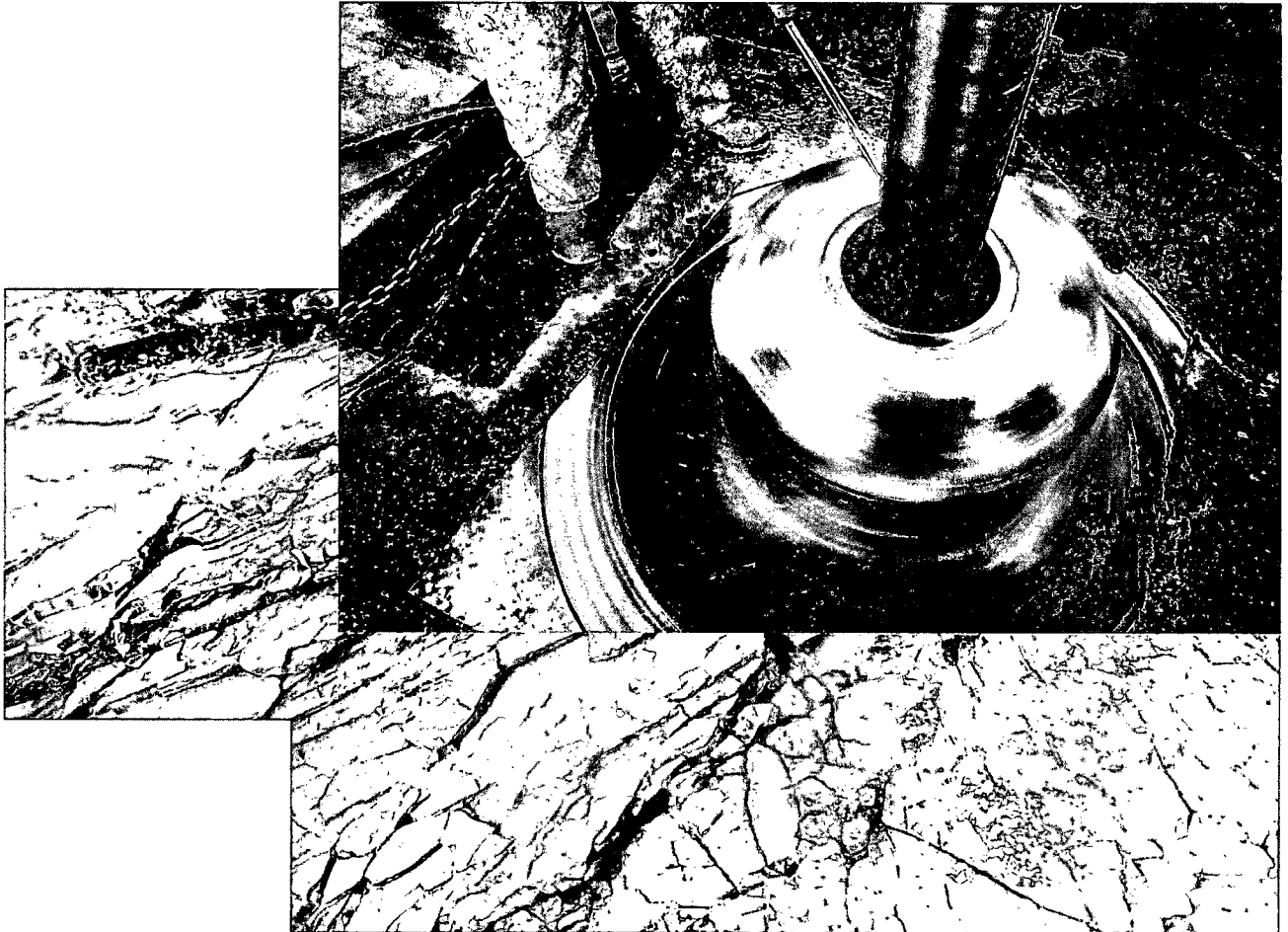
Magnetic Declination = 7.29 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6602
Local Field Strength = 48249 nT	Magnetic Vector X = 23841 nT
Magnetic Dip = 60.12 deg	Magnetic Vector Y = 3051 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41836 nT
Run Date = February 15, 2015	Magnetic Vector H = 24035 nT

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_



Commitment Runs Deep



Design Plan  
Operation and Maintenance Plan  
Closure Plan

SENM - Closed Loop Systems  
September 2014

## **I. Design Plan**

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

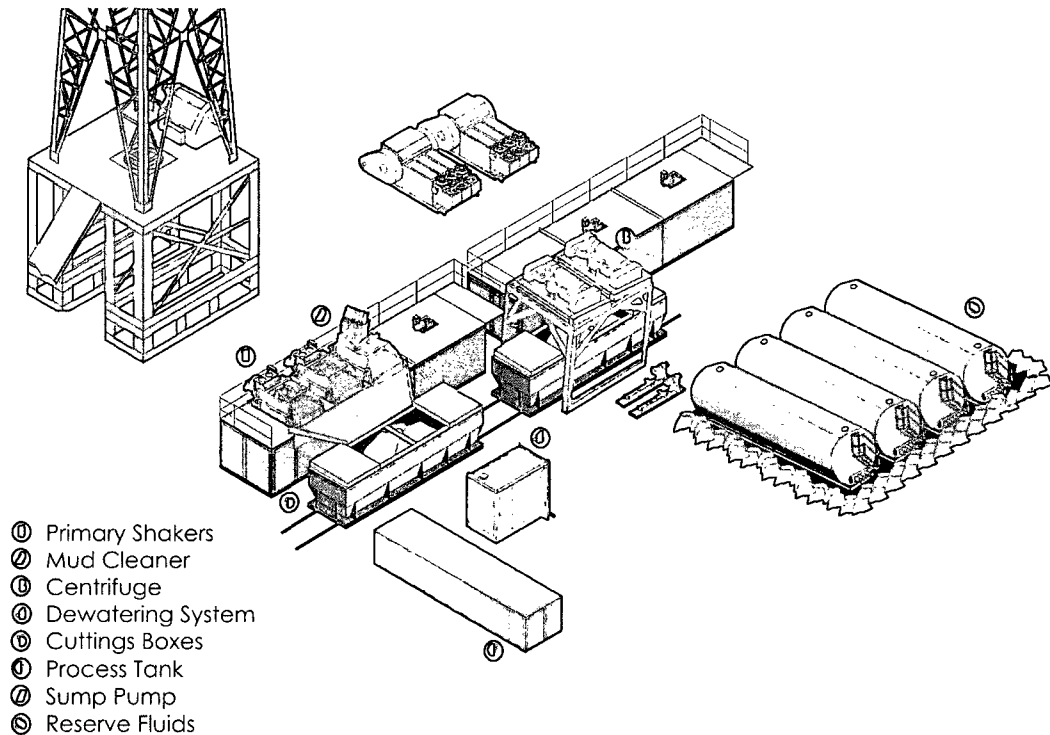
## **II. Operations and Maintenance Plan**

*Primary Shakers:* The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

**Mud Cleaner:** The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



## Closed Loop Schematic



**Centrifuges:** The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

**Dewatering System:** The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

*Cuttings Boxes:* Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

*Process Tank:* (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

*Sump and Sump Pump:* The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

*Reserve Fluids (Tank Farm):* A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe



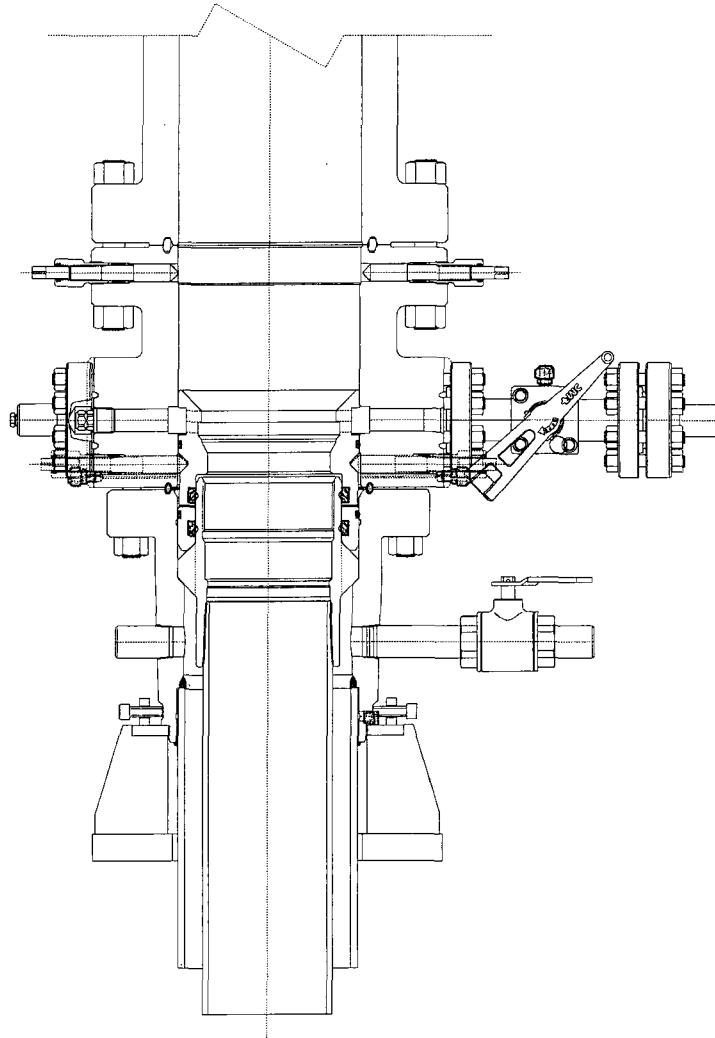
dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

### **III. Closure Plan**

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.



PRIMARY MODE

DEVON ENERGY

ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT  
F18648  
REF: DM100161737  
DM100151315

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REVISIONS

A	05-08-13
B	1-22-14
C	5-13-14

DESCRIPTION

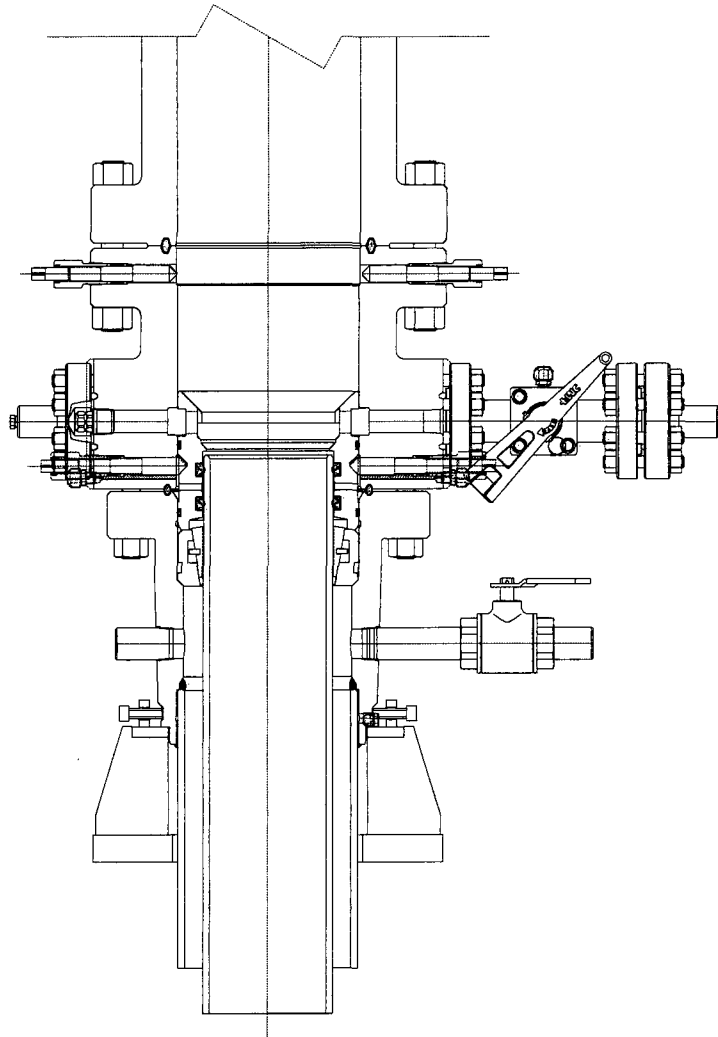
SURFACE WELLHEAD LAYOUT  
UNIHEAD, UH-1, SOW,  
DEVON ENERGY, ODESSA

DRAWN BY	K. VU	05-08-13
GRATING REVIEW	Z. MARQUEZ	05-08-13
DESIGN REVIEW	K. TAHA	05-08-13
APPROVED BY	R. HAMILTON	05-08-13

**FMC Technologies**

DRAWING NUMBER

DM100161771-2A



CONTINGENCY MODE


DEVON ENERGY

ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT  
F18648  
REF: DM100161737  
DM100151315

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	B	1-22-14	Z. MARQUEZ		05-08-13			
	C	5-13-14	K. TAHA		05-08-13			
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