

Devon Energy, Sea Snake 35 State 9H

30.025-42644

1. Geologic Formations

TVD of target	9,740'	Pilot hole depth	N/A
MD at TD:	14,377'	Deepest expected fresh water:	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	1,360	Barren	
Top of Salt	1,630	Barren	
Base of Salt	5,090	Barren	
Delaware	5,285	Oil	
Cherry Canyon	6,250	Oil	
Brushy Canyon	7,590	Oil	
Bone Spring	9,150	Oil	

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

JUL 27 2015

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2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn .	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1,440'	13.375"	48	H-40	STC	1.29	2.90	8.35
12.25"	0	4,300'	9.625"	40	J-55	BTC	1.15	3.43	4.69
12.25"	4,300'	5,200'	9.625"	40	HCK-55	BTC	1.57	4.63	6.07
8.75"	0	14,377'	5.5"	17	P-110	BTC	1.42	1.25	2.07
7" x 5.5" Option									
8.75"	0	9,150'	7"	29	P-110	BTC	1.78	1.25	2.16
8.75"	9,150'	14,377'	5.5"	17	P-110	BTC	1.42	1.25	2.07
BLM Minimum Safety Factor							1.125	1.00	1.6 Dry 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 3 rd 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 2 nd 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?	

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3. Cementing Program

Casing	# Sks	Wt. lb/ gal	H ₂ O gal/sk	Yld ft ³ / sack	500# Comp. Strength (hours)	Slurry Description
Surf.	710	12.9	9.81	1.85	15	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 3% 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	490	12.9	9.81	1.85	15	1 st 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	1 st 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	2 nd Stage Primary: Class C Cement + 0.125 lbs/sack Poly-E-Flake + 1% BWOC Calcium Chloride
Inter.	1110	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	1 st 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	1 st Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
	DV Tool = 1500ft					
	210	12.9	9.81	1.85	17	2 nd Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	150	14.8	1.33	6.32	7	2 nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake

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Casing	# Sks	Wt. lb/gal	H ₂ O gal/sk	Yld ft ³ /sack	500# Comp. Strength (hours)	Slurry Description
5.5" Prod	520	11.9	12.89	2.26	n/a	1 st 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	2 nd Lead: (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake
	1290	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	340	10.4	16.8	3.17	25	Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake
	1270	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	1 st Stage =300' / 2 nd Stage =0'	100%
Intermediate	0'	75%
Intermediate Two Stage	1 st Stage =1500' / 2 nd Stage =0'	75%
5.5" Production	5000'	25%
7 x 5.5" Combo Prod.	5000'	25%

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4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
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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	x	
			Other*		
8-3/4"	13-5/8"	3M	Annular	x	50% testing pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	x	
			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. 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.
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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. 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. - Wellhead will be installed by FMC's representatives. - 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. - FMC representative will install the test plug for the initial BOP test. - 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. - 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 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. 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. 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.

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	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
	See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	1,440'	FW Gel	8.6-8.8	28-34	N/C
1,440'	5,200'	Saturated Brine	10.0-10.2	28-34	N/C
5,200'	14,377'	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
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6. Logging and Testing Procedures

Logging, Coring and Testing.	
x	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	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
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

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7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4710 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? No.

Will be pre-setting casing? No.

Attachments

☒ Directional Plan

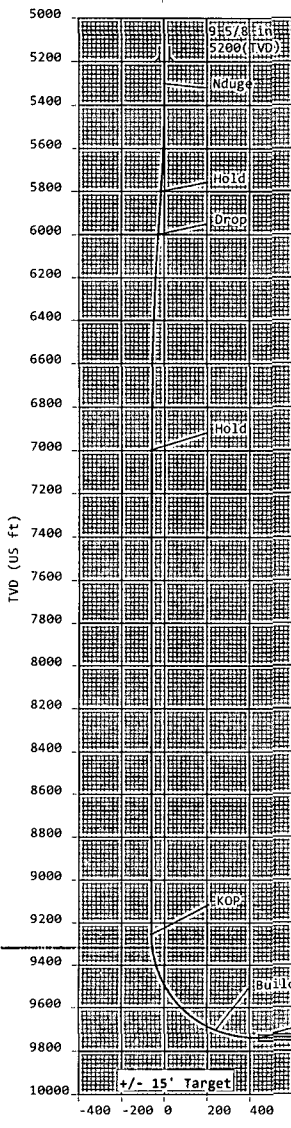
☐ Other, describe

devon

Sea Snake 35 State 9H
Lea Co, NM



KB-3683
GL-3658



Plan Data for Sea Snake 35 State 9H

Plan Point Information:

MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	457161.85	783377.06	0.00	0.00
5300.00	0.00	0.00	5300.00	0.00	0.00	457161.85	783377.06	0.00	0.00
5800.00	5.00	138.00	5799.37	-16.20	14.59	457145.65	783391.65	-16.06	1.00
6000.00	5.00	138.00	5998.60	-29.16	26.25	457132.69	783403.31	-28.91	0.00
7000.00	0.00	0.00	6997.34	-61.56	55.43	457100.29	783432.49	-61.04	0.50
9258.16	0.00	0.00	9255.50	-61.56	55.43	457100.29	783432.49	-61.04	0.00
9841.50	70.00	345.65	9704.17	242.00	-22.43	457404.65	783354.63	242.58	12.00
10047.73	98.00	0.54	9740.00	442.91	-45.85	457604.76	783331.21	442.46	12.00
14376.91	98.00	0.54	9740.00	4771.90	-5.33	461933.75	783371.73	4771.64	0.00

Plan Data for Sea Snake 35 State 9H

Slot: Sea Snake 35 State 9H

Position:

Offset is from Site centre

+N/-S: 0.61USft Northing: 457161.85USft Latitude: 32°15'15.8"

+E/-W: 99.96USft Easting: 783377.06USft Longitude: -103°33'1.3"

Elevation Above VRD: 3658.00USft

Plan Data for Sea Snake 35 State 9H

Target Set Information:

Name: Sea Snake 35 State 9H

Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)		
PBHL 9H	9740.00	4771.90	-5.33	461933.75	783371.73	Cuboid	

Plan Data for Sea Snake 35 State 9H

Well: Sea Snake 35 State 9H

Type: Main-Well

File Number:

Plan Folder: P1 Plan: P1-V1

Vertical Section: Position offset of origin from Slot centre:

+N/-S: 0.00USft

+E/-W: 0.00USft

Magnetic Parameters:

Model: Field Strength: Declination: Dip: Date:

BGGM 48224(nT) 7.21° 60.17° 2015-11-15

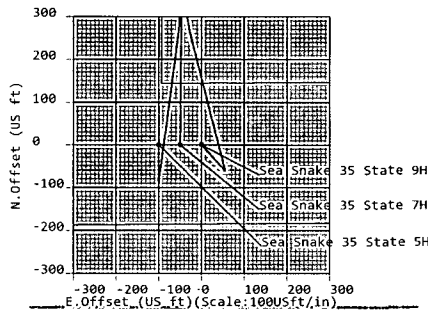
Sea Snake 35 State 9H _____

Sea Snake 35 State 7H _____

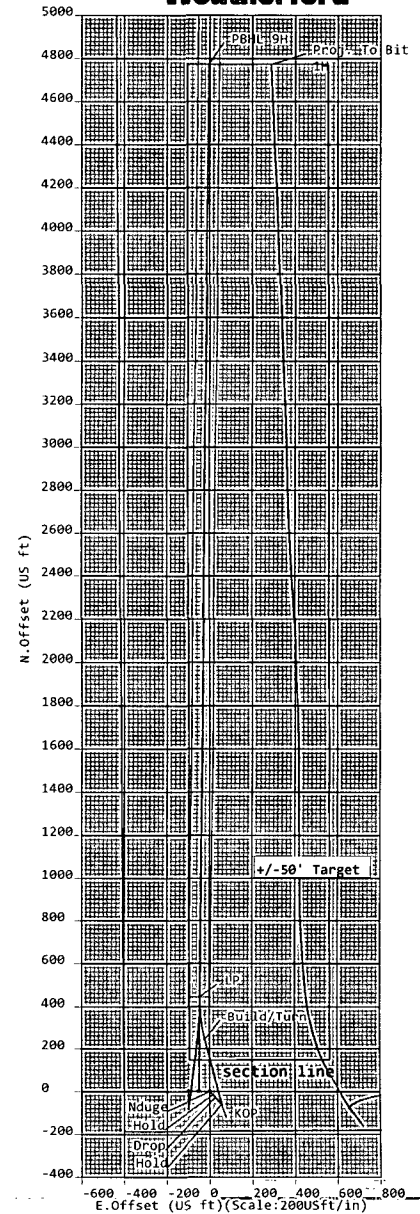
Sea Snake 35 State 1H Pilot _____

Sea Snake 35 State 1H Lateral _____

Sea Snake 35 State 5H _____



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Sign Off: Russell Joyner

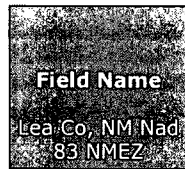
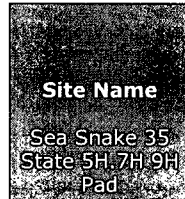
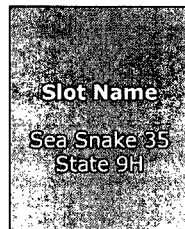
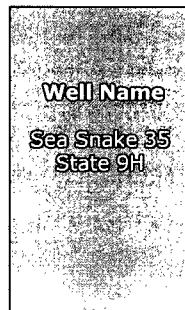
5D Plan Report**Devon Energy**

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Sea Snake 35 State 5H.7H 9H Pad*
Well Name: *Sea Snake 35 State 9H*
Plan: *P1:V1*

29 May 2015

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Sea Snake 35 State 9H

**Map Units** : US ft**Company Name** : Devon Energy**Field Name**Lea Co. NM Nad
83 NMEZ**Vertical Reference Datum (VRD)** : Mean Sea Level**Projected Coordinate System** : NAD83 / New Mexico East (ftUS)**Comment** :**Units** : US ft**North Reference** : Grid**Convergence Angle** : 0.42**Site Name**Sea Snake 35
State 5H 7H 9H
Pad**Position****Northing** : 457161.24 US ft**Latitude** : 32° 15' 15.79"**Easting** : 783277.10 US ft**Longitude** : -103° 33' 2.50"**Elevation above Mean Sea Level**: 3658.00 US ft**Comment** :**Position (Offsets relative to Site Centre)****+N / -S** : 0.61 US ft**Northing** : 457161.85 US ft**Latitude** : 32°15'15.79"**+E / -W** : 99.96 US ft**Easting** : 783377.06 US ft**Longitude** : -103°33'1.34"**Slot Name**Sea Snake 35
State 9H**Slot TVD Reference** : Ground Elevation**Elevation above Mean Sea Level** : 3658.00 US ft**Comment** :**Well Name**Sea Snake 35
State 9H**Type** : Main well**UWI** :**Plan** : P1:V1**Rig Height** *Kelly Bushing* : 25.00 US ft**Comment** :**Relative to Mean Sea Level**: 3683.00 US ft**Closure Distance** : 4771.9 US ft**Closure Azimuth** : 359.936°**Vertical Section (Position of Origin Relative to Slot)****+N / -S** : 0.00 US ft**+E / -W** : 0.00 US ft**Az** : 0.54°**Magnetic Parameters****Model** : BGGM**Field Strength** :
48224.2nT**Dec** : 7.21°**Dip** : 60.17°**Date** :

15/Nov/2015

Target Set

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

9H

Comment :

Target Name:	Position (Relative to Slot centre)		
PBHL 9H	+N / -S : 4771.90US ft	Northing : 461933.75 US ft	Latitude : 32°16'3.01"
Shape:	+E / -W : -5.33 US ft	Easting : 783371.73US ft	Longitude : -103°33'0.99"
Cuboid	TVD (Kelly Bushing) : -9740.00 US ft		
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 0.00 US ft	Breadth : 100.00 US ft	Height : 30.00 US ft

Casing 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)	Northing (US ft)	Easting (US ft)	Name
1440.00	0.00	0.00	1440.00	0.00	0.00	457161.85	783377.06	13 3/8 in

5D Plan Report

Casing 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)	Northing (US ft)	Easting (US ft)	Name
5200.00	0.00	0.00	5200.00	0.00	0.00	457161.85	783377.06	9 5/8 in

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	
1440.00	0.00	0.00	1440.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13 3/8 in
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 5/8 in
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nduge
5800.00	5.00	138.00	5799.37	-16.20	14.59	-16.06	1.00	1.00	0.00	138.00	Hold
6000.00	5.00	138.00	5998.60	-29.16	26.25	-28.91	0.00	0.00	0.00	0.00	Drop
7000.00	0.00	0.00	6997.34	-61.56	55.43	-61.04	0.50	-0.50	0.00	180.00	Hold
9258.16	0.00	0.00	9255.50	-61.56	55.43	-61.04	0.00	0.00	0.00	0.00	KOP
9841.50	70.00	345.65	9704.17	242.80	-22.43	242.58	12.00	12.00	0.00	345.65	Build/Turn
10047.73	90.00	0.54	9740.00	442.91	-45.85	442.46	12.00	9.70	7.22	37.85	LP
14376.91	90.00	0.54	9740.00	4771.90	-5.33	4771.64	0.00	0.00	0.00	0.00	PBHL 9H

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
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	457161.85	783377.06	9 5/8 in Nduge
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	457161.85	783377.06	
5400.00	1.00	138.00	5399.99	-0.65	0.58	-0.64	1.00	457161.20	783377.64	
5500.00	2.00	138.00	5499.96	-2.59	2.34	-2.57	1.00	457159.26	783379.40	
5600.00	3.00	138.00	5599.86	-5.84	5.25	-5.79	1.00	457156.01	783382.31	
5700.00	4.00	138.00	5699.68	-10.37	9.34	-10.28	1.00	457151.48	783386.40	
5800.00	5.00	138.00	5799.37	-16.20	14.59	-16.06	1.00	457145.65	783391.65	Hold
5900.00	5.00	138.00	5898.99	-22.68	20.42	-22.49	0.00	457139.17	783397.48	
6000.00	5.00	138.00	5998.60	-29.16	26.25	-28.91	0.00	457132.69	783403.31	Drop
6100.00	4.50	138.00	6098.26	-35.31	31.79	-35.01	0.50	457126.54	783408.85	
6200.00	4.00	138.00	6197.99	-40.82	36.75	-40.47	0.50	457121.03	783413.81	
6300.00	3.50	138.00	6297.77	-45.68	41.13	-45.29	0.50	457116.17	783418.19	
6400.00	3.00	138.00	6397.61	-49.89	44.92	-49.47	0.50	457111.96	783421.98	
6500.00	2.50	138.00	6497.49	-53.46	48.13	-53.00	0.50	457108.39	783425.19	
6600.00	2.00	138.00	6597.42	-56.37	50.76	-55.89	0.50	457105.48	783427.82	
6700.00	1.50	138.00	6697.37	-58.64	52.80	-58.14	0.50	457103.21	783429.86	
6800.00	1.00	138.00	6797.35	-60.26	54.26	-59.75	0.50	457101.59	783431.32	
6900.00	0.50	138.00	6897.34	-61.24	55.14	-60.72	0.50	457100.61	783432.20	
7000.00	0.00	0.00	6997.34	-61.56	55.43	-61.04	0.50	457100.29	783432.49	Hold
7100.00	0.00	0.00	7097.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7200.00	0.00	0.00	7197.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7300.00	0.00	0.00	7297.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7400.00	0.00	0.00	7397.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7500.00	0.00	0.00	7497.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7600.00	0.00	0.00	7597.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7700.00	0.00	0.00	7697.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7800.00	0.00	0.00	7797.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
7900.00	0.00	0.00	7897.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8000.00	0.00	0.00	7997.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8100.00	0.00	0.00	8097.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8200.00	0.00	0.00	8197.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8300.00	0.00	0.00	8297.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8400.00	0.00	0.00	8397.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8500.00	0.00	0.00	8497.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8600.00	0.00	0.00	8597.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8700.00	0.00	0.00	8697.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
8800.00	0.00	0.00	8797.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	

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
8900.00	0.00	0.00	8897.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
9000.00	0.00	0.00	8997.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
9100.00	0.00	0.00	9097.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
9200.00	0.00	0.00	9197.34	-61.56	55.43	-61.04	0.00	457100.29	783432.49	
9258.16	0.00	0.00	9255.50	-61.56	55.43	-61.04	0.00	457100.29	783432.49	KOP
9300.00	5.02	345.65	9297.28	-59.79	54.98	-59.27	12.00	457102.06	783432.04	
9400.00	17.02	345.65	9395.26	-41.30	50.25	-40.83	12.00	457120.55	783427.31	
9500.00	29.02	345.65	9487.13	-3.49	40.57	-3.10	12.00	457158.36	783417.63	
9600.00	41.02	345.65	9568.87	52.01	26.38	52.26	12.00	457213.86	783403.44	
9700.00	53.02	345.65	9636.92	122.76	8.28	122.83	12.00	457284.61	783385.34	
9800.00	65.02	345.65	9688.30	205.67	-12.93	205.53	12.00	457367.52	783364.13	
9841.50	70.00	345.65	9704.17	242.80	-22.43	242.58	12.00	457404.65	783354.63	Build/Turn
9900.00	75.59	350.09	9721.47	297.41	-34.14	297.07	12.00	457459.26	783342.92	
10000.00	85.32	357.23	9738.05	395.24	-44.92	394.80	12.00	457557.09	783332.14	
10047.73	90.00	0.54	9740.00	442.91	-45.85	442.46	12.00	457604.76	783331.21	LP
10100.00	90.00	0.54	9740.00	495.17	-45.36	494.72	0.00	457657.02	783331.70	
10200.00	90.00	0.54	9740.00	595.17	-44.42	594.72	0.00	457757.02	783332.64	
10300.00	90.00	0.54	9740.00	695.16	-43.49	694.72	0.00	457857.01	783333.57	
10400.00	90.00	0.54	9740.00	795.16	-42.55	794.72	0.00	457957.01	783334.51	
10500.00	90.00	0.54	9740.00	895.16	-41.62	894.72	0.00	458057.01	783335.44	
10600.00	90.00	0.54	9740.00	995.15	-40.68	994.72	0.00	458157.00	783336.38	
10700.00	90.00	0.54	9740.00	1095.15	-39.74	1094.72	0.00	458257.00	783337.32	
10800.00	90.00	0.54	9740.00	1195.14	-38.81	1194.72	0.00	458356.99	783338.25	
10900.00	90.00	0.54	9740.00	1295.14	-37.87	1294.72	0.00	458456.99	783339.19	
11000.00	90.00	0.54	9740.00	1395.13	-36.94	1394.72	0.00	458556.98	783340.12	
11100.00	90.00	0.54	9740.00	1495.13	-36.00	1494.72	0.00	458656.98	783341.06	
11200.00	90.00	0.54	9740.00	1595.12	-35.06	1594.72	0.00	458756.97	783342.00	
11300.00	90.00	0.54	9740.00	1695.12	-34.13	1694.72	0.00	458856.97	783342.93	
11400.00	90.00	0.54	9740.00	1795.12	-33.19	1794.72	0.00	458956.97	783343.87	
11500.00	90.00	0.54	9740.00	1895.11	-32.26	1894.72	0.00	459056.96	783344.80	
11600.00	90.00	0.54	9740.00	1995.11	-31.32	1994.72	0.00	459156.96	783345.74	
11700.00	90.00	0.54	9740.00	2095.10	-30.38	2094.72	0.00	459256.95	783346.68	
11800.00	90.00	0.54	9740.00	2195.10	-29.45	2194.72	0.00	459356.95	783347.61	
11900.00	90.00	0.54	9740.00	2295.09	-28.51	2294.72	0.00	459456.94	783348.55	
12000.00	90.00	0.54	9740.00	2395.09	-27.58	2394.72	0.00	459556.94	783349.48	
12100.00	90.00	0.54	9740.00	2495.09	-26.64	2494.72	0.00	459656.94	783350.42	
12200.00	90.00	0.54	9740.00	2595.08	-25.70	2594.72	0.00	459756.93	783351.36	
12300.00	90.00	0.54	9740.00	2695.08	-24.77	2694.72	0.00	459856.93	783352.29	
12400.00	90.00	0.54	9740.00	2795.07	-23.83	2794.72	0.00	459956.92	783353.23	
12500.00	90.00	0.54	9740.00	2895.07	-22.90	2894.72	0.00	460056.92	783354.16	
12600.00	90.00	0.54	9740.00	2995.06	-21.96	2994.72	0.00	460156.91	783355.10	
12700.00	90.00	0.54	9740.00	3095.06	-21.03	3094.72	0.00	460256.91	783356.03	
12800.00	90.00	0.54	9740.00	3195.05	-20.09	3194.72	0.00	460356.90	783356.97	
12900.00	90.00	0.54	9740.00	3295.05	-19.15	3294.72	0.00	460456.90	783357.91	
13000.00	90.00	0.54	9740.00	3395.05	-18.22	3394.72	0.00	460556.90	783358.84	
13100.00	90.00	0.54	9740.00	3495.04	-17.28	3494.72	0.00	460656.89	783359.78	
13200.00	90.00	0.54	9740.00	3595.04	-16.35	3594.72	0.00	460756.89	783360.71	
13300.00	90.00	0.54	9740.00	3695.03	-15.41	3694.72	0.00	460856.88	783361.65	
13400.00	90.00	0.54	9740.00	3795.03	-14.47	3794.72	0.00	460956.88	783362.59	
13500.00	90.00	0.54	9740.00	3895.02	-13.54	3894.72	0.00	461056.87	783363.52	
13600.00	90.00	0.54	9740.00	3995.02	-12.60	3994.72	0.00	461156.87	783364.46	
13700.00	90.00	0.54	9740.00	4095.02	-11.67	4094.72	0.00	461256.87	783365.39	
13800.00	90.00	0.54	9740.00	4195.01	-10.73	4194.72	0.00	461356.86	783366.33	
13900.00	90.00	0.54	9740.00	4295.01	-9.79	4294.72	0.00	461456.86	783367.27	
14000.00	90.00	0.54	9740.00	4395.00	-8.86	4394.72	0.00	461556.85	783368.20	
14100.00	90.00	0.54	9740.00	4495.00	-7.92	4494.72	0.00	461656.85	783369.14	
14200.00	90.00	0.54	9740.00	4594.99	-6.99	4594.72	0.00	461756.84	783370.07	
14300.00	90.00	0.54	9740.00	4694.99	-6.05	4694.72	0.00	461856.84	783371.01	
14376.91	90.00	0.54	9740.00	4771.90	-5.33	4771.64	0.00	461933.75	783371.73	PBHL 9H

5D Anti-Collision Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *Sea Snake 35 State 5H.7H 9H Pad***Well Name:** *Sea Snake 35 State 9H*

29 May 2015





Weatherford®

Sea Snake 35 State 9H

Field Name Lea Co., NM-Nad 83 NMEZ	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
Site Name Sea Snake 35 State 5H, 7H 9H Pad	Projected Coordinate System : NAD83 / New Mexico East (ftUS)			
	Comment :			
Slot Name Sea Snake 35 State 9H	Units : US ft	North Reference : Grid	Convergence Angle : 0.42	
	Position	Northing : 457161.24 US ft	Latitude : 32° 15' 15.79"	
		Easting : 783277.10 US ft	Longitude : -103° 33' 2.50"	
	Elevation above Mean Sea Level: 3658.00 US ft			
	Comment :			
Well Name Sea Snake 35 State 9H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.61 US ft	Northing : 457161.85 US ft	Latitude : 32° 15' 15.79"	
	+E / -W : 99.96 US ft	Easting : 783377.06 US ft	Longitude : -103° 33' 1.34"	
	Slot TVD Reference : Ground Elevation			
	Elevation above Mean Sea Level : 3658.00 US ft			
	Comment :			
Well Name Sea Snake 35 State 9H	Type : Main well	UWI :	Plan : Working Plan	
	Rig Height : Kelly Bushing : 25.00 US ft	Comment :		
	Relative to Mean Sea Level: 3683.00 US ft			
	Closure Distance : 4771.9 US ft	Closure Azimuth : 359.936°		
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az : 0.54°	
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48224.2nT	Dec : 7.21°	Dip : 60.17° Date : 15/Nov/2015

Collision / Uncertainty Analysis

Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std Deviations in Error Computation
Sea Snake 35 State 9H (p)	0.00	14376.91	100.00	2

Secondary Well Names

Sea Snake 35 State 1H Lateral (s)
Sea Snake 35 State 1H Pilot (s)
Sea Snake 35 State 5H (p)
Sea Snake 35 State 7H (p)

Anti-Collision Report Terminology

S.Minor, S.Major : Radii of the ellipse of uncertainty at the current location as seen in the along hole direction.

PHI : Angle between high-side vector and semi-minor axis

TVD Spread : Total TVD range of the ellipsoid of uncertainty at the current location

ES : Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr

T.Face to Sec : Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells

5D Anti-Collision Report

Separation factors calculated using Pedal Curve (Independent Uncertainty). Well path created using minimum curvature.

Anti Collision Proximity Summary (TVD relative to Kelly Bushing)

Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Sea Snake 35 State 7H (p)	9546.87	9526.94	9526.94	86.95	44.26	2.04	
Sea Snake 35 State 5H (p)	9425.59	9422.18	9419.51	156.41	114.49	3.73	
Sea Snake 35 State 1H Pilot (s)	9390.82	9433.46	9386.46	608.70	573.34	17.21	
Sea Snake 35 State 1H Lateral (s)	14376.91	15975.73	9740.00	1570.55	1487.54	18.92	

Primary Well: Sea Snake 35 State 9H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)

MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	269.67	0.00	0.00	Sea Snake 35 State 7H (p)	49.99	48.87	44.69	
100.00	100.00	269.67	0.11	0.11	Sea Snake 35 State 7H (p)	49.99	48.65	37.32	
200.00	200.00	269.67	0.34	0.34	Sea Snake 35 State 7H (p)	49.99	48.20	27.94	
300.00	300.00	269.67	0.56	0.56	Sea Snake 35 State 7H (p)	49.99	47.75	22.33	
400.00	400.00	269.67	0.79	0.79	Sea Snake 35 State 7H (p)	49.99	47.30	18.60	
500.00	500.00	269.67	1.01	1.01	Sea Snake 35 State 7H (p)	49.99	46.85	15.93	
600.00	600.00	269.67	1.24	1.24	Sea Snake 35 State 7H (p)	49.99	46.40	13.94	
700.00	700.00	269.67	1.46	1.46	Sea Snake 35 State 7H (p)	49.99	45.95	12.38	
800.00	800.00	269.67	1.69	1.69	Sea Snake 35 State 7H (p)	49.99	45.50	11.14	
900.00	900.00	269.67	1.91	1.91	Sea Snake 35 State 7H (p)	49.99	45.05	10.13	
1000.00	1000.00	269.67	2.14	2.14	Sea Snake 35 State 7H (p)	49.99	44.61	9.28	
1100.00	1100.00	269.67	2.36	2.36	Sea Snake 35 State 7H (p)	49.99	44.16	8.57	
1200.00	1200.00	269.67	2.59	2.59	Sea Snake 35 State 7H (p)	49.99	43.71	7.95	
1300.00	1300.00	269.67	2.81	2.81	Sea Snake 35 State 7H (p)	49.99	43.26	7.42	
1400.00	1400.00	269.67	3.03	3.03	Sea Snake 35 State 7H (p)	49.99	42.81	6.96	
1500.00	1500.00	269.67	3.26	3.26	Sea Snake 35 State 7H (p)	49.99	42.67	6.83	
1600.00	1600.00	269.67	3.48	3.48	Sea Snake 35 State 7H (p)	49.99	42.22	6.43	
1700.00	1700.00	269.67	3.71	3.71	Sea Snake 35 State 7H (p)	49.99	41.77	6.08	
1800.00	1800.00	269.67	3.93	3.93	Sea Snake 35 State 7H (p)	49.99	41.32	5.77	
1900.00	1900.00	269.67	4.16	4.16	Sea Snake 35 State 7H (p)	49.99	40.87	5.48	
2000.00	2000.00	269.67	4.38	4.38	Sea Snake 35 State 7H (p)	49.99	40.42	5.22	
2100.00	2100.00	269.67	4.61	4.61	Sea Snake 35 State 7H (p)	49.99	39.97	4.99	
2200.00	2200.00	269.67	4.83	4.83	Sea Snake 35 State 7H (p)	49.99	39.52	4.78	
2300.00	2300.00	269.67	5.06	5.06	Sea Snake 35 State 7H (p)	49.99	39.07	4.58	
2400.00	2400.00	269.67	5.28	5.28	Sea Snake 35 State 7H (p)	49.99	38.62	4.40	
2500.00	2500.00	269.67	5.51	5.51	Sea Snake 35 State 7H (p)	49.99	38.17	4.23	
2600.00	2600.00	269.67	5.73	5.73	Sea Snake 35 State 7H (p)	49.99	37.72	4.08	
2700.00	2700.00	269.67	5.96	5.96	Sea Snake 35 State 7H (p)	49.99	37.28	3.93	

5D Anti-Collision Report

Primary Well : Sea Snake 35 State 9H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
2800.00	2800.00	269.67	6.18	6.18	Sea Snake 35 State 7H (p)	49.99	36.83	3.80	
2900.00	2900.00	269.67	6.41	6.41	Sea Snake 35 State 7H (p)	49.99	36.38	3.67	
3000.00	3000.00	269.67	6.63	6.63	Sea Snake 35 State 7H (p)	49.99	35.93	3.55	
3100.00	3100.00	269.67	6.86	6.86	Sea Snake 35 State 7H (p)	49.99	35.48	3.44	
3200.00	3200.00	269.67	7.08	7.08	Sea Snake 35 State 7H (p)	49.99	35.03	3.34	
3300.00	3300.00	269.67	7.31	7.31	Sea Snake 35 State 7H (p)	49.99	34.58	3.24	
3400.00	3400.00	269.67	7.53	7.53	Sea Snake 35 State 7H (p)	49.99	34.13	3.15	
3500.00	3500.00	269.67	7.76	7.76	Sea Snake 35 State 7H (p)	49.99	33.68	3.06	
3600.00	3600.00	269.67	7.98	7.98	Sea Snake 35 State 7H (p)	49.99	33.23	2.98	
3700.00	3700.00	269.67	8.20	8.20	Sea Snake 35 State 7H (p)	49.99	32.78	2.90	
3800.00	3800.00	269.67	8.43	8.43	Sea Snake 35 State 7H (p)	49.99	32.33	2.83	
3900.00	3900.00	269.67	8.65	8.65	Sea Snake 35 State 7H (p)	49.99	31.88	2.76	
4000.00	4000.00	269.67	8.88	8.88	Sea Snake 35 State 7H (p)	49.99	31.43	2.69	
4100.00	4100.00	269.67	9.10	9.10	Sea Snake 35 State 7H (p)	49.99	30.98	2.63	
4200.00	4200.00	269.67	9.33	9.33	Sea Snake 35 State 7H (p)	49.99	30.53	2.57	
4300.00	4300.00	269.67	9.55	9.55	Sea Snake 35 State 7H (p)	49.99	30.08	2.51	
4400.00	4400.00	269.67	9.78	9.78	Sea Snake 35 State 7H (p)	49.99	29.63	2.46	
4500.00	4500.00	269.67	10.00	10.00	Sea Snake 35 State 7H (p)	49.99	29.18	2.40	
4600.00	4600.00	269.67	10.23	10.23	Sea Snake 35 State 7H (p)	49.99	28.73	2.35	
4700.00	4700.00	269.67	10.45	10.45	Sea Snake 35 State 7H (p)	49.99	28.28	2.30	
4800.00	4800.00	269.67	10.68	10.68	Sea Snake 35 State 7H (p)	49.99	27.83	2.26	
4900.00	4900.00	269.67	10.90	10.90	Sea Snake 35 State 7H (p)	49.99	27.38	2.21	
5000.00	5000.00	269.67	11.13	11.13	Sea Snake 35 State 7H (p)	49.99	26.94	2.17	
5100.00	5100.00	269.67	11.35	11.35	Sea Snake 35 State 7H (p)	49.99	26.49	2.13	
5200.00	5200.00	269.67	11.58	11.58	Sea Snake 35 State 7H (p)	49.99	26.04	2.09	
5300.00	5300.00	269.67	11.80	11.80	Sea Snake 35 State 7H (p)	49.99	25.58	2.07	
5400.00	5399.99	132.40	12.00	12.00	Sea Snake 35 State 7H (p)	50.58	26.00	2.06	
5500.00	5499.96	134.50	12.18	12.17	Sea Snake 35 State 7H (p)	52.38	27.40	2.10	
5600.00	5599.86	137.69	12.35	12.33	Sea Snake 35 State 7H (p)	55.52	30.17	2.19	
5700.00	5699.68	141.58	12.53	12.50	Sea Snake 35 State 7H (p)	60.18	34.40	2.33	
5800.00	5799.37	145.74	12.71	12.66	Sea Snake 35 State 7H (p)	66.51	40.38	2.54	
5900.00	5898.99	149.54	12.90	12.84	Sea Snake 35 State 7H (p)	73.88	47.34	2.78	
6000.00	5998.60	152.65	13.09	13.02	Sea Snake 35 State 7H (p)	81.52	54.55	3.02	
6100.00	6098.26	155.11	13.30	13.23	Sea Snake 35 State 7H (p)	88.97	61.56	3.25	
6200.00	6197.99	156.99	13.52	13.46	Sea Snake 35 State 7H (p)	95.74	67.93	3.44	
6300.00	6297.77	158.44	13.74	13.68	Sea Snake 35 State 7H (p)	101.80	73.54	3.60	

5D Anti-Collision Report

Primary Well : Sea Snake 35 State 9H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
6400.00	6397.61	159.57	13.97	13.91	Sea Snake 35 State 7H (p)	107.09	78.39	3.73	
6500.00	6497.49	160.43	14.19	14.13	Sea Snake 35 State 7H (p)	111.60	82.44	3.83	
6600.00	6597.42	161.09	14.41	14.35	Sea Snake 35 State 7H (p)	115.31	85.69	3.89	
6700.00	6697.37	161.58	14.63	14.58	Sea Snake 35 State 7H (p)	118.20	88.13	3.93	
6800.00	6797.35	161.91	14.85	14.80	Sea Snake 35 State 7H (p)	120.27	89.76	3.94	
6900.00	6897.34	162.10	15.07	15.02	Sea Snake 35 State 7H (p)	121.52	90.56	3.93	
7000.00	6997.34	300.17	15.29	15.23	Sea Snake 35 State 7H (p)	121.93	90.53	3.88	
7100.00	7097.34	300.17	15.51	15.45	Sea Snake 35 State 7H (p)	121.93	90.09	3.83	
7200.00	7197.34	300.17	15.74	15.68	Sea Snake 35 State 7H (p)	121.93	89.64	3.78	
7300.00	7297.34	300.17	15.96	15.90	Sea Snake 35 State 7H (p)	121.93	89.19	3.72	
7400.00	7397.34	300.17	16.18	16.13	Sea Snake 35 State 7H (p)	121.93	88.74	3.67	
7500.00	7497.34	300.17	16.41	16.35	Sea Snake 35 State 7H (p)	121.93	88.29	3.62	
7600.00	7597.34	300.17	16.63	16.57	Sea Snake 35 State 7H (p)	121.93	87.84	3.58	
7700.00	7697.34	300.17	16.85	16.80	Sea Snake 35 State 7H (p)	121.93	87.40	3.53	
7800.00	7797.34	300.17	17.08	17.02	Sea Snake 35 State 7H (p)	121.93	86.95	3.49	
7900.00	7897.34	300.17	17.30	17.25	Sea Snake 35 State 7H (p)	121.93	86.50	3.44	
8000.00	7997.34	300.17	17.52	17.47	Sea Snake 35 State 7H (p)	121.93	86.05	3.40	
8100.00	8097.34	300.17	17.75	17.70	Sea Snake 35 State 7H (p)	121.93	85.60	3.36	
8200.00	8197.34	300.17	17.97	17.92	Sea Snake 35 State 7H (p)	121.93	85.15	3.32	
8300.00	8297.34	300.17	18.19	18.14	Sea Snake 35 State 7H (p)	121.93	84.71	3.28	
8400.00	8397.34	300.17	18.42	18.37	Sea Snake 35 State 7H (p)	121.93	84.26	3.24	
8500.00	8497.34	300.17	18.64	18.59	Sea Snake 35 State 7H (p)	121.93	83.81	3.20	
8600.00	8597.34	300.17	18.87	18.82	Sea Snake 35 State 7H (p)	121.93	83.36	3.16	
8700.00	8697.34	300.17	19.09	19.04	Sea Snake 35 State 7H (p)	121.93	82.91	3.12	
8800.00	8797.34	300.17	19.31	19.26	Sea Snake 35 State 7H (p)	121.93	82.46	3.09	
8900.00	8897.34	300.17	19.54	19.49	Sea Snake 35 State 7H (p)	121.93	82.01	3.05	
9000.00	8997.34	300.17	19.76	19.71	Sea Snake 35 State 7H (p)	121.93	81.57	3.02	
9100.00	9097.34	300.17	19.98	19.94	Sea Snake 35 State 7H (p)	121.93	81.12	2.99	
9200.00	9197.34	300.17	20.21	20.16	Sea Snake 35 State 7H (p)	121.93	80.67	2.95	
9300.00	9297.28	313.79	20.42	20.30	Sea Snake 35 State 7H (p)	120.66	78.96	2.89	
9400.00	9395.26	305.38	20.61	20.07	Sea Snake 35 State 7H (p)	108.30	66.16	2.57	
9500.00	9487.13	284.41	20.79	19.33	Sea Snake 35 State 7H (p)	90.62	48.13	2.13	
9600.00	9568.87	254.60	20.96	18.20	Sea Snake 35 State 7H (p)	92.56	49.73	2.16	
9700.00	9636.92	229.36	21.19	16.86	Sea Snake 35 State 7H (p)	133.04	90.11	3.10	
9800.00	9688.30	211.85	21.51	15.52	Sea Snake 35 State 7H (p)	191.43	149.38	4.55	
9900.00	9721.47	194.24	21.99	14.73	Sea Snake 35 State 7H (p)	253.75	214.51	6.47	

5D Anti-Collision Report

Primary Well : Sea Snake 35 State 9H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
10000.00	9738.05	182.01	22.48	14.37	Sea Snake 35 State 7H (p)	306.13	272.47	9.09	
10100.00	9740.00	180.00	23.12	14.48	Sea Snake 35 State 7H (p)	325.20	295.02	10.78	
10200.00	9740.00	180.00	23.82	14.67	Sea Snake 35 State 7H (p)	326.13	295.60	10.68	
10300.00	9740.00	180.00	24.68	14.90	Sea Snake 35 State 7H (p)	327.06	296.11	10.57	
10400.00	9740.00	180.00	25.66	15.15	Sea Snake 35 State 7H (p)	327.99	296.56	10.44	
10500.00	9740.00	180.00	26.73	15.44	Sea Snake 35 State 7H (p)	328.92	296.95	10.29	
10600.00	9740.00	180.00	27.87	15.76	Sea Snake 35 State 7H (p)	329.85	297.29	10.13	
10700.00	9740.00	180.00	29.08	16.10	Sea Snake 35 State 7H (p)	330.78	297.57	9.96	
10800.00	9740.00	180.00	30.35	16.46	Sea Snake 35 State 7H (p)	331.71	297.80	9.78	
10900.00	9740.00	180.00	31.67	16.84	Sea Snake 35 State 7H (p)	332.64	297.98	9.60	
11000.00	9740.00	180.00	33.04	17.24	Sea Snake 35 State 7H (p)	333.57	298.13	9.41	
11100.00	9740.00	180.00	34.45	17.66	Sea Snake 35 State 7H (p)	334.50	298.24	9.22	
11200.00	9740.00	180.00	35.90	18.13	Sea Snake 35 State 7H (p)	335.43	298.31	9.03	
11300.00	9740.00	180.00	37.38	18.63	Sea Snake 35 State 7H (p)	336.36	298.30	8.84	
11400.00	9740.00	180.00	38.89	19.14	Sea Snake 35 State 7H (p)	337.29	298.26	8.64	
11500.00	9740.00	180.00	40.43	19.64	Sea Snake 35 State 7H (p)	338.22	298.22	8.46	
11600.00	9740.00	180.00	41.98	20.10	Sea Snake 35 State 7H (p)	339.15	298.24	8.29	
11700.00	9740.00	180.00	43.56	20.68	Sea Snake 35 State 7H (p)	340.08	298.03	8.09	
11800.00	9740.00	180.00	45.16	21.17	Sea Snake 35 State 7H (p)	341.01	297.90	7.91	
11900.00	9740.00	180.00	46.78	21.79	Sea Snake 35 State 7H (p)	341.94	297.78	7.74	
12000.00	9740.00	180.00	48.41	22.28	Sea Snake 35 State 7H (p)	342.87	297.60	7.57	
12100.00	9740.00	180.00	50.05	22.91	Sea Snake 35 State 7H (p)	343.80	297.37	7.40	
12200.00	9740.00	180.00	51.70	23.49	Sea Snake 35 State 7H (p)	344.73	297.14	7.24	
12300.00	9740.00	180.00	53.37	24.11	Sea Snake 35 State 7H (p)	345.66	296.89	7.09	
12400.00	9740.00	180.00	55.04	24.71	Sea Snake 35 State 7H (p)	346.59	296.61	6.93	
12500.00	9740.00	180.00	56.73	25.29	Sea Snake 35 State 7H (p)	347.52	296.39	6.80	
12600.00	9740.00	180.00	58.42	25.88	Sea Snake 35 State 7H (p)	348.45	296.16	6.66	
12700.00	9740.00	180.00	60.12	26.48	Sea Snake 35 State 7H (p)	349.39	295.93	6.54	
12800.00	9740.00	180.00	61.83	27.08	Sea Snake 35 State 7H (p)	350.32	295.64	6.41	
12900.00	9740.00	180.00	63.55	27.72	Sea Snake 35 State 7H (p)	351.25	295.32	6.28	
13000.00	9740.00	180.00	65.27	28.37	Sea Snake 35 State 7H (p)	352.18	294.97	6.16	
13100.00	9740.00	180.00	66.99	29.02	Sea Snake 35 State 7H (p)	353.11	294.61	6.04	
13200.00	9740.00	180.00	68.73	29.67	Sea Snake 35 State 7H (p)	354.04	294.25	5.92	
13300.00	9740.00	180.00	70.46	30.33	Sea Snake 35 State 7H (p)	354.97	293.88	5.81	
13400.00	9740.00	180.00	72.20	30.98	Sea Snake 35 State 7H (p)	355.90	293.51	5.70	
13500.00	9740.00	180.00	73.95	31.64	Sea Snake 35 State 7H (p)	356.83	293.13	5.60	

5D Anti-Collision Report

Primary Well : Sea Snake 35 State 9H (p) (TVD Relative to Kelly Bushing ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
13600.00	9740.00	180.00	75.69	32.31	Sea Snake 35 State 7H (p)	357.76	292.75	5.50	
13700.00	9740.00	180.00	77.45	32.97	Sea Snake 35 State 7H (p)	358.69	292.36	5.41	
13800.00	9740.00	180.00	79.20	33.64	Sea Snake 35 State 7H (p)	359.62	291.96	5.32	
13900.00	9740.00	180.00	80.96	34.31	Sea Snake 35 State 7H (p)	360.55	291.56	5.23	
14000.00	9740.00	180.00	82.72	34.98	Sea Snake 35 State 7H (p)	361.48	291.15	5.14	
14100.00	9740.00	180.00	84.48	35.66	Sea Snake 35 State 7H (p)	362.41	290.74	5.06	
14200.00	9740.00	180.00	86.25	36.34	Sea Snake 35 State 7H (p)	363.34	290.33	4.98	
14300.00	9740.00	180.00	88.02	37.01	Sea Snake 35 State 7H (p)	364.27	289.91	4.90	
14376.91	9740.00	180.00	89.38	37.54	Sea Snake 35 State 7H (p)	364.98	289.58	4.84	

Secondary Well : Sea Snake 35 State 1H Lateral (s) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
0.00	10645.87	10674.00	98.69	16.34	15.86	10667.78	10650.28	609.77	
100.00	10645.87	10674.00	98.69	16.34	15.86	10567.98	10548.20	534.06	
200.00	10645.87	10674.00	98.69	16.34	15.86	10468.20	10448.40	528.75	
300.00	10645.87	10674.00	98.69	16.34	15.86	10368.41	10348.60	523.28	
400.00	10645.87	10674.00	98.69	16.34	15.86	10268.63	10248.79	517.66	
500.00	10645.87	10674.00	98.69	16.34	15.86	10168.85	10148.99	511.91	
600.00	10645.87	10674.00	98.69	16.34	15.86	10069.08	10049.18	506.04	
700.00	10645.87	10674.00	98.69	16.34	15.86	9969.31	9949.38	500.07	
800.00	10645.87	10674.00	98.69	16.34	15.86	9869.55	9849.57	494.01	
900.00	10645.87	10674.00	98.69	16.34	15.86	9769.79	9749.77	487.87	
1000.00	10645.87	10674.00	98.69	16.34	15.86	9670.04	9649.97	481.68	
1100.00	10645.87	10674.00	98.69	16.34	15.86	9570.29	9550.16	475.42	
1200.00	10645.87	10674.00	98.69	16.34	15.86	9470.55	9450.37	469.13	
1300.00	10645.87	10674.00	98.69	16.34	15.86	9370.82	9350.57	462.81	
1400.00	10645.87	10674.00	98.69	16.34	15.86	9271.09	9250.77	456.46	
1500.00	10645.87	10674.00	98.69	16.34	15.86	9171.36	9151.14	450.11	
1600.00	10645.87	10674.00	98.69	16.34	15.86	9071.64	9051.35	443.76	
1700.00	10645.87	10674.00	98.69	16.34	15.86	8971.93	8951.57	437.41	
1800.00	10645.87	10674.00	98.69	16.34	15.86	8872.22	8851.79	431.06	
1900.00	10645.87	10674.00	98.69	16.34	15.86	8772.52	8752.01	424.71	
2000.00	10645.87	10674.00	98.69	16.34	15.86	8672.83	8652.24	418.36	
2100.00	10645.87	10674.00	98.69	16.34	15.86	8573.14	8552.47	412.01	
2200.00	10645.87	10674.00	98.69	16.34	15.86	8473.47	8452.72	405.66	
2300.00	10645.87	10674.00	98.69	16.34	15.86	8373.80	8352.96	399.31	
2400.00	10645.87	10674.00	98.69	16.34	15.86	8274.13	8253.22	392.96	
2500.00	10645.87	10674.00	98.69	16.34	15.86	8174.48	8153.48	386.61	
2600.00	10645.87	10674.00	98.69	16.34	15.86	8074.83	8053.74	380.26	
2700.00	10645.87	10674.00	98.69	16.34	15.86	7975.20	7954.02	373.91	
2800.00	10645.87	10674.00	98.69	16.34	15.86	7875.57	7854.30	367.56	
2900.00	10645.87	10674.00	98.69	16.34	15.86	7775.95	7754.59	361.21	
3000.00	10645.87	10674.00	98.69	16.34	15.86	7676.34	7654.90	354.86	
3100.00	10645.87	10674.00	98.69	16.34	15.86	7576.74	7555.20	348.51	
3200.00	10645.87	10674.00	98.69	16.34	15.86	7477.16	7455.52	342.16	
3300.00	10645.87	10674.00	98.69	16.34	15.86	7377.58	7355.85	335.81	
3400.00	10645.87	10674.00	98.69	16.34	15.86	7278.02	7256.19	329.46	
3500.00	10645.87	10674.00	98.69	16.34	15.86	7178.46	7156.54	323.11	
3600.00	10645.87	10674.00	98.69	16.34	15.86	7078.93	7056.90	316.76	
3700.00	10645.87	10674.00	98.69	16.34	15.86	6979.40	6957.28	310.41	
3800.00	10645.87	10674.00	98.69	16.34	15.86	6879.89	6857.66	304.06	
3900.00	10645.87	10674.00	98.69	16.34	15.86	6780.39	6758.06	297.71	

5D Anti-Collision Report

Secondary Well: Sea Snake SS State 1H Lateral (s) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
4000.00	10645.87	10674.00	98.69	16.34	15.86	6680.90	6658.47	297.84	
4100.00	10645.87	10674.00	98.69	16.34	15.86	6581.44	6558.90	292.02	
4200.00	10645.87	10674.00	98.69	16.34	15.86	6481.99	6459.34	286.25	
4300.00	10645.87	10674.00	98.69	16.34	15.86	6382.55	6359.80	280.51	
4400.00	10645.87	10674.00	98.69	16.34	15.86	6283.14	6260.27	274.80	
4500.00	10645.87	10674.00	98.69	16.34	15.86	6183.74	6160.76	269.14	
4600.00	10645.87	10674.00	98.69	16.34	15.86	6084.36	6061.27	263.51	
4700.00	10645.87	10674.00	98.69	16.34	15.86	5985.00	5961.80	257.92	
4800.00	10645.87	10674.00	98.69	16.34	15.86	5885.67	5862.35	252.36	
4900.00	10645.87	10674.00	98.69	16.34	15.86	5786.36	5762.92	246.85	
5000.00	10645.87	10674.00	98.69	16.34	15.86	5687.07	5663.51	241.37	
5100.00	10645.87	10674.00	98.69	16.34	15.86	5587.81	5564.12	235.94	
5200.00	10645.87	10674.00	98.69	16.34	15.86	5488.57	5464.76	230.54	
5300.00	10645.87	10674.00	98.69	16.34	15.86	5389.36	5365.55	226.31	
5400.00	10645.87	10674.00	315.22	16.34	15.86	5290.10	5266.16	220.97	
5500.00	10645.87	10674.00	308.58	16.34	15.86	5190.72	5166.65	215.67	
5600.00	10645.87	10674.00	300.61	16.34	15.86	5091.25	5067.05	210.40	
5700.00	10645.87	10674.00	291.26	16.34	15.86	4991.71	4967.38	205.18	
5800.00	10645.87	10674.00	280.80	16.34	15.86	4892.13	4867.67	200.00	
5900.00	10645.87	10674.00	280.80	16.34	15.86	4792.54	4767.95	194.88	
6000.00	10645.87	10674.00	280.80	16.34	15.86	4692.98	4668.25	189.78	
6100.00	10645.87	10674.00	285.85	16.34	15.86	4593.44	4568.57	184.72	
6200.00	10645.87	10674.00	290.56	16.34	15.86	4493.94	4468.93	179.66	
6300.00	10645.87	10674.00	294.90	16.34	15.86	4394.50	4369.34	174.64	
6400.00	10645.87	10674.00	298.86	16.34	15.86	4295.13	4269.81	169.65	
6500.00	10645.87	10674.00	302.46	16.34	15.86	4195.83	4170.36	164.72	
6600.00	10645.87	10674.00	305.72	16.34	15.86	4096.63	4071.00	159.83	
6700.00	10645.87	10674.00	308.66	16.34	15.86	3997.54	3971.75	154.99	
6800.00	10645.87	10674.00	311.31	16.34	15.86	3898.57	3872.61	150.19	
6900.00	10645.87	10674.00	313.69	16.34	15.86	3799.74	3773.61	145.40	
7000.00	10645.87	10674.00	93.85	16.34	15.86	3701.07	3674.76	140.65	
7100.00	10645.87	10674.00	93.85	16.34	15.86	3602.53	3576.04	135.96	
7200.00	10645.87	10674.00	93.85	16.34	15.86	3504.07	3477.39	131.31	
7300.00	10645.87	10674.00	93.85	16.34	15.86	3405.71	3378.83	126.71	
7400.00	10645.87	10674.00	93.85	16.34	15.86	3307.44	3280.36	122.17	
7500.00	10645.87	10674.00	93.85	16.34	15.86	3209.27	3182.00	117.68	
7600.00	10645.87	10674.00	93.85	16.34	15.86	3111.22	3083.75	113.25	
7700.00	10645.87	10674.00	93.85	16.34	15.86	3013.30	2985.63	108.87	
7800.00	10645.87	10674.00	93.85	16.34	15.86	2915.53	2887.64	104.54	
7900.00	10645.87	10674.00	93.85	16.34	15.86	2817.91	2789.80	100.28	
8000.00	10645.87	10674.00	93.85	16.34	15.86	2720.46	2692.14	96.07	
8100.00	10645.87	10674.00	93.85	16.34	15.86	2623.20	2594.66	91.93	
8200.00	10645.87	10674.00	93.85	16.34	15.86	2526.16	2497.40	87.84	
8300.00	10645.87	10674.00	93.85	16.34	15.86	2429.35	2400.37	83.82	
8400.00	10645.87	10674.00	93.85	16.34	15.86	2332.82	2303.61	79.86	
8500.00	10645.87	10674.00	93.85	16.34	15.86	2236.59	2207.15	75.98	
8600.00	10645.87	10674.00	93.85	16.34	15.86	2140.71	2111.03	72.12	
8700.00	10645.87	10674.00	93.85	16.34	15.86	2045.22	2015.27	68.29	
8800.00	10645.87	10674.00	93.85	16.34	15.86	1950.19	1919.96	64.52	
8900.00	10645.87	10674.00	93.85	16.34	15.86	1855.67	1825.17	60.84	
9000.00	10645.87	10674.00	93.85	16.34	15.86	1761.76	1730.95	57.17	
9100.00	10645.87	10674.00	93.85	16.34	15.86	1668.56	1637.39	53.53	
9200.00	10645.87	10674.00	93.85	16.34	15.86	1576.20	1544.67	49.99	
9300.00	10645.87	10674.00	117.95	16.34	15.86	1485.11	1453.21	46.56	
9400.00	10645.87	10674.00	134.08	16.34	15.86	1399.55	1367.21	43.29	
9500.00	10645.87	10674.00	143.03	16.34	15.86	1325.02	1292.24	40.41	
9600.00	10645.87	10674.00	147.92	16.34	15.86	1267.01	1233.78	38.13	
9700.00	10645.87	10674.00	150.35	16.34	15.86	1230.51	1196.73	36.42	

5D Anti-Collision Report

Secondary Well: Sea Snake 85 State 1H Lateral (s) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
9800.00	10645.87	10674.00	151.03	16.34	15.86	1219.11	1184.76	35.50	
9900.00	10645.87	10674.00	148.39	16.34	15.86	1232.29	1197.27	35.19	
10000.00	10645.87	10674.00	143.75	16.34	15.86	1261.57	1226.08	35.55	
10100.00	10645.87	10674.00	141.28	16.34	15.86	1303.18	1267.22	36.24	
10200.00	10645.87	10674.00	141.28	16.34	15.86	1351.52	1315.00	37.01	
10300.00	10645.87	10674.00	141.28	16.34	15.86	1405.32	1368.34	38.00	
10400.00	10645.87	10674.00	141.28	16.34	15.86	1463.99	1426.63	39.19	
10500.00	10645.87	10674.00	141.28	16.34	15.86	1526.96	1489.22	40.46	
10600.00	10645.87	10674.00	141.28	16.34	15.86	1593.72	1555.59	41.80	
10700.00	11283.53	12300.62	163.38	26.19	19.87	1610.85	1572.37	41.86	
10800.00	11283.62	12392.85	163.43	27.44	20.16	1610.49	1571.14	40.93	
10900.00	11282.99	12522.28	163.50	29.26	20.62	1609.48	1568.95	39.71	
11000.00	11282.15	12609.98	163.55	30.47	20.92	1608.09	1566.64	38.80	
11100.00	11281.90	12702.67	163.60	31.78	21.26	1607.32	1564.89	37.88	
11200.00	11281.81	12807.16	163.68	33.30	21.67	1606.63	1563.07	36.88	
11300.00	11281.55	12916.52	163.79	34.96	22.12	1605.51	1560.77	35.88	
11400.00	11281.02	13020.70	163.94	36.58	22.56	1603.83	1557.95	34.95	
11500.00	11280.71	13118.72	164.10	38.11	22.99	1602.23	1555.21	34.08	
11600.00	11280.58	13199.70	164.21	39.38	23.35	1601.01	1553.03	33.37	
11700.00	11282.04	13272.80	164.34	40.57	23.68	1601.65	1552.71	32.73	
11800.00	11284.61	13394.28	164.56	42.60	24.27	1602.40	1552.16	31.89	
11900.00	11286.01	13504.89	164.84	44.51	24.81	1601.82	1550.28	31.08	
12000.00	11286.33	13645.40	165.20	46.80	25.59	1600.19	1547.12	30.15	
12100.00	11285.18	13737.48	165.41	48.29	26.07	1597.27	1543.11	29.49	
12200.00	11284.50	13827.92	165.60	49.73	26.55	1594.93	1539.58	28.82	
12300.00	11283.27	13934.62	165.76	51.33	27.16	1592.68	1536.01	28.10	
12400.00	11281.27	14039.24	165.87	53.09	27.75	1589.93	1531.94	27.42	
12500.00	11279.84	14129.04	165.98	54.57	28.24	1587.46	1528.30	26.83	
12600.00	11279.15	14217.31	166.09	56.02	28.72	1585.77	1525.45	26.29	
12700.00	11278.88	14310.49	166.23	57.61	29.24	1584.46	1522.91	25.74	
12800.00	11279.75	14382.11	166.37	58.86	29.59	1584.41	1521.91	25.35	
12900.00	11282.04	14470.55	166.56	60.28	30.10	1585.69	1522.04	24.91	
13000.00	11284.80	14557.82	166.73	61.77	30.59	1587.67	1522.90	24.51	
13100.00	11288.77	14680.85	166.99	63.87	31.39	1589.64	1523.34	23.98	
13200.00	11289.90	14807.43	167.23	65.98	32.21	1589.28	1521.40	23.41	
13300.00	11290.50	14898.84	167.38	67.50	32.76	1588.88	1519.80	23.00	
13400.00	11291.48	15002.57	167.56	69.27	33.41	1588.82	1518.42	22.57	
13500.00	11291.39	15129.41	167.78	71.41	34.24	1587.67	1515.71	22.06	
13600.00	11289.49	15244.40	167.96	73.37	34.98	1585.06	1511.65	21.59	
13700.00	11287.52	15342.43	168.10	75.04	35.59	1582.14	1507.42	21.18	
13800.00	11285.62	15443.31	168.27	76.80	36.23	1579.24	1503.22	20.77	
13900.00	11283.76	15544.45	168.47	78.54	36.88	1576.29	1498.97	20.39	
14000.00	11282.01	15638.44	168.65	80.14	37.47	1573.31	1494.78	20.03	
14100.00	11281.53	15711.32	168.79	81.37	37.90	1571.58	1492.03	19.76	
14200.00	11281.92	15805.89	168.98	83.00	38.50	1570.91	1490.12	19.45	
14300.00	11282.64	15899.61	169.17	84.59	39.11	1570.59	1488.58	19.15	
14376.91	11283.39	15975.73	169.33	85.89	39.60	1570.55	1487.54	18.92	

Secondary Well: Sea Snake 85 State 1H Pilot (s) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
0.00	-0.03	6.97	88.69	0.03	0.03	895.88	894.93	936.41	
100.00	99.47	106.47	88.67	0.13	0.13	895.92	894.75	770.82	
200.00	196.39	203.40	88.63	0.32	0.32	896.13	894.55	566.76	
300.00	294.80	301.82	88.55	0.56	0.56	896.64	894.60	439.71	
400.00	394.53	401.55	88.46	0.76	0.76	897.26	894.79	363.95	
500.00	495.88	502.92	88.38	0.95	0.95	897.78	894.90	311.60	
600.00	595.02	602.06	88.31	1.16	1.15	898.31	895.00	271.34	
700.00	706.54	713.59	88.28	1.38	1.38	898.20	894.44	238.69	

5D Anti-Collision Report

Secondary Well : Sea Snake SS State 1H Pilot (s) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
800.00	810.36	817.41	88.30	1.59	1.59	897.14	892.95	213.72	
900.00	912.62	919.68	88.32	1.80	1.80	895.91	891.28	193.37	
1000.00	1012.09	1019.16	88.34	2.01	2.01	894.48	889.41	176.57	
1100.00	1108.05	1115.13	88.36	2.21	2.21	893.33	887.85	162.91	
1200.00	1204.63	1211.71	88.37	2.42	2.41	892.63	886.71	150.84	
1300.00	1304.80	1311.88	88.36	2.63	2.62	892.12	885.77	140.54	
1400.00	1404.13	1411.21	88.37	2.84	2.83	891.61	884.84	131.61	
1500.00	1504.63	1511.72	88.37	3.05	3.04	891.15	884.08	126.07	
1600.00	1613.35	1620.45	88.30	3.27	3.27	890.25	882.73	118.46	
1700.00	1715.20	1722.32	88.19	3.49	3.48	888.59	880.63	111.75	
1800.00	1815.18	1822.33	88.10	3.70	3.69	886.87	878.48	105.77	
1900.00	1911.52	1918.68	88.05	3.90	3.90	885.37	876.56	100.53	
2000.00	2012.35	2019.53	88.04	4.12	4.11	884.03	874.77	95.48	
2100.00	2114.13	2121.31	88.04	4.33	4.33	882.54	872.85	91.04	
2200.00	2216.36	2223.56	88.02	4.55	4.54	880.77	870.65	87.02	
2300.00	2315.84	2323.06	87.99	4.75	4.74	878.94	868.37	83.23	
2400.00	2414.56	2421.79	87.97	4.96	4.95	877.19	866.19	79.76	
2500.00	2514.28	2521.52	87.97	5.17	5.16	875.60	864.17	76.59	
2600.00	2615.71	2622.97	87.95	5.39	5.37	873.87	862.00	73.65	
2700.00	2716.45	2723.73	87.91	5.60	5.58	872.02	859.73	70.93	
2800.00	2815.60	2822.90	87.86	5.81	5.79	870.15	857.43	68.38	
2900.00	2914.34	2921.66	87.79	6.01	6.00	868.44	855.28	65.99	
3000.00	3013.21	3020.55	87.71	6.23	6.21	866.85	853.25	63.75	
3100.00	3111.88	3119.24	87.62	6.43	6.41	865.40	851.37	61.68	
3200.00	3209.42	3216.80	87.50	6.64	6.62	864.16	849.70	59.75	
3300.00	3307.06	3314.47	87.37	6.85	6.82	863.23	848.35	57.99	
3400.00	3407.18	3414.62	87.21	7.06	7.04	862.39	847.09	56.35	
3500.00	3507.23	3514.71	87.05	7.28	7.25	861.60	845.84	54.68	
3600.00	3606.14	3613.65	86.87	7.49	7.45	860.69	844.49	53.13	
3700.00	3701.36	3708.92	86.69	7.69	7.66	860.35	843.73	51.76	
3800.00	3800.24	3807.82	86.52	7.90	7.86	860.22	843.18	50.49	
3900.00	3896.08	3903.70	86.37	8.10	8.07	860.39	842.92	49.25	
4000.00	3991.02	3998.67	86.20	8.30	8.27	861.16	843.25	48.08	
4100.00	4086.85	4094.52	86.11	8.50	8.47	862.44	844.11	47.04	
4200.00	4182.41	4190.11	86.00	8.70	8.67	864.22	845.48	46.11	
4300.00	4280.27	4288.02	85.84	8.91	8.88	866.45	847.27	45.17	
4400.00	4385.62	4393.44	85.64	9.13	9.10	868.55	848.91	44.23	
4500.00	4468.86	4476.73	85.49	9.30	9.27	870.63	850.63	43.53	
4600.00	4542.10	4550.08	85.50	9.45	9.41	875.94	855.58	43.02	
4700.00	4635.74	4643.97	85.59	9.64	9.60	882.90	862.14	42.54	
4800.00	4727.70	4736.20	85.68	9.83	9.79	890.48	869.30	42.04	
4900.00	4811.40	4820.28	85.83	10.00	9.94	899.50	877.96	41.76	
5000.00	4901.52	4910.96	86.05	10.19	10.12	909.89	887.96	41.48	
5100.00	5011.52	5021.64	86.33	10.42	10.36	920.28	897.88	41.08	
5200.00	5135.10	5145.71	86.59	10.63	10.60	928.38	905.49	40.56	
5300.00	5251.82	5262.67	86.75	10.76	10.73	934.45	911.32	40.41	
5400.00	5357.80	5368.81	308.89	10.76	10.74	938.73	915.38	40.21	
5500.00	5461.35	5472.51	308.99	10.77	10.75	941.36	917.85	40.03	
5600.00	5572.98	5584.33	309.07	10.79	10.77	942.14	918.37	39.64	
5700.00	5686.63	5698.20	309.14	10.81	10.79	940.38	916.46	39.31	
5800.00	5798.73	5810.57	309.16	10.85	10.82	936.15	911.97	38.72	
5900.00	5907.15	5919.25	309.17	10.88	10.85	930.14	905.76	38.15	
6000.00	6014.68	6027.01	309.14	10.92	10.89	923.35	898.71	37.48	
6100.00	6124.97	6137.49	309.10	10.97	10.95	915.81	890.96	36.87	
6200.00	6228.81	6241.46	309.01	11.02	11.00	907.97	882.82	36.10	
6300.00	6336.43	6349.19	308.85	11.07	11.05	900.02	874.65	35.47	
6400.00	6447.38	6460.28	308.63	11.12	11.11	891.62	865.98	34.78	
6500.00	6566.42	6579.58	308.41	11.19	11.17	882.02	856.11	34.04	

5D Anti-Collision Report

Secondary Wall 8 Sea Snake SS State 1H Pilot (s) (TVD Relative to Kelly Bushing (Primary)) All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
6600.00	6690.60	6704.30	308.23	11.27	11.22	870.38	844.20	33.25	
6700.00	6790.00	6804.29	308.15	11.34	11.28	857.70	831.26	32.43	
6800.00	6885.24	6900.07	308.12	11.40	11.34	845.76	819.01	31.62	
6900.00	6978.00	6993.30	308.14	11.47	11.40	834.93	807.92	30.92	
7000.00	7073.42	7089.14	86.20	11.54	11.47	825.25	797.92	30.19	
7100.00	7184.83	7201.11	86.26	11.63	11.54	815.34	787.74	29.55	
7200.00	7293.55	7310.57	86.32	11.74	11.62	803.70	775.83	28.84	
7300.00	7390.25	7407.97	86.38	11.83	11.70	791.86	763.67	28.09	
7400.00	7486.90	7505.28	86.45	11.93	11.79	780.24	751.74	27.37	
7500.00	7582.34	7601.34	86.52	12.03	11.88	768.94	740.15	26.70	
7600.00	7676.59	7696.15	86.58	12.13	11.97	758.17	729.02	26.01	
7700.00	7777.07	7797.17	86.68	12.25	12.07	747.85	718.38	25.37	
7800.00	7878.22	7898.95	86.78	12.37	12.17	736.85	707.06	24.73	
7900.00	7972.07	7993.35	86.90	12.49	12.27	726.14	696.01	24.10	
8000.00	8074.16	8096.00	87.04	12.63	12.38	715.90	685.45	23.52	
8100.00	8169.89	8192.31	87.20	12.76	12.49	705.15	674.37	22.91	
8200.00	8271.28	8294.26	87.38	12.90	12.60	694.90	663.78	22.33	
8300.00	8367.54	8391.09	87.57	13.04	12.72	684.33	652.87	21.75	
8400.00	8471.23	8495.40	87.81	13.20	12.85	673.84	642.05	21.20	
8500.00	8564.31	8589.05	88.05	13.34	12.96	663.25	631.09	20.62	
8600.00	8660.09	8685.34	88.33	13.49	13.08	653.42	620.90	20.09	
8700.00	8757.84	8783.59	88.63	13.64	13.21	643.92	611.05	19.59	
8800.00	8849.29	8875.46	88.93	13.78	13.33	635.13	601.88	19.10	
8900.00	8940.59	8967.08	89.23	13.92	13.46	627.59	593.97	18.67	
9000.00	9032.05	9058.78	89.54	14.05	13.59	621.35	587.36	18.28	
9100.00	9128.21	9155.14	89.87	14.20	13.72	616.09	581.75	17.94	
9200.00	9226.46	9253.56	90.17	14.35	13.85	611.21	576.52	17.62	
9300.00	9320.57	9347.80	105.07	14.50	13.98	607.36	572.35	17.35	
9400.00	9414.59	9441.91	106.72	14.65	14.11	609.17	573.80	17.22	
9500.00	9499.08	9526.46	108.68	14.78	14.22	619.35	583.63	17.34	
9600.00	9573.30	9600.72	110.09	14.89	14.31	640.73	604.68	17.77	
9700.00	9634.33	9661.77	109.91	14.99	14.39	675.44	638.99	18.53	
9800.00	9679.85	9707.31	107.08	15.05	14.43	724.07	687.30	19.69	
9900.00	9708.53	9736.00	100.02	15.09	14.46	783.45	746.25	21.06	
10000.00	9722.15	9749.62	92.15	15.11	14.47	843.78	806.25	22.48	
10100.00	9721.46	9748.93	88.49	15.11	14.47	903.84	866.06	23.92	
10200.00	9718.85	9746.33	88.28	15.11	14.47	969.51	931.46	25.48	
10300.00	9716.24	9743.71	88.07	15.10	14.47	1040.66	1002.30	27.13	
10400.00	9713.61	9741.09	87.86	15.10	14.46	1116.23	1077.69	28.96	
10500.00	9710.98	9738.45	87.64	15.10	14.46	1195.39	1156.64	30.85	
10600.00	9708.33	9735.80	87.43	15.09	14.46	1277.47	1238.56	32.83	
10700.00	9705.67	9733.13	87.21	15.09	14.46	1361.94	1322.92	34.91	
10800.00	9702.99	9730.46	87.00	15.09	14.45	1448.38	1409.30	37.05	
10900.00	9700.43	9727.89	86.79	15.08	14.45	1536.47	1497.27	39.20	
11000.00	9697.88	9725.34	86.58	15.08	14.45	1625.93	1586.60	41.33	
11100.00	9695.31	9722.78	86.37	15.07	14.45	1716.55	1677.11	43.52	
11200.00	9692.74	9720.20	86.16	15.07	14.45	1808.16	1768.63	45.74	
11300.00	9690.16	9717.62	85.96	15.07	14.44	1900.61	1861.02	48.01	
11400.00	9687.56	9715.02	85.75	15.06	14.44	1993.78	1954.17	50.33	
11500.00	9684.95	9712.41	85.54	15.06	14.44	2087.59	2047.87	52.57	
11600.00	9682.33	9709.79	85.32	15.06	14.44	2181.94	2142.14	54.83	
11700.00	9679.70	9707.16	85.11	15.05	14.43	2276.77	2237.00	57.26	
11800.00	9677.06	9704.52	84.90	15.05	14.43	2372.02	2332.24	59.64	
11900.00	9674.41	9701.87	84.68	15.04	14.43	2467.64	2427.68	61.76	
12000.00	9671.74	9699.20	84.47	15.04	14.43	2563.59	2523.58	64.06	
12100.00	9669.07	9696.52	84.25	15.04	14.42	2659.84	2619.81	66.44	
12200.00	9666.38	9693.83	84.04	15.03	14.42	2756.36	2716.32	68.84	
12300.00	9663.68	9691.13	83.82	15.03	14.42	2853.11	2812.99	71.11	

SD Anti-Collision Report

Secondary Well : Sea Snake SS State 1H Pilot (s) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
12400.00	9660.97	9688.42	83.60	15.02	14.41	2950.08	2909.88	73.38	
12500.00	9658.24	9685.69	83.38	15.02	14.41	3047.24	3006.98	75.69	
12600.00	9655.50	9682.95	83.17	15.02	14.41	3144.57	3104.27	78.02	
12700.00	9652.76	9680.20	82.95	15.01	14.41	3242.07	3201.72	80.35	
12800.00	9649.99	9677.44	82.72	15.01	14.40	3339.71	3299.32	82.69	
12900.00	9647.22	9674.67	82.50	15.00	14.40	3437.48	3397.05	85.02	
13000.00	9644.43	9671.88	82.28	15.00	14.40	3535.38	3494.91	87.36	
13100.00	9641.64	9669.08	82.06	15.00	14.39	3633.39	3592.88	89.69	
13200.00	9638.83	9666.27	81.83	14.99	14.39	3731.50	3690.94	92.00	
13300.00	9636.00	9663.44	81.61	14.99	14.39	3829.71	3789.10	94.32	
13400.00	9633.16	9660.60	81.38	14.98	14.38	3928.00	3887.36	96.63	
13500.00	9630.31	9657.75	81.16	14.98	14.38	4026.38	3985.69	98.95	
13600.00	9627.45	9654.89	80.93	14.98	14.38	4124.84	4084.10	101.25	
13700.00	9624.58	9652.01	80.70	14.97	14.37	4223.36	4182.58	103.56	
13800.00	9621.69	9649.12	80.47	14.97	14.37	4321.95	4281.13	105.86	
13900.00	9618.78	9646.22	80.25	14.96	14.37	4420.61	4379.73	108.16	
14000.00	9615.87	9643.30	80.02	14.96	14.36	4519.32	4478.40	110.45	
14100.00	9612.94	9640.37	79.79	14.95	14.36	4618.08	4577.12	112.74	
14200.00	9610.00	9637.43	79.55	14.95	14.36	4716.89	4675.89	115.03	
14300.00	9607.42	9634.85	79.35	14.95	14.35	4815.75	4774.70	117.31	
14376.91	9605.72	9633.15	79.22	14.94	14.35	4891.82	4850.73	119.05	
Secondary Well : Sea Snake SS State SH (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	269.65	0.00	0.00	99.96	98.84	89.35	
100.00	100.00	100.00	269.65	0.11	0.11	99.96	98.62	74.63	
200.00	200.00	200.00	269.65	0.34	0.34	99.96	98.17	55.88	
300.00	300.00	300.00	269.65	0.56	0.56	99.96	97.72	44.66	
400.00	400.00	400.00	269.65	0.79	0.79	99.96	97.27	37.19	
500.00	500.00	500.00	269.65	1.01	1.01	99.96	96.82	31.86	
600.00	600.00	600.00	269.65	1.24	1.24	99.96	96.37	27.87	
700.00	700.00	700.00	269.65	1.46	1.46	99.96	95.93	24.76	
800.00	800.00	800.00	269.65	1.69	1.69	99.96	95.48	22.28	
900.00	900.00	900.00	269.65	1.91	1.91	99.96	95.03	20.25	
1000.00	1000.00	1000.00	269.65	2.14	2.14	99.96	94.58	18.56	
1100.00	1100.00	1100.00	269.65	2.36	2.36	99.96	94.13	17.13	
1200.00	1200.00	1200.00	269.65	2.59	2.59	99.96	93.68	15.91	
1300.00	1300.00	1300.00	269.65	2.81	2.81	99.96	93.23	14.84	
1400.00	1400.00	1400.00	269.65	3.03	3.03	99.96	92.78	13.92	
1500.00	1500.00	1500.00	269.65	3.26	3.26	99.96	92.64	13.65	
1600.00	1600.00	1600.00	269.65	3.48	3.48	99.96	92.19	12.86	
1700.00	1700.00	1700.00	269.65	3.71	3.71	99.96	91.74	12.16	
1800.00	1800.00	1800.00	269.65	3.93	3.93	99.96	91.29	11.53	
1900.00	1900.00	1900.00	269.65	4.16	4.16	99.96	90.84	10.96	
2000.00	2000.00	2000.00	269.65	4.38	4.38	99.96	90.39	10.45	
2100.00	2100.00	2100.00	269.65	4.61	4.61	99.96	89.94	9.98	
2200.00	2200.00	2200.00	269.65	4.83	4.83	99.96	89.49	9.55	
2300.00	2300.00	2300.00	269.65	5.06	5.06	99.96	89.04	9.16	
2400.00	2400.00	2400.00	269.65	5.28	5.28	99.96	88.60	8.79	
2500.00	2500.00	2500.00	269.65	5.51	5.51	99.96	88.15	8.46	
2600.00	2600.00	2600.00	269.65	5.73	5.73	99.96	87.70	8.15	
2700.00	2700.00	2700.00	269.65	5.96	5.96	99.96	87.25	7.86	
2800.00	2800.00	2800.00	269.65	6.18	6.18	99.96	86.80	7.59	
2900.00	2900.00	2900.00	269.65	6.41	6.41	99.96	86.35	7.34	
3000.00	3000.00	3000.00	269.65	6.63	6.63	99.96	85.90	7.11	
3100.00	3100.00	3100.00	269.65	6.86	6.86	99.96	85.45	6.89	
3200.00	3200.00	3200.00	269.65	7.08	7.08	99.96	85.00	6.68	
3300.00	3300.00	3300.00	269.65	7.31	7.31	99.96	84.55	6.49	

5D Anti-Collision Report

Secondary Well : Sea Snake SS State SH (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
3400.00	3400.00	3400.00	269.65	7.53	7.53	99.96	84.10	6.30	
3500.00	3500.00	3500.00	269.65	7.76	7.76	99.96	83.65	6.13	
3600.00	3600.00	3600.00	269.65	7.98	7.98	99.96	83.20	5.96	
3700.00	3700.00	3700.00	269.65	8.20	8.20	99.96	82.75	5.81	
3800.00	3800.00	3800.00	269.65	8.43	8.43	99.96	82.30	5.66	
3900.00	3900.00	3900.00	269.65	8.65	8.65	99.96	81.85	5.52	
4000.00	4000.00	4000.00	269.65	8.88	8.88	99.96	81.40	5.39	
4100.00	4100.00	4100.00	269.65	9.10	9.10	99.96	80.95	5.26	
4200.00	4200.00	4200.00	269.65	9.33	9.33	99.96	80.50	5.14	
4300.00	4300.00	4300.00	269.65	9.55	9.55	99.96	80.05	5.02	
4400.00	4400.00	4400.00	269.65	9.78	9.78	99.96	79.60	4.91	
4500.00	4500.00	4500.00	269.65	10.00	10.00	99.96	79.15	4.80	
4600.00	4600.00	4600.00	269.65	10.23	10.23	99.96	78.70	4.70	
4700.00	4700.00	4700.00	269.65	10.45	10.45	99.96	78.26	4.61	
4800.00	4800.00	4800.00	269.65	10.68	10.68	99.96	77.81	4.51	
4900.00	4900.00	4900.00	269.65	10.90	10.90	99.96	77.36	4.42	
5000.00	5000.00	5000.00	269.65	11.13	11.13	99.96	76.91	4.34	
5100.00	5100.00	5100.00	269.65	11.35	11.35	99.96	76.46	4.25	
5200.00	5200.00	5200.00	269.65	11.58	11.58	99.96	76.01	4.17	
5300.00	5300.00	5300.00	269.65	11.80	11.80	99.96	75.56	4.14	
5400.00	5399.98	5399.99	131.52	12.00	11.99	100.55	76.04	4.10	
5500.00	5499.91	5499.95	131.14	12.16	12.16	102.31	77.48	4.12	
5600.00	5599.73	5599.86	130.53	12.33	12.32	105.25	80.05	4.18	
5700.00	5699.38	5699.71	129.74	12.50	12.47	109.38	83.84	4.28	
5800.00	5798.83	5799.46	128.80	12.67	12.63	114.72	88.78	4.42	
5900.00	5898.25	5899.26	127.89	12.85	12.80	120.67	94.42	4.60	
6000.00	5997.68	5999.07	127.06	13.03	12.98	126.66	100.03	4.76	
6100.00	6097.26	6098.99	126.37	13.23	13.19	132.37	105.31	4.89	
6200.00	6196.96	6198.97	125.79	13.47	13.42	137.50	110.02	5.00	
6300.00	6296.77	6299.00	125.32	13.70	13.65	142.03	114.10	5.09	
6400.00	6396.68	6399.06	124.94	13.93	13.88	145.98	117.56	5.14	
6500.00	6496.66	6499.17	124.63	14.16	14.11	149.32	120.44	5.17	
6600.00	6596.71	6599.30	124.39	14.40	14.34	152.05	122.74	5.19	
6700.00	6696.82	6699.45	124.21	14.62	14.57	154.18	124.44	5.18	
6800.00	6796.97	6799.63	124.08	14.85	14.80	155.71	125.52	5.16	
6900.00	6897.15	6899.81	124.01	15.08	15.02	156.62	125.98	5.11	
7000.00	6997.34	7000.00	261.98	15.30	15.25	156.92	125.84	5.05	
7100.00	7097.34	7100.00	261.98	15.53	15.47	156.92	125.39	4.98	
7200.00	7197.34	7200.00	261.98	15.75	15.70	156.92	124.95	4.91	
7300.00	7297.34	7300.00	261.98	15.97	15.92	156.92	124.50	4.84	
7400.00	7397.34	7400.00	261.98	16.20	16.14	156.92	124.06	4.77	
7500.00	7497.34	7500.00	261.98	16.42	16.37	156.92	123.61	4.71	
7600.00	7597.34	7600.00	261.98	16.64	16.59	156.92	123.16	4.65	
7700.00	7697.34	7700.00	261.98	16.87	16.82	156.92	122.72	4.59	
7800.00	7797.34	7800.00	261.98	17.09	17.04	156.92	122.27	4.53	
7900.00	7897.34	7900.00	261.98	17.31	17.26	156.92	121.83	4.47	
8000.00	7997.34	8000.00	261.98	17.54	17.49	156.92	121.38	4.41	
8100.00	8097.34	8100.00	261.98	17.76	17.71	156.92	120.93	4.36	
8200.00	8197.34	8200.00	261.98	17.99	17.94	156.92	120.49	4.31	
8300.00	8297.34	8300.00	261.98	18.21	18.16	156.92	120.04	4.25	
8400.00	8397.34	8400.00	261.98	18.43	18.39	156.92	119.60	4.20	
8500.00	8497.34	8500.00	261.98	18.66	18.61	156.92	119.15	4.15	
8600.00	8597.34	8600.00	261.98	18.88	18.83	156.92	118.70	4.11	
8700.00	8697.34	8700.00	261.98	19.10	19.06	156.92	118.26	4.06	
8800.00	8797.34	8800.00	261.98	19.33	19.28	156.92	117.81	4.01	
8900.00	8897.34	8900.00	261.98	19.55	19.51	156.92	117.36	3.97	
9000.00	8997.34	9000.00	261.98	19.78	19.73	156.92	116.92	3.92	
9100.00	9097.34	9100.00	261.98	20.00	19.96	156.92	116.47	3.88	

5D Anti-Collision Report

Secondary Well : Sea Snake 85 State 5H (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
9200.00	9197.34	9200.00	261.98	20.22	20.18	156.92	116.02	3.84	
9300.00	9297.28	9299.95	275.65	20.45	20.40	156.73	115.38	3.79	
9400.00	9395.26	9397.92	268.73	20.67	20.62	156.01	114.27	3.74	
9500.00	9487.13	9489.79	256.56	20.87	20.83	161.69	119.51	3.83	
9600.00	9568.87	9571.54	244.20	21.06	21.01	185.23	142.68	4.35	
9700.00	9636.92	9639.59	236.30	21.21	21.17	232.89	190.01	5.43	
9800.00	9688.30	9690.97	235.01	21.32	21.28	301.93	258.83	7.01	
9900.00	9721.47	9724.14	235.23	21.40	21.36	386.50	343.20	8.93	
10000.00	9738.05	9740.71	243.61	21.43	21.39	481.85	438.55	11.13	
10100.00	9740.00	9742.66	270.00	21.44	21.40	581.19	537.92	13.43	
10200.00	9740.00	9742.66	270.00	21.44	21.40	680.89	637.56	15.71	
10300.00	10440.00	11018.14	180.02	25.90	16.57	700.00	667.97	21.85	
10400.00	10440.00	11118.14	180.02	26.82	16.80	700.00	667.49	21.53	
10500.00	10440.00	11218.14	180.02	27.82	17.06	700.00	666.94	21.17	
10600.00	10440.00	11318.14	180.02	28.91	17.34	700.00	666.35	20.80	
10700.00	10440.00	11418.14	180.02	30.06	17.64	700.00	665.70	20.41	
10800.00	10440.00	11518.14	180.02	31.27	17.97	700.00	665.02	20.01	
10900.00	10440.00	11618.14	180.02	32.54	18.34	700.00	664.25	19.58	
11000.00	10440.00	11718.14	180.01	33.86	18.75	700.00	663.45	19.15	
11100.00	10440.00	11818.14	180.01	35.23	19.17	700.00	662.61	18.72	
11200.00	10440.00	11918.14	180.01	36.63	19.61	700.00	661.70	18.27	
11300.00	10440.00	12018.14	180.01	38.07	20.06	700.00	660.75	17.83	
11400.00	10440.00	12118.14	180.01	39.55	20.49	700.00	659.81	17.41	
11500.00	10440.00	12218.14	180.01	41.05	20.93	700.00	658.87	17.02	
11600.00	10440.00	12318.14	180.01	42.57	21.48	700.00	657.86	16.61	
11700.00	10440.00	12418.14	180.01	44.12	21.90	700.00	656.85	16.22	
11800.00	10440.00	12518.14	180.01	45.69	22.47	700.00	655.79	15.83	
11900.00	10440.00	12618.14	180.01	47.28	22.99	700.00	654.66	15.44	
12000.00	10440.00	12718.14	180.01	48.88	23.52	700.00	653.64	15.10	
12100.00	10440.00	12818.14	180.01	50.50	24.10	700.00	652.43	14.71	
12200.00	10440.00	12918.14	180.01	52.13	24.67	700.00	651.28	14.37	
12300.00	10440.00	13018.14	180.01	53.77	25.22	700.00	650.11	14.03	
12400.00	10440.00	13118.14	180.01	55.43	25.75	700.00	648.99	13.72	
12500.00	10440.00	13218.14	180.01	57.10	26.39	700.00	647.76	13.40	
12600.00	10440.00	13318.14	180.01	58.77	27.00	700.00	646.56	13.10	
12700.00	10440.00	13418.14	180.01	60.46	27.59	700.00	645.37	12.81	
12800.00	10440.00	13518.14	180.01	62.15	28.19	700.00	644.17	12.54	
12900.00	10440.00	13618.14	180.01	63.85	28.78	700.00	642.93	12.27	
13000.00	10440.00	13718.14	180.01	65.55	29.38	700.00	641.69	12.00	
13100.00	10440.00	13818.14	180.01	67.26	29.98	700.00	640.44	11.75	
13200.00	10440.00	13918.14	180.01	68.98	30.59	700.00	639.18	11.51	
13300.00	10440.00	14018.14	180.00	70.71	31.20	700.00	637.91	11.27	
13400.00	10440.00	14118.14	180.00	72.43	31.82	700.00	636.63	11.05	
13500.00	10440.00	14218.14	180.00	74.17	32.48	700.00	635.32	10.82	
13600.00	10440.00	14318.14	180.00	75.90	33.13	700.00	634.00	10.61	
13700.00	10440.00	14418.14	180.00	77.64	33.79	700.00	632.68	10.40	
13800.00	10440.00	14518.14	180.00	79.39	34.45	700.00	631.35	10.20	
13900.00	10440.00	14618.14	180.00	81.14	35.11	700.00	630.02	10.00	
14000.00	10440.00	14718.14	180.00	82.89	35.77	700.00	628.69	9.82	
14100.00	10440.00	14818.14	180.00	84.64	36.43	700.00	627.35	9.63	
14200.00	10440.00	14918.14	180.00	86.40	37.10	700.00	626.00	9.46	
14300.00	10440.00	15018.14	180.00	88.16	37.77	700.00	624.65	9.29	
14376.91	10440.00	15095.05	180.00	89.52	38.29	700.00	623.61	9.16	

Secondary Well : Sea Snake 85 State 7H (p) (TVD Relative to Kelly Bushing (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
0.00	0.00	0.00	269.67	0.00	0.00	49.99	48.87	44.69	
100.00	100.00	100.00	269.67	0.11	0.11	49.99	48.65	37.32	

5D Anti-Collision Report

Secondary Well : Sea Snake SS State 7H (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
200.00	200.00	200.00	269.67	0.34	0.34	49.99	48.20	27.94	
300.00	300.00	300.00	269.67	0.56	0.56	49.99	47.75	22.33	
400.00	400.00	400.00	269.67	0.79	0.79	49.99	47.30	18.60	
500.00	500.00	500.00	269.67	1.01	1.01	49.99	46.85	15.93	
600.00	600.00	600.00	269.67	1.24	1.24	49.99	46.40	13.94	
700.00	700.00	700.00	269.67	1.46	1.46	49.99	45.95	12.38	
800.00	800.00	800.00	269.67	1.69	1.69	49.99	45.50	11.14	
900.00	900.00	900.00	269.67	1.91	1.91	49.99	45.05	10.13	
1000.00	1000.00	1000.00	269.67	2.14	2.14	49.99	44.61	9.28	
1100.00	1100.00	1100.00	269.67	2.36	2.36	49.99	44.16	8.57	
1200.00	1200.00	1200.00	269.67	2.59	2.59	49.99	43.71	7.95	
1300.00	1300.00	1300.00	269.67	2.81	2.81	49.99	43.26	7.42	
1400.00	1400.00	1400.00	269.67	3.03	3.03	49.99	42.81	6.96	
1500.00	1500.00	1500.00	269.67	3.26	3.26	49.99	42.67	6.83	
1600.00	1600.00	1600.00	269.67	3.48	3.48	49.99	42.22	6.43	
1700.00	1700.00	1700.00	269.67	3.71	3.71	49.99	41.77	6.08	
1800.00	1800.00	1800.00	269.67	3.93	3.93	49.99	41.32	5.77	
1900.00	1900.00	1900.00	269.67	4.16	4.16	49.99	40.87	5.48	
2000.00	2000.00	2000.00	269.67	4.38	4.38	49.99	40.42	5.22	
2100.00	2100.00	2100.00	269.67	4.61	4.61	49.99	39.97	4.99	
2200.00	2200.00	2200.00	269.67	4.83	4.83	49.99	39.52	4.78	
2300.00	2300.00	2300.00	269.67	5.06	5.06	49.99	39.07	4.58	
2400.00	2400.00	2400.00	269.67	5.28	5.28	49.99	38.62	4.40	
2500.00	2500.00	2500.00	269.67	5.51	5.51	49.99	38.17	4.23	
2600.00	2600.00	2600.00	269.67	5.73	5.73	49.99	37.72	4.08	
2700.00	2700.00	2700.00	269.67	5.96	5.96	49.99	37.28	3.93	
2800.00	2800.00	2800.00	269.67	6.18	6.18	49.99	36.83	3.80	
2900.00	2900.00	2900.00	269.67	6.41	6.41	49.99	36.38	3.67	
3000.00	3000.00	3000.00	269.67	6.63	6.63	49.99	35.93	3.55	
3100.00	3100.00	3100.00	269.67	6.86	6.86	49.99	35.48	3.44	
3200.00	3200.00	3200.00	269.67	7.08	7.08	49.99	35.03	3.34	
3300.00	3300.00	3300.00	269.67	7.31	7.31	49.99	34.58	3.24	
3400.00	3400.00	3400.00	269.67	7.53	7.53	49.99	34.13	3.15	
3500.00	3500.00	3500.00	269.67	7.76	7.76	49.99	33.68	3.06	
3600.00	3600.00	3600.00	269.67	7.98	7.98	49.99	33.23	2.98	
3700.00	3700.00	3700.00	269.67	8.20	8.20	49.99	32.78	2.90	
3800.00	3800.00	3800.00	269.67	8.43	8.43	49.99	32.33	2.83	
3900.00	3900.00	3900.00	269.67	8.65	8.65	49.99	31.88	2.76	
4000.00	4000.00	4000.00	269.67	8.88	8.88	49.99	31.43	2.69	
4100.00	4100.00	4100.00	269.67	9.10	9.10	49.99	30.98	2.63	
4200.00	4200.00	4200.00	269.67	9.33	9.33	49.99	30.53	2.57	
4300.00	4300.00	4300.00	269.67	9.55	9.55	49.99	30.08	2.51	
4400.00	4400.00	4400.00	269.67	9.78	9.78	49.99	29.63	2.46	
4500.00	4500.00	4500.00	269.67	10.00	10.00	49.99	29.18	2.40	
4600.00	4600.00	4600.00	269.67	10.23	10.23	49.99	28.73	2.35	
4700.00	4700.00	4700.00	269.67	10.45	10.45	49.99	28.28	2.30	
4800.00	4800.00	4800.00	269.67	10.68	10.68	49.99	27.83	2.26	
4900.00	4900.00	4900.00	269.67	10.90	10.90	49.99	27.38	2.21	
5000.00	5000.00	5000.00	269.67	11.13	11.13	49.99	26.94	2.17	
5100.00	5100.00	5100.00	269.67	11.35	11.35	49.99	26.49	2.13	
5200.00	5200.00	5200.00	269.67	11.58	11.58	49.99	26.04	2.09	
5300.00	5300.00	5300.00	269.67	11.80	11.80	49.99	25.83	2.07	
5400.00	5399.99	5399.99	132.40	12.03	12.03	50.58	26.00	2.06	
5500.00	5499.96	5499.96	134.50	12.25	12.25	52.38	27.40	2.10	
5600.00	5599.86	5599.86	137.69	12.48	12.48	55.52	30.17	2.19	
5700.00	5699.68	5699.68	141.58	12.70	12.70	60.18	34.40	2.33	
5800.00	5799.37	5799.37	145.74	12.92	12.92	66.51	40.38	2.54	
5900.00	5898.99	5898.99	149.54	13.15	13.15	73.88	47.34	2.78	

5D Anti-Collision Report

Secondary Well : Sea Snake 85 State 7H (p) (TVD Relative to Kelly Bushing (Primary)) ; All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
6000.00	5998.60	5998.60	152.65	13.37	13.37	81.52	54.55	3.02	
6100.00	6098.26	6098.26	155.11	13.60	13.60	88.97	61.56	3.25	
6200.00	6197.99	6197.99	156.99	13.82	13.82	95.74	67.93	3.44	
6300.00	6297.77	6297.77	158.44	14.04	14.04	101.80	73.54	3.60	
6400.00	6397.61	6397.61	159.57	14.27	14.27	107.09	78.39	3.73	
6500.00	6497.49	6497.49	160.43	14.49	14.49	111.60	82.44	3.83	
6600.00	6597.42	6597.42	161.09	14.72	14.72	115.31	85.69	3.89	
6700.00	6697.37	6697.37	161.58	14.94	14.94	118.20	88.13	3.93	
6800.00	6797.35	6797.35	161.91	15.17	15.17	120.27	89.76	3.94	
6900.00	6897.34	6897.34	162.10	15.39	15.39	121.52	90.56	3.93	
7000.00	6997.34	6997.34	300.17	15.62	15.62	121.93	90.53	3.88	
7100.00	7097.34	7097.34	300.17	15.84	15.84	121.93	90.09	3.83	
7200.00	7197.34	7197.34	300.17	16.07	16.07	121.93	89.64	3.78	
7300.00	7297.34	7297.34	300.17	16.29	16.29	121.93	89.19	3.72	
7400.00	7397.34	7397.34	300.17	16.52	16.52	121.93	88.74	3.67	
7500.00	7497.34	7497.34	300.17	16.74	16.74	121.93	88.29	3.62	
7600.00	7597.34	7597.34	300.17	16.97	16.97	121.93	87.84	3.58	
7700.00	7697.34	7697.34	300.17	17.19	17.19	121.93	87.40	3.53	
7800.00	7797.34	7797.34	300.17	17.41	17.41	121.93	86.95	3.49	
7900.00	7897.34	7897.34	300.17	17.64	17.64	121.93	86.50	3.44	
8000.00	7997.34	7997.34	300.17	17.86	17.86	121.93	86.05	3.40	
8100.00	8097.34	8097.34	300.17	18.09	18.09	121.93	85.60	3.36	
8200.00	8197.34	8197.34	300.17	18.31	18.31	121.93	85.15	3.32	
8300.00	8297.34	8297.34	300.17	18.54	18.54	121.93	84.71	3.28	
8400.00	8397.34	8397.34	300.17	18.76	18.76	121.93	84.26	3.24	
8500.00	8497.34	8497.34	300.17	18.99	18.99	121.93	83.81	3.20	
8600.00	8597.34	8597.34	300.17	19.21	19.21	121.93	83.36	3.16	
8700.00	8697.34	8697.34	300.17	19.44	19.44	121.93	82.91	3.12	
8800.00	8797.34	8797.34	300.17	19.66	19.66	121.93	82.46	3.09	
8900.00	8897.34	8897.34	300.17	19.89	19.89	121.93	82.01	3.05	
9000.00	8997.34	8997.34	300.17	20.11	20.11	121.93	81.57	3.02	
9100.00	9097.34	9097.34	300.17	20.34	20.34	121.93	81.12	2.99	
9200.00	9197.34	9197.34	300.17	20.56	20.56	121.93	80.67	2.95	
9300.00	9297.28	9297.28	313.79	20.79	20.79	120.66	78.96	2.89	
9400.00	9395.26	9395.26	305.38	21.01	21.01	108.30	66.16	2.57	
9500.00	9487.13	9487.13	284.41	21.21	21.21	90.62	48.13	2.13	
9600.00	9568.87	9568.87	254.60	21.40	21.40	92.56	49.73	2.16	
9700.00	9653.52	9653.73	229.36	21.58	21.39	133.04	90.11	3.10	
9800.00	9753.84	9757.40	211.85	21.80	21.00	191.43	149.38	4.55	
9900.00	9872.93	9893.42	194.24	22.10	19.67	253.75	214.51	6.47	
10000.00	10006.94	10099.59	182.01	22.70	16.87	306.13	272.47	9.09	
10100.00	10065.18	10352.56	180.00	23.99	15.13	325.20	295.02	10.78	
10200.00	10066.12	10452.55	180.00	24.69	15.29	326.13	295.60	10.68	
10300.00	10067.05	10552.55	180.00	25.49	15.48	327.06	296.11	10.57	
10400.00	10067.98	10652.54	180.00	26.40	15.71	327.99	296.56	10.44	
10500.00	10068.91	10752.54	180.00	27.39	15.96	328.92	296.95	10.29	
10600.00	10069.84	10852.53	180.00	28.47	16.24	329.85	297.29	10.13	
10700.00	10070.77	10952.53	180.00	29.63	16.55	330.78	297.57	9.96	
10800.00	10071.70	11052.52	180.00	30.84	16.89	331.71	297.80	9.78	
10900.00	10072.63	11152.52	180.00	32.12	17.25	332.64	297.98	9.60	
11000.00	10073.56	11252.52	180.00	33.44	17.63	333.57	298.13	9.41	
11100.00	10074.49	11352.51	180.00	34.82	18.03	334.50	298.24	9.22	
11200.00	10075.42	11452.51	180.00	36.23	18.45	335.43	298.31	9.03	
11300.00	10076.35	11552.50	180.00	37.67	18.89	336.36	298.30	8.84	
11400.00	10077.28	11652.50	180.00	39.15	19.34	337.29	298.26	8.64	
11500.00	10078.21	11752.49	180.00	40.66	19.80	338.22	298.22	8.46	
11600.00	10079.14	11852.49	180.00	42.19	20.26	339.15	298.24	8.29	
11700.00	10080.07	11952.49	180.00	43.74	20.81	340.08	298.03	8.09	

5D Anti-Collision Report

Secondary Well: Sea Snake SS State 7H (p) (TVD Relative to Kelly Bushing (Primary)); All Azimuth Relative to GRID NORTH									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
11800.00	10081.00	12052.48	180.00	45.32	21.37	341.01	297.90	7.91	
11900.00	10081.93	12152.48	180.00	46.91	21.82	341.94	297.78	7.74	
12000.00	10082.86	12252.47	180.00	48.52	22.43	342.87	297.60	7.57	
12100.00	10083.79	12352.47	180.00	50.14	22.96	343.80	297.37	7.40	
12200.00	10084.72	12452.46	180.00	51.78	23.56	344.73	297.14	7.24	
12300.00	10085.65	12552.46	180.00	53.43	24.11	345.66	296.89	7.09	
12400.00	10086.58	12652.46	180.00	55.09	24.72	346.59	296.61	6.93	
12500.00	10087.51	12752.45	180.00	56.76	25.28	347.52	296.39	6.80	
12600.00	10088.44	12852.45	180.00	58.43	25.84	348.45	296.16	6.66	
12700.00	10089.37	12952.44	180.00	60.12	26.41	349.39	295.93	6.54	
12800.00	10090.30	13052.44	180.00	61.82	27.03	350.32	295.64	6.41	
12900.00	10091.23	13152.43	180.00	63.52	27.67	351.25	295.32	6.28	
13000.00	10092.16	13252.43	180.00	65.23	28.30	352.18	294.97	6.16	
13100.00	10093.09	13352.43	180.00	66.94	28.94	353.11	294.61	6.04	
13200.00	10094.02	13452.42	180.00	68.67	29.57	354.04	294.25	5.92	
13300.00	10094.95	13552.42	180.00	70.39	30.22	354.97	293.88	5.81	
13400.00	10095.88	13652.41	180.00	72.12	30.86	355.90	293.51	5.70	
13500.00	10096.81	13752.41	180.00	73.86	31.51	356.83	293.13	5.60	
13600.00	10097.74	13852.40	180.00	75.60	32.16	357.76	292.75	5.50	
13700.00	10098.67	13952.40	180.00	77.34	32.82	358.69	292.36	5.41	
13800.00	10099.60	14052.40	180.00	79.09	33.47	359.62	291.96	5.32	
13900.00	10100.53	14152.39	180.00	80.84	34.13	360.55	291.56	5.23	
14000.00	10101.46	14252.39	180.00	82.59	34.80	361.48	291.15	5.14	
14100.00	10102.39	14352.38	180.00	84.35	35.46	362.41	290.74	5.06	
14200.00	10103.32	14452.38	180.00	86.11	36.13	363.34	290.33	4.98	
14300.00	10104.25	14552.37	180.00	87.87	36.80	364.27	289.91	4.90	
14376.91	10104.97	14629.28	180.00	89.22	37.32	364.98	289.58	4.84	

**Weatherford®**

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: May 29, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Sea Snake 35 State 9H
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: 457161.85 US Survey Foot	Latitude: 32.254387 Degree
East: 783377.06 US Survey Foot	Longitude: -103.550372 Degree
Convergence: 0.42°	
Declination: 7.21°	
Total Correction: 6.79°	
Datum Transformation: none	

Geodetic Location WGS84
MSL Elevation = 0 m
Latitude = 32° 15' 15.79" N
Longitude = 103° 33' 01.34" W

Magnetic Declination = 7.21 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6660
Local Field Strength = 48224 nT	Magnetic Vector X = 23799 nT
Magnetic Dip = 60.17 deg	Magnetic Vector Y = 3010 nT
Magnetic Model = bggm2015.dat	Magnetic Vector Z = 41835 nT
Run Date = November 15, 2015	Magnetic Vector H = 23988 nT

Signed: _____ Date: _____

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