

Devon Energy, North Thistle 15-10 State Com 1H

1. 17722Geologic Formations

TVD of target	10,340'	Pilot hole depth	10,500'
MD at TD:	17,722'	Deepest expected fresh water:	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	1,324	Barren	
Top of Salt	1,570	Barren	
Lamar	5,250	Barren	
Cherry Canyon	6,305	Oil	
Brushy Canyon	7,795	Oil	
Lower Brushy	8,945	Oil	
1 st Bone Spring Lime	9,133	Oil	
Leonard Shale Upper	9,307	Oil	
Leonard Shale Middle	9,605	Oil	
Leonard Shale Lower	9,781	Oil	
1 st Bone Spring Sand	10,265	Oil	

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

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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	1,400'	13.375"	48	H-40	STC	1.30	3.02	8.51
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	9,700'	7"	29	HCP-110	BTC	1.82	2.45	3.11
8.75"	9,700'	17,722'	5.5"	17	P-110	BTC	1.66	2.22	3.03
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
13-3/8" Surface	680	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	550	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
9-5/8" Inter.	1090	12.9	9.81	1.85	14	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	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
7 x 5- 1/2" Combo Prod.	310	10.4	16.9	3.17	16	Lead: Tuned Light ® + 0.125 lb/sk Pol-E-Flake
	2080	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

Casing String	TOC	% Excess
13-3/8" Surface	0'	100%
9-5/8" Intermediate	0'	75%
7 x 5-1/2" Production Casing	5000'	25%

Pilot Hole depth 10500ft

KOP ft = 9862ft

Plug top	Plug Bottom	% Excess	No. Sacks	Wt. lb/gal	Yld ft ³ /sack	Water gal/sk	Slurry Description and Cement Type
9662	10500	10	325	15.6	1.19	5.42	Class H + 0.5% BWOC HR-601 + 0.2% Halad-9

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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	x	
			Blind Ram		
			Pipe Ram		
			Double Ram	x	
			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.

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.
	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 3M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time. • If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted. • Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating. • Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2. After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the 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
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5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	1,400'	FW Gel	8.6-8.8	28-34	N/C
1,400'	5,200'	Saturated Brine	10.0-10.2	28-34	N/C
5,200'	17,722'	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	2768 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



North Thistle 15-10
State Com 1H
Lea Co, NM



KB-3739
GL-3714

Plan Data for North Thistle 15-10 State Com 1H Pilot

Plan Point Information:
DogLeg Severity Unit: °/100.00ft Position offsets from Slot centre
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 475459.48 779538.27 0.00 0.00
10500.00 0.00 0.00 10500.00 0.00 0.00 475459.48 779538.27 0.00 0.00

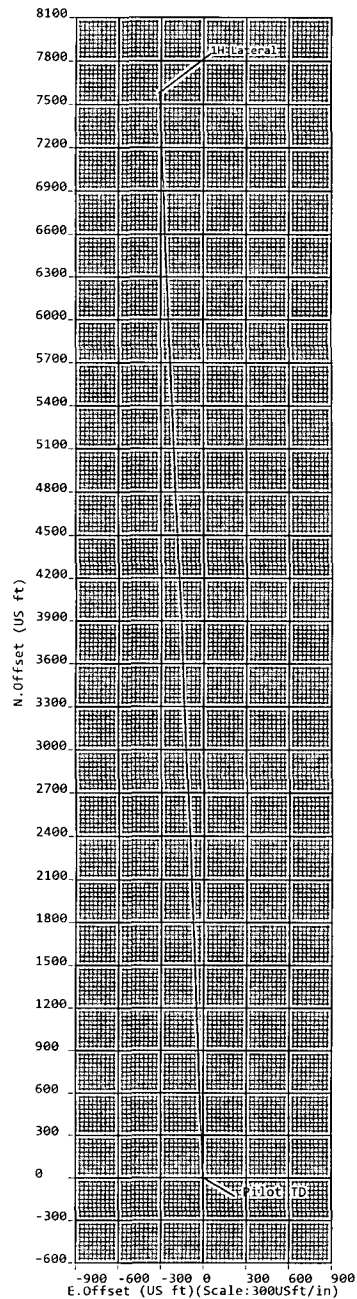
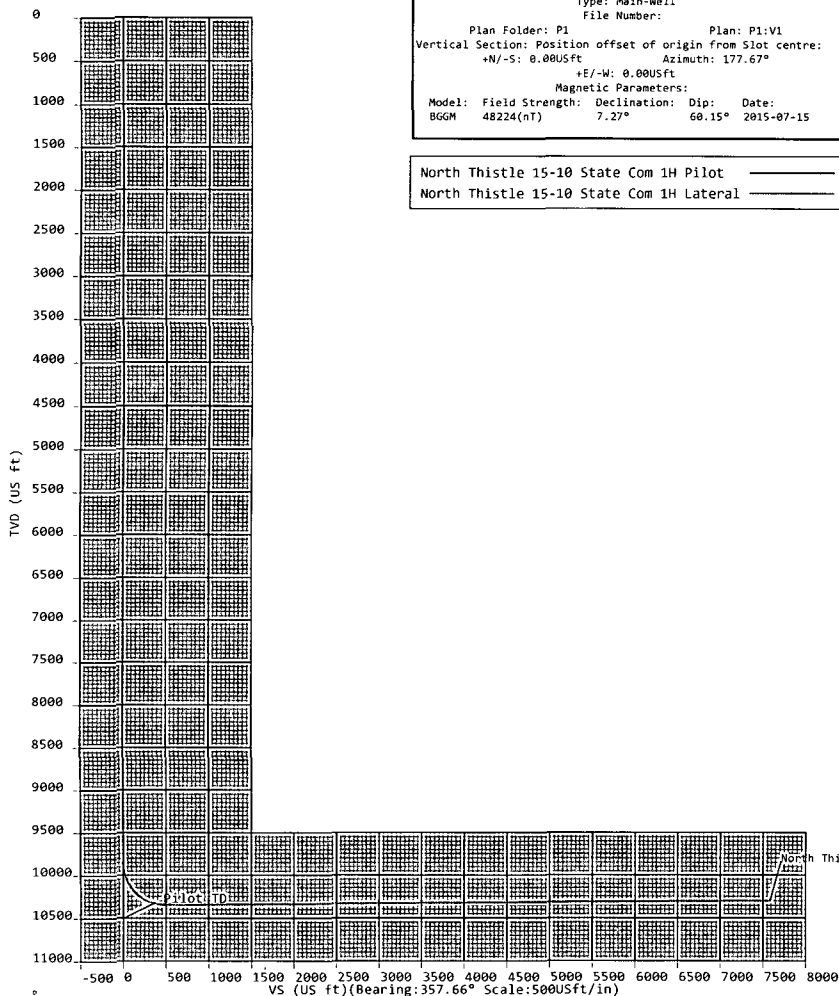
Plan Data for North Thistle 15-10 State Com 1H Pilot

Slot: North Thistle 15-10 State Com 1H
Position:
Offset is from Site centre
+N/-S: 0.00USft Northing: 475459.48USft Latitude: 32°18'17.1"
+E/-W: 0.00USft Easting: 779538.27USft Longitude: -103°33'44.5"
Elevation Above VRO: 3714.00USft

Plan Data for North Thistle 15-10 State Com 1H Pilot

Well: North Thistle 15-10 State Com 1H Pilot
Type: Main-Well
File Number:
Plan Folder: P1 Plan: P1:V1
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 177.67°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
BGGM 48224(nT) 7.27° 60.15° 2015-07-15

North Thistle 15-10 State Com 1H Pilot
North Thistle 15-10 State Com 1H Lateral



Weatherford

Sign Off: Russell Joyner

5D Plan Report

Devon Energy**Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *North Thistle 15-10 State Com 1H***Well Name:** *North Thistle 15-10 State Com 1H Pilot***Plan:** *P1:V1*

06 March 2015



North Thistle 15-10 State Com 1H Pilot

Field Name Lea Co, NM Nad 89 NMEZ	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD83 / New Mexico East (ftUS)			
	Comment :			
Site Name North Thistle 15-10 State Com 1H	Units : US ft	North Reference : Grid	Convergence Angle : 0.41	
	Position	Northing : 475459.48 US ft	Latitude : 32° 18' 17.12"	
		Easting : 779538.27 US ft	Longitude : -103° 33' 44.51"	
	Elevation above Mean Sea Level: 3714.00 US ft			
Comment :				
Slot Name North Thistle 15-10 State Com 1H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing : 475459.48 US ft	Latitude : 32°18'17.12"	
	+E / -W : 0.00 US ft	Easting : 779538.27 US ft	Longitude : -103°33'44.51"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3714.00 US ft				
Comment :				
Well Name North Thistle 15-10 State Com 1H Pilot	Type : Main well	UWI :	Plan : P1:V1	
	Rig Height <i>Kelly Bushing</i> : 25.00 US ft	Comment :		
	Relative to Mean Sea Level: 3739.00 US ft			
	Closure Distance : 0 US ft	Closure Azimuth : 0°		
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az : 357.66°	
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48224.9nT	Dec : 7.27°	Dip : 60.15°
	Date : 15/Jul/2015			

Target Set

Name : North Thistle 15-10 State Com 1H Number of Targets : 1

Comment :

Target Name: PBHL Shape: Cuboid	Position (Relative to Slot centre)			
	+N / -S : 7580.54US ft	Northing : 483040.02 US ft	Latitude : 32°19'32.16"	
	+E / -W : -309.96 US ft	Easting : 779228.31US ft	Longitude : -103°33'47.48"	
	TVD (Kelly Bushing) : 10295.00 US ft			
Orientation Azimuth : 0.00° Inclination : 0.00°				
Dimensions Length : 0.00 US ft Breadth : 0.00 US ft Height : 0.00 US ft				

Well path created using minimum curvature

5D Plan Report

Slient 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	
10500.00	0.00	0.00	10500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Pilot TD

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		

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	
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5700.00	0.00	0.00	5700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6100.00	0.00	0.00	6100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6300.00	0.00	0.00	6300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6500.00	0.00	0.00	6500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6700.00	0.00	0.00	6700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6800.00	0.00	0.00	6800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
6900.00	0.00	0.00	6900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7000.00	0.00	0.00	7000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7100.00	0.00	0.00	7100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7200.00	0.00	0.00	7200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7300.00	0.00	0.00	7300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7400.00	0.00	0.00	7400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7500.00	0.00	0.00	7500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7600.00	0.00	0.00	7600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7700.00	0.00	0.00	7700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7800.00	0.00	0.00	7800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
7900.00	0.00	0.00	7900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8000.00	0.00	0.00	8000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8100.00	0.00	0.00	8100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8200.00	0.00	0.00	8200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8300.00	0.00	0.00	8300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8400.00	0.00	0.00	8400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8500.00	0.00	0.00	8500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8600.00	0.00	0.00	8600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8700.00	0.00	0.00	8700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8800.00	0.00	0.00	8800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
8900.00	0.00	0.00	8900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9000.00	0.00	0.00	9000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9100.00	0.00	0.00	9100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9200.00	0.00	0.00	9200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9300.00	0.00	0.00	9300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9400.00	0.00	0.00	9400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9500.00	0.00	0.00	9500.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9600.00	0.00	0.00	9600.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9700.00	0.00	0.00	9700.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9800.00	0.00	0.00	9800.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
9900.00	0.00	0.00	9900.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
10000.00	0.00	0.00	10000.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
10100.00	0.00	0.00	10100.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
10200.00	0.00	0.00	10200.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
10300.00	0.00	0.00	10300.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
10400.00	0.00	0.00	10400.00	0.00	0.00	0.00	0.00	475459.48	779538.27		
10500.00	0.00	0.00	10500.00	0.00	0.00	0.00	0.00	475459.48	779538.27	Pilot TD	

**Weatherford[®]**

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: March 06, 2015
Job Number: _____
Customer: Devon Energy
Well Name: North Thistle 15-10 State Com 1H
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: 475459.48 US Survey Foot	Latitude: 32.304757 Degree
East: 779538.27 US Survey Foot	Longitude: -103.562363 Degree
Convergence: 0.41°	
Declination: 7.27°	
Total Correction: 6.86°	

Datum Transformation: none

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 18' 17.12" N
Longitude = 103° 33' 44.51" W

Magnetic Declination = 7.27 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6612
Local Field Strength = 48225 nT	Magnetic Vector X = 23808 nT
Magnetic Dip = 60.15 deg	Magnetic Vector Y = 3037 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41828 nT
Run Date = July 15, 2015	Magnetic Vector H = 24001 nT

Signed: _____ Date: _____

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Warning: This information is controlled, and any printed version is deemed as uncontrolled unless suitably endorsed by a controlling authority or accompanied by a controlled table of contents in order to ensure adequate revision control.



North Thistle 15-10
State Com 1H
Lea Co, NM



Plan Data for North Thistle 15-10 State Com 1H Lateral

Site: North Thistle 15-10 State Com 1H
Unit: USFeet TVD Reference:
Company Name: Devon Energy
Position: Northing: 475459.48USft Latitude: 32.304757°
Easting: 779538.27USft Longitude: -103.562363°
North Reference: Grid Grid Convergence: 0.41°
Elevation Above VRD: 0.00USft

Plan Data for North Thistle 15-10 State Com 1H Lateral

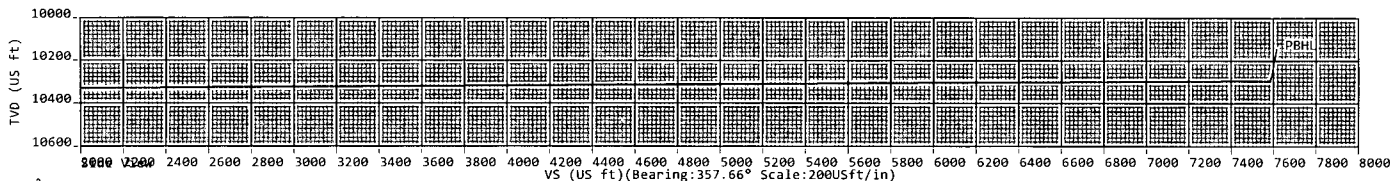
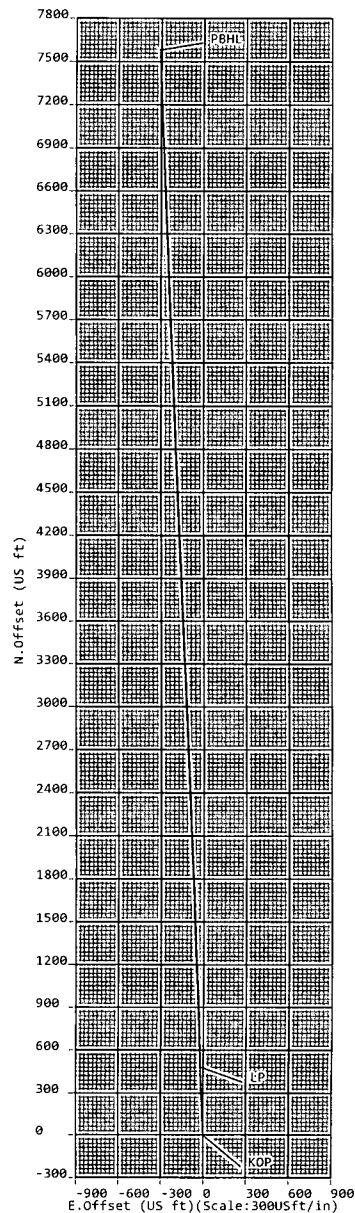
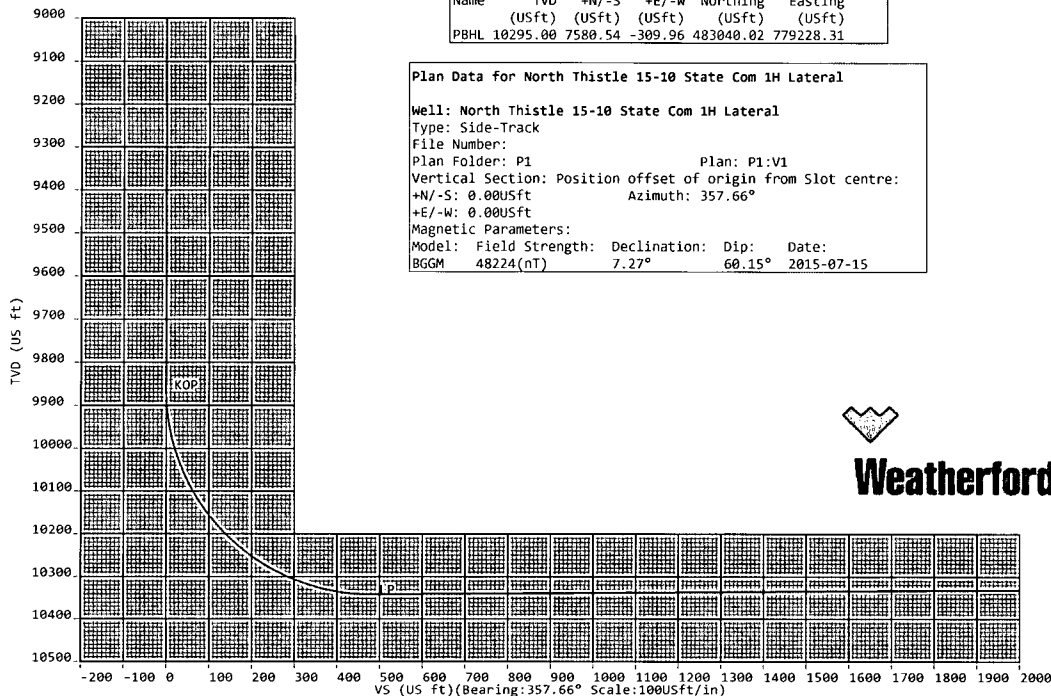
Plan Point Information:
DogLeg Severity Unit: °/100.00ft Position offsets from Slot centre
MD Inc Az TVD +N/-S +E/-W Northing Easting VSec DLS
(USft) (°) (°) (USft) (USft) (USft) (USft) (USft) (DLSU)
0.00 0.00 0.00 0.00 0.00 0.00 475459.48 779538.27 0.00 0.00
9862.54 0.00 0.00 9862.54 0.00 0.00 475459.48 779538.27 0.00 0.00
10615.56 90.36 357.66 10340.00 480.09 -19.63 475939.57 779518.64 480.49 12.00
17722.09 90.36 357.66 10295.00 7580.54 -309.96 483040.02 779228.31 7586.87 0.00

Plan Data for North Thistle 15-10 State Com 1H Lateral

Target Set Information:
Name: North Thistle 15-10 State Com 1H
Position offsets from Slot centre
Name TVD +N/-S +E/-W Northing Easting
(USft) (USft) (USft) (USft) (USft)
PBHL 10295.00 7580.54 -309.96 483040.02 779228.31

Plan Data for North Thistle 15-10 State Com 1H Lateral

Well: North Thistle 15-10 State Com 1H Lateral
Type: Side-Track
File Number:
Plan Folder: P1 Plan: P1.V1
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 357.66°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
BGGM 48224(nT) 7.27° 60.15° 2015-07-15



Sign Off: Russell Joyner

5D Plan Report

Devon Energy**Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *North Thistle 15-10 State Com 1H***Well Name:** *North Thistle 15-10 State Com 1H Lateral***Plan:** *P1:V1*

06 March 2015



North Thistle 15-10 State Com 1H Lateral

Field Name Lea Co, NM Nad 88 NMEZ	Map Units : US ft Company Name : Devon Energy Vertical Reference Datum (VRD) : Mean Sea Level Projected Coordinate System : NAD83 / New Mexico East (ftUS) Comment :									
Site Name North Thistle 15- 10 State Com 1H	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Units : US ft</td> <td style="width: 33%;">North Reference : Grid</td> <td style="width: 33%;">Convergence Angle : 0.41</td> </tr> <tr> <td rowspan="2" style="text-align: center;">Position</td> <td>Northing : 475459.48 US ft</td> <td>Latitude : 32° 18' 17.12"</td> </tr> <tr> <td>Easting : 779538.27 US ft</td> <td>Longitude : -103° 33' 44.51"</td> </tr> </table> Elevation above Mean Sea Level: 3714.00 US ft Comment :	Units : US ft	North Reference : Grid	Convergence Angle : 0.41	Position	Northing : 475459.48 US ft	Latitude : 32° 18' 17.12"	Easting : 779538.27 US ft	Longitude : -103° 33' 44.51"	
Units : US ft	North Reference : Grid	Convergence Angle : 0.41								
Position	Northing : 475459.48 US ft	Latitude : 32° 18' 17.12"								
	Easting : 779538.27 US ft	Longitude : -103° 33' 44.51"								
Slot Name North Thistle 15- 10 State Com 1H	<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%;">Northing : 475459.48 US ft</td> <td style="width: 33%;">Latitude : 32° 18' 17.12"</td> </tr> <tr> <td>+E / -W : 0.00 US ft</td> <td>Easting : 779538.27 US ft</td> <td>Longitude : -103° 33' 44.51"</td> </tr> </table> Slot TVD Reference : Ground Elevation Elevation above Mean Sea Level : 3714.00 US ft Comment :	Position (Offsets relative to Site Centre)			+N / -S : 0.00 US ft	Northing : 475459.48 US ft	Latitude : 32° 18' 17.12"	+E / -W : 0.00 US ft	Easting : 779538.27 US ft	Longitude : -103° 33' 44.51"
Position (Offsets relative to Site Centre)										
+N / -S : 0.00 US ft	Northing : 475459.48 US ft	Latitude : 32° 18' 17.12"								
+E / -W : 0.00 US ft	Easting : 779538.27 US ft	Longitude : -103° 33' 44.51"								
Well Name North Thistle 15- 10 State Com 1H Lateral	Type : Sidetrack Parent : North Thistle 15-10 State Com 1H Pilot Rig Height <i>Kelly Bushing</i> : 25.00 US ft Relative to Mean Sea Level: 3739.00 US ft Closure Distance : 7586.87 US ft Closure Azimuth : 357.659° Vertical Section (Position of Origin Relative to Slot) +N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 357.66° Magnetic Parameters Model : BGGM Field Strength : 48224.9nT Dec : 7.27° Dip : 60.15° Date : 15/Jul/2015									

Target Set

Name : North Thistle 15-10 State Com 1H **Number of Targets :** 1

Comment :

Target Name: PBHL Shape: 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 : 7580.54US ft</td> <td style="width: 33%;">Northing : 483040.02 US ft</td> <td style="width: 33%;">Latitude : 32° 19' 32.16"</td> </tr> <tr> <td>+E / -W : -309.96 US ft</td> <td>Easting : 779228.31US ft</td> <td>Longitude : -103° 33' 47.48"</td> </tr> </table> TVD (Kelly Bushing) : 10295.00 US ft Orientation Azimuth : 0.00° Inclination : 0.00° Dimensions Length : 0.00 US ft Breadth : 0.00 US ft Height : 0.00 US ft	Position (Relative to Slot centre)			+N / -S : 7580.54US ft	Northing : 483040.02 US ft	Latitude : 32° 19' 32.16"	+E / -W : -309.96 US ft	Easting : 779228.31US ft	Longitude : -103° 33' 47.48"
Position (Relative to Slot centre)										
+N / -S : 7580.54US ft	Northing : 483040.02 US ft	Latitude : 32° 19' 32.16"								
+E / -W : -309.96 US ft	Easting : 779228.31US ft	Longitude : -103° 33' 47.48"								

Well path created using minimum curvature

5D Plan Report

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	B. Rate (%/100 US ft)	T. Rate (%/100 US ft)	T. Face (°)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9862.54	0.00	0.00	9862.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
10615.56	90.36	357.66	10340.00	480.09	-19.63	480.49	12.00	12.00	0.00	357.66	LP
17722.09	90.36	357.66	10295.00	7580.54	-309.96	7586.87	0.00	0.00	0.00	0.00	PBHL

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
9862.54	0.00	0.00	9862.54	0.00	0.00	0.00	0.00	475459.48	779538.27		KOP
9962.54	12.00	357.66	9961.81	10.43	-0.43	10.43	12.00	475469.91	779537.84		
10062.54	24.00	357.66	10056.74	41.24	-1.69	41.28	12.00	475500.72	779536.58		
10162.54	36.00	357.66	10143.19	91.11	-3.73	91.19	12.00	475550.59	779534.54		
10262.54	48.00	357.66	10217.37	157.85	-6.45	157.98	12.00	475617.33	779531.82		
10362.54	60.00	357.66	10276.04	238.53	-9.75	238.73	12.00	475698.01	779528.52		
10462.54	72.00	357.66	10316.64	329.64	-13.48	329.92	12.00	475789.12	779524.79		
10562.54	84.00	357.66	10337.39	427.20	-17.47	427.56	12.00	475886.68	779520.80		
10615.56	90.36	357.66	10340.00	480.09	-19.63	480.49	12.00	475939.57	779518.64		LP
10662.54	90.36	357.66	10339.70	527.02	-21.55	527.46	0.00	475986.50	779516.72		
10762.54	90.36	357.66	10339.06	626.94	-25.63	627.46	0.00	476086.42	779512.64		
10862.54	90.36	357.66	10338.43	726.85	-29.72	727.46	0.00	476186.33	779508.55		
10962.54	90.36	357.66	10337.80	826.77	-33.81	827.46	0.00	476286.25	779504.46		
11062.54	90.36	357.66	10337.17	926.68	-37.89	927.46	0.00	476386.16	779500.38		
11162.54	90.36	357.66	10336.53	1026.60	-41.98	1027.45	0.00	476486.08	779496.29		
11262.54	90.36	357.66	10335.90	1126.51	-46.06	1127.45	0.00	476585.99	779492.21		
11362.54	90.36	357.66	10335.27	1226.43	-50.15	1227.45	0.00	476685.91	779488.12		
11462.54	90.36	357.66	10334.63	1326.34	-54.23	1327.45	0.00	476785.82	779484.04		
11562.54	90.36	357.66	10334.00	1426.25	-58.32	1427.45	0.00	476885.73	779479.95		
11662.54	90.36	357.66	10333.37	1526.17	-62.40	1527.44	0.00	476985.65	779475.87		
11762.54	90.36	357.66	10332.73	1626.08	-66.49	1627.44	0.00	477085.56	779471.78		
11862.54	90.36	357.66	10332.10	1726.00	-70.57	1727.44	0.00	477185.48	779467.70		
11962.54	90.36	357.66	10331.47	1825.91	-74.66	1827.44	0.00	477285.39	779463.61		
12062.54	90.36	357.66	10330.83	1925.83	-78.74	1927.44	0.00	477385.31	779459.53		
12162.54	90.36	357.66	10330.20	2025.74	-82.83	2027.43	0.00	477485.22	779455.44		
12262.54	90.36	357.66	10329.57	2125.66	-86.92	2127.43	0.00	477585.14	779451.35		
12362.54	90.36	357.66	10328.93	2225.57	-91.00	2227.43	0.00	477685.05	779447.27		
12462.54	90.36	357.66	10328.30	2325.48	-95.09	2327.43	0.00	477784.96	779443.18		
12562.54	90.36	357.66	10327.67	2425.40	-99.17	2427.43	0.00	477884.88	779439.10		
12662.54	90.36	357.66	10327.03	2525.31	-103.26	2527.42	0.00	477984.79	779435.01		
12762.54	90.36	357.66	10326.40	2625.23	-107.34	2627.42	0.00	478084.71	779430.93		
12862.54	90.36	357.66	10325.77	2725.14	-111.43	2727.42	0.00	478184.62	779426.84		
12962.54	90.36	357.66	10325.14	2825.06	-115.51	2827.42	0.00	478284.54	779422.76		
13062.54	90.36	357.66	10324.50	2924.97	-119.60	2927.42	0.00	478384.45	779418.67		
13162.54	90.36	357.66	10323.87	3024.89	-123.68	3027.41	0.00	478484.37	779414.59		
13262.54	90.36	357.66	10323.24	3124.80	-127.77	3127.41	0.00	478584.28	779410.50		
13362.54	90.36	357.66	10322.60	3224.72	-131.86	3227.41	0.00	478684.20	779406.41		
13462.54	90.36	357.66	10321.97	3324.63	-135.94	3327.41	0.00	478784.11	779402.33		
13562.54	90.36	357.66	10321.34	3424.54	-140.03	3427.41	0.00	478884.02	779398.24		
13662.54	90.36	357.66	10320.70	3524.46	-144.11	3527.40	0.00	478983.94	779394.16		
13762.54	90.36	357.66	10320.07	3624.37	-148.20	3627.40	0.00	479083.85	779390.07		
13862.54	90.36	357.66	10319.44	3724.29	-152.28	3727.40	0.00	479183.77	779385.99		
13962.54	90.36	357.66	10318.80	3824.20	-156.37	3827.40	0.00	479283.68	779381.90		
14062.54	90.36	357.66	10318.17	3924.12	-160.45	3927.40	0.00	479383.60	779377.82		
14162.54	90.36	357.66	10317.54	4024.03	-164.54	4027.39	0.00	479483.51	779373.73		
14262.54	90.36	357.66	10316.90	4123.95	-168.62	4127.39	0.00	479583.43	779369.65		
14362.54	90.36	357.66	10316.27	4223.86	-172.71	4227.39	0.00	479683.34	779365.56		
14462.54	90.36	357.66	10315.64	4323.77	-176.79	4327.39	0.00	479783.25	779361.48		
14562.54	90.36	357.66	10315.00	4423.69	-180.88	4427.39	0.00	479883.17	779357.39		
14662.54	90.36	357.66	10314.37	4523.60	-184.97	4527.38	0.00	479983.08	779353.30		
14762.54	90.36	357.66	10313.74	4623.52	-189.05	4627.38	0.00	480083.00	779349.22		

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
14862.54	90.36	357.66	10313.11	4723.43	-193.14	4727.38	0.00	480182.91	779345.13	
14962.54	90.36	357.66	10312.47	4823.35	-197.22	4827.38	0.00	480282.83	779341.05	
15062.54	90.36	357.66	10311.84	4923.26	-201.31	4927.38	0.00	480382.74	779336.96	
15162.54	90.36	357.66	10311.21	5023.18	-205.39	5027.37	0.00	480482.66	779332.88	
15262.54	90.36	357.66	10310.57	5123.09	-209.48	5127.37	0.00	480582.57	779328.79	
15362.54	90.36	357.66	10309.94	5223.01	-213.56	5227.37	0.00	480682.49	779324.71	
15462.54	90.36	357.66	10309.31	5322.92	-217.65	5327.37	0.00	480782.40	779320.62	
15562.54	90.36	357.66	10308.67	5422.83	-221.73	5427.37	0.00	480882.31	779316.54	
15662.54	90.36	357.66	10308.04	5522.75	-225.82	5527.36	0.00	480982.23	779312.45	
15762.54	90.36	357.66	10307.41	5622.66	-229.90	5627.36	0.00	481082.14	779308.37	
15862.54	90.36	357.66	10306.77	5722.58	-233.99	5727.36	0.00	481182.06	779304.28	
15962.54	90.36	357.66	10306.14	5822.49	-238.08	5827.36	0.00	481281.97	779300.19	
16062.54	90.36	357.66	10305.51	5922.41	-242.16	5927.36	0.00	481381.89	779296.11	
16162.54	90.36	357.66	10304.87	6022.32	-246.25	6027.35	0.00	481481.80	779292.02	
16262.54	90.36	357.66	10304.24	6122.24	-250.33	6127.35	0.00	481581.72	779287.94	
16362.54	90.36	357.66	10303.61	6222.15	-254.42	6227.35	0.00	481681.63	779283.85	
16462.54	90.36	357.66	10302.97	6322.06	-258.50	6327.35	0.00	481781.54	779279.77	
16562.54	90.36	357.66	10302.34	6421.98	-262.59	6427.35	0.00	481881.46	779275.68	
16662.54	90.36	357.66	10301.71	6521.89	-266.67	6527.34	0.00	481981.37	779271.60	
16762.54	90.36	357.66	10301.08	6621.81	-270.76	6627.34	0.00	482081.29	779267.51	
16862.54	90.36	357.66	10300.44	6721.72	-274.84	6727.34	0.00	482181.20	779263.43	
16962.54	90.36	357.66	10299.81	6821.64	-278.93	6827.34	0.00	482281.12	779259.34	
17062.54	90.36	357.66	10299.18	6921.55	-283.01	6927.34	0.00	482381.03	779255.26	
17162.54	90.36	357.66	10298.54	7021.47	-287.10	7027.33	0.00	482480.95	779251.17	
17262.54	90.36	357.66	10297.91	7121.38	-291.19	7127.33	0.00	482580.86	779247.08	
17362.54	90.36	357.66	10297.28	7221.30	-295.27	7227.33	0.00	482680.78	779243.00	
17462.54	90.36	357.66	10296.64	7321.21	-299.36	7327.33	0.00	482780.69	779238.91	
17562.54	90.36	357.66	10296.01	7421.12	-303.44	7427.33	0.00	482880.60	779234.83	
17662.54	90.36	357.66	10295.38	7521.04	-307.53	7527.32	0.00	482980.52	779230.74	
17722.09	90.36	357.66	10295.00	7580.54	-309.96	7586.87	0.00	483040.02	779228.31	PBHL



Weatherford®

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: March 06, 2015
Job Number: _____
Customer: Devon Energy
Well Name: North Thistle 15-10 State Com 1H
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: 475459.48 US Survey Foot	Latitude: 32.304757 Degree
East: 779538.27 US Survey Foot	Longitude: -103.562363 Degree
Convergence: 0.41°	
Declination: 7.27°	
Total Correction: 6.86°	

Datum Transformation: none

Geodetic Location WGS84

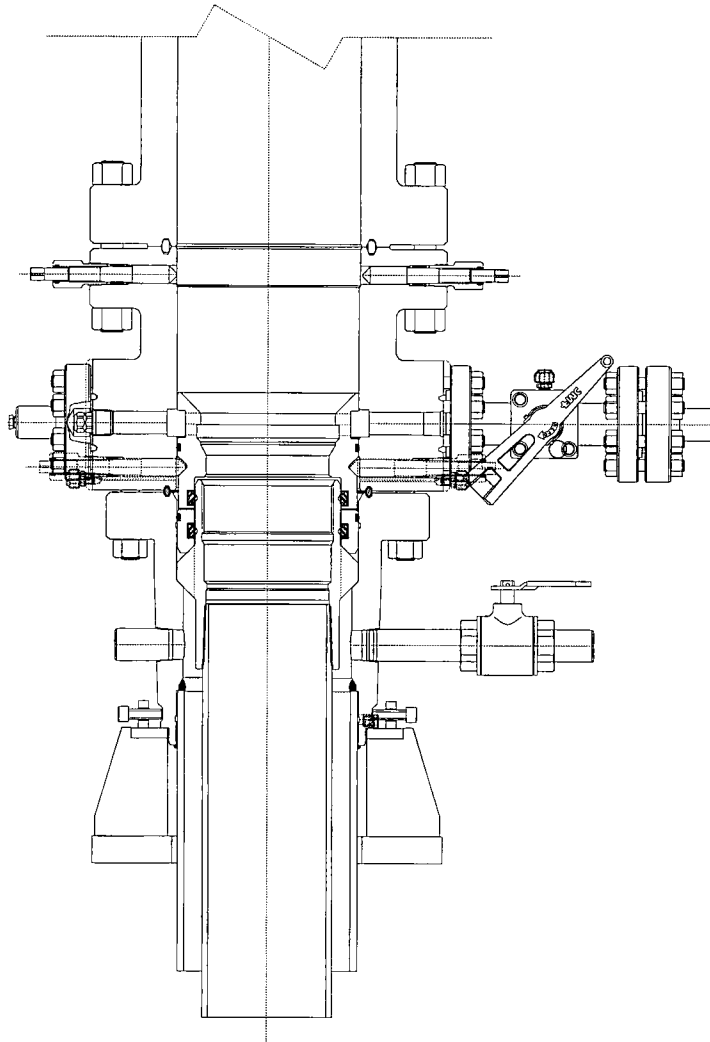
MSL Elevation = 0 m
Latitude = 32° 18' 17.12" N
Longitude = 103° 33' 44.51" W

Magnetic Declination = 7.27 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6612
Local Field Strength = 48225 nT	Magnetic Vector X = 23808 nT
Magnetic Dip = 60.15 deg	Magnetic Vector Y = 3037 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41828 nT
Run Date = July 15, 2015	Magnetic Vector H = 24001 nT

Signed: _____ Date: _____

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PRIMARY MODE

DEVON ENERGY

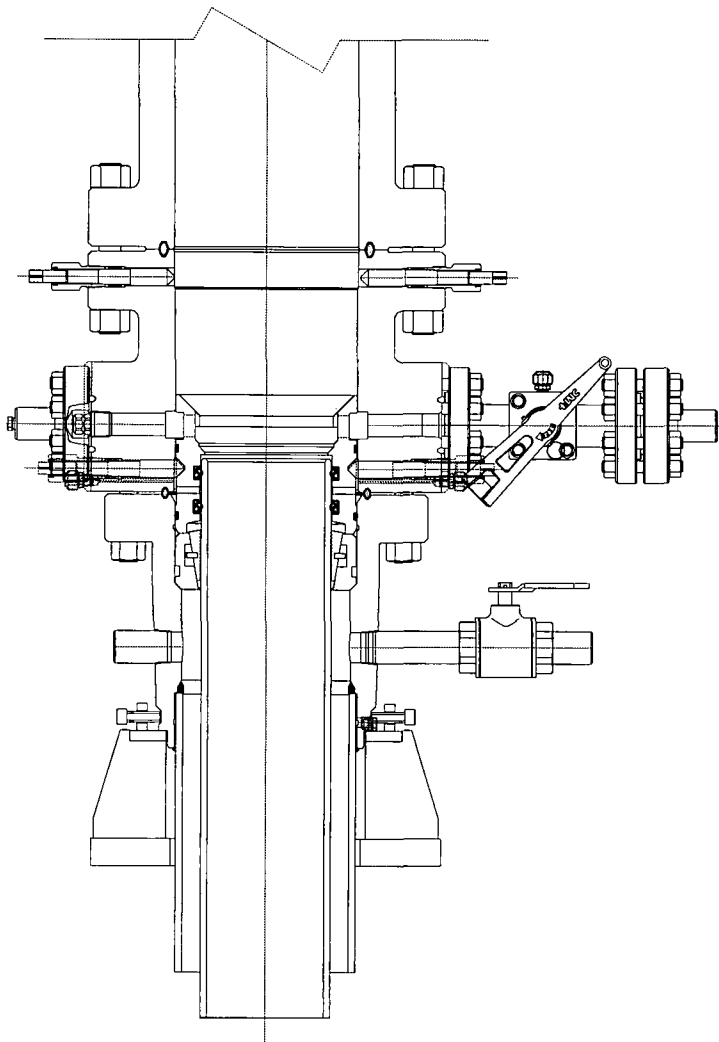
ARTESIA

S.E.N.M

13 3/8 X 9 5/8

QUOTE LAYOUT
F18648
REF: DM100161737
DM100151315

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					Z. MARQUEZ	05-08-13			
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					R. HAMILTON	05-08-13			



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	K. VUJ	05-08-13	
		C	5-13-14	DRAFTING REVIEW		
				Z. MARQUEZ	05-08-13	
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