

devon

Willow Lake 35 Fed Com 1H
Eddy Co, NM



Plan Data for Willow Lake 35 Fed Com 1H

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	424655.88	627902.62	0.00	0.00
7680.79	0.00	0.00	7680.79	0.00	0.00	424655.88	627902.62	0.00	0.00
8280.79	60.00	60.00	8176.99	143.24	248.10	424799.12	628150.72	147.98	10.00
8915.04	90.00	1.10	8354.00	650.51	520.44	425306.39	628423.06	660.38	10.00
13041.74	90.00	1.10	8354.00	4776.45	599.90	429432.33	628502.52	4787.09	0.00

Plan Data for Willow Lake 35 Fed Com 1H

Well: Willow Lake 35 Fed Com 1H
Type: Main-Well
File Number:

Plan Folder: P1
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:
BGM: 48123(nt) 7.52° 59.95° 2013-03-15

Plan Data for Willow Lake 35 Fed Com 1H

Slot: Willow Lake 35 Fed Com 1H
Position:
Offset from Site centre
+N/-S: 0.00USft
+E/-W: 0.00USft
Northing: 424655.88USft
Easting: 627902.62USft
Latitude: 32°10'1.7"
Longitude: -104°3'12.9"
Elevation Above VRD: 2955.00USft

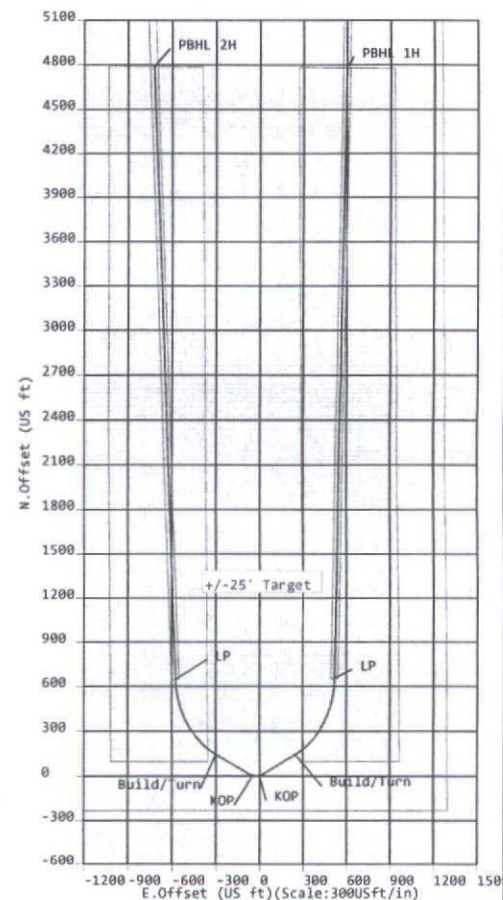
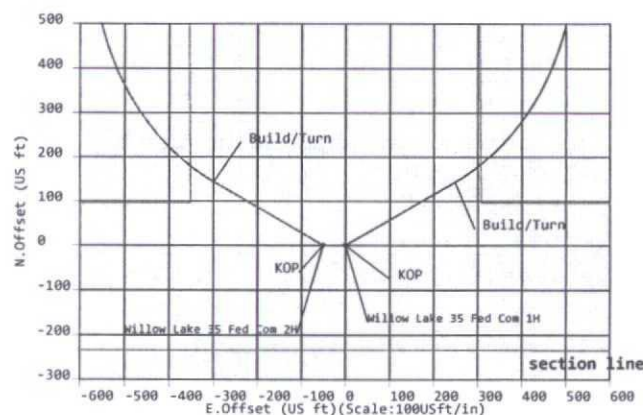
Plan Data for Willow Lake 35 Fed Com 1H

Target Set Information:

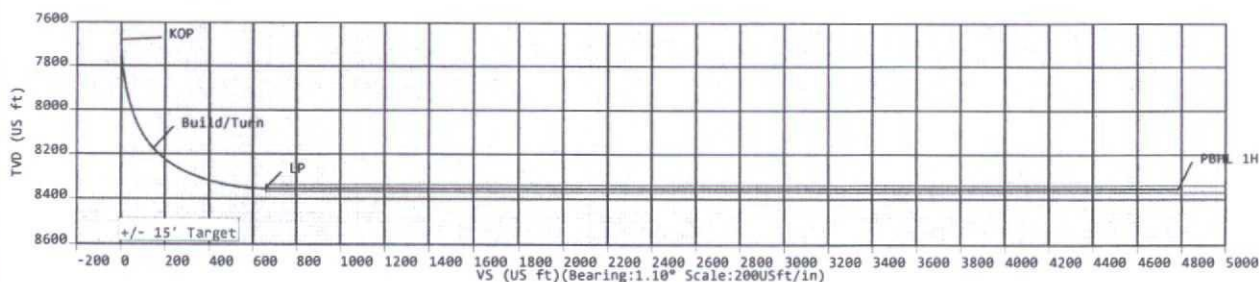
Name: Willow Lake 35 Fed Com 1H
Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)
PBHL 1H	8354.00	4776.45	599.90	429432.33	628502.52	Cuboid	

Willow Lake 35 Fed Com 1H
Willow Lake 35 Fed Com 2H



KB-2980
GL-2955



Sign Off: Russell Joyner

Oil Conservation Division
Case No. _____
Exhibit No. 15

5D Plan Report**Devon Energy**

Field Name: *Eddy Co, NM (Nad 83 NME)*
Site Name: *Willow Lake 35 Fed Com 1,2H Pad*
Well Name: *Willow Lake 35 Fed Com 1H*
Plan: *P1:V1*

10 December 2014



Willow Lake 35 Fed Com 1H

Field Name	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	Units : US ft	North Reference : Grid	Convergence Angle : 0.15
Willow Lake 35 Fed Com 1,2H Pad	Position	Northing : 424655.88 US ft	Latitude : 32° 10' 1.73"
		Easting : 627902.62 US ft	Longitude : -104° 3' 12.86"
	Elevation above Mean Sea Level: 2955.00 US ft		
	Comment :		
Slot Name	Position (Offsets relative to Site Centre)		
Willow Lake 35 Fed Com 1H	+N / -S : 0.00 US ft	Northing : 424655.88 US ft	Latitude : 32°10'1.73"
	+E / -W : 0.00 US ft	Easting : 627902.62 US ft	Longitude : -104°3'12.86"
	Slot TVD Reference : Ground Elevation		
	Elevation above Mean Sea Level : 2955.00 US ft		
	Comment :		
Well Name	Type : Main well	UWI :	Plan : P1:V1
Willow Lake 35 Fed Com 1H	Rig Height <i>Kelly Bushing</i> : 25.00 US ft		
	Relative to Mean Sea Level: 2980.00 US ft		
	Comment :		
	Closure Distance : 4813.97 US ft	Closure Azimuth : 7.1586°	
	Vertical Section (Position of Origin Relative to Slot)		
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az : 1.10°
	Magnetic Parameters		
	Model : BGGM	Field Strength : 48123.1nT	Dec : 7.52°
		Dip : 59.95°	Date : 15/Mar/2015

Target Set

Name : Willow Lake 35 Fed Com 1H **Number of Targets :** 1

Comment :

Target Name:	Position (Relative to Slot centre)		
PBHL 1H	+N / -S : 4776.45US ft	Northing : 429432.33 US ft	Latitude : 32°10'48.98"
	+E / -W : 599.90 US ft	Easting : 628502.52US ft	Longitude : -104°3'5.73"
Shape:	TVD (Kelly Bushing) : 8354.00 US ft		
Cuboid	Orientation	Azimuth : 0.00°	Inclination : 0.00°
	Dimensions	Length : 20.00 US ft	Breadth : 20.00 US ft Height : 20.00 US ft

Well path created using minimum curvature

5D Plan Report

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	B.Rate (°/100 US ft)	T.Rate (°/100 US ft)	T.Face (°)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7680.79	0.00	0.00	7680.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
8280.79	60.00	60.00	8176.99	143.24	248.10	147.98	10.00	10.00	0.00	60.00	Build/Turn
8915.04	90.00	1.10	8354.00	650.51	520.44	660.38	10.00	4.73	-9.29	286.79	LP
13041.74	90.00	1.10	8354.00	4776.45	599.90	4787.09	0.00	0.00	0.00	0.00	PBHL 1H

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
7600.00	0.00	0.00	7600.00	0.00	0.00	0.00	0.00	424655.88	627902.62	
7680.79	0.00	0.00	7680.79	0.00	0.00	0.00	0.00	424655.88	627902.62	KOP
7700.00	1.92	60.00	7700.00	0.16	0.28	0.17	10.00	424656.04	627902.90	
7800.00	11.92	60.00	7799.14	6.18	10.70	6.38	10.00	424662.06	627913.32	
7900.00	21.92	60.00	7894.69	20.71	35.88	21.40	10.00	424676.59	627938.50	
8000.00	31.92	60.00	7983.74	43.32	75.04	44.75	10.00	424699.20	627977.66	
8100.00	41.92	60.00	8063.59	73.32	126.99	75.74	10.00	424729.20	628029.61	
8200.00	51.92	60.00	8131.80	109.79	190.17	113.42	10.00	424765.67	628092.79	
8280.79	60.00	60.00	8176.99	143.24	248.10	147.98	10.00	424799.12	628150.72	Build/Turn
8300.00	60.57	57.89	8186.51	151.85	262.39	156.86	10.00	424807.73	628165.01	
8400.00	64.05	47.30	8233.07	205.62	332.49	211.97	10.00	424861.50	628235.11	
8500.00	68.26	37.37	8273.58	273.20	393.87	280.71	10.00	424929.08	628296.49	
8600.00	73.01	28.04	8306.79	352.52	444.67	360.99	10.00	425008.40	628347.29	
8700.00	78.17	19.19	8331.71	441.16	483.34	450.36	10.00	425097.04	628385.96	
8800.00	83.60	10.68	8347.57	536.45	508.70	546.12	10.00	425192.33	628411.32	
8900.00	89.16	2.35	8353.89	635.48	519.99	645.35	10.00	425291.36	628422.61	
8915.04	90.00	1.10	8354.00	650.51	520.44	660.38	10.00	425306.39	628423.06	LP
9000.00	90.00	1.10	8354.00	735.46	522.08	745.35	0.00	425391.34	628424.70	
9100.00	90.00	1.10	8354.00	835.44	524.00	845.35	0.00	425491.32	628426.62	
9200.00	90.00	1.10	8354.00	935.42	525.93	945.35	0.00	425591.30	628428.55	
9300.00	90.00	1.10	8354.00	1035.41	527.85	1045.35	0.00	425691.29	628430.47	
9400.00	90.00	1.10	8354.00	1135.39	529.78	1145.35	0.00	425791.27	628432.40	
9500.00	90.00	1.10	8354.00	1235.37	531.71	1245.35	0.00	425891.25	628434.33	
9600.00	90.00	1.10	8354.00	1335.35	533.63	1345.35	0.00	425991.23	628436.25	
9700.00	90.00	1.10	8354.00	1435.33	535.56	1445.35	0.00	426091.21	628438.18	
9800.00	90.00	1.10	8354.00	1535.31	537.48	1545.35	0.00	426191.19	628440.10	
9900.00	90.00	1.10	8354.00	1635.29	539.41	1645.35	0.00	426291.17	628442.03	
10000.00	90.00	1.10	8354.00	1735.28	541.33	1745.35	0.00	426391.16	628443.95	
10100.00	90.00	1.10	8354.00	1835.26	543.26	1845.35	0.00	426491.14	628445.88	
10200.00	90.00	1.10	8354.00	1935.24	545.18	1945.35	0.00	426591.12	628447.80	
10300.00	90.00	1.10	8354.00	2035.22	547.11	2045.35	0.00	426691.10	628449.73	
10400.00	90.00	1.10	8354.00	2135.20	549.03	2145.35	0.00	426791.08	628451.65	
10500.00	90.00	1.10	8354.00	2235.18	550.96	2245.35	0.00	426891.06	628453.58	
10600.00	90.00	1.10	8354.00	2335.16	552.89	2345.35	0.00	426991.04	628455.51	
10700.00	90.00	1.10	8354.00	2435.15	554.81	2445.35	0.00	427091.03	628457.43	
10800.00	90.00	1.10	8354.00	2535.13	556.74	2545.35	0.00	427191.01	628459.36	
10900.00	90.00	1.10	8354.00	2635.11	558.66	2645.35	0.00	427290.99	628461.28	
11000.00	90.00	1.10	8354.00	2735.09	560.59	2745.35	0.00	427390.97	628463.21	
11100.00	90.00	1.10	8354.00	2835.07	562.51	2845.35	0.00	427490.95	628465.13	
11200.00	90.00	1.10	8354.00	2935.05	564.44	2945.35	0.00	427590.93	628467.06	
11300.00	90.00	1.10	8354.00	3035.03	566.36	3045.35	0.00	427690.91	628468.98	
11400.00	90.00	1.10	8354.00	3135.02	568.29	3145.35	0.00	427790.90	628470.91	
11500.00	90.00	1.10	8354.00	3235.00	570.21	3245.35	0.00	427890.88	628472.83	
11600.00	90.00	1.10	8354.00	3334.98	572.14	3345.35	0.00	427990.86	628474.76	
11700.00	90.00	1.10	8354.00	3434.96	574.07	3445.35	0.00	428090.84	628476.69	
11800.00	90.00	1.10	8354.00	3534.94	575.99	3545.35	0.00	428190.82	628478.61	
11900.00	90.00	1.10	8354.00	3634.92	577.92	3645.35	0.00	428290.80	628480.54	
12000.00	90.00	1.10	8354.00	3734.91	579.84	3745.35	0.00	428390.79	628482.46	
12100.00	90.00	1.10	8354.00	3834.89	581.77	3845.35	0.00	428490.77	628484.39	
12200.00	90.00	1.10	8354.00	3934.87	583.69	3945.35	0.00	428590.75	628486.31	

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
12300.00	90.00	1.10	8354.00	4034.85	585.62	4045.35	0.00	428690.73	628488.24	
12400.00	90.00	1.10	8354.00	4134.83	587.54	4145.35	0.00	428790.71	628490.16	
12500.00	90.00	1.10	8354.00	4234.81	589.47	4245.35	0.00	428890.69	628492.09	
12600.00	90.00	1.10	8354.00	4334.79	591.39	4345.35	0.00	428990.67	628494.01	
12700.00	90.00	1.10	8354.00	4434.78	593.32	4445.35	0.00	429090.66	628495.94	
12800.00	90.00	1.10	8354.00	4534.76	595.25	4545.35	0.00	429190.64	628497.87	
12900.00	90.00	1.10	8354.00	4634.74	597.17	4645.35	0.00	429290.62	628499.79	
13000.00	90.00	1.10	8354.00	4734.72	599.10	4745.35	0.00	429390.60	628501.72	
13041.74	90.00	1.10	8354.00	4776.45	599.90	4787.09	0.00	429432.33	628502.52	PBHL 1H