

devon

Willow Lake 35 Fed Com 2H
Eddy Co, NM



Plan Data for Willow Lake 35 Fed Com 2H

Plan Point Information:

MD	Inc	Az	TVD	+N/-S	+E/-W	North	East	V50c	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	0.00	0.00	424655.89	627852.63	0.00	0.00
7643.49	0.00	0.00	7643.49	0.00	0.00	424655.89	627852.63	0.00	0.00
8243.49	60.00	300.00	8139.69	143.24	-248.10	424799.13	627604.53	152.02	10.00
8859.88	90.00	357.95	8314.00	642.61	-522.06	425298.50	627330.57	660.87	10.00
13016.24	90.00	357.95	8314.00	4786.31	-670.54	429442.20	627182.09	4807.23	0.00

Plan Data for Willow Lake 35 Fed Com 2H

Well: Willow Lake 35 Fed Com 2H
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: 357.95°
+E/-W: 0.00USft

Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
OGM 48119(nT) 7.52° 59.95° 2015-03-25

Plan Data for Willow Lake 35 Fed Com 2H

Slot: Willow Lake 35 Fed Com 2H
Position:
Offset is from Site centre
+N/-S: 0.01USft North: 424655.89USft Latitude: 32°10'1.7"
+E/-W: -49.99USft East: 627852.63USft Longitude: -104°3'13.4"
Elevation Above VRD: 2955.00USft

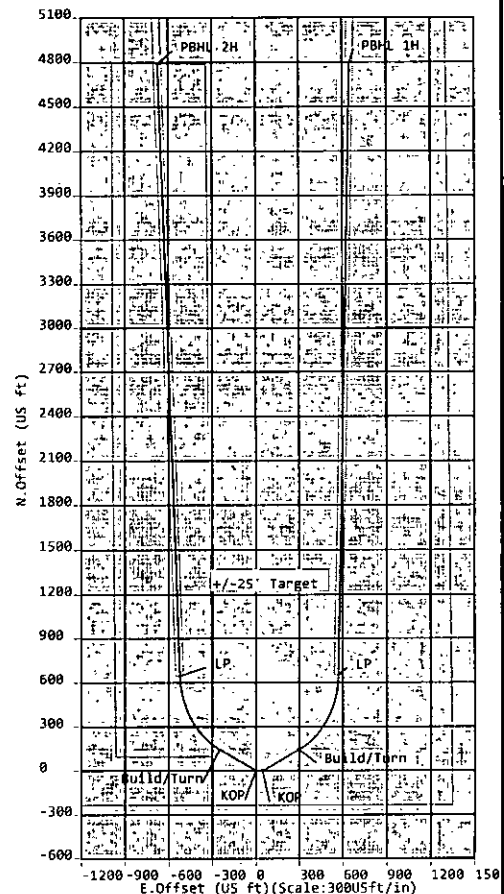
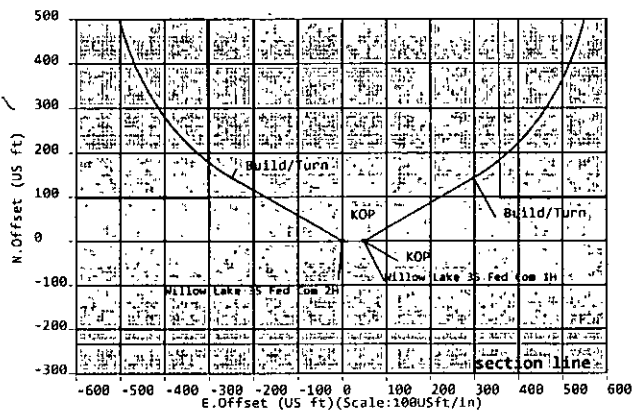
Plan Data for Willow Lake 35 Fed Com 2H

Target Set Information:

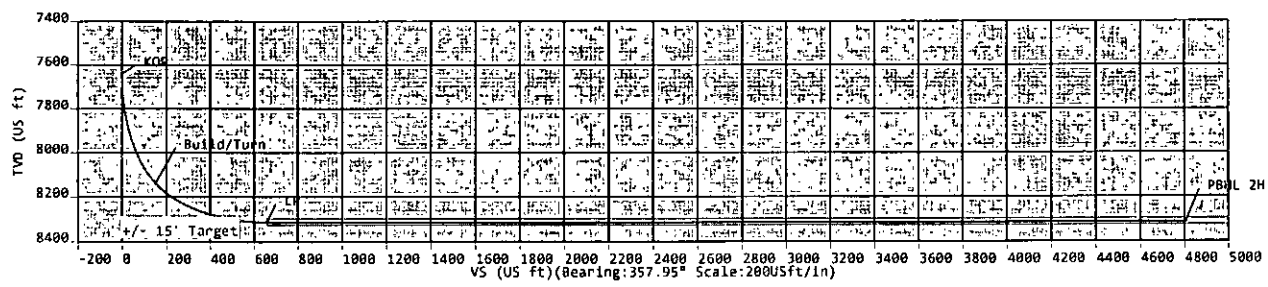
Name: Willow Lake 35 Fed Com 2H
Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	North	East	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)		
PBHL 2H	8314.00	4786.31	-670.54	429442.20	627182.09	Cuboid	

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



KB-2980
GL-2955



Sign Off: Russell Joyner

Oil Conservation Division
Case No. _____
Exhibit No. 16

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 2H*

Plan: *P1:V1*

10 December 2014



Willow Lake 35 Fed Com 2H

Field Name Eddy Co, NM (Nad 83 NME)	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 Willow Lake 35 Fed Com 1,2H Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.15	
	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 Willow Lake 35 Fed Com 2H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.01 US ft	Northing :424655.89 US ft	Latitude : 32°10'1.73"	
	+E / -W : -49.99 US ft	Easting :627852.63 US ft	Longitude : -104°3'13.44"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 2955.00 US ft				
Comment :				
Well Name Willow Lake 35 Fed Com 2H	Type : Main well		UWI :	Plan : P1:V1
	Rig Height Drill Floor : 25.00 US ft		Comment :	
	Relative to Mean Sea Level: 2980.00 US ft			
	Closure Distance : 4833.05 US ft		Closure Azimuth : 352.025°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az :357.95°
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48119.7nT	Dec : 7.52°	Dip : 59.95°
Date : 25/Mar/2015				

Target Set

Name : Willow Lake 35 Fed
Com 2H **Number of Targets :** 1

Comment :

Target Name:	Position (Relative to Slot centre)		
	+N / -S : 4786.31US ft	Northing : 429442.20 US ft	Latitude : 32°10'49.12"
PBHL 2H	+E / -W : -670.54 US ft	Easting : 627182.09US ft	Longitude : -104°3'21.10"
Shape:	TVD (Drill Floor) : 8314.00 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 Drill Floor)											Comment
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 (°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7643.49	0.00	0.00	7643.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
8243.49	60.00	300.00	8139.69	143.24	-248.10	152.02	10.00	10.00	0.00	300.00	Build/Turn
8869.88	90.00	357.95	8314.00	642.61	-522.06	660.87	10.00	4.79	9.25	72.62	LP
13016.24	90.00	357.95	8314.00	4786.31	-670.54	4807.23	0.00	0.00	0.00	0.00	PBHL 2H

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)											Comment
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)		
7600.00	0.00	0.00	7600.00	0.00	0.00	0.00	0.00	424655.89	627852.63		
7643.49	0.00	0.00	7643.49	0.00	0.00	0.00	0.00	424655.89	627852.63		KOP
7700.00	5.65	300.00	7699.91	1.39	-2.41	1.48	10.00	424657.28	627850.22		
7800.00	15.65	300.00	7798.06	10.62	-18.40	11.27	10.00	424666.51	627834.23		
7900.00	25.65	300.00	7891.52	28.23	-48.90	29.96	10.00	424684.12	627803.73		
8000.00	35.65	300.00	7977.44	53.69	-93.00	56.98	10.00	424709.58	627759.63		
8100.00	45.65	300.00	8053.21	86.22	-149.34	91.51	10.00	424742.11	627703.29		
8200.00	55.65	300.00	8116.53	124.84	-216.23	132.49	10.00	424780.73	627636.40		
8243.49	60.00	300.00	8139.69	143.24	-248.10	152.02	10.00	424799.13	627604.53		Build/Turn
8300.00	61.83	306.12	8167.17	170.18	-289.44	180.42	10.00	424826.07	627563.19		
8400.00	65.69	316.41	8211.47	229.31	-356.64	241.93	10.00	424885.20	627495.99		
8500.00	70.20	326.04	8249.09	301.52	-414.48	316.16	10.00	424957.41	627438.15		
8600.00	75.20	335.12	8278.87	384.61	-461.21	400.86	10.00	425040.50	627391.42		
8700.00	80.53	343.78	8299.93	476.05	-495.41	493.47	10.00	425131.94	627357.22		
8800.00	86.07	352.16	8311.60	573.07	-516.05	591.17	10.00	425228.96	627336.58		
8869.88	90.00	357.95	8314.00	642.61	-522.06	660.87	10.00	425298.50	627330.57		LP
8900.00	90.00	357.95	8314.00	672.71	-523.14	690.99	0.00	425328.60	627329.49		
9000.00	90.00	357.95	8314.00	772.65	-526.72	790.99	0.00	425428.54	627325.91		
9100.00	90.00	357.95	8314.00	872.58	-530.30	890.99	0.00	425528.47	627322.33		
9200.00	90.00	357.95	8314.00	972.52	-533.88	990.99	0.00	425628.41	627318.75		
9300.00	90.00	357.95	8314.00	1072.45	-537.46	1090.99	0.00	425728.34	627315.17		
9400.00	90.00	357.95	8314.00	1172.39	-541.04	1190.99	0.00	425828.28	627311.59		
9500.00	90.00	357.95	8314.00	1272.32	-544.62	1290.99	0.00	425928.21	627308.01		
9600.00	90.00	357.95	8314.00	1372.26	-548.20	1390.99	0.00	426028.15	627304.43		
9700.00	90.00	357.95	8314.00	1472.20	-551.78	1490.99	0.00	426128.09	627300.85		
9800.00	90.00	357.95	8314.00	1572.13	-555.36	1590.99	0.00	426228.02	627297.27		
9900.00	90.00	357.95	8314.00	1672.07	-558.95	1690.99	0.00	426327.96	627293.68		
10000.00	90.00	357.95	8314.00	1772.00	-562.53	1790.99	0.00	426427.89	627290.10		
10100.00	90.00	357.95	8314.00	1871.94	-566.11	1890.99	0.00	426527.83	627286.52		
10200.00	90.00	357.95	8314.00	1971.88	-569.69	1990.99	0.00	426627.77	627282.94		
10300.00	90.00	357.95	8314.00	2071.81	-573.27	2090.99	0.00	426727.70	627279.36		
10400.00	90.00	357.95	8314.00	2171.75	-576.85	2190.99	0.00	426827.64	627275.78		
10500.00	90.00	357.95	8314.00	2271.68	-580.43	2290.99	0.00	426927.57	627272.20		
10600.00	90.00	357.95	8314.00	2371.62	-584.01	2390.99	0.00	427027.51	627268.62		
10700.00	90.00	357.95	8314.00	2471.56	-587.59	2490.99	0.00	427127.45	627265.04		
10800.00	90.00	357.95	8314.00	2571.49	-591.18	2590.99	0.00	427227.38	627261.45		
10900.00	90.00	357.95	8314.00	2671.43	-594.76	2690.99	0.00	427327.32	627257.87		
11000.00	90.00	357.95	8314.00	2771.36	-598.34	2790.99	0.00	427427.25	627254.29		
11100.00	90.00	357.95	8314.00	2871.30	-601.92	2890.99	0.00	427527.19	627250.71		
11200.00	90.00	357.95	8314.00	2971.23	-605.50	2990.99	0.00	427627.12	627247.13		
11300.00	90.00	357.95	8314.00	3071.17	-609.08	3090.99	0.00	427727.06	627243.55		
11400.00	90.00	357.95	8314.00	3171.11	-612.66	3190.99	0.00	427827.00	627239.97		
11500.00	90.00	357.95	8314.00	3271.04	-616.24	3290.99	0.00	427926.93	627236.39		
11600.00	90.00	357.95	8314.00	3370.98	-619.82	3390.99	0.00	428026.87	627232.81		
11700.00	90.00	357.95	8314.00	3470.91	-623.40	3490.99	0.00	428126.80	627229.23		
11800.00	90.00	357.95	8314.00	3570.85	-626.99	3590.99	0.00	428226.74	627225.64		
11900.00	90.00	357.95	8314.00	3670.79	-630.57	3690.99	0.00	428326.68	627222.06		
12000.00	90.00	357.95	8314.00	3770.72	-634.15	3790.99	0.00	428426.61	627218.48		
12100.00	90.00	357.95	8314.00	3870.66	-637.73	3890.99	0.00	428526.55	627214.90		
12200.00	90.00	357.95	8314.00	3970.59	-641.31	3990.99	0.00	428626.48	627211.32		

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)										
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	357.95	8314.00	4070.53	-644.89	4090.99	0.00	428726.42	627207.74	
12400.00	90.00	357.95	8314.00	4170.46	-648.47	4190.99	0.00	428826.35	627204.16	
12500.00	90.00	357.95	8314.00	4270.40	-652.05	4290.99	0.00	428926.29	627200.58	
12600.00	90.00	357.95	8314.00	4370.34	-655.63	4390.99	0.00	429026.23	627197.00	
12700.00	90.00	357.95	8314.00	4470.27	-659.22	4490.99	0.00	429126.16	627193.41	
12800.00	90.00	357.95	8314.00	4570.21	-662.80	4590.99	0.00	429226.10	627189.83	
12900.00	90.00	357.95	8314.00	4670.14	-666.38	4690.99	0.00	429326.03	627186.25	
13000.00	90.00	357.95	8314.00	4770.08	-669.96	4790.99	0.00	429425.97	627182.67	
13016.24	90.00	357.95	8314.00	4786.31	-670.54	4807.23	0.00	429442.20	627182.09	PBHL 2H