



30-015-41149

May 13, 2014

Devon Energy Production Co., L. P.
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 24 2014

RECEIVED

Attn: David Cook

Re: **Spud 16 State No. 011H**

Please find enclosed a copy of the survey from 0.00' to 2871.47' ran on the above referenced well.

If I can be of any further service please do not hesitate to call me at 800-606-4976.

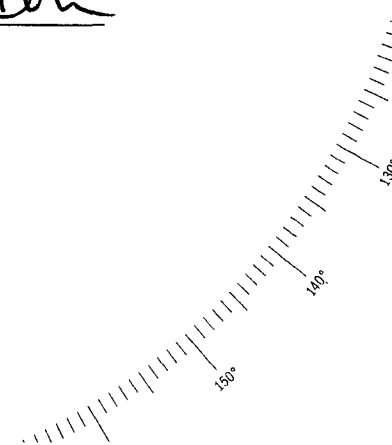
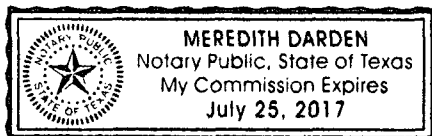
Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 13th day of May, A.D., 2014, by Keith Havelka.

Meredith Darden
Notary Public, State of Texas





Company: Devon Energy
 Lease/Well: Spud 16 State/No. 011H



Rig Name: H & P 214
 State/County: New Mexico/Eddy
 Latitude: 32.30, Longitude: -103.98
 GRID North is 0.19 Degrees East of True North
 VS-Azi: 268.66 Degrees

RECEIVED
 SEP 24 2014
 ARIZONA DISTRICT
 NMOIL CONSERVATION

Depth Reference : 25 Feet

DRILLOG MS-GYRO SURVEY CALCULATIONS

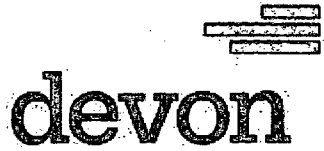
Filename: spud 16 state11h_gyro survey.ut
 Minimum Curvature Method
 Report Date/Time: 5/12/2014 / 09:30

VES Survey International
 West, Texas
 (432) 563-5444

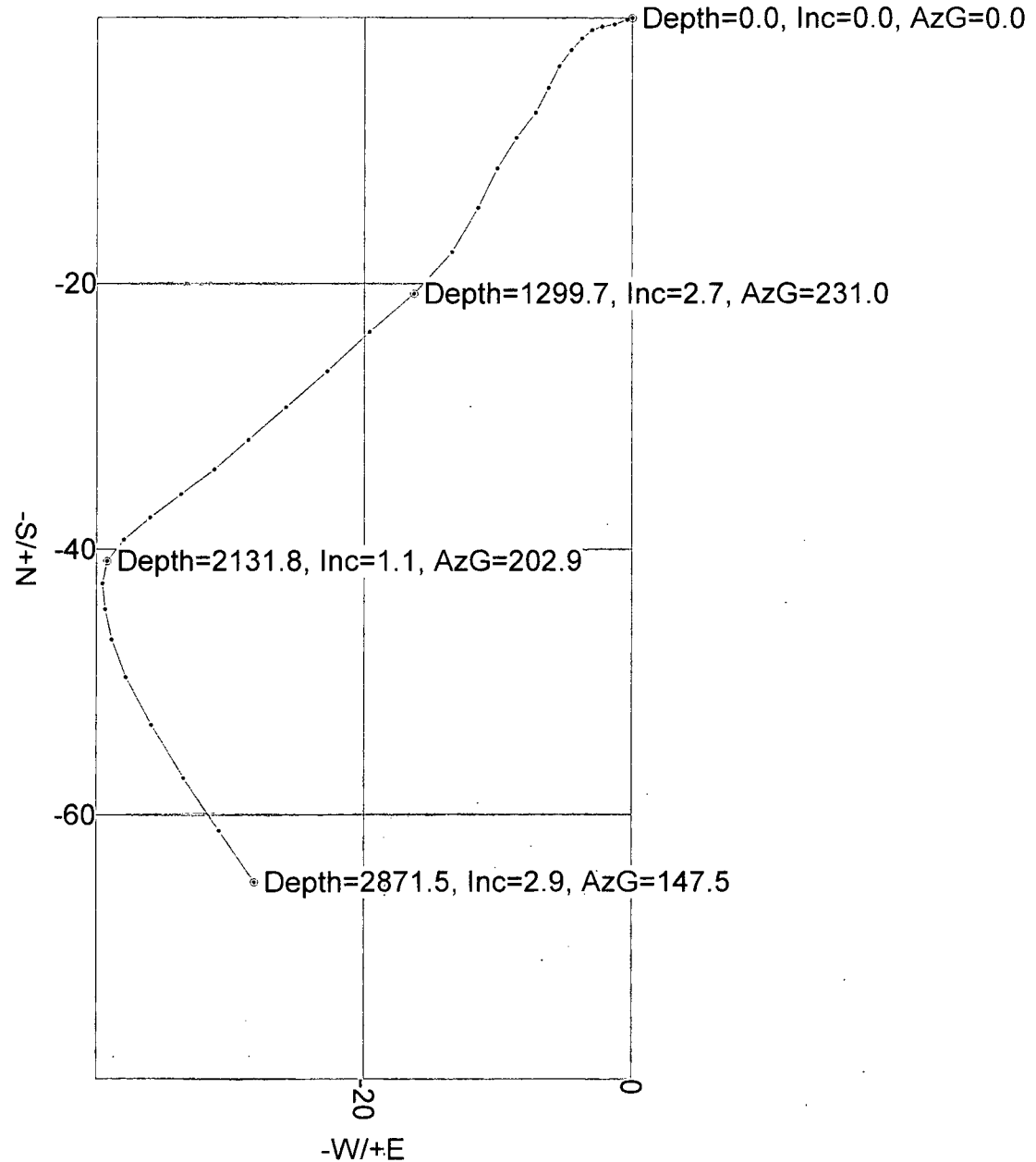
Surveyor: Gene Heiss
 Spud 16 State No. 011H / API 30-015-41149

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dc Se De
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
97.67	0.47	251.36	97.67	-0.13	-0.38	0.39	0.40	251.36	
190.13	0.76	248.59	190.12	-0.48	-1.32	1.33	1.40	250.14	
282.59	0.42	277.41	282.58	-0.66	-2.23	2.24	2.32	253.55	
375.05	0.65	234.42	375.03	-0.92	-2.99	3.01	3.13	252.90	
467.51	0.59	226.63	467.49	-1.55	-3.77	3.80	4.07	247.57	
559.97	0.85	219.06	559.94	-2.42	-4.55	4.60	5.15	242.00	
652.43	1.06	212.54	652.39	-3.68	-5.44	5.53	6.57	235.97	
744.89	1.19	200.41	744.83	-5.29	-6.24	6.36	8.18	229.68	
837.35	1.45	212.50	837.27	-7.18	-7.20	7.37	10.17	225.09	
929.81	1.51	222.43	929.70	-9.07	-8.65	8.86	12.53	223.66	
1022.27	1.88	203.48	1022.12	-11.35	-10.07	10.34	15.18	221.59	
1114.73	2.22	207.95	1114.52	-14.32	-11.52	11.85	18.38	218.80	
1207.19	2.55	212.43	1206.90	-17.65	-13.46	13.87	22.19	217.34	
1299.65	2.74	230.96	1299.26	-20.77	-16.28	16.76	26.39	218.09	
1392.11	2.71	227.39	1391.62	-23.64	-19.60	20.15	30.71	219.66	
1484.57	2.65	226.77	1483.97	-26.59	-22.77	23.39	35.00	220.58	
1577.03	2.44	230.32	1576.34	-29.31	-25.85	26.52	39.08	221.41	
1669.49	2.15	226.83	1668.73	-31.76	-28.63	29.36	42.75	222.03	

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1761.95	2.01	231.19	1761.13	-33.96	-31.16	31.94	46.09	222.54	0.23
1854.41	1.90	235.55	1853.53	-35.85	-33.69	34.52	49.19	223.22	0.20
1946.87	1.70	230.23	1945.95	-37.59	-36.01	36.87	52.05	223.77	0.28
2039.33	1.49	228.59	2038.37	-39.26	-37.96	38.87	54.61	224.03	0.24
2131.79	1.10	202.92	2130.81	-40.88	-39.21	40.15	56.64	223.81	0.74
2224.25	1.09	179.64	2223.25	-42.58	-39.55	40.53	58.11	222.89	0.48
2316.71	1.34	169.18	2315.69	-44.52	-39.34	40.37	59.41	221.47	0.35
2409.17	1.52	166.77	2408.12	-46.78	-38.86	39.94	60.81	219.72	0.21
2501.63	2.25	154.78	2500.53	-49.61	-37.80	38.95	62.37	217.31	0.89
2594.09	2.82	149.60	2592.90	-53.21	-35.88	37.12	64.18	213.99	0.66
2686.55	3.00	147.57	2685.24	-57.21	-33.44	34.76	66.26	210.30	0.22
2779.01	2.95	144.56	2777.58	-61.19	-30.76	32.18	68.49	206.69	0.17
2871.47	2.87	147.50	2869.92	-65.09	-28.13	29.65	70.91	203.37	0.18



VES Survey International
West, Texas
(432) 563-5444
Surveyor: Gene Heiss
Spud 16 State No. 011H / API 30-015-41149



VES Survey Date: 05/01/2014



Weatherford[®]

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy
333 W. Sherridan Ave
Oklahoma City, OK, 73102

Date: May 16, 2014

Attention: Art Alarcon

Re: Devon Energy
Well: Spud 16 State 11H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

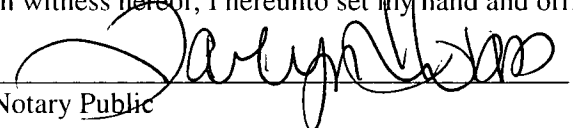
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
John Josserand MWD Supervisor	11H	3034 MD 12390 MD	5/1/2014 5/15/2014	Measurement While Drilling

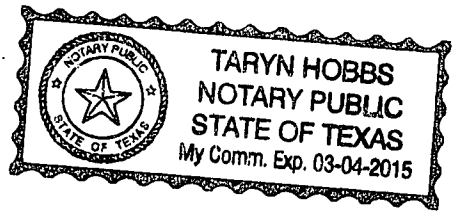
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Jesus Aguilar
MWD Coordinator

On this, the 18th day of June, 2014, before me a notary public, the undersigned officer, personally appeared JESUS AGUILAR, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public



5D Survey Report**Devon Energy**

Field Name: *Eddy Co, NM (Nad 83 NME)*
Site Name: *Spud 16 State 10,11,12H Pad*
Well Name: *Spud 16 State 11H*
Survey: *Wft MWD Svy*

14 May 2014



5D Survey Report

Spud 16 State 11H

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 Spud 16 State 10,11,12H Pad	Units : US ft	North Reference : Grid
	Position	Convergence Angle : 0.19
	Northing : 474347.08 US ft	Latitude : 32° 18' 12.84"
	Easting : 649482.55 US ft	Longitude : -103° 58' 59.91"
	Elevation above Mean Sea Level: 2963.00 US ft	
	Comment :	
Slot Name Spud 16 State 11H	Position (Offsets relative to Site Centre)	
	+N / -S : -49.99 US ft	Northing : 474297.09 US ft
		Latitude : 32°18'12.35"
	+E / -W : -0.18 US ft	Easting : 649482.37 US ft
		Longitude : -103°58'59.91"
	Slot TVD Reference : Ground Elevation	
	Elevation above Mean Sea Level : 2961.00 US ft	
	Comment :	
Well Name Spud 16 State 11H	Type : Main well	UWI :
	Rig Height Drill Floor : 25.00 US ft	Comment :
	Relative to Mean Sea Level: 2986.00 US ft	
	Closure Distance : 4322.17 US ft	Closure Azimuth : 269.382°
	Vertical Section (Position of Origin Relative to Slot)	
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft
		Az : 268.66°

Target Set

Name : Spud 16 State 11H **Number of Targets :** 1

Comment :

Target Name: PBHL	Position (Relative to Slot centre)		
	+N / -S : -68.01 US ft	Northing : 474229.08 US ft	Latitude : 32°18'11.81"
	+E / -W : -4321.47 US ft	Easting : 645160.90 US ft	Longitude : -103°59'50.27"
Shape: Cuboid	TVD (Drill Floor) : 7676.00 US ft		
	Orientation Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions Length : 20.00 US ft	Breadth : 20.00 US ft	Height : 20.00 US ft

Survey Name : Wft MWD Svy

Date : 05/May/2014 **Survey Tool :** MWD **Comment :** **Company :** Wft

Magnetic Model

Model Name: BGGM **Date:** 20/Apr/2014 **Field Strength:** 48333.5 nT **Declination:** 7.55° **Dip:** 60.10°

Tie Point

MD: 2871.47 **Inclination:** 2.87 **Azimuth:** 147.5 **TVD:** 2869.92 **North Offset:** -65.09 **East Offset:** -28.13

5D Survey Report

Well path created using minimum curvature

Survey Points (Relative to Slot centre, TVD relative to Drill Floor)											
MD (US ft)	Incl (°)	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	
3034.00	2.51	152.88	3032.27	-71.69	-24.32	25.99	0.00	474225.40	649458.05	First Wft Svy	
3128.00	3.14	127.04	3126.16	-75.07	-21.33	23.08	1.49	474222.02	649461.04		
3223.00	4.30	108.31	3220.96	-77.76	-15.87	17.68	1.75	474219.33	649466.50		
3318.00	4.92	93.55	3315.66	-79.13	-8.42	10.27	1.40	474217.96	649473.95		
3412.00	6.11	85.33	3409.22	-78.97	0.59	1.26	1.52	474218.12	649482.96		
3507.00	7.25	79.74	3503.58	-77.49	11.53	-9.71	1.38	474219.60	649493.90		
3602.00	8.24	78.07	3597.71	-75.02	24.09	-22.32	1.07	474222.07	649506.46		
3696.00	8.97	79.49	3690.65	-72.29	37.88	-36.18	0.81	474224.80	649520.25		
3791.00	9.42	79.24	3784.43	-69.49	52.80	-51.16	0.48	474227.60	649535.17		
3886.00	8.92	78.18	3878.21	-66.53	67.65	-66.07	0.56	474230.56	649550.02		
3980.00	10.06	76.47	3970.93	-63.11	82.76	-81.26	1.25	474233.98	649565.13		
4075.00	9.96	75.55	4064.48	-59.12	98.79	-97.38	0.20	474237.97	649581.16		
4169.00	9.99	75.32	4157.06	-55.03	114.55	-113.23	0.05	474242.06	649596.92		
4264.00	9.71	75.39	4250.66	-50.92	130.27	-129.04	0.30	474246.17	649612.64		
4359.00	9.25	74.71	4344.36	-46.88	145.39	-144.25	0.50	474250.21	649627.76		
4453.00	9.78	75.90	4437.07	-42.95	160.42	-159.37	0.60	474254.14	649642.79		
4548.00	9.55	75.41	4530.72	-39.00	175.87	-174.91	0.26	474258.09	649658.24		
4643.00	9.35	76.13	4624.43	-35.16	190.99	-190.11	0.24	474261.93	649673.36		
4738.00	9.06	75.37	4718.21	-31.42	205.72	-204.93	0.33	474265.67	649688.09		
4832.00	9.97	77.90	4810.91	-27.85	220.83	-220.12	1.07	474269.24	649703.20		
4927.00	10.01	77.48	4904.47	-24.33	236.94	-236.30	0.09	474272.76	649719.31		
5022.00	9.80	76.81	4998.06	-20.70	252.87	-252.31	0.25	474276.39	649735.24		
5117.00	8.97	76.22	5091.78	-17.09	267.93	-267.46	0.88	474280.00	649750.30		
5211.00	9.77	79.26	5184.53	-13.86	282.89	-282.48	1.00	474283.23	649765.26		
5305.00	9.42	79.24	5277.22	-10.93	298.28	-297.94	0.37	474286.16	649780.65		
5400.00	9.58	70.10	5370.92	-6.79	313.35	-313.11	1.60	474290.30	649795.72		
5495.00	9.06	66.19	5464.66	-1.08	327.63	-327.51	0.86	474296.01	649810.00		
5589.00	9.70	69.15	5557.41	4.73	341.80	-341.82	0.85	474301.82	649824.17		
5683.00	9.59	69.49	5650.08	10.29	356.53	-356.68	0.13	474307.38	649838.90		
5778.00	8.59	69.17	5743.88	15.58	370.58	-370.84	1.05	474312.67	649852.95		
5873.00	9.11	71.21	5837.75	20.53	384.33	-384.70	0.64	474317.62	649866.70		
5967.00	10.04	76.46	5930.44	24.84	399.34	-399.81	1.36	474321.93	649881.71		
6062.00	9.91	77.36	6024.01	28.57	415.37	-415.92	0.21	474325.66	649897.74		
6156.00	9.54	77.66	6116.66	32.01	430.87	-431.50	0.40	474329.10	649913.24		
6251.00	9.20	78.92	6210.39	35.15	446.01	-446.71	0.42	474332.24	649928.38		
6346.00	9.94	87.99	6304.07	36.90	461.66	-462.40	1.77	474333.99	649944.03		
6441.00	9.68	88.98	6397.68	37.32	477.84	-478.58	0.33	474334.41	649960.21		
6535.00	8.85	88.79	6490.46	37.62	492.97	-493.72	0.88	474334.71	649975.34		
6630.00	10.01	86.64	6584.17	38.26	508.52	-509.28	1.28	474335.35	649990.89		
6724.00	9.55	87.31	6676.81	39.10	524.47	-525.24	0.50	474336.19	650006.84		
6819.00	8.92	87.75	6770.57	39.76	539.70	-540.48	0.67	474336.85	650022.07		
6913.00	9.31	87.86	6863.39	40.33	554.58	-555.37	0.42	474337.42	650036.95		
7008.00	9.66	87.44	6957.09	40.97	570.22	-571.02	0.38	474338.06	650052.59		
7073.00	8.80	83.92	7021.25	41.74	580.61	-581.43	1.58	474338.83	650062.98		
7098.00	8.69	83.00	7045.95	42.18	584.39	-585.21	0.71	474339.27	650066.76		
7130.00	7.51	82.44	7077.64	42.75	588.86	-589.70	3.70	474339.84	650071.23		
7161.00	3.89	88.74	7108.48	43.04	591.92	-592.76	11.83	474340.13	650074.29		
7193.00	0.71	158.25	7140.45	42.88	593.08	-593.92	11.57	474339.97	650075.45		
7225.00	1.80	254.08	7172.44	42.55	592.67	-593.50	6.25	474339.64	650075.04		
7257.00	3.91	262.59	7204.40	42.27	591.10	-591.93	6.71	474339.36	650073.47		
7288.00	7.24	261.42	7235.25	41.85	588.12	-588.94	10.75	474338.94	650070.49		
7320.00	10.93	263.52	7266.84	41.20	583.11	-583.92	11.58	474338.29	650065.48		
7351.00	13.79	270.39	7297.12	40.90	576.50	-577.30	10.36	474337.99	650058.87		
7383.00	16.06	274.34	7328.04	41.26	568.27	-569.08	7.77	474338.35	650050.64		
7414.00	19.22	273.79	7357.58	41.92	558.90	-559.73	10.21	474339.01	650041.27		
7446.00	21.99	274.19	7387.53	42.71	547.67	-548.52	8.67	474339.80	650030.04		
7478.00	24.85	274.65	7416.89	43.69	534.99	-535.86	8.96	474340.78	650017.36		

5D Survey Report

Survey 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
7509.00	27.81	274.43	7444.67	44.78	521.28	-522.19	9.55	474341.87	650003.65	
7541.00	30.62	273.85	7472.60	45.90	505.70	-506.64	8.83	474342.99	649988.07	
7572.00	33.73	273.12	7498.84	46.90	489.23	-490.19	10.11	474343.99	649971.60	
7604.00	36.68	271.37	7524.98	47.61	470.80	-471.78	9.74	474344.70	649953.17	
7635.00	40.11	270.18	7549.27	47.86	451.55	-452.55	11.32	474344.95	649933.92	
7667.00	43.35	269.30	7573.15	47.76	430.25	-431.25	10.29	474344.85	649912.62	
7698.00	47.22	268.73	7594.96	47.38	408.23	-409.23	12.55	474344.47	649890.60	
7730.00	51.00	269.14	7615.90	46.93	384.05	-385.04	11.85	474344.02	649866.42	
7761.00	54.64	268.91	7634.63	46.51	359.36	-360.35	11.76	474343.60	649841.73	
7793.00	58.66	268.81	7652.22	45.98	332.64	-333.62	12.57	474343.07	649815.01	
7824.00	61.94	268.37	7667.58	45.31	305.72	-306.70	10.65	474342.40	649788.09	
7856.00	65.13	267.82	7681.84	44.36	277.10	-278.06	10.09	474341.45	649759.47	
7887.00	67.67	267.53	7694.25	43.21	248.72	-249.66	8.24	474340.30	649731.09	
7919.00	70.31	267.18	7705.72	41.83	218.88	-219.80	8.31	474338.92	649701.25	
7950.00	72.80	267.01	7715.53	40.34	189.51	-190.40	8.05	474337.43	649671.88	
7982.00	74.94	266.71	7724.42	38.65	158.82	-159.68	6.75	474335.74	649641.19	
8014.00	77.29	266.90	7732.10	36.92	127.80	-128.63	7.37	474334.01	649610.17	
8045.00	79.65	267.22	7738.29	35.37	97.47	-98.27	7.68	474332.46	649579.84	
8075.00	80.86	267.75	7743.37	34.07	67.93	-68.71	4.39	474331.16	649550.30	
8108.00	82.00	266.96	7748.29	32.56	35.34	-36.09	4.19	474329.65	649517.71	
8139.00	82.91	267.21	7752.36	31.00	4.65	-5.37	3.04	474328.09	649487.02	
8171.00	83.76	267.03	7756.07	29.40	-27.10	26.40	2.71	474326.49	649455.27	
8202.00	84.75	267.30	7759.18	27.88	-57.90	57.24	3.31	474324.97	649424.47	
8234.00	85.94	267.57	7761.77	26.45	-89.77	89.12	3.81	474323.54	649392.60	
8266.00	87.48	267.60	7763.61	25.10	-121.68	121.06	4.81	474322.19	649360.69	
8297.00	88.81	267.98	7764.61	23.91	-152.64	152.04	4.46	474321.00	649329.73	
8392.00	90.91	269.51	7764.84	21.83	-247.61	247.03	2.73	474318.92	649234.76	
8487.00	91.82	270.10	7762.58	21.50	-342.58	341.99	1.14	474318.59	649139.79	
8581.00	92.59	270.80	7758.96	22.24	-436.51	435.87	1.11	474319.33	649045.86	
8676.00	93.57	271.33	7753.86	24.01	-531.35	530.65	1.17	474321.10	648951.02	
8771.00	92.24	270.83	7749.05	25.79	-626.21	625.44	1.50	474322.88	648856.16	
8865.00	92.38	270.76	7745.26	27.10	-720.13	719.30	0.17	474324.19	648762.24	
8960.00	91.40	270.53	7742.12	28.17	-815.07	814.19	1.06	474325.26	648667.30	
9055.00	91.61	270.40	7739.63	28.94	-910.03	909.11	0.26	474326.03	648572.34	
9149.00	91.54	269.44	7737.05	28.80	-1004.00	1003.05	1.02	474325.89	648478.37	
9243.00	90.70	267.93	7735.21	26.65	-1097.95	1097.03	1.84	474323.74	648384.42	
9338.00	91.54	268.27	7733.35	23.50	-1192.88	1192.00	0.95	474320.59	648289.49	
9432.00	90.28	267.54	7731.86	20.06	-1286.80	1285.98	1.55	474317.15	648195.57	
9527.00	89.58	267.16	7731.97	15.67	-1381.70	1380.95	0.84	474312.76	648100.67	
9622.00	90.42	267.81	7731.97	11.50	-1476.61	1475.93	1.12	474308.59	648005.76	
9717.00	90.77	267.95	7730.99	7.99	-1571.54	1570.92	0.40	474305.08	647910.83	
9812.00	91.26	268.12	7729.30	4.73	-1666.46	1665.90	0.55	474301.82	647815.91	
9906.00	90.84	266.53	7727.58	0.34	-1760.34	1759.85	1.75	474297.43	647722.03	
10001.00	90.35	266.15	7726.60	-5.72	-1855.14	1854.77	0.65	474291.37	647627.23	
10096.00	90.70	266.11	7725.73	-12.13	-1949.92	1949.67	0.37	474284.96	647532.45	
10190.00	91.47	266.66	7723.95	-18.06	-2043.72	2043.58	1.01	474279.03	647438.65	
10285.00	92.10	266.94	7720.99	-23.36	-2138.52	2138.48	0.73	474273.73	647343.85	
10380.00	92.24	265.96	7717.39	-29.24	-2233.27	2233.34	1.04	474267.85	647249.10	
10475.00	91.75	266.29	7714.08	-35.65	-2328.00	2328.19	0.62	474261.44	647154.37	
10569.00	91.75	266.31	7711.21	-41.71	-2421.76	2422.07	0.02	474255.38	647060.61	
10663.00	90.91	266.69	7709.03	-47.45	-2515.56	2515.98	0.98	474249.64	646966.81	
10758.00	90.98	266.95	7707.46	-52.72	-2610.40	2610.91	0.28	474244.37	646871.97	
10853.00	89.79	267.69	7706.82	-57.16	-2705.29	2705.88	1.48	474239.93	646777.08	
10947.00	89.65	268.80	7707.28	-60.04	-2799.24	2799.88	1.19	474237.05	646683.13	
11041.00	90.21	269.60	7707.40	-61.35	-2893.23	2893.87	1.04	474235.74	646589.14	
11136.00	90.77	270.28	7706.59	-61.45	-2988.23	2988.85	0.93	474235.64	646494.14	
11231.00	91.40	270.69	7704.79	-60.65	-3083.20	3083.78	0.79	474236.44	646399.17	
11326.00	92.03	271.32	7701.94	-58.98	-3178.15	3178.66	0.94	474238.11	646304.22	
11420.00	91.33	271.06	7699.19	-57.03	-3272.09	3272.52	0.79	474240.06	646210.28	

5D Survey Report

Survey 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	
11515.00	90.14	270.34	7697.97	-55.87	-3367.07	3367.45	1.46	474241.22	646115.30		
11609.00	90.42	270.66	7697.51	-55.05	-3461.06	3461.40	0.45	474242.04	646021.31		
11704.00	90.42	270.65	7696.81	-53.97	-3556.05	3556.34	0.01	474243.12	645926.32		
11799.00	90.63	270.86	7695.94	-52.71	-3651.04	3651.28	0.31	474244.38	645831.33		
11893.00	91.19	271.51	7694.45	-50.77	-3745.01	3745.17	0.91	474246.32	645737.36		
11988.00	90.91	271.18	7692.71	-48.54	-3839.97	3840.05	0.46	474248.55	645642.40		
12082.00	90.91	270.68	7691.22	-47.02	-3933.94	3933.97	0.53	474250.07	645548.43		
12177.00	89.51	269.71	7690.87	-46.69	-4028.94	4028.93	1.79	474250.40	645453.43		
12271.00	89.02	269.52	7692.07	-47.32	-4122.93	4122.91	0.56	474249.77	645359.44		
12366.00	89.72	270.24	7693.12	-47.52	-4217.92	4217.88	1.06	474249.57	645264.45		
12390.00	90.07	270.55	7693.16	-47.36	-4241.92	4241.87	1.95	474249.73	645240.45	Last Wft Svy	
12470.00	90.07	270.55	7693.06	-46.59	-4321.92	4321.82	0.00	474250.50	645160.45	Proj. To Bit 11H	



Spud 16 State 11H
Eddy Co, NM



KB-2986
GL-2961

Plan Data for Spud 16 State 11H

Plan Point Information:

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

MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	($^{\circ}$)	($^{\circ}$)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
11326.00	92.03	271.32	7701.94	-58.96	-3178.12	474238.13	646384.25	3178.83	0.94
11446.88	90.50	269.45	7699.27	-58.15	-3298.96	474238.04	646182.41	3299.42	2.80
12469.48	90.50	269.45	7699.35	-68.01	-4321.47	474229.08	645160.90	4321.88	0.00

Plan Data for Spud 16 State 11H

Slot: Spud 16 State 11H

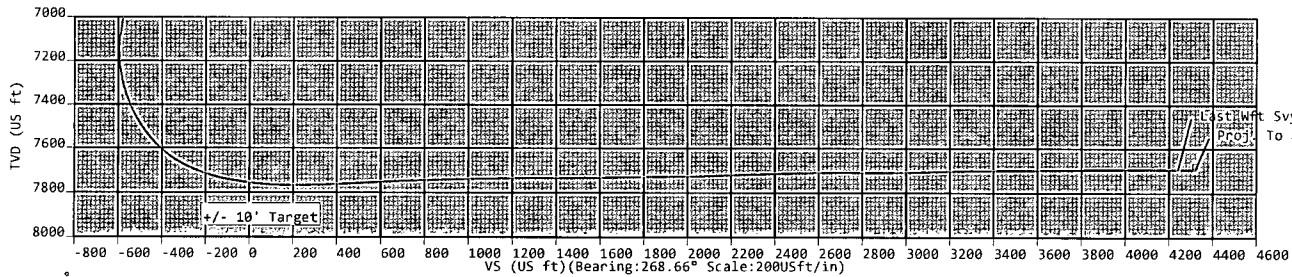
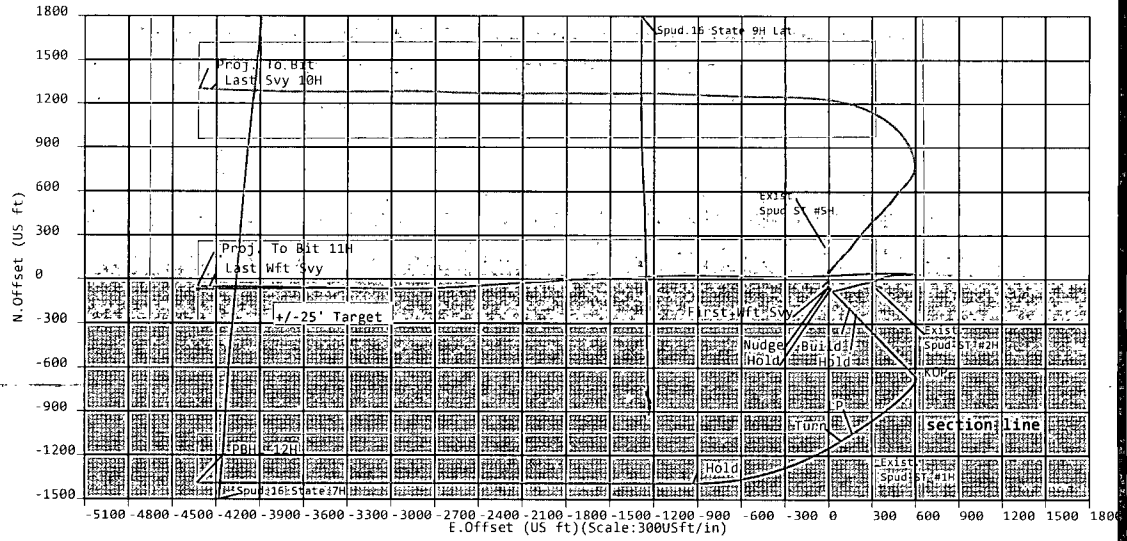
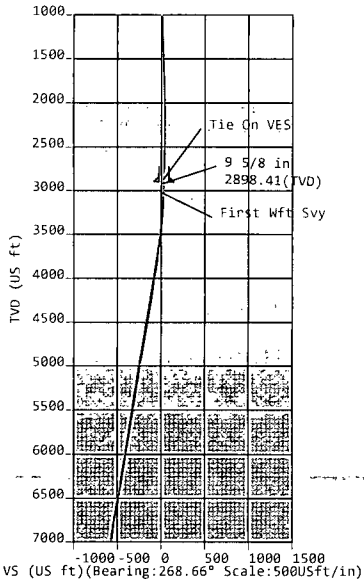
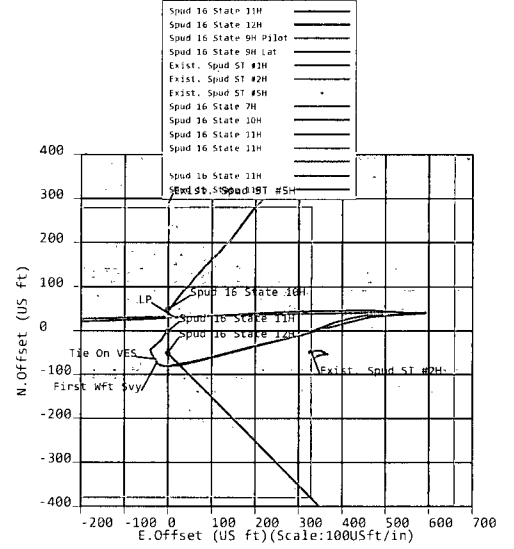
Position:

Offset 15' from Site centre

+N/-S: -49.99USft Northing: 474297.09USft Latitude: $32^{\circ}18'12.4''$

+E/-W: -0.18USft Easting: 649482.37USft Longitude: $-103^{\circ}58'59.9''$

Elevation Above VRU: 2961.80USft



Sign Off: Russell Joyner