

HOBBS OCD

MAR 18 2016

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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. Sheridan Ave
Oklahoma City, OK, 73102

Date: January 13, 2016

Attention: Spencer Stuart

Re: Devon Energy
Well: Thistle Unit 30H
Lea 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:

Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Shane Slater MWD Supervisor	30H	5309 MD 19290 MD	12/27/2015 1/8/2016	Measurement While Drilling

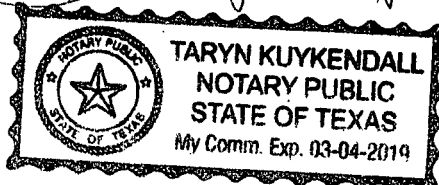
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jonathan Leger
MWD Ops Coordinator

On this, the 22nd day of January, 2016, before me a notary public, the undersigned officer, personally appeared Jonathan Leger, 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



MAR 30 2016

**5D Survey Report**

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Thistle Unit 30H*
Well Name: *Thistle Unit 30H*
Survey: *Definitive survey*

11 January 2016






Thistle Unit 30H

Field Name: Lea Co, NM Nad 83 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: Thistle Unit 30H	Units: US ft	North Reference: Grid	Convergence Angle: 0.40	
	Position:	Northing: 467200.70US ft	Latitude: 32° 16' 55.88"	
		Easting: 772731.45US ft	Longitude: -103° 35' 4.49"	
	Elevation above MSL: 3681.00 US ft			
Comment:				
Slot: Thistle Unit 30H	Position (Relative to Site Centre)			
	+N/-S: 0.00US ft	Northing: 467200.70US ft	Latitude: 32°16'55.88"	
	+E/-W: 0.00US ft	Easting: 772731.45US ft	Longitude: -103°35'4.49"	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 3681.00US ft			
Comment:				
Well: Thistle Unit 30H	Type: Main well		UWI:	
	File Number:	Comment:		
	Closure Distance: 10049.3US ft		Closure Azimuth: 179.48°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: -0.00US ft	+E/-W: -0.00US ft	Az: 179.59°	

Drill floor: Survey Name: Definitive Survey

Rig Height (Kelly Bushing): 23.50us ft	Elevation above MSL: 3704.50us ft	Inclination: 0.00°	Azimuth: 0.00°
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Survey Name: Definitive Survey

Date: 15/Oct/2015	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:
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Magnetic Model:

Model Name: bggm2015	Date: 30/Nov/2015	Field Strength: 48232.7nT	Declination: 7.22°	Dip: 60.19°
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Tie Point:

MD: 0.00 US ft	Inclination: 0.00°	Azimuth: 0.00°	TVD: 0.00 US ft	North Offset: -0.00 US ft	East Offset: -0.00 US ft
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Survey Tool Ranges:

Name	Start MD(usft)	End MD(usft)	Source Survey
MWD	0.00	5067.00	Extreme MWD
MWD	5067.00	19365.00	Wt MWD Svy

5D Survey 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
5243.00	1.76	125.28	5242.45	-3.47	22.40	467197.23	772753.85	9 5/8 in

Wellpath created using minimum curvature.

Survey 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 (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.00	467200.70	772731.45	
152.00	0.10	346.70	152.00	0.13	-0.03	-0.13	0.07	467200.83	772731.42	
305.00	0.40	350.20	305.00	0.79	-0.15	-0.79	0.20	467201.48	772731.30	
445.00	0.50	74.20	445.00	1.43	0.35	-1.43	0.43	467202.13	772731.80	
586.00	0.20	237.60	585.99	1.47	0.74	-1.46	0.49	467202.16	772732.19	
770.00	0.30	224.30	769.99	0.95	0.13	-0.95	0.06	467201.65	772731.58	
955.00	0.60	196.30	954.99	-0.32	-0.48	0.32	0.20	467200.37	772730.97	
1138.00	0.40	233.30	1137.98	-1.63	-1.26	1.62	0.20	467199.07	772730.19	
1322.00	0.40	253.10	1321.98	-2.20	-2.39	2.18	0.07	467198.50	772729.06	
1445.00	0.40	280.53	1444.97	-2.24	-3.22	2.22	0.15	467198.45	772728.23	
1628.00	0.48	288.83	1627.97	-1.88	-4.58	1.85	0.06	467198.82	772726.87	
1819.00	0.40	295.99	1818.96	-1.33	-5.93	1.29	0.05	467199.37	772725.52	
2010.00	0.31	284.92	2009.96	-0.90	-7.03	0.85	0.06	467199.79	772724.42	
2201.00	0.22	254.60	2200.96	-0.87	-7.89	0.81	0.09	467199.83	772723.57	
2390.00	0.09	156.29	2389.96	-1.10	-8.18	1.04	0.13	467199.60	772723.28	
2584.00	0.09	123.03	2583.96	-1.32	-7.99	1.26	0.03	467199.37	772723.46	
2772.00	0.22	344.82	2771.95	-1.05	-7.96	1.00	0.16	467199.64	772723.49	
2968.00	0.22	336.42	2967.95	-0.35	-8.21	0.29	0.02	467200.35	772723.25	
3158.00	0.31	297.01	3157.95	0.22	-8.81	-0.28	0.10	467200.92	772722.64	
3348.00	0.22	209.60	3347.95	0.14	-9.45	-0.21	0.20	467200.83	772722.00	
3539.00	0.22	89.32	3538.95	-0.18	-9.26	0.11	0.20	467200.52	772722.19	
3731.00	0.30	63.30	3730.95	0.05	-8.45	-0.11	0.07	467200.75	772723.01	
3921.00	0.60	32.72	3920.94	1.11	-7.46	-1.17	0.20	467201.81	772723.99	
4113.00	0.50	61.81	4112.93	2.36	-6.18	-2.40	0.15	467203.05	772725.27	
4304.00	0.80	59.70	4303.92	3.42	-4.30	-3.45	0.16	467204.12	772727.16	
4491.00	1.50	87.30	4490.88	4.20	-0.72	-4.20	0.47	467204.89	772730.73	
4591.00	1.60	84.00	4590.85	4.40	1.97	-4.39	0.13	467205.10	772733.42	
4685.00	2.00	94.81	4684.80	4.40	4.91	-4.37	0.56	467205.10	772736.36	
4777.00	2.60	97.80	4776.73	3.99	8.58	-3.92	0.66	467204.68	772740.03	
4874.00	2.30	109.09	4873.64	3.05	12.60	-2.96	0.58	467203.75	772744.05	
4971.00	1.80	127.29	4970.58	1.49	15.65	-1.38	0.84	467202.19	772747.10	
5067.00	1.80	126.63	5066.53	-0.32	18.06	0.45	0.02	467200.37	772749.51	
5195.00	1.70	125.53	5194.47	-2.63	21.22	2.78	0.08	467198.07	772752.67	Tie On Extreme
5309.00	1.85	124.96	5308.41	-4.66	24.10	4.83	0.13	467196.03	772755.55	First Wft Svy
5500.00	1.84	123.36	5499.32	-8.12	29.19	8.32	0.03	467192.58	772760.64	
5691.00	1.61	135.47	5690.23	-11.71	33.63	11.95	0.23	467188.98	772765.08	
5882.00	1.66	137.51	5881.15	-15.67	37.38	15.93	0.04	467185.03	772768.83	
6073.00	1.88	132.43	6072.06	-19.82	41.56	20.12	0.14	467180.88	772773.02	
6264.00	0.73	146.87	6263.01	-22.95	44.54	23.27	0.62	467177.74	772775.99	
6455.00	0.73	149.92	6453.99	-25.03	45.82	25.35	0.02	467175.67	772777.27	
6646.00	0.55	126.96	6644.98	-26.63	47.16	26.97	0.16	467174.07	772778.61	
6837.00	0.38	110.57	6835.97	-27.40	48.48	27.75	0.11	467173.29	772779.94	
7028.00	0.14	149.18	7026.97	-27.83	49.20	28.18	0.15	467172.87	772780.65	
7218.00	0.43	159.47	7216.97	-28.69	49.57	29.05	0.15	467172.00	772781.02	
7409.00	0.41	140.98	7407.96	-29.90	50.25	30.25	0.07	467170.80	772781.70	
7600.00	0.80	151.66	7598.95	-31.60	51.31	31.97	0.21	467169.10	772782.76	
7791.00	0.70	129.06	7789.94	-33.51	52.85	33.89	0.16	467167.19	772784.30	
7982.00	0.78	120.76	7980.92	-34.91	54.87	35.30	0.07	467165.79	772786.32	
8173.00	1.07	153.85	8171.90	-37.17	56.78	37.58	0.31	467163.52	772788.23	
8356.00	0.98	175.23	8354.87	-40.27	57.66	40.68	0.21	467160.43	772789.11	
8547.00	1.02	175.94	8545.84	-43.59	57.91	44.00	0.02	467157.10	772789.37	

5D Survey Report

Survey 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 (%/100US ft)	Northing (US ft)	Easting (US ft)	Comment
8738.00	1.05	170.94	8736.81	-47.02	58.31	47.43	0.05	467153.68	772789.76	
8929.00	1.00	180.56	8927.78	-50.41	58.57	50.83	0.09	467150.29	772790.02	
9003.00	0.81	180.52	9001.77	-51.58	58.56	52.00	0.26	467149.12	772790.01	Cross Prod Box
9025.00	0.76	180.51	9023.77	-51.88	58.56	52.30	0.23	467148.82	772790.01	
9088.00	4.35	193.66	9086.69	-54.62	57.99	55.03	5.74	467146.08	772789.44	
9120.00	8.64	195.64	9118.48	-58.12	57.05	58.52	13.42	467142.58	772788.50	
9152.00	12.70	193.83	9149.92	-63.85	55.56	64.24	12.73	467136.85	772787.02	
9184.00	15.56	190.23	9180.95	-71.49	53.96	71.87	9.35	467129.21	772785.41	
9216.00	18.00	190.92	9211.59	-80.57	52.26	80.94	7.65	467120.13	772783.71	
9264.00	21.24	189.20	9256.79	-96.44	49.46	96.79	6.86	467104.26	772780.92	
9312.00	26.12	186.96	9300.74	-115.52	46.79	115.85	10.34	467085.17	772778.24	
9360.00	31.39	186.16	9342.81	-138.45	44.17	138.77	11.01	467062.24	772775.62	
9407.00	37.33	184.80	9381.59	-164.85	41.66	165.14	12.74	467035.85	772773.11	
9455.00	42.84	183.64	9418.30	-195.66	39.41	195.94	11.58	467005.03	772770.86	
9503.00	48.60	183.81	9451.80	-229.94	37.17	230.20	12.00	466970.76	772768.62	
9550.00	53.47	184.24	9481.34	-266.38	34.60	266.62	10.39	466934.31	772766.05	
9598.00	58.34	184.06	9508.24	-306.01	31.73	306.23	10.15	466894.68	772763.18	
9646.00	63.11	184.31	9531.71	-347.76	28.67	347.96	9.95	466852.94	772760.12	
9694.00	67.77	185.67	9551.65	-391.24	24.87	391.41	10.04	466809.46	772756.32	
9742.00	71.65	186.71	9568.30	-435.99	20.01	436.12	8.33	466764.71	772751.46	
9789.00	75.51	186.43	9581.58	-480.77	14.85	480.86	8.23	466719.93	772746.30	
9837.00	80.52	187.28	9591.54	-527.37	9.25	527.42	10.58	466673.33	772740.70	
9873.00	83.06	186.24	9596.69	-562.75	5.05	562.77	7.61	466637.95	772736.50	
9937.00	88.25	184.23	9601.53	-626.27	-0.76	626.25	8.69	466574.42	772730.69	
9969.00	89.86	182.35	9602.06	-658.21	-2.60	658.18	7.73	466542.48	772728.85	
10064.00	91.47	182.22	9600.96	-753.13	-6.39	753.06	1.70	466447.57	772725.06	
10160.00	90.21	180.72	9599.55	-849.08	-8.85	849.00	2.04	466351.61	772722.60	
10255.00	90.42	180.41	9599.03	-944.08	-9.79	943.98	0.39	466256.62	772721.67	
10351.00	89.58	180.36	9599.03	-1040.07	-10.43	1039.97	0.88	466160.62	772721.02	
10446.00	89.58	180.67	9599.72	-1135.07	-11.29	1134.96	0.33	466065.63	772720.17	
10542.00	90.00	179.05	9600.08	-1231.06	-11.05	1230.95	1.74	465969.63	772720.40	
10638.00	89.65	177.21	9600.37	-1327.01	-7.92	1326.92	1.95	465873.69	772723.53	
10733.00	89.44	177.25	9601.12	-1421.89	-3.33	1421.83	0.23	465778.80	772728.12	
10829.00	89.72	177.46	9601.83	-1517.79	1.10	1517.76	0.36	465682.91	772732.55	
10924.00	89.30	178.31	9602.64	-1612.72	4.61	1612.71	1.00	465587.98	772736.06	
11020.00	89.37	178.16	9603.75	-1708.67	7.57	1708.68	0.17	465492.03	772739.02	
11115.00	89.02	178.19	9605.09	-1803.61	10.59	1803.64	0.37	465397.09	772742.04	
11211.00	89.79	179.28	9606.09	-1899.58	12.71	1899.62	1.39	465301.12	772744.16	
11306.00	89.58	178.48	9606.61	-1994.56	14.57	1994.61	0.87	465206.14	772746.02	
11402.00	90.07	178.64	9606.90	-2090.53	16.98	2090.59	0.54	465110.17	772748.43	
11497.00	90.14	178.80	9606.73	-2185.50	19.10	2185.58	0.18	465015.19	772750.55	
11592.00	90.77	179.27	9605.97	-2280.48	20.70	2280.57	0.83	464920.21	772752.15	
11688.00	88.81	178.83	9606.33	-2376.47	22.29	2376.56	2.09	464824.23	772753.74	
11783.00	88.11	178.30	9608.88	-2471.40	24.67	2471.51	0.92	464729.29	772756.12	
11879.00	88.18	179.31	9611.99	-2567.33	26.67	2567.45	1.05	464633.37	772758.12	
11974.00	88.25	179.18	9614.95	-2662.27	27.92	2662.41	0.16	464538.42	772759.37	
12069.00	89.30	179.75	9616.98	-2757.25	28.81	2757.38	1.26	464443.45	772760.26	
12165.00	89.65	179.54	9617.86	-2853.24	29.40	2853.38	0.43	464347.46	772760.86	
12260.00	89.02	179.65	9618.96	-2948.23	30.08	2948.37	0.67	464252.46	772761.53	
12356.00	89.23	179.82	9620.42	-3044.22	30.52	3044.36	0.28	464156.48	772761.97	
12451.00	89.79	179.12	9621.24	-3139.21	31.40	3139.35	0.94	464061.49	772762.85	
12547.00	90.49	178.72	9621.00	-3235.19	33.21	3235.35	0.84	463965.50	772764.66	
12642.00	91.05	178.65	9619.73	-3330.16	35.39	3330.33	0.59	463870.54	772766.84	
12738.00	91.26	178.93	9617.79	-3426.12	37.41	3426.30	0.36	463774.58	772768.87	
12834.00	91.89	178.72	9615.15	-3522.06	39.38	3522.25	0.69	463678.64	772770.83	
12929.00	91.26	179.72	9612.54	-3617.01	40.68	3617.21	1.24	463583.68	772772.13	
13024.00	92.24	179.47	9609.64	-3711.97	41.35	3712.17	1.06	463488.73	772772.80	
13120.00	89.65	179.81	9608.06	-3807.94	41.95	3808.15	2.72	463392.75	772773.40	

5D Survey Report

Survey 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 (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
13216.00	89.23	181.61	9608.99	-3903.93	40.76	3904.12	1.93	463296.77	772772.21	
13311.00	87.41	180.64	9611.78	-3998.86	38.90	3999.04	2.17	463201.83	772770.35	
13407.00	87.48	179.68	9616.06	-4094.77	38.63	4094.94	1.00	463105.93	772770.08	
13502.00	88.25	179.61	9619.60	-4189.70	39.22	4189.87	0.81	463011.00	772770.67	
13598.00	90.28	180.39	9620.83	-4285.68	39.22	4285.85	2.27	462915.01	772770.67	
13693.00	91.05	180.58	9619.73	-4380.67	38.41	4380.84	0.83	462820.02	772769.86	
13789.00	91.40	180.47	9617.68	-4476.65	37.53	4476.80	0.38	462724.05	772768.98	
13885.00	90.70	180.47	9615.92	-4572.63	36.74	4572.77	0.73	462628.07	772768.20	
13980.00	89.93	180.87	9615.39	-4667.62	35.63	4667.75	0.91	462533.08	772767.09	
14076.00	89.86	181.14	9615.57	-4763.60	33.95	4763.72	0.29	462437.09	772765.40	
14171.00	88.18	180.47	9617.19	-4858.58	32.62	4858.68	1.90	462342.12	772764.07	
14267.00	86.71	179.51	9621.47	-4954.48	32.63	4954.58	1.83	462246.22	772764.08	
14362.00	87.83	179.23	9626.00	-5049.36	33.68	5049.47	1.22	462151.33	772765.13	
14458.00	88.53	178.39	9629.05	-5145.29	35.67	5145.41	1.14	462055.41	772767.12	
14554.00	89.79	178.18	9630.45	-5241.24	38.54	5241.38	1.33	461959.46	772769.99	
14649.00	89.44	177.00	9631.09	-5336.15	42.54	5336.32	1.30	461864.55	772773.99	
14745.00	91.12	177.16	9630.62	-5432.02	47.43	5432.22	1.76	461768.68	772778.88	
14815.00	91.61	177.32	9628.96	-5501.92	50.80	5502.14	0.74	461698.78	772782.25	
14910.00	91.12	178.05	9626.69	-5596.81	54.63	5597.06	0.93	461603.88	772786.08	
15006.00	90.77	177.89	9625.11	-5692.74	58.03	5693.01	0.40	461507.96	772789.48	
15102.00	88.95	177.43	9625.34	-5788.65	61.95	5788.95	1.96	461412.04	772793.40	
15197.00	88.53	176.92	9627.43	-5883.51	66.63	5883.84	0.70	461317.18	772798.08	
15292.00	88.81	177.56	9629.64	-5978.38	71.20	5978.73	0.74	461222.32	772802.66	
15388.00	89.09	177.34	9631.40	-6074.27	75.48	6074.65	0.37	461126.43	772806.93	
15484.00	89.58	177.84	9632.51	-6170.17	79.51	6170.59	0.73	461030.52	772810.96	
15579.00	89.79	178.39	9633.03	-6265.12	82.64	6265.55	0.62	460935.57	772814.09	
15675.00	89.23	179.09	9633.86	-6361.09	84.75	6361.54	0.93	460839.60	772816.20	
15770.00	89.30	179.53	9635.07	-6456.08	85.89	6456.53	0.47	460744.62	772817.34	
15866.00	89.23	179.58	9636.31	-6552.07	86.64	6552.52	0.09	460648.63	772818.09	
15961.00	89.30	180.02	9637.52	-6647.06	86.97	6647.51	0.47	460553.64	772818.42	
16057.00	89.09	180.13	9638.87	-6743.05	86.84	6743.50	0.25	460457.65	772818.30	
16153.00	87.76	179.69	9641.51	-6839.01	86.99	6839.46	1.46	460361.68	772818.45	
16248.00	90.14	180.53	9643.25	-6933.99	86.81	6934.43	2.66	460266.71	772818.26	
16344.00	89.44	179.97	9643.60	-7029.98	86.39	7030.42	0.93	460170.71	772817.84	
16439.00	89.16	179.38	9644.77	-7124.98	86.93	7125.42	0.69	460075.72	772818.38	
16535.00	90.49	179.89	9645.06	-7220.97	87.54	7221.41	1.48	459979.73	772818.99	
16630.00	90.63	179.96	9644.13	-7315.97	87.67	7316.41	0.16	459884.73	772819.12	
16726.00	89.86	179.93	9643.72	-7411.96	87.76	7412.40	0.80	459788.73	772819.21	
16822.00	90.28	180.39	9643.60	-7507.96	87.49	7508.40	0.65	459692.73	772818.94	
16917.00	90.70	180.81	9642.79	-7602.95	86.50	7603.38	0.63	459597.74	772817.95	
17013.00	90.00	179.38	9642.20	-7698.95	86.34	7699.37	1.66	459501.75	772817.79	
17108.00	89.65	179.25	9642.49	-7793.94	87.47	7794.37	0.39	459406.75	772818.92	
17204.00	89.02	178.51	9643.61	-7889.92	89.35	7890.35	1.01	459310.78	772820.80	
17299.00	90.14	178.71	9644.30	-7984.88	91.65	7985.34	1.20	459215.81	772823.11	
17395.00	89.58	178.96	9644.54	-8080.86	93.61	8081.33	0.64	459119.83	772825.06	
17490.00	90.91	179.66	9644.13	-8175.85	94.75	8176.32	1.58	459024.84	772826.20	
17586.00	92.31	179.99	9641.43	-8271.81	95.04	8272.28	1.50	458928.88	772826.49	
17682.00	91.54	180.35	9638.21	-8367.76	94.76	8368.22	0.89	458832.94	772826.21	
17777.00	91.68	180.15	9635.54	-8462.72	94.34	8463.18	0.26	458737.98	772825.80	
17873.00	90.63	180.35	9633.61	-8558.70	93.92	8559.15	1.11	458642.00	772825.38	
17968.00	89.79	180.24	9633.26	-8653.69	93.44	8654.14	0.89	458547.00	772824.89	
18064.00	88.95	179.97	9634.31	-8749.69	93.26	8750.13	0.92	458451.01	772824.71	
18160.00	89.58	180.22	9635.54	-8845.68	93.10	8846.12	0.71	458355.02	772824.55	
18255.00	89.79	180.05	9636.07	-8940.68	92.88	8941.11	0.28	458260.02	772824.33	
18351.00	90.35	179.68	9635.95	-9036.68	93.10	9037.11	0.70	458164.02	772824.55	
18447.00	89.30	179.90	9636.24	-9132.67	93.45	9133.11	1.12	458068.02	772824.91	
18542.00	88.04	180.12	9638.45	-9227.65	93.44	9228.08	1.35	457973.05	772824.89	
18638.00	88.04	179.49	9641.73	-9323.59	93.76	9324.02	0.66	457877.11	772825.22	
18733.00	87.62	178.54	9645.33	-9418.50	95.40	9418.95	1.09	457782.19	772826.85	

5D Survey Report

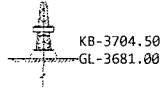
Survey Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
18829.00	89.16	178.35	9648.03	-9514.43	98.00	9514.89	1.62	457686.27	772829.45	
18924.00	87.83	179.33	9650.52	-9609.37	99.92	9609.84	1.74	457591.32	772831.38	
19020.00	86.43	179.88	9655.33	-9705.25	100.58	9705.72	1.57	457495.45	772832.04	
19115.00	85.02	181.50	9662.41	-9799.97	99.44	9800.43	2.26	457400.73	772830.90	
19211.00	85.38	182.16	9670.44	-9895.58	96.39	9896.02	0.78	457305.11	772827.84	
19269.35	85.07	181.87	9675.30	-9953.70	94.35	9954.12	0.73	457247.00	772825.80	Cross Prod Box
19290.00	84.96	181.76	9677.09	-9974.26	93.69	9974.67	0.75	457226.44	772825.15	Last Wft Svy
19365.00	84.96	181.76	9683.68	-10048.93	91.40	10049.33	0.00	457151.76	772822.85	Proj to Bit

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Thistle Unit 30H
Lea Co, NM



Plan Data for Thistle Unit 30H

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)
14745.00	91.12	177.16	9630.79	-5432.02	47.43	461768.67	772778.88	5432.22	1.76
14820.00	91.12	177.16	9629.32	-5506.92	51.14	461693.78	772782.59	5507.14	0.00
15160.92	89.00	179.83	9628.97	-5847.67	60.09	461353.03	772791.55	5847.95	1.00
15360.92	89.00	179.83	9632.46	-6047.63	60.69	461153.06	772792.14	6047.91	0.00
15420.98	89.60	179.83	9633.19	-6107.70	60.86	461093.00	772792.31	6107.97	1.00
19267.25	89.60	179.83	9660.00	-9953.86	72.00	457246.84	772803.45	9954.12	0.00

Plan Data for Thistle Unit 30H

Target Set Information:

Name: Thistle Unit 30H Tgts

Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)		
PBHL 30H	9660.00	-9953.86	72.00	457246.84	772803.45	Cuboid	

Plan Data for Thistle Unit 30H

Slot: Thistle Unit 30H

Position:

Offset is from Site centre

+N/-S:	0.00USft	Northing:	467200.70USft	Latitude:	32°16'55.9"
+E/-W:	0.00USft	Easting:	772731.45USft	Longitude:	-103°35'4.5"
		Elevation Above VRD:	3681.00USft		

Thistle Unit 30H	_____
Thistle Unit 52H	_____
Exist. Thistle Unit #18H	_____
Exist. Thistle Unit #2	_____
Thistle Unit 51H	_____
Thistle Unit 70H	_____
Thistle Unit 30H	_____

