



John Hupp BRK 3H
 Brooke County, WV
 Quail 9
Plan vs Actual

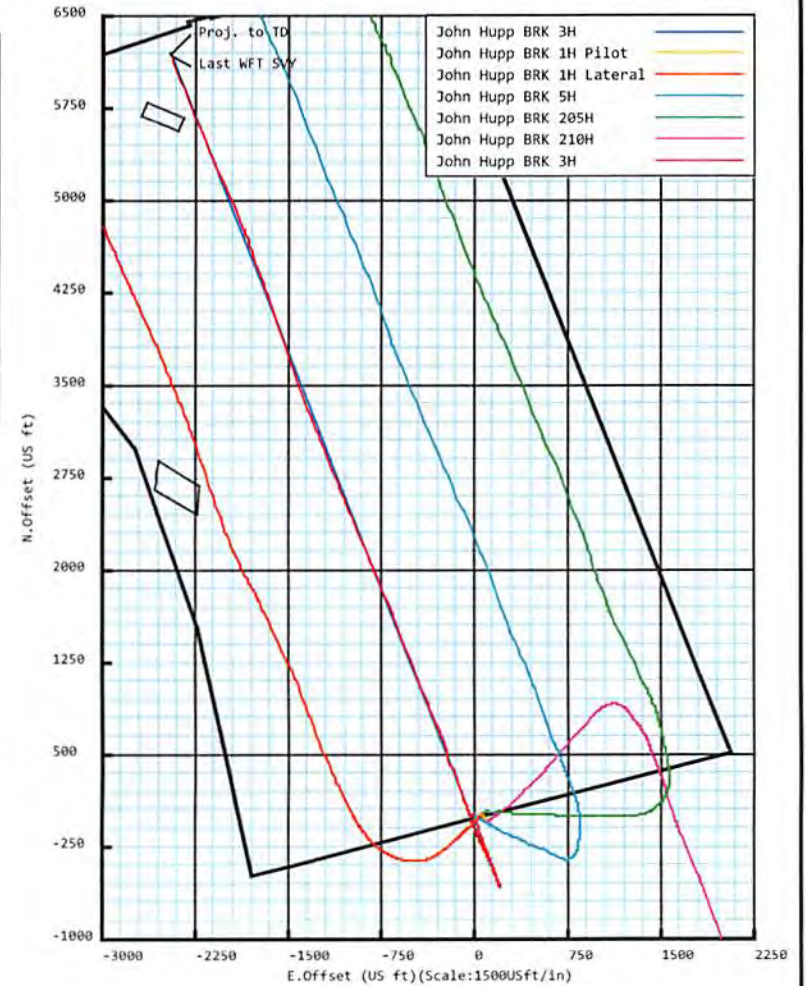
Plan Data for John Hupp BRK 3H

Plan Point Information:
 DogLeg Severity Unit: %/100.00ft Position offsets from Slot centre

MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	Comments
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	(°)
5132.00	12.55	158.58	5071.06	-541.56	195.40	-575.47	0.69	134.2	Last WFT SVY
5297.56	12.55	158.58	5232.67	-575.05	208.54	-611.44	0.00	0.0	Curve KOP 7° DLS
6476.84	70.00	337.94	6179.66	-94.70	11.97	-92.47	7.00	179.4	Build/Turn 9° DLS
6708.74	90.86	338.64	6218.00	116.60	-72.12	134.95	9.00	2.0	Landing Point
13237.11	90.86	338.64	6120.00	6195.79	-2449.81	6662.54	0.00	0.0	PBHL JH3H

Target Set Information:
 Name: John Hupp BRK 3H
 Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat	Long
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(°)	(°)
LP JH3H	6218.00	107.29	-68.48	14591402.64	1760715.82	40.176790	-80.569326
PBHL JH3H	6120.00	6195.79	-2449.81	14597491.14	1758334.49	40.193541	-80.577748



Plan Data for John Hupp BRK 3H

Field: SOUTHWESTERN_BROOKE CO, WV UTM NAD 83 (17N)
 Map Unit: USft Vertical Reference Datum (VRD):
 Projected Coordinate System: NAD83 / UTM zone 17N

Site: John Hupp Pad
 Unit: USFeet TVD Reference:
 Company Name: SOUTHWESTERN ENERGY

Position: Northing: 14591276.54USft Latitude: 40.176442°
 Easting: 1760880.58USft Longitude: -80.568739°
 North Reference: Grid Grid Convergence: 0.28°
 Elevation Above VRD: 1276.30USft

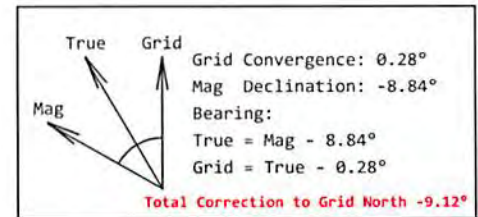
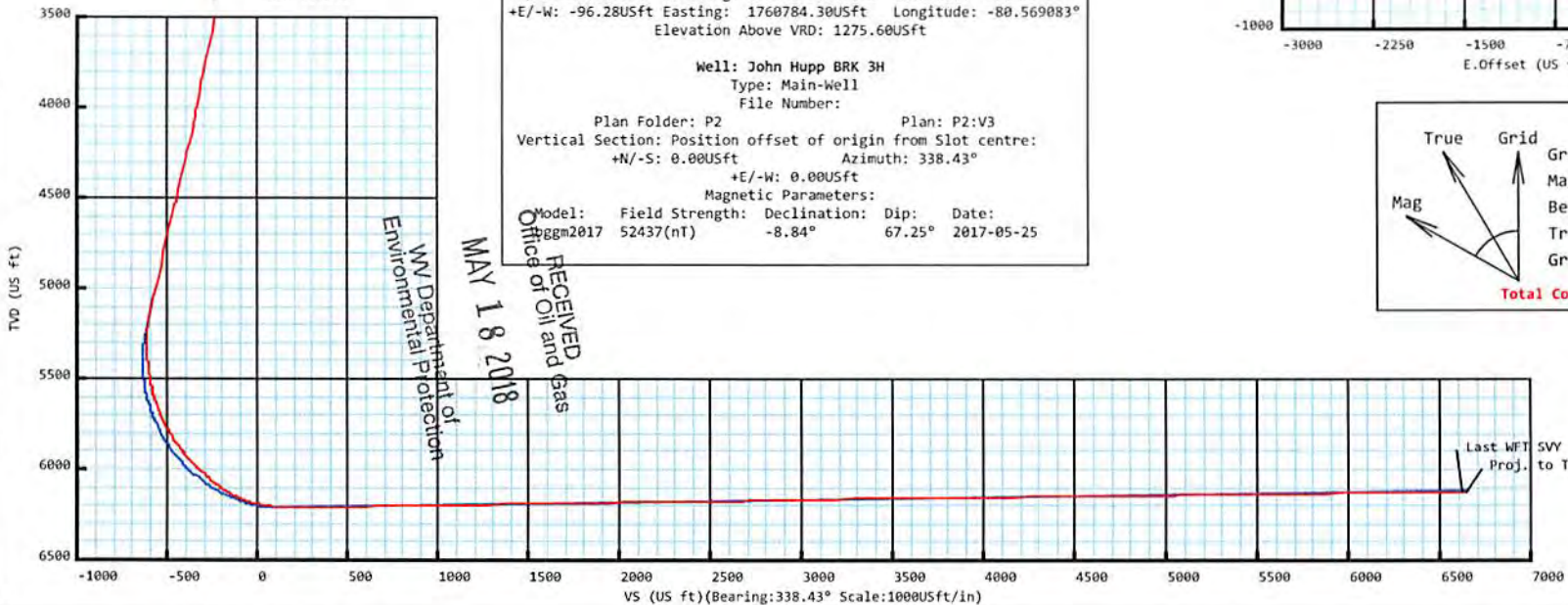
Slot: John Hupp BRK 3H
 Position:
 Offset is from Site centre
 +N/-S: 18.81USft Northing: 14591295.35USft Latitude: 40.176495°
 +E/-W: -96.28USft Easting: 1760784.30USft Longitude: -80.569083°
 Elevation Above VRD: 1275.60USft

Well: John Hupp BRK 3H
 Type: Main-Well
 File Number:

Plan Folder: P2 Plan: P2:V3
 Vertical Section: Position offset of origin from Slot centre:
 +N/-S: 0.00USft Azimuth: 338.43°
 +E/-W: 0.00USft

Magnetic Parameters:
 Model: Field Strength: Declination: Dip: Date:
 Iggm2017 52437(nT) -8.84° 67.25° 2017-05-25

KB: 1288.0'
 GL: 1275.0'



Drawing By: GWR Date: 09/04/2017
 Weatherford Drilling Services
 7725 W. Reno, Ste. #220
 Oklahoma City, OK 73127
 +1.405.773.1100 Main
 +1.405.773.1887 Fax

**5D Survey Report**

SOUTHWESTERN ENERGY

Field Name: *SOUTHWESTERN_BROOKE CO, WV UTM NAD 83
(17N)*

Site Name: *John Hupp Pad*

Well Name: *John Hupp BRK 3H*

Survey: *Definitive survey*

11 September 2017

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John Hupp BRK 3H

Map Units: US ft	Company Name: SOUTHWESTERN ENERGY
Field Name:	Vertical Reference Datum (VRD):
SOUTHWESTER N_BROOKE CO, WV UTM NAD 83 (17N)	Projected Coordinate System: NAD83 / UTM zone 17N
	Comment:

Site: John Hupp Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.28
		Northing: 14591276.54 US ft	Latitude: 40.176442
	Position:	Easting: 1760880.58 US ft	Longitude: -80.568739
		Elevation above Field Reference: 1276.30 US ft	
	Comment:		

Slot: John Hupp BRK 3H	Position (Relative to Site Centre)		
	+N/-S: 18.81 US ft	Northing: 14591295.35 US ft	Latitude: 40.176495
	+E/-W: -96.28 US ft	Easting: 1760784.30 US ft	Longitude: -80.569083
	Elevation above Field Reference: 1275.60 US ft		
	Comment:		

Well: John Hupp BRK 3H	Type: Main well	UWI:
	File Number:	Comment:
	Closure Distance: 6648.66 US ft	Closure Azimuth: 338.46°
	Vertical Section: Position of Origin (Relative to Slot centre)	
	+N/-S: 0.00 US ft	+E/-W: 0.00 US ft Az: 338.43°

Drill floor: Survey Name: Definitive Survey			
Rig Height (Well TVD Reference): 26.00 US ft	Elevation above Field Reference: 1301.60 US ft	Inclination: 0.00°	Azimuth: 0.00°

Survey Name: Definitive Survey			
Date: 17/May/2017	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:

Magnetic Model:				
Model Name: bggm2017	Date: 25/May/2017	Field Strength: 52437.7 nT	Declination: -8.84°	Dip: 67.25°

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

Survey Tool Ranges:			
Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD	0.00	13.00	
MWD	13.00	547.00	WFT MWD_01
MWD	547.00	1822.00	WFT MWD_02
MWD	1822.00	5132.00	WFT MWD_03
MWD	5132.00	13180.00	WFT MWD_04

Wellpath created using minimum curvature.

SD Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (%/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.176495	-80.569083	0.00	
13.00	0.00	0.00	13.00	0.00	0.00	0.00	40.176495	-80.569083	0.00	
151.00	0.69	160.59	151.00	-0.83	-0.78	0.28	40.176493	-80.569082	0.50	
196.00	0.83	177.69	195.99	-1.41	-1.36	0.38	40.176491	-80.569082	0.59	
240.00	0.79	183.40	239.99	-1.98	-1.99	0.37	40.176489	-80.569082	0.20	
284.00	0.85	182.79	283.98	-2.56	-2.61	0.34	40.176487	-80.569082	0.14	
328.00	0.80	191.91	327.98	-3.11	-3.24	0.26	40.176486	-80.569082	0.32	
372.00	0.87	199.23	371.97	-3.62	-3.86	0.09	40.176484	-80.569083	0.29	
416.00	1.06	204.10	415.97	-4.16	-4.54	-0.19	40.176482	-80.569084	0.47	
460.00	0.91	208.81	459.96	-4.66	-5.22	-0.52	40.176480	-80.569085	0.39	
504.00	0.79	207.44	503.96	-5.09	-5.80	-0.83	40.176479	-80.569086	0.28	
547.00	0.56	204.31	546.95	-5.43	-6.25	-1.05	40.176478	-80.569087	0.54	
641.00	0.38	295.28	640.95	-5.52	-6.54	-1.53	40.176477	-80.569089	0.73	
684.00	0.47	319.52	683.95	-5.25	-6.34	-1.77	40.176477	-80.569089	0.46	
728.00	0.51	319.71	727.95	-4.89	-6.06	-2.01	40.176478	-80.569090	0.09	
772.00	0.50	322.53	771.95	-4.52	-5.75	-2.26	40.176479	-80.569091	0.06	
816.00	0.62	300.28	815.95	-4.15	-5.48	-2.58	40.176480	-80.569092	0.56	
904.00	0.86	319.21	903.94	-3.15	-4.74	-3.42	40.176482	-80.569095	0.39	
992.00	0.76	317.07	991.93	-1.98	-3.81	-4.25	40.176484	-80.569098	0.12	
1080.00	0.77	317.31	1079.92	-0.89	-2.95	-5.05	40.176487	-80.569101	0.01	
1166.00	0.69	311.45	1165.91	0.11	-2.18	-5.83	40.176489	-80.569104	0.13	
1254.00	0.63	320.83	1253.91	1.04	-1.46	-6.53	40.176491	-80.569106	0.14	
1340.00	0.63	336.83	1339.90	1.97	-0.66	-7.02	40.176493	-80.569108	0.20	
1429.00	0.77	345.70	1428.90	3.05	0.37	-7.36	40.176496	-80.569109	0.20	
1516.00	1.07	340.76	1515.89	4.44	1.71	-7.77	40.176499	-80.569111	0.36	
1604.00	1.02	347.51	1603.87	6.04	3.25	-8.21	40.176504	-80.569112	0.15	
1691.00	0.74	343.44	1690.86	7.36	4.54	-8.54	40.176507	-80.569113	0.33	
1779.00	0.64	342.30	1778.85	8.42	5.55	-8.85	40.176510	-80.569115	0.11	
1822.00	0.67	330.14	1821.85	8.90	6.00	-9.05	40.176511	-80.569115	0.33	
1937.00	1.09	332.38	1936.84	10.66	7.55	-9.89	40.176516	-80.569118	0.37	
2026.00	0.47	334.75	2025.83	11.86	8.63	-10.44	40.176519	-80.569120	0.70	
2114.00	2.76	155.95	2113.80	10.11	7.02	-9.73	40.176514	-80.569118	3.67	
2202.00	4.46	150.88	2201.62	4.60	2.10	-7.20	40.176501	-80.569109	1.96	
2291.00	4.89	153.30	2290.33	-2.61	-4.31	-3.81	40.176483	-80.569097	0.53	
2379.00	5.43	159.89	2377.97	-10.51	-11.57	-0.69	40.176463	-80.569086	0.91	
2467.00	7.11	161.09	2465.44	-20.11	-20.64	2.51	40.176438	-80.569074	1.91	
2555.00	9.31	155.70	2552.53	-32.66	-32.28	7.20	40.176406	-80.569058	2.65	
2643.00	11.46	152.01	2639.09	-48.46	-46.49	14.23	40.176367	-80.569033	2.56	
2732.00	11.26	151.51	2726.34	-65.88	-61.93	22.53	40.176324	-80.569003	0.25	
2820.00	10.67	160.31	2812.74	-82.55	-77.15	29.37	40.176282	-80.568979	2.01	
2908.00	11.43	163.55	2899.11	-99.38	-93.19	34.58	40.176238	-80.568961	1.11	
2996.00	12.48	164.78	2985.20	-117.51	-110.72	39.55	40.176190	-80.568943	1.23	
3085.00	12.35	162.61	3072.12	-136.56	-129.09	44.92	40.176140	-80.568924	0.54	
3173.00	12.40	159.45	3158.08	-155.39	-146.91	51.05	40.176091	-80.568903	0.77	
3261.00	12.02	160.54	3244.09	-174.00	-164.40	57.42	40.176042	-80.568880	0.51	
3349.00	12.15	161.35	3330.14	-192.40	-181.82	63.43	40.175995	-80.568859	0.24	
3437.00	11.81	161.28	3416.22	-210.65	-199.12	69.28	40.175947	-80.568838	0.39	
3526.00	12.36	159.77	3503.25	-229.27	-216.68	75.50	40.175899	-80.568816	0.71	
3612.00	12.81	159.52	3587.18	-248.00	-234.25	82.02	40.175850	-80.568793	0.53	
3700.00	12.41	157.41	3673.06	-267.21	-252.12	89.07	40.175801	-80.568769	0.69	
3788.00	11.53	158.19	3759.15	-285.46	-269.02	95.97	40.175755	-80.568744	1.02	
3876.00	10.33	153.44	3845.55	-302.11	-284.24	102.76	40.175713	-80.568720	1.70	
3966.00	10.27	155.31	3934.10	-318.16	-298.75	109.72	40.175673	-80.568695	0.38	
4054.00	10.29	163.61	4020.69	-333.82	-313.42	115.22	40.175632	-80.568676	1.68	
4142.00	12.60	168.30	4106.94	-351.11	-330.36	119.38	40.175586	-80.568661	2.83	
4229.00	13.98	164.71	4191.61	-370.91	-349.79	124.08	40.175532	-80.568645	1.85	
4318.00	13.26	159.83	4278.11	-391.80	-369.74	130.43	40.175478	-80.568622	1.52	
4406.00	12.44	163.01	4363.90	-411.34	-388.28	136.68	40.175427	-80.568600	1.23	
4493.00	12.14	160.86	4448.91	-429.82	-405.88	142.42	40.175378	-80.568580	0.63	

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Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (%/100US ft)	Comment
4580.00	13.25	160.33	4533.78	-448.92	-423.91	148.77	40.175329	-80.568558	1.28	
4669.00	13.81	158.05	4620.31	-469.74	-443.37	156.18	40.175275	-80.568532	0.87	
4756.00	13.61	161.06	4704.83	-490.35	-462.68	163.38	40.175222	-80.568506	0.85	
4843.00	13.51	159.45	4789.41	-510.73	-481.88	170.27	40.175169	-80.568482	0.45	
4931.00	12.78	156.42	4875.10	-530.74	-500.43	177.77	40.175118	-80.568455	1.14	
5019.00	13.08	156.01	4960.87	-550.41	-518.44	185.71	40.175069	-80.568427	0.36	
5132.00	12.55	158.58	5071.06	-575.47	-541.56	195.40	40.175005	-80.568393	0.69	
5207.00	11.81	157.22	5144.37	-591.29	-556.22	201.35	40.174965	-80.568372	1.06	
5302.00	5.18	147.53	5238.28	-605.23	-568.81	207.42	40.174930	-80.568350	7.12	
5350.00	1.27	139.62	5286.19	-607.87	-571.05	208.93	40.174924	-80.568345	8.18	
5399.00	1.49	317.22	5335.19	-607.79	-570.99	208.85	40.174924	-80.568345	5.63	
5447.00	3.79	313.81	5383.14	-605.76	-569.44	207.28	40.174928	-80.568351	4.80	
5495.00	7.35	313.15	5430.90	-601.54	-566.24	203.89	40.174937	-80.568363	7.42	
5543.00	9.02	321.12	5478.41	-595.17	-561.21	199.29	40.174951	-80.568379	4.20	
5591.00	10.89	335.39	5525.69	-587.05	-554.16	195.04	40.174970	-80.568394	6.42	
5639.00	13.94	345.83	5572.57	-576.79	-544.42	191.73	40.174997	-80.568406	7.87	
5688.00	17.19	346.94	5619.77	-563.77	-531.65	188.65	40.175032	-80.568417	6.66	
5736.00	20.91	347.78	5665.13	-548.30	-516.36	185.23	40.175074	-80.568429	7.77	
5784.00	24.81	348.06	5709.35	-529.91	-498.13	181.34	40.175124	-80.568442	8.13	
5832.00	27.53	342.88	5752.43	-508.91	-477.67	175.99	40.175181	-80.568461	7.40	
5880.00	30.09	338.03	5794.50	-485.82	-455.90	168.22	40.175241	-80.568489	7.22	
5928.00	32.96	337.49	5835.41	-460.72	-432.67	158.71	40.175304	-80.568522	6.01	
5976.00	36.22	337.08	5874.92	-433.48	-407.54	148.19	40.175374	-80.568560	6.81	
6024.00	39.23	334.77	5912.88	-404.15	-380.74	136.19	40.175447	-80.568602	6.93	
6073.00	42.35	331.10	5949.98	-372.30	-352.27	121.61	40.175526	-80.568654	8.03	
6121.00	46.16	329.86	5984.35	-339.14	-323.13	105.09	40.175606	-80.568712	8.14	
6169.00	47.81	331.41	6017.10	-304.37	-292.54	87.89	40.175690	-80.568773	4.17	
6217.00	49.31	334.13	6048.87	-268.57	-260.55	71.44	40.175778	-80.568832	5.27	
6266.00	50.86	335.90	6080.31	-231.05	-226.48	55.57	40.175872	-80.568888	4.20	
6314.00	55.48	335.72	6109.08	-192.68	-191.45	39.83	40.175968	-80.568944	9.63	
6362.00	59.91	335.96	6134.72	-152.17	-154.44	23.23	40.176070	-80.569003	9.24	
6410.00	65.22	337.93	6156.83	-109.60	-115.25	6.57	40.176178	-80.569061	11.65	
6458.00	70.08	340.54	6175.08	-65.22	-73.75	-9.14	40.176292	-80.569117	11.30	
6506.00	75.15	342.80	6189.42	-19.51	-30.28	-23.53	40.176412	-80.569168	11.48	
6554.00	79.03	343.39	6200.14	27.11	14.48	-37.13	40.176535	-80.569216	8.17	
6602.00	83.14	342.21	6207.58	74.38	59.76	-51.15	40.176659	-80.569265	8.90	
6651.00	85.99	338.99	6212.22	123.12	105.76	-67.36	40.176786	-80.569322	8.75	
6699.00	88.89	338.91	6214.37	171.06	150.51	-84.58	40.176909	-80.569383	6.04	
6747.00	89.94	339.13	6214.86	219.06	195.32	-101.76	40.177032	-80.569444	2.23	
6843.00	90.74	338.32	6214.29	315.05	284.78	-136.59	40.177279	-80.569567	1.19	
6940.00	91.05	339.27	6212.77	412.04	375.20	-171.68	40.177527	-80.569691	1.03	
7035.00	90.99	341.23	6211.08	506.97	464.59	-203.77	40.177773	-80.569804	2.06	
7131.00	90.86	341.97	6209.53	602.81	555.67	-234.07	40.178024	-80.569911	0.78	
7227.00	90.92	341.44	6208.04	698.64	646.81	-264.20	40.178274	-80.570018	0.56	
7323.00	90.56	337.27	6206.80	794.60	736.61	-298.04	40.178521	-80.570137	4.36	
7419.00	90.86	336.71	6205.61	890.56	824.97	-335.56	40.178765	-80.570270	0.66	
7514.00	90.92	338.15	6204.13	985.53	912.68	-372.02	40.179006	-80.570399	1.52	
7610.00	90.74	337.91	6202.74	1081.52	1001.70	-407.93	40.179251	-80.570526	0.31	
7706.00	90.99	338.32	6201.29	1177.51	1090.77	-443.71	40.179496	-80.570653	0.50	
7803.00	91.05	338.77	6199.57	1274.49	1181.03	-479.18	40.179744	-80.570778	0.47	
7899.00	91.05	339.31	6197.81	1370.47	1270.67	-513.52	40.179991	-80.570899	0.56	
7995.00	90.92	339.38	6196.16	1466.44	1360.48	-547.38	40.180238	-80.571019	0.15	
8090.00	90.99	338.88	6194.57	1561.42	1449.24	-581.21	40.180482	-80.571139	0.53	
8187.00	90.92	339.44	6192.96	1658.40	1539.88	-615.72	40.180731	-80.571261	0.58	
8282.00	90.92	338.38	6191.43	1753.38	1628.50	-649.90	40.180975	-80.571381	1.12	
8378.00	90.99	338.28	6189.83	1849.37	1717.71	-685.34	40.181221	-80.571507	0.13	
8475.00	90.92	337.80	6188.21	1946.35	1807.65	-721.61	40.181468	-80.571635	0.50	
8571.00	90.80	336.66	6186.77	2042.32	1896.16	-758.76	40.181712	-80.571767	1.19	
8668.00	90.74	335.47	6185.47	2139.23	1984.81	-798.11	40.181956	-80.571906	1.23	

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SD Survey Report

Survey Points: (Relative to Slot centre) (TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Latitude (° ' ")	Longitude (° ' ")	DLS (%/100US ft)	Comment
8764.00	91.05	338.38	6183.97	2235.17	2073.11	-835.73	40.182199	-80.572039	3.05	
8860.00	91.05	338.63	6182.21	2331.16	2162.42	-870.90	40.182444	-80.572163	0.26	
8956.00	90.86	338.03	6180.61	2427.14	2251.62	-906.34	40.182690	-80.572289	0.66	
9052.00	90.93	337.00	6179.11	2523.12	2340.31	-943.05	40.182934	-80.572419	1.08	
9149.00	90.68	337.49	6177.75	2620.09	2429.75	-980.56	40.183180	-80.572551	0.57	
9244.00	90.55	335.88	6176.73	2715.03	2516.99	-1018.16	40.183420	-80.572685	1.70	
9340.00	91.11	338.66	6175.34	2810.99	2605.51	-1055.25	40.183663	-80.572816	2.95	
9436.00	91.11	337.17	6173.48	2906.97	2694.45	-1091.33	40.183908	-80.572943	1.55	
9532.00	90.86	336.84	6171.83	3002.93	2782.81	-1128.83	40.184151	-80.573076	0.43	
9628.00	91.60	338.76	6169.77	3098.89	2871.67	-1165.09	40.184396	-80.573205	2.14	
9724.00	91.30	337.57	6167.34	3194.86	2960.75	-1200.79	40.184641	-80.573331	1.28	
9821.00	90.31	337.70	6165.97	3291.84	3050.44	-1237.69	40.184888	-80.573461	1.03	
9916.00	90.43	336.36	6165.36	3386.81	3137.90	-1274.76	40.185128	-80.573593	1.42	
10013.00	90.62	338.84	6164.47	3483.78	3227.58	-1311.72	40.185375	-80.573723	2.56	
10109.00	90.49	341.63	6163.54	3579.72	3317.91	-1344.18	40.185624	-80.573838	2.91	
10205.00	90.55	340.00	6162.67	3675.63	3408.57	-1375.73	40.185873	-80.573949	1.70	
10301.00	90.55	340.56	6161.75	3771.58	3498.93	-1408.12	40.186122	-80.574064	0.58	
10397.00	90.74	339.67	6160.67	3867.53	3589.20	-1440.77	40.186370	-80.574179	0.95	
10493.00	90.55	339.72	6159.59	3963.50	3679.23	-1474.08	40.186617	-80.574297	0.20	
10590.00	90.74	339.79	6158.50	4060.47	3770.23	-1507.64	40.186868	-80.574416	0.21	
10686.00	90.80	340.78	6157.21	4156.41	3860.60	-1540.02	40.187116	-80.574530	1.03	
10783.00	90.80	340.81	6155.85	4253.31	3952.19	-1571.93	40.187368	-80.574643	0.03	
10879.00	90.68	341.26	6154.61	4349.21	4042.97	-1603.13	40.187618	-80.574753	0.49	
10975.00	90.68	342.17	6153.47	4445.04	4134.12	-1633.24	40.187869	-80.574859	0.95	
11071.00	90.68	340.13	6152.33	4540.92	4224.96	-1664.26	40.188119	-80.574968	2.12	
11167.00	90.68	337.60	6151.19	4636.90	4314.48	-1698.87	40.188365	-80.575091	2.64	
11263.00	90.68	339.67	6150.05	4732.89	4403.88	-1733.83	40.188611	-80.575215	2.16	
11359.00	90.62	341.26	6148.96	4828.82	4494.34	-1765.93	40.188860	-80.575328	1.66	
11455.00	90.74	342.27	6147.83	4924.65	4585.51	-1795.97	40.189110	-80.575434	1.06	
11552.00	90.99	340.49	6146.36	5021.51	4677.42	-1826.94	40.189363	-80.575543	1.85	
11647.00	90.68	337.11	6144.98	5116.48	4765.97	-1861.28	40.189607	-80.575665	3.57	
11743.00	90.92	337.42	6143.64	5212.45	4854.50	-1898.38	40.189850	-80.575796	0.41	
11839.00	90.56	337.58	6142.40	5308.43	4943.19	-1935.11	40.190094	-80.575926	0.41	
11935.00	90.74	336.13	6141.31	5404.39	5031.45	-1972.84	40.190337	-80.576060	1.52	
12030.00	90.68	335.44	6140.13	5499.28	5118.09	-2011.81	40.190576	-80.576198	0.73	
12126.00	90.62	333.97	6139.04	5595.07	5204.87	-2052.82	40.190815	-80.576343	1.53	
12223.00	90.68	336.62	6137.94	5691.91	5292.98	-2093.36	40.191057	-80.576487	2.73	
12319.00	90.62	337.63	6136.85	5787.87	5381.43	-2130.67	40.191300	-80.576619	1.05	
12416.00	90.62	338.24	6135.80	5884.86	5471.31	-2167.11	40.191548	-80.576748	0.63	
12510.00	90.62	338.19	6134.78	5978.86	5558.60	-2201.99	40.191788	-80.576871	0.05	
12606.00	90.86	338.34	6133.54	6074.85	5647.76	-2237.54	40.192033	-80.576997	0.29	
12701.00	90.62	338.88	6132.32	6169.84	5736.21	-2272.18	40.192276	-80.577119	0.62	
12796.00	90.62	338.54	6131.29	6264.83	5824.72	-2306.67	40.192520	-80.577241	0.36	
12892.00	90.74	337.99	6130.15	6360.83	5913.89	-2342.22	40.192765	-80.577367	0.59	
12986.00	90.53	339.95	6129.11	6454.81	6001.62	-2375.95	40.193007	-80.577486	2.10	
13082.00	91.11	340.03	6127.73	6550.77	6091.82	-2408.80	40.193255	-80.577603	0.61	
13157.00	90.56	341.49	6126.64	6625.69	6162.62	-2433.51	40.193450	-80.577690	2.08	Last WFT SVY
13180.00	90.56	341.49	6126.42	6648.66	6184.43	-2440.81	40.193509	-80.577716	0.00	Proj. to TD

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