



Margaret Sue Kelley WTZ 1H
Wetzel Co, WV
SDC 40
Plan vs Actual

Plan Data for Margaret Sue Kelley WTZ 1H

Plan Point Information: (Scale Factor = 0.999608)
Dogleg Severity Unit: °/100.00ft

MD	Inc	Az	TVD	+N/-S	+E/-W	VSec	DLS	Toolface	Comments
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(DLSU)	(°)	(°)
0.00	0.00	0.00	-0.00	0.00	-0.00	0.00	0.00	0.00	0.0
26.00	0.00	0.00	26.00	0.00	-0.00	0.00	0.00	0.0	KB Offset
1300.00	0.00	0.00	1300.00	0.00	-0.00	0.00	0.00	0.0	Nudge KOP
1705.34	8.11	220.86	1703.99	-21.65	-18.73	3.10	2.00	220.9	Hold
6660.94	8.11	220.86	6610.06	-550.21	-475.89	78.75	0.00	0.0	Curve KOP
7564.86	90.52	310.02	7176.00	-240.81	-970.90	661.66	10.00	89.1	LP MSK1H
15569.18	90.52	310.02	7104.00	4905.90	-7100.78	8627.31	0.00	0.0	PBHL MSK1H

Target Set Information: (Scale Factor = 0.999608)
Name: Margaret Sue Kelley WTZ 1H
Position offsets from Slot centre

Name	TVD	+N/-S	+E/-W	Northing	Easting	Lat	Long
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(°)	(°)
LP MSK1H	7176.00	-240.81	-970.90	14413257.56	1724377.75	39.687981	-80.701548
PBHL MSK1H	7104.00	4907.91	-7103.18	14418404.27	1718247.87	39.702170	-80.723281

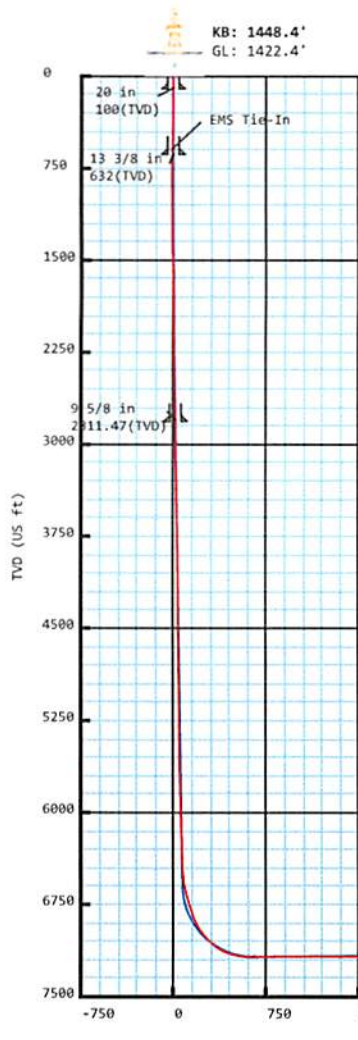


Plan Data for Margaret Sue Kelley WTZ 1H

Formation Point Information:

Name	TVD	Elevation	MD
(USft)	(USft)	(USft)	(USft)
Onondaga Limestone	-5741.00	0.00	-1.00
Base Fresh Water	512.40	936.00	512.40
Pittsburgh Coal	1225.40	223.00	1225.40
Top of Salt Water	1930.40	-482.00	1934.04
Maxton	2200.40	-752.00	2206.76
Big Lime	2312.40	-864.00	2319.89
Big Injun	2398.40	-950.00	2406.76
Base Big Injun	2644.40	-1196.00	2655.24
Berea	2982.40	-1534.00	2996.65
Gordon Sandstone	3173.40	-1725.00	3189.58
Upper Rhinestreet	6523.40	-5075.00	6573.40
Lower Rhinestreet	6589.40	-5141.00	6640.06
Basal Rhinestreet	6724.40	-5276.00	6777.25
Cashaqua	6812.40	-5364.00	6870.01
Middlesex	6922.40	-5474.00	6995.29
Lower Middlesex	6949.40	-5501.00	7028.69
Burket	7008.40	-5560.00	7107.53
Tully	7028.40	-5580.00	7136.75
Mahantango	7051.40	-5603.00	7172.52
Levanna	7139.40	-5691.00	7352.63
Upper Marcellus	7149.40	-5701.00	7383.40

- Margaret Sue Kelley WTZ 1H
- Margaret Sue Kelley WTZ 2H
- Margaret Sue Kelley WTZ 3H
- Margaret Sue Kelley WTZ 4H
- Margaret Sue Kelley WTZ 5H
- Margaret Kelley WTZ 8H
- Margaret Kelley WTZ 10H
- Margaret Kelley WTZ 14H
- Margaret Sue Kelley WTZ 1H



Plan Data for Margaret Sue Kelley WTZ 1H

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

Site: Margaret Sue Kelley WTZ Pad
Unit: USFeet
TVD Reference:
Company Name: SOUTHWESTERN ENERGY

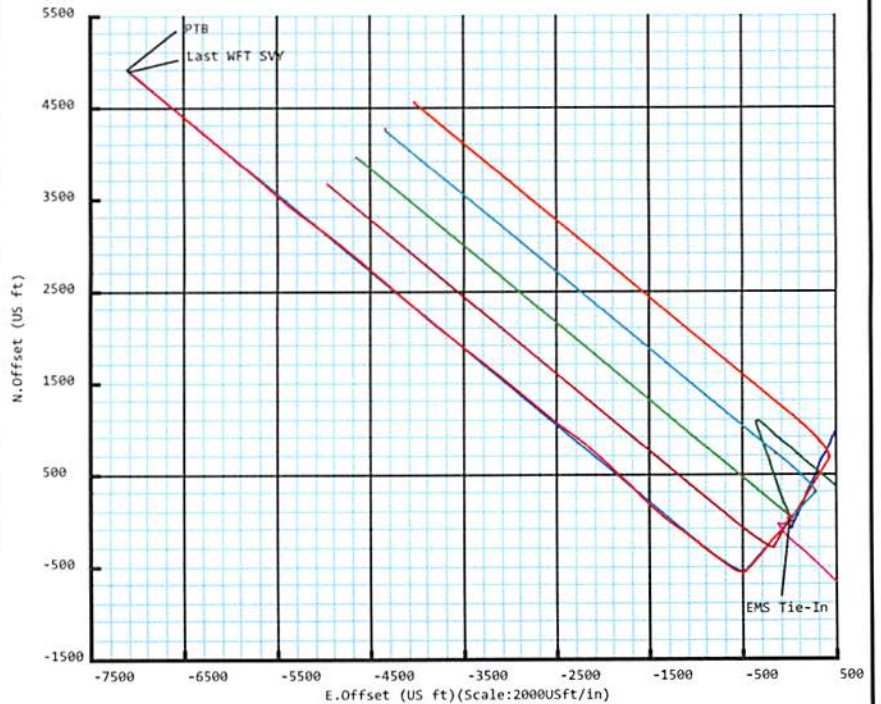
Position:
Northing: 14413498.28USft
Latitude: 39.688633°
Easting: 1725348.27USft
Longitude: -80.698095°
North Reference: Grid
Grid Convergence: 0.19°
Elevation Above VRD: 1422.40USft

Slot: Margaret Sue Kelley WTZ 1H
Position:
Offset is from Site centre
+N/-S: 0.00USft
Northing: 14413498.28USft
Latitude: 39.688633°
+E/-W: 0.00USft
Easting: 1725348.27USft
Longitude: -80.698095°
Elevation Above VRD: 1422.40USft

Well: Margaret Sue Kelley WTZ 1H
Type: Main-Well
File Number:

Plan Folder: P1
Plan: P1:V2
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft
Azimuth: 304.64°
+E/-W: 0.00USft

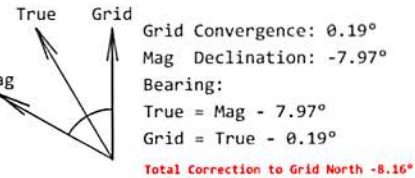
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
HDGM2016 52294(nT) -7.97° 66.90° 2018-04-02



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Drawing By: Vilaphanh (Cot) Sinakone
Date: 29 March 2018
Office Name: Weatherford Drilling Services
Address: 12101 Cutten Road
Houston, TX 77066
Phone: 281-701-4760



Weatherford®

Margaret Sue Kelley WTZ 1H

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

Site: Margaret Sue Kelley WTZ Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.19
	Position:	Northing: 14413498.28 US ft	Latitude: 39.688633
		Easting: 1725348.27 US ft	Longitude: -80.698095
	Elevation above MSL: 1422.40 US ft		
Comment:			

Slot: Margaret Sue Kelley WTZ 1H	Position (Relative to Site Centre)		
	+N/-S: 0.00 US ft	Northing: 14413498.28 US ft	Latitude: 39.688633
	+E/-W: 0.00 US ft	Easting: 1725348.27 US ft	Longitude: -80.698095
	Elevation above MSL: 1422.40 US ft		
Comment:			

Well: Margaret Sue Kelley WTZ 1H	Type: Main well	UWI:
	File Number:	Comment:
	Closure Distance: 8635.77 US ft	Closure Azimuth: 304.67°
	Vertical Section: Position of Origin (Relative to Slot centre)	
	+N/-S: 0.00 US ft	+E/-W: -0.00 US ft Az: 304.64°

Drill floor: Survey Name: Definitive Survey			
Rig Height (Drill Floor): 26.00 US ft	Elevation above MSL: 1448.40 US ft	Inclination: 0.00°	Azimuth: 0.00°

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Survey Name: Definitive Survey			
Date: 29/Mar/2018	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:

Magnetic Model:				
Model Name: HDGM2016	Date: 02/Apr/2018	Field Strength: 52294.0 nT	Declination: -7.97°	Dip: 66.90°

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
EMS	0.00	609.00	EMS

5D Survey Report

Survey Tool Ranges:			
Name	Start MD(usft)	End MD(usft)	Source Survey
MFAC_US_V2	609.00	1152.00	WFT_MFAC_01
NO SURV 1d	1152.00	1241.00	WFT_MWD_No Svy 1D
MFAC_US_V2	1241.00	1427.00	WFT_MFAC_02
MWD	1427.00	1891.00	WFT_MWD_01
MWD	1891.00	2775.00	WFT_MWD_02
MWD	2775.00	6775.00	WFT_MWD_03
MWD	6775.00	6921.00	WFT_MWD_04
MWD	6921.00	7196.00	WFT_MWD_05
MWD	7196.00	7658.00	WFT_MWD_06
MWD	7658.00	8867.00	WFT_MWD_07
MWD	8867.00	15575.00	WFT_MWD_08

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor) (Scale factor 0.999608)										
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	39.688633	-80.698095	0.00	
215.00	0.20	256.34	215.00	0.25	-0.09	-0.36	39.688633	-80.698096	0.09	
305.00	1.00	106.34	305.00	-0.39	-0.35	0.24	39.688632	-80.698094	1.31	
390.00	1.20	115.44	389.98	-1.97	-0.94	1.75	39.688631	-80.698089	0.31	
468.00	1.20	118.74	467.96	-3.59	-1.68	3.21	39.688629	-80.698084	0.09	
560.00	1.00	140.44	559.95	-5.32	-2.76	4.56	39.688626	-80.698079	0.50	
609.00	1.10	134.54	608.94	-6.20	-3.42	5.17	39.688624	-80.698077	0.30	EMS Tie-In
695.00	1.16	157.26	694.92	-7.74	-4.80	6.09	39.688620	-80.698073	0.52	
784.00	0.73	173.18	783.91	-8.88	-6.20	6.51	39.688616	-80.698072	0.56	
876.00	0.77	231.30	875.90	-9.09	-7.17	6.10	39.688614	-80.698074	0.79	
966.00	0.24	238.82	965.90	-8.84	-7.64	5.46	39.688612	-80.698076	0.59	
1105.00	0.59	35.10	1104.90	-8.73	-7.21	5.63	39.688614	-80.698075	0.59	
1152.00	0.42	27.31	1151.90	-8.71	-6.86	5.84	39.688614	-80.698074	0.39	
1241.00	0.62	239.87	1240.89	-8.46	-6.81	5.58	39.688615	-80.698075	1.12	
1334.00	2.02	237.62	1333.87	-7.60	-7.94	3.76	39.688612	-80.698082	1.51	
1427.00	4.42	224.13	1426.71	-6.37	-11.39	-0.12	39.688602	-80.698096	2.69	
1520.00	6.45	223.72	1519.29	-4.96	-17.74	-6.23	39.688585	-80.698117	2.18	
1612.00	7.89	226.38	1610.57	-2.86	-25.83	-14.37	39.688563	-80.698146	1.61	
1705.00	8.50	227.68	1702.62	-0.01	-34.86	-24.07	39.688538	-80.698181	0.69	
1798.00	8.15	223.79	1794.64	2.59	-44.25	-33.72	39.688512	-80.698215	0.71	
1891.00	8.29	217.93	1886.69	4.02	-54.29	-42.40	39.688485	-80.698246	0.91	
1983.00	8.93	217.82	1977.65	4.80	-65.17	-50.86	39.688455	-80.698277	0.70	
2076.00	8.61	219.27	2069.56	5.76	-76.26	-59.69	39.688425	-80.698308	0.42	
2169.00	5.56	221.51	2161.84	6.86	-85.02	-67.08	39.688401	-80.698334	3.29	
2258.00	4.10	224.84	2250.52	7.94	-90.51	-72.18	39.688386	-80.698353	1.67	
2351.00	4.75	221.63	2343.25	9.00	-95.74	-77.09	39.688371	-80.698370	0.75	
2444.00	6.32	222.55	2435.81	10.17	-102.39	-83.11	39.688353	-80.698392	1.69	
2537.00	6.74	222.30	2528.21	11.61	-110.20	-90.24	39.688332	-80.698417	0.45	
2629.00	6.88	222.01	2619.56	13.03	-118.29	-97.56	39.688310	-80.698443	0.16	
2719.00	6.20	220.37	2708.97	14.21	-126.00	-104.32	39.688288	-80.698467	0.78	
2775.00	5.72	219.76	2764.67	14.76	-130.44	-108.06	39.688276	-80.698481	0.86	
2902.00	5.43	220.01	2891.07	15.89	-139.91	-115.97	39.688250	-80.698509	0.23	
2995.00	5.67	221.92	2983.63	16.88	-146.70	-121.87	39.688232	-80.698530	0.33	
3087.00	7.31	224.70	3075.04	18.48	-154.24	-129.03	39.688211	-80.698555	1.81	
3180.00	7.91	224.96	3167.22	20.66	-162.98	-137.71	39.688187	-80.698586	0.65	
3273.00	7.49	224.04	3259.38	22.80	-171.86	-146.44	39.688163	-80.698617	0.47	
3366.00	7.78	224.13	3351.56	24.82	-180.74	-155.04	39.688139	-80.698648	0.31	
3458.00	9.15	223.96	3442.55	27.03	-190.47	-164.45	39.688112	-80.698682	1.49	
3551.00	9.16	223.51	3534.37	29.37	-201.16	-174.68	39.688083	-80.698718	0.08	
3644.00	8.40	223.70	3626.28	31.59	-211.44	-184.47	39.688055	-80.698753	0.82	
3737.00	8.16	220.71	3718.31	33.35	-221.36	-193.47	39.688027	-80.698785	0.53	

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5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor) (Scale factor 0.999608)										
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
3829.00	9.20	220.35	3809.25	34.77	-231.91	-202.49	39.687999	-80.698817	1.13	
3922.00	9.91	219.57	3900.96	36.20	-243.75	-212.40	39.687966	-80.698853	0.78	
4012.00	9.88	219.59	3989.62	37.53	-255.67	-222.26	39.687934	-80.698888	0.03	
4105.00	9.38	217.69	4081.31	38.63	-267.81	-231.98	39.687900	-80.698923	0.64	
4197.00	9.39	217.37	4172.08	39.38	-279.71	-241.12	39.687868	-80.698955	0.06	
4290.00	8.67	215.52	4263.93	39.85	-291.45	-249.79	39.687836	-80.698986	0.83	
4383.00	8.22	214.23	4355.92	39.91	-302.65	-257.60	39.687805	-80.699014	0.52	
4476.00	8.20	214.29	4447.97	39.82	-313.62	-265.08	39.687775	-80.699041	0.02	
4568.00	8.53	219.57	4538.99	40.37	-324.30	-273.12	39.687746	-80.699069	0.91	
4661.00	8.14	216.66	4631.01	41.19	-334.90	-281.45	39.687717	-80.699099	0.62	
4754.00	8.11	219.17	4723.07	41.94	-345.27	-289.52	39.687688	-80.699128	0.38	
4847.00	8.34	221.30	4815.12	43.24	-355.42	-298.12	39.687660	-80.699159	0.41	
4939.00	8.28	219.88	4906.15	44.62	-365.52	-306.77	39.687633	-80.699189	0.23	
5029.00	8.65	220.86	4995.17	45.95	-375.61	-315.35	39.687605	-80.699220	0.44	
5122.00	9.27	220.93	5087.03	47.53	-386.56	-324.83	39.687575	-80.699254	0.67	
5211.00	9.28	220.17	5174.87	49.00	-397.46	-334.16	39.687545	-80.699287	0.14	
5304.00	9.27	217.55	5266.66	50.11	-409.13	-343.56	39.687513	-80.699321	0.45	
5397.00	9.22	219.08	5358.45	51.06	-420.85	-352.82	39.687481	-80.699354	0.27	
5489.00	9.02	217.81	5449.28	52.03	-432.27	-361.89	39.687450	-80.699386	0.31	
5582.00	9.40	220.58	5541.09	53.22	-443.80	-371.30	39.687418	-80.699420	0.63	
5675.00	9.64	222.10	5632.81	55.02	-455.34	-381.46	39.687387	-80.699456	0.37	
5767.00	9.92	225.63	5723.47	57.53	-466.60	-392.29	39.687356	-80.699495	0.72	
5860.00	10.11	223.61	5815.05	60.33	-478.11	-403.65	39.687325	-80.699535	0.43	
5953.00	9.96	222.24	5906.63	62.67	-489.98	-414.68	39.687292	-80.699574	0.30	
6046.00	9.68	222.87	5998.27	64.85	-501.66	-425.41	39.687260	-80.699613	0.32	
6139.00	8.81	224.93	6090.06	67.24	-512.43	-435.76	39.687231	-80.699650	1.00	
6228.00	9.67	225.39	6177.90	69.85	-522.51	-445.90	39.687203	-80.699686	0.97	
6321.00	10.00	222.83	6269.54	72.46	-533.91	-456.95	39.687172	-80.699725	0.59	
6414.00	8.44	223.23	6361.33	74.63	-544.81	-467.11	39.687142	-80.699761	1.68	
6460.00	7.39	227.57	6406.89	75.80	-549.27	-471.61	39.687130	-80.699777	2.62	
6507.00	7.50	234.34	6453.50	77.51	-553.09	-476.33	39.687119	-80.699794	1.88	
6553.00	8.47	253.07	6499.06	80.62	-555.83	-482.01	39.687112	-80.699814	6.00	
6599.00	9.40	264.52	6544.50	85.60	-557.18	-488.99	39.687108	-80.699839	4.35	
6646.00	11.60	272.03	6590.72	92.52	-557.38	-497.54	39.687108	-80.699870	5.50	
6692.00	14.33	273.99	6635.54	101.31	-556.82	-507.84	39.687109	-80.699906	6.01	
6738.00	16.28	276.70	6679.91	111.91	-555.67	-519.92	39.687113	-80.699949	4.51	
6775.00	17.30	280.46	6715.33	121.51	-554.06	-530.48	39.687117	-80.699987	4.03	
6828.00	17.72	283.97	6765.88	136.25	-550.68	-546.06	39.687127	-80.700042	2.14	
6874.00	18.61	286.60	6809.58	149.78	-546.90	-559.89	39.687137	-80.700091	2.63	
6921.00	21.90	292.44	6853.68	165.48	-541.41	-575.18	39.687152	-80.700145	8.21	
6967.00	25.86	299.78	6895.74	183.87	-533.14	-591.83	39.687175	-80.700204	10.75	
7013.00	29.82	302.88	6936.41	205.31	-521.95	-610.15	39.687206	-80.700269	9.16	
7060.00	36.18	305.34	6975.81	230.89	-507.56	-631.30	39.687246	-80.700344	13.83	
7103.00	40.71	306.08	7009.48	257.61	-491.96	-653.00	39.687289	-80.700421	10.59	
7149.00	45.04	307.12	7043.18	288.88	-473.29	-678.11	39.687340	-80.700510	9.54	
7196.00	49.33	307.04	7075.11	323.32	-452.51	-705.61	39.687398	-80.700608	9.13	
7241.00	55.08	306.52	7102.68	358.84	-431.23	-734.09	39.687456	-80.700709	12.81	
7287.00	63.38	306.68	7126.19	398.31	-407.69	-765.79	39.687521	-80.700821	18.05	
7334.00	70.05	306.56	7144.76	441.43	-381.95	-800.42	39.687592	-80.700944	14.19	
7380.00	74.77	307.22	7158.66	485.23	-355.63	-835.48	39.687665	-80.701068	10.35	
7426.00	79.40	308.14	7168.94	529.99	-328.23	-870.95	39.687740	-80.701194	10.25	
7473.00	83.82	309.03	7175.80	576.37	-299.24	-907.29	39.687820	-80.701322	9.59	
7566.00	91.79	309.99	7179.35	668.89	-240.16	-978.92	39.687983	-80.701576	8.63	
7658.00	90.74	308.35	7177.32	760.57	-182.07	-1050.23	39.688143	-80.701829	2.12	
7698.00	90.99	307.60	7176.72	800.50	-157.46	-1081.76	39.688211	-80.701941	1.98	
7756.00	90.92	306.71	7175.75	858.44	-122.43	-1127.97	39.688308	-80.702104	1.54	
7849.00	90.25	304.90	7174.80	951.41	-68.03	-1203.39	39.688458	-80.702372	2.08	
7939.00	89.38	306.57	7175.09	1041.39	-15.47	-1276.44	39.688603	-80.702631	2.09	
8032.00	89.57	309.10	7175.95	1134.23	41.57	-1349.88	39.688760	-80.702891	2.73	

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5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor) (Scale factor 0.999608)										
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
8125.00	90.00	312.52	7176.29	1226.68	102.34	-1420.26	39.688927	-80.703140	3.71	
8217.00	89.82	312.28	7176.44	1317.83	164.37	-1488.20	39.689098	-80.703381	0.33	
8310.00	90.86	314.72	7175.89	1409.72	228.38	-1555.65	39.689275	-80.703620	2.85	
8357.00	91.23	314.81	7175.03	1455.98	261.48	-1589.02	39.689366	-80.703738	0.81	
8403.00	92.28	316.84	7173.62	1501.08	294.45	-1621.06	39.689457	-80.703852	4.97	
8496.00	93.02	316.99	7169.32	1591.85	362.30	-1684.51	39.689643	-80.704076	0.81	
8589.00	89.45	310.88	7167.32	1683.55	426.77	-1751.43	39.689821	-80.704313	7.61	
8635.00	89.21	309.88	7167.85	1729.32	456.57	-1786.47	39.689903	-80.704437	2.24	
8681.00	90.62	313.04	7167.92	1774.99	487.02	-1820.94	39.689987	-80.704560	7.52	
8728.00	92.34	316.49	7166.71	1821.23	520.10	-1854.29	39.690078	-80.704678	8.20	
8774.00	92.28	315.97	7164.85	1866.26	553.29	-1886.08	39.690169	-80.704790	1.14	
8867.00	90.80	312.39	7162.35	1957.92	618.07	-1952.74	39.690348	-80.705026	4.16	
8881.00	90.86	312.75	7162.15	1971.78	627.54	-1963.05	39.690374	-80.705063	2.61	
8974.00	92.90	311.78	7159.10	2063.91	690.05	-2031.84	39.690546	-80.705307	2.43	
9066.00	92.59	312.17	7154.69	2155.05	751.51	-2100.15	39.690716	-80.705549	0.54	
9159.00	90.74	312.23	7151.99	2247.20	813.95	-2169.02	39.690888	-80.705793	1.99	
9249.00	91.05	308.44	7150.59	2336.73	872.18	-2237.60	39.691048	-80.706036	4.22	
9342.00	90.68	305.67	7149.18	2429.62	928.21	-2311.80	39.691203	-80.706299	3.00	
9435.00	90.55	305.77	7148.18	2522.60	982.50	-2387.30	39.691352	-80.706566	0.18	
9528.00	90.80	307.69	7147.09	2615.53	1038.11	-2461.83	39.691506	-80.706831	2.08	
9620.00	90.74	309.54	7145.85	2707.29	1095.52	-2533.71	39.691664	-80.707085	2.01	
9713.00	90.49	309.74	7144.85	2799.94	1154.85	-2605.32	39.691827	-80.707339	0.34	
9803.00	90.43	309.62	7144.13	2889.58	1212.31	-2674.58	39.691986	-80.707584	0.15	
9899.00	90.92	309.42	7143.00	2985.23	1273.40	-2748.63	39.692154	-80.707847	0.55	
9991.00	90.92	309.88	7141.52	3076.87	1332.09	-2819.46	39.692316	-80.708098	0.50	
10084.00	90.86	309.44	7140.08	3169.50	1391.44	-2891.04	39.692479	-80.708352	0.48	
10177.00	90.62	309.81	7138.88	3262.14	1450.75	-2962.67	39.692643	-80.708605	0.47	
10270.00	90.43	310.78	7138.02	3354.68	1510.89	-3033.60	39.692809	-80.708857	1.06	
10360.00	90.43	309.10	7137.35	3444.29	1568.67	-3102.60	39.692968	-80.709101	1.87	
10452.00	90.43	308.61	7136.66	3536.04	1626.38	-3174.24	39.693127	-80.709355	0.53	
10545.00	90.37	308.72	7136.01	3628.81	1684.48	-3246.85	39.693287	-80.709613	0.13	
10638.00	90.49	308.26	7135.31	3721.59	1742.36	-3319.65	39.693447	-80.709871	0.51	
10727.00	90.49	308.09	7134.55	3810.42	1797.37	-3389.61	39.693598	-80.710119	0.19	
10820.00	90.55	309.00	7133.71	3903.20	1855.31	-3462.34	39.693758	-80.710376	0.98	
10913.00	90.62	309.38	7132.76	3995.90	1914.08	-3534.42	39.693920	-80.710632	0.42	
11006.00	90.43	309.09	7131.90	4088.60	1972.90	-3606.45	39.694082	-80.710887	0.37	
11098.00	90.74	308.46	7130.96	4180.35	2030.51	-3678.17	39.694241	-80.711141	0.76	
11191.00	90.74	308.10	7129.76	4273.16	2088.12	-3751.17	39.694400	-80.711400	0.39	
11284.00	90.80	309.21	7128.51	4365.92	2146.20	-3823.78	39.694560	-80.711657	1.20	
11376.00	90.99	311.16	7127.08	4457.47	2205.56	-3894.06	39.694723	-80.711906	2.13	
11469.00	90.74	312.59	7125.67	4549.72	2267.63	-3963.30	39.694894	-80.712152	1.56	
11562.00	90.68	311.35	7124.52	4641.95	2329.81	-4032.43	39.695066	-80.712397	1.33	
11654.00	90.92	310.05	7123.24	4733.43	2389.80	-4102.17	39.695231	-80.712644	1.44	
11747.00	90.25	311.44	7122.29	4825.89	2450.50	-4172.63	39.695398	-80.712894	1.66	
11840.00	90.49	310.95	7121.69	4918.28	2511.75	-4242.60	39.695567	-80.713142	0.59	
11933.00	90.31	310.47	7121.04	5010.76	2572.40	-4313.10	39.695734	-80.713391	0.55	
12025.00	90.37	309.57	7120.49	5102.35	2631.56	-4383.55	39.695897	-80.713641	0.98	
12118.00	89.82	310.94	7120.34	5194.90	2691.66	-4454.53	39.696063	-80.713893	1.59	
12208.00	89.69	311.50	7120.72	5284.31	2750.96	-4522.22	39.696226	-80.714133	0.64	
12301.00	90.00	311.30	7120.97	5376.66	2812.46	-4591.98	39.696395	-80.714380	0.40	
12390.00	89.82	310.62	7121.11	5465.12	2870.80	-4659.19	39.696556	-80.714618	0.79	
12480.00	89.75	309.02	7121.45	5554.75	2928.44	-4728.31	39.696715	-80.714863	1.78	
12572.00	89.75	308.81	7121.85	5646.49	2986.23	-4799.90	39.696874	-80.715117	0.23	
12665.00	89.63	308.71	7122.35	5739.25	3044.45	-4872.41	39.697035	-80.715374	0.17	
12758.00	89.88	307.60	7122.75	5832.07	3101.90	-4945.54	39.697193	-80.715633	1.22	
12851.00	89.94	307.64	7122.90	5924.95	3158.67	-5019.20	39.697350	-80.715894	0.08	
12943.00	90.06	307.96	7122.90	6016.81	3215.06	-5091.90	39.697505	-80.716152	0.37	
13036.00	89.63	307.62	7123.15	6109.66	3272.05	-5165.39	39.697662	-80.716412	0.59	
13129.00	89.88	306.62	7123.55	6202.58	3328.17	-5239.55	39.697817	-80.716675	1.11	

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5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor) (Scale factor 0.999608)										
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
13222.00	90.31	308.73	7123.39	6295.44	3385.01	-5313.15	39.697974	-80.716936	2.32	
13314.00	90.25	310.09	7122.94	6387.12	3443.41	-5384.23	39.698134	-80.717188	1.48	
13407.00	90.00	311.57	7122.74	6479.57	3504.21	-5454.60	39.698302	-80.717437	1.61	
13500.00	90.31	310.83	7122.49	6571.96	3565.47	-5524.57	39.698471	-80.717685	0.86	
13592.00	89.14	311.56	7122.93	6663.36	3626.06	-5593.80	39.698638	-80.717931	1.50	
13685.00	89.14	312.19	7124.33	6755.61	3688.13	-5663.04	39.698809	-80.718176	0.68	
13778.00	89.38	311.12	7125.53	6847.90	3749.94	-5732.51	39.698979	-80.718422	1.18	
13870.00	89.14	310.88	7126.72	6939.33	3810.29	-5801.94	39.699145	-80.718668	0.37	
13963.00	89.32	310.03	7127.97	7031.84	3870.63	-5872.70	39.699311	-80.718919	0.93	
14056.00	90.49	310.61	7128.12	7124.38	3930.80	-5943.61	39.699477	-80.719170	1.40	
14148.00	90.31	311.03	7127.48	7215.84	3990.94	-6013.23	39.699643	-80.719417	0.50	
14241.00	90.43	310.65	7126.88	7308.30	4051.76	-6083.58	39.699811	-80.719667	0.43	
14334.00	90.25	309.38	7126.33	7400.88	4111.55	-6154.81	39.699975	-80.719919	1.38	
14427.00	90.99	308.68	7125.32	7493.61	4170.11	-6227.04	39.700137	-80.720175	1.10	
14519.00	91.11	309.99	7123.63	7585.28	4228.42	-6298.19	39.700297	-80.720427	1.43	
14612.00	91.67	310.30	7121.38	7677.82	4288.36	-6369.26	39.700463	-80.720679	0.69	
14705.00	91.48	310.86	7118.82	7770.29	4348.83	-6439.86	39.700629	-80.720929	0.64	
14798.00	91.29	310.45	7116.57	7862.75	4409.40	-6510.40	39.700796	-80.721179	0.49	
14890.00	91.17	310.10	7114.60	7954.28	4468.86	-6580.57	39.700960	-80.721428	0.40	
14983.00	91.23	310.37	7112.65	8046.82	4528.92	-6651.55	39.701125	-80.721680	0.30	
15076.00	91.29	309.95	7110.61	8139.37	4588.88	-6722.61	39.701291	-80.721932	0.46	
15168.00	90.62	310.93	7109.07	8230.88	4648.55	-6792.62	39.701455	-80.722180	1.29	
15261.00	90.62	310.15	7108.07	8323.38	4709.00	-6863.29	39.701621	-80.722430	0.84	
15354.00	90.56	310.35	7107.11	8415.93	4769.08	-6934.27	39.701787	-80.722682	0.22	
15446.00	90.68	310.51	7106.11	8507.46	4828.74	-7004.29	39.701951	-80.722930	0.22	
15539.00	90.68	310.57	7105.01	8599.96	4889.19	-7074.96	39.702118	-80.723181	0.06	
15552.00	90.80	310.35	7104.84	8612.89	4897.62	-7084.86	39.702141	-80.723216	1.93	Last WFT SVY
15575.00	90.80	310.35	7104.52	8635.77	4912.51	-7102.38	39.702182	-80.723278	0.00	PTB

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