

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)



January 30, 2019

Railroad Commission of Texas
Oil and Gas Division
PO Box 12967
Capital Station
Austin, Texas 78711

Attention: Pam Johns

Re: CLIENT: Felix Energy Holdings II, LLC
WELL: UL Independence 1718-17 C 3H
FIELD: Two Georges (Bone Spring)

RIG: CACTUS 138
COUNTY: WARD
API NO: 42-475-37716
PERMIT: 846187
JOB NO: 18MLD1697

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900). Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Mohamed Gaber FE	UL Independence 1718-17 C 3H Original Hole	132.00 Ft to 21968.00 Ft	December 13, 2018 to January 18, 2019	Telepacer/SlimPulse Third Party Corrected

A plat of the bottom hole location is oriented both to the surface location and to the lease lines (or until line in case of pooling), is attached to the survey report.

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Micah Gilaspy
Field Service Manager

CC: Felix Energy Holdings II, LLC
Enclosures: [2]
County of WARD
State of Texas

UL Independence 1718-17 C 3H MWD 0' to 22039' Definitive Survey

Geodetic Report

(Def Survey)



Report Date: January 21, 2019 - 11:57 AM
Client: Felix Energy
Field: TX Ward County (NAD 27 CZ) - 2018
Structure / Slot: Felix Energy\UL Independence 1718-17 Pad\UL Independence 1718-17 C 3H
Well: UL Independence 1718-17 C 3H - Cactus 138
Borehole: Original Borehole
UWI / AP#: Unknown / Unknown
Survey Name: UL Independence 1718-17 C 3H MWD 0' to 22039' Definitive
Survey Date: November 16, 2018
Tort / AHD / DDI / ERD Ratio: 273.569' / 11688.788 ft / 6.805' / 1.058
Coordinate Reference System: NAD27 Texas State Plane, Central Zone, US Feet
Location Lat / Long: N 31° 34' 54.12355", W 103° 10' 2.81688"
Location Grid N/E/Y/X: N 707724.810 fTUS, E 1117548.690 fTUS
CRS Grid Convergence Angle: -1.4597 °
Grid Scale Factor: 0.99993289
Version / Patch: 2.10.753.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 163.367 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB=25
TVD Reference Elevation: 2689.000 ft above MSL
Seabed / Ground Elevation: 2664.000 ft above MSL
Magnetic Declination: 7.090 °
Total Gravity Field Strength: 998.4893mgn (9.80665 Bases)
Gravity Model: GARM
Total Magnetic Field Strength: 47509.000 nT
Magnetic Dip Angle: 59.490 °
Declination Date: December 13, 2018
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: -1.4597 °
Total Corr Mag North->Grid North: 8.5497 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azin Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	Closure (ft)	Closure Azimuth (°)
Surface	0.00	0.00	360.00	0.00	0.00	0.00	0.00	N/A	707724.81	1117548.69	31.581701	-103.167449	0.00	0.00
KB Shifted	12.00	0.00	360.00	12.00	0.00	0.00	0.00	0.00	707724.81	1117548.69	31.581701	-103.167449	0.00	0.00
First SLB_MWD Survey	132.00	1.25	272.75	131.99	-0.43	0.06	-1.31	1.04	707724.87	1117547.38	31.581701	-103.167453	1.31	272.75
	219.00	1.14	289.95	218.97	-1.27	0.40	-3.07	0.43	707725.21	1117545.62	31.581702	-103.167459	3.10	277.49
	310.00	1.18	287.03	309.95	-2.32	0.99	-4.82	0.08	707725.80	1117543.87	31.581703	-103.167465	4.92	281.58
	393.00	0.93	269.40	392.94	-2.98	1.23	-6.31	0.49	707726.04	1117542.38	31.581704	-103.167469	6.43	281.04
	480.00	0.52	309.35	479.93	-3.51	1.47	-7.32	0.72	707726.28	1117541.37	31.581705	-103.167473	7.46	281.38
	566.00	0.39	313.06	565.93	-4.08	1.92	-7.83	0.15	707726.73	1117540.86	31.581706	-103.167474	8.07	283.77
	627.00	0.50	345.85	626.93	-4.53	2.32	-8.05	0.45	707727.13	1117540.64	31.581707	-103.167475	8.38	286.08
	712.00	0.67	371.06	711.93	-4.62	2.53	-7.67	1.20	707727.34	1117541.02	31.581707	-103.167474	8.07	288.29
	797.00	0.53	331.96	796.92	-4.01	2.13	-6.90	0.34	707726.94	1117541.79	31.581706	-103.167471	7.22	287.12
	877.00	0.32	133.00	876.92	-3.50	1.73	-6.46	0.26	707726.54	1117542.23	31.581705	-103.167470	6.69	284.96
	938.00	0.34	143.43	937.92	-3.18	1.46	-6.23	0.11	707726.27	1117542.46	31.581705	-103.167469	6.40	283.22
	972.00	0.36	148.57	971.92	-2.98	1.29	-6.11	0.11	707726.10	1117542.58	31.581704	-103.167469	6.24	281.92
	1058.00	0.64	84.15	1057.91	-2.63	1.11	-5.49	0.68	707725.92	1117543.20	31.581704	-103.167467	5.60	281.41
	1143.00	1.52	85.66	1142.90	-2.31	1.24	-3.89	1.04	707726.05	1117544.80	31.581704	-103.167462	4.09	287.69
	1227.00	1.64	78.14	1226.87	-1.97	1.57	-1.61	0.28	707726.38	1117547.08	31.581705	-103.167454	2.25	314.39
	1315.00	1.92	66.60	1314.82	-2.04	2.42	0.98	0.52	707727.23	1117549.67	31.581708	-103.167446	2.61	22.02
	1401.00	2.97	63.00	1400.75	-2.61	4.00	4.29	1.23	707728.81	1117552.97	31.581712	-103.167436	5.86	46.96
	1486.00	4.12	55.80	1485.58	-3.93	6.72	8.77	1.45	707731.53	1117557.46	31.581720	-103.167422	11.05	52.56
	1571.00	5.01	50.08	1570.31	-6.31	10.82	14.14	1.17	707735.63	1117562.83	31.581732	-103.167405	17.81	52.60
	1656.00	5.99	46.53	1654.92	-9.78	16.25	20.21	1.22	707741.06	1117568.90	31.581747	-103.167386	25.93	51.20
	1741.00	5.95	41.25	1739.46	-14.13	22.61	26.33	1.65	707747.42	1117575.02	31.581765	-103.167366	34.71	49.35
	1827.00	6.46	32.47	1824.96	-19.67	31.87	31.87	0.25	707754.85	1117580.56	31.581786	-103.167349	43.80	46.69
	1912.00	6.79	22.56	1909.39	-26.69	38.72	36.37	1.40	707763.53	1117585.05	31.581810	-103.167336	53.12	43.20
	1997.00	7.02	9.78	1993.78	-35.24	48.48	39.18	1.82	707773.29	1117587.86	31.581837	-103.167327	62.33	38.94
	2082.00	7.58	2.21	2078.09	-45.20	59.20	40.27	1.31	707784.01	1117588.96	31.581866	-103.167325	71.60	34.23
	2167.00	7.46	354.04	2162.36	-55.92	70.29	39.52	1.26	707795.10	1117588.60	31.581897	-103.167327	80.83	29.59
	2252.00	7.36	345.90	2246.66	-66.79	81.06	38.02	1.24	707805.86	1117586.71	31.581926	-103.167334	89.53	25.13
	2337.00	7.34	345.85	2330.96	-77.65	91.61	35.36	0.02	707816.41	1117584.05	31.581955	-103.167343	98.19	21.11
	2423.00	7.61	342.57	2416.23	-88.83	102.37	32.32	0.59	707827.17	1117581.00	31.581985	-103.167354	107.34	17.52
	2508.00	7.65	341.93	2500.48	-100.12	113.11	28.87	0.11	707837.92	1117577.56	31.582014	-103.167366	116.74	14.32
	2593.00	7.24	340.35	2584.76	-111.12	123.54	25.32	0.54	707848.34	1117574.01	31.582042	-103.167378	126.10	11.58
	2682.00	7.38	341.96	2673.04	-122.44	134.25	21.66	0.28	707859.05	1117570.35	31.582071	-103.167391	135.99	9.17
	2767.00	7.23	340.45	2757.35	-133.23	144.48	18.18	0.29	707869.28	1117566.87	31.582099	-103.167403	145.62	7.17
	2853.00	6.73	341.63	2842.71	-143.68	154.37	14.78	0.60	707879.17	1117563.47	31.582126	-103.167414	155.07	5.47
	2938.00	6.51	344.32	2927.14	-153.47	163.73	11.91	0.45	707889.53	1117560.60	31.582152	-103.167424	164.17	4.16
	3024.00	6.95	351.12	3012.55	-163.50	173.57	9.79	1.06	707898.37	1117558.48	31.582179	-103.167432	173.84	3.23
	3112.00	6.59	355.41	3099.94	-173.72	183.86	8.56	0.71	707908.66	1117557.25	31.582207	-103.167437	184.06	2.67
	3201.00	6.70	352.27	3188.34	-183.84	194.10	7.46	0.43	707918.89	1117556.15	31.582235	-103.167441	194.24	2.20
	3286.00	6.86	341.27	3272.75	-193.81	203.82	5.16	1.54	707928.61	1117553.85	31.582261	-103.167449	203.88	1.45
	3371.00	7.63	342.96	3357.07	-204.53	214.02	2.18	0.94	707938.82	1117550.57	31.582289	-103.167461	214.03	0.50
	3456.00	7.45	342.81	3441.33	-215.68	224.68	-1.41	0.21	707949.47	1117547.28	31.582318	-103.167472	224.68	369.64
	3542.00	6.98	346.02	3526.65	-226.48	235.08	-4.32	0.72	707959.87	1117544.37	31.582347	-103.167482	235.12	358.95
	3627.00	7.02	342.74	3611.02	-236.83	245.05	-7.10	0.47	707969.84	1117541.59	31.582374	-103.167492	245.15	358.34
	3712.00	6.05	342.97	3695.47	-246.50	254.29	-9.96	1.14	707979.09	1117538.73	31.582399	-103.167502	254.49	357.76
	3797.00	6.29	348.90	3779.98	-255.62	263.15	-12.17	0.80	707987.94	1117536.52	31.582423	-103.167510	263.43	357.35
	3883.00	5.96	348.70	3865.48	-264.75	272.15	-13.95	0.38	707996.94	1117534.74	31.582448	-103.167516	272.50	357.07
	3968.00	6.27	351.29	3950.00	-273.74	281.06	-15.52	0.49	708005.85	1117533.18	31.582472	-103.167522	281.49	356.84
	4053.00	5.90	349.47	4034.52	-282.68	289.95	-17.02	0.49	708014.74	1117531.67	31.582497	-103.167527	290.44	356.64
	4138.00	5.48	352.76	4119.10	-291.03	298.27	-18.33	0.63	708023.06	1117530.36	31.582519	-103.167532	298.83	356.48
	4224.00	5.50	356.64	4204.71	-299.10	306.45	-19.09	0.43	708031.24	1117529.61	31.582542	-103.167533	307.05	356.44
	4309.00	5.73	349.64	4289.30	-307.28	314.70	-20.09	0.85	708039.48	1117528.60	31.582564	-103.167539	315.34	356.35
	4394.00	6.05	348.41	4373.87	-315.87	323.04	-21.86	0.39	708047.82	1117528.83	31.582587	-103.167546	323.73	356.13
	4479.00	5.44	350.20	4458.47	-324.06	331.17	-23.55	0.60	708055.96	1117525.14	31.582609	-103.167552	332.01	355.93
	4564.00	5.64	352.31	4543.07	-332.19	339.28	-24.80	0.34	708064.07	1117523.90	31.582632	-103.167556	340.19	355.82
	4649.00	5.11	350.77	4627.69	-340.07	347.16	-25.96	0.65	708071.95	1117522.73	31.582653	-103.167561	348.13	355.72
	4735.00	4.57	354.36	4713.39	-347.23	354.35	-26.91	0.72	708079.14	1117521.78	31.582673	-103.167565	355.37	355.66
	4820.00	4.30	355.44	4798.13	-353.67	360.90	-27.50	0.33	708085.68	1117521.19	31.582691	-103.167567	361.94	355.64
	4905.00	3.30	357.84	4882.94	-359.15	366.52	-27.84	1.19	708091.30	1117520.85	31.582706			

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	Closure (ft)	Closure Azimuth (°)
	8694.00	0.98	293.93	8871.12	-369.98	381.44	-15.71	0.32	708106.23	1117532.99	31.582748	-103.167513	381.76	357.64
	8988.00	0.51	340.10	9060.10	-371.67	382.64	-17.62	0.52	708107.42	1117531.07	31.582753	-103.167538	382.04	357.36
	9083.00	0.93	182.85	9155.10	-371.37	382.27	-17.80	1.49	708107.05	1117530.89	31.582750	-103.167538	382.68	357.33
	9273.00	0.75	176.50	9250.09	-370.03	380.87	-17.80	0.21	708105.66	1117530.89	31.582746	-103.167537	381.29	357.32
	9367.00	1.23	68.04	9344.08	-369.53	380.64	-16.83	1.73	708105.42	1117531.86	31.582746	-103.167534	381.01	357.47
	9462.00	2.36	72.64	9439.03	-369.65	381.60	-14.02	1.20	708106.39	1117534.67	31.582749	-103.167525	381.86	357.90
	9557.00	1.74	52.29	9533.97	-370.19	383.07	-11.01	1.00	708107.85	1117537.68	31.582753	-103.167516	383.23	358.35
	9652.00	1.24	5.62	9628.94	-371.66	384.97	-9.77	1.33	708109.76	1117538.92	31.582758	-103.167512	385.10	358.55
	9747.00	0.75	39.55	9723.93	-373.21	386.53	-9.99	0.83	709111.31	1117538.70	31.582763	-103.167513	386.66	358.52
	9841.00	1.15	299.37	9831.91	-374.84	387.76	-11.56	1.23	708112.54	1117537.13	31.582766	-103.167518	388.29	358.29
	9936.00	2.02	298.22	9912.86	-377.07	389.26	-14.30	0.29	708114.04	1117534.39	31.582770	-103.167527	389.52	357.90
	10031.00	2.56	292.67	10007.78	-379.59	390.87	-17.74	0.61	708115.65	1117530.96	31.582774	-103.167530	391.27	357.40
	10126.00	2.33	290.39	10102.69	-382.10	392.36	-21.50	0.26	708117.14	1117527.19	31.582778	-103.167558	392.95	356.86
	10221.00	1.90	251.40	10197.63	-383.21	392.53	-24.81	1.55	708117.31	1117523.89	31.582778	-103.167561	393.31	356.38
	10316.00	1.95	273.30	10292.58	-383.70	392.12	-27.91	0.77	708116.90	1117520.78	31.582777	-103.167571	393.11	355.93
	10373.00	1.85	289.10	10349.55	-384.52	392.42	-29.77	0.72	708117.20	1117518.92	31.582777	-103.167577	393.55	355.66
	10428.00	2.03	285.40	10404.52	-385.56	392.97	-31.54	0.40	708117.76	1117517.15	31.582779	-103.167583	394.24	355.41
	10490.00	2.24	292.55	10466.47	-386.67	393.80	-33.70	0.40	708118.58	1117514.99	31.582781	-103.167590	395.24	355.11
	10585.00	4.94	189.91	10561.34	-384.48	390.48	-36.12	6.16	708115.26	1117512.57	31.582772	-103.167597	392.15	354.71
	10634.00	10.37	187.77	10609.89	-378.57	384.03	-37.08	11.09	708108.81	1117511.61	31.582754	-103.167600	385.81	354.48
	10681.00	12.16	182.47	10655.98	-370.04	374.89	-37.87	4.40	708099.67	1117510.83	31.582729	-103.167601	376.80	354.23
	10730.00	15.60	181.94	10703.55	-358.92	363.14	-38.31	7.03	708087.93	1117510.38	31.582696	-103.167602	365.16	353.98
	10776.00	20.44	177.91	10747.28	-345.27	348.93	-38.23	10.86	708073.71	1117510.46	31.582657	-103.167600	351.01	353.75
	10824.00	23.84	171.73	10791.74	-327.55	330.94	-36.53	8.58	708055.73	1117512.17	31.582608	-103.167593	332.95	353.70
	10871.00	26.35	173.05	10834.30	-307.87	311.19	-33.90	5.47	708035.98	1117514.79	31.582554	-103.167583	313.03	353.78
	10919.00	32.44	165.81	10876.11	-284.48	284.48	-29.45	4.67	708012.89	1117519.25	31.582491	-103.167567	289.60	354.16
	10966.00	40.81	159.92	10913.81	-256.49	261.40	-21.07	19.30	707986.19	1117527.63	31.582418	-103.167538	262.25	355.39
	11015.00	49.32	155.58	10948.40	-222.03	229.38	-7.86	18.46	707954.17	1117540.83	31.582331	-103.167493	229.51	358.04
	11062.00	53.41	158.01	10977.74	-185.57	195.64	6.58	9.59	707920.43	1117555.27	31.582239	-103.167444	195.75	1.93
	11110.00	60.99	161.30	11003.73	-145.34	157.83	20.55	16.81	707882.62	1117569.24	31.582136	-103.167396	159.16	7.42
	11157.00	69.34	160.44	11023.45	-102.77	117.57	34.52	17.84	707842.37	1117583.21	31.582026	-103.167348	122.53	16.37
	11252.00	87.04	162.65	11042.82	-10.20	29.70	63.79	18.77	707754.51	1117612.47	31.581787	-103.167247	70.36	65.03
	11347.00	92.30	165.35	11063.36	84.75	-61.58	89.96	6.22	707663.23	1117638.64	31.581538	-103.167155	109.02	124.39
	11443.00	91.44	165.82	11040.23	180.48	-155.01	111.73	3.32	707569.81	1117670.41	31.581283	-103.167078	144.22	144.22
	11466.27	90.74	168.29	11039.79	203.69	-177.80	116.42	3.05	707547.02	1117665.11	31.581221	-103.167061	212.53	146.78
	11539.00	88.56	167.89	11040.23	276.16	-248.96	131.43	3.05	707475.87	1117690.11	31.581026	-103.167007	281.52	152.17
	11566.29	88.30	166.87	11040.98	303.38	-275.58	137.39	3.86	707449.25	1117686.07	31.580953	-103.166986	307.93	153.50
	11634.00	87.66	164.33	11043.36	370.99	-341.12	154.22	3.86	707383.72	1117702.90	31.580774	-103.166926	374.36	155.67
	11700.00	88.25	164.23	11045.72	436.94	-404.61	172.09	0.91	707320.23	1117720.77	31.580601	-103.166864	439.68	156.96
	11796.00	88.52	161.51	11048.43	532.89	-496.30	200.35	2.85	707228.54	1117749.03	31.580351	-103.166765	535.22	158.02
	11891.00	89.45	160.90	11050.11	627.80	-586.22	230.95	1.17	707138.63	1117779.63	31.580106	-103.166660	630.08	158.50
	11987.00	91.27	160.62	11050.39	723.70	-676.86	262.59	0.84	707048.00	1117811.26	31.579859	-103.166551	726.01	158.80
	12083.00	91.30	162.44	11049.24	819.55	-767.59	294.25	0.82	706961.52	1117847.29	31.579617	-103.166441	819.00	159.00
	12178.00	91.38	162.16	11047.12	914.48	-857.29	325.11	1.88	706867.58	1117873.78	31.579368	-103.166335	916.87	159.23
	12274.00	91.44	162.13	11044.76	1010.43	-948.64	354.54	0.67	706776.23	1117903.20	31.579119	-103.166233	1012.73	159.51
	12369.00	91.03	161.80	11042.71	1105.38	-1038.95	383.94	0.55	706685.93	1117932.61	31.578873	-103.166132	1107.63	159.72
	12465.00	90.07	161.51	11041.79	1201.33	-1130.07	414.16	1.04	706594.82	1117962.82	31.578624	-103.166027	1203.57	159.87
	12560.00	89.86	161.80	11041.85	1296.29	-1220.24	444.06	0.38	706504.65	1117992.71	31.578379	-103.165924	1298.53	160.00
	12656.00	89.93	161.46	11042.03	1392.25	-1311.35	474.31	0.36	706413.55	1118022.97	31.578130	-103.165819	1394.49	160.12
	12752.00	89.69	163.72	11042.34	1488.23	-1402.94	503.03	2.37	706321.96	1118051.69	31.577881	-103.165720	1490.40	160.27
	12848.00	90.28	164.34	11042.37	1584.22	-1495.24	529.44	0.89	706229.68	1118078.10	31.577629	-103.165627	1586.21	160.50
	12943.00	90.10	163.65	11042.05	1679.22	-1586.55	556.64	0.75	706138.37	1118104.29	31.577380	-103.165536	1684.04	160.70
	13038.00	90.79	163.91	11041.32	1774.21	-1677.77	582.17	0.78	706047.16	1118130.82	31.577131	-103.165443	1775.90	160.86
	13133.00	91.72	164.10	11039.24	1869.18	-1769.07	608.34	1.00	705955.86	1118156.99	31.576882	-103.165352	1874.70	161.02
	13229.00	91.34	163.98	11036.67	1965.14	-1861.34	634.73	0.42	705863.60	1118183.38	31.576630	-103.165259	1966.58	161.17
	13324.00	91.27	163.97	11034.51	2060.11	-1952.62	660.95	0.07	705772.33	1118209.59	31.576381	-103.165168	2061.45	161.30
	13419.00	91.10	163.16	11032.54	2155.09	-2043.72	687.82	0.87	705681.23	1118236.46	31.576133	-103.165074	2156.36	161.40
	13515.00	90.86	163.11	11030.90	2251.07	-2135.58	715.67	0.26	705589.38	1118264.31	31.575882	-103.164977	2251.30	161.47
	13611.00	91.03	163.10	11029.64	2347.06	-2227.46	743.56	0.26	705497.48	1118292.16	31.575630	-103.164881	2346.20	161.55
	13707.00	91.17	164.67	11028.11	2443.04	-2319.76	769.79	1.47	705405.21	1118318.43	31.575383	-103.164789	2441.15	161.64
	13802.00	91.62	164.74	11025.80	2537.99	-2411.37	794.84	0.48	705313.61	1118343.48	31.575130	-103.164701	2536.99	161.76
	13898.00	90.58	163.62	11023.96	2633.96	-2503.71	821.01	1.59	705221.27	1118369.64	31.574878	-103.164609	2634.89	161.84
	13993.00	90.24	163.36	11023.28	2728.96	-2594.79	848.01	0.45	705130.20	1118396.64	31.574630	-103.164515	2729.85	161.90
	14089.00	90.69	163.30	11022.50	2824.95	-2686.76	875.54	0.47	705038.24	1118424.17	31.574379	-103.164419	2825.82	161.95
	14184.00	90.55	163.27	11021.47	2919.95	-2777.74	902.86	0.15	704947.21	1118451.49	31.574131	-103.164324	2920.78	161.99
	14279.00	91.07	163.65	11020.13	3014.94	-2868.80	929.91	0.68	704856.21	1118478.53	31.573882	-103.164230	3015.74	162.04
	14374.00	91.34	163.78	11018.13	3109.91	-2959.86	956.54	0.32	704765.05	1118505.16	31.573634	-103.164137	3110.68	162.09
	14470.00	91.25	163.70	11016.13	3204.89	-3050.92	983.17	0.77	704673.89	1118532.48	31.573386	-103.164042	3205.62	162.13
	14565.00	90.21	163.37	11015.23	3300.89	-3142.94	1011.22	0.82	7					

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	Closure (ft)	Closure Azimuth (°)
	20175.00	90.58	162.68	10906.70	8907.84	-8535.52	2548.43	0.22	699189.88	1120096.95	31.558422	-103.158573	8907.84	163.38
	20270.00	90.79	162.90	10905.56	9002.83	-8626.26	2576.54	0.32	699099.15	1120125.05	31.558175	-103.158475	9002.83	163.37
	20366.00	90.52	162.41	10904.46	9098.81	-8717.89	2605.16	0.58	699007.52	1120153.67	31.557925	-103.158376	9098.81	163.36
	20462.00	90.34	161.24	10903.74	9194.78	-8809.09	2635.10	1.23	698916.32	1120183.61	31.557677	-103.158272	9194.78	163.35
	20651.00	90.65	162.70	10902.11	9383.71	-8988.80	2693.60	0.79	698736.63	1120242.10	31.557187	-103.158070	9383.71	163.32
	20746.00	90.65	162.07	10901.03	9478.69	-9079.34	2722.34	0.66	698646.10	1120270.85	31.556940	-103.157970	9478.69	163.31
	20842.00	90.72	162.36	10899.88	9574.66	-9170.75	2751.66	0.31	698554.70	1120300.16	31.556691	-103.157869	9574.67	163.30
	20938.00	90.58	162.02	10898.80	9670.63	-9262.14	2781.02	0.38	698463.31	1120329.52	31.556442	-103.157767	9670.64	163.29
	21033.00	90.38	162.51	10898.00	9765.61	-9352.62	2809.96	0.56	698372.84	1120358.46	31.556195	-103.157667	9765.62	163.28
	21128.00	90.45	162.42	10897.31	9860.60	-9443.20	2838.58	0.12	698282.26	1120387.08	31.555948	-103.157567	9860.61	163.27
	21223.00	90.52	162.14	10896.51	9955.58	-9533.69	2867.50	0.30	698191.78	1120415.99	31.555701	-103.157467	9955.59	163.26
	21319.00	90.52	164.04	10895.64	10051.57	-9625.54	2895.42	1.98	698099.94	1120443.91	31.555451	-103.157370	10051.59	163.26
	21414.00	90.76	163.80	10894.58	10146.56	-9716.81	2921.73	0.36	698008.67	1120470.22	31.555202	-103.157278	10146.57	163.26
	21509.00	90.48	164.29	10893.55	10241.54	-9808.15	2947.84	0.59	697917.34	1120496.33	31.554953	-103.157187	10241.56	163.27
	21605.00	90.58	163.65	10892.66	10337.53	-9900.41	2974.35	0.67	697825.08	1120522.83	31.554701	-103.157094	10337.53	163.28
	21700.00	90.62	164.26	10891.66	10432.52	-9991.70	3000.61	0.64	697733.80	1120549.09	31.554452	-103.157003	10432.53	163.28
	21795.00	90.45	164.43	10890.78	10527.51	-10083.18	3026.24	0.25	697642.33	1120574.72	31.554202	-103.156913	10527.51	163.29
Cross HL Toe	21945.38	90.27	163.77	10889.84	10677.87	-10227.80	3067.44	0.46	697497.72	1120615.92	31.553908	-103.156769	10677.88	163.31
Last SLB_MWD Survey	21968.00	90.24	163.67	10889.74	10700.49	-10249.51	3073.78	0.46	697476.01	1120622.26	31.553749	-103.156747	10700.50	163.31
Projection to Bit	22039.00	90.24	163.67	10889.44	10771.49	-10317.85	3093.74	0.00	697407.88	1120642.22	31.553563	-103.156677	10771.49	163.31

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

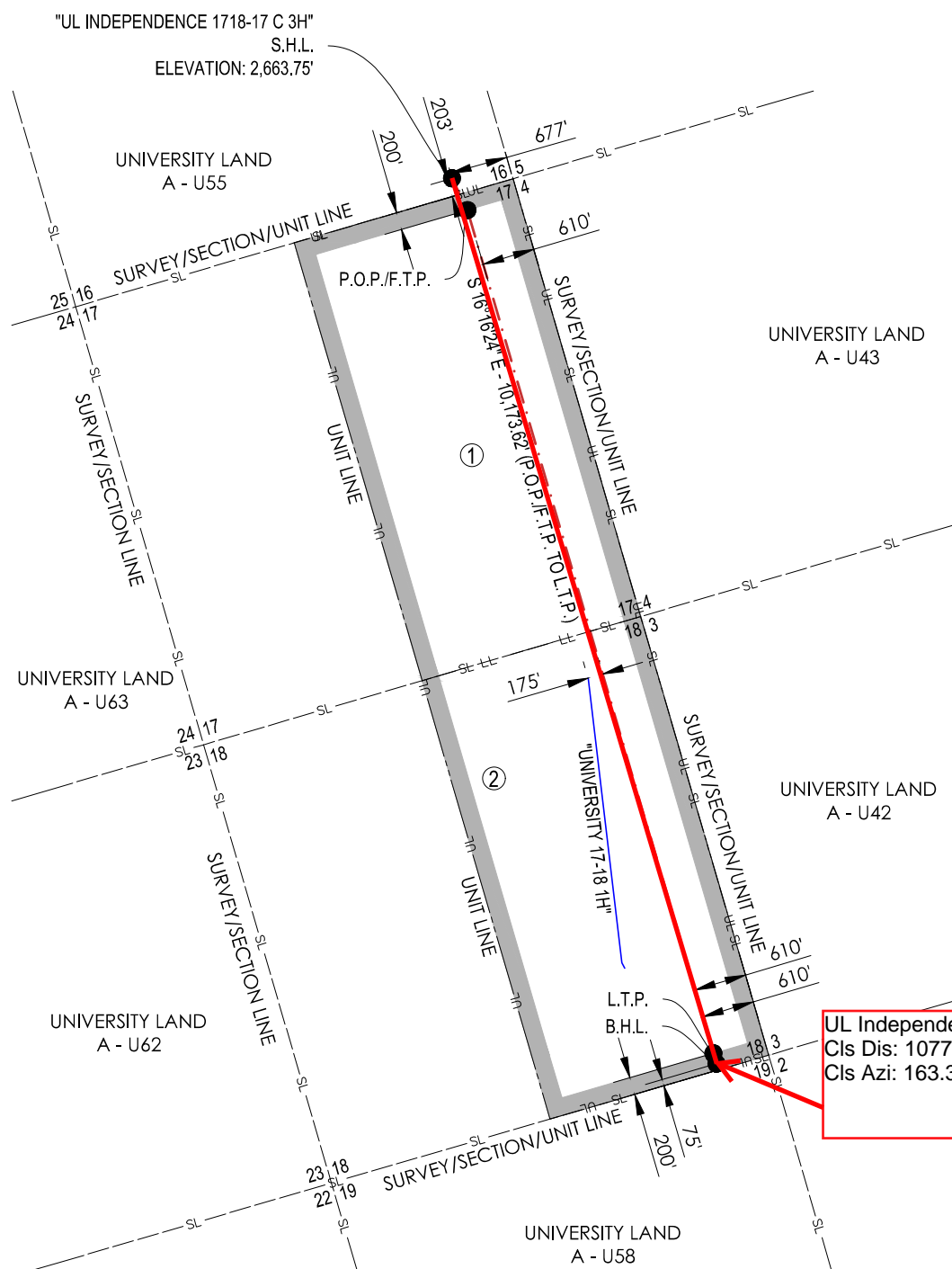
Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	12.000	1/98.425	17.500	13.375	NAL_MWD_PLUS_0.5_DEG-Depth Only	Original Borehole / UL Independence 1718-17 C 3H MWD 0' to 22039' Definitive
	1	12.000	25.000	Act Stns	17.500	13.375	NAL_MWD_PLUS_0.5_DEG-Depth Only	Original Borehole / UL Independence 1718-17 C 3H MWD 0' to 22039' Definitive
	1	25.000	938.000	Act Stns	17.500	13.375	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 C 3H
	1	938.000	5137.000	Act Stns	12.250	10.750	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 C 3H
	1	5137.000	10428.000	Act Stns	9.875	7.625	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 C 3H
	1	10428.000	22039.000	Act Stns	6.750	5.500	NAL_MWD_IFR1+MS	Original Borehole / UL Independence 1718-17 C 3H

FELIX ENERGY HOLDINGS II, LLC
WARD COUNTY, TEXAS
S.H.L. 203' FSL - 677' FEL, SECTION 16, BLOCK 17

LEGEND

- UL — UNIT LINE
- - - SL - SECTION LINE
- . - . - . PROPOSED WELL PATH
- — — EXISTING WELL PATH
- . - . - . NEAREST PROPOSED WELL PATH 200' UNIT OFFSET
- S.H.L. SURFACE HOLE LOCATION
- P.O.P. POINT OF PENETRATION
- F.T.P. FIRST TAKE POINT
- T.P. TURNING POINT
- L.T.P. LAST TAKE POINT
- B.H.L. BOTTOM HOLE LOCATION

GRID NORTH (NAD 83)
 TEXAS - CENTRAL ZONE



①
 E/2 SEC. 17 - BLOCK 17
 320.08 ACRES
 UNIVERSITY LAND
 A - U56
 UL LEASE # 111458

②
 E/2 SEC. 18 - BLOCK 17
 320.57 ACRES
 UNIVERSITY LAND
 A - U57
 UL LEASE # 105885

UL Independence 1718-17 C 3H
 Cls Dis: 10771.49 Ft
 Cls Azi: 163.31°

OPERATOR: FELIX ENERGY HOLDINGS II, LLC

WELL NAME: UL INDEPENDENCE 1718-17 **WELL NO:** C 3H

TOPOGRAPHIC & VEGETATION: FLAT LOCATION WITH LOW LYING BRUSH

GOOD DRILL SITE: YES **REFERENCE STAKES OR ALTERNATE LOCATION STAKES SET:** NONE

BEST ACCESSIBILITY TO LOCATION: FROM SOUTH

DISTANCE & DIRECTION

FROM HWY JCT OR TOWN: ±4.14 MILES NORTHWEST OF PYOTE, TX
 FROM THE INTERSECTION OF 3RD STREET AND PYOTE STREET, HEAD WEST ON 3RD STREET AND CONTINUE FOR ±3.1 MILES. TURN RIGHT ONTO EXISTING LEASE ROAD AND FOLLOW FOR ±1.5 MILES. TURN RIGHT ONTO EXISTING LEASE ROAD AND CONTINUE FOR ±1.3 MILES TO PROPOSED ACCESS EASEMENT AND FOLLOW TO PAD.

WELL PATH DATA

LINE	BEARING	DISTANCE
S.H.L. TO P.O.P./F.T.P.	S 25°45'33" E	408.82'
P.O.P./F.T.P. TO L.T.P.	S 16°16'24" E	10,173.62'
L.T.P. TO B.H.L.	S 16°16'24" E	125.00'

CALLS FROM SECTION LINE

S.H.L.	203' FSL, 677' FEL (SEC. 16)
P.O.P./F.T.P.	200' FNL, 610' FEL (SEC. 17)
L.T.P.	200' FSL, 610' FEL (SEC. 18)
B.H.L.	75' FSL, 610' FEL (SEC. 18)

LAST TAKE POINT:
 200' FSL & 610' FEL (SEC. 18)
NAD 27 TEXAS CENTRAL ZONE
 NORTHING: 697590.72, EASTING: 1120577.08
 LATITUDE: N 31.55406085°, LONGITUDE: W 103.15690132°

BOTTOM HOLE LOCATION:
 75' FSL & 610' FEL (SEC. 18)
NAD 27 TEXAS CENTRAL ZONE
 NORTHING: 697470.73, EASTING: 1120612.11
 LATITUDE: N 31.55373352°, LONGITUDE: W 103.15677913°

SURFACE HOLE LOCATION:

203' FSL & 677' FEL (SEC. 16)
 GROUND ELEVATION: 2,663.75'
NAD 27 TEXAS CENTRAL ZONE
 NORTHING: 707724.81, EASTING: 1117548.69
 LATITUDE: N 31.58170103°, LONGITUDE: W 103.16744918°
NAD 83 TEXAS CENTRAL ZONE
 NORTHING: 10550300.45, EASTING: 1414014.50
 LATITUDE: N 31.58183313°, LONGITUDE: W 103.16789037°

POINT OF PENETRATION/FIRST TAKE POINT:

200' FNL & 610' FEL (SEC. 17)
NAD 27 TEXAS CENTRAL ZONE
 NORTHING: 707356.63, EASTING: 1117726.35
 LATITUDE: N 31.58070157°, LONGITUDE: W 103.16684873°

UNIT CORNERS

LOCATION	NAD27	
	STATE PLANE TEXAS CENTRAL (32039)	GEOGRAPHIC (4267)
NE CORNER SEC. 17-BLK. 17	N = 707719.78 E = 1118255.79	LAT: 31.58173670° LONG: -103.16517879°
SE CORNER SEC. 17-BLK. 17	N = 702649.94 E = 1119735.10	LAT: 31.56790654° LONG: -103.16001619°
SE CORNER SEC. 18-BLK. 17	N = 697569.76 E = 1121218.65	LAT: 31.55404800° LONG: -103.15484062°
SW CORNER OF UNIT	N = 696829.78 E = 1118685.25	LAT: 31.55183738° LONG: -103.16291068°
NW CORNER OF LEASE 2	N = 701907.22 E = 1117202.64	LAT: 31.56568814° LONG: -103.16808408°
NW CORNER OF UNIT	N = 706979.08 E = 1115722.26	LAT: 31.57952347° LONG: -103.17325134°



CONTACT INFORMATION:
 Shannon D. Ozment
 Crafton Tull (10193715)
 1000 LedgeLawn Dr.
 Conway, AR 72034

10/29/2018

GENERAL NOTES

- THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON REASONABLE VISUAL OBSERVATION. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREIN. ADDITIONAL BURIED UTILITIES/ STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/ STRUCTURES. BEFORE EXCAVATIONS ARE BEGUN, THE OFFICES OF THE VARIOUS UTILITIES SERVICING THIS AREA SHOULD BE CONTACTED FOR THEIR UTILITY LOCATION.
- BASIS OF BEARINGS : TEXAS STATE PLANE GRID, CENTRAL ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.
- COMBINED SCALE FACTOR AT S.H.L. - 0.999805517
- VERTICAL DATUM IS NAVD 88
- AREAS, DISTANCES, AND COORDINATES ARE "GRID" BASED ON U.S. SURVEY FEET.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY.

1000 LedgeLawn Dr
 Conway, Arkansas 72034



501.328.3316 t 501.328.3325 f
 www.craftontull.com

REVISION

"UL INDEPENDENCE 1718-17 C 3H"

E/2 SECTION 17, BLOCK 17 - 320.08 ACRES
 E/2 SECTION 18, BLOCK 17 - 320.57 ACRES
 PROPOSED DRILL SITE
 WARD COUNTY, TEXAS



SCALE: 1" = 2000'
 PLOT DATE: 10-29-2018

CHECKED BY:
 DRAWN BY:

A.LILEY
 L.DOW

APPROVED BY: SO
 SHEET NO.: 1 OF 1

Oilfield Services, Central U.S. Land
Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

I, Mohamed Gaber certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of December 13, 2018 through January 18, 2019, conduct or supervise the taking of the TelePacer/SlimPulse & Third Party Corrected surveys from a depth of 132.00 feet to a depth of 21968.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Felix Energy Holdings II, LLC for the UL Independence 1718-17 C 3H Well (Original Hole) API No. 42-475-37716 in Texas; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.



Mohamed Gaber
FE