

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 29, 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 B 2H
FIELD: Phantom (Wolfcamp)

RIG: ICD 321
COUNTY: Ward
API NO: 42-475-37718
PERMIT: 846192
JOB NO: 18MLD4288

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>
Juan Estrada FS	UL INDEPENDENCE 1718-17 B 2H Original Hole	100.00 Ft to 22322.00 Ft	November 18, 2018 to January 20, 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,

Dustin Barlow
Field Service Manager

CC: FELIX ENERGY HOLDINGS II, LLC
Enclosures: [2]
County of Ward
State of Texas

UL Independence 1718-17 B 2H MWD 0' to 22402' Definitive Survey
Geodetic Report
(Def Survey)



Report Date: January 24, 2019 - 03:15 PM
Client: Felix Energy
Field: TX Ward County (NAD 27 CZ) - 2018
Structure / Slot: Felix Energy UL Independence 1718-17 Pad) / UL Independence 1718-17 B 2H
Well: UL Independence 1718-17 B 2H - ICD 321
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name:
Survey Date: January 02, 2019
Tort / AHD / DDI / ERD Ratio: 326.653' / 11501.660 ft / 6.865 / 1.001
Coordinate Reference System: NAD27 Texas State Plane, Central Zone, US Feet
Location Lat / Long: N 31° 34' 57.98811", W 103° 10' 4.26229"
Location Grid N/E Y/X: N 708118.340 ftUS, E 1117433.650 ftUS
CRS Grid Convergence Angle: -1.4599 °
Grid Scale Factor: 0.99993308
Version / Patch: 2.10.302.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 162.460 ° (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: 7.082 °
Total Gravity Field Strength: 998.4893mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47471.116 nT
Magnetic Dip Angle: 59.506 °
Declination Date: January 02, 2019
Magnetic Declination Model: HDGM 2018
North Reference: Grid North
Grid Convergence Used: -1.4599 °
Total Corr Mag North->Grid North: 8.5420 °
Local Coord Referenced To: Well Head

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 (°)
Surface Begin	0.00	0.00	360.00	0.00	0.00	0.00	0.00	N/A	708118.34	1117433.65	31.582774	-103.167851	0.00	0.00
SLB_MWD Survey	100.00	0.34	49.60	100.00	-0.12	0.19	0.23	0.34	708118.53	1117433.88	31.582775	-103.167850	0.30	49.60
13 3/8 Casing	145.00	0.36	89.96	145.00	-0.12	0.28	0.47	0.54	708118.62	1117434.12	31.582775	-103.167849	0.55	59.26
	235.00	0.25	70.47	235.00	-0.05	0.34	0.94	0.17	708118.69	1117434.59	31.582775	-103.167848	1.00	69.79
	326.00	0.11	164.52	326.00	0.03	0.33	1.15	0.31	708118.67	1117434.80	31.582775	-103.167847	1.19	74.09
	419.00	0.52	226.94	419.00	0.31	-0.05	0.86	0.52	708118.29	1117434.51	31.582774	-103.167848	0.86	93.13
	510.00	0.41	245.80	509.99	0.52	-0.46	0.26	0.21	708117.88	1117433.91	31.582773	-103.167850	0.53	150.29
	694.00	0.86	259.53	693.98	0.43	-0.98	-1.69	0.26	708117.36	1117431.96	31.582772	-103.167856	1.96	239.87
	896.00	2.60	258.08	895.88	-0.21	-2.21	-7.67	0.86	708116.14	1117425.98	31.582768	-103.167875	7.98	253.96
	938.00	2.91	258.50	937.83	-0.41	-2.61	-9.64	0.74	708115.73	1117424.01	31.582767	-103.167881	9.99	254.83
	1021.00	3.52	259.11	1020.70	-0.93	-3.52	-14.21	0.74	708114.82	1117419.44	31.582764	-103.167896	14.64	256.10
	1061.00	3.55	259.75	1060.63	-1.23	-3.97	-16.64	0.12	708114.37	1117417.02	31.582762	-103.167904	17.10	256.58
	1151.00	2.07	228.55	1150.52	-0.92	-5.54	-20.60	2.31	708112.80	1117413.06	31.582758	-103.167916	21.33	254.94
	1242.00	1.46	189.54	1241.48	0.77	-7.77	-22.02	1.44	708110.57	1117411.63	31.582752	-103.167921	23.35	250.56
	1333.00	1.49	155.98	1332.45	2.98	-10.00	-21.73	0.94	708108.35	1117411.92	31.582745	-103.167920	23.92	245.30
	1422.00	1.65	100.02	1421.42	4.72	-11.28	-20.00	1.66	708107.07	1117413.65	31.582742	-103.167914	22.96	240.58
	1516.00	2.48	73.56	1515.36	5.39	-10.94	-16.71	1.32	708107.41	1117416.94	31.582743	-103.167903	19.97	236.81
	1609.00	2.55	77.43	1608.27	5.61	-9.92	-12.77	0.20	708108.43	1117420.89	31.582746	-103.167891	16.16	232.16
	1704.00	2.18	80.44	1703.19	6.04	-9.16	-8.92	0.41	708109.19	1117424.73	31.582749	-103.167879	12.78	224.26
	1797.00	3.05	81.24	1796.09	6.66	-8.48	-4.73	0.94	708109.86	1117428.92	31.582751	-103.167865	9.71	209.14
	1891.00	3.32	80.80	1889.95	7.44	-7.67	0.43	0.29	708110.67	1117434.08	31.582753	-103.167849	7.68	176.81
	1985.00	3.01	84.06	1983.81	8.33	-6.98	5.57	0.38	708111.36	1117439.22	31.582756	-103.167832	8.93	141.41
	2077.00	3.44	73.09	2075.66	8.85	-5.93	10.61	0.82	708112.42	1117444.26	31.582759	-103.167816	12.15	119.18
	2172.00	3.41	74.67	2170.49	8.99	-4.35	16.06	0.10	708113.99	1117449.71	31.582764	-103.167799	16.64	105.15
	2267.00	3.45	76.30	2265.32	9.29	-2.93	21.57	0.11	708115.42	1117455.21	31.582768	-103.167781	21.76	97.73
	2361.00	3.46	77.06	2359.15	9.71	-1.62	27.08	0.05	708116.72	1117460.73	31.582772	-103.167764	27.13	93.42
	2455.00	4.07	80.29	2452.95	10.39	-0.42	33.13	0.69	708117.92	1117466.78	31.582776	-103.167744	33.13	90.73
	2549.00	5.59	82.43	2546.61	11.64	0.74	40.96	1.63	708119.08	1117474.61	31.582779	-103.167719	40.96	88.96
	2643.00	5.71	81.26	2640.15	13.14	2.06	50.12	0.18	708120.40	1117483.76	31.582784	-103.167690	50.16	87.65
	2738.00	5.91	92.72	2734.67	15.56	2.54	59.67	1.24	708120.88	1117493.32	31.582786	-103.167659	59.73	87.56
	2833.00	5.95	90.68	2829.16	18.79	2.25	69.48	0.23	708120.59	1117503.13	31.582786	-103.167628	69.52	88.14
	2927.00	5.79	91.90	2922.67	21.89	2.04	79.09	0.22	708120.38	1117512.74	31.582786	-103.167597	79.12	88.52
3021.00	6.10	90.06	3016.16	24.98	1.87	88.83	0.39	708120.22	1117522.47	31.582786	-103.167566	88.85	88.79	
3116.00	6.48	87.64	3110.59	27.91	2.09	99.23	0.49	708120.43	1117532.87	31.582787	-103.167532	99.25	88.79	
3210.00	6.29	87.50	3204.01	30.64	2.53	109.68	0.20	708120.87	1117543.32	31.582789	-103.167499	109.70	88.68	
3305.00	6.30	87.45	3298.43	33.34	2.99	120.08	0.01	708121.33	1117553.72	31.582791	-103.167465	120.12	88.57	
3398.00	6.17	87.55	3390.88	36.36	3.43	130.17	0.14	708121.77	1117563.81	31.582793	-103.167433	130.22	88.49	
3492.00	6.11	88.92	3484.34	38.69	3.74	140.22	0.17	708122.08	1117573.86	31.582795	-103.167401	140.27	88.47	
3585.00	6.03	87.62	3576.82	41.37	4.04	150.05	0.17	708122.38	1117583.69	31.582796	-103.167369	150.10	88.46	
3679.00	5.85	88.18	3670.32	43.96	4.40	159.77	0.20	708122.74	1117593.41	31.582798	-103.167338	159.83	88.42	
3774.00	6.11	92.03	3764.80	46.96	4.37	169.66	0.50	708122.71	1117603.30	31.582798	-103.167306	169.72	88.52	
3867.00	5.82	92.49	3857.30	50.24	3.99	179.32	0.32	708122.33	1117612.96	31.582798	-103.167275	179.36	88.73	
3961.00	5.80	94.27	3950.82	53.63	3.43	188.82	0.19	708121.77	1117622.46	31.582797	-103.167245	188.85	88.96	
4055.00	5.50	94.49	4044.36	57.09	2.72	198.05	0.32	708121.06	1117631.68	31.582796	-103.167215	198.06	89.21	
4150.00	5.20	92.11	4138.94	60.24	2.21	206.89	0.39	708120.55	1117640.52	31.582795	-103.167187	206.90	89.39	
4244.00	5.43	90.23	4232.54	63.03	2.03	215.69	0.31	708120.37	1117649.23	31.582795	-103.167159	215.60	89.46	
4339.00	4.72	90.19	4327.17	65.60	2.00	223.99	0.75	708120.34	1117657.63	31.582796	-103.167132	224.00	89.49	
4432.00	3.89	94.49	4419.90	67.94	1.74	230.97	0.96	708120.08	1117664.60	31.582795	-103.167109	230.97	89.57	
4526.00	2.80	88.45	4513.74	69.77	1.56	236.44	1.22	708119.90	1117670.07	31.582795	-103.167092	236.45	89.62	
4620.00	2.47	93.77	4607.64	71.14	1.49	240.76	0.44	708119.83	1117674.39	31.582795	-103.167078	240.76	89.65	
4715.00	1.42	95.67	4702.59	72.35	1.23	243.97	1.11	708119.57	1117677.60	31.582795	-103.167068	243.97	89.71	
4809.00	1.47	98.43	4796.56	73.34	0.94	246.32	0.09	708119.28	1117679.95	31.582794	-103.167060	246.32	89.78	
4903.00	1.52	100.40	4890.53	74.45	0.54	248.74	0.08	708118.88	1117682.37	31.582793	-103.167052	248.74	89.88	
4998.00	1.39	112.15	4985.50	75.77	-0.12	251.05	0.34	708118.22	1117684.68	31.582792	-103.167045	251.05	90.03	
5035.00	1.35	104.78	5022.49	76.29	-0.40	251.88	0.49	708117.94	1117685.52	31.582791	-103.167042	251.88	90.09	
5082.00	1.21	106.02	5069.47	76.86	-0.68	252.90	0.30	708117.66	1117686.53	31.582790	-103.167039	252.90	90.15	
5116.00	1.11	107.11	5103.47	77.25	-0.88	253.56	0.30	708117.46	1117687.19	31.582790	-103.167037	253.56	90.20	
5210.00	1.53	102.21	5197.44	78.39	-1.41	255.65	0.46	708116.93	1117689.29	31.582789	-103.167030	255.66	90.32	
5305.00	0.63	152.76	5292.43	79.53	-2.14	257.13	1.29	708116.20	1117690.76	31.582787	-103.167025	257.14	90.48	
5399.00	0.66	168.15	5386.42	80.58	-3.13	257.48	0.19	708115.21	1117691.11	31.582784	-103.167024	257.50	90.70	
5493.00	0.60	163.69	5480.41	81.61	-4.13	257.73	0.08	708114.21	1117691.38	31.582781	-103.167023	257.76	90.92	
5588.00	0.68	161.11	5575.41	82.67	-5.14	258.05	0.09	708113.20	1117691.68	31.582778	-103.167022	258.10	91.14	
5682.00	0.64	55.32	5669.40	83.08	-5.37	258.66	1.12	708112.97	1117692.30	31.582778	-103.167020	258.72	91.19	
5776.00	0.97	25.02	5763.39	82.34	-4.35	259.43	0.56	708113.99	1117693.06	31.582781	-103.167017	259.47	90.96	
5870.00	0.76	31.48	5857.38	81.34	-3.10	260.09	0.25	708115.24	1117693.73	31.582784	-103.167015	260.11	90.68	
5964.00	0.93	41.74	5845.38	80.58	-2.06	260.89	0.17	708116.28	1117694.45	31.582784	-103.167013	260.89	90.65	
6058.00	0.81	32.81	5845.37	79.65	-1.95	261.69	0.14	708117.35	1117695.32	31.582790	-103.167011	261.69	90.22	
6152.00	0.13	117.68	6138.36	79.47	-0.49	262.14	0.86	708117.85	1117695.77	31.582791	-103.167009	262.14	90.11	
6246.00	0.28	171.41	6233.36	79.77	-0.76	262.27	0.24	708117.58	1117695.90	31.582791	-103.167009	262.27	90.17	
6340.00	0.30	200.29	6327.36	80.19	-1.22	262.22	0.16	708117.12	1117695.85	31.582789	-103.167009	26		

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 (°)
	8600.0	0.33	225.36	8557.29	74.84	2.96	257.70	0.18	708121.30	117691.33	31.582801	-103.167024	257.71	89.34
	8694.00	0.53	308.27	8745.28	74.49	3.04	257.28	0.34	708121.18	117690.91	31.582801	-103.167025	257.69	89.37
	8758.00	0.53	308.27	8745.28	74.49	3.07	256.89	0.43	708121.41	117690.52	31.582801	-103.167026	256.91	89.32
	8793.00	0.40	334.31	8780.28	74.24	3.28	256.71	0.70	708121.62	117690.34	31.582801	-103.167027	256.73	89.27
	8887.00	0.64	324.93	8874.28	73.41	4.01	256.27	0.27	708122.35	117689.90	31.582803	-103.167028	256.30	89.10
	8982.00	1.91	334.20	8969.25	71.34	5.87	255.27	1.35	708124.21	117688.91	31.582808	-103.167032	255.34	88.68
	9076.00	0.64	245.19	9063.23	69.85	7.06	254.11	2.13	708125.40	117687.75	31.582812	-103.167035	254.21	88.41
	9170.00	1.06	204.37	9157.22	70.57	6.04	253.28	0.76	708124.38	117686.91	31.582809	-103.167038	253.35	88.63
	9265.00	0.73	168.09	9252.21	71.82	4.65	253.04	0.67	708122.99	117686.67	31.582805	-103.167039	253.08	88.95
	9359.00	0.53	88.19	9346.21	72.54	4.07	253.24	0.87	708122.41	117687.23	31.582803	-103.167037	253.63	89.08
	9452.00	1.90	56.97	9439.20	72.47	4.48	254.64	0.57	708122.82	117688.27	31.582805	-103.167034	254.68	88.99
	9546.00	1.03	188.12	9533.19	73.04	4.04	255.14	1.87	708122.38	117688.77	31.582803	-103.167032	255.17	89.09
	9640.00	3.12	253.79	9627.14	73.74	2.49	252.57	3.04	708120.83	117686.20	31.582799	-103.167040	252.58	89.43
	9735.00	2.24	260.83	9722.03	73.41	1.47	248.25	0.99	708119.81	117681.88	31.582796	-103.167054	248.25	89.66
	9829.00	0.98	282.98	9815.99	72.73	1.36	245.65	1.47	708119.70	117679.29	31.582795	-103.167062	245.66	89.68
	9921.00	0.68	310.24	9907.98	71.87	1.89	244.47	0.53	708120.23	117678.10	31.582797	-103.167068	244.48	89.56
	10015.00	0.11	256.14	10001.98	71.40	2.23	243.96	0.66	708120.57	117677.59	31.582798	-103.167068	243.97	89.48
	10110.00	0.56	186.35	10096.98	71.81	1.75	243.82	0.56	708120.09	117677.45	31.582796	-103.167068	243.82	89.59
	10205.00	0.55	205.73	10191.98	72.57	0.87	243.57	0.20	708119.21	117677.20	31.582794	-103.167069	243.57	89.79
	10299.00	0.90	53.69	10285.97	72.66	0.90	243.97	1.50	708119.25	117677.60	31.582794	-103.167068	243.97	89.79
	10392.00	2.18	67.19	10378.94	72.26	2.02	246.19	1.42	708120.36	117679.82	31.582797	-103.167061	246.19	89.53
	10487.00	2.04	72.97	10473.87	72.11	3.22	249.47	0.27	708121.56	117683.10	31.582801	-103.167050	249.49	89.26
	10582.00	1.23	80.89	10568.83	72.28	3.88	252.09	0.88	708122.22	117685.72	31.582803	-103.167042	252.12	89.12
	10676.00	1.81	83.26	10662.80	72.70	4.21	254.56	0.62	708122.55	117688.19	31.582804	-103.167034	254.60	89.05
	10771.00	1.02	152.20	10757.78	73.82	3.64	256.45	1.82	708121.98	117690.08	31.582802	-103.167028	256.47	89.19
	10846.00	1.08	163.12	10832.76	75.18	2.37	256.96	0.28	708120.71	117690.59	31.582799	-103.167026	256.97	89.47
	10941.00	0.87	10882.96	297.75	75.63	2.97	257.75	0.89	708119.97	117690.96	31.582797	-103.167025	257.75	89.64
	10935.00	0.85	116.32	10921.75	76.48	1.28	257.80	0.89	708119.62	117691.43	31.582796	-103.167023	257.80	89.72
	11030.00	1.93	148.31	11016.72	78.52	-0.40	259.27	1.36	708117.94	117692.90	31.582792	-103.167018	259.27	90.09
	11078.00	10.57	176.04	11064.40	83.59	-5.49	260.00	18.56	708112.85	117693.63	31.582778	-103.167016	260.06	91.21
	11126.00	18.25	174.01	11109.89	95.01	-17.13	261.07	16.37	708101.22	117694.70	31.582746	-103.167011	261.03	93.75
	11173.00	26.70	172.26	11154.20	113.03	-35.32	263.31	17.66	708083.02	117696.94	31.582696	-103.167003	263.31	97.64
	11220.00	29.87	170.40	11159.59	135.03	-57.33	266.68	7.00	708061.02	117700.31	31.582636	-103.166990	272.77	102.13
	11267.00	34.52	168.45	11235.35	159.88	-81.93	271.30	10.14	708036.42	117704.93	31.582568	-103.166973	283.40	106.80
	11314.00	39.28	161.88	11272.94	189.03	-109.14	278.80	13.14	708009.20	117712.24	31.582494	-103.166949	290.22	111.39
	11358.00	41.84	154.05	11306.39	216.50	-135.60	289.37	12.94	707982.75	117723.00	31.582422	-103.166911	319.56	115.11
	11409.00	44.77	151.71	11343.50	250.98	-166.72	305.33	6.55	707951.64	117738.95	31.582338	-103.166857	347.88	118.64
	11457.00	49.42	153.75	11376.17	285.63	-197.97	321.41	10.17	707920.39	117755.04	31.582253	-103.166803	377.48	121.63
	11505.00	53.48	157.47	11406.08	322.88	-232.15	336.87	10.40	707886.20	117770.50	31.582160	-103.166750	409.12	124.57
	11553.00	57.50	162.07	11433.28	362.37	-269.25	350.50	11.51	707849.10	117784.13	31.582059	-103.166703	441.98	127.53
	11600.00	63.81	163.60	11456.30	403.31	-308.38	362.57	13.72	707809.98	117796.20	31.581952	-103.166662	475.98	130.38
	11648.00	71.16	162.02	11474.67	447.62	-350.71	375.68	15.61	707767.66	117809.31	31.581837	-103.166616	513.94	133.03
	11696.00	78.26	161.76	11487.32	493.89	-394.69	390.07	14.80	707723.68	117823.69	31.581717	-103.166566	554.91	135.34
	11743.00	85.31	160.44	11494.03	544.23	-434.23	404.23	15.14	707679.41	117837.95	31.581596	-103.166517	593.78	137.38
	11792.00	92.06	164.42	11495.16	589.33	-485.92	418.07	14.19	707632.45	117851.69	31.581468	-103.166469	641.02	139.29
	11821.46	91.45	164.65	11494.25	618.75	-514.30	425.92	2.21	707604.08	117859.54	31.581391	-103.166441	667.76	140.37
	11887.00	90.10	165.16	11493.37	684.23	-577.58	442.98	2.21	707540.80	117876.60	31.581218	-103.166381	727.89	142.51
	11921.37	91.05	165.15	11493.02	718.56	-610.80	451.79	2.76	707507.58	117885.41	31.581128	-103.166350	759.73	143.51
	11982.00	92.72	165.12	11491.03	779.08	-669.36	467.34	2.76	707449.02	117900.96	31.580968	-103.166296	816.36	145.08
	12077.00	90.52	163.57	11488.34	873.99	-760.79	492.96	2.83	707357.60	117926.58	31.580718	-103.166206	906.54	147.06
	12130.00	88.49	165.15	11468.80	926.95	-811.82	507.25	4.85	707306.57	117940.86	31.580579	-103.166156	957.27	148.00
	12222.00	89.93	164.35	11460.07	1019.87	-900.57	531.44	1.79	707217.83	117965.05	31.580337	-103.166071	1045.69	149.45
	12313.00	91.34	165.21	11489.06	1109.78	-988.37	555.33	1.81	707130.04	117988.94	31.580097	-103.165987	1133.70	150.67
	12405.00	90.65	165.03	11487.46	1201.67	-1077.27	578.95	0.78	707041.14	118012.56	31.579855	-103.165904	1222.99	151.75
	12496.00	91.20	164.22	11485.99	1292.59	-1165.01	603.08	1.08	706953.42	118036.68	31.579615	-103.165819	1311.85	152.63
	12588.00	91.55	163.76	11483.79	1384.53	-1253.41	628.44	0.63	706865.02	118062.05	31.579374	-103.165731	1402.13	153.37
	12679.00	91.58	164.11	11481.30	1475.47	-1340.82	653.62	0.39	706777.61	118087.22	31.579135	-103.165643	1491.65	154.01
	12772.00	92.89	165.12	11477.67	1568.33	-1430.42	678.27	1.78	706688.02	118111.87	31.578891	-103.165556	1583.08	154.63
	12863.00	91.72	164.37	11474.01	1659.18	-1518.14	702.19	1.53	706600.30	118135.80	31.578652	-103.165472	1672.67	155.18
	12952.00	91.79	164.74	11471.98	1745.08	-1603.89	728.08	0.42	706514.56	118159.48	31.578418	-103.165389	1760.69	155.65
	13044.00	92.65	164.54	11467.73	1839.94	-1692.53	750.23	0.96	706425.92	118183.83	31.578177	-103.165304	1851.36	156.09
	13139.00	93.96	165.55	11462.25	1934.68	-1764.16	774.71	1.74	706334.30	118208.31	31.577926	-103.165218	1945.10	156.53
	13234.00	93.44	163.39	11456.12	2029.42	-1875.49	800.09	2.33	706242.98	118233.69	31.577676	-103.165129	2039.02	156.90
	13329.00	92.41	163.71	11451.27	2124.28	-1966.49	826.96	1.14	706151.99	118260.55	31.577428	-103.165035	2133.29	157.19
	13425.00	91.65	162.93	11447.87	2220.21	-2058.39	854.49	1.13	706060.10	118288.09	31.577178	-103.164939	2228.70	157.46
	13521.00	92.79	163.50	11444.15	2316.12	-2150.23	882.20	1.33	705968.26	118315.79	31.576927	-103.164843	2324.16	157.69
	13616.00	91.82	162.94	11440.33	2411.04	-2241.11	909.80	1.18	705877.39	118343.19	31.576679	-103.164748	2418.66	157.91
	13711.00	90.65	162.22	11438.28	2506.01	-2331.73	938.03	1.45	705786.78	118371.62	31.576432	-103.164649	2513.33	158.09
	13806.00	92.10	161.88	11436.00	2602.00	-2422.40	966.20	1.83	705696.11	118399.86	31.576184	-103.164551	2608.01	158.25
	13997.00	91.65	162.78	11428.09	2791.81	-2604.87	1022.13	0.36	705513.6					

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 (°)
	19344.00	90.93	164.09	11417.84	8133.21	-7737.03	2508.19	0.95	700381.84	1119941.67	31.561687	-103.159168	8133.43	162.04
	19440.00	91.00	164.86	11416.22	8229.13	-7829.13	2533.88	0.81	700289.37	1119967.36	31.561435	-103.159078	8229.33	162.07
	19536.00	91.00	164.77	11414.54	8325.04	-7922.15	2559.02	0.09	700196.74	1119992.50	31.561182	-103.158990	8325.20	162.10
	19631.00	90.58	161.64	11413.23	8420.01	-8013.08	2586.47	3.32	700105.82	1120019.94	31.560934	-103.158894	8420.17	162.11
	19727.00	90.07	163.21	11412.69	8516.00	-8104.59	2615.45	1.72	700014.31	1120048.92	31.560685	-103.158794	8516.16	162.11
	19823.00	90.17	164.44	11412.49	8611.98	-8196.79	2642.20	1.29	699922.12	1120075.66	31.560433	-103.158701	8612.12	162.13
	19918.00	89.38	164.57	11412.86	8706.91	-8288.33	2667.58	0.84	699830.58	1120101.04	31.560183	-103.158612	8707.03	162.16
	20014.00	90.10	164.53	11413.30	8802.85	-8380.86	2693.15	0.75	699738.06	1120126.61	31.559931	-103.158522	8802.95	162.19
	20110.00	89.79	162.70	11413.39	8898.82	-8472.96	2720.23	1.93	699645.96	1120153.69	31.559680	-103.158428	8898.92	162.20
	20205.00	91.03	161.81	11412.71	8993.82	-8563.44	2749.18	1.61	699555.50	1120182.64	31.559433	-103.158327	8993.91	162.20
	20301.00	90.24	160.89	11411.65	9089.79	-8654.33	2780.04	1.43	699464.60	1120213.49	31.559186	-103.158221	9089.89	162.19
	20367.00	91.31	162.45	11410.75	9155.77	-8716.94	2800.90	3.12	699402.00	1120234.36	31.559015	-103.158149	9155.88	162.19
	20463.00	91.10	164.45	11408.73	9251.73	-8808.94	2828.24	2.09	699310.01	1120261.69	31.558764	-103.158054	9251.83	162.20
	20558.00	92.03	165.49	11406.14	9346.60	-8900.65	2852.86	1.47	699218.30	1120286.32	31.558514	-103.157967	9346.68	162.23
	20654.00	89.62	162.91	11404.76	9442.53	-8993.00	2879.00	3.68	699125.96	1120312.45	31.558262	-103.157876	9442.60	162.25
	20750.00	92.51	165.74	11402.97	9538.45	-9085.39	2904.92	4.21	699033.57	1120338.37	31.558010	-103.157785	9538.50	162.27
	20845.00	90.65	164.42	11400.35	9633.30	-9177.15	2929.37	2.40	698941.82	1120362.82	31.557759	-103.157699	9633.34	162.30
	20941.00	90.10	163.03	11399.73	9729.28	-9269.30	2956.28	1.56	698849.68	1120389.72	31.557508	-103.157605	9729.31	162.31
	21036.00	90.48	163.08	11399.24	9824.27	-9360.17	2983.96	0.40	698758.81	1120417.41	31.557260	-103.157509	9824.30	162.32
	21132.00	91.20	164.18	11397.84	9920.24	-9452.27	3011.02	1.37	698666.72	1120444.46	31.557009	-103.157415	9920.26	162.33
	21228.00	90.72	163.84	11396.23	10016.19	-9544.54	3037.46	0.61	698574.46	1120470.90	31.556757	-103.157322	10016.21	162.35
	21323.00	90.89	163.42	11394.89	10111.16	-9635.68	3064.23	0.48	698483.32	1120497.67	31.556508	-103.157229	10111.17	162.36
	21419.00	91.03	164.05	11393.29	10207.12	-9727.82	3091.11	0.67	698391.19	1120524.55	31.556257	-103.157135	10207.13	162.37
	21515.00	90.69	163.65	11391.84	10303.08	-9820.02	3117.81	0.55	698298.99	1120551.25	31.556006	-103.157042	10303.09	162.39
	21610.00	90.76	163.08	11390.64	10398.06	-9911.04	3145.01	0.60	698207.98	1120578.44	31.555757	-103.156947	10398.07	162.39
	21706.00	92.68	165.36	11387.76	10493.96	-10003.37	3171.10	3.10	698115.66	1120604.53	31.555505	-103.156856	10493.97	162.41
	21801.00	91.31	163.27	11384.45	10588.85	-10094.77	3196.77	2.63	698024.27	1120630.20	31.555256	-103.156766	10588.85	162.43
	21897.00	91.07	163.20	11382.46	10684.82	-10186.67	3224.45	0.26	697932.37	1120657.88	31.555005	-103.156670	10684.82	162.44
	21992.00	90.72	163.43	11380.98	10779.79	-10277.66	3251.72	0.44	697841.39	1120685.15	31.554757	-103.156575	10779.80	162.44
	22088.00	90.52	163.00	11379.94	10875.78	-10369.56	3279.45	0.49	697749.49	1120712.87	31.554507	-103.156478	10875.78	162.45
	22184.00	90.69	163.28	11378.92	10971.77	-10461.43	3307.29	0.34	697657.63	1120740.71	31.554256	-103.156382	10971.77	162.46
	22279.00	87.93	160.97	11380.07	11066.74	-10551.82	3336.44	3.79	697567.24	1120769.86	31.554010	-103.156281	11066.74	162.45
	22302.30	88.94	161.79	11380.70	11090.03	-10573.90	3343.88	5.59	697545.17	1120777.30	31.553950	-103.156255	11090.03	162.45
Cross HL Toe														
Last SLB_MWD Survey	22322.00	89.79	162.49	11380.92	11109.73	-10592.65	3349.92	5.59	697526.42	1120783.33	31.553898	-103.156234	11109.73	162.45
Projection to Bit	22402.00	89.79	162.49	11381.22	11189.73	-10668.94	3373.98	0.00	697450.14	1120807.40	31.553691	-103.156151	11189.73	162.45

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	25.000	1/98.425	17.500	13.375	NAL_MWD_PLUS_0.5_DEG-Depth Only	Original Borehole / UL Independence 1718-17 B 2H MWD 0' to 22402' Definitive
	1	25.000	25.000	Act Stns	17.500	13.375	NAL_MWD_PLUS_0.5_DEG-Depth Only	Original Borehole / UL Independence 1718-17 B 2H MWD 0' to 22402' Definitive
	1	25.000	938.000	Act Stns	17.500	13.375	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 B 2H
	1	938.000	5082.000	Act Stns	12.250	10.750	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 B 2H
	1	5082.000	8827.000	Act Stns	9.875	7.625	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 B 2H
	1	8827.000	10896.000	Act Stns	8.750	7.625	NAL_MWD_PLUS_0.5_DEG	Original Borehole / UL Independence 1718-17 B 2H
	1	10896.000	22402.000	Act Stns	6.750	5.500	NAL_MWD_IFR1+MS	Original Borehole / UL Independence 1718-17 B 2H

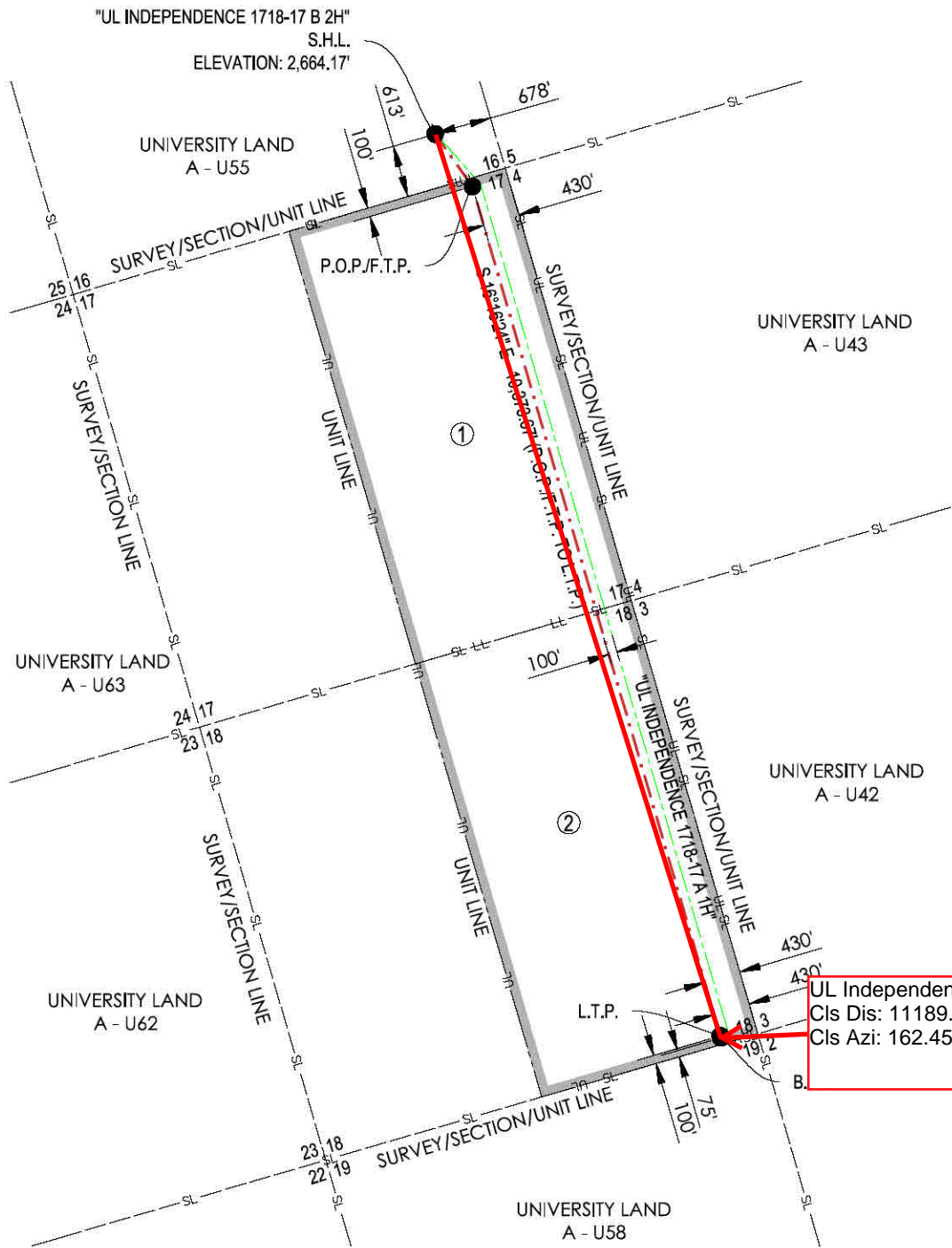
...Original Borehole\UL Independence 1718-17 B 2H MWD 0' to 22402' Definitive

GRID NORTH (NAD 83)
TEXAS - CENTRAL ZONE

FELIX ENERGY HOLDINGS II, LLC
WARD COUNTY, TEXAS
S.H.L. 613' FSL - 678' FEL, SECTION 16, BLOCK 17

LEGEND

- UL UNIT LINE
SL SECTION LINE
PROPOSED WELL PATH
NEAREST PROPOSED WELL PATH
100' 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



OPERATOR: FELIX ENERGY HOLDINGS II, LLC

WELL NAME: UL INDEPENDENCE 1718-17 WELL NO: B 2H

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.

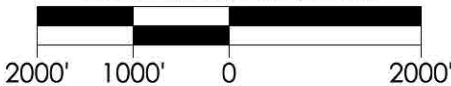
WELL PATH DATA

LINE	BEARING	DISTANCE
S.H.L. TO P.O.P./F.T.P.	S 35°24'56" E	754.89'
P.O.P./F.T.P. TO L.T.P.	S 16°16'24" E	10,373.67'
L.T.P. TO B.H.L.	S 16°16'24" E	25.00'

CALLS FROM SECTION LINE

S.H.L.	613' FSL, 678' FEL (SEC. 16)
P.O.P./F.T.P.	100' FNL, 430' FEL (SEC. 17)
L.T.P.	100' FSL, 430' FEL (SEC. 18)
B.H.L.	75' FSL, 430' FEL (SEC. 18)

GRAPHIC SCALE IN FEET



SURFACE HOLE LOCATION:

613' FSL & 678' FEL (SEC. 16)
GROUND ELEVATION: 2,664.17'
NAD 27 TEXAS CENTRAL ZONE
NORTHING: 708118.34, EASTING: 1117433.65
LATITUDE: N 31.58277449°, LONGITUDE: W 103.16785070°
NAD 83 TEXAS CENTRAL ZONE
NORTHING: 10550693.98, EASTING: 1413899.45
LATITUDE: N 31.58290657°, LONGITUDE: W 103.16829193°

POINT OF PENETRATION/FIRST TAKE POINT:

100' FNL & 430' FEL (SEC. 17)
NAD 27 TEXAS CENTRAL ZONE
NORTHING: 707503.13, EASTING: 1117871.10
LATITUDE: N 31.58111434°, LONGITUDE: W 103.16639605°

LAST TAKE POINT:

100' FSL & 430' FEL (SEC. 18)
NAD 27 TEXAS CENTRAL ZONE
NORTHING: 697545.20, EASTING: 1120777.88
LATITUDE: N 31.55394974°, LONGITUDE: W 103.15625318°

BOTTOM HOLE LOCATION:

75' FSL & 430' FEL (SEC. 18)
NAD 27 TEXAS CENTRAL ZONE
NORTHING: 697521.20, EASTING: 1120784.89
LATITUDE: N 31.55388427°, LONGITUDE: W 103.15622875°

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

10/30/2018

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. - 0.999805687
- 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.

REVISION

1	10/18 MOVE F.T.P. & L.T.P.

"UL INDEPENDENCE 1718-17 B 2H"

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: 10-30-2018

CHECKED BY:

DRAWN BY:

A.LILEY

L.DOW

APPROVED BY:

SHEET NO.: 1 OF 1

SO



501.328.3316 t 501.328.3325 f
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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)



I, Juan Estrada certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of November 18, 2018 through January 20, 2019, conduct or supervise the taking of the TelePacer/SlimPulse & Third Party Corrected surveys from a depth of 100.00 feet to a depth of 22322.00 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 B 2H Well (Original Hole) API No. 42-475-37718 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.

A handwritten signature in black ink, appearing to read "Juan Estrada", with a large, stylized flourish extending from the end.

Juan Estrada
FS