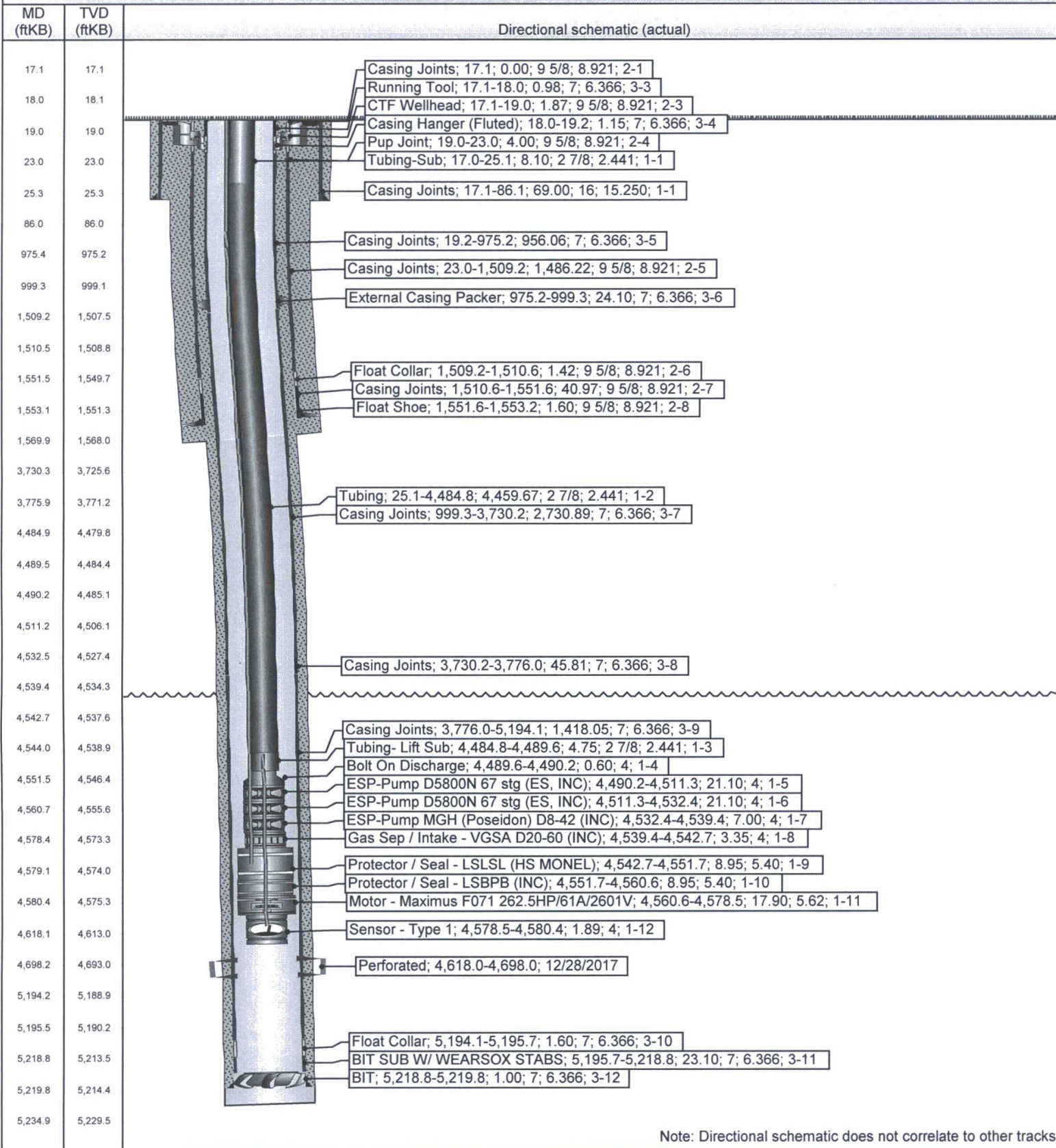


District PERMIAN CONVENTIONAL	Field Name VACUUM	API / UWI 3002542117	County LEA	State/Province NEW MEXICO
Original Spud Date 10/17/2017	Surface Legal Location 033-017S-035E	East/West Distance (ft) 2,115.00	East/West Reference FWL	North/South Distance (ft) 1,792.00
North/South Reference FSL				

VERTICAL - Original Hole, 2/28/2018 10:01:42 AM



Note: Directional schematic does not correlate to other tracks.



Company: CONOCO PHILLIPS
Lease/Well: EAST VACUUM (GSA) UNIT /#529
API: 30-025-42117
Rig Name: OPEN HOLE
State/County: NEW MEXICO/LEA
VS-Azi: 0.00 Degrees
Latitude: 32.78888, Longitude: -103.46387
Grid North = True North -0.47 degs (NAD 27)
Grid Correction Applied = -0.47 degs



FIELD COPY ONLY (NOT DEFINITIVE)

Depth Reference : GROUND LEVEL

DRILLOG MS GYRO SURVEY CALCULATIONS
Error Model: VESSI_GYROFLEX_SLICKLINE.IPM
Filename: msgyro_run01-01-de_01.ut
Minimum Curvature Method
Report Date/Time: 11/1/2017 / 23:50

VES Survey International
Gardendale, Texas
432-563-5444
Mike Cook

HOBBS OCD
MAR 05 2018
RECEIVED

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.34	159.49	100.00	-0.28	0.10	-0.28	0.29	159.49	0.34
200.00	0.39	106.73	200.00	-0.65	0.53	-0.65	0.84	140.78	0.32
300.00	0.55	72.08	299.99	-0.60	1.30	-0.60	1.44	114.64	0.32
400.00	0.39	178.34	399.99	-0.80	1.77	-0.80	1.94	114.22	0.76
500.00	0.43	104.79	499.99	-1.23	2.14	-1.23	2.47	119.97	0.49
600.00	0.43	105.10	599.99	-1.43	2.86	-1.43	3.20	116.50	0.00
700.00	0.71	68.41	699.98	-1.30	3.80	-1.30	4.01	108.84	0.45
800.00	1.18	19.51	799.97	-0.10	4.72	-0.10	4.72	91.16	0.89
900.00	1.10	16.44	899.95	1.80	5.34	1.80	5.63	71.40	0.11
1000.00	1.03	34.77	999.93	3.45	6.12	3.45	7.03	60.57	0.34
1100.00	1.14	45.94	1099.92	4.89	7.35	4.89	8.83	56.38	0.24
1200.00	1.07	47.80	1199.90	6.21	8.76	6.21	10.74	54.67	0.08
1300.00	0.51	103.26	1299.89	6.73	9.89	6.73	11.96	55.74	0.89
1400.00	0.72	239.09	1399.89	6.31	9.78	6.31	11.64	57.18	1.15
1500.00	2.47	272.66	1499.84	6.08	7.09	6.08	9.34	49.37	1.91
1600.00	3.64	284.49	1599.70	6.98	1.87	6.98	7.22	14.99	1.33
1700.00	4.54	280.17	1699.45	8.47	-5.10	8.47	9.89	328.93	0.95
1800.00	4.41	276.86	1799.14	9.63	-12.82	9.63	16.04	306.91	0.29
1900.00	4.45	275.43	1898.84	10.46	-20.51	10.46	23.02	297.02	0.12
2000.00	4.46	273.90	1998.54	11.09	-28.26	11.09	30.35	291.43	0.12
2100.00	4.23	276.87	2098.25	11.80	-35.80	11.80	37.69	288.24	0.32
2200.00	3.64	287.93	2198.02	13.21	-42.49	13.21	44.50	287.28	0.96
2300.00	3.77	287.59	2297.81	15.19	-48.64	15.19	50.96	287.34	0.13
2400.00	3.87	292.20	2397.59	17.46	-54.90	17.46	57.61	287.64	0.32
2500.00	3.75	295.36	2497.36	20.13	-60.99	20.13	64.22	288.27	0.24
2600.00	3.45	299.36	2597.17	23.01	-66.57	23.01	70.43	289.07	0.39
2700.00	3.50	296.74	2696.98	25.86	-71.92	25.86	76.43	289.78	0.17
2800.00	3.38	295.64	2796.80	28.51	-77.30	28.51	82.39	290.24	0.14
2900.00	3.04	310.27	2896.65	31.50	-81.98	31.50	87.82	291.02	0.88
3000.00	2.98	320.74	2996.51	35.22	-85.64	35.22	92.60	292.35	0.55
3100.00	2.81	325.88	3096.38	39.26	-88.66	39.26	96.96	293.88	0.31
3200.00	2.99	338.93	3196.26	43.72	-90.97	43.72	100.93	295.67	0.68

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
3300.00	2.66	330.72	3296.14	48.18	-93.04	48.18	104.78	297.37	0.52
3400.00	2.36	325.01	3396.04	51.89	-95.36	51.89	108.57	298.55	0.39
3500.00	2.06	316.39	3495.96	54.89	-97.79	54.89	112.14	299.30	0.45
3600.00	2.09	324.93	3595.90	57.69	-100.08	57.69	115.52	299.96	0.31
3700.00	2.06	319.90	3695.83	60.56	-102.29	60.56	118.87	300.63	0.19
3800.00	2.05	306.81	3795.77	63.00	-104.88	63.00	122.35	300.99	0.47
3900.00	2.23	317.94	3895.70	65.52	-107.61	65.52	125.99	301.33	0.45
4000.00	1.99	332.42	3995.63	68.50	-109.72	68.50	129.35	301.98	0.58
4100.00	2.12	331.14	4095.57	71.66	-111.42	71.66	132.47	302.75	0.14
4200.00	2.03	322.28	4195.50	74.69	-113.39	74.69	135.78	303.37	0.33
4300.00	1.54	335.58	4295.45	77.31	-115.03	77.31	138.60	303.90	0.64
4400.00	1.63	338.57	4395.42	79.86	-116.11	79.86	140.93	304.52	0.12
4500.00	1.32	334.04	4495.38	82.23	-117.14	82.23	143.12	305.07	0.34
4600.00	2.20	321.08	4595.34	84.75	-118.84	84.75	145.97	305.49	0.96
4700.00	2.20	324.83	4695.26	87.81	-121.15	87.81	149.63	305.93	0.14
4800.00	2.10	320.65	4795.19	90.80	-123.42	90.80	153.22	306.34	0.19
4900.00	1.26	305.12	4895.15	92.84	-125.48	92.84	156.09	306.50	0.95
5000.00	1.52	298.29	4995.12	94.10	-127.54	94.10	158.50	306.42	0.31
5100.00	1.47	259.99	5095.09	94.51	-129.97	94.51	160.70	306.02	0.98
5200.00	1.43	224.40	5195.06	93.39	-132.10	93.39	161.78	305.26	0.89

HORIZONTAL DISPLACEMENT IS
161.78 FEET AT 305.26 DEGREES