

Company: CONOCO PHILLIPS CO.

Lease/Well: EAST VACUUM (GSA) UNIT No./519

API: 30-025-42115

Rig Name: PRODUCTION

State/County: NEW MEXICO/LEA

VS-Azi: 0.00 Degrees

Latitude: 32.78683, Longitude: -103.46808

Grid North = True North -0.47 degs (NAD 27)

Grid Correction Applied = -0.47 degs

VES Survey Date: 10/5/2017

Depth Reference : GROUND LEVEL

DRILLOG MS GYRO SURVEY CALCULATIONS

Error Model: VESSI_GYROFLEX_SLICKLINE.IPM



Provide signature page for
deviation survey

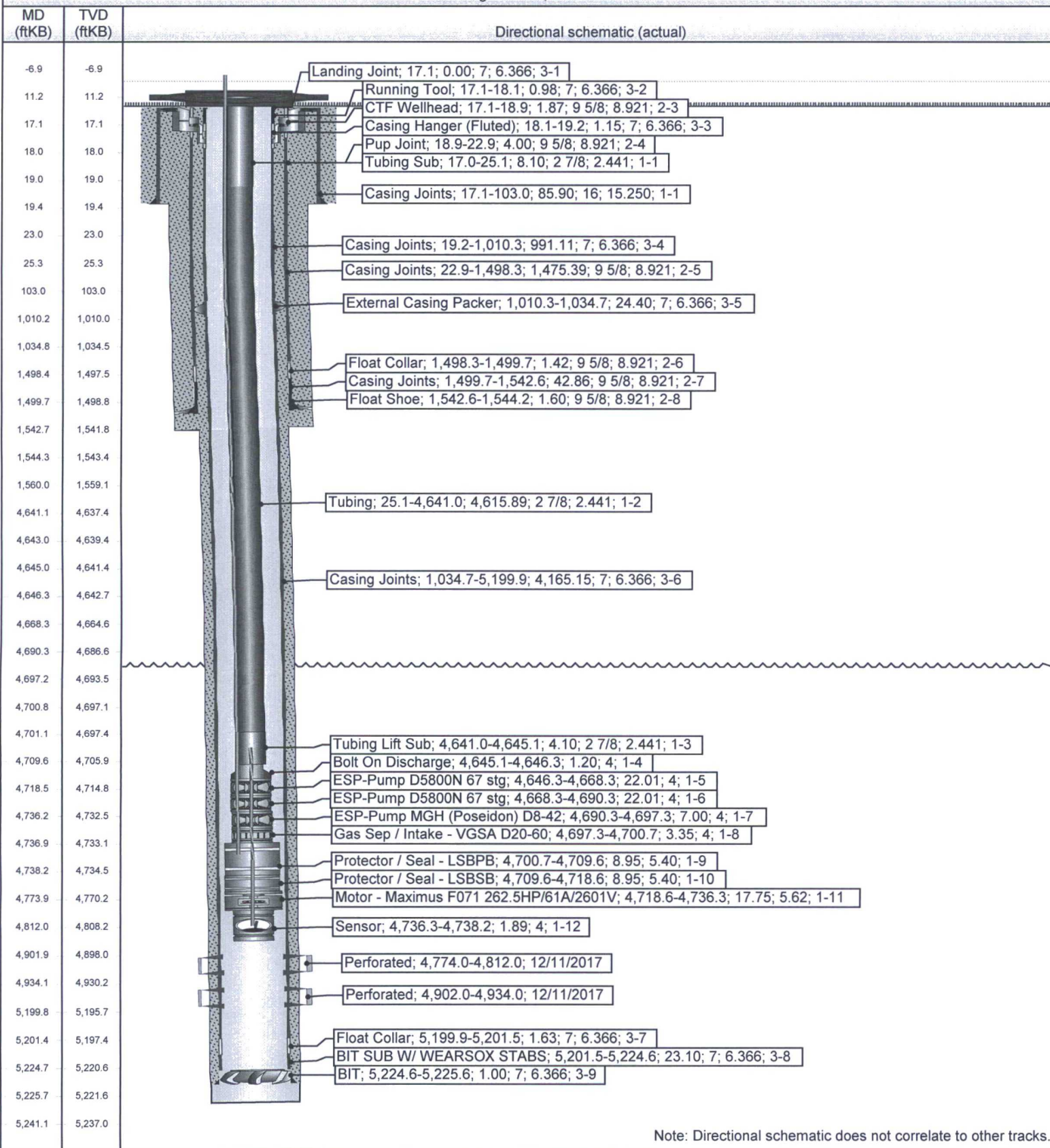
<u>Measured</u> <u>Depth</u> <u>FT</u>	<u>Incl</u> <u>Angle</u> <u>Deg</u>	<u>Drift</u> <u>Direction</u> <u>Deg</u>	<u>TVD</u> <u>FT</u>	<u>N/S</u> <u>FT</u>	<u>E/W</u> <u>FT</u>	<u>Vertical</u> <u>Section</u> <u>FT</u>	<u>Closure</u> <u>Distance</u> <u>FT</u>	<u>Closure</u> <u>Direction</u> <u>Deg</u>	<u>Dogleg</u> <u>Severity</u> <u>Deg/100</u>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.26	295.99	100.00	0.10	-0.20	0.10	0.23	295.99	0.26
200.00	0.40	304.82	200.00	0.40	-0.69	0.40	0.80	299.80	0.14
300.00	0.53	323.85	299.99	0.97	-1.25	0.97	1.58	307.76	0.20
400.00	0.53	280.58	399.99	1.42	-1.97	1.42	2.43	305.79	0.39
500.00	0.48	253.22	499.99	1.39	-2.83	1.39	3.15	296.09	0.24
600.00	0.47	250.97	599.98	1.13	-3.62	1.13	3.79	287.36	0.02
700.00	0.32	248.38	699.98	0.89	-4.27	0.89	4.36	281.83	0.15
800.00	0.31	314.76	799.98	0.98	-4.72	0.98	4.82	281.72	0.35
900.00	0.24	0.18	899.98	1.38	-4.91	1.38	5.10	285.65	0.22
1000.00	0.39	50.71	999.98	1.80	-4.65	1.80	4.99	291.16	0.30
1100.00	0.44	100.41	1099.98	1.95	-4.00	1.95	4.45	295.91	0.35
1200.00	1.21	117.43	1199.96	1.39	-2.69	1.39	3.03	297.34	0.80
1300.00	2.17	120.18	1299.92	-0.05	-0.11	-0.05	0.12	246.27	0.97
1400.00	2.98	121.74	1399.82	-2.37	3.74	-2.37	4.43	122.38	0.82
1500.00	2.75	122.21	1499.69	-5.02	7.99	-5.02	9.43	122.16	0.23
1600.00	2.85	123.18	1599.57	-7.66	12.10	-7.66	14.32	122.35	0.10
1700.00	2.77	124.95	1699.45	-10.41	16.16	-10.41	19.22	122.78	0.11
1800.00	2.56	128.94	1799.34	-13.19	19.87	-13.19	23.85	123.58	0.29
1900.00	2.41	122.95	1899.25	-15.74	23.37	-15.74	28.17	123.96	0.30
2000.00	2.15	117.39	1999.17	-17.74	26.80	-17.74	32.14	123.51	0.34
2100.00	1.76	115.26	2099.11	-19.26	29.86	-19.26	35.53	122.83	0.39
2200.00	1.66	114.41	2199.07	-20.52	32.57	-20.52	38.49	122.21	0.11
2300.00	1.52	112.13	2299.03	-21.62	35.12	-21.62	41.24	121.61	0.15
2400.00	1.53	109.19	2398.99	-22.55	37.61	-22.55	43.85	120.95	0.08

2500.00	1.63	107.63	2498.96	-23.42	40.22	-23.42	46.54	120.22	0.11
2600.00	1.72	104.86	2598.91	-24.24	43.02	-24.24	49.38	119.40	0.12
2700.00	1.93	97.71	2698.86	-24.85	46.14	-24.85	52.41	118.30	0.30
2800.00	1.95	95.10	2798.81	-25.23	49.51	-25.23	55.56	117.00	0.09
2900.00	1.99	92.49	2898.75	-25.45	52.93	-25.45	58.74	115.68	0.10
3000.00	2.29	91.42	2998.68	-25.58	56.66	-25.58	62.17	114.29	0.31
3100.00	2.56	90.16	3098.59	-25.63	60.89	-25.63	66.07	112.83	0.27
3200.00	2.65	89.76	3198.48	-25.63	65.43	-25.63	70.27	111.39	0.09
3300.00	2.94	87.71	3298.37	-25.52	70.30	-25.52	74.79	109.95	0.31
3400.00	3.00	85.07	3398.23	-25.19	75.47	-25.19	79.56	108.46	0.15
3500.00	2.69	85.99	3498.11	-24.80	80.42	-24.80	84.16	107.14	0.31
3600.00	2.41	80.33	3598.01	-24.28	84.84	-24.28	88.25	105.97	0.38
3700.00	2.36	75.55	3697.92	-23.42	88.91	-23.42	91.94	104.76	0.21
3800.00	2.16	67.46	3797.84	-22.18	92.64	-22.18	95.26	103.46	0.38
3900.00	2.24	57.40	3897.77	-20.41	96.03	-20.41	98.17	102.00	0.39
4000.00	2.01	46.53	3997.70	-18.14	98.95	-18.14	100.60	100.39	0.46
4100.00	1.76	35.13	4097.65	-15.68	101.11	-15.68	102.32	98.82	0.45
4200.00	1.57	26.80	4197.61	-13.20	102.61	-13.20	103.46	97.33	0.31
4300.00	1.46	30.53	4297.57	-10.88	103.87	-10.88	104.44	95.98	0.15
4400.00	1.47	24.69	4397.54	-8.63	105.05	-8.63	105.41	94.69	0.15
4500.00	1.61	353.68	4497.51	-6.07	105.43	-6.07	105.61	93.30	0.83
4600.00	1.31	350.97	4597.47	-3.55	105.10	-3.55	105.16	91.93	0.31
4700.00	0.51	340.97	4697.46	-2.00	104.78	-2.00	104.80	91.09	0.81
4800.00	0.56	336.03	4797.45	-1.13	104.43	-1.13	104.44	90.62	0.07
4900.00	0.24	263.51	4897.45	-0.71	104.02	-0.71	104.02	90.39	0.54
5000.00	0.25	181.81	4997.45	-0.95	103.80	-0.95	103.81	90.52	0.32
5100.00	0.23	149.71	5097.45	-1.34	103.90	-1.34	103.91	90.74	0.13

**HORIZONTAL DISPLACEMENT IS
103.91 FEET AT 90.74 DEGREES**

District PERMIAN CONVENTIONAL	Field Name VACUUM	API / UWI 3002542115	County LEA	State/Province NEW MEXICO
Original Spud Date 9/25/2017	Surface Legal Location 033-017S-035E	East/West Distance (ft) 819.00	East/West Reference FWL	North/South Distance (ft) 1,039.00
North/South Reference FSL				

VERTICAL - Original Hole, 2/6/2018 1:42:10 PM



Note: Directional schematic does not correlate to other tracks.