

30-015-22627

Schlumberger

Chevron Pardue Farms 26-1H Final Survey Report

(Non-Def Survey)



Report Date:	August 28, 2012 - 05:59 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Chevron	Vertical Section Azimuth:	176.330 ° (Grid North)
Field:	Culebra Bluff, Bone Spring South	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Chevron Pardue Farms AV 26-1H / Chevron Pardue Farms AV 26-1H	TVD Reference Datum:	RKB
Well:	Chevron Pardue Farms AV 26-1H	TVD Reference Elevation:	3051.000 ft above MSL
Borehole:	RE-Entry	Seabed / Ground Elevation:	3026.000 ft above MSL
UWI / API#:	30-015-22627	Magnetic Declination:	7.772 °
Survey Name:	Chevron Pardue Farms AV 26-1H Final Survey Report	Total Gravity Field Strength:	999.2048 mgn (9.8 based)
Survey Date:	July 23, 2012	Total Magnetic Field Strength:	48465.704 nT
Tort / AHD / DDI / ERD Ratio:	123.481 ° / 3041.589 ft / 5.719 / 0.457	Magnetic Dip Angle:	60.082 °
Coordinate Reference System:	NAD27 New Mexico State Plane, Eastern Zone, US Feet	Declination Date:	August 23, 2012
Location Lat / Long:	N 32° 16' 41.66797", W 104° 3' 50.57388"	Magnetic Declination Model:	BGGM 2012
Location Grid N/E Y/X:	N 465046.000 ftUS, E 583224.000 ftUS	North Reference:	Grid North
CRS Grid Convergence Angle:	0.1438 °	Grid Convergence Used:	0.1438 °
Grid Scale Factor:	0.99991702	Total Corr Mag North->Grid North:	7.6280 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)	TF (°)
SHL Pardue Farms 26-1H	0.00	0.00	0.00	0.00	0.00	N 0.00	E 0.00	0.00	0.00	N/A	104.59M
	100.00	0.45	104.59	100.00	0.12	S 0.10	E 0.38	0.39	104.59	0.45	90.28M
	200.00	0.37	90.28	200.00	0.27	S 0.20	E 1.08	1.10	100.43	0.13	116.46M
	300.00	0.57	116.46	299.99	0.54	S 0.42	E 1.85	1.90	102.86	0.29	107.46M
	400.00	0.75	107.46	399.99	1.03	S 0.84	E 2.92	3.04	106.06	0.21	141.59M
	500.00	0.55	141.59	499.98	1.66	S 1.41	E 3.84	4.09	110.19	0.43	129.75M
	600.00	0.62	129.75	599.98	2.42	S 2.14	E 4.56	5.03	115.10	0.14	136.35M
	700.00	-0.83	136.35	699.97	3.35	S 3.01	E 5.47	6.24	118.77	0.23	146.35M
	800.00	1.01	146.35	799.95	4.67	S 4.26	E 6.46	7.74	123.41	0.24	155.73M
	900.00	1.31	155.73	899.93	6.50	S 6.04	E 7.42	9.57	129.14	0.35	156.44M
	1000.00	1.40	156.44	999.91	8.72	S 8.20	E 8.38	11.72	134.39	0.09	148.89M
	1100.00	1.31	148.89	1099.88	10.88	S 10.30	E 9.46	13.98	137.44	0.20	149.99M
	1200.00	1.31	149.99	1199.85	12.92	S 12.27	E 10.62	16.23	139.12	0.03	154.57M
	1300.00	1.33	154.57	1299.83	15.02	S 14.31	E 11.69	18.47	140.75	0.11	148.26M
	1400.00	1.44	148.26	1399.80	17.21	S 16.42	E 12.85	20.85	141.96	0.19	147.21M
	1500.00	1.43	147.21	1499.76	19.41	S 18.54	E 14.19	23.34	142.58	0.03	143.02M
	1600.00	1.39	143.02	1599.73	21.51	S 20.56	E 15.59	25.80	142.82	0.11	139.91M
	1700.00	1.58	139.91	1699.70	23.64	S 22.58	E 17.21	28.39	142.69	0.21	135.09M
	1800.00	1.92	135.09	1799.65	26.01	S 24.82	E 19.28	31.43	142.16	0.37	129.59M
	1900.00	2.32	129.59	1899.59	28.65	S 27.30	E 22.02	35.07	141.11	0.45	130.74M
	2000.00	2.25	130.74	1999.51	31.41	S 29.87	E 25.07	39.00	139.99	0.08	130.75M
	2100.00	2.11	130.75	2099.43	34.08	S 32.35	E 27.95	42.75	139.18	0.14	127.01M
	2200.00	1.87	127.01	2199.37	36.43	S 34.54	E 30.65	46.17	138.41	0.27	124.53M
	2300.00	1.88	124.53	2299.32	38.51	S 36.45	E 33.30	49.37	137.58	0.08	123.97M
	2400.00	1.77	123.97	2399.27	40.46	S 38.24	E 35.93	52.47	136.78	0.11	122.35M
	2500.00	1.20	122.35	2499.24	42.02	S 39.66	E 38.10	55.00	136.15	0.57	138.56M
	2600.00	0.83	138.56	2599.22	43.21	S 40.77	E 39.46	56.74	135.93	0.46	123.79M
	2700.00	0.72	123.79	2699.21	44.16	S 41.66	E 40.46	58.08	135.83	0.23	122.6M
	2800.00	0.64	122.60	2799.20	44.88	S 42.31	E 41.46	59.24	135.58	0.08	129.41M
	2900.00	0.64	129.41	2899.20	45.59	S 42.97	E 42.36	60.34	135.41	0.08	112.86M
	3000.00	0.81	112.86	2999.19	46.29	S 43.59	E 43.44	61.54	135.10	0.27	102.6M
	3100.00	0.70	102.60	3099.18	46.77	S 44.00	E 44.69	62.72	134.56	0.17	108.4M
	3200.00	0.89	108.40	3199.17	47.24	S 44.38	E 46.02	63.94	133.96	0.21	99.34M
	3300.00	0.71	99.34	3299.16	47.67	S 44.73	E 47.37	65.15	133.36	0.22	120.29M
	3400.00	0.72	120.29	3399.15	48.16	S 45.14	E 48.53	66.28	132.93	0.26	107.19M
	3500.00	0.61	107.19	3499.15	48.70	S 45.62	E 49.58	67.37	132.62	0.19	118.03M
	3600.00	0.48	118.03	3599.14	49.11	S 45.97	E 50.45	68.26	132.34	0.17	109M
	3700.00	0.53	109.00	3699.14	49.51	S 46.32	E 51.26	69.09	132.10	0.09	111.43M
	3800.00	0.41	111.43	3799.13	49.84	S 46.60	E 52.03	69.85	131.85	0.12	121.5M
	3900.00	0.46	121.50	3899.13	50.22	S 46.94	E 52.71	70.58	131.69	0.09	80.89M
	4000.00	0.17	80.89	3999.13	50.44	S 47.13	E 53.20	71.07	131.54	0.35	96.11M
	4100.00	0.36	96.11	4099.13	50.48	S 47.14	E 53.65	71.42	131.30	0.20	95.19M
	4200.00	0.22	95.19	4199.13	50.56	S 47.19	E 54.16	71.83	131.07	0.14	80.12M
	4300.00	0.30	80.12	4299.13	50.56	S 47.16	E 54.61	72.15	130.82	0.10	116.79M
	4400.00	0.35	116.79	4399.13	50.69	S 47.25	E 55.14	72.62	130.60	0.21	78.2M
	4500.00	0.32	78.20	4499.12	50.80	S 47.33	E 55.68	73.08	130.37	0.22	102.69M
	4600.00	0.42	102.69	4599.12	50.87	S 47.36	E 56.32	73.58	130.06	0.18	49.4M
	4700.00	0.10	49.40	4699.12	50.92	S 47.38	E 56.74	73.92	129.86	0.37	52.63M
	4800.00	0.08	52.63	4799.12	50.83	S 47.28	E 56.86	73.95	129.75	0.02	15.58M
	4900.00	0.12	15.58	4899.12	50.69	S 47.14	E 56.94	73.92	129.62	0.07	71.54M
	5000.00	0.14	71.54	4999.12	50.56	S 47.00	E 57.09	73.95	129.46	0.12	350.82M
	5100.00	0.21	350.82	5099.12	50.34	S 46.78	E 57.17	73.87	129.29	0.23	17.2M
	5200.00	0.09	17.20	5199.12	50.09	S 46.52	E 57.17	73.71	129.14	0.14	353.01M
	5300.00	0.14	353.01	5299.12	49.89	S 46.33	E 57.18	73.59	129.02	0.07	10.44M
	5400.00	0.15	10.44	5399.12	49.64	S 46.08	E 57.19	73.44	128.86	0.05	13.45M
	5500.00	0.18	13.45	5499.12	49.37	S 45.80	E 57.25	73.31	128.66	0.03	55.27M
	5600.00	0.13	55.27	5599.12	49.16	S 45.58	E 57.38	73.28	128.46	0.12	63.32M
	5700.00	0.13	63.32	5699.12	49.06	S 45.46	E 57.57	73.36	128.30	0.02	83.87M
	5800.00	0.24	83.87	5799.12	49.00	S 45.39	E 57.88	73.56	128.10	0.13	76.39M
	5900.00	0.19	76.39	5899.12	48.96	S 45.33	E 58.25	73.81	127.89	0.06	192.02M
	5963.00	6.28	192.02	5961.99	52.27	S 48.68	E 57.63	75.44	130.18	10.10	192.19M
	6026.00	11.36	192.19	6024.23	61.56	S 58.12	E 55.60	80.43	136.27	8.06	13.24L
	6057.00	14.44	189.30	6054.44	68.26	S 64.92	E 54.33	84.66	140.07	10.15	1.98L
	6089.00	16.78	189.02	6085.26	76.66	S 73.42	E 52.97	90.53	144.19	7.32	2.81R
	6120.00	19.04	189.36	6114.75	85.95	S 82.83	E 51.44	97.50	148.16	7.30	7L
	6152.00	21.59	188.51	6144.76	96.79	S 93.80	E 49.72	106.17	152.07	8.02	5.51L
	6183.00	24.04	187.93	6173.33	108.56	S 105.70	E 48.01	116.09	155.57	7.94	1.68L
	6215.00	26.31	187.78	6202.29	121.89	S 119.18	E 46.15	127.81	158.83	7.10	21.09L
	6246.00	28.73	185.85	6229.78	135.98	S 133.41	E 44.46	140.62	161.57	8.32	37.6L

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)	TF (°)
	6278.00	31.12	182.36	6257.52	151.79	S 149.32	E 43.33	155.48	163.82	9.24	45.48L
	6309.00	33.01	178.92	6283.79	168.19	S 165.77	E 43.16	171.30	165.41	8.48	29.62L
	6341.00	35.33	176.66	6310.26	186.16	S 183.73	E 43.86	188.89	166.57	8.26	4.18L
	6372.00	37.41	176.41	6335.22	204.54	S 202.07	E 44.98	207.02	167.45	6.73	9.94R
	6404.00	39.29	176.93	6360.32	224.39	S 221.90	E 46.13	226.64	168.26	5.96	5.17R
	6436.00	41.72	177.26	6384.65	245.17	S 242.65	E 47.18	247.20	169.00	7.62	11.58L
	6467.00	44.03	176.58	6407.37	266.26	S 263.71	E 48.32	268.10	169.62	7.60	14.3L
	6498.00	46.51	175.71	6429.18	288.28	S 285.68	E 49.80	289.99	170.11	8.24	12.45L
	6530.00	48.76	175.05	6450.74	311.92	S 309.25	E 51.71	313.54	170.51	7.19	5.84R
	6561.00	50.65	175.30	6470.79	335.56	S 332.81	E 53.69	337.11	170.84	6.13	17.31R
	6593.00	52.59	176.06	6490.66	360.64	S 357.82	E 55.58	362.11	171.17	6.34	8.21R
	6624.00	55.21	176.52	6508.92	385.69	S 382.81	E 57.20	387.06	171.50	8.54	8.72R
	6656.00	57.69	176.97	6526.60	412.36	S 409.44	E 58.71	413.62	171.84	7.84	1.38L
	6688.00	59.84	176.91	6543.20	439.71	S 436.76	E 60.17	440.88	172.16	6.72	16.98L
	6719.00	62.19	176.10	6558.22	466.83	S 463.82	E 61.83	467.92	172.41	7.92	15.42L
	6751.00	64.75	175.32	6572.51	495.45	S 492.37	E 63.97	496.51	172.60	8.29	13.46L
	6782.00	67.81	174.53	6584.98	523.82	S 520.64	E 66.48	524.86	172.72	10.14	3.52R
	6814.00	70.73	174.72	6596.31	553.74	S 550.43	E 69.29	554.77	172.83	9.14	7.29R
	6845.00	73.58	175.10	6605.80	583.23	S 579.82	E 71.90	584.26	172.93	9.27	15.25R
	6877.00	76.11	175.81	6614.17	614.11	S 610.61	E 74.35	615.12	173.06	8.19	22.2R
	6908.00	78.15	176.66	6621.07	644.33	S 640.76	E 76.33	645.29	173.21	7.10	14.12R
	6940.00	80.78	177.33	6626.92	675.79	S 672.17	E 77.98	676.68	173.38	8.47	9.7R
	6971.00	83.69	177.83	6631.11	706.49	S 702.86	E 79.28	707.32	173.56	9.52	14.42R
	7003.00	85.63	178.33	6634.09	738.34	S 734.70	E 80.35	739.08	173.76	6.26	21.64R
	7034.00	87.04	178.89	6636.07	769.25	S 765.63	E 81.10	769.91	173.95	4.89	11.76L
	7066.00	87.28	178.84	6637.66	801.18	S 797.58	E 81.73	801.76	174.15	0.77	25.44L
	7097.00	87.49	178.74	6639.07	832.12	S 828.54	E 82.38	832.63	174.32	0.75	106.72R
	7128.00	87.46	178.84	6640.44	863.06	S 859.51	E 83.04	863.51	174.48	0.34	52.24R
	7147.00	87.70	179.15	6641.24	882.02	S 878.49	E 83.37	882.43	174.58	2.06	9.67R
	7241.00	89.93	179.53	6643.18	975.86	S 972.45	E 84.45	976.11	175.04	2.41	135L
	7336.00	89.83	179.43	6643.38	1070.72	S 1067.45	E 85.31	1070.85	175.43	0.15	46.64R
	7430.00	90.00	179.61	6643.52	1164.57	S 1161.45	E 86.10	1164.63	175.76	0.26	158.58R
	7525.00	89.21	179.92	6644.18	1259.40	S 1256.44	E 86.49	1259.41	176.06	0.89	105.08L
	7619.00	88.93	178.88	6645.70	1353.25	S 1350.42	E 87.48	1353.25	176.29	1.15	27.87R
	7714.00	89.97	179.43	6646.61	1448.13	S 1445.41	E 88.88	1448.14	176.48	1.24	90L
	7808.00	89.97	178.69	6646.66	1542.02	S 1539.39	E 90.42	1542.05	176.64	0.79	106.99L
	7903.00	89.42	176.89	6647.17	1636.99	S 1634.32	E 94.08	1637.02	176.71	1.98	109.84L
	7997.00	88.62	174.67	6648.78	1730.96	S 1728.04	E 101.00	1730.99	176.66	2.51	44.43L
	8092.00	89.62	173.69	6650.24	1825.88	S 1822.54	E 110.63	1825.89	176.53	1.47	69.78R
	8186.00	89.69	173.88	6650.80	1919.79	S 1915.98	E 120.81	1919.79	176.39	0.22	92.26R
	8281.00	89.66	174.64	6651.34	2014.72	S 2010.51	E 130.31	2014.72	176.29	0.80	120.33L
	8376.00	89.35	174.11	6652.16	2109.66	S 2105.04	E 139.62	2109.67	176.21	0.65	84.74R
	8470.00	89.42	174.87	6653.17	2203.61	S 2198.60	E 148.64	2203.62	176.13	0.81	99.87L
	8565.00	89.38	174.64	6654.17	2298.57	S 2293.20	E 157.33	2298.59	176.08	0.25	112.23R
	8660.00	89.00	175.57	6655.51	2393.54	S 2387.84	E 165.43	2393.57	176.04	1.06	69.38R
	8754.00	89.35	176.50	6656.86	2487.52	S 2481.61	E 171.93	2487.56	176.04	1.06	26.57L
	8848.00	89.69	176.33	6657.65	2581.52	S 2575.42	E 177.81	2581.55	176.05	0.40	82.48L
	8943.00	89.76	175.80	6658.11	2676.52	S 2670.19	E 184.33	2676.55	176.05	0.56	62.05R
	9037.00	90.28	176.78	6658.07	2770.52	S 2764.00	E 190.41	2770.55	176.05	1.18	144.02R
	9132.00	89.55	177.31	6658.21	2865.51	S 2858.87	E 195.31	2865.53	176.09	0.95	61.13R
	9226.00	90.14	178.38	6658.47	2959.47	S 2952.80	E 198.84	2959.49	176.15	1.30	57.72R
	9248.00	90.38	178.76	6658.37	2981.46	S 2974.79	E 199.39	2981.47	176.17	2.04	HS
Proj to EOWBHL	9273.00	90.38	178.76	6658.20	3006.43	S 2999.79	E 199.93	3006.44	176.19	0.00	

Survey Type: Non-Def Survey

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

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	25.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Hole / Chevron Pardue Farms AV 26-1H Gyro+ Inc_Only Oft to 13100ft
	25.000	5900.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT	Original Hole / Chevron Pardue Farms AV 26-1H Gyro+ Inc_Only RE-Entry / Chevron Pardue
	5900.000	5985.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT	Farms AV 26-1H Gyro+MWD Oft RE-Entry / Chevron Pardue
	5985.000	9273.000	Act Stns	30.000	30.000	SLB_MWD-STD	Farms AV 26-1H Gyro+MWD Oft