



Company: MEWBOURNE
Lease/Well: RUGER 6 FEDERAL COM/3H

Rig Name: PATTERSON 45
State/County: NEW MEXICO/EDDY
Latitude: 32.36

GRID North is 0.15 Degrees East of True North
VS-Azi: 180.33 Degrees



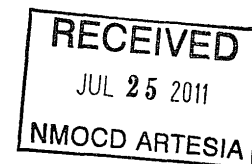
30-015-37198

Depth Reference : RKB 17 FEET

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: roger 6 federal com 3h_ed.ut
Minimum Curvature Method
Report Date/Time: 6/1/2011 / 12:11

Vaughn Energy Services
Woodward, OK
580-254-5000

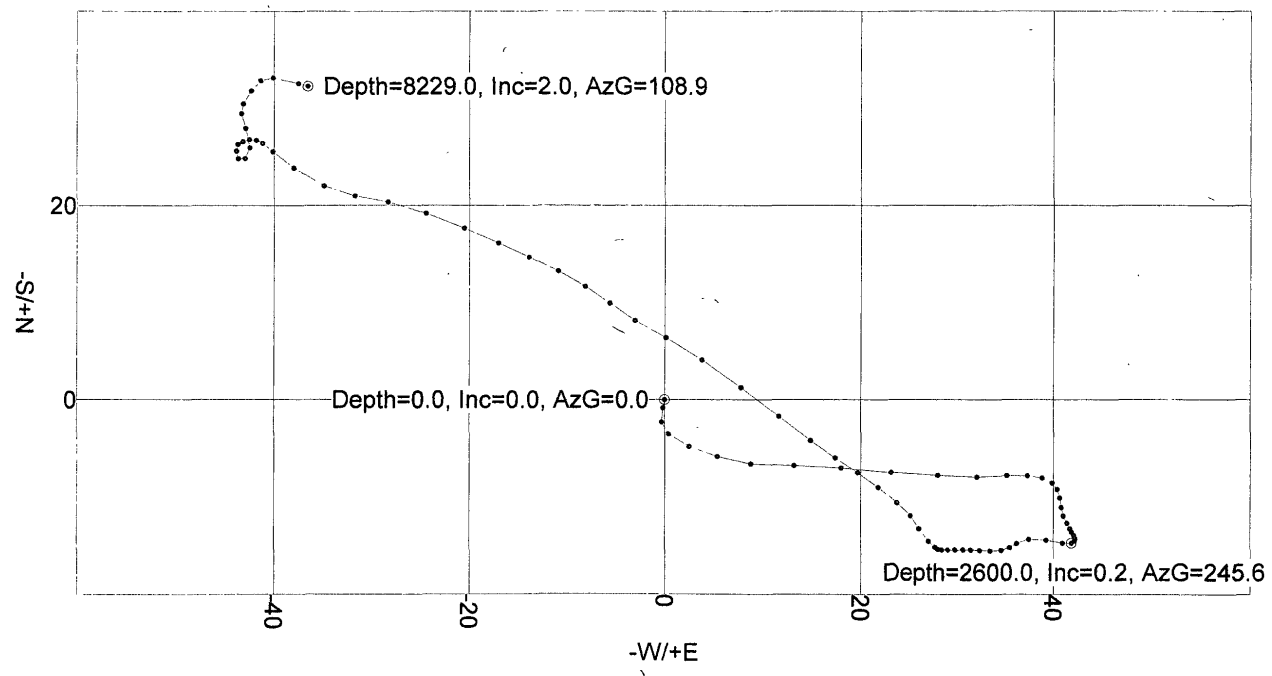
Surveyor: Juan Parra
Ruger 6 Federal Com 3H



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	0.98	191.86	100.00	-0.84	-0.18	0.84	0.86	191.86	0.98
200.00	0.72	177.05	199.98	-2.30	-0.32	2.30	2.32	187.91	0.34
300.00	1.02	132.05	299.97	-3.52	0.37	3.52	3.54	173.99	0.72
400.00	1.83	115.94	399.94	-4.81	2.47	4.80	5.41	152.86	0.90
500.00	1.74	103.11	499.89	-5.86	5.38	5.82	7.95	137.41	0.41
600.00	2.27	102.16	599.83	-6.62	8.80	6.57	11.01	126.95	0.53
700.00	2.82	84.53	699.74	-6.80	13.18	6.72	14.83	117.29	0.95
800.00	2.78	100.94	799.62	-7.02	18.01	6.92	19.33	111.31	0.80
900.00	3.06	90.05	899.49	-7.49	23.06	7.35	24.24	107.99	0.82
1000.00	2.67	97.02	999.36	-7.77	28.03	7.61	29.09	105.50	0.52
1100.00	2.02	86.54	1099.28	-7.95	32.10	7.77	33.07	103.91	0.77
1200.00	1.53	87.75	1199.23	-7.79	35.19	7.59	36.04	102.49	0.49
1300.00	0.92	95.03	1299.21	-7.81	37.32	7.60	38.12	101.82	0.63
1400.00	0.85	103.66	1399.20	-8.06	38.83	7.83	39.66	101.72	0.15
1500.00	0.54	135.05	1499.19	-8.56	39.89	8.33	40.80	102.12	0.48
1600.00	0.44	152.62	1599.19	-9.24	40.40	9.00	41.44	102.88	0.18
1700.00	0.62	169.93	1699.18	-10.10	40.67	9.87	41.90	103.95	0.24
1800.00	0.53	171.00	1799.18	-11.09	40.83	10.85	42.31	105.19	0.09

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
1900.00	0.50	159.63	1899.17	-11.95	41.06	11.72	42.76	106.23	0.10
2000.00	0.43	145.28	1999.17	-12.68	41.43	12.44	43.32	107.02	0.14
2100.00	0.32	159.60	2099.17	-13.25	41.74	13.01	43.79	107.61	0.15
2200.00	0.13	136.41	2199.17	-13.59	41.91	13.35	44.06	107.97	0.21
2300.00	0.32	150.92	2299.17	-13.92	42.12	13.67	44.36	108.28	0.20
2400.00	0.10	167.48	2399.17	-14.25	42.28	14.01	44.62	108.62	0.23
2500.00	0.20	212.53	2499.16	-14.48	42.21	14.24	44.62	108.94	0.15
2600.00	0.24	245.64	2599.16	-14.71	41.92	14.47	44.43	109.34	0.13
2700.00	0.86	275.16	2699.16	-14.73	40.98	14.50	43.55	109.77	0.66
2800.00	1.14	285.33	2799.14	-14.40	39.28	14.18	41.83	110.14	0.33
2900.00	0.97	257.56	2899.13	-14.32	37.49	14.11	40.13	110.91	0.53
3000.00	0.57	238.07	2999.12	-14.77	36.24	14.56	39.13	112.17	0.48
3100.00	0.41	242.86	3099.11	-15.19	35.50	14.99	38.61	113.17	0.16
3200.00	0.68	261.02	3199.11	-15.45	34.59	15.25	37.89	114.06	0.32
3300.00	0.64	273.07	3299.10	-15.51	33.45	15.32	36.87	114.88	0.14
3400.00	0.61	271.34	3399.10	-15.47	32.36	15.28	35.87	115.55	0.04
3500.00	0.44	273.25	3499.09	-15.43	31.45	15.25	35.03	116.14	0.17
3600.00	0.46	269.86	3599.09	-15.41	30.67	15.24	34.32	116.69	0.03
3700.00	0.52	270.82	3699.09	-15.41	29.81	15.24	33.56	117.33	0.06
3800.00	0.33	267.08	3799.08	-15.42	29.07	15.25	32.90	117.94	0.19
3900.00	0.41	272.81	3899.08	-15.41	28.42	15.25	32.33	118.47	0.08
4000.00	0.09	297.63	3999.08	-15.36	28.00	15.20	31.94	118.75	0.33
4100.00	0.29	312.82	4099.08	-15.16	27.75	15.00	31.62	118.64	0.20
4200.00	0.79	312.47	4199.08	-14.52	27.06	14.36	30.71	118.22	0.51
4300.00	1.06	328.72	4299.06	-13.26	26.07	13.11	29.24	116.96	0.38
4400.00	0.84	316.47	4399.05	-11.93	25.08	11.79	27.77	115.45	0.30
4500.00	1.39	312.02	4499.03	-10.59	23.67	10.45	25.93	114.10	0.56
4600.00	1.45	307.36	4599.00	-9.01	21.76	8.88	23.55	112.49	0.13
4700.00	1.50	304.27	4698.97	-7.50	19.67	7.39	21.05	110.87	0.09
4800.00	1.63	302.04	4798.93	-6.01	17.39	5.91	18.40	109.07	0.14
4900.00	1.95	307.84	4898.88	-4.22	14.84	4.13	15.43	105.86	0.37
5000.00	2.69	308.60	4998.80	-1.71	11.67	1.64	11.79	98.35	0.74
5100.00	2.90	306.88	5098.68	1.27	7.82	-1.31	7.92	80.79	0.22
5200.00	2.72	303.76	5198.56	4.10	3.82	-4.12	5.61	42.98	0.23
5300.00	2.27	297.98	5298.46	6.35	0.10	-6.35	6.35	0.94	0.52
5400.00	1.88	300.35	5398.40	8.11	-3.06	-8.09	8.66	339.32	0.39
5500.00	1.73	309.13	5498.35	9.89	-5.65	-9.86	11.39	330.26	0.31
5600.00	1.80	300.37	5598.30	11.64	-8.18	-11.59	14.23	324.90	0.28
5700.00	1.86	299.56	5698.25	13.23	-10.95	-13.17	17.17	320.40	0.06

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
5800.00	1.96	291.79	5798.19	14.67	-13.94	-14.59	20.24	316.45	0.28
5900.00	1.98	298.17	5898.14	16.12	-17.05	-16.02	23.46	313.39	0.22
6000.00	2.41	289.74	5998.06	17.64	-20.55	-17.52	27.08	310.65	0.54
6100.00	2.44	292.63	6097.97	19.17	-24.49	-19.03	31.10	308.05	0.13
6200.00	2.25	281.22	6197.89	20.37	-28.38	-20.21	34.94	305.67	0.50
6300.00	1.63	278.76	6297.83	20.97	-31.72	-20.79	38.02	303.47	0.62
6400.00	2.22	294.93	6397.78	22.00	-34.88	-21.80	41.24	302.25	0.79
6500.00	1.94	307.09	6497.71	23.84	-37.99	-23.62	44.85	302.11	0.52
6600.00	1.18	308.97	6597.67	25.51	-40.14	-25.28	47.57	302.44	0.76
6700.00	0.36	309.60	6697.66	26.36	-41.19	-26.12	48.90	302.62	0.83
6800.00	0.45	285.30	6797.66	26.66	-41.81	-26.42	49.59	302.53	0.20
6900.00	0.38	261.47	6897.66	26.72	-42.52	-26.47	50.21	302.15	0.19
7000.00	0.41	247.80	6997.65	26.54	-43.17	-26.29	50.67	301.58	0.10
7100.00	0.26	224.82	7097.65	26.24	-43.66	-25.99	50.94	301.01	0.20
7200.00	0.60	177.74	7197.65	25.56	-43.80	-25.31	50.71	300.27	0.46
7300.00	0.34	148.74	7297.65	24.79	-43.62	-24.53	50.17	299.61	0.34
7400.00	0.68	62.52	7397.64	24.80	-42.94	-24.56	49.59	300.02	0.74
7500.00	0.94	356.14	7497.64	25.90	-42.46	-25.66	49.74	301.38	0.92
7600.00	1.38	341.50	7597.62	27.86	-42.90	-27.61	51.15	303.00	0.52
7700.00	0.44	353.46	7697.60	29.38	-43.32	-29.13	52.36	304.14	0.95
7800.00	0.76	18.76	7797.60	30.39	-43.15	-30.14	52.78	305.15	0.41
7900.00	1.06	40.17	7897.58	31.72	-42.34	-31.48	52.91	306.84	0.45
8000.00	0.59	44.83	7997.57	32.80	-41.38	-32.56	52.80	308.40	0.48
8100.00	1.05	96.15	8097.56	33.06	-40.11	-32.83	51.98	309.50	0.82
8200.00	1.95	106.15	8197.53	32.49	-37.56	-32.28	49.67	310.86	0.93
8229.00	2.03	108.89	8226.51	32.19	-36.60	-31.98	48.74	311.33	0.43



V.E.S.