



**Scientific
Drilling**



GYRO SURVEY REPORT

Prepared For

PENWELL ENERGY INC.

**Torreon Wash 36 State # 1
McKinley County, NM**

*I-36-20N-5W
30-031-21006*

Prepared By:

***Judi Moore - Well Planner
Scientific Drilling International
Rocky Mountain District***

Scientific Drilling International
7237 W. Barton Rd. - P.O. Box 1600
Mills, WY 82644
(307) 472-6621
judimoore-sdi@touchtronics.net

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Scientific Drilling SURVEY REPORT

Company: PENWELL ENERGY INC.	Date: 1/19/2001	Time: 09:14:09	Page: 1
Field: McKinley County, NM	Co-ordinate(NE) Reference:	Site: Torreon Wash 36 State, True North	
Site: Torreon Wash 36 State	Vertical (TVD) Reference:	SITE 0.0	
Well: #36 State	Section (VS) Reference:	Well (0.00N,0.00E,184.81Azi)	
Wellpath: OH	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: Survey #1	Start Date: 1/18/2001
Company: SHL SEC.36,T20N,R5W 2143'FSL & 1223'FEL	Engineer: Dave Doney
Tool: Gyro,	Tied-to: From Surface

Survey

Meas Depth ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	CLen ft	CLSD ft	CLSA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.17	179.86	100.00	0.15	-0.15	0.00	0.17	100.00	0.15	179.86
200.00	0.14	49.59	200.00	0.21	-0.22	0.09	0.28	100.00	0.24	156.68
300.00	0.16	198.53	300.00	0.26	-0.27	0.14	0.29	100.00	0.31	152.25
400.00	0.19	287.21	400.00	0.36	-0.35	-0.06	0.25	100.00	0.36	189.67
500.00	0.08	164.22	500.00	0.39	-0.37	-0.20	0.24	100.00	0.42	208.22
600.00	0.25	208.39	600.00	0.65	-0.63	-0.28	0.20	100.00	0.69	204.26
700.00	0.05	314.32	700.00	0.83	-0.79	-0.42	0.27	100.00	0.90	207.88
800.00	0.29	167.43	800.00	1.04	-1.01	-0.40	0.33	100.00	1.08	201.40
900.00	0.21	206.41	900.00	1.45	-1.42	-0.42	0.18	100.00	1.48	196.55
1000.00	0.15	29.74	1000.00	1.50	-1.47	-0.44	0.36	100.00	1.53	196.60
1100.00	0.19	140.78	1100.00	1.50	-1.49	-0.27	0.28	100.00	1.51	190.26
1200.00	0.10	266.35	1200.00	1.63	-1.62	-0.25	0.26	100.00	1.64	188.81
1300.00	0.18	52.82	1300.00	1.54	-1.53	-0.21	0.27	100.00	1.55	187.92
1400.00	0.19	162.81	1400.00	1.59	-1.59	-0.04	0.30	100.00	1.59	181.40
1500.00	0.09	258.85	1500.00	1.77	-1.77	-0.07	0.22	100.00	1.77	182.17
1600.00	0.18	155.80	1600.00	1.93	-1.93	-0.08	0.22	100.00	1.93	182.37
1700.00	0.66	134.66	1699.99	2.43	-2.47	0.39	0.50	100.00	2.51	170.94
1800.00	0.86	132.31	1799.98	3.26	-3.38	1.36	0.20	100.00	3.65	158.12
1900.00	0.46	154.21	1899.98	4.06	-4.25	2.09	0.47	100.00	4.74	153.83
2000.00	0.29	153.55	1999.97	4.62	-4.84	2.38	0.17	100.00	5.39	153.85
2100.00	0.27	133.41	2099.97	4.99	-5.23	2.66	0.10	100.00	5.86	153.03
2200.00	0.45	129.50	2199.97	5.36	-5.64	3.13	0.18	100.00	6.45	150.93
2300.00	0.59	174.93	2299.97	6.09	-6.40	3.48	0.42	100.00	7.29	151.45
2400.00	0.87	167.89	2399.96	7.32	-7.66	3.69	0.29	100.00	8.50	154.28
2500.00	0.64	202.50	2499.95	8.58	-8.91	3.63	0.50	100.00	9.63	157.83
2600.00	0.65	207.82	2599.95	9.63	-9.93	3.15	0.06	100.00	10.42	162.38
2700.00	0.71	204.64	2699.94	10.74	-11.00	2.63	0.07	100.00	11.31	166.54
2800.00	0.66	206.04	2799.93	11.86	-12.08	2.12	0.05	100.00	12.26	170.04
2900.00	0.62	205.53	2899.92	12.90	-13.08	1.63	0.04	100.00	13.19	172.88
3000.00	0.50	201.87	2999.92	13.82	-13.98	1.24	0.13	100.00	14.03	174.94
3100.00	0.42	191.61	3099.92	14.60	-14.74	1.00	0.11	100.00	14.77	176.11
3200.00	0.53	203.32	3199.91	15.41	-15.52	0.75	0.15	100.00	15.54	177.25
3300.00	0.58	218.29	3299.91	16.27	-16.35	0.25	0.15	100.00	16.35	179.13
3400.00	0.67	199.23	3399.90	17.26	-17.30	-0.26	0.23	100.00	17.30	180.85
3500.00	0.68	229.25	3499.90	18.25	-18.24	-0.90	0.35	100.00	18.26	182.82
3600.00	0.62	237.35	3599.89	19.00	-18.91	-1.80	0.11	100.00	19.00	185.45
3700.00	0.70	201.08	3699.88	19.91	-19.78	-2.48	0.42	100.00	19.93	187.15
3800.00	0.75	233.81	3799.88	20.93	-20.73	-3.23	0.41	100.00	20.98	188.85
3900.00	0.79	237.03	3899.87	21.78	-21.49	-4.33	0.06	100.00	21.93	191.40
4000.00	0.69	249.69	3999.86	22.46	-22.08	-5.48	0.19	100.00	22.75	193.93
4100.00	0.47	264.20	4099.85	22.79	-22.33	-6.45	0.26	100.00	23.24	196.11
4200.00	0.50	236.66	4199.85	23.14	-22.61	-7.22	0.23	100.00	23.74	197.72
4300.00	0.26	278.04	4299.85	23.39	-22.82	-7.81	0.35	100.00	24.12	198.90
4400.00	0.18	204.96	4399.85	23.53	-22.93	-8.10	0.27	100.00	24.32	199.46
4500.00	0.15	167.31	4499.85	23.80	-23.20	-8.14	0.11	100.00	24.59	199.34
4600.00	0.35	79.63	4599.85	23.84	-23.27	-7.81	0.38	100.00	24.55	198.55
4700.00	0.37	96.33	4699.84	23.77	-23.25	-7.19	0.11	100.00	24.34	197.18
4800.00	0.24	128.35	4799.84	23.90	-23.42	-6.70	0.21	100.00	24.36	195.98



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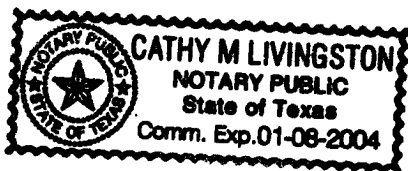
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Survey

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4900.00	0.36	64.97	4899.84	23.86	-23.41	-6.26	0.33	100.00	24.24	194.96
5000.00	0.45	106.44	4999.84	23.78	-23.39	-5.59	0.30	100.00	24.05	193.45
5100.00	0.58	78.07	5099.84	23.71	-23.40	-4.72	0.28	100.00	23.87	191.41
5200.00	0.48	93.98	5199.83	23.56	-23.32	-3.81	0.18	100.00	23.63	189.28
5300.00	0.47	110.48	5299.83	23.67	-23.50	-3.01	0.14	100.00	23.69	187.29
5400.00	0.27	128.77	5399.83	23.91	-23.79	-2.44	0.23	100.00	23.91	185.86
5489.00	0.37	71.53	5488.82	23.91	-23.83	-2.00	0.36	89.00	23.91	184.81

Brenda Coffman, Agent
for Penwell Energy, Inc.
March 8, 2001



Cathy M. Livingston
3-8-01

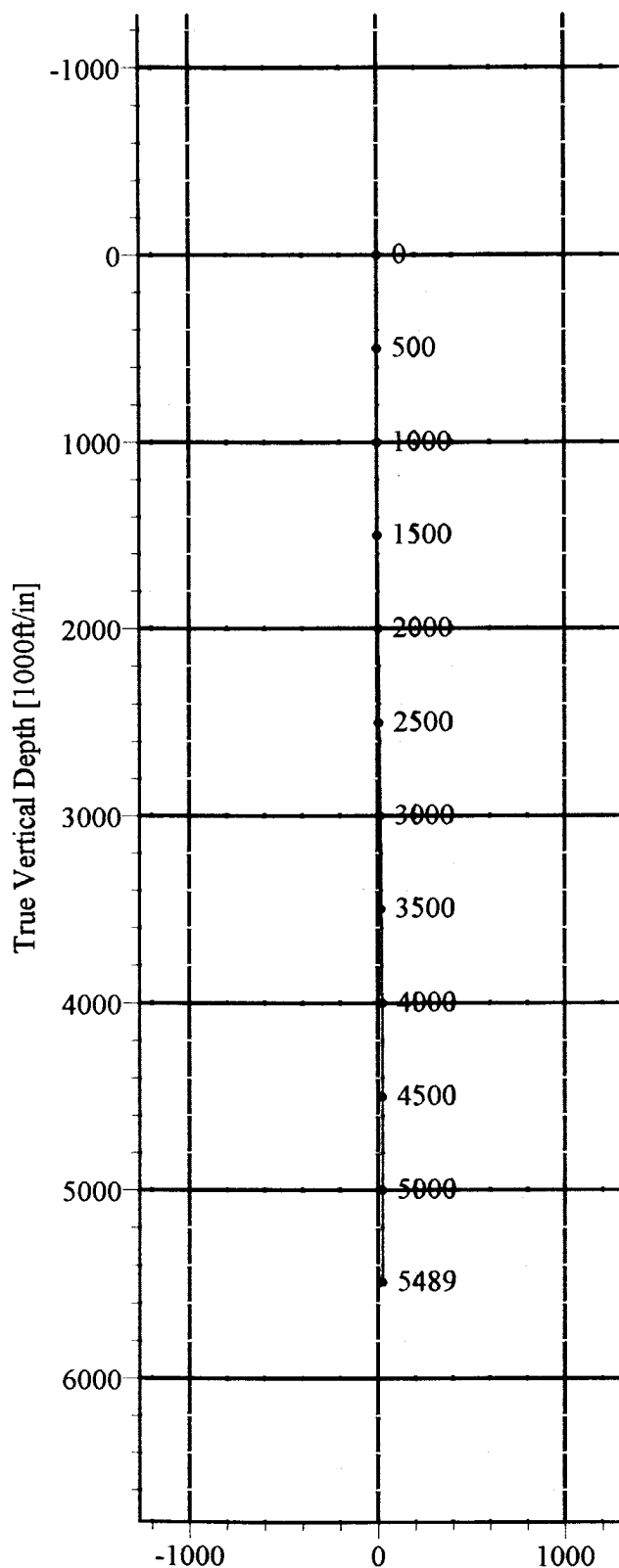




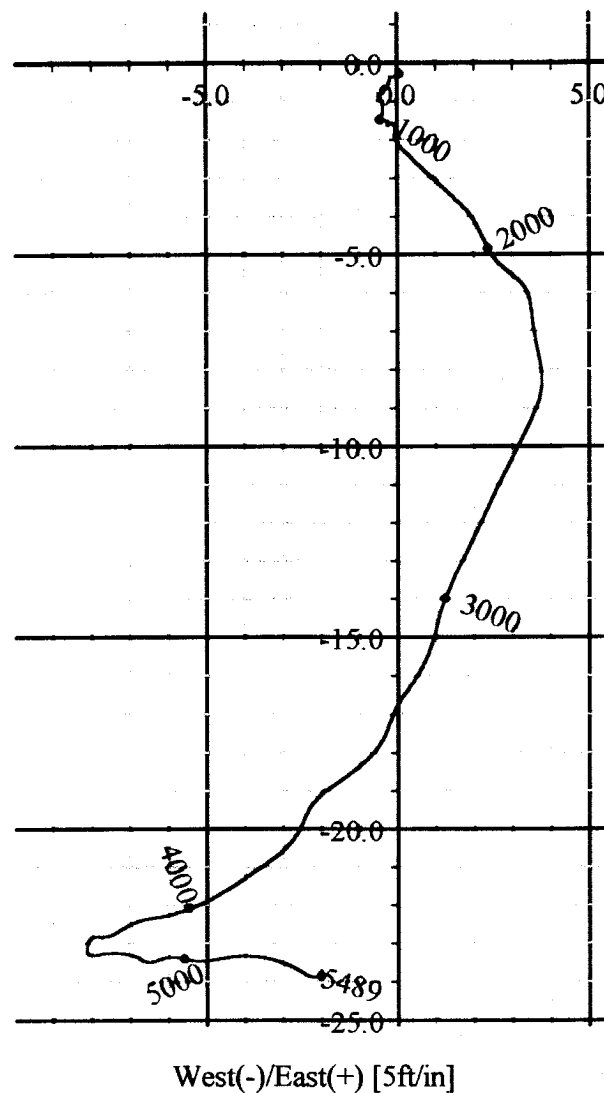
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PENWELL ENERGY INC.

Field: McKinley County, NM
Site: Torreon Wash 36 State
Well: #36 State
Survey: Survey #1



Vertical Section at 184.81° [1000ft/in]



BOTTOM HOLE CLOSURE

23.91 ft. 184.81° Azimuth

FINAL STATION

5489.0' MD 5488.82' TVD
0.37° Angle 71.53° Azimuth
South 23.83 ft. West 2.00 ft.
23.91' Vert. Sec.

Survey: Survey #1 (#36 State/OH)

Created By: Judi Moore

Date: 1/19/2001