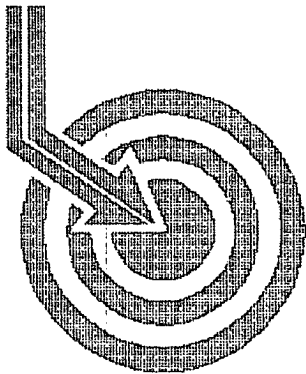




Scientific Drilling

PATTERSON PETROLEUM

Field: Vacuum
Site: Lea County, NM
Well: Twin Berry 5 State #1
Wellpath: DH - Job #32D1005760
Survey: 10/17/05-10/25/05



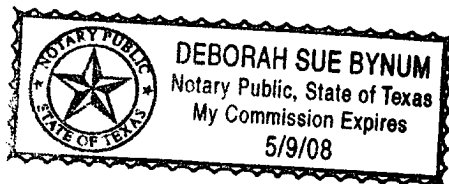
This survey is correct to the best of my knowledge
and is supported by actual field data.

Robert Hobbs.....Company Representative

Notorized this date 19th of November, 2005.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: PATTERSON PETROLEUM				Date: 11/19/2005	Time: 13:50:54	Page: 1			
Field: Vacuum				Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North				
Site: Lea County, NM				Vertical (TVD) Reference:	SITE 0.0				
Well: Twin Berry 5 State #1				Section (VS) Reference:	Well (0.00N,0.00E,7.83Azi)				
Wellpath: VH - Job #32K1005761				Survey Calculation Method:	Minimum Curvature	Db: Sybase			
Survey: 10/17/05				Start Date:	10/17/2005				
KSRG 0'-6245'									
Company: Scientific Drilling Internatio				Engineer:	Guebara w/P&M				
Tool: Keeper, Keeper Gyro				Tied-to:	From Surface				
Survey									
MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.70	314.10	100.00	0.36	0.43	-0.44	0.70	0.61	314.10
200.00	0.62	301.00	199.99	0.94	1.13	-1.34	0.17	1.75	310.09
300.00	0.67	301.65	299.98	1.38	1.71	-2.30	0.05	2.87	306.67
400.00	0.51	298.30	399.98	1.78	2.23	-3.19	0.16	3.90	304.96
500.00	0.28	290.94	499.98	1.99	2.53	-3.81	0.24	4.58	303.57
600.00	0.51	290.05	599.97	2.14	2.77	-4.46	0.23	5.25	301.86
700.00	0.31	286.42	699.97	2.27	3.00	-5.14	0.20	5.95	300.28
800.00	0.20	283.79	799.97	2.33	3.12	-5.57	0.11	6.38	299.26
900.00	0.29	223.83	899.97	2.14	2.98	-5.91	0.26	6.62	296.73
1000.00	0.29	227.41	999.97	1.74	2.62	-6.27	0.02	6.80	292.69
1100.00	0.20	241.42	1099.97	1.44	2.37	-6.61	0.11	7.02	289.71
1200.00	0.07	218.90	1199.97	1.29	2.24	-6.80	0.14	7.16	288.20
1300.00	0.33	271.58	1299.97	1.21	2.20	-7.13	0.29	7.46	287.13
1400.00	0.12	251.34	1399.97	1.13	2.17	-7.52	0.22	7.82	286.12
1500.00	0.21	272.21	1499.97	1.06	2.15	-7.80	0.11	8.09	285.38
1600.00	0.38	273.92	1599.96	1.02	2.18	-8.31	0.17	8.59	284.66
1700.00	0.34	262.63	1699.96	0.92	2.16	-8.94	0.08	9.19	283.58
1800.00	0.36	279.34	1799.96	0.85	2.17	-9.54	0.10	9.79	282.83
1900.00	0.43	321.39	1899.96	1.12	2.52	-10.09	0.29	10.39	284.01
2000.00	0.51	315.65	1999.95	1.65	3.13	-10.63	0.09	11.08	286.40
2100.00	0.57	315.32	2099.95	2.23	3.80	-11.29	0.06	11.91	288.60
2200.00	0.44	315.32	2199.95	2.76	4.43	-11.91	0.13	12.71	290.39
2300.00	0.30	298.74	2299.94	3.09	4.83	-12.41	0.17	13.32	291.25
2400.00	0.10	260.49	2399.94	3.16	4.94	-12.73	0.23	13.65	291.20
2500.00	0.07	253.73	2499.94	3.11	4.91	-12.87	0.03	13.77	290.86
2600.00	0.04	348.26	2599.94	3.11	4.92	-12.94	0.08	13.84	290.83
2700.00	0.37	65.74	2699.94	3.32	5.09	-12.65	0.36	13.64	291.92
2800.00	0.51	57.68	2799.94	3.78	5.46	-11.98	0.15	13.17	294.50
2900.00	1.20	49.52	2899.93	4.85	6.38	-10.81	0.70	12.55	300.55
3000.00	1.25	49.11	2999.91	6.45	7.77	-9.19	0.05	12.03	310.23
3100.00	1.28	45.91	3099.88	8.15	9.26	-7.56	0.08	11.96	320.78
3200.00	1.13	44.84	3199.86	9.81	10.74	-6.06	0.15	12.33	330.56
3300.00	1.20	42.01	3299.84	11.47	12.22	-4.67	0.09	13.08	339.10
3400.00	1.24	41.84	3399.82	13.23	13.80	-3.24	0.04	14.18	346.78
3500.00	1.43	41.47	3499.79	15.17	15.54	-1.69	0.19	15.63	353.78
3600.00	1.50	32.87	3599.76	17.39	17.58	-0.16	0.23	17.58	359.48
3700.00	1.62	28.89	3699.72	19.90	19.91	1.24	0.16	19.95	3.55
3800.00	1.64	26.83	3799.68	22.57	22.43	2.56	0.06	22.57	6.52
3900.00	1.97	21.33	3899.63	25.59	25.31	3.84	0.37	25.59	8.62
4000.00	2.11	20.77	3999.57	29.06	28.63	5.11	0.14	29.08	10.13
4100.00	2.16	16.18	4099.50	32.72	32.16	6.29	0.18	32.77	11.07
4200.00	2.31	13.30	4199.42	36.59	35.93	7.28	0.19	36.66	11.45
4300.00	2.59	12.67	4299.33	40.84	40.10	8.24	0.28	40.93	11.61
4400.00	2.62	13.14	4399.22	45.37	44.53	9.25	0.04	45.48	11.74
4500.00	2.61	12.63	4499.12	49.92	48.97	10.27	0.03	50.04	11.85
4600.00	2.87	12.57	4599.01	54.68	53.64	11.31	0.26	54.82	11.91
4700.00	2.61	14.44	4698.89	59.44	58.29	12.43	0.27	59.60	12.04
4800.00	2.32	12.44	4798.80	63.72	62.47	13.43	0.30	63.90	12.13



Scientific Drilling International Survey Report

Company: PATTERSON PETROLEUM
Field: Vacuum
Site: Lea County, NM
Well: Twin Berry 5 State #1
Wellpath: VH - Job #32K1005761

Date: 11/19/2005 Time: 13:50:54 Page: 2
Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,7.83Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azlm deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	2.30	9.28	4898.72	67.74	66.43	14.19	0.13	67.92	12.06
5000.00	2.52	3.51	4998.63	71.94	70.60	14.65	0.33	72.10	11.72
5100.00	2.51	7.04	5098.53	76.32	74.97	15.05	0.16	76.46	11.35
5200.00	2.53	5.78	5198.44	80.71	79.34	15.54	0.06	80.84	11.08
5300.00	2.67	7.19	5298.33	85.25	83.84	16.06	0.15	85.37	10.84
5400.00	2.75	4.72	5398.22	89.97	88.54	16.54	0.14	90.08	10.58
5500.00	2.55	5.03	5498.12	94.59	93.15	16.94	0.20	94.68	10.31
5600.00	2.70	7.70	5598.01	99.17	97.70	17.45	0.19	99.25	10.13
5700.00	2.73	3.52	5697.90	103.90	102.41	17.91	0.20	103.97	9.92
5800.00	2.98	358.27	5797.77	108.84	107.39	17.98	0.36	108.88	9.50
5900.00	3.40	359.92	5897.62	114.34	112.95	17.89	0.43	114.36	9.00
6000.00	3.54	2.46	5997.44	120.35	119.00	18.02	0.21	120.36	8.61
6100.00	3.74	1.30	6097.23	126.66	125.35	18.23	0.21	126.66	8.27
6200.00	3.63	2.54	6197.03	133.05	131.77	18.44	0.14	133.05	7.97
6245.00	3.87	0.95	6241.93	135.98	134.71	18.53	0.58	135.98	7.83



Scientific Drilling International Survey Report

Company: PATTERSON PETROLEUM	Date: 11/19/2005	Time: 13:55:04	Page: 1
Field: Vacuum	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Twin Berry 5 State #1	Section (VS) Reference:	Well (0.00N,0.00E,7.83Azi)	
Wellpath: DH - Job #32D1005760	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 10/17/05-10/25/05 MWD 6335'-8343'	Start Date: 10/17/2005
Company: Scientific Drilling Internatio	Engineer: Barbre/Ledbetter
Tool: MWD;MWD	Tied-to: From: Definitive Path

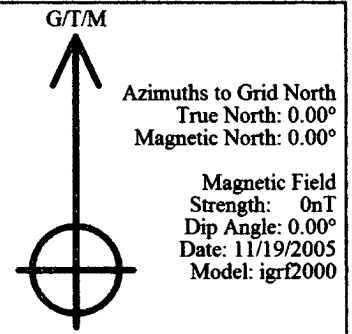
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
6245.00	3.87	0.95	6241.93	135.98	134.71	18.53	0.00	135.98	7.83
6335.00	3.61	357.70	6331.74	141.78	140.58	18.47	0.37	141.79	7.48
6429.00	3.25	359.40	6425.57	147.33	146.20	18.32	0.40	147.34	7.14
6523.00	2.64	358.60	6519.45	152.11	151.03	18.24	0.65	152.13	6.89
6619.00	2.20	350.18	6615.36	156.04	155.05	17.87	0.59	156.08	6.58
6711.00	1.93	358.44	6707.30	159.26	158.34	17.53	0.44	159.31	6.32
6807.00	1.06	11.45	6803.27	161.74	160.83	17.66	0.97	161.80	6.27
6898.00	1.06	34.65	6894.25	163.33	162.35	18.31	0.47	163.38	6.43
6991.00	0.97	60.66	6987.24	164.57	163.44	19.48	0.50	164.60	6.80
7084.00	0.62	64.09	7080.23	165.33	164.05	20.62	0.38	165.34	7.16
7178.00	0.88	89.23	7174.22	165.72	164.28	21.80	0.44	165.72	7.56
7271.00	1.49	109.53	7267.20	165.58	163.88	23.65	0.79	165.58	8.21
7367.00	2.29	108.56	7363.15	164.97	162.86	26.65	0.83	165.02	9.29
7461.00	3.78	137.39	7457.02	162.65	159.98	30.53	2.22	162.86	10.80
7492.00	4.04	145.74	7487.95	161.18	158.32	31.83	2.02	161.49	11.37
7529.00	4.48	160.60	7524.85	158.93	155.88	33.05	3.20	159.35	11.97
7617.00	2.99	158.66	7612.66	153.87	150.50	35.02	1.70	154.52	13.10
7709.00	1.93	147.15	7704.57	150.60	146.97	36.74	1.27	151.49	14.04
7741.00	2.11	144.95	7736.55	149.76	146.03	37.37	0.61	150.74	14.35
7814.00	1.32	125.35	7809.52	148.39	144.44	38.83	1.33	149.57	15.05
7898.00	1.23	99.78	7893.50	147.91	143.73	40.50	0.68	149.33	15.74
7992.00	0.79	138.97	7987.48	147.45	143.07	41.92	0.84	149.09	16.33
8055.00	1.14	162.79	8050.48	146.60	142.14	42.39	0.83	148.33	16.61
8118.00	1.32	167.80	8113.46	145.35	140.84	42.73	0.33	147.18	16.88
8250.00	0.35	47.04	8245.45	144.23	139.63	43.35	1.16	146.20	17.25
8304.00	0.97	32.19	8299.45	144.78	140.12	43.71	1.18	146.79	17.33
8343.00	0.79	61.46	8338.44	145.24	140.53	44.13	1.22	147.30	17.43

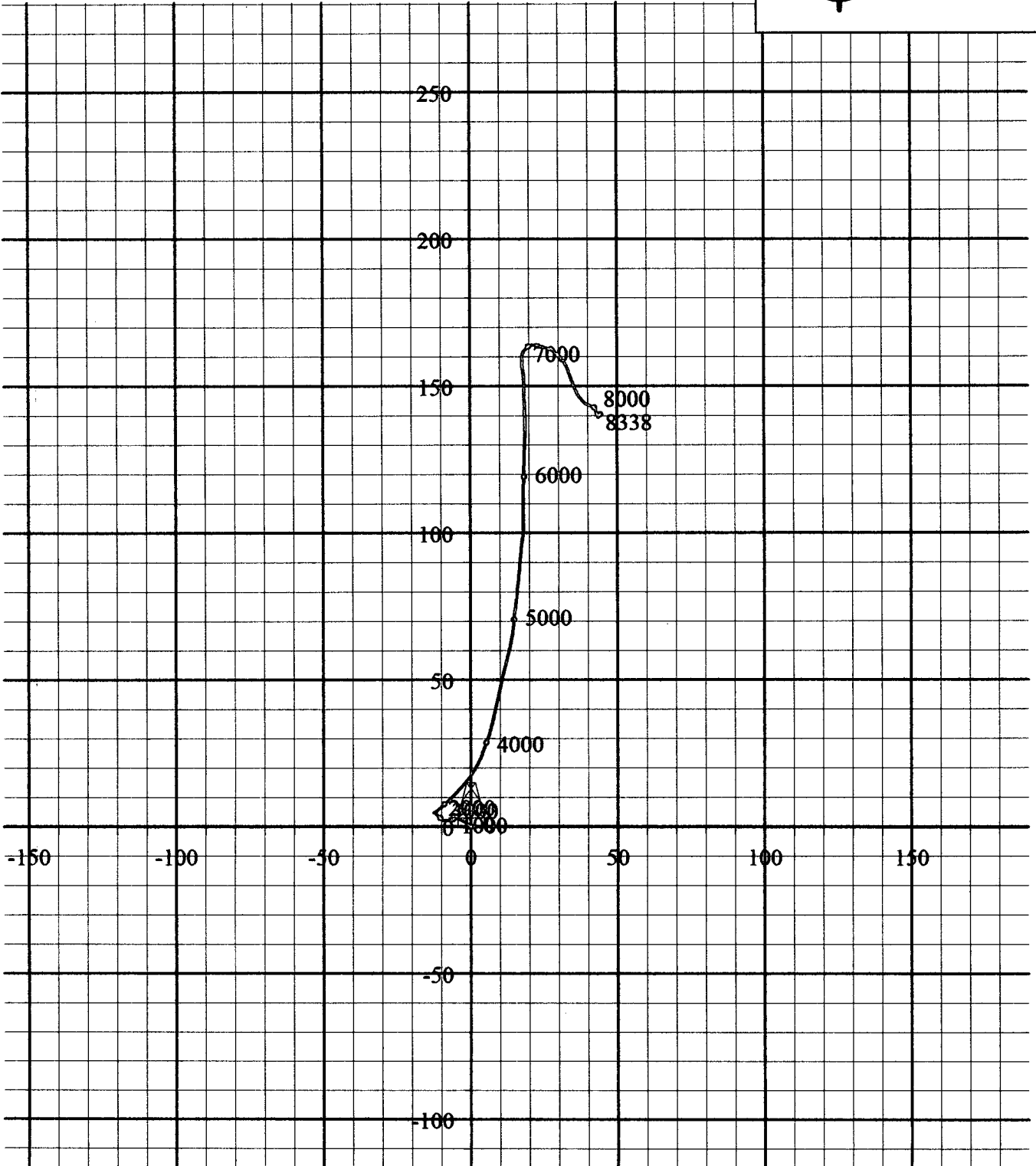


**Scientific
Drilling**

Field: Vacuum
Site: Lea County, NM
Well: Twin Berry 5 State #1
Wellpath: DH - Job #32D1005760
Survey: 10/17/05-10/25/05



South(-)/North(+) [20ft/in]



West(-)/East(+) [20ft/in]