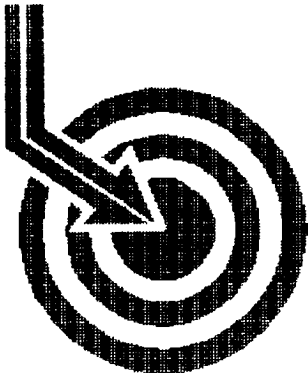




Scientific Drilling



TEXACO E & P INC.

Field: West Dollarhide Drinkard
Site: Lea County, NM
Well: WDDU #108H
Wellpath: HH - Job #32D0601369
Survey: 6/19/01-6/24/01

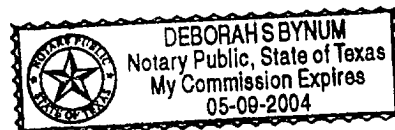
SUR: M-33-24s-38e, 1201/S & 156/W
BHL: P-32-24s-38e, 1198/S & 944/E
API #30-025-30830

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

Don Noddy.....Company Representative

Notorized this date 22nd of August, 2001.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas



Scientific Drilling International

Survey Report

Company: TEXACO E & P INC. Field: West Dollarhide Drinkard Site: Lea County, NM Well: WDDU #108H Wellpath: VH - Job #32K0601368	Date: 8/21/2001 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:	Time: 16:04:40 Site: Lea County, NM, True North SITE 0.0 above Mean Sea Level Well (0.0E,0.0N,270.0Azi) Minimum Curvature	Page: 1
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Survey: 6/19/01 KSRG 0'-6350'	Start Date: 8/21/2001	
Company: Scientific Drilling International Tool: KEEPER	Engineer: Gary DeSpain	

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00
100.0	0.27	209.55	100.0	0.1	-0.2	-0.1	0.2	209.55
200.0	0.32	275.24	200.0	0.5	-0.4	-0.5	0.6	233.02
300.0	0.41	262.19	300.0	1.1	-0.4	-1.1	1.2	250.38
400.0	0.31	240.97	400.0	1.7	-0.6	-1.7	1.8	251.29
500.0	0.09	183.22	500.0	2.0	-0.8	-2.0	2.1	248.02
600.0	0.42	148.04	600.0	1.8	-1.2	-1.8	2.1	236.39
700.0	0.51	142.83	700.0	1.3	-1.9	-1.3	2.3	215.53
800.0	0.51	143.11	800.0	0.8	-2.6	-0.8	2.7	197.06
900.0	0.39	130.46	900.0	0.3	-3.1	-0.3	3.2	184.74
1000.0	0.33	143.80	1000.0	-0.2	-3.6	0.2	3.6	177.31
1100.0	0.32	201.87	1100.0	-0.2	-4.1	0.2	4.1	176.71
1200.0	0.46	196.57	1200.0	0.0	-4.7	0.0	4.7	179.80
1300.0	0.61	148.70	1300.0	-0.2	-5.6	0.2	5.6	178.17
1400.0	0.83	125.42	1400.0	-1.0	-6.4	1.0	6.5	170.79
1500.0	0.83	125.61	1500.0	-2.2	-7.3	2.2	7.6	163.02
1600.0	0.95	128.43	1599.9	-3.5	-8.2	3.5	8.9	157.16
1700.0	0.85	117.10	1699.9	-4.8	-9.1	4.8	10.3	152.26
1800.0	0.81	112.86	1799.9	-6.1	-9.7	6.1	11.4	147.87
1900.0	0.72	98.54	1899.9	-7.4	-10.1	7.4	12.5	143.81
2000.0	0.91	76.17	1999.9	-8.7	-10.0	8.7	13.3	138.70
2100.0	1.31	64.58	2099.9	-10.6	-9.3	10.6	14.1	131.32
2200.0	1.61	66.53	2199.8	-12.9	-8.2	12.9	15.3	122.58
2300.0	1.68	67.22	2299.8	-15.5	-7.1	15.5	17.1	114.59
2400.0	1.87	67.06	2399.8	-18.4	-5.9	18.4	19.3	107.80
2500.0	1.87	68.82	2499.7	-21.4	-4.7	21.4	21.9	102.32
2600.0	1.54	66.51	2599.7	-24.1	-3.5	24.1	24.4	98.36
2700.0	1.20	68.50	2699.6	-26.4	-2.6	26.4	26.5	95.69
2800.0	1.08	69.26	2799.6	-28.2	-1.9	28.2	28.3	93.87
2900.0	0.83	69.10	2899.6	-29.8	-1.3	29.8	29.8	92.53
3000.0	0.40	73.64	2999.6	-30.8	-1.0	30.8	30.8	91.79
3100.0	0.09	130.72	3099.6	-31.2	-0.9	31.2	31.2	91.68
3200.0	0.32	231.44	3199.6	-31.0	-1.1	31.0	31.0	92.10
3300.0	0.64	233.64	3299.6	-30.3	-1.6	30.3	30.4	93.10
3400.0	0.81	228.42	3399.6	-29.4	-2.4	29.4	29.5	94.76
3500.0	0.95	225.75	3499.6	-28.2	-3.5	28.2	28.5	97.05
3600.0	1.01	226.01	3599.6	-27.0	-4.7	27.0	27.4	99.83
3700.0	1.08	235.06	3699.5	-25.6	-5.8	25.6	26.3	102.83
3800.0	1.12	245.27	3799.5	-23.9	-6.8	23.9	24.9	105.81
3900.0	1.15	251.06	3899.5	-22.1	-7.5	22.1	23.4	108.78
4000.0	1.19	249.07	3999.5	-20.2	-8.2	20.2	21.8	112.14
4100.0	1.25	244.37	4099.5	-18.2	-9.1	18.2	20.4	116.41
4200.0	1.32	238.83	4199.4	-16.3	-10.1	16.3	19.2	121.89
4300.0	1.29	236.42	4299.4	-14.3	-11.3	14.3	18.3	128.33
4400.0	1.39	236.13	4399.4	-12.4	-12.6	12.4	17.7	135.55
4500.0	1.49	238.10	4499.3	-10.3	-14.0	10.3	17.4	143.69
4600.0	1.63	235.99	4599.3	-8.0	-15.5	8.0	17.4	152.66
4700.0	1.74	229.48	4699.3	-5.7	-17.3	5.7	18.2	161.81

Scientific Drilling International Survey Report

Company: TEXACO E & P INC.
Field: West Dollarhide Drinkard
Site: Lea County, NM
Well: WDDU #108H
Wellpath: VH - Job #32K0601368

Date: 8/21/2001 Time: 16:04:40 Page: 2
Co-ordinate(NE) Reference: Site: Lea County, NM, True North
Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level
Section (VS) Reference: Well (0.0E,0.0N,270.0Azi)
Survey Calculation Method: Minimum Curvature

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg
4800.0	1.86	224.45	4799.2	-3.4	-19.4	3.4	19.7	170.11
4900.0	1.80	222.32	4899.2	-1.2	-21.7	1.2	21.8	176.86
5000.0	1.89	222.21	4999.1	1.0	-24.1	-1.0	24.1	182.31
5100.0	1.87	218.44	5099.1	3.1	-26.6	-3.1	26.8	186.64
5200.0	1.82	216.46	5199.0	5.1	-29.2	-5.1	29.6	189.83
5300.0	1.98	218.00	5299.0	7.1	-31.8	-7.1	32.6	192.52
5400.0	1.98	213.36	5398.9	9.1	-34.6	-9.1	35.8	194.69
5500.0	2.01	212.90	5498.8	11.0	-37.5	-11.0	39.1	196.30
5600.0	2.14	214.61	5598.8	13.0	-40.5	-13.0	42.6	197.77
5700.0	2.19	214.67	5698.7	15.1	-43.6	-15.1	46.2	199.13
5800.0	2.01	211.38	5798.6	17.1	-46.7	-17.1	49.8	200.15
5900.0	1.90	212.03	5898.6	18.9	-49.6	-18.9	53.1	200.88
6000.0	1.86	209.85	5998.5	20.6	-52.4	-20.6	56.3	201.47
6100.0	1.49	210.16	6098.5	22.1	-55.0	-22.1	59.2	201.89
6200.0	1.45	209.47	6198.4	23.4	-57.2	-23.4	61.8	202.21
6300.0	1.15	203.10	6298.4	24.4	-59.2	-24.4	64.0	202.37
6350.0	1.28	202.28	6348.4	24.8	-60.2	-24.8	65.1	202.38

8/21/01
10:00