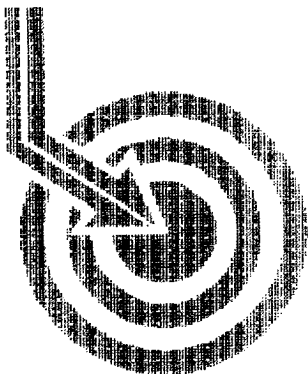




Scientific Drilling

30-025-02951



TEXACO E & P INC.

Field: Central Vacuum

Site: Lea County, NM

Well: CVU #10

Wellpath: VH - Job #32K0600210/267

Survey: 6/13/00

SUR: F-30-17s-35e
1980/N 4 1980/W

BHL

Lat. 1: 1976/N 4 3175/W
G-30-17s-35

Lat. 2: 1977/N 4 1054/E
H-25-17s-34

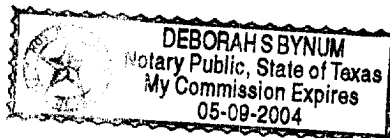
This survey is correct to the best of my knowledge
and is supported by actual field data.

David Moady.....Company Representative

Notorized this date 16th of November, 2000.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas



SCIENTIFIC DRILLING

SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #10
Wellpath: VH - Job #32K0600210

Date: 11/16/2000 **Time:** 08:58:06 **Page:** 1
Co-ordinate(NE) Reference: Site: Lea County, NM, True North
Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level
Section (VS) Reference: Slot (0.0E,0.0N,0.0Azi)
Survey Calculation Method: Minimum Curvature

Survey: 6/13/00
 KSRG 0'-4200'

Start Date: 6/14/2000

Company: SDI
Tool: KEEPER

Engineer: Jon Valenzuela

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.0
100.0	0.27	321.44	100.0	0.2	-0.1	0.2	0.27	321.44	0.2
200.0	0.22	346.92	200.0	0.6	-0.3	0.6	0.12	328.74	0.6
300.0	0.33	359.30	300.0	1.0	-0.4	1.0	0.12	339.55	1.1
400.0	0.32	296.90	400.0	1.4	-0.6	1.4	0.34	336.22	1.6
500.0	0.56	292.93	500.0	1.8	-1.3	1.8	0.24	322.83	2.2
600.0	1.19	315.15	600.0	2.7	-2.5	2.7	0.70	316.87	3.7
700.0	1.64	334.59	700.0	4.7	-3.9	4.7	0.65	320.67	6.1
800.0	2.19	354.93	799.9	7.9	-4.6	7.9	0.87	329.57	9.2
900.0	2.25	7.93	899.8	11.8	-4.5	11.8	0.51	338.87	12.6
1000.0	3.39	29.46	999.7	16.3	-2.8	16.3	1.54	350.17	16.5
1100.0	4.53	37.21	1099.5	22.0	1.0	22.0	1.26	2.66	22.0
1200.0	5.49	43.13	1199.1	28.6	6.7	28.6	1.09	13.13	29.4
1300.0	4.01	44.82	1298.7	34.6	12.4	34.6	1.49	19.74	36.8
1400.0	2.41	47.68	1398.6	38.5	16.4	38.5	1.61	23.12	41.9
1500.0	1.34	53.06	1498.5	40.6	18.9	40.6	1.08	24.98	44.8
1600.0	0.87	68.23	1598.5	41.6	20.6	41.6	0.55	26.30	46.4
1700.0	0.69	70.51	1698.5	42.1	21.8	42.1	0.18	27.42	47.4
1800.0	0.68	63.24	1798.5	42.6	22.9	42.6	0.09	28.32	48.3
1900.0	0.36	18.94	1898.5	43.1	23.6	43.1	0.49	28.66	49.1
2000.0	0.77	5.15	1998.5	44.1	23.7	44.1	0.43	28.29	50.1
2100.0	0.79	18.36	2098.5	45.4	24.0	45.4	0.18	27.86	51.4
2200.0	0.85	6.43	2198.5	46.8	24.3	46.8	0.18	27.44	52.7
2300.0	1.19	15.55	2298.4	48.5	24.7	48.5	0.38	26.94	54.4
2400.0	1.87	56.56	2398.4	50.4	26.3	50.4	1.25	27.55	56.9
2500.0	0.84	19.66	2498.4	52.0	27.9	52.0	1.30	28.22	59.0
2600.0	1.58	61.32	2598.4	53.4	29.4	53.4	1.10	28.82	60.9
2700.0	1.84	56.01	2698.3	54.9	31.9	54.9	0.30	30.15	63.5
2800.0	1.71	70.87	2798.3	56.3	34.7	56.3	0.48	31.60	66.1
2900.0	1.60	88.76	2898.2	56.8	37.5	56.8	0.53	33.38	68.1
3000.0	1.46	102.46	2998.2	56.6	40.1	56.6	0.39	35.32	69.4
3100.0	0.85	111.42	3098.2	56.1	42.0	56.1	0.63	36.86	70.1
3200.0	0.89	132.52	3198.2	55.3	43.3	55.3	0.32	38.08	70.2
3300.0	0.98	121.98	3298.1	54.3	44.6	54.3	0.19	39.40	70.2
3400.0	1.07	153.05	3398.1	53.0	45.7	53.0	0.56	40.80	70.0
3500.0	0.91	152.53	3498.1	51.5	46.5	51.5	0.16	42.12	69.4
3600.0	0.93	171.58	3598.1	50.0	47.0	50.0	0.31	43.27	68.6
3700.0	0.99	175.25	3698.1	48.3	47.2	48.3	0.09	44.35	67.5
3800.0	1.00	176.65	3798.1	46.6	47.3	46.6	0.03	45.47	66.4
3843.4	0.82	188.67	3841.5	45.9	47.3	45.9	0.60	45.88	65.9
3900.0	0.99	183.88	3898.1	45.0	47.2	45.0	0.33	46.38	65.2
4000.0	1.16	172.52	3998.0	43.1	47.3	43.1	0.27	47.64	64.0
4100.0	1.42	189.39	4098.0	40.9	47.2	40.9	0.46	49.11	62.5
4200.0	1.53	191.11	4198.0	38.4	46.8	38.4	0.12	50.63	60.5

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #10
Wellpath: WL - Job #32D0700267

Date: 11/16/2000 **Time:** 09:05:16 **Page:** 1
Co-ordinate(NE) Reference: Site: Lea County, NM, True North
Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level
Section (VS) Reference: Slot (0.0E,0.0N,271.5Azi)
Survey Calculation Method: Minimum Curvature

Survey: 7/10/00-7/24/00
 MWD 4202'-7401' (2871' Lateral at a N88.50W)

Start Date: 8/1/2000

Company: SDI w/Ryan
Tool: MWD

Engineer: L. Coetzee

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
4200.0	1.53	191.11	4198.0	38.4	46.8	-45.7	0.00	50.63	60.5
4202.0	1.53	190.66	4200.0	38.3	46.7	-45.7	0.60	50.67	60.4
4292.0	14.40	277.60	4289.0	38.6	35.4	-34.3	16.00	42.49	52.4
4324.0	18.60	274.80	4319.7	39.6	26.3	-25.3	13.35	33.65	47.5
4356.0	22.50	275.50	4349.7	40.6	15.2	-14.1	12.21	20.48	43.3
4387.0	26.70	275.50	4377.8	41.8	2.3	-1.2	13.55	3.16	41.9
4419.0	31.00	272.40	4405.9	42.8	-13.1	14.2	14.22	343.01	44.8
4451.0	35.20	268.80	4432.7	43.0	-30.6	31.7	14.49	324.60	52.7
4482.0	39.40	266.70	4457.3	42.2	-49.3	50.4	14.15	310.58	64.9
4514.0	43.80	267.40	4481.2	41.2	-70.5	71.6	13.83	300.27	81.7
4546.0	48.20	268.80	4503.5	40.4	-93.5	94.6	14.10	293.36	101.9
4577.0	53.00	269.90	4523.1	40.1	-117.5	118.5	15.72	288.86	124.1
4609.0	58.20	269.90	4541.2	40.1	-143.9	144.9	16.25	285.57	149.4
4639.0	60.00	269.90	4556.6	40.0	-169.6	170.6	6.00	283.29	174.3
4672.0	64.80	269.20	4571.9	39.8	-198.8	199.8	14.67	281.32	202.8
4704.0	66.90	265.30	4585.0	38.4	-228.0	228.9	12.91	279.56	231.2
4726.0	70.40	263.60	4593.0	36.4	-248.4	249.3	17.46	278.34	251.0
4758.0	75.50	264.60	4602.4	33.3	-278.8	279.6	16.21	276.81	280.8
4789.0	79.00	266.70	4609.2	31.0	-309.0	309.7	13.08	275.73	310.5
4821.0	82.20	268.50	4614.4	29.7	-340.5	341.2	11.44	274.98	341.8
4852.0	85.90	269.50	4617.7	29.1	-371.3	371.9	12.36	274.49	372.5
4884.0	88.70	269.20	4619.2	28.8	-403.3	403.9	8.80	274.08	404.3
4916.0	89.70	269.20	4619.6	28.3	-435.3	435.9	3.12	273.72	436.2
4947.0	92.60	268.50	4619.0	27.7	-466.3	466.8	9.62	273.40	467.1
4979.0	93.10	269.20	4617.4	27.1	-498.2	498.7	2.69	273.11	498.9
5010.0	92.70	269.90	4615.8	26.8	-529.2	529.7	2.60	272.90	529.8
5042.0	92.70	269.90	4614.3	26.8	-561.1	561.6	0.00	272.73	561.8
5074.0	94.50	271.00	4612.3	27.0	-593.1	593.6	6.59	272.61	593.7
5106.0	98.20	271.00	4608.8	27.6	-624.9	625.4	11.56	272.53	625.5
5137.0	102.10	271.30	4603.3	28.2	-655.4	655.9	12.62	272.46	656.0
5169.0	103.80	271.00	4596.1	28.8	-686.5	687.1	5.39	272.40	687.1
5191.0	104.30	272.00	4590.8	29.4	-707.9	708.4	4.96	272.38	708.5
5223.0	104.00	269.90	4583.0	29.9	-738.9	739.4	6.43	272.32	739.5
5254.0	103.60	270.30	4575.6	29.9	-769.0	769.5	1.80	272.23	769.6
5286.0	101.20	268.80	4568.7	29.7	-800.2	800.8	8.79	272.12	800.8
5317.0	101.70	269.50	4562.6	29.2	-830.6	831.1	2.74	272.02	831.1
5349.0	104.00	269.90	4555.4	29.1	-861.8	862.3	7.29	271.93	862.3
5381.0	103.80	269.90	4547.8	29.0	-892.9	893.3	0.62	271.86	893.4
5412.0	102.20	268.50	4540.8	28.6	-923.1	923.5	6.78	271.77	923.5
5449.0	102.80	268.80	4532.8	27.7	-959.2	959.6	1.80	271.66	959.6
5475.0	104.20	269.50	4526.7	27.4	-984.5	984.9	5.99	271.59	984.9
5507.0	104.00	269.20	4518.9	27.0	-1015.5	1015.9	1.10	271.52	1015.9
5539.0	104.20	269.50	4511.1	26.7	-1046.5	1046.9	1.10	271.46	1046.9
5571.0	101.90	268.80	4503.9	26.2	-1077.7	1078.0	7.50	271.39	1078.0
5602.0	96.10	267.80	4499.0	25.3	-1108.3	1108.6	18.98	271.31	1108.6
5634.0	91.50	268.50	4496.9	24.3	-1140.2	1140.5	14.54	271.22	1140.5
5664.0	86.40	271.00	4497.5	24.1	-1170.2	1170.4	18.93	271.18	1170.4
5696.0	81.30	273.80	4500.9	25.5	-1202.0	1202.2	18.16	271.21	1202.2

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #10
Wellpath: WL - Job #32D0700267

Date: 11/16/2000 **Time:** 09:05:16 **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: Slot (0.0E,0.0N,271.5Azi)
Survey Calculation Method: Minimum Curvature

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
5729.0	79.70	273.80	4506.3	27.6	-1234.4	1234.7	4.85	271.28	1234.7
5761.0	79.90	273.40	4512.0	29.6	-1265.9	1266.2	1.38	271.34	1266.2
5792.0	77.80	271.70	4518.0	30.9	-1296.3	1296.6	8.65	271.37	1296.6
5824.0	77.40	272.00	4524.9	32.0	-1327.5	1327.9	1.55	271.38	1327.9
5855.0	77.80	272.40	4531.5	33.1	-1357.7	1358.1	1.80	271.40	1358.1
5887.0	79.00	273.40	4538.0	34.7	-1389.1	1389.5	4.84	271.43	1389.5
5919.0	79.00	273.10	4544.1	36.5	-1420.4	1420.9	0.92	271.47	1420.9
5950.0	78.70	273.10	4550.1	38.1	-1450.8	1451.3	0.97	271.51	1451.3
5982.0	79.00	273.10	4556.3	39.8	-1482.1	1482.7	0.94	271.54	1482.7
6013.0	79.70	272.70	4562.0	41.4	-1512.6	1513.1	2.59	271.57	1513.1
6045.0	79.20	272.40	4567.8	42.8	-1544.0	1544.6	1.81	271.59	1544.6
6094.0	79.50	273.10	4576.9	45.1	-1592.1	1592.7	1.53	271.62	1592.7
6125.0	79.30	272.80	4582.6	46.6	-1622.5	1623.2	1.15	271.65	1623.2
6157.0	81.10	272.00	4588.1	48.0	-1654.0	1654.7	6.14	271.66	1654.7
6188.0	86.00	272.70	4591.5	49.2	-1684.8	1685.5	15.96	271.67	1685.5
6220.0	91.30	273.40	4592.3	50.9	-1716.7	1717.5	16.71	271.70	1717.5
6251.0	96.90	273.80	4590.1	52.9	-1747.6	1748.4	18.11	271.73	1748.4
6283.0	98.50	273.80	4585.8	55.0	-1779.2	1780.0	5.00	271.77	1780.1
6314.0	100.80	272.80	4580.6	56.7	-1809.7	1810.6	8.07	271.80	1810.6
6346.0	105.20	271.00	4573.4	57.8	-1840.9	1841.8	14.80	271.80	1841.8
6378.0	105.80	271.70	4564.8	58.5	-1871.7	1872.6	2.82	271.79	1872.6
6410.0	106.40	272.70	4556.0	59.7	-1902.4	1903.3	3.54	271.80	1903.4
6442.0	106.60	272.40	4546.9	61.0	-1933.1	1934.0	1.09	271.81	1934.0
6473.0	107.00	272.40	4537.9	62.3	-1962.7	1963.7	1.29	271.82	1963.7
6505.0	108.00	272.40	4528.3	63.6	-1993.2	1994.2	3.12	271.83	1994.2
6536.0	108.90	272.40	4518.5	64.8	-2022.6	2023.6	2.90	271.83	2023.6
6568.0	108.90	273.10	4508.1	66.2	-2052.8	2053.9	2.07	271.85	2053.9
6600.0	106.60	272.40	4498.4	67.7	-2083.3	2084.3	7.48	271.86	2084.4
6631.0	107.30	272.00	4489.3	68.8	-2112.9	2114.0	2.57	271.87	2114.0
6662.0	107.90	272.00	4480.0	69.9	-2142.4	2143.5	1.94	271.87	2143.6
6694.0	103.80	272.00	4471.2	71.0	-2173.2	2174.3	12.81	271.87	2174.4
6726.0	101.30	271.70	4464.3	72.0	-2204.4	2205.5	7.87	271.87	2205.6
6757.0	96.90	270.60	4459.4	72.6	-2235.0	2236.1	14.62	271.86	2236.2
6789.0	94.00	271.00	4456.3	73.0	-2266.9	2268.0	9.15	271.84	2268.0
6821.0	90.60	271.00	4455.0	73.6	-2298.8	2300.0	10.62	271.83	2300.0
6851.0	86.90	270.30	4455.7	73.9	-2328.8	2329.9	12.55	271.82	2330.0
6884.0	83.20	269.90	4458.5	74.0	-2361.7	2362.8	11.28	271.79	2362.8
6916.0	79.30	269.90	4463.4	73.9	-2393.3	2394.4	12.19	271.77	2394.4
6947.0	79.20	269.20	4469.2	73.7	-2423.8	2424.9	2.24	271.74	2424.9
6979.0	79.00	268.80	4475.2	73.1	-2455.2	2456.2	1.38	271.71	2456.3
7011.0	78.70	269.20	4481.4	72.6	-2486.6	2487.6	1.54	271.67	2487.6
7042.0	78.50	269.20	4487.6	72.2	-2516.9	2518.0	0.65	271.64	2518.0
7074.0	79.20	270.60	4493.7	72.1	-2548.3	2549.4	4.82	271.62	2549.4
7105.0	79.00	269.90	4499.6	72.2	-2578.8	2579.8	2.31	271.60	2579.8
7137.0	79.00	269.90	4505.7	72.2	-2610.2	2611.2	0.00	271.58	2611.2
7169.0	80.10	271.70	4511.5	72.6	-2641.7	2642.7	6.51	271.57	2642.7
7200.0	80.20	271.70	4516.8	73.5	-2672.2	2673.2	0.32	271.58	2673.2
7232.0	79.90	272.00	4522.3	74.5	-2703.7	2704.7	1.32	271.58	2704.7
7263.0	78.50	271.00	4528.2	75.3	-2734.1	2735.2	5.52	271.58	2735.2
7295.0	78.30	270.60	4534.6	75.8	-2765.5	2766.5	1.37	271.57	2766.5
7358.0	78.50	271.00	4547.3	76.6	-2827.2	2828.2	0.70	271.55	2828.2
7401.0	78.50	271.00	4555.8	77.4	-2869.3	2870.4	0.00	271.54	2870.4

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #10
Wellpath: EL - Job #32D0700267

Date: 11/16/2000 Time: 09:31:20 Page: 1
Co-ordinate(NE) Reference: Site: Lea County, NM, True North
Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level
Section (VS) Reference: Slot (0.0E,0.0N,90.0Azi)
Survey Calculation Method: Minimum Curvature

Survey: 7/27/00-8/5/00
MWD 4147'-7365' (2950' Lateral at a N90.00E)

Start Date: 11/16/2000

Company: SDI w/ Ryan
Tool: MWD

Engineer: Lawrence Coetzee

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
4147.0	1.47	190.23	4145.0	39.7	47.0	47.0	0.00	49.80	61.5
4190.0	6.50	97.30	4187.9	38.9	49.3	49.3	15.67	51.77	62.8
4254.0	14.10	96.60	4250.8	37.5	60.7	60.7	11.88	58.28	71.3
4285.0	17.40	102.20	4280.7	36.1	69.0	69.0	11.71	62.38	77.8
4317.0	19.00	104.30	4311.1	33.8	78.7	78.7	5.40	66.76	85.6
4348.0	22.00	110.60	4340.1	30.5	89.0	89.0	12.00	71.08	94.1
4380.0	25.30	108.50	4369.4	26.2	101.1	101.1	10.64	75.46	104.5
4412.0	28.90	104.30	4397.9	22.1	115.1	115.1	12.73	79.11	117.2
4443.0	32.50	100.80	4424.5	18.7	130.6	130.6	12.96	81.83	131.9
4475.0	36.30	97.60	4450.9	15.9	148.4	148.4	13.15	83.90	149.2
4507.0	39.60	96.20	4476.2	13.5	167.9	167.9	10.66	85.40	168.5
4539.0	43.80	94.80	4500.1	11.5	189.1	189.1	13.44	86.52	189.5
4570.0	48.20	93.80	4521.6	9.8	211.3	211.3	14.38	87.34	211.6
4602.0	52.40	92.70	4542.0	8.4	235.9	235.9	13.39	87.95	236.1
4633.0	56.70	91.70	4560.0	7.5	261.1	261.1	14.12	88.36	261.3
4665.0	61.10	92.00	4576.5	6.6	288.5	288.5	13.77	88.69	288.6
4697.0	65.60	91.70	4590.9	5.7	317.1	317.1	14.09	88.98	317.2
4728.0	70.00	90.90	4602.6	5.0	345.8	345.8	14.39	89.17	345.8
4760.0	74.80	89.60	4612.3	4.9	376.3	376.3	15.49	89.26	376.3
4792.0	76.00	89.20	4620.3	5.2	407.2	407.2	3.94	89.27	407.3
4823.0	80.60	90.30	4626.6	5.3	437.6	437.6	15.24	89.30	437.6
4855.0	85.30	91.30	4630.5	4.9	469.3	469.3	15.01	89.40	469.4
4886.0	86.90	90.90	4632.6	4.3	500.3	500.3	5.32	89.51	500.3
4918.0	87.80	90.90	4634.1	3.8	532.2	532.2	2.81	89.59	532.2
4935.0	88.30	90.90	4634.7	3.5	549.2	549.2	2.94	89.63	549.2
4967.0	89.20	90.90	4635.4	3.0	581.2	581.2	2.81	89.70	581.2
4998.0	93.30	90.30	4634.7	2.7	612.2	612.2	13.37	89.75	612.2
5026.0	96.60	88.10	4632.3	3.1	640.1	640.1	14.15	89.72	640.1
5057.0	98.00	88.10	4628.4	4.1	670.8	670.8	4.52	89.65	670.8
5089.0	97.70	88.10	4624.0	5.2	702.5	702.5	0.94	89.58	702.5
5120.0	97.70	88.50	4619.8	6.1	733.2	733.2	1.28	89.53	733.2
5152.0	95.00	92.00	4616.3	5.9	765.0	765.0	13.76	89.56	765.0
5184.0	95.20	92.40	4613.5	4.7	796.8	796.8	1.39	89.66	796.9
5215.0	95.70	92.00	4610.5	3.5	827.7	827.7	2.06	89.76	827.7
5247.0	96.80	90.90	4607.0	2.7	859.5	859.5	4.85	89.82	859.5
5278.0	97.10	90.90	4603.3	2.2	890.2	890.2	0.97	89.86	890.2
5310.0	96.80	90.60	4599.4	1.8	922.0	922.0	1.32	89.89	922.0
5342.0	96.40	90.90	4595.7	1.4	953.8	953.8	1.56	89.92	953.8
5373.0	96.40	90.90	4592.3	0.9	984.6	984.6	0.00	89.95	984.6
5405.0	98.90	90.60	4588.0	0.5	1016.3	1016.3	7.87	89.97	1016.3
5437.0	99.10	90.60	4583.0	0.2	1047.9	1047.9	0.62	89.99	1047.9
5468.0	96.60	90.30	4578.8	-0.1	1078.6	1078.6	8.12	90.00	1078.6
5500.0	96.90	89.90	4575.0	-0.1	1110.4	1110.4	1.56	90.01	1110.4
5531.0	93.30	89.60	4572.3	0.0	1141.3	1141.3	11.65	90.00	1141.3
5563.0	88.50	88.50	4571.8	0.5	1173.2	1173.2	15.39	89.97	1173.2
5595.0	83.80	88.50	4573.9	1.4	1205.2	1205.2	14.69	89.93	1205.2
5627.0	83.20	89.90	4577.5	1.8	1236.9	1236.9	4.73	89.92	1236.9
5658.0	83.80	89.60	4581.0	2.0	1267.7	1267.7	2.16	89.91	1267.7

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #10
Wellpath: EL - Job #32D0700267

Date: 11/16/2000 Time: 09:31:20 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: Slot (0.0E,0.0N,90.0Azi)
Survey Calculation Method: Minimum Curvature

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
5690.0	81.80	90.30	4585.1	2.0	1299.5	1299.5	6.62	89.91	1299.5
5722.0	82.50	90.30	4589.4	1.8	1331.2	1331.2	2.19	89.92	1331.2
5753.0	82.30	90.60	4593.5	1.6	1361.9	1361.9	1.16	89.93	1361.9
5785.0	82.30	90.90	4597.8	1.2	1393.6	1393.6	0.93	89.95	1393.6
5816.0	82.70	90.90	4601.9	0.7	1424.4	1424.4	1.29	89.97	1424.4
5848.0	82.50	89.60	4606.0	0.5	1456.1	1456.1	4.08	89.98	1456.1
5880.0	82.20	89.20	4610.2	0.9	1487.8	1487.8	1.55	89.97	1487.8
5911.0	82.50	88.50	4614.4	1.5	1518.5	1518.5	2.44	89.94	1518.5
5943.0	82.50	88.80	4618.5	2.2	1550.2	1550.2	0.93	89.92	1550.2
5974.0	82.00	89.60	4622.7	2.7	1580.9	1580.9	3.02	89.90	1581.0
6006.0	81.80	89.60	4627.2	2.9	1612.6	1612.6	0.62	89.90	1612.6
6037.0	81.80	90.60	4631.7	2.8	1643.3	1643.3	3.19	89.90	1643.3
6069.0	82.70	90.60	4636.0	2.5	1675.0	1675.0	2.81	89.91	1675.0
6100.0	83.90	90.60	4639.6	2.2	1705.8	1705.8	3.87	89.93	1705.8
6125.0	86.70	92.40	4641.6	1.5	1730.7	1730.7	13.30	89.95	1730.7
6156.0	90.10	92.40	4642.5	0.2	1761.7	1761.7	10.97	89.99	1761.7
6188.0	92.40	92.00	4641.8	-1.0	1793.6	1793.6	7.30	90.03	1793.6
6219.0	94.70	91.30	4639.9	-1.9	1824.6	1824.6	7.75	90.06	1824.6
6251.0	94.50	90.60	4637.3	-2.4	1856.4	1856.4	2.27	90.07	1856.4
6282.0	95.90	89.60	4634.5	-2.5	1887.3	1887.3	5.54	90.08	1887.3
6314.0	98.00	89.20	4630.6	-2.1	1919.1	1919.1	6.68	90.06	1919.1
6346.0	97.30	88.80	4626.4	-1.6	1950.8	1950.8	2.51	90.05	1950.8
6377.0	97.10	88.50	4622.5	-0.9	1981.5	1981.5	1.16	90.02	1981.5
6409.0	97.50	88.80	4618.4	-0.1	2013.3	2013.3	1.56	90.00	2013.3
6441.0	98.50	88.80	4614.0	0.6	2045.0	2045.0	3.12	89.98	2045.0
6472.0	98.40	89.60	4609.4	1.0	2075.6	2075.6	2.57	89.97	2075.6
6504.0	97.10	90.90	4605.1	0.8	2107.3	2107.3	5.72	89.98	2107.3
6536.0	98.20	90.60	4600.8	0.4	2139.0	2139.0	3.56	89.99	2139.0
6573.0	98.50	90.30	4595.5	0.1	2175.6	2175.6	1.14	90.00	2175.6
6604.0	99.20	90.90	4590.7	-0.2	2206.3	2206.3	2.96	90.00	2206.3
6631.0	97.10	91.50	4586.9	-0.7	2233.0	2233.0	8.08	90.02	2233.0
6668.0	97.10	91.30	4582.3	-1.6	2269.7	2269.7	0.54	90.04	2269.7
6694.0	97.10	91.30	4579.1	-2.2	2295.5	2295.5	0.00	90.06	2295.5
6726.0	94.50	90.60	4575.8	-2.8	2327.3	2327.3	8.41	90.07	2327.3
6757.0	91.80	89.90	4574.1	-2.9	2358.3	2358.3	9.00	90.07	2358.3
6789.0	89.90	89.90	4573.7	-2.8	2390.3	2390.3	5.94	90.07	2390.3
6820.0	87.60	88.80	4574.3	-2.5	2421.2	2421.2	8.22	90.06	2421.2
6852.0	85.20	88.10	4576.4	-1.6	2453.2	2453.2	7.81	90.04	2453.2
6884.0	82.30	88.50	4579.8	-0.7	2485.0	2485.0	9.15	90.02	2485.0
6914.0	80.10	89.60	4584.4	-0.2	2514.6	2514.6	8.18	90.00	2514.6
6947.0	80.60	89.90	4590.0	0.0	2547.1	2547.1	1.76	90.00	2547.1
6979.0	81.30	90.60	4595.0	-0.2	2578.7	2578.7	3.07	90.00	2578.7
7007.0	81.80	89.90	4599.1	-0.3	2606.4	2606.4	3.05	90.01	2606.4
7039.0	82.30	89.60	4603.5	-0.2	2638.1	2638.1	1.82	90.00	2638.1
7071.0	82.70	89.60	4607.7	0.1	2669.8	2669.8	1.25	90.00	2669.8
7102.0	83.20	89.60	4611.5	0.3	2700.6	2700.6	1.61	89.99	2700.6
7134.0	80.60	90.30	4616.0	0.3	2732.3	2732.3	8.41	89.99	2732.3
7165.0	80.80	90.60	4621.0	0.1	2762.9	2762.9	1.15	90.00	2762.9
7197.0	81.50	90.60	4626.0	-0.3	2794.5	2794.5	2.19	90.01	2794.5
7229.0	82.20	90.60	4630.5	-0.6	2826.2	2826.2	2.19	90.01	2826.2
7260.0	81.80	90.60	4634.8	-0.9	2856.9	2856.9	1.29	90.02	2856.9
7291.0	81.50	89.20	4639.3	-0.9	2887.5	2887.5	4.57	90.02	2887.5

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #10
Wellpath: EL - Job #32D0700267

Date: 11/16/2000

Time: 09:31:20

Page: 3

Co-ordinate(NE) Reference:

Site: Lea County, NM, True North

Vertical (TVD) Reference:

SITE 0.0 above Mean Sea Level

Section (VS) Reference:

Slot (0.0E,0.0N,90.0Azi)

Survey Calculation Method:

Minimum Curvature

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
7323.0	82.00	89.20	4643.9	-0.4	2919.2	2919.2	1.56	90.01	2919.2
7365.0	82.00	89.20	4649.7	0.2	2960.8	2960.8	0.00	90.00	2960.8