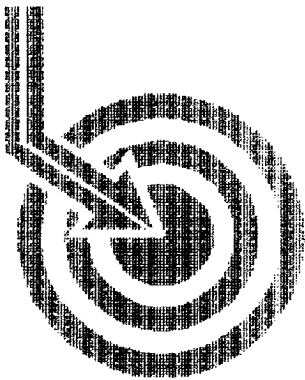




Scientific Drilling



TEXACO E & P INC.

Field: Central Vacuum

Site: Lea County, NM

Well: CVU #11

Wellpath: VH - Job #32K0600235

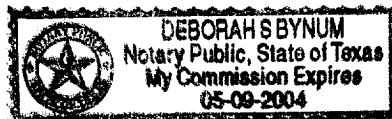
Survey: 6/26/00

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

Deaf Hardy.....Company Representative

Notorized this date 23rd of August, 2000.

Deborah S 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 #11
Wellpath: VH - Job #32K0600235

Date: 8/17/2000 **Time:** 17:05:18 **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: 6/26/00
 KSRG 0'-4130'

Start Date: 6/29/2000

Company: SDI
Tool: KEEPER

Engineer: Kyle Shoup

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	0.45	235.91	100.0	-0.2	-0.3	-0.2	0.45	235.91	0.4
200.0	0.36	182.46	200.0	-0.8	-0.7	-0.8	0.37	221.36	1.0
300.0	0.43	184.61	300.0	-1.4	-0.7	-1.4	0.07	206.14	1.6
400.0	0.60	168.31	400.0	-2.3	-0.6	-2.3	0.22	195.18	2.4
500.0	0.72	165.22	500.0	-3.4	-0.4	-3.4	0.13	186.05	3.5
600.0	0.74	171.52	600.0	-4.7	-0.1	-4.7	0.08	181.34	4.7
700.0	0.93	175.17	700.0	-6.1	0.1	-6.1	0.20	179.50	6.1
800.0	0.67	167.56	800.0	-7.5	0.2	-7.5	0.28	178.11	7.5
900.0	0.23	123.47	900.0	-8.2	0.5	-8.2	0.53	176.22	8.2
1000.0	0.14	185.07	1000.0	-8.4	0.7	-8.4	0.20	175.27	8.5
1100.0	0.39	154.05	1100.0	-8.9	0.8	-8.9	0.28	174.61	8.9
1200.0	0.47	169.99	1199.9	-9.6	1.1	-9.6	0.14	173.70	9.6
1300.0	0.55	176.39	1299.9	-10.5	1.2	-10.5	0.10	173.68	10.5
1400.0	0.36	160.68	1399.9	-11.2	1.3	-11.2	0.21	173.42	11.3
1500.0	0.34	120.08	1499.9	-11.7	1.7	-11.7	0.25	171.91	11.8
1600.0	0.28	117.86	1599.9	-12.0	2.1	-12.0	0.06	169.88	12.2
1700.0	0.24	121.25	1699.9	-12.2	2.5	-12.2	0.04	168.27	12.5
1800.0	0.35	125.27	1799.9	-12.5	3.0	-12.5	0.11	166.66	12.8
1900.0	0.46	122.32	1899.9	-12.9	3.5	-12.9	0.11	164.58	13.4
2000.0	0.28	125.69	1999.9	-13.2	4.1	-13.2	0.18	162.83	13.8
2100.0	0.37	138.24	2099.9	-13.6	4.5	-13.6	0.11	161.71	14.3
2200.0	0.33	119.62	2199.9	-14.0	5.0	-14.0	0.12	160.47	14.9
2300.0	0.40	132.71	2299.9	-14.4	5.5	-14.4	0.11	159.16	15.4
2400.0	0.57	113.32	2399.9	-14.8	6.2	-14.8	0.23	157.33	16.0
2500.0	0.46	117.12	2499.9	-15.2	7.0	-15.2	0.12	155.26	16.7
2600.0	1.31	93.76	2599.9	-15.4	8.5	-15.4	0.91	151.18	17.6
2700.0	1.19	94.38	2699.9	-15.6	10.7	-15.6	0.12	145.62	18.9
2800.0	1.55	89.15	2799.9	-15.7	13.1	-15.7	0.38	140.17	20.4
2900.0	1.58	86.54	2899.8	-15.6	15.8	-15.6	0.08	134.57	22.2
3000.0	1.52	88.03	2999.8	-15.4	18.5	-15.4	0.07	129.84	24.1
3100.0	0.60	99.91	3099.8	-15.5	20.3	-15.5	0.94	127.27	25.6
3200.0	0.56	97.94	3199.8	-15.6	21.3	-15.6	0.04	126.23	26.4
3300.0	0.64	47.29	3299.7	-15.3	22.2	-15.3	0.52	124.57	27.0
3400.0	0.49	27.63	3399.7	-14.6	22.8	-14.6	0.24	122.52	27.1
3500.0	0.59	265.26	3499.7	-14.2	22.5	-14.2	0.95	122.28	26.6
3600.0	1.28	235.55	3599.7	-14.9	21.1	-14.9	0.82	125.24	25.8
3700.0	2.23	229.33	3699.7	-16.8	18.7	-16.8	0.97	131.95	25.1
3800.0	2.35	223.34	3799.6	-19.6	15.8	-19.6	0.27	141.05	25.1
3900.0	2.29	226.48	3899.5	-22.4	13.0	-22.4	0.14	149.99	25.9
4000.0	2.46	191.21	3999.4	-25.9	11.1	-25.9	1.45	156.83	28.2
4100.0	2.35	211.11	4099.4	-29.8	9.6	-29.8	0.84	162.11	31.3
4130.2	2.38	220.03	4129.5	-30.8	8.9	-30.8	1.22	163.90	32.0



Scientific
Drilling

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