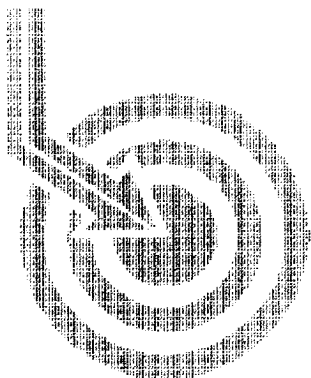




Scientific Drilling



TEXACO E & P INC.

Field: Central Vacuum

Site: Lea County, NM

Well: CVU #266

Wellpath: VH/HH - Job #32D1199307/290

Survey: 11/11/99-11/16/99

API #: 30-025-30022

Gyro Footage: 0'-4385'

MWD Footage: 4240'-5622'

Survey: Sec. 36, T17S, R34E

K.O.P.: 4200'

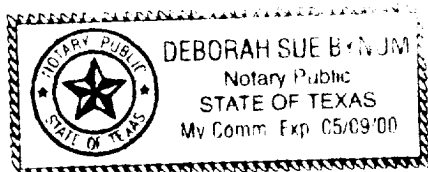
SUR: 1974N & 1310/E
H- 36-17s-34e

BAL: 1973N & 2427/E
G- 36-17s-34e

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

Scott Noddy Company Representative

Notorized this date 25th of March, 2000.



Deborah Sue Benjamin
Midland Co. Tx

WJ

SCIENTIFIC DRILLING

SURVEY REPORT

Company: TEXACO E & P INC.
Field: Central Vacuum
Site: Lea County, NM
Well: CVU #266
Wellpath: VH - Job #32K1099290

Date: 3/24/2000 **Time:** 14:06:15 **Page:** 1
Co-ordinate(N/E) 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: 10/28/99
 KSRG 0'-4385'

Start Date: 11/1/1999

Company: S.D.I.
Tool: KEEPER

Engineer: Gary DeSpain

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	0.07	233.18	100.0	0.0	0.0	0.0	0.07	233.18	0.1
200.0	0.08	242.81	200.0	-0.1	-0.2	-0.1	0.02	236.68	0.2
300.0	0.11	222.20	300.0	-0.2	-0.3	-0.2	0.05	234.00	0.4
400.0	0.14	234.63	400.0	-0.3	-0.5	-0.3	0.04	232.16	0.6
500.0	0.19	238.06	500.0	-0.5	-0.7	-0.5	0.05	233.65	0.9
600.0	0.24	233.27	600.0	-0.7	-1.0	-0.7	0.05	234.18	1.2
700.0	0.28	238.11	700.0	-1.0	-1.4	-1.0	0.05	234.64	1.7
800.0	0.30	232.96	800.0	-1.3	-1.8	-1.3	0.03	234.82	2.2
900.0	0.31	230.00	900.0	-1.6	-2.2	-1.6	0.02	234.17	2.7
1000.0	0.38	225.49	1000.0	-2.0	-2.7	-2.0	0.08	232.96	3.3
1100.0	0.37	229.00	1100.0	-2.4	-3.1	-2.4	0.03	232.02	4.0
1200.0	0.42	226.31	1200.0	-2.9	-3.6	-2.9	0.05	231.36	4.7
1300.0	0.36	235.92	1300.0	-3.3	-4.2	-3.3	0.09	231.28	5.3
1400.0	0.36	231.93	1400.0	-3.7	-4.7	-3.7	0.03	231.56	6.0
1500.0	0.22	235.45	1500.0	-4.0	-5.1	-4.0	0.14	231.69	6.5
1600.0	0.15	226.38	1600.0	-4.2	-5.3	-4.2	0.08	231.70	6.8
1700.0	0.14	238.62	1700.0	-4.4	-5.5	-4.4	0.03	231.72	7.0
1800.0	0.11	187.49	1800.0	-4.5	-5.6	-4.5	0.11	231.31	7.2
1900.0	0.19	164.06	1900.0	-4.8	-5.6	-4.8	0.10	229.60	7.4
2000.0	0.18	136.85	2000.0	-5.1	-5.5	-5.1	0.09	227.23	7.4
2100.0	0.26	104.24	2100.0	-5.2	-5.1	-5.2	0.15	224.51	7.3
2200.0	0.31	97.92	2200.0	-5.3	-4.6	-5.3	0.06	221.15	7.1
2300.0	0.40	89.25	2300.0	-5.3	-4.0	-5.3	0.10	216.99	6.7
2400.0	0.51	80.28	2400.0	-5.3	-3.2	-5.3	0.13	211.60	6.2
2500.0	0.68	76.02	2500.0	-5.0	-2.2	-5.0	0.18	203.79	5.5
2600.0	0.85	72.02	2600.0	-4.7	-0.9	-4.7	0.18	191.43	4.8
2700.0	0.86	71.48	2699.9	-4.2	0.5	-4.2	0.01	173.61	4.2
2800.0	0.88	74.26	2799.9	-3.8	1.9	-3.8	0.05	152.94	4.2
2900.0	0.75	63.09	2899.9	-3.3	3.2	-3.3	0.20	135.12	4.6
3000.0	0.63	51.05	2999.9	-2.6	4.3	-2.6	0.19	121.59	5.0
3100.0	0.60	36.45	3099.9	-1.9	5.0	-1.9	0.16	110.33	5.3
3200.0	0.50	334.86	3199.9	-1.0	5.1	-1.0	0.57	101.42	5.2
3300.0	0.53	338.63	3299.9	-0.2	4.8	-0.2	0.05	92.50	4.8
3400.0	0.62	343.45	3399.9	0.7	4.4	0.7	0.10	80.54	4.5
3500.0	0.67	354.23	3499.9	1.8	4.2	1.8	0.13	66.49	4.6
3600.0	0.70	353.16	3599.9	3.0	4.1	3.0	0.03	53.54	5.1
3700.0	0.71	348.60	3699.9	4.2	3.9	4.2	0.06	42.62	5.8
3800.0	0.60	346.80	3799.9	5.4	3.7	5.4	0.11	34.34	6.5
3900.0	0.47	19.72	3899.9	6.3	3.7	6.3	0.33	30.47	7.3
4000.0	0.50	28.64	3999.9	7.0	4.0	7.0	0.08	29.83	8.1
4100.0	0.50	48.91	4099.9	7.7	4.6	7.7	0.18	30.69	8.9
4200.0	0.49	29.09	4199.9	8.4	5.1	8.4	0.17	31.42	9.8
4300.0	0.60	23.88	4299.9	9.2	5.5	9.2	0.12	30.96	10.7
4385.0	0.68	352.72	4384.8	10.1	5.6	10.1	0.41	29.14	11.6

SCIENTIFIC DRILLING

SURVEY REPORT

Company: TEXACO E & P INC.
 Field: Central Vacuum
 Site: Lea County, NM
 Well: CVU #266
 Wellpath: VH/HH - Job #32D1199307/2

Date: 3/24/2000
 Co-ordinate(NE) Reference:
 Vertical (TVD) Reference:
 Section (VS) Reference:
 Survey Calculation Method:

Time: 14:24:18
 Site: Lea County, NM, True North
 SITE 0.0 above Mean Sea Level
 Slot (0.0E,0.0N,0.0Azi)
 Minimum Curvature

Page: 1

Survey: 11/11/99-11/16/99
 KSRG 0'-4200'/MWD 4240'-5622'

Start Date: 1/19/2000

Company: SDI/Ryan
 Tool: MWD

Engineer: DeSpain/Bergeron

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	0.49	29.09	4199.9	8.4	5.1	8.4	0.00	31.26	9.8
4240.0	0.53	26.75	4239.9	8.7	5.3	8.7	0.11	31.15	10.2
4305.0	15.60	303.30	4304.1	13.8	-1.9	13.8	23.92	351.97	13.9
4336.0	21.50	297.70	4333.5	18.7	-10.5	18.7	19.86	330.82	21.5
4368.0	26.80	291.70	4362.7	24.1	-22.4	24.1	18.23	317.18	32.9
4400.0	29.60	280.50	4390.9	28.3	-36.9	28.2	18.68	307.47	46.4
4432.0	33.40	274.50	4418.2	30.4	-53.4	30.3	15.38	299.63	61.5
4463.0	34.80	272.00	4443.8	31.4	-70.8	31.3	6.39	293.90	77.4
4495.0	37.20	267.80	4469.7	31.3	-89.6	31.3	10.76	289.27	94.9
4527.0	37.50	265.70	4495.2	30.2	-108.9	30.2	4.09	285.50	113.1
4558.0	41.90	266.00	4519.0	28.8	-128.7	28.7	14.21	282.61	131.9
4590.0	47.80	266.70	4541.7	27.4	-151.2	27.3	18.50	280.25	153.7
4622.0	54.70	267.10	4561.7	26.0	-176.1	26.0	21.58	278.40	178.0
4651.0	60.00	267.80	4577.4	24.9	-200.5	24.9	18.39	277.09	202.0
4682.0	61.00	268.10	4592.6	24.0	-227.5	23.9	3.33	276.01	228.7
4714.0	61.50	268.80	4608.0	23.2	-255.5	23.2	2.47	275.19	256.6
4746.0	62.00	268.80	4623.2	22.6	-283.7	22.6	1.56	274.56	284.6
4778.0	65.10	268.10	4637.4	21.8	-312.3	21.8	9.88	274.00	313.1
4809.0	68.90	265.30	4649.5	20.2	-340.8	20.1	14.81	273.39	341.4
4840.0	70.10	265.30	4660.4	17.8	-369.7	17.8	3.87	272.76	370.2
4871.0	70.80	265.70	4670.7	15.5	-398.9	15.5	2.56	272.23	399.2
4903.0	75.40	265.30	4680.0	13.1	-429.4	13.1	14.42	271.75	429.6
4934.0	80.80	265.30	4686.4	10.6	-459.6	10.6	17.42	271.32	459.7
4966.0	79.80	265.70	4691.8	8.2	-491.0	8.1	3.36	270.95	491.1
4998.0	78.50	265.30	4697.9	5.7	-522.4	5.6	4.24	270.62	522.4
5030.0	80.90	265.30	4703.6	3.1	-553.7	3.1	7.50	270.32	553.8
5062.0	86.30	266.00	4707.1	0.7	-585.4	0.7	17.01	270.07	585.4
5093.0	88.50	267.10	4708.5	-1.2	-616.4	-1.2	7.93	269.89	616.4
5125.0	93.10	268.10	4708.1	-2.5	-648.3	-2.6	14.71	269.78	648.3
5157.0	96.90	268.80	4705.3	-3.4	-680.2	-3.4	12.07	269.72	680.2
5189.0	100.10	269.90	4700.6	-3.7	-711.8	-3.8	10.56	269.70	711.8
5220.0	103.20	271.70	4694.3	-3.3	-742.2	-3.4	11.50	269.74	742.2
5252.0	104.40	271.70	4686.7	-2.4	-773.2	-2.4	3.75	269.82	773.2
5283.0	107.20	271.70	4678.2	-1.5	-803.0	-1.5	9.03	269.89	803.0
5315.0	108.40	271.70	4668.5	-0.6	-833.5	-0.6	3.75	269.96	833.5
5347.0	112.60	270.30	4657.3	-0.1	-863.5	-0.1	13.75	270.00	863.5
5378.0	114.10	269.90	4645.0	0.0	-891.9	-0.1	4.98	270.00	891.9
5410.0	114.00	270.30	4631.9	0.0	-921.1	0.0	1.18	270.00	921.1
5442.0	112.00	269.90	4619.4	0.1	-950.6	0.0	6.36	270.00	950.6
5481.0	112.40	269.90	4604.7	0.0	-986.7	0.0	1.03	270.00	986.7
5504.0	112.60	269.90	4595.9	0.0	-1008.0	-0.1	0.87	270.00	1008.0
5536.0	112.50	269.60	4583.6	-0.1	-1037.5	-0.2	0.92	269.99	1037.5
5567.0	113.20	269.20	4571.6	-0.4	-1066.1	-0.5	2.55	269.98	1066.1
5583.0	113.30	268.80	4565.3	-0.7	-1080.8	-0.7	2.38	269.96	1080.8
5622.0	113.30	268.80	4549.8	-1.5	-1116.6	-1.5	0.00	269.93	1116.6