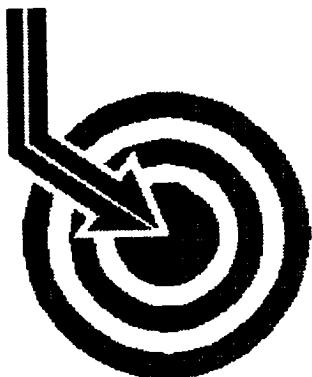




Scientific Drilling



TEXACO E & P INC.

Field: North Justis

Site: Lea County, NM

Well: CC Fristoe B NCT-2 #17

Wellpath: HH - Job #32D0600208

Survey: 6/13/00-6/19/00

SUR: F-35-24s-37e
2310/N & 1650/W

BHL: C-35-24s-37e
917/N & 2261/W

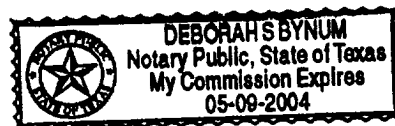
30-025-33383

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

Deborah S. Bynum 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: North Justice Site: Lea County, NM Well: CC Frisbie B NCT-2 #17 Wellpath: VH - Job #32K0500162	Date: 8/20/2000 Time: 14:38:29 Page: 1 Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North Vertical (TVD) Reference: SITE 0.0' above Mean Sea Level Section (VS) Reference: Slot (0.0E, 0.0N, 23.8Az) Survey Calculation Method: Minimum Curvature
---	---

Survey: 5/11/00
KSRG 0'-6250'

Start Date: 5/16/2000

Company: SDI
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	ChA deg	ChD 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	174.21	100.0	-0.2	0.0	-0.2	0.27	174.21	0.2
200.0	0.11	104.16	200.0	-0.5	0.1	-0.4	0.25	164.06	0.5
300.0	0.07	90.29	300.0	-0.5	0.3	-0.4	0.05	150.27	0.6
400.0	0.22	219.96	400.0	-0.7	0.2	-0.5	0.27	160.69	0.7
500.0	0.13	267.38	500.0	-0.8	0.0	-0.7	0.16	180.29	0.8
600.0	0.23	274.22	600.0	-0.8	-0.3	-0.9	0.10	201.50	0.9
700.0	0.31	271.75	700.0	-0.8	-0.8	-1.0	0.08	225.18	1.1
800.0	0.31	281.81	800.0	-0.7	-1.3	-1.2	0.05	241.46	1.5
900.0	0.35	303.20	900.0	-0.5	-1.8	-1.2	0.13	254.91	1.9
1000.0	0.28	322.24	1000.0	-0.1	-2.2	-1.0	0.12	266.52	2.3
1100.0	0.20	340.33	1100.0	0.2	-2.5	-0.8	0.11	275.14	2.5
1200.0	0.15	335.84	1200.0	0.5	-2.6	-0.6	0.05	281.11	2.6
1300.0	0.04	345.55	1300.0	0.7	-2.6	-0.4	0.11	284.03	2.7
1400.0	0.13	69.16	1400.0	0.7	-2.5	-0.3	0.13	286.11	2.6
1500.0	0.37	60.29	1500.0	0.9	-2.1	0.0	0.24	293.46	2.3
1600.0	0.59	49.22	1600.0	1.4	-1.5	0.7	0.24	314.03	2.1
1700.0	1.31	40.36	1700.0	2.6	-0.3	2.3	0.73	352.49	2.7
1800.0	2.06	45.39	1799.9	4.8	1.7	5.0	0.76	19.32	5.1
1900.0	3.08	48.62	1899.8	7.8	5.0	9.1	1.03	32.47	9.3
2000.0	3.50	48.78	1999.7	11.6	9.3	14.3	0.42	38.67	14.9
2100.0	3.77	50.24	2099.5	15.7	14.1	20.0	0.29	41.92	21.1
2200.0	3.71	50.62	2199.2	19.9	19.1	25.9	0.06	43.92	27.6
2300.0	3.66	52.01	2299.0	23.9	24.1	31.5	0.10	45.32	34.0
2400.0	3.11	54.83	2398.9	27.4	28.9	36.7	0.57	46.50	39.8
2500.0	2.81	57.08	2498.7	30.3	33.2	41.0	0.32	47.57	44.9
2600.0	2.47	62.53	2598.6	32.6	37.1	44.8	0.42	48.69	49.4
2700.0	2.31	66.34	2698.5	34.4	40.9	47.9	0.23	49.89	53.5
2800.0	2.28	68.55	2798.5	36.0	44.6	50.8	0.09	51.10	57.3
2900.0	2.05	68.23	2898.4	37.4	48.1	53.5	0.23	52.16	60.9
3000.0	1.86	69.17	2998.3	38.6	51.3	55.9	0.19	53.02	64.2
3100.0	1.85	69.28	3098.3	39.7	54.3	58.1	0.01	53.79	67.3
3200.0	1.79	77.51	3198.2	40.7	57.3	60.2	0.27	54.66	70.3
3300.0	1.77	78.35	3298.2	41.3	60.4	62.0	0.03	55.62	73.1
3400.0	1.65	81.47	3398.1	41.8	63.3	63.7	0.15	56.54	75.9
3500.0	1.54	86.41	3498.1	42.1	66.1	65.0	0.18	57.48	78.4
3600.0	1.39	87.38	3598.1	42.3	68.6	66.2	0.15	58.37	80.6
3700.0	1.25	82.30	3698.0	42.5	70.9	67.3	0.18	59.08	82.7
3800.0	1.31	79.40	3798.0	42.8	73.1	68.5	0.09	59.64	84.7
3900.0	1.30	75.57	3898.0	43.3	75.3	69.8	0.09	60.10	86.9
4000.0	1.54	64.34	3998.0	44.2	77.7	71.5	0.37	60.36	89.3
4100.0	2.17	63.09	4097.9	45.6	80.6	74.0	0.63	60.47	92.6
4200.0	2.25	62.57	4197.8	47.4	84.0	77.0	0.08	60.57	96.4
4300.0	2.35	65.08	4297.7	49.2	87.6	80.1	0.14	60.70	100.4
4400.0	2.24	62.51	4397.7	50.9	91.2	83.1	0.15	60.82	104.4
4500.0	1.88	61.50	4497.6	52.6	94.4	85.9	0.36	60.86	108.0
4600.0	1.67	65.19	4597.6	54.0	97.1	88.3	0.24	60.93	111.1
4700.0	1.58	70.39	4697.5	55.1	99.7	90.4	0.17	61.09	113.9

SCIENTIFIC DRILLING

SURVEY REPORT

Company: TEXACO E & P INC.
 Field: North Justice
 Site: Lea County, NM
 Well: CC Frisloe B NCT-2 #17
 Wellpath: VH - Job #32K0500162

Date: 8/20/2000
 Co-ordinate (NE) Reference:
 Vertical (TVD) Reference:
 Section (VS) Reference:
 Survey Calculation Method:

Time: 14:38:28
 Site: Lea County, NM Grid North
 SITE 0.0 above Mean Sea Level
 Slot (0.0E, 0.0N, 23.6Az)
 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
4800.0	1.64	71.04	4797.5	56.0	102.4	92.3	0.06	61.32	116.7
4900.0	1.63	82.10	4897.4	56.7	105.2	94.0	0.32	61.68	119.4
5000.0	1.64	83.58	4997.4	57.0	108.0	95.4	0.04	62.17	122.1
5100.0	1.68	96.90	5097.3	57.0	110.9	96.6	0.39	62.79	124.7
5200.0	1.83	96.47	5197.3	56.6	113.9	97.5	0.15	63.56	127.2
5300.0	1.63	99.17	5297.3	56.2	116.9	98.3	0.22	64.31	129.7
5400.0	1.56	101.28	5397.2	55.7	119.6	98.9	0.09	65.02	132.0
5500.0	1.51	104.78	5497.2	55.1	122.2	99.4	0.11	65.72	134.1
5600.0	1.39	107.15	5597.1	54.4	124.7	99.8	0.13	66.41	136.0
5700.0	1.36	106.74	5697.1	53.7	127.0	100.0	0.03	67.06	137.9
5800.0	1.21	110.73	5797.1	53.0	129.1	100.2	0.17	67.67	139.6
5900.0	1.18	117.81	5897.1	52.2	131.0	100.2	0.15	68.28	141.0
6000.0	0.98	117.35	5997.1	51.3	132.7	100.1	0.20	68.86	142.2
6100.0	0.91	117.61	6097.0	50.5	134.1	100.0	0.07	69.35	143.3
6200.0	0.84	123.36	6197.0	49.8	135.4	99.8	0.11	69.82	144.3
6250.0	1.13	127.23	6247.0	49.3	136.1	99.6	0.59	70.10	144.8

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC	Date: 8/20/2000	Time: 14:47:14	Page: 1
Field: North Justice	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0 above Mean Sea Level	
Well: CC Friscos B NCT-2 #17	Section (VS) Reference:	Slot (0.0E, 0.0N, 23.6Azi)	
Wellpath: HH - Job #32D0600208	Survey Calculation Method:	Minimum Curvature	

Survey: 6/13/00-6/19/00
MWD 5852-7448'

Start Date: 8/20/2000

Company: SDI w/Ryan
Tool: MWD

Engineer: Robert Guidry

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS d/100ft	ClsA deg	ClsD ft
5800.0	1.21	110.73	5797.1	53.0	129.1	100.2	0.00	67.67	139.6
5852.0	1.19	114.37	5849.1	52.6	130.1	100.2	0.15	67.98	140.3
5839.0	22.70	32.20	5833.8	66.6	140.0	117.0	25.94	64.55	155.0
5870.0	31.30	32.20	5861.4	78.5	147.5	131.0	27.74	61.97	167.1
6002.0	40.10	28.30	5887.4	94.7	156.8	149.5	28.39	58.88	183.2
6021.0	45.20	26.20	6001.3	106.1	162.7	162.3	27.86	56.89	194.2
6032.0	48.20	25.80	6008.9	113.3	166.2	170.3	27.40	55.72	201.2
6064.0	56.10	23.70	6028.5	136.2	176.8	195.6	25.22	52.37	223.2
6095.0	60.70	23.00	6044.7	160.5	187.2	222.0	14.96	49.40	246.6
6127.0	61.20	23.40	6060.3	186.2	198.2	249.9	1.91	46.79	272.0
6158.0	64.90	23.00	6074.3	211.6	209.1	277.6	11.99	44.66	297.5
6189.0	69.50	23.00	6086.3	237.9	220.3	306.1	14.84	42.80	324.2
6220.0	71.10	21.60	6096.8	264.9	231.4	335.3	6.69	41.13	351.7
6252.0	71.30	21.60	6107.1	293.1	242.5	365.6	0.62	39.61	380.4
6284.0	71.30	21.60	6117.4	321.2	253.7	395.9	0.00	38.30	409.3
6315.0	70.70	18.10	6127.4	348.8	263.6	425.1	10.85	37.08	437.2
6347.0	70.70	17.80	6138.0	377.5	272.9	455.2	0.88	35.86	465.9
6378.0	70.70	17.80	6148.3	405.4	281.9	484.3	0.00	34.81	493.7
6410.0	70.90	17.40	6158.8	434.2	291.0	514.3	1.34	33.83	522.7
6440.0	71.10	17.00	6168.6	461.3	299.4	542.5	1.43	32.98	549.9
6472.0	70.90	17.40	6179.0	490.2	308.3	572.6	1.34	32.17	579.1
6503.0	73.70	17.80	6188.4	518.3	317.3	602.0	9.12	31.47	607.7
6534.0	73.90	17.80	6197.1	546.7	326.4	631.6	0.65	30.84	636.7
6566.0	77.60	18.50	6204.9	576.2	336.0	662.5	11.76	30.25	667.0
6597.0	81.30	18.80	6210.6	605.0	345.8	692.8	11.97	29.75	696.9
6629.0	82.50	19.50	6215.1	634.9	356.2	724.4	4.33	29.29	728.0
6660.0	86.90	19.50	6218.0	664.0	368.5	755.2	14.19	28.89	758.5
6692.0	87.80	19.50	6219.5	694.2	377.1	787.1	2.81	28.52	790.0
6723.0	91.70	19.90	6219.6	723.3	387.6	818.0	12.65	28.18	820.6
6756.0	95.70	19.50	6217.5	754.3	398.7	850.8	12.18	27.86	853.2
6787.0	96.80	19.90	6214.1	783.4	409.1	881.6	3.77	27.57	883.7
6819.0	97.30	18.10	6210.2	813.4	419.4	913.2	5.80	27.28	915.2
6850.0	99.40	17.00	6205.7	842.6	428.7	943.7	7.63	26.96	945.4
6882.0	101.20	17.40	6199.9	872.7	438.0	975.0	5.76	26.65	976.4
6914.0	101.30	17.40	6193.7	902.7	447.4	1006.2	0.31	26.36	1007.4
6945.0	105.20	18.80	6186.6	931.3	456.7	1036.3	13.33	26.12	1037.3
6977.0	106.10	19.10	6178.0	960.5	466.7	1067.0	2.95	25.92	1067.9
7009.0	106.30	18.80	6169.0	989.5	476.7	1097.6	1.10	25.72	1098.4
7040.0	104.90	18.10	6160.7	1017.9	486.2	1127.3	5.01	25.53	1128.0
7071.0	105.20	18.10	6152.6	1046.3	495.5	1157.1	0.97	25.34	1157.7
7102.0	105.00	18.80	6144.6	1074.7	504.9	1187.0	2.27	25.17	1187.4
7134.0	105.20	19.10	6136.2	1103.9	515.0	1217.7	1.10	25.01	1218.1
7166.0	105.00	18.80	6127.9	1133.1	525.0	1248.5	1.10	24.86	1248.9
7198.0	104.80	17.80	6119.6	1162.5	534.7	1279.3	3.04	24.70	1279.6
7229.0	104.00	17.80	6111.9	1191.1	543.9	1309.2	2.90	24.54	1309.4
7261.0	103.80	17.40	6104.2	1220.7	553.3	1340.1	1.36	24.38	1340.2
7298.0	105.00	18.10	6095.0	1254.8	564.2	1375.7	3.73	24.21	1375.8
7324.0	105.20	18.80	6088.2	1278.6	572.1	1400.7	2.71	24.11	1400.8

SCIENTIFIC DRILLING SURVEY REPORT

Company: TEXACO E & P INC. Field: North Justis Site: Lea County, NM Well: CC Frisoe B NCT-2 #17 Wellpath: HH-1 - Job #32D0600208	Date: 8/20/2000 Time: 14:47:14 Page: 1 of 2 Co-ordinate(N/E) Reference: Site: Lea County, NM, Grid North Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level Section (VS) Reference: Slot (0.0E,0.0N,23.6Azi) 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	CisA deg	CisD ft
7361.0	106.40	18.50	6078.2	1312.4	583.5	1436.2	3.34	23.97	1436.2
7388.0	106.60	18.80	6070.5	1336.9	591.8	1462.0	1.30	23.88	1462.0
7448.5	106.60	18.80	6053.2	1391.8	610.5	1519.8	0.00	23.68	1519.8



TEXACO E & P INC.

Field: North Justis

Site: Lea County, NM

Well: CC Fristoe B NCT-2 #17

Wellpath: HH - Job #32D0600208

Survey: 6/13/00-6/19/00

