

PHOENIX DRILLING SERVICES HORIZONTAL SURVEY PROGRAM										
OPERATOR: TEXACO E & P INC.				START: 03/05/97						
WELL: J.R. PHILLIPS #9				FINISH: 03/11/97						
LOCATION: LEA COUNTY, NEW MEXICO				INFORMATION PROVIDED BY: TEXACO						
JOB NO: 173026				HORIZONTAL COORDINATOR: MADDUX						
DIP1 =		0.00	deg			DATE: 03/11/97		MAG DEC		
TARGET1 =		5,696	ft			TIME: 18:19:16		9.02 EAS		
VS1 =		0	ft			TERM I1 = 90.00 deg				
DIP2 =		0.00	deg	SIDETRACK #1		TERM I2 = 90.00 deg				
TARGET2 =		5,696	ft			MINIMUM CURVATURE CALCULATIONS(SP				
VS2 =		100	ft			DIRECTION 193.80 (GRID)				
				TRUE		CENTER				
SVY #	MEASURED DEPTH	INC	AZIMUTH	VERTICAL DEPTH	VERTICAL SECTION	DLS/ 100	ABOVE(+) BELOW(-)	RIIGHT(+) LEFT(-)	NORTH(+) SOUTH(-)	EAST(+) WEST(-)
TIE	5589	1.2	152.4	5587.8	57.0	0	108	-48	-67	33
1	5629	5.4	197.2	5627.7	59.2	11.6	68	-48	-69	32
2	5631	6.5	197.5	5629.7	59.4	55.0	66	-48	-69	32
3	5633	7.8	197.5	5631.7	59.6	65.0	64	-48	-69	32
4	5635	9.0	197.5	5633.6	59.9	60.0	62	-48	-70	32
5	5640	12.2	201.3	5638.5	60.8	65.5	57	-48	-70	32
6	5645	15.5	204.1	5643.4	62.0	67.3	53	-47	-72	31
7	5650	18.6	205.7	5648.2	63.5	62.7	48	-47	-73	31
8	5655	22.0	206.3	5652.9	65.2	68.1	43	-47	-74	30
9	5660	25.3	206.8	5657.4	67.1	66.1	39	-46	-76	29
10	5665	28.8	206.8	5661.9	69.3	70.0	34	-46	-78	28
11	5670	32.2	206.4	5666.2	71.8	68.1	30	-45	-81	27
12	5675	35.5	205.6	5670.4	74.5	66.6	26	-45	-83	26
13	5680	39.0	204.1	5674.3	77.5	72.3	22	-44	-86	24
14	5685	42.3	202.8	5678.1	80.7	68.1	18	-44	-89	23
15	5690	45.9	201.6	5681.7	84.1	73.9	14	-43	-92	22
16	5695	49.2	200.7	5685.1	87.8	67.3	11	-43	-95	20
17	5700	52.6	199.9	5688.2	91.7	69.1	8	-42	-99	19
18	5705	56.1	199.1	5691.2	95.7	71.2	5	-42	-103	18
19	5710	59.8	198.8	5693.8	99.9	74.2	2	-41	-107	16
20	5715	63.3	198.6	5696.2	104.3	70.1	-0	-41	-111	15
21	5720	67.2	198.7	5698.3	108.8	78.0	-2	-41	-115	13
22	5725	70.8	199.0	5700.1	113.5	72.2	-4	-40	-120	12
23	5730	74.5	199.3	5701.6	118.2	74.2	-6	-40	-124	10
24	5761	91.0	199.6	5705.5	148.7	53.2	-9	-37	-153	0
25	5793	92.9	198.3	5704.4	180.6	7.2	-8	-34	-183	-10
26	5823	92.7	199.1	5702.9	210.4	2.7	-7	-31	-212	-20
27	5855	91.3	198.6	5701.8	242.3	4.6	-6	-28	-242	-30
28	5887	89.9	193.8	5701.5	274.2	15.6	-5	-27	-273	-39
29	5918	90.5	192.9	5701.4	305.2	3.5	-5	-27	-303	-46
30	5950	90.8	193.9	5701.0	337.2	3.3	-5	-28	-334	-54
31	5981	89.4	193.6	5700.9	368.2	4.6	-5	-28	-364	-61
32	6013	90.5	194.2	5701.0	400.2	3.9	-5	-28	-395	-69
33	6045	92.0	193.8	5700.3	432.2	4.9	-4	-27	-426	-76
34	6076	91.9	193.2	5699.2	463.2	2.0	-3	-28	-456	-84
35	6108	92.6	192.9	5698.0	495.2	2.4	-2	-28	-488	-91
36	6140	90.9	194.0	5697.0	527.2	6	-1	-28	-519	-98
37	6171	90.3	194.7	5696.7	558.2	3	-1	-28	-549	-106
38	6203	89.6	195.0	5696.7	590.1	2	-1	-27	-580	-114