

PHOENIX DRILLING SERVICES
HORIZONTAL SURVEY PROGRAM
MINIMUM CURVATURE CALCULATIONS(SPE-3362)

OPERATOR: TEXACO E & P, INC. WELL: NORTH VACUUM ABO UNIT # 31 LOCATION: LEA COUNTY, NEW MEXICO JOB NO: 173166				START: <u>8/20/97</u> FILE: CURVE1.V FINISH: <u>8/20/97</u> INFORMATION PROVIDED BY: TEXACO E HORIZONTAL COORDINATOR: RUBESH, I	
DIP1 =	7.35	deg	=	97.35	deg
TARGET1 =	8,768	ft TVD			
VS1 =	1,317	ft			
DIP2 =	-9.85	deg	=	80.15	deg
TARGET2 =	8,771	ft TVD			
VS2 =	1,431	ft			
				DATE:	8/29/97 MAG DECLINATION
					9.11 EAST
				TIME:	4:15 PM
				DIRECTION	224.80

SVY #	MEASURED DEPTH	INCL (DRIFT)	TRUE		DLS/ 100	CENTER			
			AZIMUTH (DIR)	VERTICAL DEPTH		ABOVE(+) BELOW(-)	RIGHT(+) LEFT(-)	NORTH(+) SOUTH(-)	EAST(+) WEST(-)
41	9781	96.3	226.1	8804.2	1.1	2.0	5.2	-722.0	-724.4
42	9813	95.7	226.0	8800.9	1.9	1.2	5.9	-744.1	-747.3
43	9845	95.4	225.0	8797.8	3.2	0.2	6.3	-766.4	-770.0
44	9876	97.4	225.9	8794.3	7.1	-0.3	6.7	-788.0	-792.0
45	9907	97.1	225.1	8790.4	2.7	-0.4	7.1	-809.6	-813.9
46	9939	97.2	226.3	8786.4	3.7	-0.5	7.6	-831.8	-836.6
47	9970	96.9	225.9	8782.6	1.6	-0.7	8.2	-853.1	-858.8
BIT	10010	96.9	225.0	8777.8	2.2	-1.0	8.7	-881.0	-887.1

