



Job Number:
Company: TEXACOE & PQ
Lease/Well: J.R. PHILLIPS #13
Location: LEA COUNTY, NM
Rig Name:
RKB: 3579.8
G.L. or M.S.L.: 3567

State/Country: NEW MEXICO
Declination:
Grid:
File name: C:\WINSERVE\JRPILL13.SVY
Date/Time: 17-Oct-97 / 08:22
Curve Name: JRPILL13(REV.0)

PHOENIX DRILLING SERVICES, INC.

WINSERVE SURVEY CALCULATIONS Minimum Curvature Method Vertical Section Plane 336.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
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KOP-BEGIN 45°/100' BR-NOTE: ACTUAL AZIMUTH TO BE DETERMINED

5568.47	.00	312.71	5568.47	-1988.67	.00	.00	.00	.00	.00	.00
578.47	4.50	312.71	5578.46	-1998.66	.27	-.29	.36	.39	312.71	45.00
5588.47	9.00	312.71	5588.39	-2008.59	1.06	-1.15	1.44	1.57	312.71	45.00
5598.47	13.50	312.71	5598.19	-2018.39	2.39	-2.59	3.23	3.52	312.71	45.00
5608.47	18.00	312.71	5607.82	-2028.02	4.23	-4.58	5.72	6.23	312.71	45.00
5618.47	22.50	312.71	5617.19	-2037.39	6.57	-7.12	8.90	9.69	312.71	45.00
5628.47	27.00	312.71	5626.27	-2046.47	9.41	-10.20	12.75	13.88	312.71	45.00
5638.47	31.50	312.71	5635.00	-2055.20	12.73	-13.79	17.23	18.76	312.71	45.00
5648.47	36.00	312.71	5643.31	-2063.51	16.49	-17.87	22.34	24.32	312.71	45.00
5658.47	40.50	312.71	5651.16	-2071.36	20.69	-22.42	28.02	30.51	312.71	45.00
5668.47	45.00	312.71	5658.50	-2078.70	25.29	-27.40	34.25	37.29	312.71	45.00