

ALL DIRECTIONAL DRILLING CALCULATIONS PERFORMED BY AN IBM ELECTRONIC COMPUTER

COMPANY- CITIES SERVICE OIL COMPANY WELL- CSOC TRACY B WELL NO. 1

FIELD- CARLSBAD EDDY COUNTY STATE OF NEW MEXICO

MEAS DEPTH	COURSE LENGTH	DRIFT ANGLE	VERTICAL-DEPTH COURSE	TOTAL	DEVIATION	DIRECTION	TOTAL COORDINATES		
							NORTH	SOUTH	EAST WEST
SPERRY-SUN GYRO & MULTIPLE SHOT SURVEYS TO 7432FT. MEASURED DEPTH									
7432		.00		7430.26		N E	35.27		42.83
7432		1.15	.00	7430.26	.00	S 83W	35.27		42.83
7520	88	2.00	87.95	7518.21	3.07	N 5 W	37.24		40.48
7575	55	4.00	54.87	7573.08	3.84	N 28W	40.63		38.68
7610	35	4.45	34.88	7607.96	2.90	N 28W	43.19		37.32
7675	65	5.15	64.73	7672.69	5.95	N 29W	48.39		34.44
7735	60	5.30	59.72	7732.41	5.75	N 33W	53.21		31.31
7800	65	5.45	64.67	7797.08	6.51	N 37W	58.41		27.39
7930	130	9.45	128.12	7925.20	22.02	N 19W	79.23		20.22
7960	30	10.15	29.52	7954.72	5.34	N 18W	84.31		18.57
8020	60	10.30	59.00	8013.72	10.93	N 18W	94.71		15.19
8145	125	11.45	122.38	8136.10	25.46	N 19W	118.78		6.90
8300	155	13.00	151.03	8287.13	34.87	N 24W	150.64		7.2
8455	155	14.15	150.23	8437.36	38.15	N 26W	184.93		24.0
8610	155	13.30	150.72	8588.08	36.18	N 36W	214.20		45.2