



30-015 40652 2nd Lateral **SURVEY CALCULATION PROGRAM**

TARGET DETAIL

v1.00.02

OPERATOR:	COG	Supervisors:		TARGET N-S	Directional
WELL:	Reposado 2 State Com	Joe Beal		TARGET E-W	
LOCATION:	Eddy Co., NM	Derek Sawyer		TARGET RADIUS	
JOB NUMBER:	WT-12792	David Martinez		TARGET DISPLACEMENT	
COMMENTS:		Andy Richards		TARGET CLOSURE	
		MAG DEC. (-/+)	7.59	TARGET TVD	Horizontal
		GRID CORR. (-/+)	-0.20	DIP AZ	
		TOTAL CORR. (-/+)	7.39	DIP DEG UP+/DN-	
DATE: 11/26/12		TIME: 10:24 AM		TARGET INCLINATION	

MINIMUM CURVATURE CALCULATIONS(SPE-3362)									PROPOSED DIRECTION		TARGET TRACKING				
									357.30		TO CENTER		CLOSURE		BUILD
SVY	MD	INC	TRUE	TVD	SECT	N-S	E-W	DLS/			ABOVE(+)	RIGHT(+)	DIR	DISTANCE	RATE/
NUM			AZM					100			BELOW(-)	LEFT(-)	(DEG AZ)	(FEET)	%/100'
TIE-IN	7100	3.31	134.00	7097.10	-105.80	-103.70	46.60			587.01	0.00		155.80	113.69	
1	7233	4.30	348.40	7229.98	-103.65	-101.48	48.36	5.47		454.12			154.52	112.41	0.74
2	7264	9.00	344.00	7260.76	-100.14	-98.01	47.46	15.24		423.31	42.79		154.16	108.89	15.16
3	7296	13.00	344.90	7292.17	-94.18	-92.13	45.83	12.51		391.86	41.44		153.55	102.90	12.50
4	7327	16.90	346.10	7322.11	-86.35	-84.38	43.84	12.62		361.86	39.82		152.55	95.09	12.58
5	7359	18.90	346.30	7352.56	-76.70	-74.83	41.49	6.25		331.35	37.92		150.99	85.57	6.25
6	7391	21.20	347.50	7382.62	-65.91	-64.15	39.01	7.30		301.21	35.95		148.69	75.08	7.19
7	7422	24.80	348.20	7411.15	-53.96	-52.31	36.47	11.65		272.60	33.97		145.11	63.76	11.61
8	7454	28.70	348.20	7439.72	-39.75	-38.21	33.53	12.19		243.93	31.69		138.74	50.83	12.19
9	7486	32.40	348.00	7467.28	-23.69	-22.30	30.17	11.57		216.26	29.09		126.46	37.52	11.56
10	7517	35.40	348.60	7493.00	-6.62	-5.37	26.67	9.74		190.41	26.39		101.38	27.20	9.68
11	7546	37.90	349.60	7516.27	10.52	11.63	23.40	8.86		167.03	23.92		63.57	26.13	8.62
12	7577	40.40	353.50	7540.31	29.98	30.98	20.54	11.32		142.85	21.98		33.55	37.17	8.06
13	7609	44.80	356.00	7563.86	51.61	52.55	18.58	14.73		119.15	21.04		19.48	55.73	13.75
14	7640	49.90	356.30	7584.86	74.40	75.29	17.05	16.47		97.99	20.58		12.76	77.19	16.45
15	7672	53.10	356.30	7604.78	99.44	100.27	15.44	10.00		77.90	20.14		8.75	101.46	10.00
16	7703	57.30	356.80	7622.46	124.88	125.68	13.91	13.61		60.04	19.81		6.32	126.45	13.55
17	7735	60.60	357.20	7638.97	152.29	153.05	12.48	10.37		43.34	19.67		4.66	153.56	10.31
18	7766	64.80	357.50	7653.18	179.84	180.56	11.20	13.58		28.93	19.70		3.55	180.91	13.55
19	7798	69.80	358.10	7665.53	209.35	210.05	10.07	15.72		16.38	19.96		2.75	210.30	15.62
20	7830	75.40	357.70	7675.09	239.87	240.56	8.95	17.54		6.60	20.28		2.13	240.72	17.50
21	7861	82.40	356.50	7681.06	270.27	270.92	7.41	22.90		0.43	20.17		1.57	271.02	22.58
22	7956	93.60	357.50	7684.37	365.06	365.58	2.45	11.84		-3.54	19.67		0.38	365.59	11.79
23	8019	93.50	357.00	7680.47	427.94	428.38	-0.56	0.81		-0.08	19.62		359.92	428.39	-0.16

24	8051	91.60	357.40	7679.04	459.90	460.31	-2.12	6.07	1.12	19.56	359.74	460.32	-5.94
25	8114	90.00	357.00	7678.16	522.89	523.23	-5.20	2.62	1.56	19.45	359.43	523.26	-2.54
26	8178	89.80	357.20	7678.28	586.89	587.15	-8.44	0.44	1.00	19.23	359.18	587.21	-0.31
27	8239	89.50	357.40	7678.65	647.89	648.08	-11.31	0.59	0.20	19.23	359.00	648.18	-0.49
28	8302	89.90	357.20	7678.98	710.89	711.01	-14.28	0.71	-0.57	19.23	358.85	711.15	0.63
29	8365	89.60	356.70	7679.25	773.89	773.92	-17.63	0.93	-1.28	18.84	358.69	774.12	-0.48
30	8460	89.40	357.50	7680.08	868.88	868.79	-22.44	0.87	-2.78	18.51	358.52	869.08	-0.21
31	8555	90.50	357.90	7680.16	963.88	963.71	-26.25	1.23	-3.52	19.18	358.44	964.07	1.16
32	8650	90.20	357.00	7679.58	1058.88	1058.62	-30.48	1.00	-3.60	19.42	358.35	1059.06	-0.32
33	8745	90.30	355.60	7679.17	1153.86	1153.42	-36.61	1.48	-3.85	17.77	358.18	1154.00	0.11
34	8840	90.80	355.60	7678.26	1248.81	1248.13	-43.90	0.53	-3.60	14.95	357.99	1248.90	0.53
35	8934	90.70	356.30	7677.03	1342.78	1341.89	-50.53	0.75	-3.03	12.73	357.84	1342.84	-0.11
36	9028	90.50	356.30	7676.04	1436.76	1435.69	-56.60	0.21	-2.70	11.09	357.74	1436.80	-0.21
37	9122	90.40	356.70	7675.30	1530.75	1529.51	-62.34	0.44	-2.62	9.78	357.67	1530.78	-0.11
38	9216	90.80	356.70	7674.32	1624.74	1623.35	-67.75	0.43	-2.29	8.80	357.61	1624.76	0.43
39	9310	91.40	356.50	7672.52	1718.71	1717.16	-73.32	0.67	-1.14	7.65	357.55	1718.73	0.64
40	9373	91.70	357.20	7670.81	1781.69	1780.04	-76.78	1.21	0.12	7.15	357.53	1781.70	0.48
41	9467	91.30	357.90	7668.35	1875.65	1873.93	-80.80	0.86	1.93	7.56	357.53	1875.67	-0.43
42	9562	90.60	356.70	7666.78	1970.64	1968.80	-85.27	1.46	2.84	7.56	357.52	1970.65	-0.74
43	9656	89.80	357.40	7666.45	2064.63	2062.68	-90.11	1.13	2.51	7.15	357.50	2064.65	-0.85
44	9750	91.00	356.50	7665.79	2158.63	2156.54	-95.11	1.60	2.51	6.58	357.47	2158.64	1.28
45	9845	91.40	355.30	7663.80	2253.58	2251.27	-101.90	1.33	3.84	4.26	357.41	2253.58	0.42
46	9939	89.90	354.90	7662.74	2347.50	2344.92	-109.93	1.65	4.25	0.65	357.32	2347.50	-1.60
47	10034	90.20	355.60	7662.65	2442.44	2439.59	-117.80	0.80	3.67	-2.75	357.24	2442.44	0.32
48	10128	91.70	355.30	7661.09	2536.37	2533.28	-125.25	1.63	4.57	-5.78	357.17	2536.38	1.60
49	10222	90.10	355.30	7659.62	2630.30	2626.95	-132.96	1.70	5.39	-9.06	357.10	2630.31	-1.70
50	10316	91.40	356.50	7658.39	2724.26	2720.70	-139.68	1.88	5.96	-11.36	357.06	2724.28	1.38
51	10411	92.80	359.00	7654.91	2819.18	2815.55	-143.40	3.01	8.78	-10.61	357.08	2819.20	1.47
52	10474	91.60	359.50	7652.49	2882.10	2878.50	-144.23	2.06	10.76	-8.47	357.13	2882.11	-1.90
53	10537	90.60	359.70	7651.28	2945.04	2941.49	-144.67	1.62	11.53	-5.94	357.18	2945.04	-1.59
54	10600	89.10	359.50	7651.44	3007.98	3004.48	-145.11	2.40	10.93	-3.42	357.23	3007.98	-2.38
55	10663	89.00	359.80	7652.49	3070.92	3067.47	-145.49	0.50	9.44	-0.83	357.28	3070.92	-0.16
56	10726	88.50	358.40	7653.86	3133.87	3130.45	-146.48	2.36	7.63	1.15	357.32	3133.87	-0.79
57	10820	89.20	359.10	7655.75	3227.82	3224.41	-148.53	1.05	5.09	3.52	357.36	3227.82	0.74
58	10914	87.90	358.80	7658.13	3321.75	3318.36	-150.25	1.42	2.05	6.23	357.41	3321.76	-1.38
59	10977	88.60	358.40	7660.05	3384.71	3381.31	-151.79	1.28	-0.31	7.66	357.43	3384.71	1.11
60	11039	89.50	358.60	7661.08	3446.68	3443.28	-153.41	1.49	-1.77	8.96	357.45	3446.69	1.45
61	11101	89.60	357.40	7661.57	3508.68	3505.24	-155.58	1.94	-2.69	9.71	357.46	3508.69	0.16
62	11196	90.50	357.20	7661.48	3603.67	3600.13	-160.05	0.97	-3.27	9.71	357.45	3603.69	0.95
63	11290	88.30	356.70	7662.47	3697.66	3693.99	-165.05	2.40	-4.91	9.14	357.44	3697.67	-2.34

64	11353	88.30	356.10	7664.34	3760.63	3756.83	-169.01	0.95	-7.22	8.15	357.42	3760.63	0.00
65	11415	89.10	356.00	7665.74	3822.59	3818.67	-173.28	1.30	-9.06	6.80	357.40	3822.60	1.29
66	11478	90.60	357.00	7665.91	3885.59	3881.55	-177.12	2.86	-9.66	5.92	357.39	3885.59	2.38
67	11540	91.20	357.00	7664.93	3947.58	3943.46	-180.37	0.97	-9.12	5.59	357.38	3947.58	0.97
68	11634	91.40	357.40	7662.80	4041.55	4037.32	-184.96	0.48	-7.64	5.43	357.38	4041.56	0.21
69	11729	91.20	357.00	7660.65	4136.53	4132.18	-189.60	0.47	-6.15	5.26	357.37	4136.53	-0.21
70	11823	92.50	357.20	7657.61	4230.48	4226.01	-194.35	1.40	-3.77	4.94	357.37	4230.48	1.38
71	11886	92.20	357.50	7655.03	4293.42	4288.89	-197.26	0.67	-1.63	4.99	357.37	4293.42	-0.48
72	11948	92.50	357.70	7652.49	4355.37	4350.78	-199.86	0.58	0.48	5.32	357.37	4355.37	0.48
73	12011	90.60	358.80	7650.78	4418.33	4413.73	-201.78	3.48	1.74	6.36	357.38	4418.34	-3.02
74	12105	90.30	0.00	7650.04	4512.27	4507.72	-202.76	1.32	1.83	9.80	357.42	4512.28	-0.32
75	12227	92.40	0.00	7647.17	4634.09	4629.68	-202.76	1.72	3.85	15.55	357.49	4634.12	1.72
Proj TD	12279	92.40	0.00	7644.99	4685.99	4681.63	-202.76	0.00	5.67	18.00	357.52	4686.02	0.00