

PDC**SURVEY CALCULATION PROGRAM**

MINIMUM CURVATURE CALCULATIONS(SPE-3362)

TARGET DETAILS

OPERATOR: BTA Oil Producers

Supervisors:

WELL: 8808 JV-P Pardue B #4

Alan Donaldson

LOCATION: Eddy Cnty, NM

Garrett Appel

JOB NUMBER: CO-06150

COMMENTS

Tie in at Surface

DATE: 05/08/06

TIME: 9:40 AM

TRUE TO GRID

TARGET DIP

ANGLE

LINE

DIRECTION

86.18

MAG DEC.(+/-)

GRID CORR.(+/-)

TOTAL CORR.(+/-)

8.29
0.00
8.28GAMMA SUR
TEMP #

MD INC

TRUE
AZM

TYD

SECT

N-S

E-W

DLS/
100TARGET TRACKING
TO CENTERABOVE(+)
BELOW(-)RIGHT(+)
LEFT(-)CLOSURE CLOSURE
DIR DISTANCE

(DEG/AZ)

(FEET)

BUILD
RATE/WALK
RATE/

TIE-IN 0 2371 3.1 124.3 2370.38 -0.4 -31.2 1.7 0.0 -2370.4 31.8 176.90 31.20 #DIV/0!

1 2419 3.3 104.0 2418.31 1.9 -32.3 4.1 2.4 -2418.3 32.5 172.76 32.53 0.38 -2.35

2 2513 5.6 80.1 2512.02 9.1 -32.1 11.2 3.1 -2512.0 32.8 160.71 34.05 2.45 -1.96

3 2576 6.0 74.7 2574.70 15.4 -30.7 17.4 1.1 -2574.7 31.8 150.42 35.35 0.63 -0.87

4 2640 7.4 74.2 2638.26 22.7 -28.7 24.6 2.2 -2638.3 30.3 139.38 37.85 2.19 -0.09

5 2703 9.2 76.8 2700.60 31.6 -26.5 33.4 2.9 -2700.6 28.6 128.37 42.66 2.86 0.60

6 2766 10.3 78.7 2762.69 42.2 -24.2 43.9 1.8 -2762.7 27.1 118.90 50.12 1.75 0.51

7 2829 10.6 76.6 2824.65 53.5 -21.8 55.0 0.8 -2824.6 25.4 111.59 59.19 0.48 -0.60

8 2892 11.3 75.0 2886.50 65.2 -18.8 66.6 1.2 -2886.5 23.2 105.79 69.25 1.11 -0.48

9 2955 12.7 76.1 2948.12 78.1 -15.6 79.3 2.3 -2948.1 20.8 101.11 80.83 2.22 0.36

10 3018 14.0 75.9 3009.42 92.4 -12.1 93.4 2.1 -3009.4 18.3 97.35 94.21 2.06 -0.07

11 3081 15.8 76.3 3070.30 108.4 -8.2 109.2 2.9 -3070.3 15.4 94.28 109.46 2.86 0.16

12 3144 16.4 76.5 3130.82 125.6 -4.1 126.1 1.0 -3130.8 12.5 91.84 126.20 0.95 0.09

13 3207 16.7 75.4 3191.21 143.2 0.3 143.5 0.7 -3191.2 9.3 89.88 143.55 0.48 -0.50

14 3271 17.2 74.7 3252.43 161.6 5.1 161.6 0.8 -3252.4 5.7 88.19 161.65 0.78 -0.32

15 3334 17.4 76.1 3312.58 180.0 9.8 179.7 0.7 -3312.6 2.2 86.87 179.97 0.32 0.66

16 3397 16.9 79.5 3372.78 198.3 13.8 197.9 1.8 -3372.8 -0.6 86.02 198.33 -0.79 1.59

17 3459 16.4 81.5 3432.19 216.0 16.7 215.4 1.2 -3432.2 -2.3 85.57 216.01 -0.81 0.92

18 3522 15.9 82.7 3492.70 233.5 19.1 232.7 1.0 -3492.7 -3.6 85.31 233.51 -0.79 0.53

19 3585 16.2 84.5 3553.24 250.9 21.1 250.0 0.9 -3553.2 -4.3 85.19 250.92 0.48 0.79

20 3648 16.4 87.7 3613.71 268.6 22.2 267.7 1.5 -3613.7 -4.4 85.25 268.59 0.32 1.43

MINIMUM CURVATURE CALCULATIONS(SPE-3362)

v1:00:02

TARGET DETAILS

DATE: 05/08/06[illegible]

21	3712	16.2	87.9	3675.14	286.5	22.9	285.6	0.3	-3675.1	-3.9	85.41	286.54	-0.31	0.09
22	3775	15.8	87.4	3735.70	303.9	23.7	303.0	0.7	-3735.7	-3.4	85.54	303.89	-0.63	-0.22
23	3838	15.4	84.7	3796.38	320.8	24.8	319.9	1.3	-3796.4	-3.4	85.56	320.82	-0.63	-1.15
24	3902	14.5	87.0	3858.21	337.3	26.0	336.3	1.7	-3858.2	-3.6	85.58	337.33	-1.41	0.93
25	3965	13.5	87.3	3919.34	352.6	26.8	351.5	1.6	-3919.3	-3.3	85.64	352.57	-1.59	0.12
26	4029	12.5	86.7	3981.70	366.9	27.5	365.9	1.6	-3981.7	-3.1	85.70	366.96	-1.56	-0.21
27	4092	11.3	86.3	4043.34	379.9	28.3	378.9	1.9	-4043.3	-3.0	85.73	379.95	-1.90	-0.13
28	4154	9.8	87.6	4104.30	391.3	28.9	390.2	2.4	-4104.3	-2.9	85.76	391.30	-2.42	0.38
29	4218	8.7	85.5	4167.46	401.6	29.5	400.5	1.8	-4167.5	-2.8	85.78	401.58	-1.72	-0.53
30	4281	8.0	85.0	4229.79	410.7	30.3	409.6	1.1	-4229.8	-2.9	85.77	410.73	-1.11	-0.12
31	4344	6.9	88.4	4292.26	418.9	30.8	417.8	1.9	-4292.3	-2.9	85.79	418.89	-1.75	0.70
32	4405	5.8	85.6	4352.89	425.6	31.1	424.5	1.9	-4352.9	-2.8	85.81	425.64	-1.80	-0.51
33	4469	4.7	81.7	4416.62	431.5	31.7	430.3	1.8	-4416.6	-3.0	85.78	431.49	-1.72	-0.56
34	4532	3.6	86.5	4479.45	436.0	32.2	434.8	1.8	-4479.5	-3.2	85.76	436.04	-1.75	0.55
35	4595	2.2	92.1	4542.37	439.2	32.3	438.0	2.3	-4542.4	-3.1	85.78	439.22	-2.22	0.45
36	4658	1.1	106.0	4605.34	441.0	32.1	439.8	1.8	-4605.3	-2.7	85.82	440.99	-1.75	0.63
37	4721	0.2	221.6	4668.34	441.5	31.9	440.3	1.9	-4668.3	-2.5	85.86	441.48	-1.43	1.75
38	4784	0.4	233.8	4731.34	441.2	31.6	440.1	0.3	-4731.3	-2.3	85.89	441.21	0.32	0.10
39	4847	0.8	248.6	4794.33	440.6	31.4	439.5	0.7	-4794.3	-2.0	85.92	440.61	0.63	0.00
40	4911	1.0	232.8	4858.33	439.7	30.9	438.6	0.5	-4858.3	-1.6	85.98	439.71	0.31	-0.39
41	4975	0.7	254.1	4922.32	438.9	30.4	437.8	0.7	-4922.3	-1.2	86.03	438.86	-0.47	0.49



SURVEY CALCULATION PROGRAM

MINIMUM CURVATURE CALCULATIONS(SPE-3362)

v1.00.02

TARGET DETAILS

OPERATOR:	BTA Oil Producers	Supervisors:		TARGET N-S	Directional	29.00
WELL:	8808 JV-P Pardue B		Alan Donaldson	TARGET E-W		435.30
LOCATION:	Eddy Cnty, NM		Garrett Appel	TARGET RADIUS		25.00
JOB NUMBER:	CO-06150			TARGET DISPLACEMENT		436.30
COMMENTS				TARGET CLOSURE		86.20
Tie in at Surface				TARGET TVD	Horizontal	
				DIP AZ		
				DIP DEG UP+DN		

DATE: 05/08/06 TIME: 9:40 AM

TRUE TO GRID

 TARGET DIP ANGLE LINE DIRECTION **86.18**

 TARGET TRACKING
 TO CENTER
 ABOVE(+) RIGHT(+)

 CLOSURE CLOSURE
 DIR DISTANCE
 (DEG/AZ) (FEET)

BUILD RATE/

WALK RATE/

GAMMA SUR TEMP	#	MD	INC	TRUE		TYD	SECT	N-S	E-W	DLS/ 100	TO CENTER		CLOSURE		BUILD RATE/ %100'	WALK RATE/ %100'
				AZM	TVD						ABOVE(+) BELOW(-)	RIGHT(+) LEFT(-)	DIR (DEG AZ)	CLOSURE DISTANCE (FEET)		
	42	5037	0.6	217.6	4984.32	438.3	30.0	437.2	0.7	-4984.3	-0.9	86.07	438.28	-0.16	-0.66	
	43	5100	0.4	221.5	5047.31	437.9	29.6	436.9	0.3	-5047.3	-0.4	86.12	437.90	-0.32	0.05	
	44	5163	0.4	206.3	5110.31	437.6	29.3	436.7	0.2	-5110.3	-0.1	86.17	437.63	0.00	-0.17	
	45	5226	0.6	191.0	5173.31	437.4	28.7	436.5	0.4	-5173.3	0.4	86.23	437.44	0.32	-0.21	
	46	5289	0.4	204.5	5236.31	437.3	28.2	436.3	0.4	-5236.3	0.9	86.30	437.25	-0.32	0.19	
	47	5352	0.8	204.1	5299.30	436.9	27.6	436.1	0.6	-5299.3	1.5	86.38	436.94	0.63	-0.01	
	48	5415	0.9	190.3	5362.30	436.6	26.7	435.8	0.4	-5362.3	2.4	86.49	436.62	0.16	-0.32	
	49	5542	0.8	223.2	5489.28	435.7	25.1	435.0	0.4	-5489.3	3.9	86.70	435.74	-0.08	0.38	
	50	5605	0.6	192.3	5552.28	435.3	24.5	434.6	0.7	-5552.3	4.6	86.78	435.33	-0.32	-0.59	
	51	5668	0.7	196.7	5615.27	435.1	23.8	434.5	0.2	-5615.3	5.2	86.87	435.11	0.16	0.08	
	52	5762	1.4	266.8	5709.26	433.7	23.2	433.2	1.4	-5709.3	5.8	86.94	433.77	0.74	1.28	
	53	5826	0.6	285.1	5773.25	432.6	23.2	432.0	1.3	-5773.3	5.6	86.93	432.67	-1.25	0.50	
	ptb	5870	0.6	230.0	5817.25	432.2	23.1	431.6	1.3	-5817.2	5.7	86.94	432.27	0.00	-1.26	
PROJ	TD	6353	0.8	200.0	6300.21	428.8	18.3	428.6	0.1	-6300.2	10.3	87.55	428.95	0.04	-0.08	