

DEVIATION - TOTCO SURVEYS

<u>DEPTH</u>	<u>DEG OFF</u>	<u>DEPTH</u>	<u>DEG OFF</u>	<u>DEPTH</u>	<u>DEG OFF</u>	<u>DEPTH</u>	<u>DEG OFF</u>
250	1/2	2390	3/4	3600	1/2	4570	3
450	1/2	2480	3/4	3690	0	4600	2-3/4
600	1/2	2575	3/4	3780	3/4	4630	3-1/4
750	1/4	2635	1/4	3840	1	4690	3-1/4
900	1/4	2750	3/4	3910	1	4750	3-1/4
1085	1/2	2810	3/4	3970	3/4	4805	3-1/4
1300	1/2	2900	3/4	4125	2	4875	3-1/4
1450	0	2990	3/4	4153	2	4900	2-3/4
1620	1/4	3090	1/2	4214	1-3/4	4935	2-3/4
1770	1/4	3210	1/2	4305	2-1/4	5400	2
2170	3/4	3300	1/2	4365	2-1/4	5600	1-1/4
2260	1	3390	1/2	4420	2-3/4		
2330	3/4	3510	3/4	4450	2-1/4		

DRILL STEM TESTS

No. 1, 6-9-53 - 1 Hour Howco DST from 2649-3410' with 1" choke at 2592' - Packer at 2600' - Bombs at 2616' & 2595' - Tool opened 10:45 PM 6-9-53 - Blow air 4 minutes and dead 56 minutes - Recovered 165' drilling mud, no gas show - FP 0# - BHP 0#.

No. 2, 7-9-53 - 1 Hour Halliburton DST from 5105-5180' with 5/8" choke at 5072' - Packers at 5096' and 5105' - Bombs at 5077' and 5178' - Tool opened 8:50 PM 7-9-53 - Gas to surface in 2 minutes, 723,300 cu. ft., mud in 27 minutes - Spray of oil in 35 minutes thruout test - Recovered 270' fluid, 150' oil and gas cut drilling mud, cut 25% oil and 120' 38 gravity clean oil, no water - HP 2320# - FP 290# - 15 Minute BHP 1390#.

No. 3, 7-10-53 - 3 Hour Halliburton DST from 5179-5260' with 5/8" choke at 5145' - Packers at 5170' and 5179' - Bombs at 5152' and 5258' - Tool opened 9:40 PM 7-10-53 - Good blow air, gas to surface in 2 minutes, 24 hour rate 31,900 cu. ft. - Mud in 1 hour 5 minutes, oil in 1 hour 10 minutes - Flowed 7 bbls 37 gravity clean oil in 1 hour 50 minutes - Recovered 90' oil and gas cut drilling mud, cut 85% oil, no water - HP 2380# - TP 135-1470# - 15 minute BHP 1640#.

No. 4, 7-13-53 - 1 Hour Johnston DST from 5270-5430' with 1/2" choke at 5402' - Packers at 5430' and 5424' - Bombs at 5526' and 5525' - Tool opened 6:40 PM 7-13-53 - Good to fair blow air, used no blanket - No gas or fluid to surface - Recovered 4320' of sulphur water - HP 2675# - FP 575-1975# - 15 minute BU 2075#.

No. 5, 7-21-53 - 2 Hour 40 minute Johnston DST from 5638-5720' with 1/2" choke at 5603' - Packer at 5633' - Bombs at 5718' & 5719' - Tool opened 6:15 PM 7-21-53 - Used no blanket - Gas to surface 3 min., 24 Hour rate 80,000 cu. ft., Mud to surface in 30 min. oil in 40 min. - Flowed 17 bbls 38 gravity oil in 2 hours - Reversed out 6 bbls oil, no water - HP 2575# - FP 475 -926# - 15 minute BU 2050#.