

Deviation - Totco Surveys

400'	Off	3/4	Deg.	4880'	Off	1/4	Deg.	9500'	Off	3/4	Deg.
500	"	3/4	"	4922	"	3/4	"	9528	"	3/4	"
665	"	1-1/4	"	4990	"	3/4	"	9616	"	3/4	"
800	"	1/2	"	5090	"	1	"	9618	"	3/4	"
1000	"	0	"	5166	"	3/4	"	9740	"	1-1/4	"
1500	"	1	"	5250	"	3/4	"	9907	"	1/2	"
1650	"	1	"	5280	"	1/2	"	10120	"	1/4	"
1850	"	1/4	"	5340	"	3/4	"	10255	"	1/2	"
2050	"	1/4	"	5461	"	3/4	"	10326	"	1	"
2185	"	3/4	"	5530	"	1/4	"	10360	"	1	"
2480	"	0	"	5815	"	3/4	"	10400	"	1-1/2	"
3035	"	1/4	"	5937	"	3/4	"	10465	"	1	"
3200	"	3/4	"	6030	"	1/4	"	10560	"	1	"
3425	"	1-3/4	"	6169	"	3/4	"	10577	"	1	"
3625	"	4-1/4	"	6370	"	1-3/4	"	10645	"	1/2	"
3655	"	5	"	6400	"	1-3/4	"	10668	"	1/2	"
Plug Back to 3402				6435	"	1-3/4	"	10735	"	3/4	"
3398	"	1-1/4	"	6465	"	1-1/2	"	10777	"	1-1/4	"
3420	"	2	"Before reaming	6560	"	1-1/2	"	10801	"	1-1/4	"
3420	"	1-1/4	"After reaming	6658	"	1	"	10810	"	1-1/4	"
3457	"	2	"	6750	"	3/4	"	10855	"	1-1/4	"
3465	"	2	"	6865	"	1	"	10860	"	1	"
3500	"	2-1/2	"	6925	"	1	"	10890	"	1-1/4	"
3540	"	2-1/4	"Before reaming	6987	"	3/4	"	10915	"	1-1/2	"
3544	"	3	"	7090	"	1	"	10955	"	1-1/2	"
3540	"	2-1/2	"After reaming	7140	"	1/4	"	11010	"	1-1/2	"
3581	"	3	"	7230	"	1	"	11120	"	2	"
3615	"	3-1/4	"	7350	"	1	"	11135	"	1-1/4	"
3635	"	3	"	7460	"	3/4	"	11157	"	1-3/4	"
3650	"	3	"	7550	"	1	"	11180	"	2	"
3655	"	3	"	7619	"	3/4	"	11215	"	1-1/4	"
3664	"	3	"	7670	"	1	"	11260	"	1-1/2	"
3690	"	2-1/2	"	7714	"	1	"	11348	"	2	"
3710	"	1-3/4	"	7780	"	1	"	11370	"	2	"
3780	"	1-1/4	"	7885	"	1	"	11410	"	2-1/4	"
3820	"	1-1/2	"	7995	"	1	"	11454	"	1-3/4	"
3880	"	1-3/4	"	8160	"	1	"	11515	"	1-1/2	"
3910	"	1-3/4	"	8365	"	1/4	"	11545	"	1-3/4	"
3935	"	1-1/2	"	8515	"	1/2	"	11640	"	1-1/2	"
3950	"	1-1/4	"	8525	"	1/4	"	11700	"	1-1/4	"
3960	"	1	"	8575	"	1/4	"	11820	"	1-1/4	"
4015	"	3/4	"	8618	"	1/2	"	11890	"	1-1/4	"
4044	"	1/2	"	8660	"	3/4	"	11925	"	1	"
4112	"	3/4	"	8730	"	3/4	"	11975	"	3/4	"
4185	"	3/4	"	8800	"	1/2	"	12150	"	1	"
4275	"	3/4	"	8850	"	1/2	"	12260	"	2	"
4320	"	3/4	"	8927	"	1	"	12300	"	2	"
4490	"	3/4	"	9040	"	1	"	12412	"	1-1/2	"
4530	"	3/4	"	9100	"	3/4	"	12475	"	1-1/2	"
4620	"	3/4	"	9276	"	1	"				
4740	"	1	"	9379	"	1	"				
4845	"	1/4	"	9444	"	3/4	"				

Electrical Well Logs

6-13-51 - Ran Schlumberger survey from surface to 4669'.

11-12-51 - Ran Schlumberger Caliper survey from 9700' to 4668'.

Perforation Record

11-17-51 - Perforated 7" casing with 4 jet holes per foot from 9605-9620'.

11-22-51 - Perforated 7" casing with 4 jet holes per foot from 9600-9625'.

Temperature Survey

6-15-51 - Company temperature survey indicated top of cement behind 9-5/8" casing at 2610'.

11-15-51 - Halliburton temperature survey indicated top of cement behind 7" casing at 8705'.

Drill Stem Test

No. 1, 8-21-51 - One Hour 30 minute Halliburton DST 9589-9633' with 5/8" choke at 9558' - Used 2 packers at 9589' and 9581' - Bombs at 9637' and 9560' - Tool opened 3:25 p.m. 8-21-51 - Good blow of air throughout test - Recovered 220' oil and gas cut drilling mud - 5% oil - Hydrostatic Pressure 4720# - Flowing Pressure 65-100# - 15 Minute BUP 200#.

No. 2, 8-23-51 - Attempted to run test from 9670-9714' - leak in 4-1/2" drill pipe allowed mud to enter pipe - lost circulation.

No. 3, 8-25-51 - One Hour Halliburton DST from 9671-9714' with 5/8" choke at 9639' - Used 2 packers at 9671 and 9663' - Bomb at 9634' and 9712' - Tool open 1:55 a.m. 8-25-51 - Light blow of air throughout test - Recovered 420' drilling mud, no oil or gas show - Hydrostatic Pressure 4240# - Flowing Pressure 45-195 # - 15 Minute BUP 2725#.

No. 4, 8-27-51 - DST at 9715' - misrun.

No. 5, 8-28-51 - One Hour Halliburton DST from 9688' to 9830' with 5/8" choke at 9664' - Used 2 packers at 9688' and 9680' - Bombs at 9828' and 9668' - Tool open at 1:30 p.m. 8-28-51 - Good blow of air throughout test - no gas or fluid to surface - Recovered 3280' salt water - Hydrostatic Pressure 4900# - Flowing Pressure 465-1567# - 15 Minute BUP 3405#.

No. 6, 9-2-51 - DST from 10,116' to 10,138' - Misrun.

No. 7, 9-3-51 - One Hour Johnston DST from 10,177' to 10,138' with 5/8" choke at 10,100' - Used 2 packers at 10,117' and 10,110' - Bombs at 10,137' and 10,135' - Tool open at 8:20 a.m. 9-3-51 - Strong blow of air throughout test - Recovered 7550' of sulphur water - Hydrostatic Pressure 5150# - Flowing Pressure 1950-3250# - 15 Minute BUP 3850#.

No. 8, 9-27-51 - One Hour Halliburton DST from 11,144' to 11,219' w/5/8" choke at 11,113' - Used 2 packers at 11,138' and 11,144' - Bombs at 11,217' and 11,119' - Tool open at 12:25 p.m. 9-27-51 - No gas or fluid to surface - Recovered 30' mud, no oil or gas show. Hydrostatic Pressure 5325# - Flowing and BHP Pressures Zero.

Drill Stem Test (Continued)

No. 9, 10-31-51 - One Hour Halliburton DST 12,391' - 12,416' with 5/8" choke at 12,350' - Used 2 packers at 12,383' and 12,391' - Bombs at 12,350' and 12,416' - Tool open 9:40 a.m. 10-31-51 - Used 1000' water blanket - very light blow of air for 8 minutes and died - Recovered 120' drilling mud, no shows of gas or oil - 1000' water blanket recovered - Hydrostatic Pressure 6400# - Flowing Pressure and 15 Minute closed in pressure no good due to bad order chart.

No. 10, 11-6-51 - One Hour Halliburton DST 12,572-12603' - with 5/8" choke at 12,538' - Used 2 packers at 12,564' and 12,572' - Bombs at 12,543' and 12,600' - Tool opened 11:30 a.m. 11-6-51 - 1400' water blanket used - Good blow of air for 51 minutes and died - No gas to surface - Recovered 11,461' fluid, 130' drilling mud - no shows - 9931' salt water and 1400' water blanket - Hydrostatic Pressure 6050# - Flowing Pressure 5050# - 15 Minute closed in pressure 3050#.