

S. J. Carr #5

DEVIATIONS - TOTCO SURVEYS

<u>DEPTH</u>	<u>DEG.OFF</u>	<u>DEPTH</u>	<u>DEG.OFF</u>	<u>DEPTH</u>	<u>DEG.OFF</u>
90'	1/4	5907	3/4	8532	3-1/4
190	1/4	5945	0	8556	0
319	0	6155	3/4	8585	3-1/2
450	3/4	6160	1/2	8620	3-1/4
700	1	6200	1/2	8653	0
850	1	6260	3/4	8675	3
970	1/2	6310	3/4	8700	3
1220	3/4	6380	1/2	8735	0
1520	1/2	6466	1/2	8780	2-3/4
1680	3/4	6480	0	8825	2-1/4
1850	3/4	6545	3/4	8863	3
2050	1/2	6600	0	8905	2-3/4
2130	2-1/2	6680	1/4	8940	3
2169	2-1/4	6780	0	8968	3
2230	2-1/4	6908	1	9002	2-1/2
2260	2-1/2	6953	3/4	9025	2-3/4
2325	2	7000	3/4	9047	3
2420	2-1/2	7040	1	9078	2-3/4
2470	1-3/4	7085	3/4	9108	2-3/4
2540	1-1/2	7130	1/2	9130	0
2580	1-1/2	7174	1/2	9150	0
2670	1-1/4	7232	1	9175	3
2755	1	7285	0	9200	3-1/4
2917	1	7325	3/4	9228	3
3010	2	7356	1	9252	3
3070	1-1/2	7390	1-1/4	9300	3-1/4
3140	2	7431	1	9320	3-1/4
3200	1-1/4	7470	3/4	9337	3
3320	1	7500	0	9368	3-1/2
3405	1	7530	1	9396	0
3538	3/4	7569	1-1/4	9418	3-1/4
3600	3/4	7600	1-1/2	9445	3-1/4
3651	1/2	7640	1-1/2	9465	3-1/4
3705	1/2	7690	1-1/4	9502	2-3/4
3875	1-1/4	7700	2	9530	2-3/4
3970	3/4	7740	2	9575	2-1/2
4138	1	7788	2	9625	3-3/4
4400	1-3/4	7838	2	9668	4
4546	1-3/4	7870	2-1/2	9702	3-3/4
4670	1-1/4	7902	2-3/4	9735	3-3/4
4800	2	7946	3	9782	3-1/2
5110	1-1/4	7996	2-3/4	9827	3-1/4
5150	1-3/4	8058	2-3/4	9867	3-1/4
5235	3/4	8103	3	9911	0
5455	0	8142	2-3/4	9940	3
5465	1	8175	3-1/4	9971	3
5515	1	8197	3-1/4	10000	2-1/2
5570	1	8222	3	10072	2-3/4
5625	1	8291	3-1/2	10092	2-1/2
5675	3/4	8323	3-1/4	10010	2-1/2
5700	3/4	8360	3-1/4	10140	2-3/4
5770	1	8391	3-1/2	10175	0
5805	1/2	8418	0	10215	2-3/4
5860	1/2	8450	3-1/4	10277	2-1/2
		8480	3	10345	0
				10445	2-1/4
				10510	2

DRILL STEM TESTS

- No. 1 - 12-15-52 - 1 Hour Johnston Drill Stem Test from 5550-5675' with 5/8" choke at 5527' - Packers at 5542' and 5550' - Bombs at 5671' and 5673' - Tool opened 9:45PM 12-15-52 - Weak blow air 20 minutes and dead 40 minutes - Recovered 30' drilling mud, no show, no water - Hydrostatic Pressure 3075# - Flowing Pressure 0# - 15 Minute BHP 0#.
- No. 2 - 12-23-52 - 1-1/2 Hour Johnston Drill Stem Test from 6360-6485' with 5/8" choke at 6335' - Packers at 6351' and 6360' - Bombs at 6481' and 6483' - Tool opened 5:05AM 12-23-52 - Used no blanket - No gas or fluid to surface, weak blow of air thruout test - Recovered 1170' fluid, 270' drilling mud and 900' sulphur water - Hydrostatic Pressure 3250# - Flowing Pressure 500# - 15 Minute BU 2000#.
- No. 3 - 1-5-53 - 1 Hour Johnston Drill Stem Test from 7379-7504' with 5/8" choke at 7355' - Packers at 7372' and 7379' - Bombs at 7502' and 7500' - Tool opened 7:45PM 1-5-53 - Very weak blow air 10 minutes, dead 50 minutes - Recovered 20' drilling mud, no shows - Hydrostatic Pressure 3675# - Flowing Pressure 0# - 15 Minute BHP 0#.
- No. 4 - 2-8-53 - 1-1/2 Hour Johnston Drill Stem Test from 9065-9131' with 5/8" choke at 9041' - Packers at 9057' and 9065' - Bombs at 9127' and 9129' - Tool opened 4:35AM 2-8-53 - Medium blow air for 30 minutes and dead remainder of test - Recovered 150' oil and gas cut drilling mud, cut 50% oil and 90' clean oil, no water - Hydrostatic Pressure 4800# - Flowing Pressure 0# - 15 Minute BHP 575#.
- No. 5 - 3-10-53 - 2-1/2 Hour Johnston Drill Stem Test - Misrun.
- No. 6 - 3-11-53 - 15 Minute Johnston Drill Stem Test from 10211-10203' with 5/8" choke at 10187' - Packers at 10211' and 10203' - Bombs at 10338' and 10339' - Tool opened 3:15AM 3-11-53 - Gas to surface in 8 minutes, 24 hour rate, 125,700 cu. ft. - Packer failed after 15 minutes.
- No. 7 - 3-12-53 - 7 Hour Johnston Drill Stem Test from 10280-10345' with 5/8" choke at 10255' - Packers at 10272' and 10280' - Bombs at 10341' and 10343' - Tool opened 3:34AM 3-12-53 - Used no blanket - Gas to surface in 7 minutes, 24 hour rate, 382, 600 cu. ft. - Mud to surface in 1 hour 55 minutes - Oil to surface in 2 hours - Flowed 83.83 bbls of 45 gravity clean oil and no water in 5 hours - 11 bbls of oil reversed out - Blow off 6 bbls after closing tool - Recovered 17' clean oil - Hydrostatic Pressure in 5050#, out 4975# - Flowing Pressure initial 300#, final 1175# - 15 minute BU 3225#.
- No. 8 - 3-14-53 - 6 Hour Johnston Drill Stem Test from 10345-10445' with 5/8" choke at 10318' - Packers at 10338' and 10345' - Bombs at 10443' and 10441' - Tool opened 10:35AM 3-14-53 - No water blanket - Gas to surface 8 minutes, 24 hour rate, 1,126, 100 cu. ft. - Mud to surface in 50 minutes, oil in 60 minutes, - Flowed 270 bbls 45 gravity clean oil in 5 hours - Bleed off to tank 21 bbls oil, reversed out 9 bbls oil - Total oil recovered 300 bbls - Hydrostatic Pressure 5300# - Flowing Pressure 1525-2725# - 15 Minute BHP 3400#.
- No. 9 - 3-16-53 - 6-1/4 Hour Johnston Drill Stem Test from 10445-10510' with 5/8" choke at 10422' - Packers at 10438' and 10445' - Bombs at 10427' and 10508' - Tool opened at 10:15AM 3-16-53 - No water blanket - Gas to surface 8 minutes, 24 hour rate, 759,000 cu. ft. thruout test - Mud in 1 hour 9 minutes, oil in 1-1/4 hours - Flowed 190 bbls 45 gravity clean oil, no water 5 hours - Reversed out 34 bbls oil - Total oil recovered 224 bbls - Hydrostatic Pressure 5120# - Flowing Pressure 725# to 2085# - 15 Minute BHP 2840#.
- No. 10 - 3-18-53 - 3 Hour Halliburton Drill Stem Test from 10510'-10570' with 5/8" choke at 10489' - Packers at 10502' and 10510' - Bombs at 10492' and 10568' - Tool opened 3:30AM 3-18-53 - No water blanket - Gas to surface in 12 minutes, 24 hour rate, 111,400 cu. ft. - Decreased to almost dead in 1-1/2 hours and started to increase at end of test - Recovered 5520' fluid, 2250' oil and gas cut drilling mud, cut 50% oil - 2700' clean oil, 570' sulphur water - Hydrostatic Pressure 5160# - Flowing Pressure 175-1095# - 15 Minute BHP 2850#.

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FORMATIONS CONTINUED

<u>DEPTH</u>	<u>FORMATION</u>
9214'	Lime & Chert
9229	Lime
9240	Lime & Chert
9321	Lime
9329	Lime & Chert
9338	Lime & Shale
9355	Lime & Black Shale
9670	Lime & Shale
9714	Shale
9730	Shale & Lime
9738	Shale, Sand & Lime
9816	Shale & Lime
9828	Shale, Lime & Chert
9854	Shale w/Lime Streaks
10,083	Lime & Shale
10,094	Chert & Shale
10,110	Sand, Lime & Shale
10,130	Lime & Shale
10,279	Shale