

ATTACHMENT - DINKINSON HEIRS NO. 1

TOTCO DEVIATION SURVEYS

<u>DEPTH</u>	<u>Degree off Vertical</u>	<u>Depth</u>	<u>Degree off Vertical</u>	<u>Depth</u>	<u>Degree off Vertical</u>
426	1/2	6997	1-3/4	10010	3
700	1	7283	1-1/4	10179	2-3/4
1431	1-1/2	7373	1-1/2	10290	2
1721	1-1/4	7489	1-1/4	10424	1-3/4
2000	3/4	7694	1-1/2	10774	1-1/2
2146	1/2	7767	1	10891	1-3/4
2275	3/4	7898	2	10939	2
2590	1	7998	1-1/2	11067	2-1/2
3324	3/4	8096	1-1/4	11265	3
3426	1/2	8180	1	11331	2
3934	None	8514	2	11475	3
4345	3/4	8880	1-1/4	11648	2-1/2
4515	1/4	8983	1	11704	2-1/4
4825	1/2	9105	1-1/4	11831	2-1/2
4827	None	9184	1-1/2	11892	2-3/4
5441	1/4	9285	1	11963	3-3/4
5600	1/2	9359	3/4	12057	3
5741	3/4	9531	1	12129	2-1/2
6409	2	9614	3/4	12270	2-1/4
6555	1-3/4	9716	1-1/4	12329	1-3/4
6766	1	9921	2	12684	3

CORE RECORD

<u>No.</u>	<u>Top</u>	<u>Bottom</u>	<u>Rec.</u>	<u>Description:</u>
1	9831	9860	30'	Lime & Shale, No Show.
2	10804	10824	18'	Limestone, No Show.
3	10824	10844	20'	Limestone, No Show.
4	No recovery			
5	12385	12415	29'	Dolomite, 12385 - 12401, 16' dolomite, finely crystalline to coarsely crystalline cream to tan, trace pin point and pin lead presity, fluorescence with sour odors, 12401 - 12414, dolomite, trace chert, no show.
6	12415	12427	10'	Dolomite, 12415 - 12419, dolomite, finely crystalline to coarsely crystalline green to tan fractured with sour odor, good yellow fluorescence, no cut, 12419 1/2 - 12425, fractured dolomite, no shows.
7	12427	12437	10'	Dolomite & Lime, no shows.
8	12437	12467	30'	Lime & Dolomite, no shows.

DRILL STEM TESTS:

<u>No.</u>	<u>Date</u>	<u>From</u>	<u>To.</u>	<u>No. Kind & Size of Perforations (or Open Hole)</u>	<u>Tool Set @</u>	<u>Chokes Top Bottom</u>	<u>Water Cushion</u>	<u>Time Tested</u>
1	8-12-56	4950	5010	Open Hole	4950	5/8" 1"	None	1 Hr.
San Andres - Nothing to Surface, recovered 35' of drilling mud, no shows, Oil, Gas or water, SFP 0#, BHFP 0#, 39 minutes, SIP 195#, HH 3170-3145#.								
2	9-13-56	9035	9105	Open Hole	9035	5/8" 1"	None	1 Hr.
Wolfcamp - Nothing to surface, recovered 15' of slightly gas cut mud, no oil or water, SFP 0#, BHFP 105#, 15 minutes, SIP 105#, HH 4940# in and out.								
3	9-16-56	9106	9150	Open Hole	9105	5/8" 1"	None	3 Hrs.
Wolfcamp - Nothing to surface, recovered 123' of salt water, no oil or gas, SFP 0#, BHFP, 510# 30 minutes, SIP 2725#, HH 4025# in and out.								
4	9-25-56	9825	9860	Open Hole	9825	5/8" 1"	None	1 Hr.
Bough "C" - Nothing to surface, recovered 120' of drilling mud, no shows, SFP 0#, BHFP 0#, 15 minutes, SIP 1565#, HH 5515-5405#.								
5	10-11-56	10786	10804	Open hole	10786	5/8" 1"	None	2 Hrs.
Penn. - Gas to surface in 9 minutes, 162 MCF/da., recovered 450' of free oil (Qty. 40 @ 600.) + 240' of mud out oil, no water. SFP 10#, BHFP 250#, 30 minutes SIP 2600#, HH 6005-5965#.								

UNITED STATES DEPARTMENT OF AGRICULTURE

Station	Time	Remarks	Time	Remarks	Time	Remarks
1-1-54	10:00	1-1-54	10:00	1-1-54	10:00	1-1-54
1-1-54	10:05	1-1-54	10:05	1-1-54	10:05	1-1-54
1-1-54	10:10	1-1-54	10:10	1-1-54	10:10	1-1-54
1-1-54	10:15	1-1-54	10:15	1-1-54	10:15	1-1-54
1-1-54	10:20	1-1-54	10:20	1-1-54	10:20	1-1-54
1-1-54	10:25	1-1-54	10:25	1-1-54	10:25	1-1-54
1-1-54	10:30	1-1-54	10:30	1-1-54	10:30	1-1-54
1-1-54	10:35	1-1-54	10:35	1-1-54	10:35	1-1-54
1-1-54	10:40	1-1-54	10:40	1-1-54	10:40	1-1-54
1-1-54	10:45	1-1-54	10:45	1-1-54	10:45	1-1-54
1-1-54	10:50	1-1-54	10:50	1-1-54	10:50	1-1-54
1-1-54	10:55	1-1-54	10:55	1-1-54	10:55	1-1-54
1-1-54	11:00	1-1-54	11:00	1-1-54	11:00	1-1-54

UNITED STATES DEPARTMENT OF AGRICULTURE

Station	Time	Remarks	Time	Remarks	Time	Remarks
1-1-54	11:05	1-1-54	11:05	1-1-54	11:05	1-1-54
1-1-54	11:10	1-1-54	11:10	1-1-54	11:10	1-1-54
1-1-54	11:15	1-1-54	11:15	1-1-54	11:15	1-1-54
1-1-54	11:20	1-1-54	11:20	1-1-54	11:20	1-1-54
1-1-54	11:25	1-1-54	11:25	1-1-54	11:25	1-1-54
1-1-54	11:30	1-1-54	11:30	1-1-54	11:30	1-1-54
1-1-54	11:35	1-1-54	11:35	1-1-54	11:35	1-1-54
1-1-54	11:40	1-1-54	11:40	1-1-54	11:40	1-1-54
1-1-54	11:45	1-1-54	11:45	1-1-54	11:45	1-1-54
1-1-54	11:50	1-1-54	11:50	1-1-54	11:50	1-1-54
1-1-54	11:55	1-1-54	11:55	1-1-54	11:55	1-1-54
1-1-54	12:00	1-1-54	12:00	1-1-54	12:00	1-1-54

Station	Time	Remarks	Time	Remarks	Time	Remarks
1-1-54	12:05	1-1-54	12:05	1-1-54	12:05	1-1-54
1-1-54	12:10	1-1-54	12:10	1-1-54	12:10	1-1-54
1-1-54	12:15	1-1-54	12:15	1-1-54	12:15	1-1-54
1-1-54	12:20	1-1-54	12:20	1-1-54	12:20	1-1-54
1-1-54	12:25	1-1-54	12:25	1-1-54	12:25	1-1-54
1-1-54	12:30	1-1-54	12:30	1-1-54	12:30	1-1-54
1-1-54	12:35	1-1-54	12:35	1-1-54	12:35	1-1-54
1-1-54	12:40	1-1-54	12:40	1-1-54	12:40	1-1-54
1-1-54	12:45	1-1-54	12:45	1-1-54	12:45	1-1-54
1-1-54	12:50	1-1-54	12:50	1-1-54	12:50	1-1-54
1-1-54	12:55	1-1-54	12:55	1-1-54	12:55	1-1-54
1-1-54	13:00	1-1-54	13:00	1-1-54	13:00	1-1-54

Attachment - Dickinson Wells No. 1

DRILL STEM TESTS - CONTINUED

No.	Date	From	to.	No. Kind & Size of Perforations (or open Hole)	Tool Set #	Chokes		Water Cushion	Time Tested
						Top	Bottom		
6	10-15-56	10805	10844	Open Hole	10805	5/8"	1"	None	1 Hr.
Strawn Penn. - Nothing to surface, recovered 5' drilling mud, no shows, all pressured @, HH 6040 - 6040#.									
7	10-28-56	11198	11228	Open Hole	11198	5/8"	1"	None	1 Hr. 15 Min
Penn. - Nothing to surface, recovered 300' gas cut drilling mud, no oil or water SFP 0#, BHFP 570#, 15 minutes, SIP 570#, HH 6235 - 6235#.									
8	10-29-56	11223	11311	Open Hole	11223	5/8"	1"	None	2 Hrs. 30 min
Penn. - Gas to surface in 4 minutes, 784 MCF/da. Mud to surface in 12 minutes, recovered 1540' of free oil (Qty. 55.4 @ 60") + 30' salt water, SFP 400 - 340#, BHFP 1993-1555#, 30 min. SIP 2665#, HH 6350 - 6170#.									
9	11-5-56	11494	11536	Open Hole	11494	5/8"	1"	None	2 Hrs. 30 min
Penn. - Gas to surface in 59 minutes, MCF/da., recovered 240' heavy oil and gas cut drilling mud + 840' of free oil (Qty. 41.5 @ 60") SFP 19#, BHFP 375#, 30 minutes, SIP 3795#, HH 5605-6350#.									
10	11-7-56	11530	11578	Open Hole	11530	5/8"	1"	None	2 Hrs. 30 min
Penn. - Gas to surface in 22 minutes, 205 MCF/da., recovered 90' of heavy oil and gas cut mud + 1525' of free oil. (Qty. 38 @ 60") + 365' of salt water. SFP 24#, BHFP 770#, 30 min. SIP 3725#, HH 6445 - 6165#.									
11	11-12-56	11730	11747	Open Hole	11730	5/8"	1"	1000	1 Hr.
Mississippian - Nothing to surface, recovered 1000' W.C. + 40' of drilling mud, no shows, SFP 0#, BHFP 535#, 15 min. SIP 535#, HH 6460-6325#.									
12	12-27-56	12385	12415	Open Hole	12385	5/8"	1"	1570'	3 Hrs.
Devonian - Nothing to surface, recovered 1570' slightly oil & gas cut water cushion + 210' oil & gas cut drilling mud, SIP 0#, BHFP 810' 30 minutes SIP 4780 4780#, HH 6810 - 6610#.									
13	1-3-57	12480	12530	Open Hole	12480	5/8"	1"	None	
Devonian - Packer failed.									
14	1-6-57	12394	12530	Open Hole	12394	5/8"	1"	1400	1 Hr.
Devonian - Nothing to surface, recovered 1400' W.C. + 100' drilling mud, no show, SFP 0#, BHFP 815#, 15 min. SIP 1000#, HH 6940 in 6595 out.									
15	1-6-57	12527	12547	Open Hole	12547	5/8"	1"	1500'	1 Hr.
Devonian - Nothing to surface, recovered 1500' W.C. + 100' drilling mud with sulphur odor, no oil or gas, SFP 0#, BHFP 755#, 10 min. SIP 920#, HH 6850 - 6650#.									
16	1-9-57	12678	12690	Open Hole	12678	5/8"	1"	1650'	3 Hrs.
Devonian - Nothing to surface, recovered 1650' water cushion + 9660' Salt Water with sulphur odor, SFP 0#, BHFP 1340 - 5100#, 15 min. SIP 5100#, HH 7020 in and 6765 out.									

ACIDIZING

- 1-20-57 Cardinal Chemical Company acidised perms. 11540-11548 and 11550-11562 with 500 gallons. T.P. 3000-2800-3000, communication with 240 gals. into formation.
- 1-27-57 Cardinal Chemical Company reacidised perms. 11540-11548 and 11550-11562 with 1000 gallons. T.P. 2500-2900, swabbed 40 bbls load oil in 1 hour, no gas.

