

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 1 Date 8/7/92
Company MURFIN DRILLING CO., INC. Zone LANSING
Address 250 N WATER SWT #300 WICHITA KS 67202 Elevation 2714 K.B.
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay _____
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested 4325-4350
Anchor Length 25
Top Packer Depth 4320
Bottom Packer Depth 4325
Total Depth 4350

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 620
Mud Wt. 9.1 lb/Gal.
Viscosity 44 Filtrate 7.2

Tool Open @ 8:40 AM Initial Blow WEAK 8" BLOW IN 30 MINUTES
NO BLOW BACK ON SHUT IN
Final Blow WEAK 10" BLOW IN 60 MINUTES
NO BLOW BACK ON SHUT IN

Recovery - Total Feet 651 Flush Tool? NO

Rec. 31 Feet of MUD
Rec. 372 Feet of MUDDY WATER-70%WTR/30%MUD
Rec. 248 Feet of WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 115 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.1 @ 93 °F Chlorides 55000 ppm Recovery Chlorides 3400 ppm System

(A) Initial Hydrostatic Mud 2110.3 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 66.9 PSI @ (depth) 4327 w / Clock No. 26191

(C) First Final Flow Pressure 147.8 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1228.6 PSI @ (depth) 4347 w / Clock No. 17652

(E) Second Initial Flow Pressure 203.4 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 321.4 PSI @ (depth) _____ w / Clock No. _____

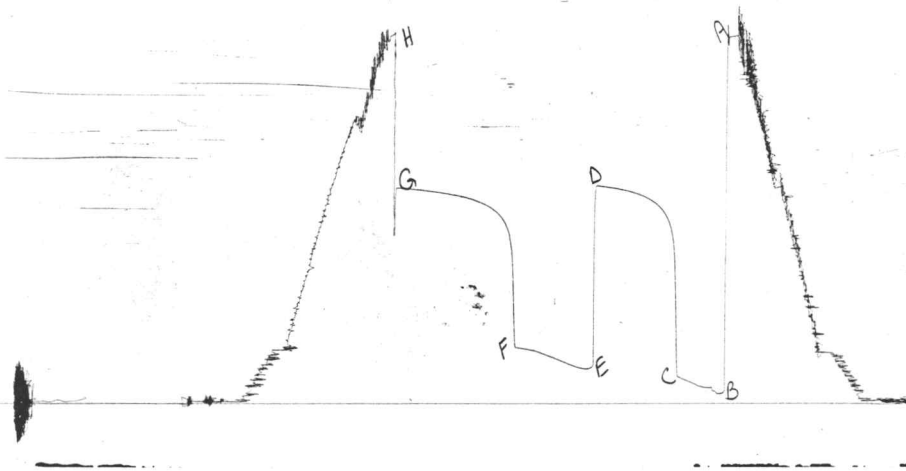
(G) Final Shut-in Pressure 1227.5 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2055.6 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative STEVE BOWMAN

CHART PAGE

DST #1
13851



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2104	2110.3
(B) FIRST INITIAL FLOW PRESSURE	64	66.9
(C) FIRST FINAL FLOW PRESSURE	149	147.8
(D) INITIAL CLOSED-IN PRESSURE	1228	1228.6
(E) SECOND INITIAL FLOW PRESSURE	202	203.4
(F) SECOND FINAL FLOW PRESSURE	320	321.4
(G) FINAL CLOSED-IN PRESSURE	1228	1227.5
(H) FINAL HYDROSTATIC MUD	2050	2055.6

FLUID SAMPLER DATA

Ticket No.: 5058 Date: 8/7/92
Company: MURFIN DRILLING CO., INC.
Lease: OXY-WATSON #1-13 Test No.: 1
County: SEWARD Sec.: 13 Twp.: 33S Rng.: 33W

SAMPLER RECOVERY

Gas
Oil
Mud
Water 4000
Other
Pressure 100
TOTAL 4000

SAMPLER ANALYSIS

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 3400
Resistivity ohms@ F
Viscosity 44
Mud Wt. 9.1
Filtrate 7.2
Other

PIPE RECOVERY

TOP

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm

MIDDLE

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm

BOTTOM

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 2 Date 8/8/92
Company MURFIN DRILLING CO., INC. Zone LANSING
Address 250 N WATER SWT #300 WICHITA KS 67202 Elevation 2714 K.B.
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay _____
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested <u>4562-4589</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>27</u>	Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth <u>4557</u>	Drill Collar - 2.25 Ft. Run <u>620</u>
Bottom Packer Depth <u>4562</u>	Mud Wt. <u>9.1</u> lb/Gal.
Total Depth <u>4589</u>	Viscosity <u>43</u> Filtrate <u>8</u>

Tool Open @ 2:40 PM Initial Blow VERY WEAK 1/4" BLOW DIED IN 10 MINUTES

Final Blow VERY WEAK SURFACE BLOW DIED IN 15 MINUTES

Recovery - Total Feet 250 Flush Tool? NO

Rec. <u>250</u>	Feet of <u>MUDDY WATER-70%WTR/30%MUD</u>
Rec. _____	Feet of _____
Rec. _____	Feet of _____
Rec. _____	Feet of _____
Rec. _____	Feet of _____

BHT 119 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.1 @ 93 °F Chlorides 55000 ppm Recovery Chlorides 3400 ppm System

(A) Initial Hydrostatic Mud 2207.8 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 45.6 PSI @ (depth) 4564 w / Clock No. 26191

(C) First Final Flow Pressure 99.7 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1405.2 PSI @ (depth) 4586 w / Clock No. 17652

(E) Second Initial Flow Pressure 105.9 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 137.6 PSI @ (depth) _____ w / Clock No. _____

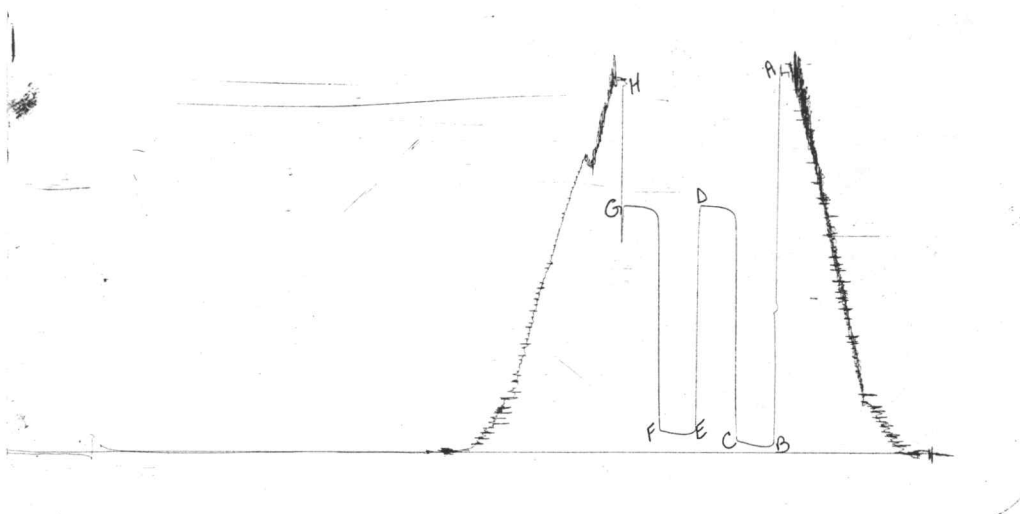
(G) Final Shut-in Pressure 1403.0 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2133.7 PSI Initial Shut-in 30 Final Shut-in 30

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CHART PAGE

DST #2
1385T



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2203	2207.8
(B) FIRST INITIAL FLOW PRESSURE	42	45.6
(C) FIRST FINAL FLOW PRESSURE	96	99.7
(D) INITIAL CLOSED-IN PRESSURE	1400	1405.2
(E) SECOND INITIAL FLOW PRESSURE	106	105.9
(F) SECOND FINAL FLOW PRESSURE	138	137.6
(G) FINAL CLOSED-IN PRESSURE	1400	1403
(H) FINAL HYDROSTATIC MUD	2137	2133.7

FLUID SAMPLER DATA

Ticket No.: 5059 Date: 8/8/92
Company: MURFIN DRILLING CO., INC.
Lease: OXY-WATSON #1-13 Test No.: 2
County: SEWARD Sec.: 13 Twp.: 33S Rng.: 33W

SAMPLER RECOVERY

Gas
Oil
Mud 500
Water 3500
Other
Pressure 75
TOTAL 4000

PIT MUD ANALYSIS

Chlorides 3400
Resistivity ohms@ F
Viscosity 43
Mud Wt. 9.1
Filtrate 8
Other

SAMPLER ANALYSIS

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm.
Gravity corrected @60F

PIPE RECOVERY

TOP

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm

MIDDLE

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm

BOTTOM

Resistivity 0.1 ohms@ 93 F
Chlorides 55000 ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 3 Date 8/10/92
Company MURFIN DRILLING CO., INC. Zone MARMATON
Address 250 N WATER SWT #300 WICHITA KS 67202 Elevation 2714
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay 4
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested <u>4930-4957</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>27</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u> </u>
Top Packer Depth <u>4925</u>	Drill Collar - 2.25 Ft. Run <u>620</u>
Bottom Packer Depth <u>4930</u>	Mud Wt. <u>9</u> lb/Gal.
Total Depth <u>4957</u>	Viscosity <u>47</u> Filtrate <u>9</u>

Tool Open @ 6:05 AM Initial Blow VERY STRONG 12" BLOW IN 1 MINUTE
8" BLOW BACK ON SHUT IN
Final Blow VERY STRONG 12" BLOW IN 1 MINUTE-GAS TO SURFACE IN 40
MINUTES-SEE GAS VOLUME REPORT

Recovery - Total Feet 217 Flush Tool? NO

Rec. <u>4689</u>	Feet of <u>GAS IN PIPE</u>
Rec. <u>217</u>	Feet of <u>GAS & OIL CUT MUD-30%GAS/25%OIL/45%MUD</u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>

BHT 120 °F Gravity 41 °API @ 94 °F Corrected Gravity 38.2 °API
RW @ °F Chlorides ppm Recovery Chlorides 2300 ppm System

(A) Initial Hydrostatic Mud 2455.6 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 45.6 PSI @ (depth) 4932 w / Clock No. 26191

(C) First Final Flow Pressure 50.3 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1566.7 PSI @ (depth) 4954 w / Clock No. 17652

(E) Second Initial Flow Pressure 66.3 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 99.7 PSI @ (depth) w / Clock No.

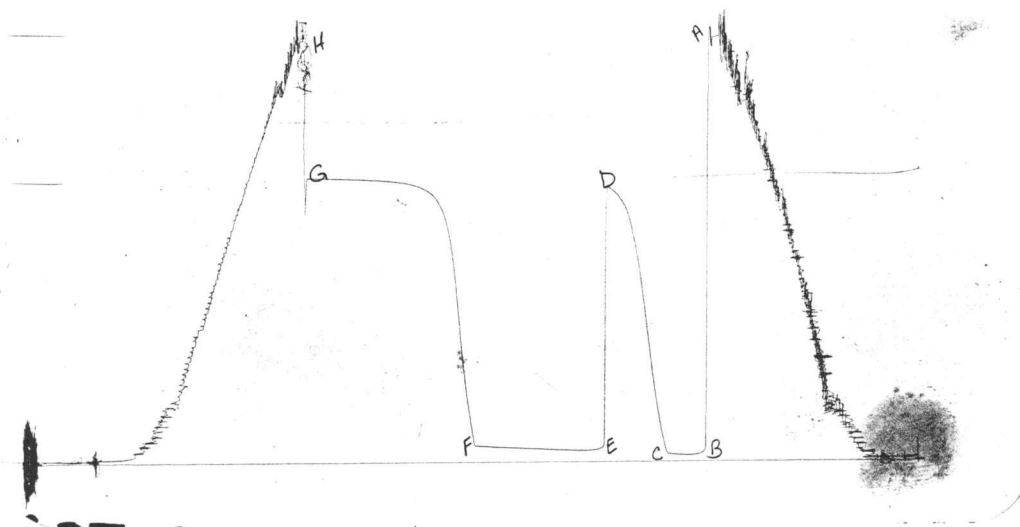
(G) Final Shut-in Pressure 1620.3 PSI Initial Opening 30 Final Flow 90

(H) Final Hydrostatic Mud 2370.8 PSI Initial Shut-in 45 Final Shut-in 120

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CHART PAGE

DST#3
13851



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2454	2455.6
(B) FIRST INITIAL FLOW PRESSURE	42	45.6
(C) FIRST FINAL FLOW PRESSURE	53	50.3
(D) INITIAL CLOSED-IN PRESSURE	1562	1566.7
(E) SECOND INITIAL FLOW PRESSURE	64	66.3
(F) SECOND FINAL FLOW PRESSURE	96	99.7
(G) FINAL CLOSED-IN PRESSURE	1616	1620.3
(H) FINAL HYDROSTATIC MUD	2366	2370.8

GAS VOLUME REPORT

MURFIN DRILLING CO., INC.

OXY-WATSON #1-13

DST # 3

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
				5			
				10			
				15			
				20			
				25			
				30			
				35			
				40	5	0.25	3710
				45	10	0.25	5320
				50	14	0.25	6330
				55	19	0.25	7320
				60	20	0.25	7510
				65	20	0.25	7880
				70	20	0.25	7510
				75	20	0.25	7510
				80	20	0.25	7510
				85	20	0.25	7510
				90	20	0.25	7510

Remarks:

FLUID SAMPLER DATA

Ticket No.: 5060 Date: 8/10/92
Company: MURFIN DRILLING CO., INC.
Lease: OXY-WATSON #1-13 Test No.: 3
County: SEWARD Sec.: 13 Twp.: 33S Rng.: 33W

SAMPLER RECOVERY

Gas 500
Oil 3500
Mud
Water
Other
Pressure 200
TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F
Chlorides ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2300
Resistivity ohms@ F
Viscosity 47
Mud Wt. 9
Filtrate 9
Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity ohms@ F
Chlorides ppm

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 4 Date 8/10/92
Company MURFIN DRILLING CO., INC. Zone MARMATON
Address 250 N WATER SWT #300 WICHITA KS 67202 Elevation 2714
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay _____
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested 4970-4990
Anchor Length 20
Top Packer Depth 4965
Bottom Packer Depth 4970
Total Depth 4990

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 620
Mud Wt. 9 lb/Gal.
Viscosity 44 Filtrate 7.8

Tool Open @ 2:25 AM Initial Blow WEAK 3" BLOW IN 30 MINUTES

Final Blow WEAK 1.5" BLOW IN 60 MINUTES

Recovery - Total Feet 496 Flush Tool? NO

Rec. 496 Feet of MUDDY WATER-70%WTR/30%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 121 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.2 @ 70 °F Chlorides 70000 ppm Recovery Chlorides 2500 ppm System

(A) Initial Hydrostatic Mud 2480.3 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 45.6 PSI @ (depth) 4972 w / Clock No. 26191

(C) First Final Flow Pressure 110.3 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1599.3 PSI @ (depth) 4987 w / Clock No. 17652

(E) Second Initial Flow Pressure 150.3 PSI AK1 Recorder No. _____ Range _____

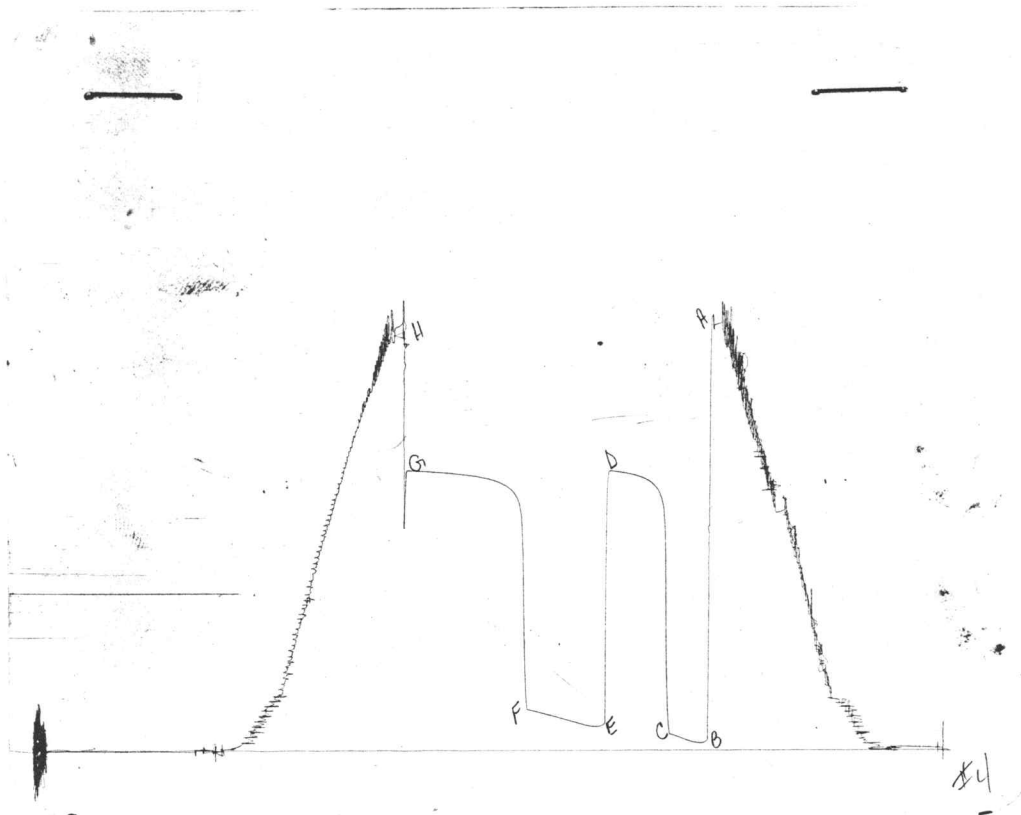
(F) Second Final Flow Pressure 244.7 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1590.9 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2420.3 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative STEVE BOWMAN

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2475	2480.3
(B) FIRST INITIAL FLOW PRESSURE	42	45.6
(C) FIRST FINAL FLOW PRESSURE	106	110.3
(D) INITIAL CLOSED-IN PRESSURE	1595	1599.3
(E) SECOND INITIAL FLOW PRESSURE	149	150.3
(F) SECOND FINAL FLOW PRESSURE	245	244.7
(G) FINAL CLOSED-IN PRESSURE	1595	1590.9
(H) FINAL HYDROSTATIC MUD	2421	2420.3

FLUID SAMPLER DATA

Ticket No.: 5061 Date: 8/10/92
Company: MURFIN DRILLING CO., INC.
Lease: OXY-WATSON #1-13 Test No.: 4
County: SEWARD Sec.: 13 Twp.: 33S Rng.: 33W

SAMPLER RECOVERY

Gas
Oil
Mud
Water 4000
Other
Pressure 100
TOTAL 4000

SAMPLER ANALYSIS

Resistivity 0.2 ohms@ 70 F
Chlorides 70000 ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2500
Resistivity ohms@ F
Viscosity 44
Mud Wt. 9
Filtrate 7.8
Other

PIPE RECOVERY

TOP

Resistivity 0.2 ohms@ 70 F
Chlorides 70000 ppm

MIDDLE

Resistivity 0.2 ohms@ 70 F
Chlorides 70000 ppm

BOTTOM

Resistivity 0.2 ohms@ 70 F
Chlorides 70000 ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 5 Date 8/14/92
Company MURFIN DRILLING CO., INC. Zone MORROW
Address 250 N WATER SWT #300 WICHITA KS 67202 Elevation 2714
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay _____
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested 5602-5670
Anchor Length 68
Top Packer Depth 5597
Bottom Packer Depth 5602
Total Depth 5670

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 620
Mud Wt. 9 lb/Gal.
Viscosity 54 Filtrate 7.6

Tool Open @ 6:15 AM Initial Blow WEAK 3" BLOW DIED BACK IN 15 MINUTES

Final Blow WEAK 5" BLOW IN 60 MINUTES

Recovery - Total Feet 62 Flush Tool? NO

Rec. 62 Feet of MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 124 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud 2840.3 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 66.3 PSI @ (depth) 5604 w / Clock No. 26191

(C) First Final Flow Pressure 66.3 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 99.7 PSI @ (depth) 5667 w / Clock No. 17652

(E) Second Initial Flow Pressure 66.3 PSI AK1 Recorder No. _____ Range _____

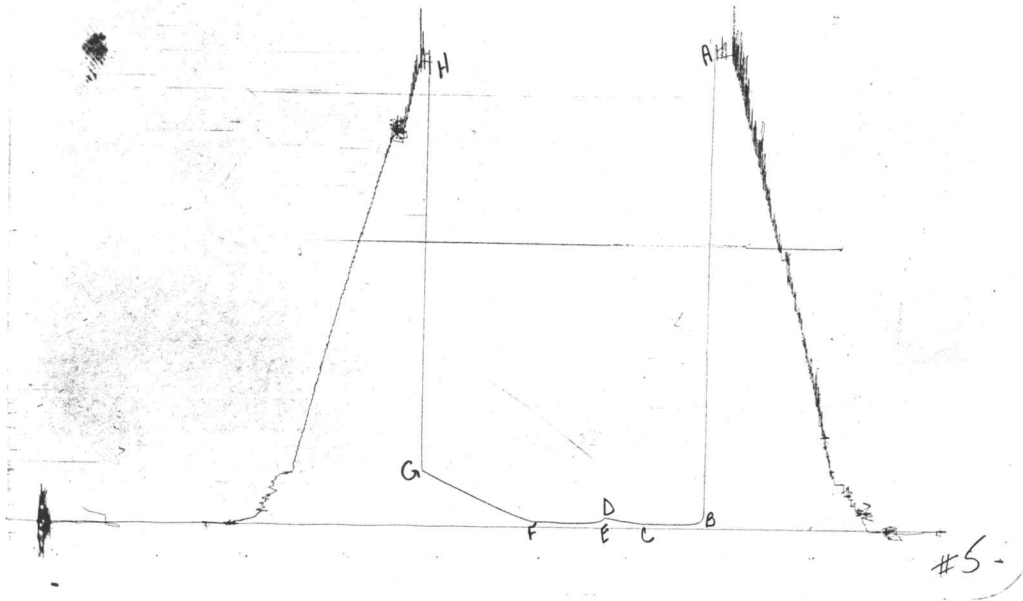
(F) Second Final Flow Pressure 66.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 355.7 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2720.9 PSI Initial Shut-in 45 Final Shut-in 90

Our Representative STEVE BOWMAN

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2836	2840.3
(B) FIRST INITIAL FLOW PRESSURE	64	66.3
(C) FIRST FINAL FLOW PRESSURE	64	66.3
(D) INITIAL CLOSED-IN PRESSURE	96	99.7
(E) SECOND INITIAL FLOW PRESSURE	64	66.3
(F) SECOND FINAL FLOW PRESSURE	64	66.3
(G) FINAL CLOSED-IN PRESSURE	352	355.7
(H) FINAL HYDROSTATIC MUD	2716	2720.9

FLUID SAMPLER DATA

Ticket No.: 5062 Date: 8/14/92
 Company: MURFIN DRILLING CO., INC.
 Lease: OXY-WATSON #1-13 Test No.: 5
 County: SEWARD Sec.: 13 Twp.: 33S Rng.: 33W

SAMPLER RECOVERY

Gas
 Oil
 Mud 4000
 Water
 Other
 Pressure 100
 TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F
 Chlorides ppm.
 Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2000
 Resistivity ohms@ F
 Viscosity 54
 Mud Wt. 9
 Filtrate 7.6
 Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
 Chlorides ppm

MIDDLE

Resistivity ohms@ F
 Chlorides ppm

BOTTOM

Resistivity ohms@ F
 Chlorides ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 6 Date 8/15/92
Company MURFIN DRILLING CO., INC. Zone CHESTER
Address 250 N WATER SWT #300 WICHITA KS 67202 Elevation 2714
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay _____
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested 5707-5747
Anchor Length 40
Top Packer Depth 5702
Bottom Packer Depth 5707
Total Depth 5747

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run _____
Drill Collar - 2.25 Ft. Run 620
Mud Wt. 9 lb/Gal.
Viscosity 52 Filtrate 7.2

Tool Open @ 6:00 AM Initial Blow STRONG 12" BLOW IN 3 MINUTES

Final Blow VERY STRONG 12" BLOW IN 1 MINUTE-GAS TO SURFACE
IN 50 MINUTES-SEE GAS VOLUME REPORT

Recovery - Total Feet 155 Flush Tool? NO

Rec. 5523 Feet of GAS IN PIPE
Rec. 155 Feet of GASSY MUD-5%GAS/95%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

SHT 125 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1500 ppm System

(A) Initial Hydrostatic Mud 2860.6 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 55.8 PSI @ (depth) 5710 w / Clock No. 26191

(C) First Final Flow Pressure 75.1 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1710.4 PSI @ (depth) 5744 w / Clock No. 17652

(E) Second Initial Flow Pressure 84.9 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 84.9 PSI @ (depth) _____ w / Clock No. _____

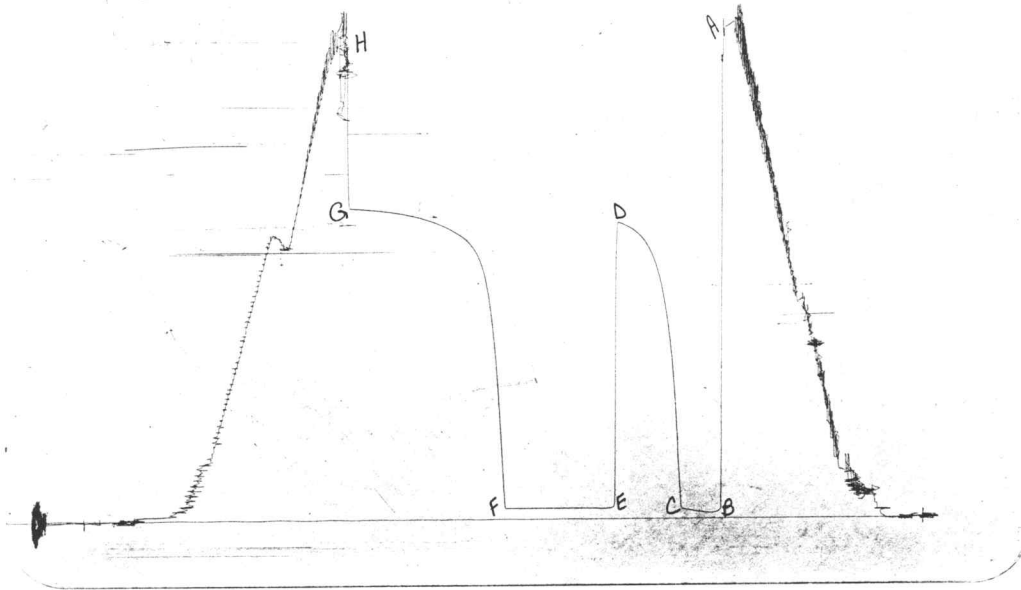
(G) Final Shut-in Pressure 1770.3 PSI Initial Opening 30 Final Flow 90

(H) Final Hydrostatic Mud 2810.5 PSI Initial Shut-in 45 Final Shut-in 120

Our Representative STEVE BOWMAN

CHART PAGE

DST #6
13851



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2858	2860.6
(B) FIRST INITIAL FLOW PRESSURE	53	55.8
(C) FIRST FINAL FLOW PRESSURE	74	75.1
(D) INITIAL CLOSED-IN PRESSURE	1703	1710.4
(E) SECOND INITIAL FLOW PRESSURE	85	84.9
(F) SECOND FINAL FLOW PRESSURE	85	84.9
(G) FINAL CLOSED-IN PRESSURE	1768	1770.3
(H) FINAL HYDROSTATIC MUD	2803	2810.5

GAS VOLUME REPORT

MURFIN DRILLING CO., INC.

OXY-WATSON #1-13

DST # 6

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
5							
10							
15							
20							
25							
30							
35							
40							
45							
50	4	0.25	3370				
55	9	0.25	5050				
60	20	0.25	7510				
65	26	0.25	8560				
70	26	0.25	8560				
75	30	0.25	9200				
80	30	0.25	9200				
85	30	0.25	9200				
90	30	0.25	9200				

Remarks:

FLUID SAMPLER DATA

Ticket No.: 5063

Date: 8/15/92

Company: MURFIN DRILLING CO., INC.

Lease: OXY-WATSON #1-13

Test No.: 6

County: SEWARD

Sec.: 13

Twp.: 33S

Rng.: 33W

SAMPLER RECOVERY

Gas 1000
Oil
Mud 3000
Water
Other 25.0 C.F.
Pressure 1000
TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F
Chlorides ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1500
Resistivity ohms@ F
Viscosity 52
Mud Wt. 9
Filtrate 7.2
Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity ohms@ F
Chlorides ppm

INITIAL TIME(MIN)	Pws (psi)	Log Horn T
3	436.9	1.041
6	735.1	0.778
9	944.6	0.637
12	1106.6	0.544
15	1250.0	0.477
18	1342.6	0.426
21	1433.1	0.385
24	1512.9	0.352
27	1563.8	0.325
30	1591.9	0.301
33	1621.2	0.281
36	1642.8	0.263
39	1662.3	0.248
42	1675.3	0.234
45	1687.2	0.222
48	1696.9	0.211
51	1705.6	0.201
54	1712.1	0.192

FINAL	Pws (psi)	Log Horn T
6	642.5	1.322
12	1085.1	1.041
18	1346.9	0.885
24	1511.9	0.778
30	1584.4	0.699
36	1621.2	0.637
42	1650.4	0.586
48	1673.1	0.544
54	1690.4	0.508
60	1707.7	0.477
66	1721.8	0.450
72	1733.7	0.426
78	1743.5	0.405
84	1751.0	0.385
90	1760.8	0.368
96	1766.2	0.352
102	1771.6	0.338
108	1775.9	0.325
114	1780.3	0.312
120	1783.5	0.301
126	1787.8	0.291

X

X

X

INITIAL FLOW

RECORDER #	13850	DST # 6
TIME(MIN)	PRESSURE	<>PRESSURE
0	61.9	61.9
15	64.1	2.2
30	79	14.9

FINAL FLOW

RECORDER #	13850	DST # 6
TIME(MIN)	PRESSURE	<> PRESSURE
0	80.3	80.3
15	85.4	5.1
30	86.5	1.1
45	86.5	0
60	86.5	0
75	86.5	0
90	86.5	0

INITIAL FLOW

RECORDER #	13850	DST # 7
TIME(MIN)	PRESSURE	<>PRESSURE
0	362.1	362.1
15	392	29.9
30	418.8	26.8

FINAL FLOW

RECORDER #	13850	DST # 7
TIME(MIN)	PRESSURE	<> PRESSURE
0	383.5	383.5
15	397.4	13.9
30	422	24.6
45	433.7	11.7
60	435.9	2.2

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name OXY-WATSON #1-13 Test No. 7 Date 8/17/92
Company MURFIN DRILLING COMPANY Zone ST LOUIS
Address 250 N WATER SUITE #300 WICHITA KS 67202 Elevation 2714
Co. Rep./Geo. PAUL GODOWIC Cont. MURFIN RIG #22 Est. Ft. of Pay 10
Location: Sec. 13 Twp. 33S Rge. 33W Co. SEWARD State KS

Interval Tested 6055-6105 Drill Pipe Size 4.5 XH
Anchor Length 50 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 6050 Drill Collar - 2.25 Ft. Run 620
Bottom Packer Depth 6055 Mud Wt. 9 lb/Gal.
Total Depth 6105 Viscosity 60 Filtrate 6.8

Tool Open @ 8:20 AM Initial Blow VERY STRONG BLOW-GAS TO SURFACE IN 5 MINUTES
SEE GAS VOLUME REPORT

Final Blow _____

Recovery - Total Feet 65 Flush Tool? NO

Rec. 65 Feet of GASSY MUD-10%GAS/90%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 125 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1750 ppm System

(A) Initial Hydrostatic Mud 3133.6 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 354.2 PSI @ (depth) 6086 w / Clock No. 26191

(C) First Final Flow Pressure 414.5 PSI AK1 Recorder No. 13850 Range 4325

(D) Initial Shut-in Pressure 1937.9 PSI @ (depth) 6102 w / Clock No. 17652

(E) Second Initial Flow Pressure 386.9 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 432.9 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1925.8 PSI Initial Opening 30 Final Flow 60

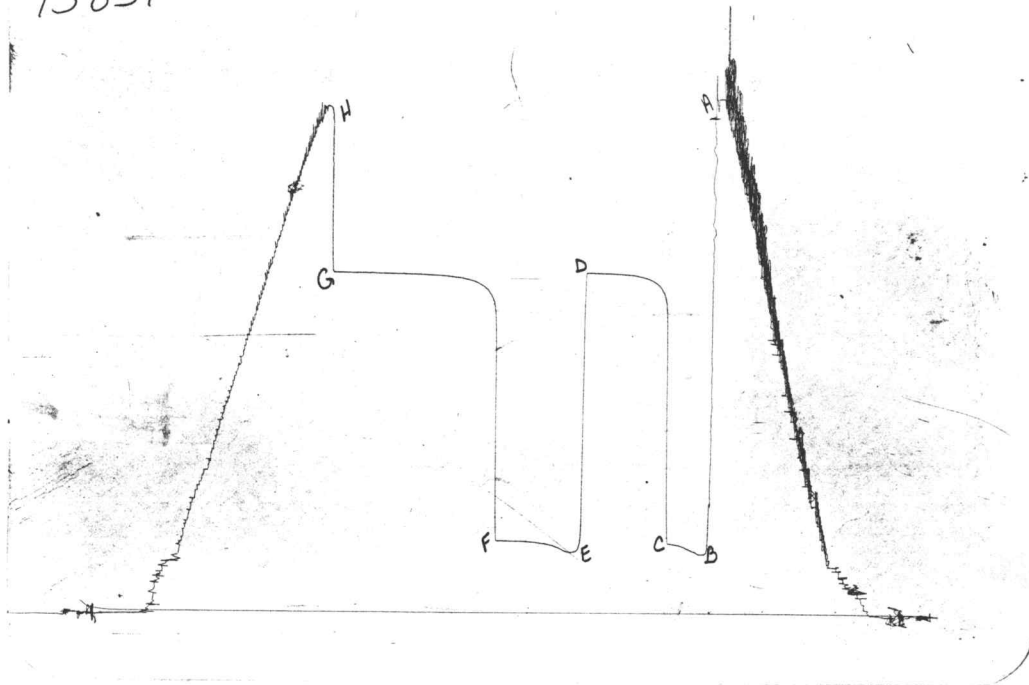
(H) Final Hydrostatic Mud 2871.9 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative STEVE BOWMAN

CHART PAGE

DST # 17

13851



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	3131	3133.6
(B) FIRST INITIAL FLOW PRESSURE	363	354.2
(C) FIRST FINAL FLOW PRESSURE	416	414.5
(D) INITIAL CLOSED-IN PRESSURE	1941	1937.9
(E) SECOND INITIAL FLOW PRESSURE	373	386.9
(F) SECOND FINAL FLOW PRESSURE	427	432.9
(G) FINAL CLOSED-IN PRESSURE	1941	1925.8
(H) FINAL HYDROSTATIC MUD	2869	2871.9

COMPUTER EVALUATION BY TRILOBITE TESTING, L.L.C.

MURFIN DRILLING CO

OXY-WATSON #1-13

DST #1

13 33S 33W

SEWARD KS

ELEVATION:	2714 KB	EST. PAY:	24 FT.
DATUM:	-3389	ZONE TESTED:	ST LOUIS
TEST INTERVAL:	6055-6105	TIME INTERVALS:	30-60-60-120
RECORDER DEPTH:	6102	VISCOSITY:	0.01645 CP
BOTTOM HOLE TEMP:	125	HOLE SIZE:	7.875 IN
COMPRESSIBILITY:	0.9974	GAS GRAVITY:	0.7037

TEMPERATURE RANKINE:	585.00	&
TRANSMISSIBILITY:	46433.48	Kh/%
THEORITICAL FLOW CAPACITY:	763.80	Kh
AVERAGE EFFECTIVE PERMEABILITY:	31.82	K(md.)
RADIUS OF INVESTIGATION:	53.52	FT.
DAMAGE RATIO:	10.96	
ABSOLUTE OPEN FLOW(MAX)	1920.05	MCFD
ABSOLUTE OPEN FLOW(MIN)	1871.41	MCFD
THEORITICAL OPEN FLOW(MAX)	21035.22	MCFD
THEORITICAL OPEN FLOW(MIN)	20502.33	MCFD
POTENTIOMETRIC SURFACE	0.00	(FT.)

INITIAL SHUT-IN VALUES:

SLOPE	20907.77
THEORETICAL STATIC PRESSURE	1943

FINAL SHUT-IN VALUES:

SLOPE	37520.40
THEORETICAL STATIC PRESSURE	1936

DRAWDOWN FACTOR:	0.40 (%)
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OXY-WATSON
INITIAL

DST #7
SHUTIN

15

30.0

TIME

Slope 20907.77 psi/cycle
P * 1943 psi

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
0.1	489.3	2.179	489.3	151
0.2	607.8	1.881	118.5	76
0.3	1016.0	1.708	408.2	51
0.9	1245.6	1.247	229.6	18
1.3	1640.9	1.098	395.3	13
3.3	1771.1	0.744	130.2	6
4.8	1817.9	0.615	46.8	4
7.2	1851.8	0.489	33.9	3
8.5	1880.5	0.442	28.7	3
16.4	1911.7	0.282	31.2	2
23.6	1923.7	0.214	12.0	2
30.6	1933.7	0.173	10.0	1
39.4	1934.7	0.140	1.0	1
48.2	1935.7	0.118	1.0	1
52.3	1936.7	0.110	1.0	1
57.7	1937.7	0.100	1.0	1
59.7	1937.9	0.097	0.2	1

OXY-WATSON
FINAL

DST #7
SHUTIN

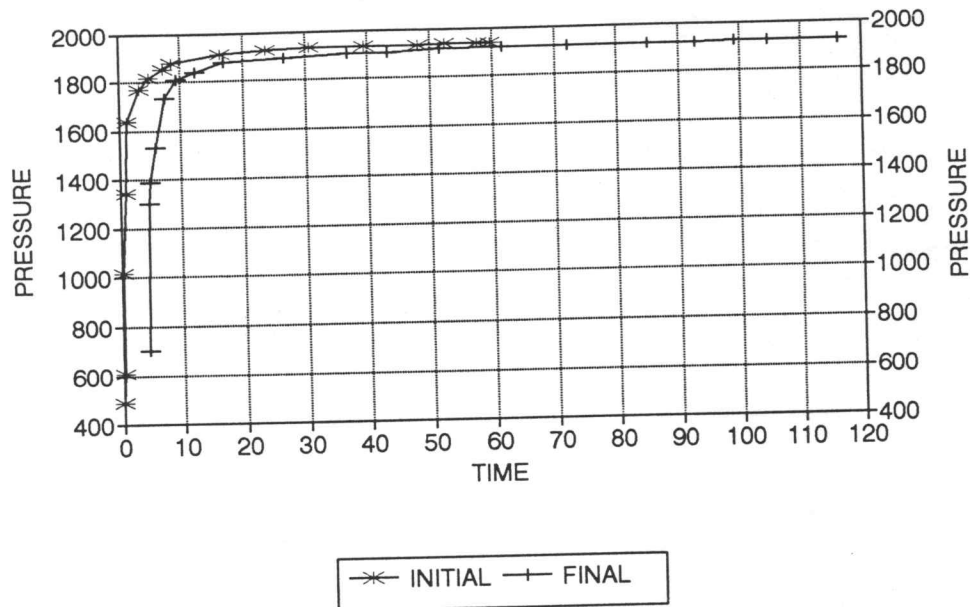
90 TOTAL FLOW

TIME

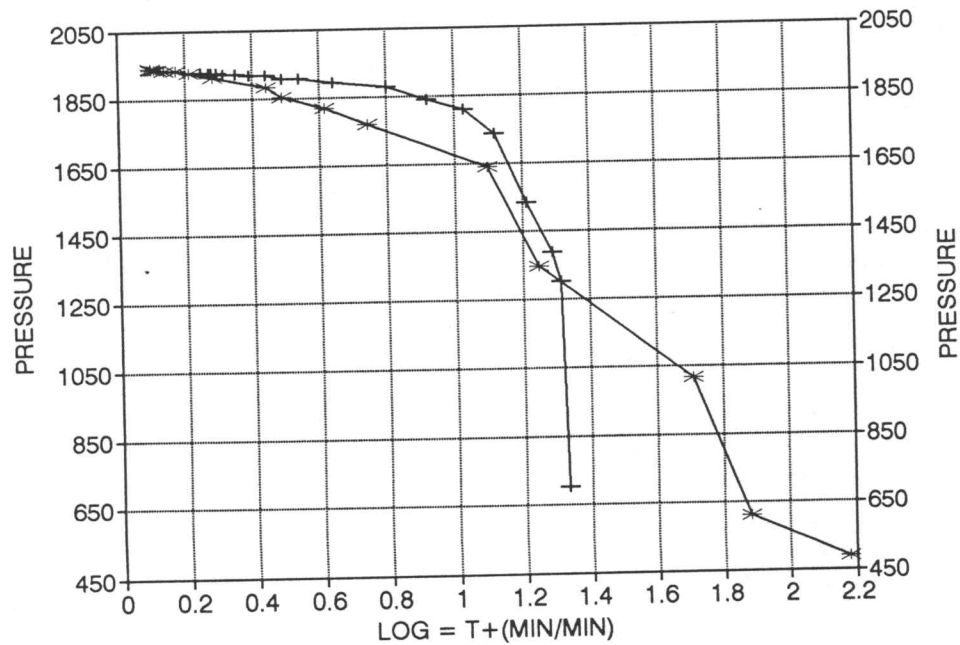
Slope 37520.40 psi/cycle
P * 1936 psi

TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
4.4	700.9	1.332	700.9	21
4.6	1301.4	1.313	600.5	21
4.9	1388.9	1.287	87.5	19
5.9	1532.0	1.211	143.1	16
7.4	1734.9	1.119	202.9	13
9.3	1809.5	1.028	74.6	11
12.3	1839.0	0.920	29.5	8
16.9	1878.1	0.801	39.1	6
26.6	1893.0	0.642	14.9	4
36.7	1905.4	0.538	12.4	3
43.2	1905.9	0.489	0.5	3
51.5	1917.0	0.439	11.1	3
61.5	1919.1	0.392	2.1	2
72.1	1921.8	0.352	2.7	2
85.1	1922.0	0.313	0.2	2
92.7	1923.2	0.295	1.2	2
99.2	1925.0	0.280	1.8	2
104.7	1925.6	0.269	0.6	2
116.1	1925.8	0.249	0.2	2

OXY-WATSON #1-13 / DST #7 DELTA T DELTA P



HORNER PLOT



GAS VOLUME REPORT

MURFIN DRILLING COMPANY

OXY-WATSON #1-13

DST # 7

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
5	5	1.5	863	5	12	1.5	1420
10	7	1.5	1036	10	17	1.5	1760
15	10	1.5	1274	15	18	1.5	1824
20	15	1.5	1626	20	18	1.5	1824
25	16	1.5	1694	25	18	1.5	1824
30	17	1.5	1760	30	18	1.5	1824
				35	18	1.5	1824
				40	18	1.5	1824
				45	18	1.5	1824
				50	18	1.5	1824
				55	18	1.5	1824
				60	18	1.5	1824

Remarks:

FLUID SAMPLER DATA

Ticket No.: 5065 Date: 8/17/92
Company: MURFIN DRILLING COMPANY
Lease: OXY-WATSON #1-13 Test No.: 7
County: SEWARD Sec.: 13 Twp.: 33S Rng.: 33W

SAMPLER RECOVERY

Gas 4000
Oil
Mud
Water
Other 145 CU FT GAS
Pressure 1700
TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F
Chlorides ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1750
Resistivity 0.58 ohms@ 72 F
Viscosity 60
Mud Wt. 9
Filtrate 6.8
Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity ohms@ F
Chlorides ppm