

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name NOONE #1 Test No. 1 Date 11-6-93
Company ALFRED WARD & SON OPERATING CO Zone LANSING 'C'
Address PO BOX V AKRON CO 80720 Elevation 2612 KB
Co. Rep./Geo. BRYAN BYNOG Cont. EMPHASIS #6 Est. Ft. of Pay _____
Location: Sec. 1 Twp. 5S Rge. 27W Co. DECATUR State KS

Interval Tested 3560-3594 Drill Pipe Size 4.5" FH
Anchor Length 34 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3555 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3560 Mud Wt. 9.1 lb/Gal.
Total Depth 3594 Viscosity 49 Filtrate 7.8

Tool Open @ 4:10 AM Initial Blow WEAK BLOW 1/4-1/2"

Final Blow NO BLOW

Recovery - Total Feet 3 Flush Tool? NO

Rec. 3 Feet of DRILLING MUD WITH A FEW SPECKS OF OUL
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 1000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud 1720.3 PSI AK1 Recorder No. 10248 Range 4400

(B) First Initial Flow Pressure 35.6 PSI @ (depth) 3591 w / Clock No. 30410

(C) First Final Flow Pressure 35.6 PSI AK1 Recorder No. 13278 Range 4400

(D) Initial Shut-in Pressure 46.8 PSI @ (depth) 3586 w / Clock No. 22993

(E) Second Initial Flow Pressure 35.6 PSI AK1 Recorder No. _____ Range _____

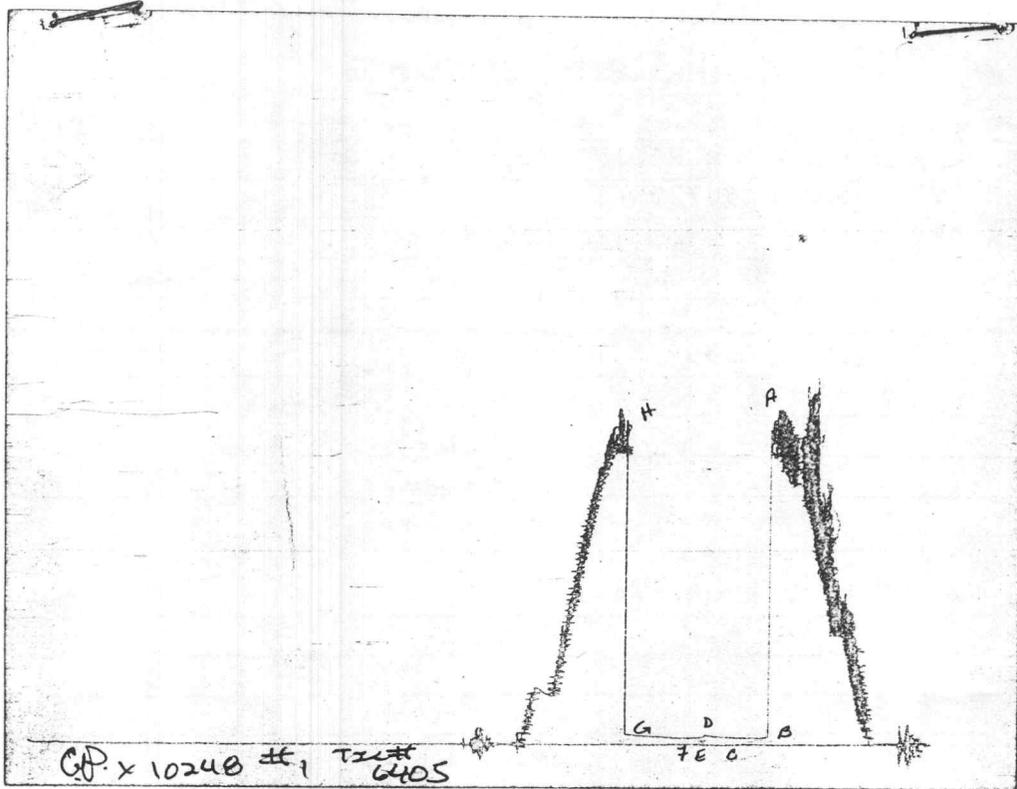
(F) Second Final Flow Pressure 35.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 46.8 PSI Initial Opening 15 Final Flow 10

(H) Final Hydrostatic Mud 1682.7 PSI Initial Shut-in 30 Final Shut-in 45

Our Representative GARY PEVOTEAUX

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1716	1720.3
(B) FIRST INITIAL FLOW PRESSURE	30	35.6
(C) FIRST FINAL FLOW PRESSURE	30	35.6
(D) INITIAL CLOSED-IN PRESSURE	41	46.8
(E) SECOND INITIAL FLOW PRESSURE	30	35.6
(F) SECOND FINAL FLOW PRESSURE	30	35.6
(G) FINAL CLOSED-IN PRESSURE	41	46.8
(H) FINAL HYDROSTATIC MUD	1679	1682.7

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Drill-Stem Test Data

Well Name NOONE #1 Test No. 2 Date 11-6-93
Company ALFRED WARD & SON OPERATING CO Zone LANSING 'E&F'
Address PO BOX V AKRON CO 80720 Elevation 2612 KB
Co. Rep./Geo. BRYAN BYNOG Cont. EMPHASIS #6 Est. Ft. of Pay _____
Location: Sec. 1 Twp. 5S Rge. 27W Co. DECATUR State KS

Interval Tested 3590-3622 Drill Pipe Size 4.5" FH
Anchor Length 32 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3585 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3590 Mud Wt. 9.4 lb/Gal.
Total Depth 3622 Viscosity 46 Filtrate 7.8

Tool Open @ 5:35 PM Initial Blow STRONG BLOW - PACKERS FAILING
PICKED UP AND RE-SET TOOL. PACKERS FAILED
Final Blow NONE (SLIDE TOOL 2-3' TO BOTTOM)

Recovery - Total Feet 160 Flush Tool? NO

Rec. 160 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 1000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 10248 Range 4400

(B) First Initial Flow Pressure _____ PSI @ (depth) 3619 w / Clock No. 30410

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. 13278 Range 4400

(D) Initial Shut-in Pressure _____ PSI @ (depth) 3614 w / Clock No. 22993

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

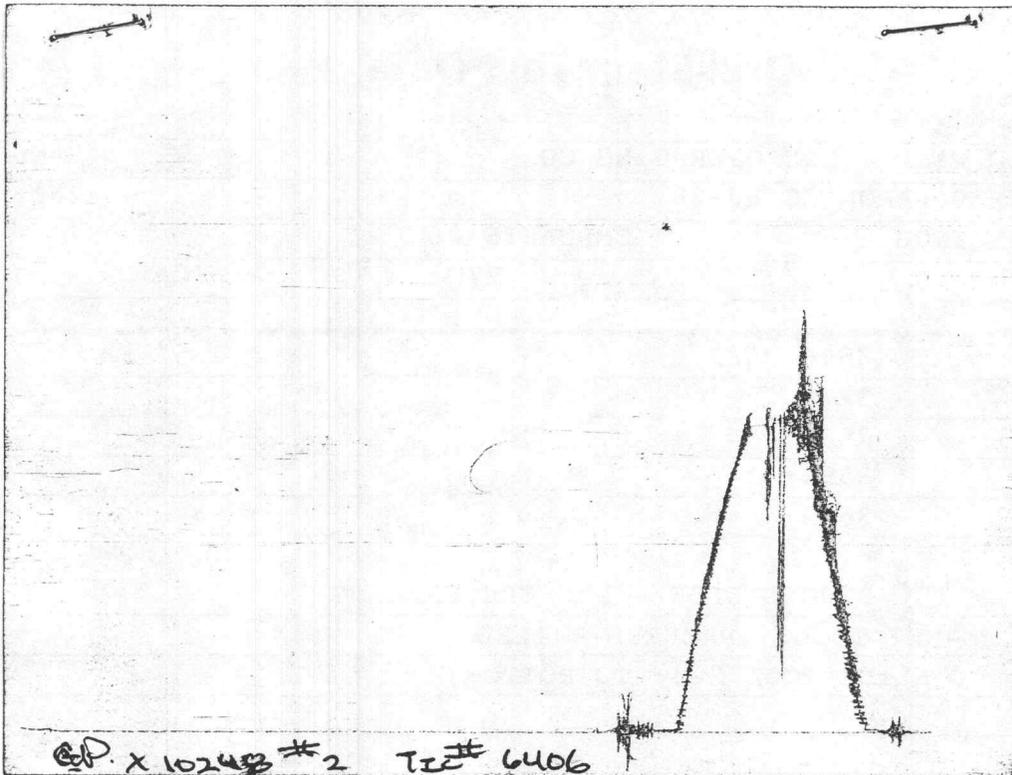
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

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

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in _____ Final Shut-in _____

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CHART PAGE



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FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

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Drill-Stem Test Data

Well Name NOONE #1 Test No. 3 Date 11-7-93
Company ALFRED WARD & SON OPERATING CO Zone LANSING 'F&G
Address PO BOX V AKRON CO 80720 Elevation 2612 KB
Co. Rep./Geo. BRYAN BYNOG Cont. EMPHASIS #6 Est. Ft. of Pay _____
Location: Sec. 1 Twp. 5S Rge. 27W Co. DECATUR State KS

Interval Tested 3565-3630 Drill Pipe Size 4.5" FH
Anchor Length 65 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3560 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3565 Mud Wt. 9.4 lb/Gal.
Total Depth 3630 Viscosity 46 Filtrate 7.8

Tool Open @ 4:22 AM Initial Blow WEAK BLOW (SLOW INCREASE TO 4")

Final Blow WEAK TO FAIR BLOW (SLOW INCREASE TO 4 1/2")

Recovery - Total Feet 75 Flush Tool? NO

Rec. 75 Feet of HEAVY DRILLING MUD OIL SCUM AT TOP OF TOOL
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides 1300 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud 1806.3 PSI AK1 Recorder No. 10248 Range 4400

(B) First Initial Flow Pressure 59.1 PSI @ (depth) 3627 w / Clock No. 30410

(C) First Final Flow Pressure 67.9 PSI AK1 Recorder No. 13278 Range 4400

(D) Initial Shut-in Pressure 1019.2 PSI @ (depth) 3622 w / Clock No. 22993

(E) Second Initial Flow Pressure 69.4 PSI AK1 Recorder No. _____ Range _____

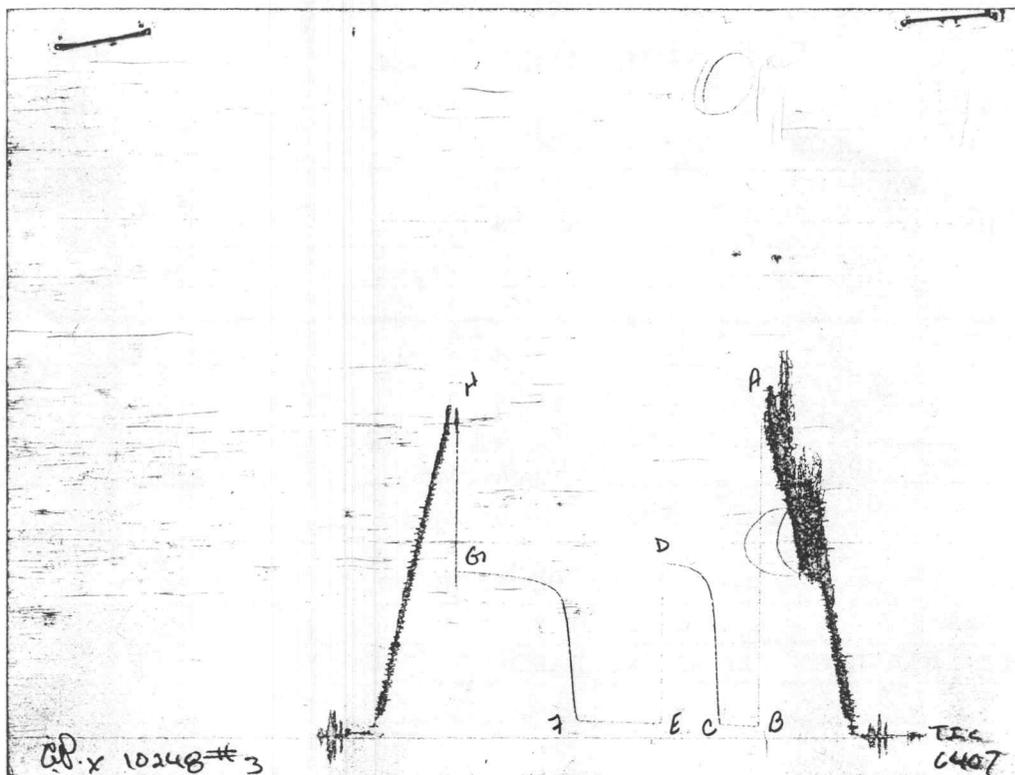
(F) Second Final Flow Pressure 86.3 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 961.8 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1783.6 PSI Initial Shut-in 45 Final Shut-in 90

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CHART PAGE



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	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1799	1806.3
(B) FIRST INITIAL FLOW PRESSURE	53	59.1
(C) FIRST FINAL FLOW PRESSURE	62	67.9
(D) INITIAL CLOSED-IN PRESSURE	1010	1019.2
(E) SECOND INITIAL FLOW PRESSURE	62	69.4
(F) SECOND FINAL FLOW PRESSURE	80	86.3
(G) FINAL CLOSED-IN PRESSURE	955	961.8
(H) FINAL HYDROSTATIC MUD	1779	1783.6

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Drill-Stem Test Data

Well Name NOONE #1 Test No. 4 Date 11-8-93
Company ALFRED WARD & SON OPERATING CO Zone LANSING 'H'
Address PO BOX V AKRON CO 80720 Elevation 2612 KB
Co. Rep./Geo. BRYAN BYNOG Cont. EMPHASIS #6 Est. Ft. of Pay _____
Location: Sec. 1 Twp. 5S Rge. 27W Co. DECATUR State KS

Interval Tested 3640-3790 Drill Pipe Size 4.5" FH
Anchor Length 150 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3635 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3640 Mud Wt. 9.2 lb/Gal.
Total Depth 3790 Viscosity 47 Filtrate 8.5

Tool Open @ 11:26 AM Initial Blow FAIR TO STRONG BLOW (BOTTOM OF BUCKET IN 9 MINUTES)

Final Blow FAIR TO STRONG BLOW (BOTTOM OF BUCKET IN 11 MINUTES)

Recovery - Total Feet 415 Flush Tool? NO

Rec. 25 Feet of GAS IN PIPE
Rec. 105 Feet of WATERY MUD WITH OIL SPECKS 33%WATER/67%MUD
Rec. 310 Feet of MUDDY WATER WITH OIL SPECKS 98%WATER/2%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 109 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.26 @ 71 °F Chlorides 48000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud 1929.7 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 109.5 PSI @ (depth) 3787 w / Clock No. 22993

(C) First Final Flow Pressure 194.5 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 934.1 PSI @ (depth) 3782 w / Clock No. 30410

(E) Second Initial Flow Pressure 210.3 PSI AK1 Recorder No. _____ Range _____

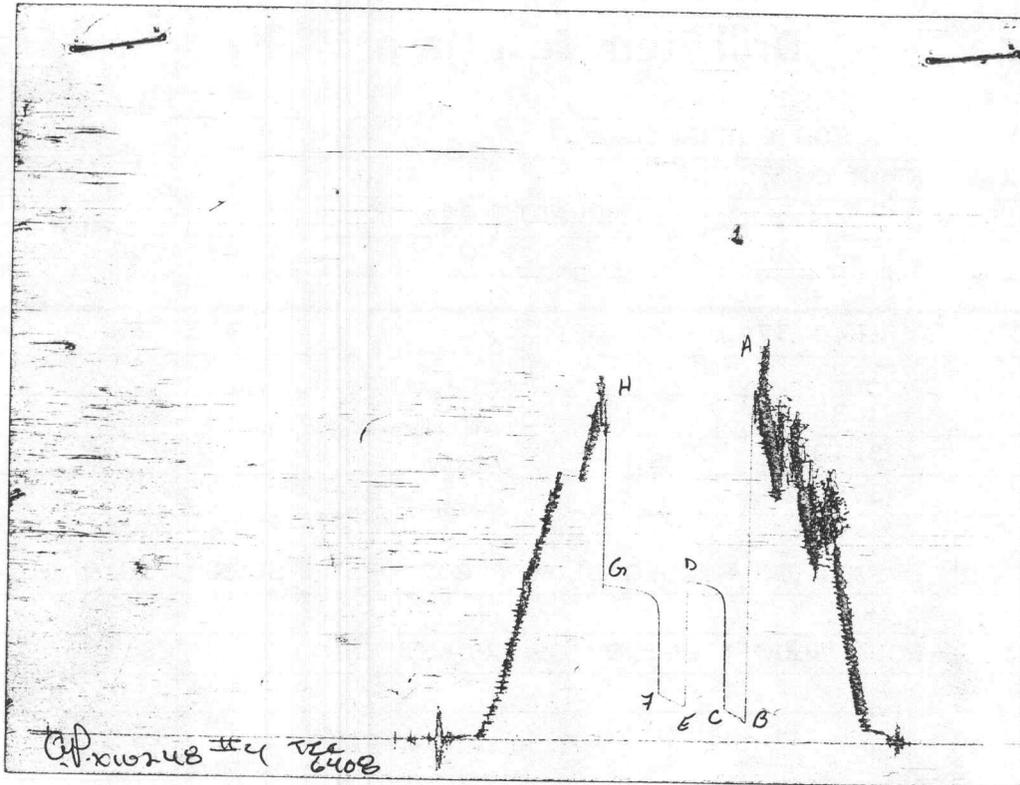
(F) Second Final Flow Pressure 279.8 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 899.1 PSI Initial Opening 15 Final Flow 20

(H) Final Hydrostatic Mud 1916.4 PSI Initial Shut-in 30 Final Shut-in 40

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CHART PAGE



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	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1922	1929.7
(B) FIRST INITIAL FLOW PRESSURE	100	109.5
(C) FIRST FINAL FLOW PRESSURE	186	194.5
(D) INITIAL CLOSED-IN PRESSURE	925	934.1
(E) SECOND INITIAL FLOW PRESSURE	200	210.3
(F) SECOND FINAL FLOW PRESSURE	270	279.8
(G) FINAL CLOSED-IN PRESSURE	894	899.1
(H) FINAL HYDROSTATIC MUD	1909	1916.4

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Drill-Stem Test Data

Well Name NOONE #1 Test No. 5 Date 11-8-93
Company ALFRED WARD & SON OPERATING CO Zone LANSING 'D-G
Address PO BOX V AKRON CO 80720 Elevation 2612 KB
Co. Rep./Geo. BRYAN BYNOG Cont. EMPHASIS #6 Est. Ft. of Pay _____
Location: Sec. 1 Twp. 5S Rge. 27W Co. DECATUR State KS

Interval Tested 3562-3640 Drill Pipe Size 4.5" FH
Anchor Length 78 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3562 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3640 Mud Wt. _____ 9.2 lb/Gal.
Total Depth 3790 Viscosity 47 Filtrate 8.5

Tool Open @ 6:55 PM Initial Blow FAIR SURGING BLOW 2-10" IN WATER
LOST CIRC. BEFORE SETTING TOOL ADDED LCM TO GET IT BACK
Final Blow FAIR TO STRONG BLOW (BOTTOM OF BUCKET IN 15 MINUTES)

Recovery - Total Feet 332 Flush Tool? NO

Rec. 82 Feet of HEAVY MUD WITH A FEW OIL SPECKS
Rec. 120 Feet of WATERY MUD WITH OIL SPECKS 18%WATER/82%MUD
Rec. 130 Feet of DRILLING MUD WITH OIL SPECKS
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 109 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.37 @ 68 °F Chlorides 28000 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud 1915.6 PSI AK1 Recorder No. 13224 Range 4350

(B) First Initial Flow Pressure 36.7 PSI @ (depth) 3634 w / Clock No. 27785

(C) First Final Flow Pressure 121.7 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure 1016.3 PSI @ (depth) 3629 w / Clock No. 30410

(E) Second Initial Flow Pressure 156.3 PSI AK1 Recorder No. 13278 Range 4400

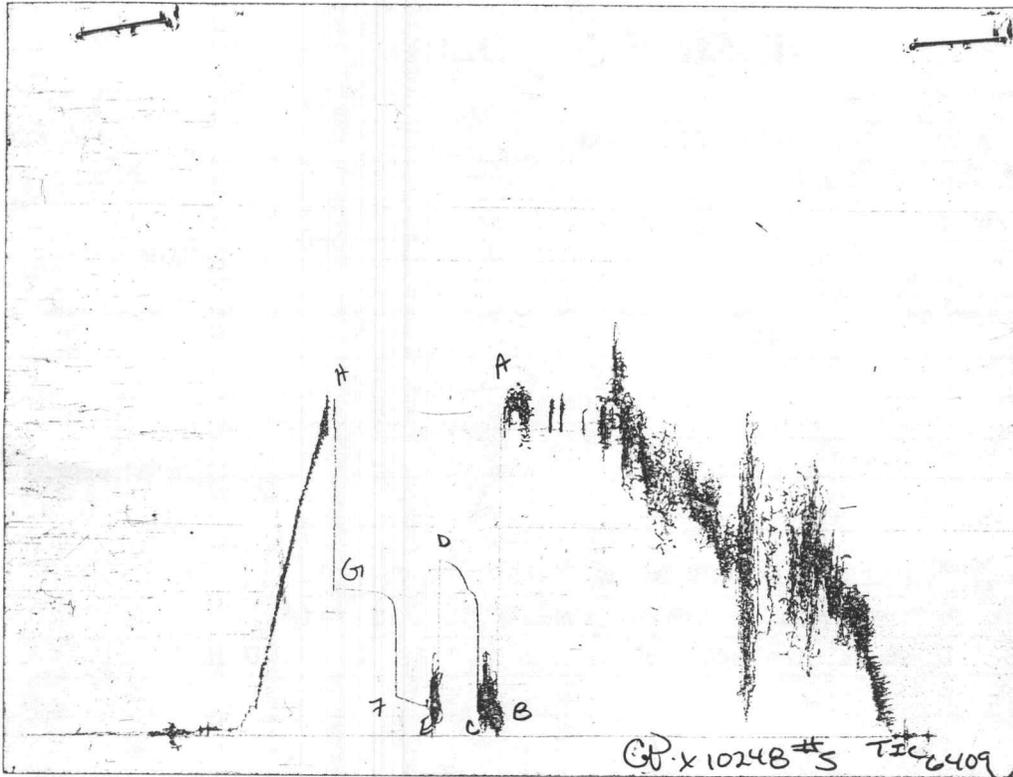
(F) Second Final Flow Pressure 228.7 PSI @ (depth) 3655 w / Clock No. 22993

(G) Final Shut-in Pressure 841.6 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 1799.7 PSI Initial Shut-in 30 Final Shut-in 45

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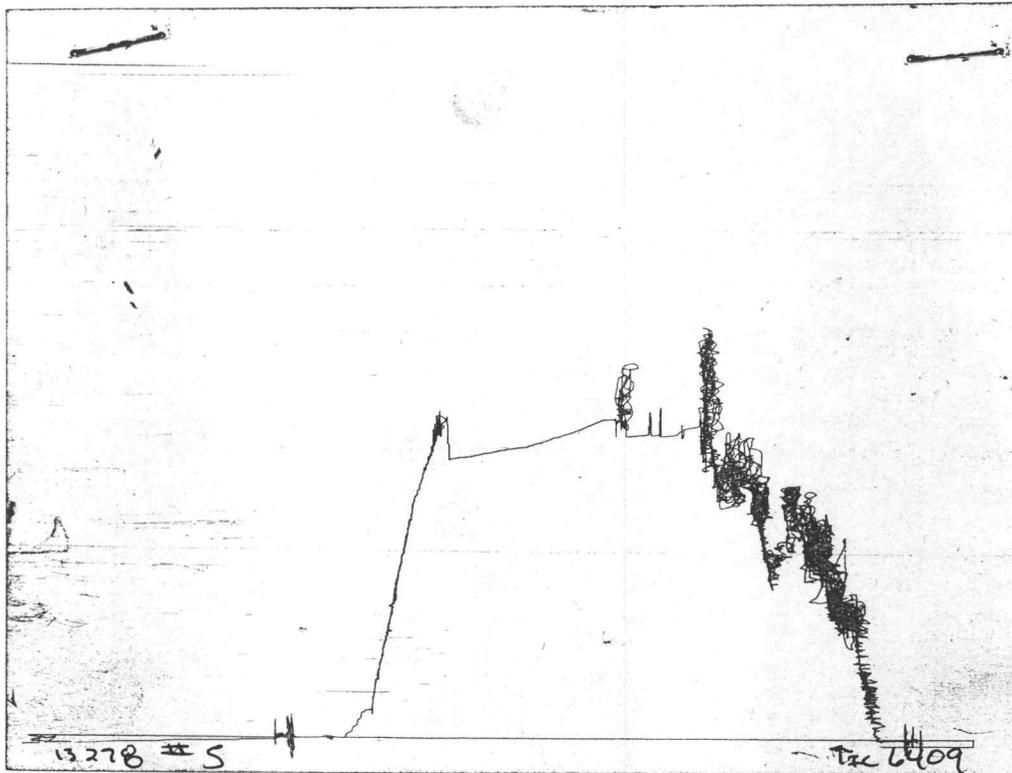
CHART PAGE



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	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1900	1915.6
(B) FIRST INITIAL FLOW PRESSURE	32	36.7
(C) FIRST FINAL FLOW PRESSURE	114	121.7
(D) INITIAL CLOSED-IN PRESSURE	1001	1016.3
(E) SECOND INITIAL FLOW PRESSURE	146	156.3
(F) SECOND FINAL FLOW PRESSURE	220	228.7
(G) FINAL CLOSED-IN PRESSURE	834	841.6
(H) FINAL HYDROSTATIC MUD	1793	1799.7

CHART PAGE



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FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD