

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CUMMINGS #1 Test No. 1 Date 05/01/95
Company H & H INVESTMENTS Zone KC "H" & "I"
Address PO BOX 1433, HAYS KS 67601 Elevation 2499
Co. Rep./Geo. RANDY KILIAN Cont. DISCOVERY #1 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 24W Co. GRAHAM State KS

Interval Tested 3902-3946 Drill Pipe Size 4.5" XH
Anchor Length 44 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3897 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3902 Mud Wt. 8.8 lb/Gal.
Total Depth 3946 Viscosity 42 Filtrate _____

Tool Open @ 11:15 PM Initial Blow VERY WEAK SURFACE BLOW, DIED IN 3 MIN

Final Blow NO RETURN BLOW - FLUSHED TOOL/GOOD SURGE, NO HELP

Recovery - Total Feet 5 Flush Tool? YES

Rec. 5 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 115 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 100 ppm System

(A) Initial Hydrostatic Mud 1939.80 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 31.80 PSI @ (depth) 3936 w / Clock No. 23832

(C) First Final Flow Pressure 31.80 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 31.80 PSI @ (depth) 3941 w / Clock No. 17640

(E) Second Initial Flow Pressure 31.80 PSI AK1 Recorder No. _____ Range _____

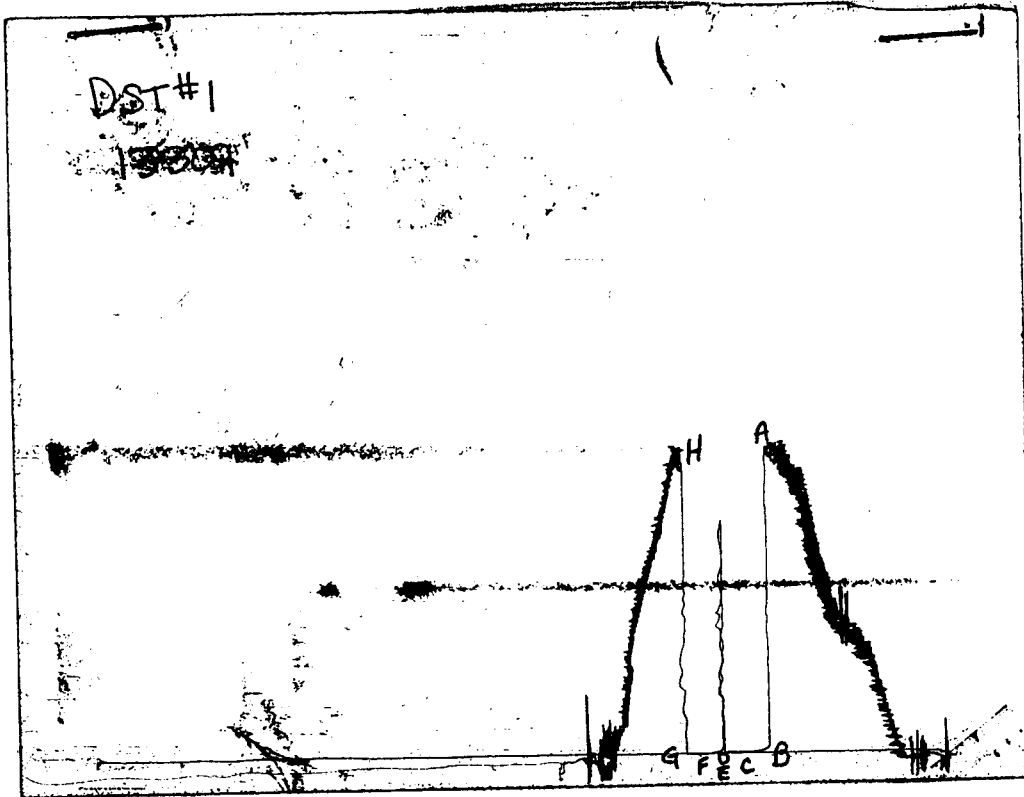
(F) Second Final Flow Pressure 31.80 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 31.80 PSI Initial Opening 15 Final Flow 15

(H) Final Hydrostatic Mud 1917.40 PSI Initial Shut-in 15 Final Shut-in 15

Our Representative ROD STEINBRINK

CHART PAGE



This is an actual photograph of an AK1 recorder chart

| | FIELD READING | OFFICE READING |
|----------------------------------|------------------|-------------------|
| (A) INITIAL HYDROSTATIC MUD | 1902 | 1939.80 |
| (B) FIRST INITIAL FLOW PRESSURE | 20 | 31.80 |
| (C) FIRST FINAL FLOW PRESSURE | 20 | 31.80 |
| (D) INITIAL CLOSED-IN PRESSURE | 20 | 31.80 |
| (E) SECOND INITIAL FLOW PRESSURE | 20 | 31.80 |
| (F) SECOND FINAL FLOW PRESSURE | 20 | 31.80 |
| (G) FINAL CLOSED-IN PRESSURE | 20 | 31.80 |
| (H) FINAL HYDROSTATIC MUD | 1892 | 1917.40 |

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Drill-Stem Test Data

Well Name CUMMINGS #1 Test No. 2 Date 05/02/95
Company H & H INVESTMENTS Zone KC "J" & "K"
Address PO BOX 1433, HAYS KS 67601 Elevation 2499
Co. Rep./Geo. RANDY KILIAN Cont. DISCOVERY #1 Est. Ft. of Pay _____
Location: Sec. 31 Twp. 7S Rge. 24W Co. GRAHAM State KS

Interval Tested 3934-3995 Drill Pipe Size 4.5" XH
Anchor Length 61 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 3929 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 3934 Mud Wt. 9.1 lb/Gal.
Total Depth 3995 Viscosity 46 Filtrate 8.4

Tool Open @ 8:00 PM Initial Blow VERY WEAK BLOW, DIED IN 1 MIN

Final Blow NO FLOW PERIOD, PULLED TOOL AT COMPANY ORDERS

Recovery - Total Feet 5 Flush Tool? NO

Rec. 5 Feet of OIL CUT MUD - 3% OIL, 97% MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 120 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 100 ppm System

(A) Initial Hydrostatic Mud 1851.40 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 27.10 PSI @ (depth) 3955 w / Clock No. 23832

(C) First Final Flow Pressure 27.10 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 67.20 PSI @ (depth) 3990 w / Clock No. 17640

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

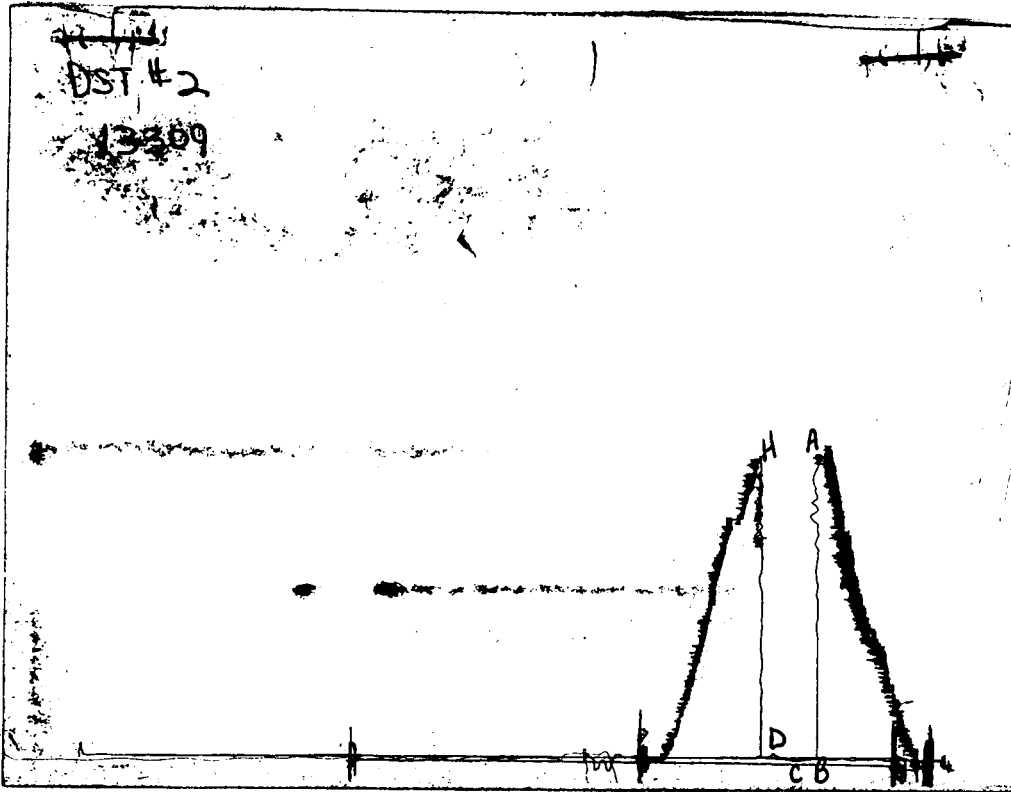
(F) Second Final Flow Pressure NA PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure NA PSI Initial Opening 15 Final Flow _____

(H) Final Hydrostatic Mud 1850.20 PSI Initial Shut-in 15 Final Shut-in _____

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CHART PAGE



This is an actual photograph of an AK1 recorder chart

| | FIELD READING | OFFICE READING |
|----------------------------------|------------------|-------------------|
| (A) INITIAL HYDROSTATIC MUD | 1822 | 1851.40 |
| (B) FIRST INITIAL FLOW PRESSURE | 31 | 27.10 |
| (C) FIRST FINAL FLOW PRESSURE | 31 | 27.10 |
| (D) INITIAL CLOSED-IN PRESSURE | 52 | 67.20 |
| (E) SECOND INITIAL FLOW PRESSURE | NA | NA |
| (F) SECOND FINAL FLOW PRESSURE | NA | NA |
| (G) FINAL CLOSED-IN PRESSURE | NA | NA |
| (H) FINAL HYDROSTATIC MUD | 1812 | 1850.20 |

CALCULATED RECOVERY ANALYSIS DRILL PIPE

DST # 2

TICKET # 8053

| SAMPLE # | TOTAL FEET | GAS | | OIL | | WATER | | MUD | |
|--------------|------------|-------------|----------|-------------|-------------|----------|----------|--------------|-------------|
| | | % | FEET | % | FEET | % | FEET | % | FEET |
| 1 | 5 | | 0 | 3 | 0.15 | | 0 | 97 | 4.85 |
| 2 | | | 0 | | 0 | | 0 | | 0 |
| 3 | | | 0 | | 0 | | 0 | | 0 |
| 4 | | | 0 | | 0 | | 0 | | 0 |
| 5 | | | 0 | | 0 | | 0 | | 0 |
| 6 | | | 0 | | 0 | | 0 | | 0 |
| TOTAL | 5 | 0.00 | 0 | 3.00 | 0.15 | 0 | 0 | 97.00 | 4.85 |

| | | | HRS OPEN | BBL/DAY |
|------------|----------|---|----------|---------|
| BBL OIL= | 0.002133 | * | 0.25 | 0.20 |
| BBL WATER= | 0 | * | | 0.00 |
| BBL MUD= | 0.068967 | | | |
| BBL GAS | 0 | | | |

