

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name KUHN #2-10 Test No. 1 Date 11/18/94
Company HELMERICH & PAYNE INC Zone MORROW
Address P. O. BOX 558, GARDEN CITY, KS 67846 Elevation 2966
Co. Rep./Geo. KEN JEHLIK/AUSTIN GARNER CHEYENNE #5 Est. Ft. of Pay KS
Location: Sec. 10 Twp. 27S Rge. 34W Co. HASKELL State KS

Interval Tested 5014-5025 Drill Pipe Size 4.5" XH
Anchor Length 11 Wt. Pipe I.D. - 2.7 Ft. Run 700
Top Packer Depth 5009 Drill Collar - 2.25 Ft. Run 9.1
Bottom Packer Depth 5014 Mud Wt. 49 lb/Gal. 8.4
Total Depth 5025 Viscosity 49 Filtrate 8.4

Tool Open @ 3:15 PM Initial Blow WEAK SURFACE BLOW BUILT TO 1/4"

Final Blow NO RETURN - FLUSHED TOOL/GOOD SURGE - NO HELP.

Recovery - Total Feet 20 Flush Tool? YES

Rec. 20 Feet of MUD. 100% MUD.
Rec. _____ Feet of _____
Rec. _____ Feet of 0
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 120 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 5.5 @ 70 °F Chlorides 900 ppm Recovery Chlorides 900 ppm System

(A) Initial Hydrostatic Mud 2490.7 PSI AK1 Recorder No. 13276 Range 4000

(B) First Initial Flow Pressure 58.2 PSI @ (depth) 5015 w / Clock No. 23832

(C) First Final Flow Pressure 37.4 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 1122.4 PSI @ (depth) 5020 w / Clock No. 23934

(E) Second Initial Flow Pressure 69.7 PSI AK1 Recorder No. _____ Range _____

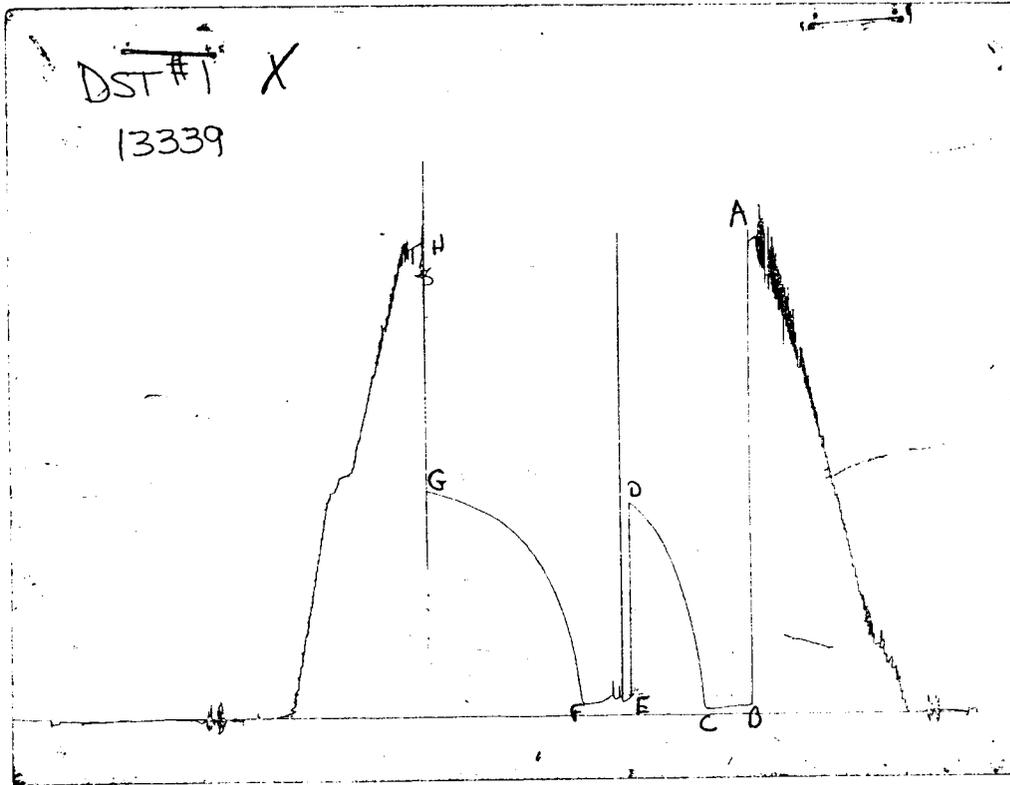
(F) Second Final Flow Pressure 65.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1189.7 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2493.7 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROD STEINBRINK

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2573	2490.7
(B) FIRST INITIAL FLOW PRESSURE	52	58.2
(C) FIRST FINAL FLOW PRESSURE	52	37.4
(D) INITIAL CLOSED-IN PRESSURE	1110	1122.4
(E) SECOND INITIAL FLOW PRESSURE	62	69.7
(F) SECOND FINAL FLOW PRESSURE	62	65.5
(G) FINAL CLOSED-IN PRESSURE	1190	1189.7
(H) FINAL HYDROSTATIC MUD	2473	2493.7

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FLUID SAMPLER DATA

Ticket No. 7495 Date 11-18-94
Company Name Helmerich & Payne Cont. Cheyenne #5
Lease Kuba #2-10 Test No. 1 Morrow
County Haskell KS Sec. 10 Twp. 27^S Rng. 34^W

SAMPLER RECOVERY

Gas _____ ML
Oil _____ ML
Mud 4000 ML
Water _____ ML
Other _____ ML
Pressure 15 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 900 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 49
Mud Weight 9.1
Filtrate 8.4
Other _____

SAMPLER ANALYSIS

Resistivity 5.5 ohms @ 70° F
Chlorides 900 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity 5.5 ohms @ 70° F
Chlorides 900 ppm.