TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name KOHL #1 Test No. 1 Date 8-12-93

Company HORIZONTAL DEVELOPMENT & PRODUCTION Zone MARM-CONG

Address 2535 MARSH LANE #1208 CARROLLTON TX 75006 Elevation 2153

Co. Rep./Geo. R HALL/M STERNBERG Cont. EMPHASIS RIG #6 Est. Ft. of Pay

Location: Sec. 7 Twp. 13S Rge. 20W Co. ELLIS State KS

Interval Tested 3777-3855 Drill Pipe Size 4.5" XH

Anchor Length 78 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 3772 Drill Collar – 2.25 Ft. Run

Bottom Packer Depth 3777 Mud Wt. 9.7 lb/Gal.

Total Depth 3855 Viscosity 46 Filtrate 10.4

Tool Open @ 5:47 AM Initial Blow VERY WEAK SURFACE BLOW DIED IN 4 MINUTES

Final Blow NO BLOW

Recovery - Total Feet 45 Flush Tool? NO

Rec. 45 Feet of MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 117 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 2054.2 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 39.5 PSI @ (depth) 3780 w / Clock No. 30401

(C) First Final Flow Pressure 39.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 964.1 PSI @ (depth) 3852 w / Clock No. 27573

(E) Second Initial Flow Pressure 39.5 PSI AK1 Recorder No. Range

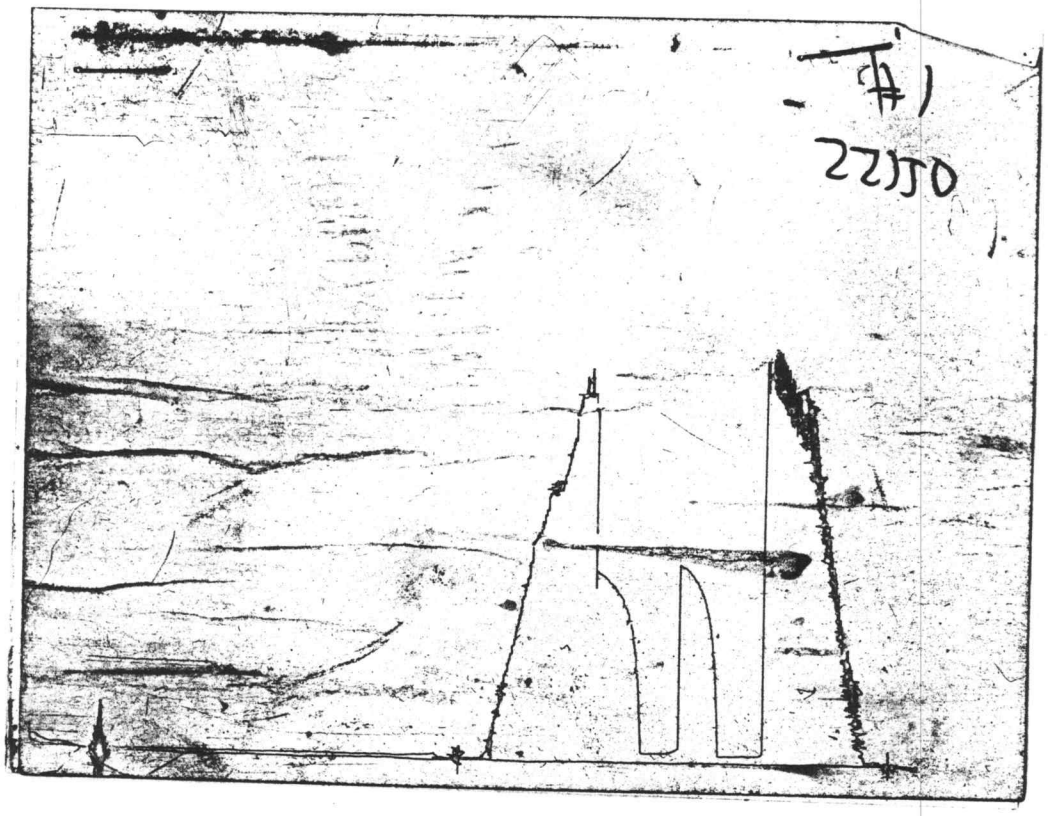
(F) Second Final Flow Pressure 39.5 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 916.2 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1926.3 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2040	2054.2
(B) FIRST INITIAL FLOW PRESSURE	29	39.5
(C) FIRST FINAL FLOW PRESSURE	29	39.5
(D) INITIAL CLOSED-IN PRESSURE	953	964.1
(E) SECOND INITIAL FLOW PRESSURE	29	39.5
(F) SECOND FINAL FLOW PRESSURE	29	39.5
(G) FINAL CLOSED-IN PRESSURE	901	916.2
(H) FINAL HYDROSTATIC MUD	1901	1926.3

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Test Ticket

No 6024

Well Name & No. Kohl #1 Test No. 1 Date 8-12-93

Company HDP, Inc Zone Tested Marmaton/Conglomerate

Address Dallas Address Elevation 2153

Co. Rep./Geo. Rick Hall/Mike Sternberg Cont. Emphasis #6 Est. Ft. of Pay

Location: Sec. 7 Twp. 13s Rge. 20w Co. Ellis State Ks

No. of Copies 5 Distribution Sheet ____ Yes ____ No Turnkey ____ Yes ____ No ____ Evaluation

Interval Tested 3777-3855 Drill Pipe Size 4½ XH

Anchor Length 78 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 3772 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 3777 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 3855 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.7 lb/gal. Viscosity 46 Filtrate 10.4

Tool Open @ 5:47 AM Initial Blow w/weak surface blow- died in 4 minutes

Final Blow No blow

Recovery — Total Feet 45 Feet of Gas in Pipe — Flush Tool? ____

Rec. 45	Feet Of Mud	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 117 °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides ____ ppm System

(A) Initial Hydrostatic Mud 2040 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 29 PSI @ (depth) 3780 w/Clock No. 30401

(C) First Final Flow Pressure 29 PSI AK1 Recorder No 24174 Range 3950

(D) Initial Shut-In Pressure 953 PSI @ (depth) 3852 w/Clock No. [illegible] 27573

(E) Second Initial Flow Pressure 29 PSI AK1 Recorder No. ____ Range ____

(F) Second Final Flow Pressure 29 PSI @ (depth) ____ w/Clock No. ____

(G) Final Shut-In Pressure 901 PSI Initial Opening 30 Test X 400

(H) Final Hydrostatic Mud 1901 PSI Initial Shut-In 30 Jars X 200

Final Flow 30 Safety Joint X 50

Final Shut-In 30 Straddle ____

Circ. Sub ____

Sampler ____

Extra Packer ____

Other ____

TOTAL PRICE $ 850

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Rick Hall

Our Representative Paul Simpson

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