TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name MOORE ESTATE #1 Test No. 1 Date 1/15/94

Company RITCHIE EXPLORATION, INC. Zone LANS/70'-90'

Address 125 N MARKET SUITE 1000 WICHITA KS 67202 Elevation 2472

Co. Rep./Geo. JEFF CHRISTIAN Cont. MURFIN DRLG RIG #8 Est. Ft. of Pay

Location: Sec. 15 Twp. 6S Rge. 24W Co. GRAHAM State KS

Interval Tested 3699-3738 Drill Pipe Size 4.5" XH

Anchor Length 39 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth none Drill Collar – 2.25 Ft. Run

Bottom Packer Depth 3699 Mud Wt. 9.5 lb/Gal.

Total Depth 3738 Viscosity 40 Filtrate 8.8

Tool Open @ 11:45 AM Initial Blow FAIR TO STRONG BLOW - PACKER FAILING ON INITIAL OPEN PICKED UP AND RESET / PACKER FAILED AGAIN 25 MIN INTO 1st OPEN

Final Blow

Recovery - Total Feet 870 Flush Tool? NO

Rec. 186 Feet of DRILLING MUD

Rec. 250 Feet of WATERY MUD-45% WTR/ 52% MUD

Rec. 372 Feet of DRILLING MUD

Rec. 62 Feet of WATERY MUD- 24% WTR/ 76% MUD

Rec. Feet of

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

RW 0.36 @ 65 °F Chlorides 34000 ppm Recovery Chlorides 1600 ppm System

(A) Initial Hydrostatic Mud 1845.8 PSI AK1 Recorder No. 13278 Range 4400

(B) First Initial Flow Pressure 141.5 PSI @ (depth) 3735 w / Clock No. 22993

(C) First Final Flow Pressure 194.6 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-in Pressure none PSI @ (depth) 3730 w / Clock No. 30410

(E) Second Initial Flow Pressure none PSI AK1 Recorder No. Range

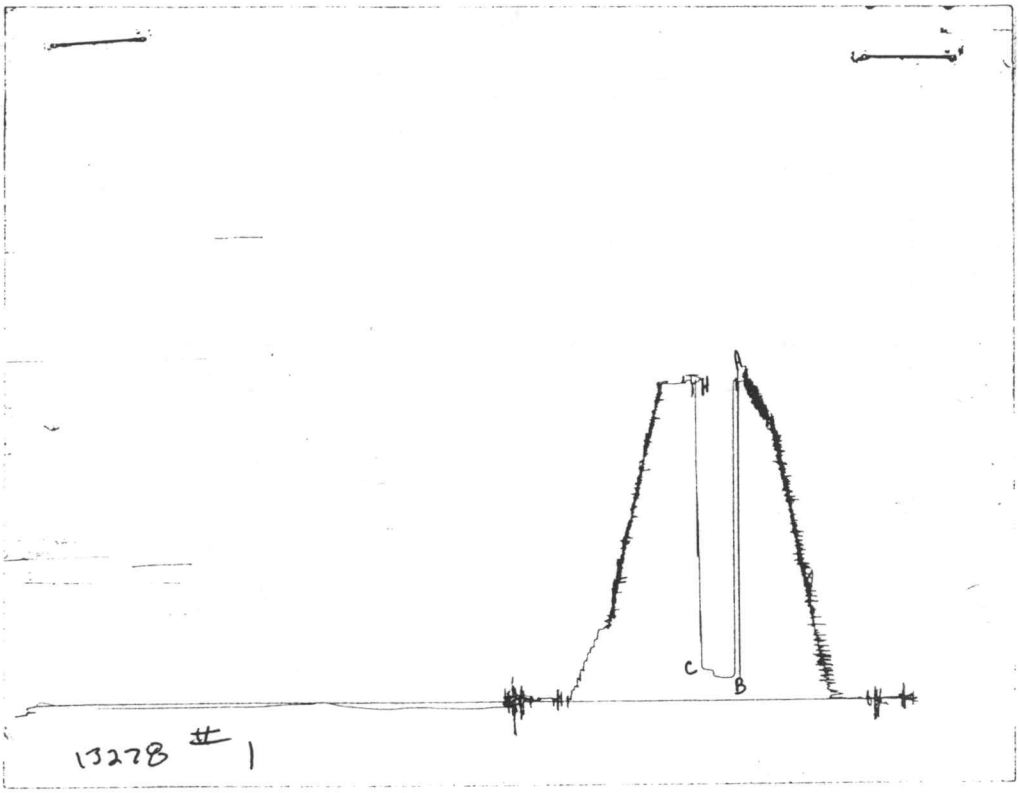
(F) Second Final Flow Pressure none PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure none PSI Initial Opening 25 Final Flow

(H) Final Hydrostatic Mud 1841.3 PSI Initial Shut-in Final Shut-in

Our Representative GARY PEVOTEAUX

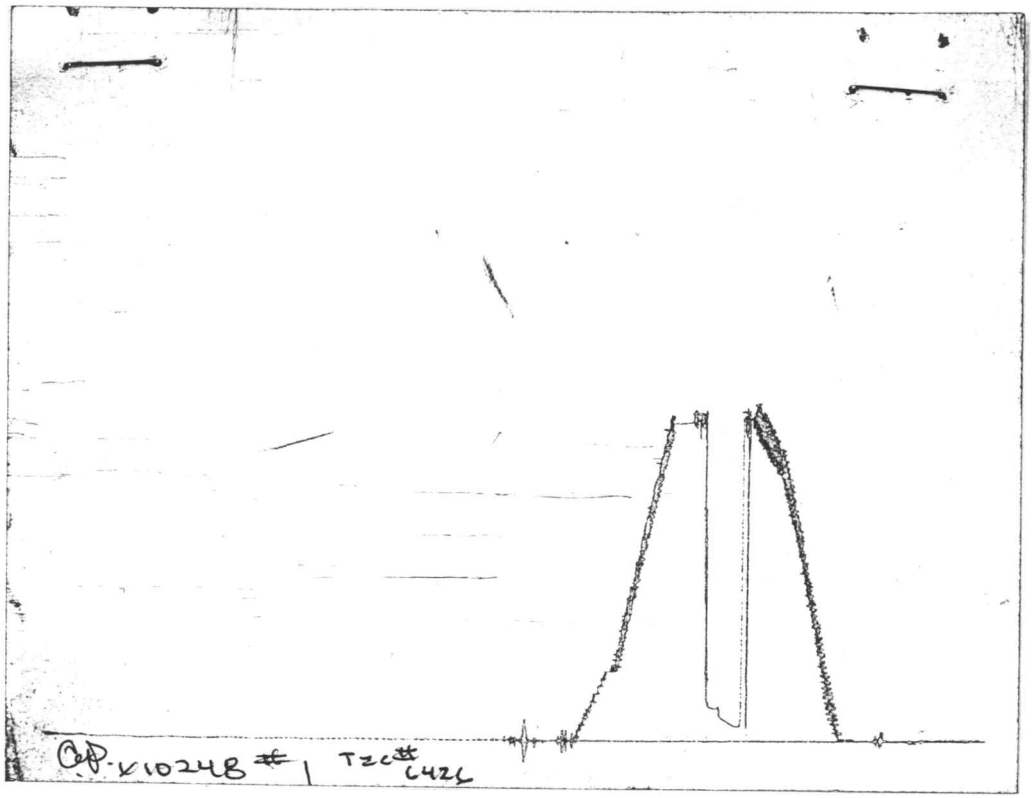
CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1843	1845.8
(B) FIRST INITIAL FLOW PRESSURE	69	141.5
(C) FIRST FINAL FLOW PRESSURE	196	194.6
(D) INITIAL CLOSED-IN PRESSURE	none	none
(E) SECOND INITIAL FLOW PRESSURE	none	none
(F) SECOND FINAL FLOW PRESSURE	none	none
(G) FINAL CLOSED-IN PRESSURE	none	none
(H) FINAL HYDROSTATIC MUD	1821	1841.3

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: MOORE ESTATE #1 | Test No.: 2 | Date: 1/16/94

Company: RITCHIE EXPLORATION, INC. | Zone: LANSING-160'

Address: 125 N MARKET SUITE 1000 WICHITA KS 67202 | Elevation: 2472

Co. Rep./Geo.: JEFF CHRISTIAN | Cont.: MURFIN DRLG RIG #8 | Est. Ft. of Pay:

Location: Sec. 15 | Twp. 6S | Rge. 24W | Co. GRAHAM | State KS

Interval Tested: 3753-3810 | Drill Pipe Size: 4.5" XH

Anchor Length: 57 | Wt. Pipe I.D. - 2.7 Ft. Run:

Top Packer Depth: 3748 | Drill Collar – 2.25 Ft. Run:

Bottom Packer Depth: 3753 | Mud Wt.: 9.5 lb/Gal.

Total Depth: 3810 | Viscosity: 42 | Filtrate: 8.8

Tool Open @: 3:32 AM | Initial Blow: WEAK BLOW-(1/2" TO 1.5")

Final Blow: WEAK BLOW - (1/2" TO 1")

Recovery - Total Feet: 85 | Flush Tool?: NO

Rec. 85 Feet of DRILLING MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT: 120 °F | Gravity: °API | @ °F Corrected Gravity °API

RW: 1.92 @ 63 °F | Chlorides: 6800 ppm Recovery | Chlorides: 1600 ppm System

(A) Initial Hydrostatic Mud: 1912.2 PSI | AK1 Recorder No.: 13278 | Range: 4400

(B) First Initial Flow Pressure: 94.2 PSI | @ (depth): 3807 | w / Clock No.: 22993

(C) First Final Flow Pressure: 85.9 PSI | AK1 Recorder No.: 10248 | Range: 4400

(D) Initial Shut-in Pressure: 1216.8 PSI | @ (depth): 3802 | w / Clock No.: 30410

(E) Second Initial Flow Pressure: 115.5 PSI | AK1 Recorder No.: | Range:

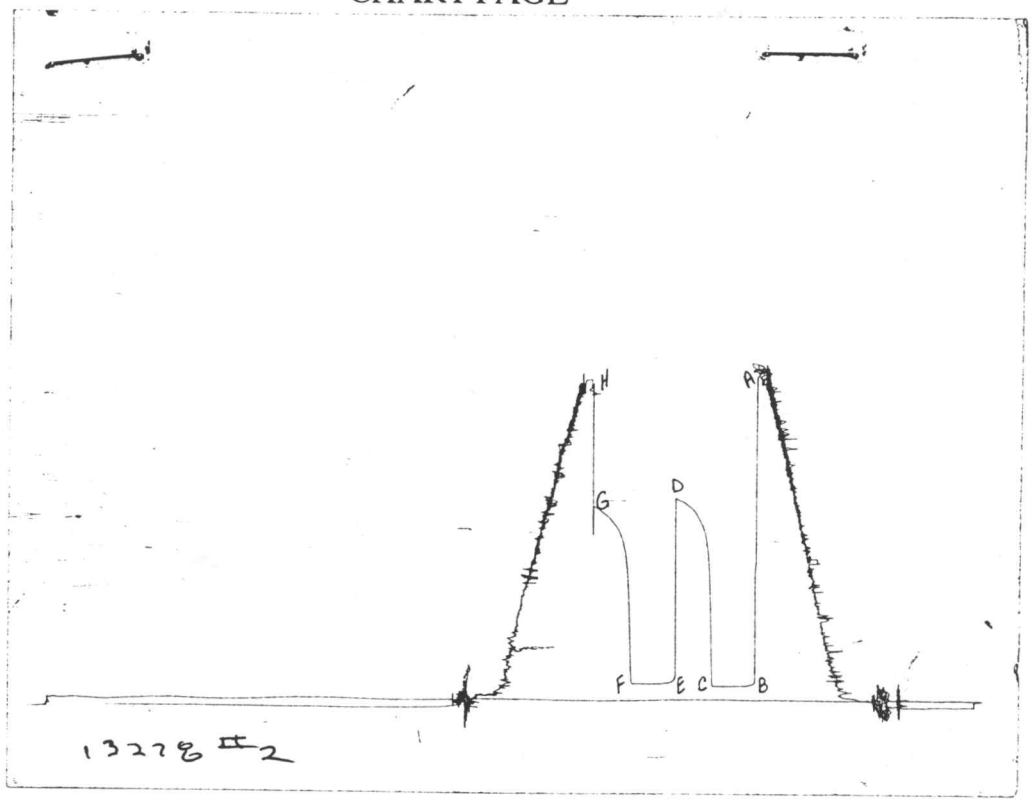
(F) Second Final Flow Pressure: 97.8 PSI | @ (depth): | w / Clock No.:

(G) Final Shut-in Pressure: 1165.6 PSI | Initial Opening: 30 | Final Flow: 30

(H) Final Hydrostatic Mud: 1830.1 PSI | Initial Shut-in: 30 | Final Shut-in: 30

Our Representative: GARY PEVOTEAUX

CHART PAGE



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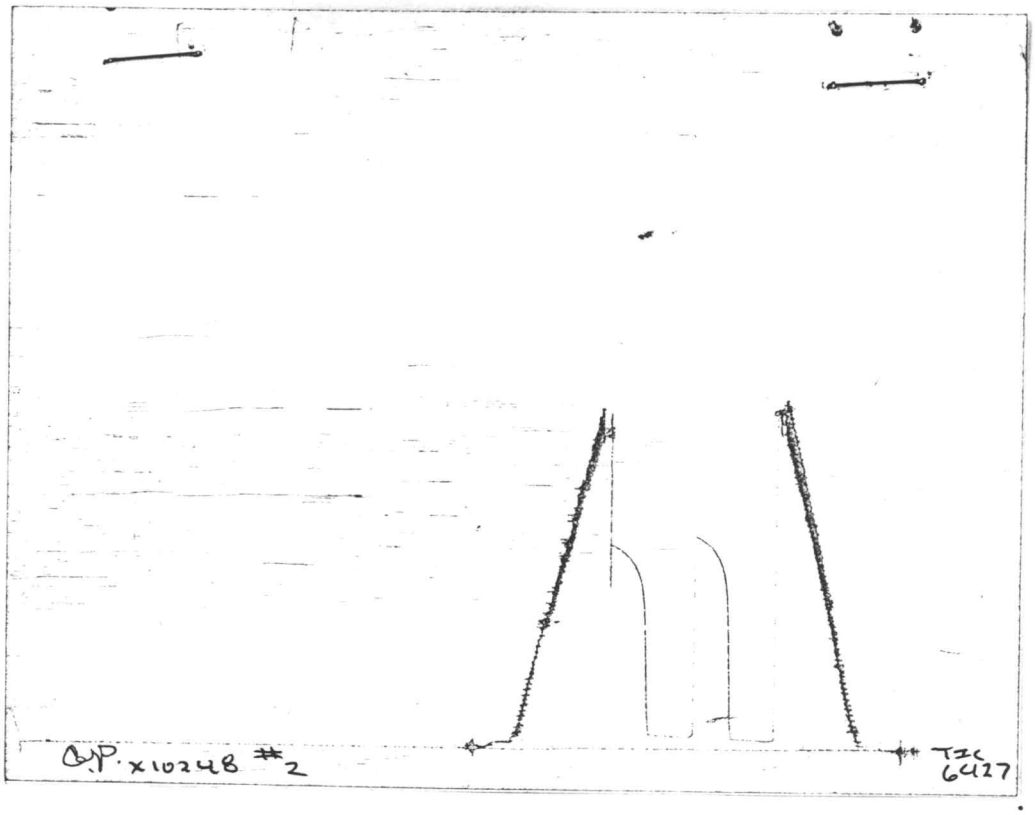
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1909	1912.2
(B) FIRST INITIAL FLOW PRESSURE	37	94.2
(C) FIRST FINAL FLOW PRESSURE	57	85.9
(D) INITIAL CLOSED-IN PRESSURE	1213	1216.8
(E) SECOND INITIAL FLOW PRESSURE	59	115.5
(F) SECOND FINAL FLOW PRESSURE	71	97.8
(G) FINAL CLOSED-IN PRESSURE	1165	1165.6
(H) FINAL HYDROSTATIC MUD	1821	1830.1

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		