

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name EMMERAN #1 Test No. 1 Date 10/30/94
Company ESP DEVELOPMENT Zone LKC "D-E-F-G"
Address 17746 171TH BLVD.-PARADISE, KS. 67658 Elevation 2021
Co. Rep./Geo. RANDY KILIAN Cont. VONFELDT DRLG Est. Ft. of Pay _____
Location: Sec. 5 Twp. 13S Rge. 16W Co. ELLIS State KS

Interval Tested <u>3299-3358</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>59</u>	Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth <u>3294</u>	Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth <u>3299</u>	Mud Wt. <u>9.9</u> lb/Gal.
Total Depth <u>3358</u>	Viscosity <u>43</u> Filtrate <u>12.6</u>

Tool Open @ 4:05 P.M. Initial Blow (SLID TOOL 4' WHEN OPENED) 1" BLOW BUILDING TO 6"

Final Blow 1" BLOW BUILT TO 9"-SURFACE BLOW ON SHUT-IN

Recovery - Total Feet 100 Flush Tool? NO

Rec. <u>150</u>	Feet of <u>GAS IN PIPE</u>
Rec. <u>40</u>	Feet of <u>GASSY HEAVY OIL CUT MUD 15%GAS/25%OIL/10%WATER/50%MUD</u>
Rec. <u>60</u>	Feet of <u>GASSY HEAVY OIL CUT MUD 5%GAS/45%OIL/10%WATER/40%MUD</u>
Rec. _____	Feet of <u>GOOD SHOW OF GASSY OIL IN TOOL</u>
Rec. _____	Feet of _____

BHT 94 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1766.7 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 47.8 PSI @ (depth) 3333 w / Clock No. 30416

(C) First Final Flow Pressure 51.7 PSI AK1 Recorder No. 10994 Range 4200

(D) Initial Shut-in Pressure 464.5 PSI @ (depth) 3353 w / Clock No. _____

(E) Second Initial Flow Pressure 64.1 PSI AK1 Recorder No. _____ Range _____

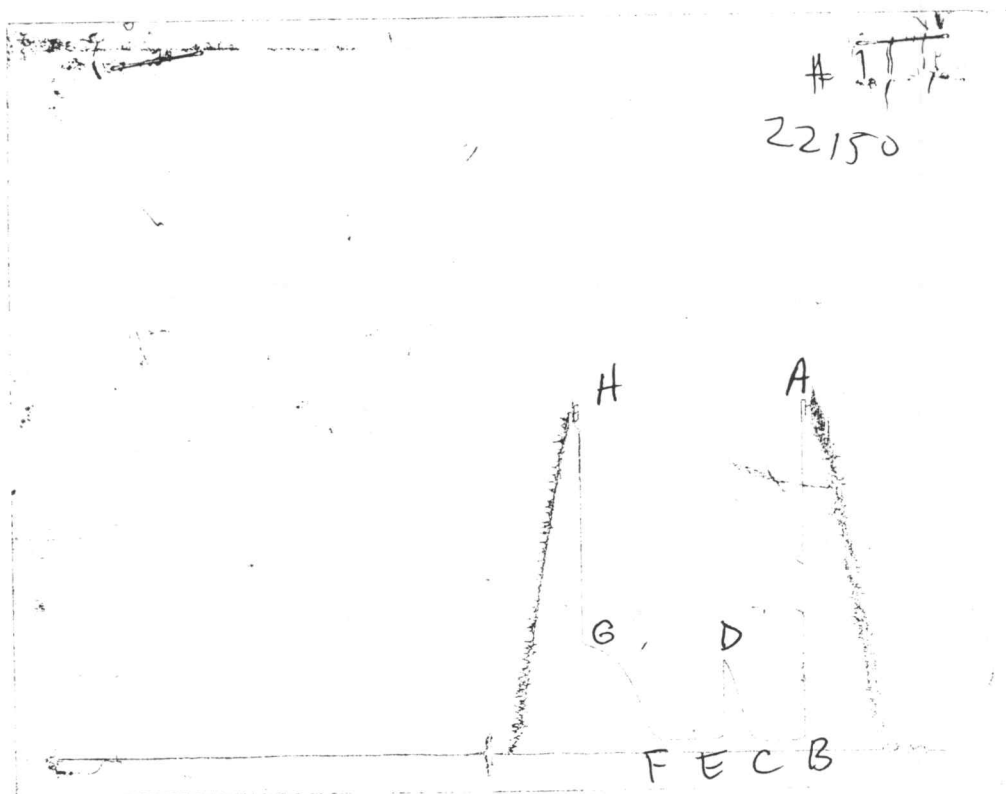
(F) Second Final Flow Pressure 63.2 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 541.7 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1749.0 PSI Initial Shut-in 30 Final Shut-in 60

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1774	1766.7
(B) FIRST INITIAL FLOW PRESSURE	38	47.8
(C) FIRST FINAL FLOW PRESSURE	48	51.7
(D) INITIAL CLOSED-IN PRESSURE	460	464.5
(E) SECOND INITIAL FLOW PRESSURE	57	64.1
(F) SECOND FINAL FLOW PRESSURE	57	63.2
(G) FINAL CLOSED-IN PRESSURE	537	541.7
(H) FINAL HYDROSTATIC MUD	1705	1749

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name EMMERAN #1 Test No. 2 Date 10/31/94
Company ESP DEVELOPMENT Zone LKC H-K
Address 17746 171TH BLVD.-PARADISE, KS. 67658 Elevation 2021
Co. Rep./Geo. RANDY KILIAN Cont. VONFELDT DRLG Est. Ft. of Pay _____
Location: Sec. 5 Twp. 13S Rge. 16W Co. ELLIS State KS

Interval Tested	<u>3377-3468</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>91</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>3372</u>	Drill Collar - 2.25 Ft. Run	_____
Bottom Packer Depth	<u>3377</u>	Mud Wt.	<u>9.7</u> lb/Gal.
Total Depth	<u>3468</u>	Viscosity	<u>43</u>
		Filtrate	<u>11.2</u>

Tool Open @ 10:44AM Initial Blow WEAK 1/2" BLOW BUILDING TO 1"

Final Blow SURFACE BLOW BUILDING TO 1/4"

Recovery - Total Feet 30 Flush Tool? NO

Rec. 30 Feet of MUD - WITH GOOD SHOW OF OIL IN TOOL
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 92 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1847.4 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 68.1 PSI @ (depth) 3440 w / Clock No. 22336

(C) First Final Flow Pressure 68.1 PSI AK1 Recorder No. 10994 Range 4200

(D) Initial Shut-in Pressure 97.7 PSI @ (depth) 3462 w / Clock No. 23839

(E) Second Initial Flow Pressure 71.8 PSI AK1 Recorder No. _____ Range _____

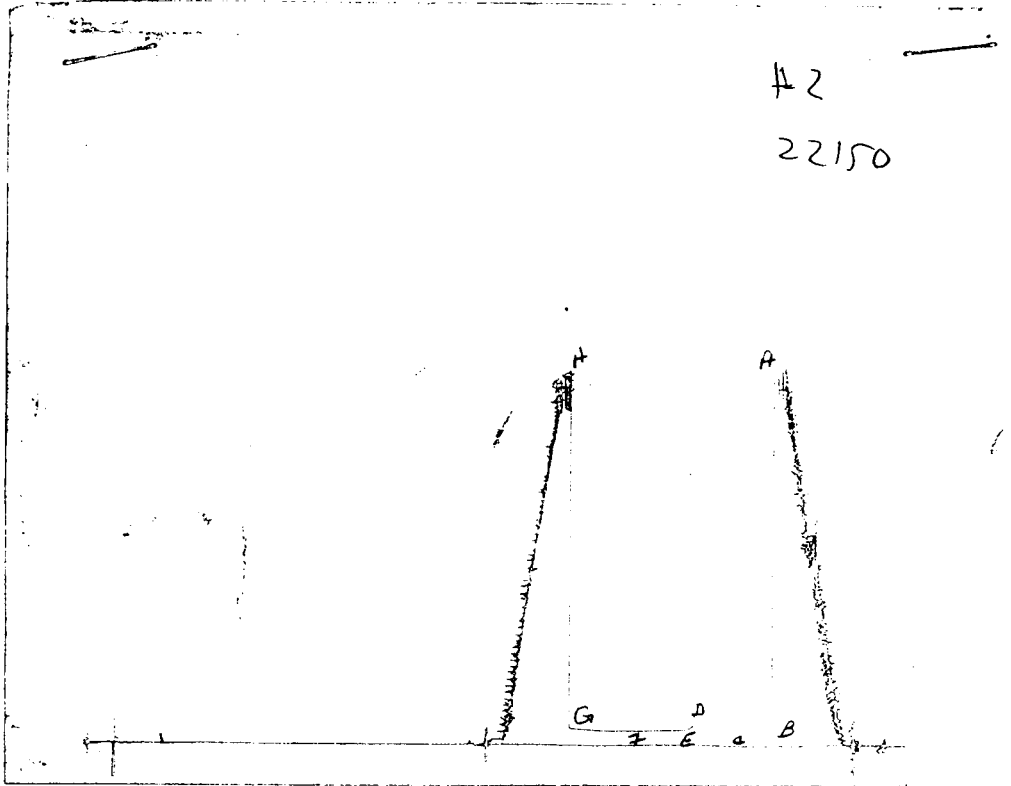
(F) Second Final Flow Pressure 71.8 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 83.3 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1834.6 PSI Initial Shut-in 30 Final Shut-in 45

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1872	1847.4
(B) FIRST INITIAL FLOW PRESSURE	67	68.1
(C) FIRST FINAL FLOW PRESSURE	67	68.1
(D) INITIAL CLOSED-IN PRESSURE	96	97.7
(E) SECOND INITIAL FLOW PRESSURE	67	71.8
(F) SECOND FINAL FLOW PRESSURE	67	71.8
(G) FINAL CLOSED-IN PRESSURE	86	83.3
(H) FINAL HYDROSTATIC MUD	1823	1834.6