

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name STARR #1 Test No. 1 Date 10/31/93
Company GENERAL ATLANTIC RESOURCES INC Zone LANSING "K"
Address 410 17th ST #1400 DENVER CO Elevation KB
Co. Rep./Geo. TOM LARSON Cont. EMPHASIS DRLG RIG #7 Est. Ft. of Pay _____
Location: Sec. 23 Twp. 19S Rge. 28W Co. LANE State KS

Interval Tested	<u>4276-4322</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>46</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>4271</u>	Drill Collar - 2.25 Ft. Run	_____
Bottom Packer Depth	<u>4276</u>	Mud Wt.	<u>9.4</u> lb/Gal.
Total Depth	<u>4322</u>	Viscosity	<u>43</u> Filtrate <u>9.6</u>

Tool Open @ 1:12 AM Initial Blow STRONG BLOW OFF BOTTOM IN 1 MINUTE

Final Blow GOOD BLOW OFF BOTTOM IN 4 MINUTES TO NO BLOW IN 43 MINUTES

Recovery - Total Feet 1418 Flush Tool? NO

Rec. <u>77</u>	Feet of	<u>MUD</u>
Rec. <u>248</u>	Feet of	<u>SLTLY MUD CUT WATER-85% WTR/ 15% MUD</u>
Rec. <u>1093</u>	Feet of	<u>WATER</u>
Rec. _____	Feet of	_____
Rec. _____	Feet of	_____

BHT 122 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.16 @ 70 °F Chlorides 45000 ppm Recovery Chlorides 2500 ppm System

(A) Initial Hydrostatic Mud 2133.4 PSI AK1 Recorder No. 13308 Range 4700

(B) First Initial Flow Pressure 362.3 PSI @ (depth) 4317 w / Clock No. 27566

(C) First Final Flow Pressure 623.4 PSI AK1 Recorder No. 11057 Range 4500

(D) Initial Shut-in Pressure 715.6 PSI @ (depth) 4280 w / Clock No. 17652

(E) Second Initial Flow Pressure 688.9 PSI AK1 Recorder No. _____ Range _____

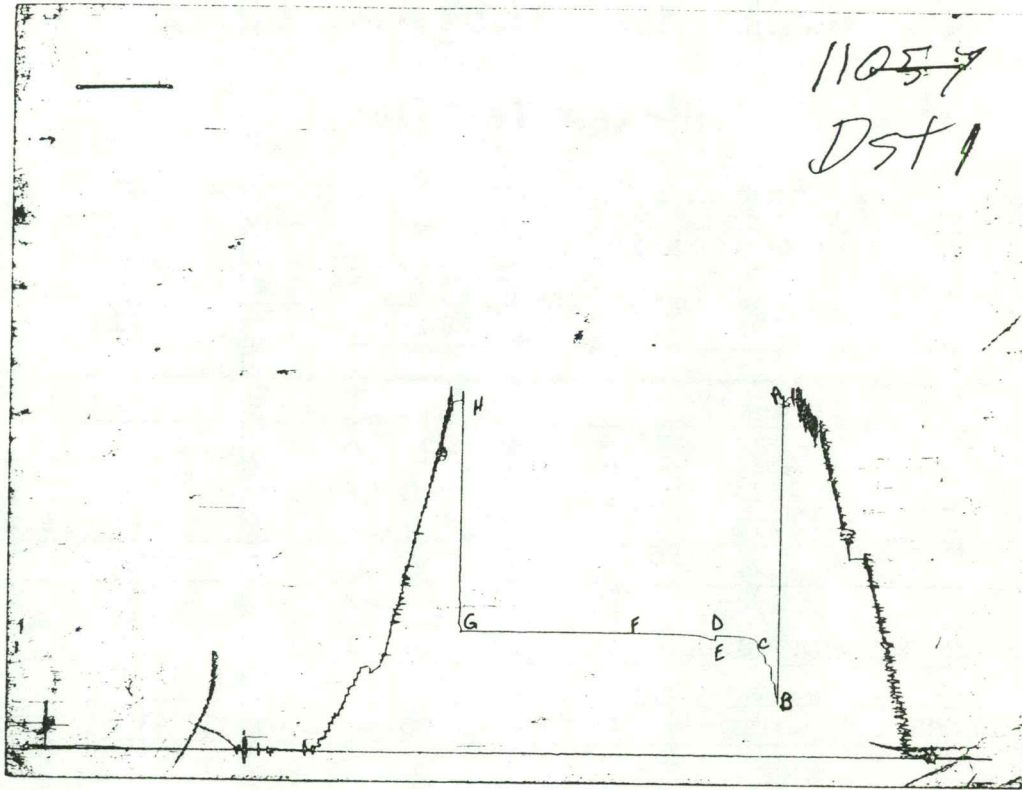
(F) Second Final Flow Pressure 714.5 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 752.3 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2114.5 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2128	2133.4
(B) FIRST INITIAL FLOW PRESSURE	359	362.3
(C) FIRST FINAL FLOW PRESSURE	619	623.4
(D) INITIAL CLOSED-IN PRESSURE	713	715.6
(E) SECOND INITIAL FLOW PRESSURE	689	688.9
(F) SECOND FINAL FLOW PRESSURE	713	714.5
(G) FINAL CLOSED-IN PRESSURE	748	752.3
(H) FINAL HYDROSTATIC MUD	2104	2114.5

FLUID SAMPLER DATA

Ticket No.: 6779 Date: 10/31/93
Company: GENERAL ATLANTIC RESOURCES INC
Lease: STARR #1 Test No.: 1
County: LANE Sec.: 23 Twp.: 19S Rng.: 28W

SAMPLER RECOVERY

Gas .01 CU FT
Oil
Mud
Water 4000
Other
Pressure 75
TOTAL 4000

SAMPLER ANALYSIS

Resistivity 0.16 ohms@ 70 F
Chlorides 45000 ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2500
Resistivity ohms@ F
Viscosity 43
Mud Wt. 9.4
Filtrate 9.6
Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity 0.17 ohms@ 74 F
Chlorides 43000 ppm

BOTTOM

Resistivity 0.16 ohms@ 70 F
Chlorides 45000 ppm

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FLUID SAMPLER DATA

Ticket No. 6779 Date 10-31-83
Company Name GENERAT ATLANTIC RES INC
Lease STARR Test No. 1
County LANE KS Sec. 23 Twp. 19s Rng. 28w

SAMPLER RECOVERY

Gas ~~0.01~~ 0.01 CF ML
Oil — ML
Mud — ML
Water 4000 ML
Other — ML
Pressure 75 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 2500 ppm.
Resistivity — ohms @ — F
Viscosity 43
Mud Weight 9.4 LCM -
Filtrate 9.6 PH 10.5
Other P.V. 13 Y.P. 10
GEL STRENGTH 4/25

SAMPLER ANALYSIS

Resistivity 0.16 ohms @ 70 F
Chlorides 45000 ppm.
Gravity — corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity — ohms @ — F
Chlorides Mod ppm.

MIDDLE
Resistivity 0.17 ohms @ 74 F
Chlorides 43000 ppm.

BOTTOM
Resistivity 0.16 ohms @ 70 F
Chlorides 45000 ppm.