

15-055-21242

16-235-34w

# TRILOBITE TESTING, L.L.C.

# KCC

P.O. Box 362 • Hays, Kansas 67601

MAY 13 1994

## Computer Inventoried Drill-Stem Test Data

Well Name GARDEN CITY 4-16 Test No. 1 Date 9/27/93  
 Company HARRIS OIL & GAS Zone LANSING "H"  
 Address 410 17th ST #2310 DENVER CO Elevation 2964 KB  
 Co. Rep./Geo. HAROLD FRAULI Cont. ALLEN RIG #5 Est. Ft. of Pay \_\_\_\_\_  
 Location: Sec. 16 Twp. 23S Rge. 34W Co. FINNEY State KS

Interval Tested <u>4057-4072</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>15</u>	Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth <u>4052</u>	Drill Collar - 2.25 Ft. Run <u>155</u>
Bottom Packer Depth <u>4057</u>	Mud Wt. <u>9.1</u> lb/Gal.
Total Depth <u>4072</u>	Viscosity <u>40</u> Filtrate <u>16.8</u>

Tool Open @ 11:18 PM Initial Blow WEAK SURFACE BLOW TO 1/4" TO NO BLOW IN 10  
 MINUTES  
 Final Blow NO BLOW FOR 30 MINUTES-FLOAT IN COLLAR - MISRUN

Recovery - Total Feet \_\_\_\_\_ Flush Tool? NO

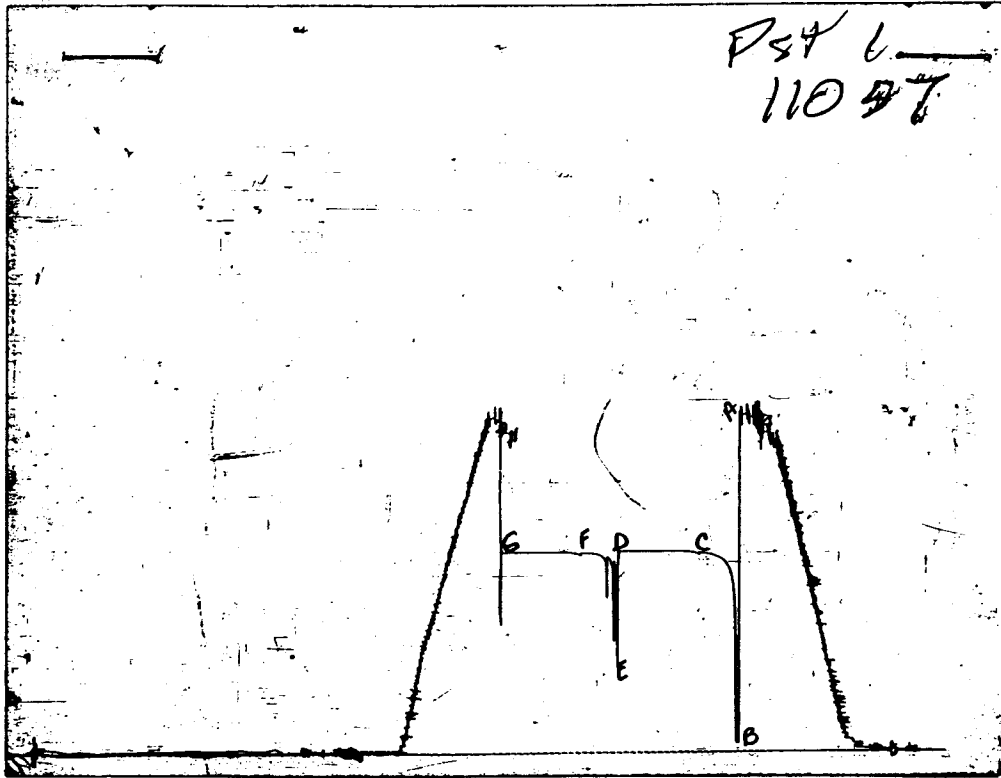
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 109 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides 2100 ppm System

(A) Initial Hydrostatic Mud 1969.8 PSI AK1 Recorder No. 13308 Range 4700  
 (B) First Initial Flow Pressure 35.2 PSI @ (depth) 4059 w / Clock No. 17652  
 (C) First Final Flow Pressure 1157.8 PSI AK1 Recorder No. 11057 Range 4500  
 (D) Initial Shut-in Pressure 1179.6 PSI @ (depth) 4067 w / Clock No. 27566  
 (E) Second Initial Flow Pressure 519.8 PSI AK1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_  
 (F) Second Final Flow Pressure 1160.3 PSI @ (depth) \_\_\_\_\_ w / Clock No. \_\_\_\_\_  
 (G) Final Shut-in Pressure 1178.9 PSI Initial Opening 30 Final Flow 30  
 (H) Final Hydrostatic Mud 1944.3 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1970	1969.8
(B) FIRST INITIAL FLOW PRESSURE	33	35.2
(C) FIRST FINAL FLOW PRESSURE	1152	1157.8
(D) INITIAL CLOSED-IN PRESSURE	1174	1179.6
(E) SECOND INITIAL FLOW PRESSURE	515	519.8
(F) SECOND FINAL FLOW PRESSURE	1152	1160.3
(G) FINAL CLOSED-IN PRESSURE	1174	1178.9
(H) FINAL HYDROSTATIC MUD	1948	1944.3

# FLUID SAMPLER DATA

Ticket No.: 5767 Date: 9/27/93  
Company: HARRIS OIL & GAS  
Lease: GARDEN CITY 4-16 Test No.: 1  
County: FINNEY Sec.: 16 Twp.: 23S Rng.: 34W

## SAMPLER RECOVERY

Gas  
Oil  
Mud 4000  
Water  
Other  
Pressure 500  
TOTAL 4000

## SAMPLER ANALYSIS

Resistivity ohms@ F  
Chlorides ppm.  
Gravity corrected @60F

## PIT MUD ANALYSIS

Chlorides 2100  
Resistivity ohms@ F  
Viscosity 40  
Mud Wt. 9.1  
Filtrate 16.8  
Other

## PIPE RECOVERY

### TOP

Resistivity ohms@ F  
Chlorides ppm

### MIDDLE

Resistivity ohms@ F  
Chlorides ppm

### BOTTOM

Resistivity ohms@ F  
Chlorides ppm

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name GARDEN CITY 4-16 Test No. 2 Date 9/28/93  
Company HARRIS OIL & GAS Zone LANSING "H"  
Address 410 17th ST #2310 DENVER CO Elevation 2964 KB  
Co. Rep./Geo. HAROLD FRAULI Cont. ALLEN RIG #5 Est. Ft. of Pay 10  
Location: Sec. 16 Twp. 23S Rge. 34W Co. FINNEY State KS

Interval Tested 4057-4072 Drill Pipe Size 4.5" XH  
Anchor Length 15 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
Top Packer Depth 4052 Drill Collar - 2.25 Ft. Run 155  
Bottom Packer Depth 4057 Mud Wt. 9.1 lb/Gal.  
Total Depth 4072 Viscosity 40 Filtrate 10.4

Tool Open @ 12:18 PM Initial Blow SURFACE TO 4.25" IN 30 MINUTES

Final Blow SURFACE TO 5.25" IN 60 MINUTES

Recovery - Total Feet 210 Flush Tool? NO

Rec. 20 Feet of CLEAN OIL  
Rec. 190 Feet of SLTLY MUD CUT WATER-98% WTR/ 2% MUD  
Rec. \_\_\_\_\_ Feet of (TRACE OF OIL IN WATER)  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 108 °F Gravity 34 °API @ 70 °F Corrected Gravity 33 °API  
RW 0.36 @ 67 °F Chlorides 21000 ppm Recovery Chlorides 2200 ppm System

(A) Initial Hydrostatic Mud 1944.3 PSI AK1 Recorder No. 2023 Range 4000

(B) First Initial Flow Pressure 35.2 PSI @ (depth) 4059 w / Clock No. 17652

(C) First Final Flow Pressure 71.5 PSI AK1 Recorder No. 11057 Range 4500

(D) Initial Shut-in Pressure 1122.4 PSI @ (depth) 4067 w / Clock No. 27566

(E) Second Initial Flow Pressure 81.9 PSI AK1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_

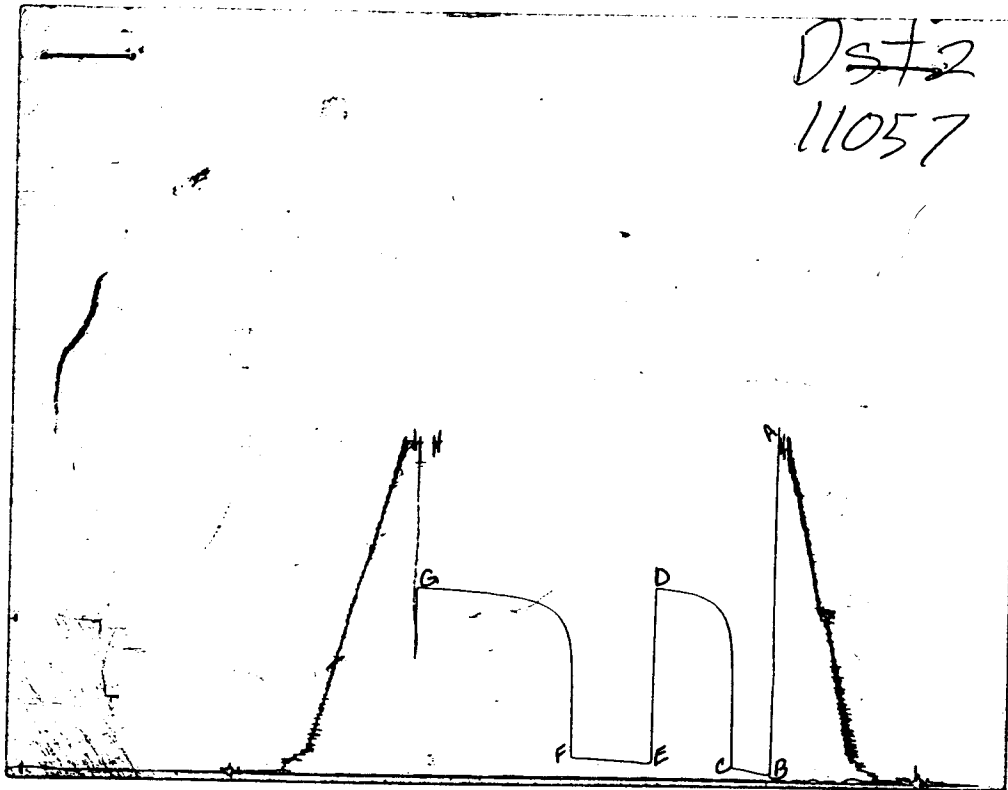
(F) Second Final Flow Pressure 116.7 PSI @ (depth) \_\_\_\_\_ w / Clock No. \_\_\_\_\_

(G) Final Shut-in Pressure 1122.4 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1931.4 PSI Initial Shut-in 60 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	1948	1944.3
(B) FIRST INITIAL FLOW PRESSURE	33	35.2
(C) FIRST FINAL FLOW PRESSURE	67	71.5
(D) INITIAL CLOSED-IN PRESSURE	1118	1122.4
(E) SECOND INITIAL FLOW PRESSURE	78	81.9
(F) SECOND FINAL FLOW PRESSURE	112	116.7
(G) FINAL CLOSED-IN PRESSURE	1118	1122.4
(H) FINAL HYDROSTATIC MUD	1926	1931.4



# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name GARDEN CITY 4-16 Test No. 3 Date 9/30/93  
Company HARRIS OIL & GAS Zone MORROW  
Address 410 17th ST #2310 DENVER CO Elevation 2964 KB  
Co. Rep./Geo. HAROLD FRAULI Cont. ALLEN RIG #5 Est. Ft. of Pay \_\_\_\_\_  
Location: Sec. 16 Twp. 23S Rge. 34W Co. FINNEY State KS

Interval Tested 4667-4675 Drill Pipe Size 4.5" XH  
Anchor Length 8 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
Top Packer Depth 4662 Drill Collar - 2.25 Ft. Run 155  
Bottom Packer Depth 4667 Mud Wt. 9.2 lb/Gal.  
Total Depth 4675 Viscosity 40 Filtrate 10.4

Tool Open @ 6:46 PM Initial Blow WEAK SURFACE BLOW FOR 5 MINUTES  
PACKER FAILURE  
Final Blow NO GOOD SECOND TIME

Recovery - Total Feet 382 Flush Tool? NO

Rec. 382 Feet of MUD  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 112 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
RW 2 @ 76 °F Chlorides 2800 ppm Recovery Chlorides 2500 ppm System

(A) Initial Hydrostatic Mud 2223.6 PSI AK1 Recorder No. 13308 Range 4700

(B) First Initial Flow Pressure \_\_\_\_\_ PSI @ (depth) 4670 w / Clock No. 17652

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

(D) Initial Shut-in Pressure \_\_\_\_\_ PSI @ (depth) 4655 w / Clock No. 27566

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

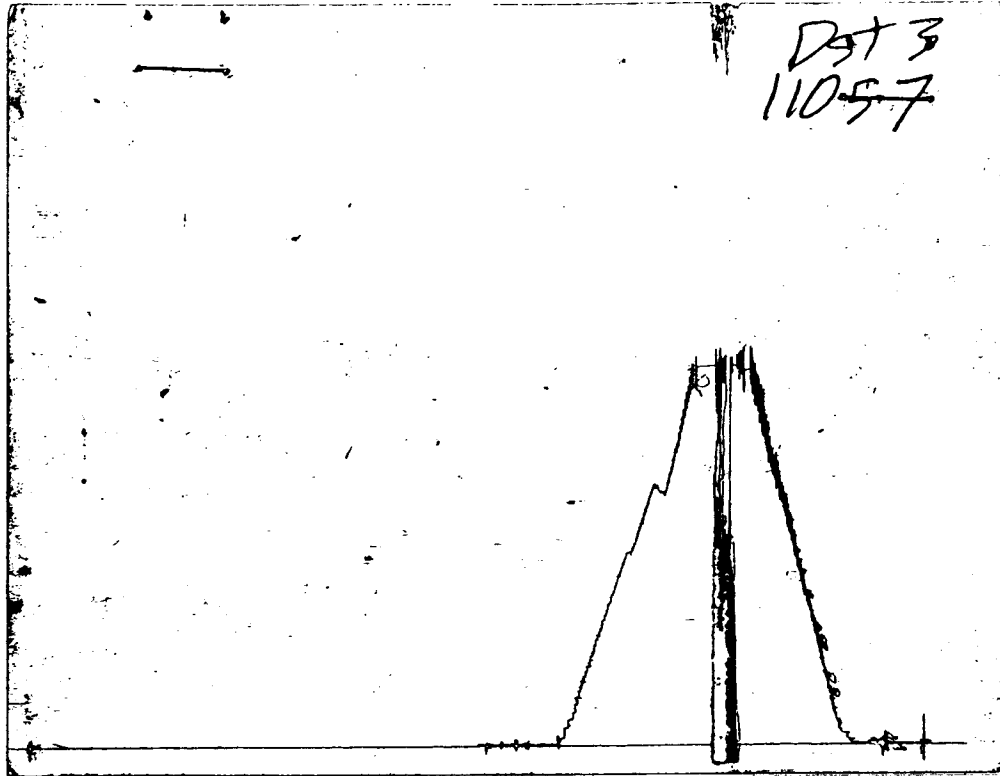
(F) Second Final Flow Pressure \_\_\_\_\_ PSI @ (depth) \_\_\_\_\_ w / Clock No. \_\_\_\_\_

(G) Final Shut-in Pressure \_\_\_\_\_ PSI Initial Opening 5 Final Flow \_\_\_\_\_

(H) Final Hydrostatic Mud 2201.4 PSI Initial Shut-in \_\_\_\_\_ Final Shut-in \_\_\_\_\_

Our Representative MARK HERSKOWITZ

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2219	2223.6
(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	2196	2201.4