TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: MARGIE #1 | Test No.: 1 | Date: 12/22/93

Company: HESS OIL CO., INC. | Zone: CHEROKEE

Address: BOX 1009 McPHERSON KANSAS | Elevation: 2302

Co. Rep./Geo.: JAMES C. HESS | Cont.: MALLARD RIG #2 | Est. Ft. of Pay: 2

Location: Sec.: 17 | Twp.: 17S | Rge.: 22W | Co.: NESS | State: KS

Interval Tested: 4228-4250 | Drill Pipe Size: 4.5" FH

Anchor Length: 22 | Wt. Pipe I.D. - 2.7 Ft. Run:

Top Packer Depth: 4223 | Drill Collar – 2.25 Ft. Run: 298

Bottom Packer Depth: 4228 | Mud Wt.: 9.1 lb/Gal.

Total Depth: 4250 | Viscosity: 52 | Filtrate: 10

Tool Open @: 11:19 PM | Initial Blow: STRONG BLOW OFF BOTTOM IN 45 SECONDS

Final Blow: 15 MINUTE INITIAL OPENING - OUT OF HOLE

Recovery - Total Feet: 1070 | Flush Tool?: NO

Rec. 1008 Feet of GAS IN PIPE

Rec. 624 Feet of CLEAN GASSY OIL- 10% GAS/ 90% OIL

Rec. 206 Feet of GSY WTR CUT MUDDY OIL-5%GAS/65%OIL/10%WTR/20%MUD

Rec. 240 Feet of SLTLY OIL STAINED WATER- 2% OIL/ 98% WTR

Rec. Feet of

BHT 116 °F | Gravity 37 °API | @ 50 °F | Corrected Gravity 38 °API

RW 0.1 @ 80 °F | Chlorides 63000 ppm Recovery | Chlorides 10000 ppm System

(A) Initial Hydrostatic Mud 2078.3 PSI | AK1 Recorder No. 11057 | Range 4500

(B) First Initial Flow Pressure 281.4 PSI | @ (depth) 4230 | w / Clock No. 7452

(C) First Final Flow Pressure 415.9 PSI | AK1 Recorder No. 2023 | Range 4000

(D) Initial Shut-in Pressure PSI | @ (depth) 4245 | w / Clock No. 30401

(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 15 | Final Flow

(H) Final Hydrostatic Mud 2050.9 PSI | Initial Shut-in | Final Shut-in

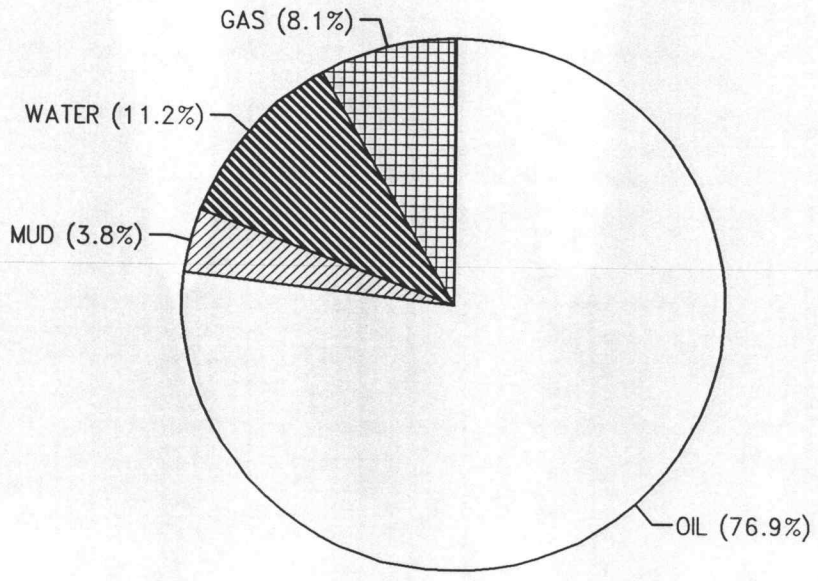
Our Representative: MARK HERSKOWITZ

CALCULATED RECOVERY ANALYSIS

DST 1 TICKET # 6360

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL 1	624	10	62.4	90	561.6	0	0	0	0
PIPE 2	148	5	7.4	65	96.2	10	14.8	20	29.6
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	58	5	2.9	65	37.7	10	5.8	20	11.6
COLLAR 2	240	0	0	2	4.8	98	235.2	0	0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1070		72.7		700.3		255.8		41.2

			HRS OPEN	BBL/DAY
BBL OIL=	9.561741	*	0.25	917.92714
BBL WATER=	1.388946	*		133.33882
BBL MUD=	0.477636			
BBL GAS =	1.006737			



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P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 6360

Well Name & No. MARGIE 1st Test No. 1 Date 12-22-93

Company HESS Oil COMP Zone Tested CHEROKEE

Address Box 1009 McPHERSON K Elevation 2302 KB

Co. Rep./Geo. JAMES HESS Cont. MALLARD Rig 2 Est. Ft. of Pay 2

Location: Sec. 17 Twp. 17 S Rge. 22W Co. NESS State KS

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

Interval Tested 4228 4250 Drill Pipe Size 4½ FH

Anchor Length 22 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4223 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4228 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4250 Drill Collar — 2.25 Ft. Run 298

Mud Wt. 9.1 LCM — lb / gal. Viscosity 52 Filtrate 10.0

Tool Open @ 11:19 PM Initial Blow STRONG Blow OFF Bottom in 45 SEC

Final Blow 15 MIN Initial OPENING Out of Hole

Recovery — Total Feet 1070 Feet of Gas in Pipe 1008 Flush Tool? —

Rec. 624	Feet Of	GC Oil	10 %gas	90 %oil		%water		%mud
Rec. 206	Feet Of	GWCM WATER	5 %gas	65 %oil	10	%water	20	%mud
Rec. 240	Feet Of	SOCM WATER		%gas	2 %oil	98 %water		%mud
Rec.	Feet Of			%gas	%oil	%water		%mud
Rec.	Feet Of			%gas	%oil	%water		%mud

BHT 116 °F Gravity 37 [redacted] °API @ 50 °F Corrected Gravity 38 °API

RW 0.10 @ 80 °F Chlorides 63,000 ppm Recovery Chlorides 10,000 ppm System

(A) Initial Hydrostatic Mud	2067 PSI	AK1 Recorder No.	11057	Range	4500
(B) First Initial Flow Pressure	267 PSI	@ (depth)	4230	w/Clock No.	7452
(C) First Final Flow Pressure	409 PSI	AK1 Recorder No.	2023	Range	4000
(D) Initial Shut-In Pressure	— PSI	@ (depth)	4245	w/Clock No.	30901
(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	15	Test ✓	600
(H) Final Hydrostatic Mud	2039 PSI	Initial Shut-In	—	Jars ✓	200
		Final Flow	—	Safety Joint ✓	50
		Final Shut-In	—	Straddle	
				Circ. Sub ✓	NC
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	850.00

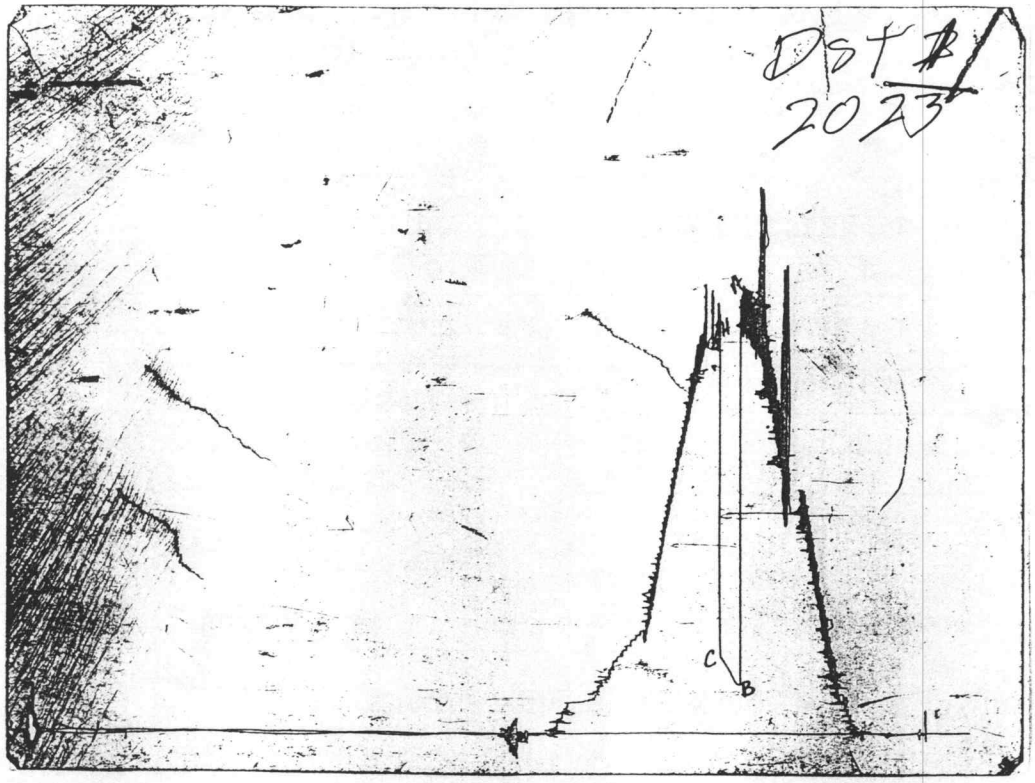
TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS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

Approved By James G. Hess

Our Representative Mark Hershberger

Printcraft Printers - Hays, KS

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2069	2078.3
(B) FIRST INITIAL FLOW PRESSURE	267	281.4
(C) FIRST FINAL FLOW PRESSURE	409	415.9
(D) INITIAL CLOSED-IN PRESSURE		
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	2039	2050.9