

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name HOOVLER #1-36 Test No. 1 Date 7/10/92  
Company RANKEN ENERGY CORP. Zone MISSISSIPPI  
Address 2325 W. 15TH EDMOND OK 73013 Elevation 2414  
Co. Rep./Geo. DOUG BELLIS Cont. EMPHASIS #7 Est. Ft. of Pay \_\_\_\_\_  
Location: Sec. 36 Twp. 17S Rge. 25W Co. NESS State KS

Interval Tested 4340-4384 Drill Pipe Size 4.5 XH  
Anchor Length 44 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
Top Packer Depth 4335 Drill Collar - 2.25 Ft. Run \_\_\_\_\_  
Bottom Packer Depth 4340 Mud Wt. 9.2 lb/Gal.  
Total Depth 4384 Viscosity 52 Filtrate 12

Tool Open @ 8:02 AM Initial Blow 1/4" BLOW DECREASED AND DIED IN 25 MINUTES

Final Blow NO RETURN - FLUSHED TOOL/GOOD SURGE-  
NO HELP

Recovery - Total Feet 20 Flush Tool? YES

Rec. 20 Feet of OIL STAINED MUD-1%OIL/99%MUD  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 114 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides \_\_\_\_\_ ppm System

(A) Initial Hydrostatic Mud 2236.9 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 44.2 PSI @ (depth) 4374 w / Clock No. 25814

(C) First Final Flow Pressure 44.2 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 1147.8 PSI @ (depth) 4379 w / Clock No. 27566

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

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

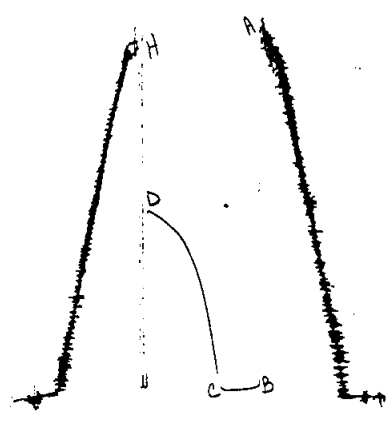
(G) Final Shut-in Pressure \_\_\_\_\_ PSI Initial Opening 25 Final Flow 5

(H) Final Hydrostatic Mud 2180.7 PSI Initial Shut-in 60 Final Shut-in \_\_\_\_\_

Our Representative ROD STEINBRINK

CHART PAGE

DST # 1  
13309



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2223	2236.9
(B) FIRST INITIAL FLOW PRESSURE	41	44.2
(C) FIRST FINAL FLOW PRESSURE	41	44.2
(D) INITIAL CLOSED-IN PRESSURE	1140	1147.8
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	2183	2180.7

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## Test Ticket

No 5021

Well Name & No. Hoovler #1-36 Test No. 1 Date 7-10-92  
 Company Ranken Energy Corporation Zone Tested Mississippian  
 Address 2325 S.W. 15th St. Edmond, OK. 73013 Elevation 2414 (KB)  
 Co. Rep./Geo. Doug Bellis cont. Emphasis #7 Est. Ft. of Pay \_\_\_\_\_  
 Location: Sec. 36 Twp. 17 S Rge. 25 W Co. Ness State KS.  
 No. of Copies Normal Distribution Sheet \_\_\_\_\_ Yes X No Turnkey \_\_\_\_\_ Yes X No \_\_\_\_\_ Evaluation \_\_\_\_\_

Interval Tested 4340 - 4384 Drill Pipe Size 4 1/2" XH  
 Anchor Length 44' Top Choke — 1" \_\_\_\_\_ Bottom Choke — 3/4" \_\_\_\_\_  
 Top Packer Depth 4335 Hole Size — 77/8" \_\_\_\_\_ Rubber Size — 63/4" \_\_\_\_\_  
 Bottom Packer Depth 4340 Wt. Pipe I.D. — 2.7 Ft. Run \_\_\_\_\_  
 Total Depth 4384 Drill Collar — 2.25 Ft. Run \_\_\_\_\_  
 Mud Wt. 9.2 lb/gal. Viscosity 52 Filtrate 12.0  
 Tool Open @ 8:02 am Initial Blow 1/4" blow decreased and died in 25 mins

Final Blow No return - flushed tool / good surge - no help.

Recovery — Total Feet \_\_\_\_\_ Feet of Gas in Pipe \_\_\_\_\_ Flush Tool? YES

Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. <u>20'</u>	Feet Of <u>Dil Stained Mud</u>	%gas <u>1</u>	%oil <u>—</u>	%water <u>99</u>	%mud <u>—</u>
Rec. _____	Feet Of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec. _____	Feet Of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec. _____	Feet Of _____	%gas _____	%oil _____	%water _____	%mud _____

BHT 114° °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API

RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides \_\_\_\_\_ ppm System

- (A) Initial Hydrostatic Mud 2223 PSI AK1 Recorder No. 13309 Range 4700
- (B) First Initial Flow Pressure 41 PSI @ (depth) 4374 w/Clock No. 25814
- (C) First Final Flow Pressure 41 PSI AK1 Recorder No. 13339 Range 4025
- (D) Initial Shut-In Pressure 1140 PSI @ (depth) 4379 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 25 Test \_\_\_\_\_
- (H) Final Hydrostatic Mud 2183 PSI Initial Shut-In 60 Jars \_\_\_\_\_

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.

Final Flow 5 Safety Joint \_\_\_\_\_  
Final Shut-In — Straddle \_\_\_\_\_  
Circ. Sub X n/c \_\_\_\_\_  
Sampler \_\_\_\_\_

Approved By Doug Bellis

Our Representative Rod Steinbrink

Extra Packer \_\_\_\_\_

Other \_\_\_\_\_

TOTAL PRICE \$ \_\_\_\_\_

# TRILOBITE TESTING, L.L.C.

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## Drill-Stem Test Data

Well Name HOOVLER #1-36 Test No. 2 Date 7/10/92  
Company RANKEN ENERGY CORP. Zone MISSISSIPPI  
Address 2325 W. 15TH EDMOND OK 73013 Elevation 2414  
Co. Rep./Geo. DOUG BELLIS Cont. EMPHASIS #7 Est. Ft. of Pay 4  
Location: Sec. 36 Twp. 17S Rge. 25W Co. NESS State KS

Interval Tested 4340-4390 Drill Pipe Size 4.5 XH  
Anchor Length 50 Wt. Pipe I.D. - 2.7 Ft. Run \_\_\_\_\_  
Top Packer Depth 4335 Drill Collar - 2.25 Ft. Run 30  
Bottom Packer Depth 4340 Mud Wt. 9.2 lb/Gal.  
Total Depth 4390 Viscosity 52 Filtrate 12

Tool Open @ 6:20 PM Initial Blow SURFACE BLOW GRADUALLY BUILT TO 3"  
ISI: BLED OFF BLOW-NO RETURN  
Final Blow SURFACE RETURN IN 2 MINUTES SLOWLY BUILT TO 1.5"

Recovery - Total Feet 70 Flush Tool? NO

Rec. 10 Feet of FREE OIL  
Rec. 60 Feet of OIL CUT MUD-10%OIL/90%MUD  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_

BHT 118 °F Gravity 40 °API @ 72 °F Corrected Gravity 38.8 °API  
RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides N/A ppm System

(A) Initial Hydrostatic Mud 2188.5 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 60.3 PSI @ (depth) 4380 w / Clock No. 25814

(C) First Final Flow Pressure 60.3 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 1167.4 PSI @ (depth) 4385 w / Clock No. 27566

(E) Second Initial Flow Pressure 70.5 PSI AK1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_

(F) Second Final Flow Pressure 70.5 PSI @ (depth) \_\_\_\_\_ w / Clock No. \_\_\_\_\_

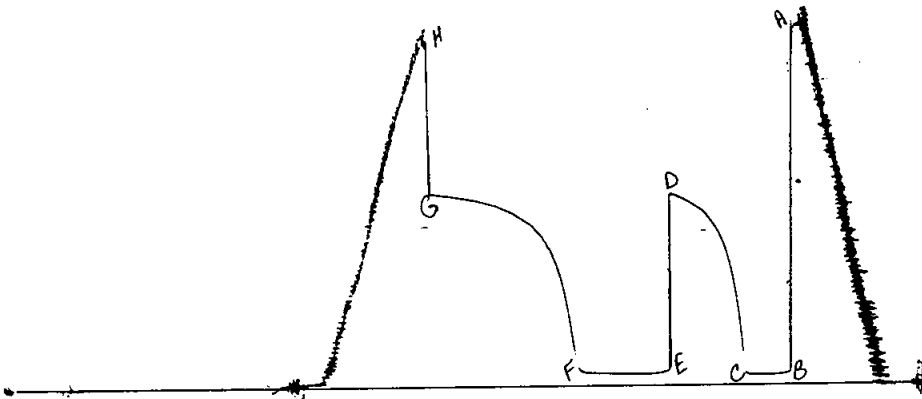
(G) Final Shut-in Pressure 1165.3 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2055.4 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROD STEINBRINK

CHART PAGE

DST #2  
13309



This is an actual photograph of recorder chart

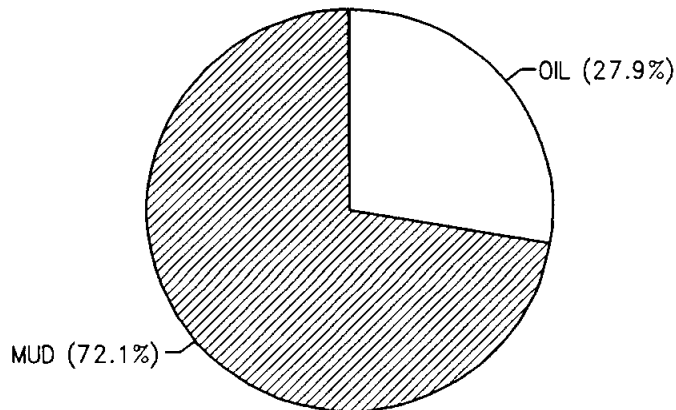
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2183	2188.5
(B) FIRST INITIAL FLOW PRESSURE	52	60.3
(C) FIRST FINAL FLOW PRESSURE	52	60.3
(D) INITIAL CLOSED-IN PRESSURE	1160	1167.4
(E) SECOND INITIAL FLOW PRESSURE	62	70.5
(F) SECOND FINAL FLOW PRESSURE	62	70.5
(G) FINAL CLOSED-IN PRESSURE	1160	1165.3
(H) FINAL HYDROSTATIC MUD	2053	2055.4

CALCULATED RECOVERY ANALYSIS

DST # 2 TICKET # 5022

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	10	0	0	100	10	0	0	0	0
PIPE 2	30	0	0	10	3	0	0	90	27
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	30	0	0	10	3	0	0	90	27
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	70		0		16		0		54

		HRS OPEN	BBL/DAY
BBL OIL=	0.19953 *	1.5	3.19248
BBL WATER=	0 *		0
BBL MUD=	0.51597		
BBL GAS =	0		



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## Test Ticket

N<sup>o</sup> 5022

Well Name & No.	Hoovler #1-36	Test No.	2	Date	7-10-92					
Company	Ranken Energy Corporation	Zone Tested	Mississippian							
Address	2325 S.W. 15 <sup>th</sup> St. Edmond, OK 73013	Elevation	2414 (KB)							
Co. Rep./Geo.	Doug Bellis	cont.	Emphasis #7	Est. Ft. of Pay	4'					
Location: Sec.	36	Twp.	17 S	Rge.	25 W	Co.	Ness	state	KS	
No. of Copies	Normal	Distribution Sheet	Yes	X	No	Turnkey	Yes	X	No	Evaluation

Interval Tested	4340 - 4390	Drill Pipe Size	4 1/2" x H		
Anchor Length	50'	Top Choke - 1"	Bottom Choke - 3/4"		
Top Packer Depth	4335	Hole Size - 7 7/8"	Rubber Size - 6 3/4"		
Bottom Packer Depth	4340	Wt. Pipe I.D. - 2.7 Ft. Run	---		
Total Depth	4390	Drill Collar - 2.25 Ft. Run	--- 30'		
Mud Wt.	9.2 lb/gal.	Viscosity	52	Filtrate	12.0
Tool Open @	6:20 pm	Initial Blow	Surface blow gradually built to 3".		
			ISI: Bled off blow - No return.		
Final Blow	Surface return in 2 mins slowly built to 1 1/2"				

Recovery - Total Feet	70'	Feet of Gas in Pipe	---	Flush Tool?	No
Rec.	Feet Of	% gas	% oil	% water	% mud
Rec.	10'	Free Oil	---	100%	---
Rec.	Feet Of	% gas	% oil	% water	% mud
Rec.	60'	DCM	---	10%	90%
Rec.	Feet Of	% gas	% oil	% water	% mud

BHT 118° °F Gravity 40 °API @ 72° °F Corrected Gravity 38.8 °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

- (A) Initial Hydrostatic Mud 2183 PSI AK1 Recorder No. 13309 Range 4700
- (B) First Initial Flow Pressure 52 PSI @ (depth) 4380 w/Clock No. 25814
- (C) First Final Flow Pressure 52 PSI AK1 Recorder No. 13339 Range 4025
- (D) Initial Shut-in Pressure 1160 PSI @ (depth) 4385 w/Clock No. 27566
- (E) Second Initial Flow Pressure 62 PSI AK1 Recorder No. --- Range ---
- (F) Second Final Flow Pressure 62 PSI @ (depth) --- w/Clock No. ---
- (G) Final Shut-in Pressure 1160 PSI Initial Opening 30 Test ---
- (H) Final Hydrostatic Mud 2053 PSI Initial Shut-in 60 Jars ---

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Final Flow 60 Safety Joint ---  
Final Shut-in 120 Straddle ---  
Circ. Sub X n/c  
Sampler ---

Approved By Doug Bellis  
Our Representative Rod Steinbrink

Extra Packer ---  
Other ---