TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name TERRILL #1-11 Test No. 1 Date 8/27/92

Company GRIGGS OIL, INC. Zone MISSISSIPPI

Address 107 N MARKET #800 WICHITA KS 67202 Elevation 1674

Co. Rep./Geo. KRIS KENNEDY Cont. STERLING RIG #4 Est. Ft. of Pay

Location: Sec. 11 Twp. 25S Rge. 9W Co. RENO State KS

Interval Tested 3847-3865 Drill Pipe Size 4.5" XH

Anchor Length 18 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 3842 Drill Collar – 2.25 Ft. Run 436

Bottom Packer Depth 3847 Mud Wt. 9 lb/Gal.

Total Depth 3865 Viscosity 46 Filtrate 9.2

Tool Open @ 12:50 AM Initial Blow SLID TOOL 12' WHEN OPENED-LOST MUD-RESET TOOL & SLID MORE-BLED OFF BLOW & HAD 2" BLOW DECREASING TO 1"

Final Blow VERY WEAK SURFACE BLOW-DIED IN 5 MINUTES PACKERS LEAKING DURING SHUT IN

Recovery - Total Feet 500 Flush Tool?

Rec. 500 Feet of MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 108 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud 1886.3 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 277.5 PSI @ (depth) 3850 w / Clock No. 27501

(C) First Final Flow Pressure 277.5 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure PSI @ (depth) 3864 w / Clock No. 27573

(E) Second Initial Flow Pressure 284.6 PSI AK1 Recorder No. Range

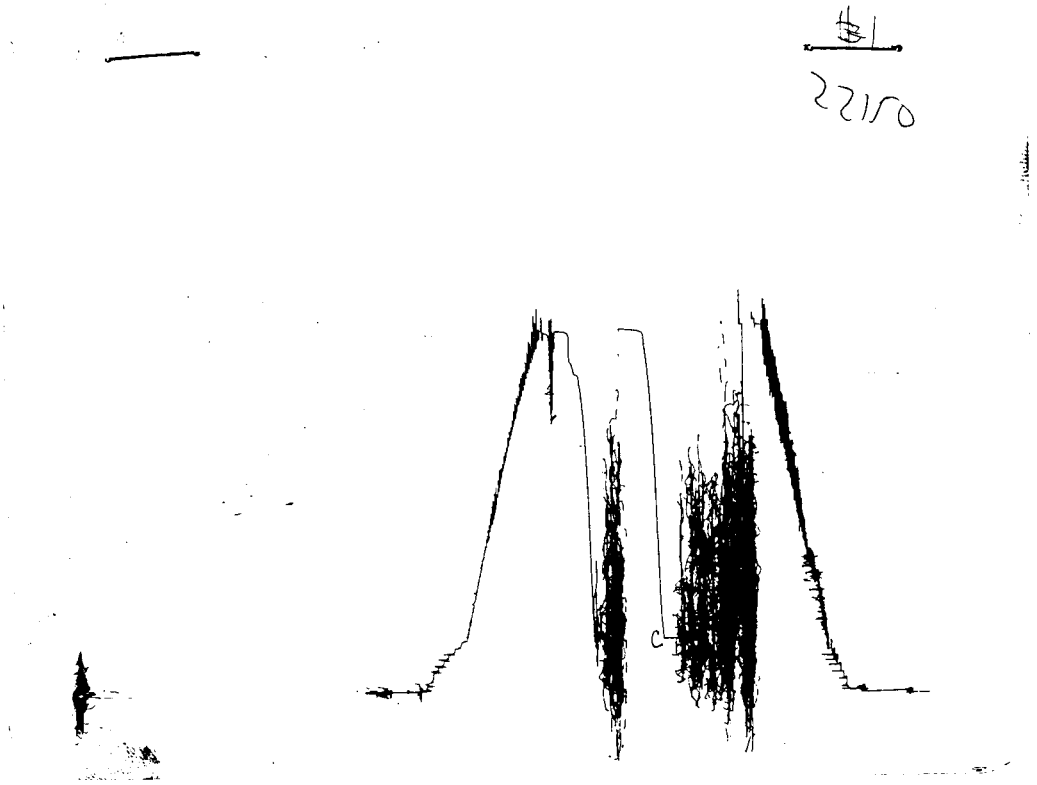
(F) Second Final Flow Pressure 284.6 PSI @ (depth) w / Clock No.

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

(H) Final Hydrostatic Mud 1744.6 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1895	1886.3
(B) FIRST INITIAL FLOW PRESSURE	278	277.5
(C) FIRST FINAL FLOW PRESSURE	278	277.5
(D) INITIAL CLOSED-IN PRESSURE		
(E) SECOND INITIAL FLOW PRESSURE	285	284.6
(F) SECOND FINAL FLOW PRESSURE	285	284.6
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	1742	1744.6

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 5209

Well Name & No. Terrill 1-11 Test No. 1 Date 8-27-92

Company Griggs Oil Inc Zone Tested Miss

Address 107 N Market # 800 Wichita Ks 67202 Elevation 1624 KB

Co. Rep./Geo. Kriss Kennedy Cont. Sterling #4 Est. Ft. of Pay

Location: Sec. 11 Twp. 25 Rge. 9w Co. Rice State Ks

No. of Copies Distribution Sheet Yes No Turnkey Yes No Evaluation

Interval Tested 3847-3865 Drill Pipe Size 4½ XH

Anchor Length 18 Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 3842 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 3847 Wt. Pipe I.D. — 2.7 Ft. Run

Total Depth 3865 Drill Collar — 2.25 Ft. Run 436

Mud Wt. 9.0 lb / gal. Viscosity 46 Filtrate 9.2

Tool Open @ 12:50AM Initial Blow slid tool 12' when opened - lost mud - reset tool & slid more - bled off blow & had 2" blow decreasing to 1"

Final Blow vl weak surface blow - died in 5 minutes pkr leaking during shut in

Recovery — Total Feet 500 Feet of Gas in Pipe Flush Tool?

Rec. 500	Feet Of mud	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 108 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud	1895 PSI	AK1 Recorder No.	22150	Range	3925
(B) First Initial Flow Pressure	278 PSI	@ (depth)	3850	w/Clock No.	27501
(C) First Final Flow Pressure	278 PSI	AK1 Recorder No.	24174	Range	3050
(D) Initial Shut-In Pressure	PSI	@ (depth)	3864	w/Clock No.	27573
(E) Second Initial Flow Pressure	285 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	285 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	PSI	Initial Opening	15	Test	
(H) Final Hydrostatic Mud	1742 PSI	Initial Shut-In	30	Jars	
		Final Flow	15	Safety Joint	
		Final Shut-In	30	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	400

Approved By

Our Representative Pat Simpson

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: TERRILL #1-11 | Test No.: 2 | Date: 8/27/92

Company: GRIGGS OIL, INC. | Zone: MISSISSIPPI

Address: 107 N MARKET #800 WICHITA KS 67202 | Elevation: 1674

Co. Rep./Geo.: KRIS KENNEDY | Cont.: STERLING RIG #4 | Est. Ft. of Pay:

Location: Sec.: 11 | Twp.: 25S | Rge.: 9W | Co.: RENO | State: KS

Interval Tested	3790-3865	Drill Pipe Size	4.5" XH
Anchor Length	75	Wt. Pipe I.D. - 2.7 Ft. Run	
Top Packer Depth	3785	Drill Collar – 2.25 Ft. Run	374
Bottom Packer Depth	3790	Mud Wt.	9.1 lb/Gal.
Total Depth	3865	Viscosity	45 Filtrate 8.8

Tool Open @ 11:10 AM

Initial Blow: SLID TOOL 10' WHEN OPENED -LOST 20' OF MUD-RESET TOOL
4" BLOW BUILDING TO BOTTOM OF BUCKET IN 6 MIN-BLOW BACK BUILT TO 4.5"

Final Blow: WEAK BLOW BUILDING TO BOTTOM OF BUCKET IN 7 MINUTES
DECREASING TO 6" BLOW AT END OF FINAL FLOW-(NO BLOW BACK ON SHUT IN)

Recovery - Total Feet: 375/1225 G.I.P. | Flush Tool?

Rec. 120	Feet of	GAS IN PIPE
Rec. 65	Feet of	GASSY SLTLY OIL CUT MUD-5%GAS/5%OIL/90%MUD
Rec. 65	Feet of	GASSY OIL CUT MUD-10%GAS/20%OIL/70%MUD
Rec. 65	Feet of	GASSY HEAVY OIL CUT MUD-5%GAS/45%OIL/50%MUD
Rec. 60	Feet of	GASSY SLTLY OIL CUT MUD-5%GAS/15%OIL/80%MUD

BHT 109 °F | Gravity ____ °API | @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F | Chlorides ____ ppm Recovery | Chlorides ____ ppm System

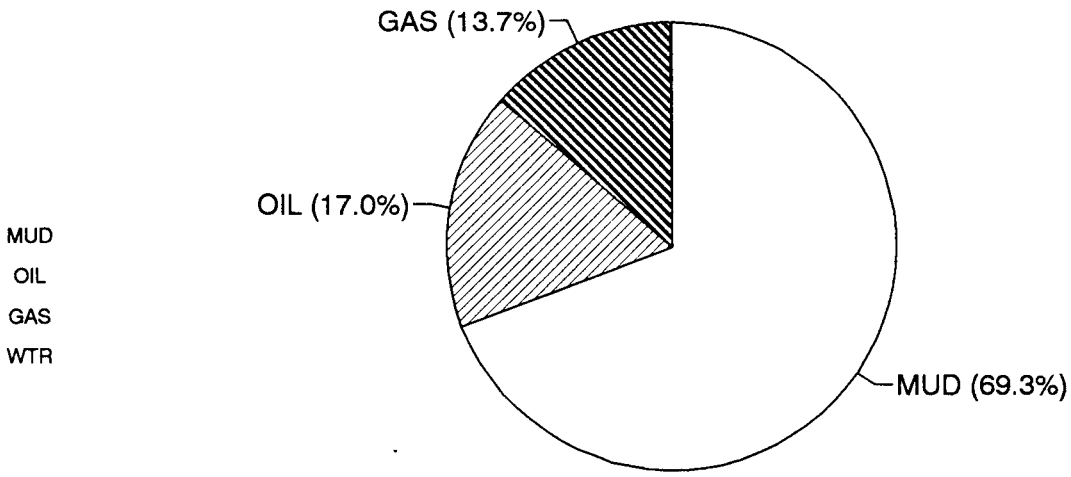
(A) Initial Hydrostatic Mud	1835.9 PSI	AK1 Recorder No. 22150	Range 3925
(B) First Initial Flow Pressure	102.3 PSI	@ (depth) 3793	w / Clock No. 27501
(C) First Final Flow Pressure	134.6 PSI	AK1 Recorder No. 24174	Range 3050
(D) Initial Shut-in Pressure	1181.2 PSI	@ (depth) 3864	w / Clock No. 27573
(E) Second Initial Flow Pressure	1090.3/INVALID PSI	AK1 Recorder No.	Range
(F) Second Final Flow Pressure	1103.6/INVALID PSI	@ (depth)	w / Clock No.
(G) Final Shut-in Pressure	1181.2 PSI	Initial Opening 30	Final Flow 45
(H) Final Hydrostatic Mud	1780.3 PSI	Initial Shut-in 60	Final Shut-in 60

Our Representative: PAUL SIMPSON

DST # 2 TICKET 5210

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	120	5	6	5	6	0	0	90	108
2	65	50	32.5	10	6.5	0	0	40	26
3	65	10	6.5	20	13		0	70	45.5
4	65	5	3.25	45	29.25		0	50	32.5
5	60	5	3	15	9		0	80	48
TOTAL	375	13.67	51.25	17.00	63.75	0.00	0	69.333333	260

			HRS OP	BBL/DAY
BBL OIL=	0.3117375	*	0.25	29.9268
BBL WATER=	0	*		0
BBL MUD=	1.2714			
BBL GAS=	0.2506125			



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 5210

Well Name & No. Terrill 1-11 Test No. 2 Date 8-27-92

Company Griggs Oil Inc Zone Tested Miss

Address 107 N Market #800 Wichita Ks 67202 Elevation 1674 KB

Co. Rep./Geo. Kris Kennedy Cont. Sterling #4 Est. Ft. of Pay

Location: Sec. 11 Twp. 25s Rge. 9w Co. Reno State Ks

No. of Copies Distribution Sheet Yes No Turnkey Yes No Evaluation

Interval Tested 3790-3865 Drill Pipe Size 4½ XH

Anchor Length 75 Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 3785 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 3790 Wt. Pipe I.D. — 2.7 Ft. Run

Total Depth 3865 Drill Collar — 2.25 Ft. Run 374

Mud Wt. 9.1 lb/gal. Viscosity 45 Filtrate 8.8

Tool Open @ 11:10AM Initial Blow slid tool 10' when opened lost 20' of mud reset tool - 4" blow building to bottom of bucket in 6min (blow back built to 4½ in)

Final Blow weak blow building to bottom of bucket in 7minutes - decreasing to 6" blow at end of F.F. (no blow back on shut-in)

Recovery — Total Feet 375 Feet of Gas in Pipe 1225 Flush Tool?

Rec. 120	Feet Of	gassy SOCM	5 %gas	5 %oil	%water 90	%mud	
Rec. 65	Feet Of	" " "	50 %gas	10 %oil	%water 40	%mud	
Rec. 65	Feet Of	" OCM	10 %gas	20 %oil	%water 70	%mud	
Rec. 65	Feet Of	" HOCM	5 %gas	45 %oil	%water 50	%mud	
Rec. 60	Feet Of	" SOCM	5 %gas	15 %oil	%water 80	%mud	

BHT 109 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud	1832 PSI	AK1 Recorder No. 22150	Range 3525		
(B) First Initial Flow Pressure	105 PSI	@ (depth) 3793	w/Clock No. 27504		
(C) First Final Flow Pressure	134 PSI	AK1 Recorder No. 24174	Range 3050		
(D) Initial Shut-In Pressure	1177 PSI	@ (depth) 3864	w/Clock No. 27573		
(E) Second Initial Flow Pressure	1089 incl. f PSI	AK1 Recorder No.	Range		
(F) Second Final Flow Pressure	1095 incl PSI	@ (depth)	w/Clock No.		
(G) Final Shut-In Pressure	1177 PSI	Initial Opening 30	Test		
(H) Final Hydrostatic Mud	1773 PSI	Initial Shut-In 60	Jars		
		Final Flow 45	Safety Joint		
		Final Shut-In 60	Straddle		
			Circ. Sub		
			Sampler		
			Extra Packer		
			Other		

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

Our Representative Paul Simpson

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: TERRILL #1-11 | Test No. 3 | Date 8/28/92

Company: GRIGGS OIL, INC. | Zone MISSISSIPPI

Address: 107 N MARKET #800 WICHITA KS 67202 | Elevation 1674

Co. Rep./Geo.: KRIS KENNEDY | Cont. STERLING RIG #4 | Est. Ft. of Pay 9

Location: Sec. 11 | Twp. 25S | Rge. 9W | Co. RENO | State KS

Interval Tested: 3866-3875 | Drill Pipe Size: 4.5" XH

Anchor Length: 9 | Wt. Pipe I.D. - 2.7 Ft. Run:

Top Packer Depth: | Drill Collar – 2.25 Ft. Run: 436

Bottom Packer Depth: 3866 | Mud Wt.: 9.1 lb/Gal.

Total Depth: 3875 | Viscosity: 56 | Filtrate: 8.4

Tool Open @ 2:44 AM | Initial Blow: STRONG BLOW - BOTTOM OF BUCKET IN 30 SECONDS/GAS TO SURFACE IN 25 MINUTES INTO INITIAL FLOW

Final Blow: GAUGING GAS-SEE REPORT

Recovery - Total Feet: 590 | Flush Tool?:

Rec. 160	Feet of	CLEAN GASSY OIL-60%GAS/40%OIL
Rec. 60	Feet of	GASSY SLTLY MUD & WTR CUT OIL-5%GAS/85%OIL/5%WTR/5%MUD
Rec. 60	Feet of	GASSY OIL CUT WATER-45%GAS/25%OIL/28%WATER/2%MUD
Rec. 60	Feet of	OIL CUT WATEWR-5%OIL/95%WATER
Rec. 250	Feet of	SALT WATER

BHT 112 °F | Gravity °API @ °F | Corrected Gravity 38 °API

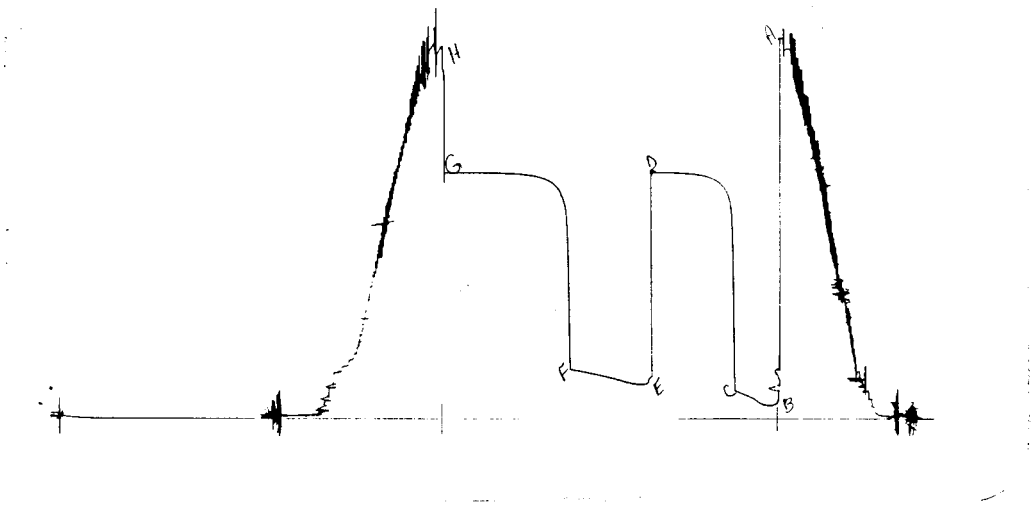
RW 0.16 @ 74 °F | Chlorides 50000 ppm Recovery | Chlorides 7000 ppm System

(A) Initial Hydrostatic Mud	1916.3 PSI	AK1 Recorder No. 22150	Range 3925
(B) First Initial Flow Pressure	77.1 PSI	@ (depth) 3868	w / Clock No. 27501
(C) First Final Flow Pressure	142.8 PSI	AK1 Recorder No. 24174	Range 3050
(D) Initial Shut-in Pressure	1233.0 PSI	@ (depth) 3874	w / Clock No. 27573
(E) Second Initial Flow Pressure	162.1 PSI	AK1 Recorder No.	Range
(F) Second Final Flow Pressure	242.2 PSI	@ (depth)	w / Clock No.
(G) Final Shut-in Pressure	1229.5 PSI	Initial Opening 30	Final Flow 60
(H) Final Hydrostatic Mud	1877.9 PSI	Initial Shut-in 60	Final Shut-in 90

Our Representative: PAUL SIMPSON

CHART PAGE

A3



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1903	1916.3
(B) FIRST INITIAL FLOW PRESSURE	53	77.1
(C) FIRST FINAL FLOW PRESSURE	142	142.8
(D) INITIAL CLOSED-IN PRESSURE	1236	1233
(E) SECOND INITIAL FLOW PRESSURE	157	162.1
(F) SECOND FINAL FLOW PRESSURE	255	242.2
(G) FINAL CLOSED-IN PRESSURE	1236	1229.5
(H) FINAL HYDROSTATIC MUD	1872	1877.9

COMPUTER EVALUATION BY TRILOBITE TESTING, L.L.C.

GRIGGS OIL, INC. TERRILL #1-11 DST 3

11 25S 9W RENO KS

****

ELEVATION:	1674	KB	EST. PAY	9	FT
DATUM:	-2195		ZONE TESTED:	MISSISSIPPIAN	
TEST INTERVAL:	3866-3875		TIME INTERVALS:	30-60-60-90	
RECORDER DEPTH:	3868		VISCOSITY:	2.717	CP
BOTTOM HOLE TEMP:	112		HOLE SIZE:	7.875	IN

****

CUBIC FEET OF GAS IN PIPE:	468.75			
TOTAL FEET OF RECOVERY:	590.00	CORRECTED PIPE FILLUP:	669.061	
TOTAL BARRELS OF RECOVERY:	4.32	CORR. BARRELS OF RECOVERY:	5.445	BBL
BARRELS IN DRILL PIPE:	2.19	API GRAVITY:	38	
BARRELS IN WEIGHT PIPE:	0.00	FLUID GRADIENT:	0.362	
BARRELS IN DRILL COLLARS:	2.13			
GAS OIL RATIO:	108.4587	CU.FT/BBL		
BUBBLE POINT PRESSURE:	582.815			
UNCORRECTED INITIAL PRODUCTION:			69.15	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			87.12	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			17.208	

****

INITIAL SLOPE	27.73	PSI/CYCLE	FINAL SLOPE	22.05	PSI/CYCLE
INITIAL P*	1238	PSI	FINAL P*	1236	PSI

****

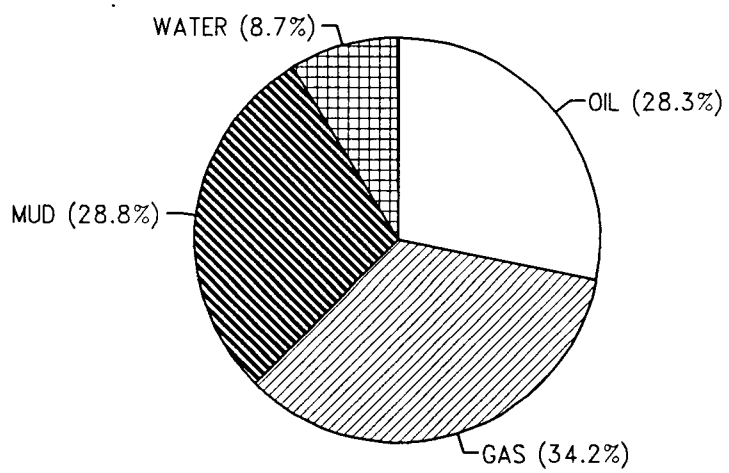
TRANSMISSIBILITY	642.51	(MD.-FT./CP.)
PERMEABILITY	193.94	(MD.)
INDICATED FLOW CAPACITY	1745.49	)MD.FT)
PRODUCTIVITY INDEX	0.73	(BARRELS/DAY/PSI)
DAMAGE RATIO	8.25	
RADIUS OF INVESTIGATION	132.12	(FT,)
POTENTIOMETRIC SURFACE	673.26	(FT.)
DRAWDOWN FACTOR	0.124	(%)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE	718.94	
THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE	142.00	

CALCULATED RECOVERY ANALYSIS

DST # 3 TICKET # 5211

SAMPLE #	TOTAL FEET		GAS FEET	%	OIL FEET	%	WATER FEET	%	MUD FEET
DRILL 1	154	60	92.4	40	61.6		0		0
PIPE 2			0		0		0		0
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	6	60	3.6	40	2.4		0		0
COLLAR 2	60	5	3	85	51	5	3	5	3
3	60	45	27	25	15	28	16.8	2	1.2
4	60		0	5	3	95	57		0
5	250		0		0		0	100	250
TOTAL	590		126		133		76.8		254.2

			HRS OPEN	BBL/DAY
BBL OIL=	1.225098	*	1.5	19.601568
BBL WATER=	0.375552	*		6.008832
BBL MUD=	1.243038			
BBL GAS =	1.478232			



INITIAL FLOW

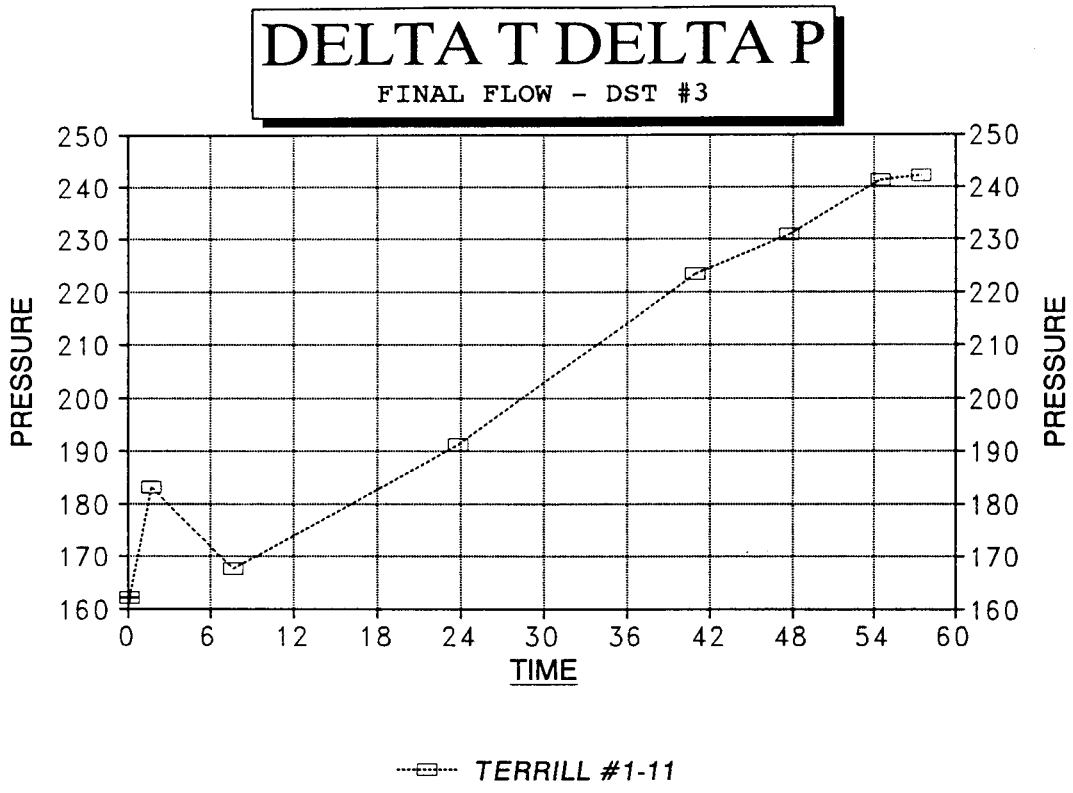
RECORDER # 22150 DST # 3

TIME(MIN)	PRESSURE	<>PRESSURE
2.5	77.1	77.1
5.8	70.2	-6.9
10.7	78.7	8.5
17.1	110.4	31.7
23.5	125.6	15.2
24.7	130.4	4.8
28.9	142.8	12.4

FINAL FLOW

RECORDER # 22150 DST # 3

TIME(MIN)	PRESSURE	<> PRESSURE
0.1	162.1	162.1
1.7	183.2	21.1
7.6	167.6	-15.6
23.8	191.2	23.6
40.9	223.4	32.2
47.8	230.9	7.5
54.5	241.3	10.4
57.5	242.2	0.9



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 17.208

TERRILL #1-11 DST #3
INITIAL SHUTIN

30 TOTAL FLOW TIME

Slope 27.73 psi/cycle
P * 1238 psi

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	0.2	526.7	2.179	526.7	151
	1.4	869.2	1.351	342.5	22
	2	1043.8	1.204	174.6	16
	3.2	1096.9	1.016	53.1	10
	6	1140.2	0.778	43.3	6
	10.9	1180.6	0.574	40.4	4
	17.9	1210.2	0.427	29.6	3
	23.4	1223.6	0.358	13.4	2
X	37	1230.8	0.258	7.2	2
	44.5	1231.6	0.224	0.8	2
	55.4	1232.2	0.188	0.6	2
X	59	1233.0	0.179	0.8	2

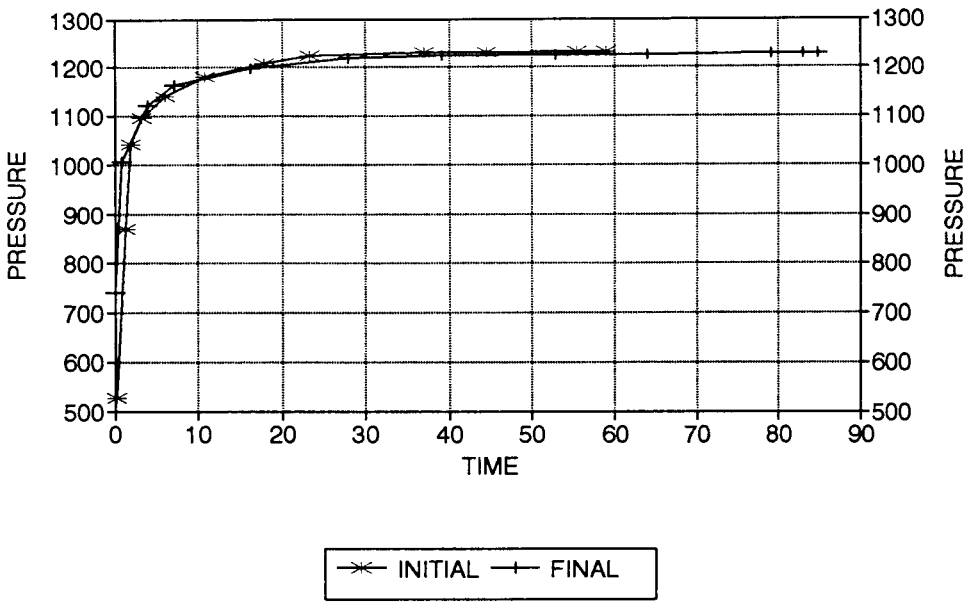
TERRILL #1-11 DST #3
FINAL SHUTIN

90 TOTAL FLOW TIME

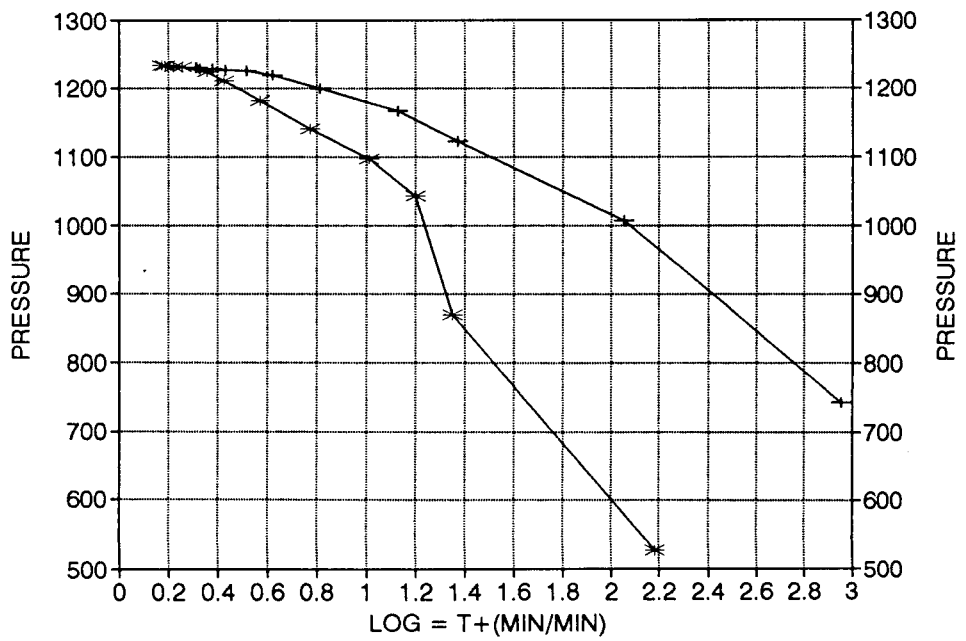
Slope 22.05 psi/cycle
P * 1236 psi

		Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	0.1	741.0	2.955	741.0	901
	0.8	1006.2	2.055	265.2	113
	4	1121.9	1.371	115.7	24
	7.2	1165.2	1.130	43.3	14
	16.2	1199.7	0.817	34.5	7
	28	1219.6	0.625	19.9	4
X	39.2	1225.0	0.518	5.4	3
	52.9	1226.4	0.432	1.4	3
	64	1227.4	0.381	1.0	2
	79.1	1228.4	0.330	1.0	2
	83.1	1229.0	0.319	0.6	2
X	84.9	1229.5	0.314	0.5	2

TERRILL #1-11 / DST #3
DELTA T DELTA P



HORNER PLOT



GAS VOLUME REPORT

GRIGGS OIL, INC.

TERRILL #1-11 DST # 3

MIN	PSIG	ORIFICE	MCF/D
26	50	0.25	7.51
30	50	0.25	7.51

MIN	PSIG	ORIFICE	MCF/D
5	CAUGHT SAMPLE		
15	30	0.25	9.2
30	36	0.25	10.1
45	26	0.25	8.56
60	20	0.25	7.5

Remarks: GAS TO SURFACE 25 MINUTES OF INITIAL FLOW

Griggs Oil Inc

184p2h10s16.66H

2.545351	77.10462	1
5.866418	70.24394	1
10.72194	78.77115	1
17.11711	110.4051	1
23.50133	125.637	1
24.75161	130.4211	1
28.91693	142.8297	1
30.28014	526.7888	2
31.4773	869.2654	2
32.00884	1043.882	2
33.29119	1096.907	2
36.09127	1140.235	2
40.96797	1180.601	2
47.91606	1210.287	2
53.46759	1223.616	2
67.05213	1230.897	2
74.53521	1231.622	2
85.48258	1232.234	2
89.08585	1233.083	2
89.48396	162.108	3
91.7151	183.2627	3
97.66319	167.634	3
113.8913	191.233	3
130.9565	223.4884	3
137.89	230.9841	3
144.5481	241.3832	3
147.5972	242.2498	3
~~148.3912~~	~~394.6677~~	4
149.4524	741.0079	4
150.8754	1006.291	4
154.0006	1121.97	4
157.2164	1165.284	4
166.2463	1199.727	4
178.0377	1219.609	4
189.2653	1225.037	4
202.9859	1228.455	4
214.0717	1229.063	4
229.176	1229.543	4
233.193	1227.483	4
234.9937	1226.461	4

TRILOBITE TESTING

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

Griggs Oil Inc — OPERATOR
Terrill 1-11 — WELL NAME AND NO.
3 — DST NO.

Min.	Ins. of Water	Orifice Size	MCF/D	Min.	Ins. of Water	Orifice Size	MCF/D
26	50	1/4"	7.51	5	Caught sample		
30	50	"	7.51	15	30	1/4"	9.2
				30	36	"	10.1
				45	26	"	8.56
				60	20	"	7.5

Remarks: GTS 25 min IF

101 NCR

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 5211

Well Name & No. Terrill #1 Test No. 3 Date 5-26-12

Company Griggs Oil Inc Zone Tested Miss

Address _____ Elevation _____

Co. Rep./Geo. Kris Kennedy Cont. Sterling #4 Est. Ft. of Pay 9

Location: Sec. _____ Twp. 25s Rge. 9w Co. Reno State Ks

No. of Copies will call Distribution Sheet _____ Yes _____ No Turnkey _____ Yes _____ No X Evaluation

Interval Tested 3866 - 3875 Drill Pipe Size 4½ XH

Anchor Length 9 Top Choke — 1" _____ Bottom Choke — ¾" _____

~~Top Packer Depth~~ _____ Hole Size — 7⅞" _____ Rubber Size — 6¾" _____

Bottom Packer Depth 3866 Wt. Pipe I.D. — 2.7 Ft. Run _____

Total Depth 3875 Drill Collar — 2.25 Ft. Run 456

Mud Wt. 9.1 lb/gal. Viscosity 56 Filtrate 8.4

Tool Open @ 2:44 AM Initial Blow strong blow bottom bucket 30 sec - BTS 25 min into I.F.

Final Blow gauging gas see report

Recovery — Total Feet 590 Feet of Gas in Pipe _____ Flush Tool? _____

Rec. 160	Feet Of	cl gassy oil	60	%gas	40	%oil		%water		%mud
Rec. 60	Feet Of	gassy slmdy wcw	5	%gas	85	%oil	5	%water	5	%mud
Rec. 60	Feet Of	gassy OCW	45	%gas	25	%oil	28	%water	2	%mud
Rec. 60	Feet Of	OCW		%gas	5	%oil	95	%water		%mud
Rec. 250	Feet Of	salt water		%gas		%oil		%water		%mud

BHT 112 °F Gravity _____ °API @ _____ °F Corrected Gravity 38 °API

RW .216 @ 74 °F Chlorides 50,000 ppm Recovery Chlorides 2,000 ppm System

(A) Initial Hydrostatic Mud	1903 PSI	Ak1 Recorder No.	22150	Range	3925
(B) First Initial Flow Pressure	53 PSI	@ (depth)	3868	w/Clock No.	27501
(C) First Final Flow Pressure	142 PSI	AK1 Recorder No.	24174	Range	3050
(D) Initial Shut-In Pressure	1236 PSI	@ (depth)	3874	w/Clock No.	27573
(E) Second Initial Flow Pressure	157 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	255 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	1236 PSI	Initial Opening	30	Test	X
(H) Final Hydrostatic Mud	1872 PSI	Initial Shut-In	60	Jars	X
		Final Flow	60	Safety Joint	X
		Final Shut-In	90	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	600

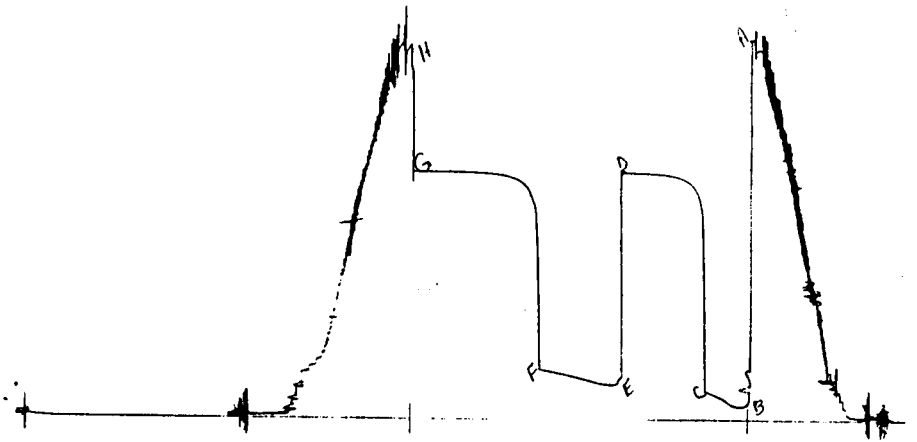
TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS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

Approved By _____

Our Representative Paul Simpson

Printcraft Printers - Hays, KS

A3



0.263	~~251.9173~~
1.123	1082.652
1.208	1165.284
1.239	1195.454
1.254	1210.057
1.263	1218.821
1.27	1225.637
1.274	1229.533
1.276	1231.481
1.278	1233.429
1.28	1235.377
1.282	1237.325
1.283	1238.299
1.284	1239.273
1.285	1240.247
1.285	1240.247
1.285	1240.247

WELL NAME_____ DST #_____ RECORDER #_____22150

INIT. HYD. MUD._____ _____ FINAL HYD. MUD _____ _____

INITIAL FLOW MINUTES / INTERVAL		INITIAL SHUTIN MINUTES / INTERVAL			FINAL FLOW MINUTES / INTERVAL		FINAL SHUTIN MINUTES 20 / INTERVAL 6	
				1			~~1.274~~ 1.263	
				2			1.123	
				3			1.207	
				4			1.239	
				5			1.254	
				6			1.263	
				7			1.270	
				8			1.274	
				9			1.276	
				10			1.278	
				11			1.280	
				12			~~1.282~~	
				13			1.284	
				14			1.285	
				15			~~1.285~~	
				16		X	~~1.285~~	1.285
				17			1.285	
				18				
				19				
				20				
				21				
				22				
				23				
				24				
				25				
				26				
				27				

TERRILL #1-11 DST #3
FINAL SHUTIN

90 TOTAL FLOW TIME

Slope 21.75 psi/cycle
P * 1246 psi

		Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	6	1082.6	1.204	1082.6	16
	12	1165.2	0.929	82.6	9
	18	1195.4	0.778	30.2	6
	24	1210.0	0.677	14.6	5
	30	1218.8	0.602	8.8	4
	36	1225.6	0.544	6.8	4
	42	1229.5	0.497	3.9	3
	48	1231.4	0.459	1.9	3
	54	1233.4	0.426	2.0	3
	60	1235.3	0.398	1.9	3
	66	1237.3	0.374	2.0	2
	72	1238.2	0.352	0.9	2
X	78	1239.2	0.333	1.0	2
	84	1240.2	0.316	1.0	2
	90	1240.2	0.301	0.0	2
X	96	1240.2	0.287	0.0	2