WELL NAME:	Lehner # 18
COMPANY:	Hugoton Energy Corp.
LOCATION:	24-20S-24W
	Ness County Kansas
DATE:	04/11/97

TRILOBITE TESTING L.L.C.

OPERATOR : Hugoton Energy Corp — DATE 4/9/97
WELL NAME: Lehner #18 — KB 2305.00 ft — TICKET NO: 10114 — DST #1
LOCATION : 24-20-24 — GR 2300.00 ft — FORMATION: Ft Scott
INTERVAL : 4240.00 To 4281.00 ft — TD 4281.00 ft — TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13249	13249	13754		
SI 60	Range(Psi)	4500.0	4500.0	4000.0	0.0	0.0
SF 30	Clock(hrs)	12 HR	12 HR	12 HR		
FS 60	Depth(ft)	4242.0	4242.0	4278.0	0.0	0.0

TIME DATA----------
PF Fr. 0425 to 0455 hr
IS Fr. 0455 to 0555 hr
SF Fr. 0555 to 0625 hr
FS Fr. 0625 to 0725 hr

	Field	1	2	3	4
A. Init Hydro	2061.0	2046.0	0.0	0.0	0.0
B. First Flow	79.0	94.0	0.0	0.0	0.0
B1. Final Flow	79.0	73.0	0.0	0.0	0.0
C. In Shut-in	395.0	389.0	0.0	0.0	0.0
D. Init Flow	135.0	169.0	0.0	0.0	0.0
E. Final Flow	135.0	112.0	0.0	0.0	0.0
F. Fl Shut-in	395.0	387.0	0.0	0.0	0.0
G. Final Hydro	2027.0	2021.0	0.0	0.0	0.0
Inside/Outside	I	I	O		

T STARTED 0130 hr
T ON BOTM 0420 hr
T OPEN 0425 hr
T PULLED 0725 hr
T OUT 0915 hr

RECOVERY
Tot Fluid 186.00 ft of 186.00 ft in DC and 0.00 ft in DP
186.00 ft of Drilling Mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	1000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	25000.00 lbs
Initial Str Wt	71000.00 lbs
Unseated Str Wt	71000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	308.00 ft
D.P. Length	3906.00 ft

BLOW DESCRIPTION
Iniital Flow:
Weak bow, building to 1 3/4"

Initial Shut In:

Final Flow:
Weak steady surface blow

Final Shut In:

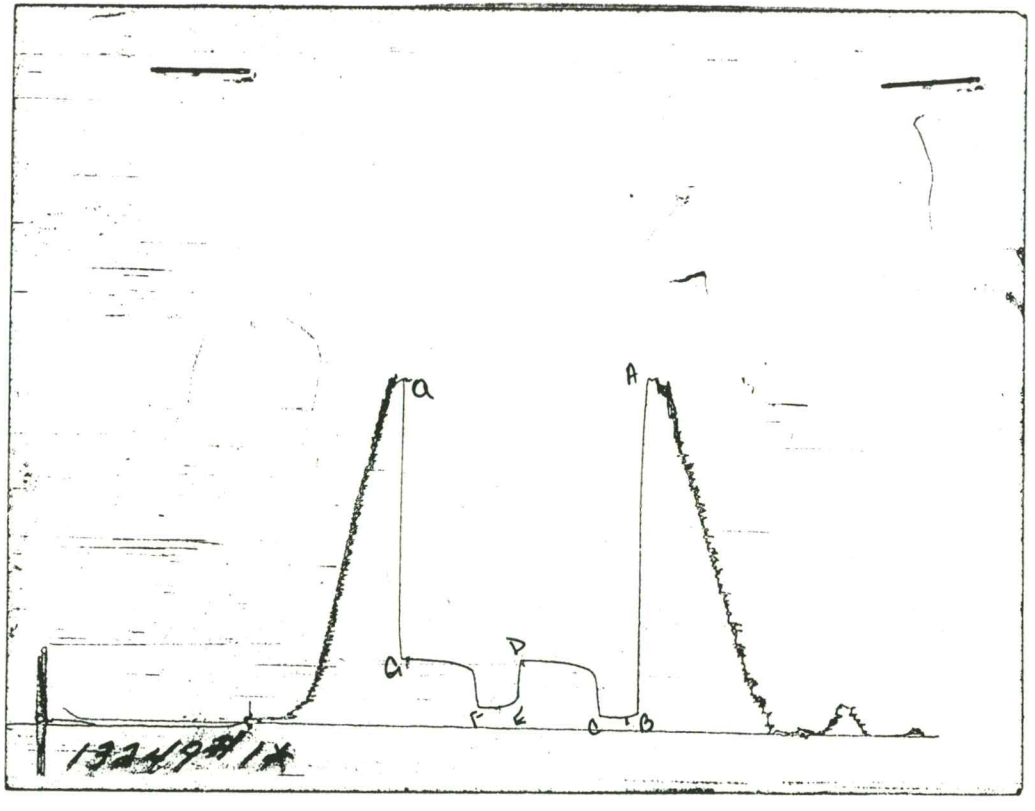
SAMPLES:
SENT TO:

MUD DATA----------

Mud Type	Chemical
Weight	9.30 lb/cf
Vis.	40.00 S/L
W.L.	11.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	117.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Dan Bangle
Co. Rep.	Dan Fredlund
Contr.	Murfin
Rig #	20
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10114

Well Name & No. Lehner #18 Test No. 1 Date 4-9-97

Company Hugoton Energy Corp. Zone Tested FT. SCOTT

Address 301 W. Main, Suite 1900, Wichita, Ks. 67202 Elevation 2305 KB 2300 GL

Co. Rep / Geo. Dan Fredlund Cont. Murfin #20 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 24 Twp. 20 Rge. 24 Co. Ness State Ks.

No. of Copies 12 Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) ____

Interval Tested 4240 - 4281 Initial Str Wt./Lbs. 21,000 Unseated Str Wt./Lbs. 21,000

Anchor Length 41 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 25,000

Top Packer Depth 4235 Tool Weight 1000

Bottom Packer Depth 4240 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 4281 Wt. Pipe Run ____ Drill Collar Run 308

Mud Wt. 9.3 LCM ____ Vis. 40 WL 11.4 Drill Pipe Size 4.5 XH Ft. Run 3906

Blow Description I.F. Weak - building to 13/4"

F.F. Weak - Steady surface blow.

Recovery — Total Feet 186 GIP ____ Ft. in DC 186 Ft. in DP ____

Rec. 186	Feet Of D.M.	%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 117 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 6200 ppm System

(A) Initial Hydrostatic Mud	2061	PSI	Recorder No.	13754	T-Started	01:30
(B) First Initial Flow Pressure	79	PSI	(depth)	4278	T-Open	04:25
(C) First Final Flow Pressure	79	PSI	Recorder No.	13249	T-Pulled	07:25
(D) Initial Shut-in Pressure	395	PSI	(depth)	4242	T-Out	09:15
(E) Second Initial Flow Pressure	135	PSI	Recorder No.			
(F) Second Final Flow Pressure	135	PSI	(depth)			
(G) Final Shut-in Pressure	395	PSI	Initial Opening	30	Test	700
(H) Final Hydrostatic Mud	2027	PSI	Initial Shut-in	60	Jars X	200
			Final Flow	30	Safety Joint X	50
			Final Shut-in	60	Straddle	____
					Circ. Sub	____
					Sampler X	200
					Extra Packer	____
					Elect. Rec.	____
					Other	____
					TOTAL PRICE $	1150

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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 Dan Fredlund

Our Representative Dan Banach

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 10114 Date 4-9-97

Company Name Hugoton Energy Corp.

Lease Lehner # 18 Test No. 1

County Ness Sec. 24 Twp. 20 Rng. 24

SAMPLER RECOVERY

Gas 0 ML

Oil 0 ML

Mud 3500 ML

Water 500 ML

Other ML

Pressure 150 PSI

Total 4000 ML

PIT MUD ANALYSIS

Chlorides 6200 ppm.

Resistivity 1.19 ohms @ 50 F

Viscosity 40

Mud Weight 9.3

Filtrate 11.4

Other

SAMPLER ANALYSIS

Resistivity 1.19 ohms @ 50 F

Chlorides 6200 ppm.

Gravity corrected @ 60 F

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.

OPERATOR : Hugoton Energy Corp — DATE 4/9/97
WELL NAME: Lehner #18 — KB 2305.00 ft — TICKET NO: 10115 DST #2
LOCATION : 24-20-24 Ness KS — GR 2300.00 ft — FORMATION: Mississippi/Warsaw
INTERVAL : 4365.00 To 4380.00 ft — TD 4380.00 ft — TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13754	13754	13249		
SI 60	Range(Psi)	4000.0	4000.0	4500.0	0.0	0.0
SF 60	Clock(hrs)	12 HR	12 HR	12 HR		
FS 120	Depth(ft)	4367.0	4367.0	4377.0	0.0	0.0

TIME DATA----------
PF Fr. 0040 to 0110 hr
IS Fr. 0110 to 0210 hr
SF Fr. 0210 to 0310 hr
FS Fr. 0310 to 0510 hr

	Field	1	2	3	4
A. Init Hydro	2117.0	2118.0	0.0	0.0	0.0
B. First Flow	9.0	15.0	0.0	0.0	0.0
B1. Final Flow	127.0	144.0	0.0	0.0	0.0
C. In Shut-in	482.0	495.0	0.0	0.0	0.0
D. Init Flow	167.0	178.0	0.0	0.0	0.0
E. Final Flow	206.0	217.0	0.0	0.0	0.0
F. Fl Shut-in	482.0	488.0	0.0	0.0	0.0
G. Final Hydro	2036.0	2108.0	0.0	0.0	0.0
Inside/Outside	I	I	O		

T STARTED 2230 hr
T ON BOTM 0030 hr
T OPEN 0040 hr
T PULLED 0510 hr
T OUT 0730 hr

RECOVERY
Tot Fluid 448.00 ft of 308.00 ft in DC and 140.00 ft in DP
80.00 ft of Gassy Oil - 20%gas 80%oil
60.00 ft of Frothy Oil
124.00 ft of Mud Cut Gassy Oil - 20%gas 30%mud 50%oil
60.00 ft of Slight Oil Cut Water 5%oil 95%water
124.00 ft of Mud Cut Water - 20%mud 80%water
0.00 ft of
0.00 ft of
0.00 ft of RW .30 @ 80F
SALINITY 20000.00 P.P.M. A.P.I. Gravity 0.34

TOOL DATA----------

Tool Wt.	800.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	71000.00 lbs
Unseated Str Wt	71000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	308.00 ft
D.P. Length	4053.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak blow building to fair blow,
bottom of bucket in 27 minutes

Initial Shut In:
Bled off blow, weak surface blow

Final Flow:
Weak Blow building to 9"

Final Shut In:
Weak surface blow for 30 minutes

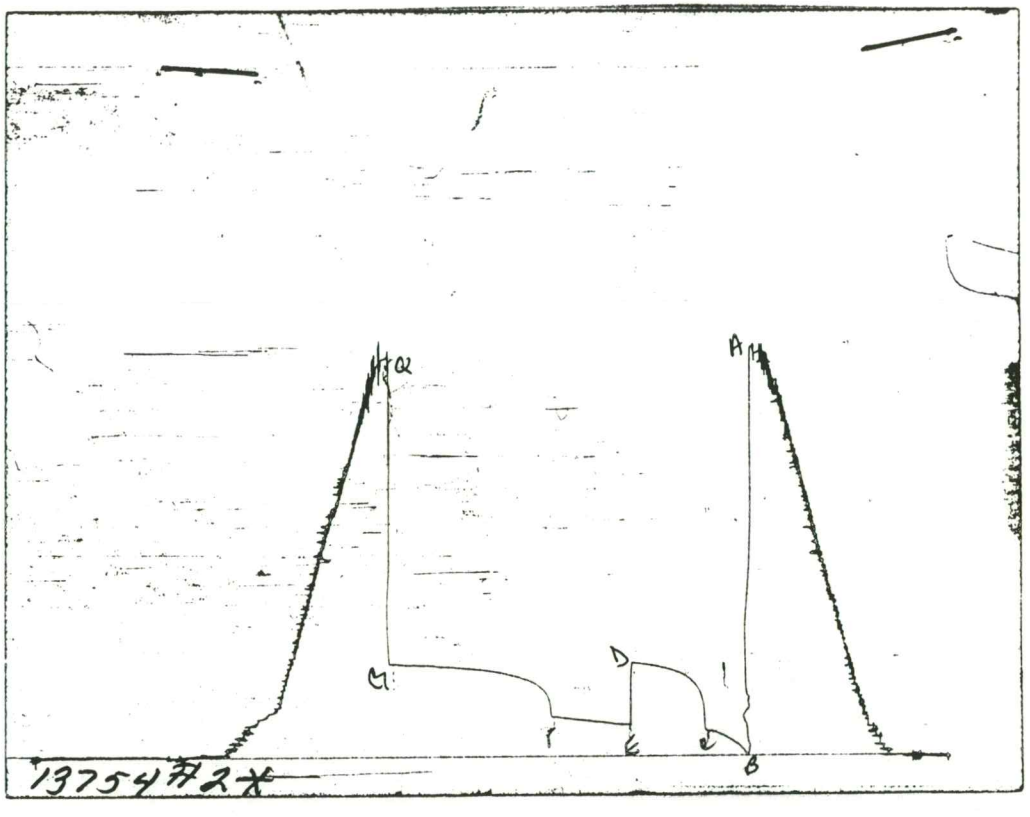
SAMPLES:
SENT TO:

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	44.00 S/L
W.L.	10.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	130.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Dan Bangle
Co. Rep.	Dan Fredlund
Contr.	Murfin
Rig #	20
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10115

Well Name & No. Lehner #18 Test No. 2 Date 4-9-97

Company Hugoton Energy Corp. Zone Tested Miss Warsaw

Address _____ Elevation 2305 KB 2300 GL

Co. Rep / Geo. Dan Fredlund Cont. Murfin #20 Est. Ft. of Pay 14 Por. 10 %

Location: Sec. 24 Twp. 20 Rge. 24 Co. Ness State Ks.

No. of Copies 12 Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) _____

Interval Tested 4365 - 4380 Initial Str Wt./Lbs. 71,000 Unseated Str Wt./Lbs. 71,000

Anchor Length 15 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 80,000

Top Packer Depth 4360 Tool Weight 800

Bottom Packer Depth 4365 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____

Total Depth 4380 Wt. Pipe Run _____ Drill Collar Run 308

Mud Wt. 9.2 LCM _____ Vis. 44 WL 10.2 Drill Pipe Size 4.5XH Ft. Run 4053

Blow Description I.F. Weak - building to fair blow - B.O.B. in 22 min. ISI - Bled off blow - Weak surface blow F.F. Weak - building to 9" FSI - Weak surface blow for 30 min.

Recovery — Total Feet 448 GIP 90 Ft. in DC 308 Ft. in DP 140

Rec. 80	Feet Of CGsyO	20 %gas	80 %oil	%water	%mud
Rec. 60	Feet Of Frothy O	%gas	%oil	%water	%mud
Rec. 124	Feet Of MCGsyO	20 %gas	50 %oil	%water	30 %mud
Rec. 60	Feet Of SlTy OCW	%gas	5 %oil	95 %water	%mud
Rec. 124	Feet Of MCW	%gas	%oil	80 %water	20 %mud

BHT 130 °F Gravity _____ °API D@ _____ °F Corrected Gravity 34 °API

RW .30 @ 80 °F Chlorides 20,000 ppm Recovery Chlorides 7500 ppm System

(A) Initial Hydrostatic Mud	2117	PSI	Recorder No.	13754	T-Started	22:30
(B) First Initial Flow Pressure	9	PSI	(depth)	4367	T-Open	24:40
(C) First Final Flow Pressure	127	PSI	Recorder No.	13249	T-Pulled	05:10
(D) Initial Shut-in Pressure	482	PSI	(depth)	4377	T-Out	07:30
(E) Second Initial Flow Pressure	167	PSI	Recorder No.			
(F) Second Final Flow Pressure	206	PSI	(depth)			
(G) Final Shut-in Pressure	482	PSI	Initial Opening	30	Test	700
(H) Final Hydrostatic Mud	2036	PSI	Initial Shut-in	60	Jars X	200
			Final Flow	60	Safety Joint X	50
			Final Shut-in	120	Straddle	
					Circ. Sub	
					Sampler X	200
					Extra Packer	
					Elect. Rec.	
					Other	
					TOTAL PRICE $	1150

TRILOBIITE 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 Dan Rumple

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 10115 Date 4-

Company Name Hugoton Energy Corp.

Lease Lehner #18 Test No. 2

County Ness Sec. 24 Twp. 20 Rng. 24

SAMPLER RECOVERY

Gas 0 ML

Oil 100 ML

Mud 0 ML

Water 3900 ML

Other ML

Pressure 375 PSI

Total 4000 ML

PIT MUD ANALYSIS

Chlorides 7500 ppm.

Resistivity ohms @ F

Viscosity 44

Mud Weight 9.2

Filtrate 10.2

Other

SAMPLER ANALYSIS

Resistivity .30 ohms @ 80 F

Chlorides 20,000 ppm.

Gravity corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity ohms @ F

Chlorides ppm.

MIDDLE

Resistivity ohms @ F

Chlorides ppm.

BOTTOM

Resistivity .30 ohms @ 80 F

Chlorides 20,000 ppm.

WELL NAME Lehner DST # 2 RECORDER # 13249

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

INITIAL FLOW MINUTES / INTERVAL		INITIAL SHUTIN MINUTES / INTERVAL			FINAL FLOW MINUTES / INTERVAL		FINAL SHUTIN MINUTES / INTERVAL	
		.125		1			.185	
		.211		2			.272	
		.279		3			.310	
		.306		4			.331	
		.326		5			.350	
		.340		6			.365	
		.358		7			.376	
		.368		8			.385	
		.378		9			.387	
		.385		10			.395	
		.392		11			.398	
		.400		12			.404	
		.406		13			.409	
		.411		14			.415	
		.415		15			.417	
		.420		16			.421	
		.424		17			.423	
		.428		18			.423	
		.430		19			.424	
		.433		20			.424	
		.434		21			.426	
				22			.426	
				23				
				24				
				25				
				26				
				27				

TRILOBITE TESTING L.L.C.

OPERATOR : Hugoton Energy Corp — DATE 4/10/97
WELL NAME: Lehner #18 — KB 2305.00 ft — TICKET NO: 10116 — DST #3
LOCATION : 24-20-24 Ness KS — GR 2300.00 ft — FORMATION: Warsaw
INTERVAL : 438020.00 To 4392.00 ft — TD 4392.00 ft — TEST TYPE: CONV

RECORDER DATA

	Mins		Field	1	2	3	4
PF	30	Rec.	13754	13754	13249		
SI	60	Range(Psi)	4000.0	4000.0	4500.0	0.0	0.0
SF	60	Clock(hrs)	12 HR	12 HR	12 HR		
FS	120	Depth(ft)	4382.0	4382.0	4389.0	0.0	0.0

TIME DATA----------
PF Fr. 1845 to 1915 hr
IS Fr. 1915 to 2015 hr
SF Fr. 2015 to 2115 hr
FS Fr. 2115 to 2315 hr

	Field	1	2	3	4
A. Init Hydro	2087.0	2123.0	0.0	0.0	0.0
B. First Flow	9.0	4.0	0.0	0.0	0.0
B1. Final Flow	88.0	85.0	0.0	0.0	0.0
C. In Shut-in	541.0	554.0	0.0	0.0	0.0
D. Init Flow	118.0	131.0	0.0	0.0	0.0
E. Final Flow	167.0	168.0	0.0	0.0	0.0
F. Fl Shut-in	501.0	502.0	0.0	0.0	0.0
G. Final Hydro	2056.0	2082.0	0.0	0.0	0.0
Inside/Outside	I	I	O		

T STARTED 1630 hr
T ON BOTM 1840 hr
T OPEN 1845 hr
T PULLED 2315 hr
T OUT 0130 hr

RECOVERY
Tot Fluid 338.00 ft of 208.00 ft in DC and 30.00 ft in DP
5.00 ft of Clean Oil
0.00 ft of
333.00 ft of Muddy water 40%mud 60%water
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of RW .25 @ 20F
SALINITY 28000.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	800.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	71000.00 lbs
Unseated Str Wt	71000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	308.00 ft
D.P. Length	4056.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak blow, building to 5"

Initial Shut In:

Final Flow:
Weak blow, building to 1/2"

Final Shut In:

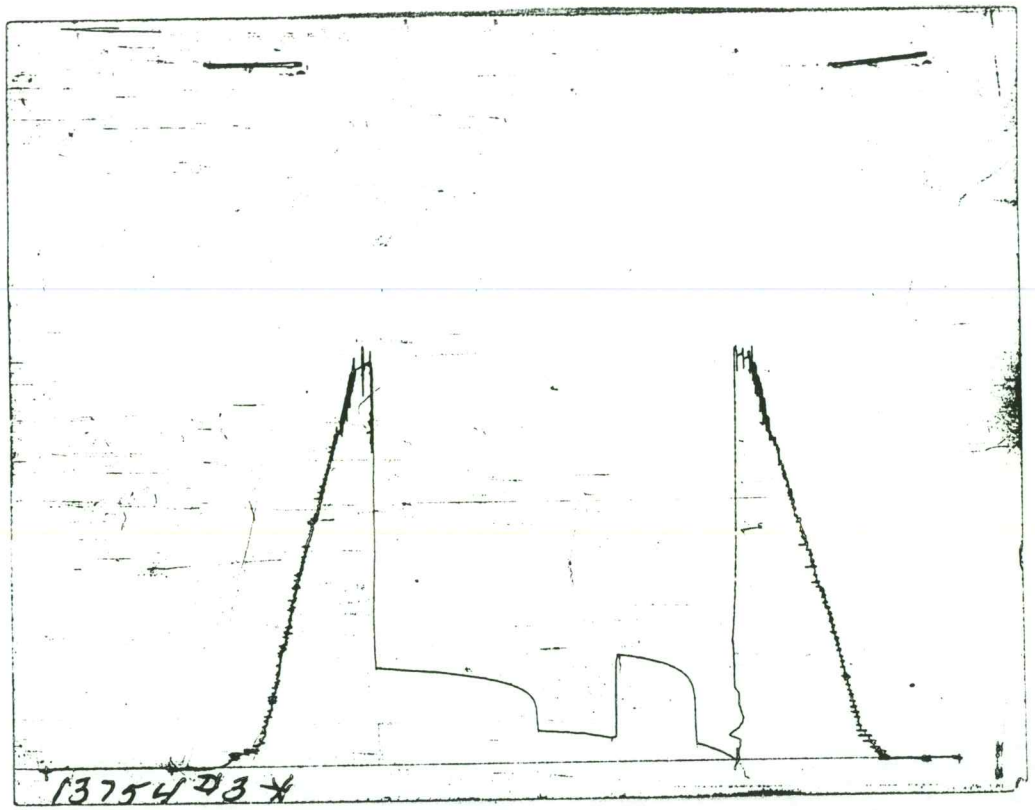
SAMPLES:
SENT TO:

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	44.00 S/L
W.L.	10.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	127.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Dan Bangle
Co. Rep.	Dan Fredlund
Contr.	Murfin Drilling
Rig #	20
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 10116

Well Name & No. Lehner #18 Test No. 3 Date 4-10-97

Company Hugoton Energy Corp. Zone Tested Warsaw

Address _____ Elevation 2305 KB 2300 GL

Co. Rep / Geo. Dan Fredlund Cont. Murfin #20 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 24 Twp. 20 Rge. 24 Co. Ness State Ks.

No. of Copies 12 Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) _____

Interval Tested 4380 - 4392 Initial Str Wt./Lbs. 71,000 Unseated Str Wt./Lbs. 71,000

Anchor Length 12 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 80,000

Top Packer Depth 4375 Tool Weight 800

Bottom Packer Depth 4380 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 4392 Wt. Pipe Run ____ Drill Collar Run 308

Mud Wt. 9.2 LCM ____ Vis. 44 WL 10.2 Drill Pipe Size 4.5 XH Ft. Run 4056

Blow Description I.F. Weak - building to 5"

F.F. Weak - building to ½"

Recovery — Total Feet 338 GIP ____ Ft. in DC 308 Ft. in DP 30

Rec. 5	Feet Of CO	%gas	%oil	%water	%mud
Rec. 333	Feet Of Mdy WTR	%gas	%oil	60 %water	40 %mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 127 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW .25 @ 20 °F Chlorides 28,000 ppm Recovery Chlorides 7500 ppm System

(A) Initial Hydrostatic Mud	2087	PSI	Recorder No.	13754	T-Started	16:30
(B) First Initial Flow Pressure	9	PSI	(depth)	4382	T-Open	18:45
(C) First Final Flow Pressure	88	PSI	Recorder No.	13249	T-Pulled	23:15
(D) Initial Shut-in Pressure	541	PSI	(depth)	4389	T-Out	01:30
(E) Second Initial Flow Pressure	118	PSI	Recorder No.	____		
(F) Second Final Flow Pressure	167	PSI	(depth)	____		
(G) Final Shut-in Pressure	501	PSI	Initial Opening	30	Test	700
(H) Final Hydrostatic Mud	2056	PSI	Initial Shut-in	60	Jars X	200
			Final Flow	60	Safety Joint X	50
			Final Shut-in	120	Straddle	____
			____		Circ. Sub	____
			____		Sampler X	200
					Extra Packer	____
					Elect. Rec.	____
					Other	____
					TOTAL PRICE $	1150

TRILOBIITE 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 D. F. Fredlund

Our Representative Dan Bangle

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 10116 Date 4-10-97

Company Name Hugoton Energy Corp.

Lease Lehner #18 Test No. 3

County Ness Sec. 24 Twp. 20 Rng. 24

SAMPLER RECOVERY

Gas 0 ML

Oil 100 ML

Mud 0 ML

Water 3900 ML

Other ML

Pressure 325 PSI

Total 4000 ML

PIT MUD ANALYSIS

Chlorides 7500 ppm.

Resistivity ohms @ F

Viscosity 44

Mud Weight 9.2

Filtrate 10.2

Other

SAMPLER ANALYSIS

Resistivity .25 ohms @ 80 F

Chlorides 28,000 ppm.

Gravity corrected @ 60 F

PIPE RECOVERY

TOP

Resistivity ohms @ F

Chlorides ppm.

MIDDLE

Resistivity ohms @ F

Chlorides ppm.

BOTTOM

Resistivity .25 ohms @ 80 F

Chlorides 28,000 ppm.

WELL NAME_____ DST #_3_ RECORDER #_____

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

NITIAL FLOW INUTES _____ NTERVAL_____		INITIAL SHUTIN MINUTES_____ INTERVAL_____			FINAL FLOW MINUTES_____ INTERVAL_____		FINAL SHUTIN MINUTES_____ INTERVAL_____	
		.075		1			.150	
		.278		2			.290	
		.344		3			.327	
		.369		4			.343	
		.391		5			.359	
		.402		6			.372	
		.412		7			.382	
		.420		8			.390	
		.431		9			.400	
		.438		10			.406	
		.444		11			.412	
		.450		12			.418	
		.455		13			.423	
		.463		14			.425	
		.470		15			.427	
		.475		16			.432	
		.478		17			.438	
		.480		18			.440	
		.481		19			.440	
		.485		20			.442	
		.488		21			.446	
		.490		22			.448	
				23				
				24				
				25				
				26				
				27				

Operator.....: Hugoton Energy Corp
Well Name.....: Lehner #18
DST Number.....: 2

Location.: 24-20S-24W Ness Cty KS' Recorder No...: 13249
Test Type: conventional Recorder Depth: 4377
Formation: Mississippi Test Interval.: 4365-4380

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

Net Pay	12.00 ft
Porosity	15.00 %
Bottom Hole Temp	130.00 F
Specific Gravity	0.032
API Gravity	34.00
Compressibility	0.000010 /psi
Viscosity	5.2148 cp
Total Recovery	448.00 ft
Total Flowing Time	90.00 min.
Flow Rate	27.84 bbls/d
Final Flowing Pressure	217.00 psi
Horner Slope	97.7620 psi/cycle
Extrapolated Pressure	505.73 psi
Formation Volume Factor	1.03 Reservoir/Surface
Well Bore Radius	3.94 in

RESULTS:

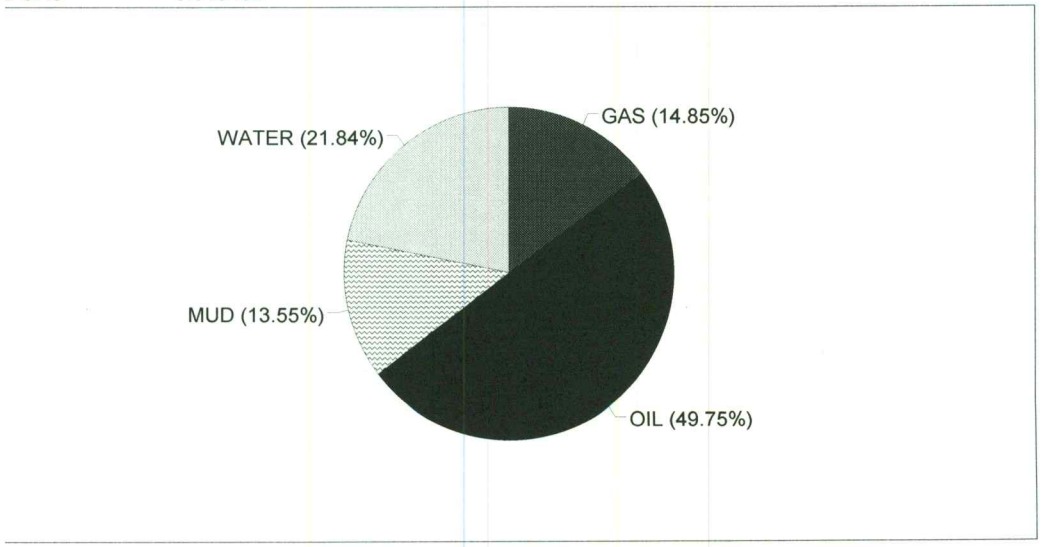
Effective Permeability	20.780447 md
Flow Capacity	249.3654 md.ft
Transmissibility	47.8188 md.ft/cp
Skin Factor	-1.1390
Radius of Investigation	56.76622 ft
Damage Ratio	0.7490
Productivity Index	0.0964 bbls/psi.d
Productivity Index W/O Damage.	0.0722 bbls/psi.d

CALCULATED RECOVERY ANALYSIS

DST 2 TICKET 10115

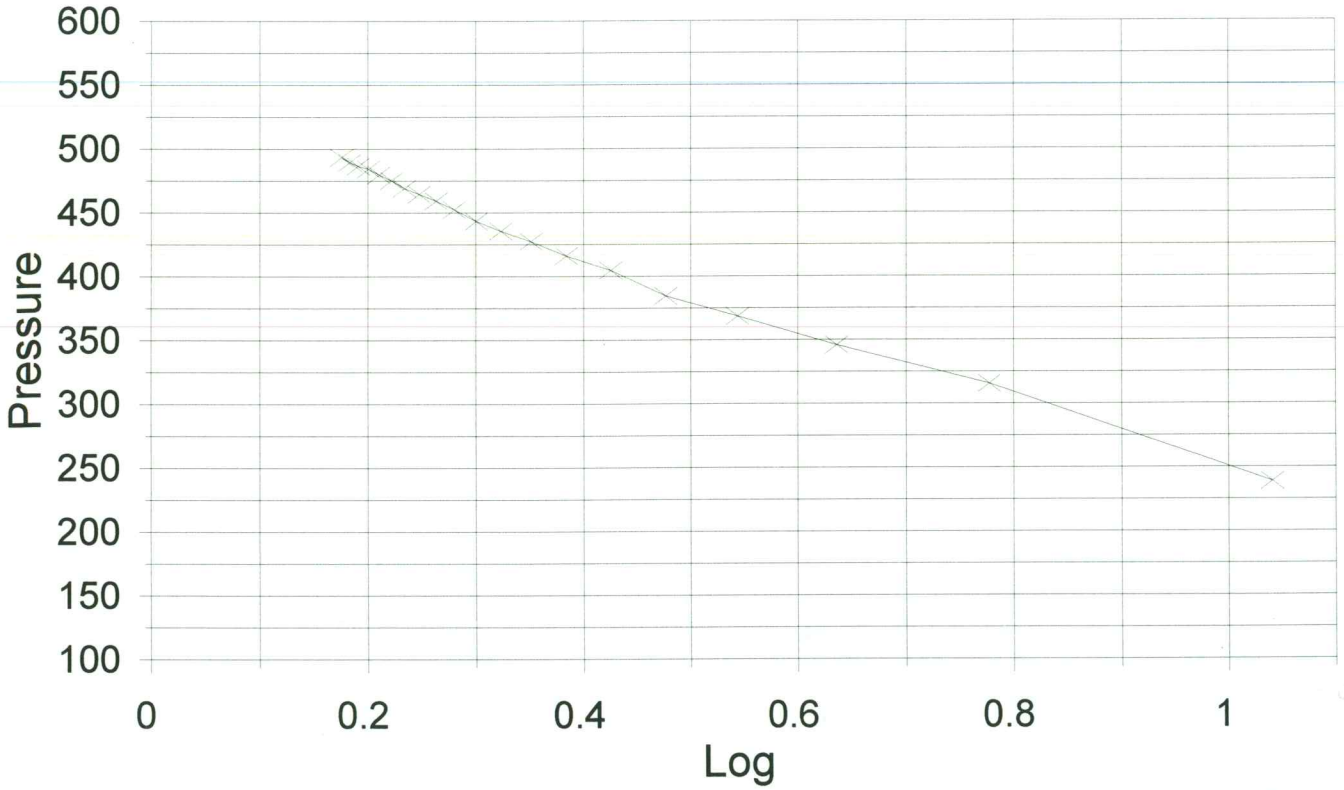
SAMPLE		TOTAL	GAS		OIL		WATER		MUD	
#		FEET	%	FEET	%	FEET	%	FEET	%	FEET
RILL	1	80	20	16	80	64		0		0
PIPE	2	60	20	12	60	36		0	20	12
	3			0		0		0		0
	4			0		0		0		0
	5			0		0		0		0
	6			0		0		0		0
EIGHT	1			0		0		0		0
PIPE	2			0		0		0		0
	3			0		0		0		0
	4			0		0		0		0
L	1	124	20	24.8	50	62		0	30	37.2
LARS	2	60		0	5	3	95	57		0
	3	124		0		0	80	99.2	20	24.8
	4			0		0		0		0
	5			0		0		0		0
OTAL		448		52.8		165		156.2		74

			HRS OPEN		BBL/DAY
L OIL=	1.73985	*	1.5	=	27.8376
WATER=	0.763818	*		=	12.221088
L MUD=	0.47382				
GAS =	0.519432				



Horner Plot: Shut-in #1

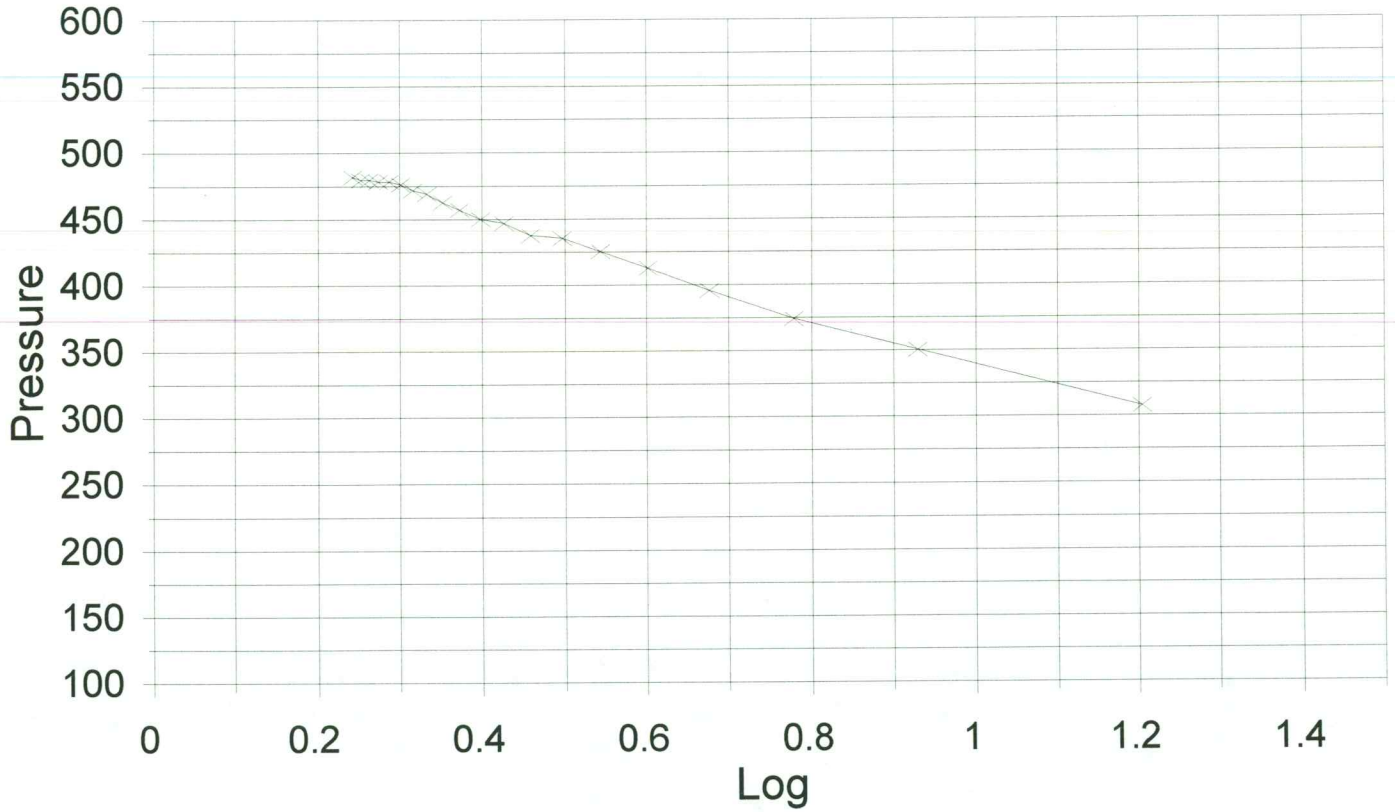
P * 563.65 Slope 399.456



	Time	Pressure PSIg	Log Horn T	<> Pressure	(T+dT)/dT
***Start Shutin 1	3	238.7	1.041	238.7	11.0
	6	315.6	0.778	76.9	6.0
	9	346.2	0.637	30.5	4.3
	12	368.8	0.544	22.6	3.5
	15	384.6	0.477	15.8	3.0
	18	405.0	0.426	20.4	2.7
	21	416.3	0.385	11.3	2.4
	24	427.6	0.352	11.3	2.3
	27	435.5	0.325	7.9	2.1
	30	443.4	0.301	7.9	2.0
	33	452.5	0.281	9.1	1.9
	36	459.3	0.263	6.8	1.8
	39	465.0	0.248	5.7	1.8
	42	469.5	0.234	4.5	1.7
	45	475.2	0.222	5.7	1.7
	48	479.7	0.211	4.5	1.6
	51	484.2	0.201	4.5	1.6
	54	486.5	0.192	2.3	1.6
	57	489.9	0.184	3.4	1.5
	60	493.3	0.176	3.4	1.5

Horner Plot: Shut-in #2

P* 505.73 Slope 97.762



	Time	Pressure PSIg	Log Horn T	<> Pressure	(T+dT)/dT
***Start Shutin 2	6	307.7	1.204	307.7	16.0
	12	350.7	0.929	43.0	8.5
	18	374.4	0.778	23.8	6.0
	24	395.9	0.677	21.5	4.8
	30	412.9	0.602	17.0	4.0
	36	425.3	0.544	12.4	3.5
	42	435.5	0.497	10.2	3.1
	48	437.8	0.459	2.3	2.9
	54	446.8	0.426	9.0	2.7
	60	450.2	0.398	3.4	2.5
	66	457.0	0.374	6.8	2.4
	72	462.7	0.352	5.7	2.3
	78	469.5	0.333	6.8	2.2
	84	471.8	0.316	2.3	2.1
	90	476.3	0.301	4.5	2.0
	96	478.6	0.287	2.3	1.9
	102	478.6	0.275	0.0	1.9
	108	479.7	0.263	1.1	1.8
	114	479.7	0.253	0.0	1.8
	120	482.0	0.243	2.3	1.8

Operator.....: Hugoton Energy Corp
Well Name.....: Lehner #18
DST Number.....: 3

Location.: 24-20S-24W Ness Cty KS Recorder No...: 13249
Test Type: conventional Recorder Depth: 4389
Formation: Warsaw Test Interval.: 4380-4392

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

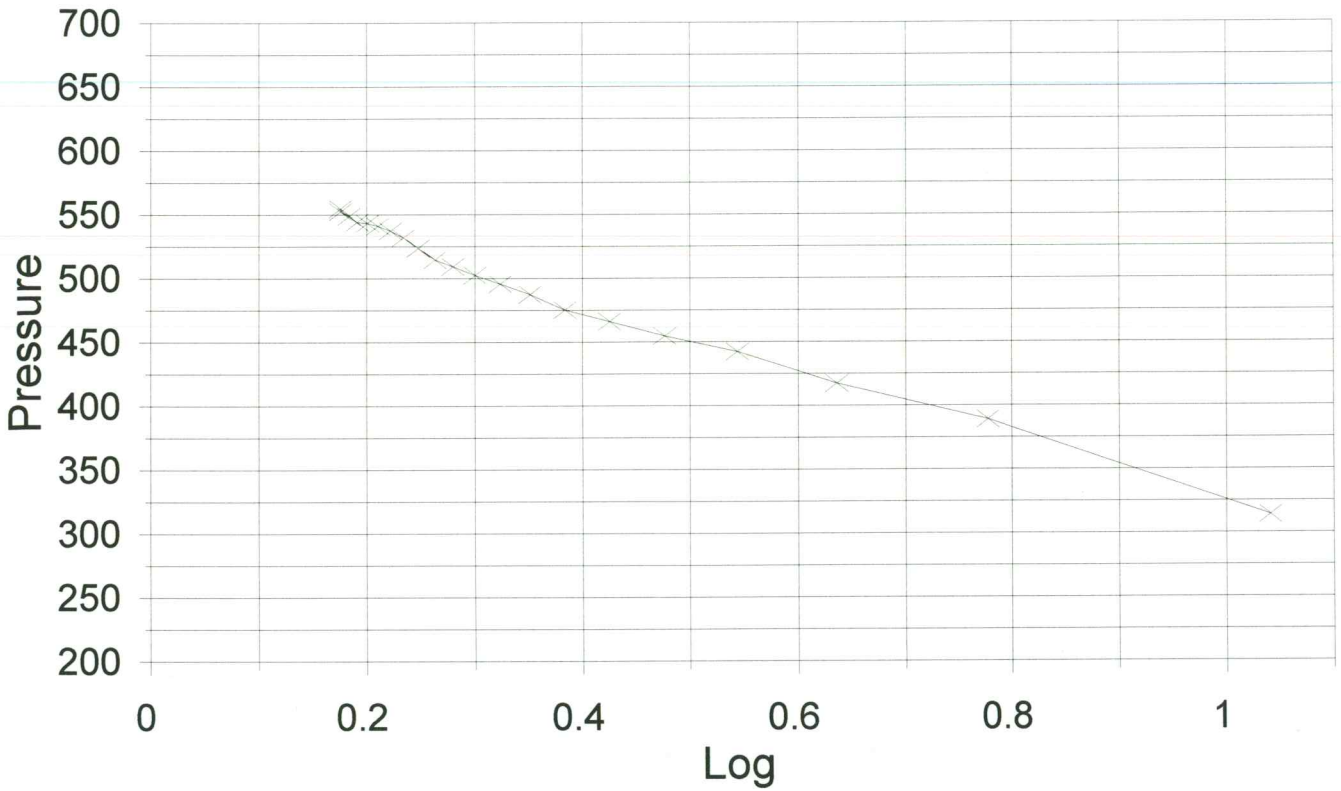
Net Pay	10.00 ft
Porosity	15.00 %
Bottom Hole Temp	127.00 F
Specific Gravity	0.032
API Gravity	34.00
Compressibility	0.000008 /psi
Viscosity	6.0389 cp
Total Recovery	338.00 ft
Total Flowing Time	90.00 min.
Flow Rate	1.14 bbls/d
Final Flowing Pressure	168.00 psi
Horner Slope	271.0410 psi/cycle
Extrapolated Pressure	570.36 psi
Formation Volume Factor	1.03 Reservoir/Surface
Well Bore Radius	3.94 in

RESULTS:

Effective Permeability	0.424905 md
Flow Capacity	4.2490 md.ft
Transmissibility	0.7036 md.ft/cp
Skin Factor	-0.9128
Radius of Investigation	8.34364 ft
Damage Ratio	0.6518
Productivity Index	0.0028 bbls/psi.d
Productivity Index W/O Damage.	0.0018 bbls/psi.d

Horner Plot: Shut-in #1

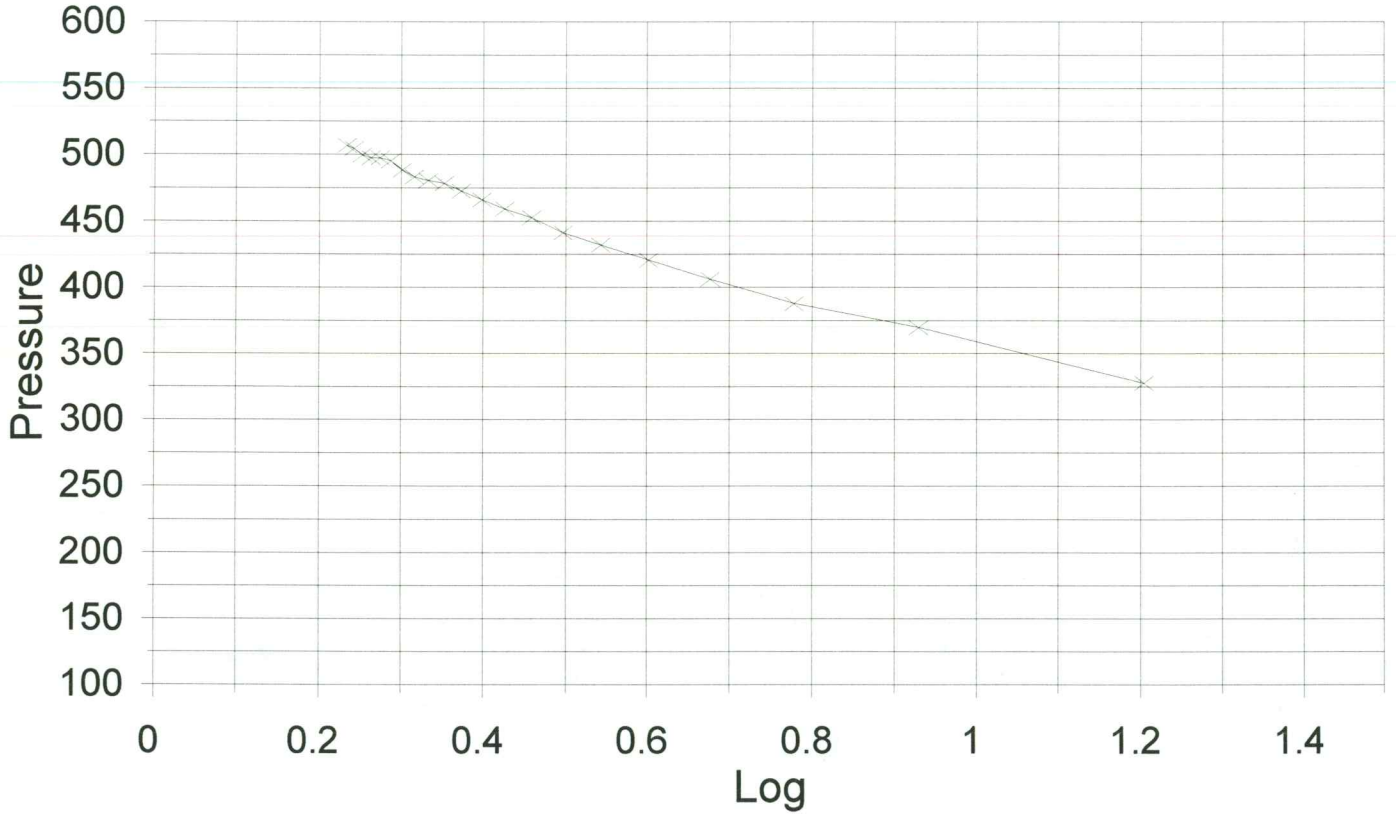
P * 628.11 Slope 417.665



	Time	Pressure PSIg	Log Horn T	<> Pressure	(T+dT)/dT
***Start Shutin 1	3	314.5	1.041	314.5	11.0
	6	389.1	0.778	74.7	6.0
	9	417.4	0.637	28.3	4.3
	12	442.3	0.544	24.9	3.5
	15	454.8	0.477	12.4	3.0
	18	466.1	0.426	11.3	2.7
	21	475.2	0.385	9.1	2.4
	24	487.6	0.352	12.5	2.3
	27	495.6	0.325	7.9	2.1
	30	502.4	0.301	6.8	2.0
	33	509.2	0.281	6.8	1.9
	36	514.9	0.263	5.7	1.8
	39	523.9	0.248	9.1	1.8
	42	531.9	0.234	7.9	1.7
	45	537.5	0.222	5.7	1.7
	48	540.9	0.211	3.4	1.6
	51	543.2	0.201	2.3	1.6
	54	544.4	0.192	1.1	1.6
	57	548.9	0.184	4.5	1.5
	60	552.3	0.176	3.4	1.5
	63	554.6	0.176	3.4	1.5

Horner Plot: Shut-in #2

P* 570.36 Slope 271.041



	Time	Pressure PSIg	Log Horn T	<> Pressure	(T+dT)/dT
***Start Shutin 2	6	328.1	1.204	328.1	16.0
	12	369.9	0.929	41.9	8.5
	18	388.0	0.778	18.1	6.0
	24	406.1	0.677	18.1	4.8
	30	420.8	0.602	14.7	4.0
	36	432.1	0.544	11.3	3.5
	42	441.2	0.497	9.0	3.1
	48	452.5	0.459	11.3	2.9
	54	459.3	0.426	6.8	2.7
	60	466.1	0.398	6.8	2.5
	66	472.9	0.374	6.8	2.4
	72	478.6	0.352	5.7	2.3
	78	480.8	0.333	2.3	2.2
	84	483.1	0.316	2.3	2.1
	90	488.8	0.301	5.7	2.0
	96	495.6	0.287	6.8	1.9
	102	497.8	0.275	2.3	1.9
	108	497.8	0.263	0.0	1.8
	114	500.1	0.253	2.3	1.8
	120	504.6	0.243	4.5	1.8
	126	506.9	0.234	2.3	1.7

CALCULATED RECOVERY ANALYSIS

DST 3 TICKET 10116

SAMPLE #		TOTAL FEET	%	GAS FEET	%	OIL FEET	%	WATER FEET	%	MUD FEET
DRILL	1	5		0	100	5		0		0
PIPE	2	25		0		0	60	15	40	10
	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	308		0		0	60	184.8	40	123.2
COLLARS	2			0		0		0		0
	3			0		0		0		0
	4			0		0		0		0
	5			0		0		0		0
TOTAL		338		0		5		199.8		133.2

			HRS OPEN		BBL/DAY
BBL OIL=	0.0711	*	1.5	=	1.1376
BBL WATER=	1.116972	*		=	17.871552
BBL MUD=	0.744648				
BBL GAS =	0				

