TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name J&L LAND "B" #1 Test No. 1 Date 6/11/93

Company CHARTER PRODUCTION COMPANY Zone PAWNEE

Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2352

Co. Rep./Geo. ROBERT SMITH Cont. MURFIN RIG #3 Est. Ft. of Pay

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KS

Interval Tested 4103-4143 Drill Pipe Size 4.5" XH

Anchor Length 40 Wt. Pipe I.D. - 2.7 Ft. Run 750

Top Packer Depth 4098 Drill Collar – 2.25 Ft. Run 260

Bottom Packer Depth 4103 Mud Wt. 9 lb/Gal.

Total Depth 4143 Viscosity 43 Filtrate 11.2

Tool Open @ 11:35 Initial Blow STRONG BLOW -- INITIAL 2" BUILDING TO BOTTOM OF BUCKET IN 29 MINUTES

Final Blow STRONG BLOW -- BLOW BUILD TO 11" AT END OF PERIOD NO BLOW BACKS

Recovery - Total Feet 540 Flush Tool? NO

Rec. 160 Feet of SLIGHTLY MUD CUT WATER 85%WATER/15%MUD

Rec. 380 Feet of WATER

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 120 °F Gravity °API @ °F Corrected Gravity °API

RW 0.3 @ 66 °F Chlorides 30000 ppm Recovery Chlorides 5000 ppm System

(A) Initial Hydrostatic Mud 1945.6 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 102.1 PSI @ (depth) 4106 w / Clock No. 26191

(C) First Final Flow Pressure 176.5 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 1253.4 PSI @ (depth) 4140 w / Clock No. 27573

(E) Second Initial Flow Pressure 236.1 PSI AK1 Recorder No. Range

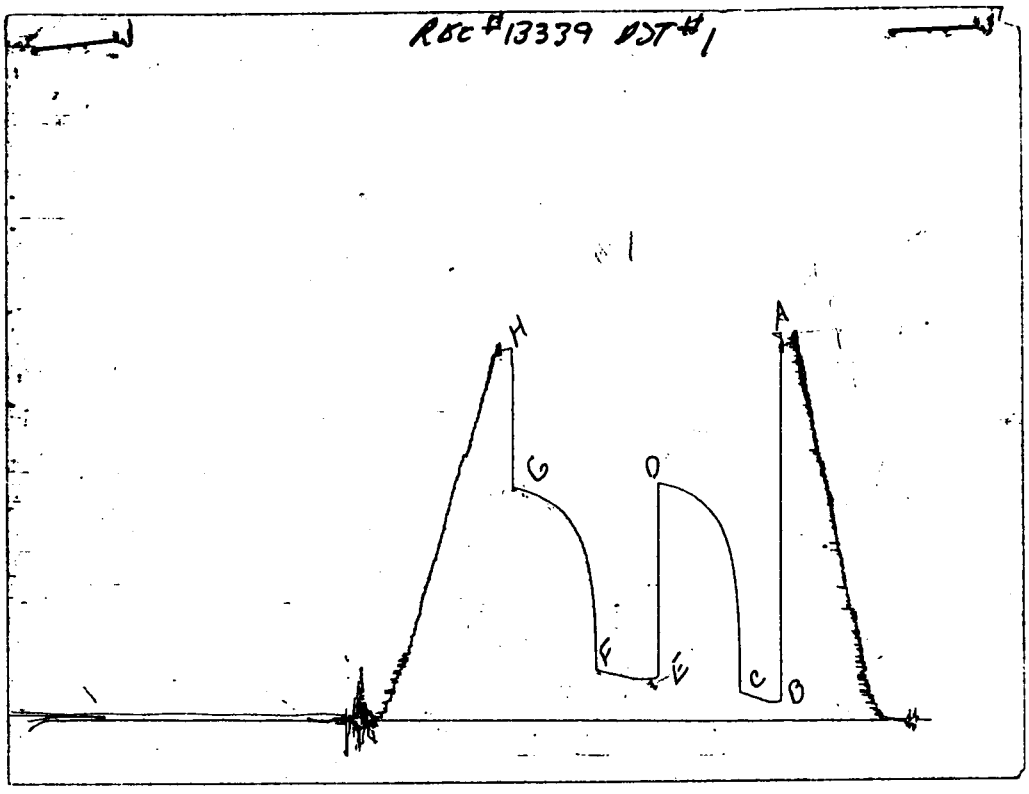
(F) Second Final Flow Pressure 256.4 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1203.1 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1945.6 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative JOHN RIEDL

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1952	1945.6
(B) FIRST INITIAL FLOW PRESSURE	93	102.1
(C) FIRST FINAL FLOW PRESSURE	166	176.5
(D) INITIAL CLOSED-IN PRESSURE	1251	1253.4
(E) SECOND INITIAL FLOW PRESSURE	228	236.1
(F) SECOND FINAL FLOW PRESSURE	249	256.4
(G) FINAL CLOSED-IN PRESSURE	1210	1203.1
(H) FINAL HYDROSTATIC MUD	1931	1945.6

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 5934

Well Name & No. J+L LAND "B" #1 Test No. 1 Date 6/11/93

Company CHARTER PRODUCTION COMPANY Zone Tested PAWNEE

Address 224 E DOUGLAS SUITE 400 WICHITA KS 67202 Elevation

Co. Rep./Geo. ROBERT SMITH Cont. MURFIN RIG 3 Est. Ft. of Pay

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KANSAS

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

Interval Tested 4103 - 4143 Drill Pipe Size 4½ XH

Anchor Length 40 FT Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4098 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4103 Wt. Pipe I.D. — 2.7 Ft. Run 750

Total Depth 4143 Drill Collar — 2.25 Ft. Run 260

Mud Wt. 9.0 lb/gal. Viscosity 43 Filtrate 11.2

Tool Open @ 11:35 P.M. Initial Blow STRONG BLOW - INITIAL 2" BUILDING TO B.O.B (1' IN 29 MINUTES

Final Blow STRONG BLOW - SLOW BUILD TO 11" AT END OF PERIOD NO BLOWBACKS

Recovery — Total Feet 540 Feet of Gas in Pipe 0 Flush Tool? NO

Rec. 160	Feet Of	OIL MUD CUT WATER	%gas	%oil 85	%water 15	%mud
Rec. 380	Feet Of	WATER	%gas	%oil	%water 100	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud

BHT 120 °F Gravity — °API @ — °F Corrected Gravity — °API

RW .3 @ 66 °F Chlorides 30,000 ppm Recovery Chlorides 5,000 ppm System

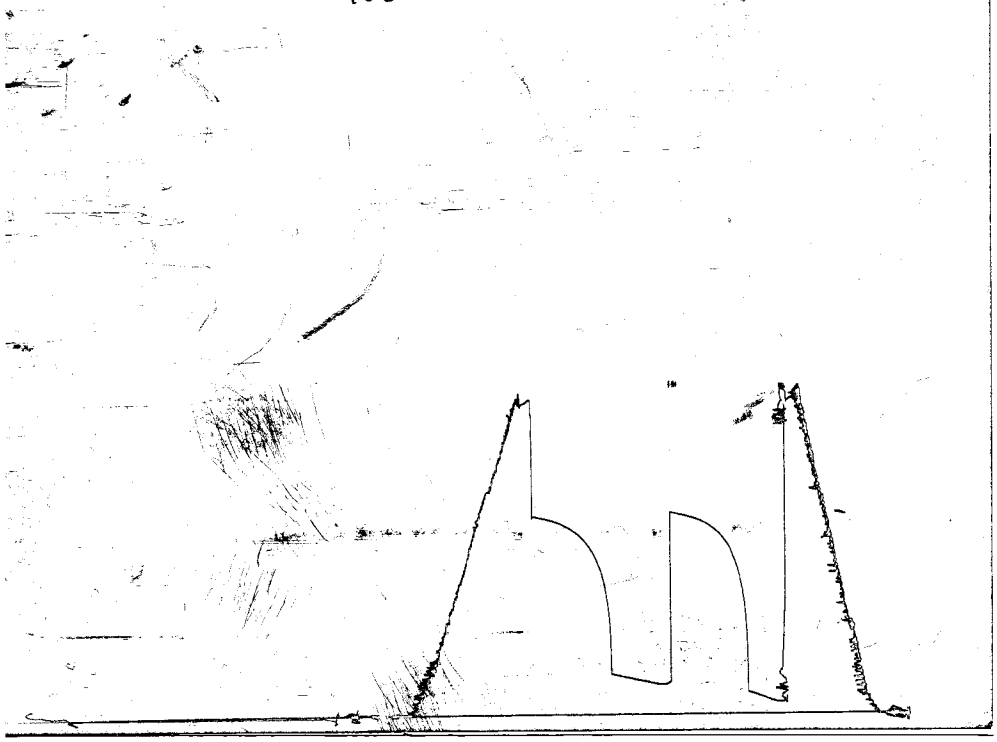
(A) Initial Hydrostatic Mud	1952 PSI	AK1 Recorder No.	13309	Range	4700
(B) First Initial Flow Pressure	93 PSI	@ (depth)	4106	w/Clock No.	26191
(C) First Final Flow Pressure	166 PSI	AK1 Recorder No.	13339	Range	4025
(D) Initial Shut-In Pressure	1251 PSI	@ (depth)	4140	w/Clock No.	27573
(E) Second Initial Flow Pressure	228 PSI	AK1 Recorder No.	—	Range	—
(F) Second Final Flow Pressure	249 PSI	@ (depth)	—	w/Clock No.	
(G) Final Shut-In Pressure	1210 PSI	Initial Opening	30	Test	√ 600
(H) Final Hydrostatic Mud	1931 PSI	Initial Shut-In	60	Jars	√ 200
		Final Flow	45	Safety Joint	√ 50
		Final Shut-In	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	850

Approved By

Our Representative John Rice

Printcraft Printers - Hays, KS

ROC #13309 DST #1



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: J&L LAND "B" #1 Test No. 2 Date 6/12/93

Company: CHARTER PRODUCTION COMPANY Zone PAWNEE

Address: 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2352

Co. Rep./Geo.: ROBERT SMITH Cont. MURFIN RIG #3 Est. Ft. of Pay

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KS

Interval Tested 4164-4205 Drill Pipe Size 4.5" XH

Anchor Length 41 Wt. Pipe I.D. - 2.7 Ft. Run 350

Top Packer Depth 4159 Drill Collar — 2.25 Ft. Run 260

Bottom Packer Depth 4164 Mud Wt. 9.1 lb/Gal.

Total Depth 4205 Viscosity 46 Filtrate 10.4

Tool Open @ 7:10 PM Initial Blow WEAK BLOW DEAD IN 10 MINUTES

Final Blow NO BLOW -- FLUSHED TOOL AND RECEIVED WEAK 3 MINUTE BLOW

Recovery - Total Feet 60 Flush Tool? YES

Rec. 60 Feet of DRILLING MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 118 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 1965.2 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 49.8 PSI @ (depth) 4169 w / Clock No. 26191

(C) First Final Flow Pressure 51.3 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 186.5 PSI @ (depth) 4203 w / Clock No. 27573

(E) Second Initial Flow Pressure 76.8 PSI AK1 Recorder No. Range

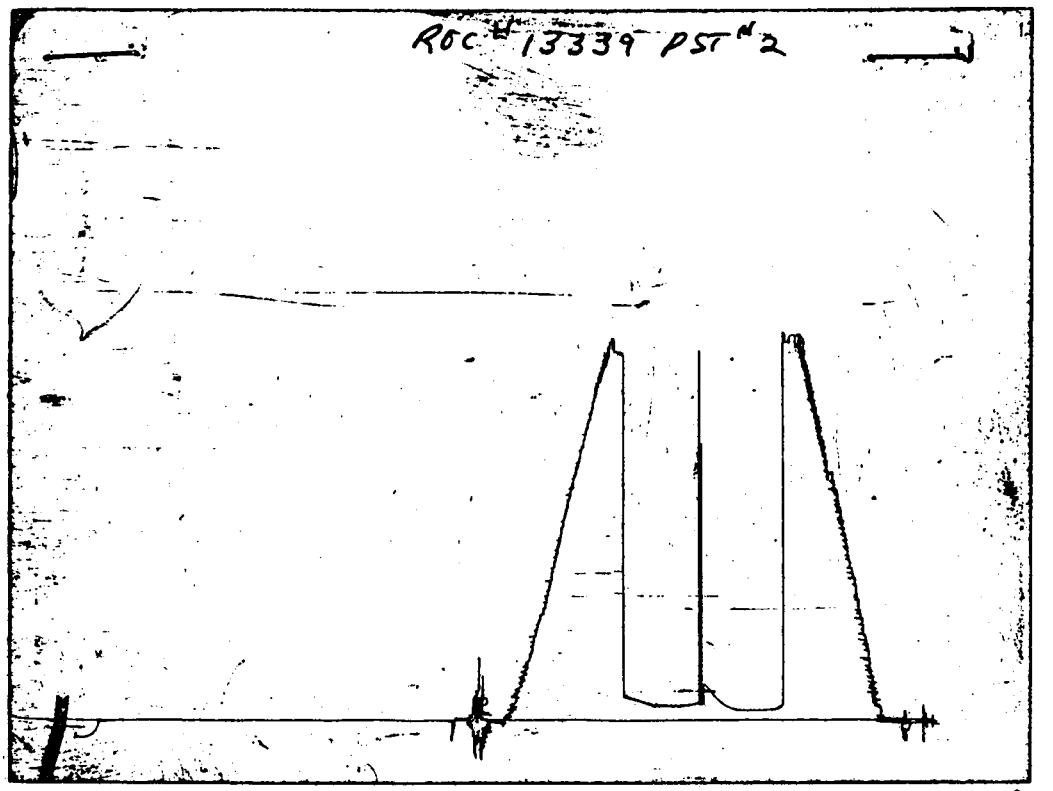
(F) Second Final Flow Pressure 76.8 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 132.5 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1935.6 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative JOHN RIEDL

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1952	1965.2
(B) FIRST INITIAL FLOW PRESSURE	41	49.8
(C) FIRST FINAL FLOW PRESSURE	43	51.3
(D) INITIAL CLOSED-IN PRESSURE	176	186.5
(E) SECOND INITIAL FLOW PRESSURE	62	76.8
(F) SECOND FINAL FLOW PRESSURE	62	76.8
(G) FINAL CLOSED-IN PRESSURE	124	132.5
(H) FINAL HYDROSTATIC MUD	1928	1935.6

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 5935

Well Name & No. J+L LAND "B" 1 Test No. 2 Date 6/12/93

Company CHARTER PRODUCTION COMPANY Zone Tested PAWNEE

Address 224 E. DOUGLAS SUITE 400 WICHITA KS 67202 Elevation 2352 K.B

Co. Rep./Geo. ROBERT SMITH Cont. MURFIN RIG 3 Est. Ft. of Pay

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KANSAS

No. of Copies Distribution Sheet Yes (NO) Turnkey Yes (NO) Evaluation

Interval Tested 4164-4205 Drill Pipe Size 4½ XH

Anchor Length 41 FT Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4159 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4164 Wt. Pipe I.D. — 2.7 Ft. Run 350

Total Depth 4205 Drill Collar — 2.25 Ft. Run 260

Mud Wt. 9.1 lb/gal. Viscosity 46 Filtrate 10.4

Tool Open @ 7:10 P.M. Initial Blow WEAK BLOW DEAD IN 10 MINUTES

Final Blow NO BLOW - FLUSHED TOOL & RECEIVED WEAK 3 MINUTE BLOW

Recovery — Total Feet 60 Feet of Gas in Pipe Flush Tool? YES

Rec. 60	Feet Of DRILLING 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 118 °F Gravity — °API @ — °F Corrected Gravity — °API

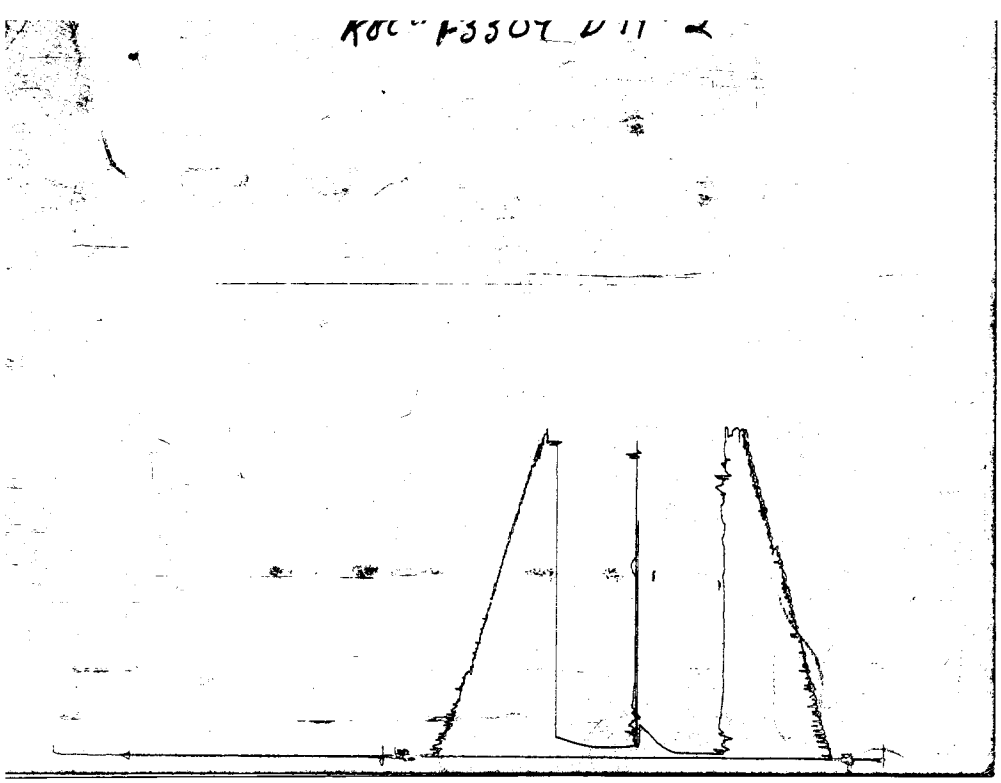
RW — @ — °F Chlorides — ppm Recovery Chlorides 6,000 ppm System

(A) Initial Hydrostatic Mud	1952 PSI	AK1 Recorder No.	13309	Range	4700
(B) First Initial Flow Pressure	41 PSI	@ (depth)	4169	w/Clock No.	26191
(C) First Final Flow Pressure	43 PSI	AK1 Recorder No.	13339 (DEAD)	Range	4025
(D) Initial Shut-In Pressure	176 PSI	@ (depth)	4203	w/Clock No.	27577
(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	124 PSI	Initial Opening	30	Test	V 6000
(H) Final Hydrostatic Mud	1928 PSI	Initial Shut-In	30	Jars	V 206
		Final Flow	30	Safety Joint	V 50
		Final Shut-In	30	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	5'50

Approved By

Our Representative John Reid

Printcraft Printers - Hays, KS



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name J&L LAND "B" #1 Test No. 3 Date 6/13/93

Company CHARTER PRODUCTION COMPANY Zone CHEROKEE

Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2352

Co. Rep./Geo. ROBERT SMITH Cont. MURFIN RIG #3 Est. Ft. of Pay 9

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KS

Interval Tested 4211-4224 Drill Pipe Size 4.5" XH

Anchor Length 13 Wt. Pipe I.D. - 2.7 Ft. Run 350

Top Packer Depth 4206 Drill Collar – 2.25 Ft. Run 260

Bottom Packer Depth 4211 Mud Wt. 9.2 lb/Gal.

Total Depth 4224 Viscosity 51 Filtrate 11.2

Tool Open @ 9:00 Initial Blow STRONG BLOW BUILDING TO BOTTOM OF BUCKET IN 4 MINUTES

Final Blow STRONG BLOW -- INITIAL 3" BLOW BUILDING TO BOTTOM OF BUCKET IN 7 MINUTES (1" SHUT-IN BLOWBACK)

Recovery - Total Feet 1100 Flush Tool? NO

Rec. 60 Feet of GAS IN PIPE

Rec. 250 Feet of CLEAN GASSY OIL 10%GAS/90%OIL

Rec. 60 Feet of HEAVY OIL CUT GASSY WATER 10%GAS/35%OIL/55%WATER

Rec. 120 Feet of SLIGHTLY OIL CUT GASSY WATER 5%GAS/2%OIL/93%WATER

Rec. 670 Feet of WATER

BHT 124 °F Gravity 33 °API @ 90 °F Corrected Gravity 32 °API

RW 0.16 @ 87 °F Chlorides 17000 ppm Recovery Chlorides 6000 ppm System

(A) Initial Hydrostatic Mud 2045.2 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 109.1 PSI @ (depth) 4214 w / Clock No. 26191

(C) First Final Flow Pressure 340.9 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 724.4 PSI @ (depth) 4221 w / Clock No. 27573

(E) Second Initial Flow Pressure 462.2 PSI AK1 Recorder No. Range

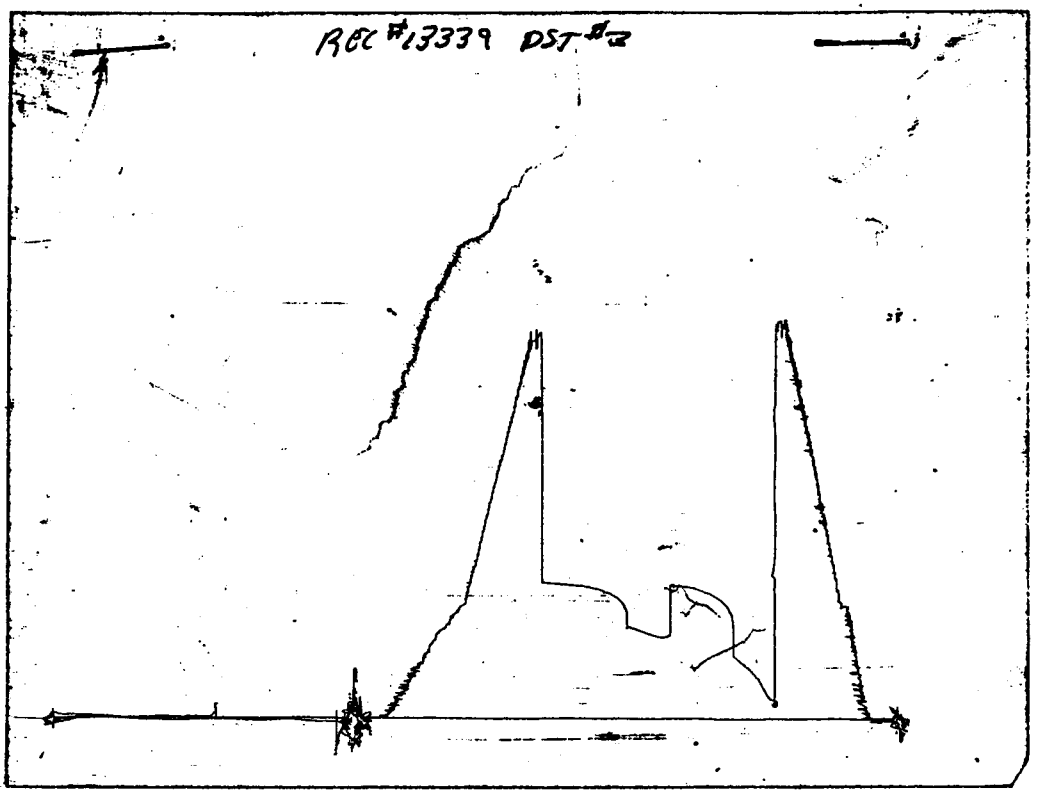
(F) Second Final Flow Pressure 502.5 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 736.4 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1989.7 PSI Initial Shut-in 45 Final Shut-in 60

Our Representative JOHN RIEDL

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2033	2045.2
(B) FIRST INITIAL FLOW PRESSURE	83	109.1
(C) FIRST FINAL FLOW PRESSURE	322	340.9
(D) INITIAL CLOSED-IN PRESSURE	703	724.4
(E) SECOND INITIAL FLOW PRESSURE	426	462.2
(F) SECOND FINAL FLOW PRESSURE	488	502.5
(G) FINAL CLOSED-IN PRESSURE	703	736.4
(H) FINAL HYDROSTATIC MUD	1982	1989.7

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

CHARTER PRODUCTION COMPANY

J&L LAND "B" #1 DST 3

27 15S 21W TREGO KS

****

ELEVATION:	2352	KB	EST. PAY	9	FT
DATUM:	-1870		ZONE TESTED:	CHEROKEE	
TEST INTERVAL:	4211-4224		TIME INTERVALS:	30-45-30-60	
RECORDER DEPTH:	4221		VISCOSITY:	9.16	CP
BOTTOM HOLE TEMP:	124		HOLE SIZE:	7.875	IN

****

CUBIC FEET OF GAS IN PIPE:	5			
TOTAL FEET OF RECOVERY:	1160.00	CORRECTED PIPE FILLUP:.	1340.000	
TOTAL BARRELS OF RECOVERY:	11.54	CORR. BARRELS OF RECOVERY:	14.102	BBL
BARRELS IN DRILL PIPE:	7.82	API GRAVITY:	32	
BARRELS IN WEIGHT PIPE:	2.45	FLUID GRADIENT:	0.375	
BARRELS IN DRILL COLLARS:	1.27			
GAS OIL RATIO:	0.42	CU.FT/BBL		
BUBBLE POINT PRESSURE:	7			
UNCORRECTED INITIAL PRODUCTION:			277.02	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			338.45	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			128.742	

****

INITIAL SLOPE	169.11	PSI/CYCL	FINAL SLOPE	81.69	PSI/CYCLE
INITIAL P*	761.92	PSI	FINAL P*	760.99	PSI

****

TRANSMISSIBILITY	673.64	(MD.-FT./CP.)
PERMEABILITY	685.65	(MD.)
INDICATED FLOW CAPACITY	6170.87	(MD.FT)
PRODUCTIVITY INDEX	0.76	(BARREL/DAY/PSI)
DAMAGE RATIO	0.58	
RADIUS OF INVESTIGATION	202.83	(FT,)
POTENTIOMETRIC SURFACE	-104.26	(FT.)
DRAWDOWN FACTOR	0.121	(%)

INITIAL FLOW

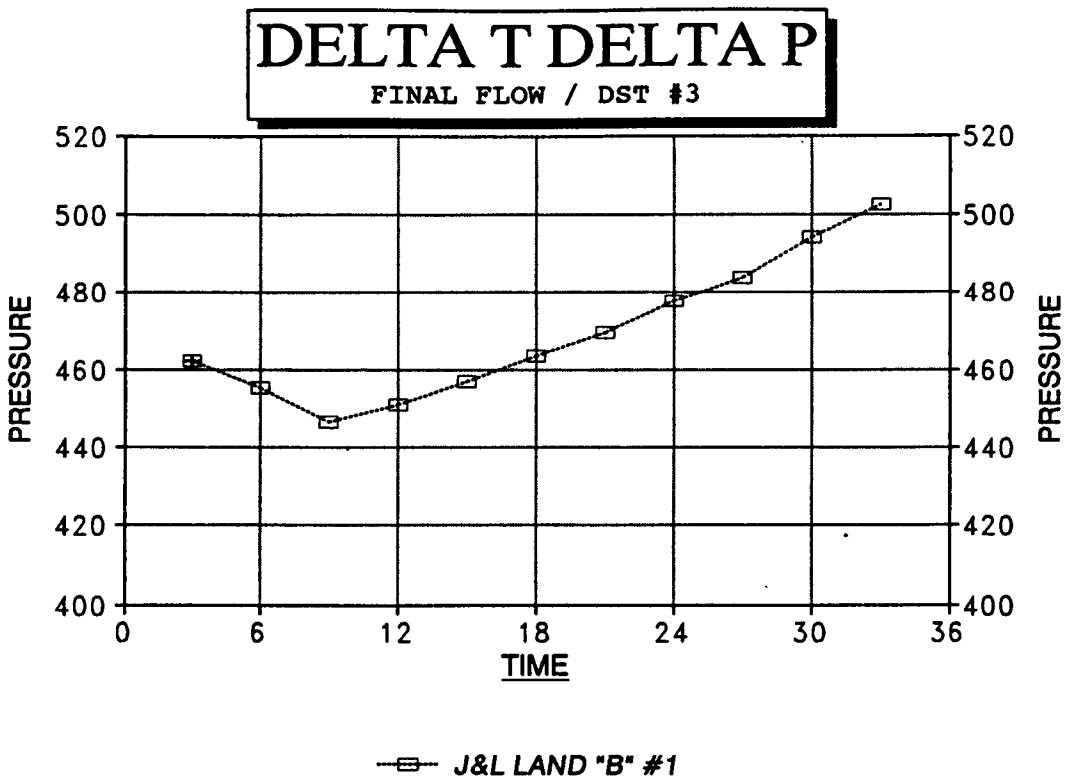
RECORDER 13339 DST # 3

TIME(MIN)	PRESSURE	<>PRESSURE
3	109.1	109.1
6	122.6	13.5
9	155.9	33.3
12	185.1	29.2
15	226.6	41.5
18	249.4	22.8
21	273.4	24.0
24	292.1	18.7
27	310.8	18.7
30	327.4	16.6
33	340.9	13.5

FINAL FLOW

RECORDER 13339 DST # 3

TIME(MIN)	PRESSURE	<> PRESSURE
3	462.2	462.2
6	455.1	-7.1
9	446.7	-8.4
12	450.9	4.2
15	457.1	6.2
18	463.3	6.2
21	469.5	6.2
24	477.7	8.2
27	483.9	6.2
30	494.2	10.3
33	502.5	8.3



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 128.742

J&L LAND "B" #1 DST #3
INITIAL SHUTIN

30 INITIAL FLOW TIME

SLOPE 169.1 PSI/CYCLE
P* 761.92 PSI

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	577.2	1.041	577.2	11
	6	616.2	0.778	39.0	6
	9	633.2	0.637	17.0	4
	12	655.3	0.544	22.1	4
	15	667.4	0.477	12.1	3
	18	676.4	0.426	9.0	3
	21	685.4	0.385	9.0	2
	24	692.4	0.352	7.0	2
	27	703.4	0.325	11.0	2
	30	707.4	0.301	4.0	2
	33	712.4	0.281	5.0	2
X	36	717.4	0.263	5.0	2
	39	720.4	0.248	3.0	2
	42	722.4	0.234	2.0	2
X	45	724.4	0.222	2.0	2

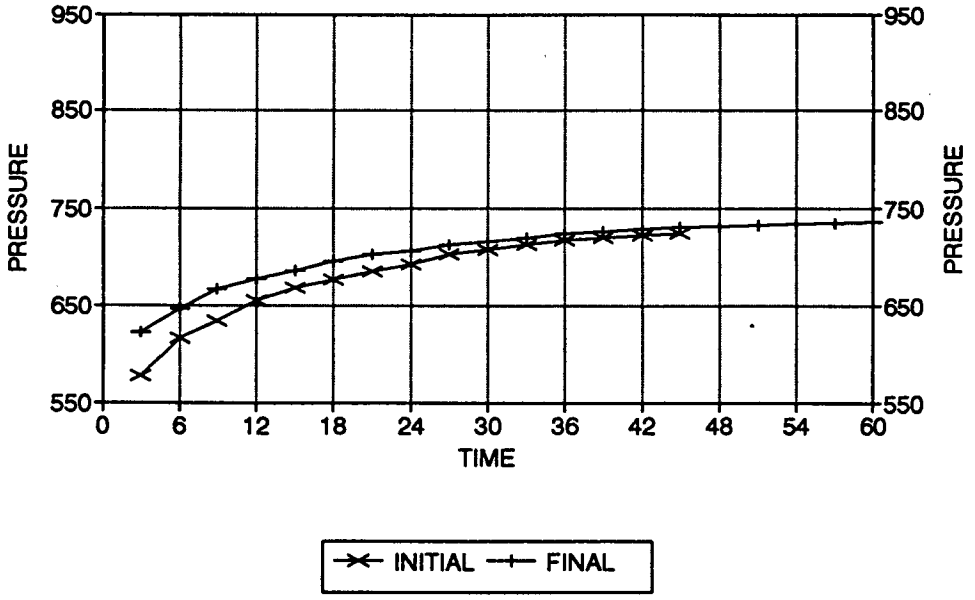
J&L LAND "B" #1 DST #3
FINAL SHUTIN

60 TOTAL FLOW TIME

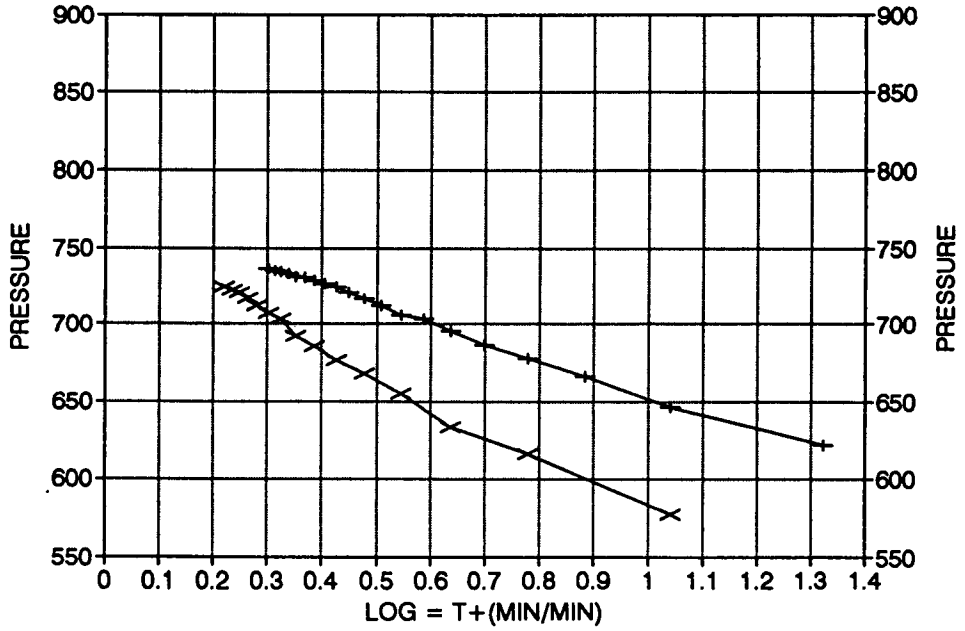
SLOPE 81.7 PSI/CYCLE
P* 761.0 PSI

		Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	622.2	1.322	622.2	21
	6	646.3	1.041	24.1	11
	9	666.4	0.885	20.1	8
	12	677.4	0.778	11.0	6
	15	686.4	0.699	9.0	5
	18	695.4	0.637	9.0	4
	21	703.4	0.586	8.0	4
	24	706.4	0.544	3.0	4
	27	712.4	0.508	6.0	3
	30	716.4	0.477	4.0	3
	33	720.4	0.450	4.0	3
	36	724.4	0.426	4.0	3
	39	726.4	0.405	2.0	3
	42	728.4	0.385	2.0	2
	45	730.4	0.368	2.0	2
	48	731.4	0.352	1.0	2
X	51	733.4	0.338	2.0	2
	54	734.4	0.325	1.0	2
	57	735.4	0.312	1.0	2
X	60	736.4	0.301	1.0	2

J&L LAND "B" #1/DST #3
DELTA T DELTA P



HORNER PLOT

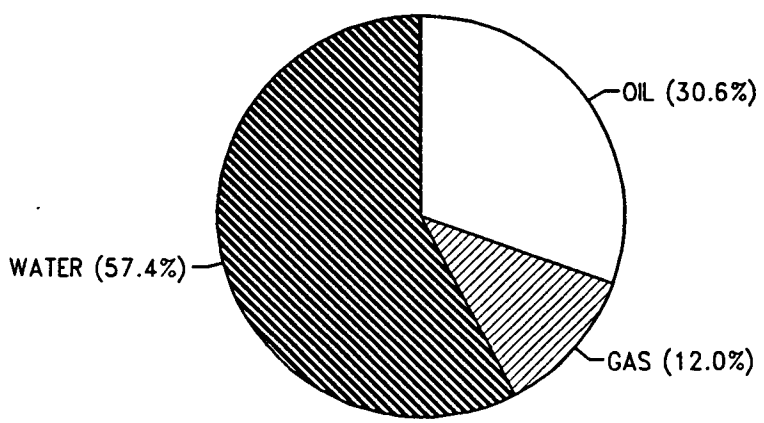


CALCULATED RECOVERY ANALYSIS

DST 3 TICKET # 5936

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL 1	60	100	60		0		0		0
PIPE 2	250	10	25	90	225		0		0
3	60	10	6	35	21	55	33		0
4	120	5	6	2	2.4	93	111.6		0
5	60		0		0	100	60		0
6			0		0		0		0
WEIGHT 1	350		0		0	100	350		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	260		0		0	100	260		0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1160		97		248.4		814.6		0

			HRS OPEN	BBL/DAY
BBL OIL=	3.532248	*	1	84.773952
BBL WATER=	6.630812	*		159.13949
BBL MUD=	0			
BBL GAS =	1.37934			



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 5936

Well Name & No. JTL LAND "B" #1 Test No. 3 Date 6/13/93

Company CHARTER PRODUCTION COMPANY Zone Tested CHEROKEE

Address 224 E. DOUGLAS SUITE 400 WICHITA KS 67202 Elevation 2352 K.B

Co. Rep./Geo. ROBERT SMITH Cont. MURFIN RIG 3 Est. Ft. of Pay 9

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KANSAS

No. of Copies ____ Distribution Sheet ____ Yes ____ (NO) Turnkey ____ Yes ____ (NO) YES Evaluation

Interval Tested 4211 - 4224 Drill Pipe Size 4½ XH

Anchor Length 13FT Top Choke — 1" ____ Bottom Choke — ¼" ____

Top Packer Depth 4206 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4211 Wt. Pipe I.D. — 2.7 Ft. Run [redacted] 280

Total Depth 4224 Drill Collar — 2.25 Ft. Run 260

Mud Wt. 9.2 lb / gal. Viscosity 51 Filtrate 11.2 (12")

Tool Open @ 9:00 Initial Blow STRONG BLOW - INITIAL 1" BUILDING TO BOB IN 4 MINUTES (2" SHUT-IN BLOWBACK)

Final Blow STRONG BLOW - INITIAL 3" BLOW BUILDING TO B.O.B IN 7 MINUTES (1" SHUT-IN BLOWBACK)

Recovery — Total Feet 1100 Feet of Gas in Pipe 60 Flush Tool? NO

Rec. 250	Feet Of	CLEAN GASSY OIL	10 %gas	90 %oil	%water	%mud
Rec. 60	Feet Of	HVY OIL CUT GASSY WATER	10 %gas	35 %oil	55 %water	%mud
Rec. 120	Feet Of	LT OIL CUT GASSY WATER	5 %gas	2 %oil	93 %water	%mud
Rec. 670	Feet Of	WATER	%gas	%oil	100 %water	%mud
Rec. ____	Feet Of	____	%gas	%oil	%water	%mud

BHT 124 °F Gravity 35 °API @ 90 °F Corrected Gravity 32 °API

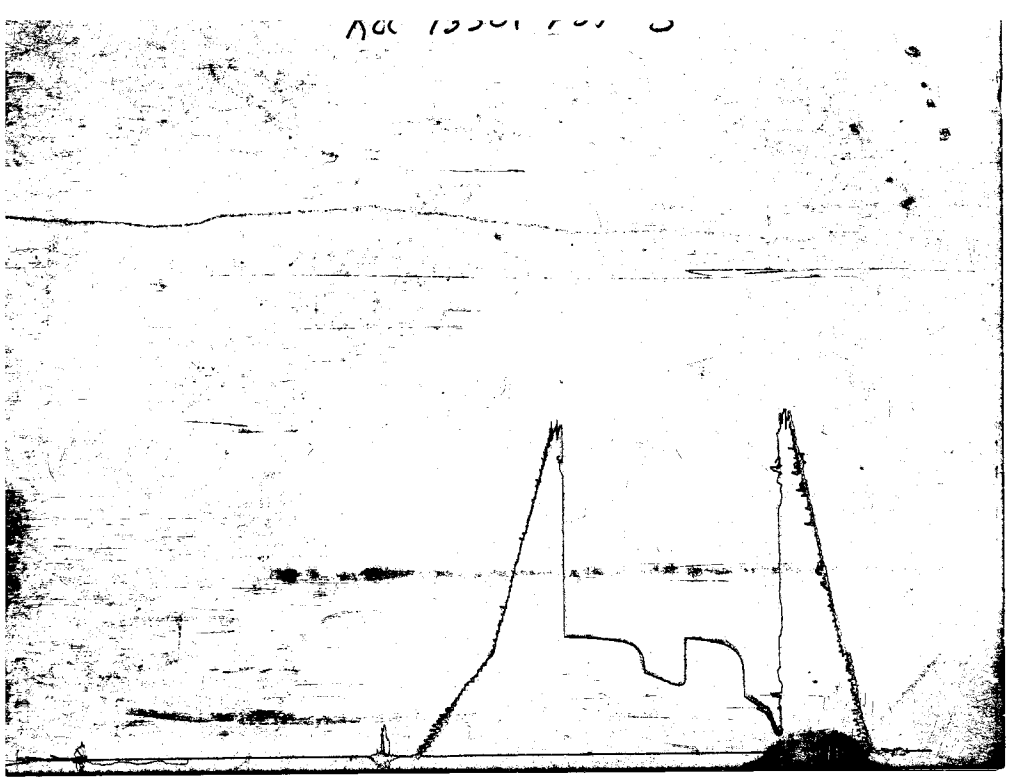
RW .160 @ 87 °F Chlorides 17,000 ppm Recovery Chlorides 6,000 ppm System

(A) Initial Hydrostatic Mud	2033 PSI	AK1 Recorder No.	13309	Range	4700
(B) First Initial Flow Pressure	83 PSI	@ (depth)	[redacted] 4214	w/Clock No.	26191
(C) First Final Flow Pressure	322 PSI	AK1 Recorder No.	13339 RED	Range	4025
(D) Initial Shut-In Pressure	703 PSI	@ (depth)	4221	w/Clock No.	27573
(E) Second Initial Flow Pressure	426 PSI	AK1 Recorder No.	—	Range	
(F) Second Final Flow Pressure	488 PSI	@ (depth)	—	w/Clock No.	—
(G) Final Shut-In Pressure	703 PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	1982 PSI	Initial Shut-In	45	Jars	200
		Final Flow	30	Safety Joint	50
		Final Shut-In	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	900

Approved By [signature]

Our Representative [signature]

Printcraft Printers - Hays, KS



TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: J&L LAND "B" #1 — Test No.: 4 — Date: 6/14/93

Company: CHARTER PRODUCTION COMPANY — Zone: CONGLOMERATE

Address: 224 EAST DOUGLAS #400 WICHITA KS 67202 — Elevation: 2352

Co. Rep./Geo.: ROBERT SMITH — Cont.: MURFIN RIG #3 — Est. Ft. of Pay:

Location: Sec.: 27 — Twp.: 15S — Rge.: 21W — Co.: TREGO — State: KS

Interval Tested: 4238-4270 — Drill Pipe Size: 4.5" XH

Anchor Length: 32 — Wt. Pipe I.D. - 2.7 Ft. Run: 280

Top Packer Depth: 4233 — Drill Collar – 2.25 Ft. Run: 230

Bottom Packer Depth: 4238 — Mud Wt.: 9.2 lb/Gal.

Total Depth: 4270 — Viscosity: 51 — Filtrate: 11.2

Tool Open @ 3:50 AM — Initial Blow: STRONG BLOW -- BOTTOM OF BUCKET IN 4 MINUTES
NO SHUT-IN BLOWBACK

Final Blow: STRONG BLOW -- BOTTOM OF BUCKET IN 7 MINUTES
NO BLOWBACKS

Recovery - Total Feet: 1200 — Flush Tool?: NO

Rec. 1200 — Feet of: GASSY WATER

Rec. — Feet of

Rec. — Feet of

Rec. — Feet of

Rec. — Feet of

BHT: 124 °F — Gravity: — °API — @ — °F Corrected Gravity — °API

RW: 0.35 — @ 60 °F — Chlorides: 21000 ppm Recovery — Chlorides: 6000 ppm System

(A) Initial Hydrostatic Mud: 2056.1 PSI — AK1 Recorder No.: 13309 — Range: 4700

(B) First Initial Flow Pressure: 125.4 PSI — @ (depth): 4241 — w / Clock No.: 26191

(C) First Final Flow Pressure: 365.9 PSI — AK1 Recorder No.: 13339 — Range: 4025

(D) Initial Shut-in Pressure: 842.1 PSI — @ (depth): 4267 — w / Clock No.: 27573

(E) Second Initial Flow Pressure: 378.4 PSI — AK1 Recorder No.: — Range:

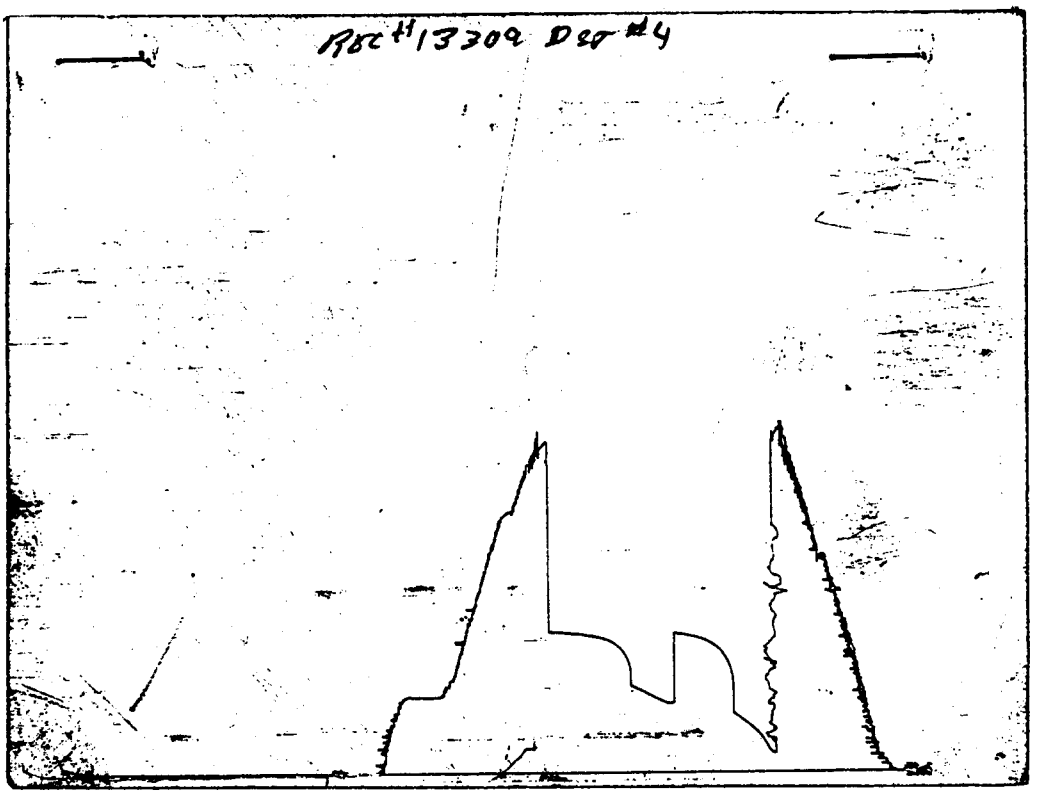
(F) Second Final Flow Pressure: 478.9 PSI — @ (depth): — w / Clock No.:

(G) Final Shut-in Pressure: 865.2 PSI — Initial Opening: 30 — Final Flow: 30

(H) Final Hydrostatic Mud: 2036.1 PSI — Initial Shut-in: 45 — Final Shut-in: 60

Our Representative: JOHN RIEDL

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2063	2056.1
(B) FIRST INITIAL FLOW PRESSURE	114	125.4
(C) FIRST FINAL FLOW PRESSURE	353	365.9
(D) INITIAL CLOSED-IN PRESSURE	854	842.1
(E) SECOND INITIAL FLOW PRESSURE	363	378.4
(F) SECOND FINAL FLOW PRESSURE	467	478.9
(G) FINAL CLOSED-IN PRESSURE	854	865.2
(H) FINAL HYDROSTATIC MUD	2024	2036.1

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 5937

Well Name & No. JT L LAND "B" #1 Test No. 4 Date 6/14/93

Company CHARTER PRODUCTION COMPANY Zone Tested CONGLOMERATE

Address 224 E DOUGLAS SUITE 400 WI. KS 67202 Elevation 2352 K.B.

Co. Rep./Geo. ROBERT SMITH Cont. MURFIN RIG 3 Est. Ft. of Pay

Location: Sec. 27 Twp. 15S Rge. 21W Co. TREGO State KS

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

Interval Tested 4238 -4270 Drill Pipe Size 4½ XH

Anchor Length 32 FT Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4233 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4238 Wt. Pipe I.D. — 2.7 Ft. Run 280

Total Depth 4270 Drill Collar — 2.25 Ft. Run 230

Mud Wt. 9.2 lb/gal. Viscosity 51 Filtrate 11.2

Tool Open @ 3:50A.M. Initial Blow STRONG BLOW - B.O.B IN 4 MINUTES (NO SHUT-IN BLOWBACK)

Final Blow STRONG BLOW - B.O.B IN 7 MINUTES (NO BLOWBACK)

Recovery — Total Feet 1200 Feet of Gas in Pipe 0 Flush Tool? NO

Rec. 1200	Feet Of	GASSY WATER	%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 124 °F Gravity — °API @ — °F Corrected Gravity — °API

RW .350 @ 60 °F Chlorides 21,000 ppm Recovery Chlorides 6,000 ppm System

(B) Initial Hydrostatic Mud	2063 PSI	AK1 Recorder No.	13309	Range	4700
(C) First Initial Flow Pressure	114 PSI	@ (depth)	4241	w/Clock No.	26191
(D) First Final Flow Pressure	353 PSI	AK1 Recorder No.	13339	Range	4025
(E) Initial Shut-In Pressure	854 PSI	@ (depth)	4267	w/Clock No.	27523
(F) Second Initial Flow Pressure	363 PSI	AK1 Recorder No.	—	Range	—
Second Final Flow Pressure	467 PSI	@ (depth)		w/Clock No.	—
(G) Final Shut-In Pressure	854 PSI	Initial Opening	30	Test	✓ 600
(H) Final Hydrostatic Mud	2024 PSI	Initial Shut-In	45	Jars	✓ 200
		Final Flow	30	Safety Joint	✓ 50
		Final Shut-In	60	Straddle	
				Circ. Sub	✓ NC
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	850

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 John Reed

Printcraft Printers - Hays, KS

0.558	577.2622
0.597	616.2115
0.614	633.2796
0.636	655.3707
0.648	667.403
0.657	676.419
0.666	685.4282
0.673	692.4305
0.684	703.4256
0.688	707.4213
0.693	712.4139
0.698	717.4044
0.701	720.4052
0.703	722.4154
0.705	724.4253 D

Initial Shut-in

0.603	622.2185
0.627	646.3385
0.647	666.4008
0.658	677.4204
0.667	686.4288
0.676	695.4302
0.684	703.4256
0.687	706.4225
0.693	712.4139
0.697	716.4065
0.701	720.4052

Final Shut-in

0.705	724.4253
0.707	726.4349
0.709	728.4443
0.711	730.4535
0.712	731.4579
0.714	733.4667
0.715	734.471
0.716	735.4752
0.717	736.4794 C

0.105	109.193	B
0.118	122.6917	
0.15	155.9	
0.178	185.0179	Initial Flow
0.218	226.6175	
0.24	249.496	
0.263	273.4161	
0.281	292.1374	
0.279	290.0572	
0.315	327.4871	
0.328	340.9954	C

0.445	462.2771	E
0.438	455.0513	
0.43	446.7915	
0.434	450.9217	Final Flow
0.44	457.116	
0.446	463.3093	
0.452	469.5014	
0.46	477.756	
0.466	483.9457	
0.476	494.2594	
0.484	502.5082	F

WELL NAME J & L Land DST # 3 RECORDER # 13339

INIT. HYD. MUD. 2,073 A FINAL HYD. MUD ____ ____

INITIAL FLOW MINUTES 30 INTERVAL 3		INITIAL SHUTIN MINUTES 45 INTERVAL 3			FINAL FLOW MINUTES 30 INTERVAL 3		FINAL SHUTIN MINUTES 60 INTERVAL 3	
105	B	~~328~~		1	445	E	~~484~~	
118		558		2	438		603	
150		597		3	430		627	
178		614		4	434		647	
218		636		5	440		658	
240		648		6	446		667	
263		657		7	452		676	
281		666		8	460		684	
279		673		9	466		687	
315		684		10	476		693	
328	C	688		11	484	F	697	
		693		12			701	
		698		13			705	
		701		14			707	
		703		15			709	
		705	D	16			711	
				17			712	
				18			714	
				19			715	
				20			716	
				21			717	G
				22				
				23				
				24				
				25				
				26				
				27				