

15-033-20791

6-335-18w

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

SOURCE PETROLEUM
LOUSCH A #1
DST #1, #2, & #3

Drill-Stem Test Data

Well Name & No.	LOUSCH a-#1	Test No.	1	Date	10/23/90
Company	SOURCE PETROLEUM	Zone Tested	LANSING-KS CITY "H"		
Address	200 W DOUGLAS #B20 WICHITA KS 67202		Elevation	2085 GL	
Co. Rep./Geo.	RANDY LILAK	Cont.	H-30	Est. Ft. of Pay	6
Location: Sec.	6	Twp.	33S	Rge.	18W
Co.	COMMANCHE	State	KANSAS		

Interval Tested	4735-4750	Drill Pipe Size	4.5" XH
Anchor Length	15	Top Choke — 1"	Bottom Choke — 1/4"
Top Packer Depth	4730	Hole Size — 7 7/8"	Rubber Size — 6 3/4"
Bottom Packer Depth	4735	Wt. Pipe I.D. — 2.7 Ft. Run	0
Total Depth	4750	Drill Collar — 2.25 Ft. Run	530
Mud Wt.	8.9	lb/gal.	Viscosity 62 Filtrate 13.6
Tool Open @	9:45 AM	Initial Blow	STRONG THROUGHOUT-GAS TO SURFACE IN 20 MINUTES

Final Blow — STRONG THROUGHOUT

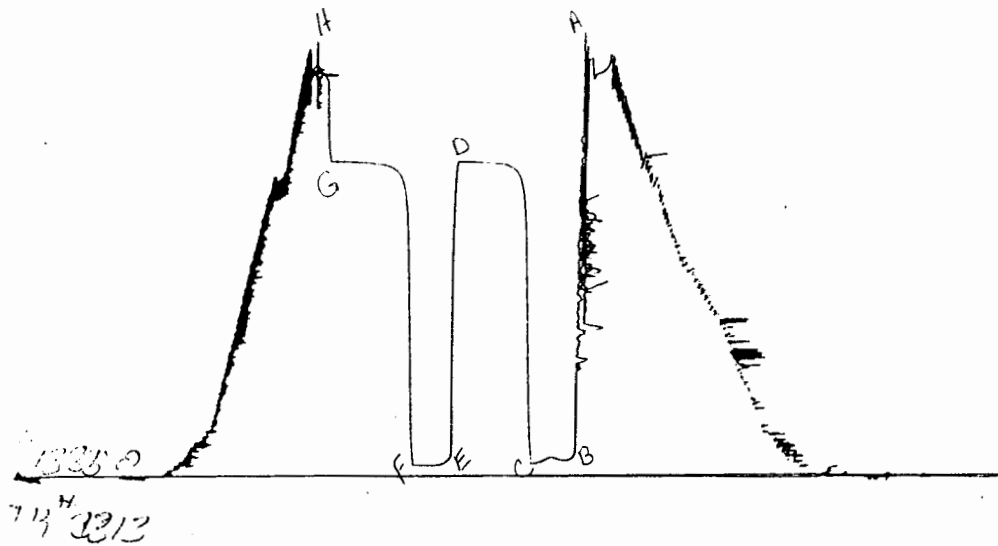
Recovery — Total Feet	180	Flush Tool?	NO
Rec.	180	Feet of	GAS CUT MUD
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
BHT	109	°F Gravity	°API @ 0 °F Corrected Gravity 0 °API
RW	@	°F Chlorides	ppm Recovery Chlorides 11000 ppm System
(A) Initial Hydrostatic Mud	2394.1	PSI	AK1 Recorder No. 13851 Range 4325
(B) First Initial Flow Pressure	100.4	PSI	@ (depth) 4740 w/Clock No. 25813
(C) First Final Flow Pressure	65.1	PSI	AK1 Recorder No. 13850 Range 4425
(D) Initial Shut-In Pressure	1764.0	PSI	@ (depth) 4750 w/Clock No. 31154
(E) Second Initial Flow Pressure	54.4	PSI	AK1 Recorder No. 0 Range 0
(F) Second Final Flow Pressure	74.7	PSI	@ (depth) 0 w/Clock No. 0
(G) Final Shut-In Pressure	1764.0	PSI	Initial Opening 30
(H) Final Hydrostatic Mud	2262.0	PSI	Initial Shut-In 60
			Final Flow 30
			Final Shut-In 60

MR HARRY SCHMIDT

800

Our Representative _____

TOTAL PRICE \$ _____

DST# 1 RECORDER# 13850


This is an actual photograph of recorder chart.

PRESSURE

POINT	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	2352	2394.1	PSI
(B) First Initial Flow Pressure.....	111	100.4	PSI
(C) First Final Flow Pressure.....	100	65.1	PSI
(D) Initial Closed-in Pressure.....	1763	1764.0	PSI
(E) Second Initial Flow Pressure.....	77	54.4	PSI
(F) Second Final Flow Pressure.....	88	74.7	PSI
(G) Final Closed-in Pressure.....	1763	1764.0	PSI
(H) Final Hydrostatic Mud.....	2352	2262.0	PSI

COMANCHE KS

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ELEVATION:          2085 KB          EST. PAY:          6 FT
DATUM:              -2666           ZONE TESTED:       LKC 'H'
TEST INTERVAL:      4735-4750
                                TIME INTERVALS: 30-60-30-60
RECORDER DEPTH:     4750            VISCOSITY:         .01566 CP
BOTTOM HOLE TEMP:   109             HOLE SIZE:         7.875 IN
COMPRESSIBILITY :   .9977           GAS GRAVITY:        .6669
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CALCULATIONS

TEMPERATURE RANKINE	569 &
TRANSMISSIBILITY	3218.493 Kh/%
THEORITICAL FLOW CAPACITY	50.40159 Kh
AVERAGE EFFECTIVE PERMEABILITY	8.400266 K(md.)
RADIUS OF INVESTIGATION	22.4503 FT.
DAMAGE RATIO	9.503127
ABSOLUTE OPEN FLOW(MAX)	166.2939 MCFD
ABSOLUTE OPEN FLOW(MIN)	166.1469 MCFD
THEORITICAL OPEN FLOW(MAX)	1580.312 MCFD
THEORITICAL OPEN FLOW(MIN)	1578.915 MCFD
POTENTIOMETRIC SURFACE	1455.863 (FT.)

[illegible]

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INITIAL SHUT-IN VALUES:
THEORETICAL STATIC PRESSURE  1779.765
SLOPE                        55868.5
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FINAL SHUT-IN VALUES
THEORETICAL STATIC PRESSURE  1777.534
SLOPE                        47931.75
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DRAWDOWN FACTOR .1253486 (%)

INITIAL FLOW

RECORDER # 13850

DST #1

DT (MIN)	PRESSURE	<> PRESSURE
0	100.4	100.4
3	87.6	-12.8
6	87.6	0
9	89.7	2.099999
12	92.9	3.200005
15	98.2	5.299996
18	100.4	2.200005
21	97.2	-3.200005
24	86.5	-10.7
27	76.9	-9.599999
30	65.1	-11.8

FINAL FLOW

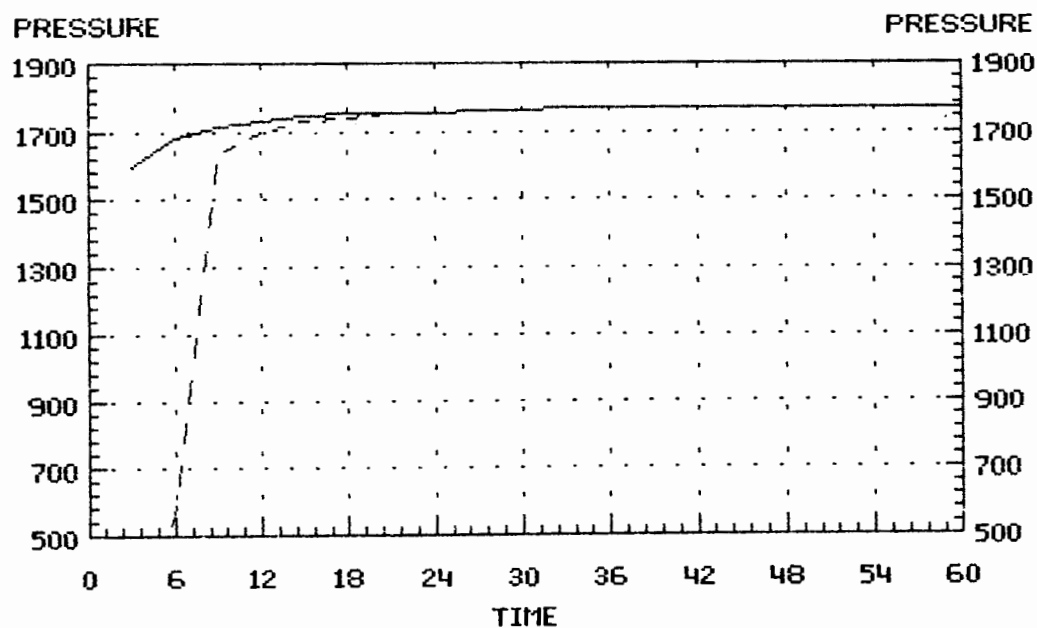
RECORDER # 13850

DST #1

DT (MIN)	PRESSURE	<> PRESSURE
0	54.4	54.4
3	54.4	0
6	55.5	1.099999
9	56.6	1.099999
12	58.7	2.100002
15	60.9	2.200001
18	61.9	1
21	63	1.099999
24	64.1	1.099999
27	66.2	2.099999
30	74.7	8.5

DELTA T DELTA P
DST #1 INITIAL & FINAL SHUTIN
RECORDER # 13850

FINAL INITIAL



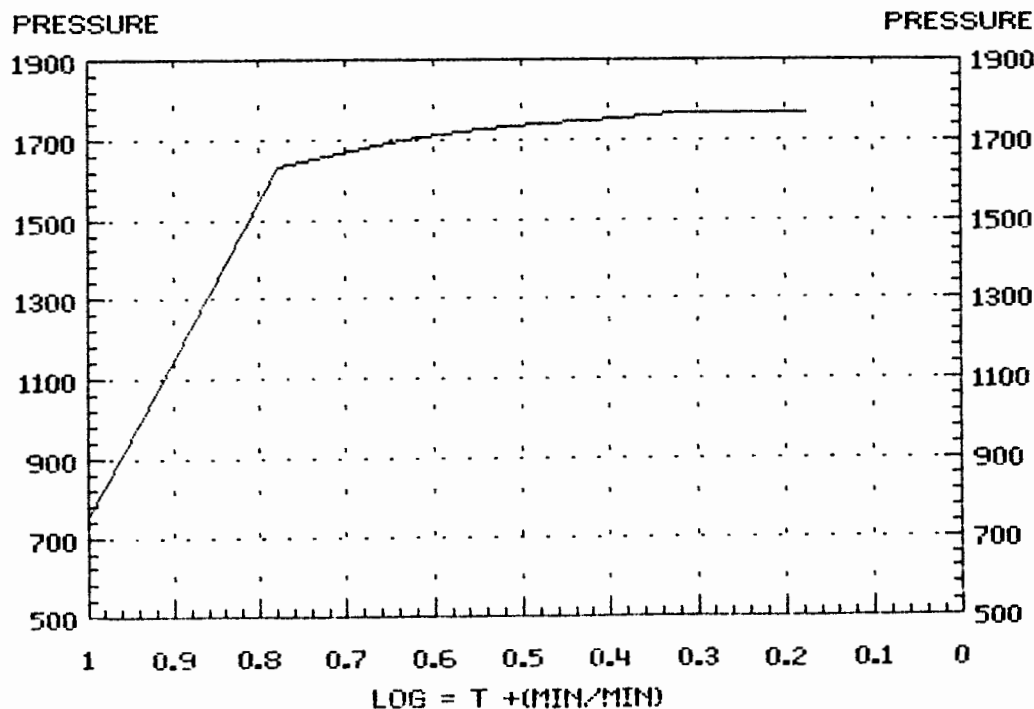
LOUSCH #A-1 DST #1
 INITIAL SHUTIN
 30 INITIAL
 FLOW

Slope -143.25 psi/cycle
 P * 1.789 psi

		Log			
TIME(MIN)	Pws (psi)	Horn T	Horn T	<> PRESSURE	
3	588.3	11	1.041	588.3	
6	1632.0	6	0.778	1043.7	
9	1698.0	4	0.637	66.0	
12	1725.1	4	0.544	27.1	
15	1739.1	3	0.477	14.0	
18	1748.9	3	0.426	9.8	
21	1754.3	2	0.385	5.4	
24	1760.8	2	0.352	6.5	
27	1762.9	2	0.325	2.1	
30	1764.0	2	0.301	1.1	
33	1764.0	2	0.281	0.0	
36	1764.0	2	0.263	0.0	
39	1764.0	2	0.248	0.0	
42	1764.0	2	0.234	0.0	
45	1764.0	2	0.222	0.0	
48	1764.0	2	0.211	0.0	
51	1764.0	2	0.201	0.0	
54	1764.0	2	0.192	0.0	
57	1764.0	2	0.184	0.0	
60	1764.0	2	0.176	0.0	

HORNER PLOT

DST #1 INITIAL SHUTIN
 RECORDER # 13850



LOUSCH #A-1 DST #1

FINAL

SHUTIN

60 TOTAL FLOW TIME

FLOW

Slope -18.17 psi/cycle

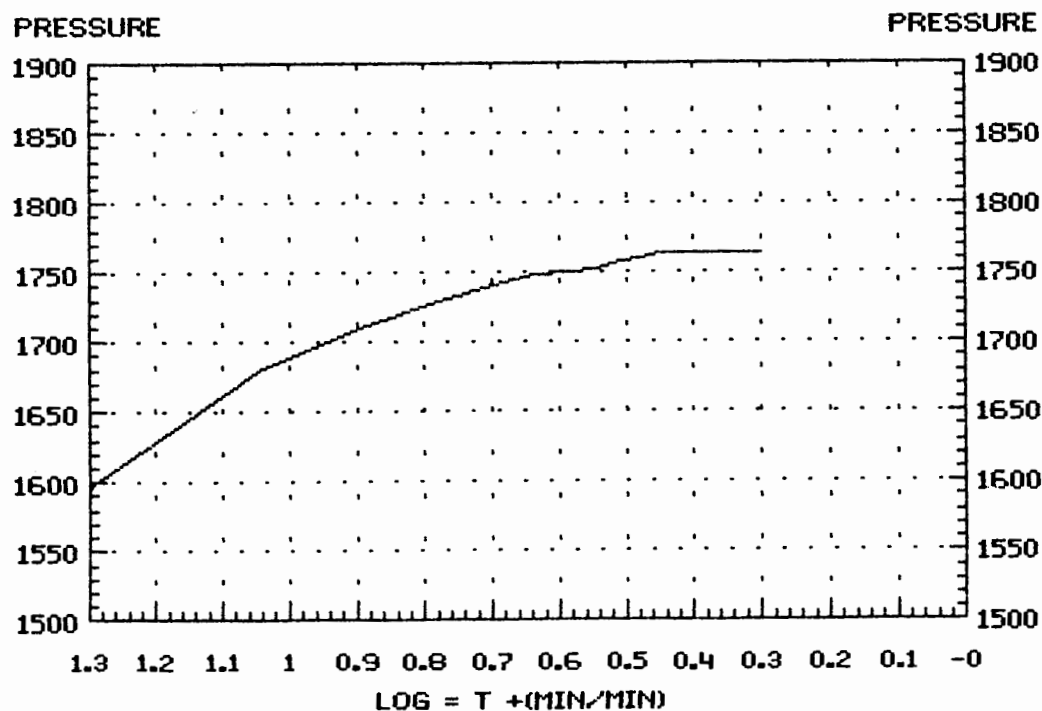
P * 1,769 psi

TIME(MIN)	Pws (psi)	Log		<> PRESSURE
		Horn T	Horn T	
3	1589.8	21	1.322	1589.8
6	1681.8	11	1.041	92.0
9	1712.1	8	0.885	30.3
12	1729.4	6	0.778	17.3
15	1740.2	5	0.699	10.8
18	1747.8	4	0.637	7.6
21	1751.0	4	0.586	3.2
24	1753.2	4	0.544	2.2
27	1757.5	3	0.508	4.3
30	1760.8	3	0.477	3.3
33	1764.0	3	0.450	3.2
36	1764.0	3	0.426	0.0
39	1764.0	3	0.405	0.0
42	1764.0	2	0.385	0.0
45	1764.0	2	0.368	0.0
48	1764.0	2	0.352	0.0
51	1764.0	2	0.338	0.0
54	1764.0	2	0.325	0.0
57	1764.0	2	0.312	0.0
60	1764.0	2	0.301	0.0

HORNER PLOT

DST #1 FINAL SHUTIN

RECORDER # 13850





GAS VOLUME REPORT

1

DST NO.

Remarks:

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 3313

Well Name & No. <u>LOUSBA # A-1</u>	Test No. <u>ONE</u>	Date <u>10-23-90</u>
Company <u>SOURCE</u>	Zone Tested <u>LIKE (1+)</u>	
Address _____	Elevation _____	
Co. Rep. / Geo. <u>BANDY LILIK</u>	Cont. <u>14-30</u>	Est. Ft. of Pay <u>6'</u>
Location: Sec. <u>1</u>	Twp. _____	Rge. _____ Co. _____ State <u>KS</u>
No. of Copies <u>5</u>	Distribution Sheet _____ Yes _____ No <u>(X)</u>	Turnkey _____ Yes _____ No <u>(X)</u>

Interval Tested <u>4735 TO 4750</u>	Drill Pipe Size <u>4 1/2" X 14</u>
Anchor Length <u>15'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>4730</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4735</u>	Wt. Pipe I.D. — 2.7 Ft. Run. _____
Total Depth <u>4750</u>	Drill Collar — 2.25 Ft. Run. <u>530</u>
Mud Wt. <u>8.9</u> lb/gal.	Viscosity <u>62</u> Filtrate <u>13-6</u>
Tool Open @ <u>9:45 A</u> Initial Blow <u>STRONG THROUGHOUT</u>	
<u>GAS TO SURFACE IN 20 MIN.</u>	
Final Blow <u>STRONG THROUGHOUT</u>	

Recovery — Total Feet <u>180</u>	Flush Tool? <u>NO</u>
Rec. <u>180</u> Feet of <u>GAS CUT MUD</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides <u>11,000</u> ppm System	
(A) Initial Hydrostatic Mud <u>2352</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4305</u>	
(B) First Initial Flow Pressure <u>111</u> PSI @ (depth) <u>4740</u> w/Clock No. <u>25813</u>	
(C) First Final Flow Pressure <u>100</u> PSI AK1 Recorder No. <u>13850</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>1763</u> PSI @ (depth) <u>4750</u> w/Clock No. <u>31154</u>	
(E) Second Initial Flow Pressure <u>77</u> PSI AK1 Recorder No. _____ Range _____	
(F) Second Final Flow Pressure <u>88</u> PSI @ (depth) _____ w/Clock No. _____	
(G) Final Shut-In Pressure <u>1763</u> PSI Initial Opening <u>30</u> Test <u>550</u> °F	
(H) Final Hydrostatic Mud <u>2352</u> PSI Initial Shut-In <u>60</u> Jars <u>200</u> °F	
Final Flow <u>30</u> Safety Joint <u>50</u> °F	
Final Shut-In <u>60</u> Straddle _____	

Approved By [Signature]

Our Representative [Signature]

Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ 800 °F

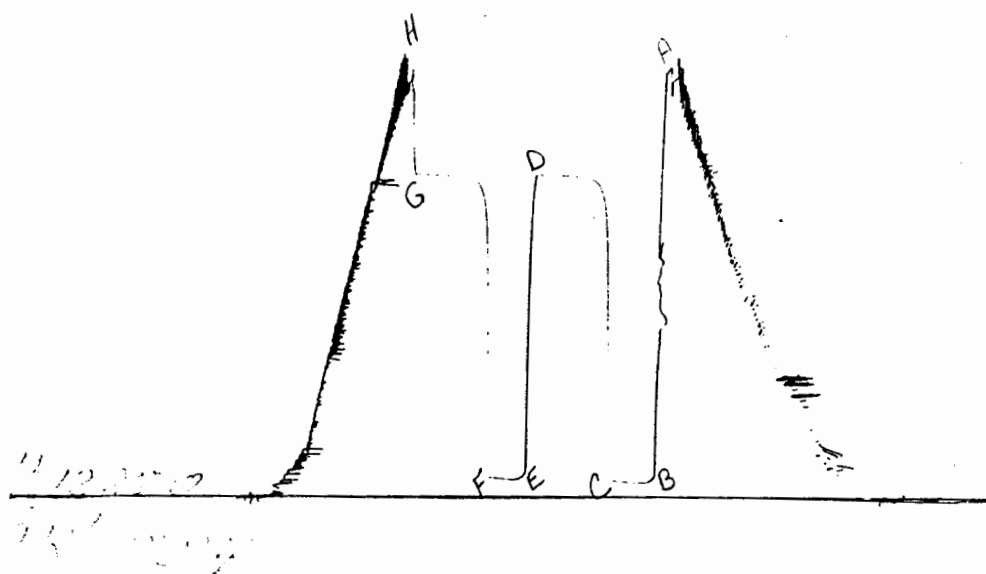
P.O. Box 362 • Hays, Kansas 67601

LOUSCH a-#1		2	10/24/90	
Well Name & No. _____		Test No. _____	Date _____	
SOURCE PETROLEUM			SWOPE	
Company _____		Zone Tested _____		
200 W DOUGLAS #820 WICHITA KS 67202			2085 GL	
Address _____		Elevation _____		
RANDY LILAK		H-30	10	
Co. Rep./Geo. _____		Cont. _____	Est. Ft. of Pay _____	
6		33S	18W	COMMANCHE KANSAS
Location: Sec. _____		Twp. _____	Rge. _____	Co. _____ State _____

Recovery — Total Feet	360	Flush Tool?	NO
Rec.	360	Feet of	GAS CUT MUDDY WATER
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
BHT	109	°F	Gravity
		°API @	0
		°F	Corrected Gravity
			0
RW	0.12	@	75
		°F	Chlorides
			65000
		ppm	Recovery
			Chlorides
			15000
		ppm	System
(A) Initial Hydrostatic Mud	2390.8	PSI	AK1 Recorder No.
			13851
			Range
			4325
(B) First Initial Flow Pressure	79.0	PSI	@ (depth)
			4847
			w/Clock No.
			25813
(C) First Final Flow Pressure	110.4	PSI	AK1 Recorder No.
			13850
			Range
			4425
(D) Initial Shut-In Pressure	1799.7	PSI	@ (depth)
			4860
			w/Clock No.
			31154
(E) Second Initial Flow Pressure	81.2	PSI	AK1 Recorder No.
			0
			Range
			0
(F) Second Final Flow Pressure	99.3	PSI	@ (depth)
			0
			w/Clock No.
			0
(G) Final Shut-In Pressure	1808.4	PSI	Initial Opening
			30
(H) Final Hydrostatic Mud	2390.8	PSI	Initial Shut-In
			60
			Final Flow
			30
			Final Shut-In
			60

Printcraft Printers - Hays, KS

DST# .2 RECORDER# 13850



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2430	2390.8 PSI
(B) First Initial Flow Pressure.....	88	79.0 PSI
(C) First Final Flow Pressure.....	111	110.4 PSI
(D) Initial Closed-in Pressure.....	1763	1799.7 PSI
(E) Second Initial Flow Pressure.....	55	81.2 PSI
(F) Second Final Flow Pressure.....	77	99.3 PSI
(G) Final Closed-in Pressure.....	1763	1808.4 PSI
(H) Final Hydrostatic Mud.....	2430	2390.8 PSI

TEST PARAMETERS

CALCULATIONS

[illegible]

DRAWDOWN FACTOR -1.548815 (%)



GAS VOLUME REPORT

2

DST NO.

Remarks:

INITIAL FLOW

REORDER # 13850

DST #2

DT (MIN)	PRESSURE	<> PRESSURE
0	79	79
3	81.2	2.199997
6	83.3	2.100006
9	85.4	2.099999
12	86.5	1.099999
15	87.6	1.099999
18	88.6	1
21	89.7	1.099999
24	92.9	3.200005
27	97.2	4.299996
30	100.4	3.200005

FINAL FLOW

REORDER # 13850

DST #2

DT (MIN)	PRESSURE	<> PRESSURE
0	81.2	81.2
3	97.2	16
6	99.3	2.100006
9	99.3	0
12	99.3	0
15	99.3	0
18	99.3	0
21	99.3	0
24	99.3	0
27	99.3	0
30	99.3	0

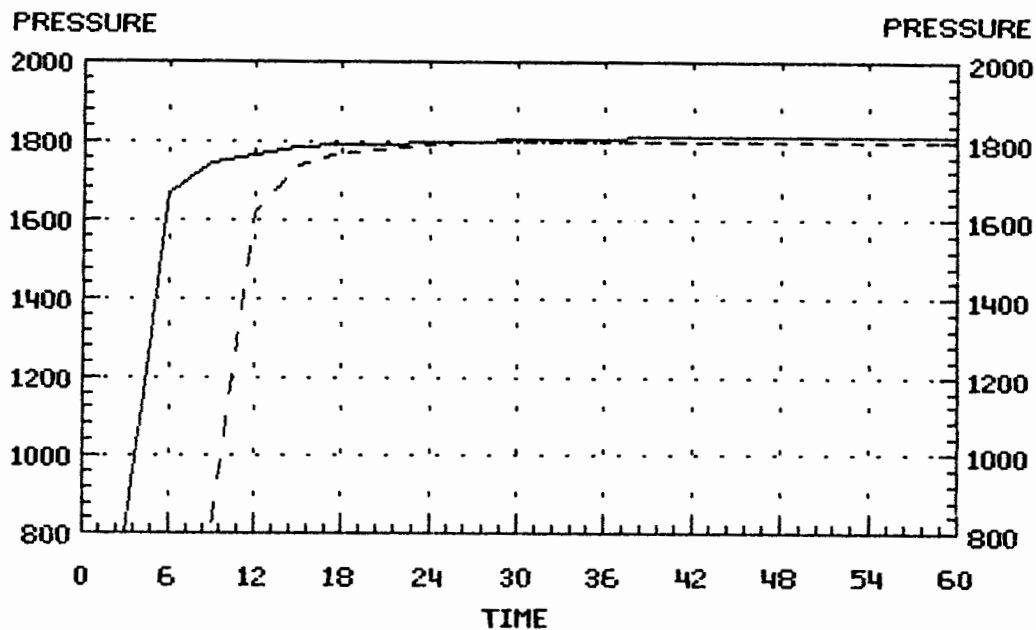
DELTA T DELTA P

DST #2 INITIAL & FINAL SHUTIN

RECORDER # 13850

FINAL

INITIAL



LOUSCH #A-1 DST #2

INITIAL SHUTIN

30 INITIAL FLOW TIME

Slope -20.55 psi/cycle

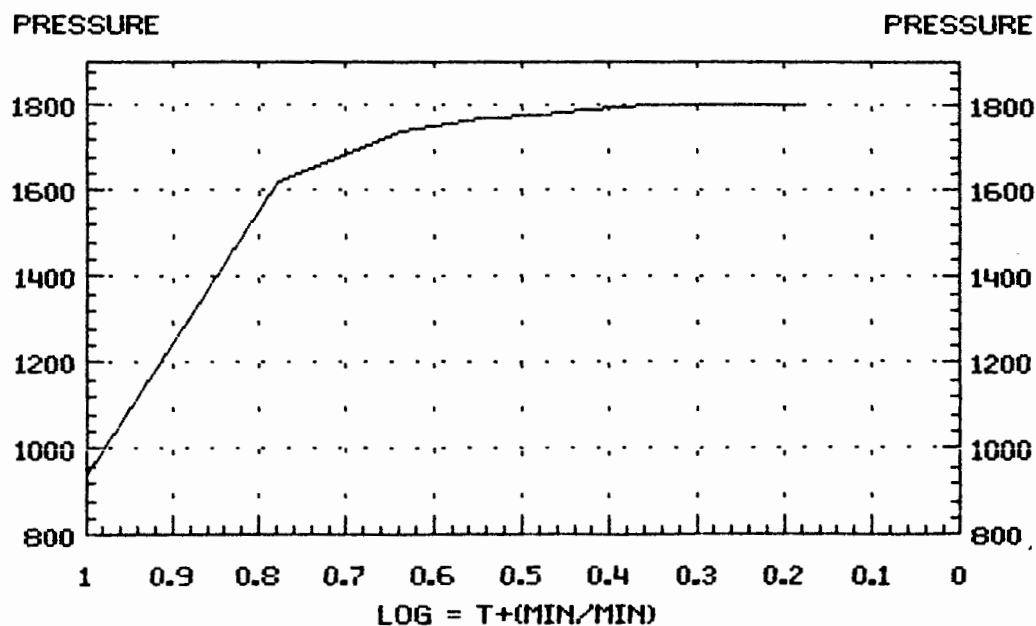
P * 1.803 psi

		Log			
TIME(MIN)	Pws (psi)	Horn T	Horn T	<>	PRESSURE
3	812.7	11	1.041		812.7
6	1622.2	6	0.778		809.5
9	1738.1	4	0.637		115.9
12	1770.5	4	0.544		32.4
15	1780.3	3	0.477		9.8
18	1790.0	3	0.426		9.7
X 21	1795.4	2	0.385		5.4
24	1799.7	2	0.352		4.3
27	1799.7	2	0.325		0.0
30	1799.7	2	0.301		0.0
33	1799.7	2	0.281		0.0
36	1799.7	2	0.263		0.0
39	1799.7	2	0.248		0.0
42	1799.7	2	0.234		0.0
45	1799.7	2	0.222		0.0
48	1799.7	2	0.211		0.0
51	1799.7	2	0.201		0.0
54	1799.7	2	0.192		0.0
X 57	1799.7	2	0.184		0.0
60	1799.7	2	0.176		0.0

HORNER PLOT

DST #2 INITIAL SHUTIN

RECORDER # 13850



LOUSCH #A-1 DST #2

FINAL

SHUTIN

60 TOTAL FLOW TIME

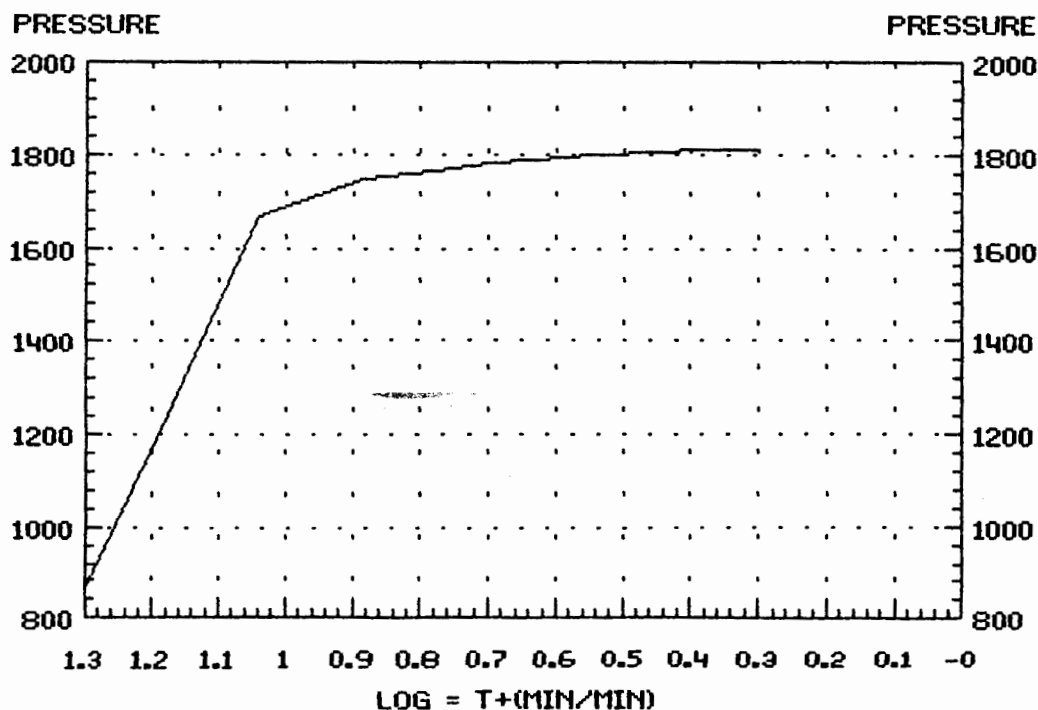
Slope -88.45 psi/cycle

P * 1.835 psi

TIME(MIN)	Pws (psi)	Horn T	Log	<> PRESSURE
			Horn T	
3	795.7	21	1.322	795.7
6	1668.8	11	1.041	873.1
9	1745.6	8	0.885	76.8
12	1766.2	6	0.778	20.6
15	1781.3	5	0.699	15.1
18	1788.9	4	0.637	7.6
21	1794.3	4	0.586	5.4
24	1797.6	4	0.544	3.3
27	1799.7	3	0.508	2.1
30	1801.9	3	0.477	2.2
33	1803.0	3	0.450	1.1
36	1806.2	3	0.426	3.2
39	1808.4	3	0.405	2.2
42	1808.4	2	0.385	0.0
45	1808.4	2	0.368	0.0
48	1808.4	2	0.352	0.0
51	1808.4	2	0.338	0.0
54	1808.4	2	0.325	0.0
57	1808.4	2	0.312	0.0
60	1808.4	2	0.301	0.0

HORNER PLOT

DST #2 FINAL SHUTIN
RECORDER # 13850



TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 3314

Well Name & No. <u>LOUSEN A #1</u>	Test No. <u>TWO</u>	Date <u>10-24-90</u>
Company <u>SOURCE</u>	Zone Tested <u>SWORE LIKE-X</u>	
Address <u>200 W DOUGLAS SUITE 920 WICHITA 67202</u>		Elevation <u>2085 GL</u>
Co. Rep. / Geo. <u>RANDY</u>	Cont. <u>1A-30</u>	Est. Ft. of Pay <u>10</u>
Location: Sec. <u>C</u>	Twp. <u>33 S</u>	Rge. <u>18 W</u> Co. <u>COMANCHE</u> State <u>KS</u>
No. of Copies <u>REG.</u>	Distribution Sheet <u>Yes</u>	Turnkey <u>No</u>

Interval Tested <u>4842 TO 4860</u>	Drill Pipe Size <u>4 1/2" X 14</u>
Anchor Length <u>18'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>4837</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4842</u>	Wt. Pipe I.D. — 2.7 Ft. Run
Total Depth <u>4860</u>	Drill Collar — 2.25 Ft. Run <u>530</u>
Mud Wt. <u>9.0</u> lb / gal.	Viscosity <u>62</u> Filtrate <u>152</u>
Tool Open @ <u>9:00 AM</u> Initial Blow <u>STRONG THROUGHOUT</u>	
<u>G.T.S. IN 5 MIN.</u>	
Final Blow <u>SAME AS INITIAL</u>	

Recovery — Total Feet <u>360</u>	Flush Tool? <u>NO</u>
Rec. _____ Feet of <u>GAS TO SURFACE IN 5 MIN. 200 MGIS</u>	
Rec. _____ Feet of _____	
Rec. <u>360'</u> Feet of <u>GAS CUT MUDDY WATER</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
BHT <u>109</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW <u>0-12</u> @ <u>875</u> °F Chlorides <u>65,000</u> ppm Recovery Chlorides <u>15,000</u> ppm System	
(A) Initial Hydrostatic Mud <u>2430</u> PSI Ak1 Recorder No <u>13851</u> Range <u>4325</u>	
(B) First Initial Flow Pressure <u>88</u> PSI @ (depth) <u>4847</u> W/Clock No. <u>25813</u>	
(C) First Final Flow Pressure <u>111</u> PSI AK1 Recorder No <u>13850</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>1763</u> PSI @ (depth) <u>4860</u> W/Clock No. <u>31154</u>	
(E) Second Initial Flow Pressure <u>55</u> PSI AK1 Recorder No. _____ Range _____	
(F) Second Final Flow Pressure <u>77</u> PSI @ (depth) _____ W/Clock No. _____	
(G) Final Shut-In Pressure <u>1763</u> PSI Initial Opening <u>30</u> Test <u>550</u> <u>W</u>	
(H) Final Hydrostatic Mud <u>2430</u> PSI Initial Shut-In <u>60</u> Jars <u>200</u> <u>W</u>	
Final Flow <u>30</u> Safety Joint <u>50</u>	
Final Shut-In <u>60</u> Straddle _____	
Circ. Sub _____	
Sampler _____	
Extra Packer _____	
Other _____	

Approved By

Randy Black

Our Representative

[Signature]

Printcraft Printers • Hays, KS

TOTAL PRICE \$ 900 W

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name & No.	LOUSCH A #1	Test No.	3	Date	10/26
Company	SOURCE PETROLEUM	Zone Tested	MISS-SPERGEN		
Address	200 W DOUGLAS #B20 WICHITA KS 67202	Elevation	2085 GL		
Co. Rep./Geo.	RANDY LILAK	Cont.	H-30	Est. Ft. of Pay	122
Location: Sec.	6	Twp.	33S	Rge.	18W
		Co.	COMMANCHE	State	KANSAS

Interval Tested	5233-5355	Drill Pipe Size	4.5" XH
Anchor Length	122	Top Choke — 1"	Bottom Choke — 1/4"
Top Packer Depth	5227	Hole Size — 77/8"	Rubber Size — 63/4"
Bottom Packer Depth	5233	Wt. Pipe I.D. — 2.7 Ft. Run	0
Total Depth	5355	Drill Collar — 2.25 Ft. Run	530
Mud Wt.	9.0	Viscosity	51
	lb/gal.	Filtrate	8.8
Tool Open @	12: 35 PM	Initial Blow	STRONG THROUGHOUT-GAS TO SURFACE IN
	5 MINUTES		
Final Blow	SAME		

Recovery — Total Feet	270	Flush Tool?	
Rec.	270	Feet of	MUD
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
BHT	124	%F Gravity	
		%API @	0
		%F Corrected Gravity	0
RW	@	%F Chlorides	10000
		ppm Recovery	ppm System
(A) Initial Hydrostatic Mud	2622.2	PSI	AK1 Recorder No. 13851 Range 4325
(B) First Initial Flow Pressure	125.5	PSI	@ (depth) 5238 w/Clock No. 25813
(C) First Final Flow Pressure	116.6	PSI	AK1 Recorder No. 13850 Range 4425
(D) Initial Shut-In Pressure	1524.3	PSI	@ (depth) 5355 w/Clock No. 31154
(E) Second Initial Flow Pressure	100.0	PSI	AK1 Recorder No. 0 Range 0
(F) Second Final Flow Pressure	91.1	PSI	@ (depth) 0 w/Clock No. 0
(G) Final Shut-In Pressure	1409.6	PSI	Initial Opening 30
(H) Final Hydrostatic Mud	2520.0	PSI	Initial Shut-In 60
			Final Flow 30
			Final Shut-In 60

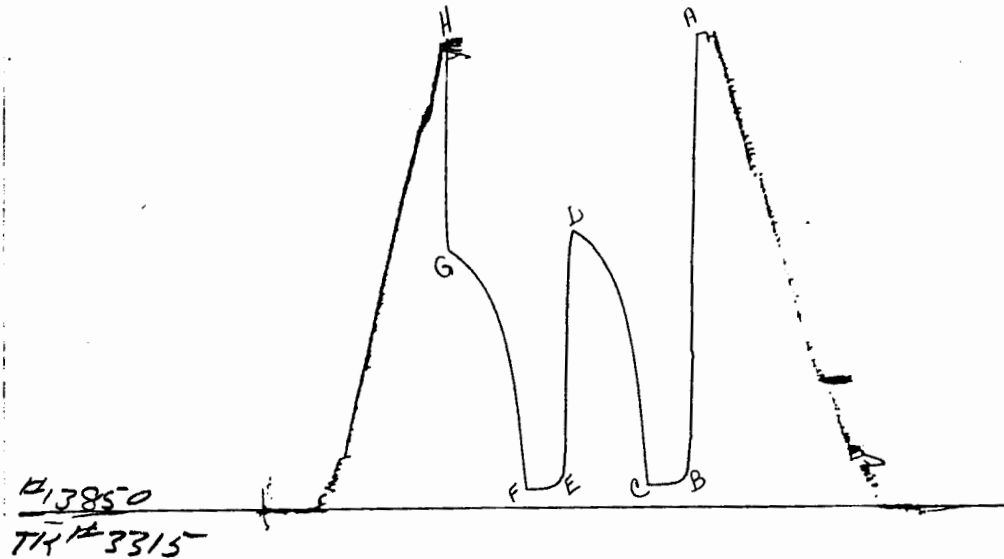
MR HARRY SCHMIDT

950

Our Representative _____

TOTAL PRICE \$ _____

DST# 3 RECORDER# 13850



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2675	2622.2 PSI
(B) First Initial Flow Pressure.....	144	125.5 PSI
(C) First Final Flow Pressure.....	133	116.6 PSI
(D) Initial Closed-In Pressure.....	1542	1524.3 PSI
(E) Second Initial Flow Pressure.....	133	100.0 PSI
(F) Second Final Flow Pressure.....	111	91.1 PSI
(G) Final Closed-In Pressure.....	1420	1409.6 PSI
(H) Final Hydrostatic Mud.....	2675	2520.0 PSI

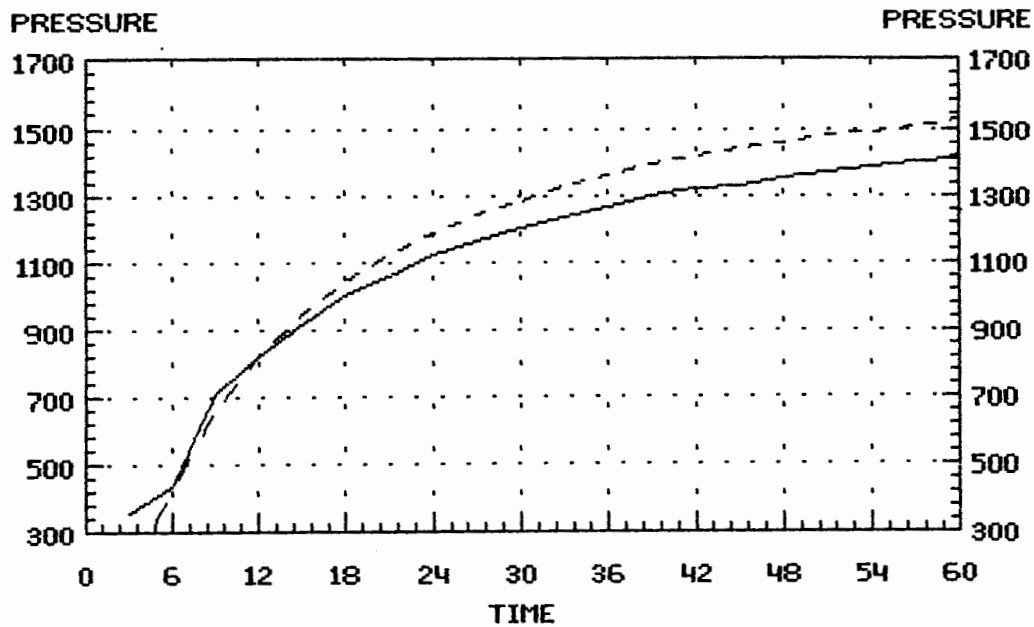
DELTA T DELTA P

DST #3 INITIAL & FINAL SHUTIN

RECORDER # 13851

FINAL

INITIAL



LOUSCH #A-1 DST #3

INITIAL SHUTIN

30 INITIAL FLOW TIME

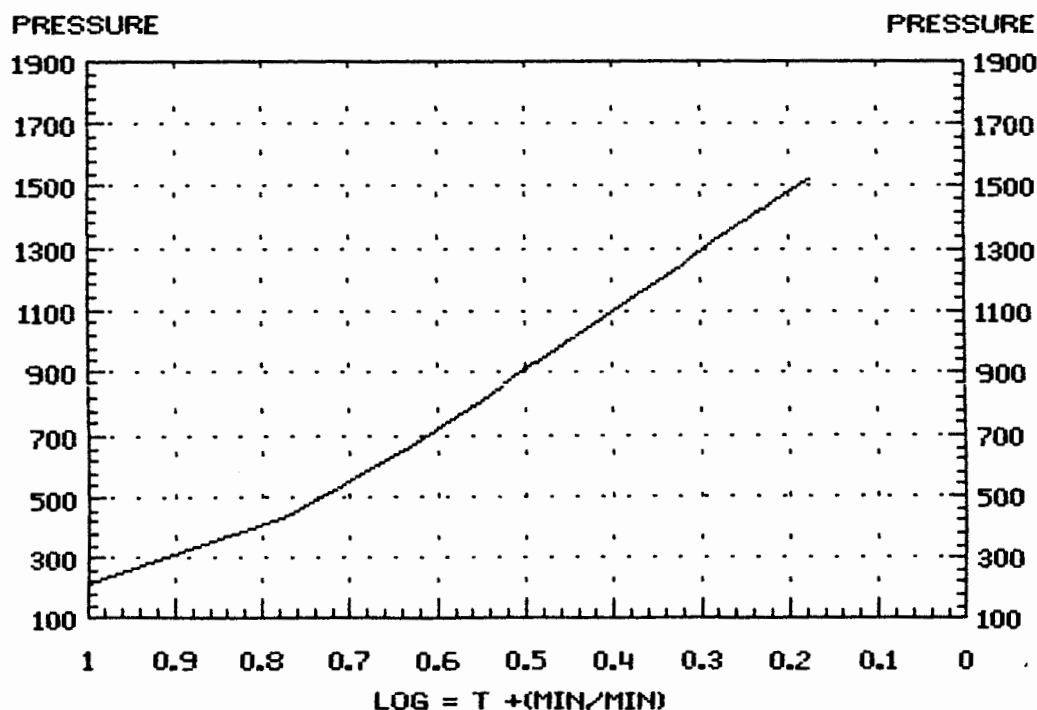
Slope *****psi/cycle
P * 1,844 psi

		Log			
TIME(MIN)	Pws (psi)	Horn T	Horn T	<> PRESSURE	
	3	177.7	11	1.041	177.7
X	6	431.1	6	0.778	253.4
	9	660.4	4	0.637	229.3
	12	822.0	4	0.544	161.6
	15	950.8	3	0.477	128.8
	18	1045.1	3	0.426	94.3
	21	1123.3	2	0.385	78.2
	24	1186.1	2	0.352	62.8
	27	1238.9	2	0.325	52.8
	30	1283.0	2	0.301	44.1
	33	1329.3	2	0.281	46.3
	36	1362.3	2	0.263	33.0
	39	1390.9	2	0.248	28.6
	42	1413.0	2	0.234	22.1
	45	1437.2	2	0.222	24.2
	48	1459.2	2	0.211	22.0
	51	1476.8	2	0.201	17.6
	54	1491.1	2	0.192	14.3
	57	1507.7	2	0.184	16.6
X	60	1524.3	2	0.176	16.6

HORNER PLOT

DST #3 INITIAL SHUTIN

RECORDER # 13851



LOUSCH #A-1 DST #3

FINAL SHUTIN

60 TOTAL FLOW TIME

Slope *****psi/cycle

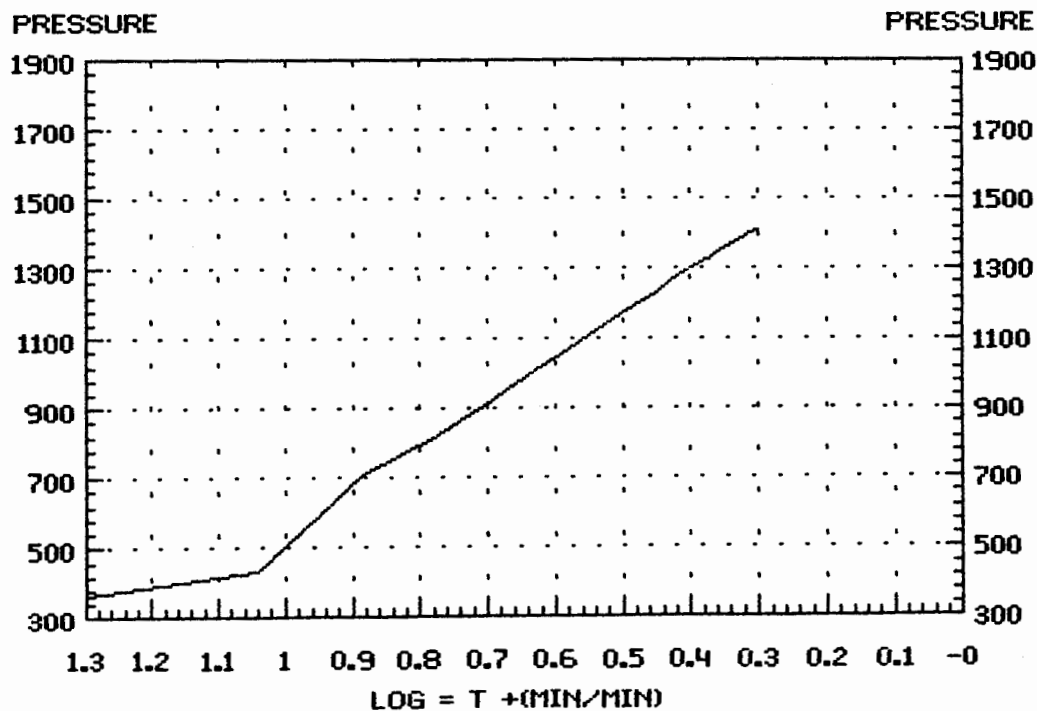
P * 1,784 psi

TIME(MIN)	Pws (psi)	Log		<> PRESSURE
		Horn T	Horn T	
3	361.1	21	1.322	361.1
6	435.5	11	1.041	74.4
9	706.3	8	0.885	270.8
12	816.5	6	0.778	110.2
15	914.8	5	0.699	98.3
18	1002.2	4	0.637	87.4
21	1060.5	4	0.586	58.3
24	1118.9	4	0.544	58.4
27	1163.0	3	0.508	44.1
30	1198.2	3	0.477	35.2
33	1235.6	3	0.450	37.4
36	1267.6	3	0.426	32.0
39	1294.0	3	0.405	26.4
42	1318.2	2	0.385	24.2
45	1332.6	2	0.368	14.4
48	1354.6	2	0.352	22.0
51	1371.1	2	0.338	16.5
54	1385.4	2	0.325	14.3
57	1399.7	2	0.312	14.3
60	1409.6	2	0.301	9.9

HORNER PLOT

DST #3 FINAL SHUTIN

RECORDER # 13851





GAS VOLUME REPORT

LOUSCH A #1

LOUSCH A #1

3

DST NO.

[illegible]

Remarks:

TRILOBITE TOOL COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No 3315

Well Name & No. <u>LOUSCH 14-121</u>	Test No. <u>THREE</u>	Date <u>10-26-90</u>
Company <u>SOURCE</u>	Zone Tested <u>MISS + SPERGEN</u>	
Address <u>200 W DOUGLAS SUITE 820 WICHITA 67202</u>		Elevation <u>2085' G.L.</u>
Co. Rep. / Geo. <u>RANDY</u>	Cont. <u>14-30</u>	Est. Ft. of Pay <u>122</u>
Location: Sec. <u>6</u>	Twp. <u>33 S</u>	Rge. <u>18 W</u> Co. <u>COMANCHE</u> State <u>KS</u>
No. of Copies <u>REC.</u>	Distribution Sheet <u>Yes</u>	Turnkey <u>No</u>

Interval Tested <u>5233 to 5355'</u>	Drill Pipe Size <u>4 1/2" X.14.</u>
Anchor Length <u>122'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>5227'</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>5233'</u>	Wt. Pipe I.D. — 2.7 Ft. Run
Total Depth <u>5355'</u>	Drill Collar — 2.25 Ft. Run <u>530</u>
Mud Wt. <u>9.0</u> lb / gal.	Viscosity <u>51</u> Filtrate <u>8-8</u>
Tool Open @ <u>12:35 P</u> Initial Blow <u>STRONG THROUGHOUT</u>	
<u>G.T.S. IN 5 MIN.</u>	
Final Blow <u>SAME AS INITIAL</u>	

Recovery — Total Feet <u>270</u>	Flush Tool? <u>NO</u>
Rec. <u>270</u> Feet of <u>MUD</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
BHT <u>127</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides <u>10,000</u> ppm System	
(A) Initial Hydrostatic Mud <u>2420</u> <u>2675</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4325</u>	
(B) First Initial Flow Pressure <u>144</u> PSI @ (depth) <u>5238'</u> W/Clock No. <u>25813</u>	
(C) First Final Flow Pressure <u>133</u> PSI AK1 Recorder No. <u>13850</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>1542</u> PSI @ (depth) <u>5355'</u> W/Clock No. <u>31154</u>	
(E) Second Initial Flow Pressure <u>133</u> PSI AK1 Recorder No. _____ Range _____	
(F) Second Final Flow Pressure <u>111</u> PSI @ (depth) _____ W/Clock No. _____	
(G) Final Shut-In Pressure <u>1420</u> PSI Initial Opening <u>30</u> Test <u>650</u>	
(H) Final Hydrostatic Mud <u>2420</u> <u>2675</u> PSI Initial Shut-In <u>60</u> Jars <u>200</u>	
Final Flow <u>30</u> Safety Joint <u>50</u>	
Final Shut-In <u>60</u> Straddle _____	
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other <u>evaluation</u>
	TOTAL PRICE \$ <u>900.00</u> <u>950.00</u>

Approved By Randall M. Holt

Our Representative [Signature]