

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 1 Date 1/15/92
Company BEREXCO INC Zone Tested LANSING "D"
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay 4
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 3890-3905 Drill Pipe Size 4.5 XH
Anchor Length 15 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 3885 Drill Collar - 2.25 Ft. Run 609
Bottom Packer Depth 3890
Total Depth 3905

Mud Wt. 9 lb / gal. Viscosity 43 Filtrate 9.2

Tool Open @ 3:30 A Initial Blow STRONG BLOW OFF BOTTOM OF BUCKET IN 3 MINUTES
ISI: BLED THROUGH 2" - NO BLOW BACK ON SHUT IN
Final Blow STRONG BLOW - OFF BOTTOM OF BUCKET IN 4 MINUTES
FSI: BLED THROUGH 2" - NO BLOW BACK ON SHUT IN

Recovery — Total Feet 1060 Flush Tool? NO

Rec. 1060 Feet of SALT WATER

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 119 °F Gravity °API @ °F Corrected Gravity °API

RW 0.57 @ 52 °F Chlorides 18000 ppm Recovery Chlorides 2500 ppm System

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

(B) First Initial Flow Pressure PSI @ (depth) 3895 w/Clock No. N/A

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

(D) Initial Shut-in Pressure PSI @ (depth) 3902 w/Clock No. 7452

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

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

(G) Final Shut-in Pressure PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud PSI Initial Shut-in 30 Final Shut-in 60

Our Representative LEWAYNE TRESNER

TOTAL PRICE \$ 450

Test Ticket

No 4526

Well Name & No. <u>ROBY JEAN #1-34</u>		Test No. <u>#1</u>	Date <u>1-15-92</u>
Company <u>BEREXCO</u>		Zone Tested <u>LANSING "D"</u>	
Address <u>401 E DOUGLAS #402, WICHITA, KS</u>		Elevation _____	
Co. Rep./Geo. <u>CHARLIE SPRADLIN</u>		Cont. <u>BEREXCO #1</u>	Est. Ft. of Pay <u>4'</u>
Location: Sec. <u>34</u>	Twp. <u>22</u>	Rge. <u>34W</u>	Co. <u>FINNEY</u> State <u>KANSAS</u>
No. of Copies <u>810</u>	Distribution Sheet _____	Yes _____ No _____	Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3890 - 3905</u>	Drill Pipe Size <u>4 1/2" x HOLE</u>
Anchor Length <u>15'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3885</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3890</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>3905</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>43</u> Filtrate <u>2.2</u>
Tool Open @ <u>3:30 A.M.</u> Initial Blow <u>STRONG BLOW, OFF BOTTOM OF BUCKET (3 MIN)</u>	
<u>ISI-BLED THROUGH 2", NO BLOW BACK ON SHUT IN</u>	
Final Blow <u>STRONG BLOW, OFF BOTTOM OF BUCKET (4 MIN)</u>	
<u>FSI-BLED THROUGH 2", NO BLOW BACK ON SHUT IN.</u>	
Recovery — Total Feet <u>1060'</u>	Feet of Gas in Pipe _____ Flush Tool? <u>No</u>
Rec. <u>1060</u> Feet Of <u>SALT WATER</u>	%gas _____ %oil _____ 100%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 <u>119°</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW <u>.57</u> @ <u>52</u> °F Chlorides <u>18,000</u> ppm Recovery Chlorides <u>2500</u> ppm System	
(A) Initial Hydrostatic Mud <u>2210</u> PSI	AK1 Recorder No. <u>13309</u> Range <u>4700</u>
(B) First Initial Flow Pressure <u>72</u> PSI	@ (depth) <u>3895</u> W/Clock No. _____
(C) First Final Flow Pressure <u>84</u> PSI	AK1 Recorder No. <u>13339</u> Range <u>4025</u>
(D) Initial Shut-In Pressure <u>940</u> PSI	@ (depth) <u>3902</u> W/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure <u>72</u> PSI	AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure <u>72 84</u> PSI	@ (depth) _____ W/Clock No. _____
(G) Final Shut-In Pressure <u>940</u> PSI	Initial Opening <u>15 min</u> Test <u>X</u> <u>11 min</u>
(H) Final Hydrostatic Mud <u>2190</u> PSI	Initial Shut-In <u>30 min</u> Jars _____

TRILobe TESTING COMPANY 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 SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow <u>30 min</u>	Safety Joint <u>X</u>
Final Shut-In <u>60 min</u>	Straddle _____
	Circ. Sub <u>X</u> <u>N/C</u>
	Sampler _____
	Extra Packer _____
	Other _____

Approved By _____

Our Representative Brynn Turner

TOTAL PRICE \$ 450.00

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 2 Date 1/15/92
Company BEREXCO INC Zone Tested LANSING "G"
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN cont. BEREDCO RIG #1 Est. Ft. of Pay 6
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 3990-4011 Drill Pipe Size 4.5 XH
Anchor Length 21 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 3985 Drill Collar — 2.25 Ft. Run 609
Bottom Packer Depth 3990
Total Depth 4011

Mud Wt. 9.1 lb / gal. Viscosity 52 Filtrate 8.8

Tool Open @ 11:15 PM Initial Blow WEAK BLOW BUILT TO 1" IN 15 MINUTES
ISI: BLED THROUGH 2" - NO BLOW BACK ON SHUT IN
Final Blow VERY WEAK SURFACE BLOW - DIED OUT IN 6 MINUTES
FSI: NO BLOW BACK

Recovery — Total Feet 5 Flush Tool? NO

Rec. 5 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 2900 ppm System

(A) Initial Hydrostatic Mud 2055.4 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 32.2 PSI @ (depth) 3995 w/Clock No. 27566

(C) First Final Flow Pressure 32.2 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 651.3 PSI @ (depth) 4008 w/Clock No. 7452

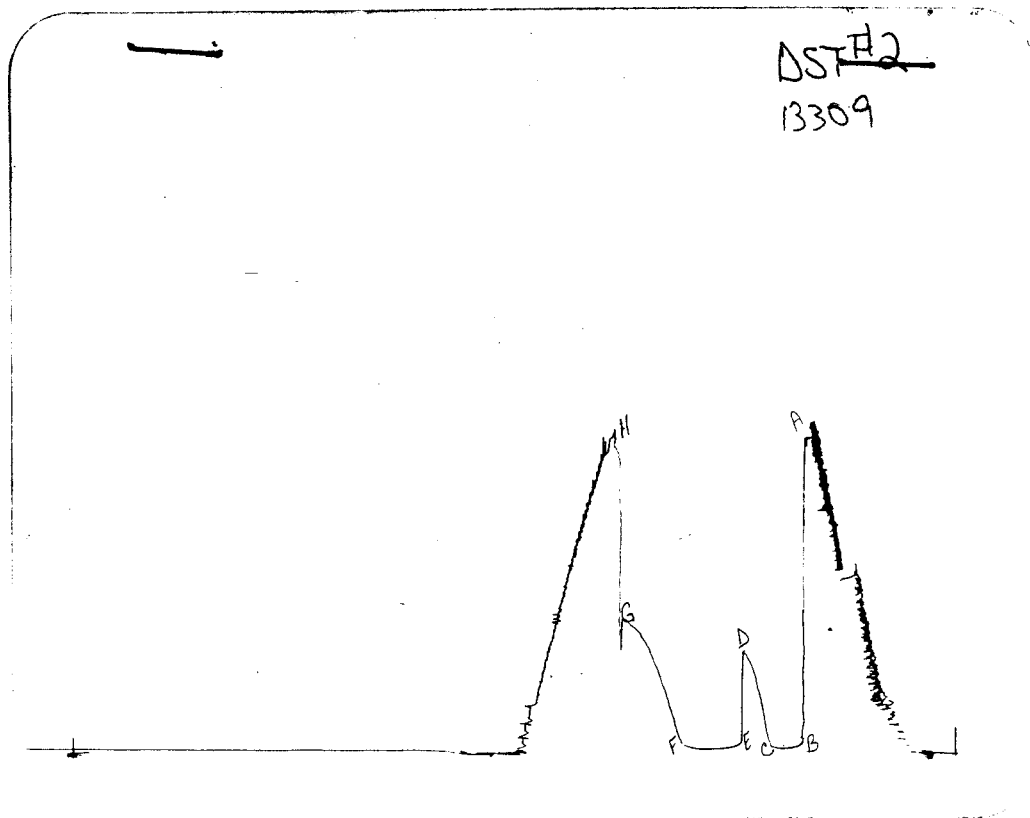
(E) Second Initial Flow Pressure 42.3 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 42.3 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-in Pressure 821.2 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 2015.4 PSI Initial Shut-in 30 Final Shut-in 60

Our Representative LEWAYNE TRESNER TOTAL PRICE \$ 600



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2053	2055.4
(B) FIRST INITIAL FLOW PRESSURE	31	32.2
(C) FIRST FINAL FLOW PRESSURE	31	32.2
(D) INITIAL CLOSED-IN PRESSURE	649	651.3
(E) SECOND INITIAL FLOW PRESSURE	41	42.3
(F) SECOND FINAL FLOW PRESSURE	41	42.3
(G) FINAL CLOSED-IN PRESSURE	819	821.2
(H) FINAL HYDROSTATIC MUD	2013	2015.4

TRILOBITE TESTING COMPANY, L.L.C

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4527

Well Name & No. <u>RUBY JEAN #1-34</u>	Test No. <u>#2</u>	Date <u>1-15-92</u>
Company <u>BEREXCO</u>	Zone Tested <u>LANISING "G"</u>	
Address <u>970 FOURTH FINANCIAL CENTER</u>	Elevation _____	
Co. Rep./Geo. <u>CHARLIE SPRABLIN</u>	Cont. <u>BERESCO #1</u>	Est. Ft. of Pay <u>6'</u>
Location: Sec. <u>34</u>	Twp. <u>22</u>	Rge. <u>34W</u> Co. <u>FENNEY</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3990-4011</u>	Drill Pipe Size <u>4 1/2" x HOLE</u>
Anchor Length <u>21'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3985</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>3990</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4011</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>9.1</u> lb/gal.	Viscosity <u>52</u> Filtrate <u>8.8</u>

Tool Open @ 11:15 P.M. Initial Blow WEAK BLOW, BUILT TO 1" (15 MIN)
ISI - BLEED THROUGH 2", NO BLOW BACK ON SHUT IN
 Final Blow VERY WEAK SURFACE BLOW, DIED OUT (6 MIN)
FSI - NO BLOW BACK

Recovery — Total Feet <u>5'</u>	Feet of Gas in Pipe _____	Flush Tool? <u>No</u>
Rec. <u>5</u> Feet Of <u>DRUG MUD</u>	%gas _____ %oil _____ %water <u>100</u> %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 2900 ppm System

(A) Initial Hydrostatic Mud <u>2053</u>	PSI Ak1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>31</u>	PSI @ (depth) <u>3995</u>	w/Clock No. <u>27566</u>
(C) First Final Flow Pressure <u>31</u>	PSI AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>649</u>	PSI @ (depth) <u>4008</u>	w/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure <u>41</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>41</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>819</u>	PSI Initial Opening <u>15 MIN</u>	Test <u>X</u> <u>550.00</u>
(H) Final Hydrostatic Mud <u>2013</u>	PSI Initial Shut-In <u>30 MIN</u>	Jars _____

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Final Flow 30 MIN Safety Joint X
 Final Shut-In 60 MIN Straddle _____

Circ. Sub X N/C

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ 600.00

Approved By _____

Our Representative Quincy Turner

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 3 Date 1/16/92
Company BEREXCO INC Zone Tested LANSING "H"
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay 9
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4032-4046 Drill Pipe Size 4.5 XH
Anchor Length 14 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 4027 Drill Collar — 2.25 Ft. Run 609
Bottom Packer Depth 4032
Total Depth 4046

Mud Wt. 8.9 lb / gal. Viscosity 50 Filtrate 8.2

Tool Open @ 1:52 PM Initial Blow FAIR BLOW-OFF BOTTOM OF BUCKET IN 9 MINUTES
ISI: BLED THROUGH 2"-WEAK SURFACE BLOW CONT. THROUGHOUT SHUTIN
Final Blow FAIR BLOW-OFF BOTTOM OF BUCKET IN 11 MINUTES
FSI: BLED THROUGH 2"-WEAK SURFACE BLOW-DIED OUT IN 40 MIN

Recovery — Total Feet 670 Flush Tool? NO

Rec. 120 Feet of GAS IN PIPE

Rec. 65 Feet of CLEAN GASSY OIL-20%GAS/80%OIL

Rec. 180 Feet of GSY WTR & OIL CUT MUD-5%GAS/10%OIL/75%MUD

Rec. 425 Feet of SALT WATER

Rec. Feet of
BHT 122 °F Gravity 43 °API @ 66 °F Corrected Gravity 42 °API

RW 0.25 @ 65 °F Chlorides 34000 ppm Recovery Chlorides 2800 ppm System

(A) Initial Hydrostatic Mud 2066.4 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 31.2 PSI @ (depth) 4037 w/Clock No. 27566

(C) First Final Flow Pressure 121.6 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-In Pressure 1030 PSI @ (depth) 4043 w/Clock No. 7452

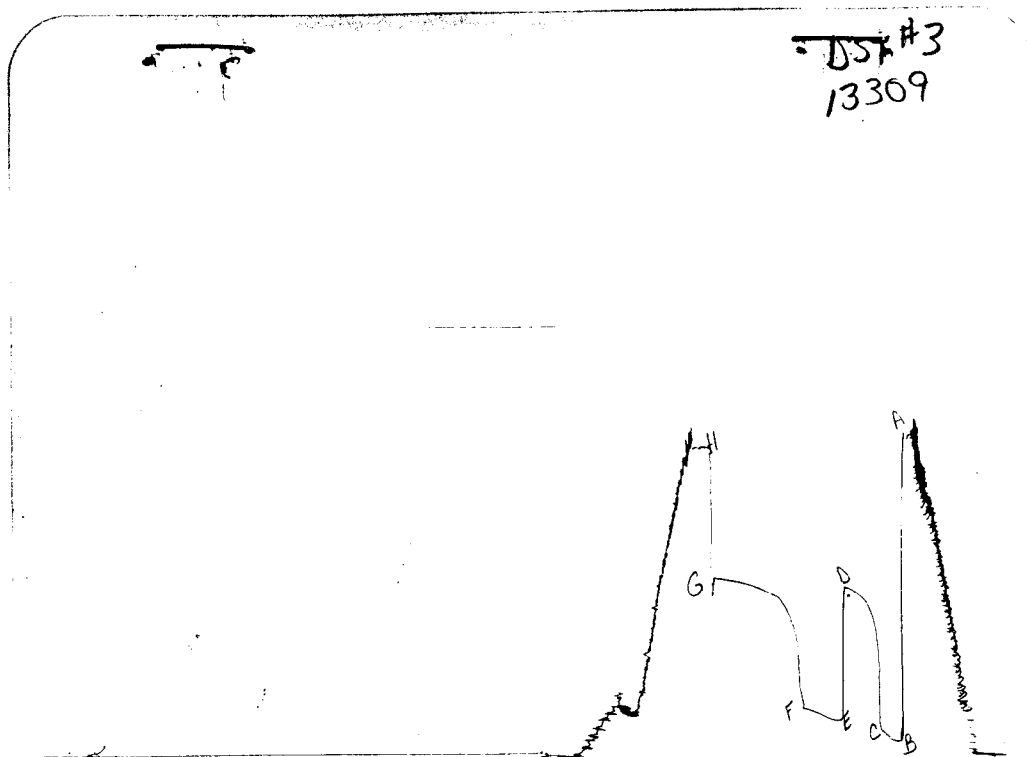
(E) Second Initial Flow Pressure 190.2 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 272.3 PSI @ (depth) w/Clock No.

(G) Final Shut-In Pressure 1080.2 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 2010.4 PSI Initial Shut-In 30 Final Shut-In 60

Our Representative LEWAYNE TRESNER TOTAL PRICE \$ 600



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2063	2066.4
(B) FIRST INITIAL FLOW PRESSURE	31	31.2
(C) FIRST FINAL FLOW PRESSURE	114	121.6
(D) INITIAL CLOSED-IN PRESSURE	1020	1030
(E) SECOND INITIAL FLOW PRESSURE	197	190.2
(F) SECOND FINAL FLOW PRESSURE	259	272.3
(G) FINAL CLOSED-IN PRESSURE	1070	1080.2
(H) FINAL HYDROSTATIC MUD	2003	2010.4

COMPUTER EVALUATION BY TRILOBITE TESTING
BEREXCO INC
REPORT FOR DST#3 FOR THE RUBY JEAN #1-34
34-22S-34W FINNEY KANSAS

TEST PARAMETERS

ELEVATION: 2960 KB EST. PAY: 9 FT
DATUM: -1084 ZONE TESTED: LANSING "H"
TEST INTERVAL: 4032-4046
TIME INTERVALS: 15-30-30-60
RECORDER DEPTH: 4043 VISCOSITY: 5.726515 CP
BOTTOM HOLE TEMP: 122 HOLE SIZE: 7.875 IN

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 9.580726
TOTAL FEET OF RECOVERY: 670
BARRELS IN DRILL PIPE: .86742
BARRELS IN DRILL COLLARS: 2.97801
GAS OIL RATIO: 2.491458 CU.FT./BBL
BUBBLE POINT PRESSURE: ; 8.938789E-02
TOTAL BARRELS OF RECOVERY: 3.84543

UNCORR. INIT. PROD.: 123.0538 BBL/DAY

API GRAVITY: 42

FLUID GRADIENT: .354

CORRECTED PIPE FILLUP: 769.209

CORR. BARRELS OF RECOVERY: 5.25321 BBL

INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 168.1027 BBL/DAY

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE

101.6735

INITIAL SLOPE 563.4 PSI/CYCLE

INITIAL P* 1129 PSI

FINAL SLOPE 431.55 PSI/CYCLE

FINAL P* 1181 PSI

TRANSMISSIBILITY 63.33798 (MD.-FT./CP.)
PERMEABILITY 40.30065 (MD.)
INDICATED FLOW CAPACITY 362.7059 (MD.FT)
PRODUCTIVITY INDEX 7.157192E-02 (BARRELS/DAY/PSI)
DAMAGE RATIO .3853368
RADIUS OF INVESTIGATION 42.58555 (FT.)
POTENTIOMETRIC SURFACE 1655.739 (FT.)
DRAWDOWN FACTOR -4.605842 (%)

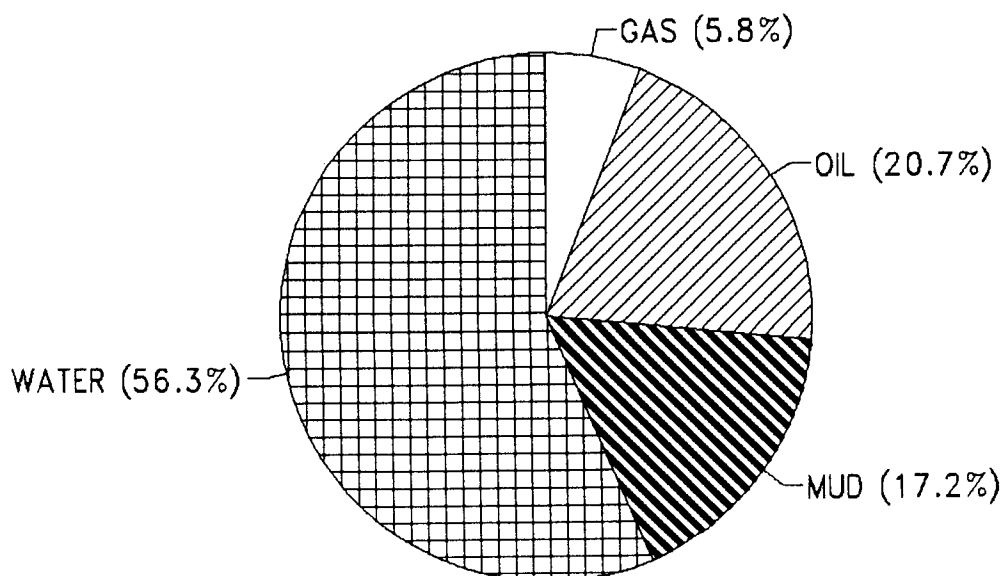
CALCULATED RECOVERY ANALYSIS

DST # 3 TICKET # 4528

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL 1	61	20	12.2	80	48.8	0	0	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	4	20	0.8	80	3.2	0	0	0	0
COLLAR 2	180	5	9	10	18	10	18	75	135
3	425	0	0	0	0	100	425	0	0
4			0		0		0		0
5			0		0		0		0
TOTAL	670		22		70		443		135

HRS OPEN BBL/DAY

BBL OIL= 0.797604 * 0.75 25.5233
 BBL WATER 2.16627 * 69.3206
 BBL MUD= 0.66015
 BBL GAS =0.221406



INITIAL FLOW

REORDER # 13339

DST #3

DT(MIN)	PRESSURE	<> PRESSURE
0	31.2	31.2
3	40.5	9.299999
6	55.1	14.6
9	82.1	27
12	102.9	20.8
15	121.6	18.7

FINAL FLOW

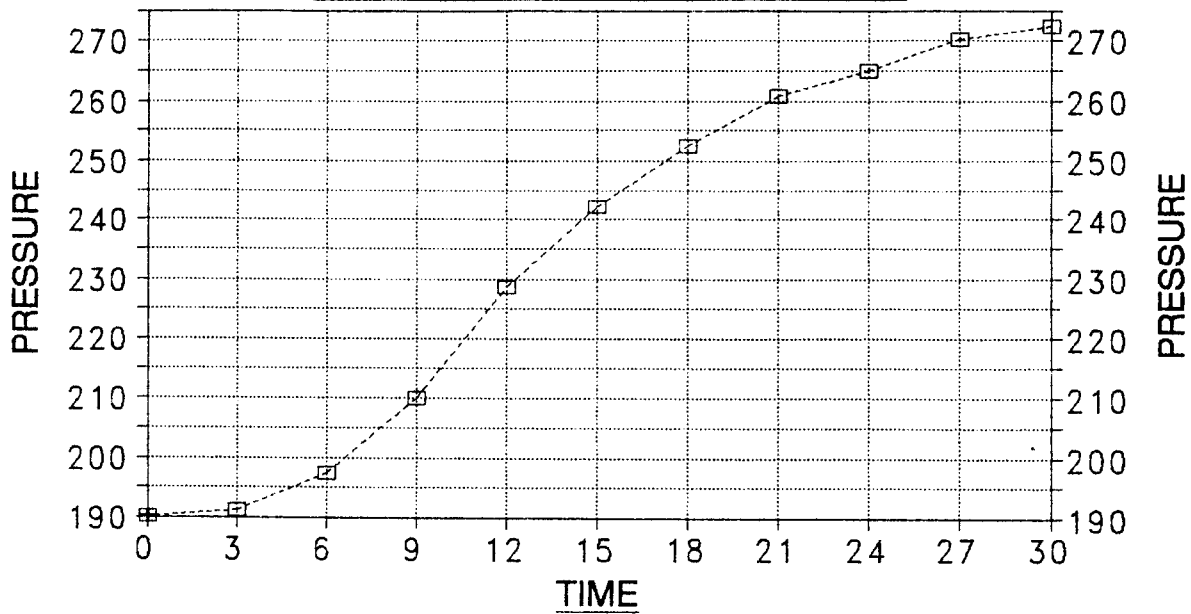
REORDER # 13339

DST #3

DT(MIN)	PRESSURE	<> PRESSURE
0	190.2	190.2
3	191.2	1
6	197.4	6.199997
9	209.9	12.5
12	228.6	18.70001
15	242.2	13.59999
18	252.6	10.40001
21	260.9	8.299988
24	265	4.100006
27	270.2	5.200012
30	272.3	2.099976

DELTA T DELTA P

FINAL FLOW - DST #3



---□--- RUBY JEAN #1-34

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 101.6735 BBL/DAY

RUBY JEAN #1-34 DST #3
INITIAL SHUTIN

15 INITIAL FLOW TIME

Slope -563.40 psi/cycle
P * 1,129 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	765.5	6	0.778	765.5
	6	855.7	4	0.544	90.2
	9	903.8	3	0.426	48.1
	12	939.8	2	0.352	36.0
	15	962.9	2	0.301	23.1
X	18	980.9	2	0.263	18.0
	21	998.9	2	0.234	18.0
	24	1010.9	2	0.211	12.0
	27	1025.0	2	0.192	14.1
X	30	1030.0	2	0.176	5.0

RUBY JEAN #1-34 DST #3
FINAL SHUTIN

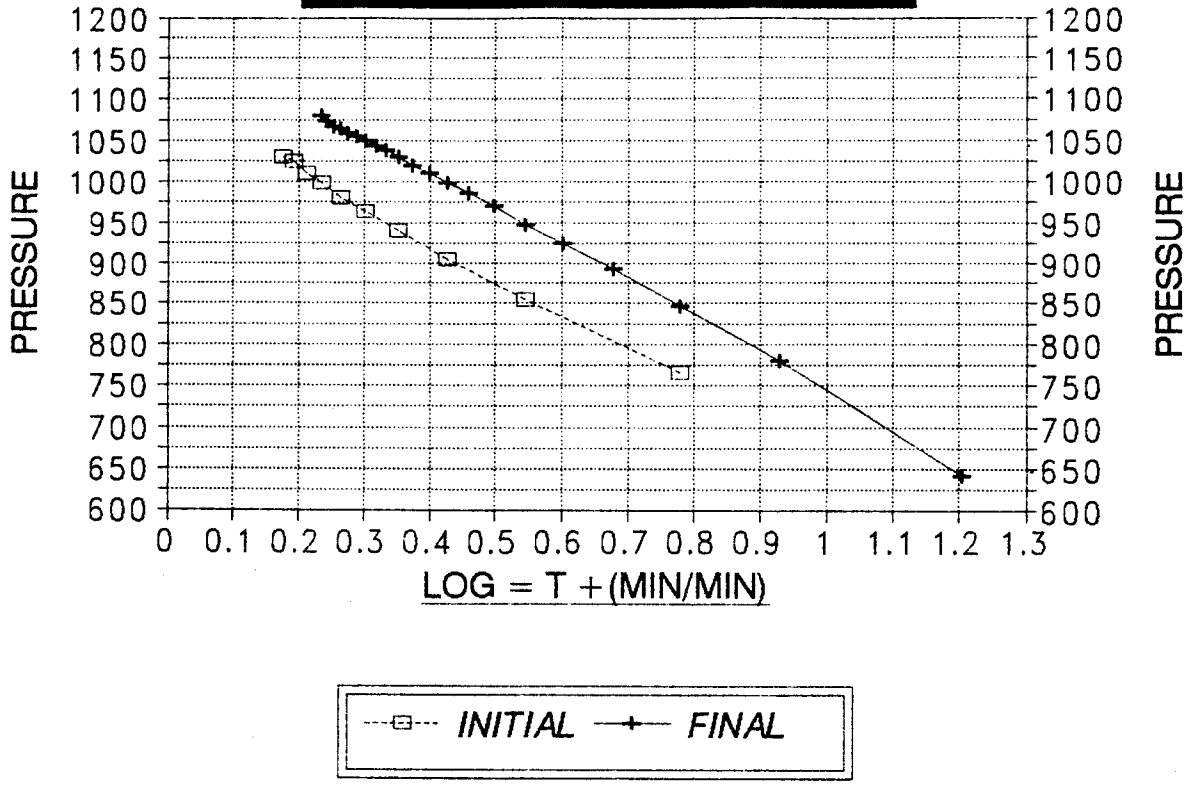
45 TOTAL FLOW TIME

Slope -431.55 psi/cycle
P * 1,181 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	642.3	16	1.204	642.3
	6	779.5	9	0.929	137.2
	9	846.7	6	0.778	67.2
	12	892.7	5	0.677	46.0
	15	923.8	4	0.602	31.1
	18	946.8	4	0.544	23.0
	21	969.9	3	0.497	23.1
	24	984.9	3	0.459	15.0
	27	998.9	3	0.426	14.0
	30	1010.9	3	0.398	12.0
X	33	1020.0	2	0.374	9.1
	36	1030.0	2	0.352	10.0
	39	1038.0	2	0.333	8.0
	42	1044.1	2	0.316	6.1
	45	1050.1	2	0.301	6.0
	48	1055.1	2	0.287	5.0
	51	1060.1	2	0.275	5.0
	54	1064.2	2	0.263	4.1
	57	1067.2	2	0.253	3.0
	60	1074.2	2	0.243	7.0
X	63	1080.2	2	0.234	6.0

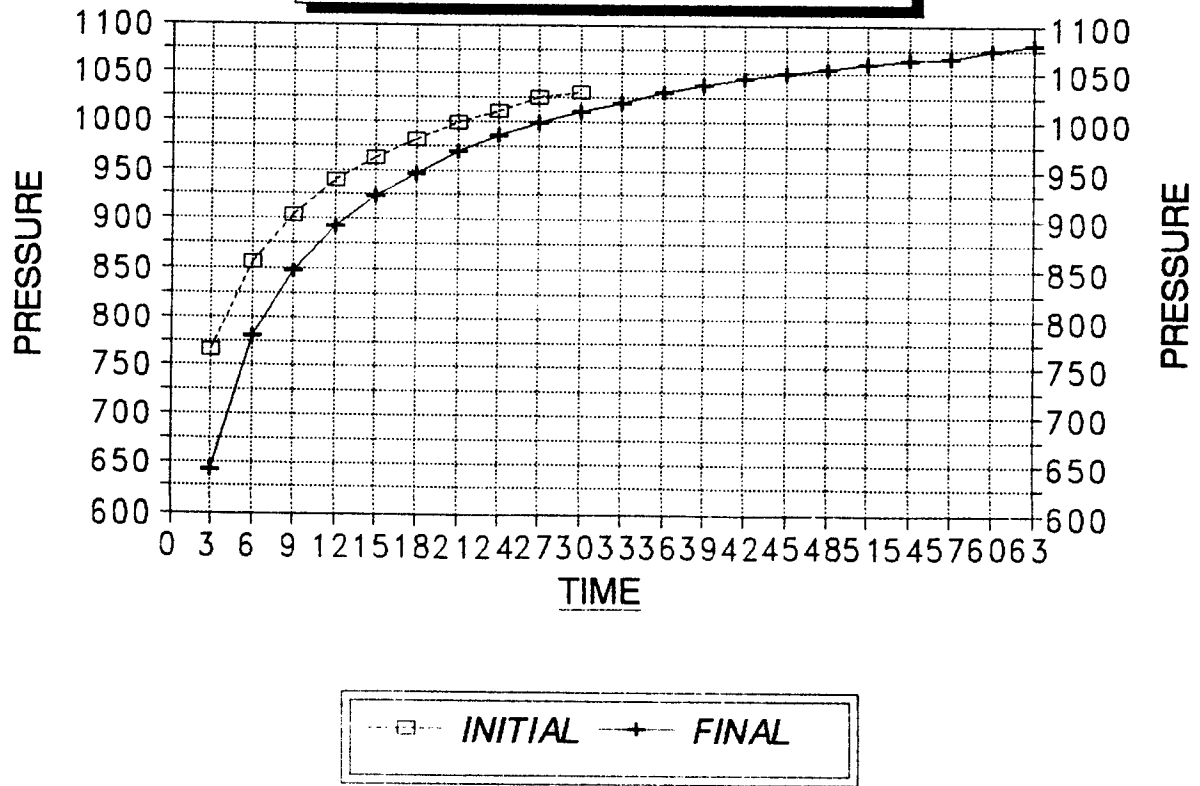
HORNER PLOT

DST #3 / RUBY JEAN #1-34



DELTA T DELTA P

DST #3 / RUBY JEAN #1-34



#3.

0.03	31.2
0.039	40.56
0.053	55.12
0.079	82.16
0.099	102.96
0.117	121.6535

0.183	190.2181
0.184	191.2582
0.19	197.4987
0.202	209.9797
0.22	228.6973
0.233	242.2163
0.243	252.6159
0.251	260.9358
0.255	265.0959
0.26	270.296
0.262	272.3761

0.117	121.6535
0.746	765.5718
0.836	855.7296
0.884	903.8016
0.92	939.872
0.943	962.935
0.961	980.9696
0.979	998.9912
0.991	1010.998
1.005	1025.027
1.01	1030.053

0.262	272.3761
0.623	642.3219
0.76	779.5971
0.827	846.7033
0.873	892.7953
0.904	923.8157
0.927	946.8934
0.95	969.95
0.965	984.9755
0.979	998.9912
0.991	1010.998
1	1020
1.01	1030.053
1.018	1038.093
1.024	1044.123
1.03	1050.151
1.035	1055.173
1.04	1060.195
1.044	1064.212
1.047	1067.224
1.054	1074.252
1.06	1080.275

WELL NAME Ruby Jean DST # 3 RECORDER # 13339

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

INITIAL FLOW MINUTES <u>15</u> INTERVAL _____	INITIAL SHUTIN MINUTES <u>30</u> INTERVAL _____	FINAL FLOW MINUTES <u>30</u> INTERVAL _____	FINAL SHUTIN MINUTES <u>60</u> INTERVAL <u>3</u>
<u>.030</u> 31.2	<u>.117</u> —	1 <u>.183</u> <u>190.2</u>	<u>.262</u> —
<u>.039</u>	<u>.746</u>	2 <u>.184</u>	<u>.623</u>
<u>.053</u>	<u>.836</u>	3 <u>.190</u>	<u>.760</u>
<u>.079</u>	<u>.884</u>	4 <u>.202</u>	<u>.827</u>
<u>.099</u>	<u>.920</u>	5 <u>.220</u>	<u>.873</u>
<u>.117</u> 121.6	<u>.942</u>	6 <u>.233</u>	<u>.904</u>
	<u>.961</u>	7 <u>.243</u>	<u>.927</u>
	<u>.979</u>	8 <u>.251</u>	<u>.950</u>
	<u>.991</u>	9 <u>.255</u>	<u>.965</u>
	<u>1.005</u>	10 <u>.260</u>	<u>.979</u>
	<u>1.010</u> <u>1030.0</u>	11 <u>.262</u> <u>272.3</u>	<u>.991</u>
		12	<u>1.000</u>
		13	<u>1.010</u>
		14	<u>1.018</u>
		15	<u>1.024</u>
		16	<u>1.030</u>
		17	<u>1.035</u>
		18	<u>1.040</u>
		19	<u>1.044</u>
		20	<u>1.047</u>
		21	<u>1.054</u>
		22	<u>1.060</u> <u>1080.2</u>
		23	
		24	
		25	
		26	
		27	

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4528

Well Name & No. <u>RUBY JEAN #1-34</u>	Test No. <u>#3</u>	Date <u>1-16-92</u>
Company <u>BEREXCO</u>	Zone Tested <u>LANSING "H"</u>	
Address <u>970 FOURTH FINANCIAL CENTER, WICHITA</u>	Elevation _____	
Co. Rep./Geo. <u>CHARLIE SPRADLIN</u>	Cont. <u>BEREDCO #1</u>	Est. Ft. of Pay <u>9'</u>
Location: Sec. <u>34</u>	Twp. <u>22</u>	Rge. <u>34 W</u> Co. <u>FINNEY</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4032-4046</u>	Drill Pipe Size <u>4 1/2" X HOLE</u>
Anchor Length <u>14'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4027</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4032</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4046</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>8.9</u> lb/gal.	Viscosity <u>50</u> Filtrate <u>8.2</u>

Tool Open @ 1:52 P.M. Initial Blow FAIR BLOW, OFF BOTTOM OF BUCKET (9 MIN)
ISI-BLED THROUGH 2", WEAK SURFACE BLOW, CONTINUED THROUGHOUT SHUT IN
 Final Blow FAIR BLOW, OFF BOTTOM OF BUCKET (11 MIN)
FSI-BLED THROUGH 2", WEAK SURFACE BLOW, DIED OUT (40 MIN)

Recovery — Total Feet 670' Feet of Gas in Pipe 120' Flush Tool? NO

Rec.	Feet Of	20% gas	80% oil	% water	% mud
<u>65</u>	<u>CGO</u>	<u>20%</u>	<u>80%</u>	<u>0%</u>	<u>0%</u>
<u>180</u>	<u>GWOCM</u>	<u>5%</u>	<u>10%</u>	<u>10%</u>	<u>75%</u>
<u>425</u>	<u>SALT WATER</u>	<u>0%</u>	<u>0%</u>	<u>100%</u>	<u>0%</u>
_____	_____	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>
_____	_____	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>

BHT 122° °F Gravity 43 °API @ 66 °F Corrected Gravity 42 °API

RW 125 @ 65° °F Chlorides 34,000 ppm Recovery Chlorides 2800 ppm System

(A) Initial Hydrostatic Mud <u>2063</u>	PSI AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>31</u>	PSI @ (depth) <u>4037</u>	w/Clock No. <u>27566</u>
(C) First Final Flow Pressure <u>114</u>	PSI AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>1020</u>	PSI @ (depth) <u>4043</u>	w/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure <u>197</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>259</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1070</u>	PSI Initial Opening <u>15 MIN</u>	Test <u>X</u>
(H) Final Hydrostatic Mud <u>2003</u>	PSI Initial Shut-In <u>30 MIN</u>	Jars _____

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Final Flow <u>30 MIN</u>	Safety Joint <u>X</u>
Final Shut-In <u>60 MIN</u>	Straddle _____
	Circ. Sub <u>X</u> <u>N/C.</u>
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ _____

Approved By Charlie Spradlin
 Our Representative Bentley Turner

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 4 Date 1/17/92
Company BEREXCO INC Zone Tested N/A
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay _____
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4294-4309 Drill Pipe Size 4.5 XH
Anchor Length 15 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4289 Drill Collar — 2.25 Ft. Run 609
Bottom Packer Depth 4294
Total Depth 4309

Mud Wt. 9 lb / gal. Viscosity 50 Filtrate 7.6

Tool Open @ 4:22 PM Initial Blow WEAK SURFACE BLOW-CONT. THROUGHOUT INITIAL FLOW
ISI:NO BLOW BACK ON SHUT IN
Final Blow NO BLOW-FLUSHED TOOL-GOOD SURGE-NO BLOW
PSI:NO BLOW

Recovery — Total Feet 10 Flush Tool? YES

Rec. 10 Feet of DRILLING MUD

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT 123 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 2700 ppm System

(A) Initial Hydrostatic Mud 2081.4 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 11.1 PSI @ (depth) 4299 w/Clock No. 27566

(C) First Final Flow Pressure 11.1 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 972.4 PSI @ (depth) 4306 w/Clock No. 7452

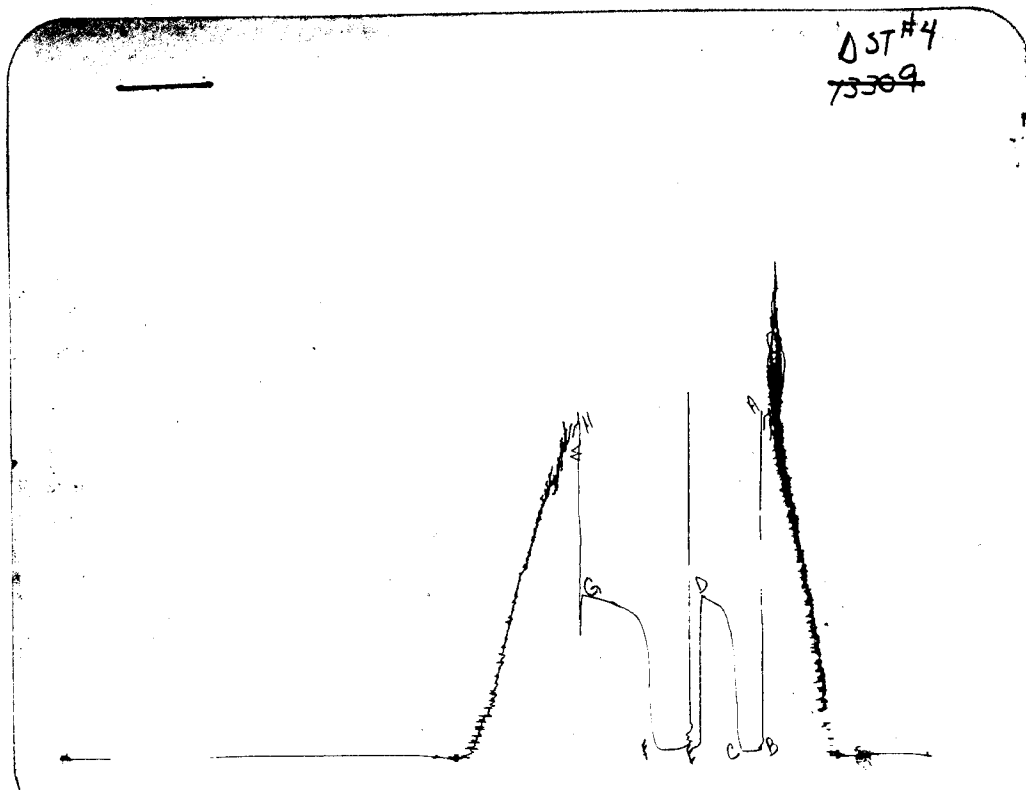
(E) Second Initial Flow Pressure 24.2 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 24.2 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-in Pressure 983.4 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 2070.4 PSI Initial Shut-in 30 Final Shut-in 60

Our Representative LEWAYNE TRESNER TOTAL PRICE \$ 600



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2078	2081.4
(B) FIRST INITIAL FLOW PRESSURE	10	11.1
(C) FIRST FINAL FLOW PRESSURE	10	11.1
(D) INITIAL CLOSED-IN PRESSURE	969	972.4
(E) SECOND INITIAL FLOW PRESSURE	20	24.2
(F) SECOND FINAL FLOW PRESSURE	20	24.2
(G) FINAL CLOSED-IN PRESSURE	979	983.4
(H) FINAL HYDROSTATIC MUD	2066	2070.4

TRILOBITE TESTING COMPANY, L.L.C.

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Test Ticket

No 4530

Well Name & No. <u>RUBY JEAN #1-34</u>	Test No. <u>#4</u>	Date <u>1-17-92</u>
Company <u>BEREXCO</u>	Zone Tested _____	
Address <u>970 FOURTH FINANCIAL CENTER, WICHITA</u>	Elevation _____	
Co. Rep./Geo. <u>CHARLIE SPRADLIN</u>	cont. <u>BEREXCO #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>34</u>	Twp. <u>22</u>	Rge. <u>34W</u> Co. <u>FINNEY</u> State <u>KANSAS</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 4294 - 4309 Drill Pipe Size 4 1/2" X HOLE
 Anchor Length 15' Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 4289 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4294 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4309 Drill Collar — 2.25 Ft. Run 609'
 Mud Wt. 9.0 lb/gal. Viscosity 50 Filtrate 7.6
 Tool Open @ 4:22 P.M. Initial Blow WEAK SURFACE BLOW, CONTINUED THROUGHOUT INITIAL FLOW
FSI - NO BLOW BACK ON SHUT IN
 Final Blow NO BLOW, FLUSH TOOL, GOOD SURGE, NO BLOW
FSI - NO BLOW

Recovery — Total Feet <u>10'</u>	Feet of Gas in Pipe _____	Flush Tool? <u>YES</u>
Rec. <u>10</u> Feet Of <u>DRUG MUD</u>	%gas _____ %oil _____ %water <u>100%</u> 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 123° °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 2700 ppm System

(A) Initial Hydrostatic Mud <u>2078</u>	PSI	AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>10</u>	PSI	@ (depth) <u>4299</u>	w/Clock No. <u>27566</u>
(C) First Final Flow Pressure <u>10</u>	PSI	AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>969</u>	PSI	@ (depth) <u>4304</u>	w/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure <u>20</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>20</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>979</u>	PSI	Initial Opening <u>15 MIN</u>	Test <u>X</u>
(H) Final Hydrostatic Mud <u>2066</u>	PSI	Initial Shut-In <u>30 MIN</u>	Jars _____

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Final Flow 30 MIN Safety Joint X
 Final Shut-In 60 MIN Straddle _____

Circ. Sub X N/C

Sampler _____

Approved By _____

Extra Packer _____

Our Representative Robyne Turner

Other _____

TOTAL PRICE \$ _____

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 5 Date 1/18/92
Company BEREXCO INC Zone Tested N/A
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN cont. BEREDCO RIG #1 Est. Ft. of Pay _____
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4326-4348 Drill Pipe Size 4.5 XH
Anchor Length 22 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4321 Drill Collar — 2.25 Ft. Run 609
Bottom Packer Depth 4326
Total Depth 4348

Mud Wt. 9 lb / gal. Viscosity 50 Filtrate 7.6

Tool Open @ 7:57 Initial Blow WEAK SURFACE BLOW-DIED OUT IN 12 MINUTES
ISI:NO BLOW

Final Blow WEAK SURFACE BLOW-CONTINUED THROUGHOUT FINAL FLOW
FSI:NO BLOW

Recovery — Total Feet 10 Flush Tool? NO

Rec. 10 Feet of GSY OIL CUT MUD-20%GAS/10%OIL/70%MUD

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT 123 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2145.5 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 32.2 PSI @ (depth) 4331 w/Clock No. 27566

(C) First Final Flow Pressure 32.2 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-In Pressure 1014.6 PSI @ (depth) 4345 w/Clock No. 7452

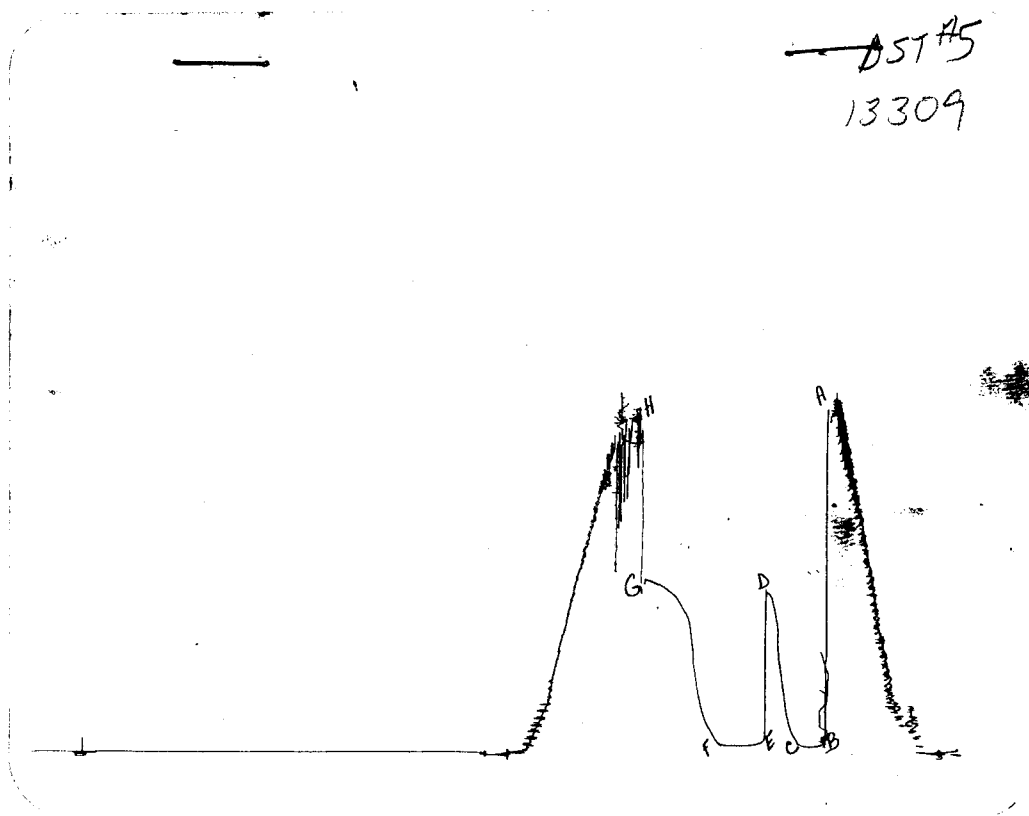
(E) Second Initial Flow Pressure 42.3 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 42.3 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 1074.5 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 2130.5 PSI Initial Shut-in 30 Final Shut-In 60

Our Representative LEWAYNE TRESNER TOTAL PRICE \$ 600



POINT This is an actual photograph of recorder chart PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2143	2145.5
(B) FIRST INITIAL FLOW PRESSURE	31	32.2
(C) FIRST FINAL FLOW PRESSURE	31	32.2
(D) INITIAL CLOSED-IN PRESSURE	1010	1014.6
(E) SECOND INITIAL FLOW PRESSURE	41	42.3
(F) SECOND FINAL FLOW PRESSURE	41	42.3
(G) FINAL CLOSED-IN PRESSURE	1070	1074.5
(H) FINAL HYDROSTATIC MUD	2123	2130.5

TRILOBITE TESTING COMPANY, L.L.C.

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Test Ticket

No 4531

Well Name & No. <u>RUBY JEAN #1-34</u>	Test No. <u>#5</u>	Date <u>1-18-92</u>
Company <u>BEREXCO</u>	Zone Tested _____	
Address <u>970 FOURTH FINANCIAL CENTER, WICHITA</u> Elevation _____		
Co. Rep./Geo. <u>CHARLIE SPRADLIN</u>	Cont. <u>BEREXCO #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>34</u>	Twp. <u>22</u>	Rge. <u>34W</u> Co. <u>FINNEY</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet <u>X</u> Yes _____ No _____	Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4326 - 4348</u>	Drill Pipe Size <u>4 1/2" x HOLE</u>
Anchor Length <u>22'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>4321</u>	Hole Size — 7 1/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4326</u>	Wt. Pipe I.D. — 2.7 Ft. Run —
Total Depth <u>4348</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>50</u> Filtrate <u>7.6</u>
Tool Open @ <u>7:57</u>	Initial Blow <u>WEAK SURFACE BLOW, DIED OUT (12 MIN)</u>
<u>ISI - NO BLOW</u>	
Final Blow <u>WEAK SURFACE BLOW, CONTINUED THROUGHOUT FINAL FLOW</u>	
<u>FSI - NO BLOW</u>	

Recovery — Total Feet <u>10'</u>	Feet of Gas in Pipe _____	Flush Tool? <u>NO</u>
Rec. <u>10'</u>	Feet Of <u>GOCM</u>	20% gas 10% oil %water 70% 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 123° °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud <u>2143</u>	PSI AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>31</u>	PSI @ (depth) <u>4331</u>	w/Clock No. <u>27566</u>
(C) First Final Flow Pressure <u>31</u>	PSI AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>1010</u>	PSI @ (depth) <u>4345</u>	w/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure <u>41</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>41</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1070</u>	PSI Initial Opening <u>15 MIN</u>	Test <u>X</u>
(H) Final Hydrostatic Mud <u>2123</u>	PSI Initial Shut-In <u>30 MIN</u>	Jars _____

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Final Flow 30 MIN Safety Joint X

Final Shut-In 60 MIN Straddle _____

Circ. Sub X N/C

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ _____

Approved By Charlie Spradlin

Our Representative Burkynne Turner

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 6 Date 1/18/92
Company BEREXCO INC Zone Tested PAWNEE
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay 6
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4358-4380 Drill Pipe Size 4.5 XH
Anchor Length 22 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 4353 Drill Collar — 2.25 Ft. Run 609
Bottom Packer Depth 4358
Total Depth 4380

Mud Wt. 9.1 lb / gal. Viscosity 54 Filtrate 5.2

Tool Open @ 9:26 Initial Blow TOOL OPENED-LOST MUD-TRIED TWICE

Final Blow PACKER FAILURE

Recovery — Total Feet Flush Tool? NO

Rec. Feet of

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 2000 ppm System

(A) Initial Hydrostatic Mud 2145.5 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure PSI @ (depth) 4363 w/Clock No. 27566

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

(D) Initial Shut-In Pressure PSI @ (depth) 4377 w/Clock No. 7452

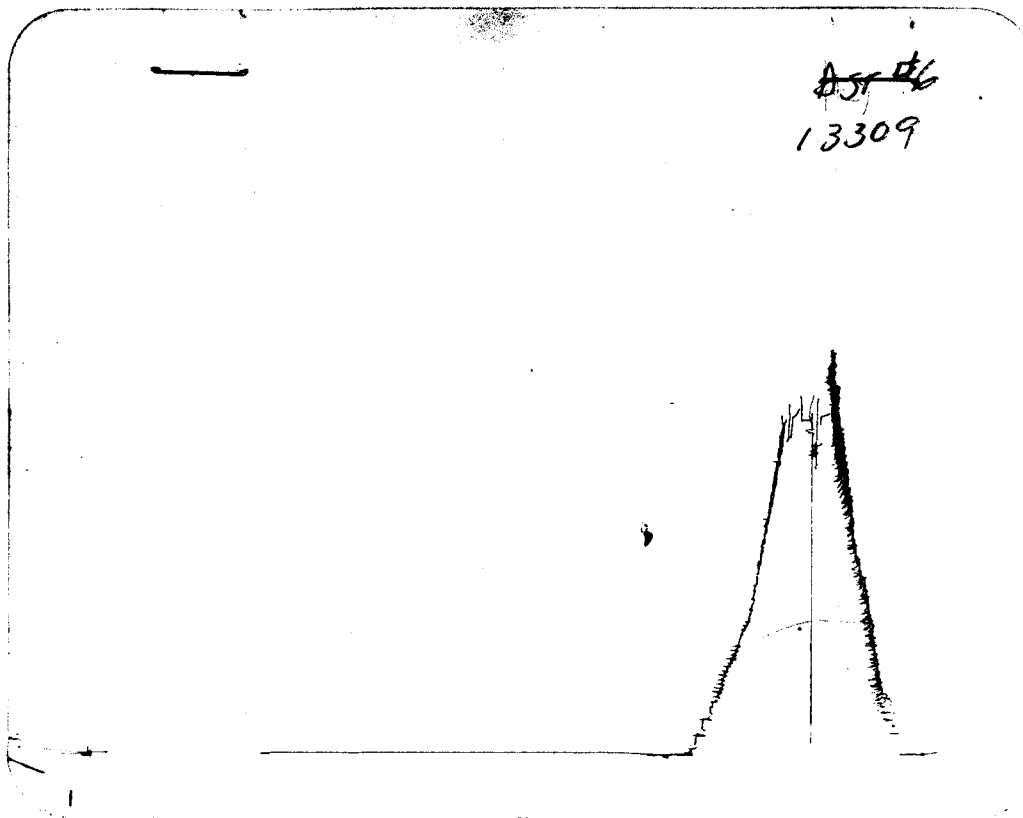
(E) Second Initial Flow Pressure PSI AK1 Recorder No. Range

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

(G) Final Shut-In Pressure PSI Initial Opening Final Flow

(H) Final Hydrostatic Mud 2115.5 PSI Initial Shut-in Final Shut-in

Our Representative LEWAYNE TRESNER TOTAL PRICE \$ 450



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2143	2145.5
(B) FIRST INITIAL FLOW PRESSURE		
(C) FIRST FINAL FLOW PRESSURE		
(D) INITIAL CLOSED-IN PRESSURE		
(E) SECOND INITIAL FLOW PRESSURE		
(F) SECOND FINAL FLOW PRESSURE		
(G) FINAL CLOSED-IN PRESSURE		
(H) FINAL HYDROSTATIC MUD	2113	2115.5

TRILOBITE TESTING COMPANY, L.L.C.

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Test Ticket

No 4532

Well Name & No. <u>RUBY JEAN</u>	Test No. <u>46</u>	Date <u>1-18-92</u>
Company <u>BEREXCO</u>	Zone Tested <u>PAWNEE</u>	
Address <u>970 FOMAH FINACIAL CENTER, WICHITA</u>	Elevation _____	
Co. Rep./Geo. <u>CHARLIE SPRADLIN</u>	Cont. <u>BEREXCO #1</u>	Est. Ft. of Pay <u>6'</u>
Location: Sec. <u>34</u> Twp. <u>22</u> Rge. <u>34W</u>	Co. <u>FINNEY</u>	State <u>KS</u>
No. of Copies _____	Distribution Sheet <u>X</u> Yes _____ No _____	Turnkey _____ Yes _____ No _____
Evaluation _____		

Interval Tested <u>4358 - 4380</u>	Drill Pipe Size <u>4 1/2" x HOLE</u>
Anchor Length <u>22'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4353</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4358</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4380</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>9.1</u> lb/gal.	Viscosity <u>54</u> Filtrate <u>5.2</u>
Tool Open @ <u>9:26</u>	Initial Blow <u>Tool OPENED, LOST MUD, TRIED TWICE</u>
Final Blow _____	<u>PACKER FAILURE</u>

Recovery — Total Feet _____	Feet of Gas In Pipe _____	Flush Tool? <u>N</u>
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 _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT _____ °F	Gravity _____ °API @ _____ °F	Corrected Gravity _____ °API
RW _____ @ _____ °F	Chlorides _____ ppm	Recovery Chlorides <u>2000</u> ppm
(A) Initial Hydrostatic Mud <u>2143</u>	PSI AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure _____	PSI @ (depth) <u>4363</u>	w/Clock No. <u>27566</u>
(C) First Final Flow Pressure _____	PSI AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure _____	PSI @ (depth) <u>4377</u>	w/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure _____	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure _____	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure _____	PSI Initial Opening _____	Test <u>X</u> <u>1215000</u>
(H) Final Hydrostatic Mud <u>2113</u>	PSI Initial Shut-In _____	Jars _____

TRILOBITE TESTING COMPANY 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 SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____	Safety Joint <u>X</u>
Final Shut-In _____	Straddle _____
	Circ. Sub <u>X</u> <u>N/C</u>
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ <u>47000</u>

Approved By Charles M. Spradlin

Our Representative Robynne Turner

TRILOBITE TESTING COMPANY, L.L.C

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 7 Date 1/19/92
Company BEREXCO INC Zone Tested PAWNEE
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay 6
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4348-4380
Anchor Length 32
Top Packer Depth 4343
Bottom Packer Depth 4348
Total Depth 4380

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run
Drill Collar — 2.25 Ft. Run 609

Mud Wt. 9.1 lb / gal. Viscosity 54 Filtrate 5.2

Tool Open @ 6:10 AM Initial Blow WEAK SURFACE BLOW-CONTINUED THROUGHOUT FLOW
ISI:NO BLOW
Final Blow WEAK SURFACE BLOW-DIED OUT IN 23 MINUTES
FSI:NO BLOW

Recovery — Total Feet 10 Flush Tool? NO

Rec. 10 Feet of DRILLING MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

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

RW @ °F Chlorides ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud 2030.4 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 42.3 PSI @ (depth) 4353 w/Clock No. 27566

(C) First Final Flow Pressure 42.3 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-In Pressure 1124.6 PSI @ (depth) 4377 w/Clock No. 7452

(E) Second Initial Flow Pressure 54.4 PSI AK1 Recorder No. Range

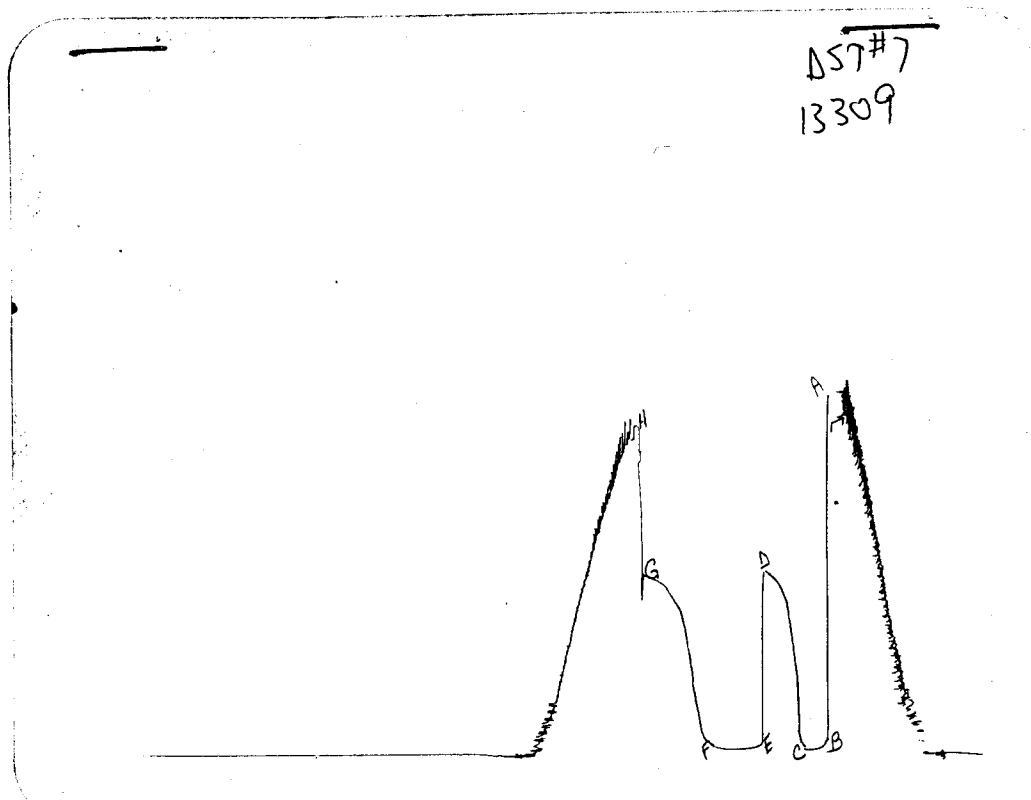
(F) Second Final Flow Pressure 54.4 PSI @ (depth) w/Clock No.

(G) Final Shut-In Pressure 1105.6 PSI Initial Opening 15 Final Flow 30

(H) Final Hydrostatic Mud 2015.4 PSI Initial Shut-In 30 Final Shut-In 60

Our Representative LEWAYNE TRESNER

TOTAL PRICE \$ 600



POINT This is an actual photograph of recorder chart PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2023	2030.4
(B) FIRST INITIAL FLOW PRESSURE	41	42.3
(C) FIRST FINAL FLOW PRESSURE	41	42.3
(D) INITIAL CLOSED-IN PRESSURE	1120	1124.6
(E) SECOND INITIAL FLOW PRESSURE	52	54.4
(F) SECOND FINAL FLOW PRESSURE	52	54.4
(G) FINAL CLOSED-IN PRESSURE	1100	1105.6
(H) FINAL HYDROSTATIC MUD	2013	2015.4

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4533

Well Name & No. <u>RUBY JEAN # 1-34</u>	Test No. <u>#7</u>	Date <u>1-17-92</u>
Company <u>BEREXCO</u>	Zone Tested <u>PAUNEE</u>	
Address <u>970 FOURTH FINANCIAL CENTER, WICHITA</u>	Elevation _____	
Co. Rep./Geo. <u>CHARLIE SPRADLIN</u>	cont. <u>BEREXCO #1</u>	Est. Ft. of Pay <u>6'</u>
Location: Sec. <u>34</u>	Twp. <u>22</u>	Rge. <u>34W</u> Co. <u>FINNEY</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet <u>X</u> Yes _____ No _____	Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4348-4380</u>	Drill Pipe Size <u>4 1/2" x HOLE</u>
Anchor Length <u>32'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>4343</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4348</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4380</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>9.1</u> lb/gal.	Viscosity <u>54</u> Filtrate <u>5.2</u>
Tool Open @ <u>6:10 A.M.</u>	Initial Blow <u>WEAK SURFACE BLOW, CONTINUED THROUGHOUT FLOW</u>
	<u>ISI - NO BLOW</u>
Final Blow <u>WEAK SURFACE BLOW, JIED OUT (23 MIN)</u>	
	<u>ESI - NO BLOW</u>

Recovery — Total Feet _____	Feet of Gas in Pipe _____	Flush Tool? <u>NO</u>
Rec. <u>10</u> Feet Of <u>DRUG MUD</u>	%gas _____ %oil _____ %water <u>100</u> %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 _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 2000 ppm System

(A) Initial Hydrostatic Mud <u>2023</u>	PSI	AK1 Recorder No. <u>13309</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>41</u>	PSI	@ (depth) <u>4353</u>	w/Clock No. <u>27566</u>
(C) First Final Flow Pressure <u>41</u>	PSI	AK1 Recorder No. <u>13339</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>1120</u>	PSI	@ (depth) <u>4377</u>	w/Clock No. <u>7452</u>
(E) Second Initial Flow Pressure <u>52</u>	PSI	AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>52</u>	PSI	@ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1100</u>	PSI	Initial Opening <u>15 min</u>	Test <u>X</u>
(H) Final Hydrostatic Mud <u>2013</u>	PSI	Initial Shut-In <u>30 min</u>	Jars _____

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Final Flow <u>30 min</u>	Safety Joint <u>X</u>
Final Shut-In <u>60 min</u>	Straddle _____
	Circ. Sub <u>X</u> <u>N/C</u>
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ _____

Approved By Charles B. Spradlin

Our Representative Quynne Turner

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 8 Date 1/19/92
Company BEREXCO INC Zone Tested FT SCOTT
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay 9
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4392-4420 Drill Pipe Size 4.5 XH
Anchor Length 28 Wt. Pipe I.D. - 2.7 Ft. Run
Top Packer Depth 4387 Drill Collar — 2.25 Ft. Run 609
Bottom Packer Depth 4392
Total Depth 4420

Mud Wt. 9 lb / gal. Viscosity 61 Filtrate 6

Tool Open @ 8:20 PM Initial Blow 1/4" BLOW BUILT TO 3.5"
ISI: BLED OFF BLOW-NO BLOW BACK
Final Blow STRONG BLOW-BUILT TO BOTTOM OF BUCKET IN 10 MINUTES
FSI: BLED OFF BLOW-NO BLOW BACK

Recovery — Total Feet 100 Flush Tool? NO

Rec. 900 Feet of GAS IN PIPE

Rec. 5 Feet of CLEAN GASSY OIL

Rec. 95 Feet of GSY OIL CUT MUD-70%GAS/5%OIL/25%MUD

Rec. Feet of

Rec. Feet of

BHT 120 °F Gravity 32 °API @ 58 °F Corrected Gravity 32 °API

RW @ °F Chlorides ppm Recovery Chlorides 3400 ppm System

(A) Initial Hydrostatic Mud 2196.7 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 89.6 PSI @ (depth) 4400 w/Clock No. 25828

(C) First Final Flow Pressure 91.8 PSI AK1 Recorder No. 5495 Range 4200

(D) Initial Shut-in Pressure 1074.5 PSI @ (depth) 4417 w/Clock No. 27594

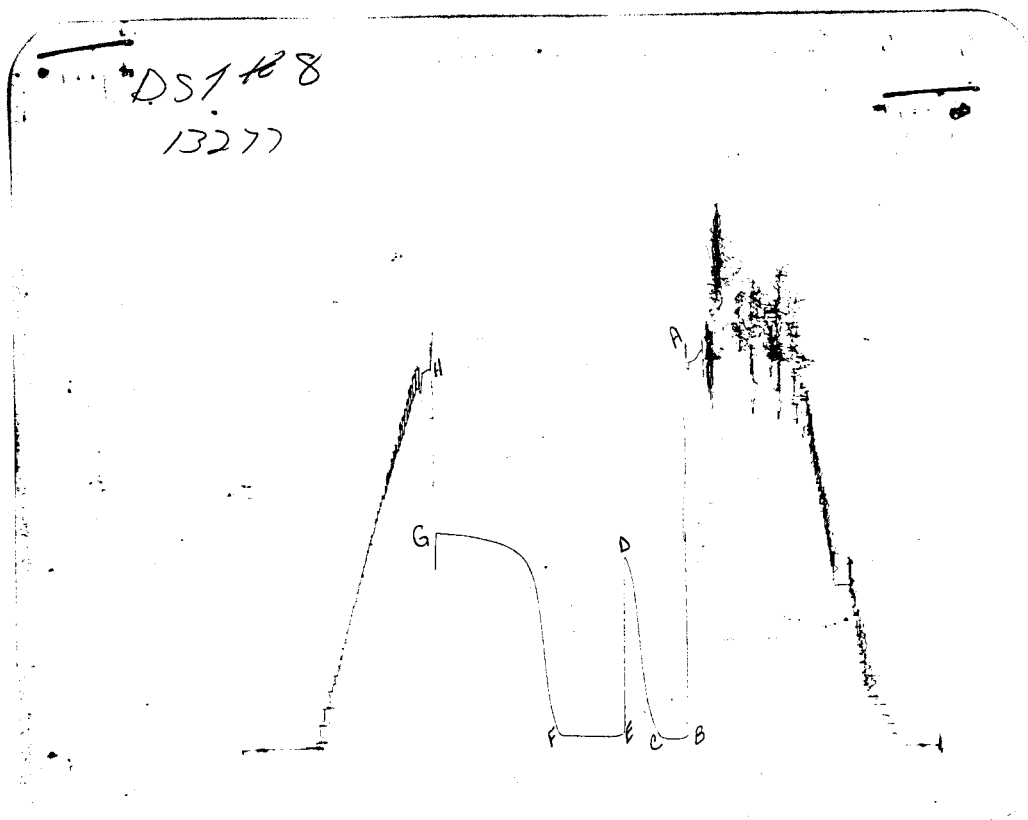
(E) Second Initial Flow Pressure 104.7 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 117.7 PSI @ (depth) w/Clock No.

(G) Final Shut-in Pressure 1216.3 PSI Initial Opening 15 Final Flow 45

(H) Final Hydrostatic Mud 2105.6 PSI Initial Shut-in 30 Final Shut-in 90

Our Representative TOM HORACEK TOTAL PRICE \$ 600

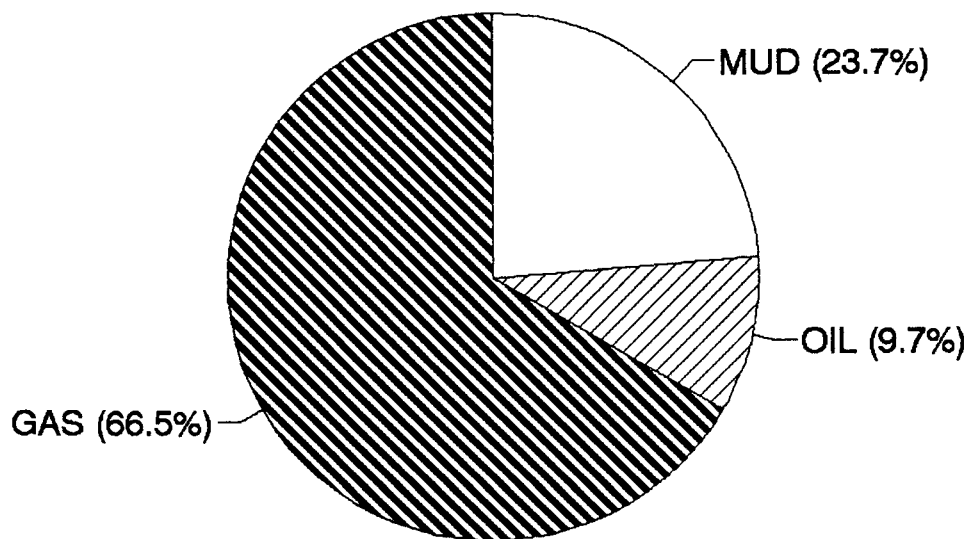


POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2184	2196.7
(B) FIRST INITIAL FLOW PRESSURE	86	89.6
(C) FIRST FINAL FLOW PRESSURE	86	91.8
(D) INITIAL CLOSED-IN PRESSURE	1070	1074.5
(E) SECOND INITIAL FLOW PRESSURE	108	104.7
(F) SECOND FINAL FLOW PRESSURE	108	117.7
(G) FINAL CLOSED-IN PRESSURE	1203	1216.3
(H) FINAL HYDROSTATIC MUD	2091	2105.6

CALCULATED RECOVERY ANALYSIS						DRILL COLLARS			
DST #	8					TICKET #	4421		
SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
1	5	0	0	100	5	0	0	0	0
2	95	70	66.5	5	4.75	0	0	25	23.75
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	100	66.5	66.5	9.75	9.75	0	0	23.75	23.75

HRS OPEN BBL/DAY
 BBL OIL= 0.047677 * 1 1.14426
 BBL WATER 0 * 0
 BBL MUD= 0.116137
 BBL GAS= 0.325185



INITIAL FLOW

REORDER # 13277
DST #8

DT(MIN)	PRESSURE	<> PRESSURE
0	89.6	89.6
3	90.7	1.099999
6	90.7	0
9	91.8	1.100006
12	91.8	0
15	91.8	0

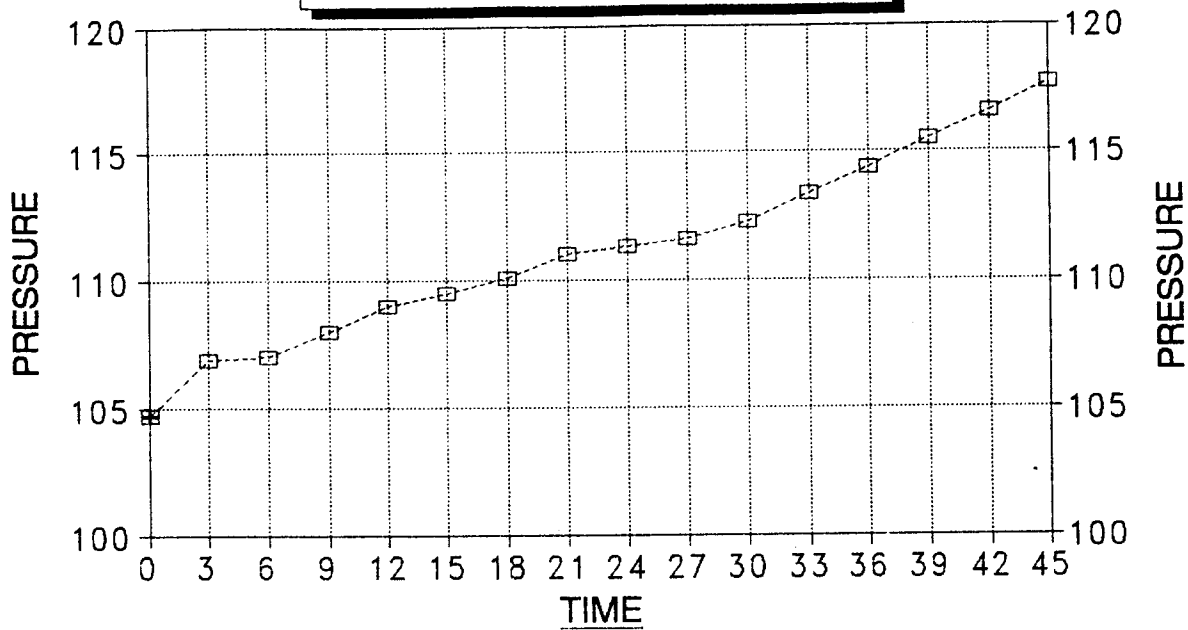
FINAL FLOW

REORDER # 13277
DST #8

DT(MIN)	PRESSURE	<> PRESSURE
0	104.7	104.7
3	106.9	2.200005
6	107	9.999848E-02
9	108	1
12	109	1
15	109.5	.5
18	110.1	.5999985
21	111	.9000015
24	111.3	.3000031
27	111.6	.2999954
30	112.3	.7000046
33	113.4	1.099999
36	114.4	1
39	115.5	1.099999
42	116.6	1.099999
45	117.7	1.099999

DELTA T DELTA P

FINAL FLOW - DST #8



---□--- RUBY JEAN #1-34

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 5.32032 BBL/DAY

RUBY JEAN #1-34 DST #8

INITIAL

SHUTIN

15 INITIAL FLOW TIME

Slope psi/cycle
P * psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
6	125.2	4	0.544	125.2
12	240.8	2	0.352	115.6
18	499.8	2	0.263	259.0
X 24	939.5	2	0.211	439.7
X 30	1074.5	2	0.176	135.0

RUBY JEAN #1-34 DST #8

FINAL

SHUTIN

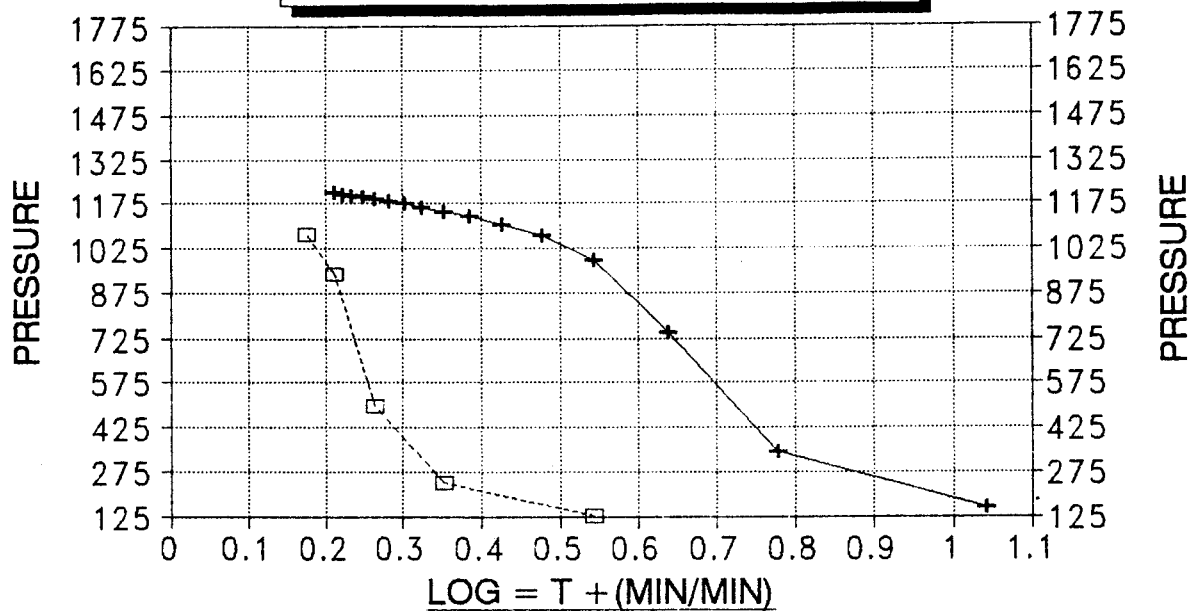
60 TOTAL FLOW TIME

Slope -389.40 psi/cycle
P * 1,296 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
6	158.7	11	1.041	158.7
12	342.3	6	0.778	183.6
18	742.8	4	0.637	400.5
24	987.6	4	0.544	244.8
30	1068.4	3	0.477	80.8
36	1108.3	3	0.426	39.9
42	1134.9	2	0.385	26.6
48	1151.2	2	0.352	16.3
54	1165.6	2	0.325	14.4
60	1174.8	2	0.301	9.2
66	1186.0	2	0.281	11.2
X 72	1193.2	2	0.263	7.2
78	1200.3	2	0.248	7.1
84	1204.4	2	0.234	4.1
90	1208.5	2	0.222	4.1
X 96	1213.6	2	0.211	5.1

HORNER PLOT

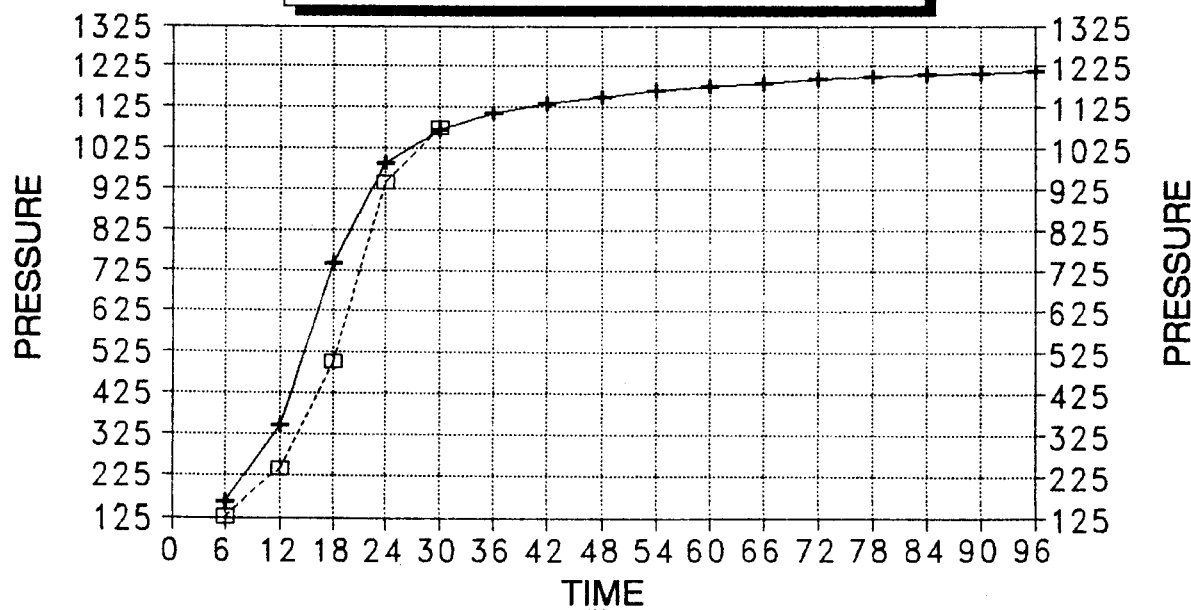
DST #8 / RUBY JEAN #1-34



---□--- INITIAL —+— FINAL

DELTA T DELTA P

DST #8 / RUBY JEAN #1-34



---□--- INITIAL —+— FINAL

#8 - Final Flow

0.097	104.76
0.099	106.92
0.1	107.0108
0.1	108
0.101	109.08
101	109.5
0.102	110.16
0.103	111.24
0.103	111.24.3
0.103	111.24.6
0.104	112.32
0.105	113.4
0.106	114.48
0.107	115.56
0.108	116.64
0.109	117.72

0.052	56.16
0.093	100.44
0.116	125.28
0.164	177.12
0.223	240.84
0.319	344.52
0.464	499.8728
0.693	735.6642
0.892	939.5258
0.974	1023.46
1.024	1074.597

I

0.109	117.72
0.147	158.76
0.317	342.36
0.7	742.8
0.939	987.6684
1.018	1068.45
1.057	1108.371
1.083	1134.944
1.099	1151.279
1.113	1165.61
1.122	1174.821
1.133	1186.073
1.14	1193.231
1.147	1200.387
1.151	1204.475
1.155	1208.563
1.16	1213.671

F

SPRUCO

WELL NAME Ruby Jean #1-34 DST # 8 RECORDER # 13277

INIT. HYD. MUD. _____ FINAL HYD. MUD 2.006

INITIAL FLOW		INITIAL SHUTIN		FINAL FLOW		FINAL SHUTIN	
MINUTES	INTERVAL	MINUTES	INTERVAL	MINUTES	INTERVAL	MINUTES	INTERVAL
<u>15</u>	<u>3</u>	<u>30</u>	<u>3</u>	<u>45</u>	<u>3</u>	<u>90</u>	<u>6</u>
.083	<u>.083 / 896</u>	<u>—</u>	<u>91.8</u>	1	<u>.1091</u>	<u>104.7</u>	<u>—</u>
	<u>.084 - 90.7</u>	<u>.693</u>		2	<u>.099</u>	<u>1147</u>	
	<u>" 90.7</u>	<u>.116</u>		3	<u>.100</u>	<u>.317</u>	
	<u>.085 91.8</u>	<u>.164</u>		4	<u>"</u>	<u>.700</u>	
	<u>91.8</u>	<u>.223</u>		5	<u>.161</u>	<u>.939</u>	
<u>.052</u>	<u>.085 / 91.8</u>	<u>.319</u>		6	<u>"</u>	<u>1.018</u>	
		<u>.464</u>		7	<u>.102</u>	<u>1.057</u>	
		<u>.693</u>		8	<u>.103</u>	<u>1.083</u>	
		<u>.892</u>		9	<u>.103</u>	<u>1.099</u>	
		<u>.974</u>		10	<u>.103</u>	<u>1.113</u>	
		<u>1.024</u>	<u>1074.5</u>	11	<u>.104</u>	<u>1.122</u>	
				12	<u>.105</u>	<u>1.133</u>	
				13	<u>.106</u>	<u>1.140</u>	
				14	<u>.107</u>	<u>1.147</u>	
				15	<u>.108</u>	<u>1.151</u>	
				16	<u>.109</u>	<u>1.155</u>	
				17		<u>1.160</u>	<u>1213 6</u>
				18			
				19			
				20			
				21			
				22			
				23			
				24			
				25			
				26			
				27			

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4421

Well Name & No. <u>Ruby Jean #1-34</u>	Test No. <u>#8</u>	Date <u>1-19-92</u>
Company <u>Berecvo Inc.</u>	Zone Tested <u>Ft. Scott</u>	
Address <u>970 4th Financial Center Wichita Ks. 67202</u>	Elevation <u>2960 (KB)</u>	
Co. Rep./Geo. <u>Charlie Spradlin</u>	cont. <u>Berecvo Drils #1</u>	Est. Ft. of Pay <u>9'</u>
Location: Sec. <u>34</u>	Twp. <u>22 S</u>	Rge. <u>34 W</u>
Co. <u>Finney</u>	State <u>Ks.</u>	
No. of Copies <u>310</u>	Distribution Sheet <u>X</u>	Yes <u> </u> No <u> </u> Turnkey <u> </u> Yes <u> </u> No <u> </u> Evaluation <u> </u>

Interval Tested <u>4392-4420</u>	Drill Pipe Size <u>4.5 x-Hole</u>
Anchor Length <u>28'</u>	Top Choke — 1" <u> </u> Bottom Choke — 3/4" <u> </u>
Top Packer Depth <u>4387</u>	Hole Size — 77/8" <u> </u> Rubber Size — 63/4" <u> </u>
Bottom Packer Depth <u>4392</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u> </u>
Total Depth <u>4420</u>	Drill Collar — 2.25 Ft. Run <u>609'</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>61</u> Filtrate <u>6.0</u>
Tool Open @ <u>8:20 pm</u> Initial Blow <u>1/4 in. blow built to 3 1/2 in.</u>	
<u>ISI - bled off blow - No blow back</u>	
Final Blow <u>strong blow - built to bottom of bucket in 10 min.</u>	
<u>FSI - bled off blow - No blow back</u>	

Recovery — Total Feet <u>100'</u>	Feet of Gas in Pipe <u>900'</u>	Flush Tool? <u>NO</u>
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Rec.	Feet Of	%gas	%oil	%water	%mud
Rec. <u>5'</u>	Feet Of <u>CGO</u>	%gas <u>100</u>	%oil <u> </u>	%water <u> </u>	%mud <u> </u>
Rec. <u>95'</u>	Feet Of <u>GOCM</u>	70 %gas <u>5</u>	%oil <u> </u>	%water <u>25</u>	%mud <u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u>	%water <u> </u>	%mud <u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas <u> </u>	%oil <u> </u>	%water <u> </u>	%mud <u> </u>

BHT <u>120</u> °F	Gravity <u>32</u>	°API @ <u>58</u>	°F Corrected Gravity <u>32</u>	°API <u> </u>
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RW <u> </u> @ <u> </u> °F	Chlorides <u> </u> ppm	Recovery Chlorides <u>3400</u>	ppm System <u> </u>
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(A) Initial Hydrostatic Mud <u>2184</u>	PSI	AK1 Recorder No. <u>13277</u>	Range <u>4125</u>
(B) First Initial Flow Pressure <u>86</u>	PSI	@ (depth) <u>4400</u>	w/Clock No. <u>25828</u>
(C) First Final Flow Pressure <u>86</u>	PSI	AK1 Recorder No. <u>5495</u>	Range <u>4200</u>
(D) Initial Shut-In Pressure <u>1070</u>	PSI	@ (depth) <u>4417</u>	w/Clock No. <u>27594</u>
(E) Second Initial Flow Pressure <u>108</u>	PSI	AK1 Recorder No. <u> </u>	Range <u> </u>
(F) Second Final Flow Pressure <u>108</u>	PSI	@ (depth) <u> </u>	w/Clock No. <u> </u>
(G) Final Shut-In Pressure <u>1203</u>	PSI	Initial Opening <u>15</u>	Test <u>X</u>
(H) Final Hydrostatic Mud <u>2091</u>	PSI	Initial Shut-In <u>30</u>	Jars <u> </u>

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Approved By Charles B. Spradlin

Our Representative Tom Horacek

Final Flow 45 Safety Joint X

Final Shut-In 90 Straddle

Circ. Sub

Sampler

Extra Packer

Other extra copies

TOTAL PRICE \$

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name RUBY JEAN #1-34 Test No. 9 Date 1/21/92
Company BEREXCO INC Zone Tested ST LOUIS
Address 970 FINANCIAL CENTER WICHITA KANSAS Elevation 2960 K.B.
Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #1 Est. Ft. of Pay 15
Location: Sec. 34 Twp. 22S Rge. 34W Co. FINNEY State KS

Interval Tested 4742-4768
Anchor Length 26
Top Packer Depth 4737
Bottom Packer Depth 4742
Total Depth 4768

Drill Pipe Size 4.5 XH
Wt. Pipe I.D. - 2.7 Ft. Run
Drill Collar — 2.25 Ft. Run 609

Mud Wt. 8.9 lb / gal. Viscosity 52 Filtrate 7.6

Tool Open @ 7:30 AM Initial Blow 1" BLOW -BUILT TO BOTTOM OF BUCKET IN 2 MIN
ISI: BLED OFF BLOW-WEAK BLOW-BUILT TO 2"
Final Blow 2" BLOW-BUILT TO BOTTOM OF BUCKET IN 1 MINUTE
FSI: BLED OFF BLOW-WEAK BLOW -BUILT TO BOTTOM IN 60 MIN

Recovery — Total Feet 1080 Flush Tool? NO

Rec. 3000 Feet of GAS IN PIPE

Rec. 1080 Feet of CLEAN GASSY OIL-30%GAS/70%OIL

Rec. Feet of

Rec. Feet of

Rec. Feet of
BHT 127 °F Gravity 27 °API @ 64 °F Corrected Gravity 26 °API

RW @ °F Chlorides ppm Recovery Chlorides 1800 ppm System

(A) Initial Hydrostatic Mud 2350.3 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 151.2 PSI @ (depth) 4745 w/Clock No. 25828

(C) First Final Flow Pressure 197.6 PSI AK1 Recorder No. 5495 Range 4200

(D) Initial Shut-in Pressure 1017.3 PSI @ (depth) 4765 w/Clock No. 3942

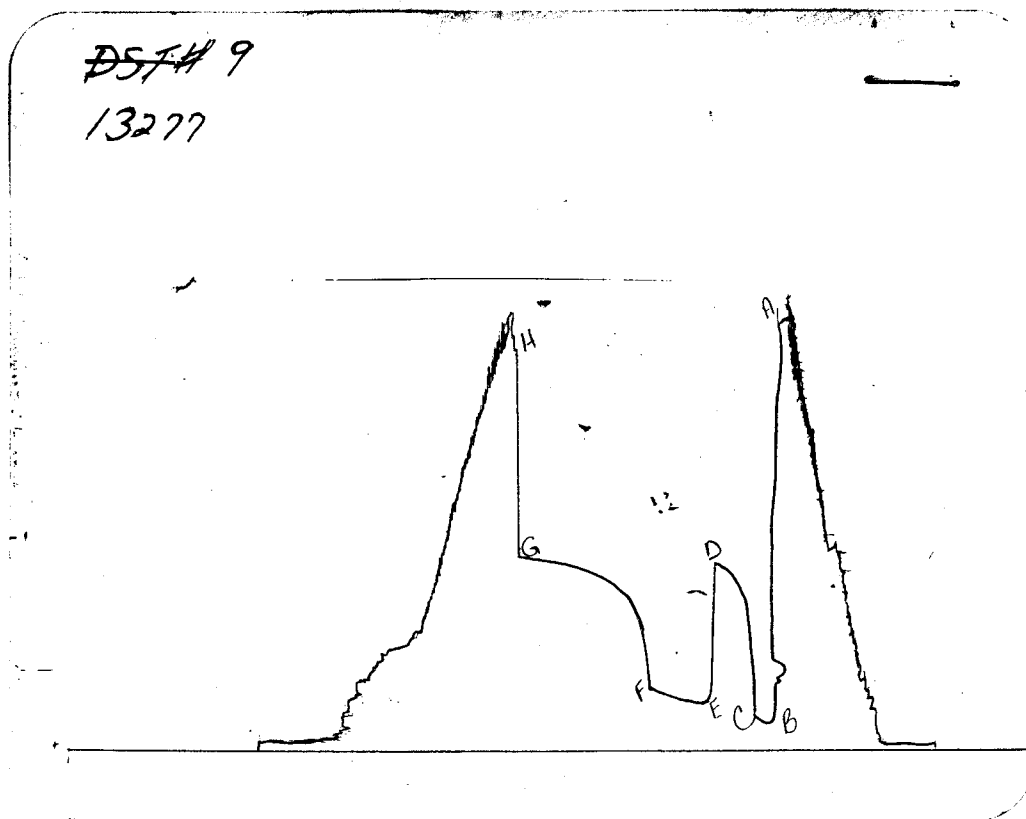
(E) Second Initial Flow Pressure 261.3 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 343.4 PSI @ (depth) w/Clock No.

(G) Final Shut-in Pressure 1048.9 PSI Initial Opening 15 Final Flow 45

(H) Final Hydrostatic Mud 2250.2 PSI Initial Shut-in 30 Final Shut-In 90

Our Representative TOM HORACEK TOTAL PRICE \$ 800



POINT This is an actual photograph of recorder chart
PRESSURE

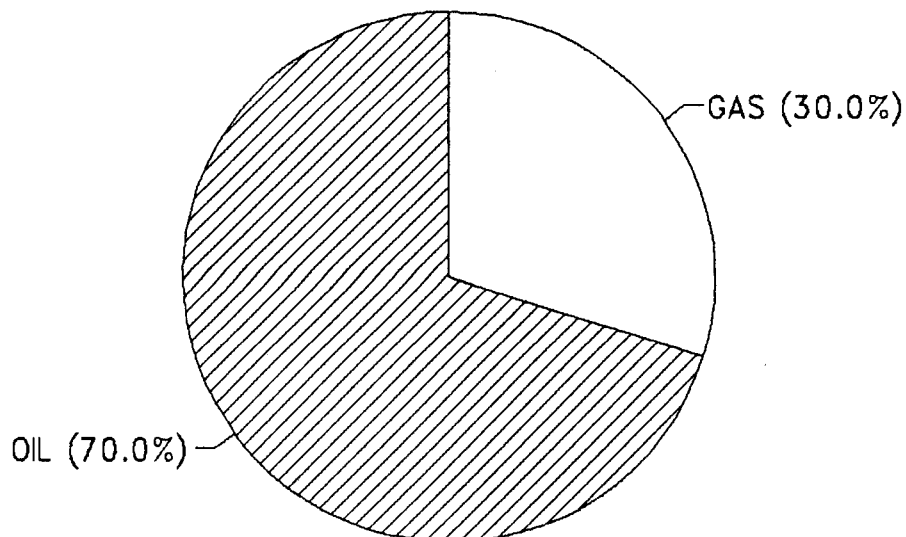
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2329	2350.3
(B) FIRST INITIAL FLOW PRESSURE	151	151.2
(C) FIRST FINAL FLOW PRESSURE	205	197.6
(D) INITIAL CLOSED-IN PRESSURE	1029	1017.3
(E) SECOND INITIAL FLOW PRESSURE	259	261.3
(F) SECOND FINAL FLOW PRESSURE	345	343.4
(G) FINAL CLOSED-IN PRESSURE	1060	1048.9
(H) FINAL HYDROSTATIC MUD	2246	2250.2

CALCULATED RECOVERY ANALYSIS

DST # 9 TICKET # 4422

SAMPLE #	TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL 1	471	30	141.3	70	329.7	0	0	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	609	30	182.7	70	426.3	0	0	0	0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1080		324		756		0		0

HRS OPEN BBL/DAY
 BBL OIL= 6.772941 * 1 162.551
 BBL WATER 0 * 0
 BBL MUD= 0
 BBL GAS =2.902689



COMPUTER EVALUATION BY TRILOBITE TESTING
BEREXCO INC
REPORT FOR DST#9 FOR THE RUBY JEAN #1-34
34-22S-34W FINNEY KANSAS

TEST PARAMETERS

ELEVATION:	2960 KB	EST. PAY:	15 FT
DATUM:	-1786	ZONE TESTED:	ST LOUIS
TEST INTERVAL:	4742-4768		
RECORDER DEPTH:	4745	TIME INTERVALS:	15-30-45-90
BOTTOM HOLE TEMP:	127	VISCOSITY:	12.55211 CP
		HOLE SIZE:	7.875 IN

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 239.5182

TOTAL FEET OF RECOVERY: 1080
BARRELS IN DRILL PIPE: 6.69762
BARRELS IN DRILL COLLARS: 2.97801
GAS OIL RATIO: 24.75479 CU.FT./BBL
BUBBLE POINT PRESSURE: ; .5722829
TOTAL BARRELS OF RECOVERY: 9.675629

UNCORR. INIT. PROD.: 232.2151 BBL/DAY

API GRAVITY: 26

FLUID GRADIENT: .389

CORRECTED PIPE FILLUP: 882.7764

CORR. BARRELS OF RECOVERY: 6.86007 BBL

INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 164.6417 BBL/DAY

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE

145.3968

INITIAL SLOPE 751.58 PSI/CYCLE

INITIAL P* 1150 PSI

FINAL SLOPE 486.29 PSI/CYCLE

FINAL P* 1142 PSI

TRANSMISSIBILITY	55.05097 (MD.-FT./CP.)
PERMEABILITY	46.06706 (MD.)
INDICATED FLOW CAPACITY	691.006 (MD.FT)
PRODUCTIVITY INDEX	.0622076 (BARRELS/DAY/PSI)
DAMAGE RATIO	.3005281
RADIUS OF INVESTIGATION	52.57398 (FT.)
POTENTIOMETRIC SURFACE	863.2981 (FT.)
DRAWDOWN FACTOR	.6956518 (%)

INITIAL FLOW

RECORDER # 13277

DST #9

DT(MIN)	PRESSURE	<> PRESSURE
0	151.2	151.2
3	153.3	2.100006
6	154.4	1.099991
9	157	2.600006
12	176	19
15	197.6	21.60001

FINAL FLOW

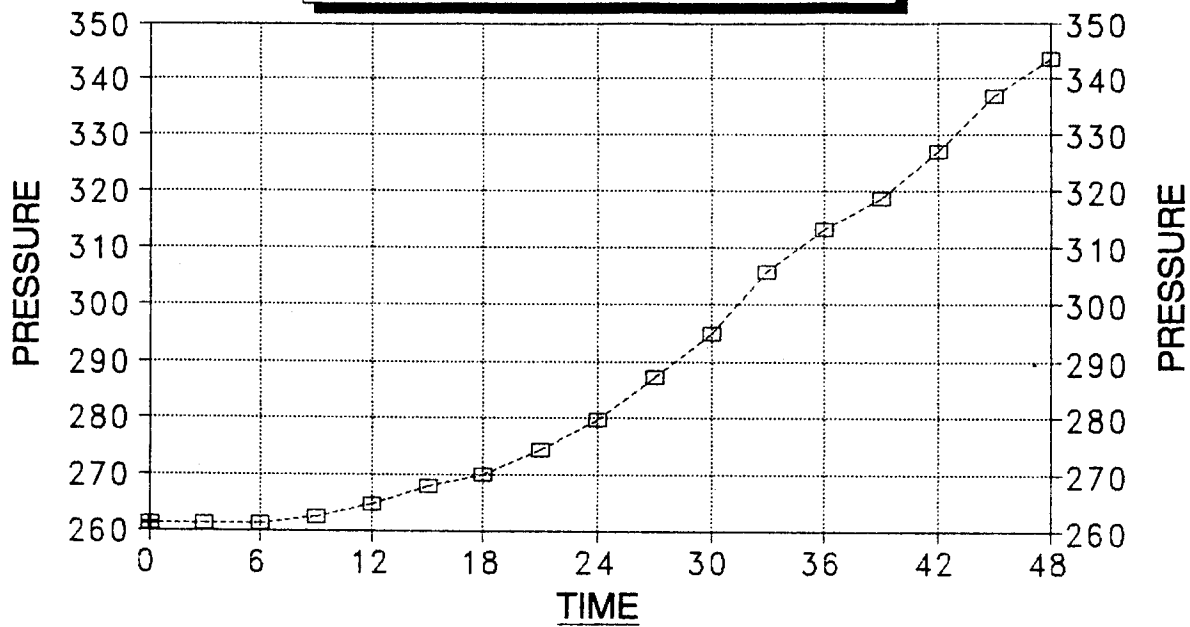
RECORDER # 13277

DST #9

DT(MIN)	PRESSURE	<> PRESSURE
0	261.3	261.3
3	261.3	0
6	261.3	0
9	262.4	1.100006
12	264.6	2.200012
15	267.8	3.199982
18	270	2.200012
21	274.3	4.299988
24	279.7	5.400025
27	287.2	7.5
30	294.8	7.599976
33	305.6	10.80002
36	313.2	7.600006
39	318.6	5.399994
42	327.2	8.600006
45	336.9	9.699982
48	343.4	6.5

DELTA T DELTA P

FINAL FLOW - DST #9



---□--- RUBY JEAN #1-34

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 145.3968 BBL/DAY

RUBY JEAN #1-34 DST #9
INITIAL SHUTIN

15 INITIAL FLOW TIME

Slope -751.58 psi/cycle
P * 1,150 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	6	713.1	4	0.544	713.1
	12	879.1	2	0.352	166.0
X	18	951.8	2	0.263	72.7
	24	992.7	2	0.211	40.9
X	30	1017.3	2	0.176	24.6

RUBY JEAN #1-34 DST #9
FINAL SHUTIN

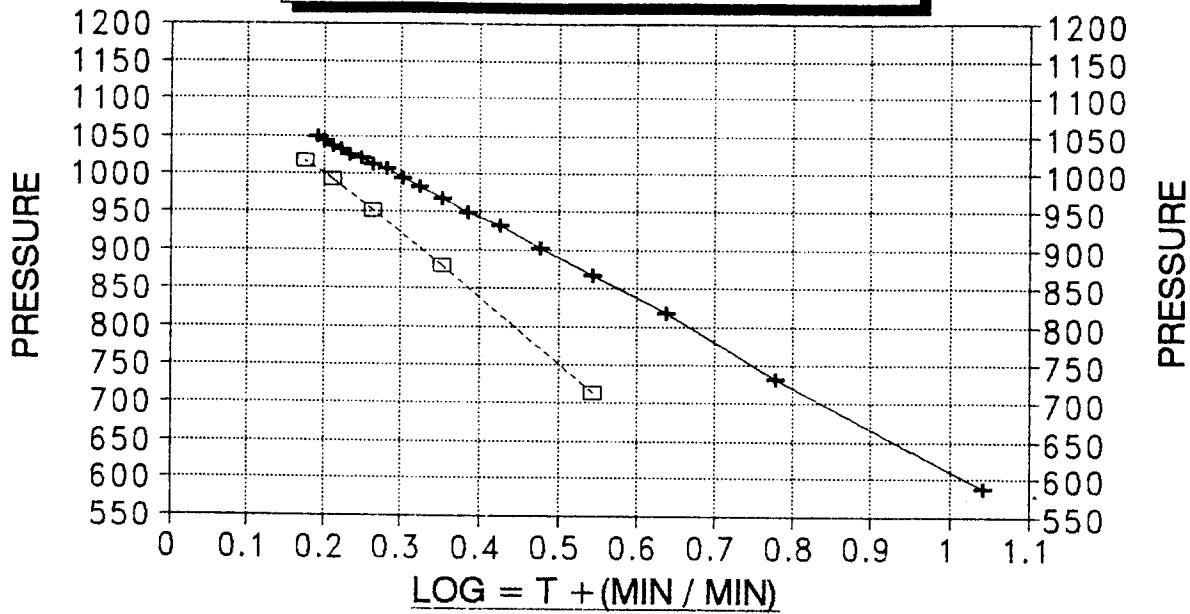
60 TOTAL FLOW TIME

Slope -486.29 psi/cycle
P * 1,142 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	6	588.2	11	1.041	588.2
	12	731.5	6	0.778	143.3
	18	818.6	4	0.637	87.1
	24	866.7	4	0.544	48.1
	30	903.7	3	0.477	37.0
	36	932.3	3	0.426	28.6
	42	949.7	2	0.385	-582.6
	48	968.2	2	0.352	618.5
	54	982.5	2	0.325	14.3
	60	995.8	2	0.301	13.3
	66	1007.1	2	0.281	11.3
X	72	1014.2	2	0.263	7.1
	78	1021.4	2	0.248	7.2
	84	1025.5	2	0.234	4.1
	90	1032.6	2	0.222	7.1
	96	1036.7	2	0.211	4.1
	102	1043.8	2	0.201	7.1
X	108	1048.9	2	0.192	5.1

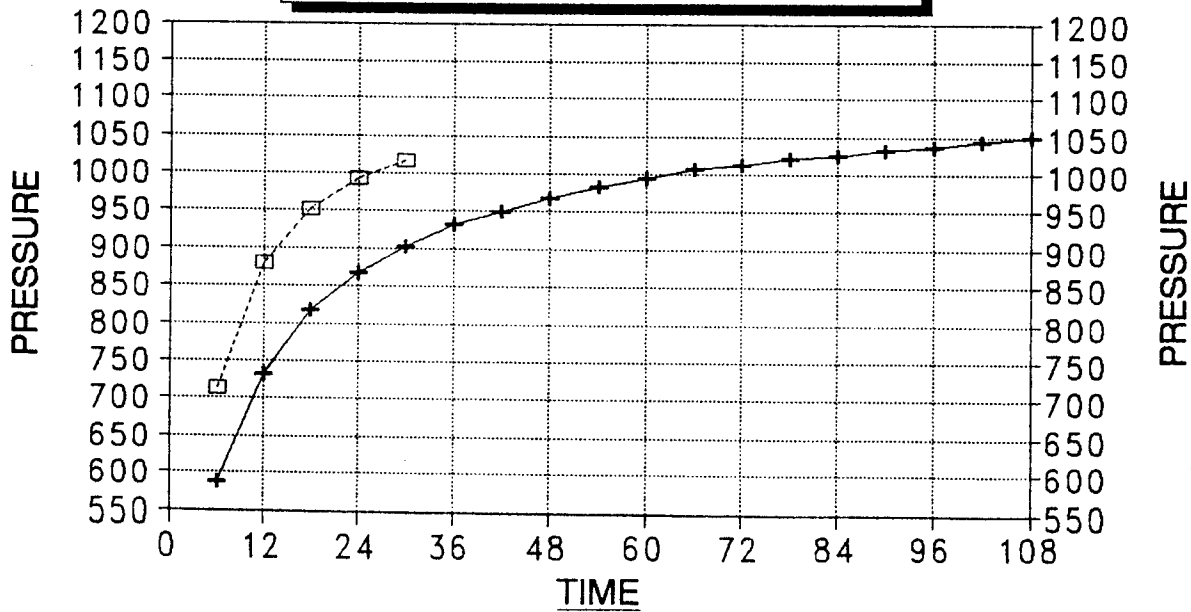
HORNER PLOT

DST #9 / RUBY JEAN #1-34



DELTA T DELTA P

DST #9 / RUBY JEAN #1-34



#9

Flow

0.14	151.2
0.142	153.36
0.143	154.44
0.146	157.68
0.163	176.04
0.183	197.64

0.242	261.36
0.242	261.36
0.242	261.36
0.243	262.44
0.245	264.6
0.248	267.84
0.25	270
0.254	274.32
0.259	279.72
0.266	287.28
0.273	294.84
0.283	305.64
0.29	313.2
0.295	318.6
0.303	327.24
0.312	336.96
0.318	343.44

Shut in

0.183	197.64
0.671	713.199
0.833	879.1024
0.904	951.8035
0.944	992.7859
0.968	1017.329

0.318	343.44
0.549	588.2917
0.689	731.584
0.774	818.6653
0.821	866.7831
0.857	903.7108
0.885	932.3696
0.902	949.7519
0.92	968.208
0.934	982.5493
0.947	995.8557
0.958	1007.107
0.965	1014.263
0.972	1021.416
0.976	1025.503
0.983	1032.651
0.987	1036.735
0.994	1043.879
0.999	1048.98

30000

WELL NAME Ruby Jean #134 DST # 9 RECORDER # 13277
2071 2257.6

INIT. HYD. MUD. _____ FINAL HYD. MUD _____
INITIAL FLOW INITIAL SHUTIN FINAL FLOW FINAL SHUTIN
MINUTES 15 MINUTES 30 MINUTES 45 MINUTES 90
INTERVAL 3 INTERVAL 3 INTERVAL 3 INTERVAL 6

.140	151.2	.183	-	1	.242	261.3	.318	-
.142		.503		2	.242		.549	
.143		.671		3	.242		.689	
.146		.768		4	.243		.774	
.162		.833		5	.245		.821	
.183	197.6	.874		6	.248		.857	
		.904		7	.250		.885	
		.922		8	.254		.902	
		.944		9	.259		.920	
		.958		10	.266		.934	
		.968	1017.3	11	.273		.947	
		.976		12	.283		.958	
				13	.290		.965	
				14	.295		.972	
				15	.303		.976	
				16	.312		.983	
				17	.318	343.4	.987	
				18			.994	
				19			.999	1048.9
				20				
				21				
				22				
				23				
				24				
				25				
				26				
				27				

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 4422

Well Name & No. <u>Ruby Jean</u>	<u>1-34</u>	Test No. <u>9</u>	Date <u>1-21-92</u>
Company <u>Berco Inc.</u>	Zone Tested <u>St. Louis</u>		
Address <u>970 4th Financial Center Wichita Ks. 67202</u>		Elevation <u>2960 (KB)</u>	
Co. Rep./Geo. <u>Charlie Spradlin</u>	Cont. <u>Berco Dr. #1</u>	Est. Ft. of Pay <u>15'</u>	
Location: Sec. <u>34</u>	Twp. <u>22 S</u>	Rge. <u>34 W</u>	Co. <u>Finney</u> State <u>Ks.</u>
No. of Copies _____	Distribution Sheet <u>X</u> Yes _____ No _____	Turnkey _____	Yes _____ No _____ Evaluation _____

Interval Tested <u>4742-4768</u>	Drill Pipe Size <u>4.5 x-Hole</u>
Anchor Length <u>26'</u>	Top Choke — 1" _____ Bottom Choke — ¾" _____
Top Packer Depth <u>4737</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4742</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>4768</u>	Drill Collar — 2.25 Ft. Run <u>609</u>
Mud Wt. <u>8.9</u> lb/gal.	Viscosity <u>52</u> Filtrate <u>7.6</u>
Tool Open @ <u>7:30 AM</u> Initial Blow <u>1 in blow - built to bottom of bucket 2 min.</u>	
<u>ISI - bled off blow - weak blow - built to 2 in.</u>	
Final Blow <u>2 in blow - built to bottom of bucket 1 min.</u>	
<u>FSI - bled off blow - weak blow - built to bottom of bucket in 60 min.</u>	
Recovery — Total Feet <u>1080</u>	Feet of Gas in Pipe <u>3000</u> Flush Tool? <u>NO</u>
Rec. _____ Feet Of _____	%gas _____ %Oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____ %Oil _____ %water _____ %mud _____
Rec. <u>1080</u> Feet Of <u>660</u>	<u>30</u> %gas <u>70</u> %Oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____ %Oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____ %Oil _____ %water _____ %mud _____
BHT <u>127</u> °F Gravity <u>27</u> °API @ <u>64</u>	°F Corrected Gravity <u>27</u> °API _____
RW _____ @ _____ °F Chlorides _____ ppm Recovery _____	Chlorides <u>1800</u> ppm System _____
(A) Initial Hydrostatic Mud <u>2329</u> PSI	AK1 Recorder No. <u>13277</u> Range <u>4125</u>
(B) First Initial Flow Pressure <u>151</u> PSI	@ (depth) <u>4745</u> W/Clock No. <u>25828</u>
(C) First Final Flow Pressure <u>205</u> PSI	AK1 Recorder No. <u>5495</u> Range <u>4200</u>
(D) Initial Shut-In Pressure <u>1029</u> PSI	@ (depth) <u>4765</u> W/Clock No. <u>3942</u>
(E) Second Initial Flow Pressure <u>259</u> PSI	AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure <u>345</u> PSI	@ (depth) _____ W/Clock No. _____
(G) Final Shut-In Pressure <u>1060</u> PSI	Initial Opening <u>15</u> Test <u>X</u>
(H) Final Hydrostatic Mud <u>2246</u> PSI	Initial Shut-In <u>30</u> Jars <u>X</u>

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Final Flow <u>45</u>	Safety Joint <u>X</u>
Final Shut-In <u>90</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____
	TOTAL PRICE \$ _____

Approved By Charlie Spradlin

Our Representative Tom Horack