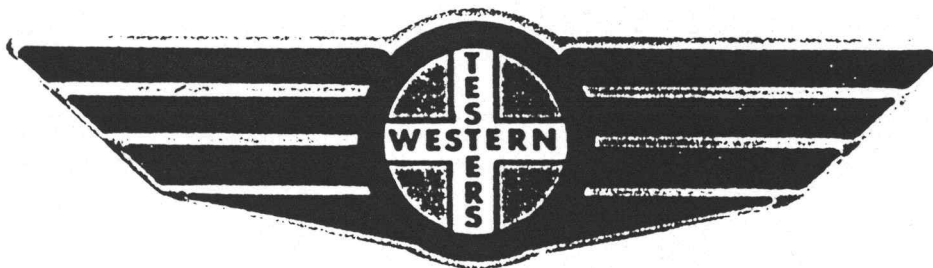


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY RINE EXPLORATION LEASE & WELL NO. BARTHOLOW #1-2 SEC. 2 TWP. 33S RGE. 12W TEST NO. 1 DATE 11/30/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	11-30-88	TICKET	:	14619
CUSTOMER	:	RINE EXPLORATION	LEASE	:	BARTHLOW
WELL	:	#1-2 TEST: 1	GEOLOGIST	:	McELROY
ELEVATION	:	-	FORMATION	:	DOUGLAS SD
SECTION	:	2	TOWNSHIP	:	33S
RANGE	:	12W	STATE	:	KANSAS
GAUGE SN#	:	13552	CLOCK	:	12
		COUNTY :	BARBER		
		RANGE :	4050		

INTERVAL FROM	:	3670	TO	:	3725	TOTAL DEPTH	:	3725
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	3665	SIZE	:	6.63			
PACKER DEPTH	:	3670	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE RIG 2			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	36
WEIGHT	:	9.4	WATER LOSS (CC)	:	12.8
CHLORIDES (PPM)	:	50000			
JARS-MAKE	:	-	SERIAL NUMBER	:	-
DID WELL FLOW ?	:	YES	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	210	FT	I.D. inch	:	2.70
DRILL PIPE LENGTH	:	3436	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	24	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	55	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT BOTH FLOW PERIODS.
BLOW COMMENT #2 : GAS TO SURFACE IN 12 MINUTES ON THE FINAL FLOW.
BLOW COMMENT #3 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #4 :

RECOVERED : 390 FT OF: HEAVY GAS CUT MUDDY WATER
(SCUNM OF OIL)(50% GAS)(40% WTR)
RECOVERED : 120 FT OF: SLIGHTLY OIL CUT MUDDY WATER
(2% OIL)(10% GAS)(70% WTR)

CHLORIDES: 85000 PPM

Total Barrels Fluid = 5.69
Total Fluid Prod Rate = 109.34 BFPD
Indicated Oil Rate = 7.72 BOPD
Indicated Wtr Rate = 25.73 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 4:15 AM
WELL TEMPERATURE : 122
INITIAL HYDROSTATIC PRESSURE (A) 1967
INITIAL FLOW PERIOD MIN: 30 (B) 168 PSI TO (C) : 168
INITIAL CLOSED IN PERIOD MIN: 60 (D) 809
FINAL FLOW PERIOD MIN: 45 (E) 209 PSI TO (F) : 209
FINAL CLOSED IN PERIOD MIN: 87 (G) 649
FINAL HYDROSTATIC PRESSURE (H) 1920

TIME STARTED OFF BOTTOM : 8:00 AM

GAS FLOW REPORT

Date : 11-30-88	Ticket # : 14619
Customer : RINE EXPLORATION	Lease : BARTHOLOW
Well : #1-2	Geologist : McELORY
Test : 1	
Elevation (KB) : -	Formation : DOUGLAS SD
Section : 2	Township : 33S
Range : 12W	County : BARBER
Gauge SN # : 13552	State : KANSAS
	Range : 4050
	Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
---------------------	-------------	----------------	-------------------	------------------

PRE FLOW
=====

SECOND FLOW
=====

15	MERLA	1/4"	1" of WTR	1680 CFPD
25			4	3370 CFPD
35			7	4450 CFPD
45			7	4450 CFPD

Gas Bottle SN # :
Date Bottle Filled :
Date to be Invoiced :

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RINE EXPLORATION
RIG : BARBER-KANSAS
FIELD : BARTHOLOW
WELL : #1-2
DATE : 11-30-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 30/11/88

FIELD : BARTHOLOW
JOB # : 14619
DEPTH : 3725
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	4:15: 0	0.000	168.000	122.00	0.000
3	4:19:59	0.083	168.000	122.00	0.000
4	4:25: 0	0.167	168.000	122.00	0.000
5	4:30: 0	0.250	168.000	122.00	0.000
6	4:34:59	0.333	168.000	122.00	0.000
7	4:40: 0	0.417	168.000	122.00	0.000
8	4:45: 0	0.500	168.000	122.00	0.000
INITIAL SHUT-IN					
9	4:48: 0	0.550	174.000	122.00	6.000
10	4:51: 0	0.600	187.000	122.00	13.000
11	4:54: 0	0.650	210.000	122.00	23.000
12	4:57: 0	0.700	239.000	122.00	29.000
13	5: 0: 0	0.750	268.000	122.00	29.000
14	5: 3: 0	0.800	301.000	122.00	33.000
15	5: 6: 0	0.850	336.000	122.00	35.000
16	5: 9: 0	0.900	374.000	122.00	38.000
17	5:12: 0	0.950	408.000	122.00	34.000
18	5:15: 0	1.000	450.000	122.00	42.000
19	5:18: 0	1.050	483.000	122.00	33.000
20	5:21: 0	1.100	521.000	122.00	38.000
21	5:24: 0	1.150	562.000	122.00	41.000
22	5:27: 0	1.200	601.000	122.00	39.000
23	5:30: 0	1.250	644.000	122.00	43.000
24	5:33: 0	1.300	681.000	122.00	37.000
25	5:36: 0	1.350	717.000	122.00	36.000
26	5:39: 0	1.400	750.000	122.00	33.000
27	5:42: 0	1.450	779.000	122.00	29.000
28	5:45: 0	1.500	809.000	122.00	30.000
FINAL FLOW					
29	5:46: 0	1.517	209.000	122.00	-600.000
30	5:49:59	1.583	209.000	122.00	0.000
31	5:55: 0	1.667	209.000	122.00	0.000
32	6: 0: 0	1.750	209.000	122.00	0.000
33	6: 4:59	1.833	209.000	122.00	0.000
34	6:10: 0	1.917	209.000	122.00	0.000
35	6:15: 0	2.000	209.000	122.00	0.000
36	6:19:59	2.083	209.000	122.00	0.000
37	6:25: 0	2.167	209.000	122.00	0.000
38	6:30: 0	2.250	209.000	122.00	0.000
FINAL SHUT-IN					
39	6:33: 0	2.300	211.000	122.00	2.000
40	6:36: 0	2.350	220.000	122.00	9.000
41	6:39: 0	2.400	234.000	122.00	14.000
42	6:42: 0	2.450	250.000	122.00	16.000
43	6:45: 0	2.500	267.000	122.00	17.000
44	6:48: 0	2.550	284.000	122.00	17.000
45	6:51: 0	2.600	299.000	122.00	15.000
46	6:54: 0	2.650	314.000	122.00	15.000
47	6:57: 0	2.700	331.000	122.00	17.000
48	7: 0: 0	2.750	349.000	122.00	18.000

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 30/11/88

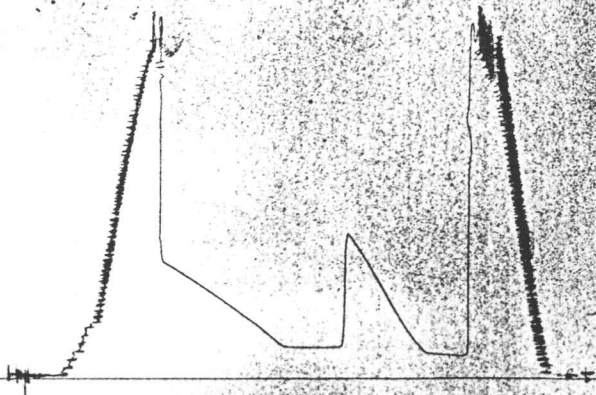
FIELD : BARTHOLOW
JOB # : 14619
DEPTH : 3725
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	7: 3: 0	2.800	365.000	122.00	16.000
50	7: 6: 0	2.850	381.000	122.00	16.000
51	7: 9: 0	2.900	399.000	122.00	18.000
52	7:12: 0	2.950	414.000	122.00	15.000
53	7:15: 0	3.000	430.000	122.00	16.000
54	7:18: 0	3.050	446.000	122.00	16.000
55	7:21: 0	3.100	463.000	122.00	17.000
56	7:24: 0	3.150	481.000	122.00	18.000
57	7:27: 0	3.200	495.000	122.00	14.000
58	7:30: 0	3.250	509.000	122.00	14.000
59	7:33: 0	3.300	526.000	122.00	17.000
60	7:36: 0	3.350	542.000	122.00	16.000
61	7:39: 0	3.400	559.000	122.00	17.000
62	7:42: 0	3.450	576.000	122.00	17.000
63	7:45: 0	3.500	589.000	122.00	13.000
64	7:48: 0	3.550	604.000	122.00	15.000
65	7:51: 0	3.600	617.000	122.00	13.000
66	7:54: 0	3.650	631.000	122.00	14.000
67	7:57: 0	3.700	649.000	122.00	18.000

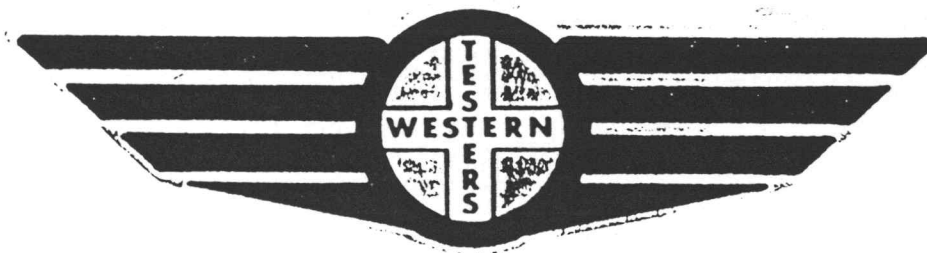
WESTERN TESTING CO. INC.

JKt # 14619

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY RINE EXPLORATION LEASE & WELL NO. BARTHOLOW #1-2 SEC. 2 TWP. 33S RGE. 12W TEST NO. 2 DATE 11/30/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	11-30-88	TICKET	:	14620
CUSTOMER	:	RINE EXPLORATION	LEASE	:	BARTHOLOW
WELL	:	#1-2 TEST: 2	GEOLOGIST	:	McELROY
ELEVATION	:	1464 KB	FORMATION	:	LANSING
SECTION	:	2	TOWNSHIP	:	33S
RANGE	:	12W	STATE	:	KANSAS
GAUGE SN#	:	13552	CLOCK	:	12
		COUNTY :	BARBER		
		RANGE :	4050		

INTERVAL FROM	:	3770	TO	:	3788	TOTAL DEPTH	:	3788
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	3765	SIZE	:	6.63			
PACKER DEPTH	:	3770	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE RIG 2			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	38
WEIGHT	:	9.5	WATER LOSS (CC)	:	13.2
CHLORIDES (PPM)	:	48000			
JARS-MAKE	:	-	SERIAL NUMBER	:	-
DID WELL FLOW ?	:	YES	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	240	FT	I.D. inch	:	2.70
DRILL PIPE LENGTH	:	3506	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	24	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	18	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT BOTH FLOW PERIODS.
BLOW COMMENT #2 : GAS TO SURFACE IN 1 MINUTE ON THE INITIAL FLOW.
BLOW COMMENT #3 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #4 :

RECOVERED : 20 FT OF: OIL & GAS CUT MUD
30% OIL-6% GAS
RECOVERED : 50 FT OF: GAS CUT MUDDY OIL
80% OIL-10% GAS

Total Barrels Fluid = 0.50
Total Fluid Prod Rate = 10.20 BFPD
Indicated Oil Rate = 6.70 BOPD
Indicated Wtr Rate = 0.17 BWPD
Corrected Oil Rate = 99.94 BOPD
Corrected Wtr Rate = 2.61 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 6:30 PM

TIME STARTED OFF BOTTOM : 10:10 PM

WELL TEMPERATURE : 123

INITIAL HYDROSTATIC PRESSURE

(A) 2014

INITIAL FLOW PERIOD MIN: 30

(B) 508 PSI TO (C) : 284

INITIAL CLOSED IN PERIOD MIN: 60

(D) 1398

FINAL FLOW PERIOD MIN: 40

(E) 436 PSI TO (F) : 254

FINAL CLOSED IN PERIOD MIN: 90

(G) 1398

FINAL HYDROSTATIC PRESSURE

(H) 1993

GAS FLOW REPORT

Date : 11-30-88 Ticket # : 14620
 Customer : RINE EXPLORATION Lease : BARTHOLOW
 Well : #1-2 Test : 2 Geologist : McELROY
 Elevation (KB) : 1464 Formation : LANSING
 Section : 2 Township : 33S
 Range : 12W County : BARBER State : KANSAS
 Gauge SN # : 13552 Range : 4050 Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

=====

5	MERLA	1 1/2"	9	1198000 CFPD
10			6	953000 CFPD
20			4	764000 CFPD
30			4	764000 CFPD

SECOND FLOW

=====

5	MERLA	1 1/2"	8	1123000 CFPD
15			5	863000 CFPD
25			4	764000 CFPD
35			3	654000 CFPD
40			3	654000 CFPD

Gas Bottle SN # : NO
 Date Bottle Filled :
 Date to be Invoiced :

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RINE EXPLORATION
RIG : BARBER-KANSAS
FIELD : BARTHOLOW
WELL : #1-2
DATE : 11-30-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 30/11/88

FIELD : BARTHOLOW
JOB # : 14620
DEPTH : 3788
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	6:30: 0	0.000	508.000	123.00	0.000
3	6:34:59	0.083	386.000	123.00	-122.000
4	6:40: 0	0.167	345.000	123.00	-41.000
5	6:45: 0	0.250	325.000	123.00	-20.000
6	6:49:59	0.333	304.000	123.00	-21.000
7	6:55: 0	0.417	294.000	123.00	-10.000
8	7: 0: 0	0.500	284.000	123.00	-10.000
INITIAL SHUT-IN					
9	7: 3: 0	0.550	882.000	123.00	598.000
10	7: 6: 0	0.600	1024.000	123.00	142.000
11	7: 9: 0	0.650	1105.000	123.00	81.000
12	7:12: 0	0.700	1155.000	123.00	50.000
13	7:15: 0	0.750	1186.000	123.00	31.000
14	7:18: 0	0.800	1206.000	123.00	20.000
15	7:21: 0	0.850	1236.000	123.00	30.000
16	7:24: 0	0.900	1246.000	123.00	10.000
17	7:27: 0	0.950	1267.000	123.00	21.000
18	7:30: 0	1.000	1287.000	123.00	20.000
19	7:33: 0	1.050	1307.000	123.00	20.000
20	7:36: 0	1.100	1317.000	123.00	10.000
21	7:39: 0	1.150	1327.000	123.00	10.000
22	7:42: 0	1.200	1348.000	123.00	21.000
23	7:45: 0	1.250	1358.000	123.00	10.000
24	7:48: 0	1.300	1368.000	123.00	10.000
25	7:51: 0	1.350	1378.000	123.00	10.000
26	7:54: 0	1.400	1388.000	123.00	10.000
27	7:57: 0	1.450	1388.000	123.00	0.000
28	8: 0: 0	1.500	1398.000	123.00	10.000
FINAL FLOW					
29	8: 1: 0	1.517	436.000	123.00	-962.000
30	8: 4:59	1.583	335.000	123.00	-101.000
31	8:10: 0	1.667	304.000	123.00	-31.000
32	8:15: 0	1.750	284.000	123.00	-20.000
33	8:19:59	1.833	274.000	123.00	-10.000
34	8:25: 0	1.917	264.000	123.00	-10.000
35	8:30: 0	2.000	254.000	123.00	-10.000
36	8:34:59	2.083	254.000	123.00	0.000
37	8:40: 0	2.167	254.000	123.00	0.000
FINAL SHUT-IN					
38	8:43: 0	2.217	953.000	123.00	699.000
39	8:46: 0	2.267	1034.000	123.00	81.000
40	8:49: 0	2.317	1085.000	123.00	51.000
41	8:52: 0	2.367	1105.000	123.00	20.000
42	8:55: 0	2.417	1145.000	123.00	40.000
43	8:58: 0	2.467	1165.000	123.00	20.000
44	9: 1: 0	2.517	1186.000	123.00	21.000
45	9: 4: 0	2.567	1206.000	123.00	20.000
46	9: 7: 0	2.617	1226.000	123.00	20.000
47	9:10: 0	2.667	1246.000	123.00	20.000
48	9:13: 0	2.717	1267.000	123.00	21.000

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 30/11/88

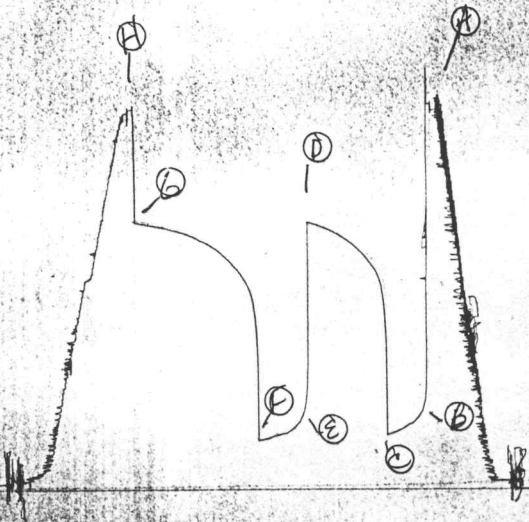
FIELD : BARTHOLOW
JOB # : 14620
DEPTH : 3788
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	9:16: 0	2.767	1277.000	123.00	10.000
50	9:19: 0	2.817	1287.000	123.00	10.000
51	9:22: 0	2.867	1297.000	123.00	10.000
52	9:25: 0	2.917	1307.000	123.00	10.000
53	9:28: 0	2.967	1327.000	123.00	20.000
54	9:31: 0	3.017	1338.000	123.00	11.000
55	9:34: 0	3.067	1338.000	123.00	0.000
56	9:37: 0	3.117	1348.000	123.00	10.000
57	9:40: 0	3.167	1358.000	123.00	10.000
58	9:43: 0	3.217	1358.000	123.00	0.000
59	9:46: 0	3.267	1358.000	123.00	0.000
60	9:49: 0	3.317	1368.000	123.00	10.000
61	9:52: 0	3.367	1368.000	123.00	0.000
62	9:55: 0	3.417	1378.000	123.00	10.000
63	9:58: 0	3.467	1388.000	123.00	10.000
64	10: 1: 0	3.517	1388.000	123.00	0.000
65	10: 4: 0	3.567	1398.000	123.00	10.000
66	10: 7: 0	3.617	1398.000	123.00	0.000
67	10:10: 0	3.667	1398.000	123.00	0.000

WESTERN TESTING CO. INC.

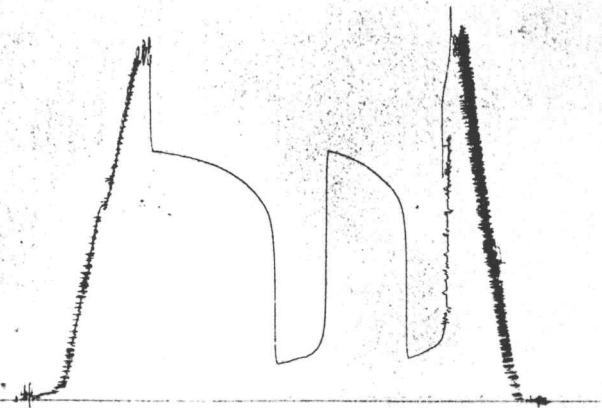
JK # 14620

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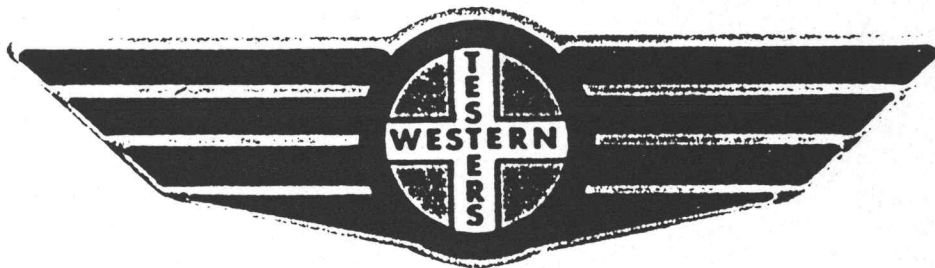


Lkt # 14620,

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY

RINE EXPLORATION

LEASE & WELL NO.

BARTHOLOW #1-2

SEC. 2

TWP. 33S

RGE. 12W

TEST NO. 3

DATE

12/2/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	12-02-88	TICKET	:	14621
CUSTOMER	:	RINE EXPLORATION	LEASE	:	BARTHOLOW
WELL	:	#1-2	TEST:	:	3
ELEVATION	:	1464 KB	GEOLOGIST	:	McELORY
SECTION	:	2	FORMATION	:	-
RANGE	:	12W	COUNTY	:	BARBER
GAUGE SN#	:	13552	RANGE	:	4050
			STATE	:	KANSAS
			CLOCK	:	12

INTERVAL FROM	:	4173	TO	:	4187	TOTAL DEPTH	:	4187
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4168	SIZE	:	6.63			
PACKER DEPTH	:	4173	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE RIG 2			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	38
WEIGHT	:	9.6	WATER LOSS (CC)	:	15.2
CHLORIDES (PPM)	:	45000			
JARS-MAKE	:	-	SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	240	FT	I.D. inch	:	2.70
DRILL PIPE LENGTH	:	3909	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	24	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	14	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 FH

BLOW COMMENT #1 : WEAK BLOW THROUGHOUT FLOW PERIODS.
BLOW COMMENT #2 :
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 90 FT OF: GAS CUT WATERY MUD
(20% WTR)(SCUM OF OIL)

Total Barrels Fluid = 0.64
Total Fluid Prod Rate = 15.30 BFPD
Indicated Wtr Rate = 3.40 BWPD

REMARK 1 :
REMARK 2 : RECOVERED 60 FEET OF GAS ABOVE FLUID.
REMARK 3 :
REMARK 4 :

SET PACKER(S) :	6:30 AM	TIME STARTED OFF BOTTOM :	8:30 AM
WELL TEMPERATURE :	123		
INITIAL HYDROSTATIC PRESSURE		(A)	2200
INITIAL FLOW PERIOD MIN:	30	(B)	79 PSI TO (C) : 79
INITIAL CLOSED IN PERIOD MIN:	30	(D)	1557
FINAL FLOW PERIOD MIN:	30	(E)	101 PSI TO (F) : 101
FINAL CLOSED IN PERIOD MIN:	30	(G)	1521
FINAL HYDROSTATIC PRESSURE		(H)	2173

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RINE EXPLORATION
RIG : BARBER-KANSAS
FIELD : BARTHLOW
WELL : #1-2
DATE : 12-02-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

RECOVERED 60 FEET OF GAS ABOVE FLUID.

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 2/12/88

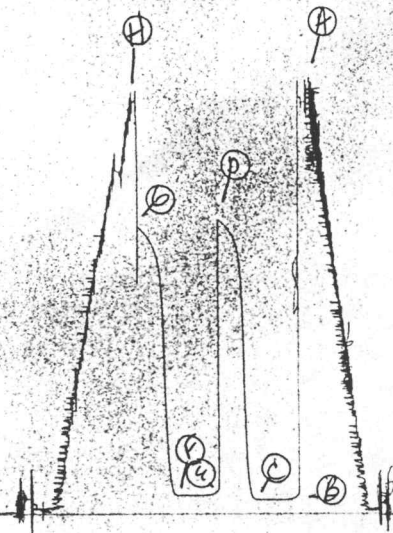
FIELD : BARTHLOW
JOB # : 14621
DEPTH : 4187
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	6:30: 0	0.000	79.000	123.00	0.000
3	6:34:59	0.083	79.000	123.00	0.000
4	6:40: 0	0.167	79.000	123.00	0.000
5	6:45: 0	0.250	79.000	123.00	0.000
6	6:49:59	0.333	79.000	123.00	0.000
7	6:55: 0	0.417	79.000	123.00	0.000
8	7: 0: 0	0.500	79.000	123.00	0.000
INITIAL SHUT-IN					
9	7: 3: 0	0.550	82.000	123.00	3.000
10	7: 6: 0	0.600	154.000	123.00	72.000
11	7: 9: 0	0.650	375.000	123.00	221.000
12	7:12: 0	0.700	869.000	123.00	494.000
13	7:15: 0	0.750	1293.000	123.00	424.000
14	7:18: 0	0.800	1419.000	123.00	126.000
15	7:21: 0	0.850	1483.000	123.00	64.000
16	7:24: 0	0.900	1512.000	123.00	29.000
17	7:27: 0	0.950	1537.000	123.00	25.000
18	7:30: 0	1.000	1557.000	123.00	20.000
FINAL FLOW					
19	7:31: 0	1.017	101.000	123.00	-1456.000
20	7:34:59	1.083	101.000	123.00	0.000
21	7:40: 0	1.167	101.000	123.00	0.000
22	7:45: 0	1.250	101.000	123.00	0.000
23	7:49:59	1.333	101.000	123.00	0.000
24	7:55: 0	1.417	101.000	123.00	0.000
25	8: 0: 0	1.500	101.000	123.00	0.000
FINAL SHUT-IN					
26	8: 3: 0	1.550	119.000	123.00	18.000
27	8: 6: 0	1.600	240.000	123.00	121.000
28	8: 9: 0	1.650	544.000	123.00	304.000
29	8:12: 0	1.700	1024.000	123.00	480.000
30	8:15: 0	1.750	1309.000	123.00	285.000
31	8:18: 0	1.800	1398.000	123.00	89.000
32	8:21: 0	1.850	1441.000	123.00	43.000
33	8:24: 0	1.900	1478.000	123.00	37.000
34	8:27: 0	1.950	1499.000	123.00	21.000
35	8:30: 0	2.000	1521.000	123.00	22.000

WESTERN TESTING CO. INC.

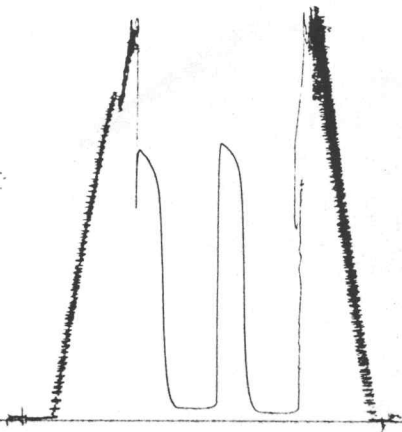
JK # 14621

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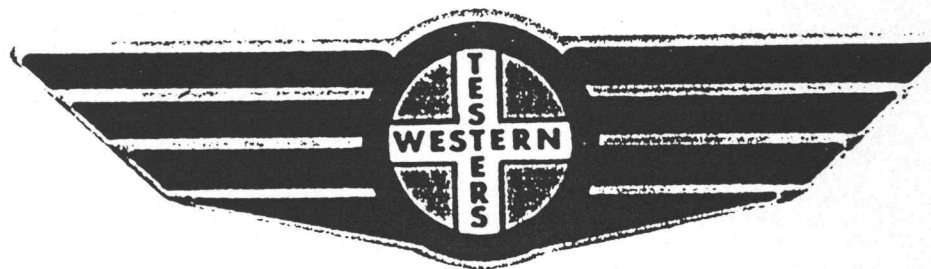


2K # 14621

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY

RINE EXPLORATION

LEASE & WELL NO. BARTHOLOW #1-2

SEC. 2

TWP. 33S

RGE. 12W

TEST NO. 4

DATE 12/3/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	12-03-88	TICKET	:	14622
CUSTOMER	:	RINE EXPLORATION	LEASE	:	BARTHOLOW
WELL	:	#1-2	TEST:	:	4
ELEVATION	:	1464 KB	GEOLOGIST	:	McELROY
SECTION	:	2	FORMATION	:	MISSISSIPPI
RANGE	:	12W	COUNTY	:	BARBER
GAUGE SN#	:	13552	RANGE	:	4050
			STATE	:	KANSAS
			CLOCK	:	12

INTERVAL FROM	:	4352	TO	:	4371	TOTAL DEPTH	:	4371
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4347	SIZE	:	6.63			
PACKER DEPTH	:	4352	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE RIG 2			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	38
WEIGHT	:	9.6	WATER LOSS (CC)	:	15.2
CHLORIDES (PPM)	:	45000			
JARS-MAKE	:	-	SERIAL NUMBER	:	-
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	240	FT	I.D. inch	:	2.70
DRILL PIPE LENGTH	:	4088	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	24	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	19	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 FH

BLOW COMMENT #1 : FAIR BLOW THROUGHOUT FLOW PERIODS.
BLOW COMMENT #2 :
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 60 FT OF: DRILLING MUD

Total Barrels Fluid = 0.42
Total Fluid Prod Rate = 10.20 BFPD
Indicated Wtr Rate = 0.10 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 4:45 AM

TIME STARTED OFF BOTTOM : 7:15 AM

WELL TEMPERATURE : 124

INITIAL HYDROSTATIC PRESSURE

(A) 2342

INITIAL FLOW PERIOD MIN: 30

(B) 97 PSI TO (C) : 97

INITIAL CLOSED IN PERIOD MIN: 30

(D) 102

FINAL FLOW PERIOD MIN: 30

(E) 97 PSI TO (F) : 97

FINAL CLOSED IN PERIOD MIN: 57

(G) 100

FINAL HYDROSTATIC PRESSURE

(H) 2303

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RINE EXPLORATION
RIG : BARBER-KANSAS
FIELD : BARTHLOW
WELL : #1-2
DATE : 12-03-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

COMPANY : RINE EXPLORATION
 WELL : #1-2
 GAUGE # : 13552
 DATE : 3/12/88

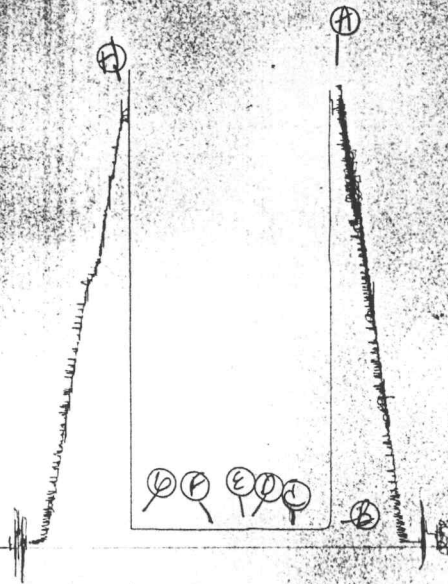
FIELD : BARTHOLOW
 JOB # : 14622
 DEPTH : 4371
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	4:45: 0	0.000	97.000	124.00	0.000
3	4:49:59	0.083	97.000	124.00	0.000
4	4:55: 0	0.167	97.000	124.00	0.000
5	5: 0: 0	0.250	97.000	124.00	0.000
6	5: 4:59	0.333	97.000	124.00	0.000
7	5:10: 0	0.417	97.000	124.00	0.000
8	5:15: 0	0.500	97.000	124.00	0.000
INITIAL SHUT-IN					
9	5:18: 0	0.550	97.000	124.00	0.000
10	5:21: 0	0.600	97.000	124.00	0.000
11	5:24: 0	0.650	97.000	124.00	0.000
12	5:27: 0	0.700	97.000	124.00	0.000
13	5:30: 0	0.750	97.000	124.00	0.000
14	5:33: 0	0.800	98.000	124.00	1.000
15	5:36: 0	0.850	99.000	124.00	1.000
16	5:39: 0	0.900	100.000	124.00	1.000
17	5:42: 0	0.950	101.000	124.00	1.000
18	5:45: 0	1.000	102.000	124.00	1.000
FINAL FLOW					
19	5:46: 0	1.017	97.000	124.00	-5.000
20	5:49:59	1.083	97.000	124.00	0.000
21	5:55: 0	1.167	97.000	124.00	0.000
22	6: 0: 0	1.250	97.000	124.00	0.000
23	6: 4:59	1.333	97.000	124.00	0.000
24	6:10: 0	1.417	97.000	124.00	0.000
25	6:15: 0	1.500	97.000	124.00	0.000
FINAL SHUT-IN					
26	6:18: 0	1.550	97.000	124.00	0.000
27	6:21: 0	1.600	97.000	124.00	0.000
28	6:24: 0	1.650	97.000	124.00	0.000
29	6:27: 0	1.700	97.000	124.00	0.000
30	6:30: 0	1.750	97.000	124.00	0.000
31	6:33: 0	1.800	97.000	124.00	0.000
32	6:36: 0	1.850	97.000	124.00	0.000
33	6:39: 0	1.900	98.000	124.00	1.000
34	6:42: 0	1.950	98.000	124.00	0.000
35	6:45: 0	2.000	98.000	124.00	0.000
36	6:48: 0	2.050	99.000	124.00	1.000
37	6:51: 0	2.100	99.000	124.00	0.000
38	6:54: 0	2.150	99.000	124.00	0.000
39	6:57: 0	2.200	99.000	124.00	0.000
40	7: 0: 0	2.250	100.000	124.00	1.000
41	7: 3: 0	2.300	100.000	124.00	0.000
42	7: 6: 0	2.350	100.000	124.00	0.000
43	7: 9: 0	2.400	100.000	124.00	0.000
44	7:12: 0	2.450	100.000	124.00	0.000

WESTERN TESTING CO. INC.

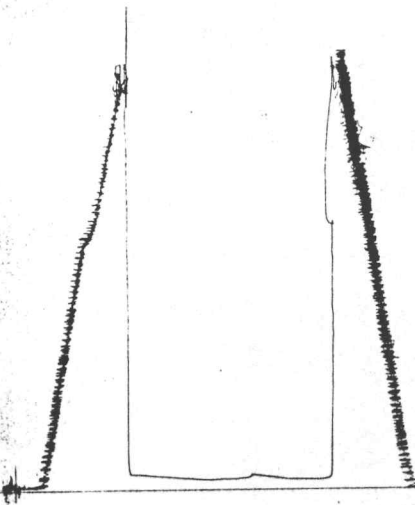
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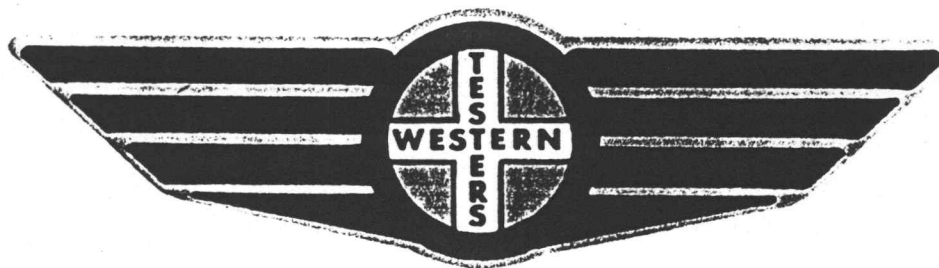


JK # 14622

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	12-05-88	TICKET	:	14623
CUSTOMER	:	RINE EXPLORATION	LEASE	:	BARTHOLOW
WELL	:	#1-2 TEST: 5	GEOLOGIST	:	McELROY
ELEVATION	:	1464 KB	FORMATION	:	SIMPSON
SECTION	:	2	TOWNSHIP	:	33S
RANGE	:	12W	STATE	:	KANSAS
Gauge SN#	:	13552	CLOCK	:	12
		COUNTY :	BARBER		
		RANGE :	4050		

INTERVAL FROM	:	4729	TO	:	4743	TOTAL DEPTH	:	4743
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4724	SIZE	:	6.63			
PACKER DEPTH	:	4729	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE RIG 2			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	37
WEIGHT	:	9.7	WATER LOSS (CC)	:	10.4
CHLORIDES (PPM)	:	46000			
JARS-MAKE	:	-	SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	240	FT	I.D. inch	:	2.70
DRILL PIPE LENGTH	:	4465	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	24	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	14	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT FLOW PERIODS.
BLOW COMMENT #2 :
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 190 FT OF: GAS CUT MUDDY WATER
SCUM OF OIL-10% GAS-70% WTR
RECOVERED : 1620 FT OF: SALT WATER

CHLORIDES: 90000 PPM

Total Barrels Fluid = 23.72
Total Fluid Prod Rate = 569.30 BFPD
Indicated Wtr Rate = 551.37 BWPD

REMARK 1 :
REMARK 2 : RECOVERED 180 FEET OF GAS ABOVE FLUID.
REMARK 3 :
REMARK 4 :

SET PACKER(S) :	11:00 PM	TIME STARTED OFF BOTTOM :	2:00 AM
WELL TEMPERATURE :	134		
INITIAL HYDROSTATIC PRESSURE		(A)	2510
INITIAL FLOW PERIOD MIN:	30	(B)	219 PSI TO (C) : 536
INITIAL CLOSED IN PERIOD MIN:	60	(D)	1865
FINAL FLOW PERIOD MIN:	30	(E)	640 PSI TO (F) : 850
FINAL CLOSED IN PERIOD MIN:	60	(G)	1868
FINAL HYDROSTATIC PRESSURE		(H)	2479

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RINE EXPLORATION
RIG : BARBER-KANSAS
FIELD : BARTHLOW
WELL : #1-2
DATE : 12-05-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

RECOVERED 180 FEET OF GAS ABOVE FLUID.

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 5/12/88

FIELD : BARTHOLOW
JOB # : 14623
DEPTH : 4743
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW					
2	11: 0: 0	0.000	219.000	134.00	0.000
3	11: 4: 59	0.083	219.000	134.00	0.000
4	11:10: 0	0.167	272.000	134.00	53.000
5	11:15: 0	0.250	347.000	134.00	75.000
6	11:19:59	0.333	412.000	134.00	65.000
7	11:25: 0	0.417	479.000	134.00	67.000
8	11:30: 0	0.500	536.000	134.00	57.000
INITIAL SHUT-IN					
9	11:33: 0	0.550	1788.000	134.00	1252.000
10	11:36: 0	0.600	1818.000	134.00	30.000
11	11:39: 0	0.650	1832.000	134.00	14.000
12	11:42: 0	0.700	1844.000	134.00	12.000
13	11:45: 0	0.750	1849.000	134.00	5.000
14	11:48: 0	0.800	1853.000	134.00	4.000
15	11:51: 0	0.850	1855.000	134.00	2.000
16	11:54: 0	0.900	1856.000	134.00	1.000
17	11:57: 0	0.950	1857.000	134.00	1.000
18	12: 0: 0	1.000	1858.000	134.00	1.000
19	12: 2: 59	1.050	1861.000	134.00	3.000
20	12: 6: 0	1.100	1862.000	134.00	1.000
21	12: 9: 0	1.150	1863.000	134.00	1.000
22	12:12: 0	1.200	1864.000	134.00	1.000
23	12:15: 0	1.250	1865.000	134.00	1.000
24	12:18: 0	1.300	1865.000	134.00	0.000
25	12:21: 0	1.350	1865.000	134.00	0.000
26	12:24: 0	1.400	1865.000	134.00	0.000
27	12:27: 0	1.450	1865.000	134.00	0.000
28	12:30: 0	1.500	1865.000	134.00	0.000
FINAL FLOW					
29	12:31: 0	1.517	640.000	134.00	-1225.000
30	12:34:59	1.583	640.000	134.00	0.000
31	12:40: 0	1.667	676.000	134.00	36.000
32	12:45: 0	1.750	728.000	134.00	52.000
33	12:49:59	1.833	773.000	134.00	45.000
34	12:55: 0	1.917	817.000	134.00	44.000
35	13: 0: 0	2.000	850.000	134.00	33.000
FINAL SHUT-IN					
36	13: 3: 0	2.050	1794.000	134.00	944.000
37	13: 5: 59	2.100	1823.000	134.00	29.000
38	13: 9: 0	2.150	1840.000	134.00	17.000
39	13:12: 0	2.200	1845.000	134.00	5.000
40	13:15: 0	2.250	1850.000	134.00	5.000
41	13:18: 0	2.300	1853.000	134.00	3.000
42	13:21: 0	2.350	1855.000	134.00	2.000
43	13:24: 0	2.400	1857.000	134.00	2.000
44	13:27: 0	2.450	1859.000	134.00	2.000
45	13:30: 0	2.500	1860.000	134.00	1.000
46	13:33: 0	2.550	1862.000	134.00	2.000
47	13:36: 0	2.600	1863.000	134.00	1.000
48	13:39: 0	2.650	1864.000	134.00	1.000

COMPANY : RINE EXPLORATION
WELL : #1-2
GAUGE # : 13552
DATE : 5/12/88

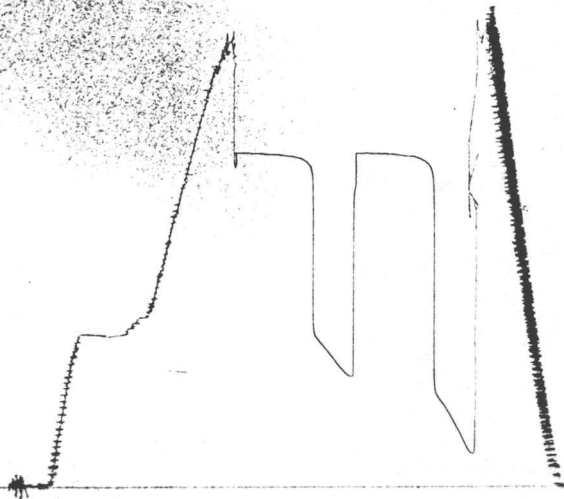
FIELD : BARTHOLOW
JOB # : 14623
DEPTH : 4743
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	13:42: 0	2.700	1865.000	134.00	1.000
50	13:45: 0	2.750	1866.000	134.00	1.000
51	13:48: 0	2.800	1867.000	134.00	1.000
52	13:51: 0	2.850	1868.000	134.00	1.000
53	13:54: 0	2.900	1868.000	134.00	0.000
54	13:57: 0	2.950	1868.000	134.00	0.000
55	14: 0: 0	3.000	1868.000	134.00	0.000

WESTERN TESTING CO. INC.

JK # 14623

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