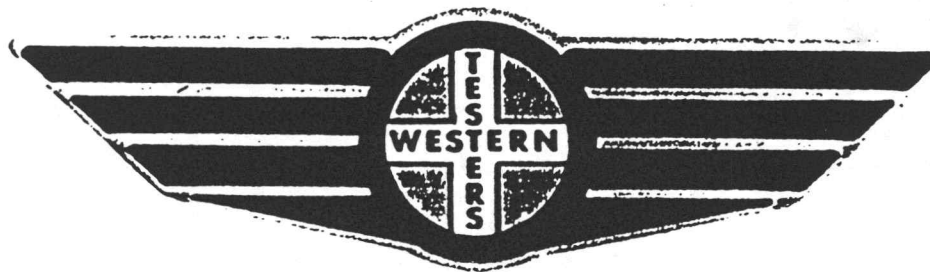


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY KACHINA OIL COMPANY, INC.

LEASE & WELL NO.

BRUBAKER #1

SEC. 32

TWP. 29S

RGE. 12W

TEST NO.

1 DATE

1/15/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	: 1-15-88	TICKET	: 12091
CUSTOMER	: KACHINA OIL CO. INC.	LEASE	: BRUBAKER
WELL	: #1 TEST: 1	GEOLOGIST	: M. DOUGLASS
ELEVATION	: 1858 KB	FORMATION	: INDIAN CAVE
SECTION	: 32	TOWNSHIP	: 29S
RANGE	: 12W	STATE	: KANSAS
GAUGE SN#	: 13362	CLOCK	: 12
COUNTY	: PRATT		
RANGE	: 4450		

INTERVAL FROM : 2748 TO : 2803 TOTAL DEPTH : 2803

DEPTH OF SELECTIVE ZONE	:	
PACKER DEPTH	: 2743	SIZE : 6.63
PACKER DEPTH	: 2748	SIZE : 6.63
PACKER DEPTH	:	SIZE :
PACKER DEPTH	:	SIZE :

DRILLING CON.	: DUKE RIG 2	
MUD TYPE	: -	VISCOSITY : 32
WEIGHT	: 9.5	WATER LOSS (CC) : NC
CHLORIDES (PPM)	: 75000	
JARS-MAKE	: -	SERIAL NUMBER :
DID WELL FLOW ?	: NO	REVERSED OUT ? : NO

DRILL COLLAR LENGTH	: 0 FT	I.D. inch	: 0.00
WEIGHT PIPE LENGTH	: 189 FT	I.D. inch	: 2.50
DRILL PIPE LENGTH	: 2539 FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 20 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 XH

BLOW COMMENT #1 : STRONG BLOW IN 3 MINUTES ON INITIAL FLOW.
BLOW COMMENT #2 : GOOD TO STRONG BLOW IN THE FINAL FLOW.
BLOW COMMENT #3 : NO GAS TO SURFACE
BLOW COMMENT #4 :

RECOVERED : 80 FT OF: WATER CUT MUD
RECOVERED : 300 FT OF: WATER (GAS CUT)
CHLORIDES: 70000 PPM

Total Barrels Fluid = 3.83
Total Fluid Prod Rate = 110.20 BFPD
Indicated Wtr Rate = 89.61 BWPD

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

SET PACKER(S) : 9:15 AM
WELL TEMPERATURE : 98

TIME STARTED OFF BOTTOM : 11:30 AM

INITIAL HYDROSTATIC PRESSURE		(A)	1375	
INITIAL FLOW PERIOD	MIN: 25	(B)	152	PSI TO (C) : 119
INITIAL CLOSED IN PERIOD	MIN: 33	(D)	853	
FINAL FLOW PERIOD	MIN: 25	(E)	212	PSI TO (F) : 179
FINAL CLOSED IN PERIOD	MIN: 48	(G)	871	
FINAL HYDROSTATIC PRESSURE		(H)	1356	

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : KACHINA OIL CO. INC.
RIG : PRATT-KANSAS
FIELD : BRUBAKER
WELL : #1
DATE : 1-15-88
GAUGE NO : 13362

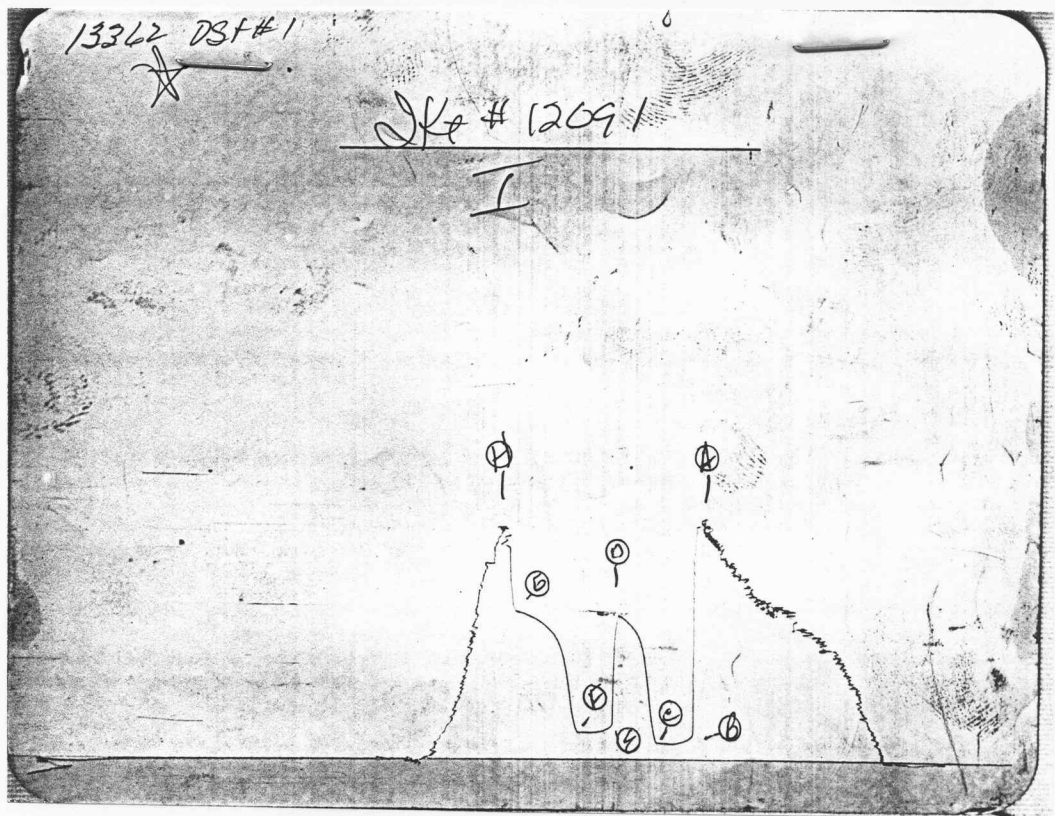
OPERATIONAL COMMENTS

COMPANY : KACHINA OIL CO. INC.
WELL : #1
GAUGE # : 13362
DATE : 15/ 1/88

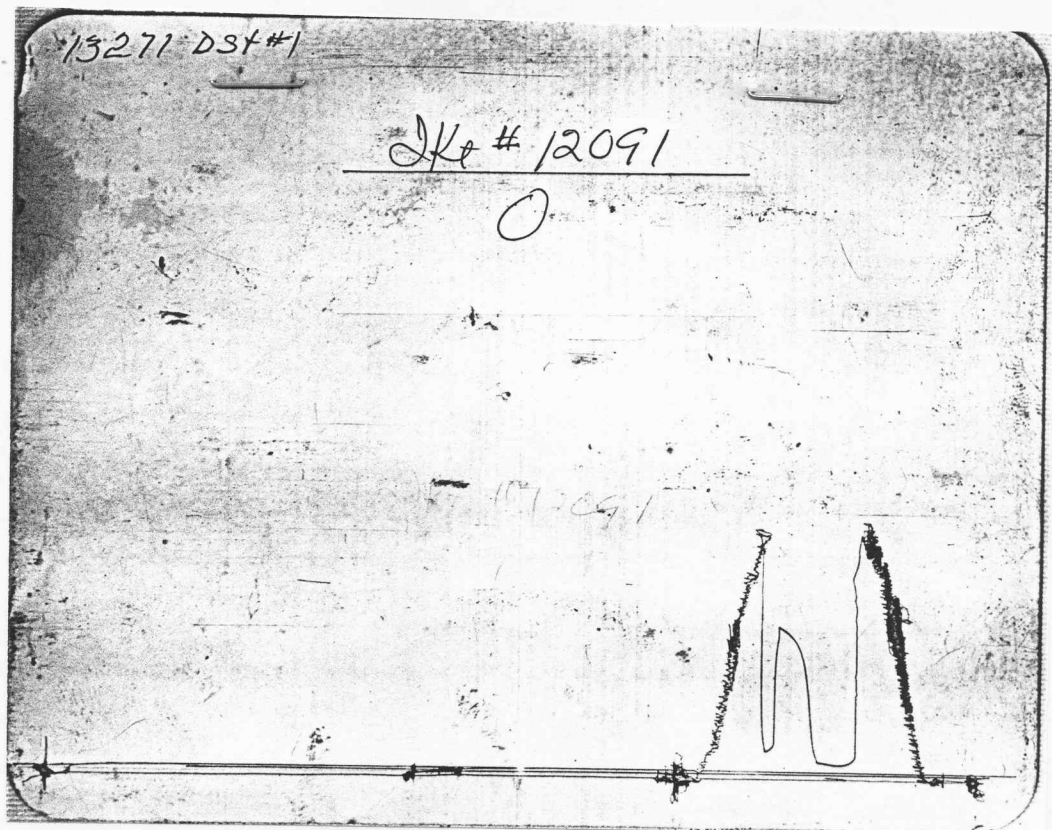
FIELD : BRUBAKER
JOB # : 12091
DEPTH : 2803
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	9:15: 0	0.000	152.000	98.00	0.000
2	9:19:59	0.083	132.000	98.00	-20.000
3	9:25: 0	0.167	117.000	98.00	-15.000
4	9:30: 0	0.250	113.000	98.00	-4.000
5	9:34:59	0.333	116.000	98.00	3.000
6	9:40: 0	0.417	119.000	98.00	3.000
7	9:43: 0	0.467	212.000	98.00	93.000
8	9:46: 0	0.517	333.000	98.00	121.000
9	9:49: 0	0.567	479.000	98.00	146.000
10	9:52: 0	0.617	588.000	98.00	109.000
11	9:55: 0	0.667	685.000	98.00	97.000
12	9:58: 0	0.717	745.000	98.00	60.000
13	10: 1: 0	0.767	776.000	98.00	31.000
14	10: 4: 0	0.817	798.000	98.00	22.000
15	10: 7: 0	0.867	821.000	98.00	23.000
16	10:10: 0	0.917	838.000	98.00	17.000
17	10:13: 0	0.967	853.000	98.00	15.000
18	10:14: 0	0.983	212.000	98.00	-641.000
19	10:18: 0	1.050	190.000	98.00	-22.000
20	10:23: 0	1.133	179.000	98.00	-11.000
21	10:28: 0	1.217	176.000	98.00	-3.000
22	10:33: 0	1.300	177.000	98.00	1.000
23	10:38: 0	1.383	179.000	98.00	2.000
24	10:41: 0	1.433	262.000	98.00	83.000
25	10:44: 0	1.483	388.000	98.00	126.000
26	10:47: 0	1.533	501.000	98.00	113.000
27	10:50: 0	1.583	596.000	98.00	95.000
28	10:53: 0	1.633	668.000	98.00	72.000
29	10:56: 0	1.683	712.000	98.00	44.000
30	10:59: 0	1.733	746.000	98.00	34.000
31	11: 2: 0	1.783	770.000	98.00	24.000
32	11: 5: 0	1.833	790.000	98.00	20.000
33	11: 8: 0	1.883	809.000	98.00	19.000
34	11:11: 0	1.933	824.000	98.00	15.000
35	11:14: 0	1.983	836.000	98.00	12.000
36	11:17: 0	2.033	844.000	98.00	8.000
37	11:20: 0	2.083	856.000	98.00	12.000
38	11:23: 0	2.133	864.000	98.00	8.000
39	11:26: 0	2.183	871.000	98.00	7.000

WESTERN TESTING CO. INC.

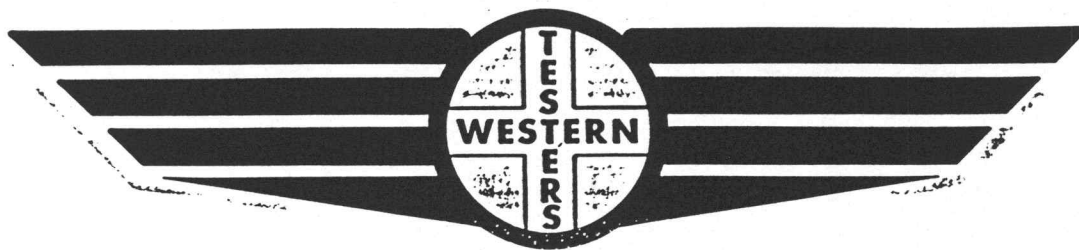


Inside Recorder



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

REPORT KACHINA OIL CO. INC. LEASE & WELL NO. BRUBAKER #1 SEC. 32 TWP. 27SRGE. 12W TEST NO. 2 DATE 1-19-88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	1-19-88	TICKET	:	12092
CUSTOMER	:	KACHINA OIL CO. INC.	LEASE	:	BRUBAKER
WELL	:	#1	TEST:	:	2
ELEVATION	:	1858 KB	GEOLOGIST	:	M. DOUGLASS
SECTION	:	32	FORMATION	:	MARM & MISS
RANGE	:	12W	TOWNSHIP	:	27S
GAUGE SN#	:	13362	STATE	:	KANSAS
		COUNTY :	RANGE :		CLOCK :
			4450		12

INTERVAL FROM	:	4280	TO	:	4332	TOTAL DEPTH	:	4332
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4275	SIZE	:	6.63			
PACKER DEPTH	:	4280	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE RIG 2			
MUD TYPE	:	CHEM/DRISPAC	VISCOSITY	:	43
WEIGHT	:	9.3	WATER LOSS (CC)	:	10.8
CHLORIDES (PPM)	:	7000			
JARS-MAKE	:	-	SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	189	FT	I.D. inch	:	2.50
DRILL PIPE LENGTH	:	4071	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	52	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 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW-GAS TO SURFACE IN 15 MINITES.
BLOW COMMENT #2 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 480 FT OF: GASSY OIL
35 GRAVITY @ 40 DEG.F. CORRECTED
RECOVERED : 30 FT OF: MUDDY OIL
55% GAS-25% OIL-20% MUD

Total Barrels Fluid = 5.65
Total Fluid Prod Rate = 108.48 BFPD
Indicated Oil Rate = 103.59 BOPD
Indicated Wtr Rate = 1.70 BWPD
Corrected Oil Rate = 2.31 BOPD
Corrected Wtr Rate = 0.04 BWPD

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

SET PACKER(S) : 2:20 AM
WELL TEMPERATURE : 123
INITIAL HYDROSTATIC PRESSURE (A) 2121
INITIAL FLOW PERIOD MIN: 20 (B) 135 PSI TO (C) : 80
INITIAL CLOSED IN PERIOD MIN: 45 (D) 1451
FINAL FLOW PERIOD MIN: 55 (E) 112 PSI TO (F) : 139
FINAL CLOSED IN PERIOD MIN: 69 (G) 1440
FINAL HYDROSTATIC PRESSURE (H) 2020

GAS FLOW REPORT

Date : 1-19-88	Ticket # : 12092
Customer : KACHINA OIL CO. INC.	Lease : BRUBAKER
Well : #1	Geologist : M. DOUGLASS
Test : 2	
Elevation (KB) : 1858 KB	Formation : MARM & MISS
Section : 32	Township : 27S
Range : 12W	County : PRATT
	State : KANSAS
Gauge SN # : 13362	Range : 4450
	Clock : 12

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

15	MERLA	1/2"	INCHES OF WTR	
				GAS TO SURFACE
20			15	24500 CFPD
30			20	28000 CFPD

SECOND FLOW

10	MERLA	1/2"	24 " OF WTR	30700 CFPD
20			20	28000 CFPD
30			20	28000 CFPD
40			15	24500 CFPD
50			13	22800 CFPD
60			13	22800 CFPD

Gas Bottle SN #	: 23P
Date Bottle Filled	: 1-19-88
Date to be Invoiced	:

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : KACHINA OIL CO. INC.
RIG : PRATT-KANSAS
FIELD : BRUBAKER
WELL : #1
DATE : 1-19-88
GAUGE NO : 13362

OPERATIONAL COMMENTS

COMPANY : KACHINA OIL CO. INC.
WELL : #1
GAUGE # : 13362
DATE : 19/ 1/88

FIELD : BRUBAKER
JOB # : 12092
DEPTH : 4332
TEST :

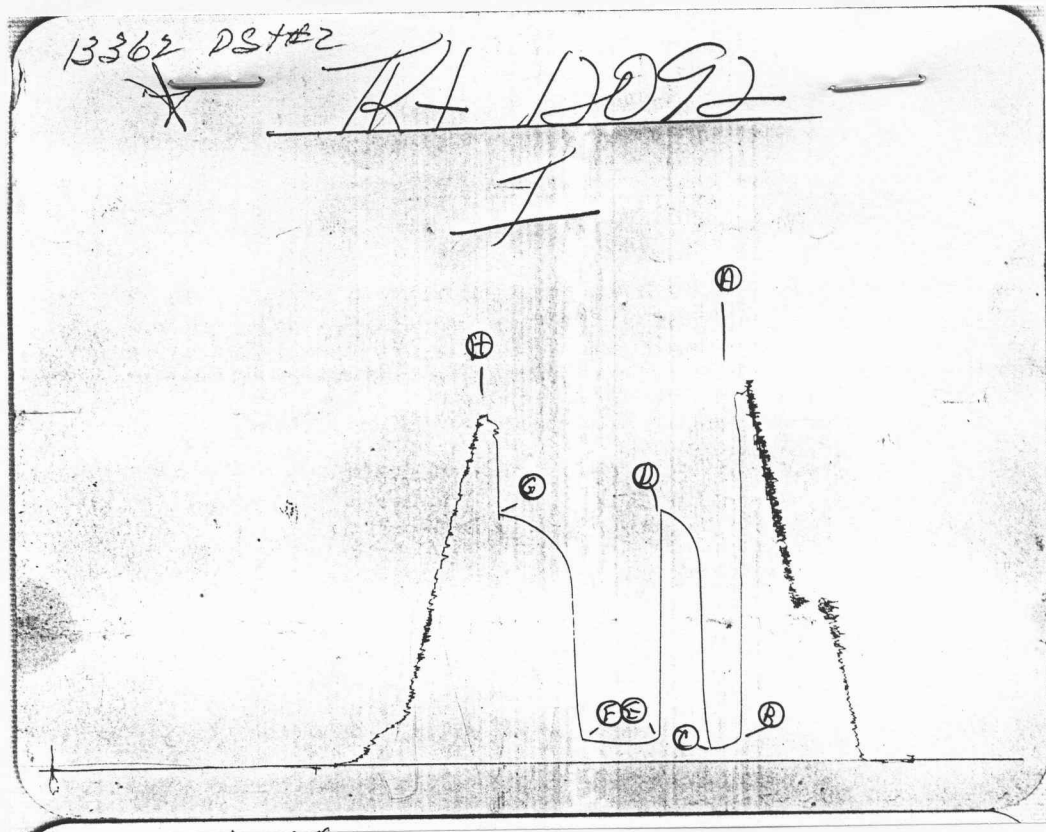
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	2:20: 0	0.000	135.000	123.00	0.000
2	2:24:59	0.083	110.000	123.00	-25.000
3	2:30: 0	0.167	94.000	123.00	-16.000
4	2:35: 0	0.250	84.000	123.00	-10.000
5	2:39:59	0.333	80.000	123.00	-4.000
6	2:42:59	0.383	176.000	123.00	96.000
7	2:45:59	0.433	326.000	123.00	150.000
8	2:48:59	0.483	568.000	123.00	242.000
9	2:51:59	0.533	935.000	123.00	367.000
10	2:54:59	0.583	1163.000	123.00	228.000
11	2:57:59	0.633	1250.000	123.00	87.000
12	3: 0:59	0.683	1303.000	123.00	53.000
13	3: 3:59	0.733	1335.000	123.00	32.000
14	3: 6:59	0.783	1362.000	123.00	27.000
15	3: 9:59	0.833	1384.000	123.00	22.000
16	3:12:59	0.883	1405.000	123.00	21.000
17	3:15:59	0.933	1420.000	123.00	15.000
18	3:18:59	0.983	1435.000	123.00	15.000
19	3:21:59	1.033	1445.000	123.00	10.000
20	3:24:59	1.083	1451.000	123.00	6.000
21	3:26: 0	1.100	112.000	123.00	-1339.000
22	3:29:59	1.167	112.000	123.00	0.000
23	3:35: 0	1.250	112.000	123.00	0.000
24	3:39:59	1.333	112.000	123.00	0.000
25	3:44:59	1.417	112.000	123.00	0.000
26	3:50: 0	1.500	112.000	123.00	0.000
27	3:54:59	1.583	114.000	123.00	2.000
28	3:59:59	1.667	118.000	123.00	4.000
29	4: 5: 0	1.750	122.000	123.00	4.000
30	4: 9:59	1.833	126.000	123.00	4.000
31	4:14:59	1.917	132.000	123.00	6.000
32	4:20: 0	2.000	139.000	123.00	7.000
33	4:23: 0	2.050	242.000	123.00	103.000
34	4:26: 0	2.100	475.000	123.00	233.000
35	4:29: 0	2.150	716.000	123.00	241.000
36	4:32: 0	2.200	971.000	123.00	255.000
37	4:35: 0	2.250	1108.000	123.00	137.000
38	4:38: 0	2.300	1173.000	123.00	65.000
39	4:41: 0	2.350	1209.000	123.00	36.000
40	4:44: 0	2.400	1239.000	123.00	30.000
41	4:47: 0	2.450	1270.000	123.00	31.000
42	4:50: 0	2.500	1294.000	123.00	24.000
43	4:53: 0	2.550	1316.000	123.00	22.000
44	4:56: 0	2.600	1332.000	123.00	16.000
45	4:59: 0	2.650	1349.000	123.00	17.000
46	5: 2: 0	2.700	1364.000	123.00	15.000
47	5: 5: 0	2.750	1381.000	123.00	17.000
48	5: 8: 0	2.800	1392.000	123.00	11.000
49	5:11: 0	2.850	1404.000	123.00	12.000
50	5:14: 0	2.900	1413.000	123.00	9.000
51	5:17: 0	2.950	1419.000	123.00	6.000
52	5:20: 0	3.000	1426.000	123.00	7.000

COMPANY : KACHINA OIL CO. INC.
WELL : #1
GAUGE # : 13362
DATE : 19/ 1/88

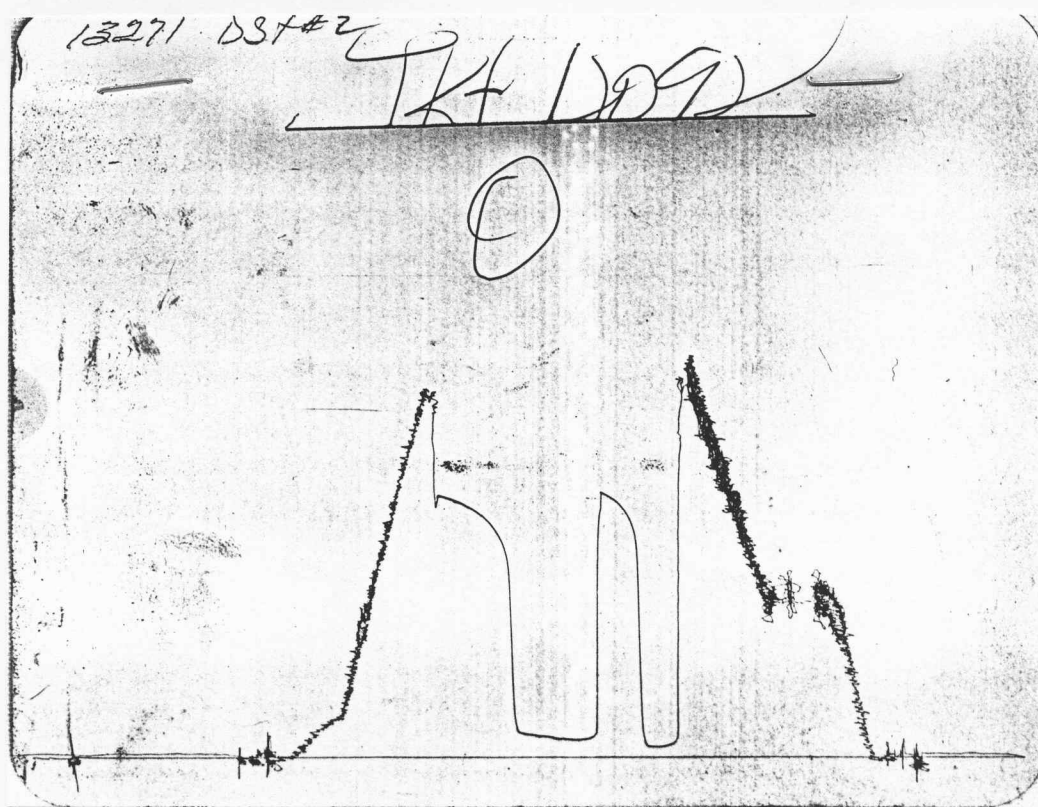
FIELD : BRUBAKER
JOB # : 12092
DEPTH : 4332
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	5:23: 0	3.050	1431.000	123.00	5.000
54	5:26: 0	3.100	1437.000	123.00	6.000
55	5:29: 0	3.150	1440.000	123.00	3.000

WESTERN TESTING CO. INC.

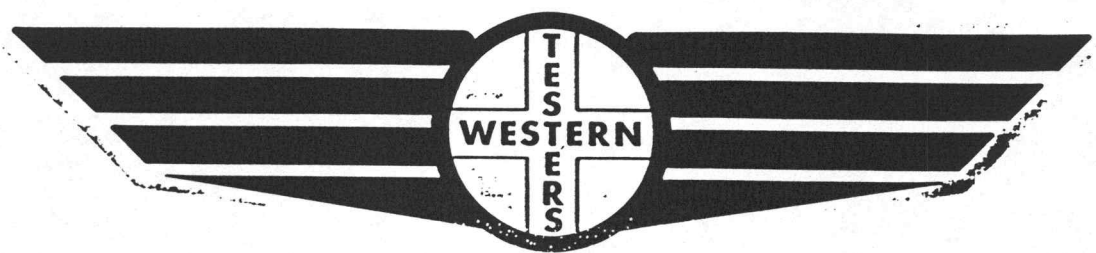


Inside Recorder



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY KACHINA OIL CO., INC. LEASE & WELL NO. BRUBAKER #1 SEC. 32 TWP. 27S RGE. 12W TEST NO. 3 DATE 1-20-88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	1-20-88	TICKET	:	12093
CUSTOMER	:	KACHINA OIL CO. INC.	LEASE	:	BRUBAKER
WELL	:	#1	TEST:	:	3
ELEVATION	:	1858 KB	GEOLOGIST	:	M. DOUGLASS
SECTION	:	32	FORMATION	:	VIOLA
RANGE	:	12W	TOWNSHIP	:	27S
GAUGE SN#	:	13362	STATE	:	KANSAS
		COUNTY :	RANGE :		CLOCK :
			4450		12

INTERVAL FROM	:	4460	TO	:	4467	TOTAL DEPTH	:	4467
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4455	SIZE	:	6.63			
PACKER DEPTH	:	4460	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE			
MUD TYPE	:	CHEM/DRISPAC	VISCOSITY	:	46
WEIGHT	:	9.4	WATER LOSS (CC)	:	12.8
CHLORIDES (PPM)	:	9000			
JARS-MAKE	:	NO	SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	189	FT	I.D. inch	:	2.50
DRILL PIPE LENGTH	:	4251	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	7	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 XH

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

RECOVERED : 70 FT OF: GAS CUT MUD

Total Barrels Fluid = 0.42
Total Fluid Prod Rate = 7.20 BFPD
Indicated Wtr Rate = 0.62 BWPD

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

SET PACKER(S) : 4:25 AM

TIME STARTED OFF BOTTOM : 7:25 AM

WELL TEMPERATURE : 125

INITIAL HYDROSTATIC PRESSURE

INITIAL FLOW PERIOD MIN: 25

INITIAL CLOSED IN PERIOD MIN: 30

FINAL FLOW PERIOD MIN: 60

FINAL CLOSED IN PERIOD MIN: 60

FINAL HYDROSTATIC PRESSURE

(A) 2231

(B) 235 PSI TO (C) : 165

(D) 1507

(E) 208 PSI TO (F) : 143

(G) 1461

(H) 2162

GAS FLOW REPORT

Date : 1-20-88
Customer : KACHINA OIL CO. INC.

Ticket # : 12093
Lease : BRUBAKER

Well : #1 Test : 3

Geologist : M. DOUGLASS

Elevation (KB) : 1858 Formation : VIOLA

Section : 32 Township : 27S

Range : 12W County : PRATT State : KANSAS

Gauge SN # : 13362 Range : 4450 Clock : 12

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

02	MERLA	1"		GAS TO SURFACE
10			18	687000 CFPD
20			20	735000 CFPD
30			22	773000 CFPD

SECOND FLOW

10	MERLA	1"	22	773000 CFPD
20			22	773000 CFPD
30			22	773000 CFPD
40			22	773000 CFPD
50			22	773000 CFPD
60			22	773000 CFPD

Gas Bottle SN # : 24P
Date Bottle Filled : 1-20-88
Date to be Invoiced :

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : KACHINA OIL CO. INC.
RIG : PRATT-KANSAS
FIELD : BRUBAKER
WELL : #1
DATE : 1-20-88
GAUGE NO : 13362

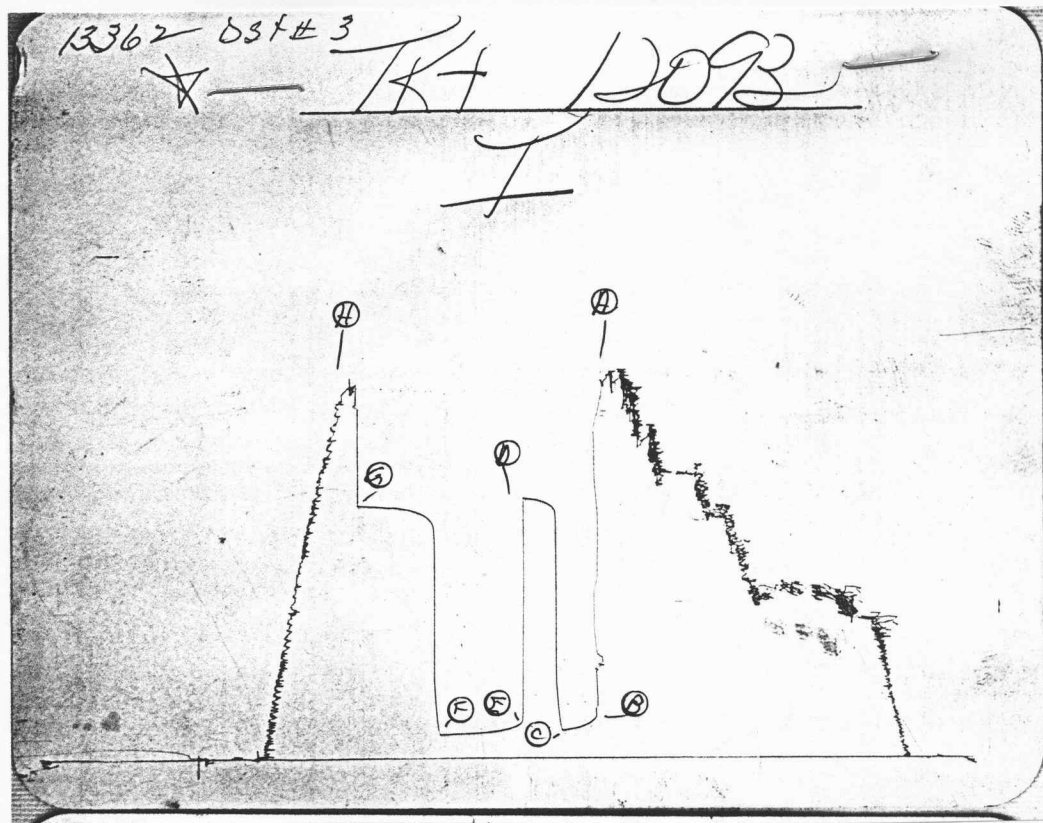
OPERATIONAL COMMENTS

COMPANY : KACHINA OIL CO. INC.
WELL : #1
GAUGE # : 13362
DATE : 20/ 1/88

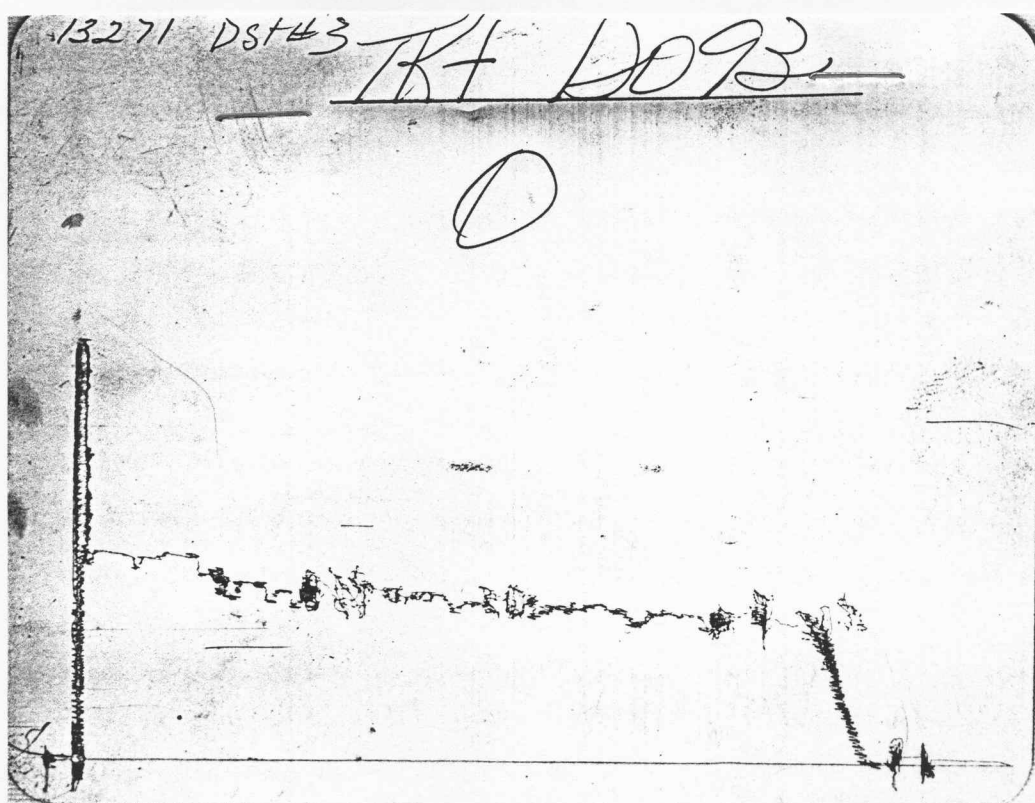
FIELD : BRUBAKER
JOB # : 12093
DEPTH : 4467
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	4:25: 0	0.000	235.000	125.00	0.000
2	4:29:59	0.083	208.000	125.00	-27.000
3	4:35: 0	0.167	190.000	125.00	-18.000
4	4:40: 0	0.250	176.000	125.00	-14.000
5	4:44:59	0.333	170.000	125.00	-6.000
6	4:50: 0	0.417	165.000	125.00	-5.000
7	4:53: 0	0.467	307.000	125.00	142.000
8	4:56: 0	0.517	1259.000	125.00	952.000
9	4:59: 0	0.567	1451.000	125.00	192.000
10	5: 2: 0	0.617	1469.000	125.00	18.000
11	5: 5: 0	0.667	1484.000	125.00	15.000
12	5: 8: 0	0.717	1490.000	125.00	6.000
13	5:11: 0	0.767	1496.000	125.00	6.000
14	5:14: 0	0.817	1500.000	125.00	4.000
15	5:17: 0	0.867	1503.000	125.00	3.000
16	5:20: 0	0.917	1507.000	125.00	4.000
17	5:21: 0	0.933	208.000	125.00	-1299.000
18	5:25: 0	1.000	185.000	125.00	-23.000
19	5:30: 0	1.083	174.000	125.00	-11.000
20	5:35: 0	1.167	165.000	125.00	-9.000
21	5:40: 0	1.250	158.000	125.00	-7.000
22	5:45: 0	1.333	154.000	125.00	-4.000
23	5:50: 0	1.417	149.000	125.00	-5.000
24	5:55: 0	1.500	148.000	125.00	-1.000
25	6: 0: 0	1.583	147.000	125.00	-1.000
26	6: 5: 0	1.667	146.000	125.00	-1.000
27	6:10: 0	1.750	145.000	125.00	-1.000
28	6:15: 0	1.833	144.000	125.00	-1.000
29	6:20: 0	1.917	143.000	125.00	-1.000
30	6:23: 0	1.967	293.000	125.00	150.000
31	6:26: 0	2.017	1326.000	125.00	1033.000
32	6:29: 0	2.067	1378.000	125.00	52.000
33	6:32: 0	2.117	1400.000	125.00	22.000
34	6:35: 0	2.167	1413.000	125.00	13.000
35	6:38: 0	2.217	1424.000	125.00	11.000
36	6:41: 0	2.267	1433.000	125.00	9.000
37	6:44: 0	2.317	1439.000	125.00	6.000
38	6:47: 0	2.367	1442.000	125.00	3.000
39	6:50: 0	2.417	1445.000	125.00	3.000
40	6:53: 0	2.467	1450.000	125.00	5.000
41	6:56: 0	2.517	1453.000	125.00	3.000
42	6:59: 0	2.567	1454.000	125.00	1.000
43	7: 2: 0	2.617	1455.000	125.00	1.000
44	7: 5: 0	2.667	1456.000	125.00	1.000
45	7: 8: 0	2.717	1457.000	125.00	1.000
46	7:11: 0	2.767	1458.000	125.00	1.000
47	7:14: 0	2.817	1459.000	125.00	1.000
48	7:17: 0	2.867	1460.000	125.00	1.000
49	7:20: 0	2.917	1461.000	125.00	1.000

WESTERN TESTING CO. INC.

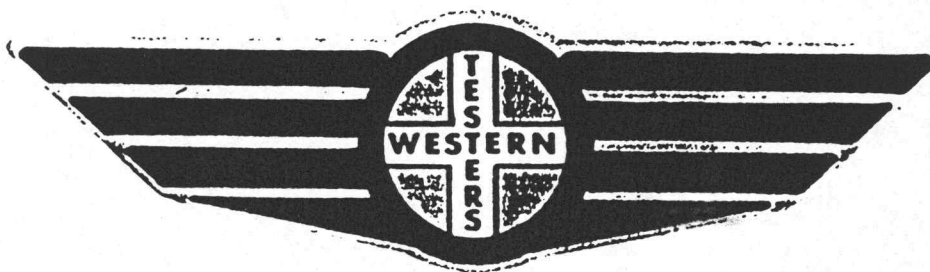


Inside Recorder



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 1-20-88
CUSTOMER : KACHINA OIL CO INC
WELL : #1 TEST: 4
ELEVATION : 1858 KB
SECTION : 32
RANGE : 12W COUNTY : PRATT
GAUGE SN# : 13362 RANGE : 4450
TICKET : 12094
LEASE : BRUBAKER
GEOLOGIST : M. DOUGLASS
FORMATION : VIOLA
TOWNSHIP : 29S
STATE : KANSAS
CLOCK : 12

INTERVAL FROM : 4468 TO : 4490 TOTAL DEPTH : 4490
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4463 SIZE : 6.63
PACKER DEPTH : 4468 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : DUKE RIG 2
MUD TYPE : DRISPAC VISCOSITY : 45
WEIGHT : 9.1 WATER LOSS (CC) : 13.8
CHLORIDES (PPM) : 10000
JARS-MAKE : NO SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 189 FT I.D. inch : 2.50
DRILL PIPE LENGTH : 4259 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 22 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 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW IN 5 MINUTES-NO GAS TO SURFACE.
BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW-GAS TO SURFACE IN 55 MINUTES-
BLOW COMMENT #3 : TOO WEAK TO MEASURE.
BLOW COMMENT #4 :

RECOVERED : 50 FT OF: GAS CUT MUD

Total Barrels Fluid = 0.30
Total Fluid Prod Rate = 5.46 BFPD
Indicated Wtr Rate = 0.44 BWPD

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

SET PACKER(S) : 7:10 PM

TIME STARTED OFF BOTTOM : 10:10 PM

WELL TEMPERATURE : 128

INITIAL HYDROSTATIC PRESSURE

(A) 2234

INITIAL FLOW PERIOD MIN: 25

(B) 183 PSI TO (C) : 102

INITIAL CLOSED IN PERIOD MIN: 36

(D) 1159

FINAL FLOW PERIOD MIN: 55

(E) 170 PSI TO (F) : 86

FINAL CLOSED IN PERIOD MIN: 66

(G) 1416

FINAL HYDROSTATIC PRESSURE

(H) 2215

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

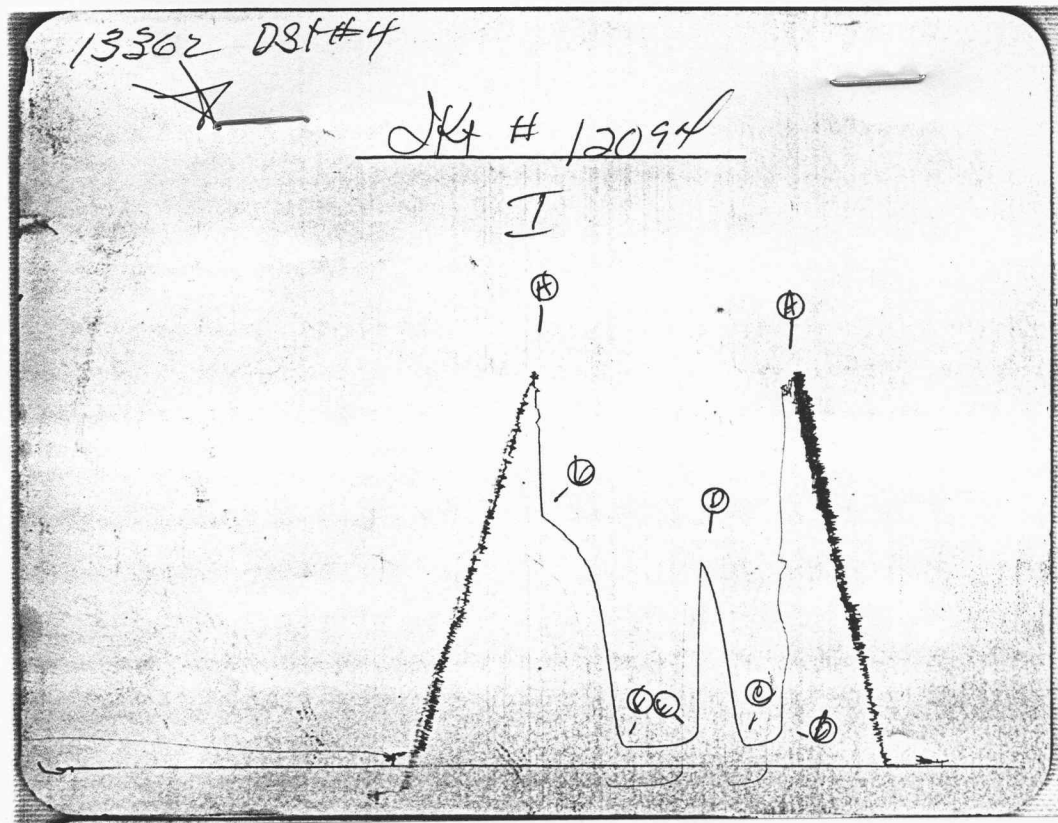
COMPANY : KACHINA OIL CO INC
RIG : PRATT-KANSAS
FIELD : BRUBAKER
WELL : #1
DATE : 1-20-88
GAUGE NO : 13362

OPERATIONAL COMMENTS

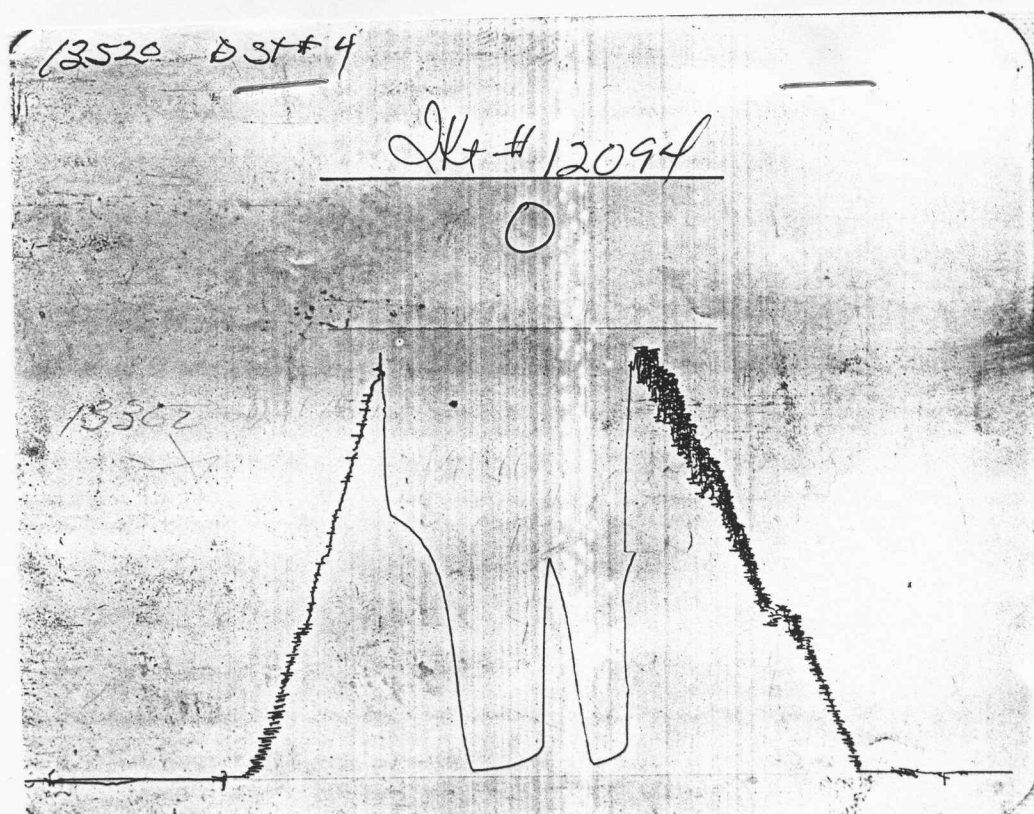
COMPANY : KACHINA OIL CO INC
WELL : #1
GAUGE # : 13362
DATE : 20/ 1/88

FIELD : BRUBAKER
JOB # : 12094
DEPTH : 4490
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P P1-P(i-1)
1	7:10: 0	0.000	183.000	128.00	0.000
2	7:14:59	0.083	143.000	128.00	-40.000
3	7:20: 0	0.167	127.000	128.00	-16.000
4	7:25: 0	0.250	113.000	128.00	-14.000
5	7:29:59	0.333	108.000	128.00	-5.000
6	7:35: 0	0.417	102.000	128.00	-6.000
7	7:38: 0	0.467	129.000	128.00	27.000
8	7:41: 0	0.517	192.000	128.00	63.000
9	7:44: 0	0.567	314.000	128.00	122.000
10	7:47: 0	0.617	473.000	128.00	159.000
11	7:50: 0	0.667	605.000	128.00	132.000
12	7:53: 0	0.717	726.000	128.00	121.000
13	7:56: 0	0.767	833.000	128.00	107.000
14	7:59: 0	0.817	919.000	128.00	86.000
15	8: 2: 0	0.867	999.000	128.00	80.000
16	8: 5: 0	0.917	1062.000	128.00	63.000
17	8: 8: 0	0.967	1121.000	128.00	59.000
18	8:11: 0	1.017	1159.000	128.00	38.000
19	8:12: 0	1.033	170.000	128.00	-989.000
20	8:16: 0	1.100	134.000	128.00	-36.000
21	8:21: 0	1.183	114.000	128.00	-20.000
22	8:26: 0	1.267	101.000	128.00	-13.000
23	8:31: 0	1.350	95.000	128.00	-6.000
24	8:36: 0	1.433	93.000	128.00	-2.000
25	8:41: 0	1.517	91.000	128.00	-2.000
26	8:46: 0	1.600	89.000	128.00	-2.000
27	8:51: 0	1.683	87.000	128.00	-2.000
28	8:56: 0	1.767	86.000	128.00	-1.000
29	9: 1: 0	1.850	86.000	128.00	0.000
30	9: 6: 0	1.933	86.000	128.00	0.000
31	9: 9: 0	1.983	101.000	128.00	15.000
32	9:12: 0	2.033	165.000	128.00	64.000
33	9:15: 0	2.083	287.000	128.00	122.000
34	9:18: 0	2.133	459.000	128.00	172.000
35	9:21: 0	2.183	602.000	128.00	143.000
36	9:24: 0	2.233	748.000	128.00	146.000
37	9:27: 0	2.283	875.000	128.00	127.000
38	9:30: 0	2.333	972.000	128.00	97.000
39	9:33: 0	2.383	1058.000	128.00	86.000
40	9:36: 0	2.433	1116.000	128.00	58.000
41	9:39: 0	2.483	1155.000	128.00	39.000
42	9:42: 0	2.533	1187.000	128.00	32.000
43	9:45: 0	2.583	1231.000	128.00	44.000
44	9:48: 0	2.633	1262.000	128.00	31.000
45	9:51: 0	2.683	1284.000	128.00	22.000
46	9:54: 0	2.733	1308.000	128.00	24.000
47	9:57: 0	2.783	1335.000	128.00	27.000
48	10: 0: 0	2.833	1353.000	128.00	18.000
49	10: 3: 0	2.883	1369.000	128.00	16.000
50	10: 6: 0	2.933	1388.000	128.00	19.000
51	10: 9: 0	2.983	1399.000	128.00	11.000
52	10:12: 0	3.033	1416.000	128.00	17.000

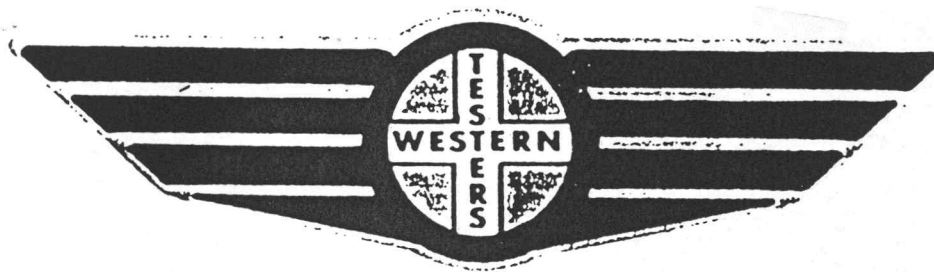


Inside Recorder



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	1-21-88	TICKET	:	12095	
CUSTOMER	:	KACHINA OIL CO. INC.	LEASE	:	BRUBAKER	
WELL	:	#1	TEST:	:	5	
ELEVATION	:	1858	GEOLOGIST	:	M. DOUGLASS	
SECTION	:	32	FORMATION	:	SIMPSON	
RANGE	:	12W	TOWNSHIP	:	29S	
GAUGE SN#	:	13362	STATE	:	KANSAS	
		COUNTY :	PRATT		CLOCK :	12
		RANGE :	4450			

INTERVAL FROM	:	4574	TO	:	4585	TOTAL DEPTH	:	4585
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4569	SIZE	:	6.63			
PACKER DEPTH	:	4574	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	DUKE			
MUD TYPE	:	DRISPAC	VISCOSITY	:	40
WEIGHT	:	9.4	WATER LOSS (CC)	:	20.2
CHLORIDES (PPM)	:	18000			
JARS-MAKE	:	NO	SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	189	FT	I.D. inch	:	2.50
DRILL PIPE LENGTH	:	4365	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	11	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 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW IN 7 MINUTES.
BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW-WOULDN'T MAINTAIN 2" FLOW LINE.
BLOW COMMENT #3 : NO GAS.
BLOW COMMENT #4 :

RECOVERED : 960 FT OF: WATER

CHLORIDES: 68000 PPM

Total Barrels Fluid = 11.96
Total Fluid Prod Rate = 202.65 BFPD
Indicated Wtr Rate = 202.65 BWPD

REMARK 1 :
REMARK 2 : HIT BRIDGE-JAMMED CLOCK ON OUTSIDE RECORDER.
REMARK 3 :
REMARK 4 :

SET PACKER(S) :	3:20 PM	TIME STARTED OFF BOTTOM :	6:20 PM
WELL TEMPERATURE :	140		
INITIAL HYDROSTATIC PRESSURE		(A)	2289
INITIAL FLOW PERIOD MIN:	25	(B)	107 PSI TO (C) : 176
INITIAL CLOSED IN PERIOD MIN:	36	(D)	1172
FINAL FLOW PERIOD MIN:	60	(E)	275 PSI TO (F) : 435
FINAL CLOSED IN PERIOD MIN:	36	(G)	1174
FINAL HYDROSTATIC PRESSURE		(H)	2176

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : KACHINA OIL CO. INC.
RIG : PRATT-KANSAS
FIELD : BRUBAKER
WELL : #1
DATE : 1-21-88
GAUGE NO : 13362

OPERATIONAL COMMENTS

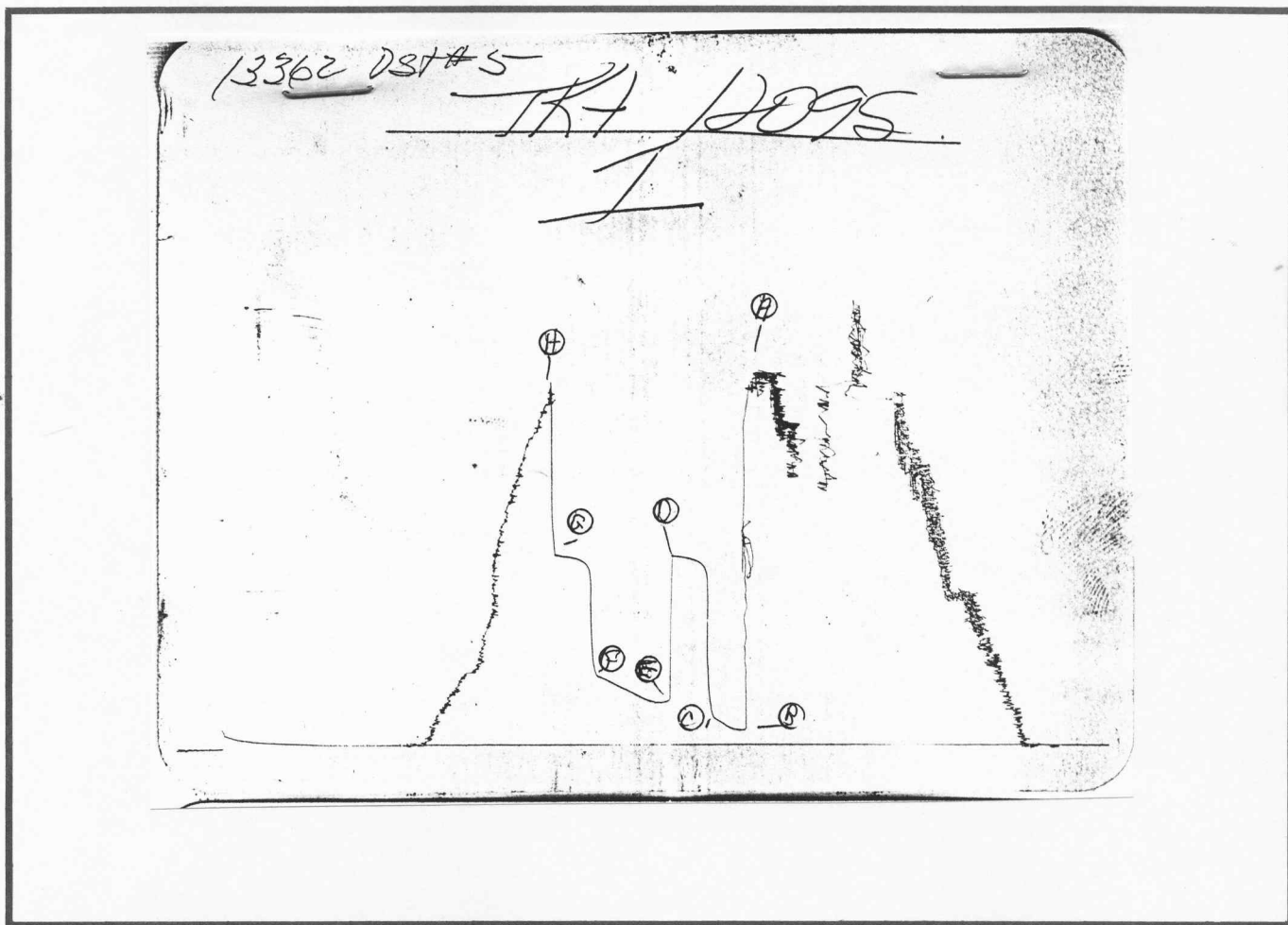
HIT BRIDGE-JAMMED CLOCK ON OUTSIDE RECORDER.

COMPANY : KACHINA OIL CO. INC.
WELL : #1
GAUGE # : 13362
DATE : 21/ 1/88

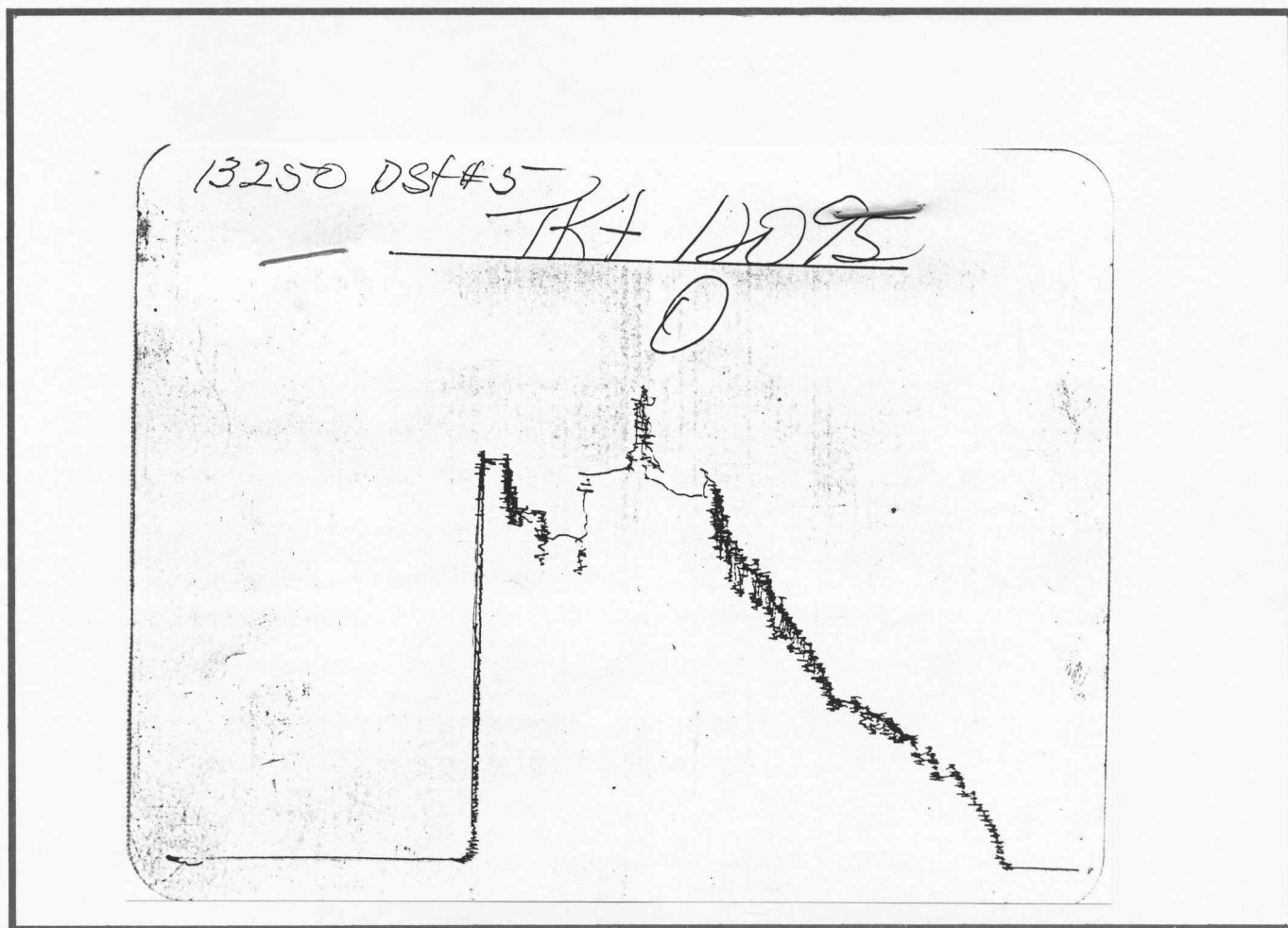
FIELD : BRUBAKER
JOB # : 12095
DEPTH : 4585
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	3:20: 0	0.000	107.000	140.00	0.000
2	3:24:59	0.083	107.000	140.00	0.000
3	3:30: 0	0.167	111.000	140.00	4.000
4	3:35: 0	0.250	128.000	140.00	17.000
5	3:39:59	0.333	154.000	140.00	26.000
6	3:45: 0	0.417	176.000	140.00	22.000
7	3:48: 0	0.467	285.000	140.00	109.000
8	3:51: 0	0.517	631.000	140.00	346.000
9	3:54: 0	0.567	1061.000	140.00	430.000
10	3:57: 0	0.617	1110.000	140.00	49.000
11	4: 0: 0	0.667	1130.000	140.00	20.000
12	4: 3: 0	0.717	1144.000	140.00	14.000
13	4: 6: 0	0.767	1152.000	140.00	8.000
14	4: 9: 0	0.817	1158.000	140.00	6.000
15	4:12: 0	0.867	1163.000	140.00	5.000
16	4:15: 0	0.917	1166.000	140.00	3.000
17	4:18: 0	0.967	1169.000	140.00	3.000
18	4:21: 0	1.017	1172.000	140.00	3.000
19	4:22: 0	1.033	275.000	140.00	-897.000
20	4:26: 0	1.100	275.000	140.00	0.000
21	4:31: 0	1.183	275.000	140.00	0.000
22	4:36: 0	1.267	282.000	140.00	7.000
23	4:41: 0	1.350	295.000	140.00	13.000
24	4:46: 0	1.433	314.000	140.00	19.000
25	4:51: 0	1.517	335.000	140.00	21.000
26	4:56: 0	1.600	354.000	140.00	19.000
27	5: 1: 0	1.683	374.000	140.00	20.000
28	5: 6: 0	1.767	391.000	140.00	17.000
29	5:11: 0	1.850	410.000	140.00	19.000
30	5:16: 0	1.933	427.000	140.00	17.000
31	5:21: 0	2.017	435.000	140.00	8.000
32	5:24: 0	2.067	519.000	140.00	84.000
33	5:27: 0	2.117	721.000	140.00	202.000
34	5:30: 0	2.167	1051.000	140.00	330.000
35	5:33: 0	2.217	1114.000	140.00	63.000
36	5:36: 0	2.267	1132.000	140.00	18.000
37	5:39: 0	2.317	1146.000	140.00	14.000
38	5:42: 0	2.367	1154.000	140.00	8.000
39	5:45: 0	2.417	1158.000	140.00	4.000
40	5:48: 0	2.467	1163.000	140.00	5.000
41	5:51: 0	2.517	1166.000	140.00	3.000
42	5:54: 0	2.567	1169.000	140.00	3.000
43	5:57: 0	2.617	1174.000	140.00	5.000

WESTERN TESTING CO. INC.



Inside Recorder



Outside Recorder