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# FORMATION TEST REPORT

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KATO OIL & GAS CONS COMPANY



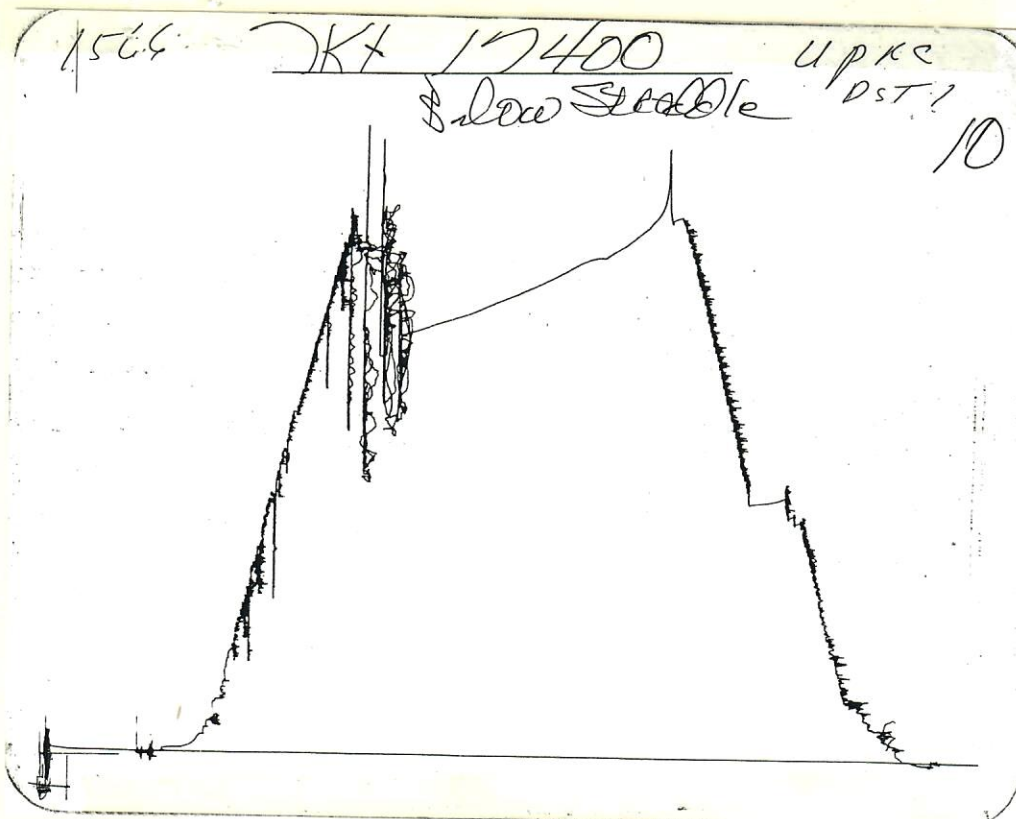
Home Office:

Wichita, Kansas 67201

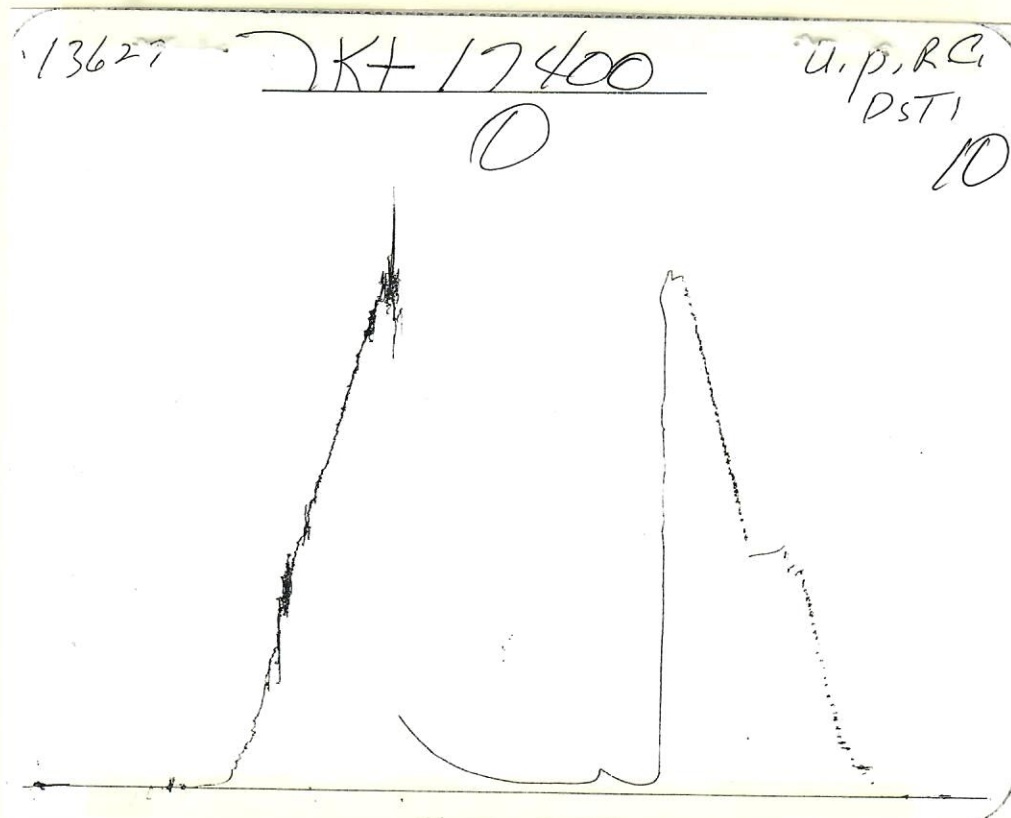
P.O. Box 1599

Phone (316) 262-5861

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Inside Recorder



Outside Recorder

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 1-25-92  
CUSTOMER : UNION PACIFIC RESOURCES COMPANY  
WELL : 1 TEST: 1  
ELEVATION : 4663 KB  
SECTION : 24  
RANGE : 52W COUNTY : LINCOLN  
GAUGE SN# : 11018 RANGE : 4425  
TICKET : 17400  
LEASE : BENZ 11-24  
GEOLOGIST : RITZ ?  
FORMATION : SPERGEN  
TOWNSHIP : 16S  
STATE : COLORADO  
CLOCK : 12

INTERVAL FROM : 6005 TO : 6040 TOTAL DEPTH : 6075  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 6000 SIZE : 6.75  
PACKER DEPTH : 6005 SIZE : 6.75  
PACKER DEPTH : 6040 SIZE : 6.75  
PACKER DEPTH : SIZE :

DRILLING CON. : MURFIN RIG 25  
MUD TYPE : CHEMICAL VISCOSITY : 73  
WEIGHT : 9.3 WATER LOSS (CC) : 7.6  
CHLORIDES (PPM) : 300  
JARS-MAKE : W.T.C. SERIAL NUMBER : 408  
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 594 FT I.D. inch : 2.20  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 5379 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 32 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 35 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5XH

BLOW COMMENT #1 : INITIAL FLOW PERIOD VERY WEAK 1 INCH IN BUCKET.  
BLOW COMMENT #2 : FINAL FLOW PERIOD VERY WEAK 2 INCH IN BUCKET  
BLOW COMMENT #3 : DECREASING TO 1 INCH IN BUCKET.  
BLOW COMMENT #4 :



RECOVERED : 60 FT OF: DRILLING MUD  
RECOVERED : 0 FT OF: CHLORIDES 1500 P.P.M.

Total Barrels Fluid = 0.28  
Total Fluid Prod Rate = 5.42 BFPD  
Indicated Wtr Rate = 0.54 BWPD

REMARK 1 : AFE #09178  
REMARK 2 :  
REMARK 3 :  
REMARK 4 :

SET PACKER(S) : 2:45 A.M. TIME STARTED OFF BOTTOM : 6:00 A.M.  
WELL TEMPERATURE : 137  
INITIAL HYDROSTATIC PRESSURE (A) 2992  
INITIAL FLOW PERIOD MIN: 15 (B) 64 PSI TO (C) : 64  
INITIAL CLOSED IN PERIOD MIN: 33 (D) 150  
FINAL FLOW PERIOD MIN: 60 (E) 69 PSI TO (F) : 70  
FINAL CLOSED IN PERIOD MIN: 93 (G) 451  
FINAL HYDROSTATIC PRESSURE (H) 2992

WESTERN TESTING CO. INC.  
WICHITA-KANSAS

Pressure Transient Report  
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COMPANY : UNION PACIFIC RESOURCES COMPANY  
RIG : LINCOLN-COLORADO  
FIELD : BENZ 11-24  
WELL : 1  
DATE : 1-25-92  
GAUGE NO : 11018

OPERATIONAL COMMENTS

AFE #09178

COMPANY : UNION PACIFIC RESOURCES COMPANY

FIELD : BENZ 11-24

WELL : 1

JOB # : 17400

GAUGE # : 11018

DEPTH : 6075

DATE : 25/ 1/92

TEST : AFE #09178

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	2:45: 0	0.000	64.000	137.00	0.000
3	2:49:59	0.083	64.000	137.00	0.000
4	2:55: 0	0.167	64.000	137.00	0.000
5	3: 0: 0	0.250	64.000	137.00	0.000
INITIAL SHUT-IN PERIOD					
6	3: 3: 0	0.300	64.000	137.00	0.000
7	3: 6: 0	0.350	64.000	137.00	0.000
8	3: 9: 0	0.400	67.000	137.00	3.000
9	3:12: 0	0.450	70.000	137.00	3.000
10	3:15: 0	0.500	77.000	137.00	7.000
11	3:18: 0	0.550	88.000	137.00	11.000
12	3:21: 0	0.600	96.000	137.00	8.000
13	3:24: 0	0.650	109.000	137.00	13.000
14	3:27: 0	0.700	122.000	137.00	13.000
15	3:30: 0	0.750	136.000	137.00	14.000
16	3:33: 0	0.800	150.000	137.00	14.000
FINAL FLOW PERIOD					
17	3:34: 0	0.817	69.000	137.00	-81.000
18	3:37:59	0.883	69.000	137.00	0.000
19	3:43: 0	0.967	69.000	137.00	0.000
20	3:48: 0	1.050	69.000	137.00	0.000
21	3:52:59	1.133	69.000	137.00	0.000
22	3:58: 0	1.217	69.000	137.00	0.000
23	4: 3: 0	1.300	70.000	137.00	1.000
24	4: 7:59	1.383	70.000	137.00	0.000
25	4:13: 0	1.467	70.000	137.00	0.000
26	4:18: 0	1.550	70.000	137.00	0.000
27	4:22:59	1.633	70.000	137.00	0.000
28	4:28: 0	1.717	70.000	137.00	0.000
29	4:33: 0	1.800	70.000	137.00	0.000
FINAL SHUT-IN PERIOD					
30	4:36: 0	1.850	70.000	137.00	0.000
31	4:39: 0	1.900	70.000	137.00	0.000
32	4:42: 0	1.950	71.000	137.00	1.000
33	4:45: 0	2.000	74.000	137.00	3.000
34	4:48: 0	2.050	77.000	137.00	3.000
35	4:51: 0	2.100	80.000	137.00	3.000
36	4:53:59	2.150	83.000	137.00	3.000
37	4:57: 0	2.200	87.000	137.00	4.000
38	5: 0: 0	2.250	93.000	137.00	6.000
39	5: 3: 0	2.300	100.000	137.00	7.000
40	5: 6: 0	2.350	107.000	137.00	7.000
41	5: 9: 0	2.400	112.000	137.00	5.000
42	5:11:59	2.450	119.000	137.00	7.000
43	5:15: 0	2.500	126.000	137.00	7.000
44	5:18: 0	2.550	132.000	137.00	6.000
45	5:21: 0	2.600	140.000	137.00	8.000
46	5:24: 0	2.650	149.000	137.00	9.000
47	5:26:59	2.700	160.000	137.00	11.000
48	5:30: 0	2.750	173.000	137.00	13.000



COMPANY : UNION PACIFIC RESOURCES COMPANY

WELL : 1  
GAUGE # : 11018  
DATE : 25/ 1/92

FIELD : BENZ 11-24  
JOB # : 17400  
DEPTH : 6075  
TEST : AFE #09178

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	5:33: 0	2.800	190.000	137.00	17.000
50	5:36: 0	2.850	202.000	137.00	12.000
51	5:39: 0	2.900	218.000	137.00	16.000
52	5:41:59	2.950	239.000	137.00	21.000
53	5:45: 0	3.000	258.000	137.00	19.000
54	5:48: 0	3.050	281.000	137.00	23.000
55	5:51: 0	3.100	307.000	137.00	26.000
56	5:54: 0	3.150	310.000	137.00	3.000
57	5:56:59	3.200	358.000	137.00	48.000
58	6: 0: 0	3.250	384.000	137.00	26.000
59	6: 3: 0	3.300	416.000	137.00	32.000
60	6: 6: 0	3.350	451.000	137.00	35.000

WESTERN TESTING CO. INC.



# FLUID SAMPLE REPORT

Date : 1-25-92 Ticket No. : 17400  
 Company : UNION PACIFIC RESOURCES COMPANY  
 Well Name & No. : #1 BENZ 11-24  
 DST No. 1  
 County : LINCOLN State : COLORADO  
 Sampler No. : 6 Test Interval : 6005-6040

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Pressure in Sampler	50	PSIG	BHT	137	Deg F
Total Volume of Sampler	: 3000		cc		
Total Volume of Sample	: 2200		cc		
Oil:			cc		
Water:			cc		
Mud:	2200		cc		
Gas:		cu ft			
Other:			cc		

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## RESITIVITY

Drilling Mud	4.0	@	70 F	Chloride Content	1500 ppm
Mud Pit Sample	10.0	@	70 F	Chloride Content	500 ppm
Gas/Oil Ratio			Gravity	API @	Deg F

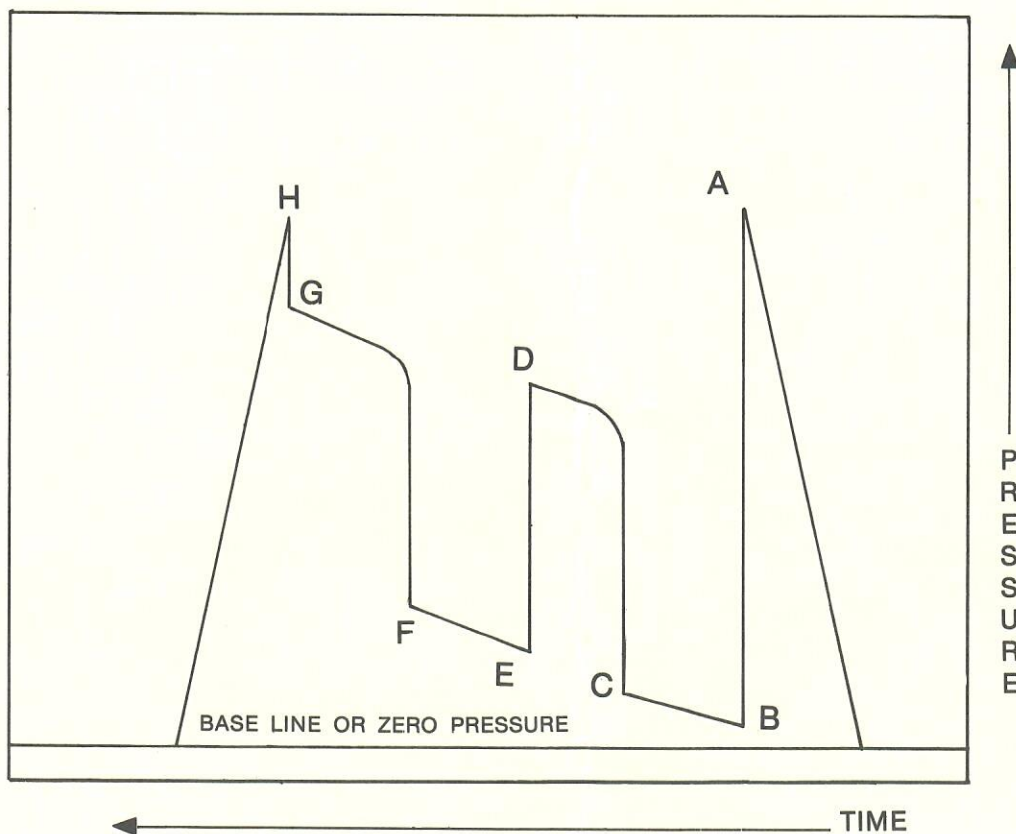
Where was sample drained ON LOCATION

Remarks: AFE #09178

### COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

### AK-1 Recorders



A - Initial Hydrostatic

B - First Initial Flow

C - First Final Flow

D - Initial Shut-In

E - Second Initial Flow

F - Second Final Flow

G - Final Shut-In

H - Final Hydrostatic

