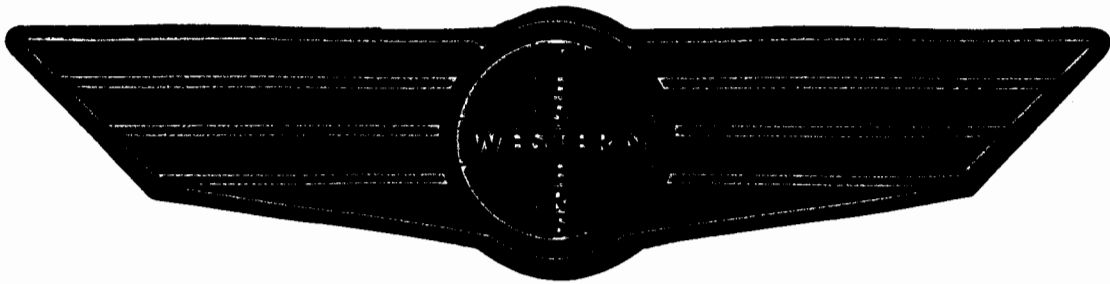


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone **1-800-688-7021**

COMPANY CRYSTAL OIL COMPANY

LEASE & WELL NO. HIRT FARMS #1

SEC. 26 TWP. 27S RGE. 12W

TEST NO. 1

DATE 1/15/92

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 1-15-92 TICKET : 17600
CUSTOMER : CRYSTAL OIL COMPANY LEASE : HIRT FARMS
WELL : 1 TEST: 1 GEOLOGIST : SCOTT
ELEVATION : 1842 KB FORMATION : KANSAS CITY A&B
SECTION : 26 TOWNSHIP : 27S
RANGE : 12W COUNTY : PRATT STATE : KANSAS
GAUGE SN# : 1051 RANGE : 4150 CLOCK : 12

INTERVAL FROM : 3686 TO : 3754 TOTAL DEPTH : 3754
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 3681 SIZE : 6.63
PACKER DEPTH : 3686 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 6
MUD TYPE : CHEMICAL VISCOSITY : 45
WEIGHT : 8.8 WATER LOSS (CC) : 12.0
CHLORIDES (PPM) : 4000
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 597 FT I.D. inch : 2.50
DRILL PIPE LENGTH : 3069 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 68 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 STRONG BLOW.
BLOW COMMENT #2 : FINAL FLOW PERIOD STRONG BLOW - GAS TO SURFACE
BLOW COMMENT #3 : IN 15 MINUTES - SEE FLOW CHART.
BLOW COMMENT #4 :

RECOVERED : 90 FT OF: MUD
RECOVERED : 60 FT OF: SLY OIL CUT MUD

Total Barrels Fluid = 0.91
Total Fluid Prod Rate = 17.48 BFPD
Indicated Oil Rate = 0.35 BOPD
Indicated Wtr Rate = 1.75 BWPD
Corrected Oil Rate = 10.26 BOPD
Corrected Wtr Rate = 51.32 BWPD

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

SET PACKER(S) : 3:30 A.M. TIME STARTED OFF BOTTOM : 6:30 A.M.
WELL TEMPERATURE : 108
INITIAL HYDROSTATIC PRESSURE (A) 1764
INITIAL FLOW PERIOD MIN: 30 (B) 64 PSI TO (C) : 64
INITIAL CLOSED IN PERIOD MIN: 45 (D) 955
FINAL FLOW PERIOD MIN: 45 (E) 97 PSI TO (F) : 97
FINAL CLOSED IN PERIOD MIN: 63 (G) 934
FINAL HYDROSTATIC PRESSURE (H) 1726

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : CRYSTAL OIL COMPANY
RIG : PRATT-KANSAS
FIELD : HIRT FARMS
WELL : 1
DATE : 1-15-92
GAUGE NO : 1051

OPERATIONAL COMMENTS

COMPANY : CRYSTAL OIL COMPANY
 WELL : 1
 GAUGE # : 1051
 DATE : 15/ 1/92

FIELD : HIRT FARMS
 JOB # : 17600
 DEPTH : 3754
 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 PERIOD					
2	3:30: 0	0.000	64.000	108.00	0.000
3	3:34:59	0.083	64.000	108.00	0.000
4	3:40: 0	0.167	64.000	108.00	0.000
5	3:45: 0	0.250	64.000	108.00	0.000
6	3:49:59	0.333	64.000	108.00	0.000
7	3:55: 0	0.417	64.000	108.00	0.000
8	4: 0: 0	0.500	64.000	108.00	0.000
INITIAL SHUT-IN PERIOD					
9	4: 3: 0	0.550	83.000	108.00	19.000
10	4: 6: 0	0.600	177.000	108.00	94.000
11	4: 9: 0	0.650	266.000	108.00	89.000
12	4:12: 0	0.700	328.000	108.00	62.000
13	4:15: 0	0.750	379.000	108.00	51.000
14	4:18: 0	0.800	422.000	108.00	43.000
15	4:21: 0	0.850	455.000	108.00	33.000
16	4:24: 0	0.900	477.000	108.00	22.000
17	4:27: 0	0.950	490.000	108.00	13.000
18	4:30: 0	1.000	506.000	108.00	16.000
19	4:33: 0	1.050	658.000	108.00	152.000
20	4:36: 0	1.100	750.000	108.00	92.000
21	4:39: 0	1.150	833.000	108.00	83.000
22	4:42: 0	1.200	895.000	108.00	62.000
23	4:45: 0	1.250	955.000	108.00	60.000
FINAL FLOW PERIOD					
24	4:46: 0	1.267	97.000	108.00	-858.000
25	4:49:59	1.333	97.000	108.00	0.000
26	4:55: 0	1.417	97.000	108.00	0.000
27	5: 0: 0	1.500	97.000	108.00	0.000
28	5: 4:59	1.583	97.000	108.00	0.000
29	5:10: 0	1.667	97.000	108.00	0.000
30	5:15: 0	1.750	97.000	108.00	0.000
31	5:19:59	1.833	97.000	108.00	0.000
32	5:25: 0	1.917	97.000	108.00	0.000
33	5:30: 0	2.000	97.000	108.00	0.000
FINAL SHUT-IN PERIOD					
34	5:33: 0	2.050	122.000	108.00	25.000
35	5:36: 0	2.100	170.000	108.00	48.000
36	5:39: 0	2.150	223.000	108.00	53.000
37	5:42: 0	2.200	269.000	108.00	46.000
38	5:45: 0	2.250	313.000	108.00	44.000
39	5:48: 0	2.300	354.000	108.00	41.000
40	5:51: 0	2.350	392.000	108.00	38.000
41	5:54: 0	2.400	411.000	108.00	19.000
42	5:57: 0	2.450	427.000	108.00	16.000
43	6: 0: 0	2.500	437.000	108.00	10.000
44	6: 3: 0	2.550	454.000	108.00	17.000
45	6: 6: 0	2.600	539.000	108.00	85.000
46	6: 9: 0	2.650	624.000	108.00	85.000
47	6:12: 0	2.700	690.000	108.00	66.000
48	6:15: 0	2.750	750.000	108.00	60.000

COMPANY : CRYSTAL OIL COMPANY
WELL : 1
GAUGE # : 1051
DATE : 15/ 1/92

FIELD : HIRT FARMS
JOB # : 17600
DEPTH : 3754
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	6:18: 0	2.800	807.000	108.00	57.000
50	6:21: 0	2.850	846.000	108.00	39.000
51	6:24: 0	2.900	874.000	108.00	28.000
52	6:27: 0	2.950	900.000	108.00	26.000
53	6:30: 0	3.000	920.000	108.00	20.000
54	6:33: 0	3.050	934.000	108.00	14.000

WESTERN TESTING CO. INC.

GAS FLOW REPORT

Date : 1-15-92	Ticket # : 17600
Customer : CRYSTAL OIL COMPANY	Lease : HIRT FARMS
Well : 1 Test : 1	Geologist : SCOTT
Elevation (KB) : 1842 Formation : KANSAS CITY A&B	
Section : 26 Township : 27S	
Range : 12W County : PRATT	State : KANSAS
Gauge SN # : 1051 Range : 4150	Clock : 12

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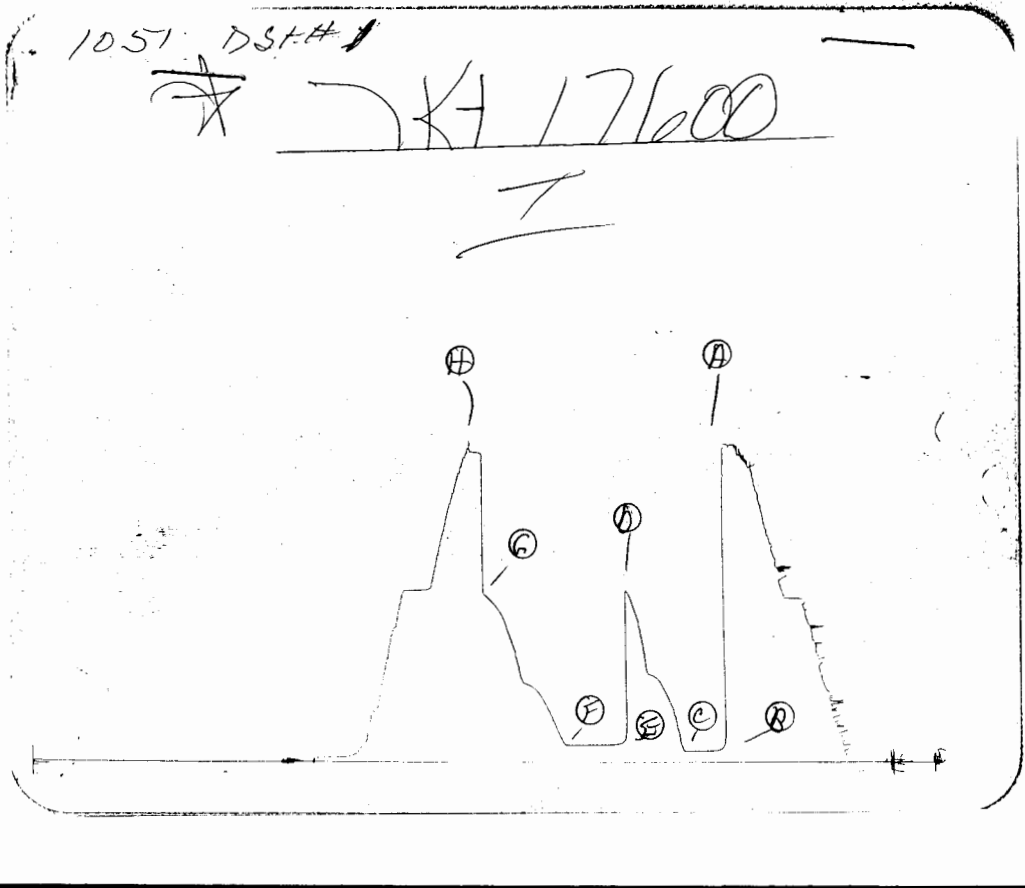
PRE FLOW
=====

SECOND FLOW
=====

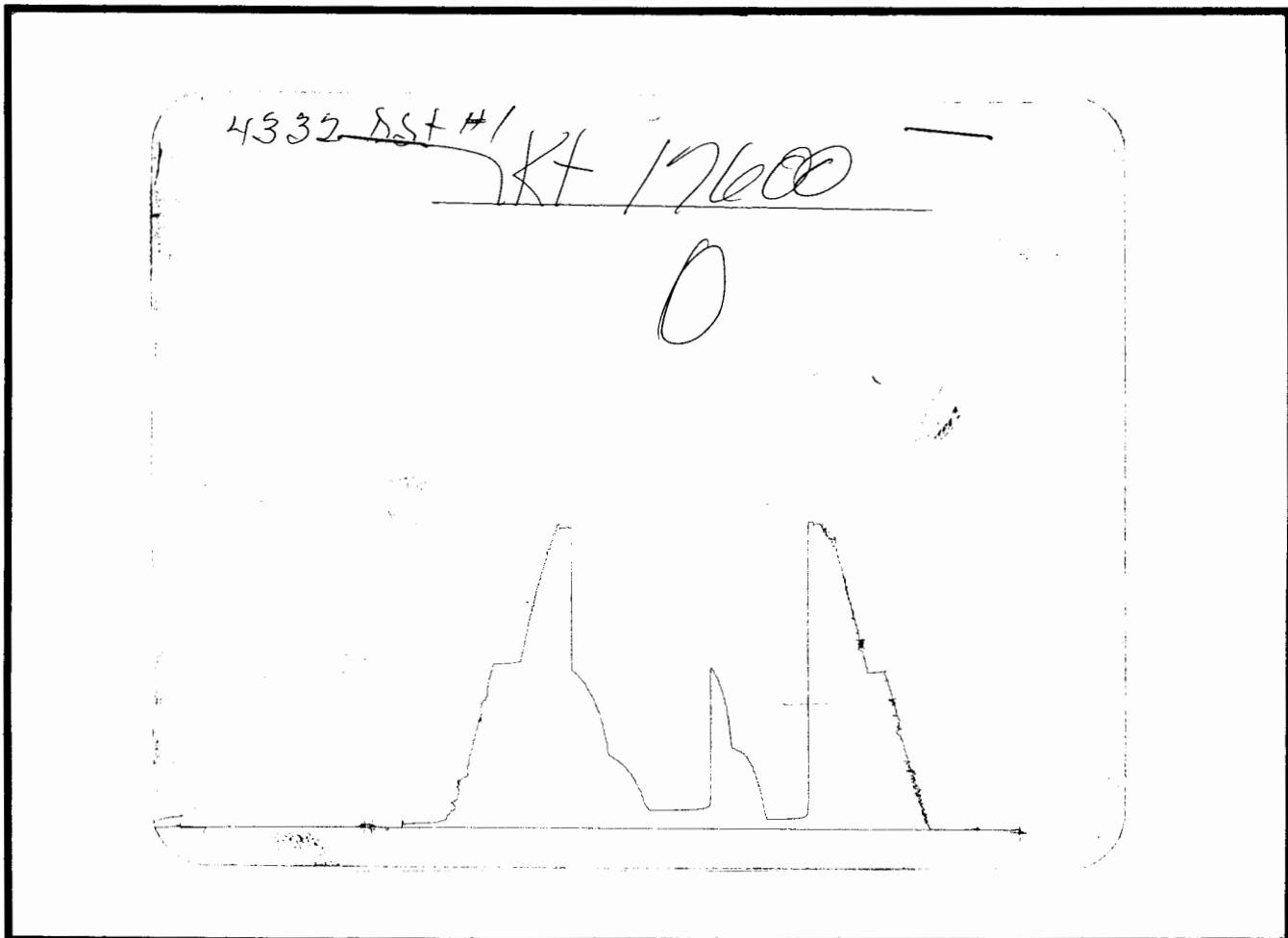
15 MIN.	MERLA	1/8"		GAS TO SURFACE
15 MIN.	MERLA	1/8"	5"WTR	1180 C.F.P.D.
20 MIN.	MERLA	1/8"	7"WTR	1390 C.F.P.D.
25 MIN.	MERLA	1/8"	7"WTR	1390 C.F.P.D.
30 MIN.	MERLA	1/8"	7"WTR	1390 C.F.P.D.

TOO WEAK A BLOW - NO GAS SAMPLE TAKEN

Gas Bottle SN #	:	
Date Bottle Filled	:	1-15-92
Date to be Invoiced	:	1-15-92



Inside Recorder



Outside Recorder