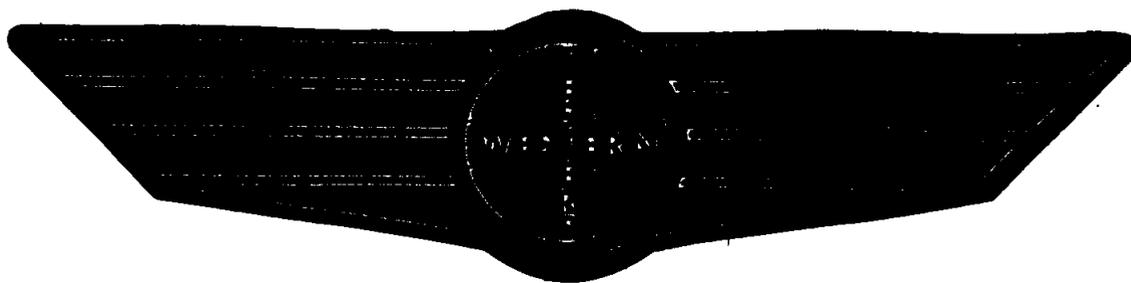


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 10/16/92
CUSTOMER : RANGE OIL COMPANY, INC.
WELL : 1 TEST: 1
ELEVATION: 1250 KB
SECTION : 1
RANGE : 9E COUNTY: ELK
GAUGE SN#: 10979 RANGE : 4100
TICKET : 18617
LEASE : BRACE A
GEOLOGIST: THOMAS BLAIR
FORMATION: MISSISSIPPI
TOWNSHIP : 31S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2297.00 ft TO: 2316.00 ft TVD: 2316.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2310.0 ft 2313.0 ft
TEMPERATURE: 103.0
DRILL COLLAR LENGTH: 360.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 1917.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 20.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 19.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5FH
PACKER DEPTH: 2292.0 ft SIZE: 6.630 in
PACKER DEPTH: 2297.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : GLAVES RIG 1
MUD TYPE : CHEMICAL VISCOSITY : 45.00 cp
WEIGHT : 9.200 ppg WATER LOSS: 9.200 cc
CHLORIDES : 1100 ppm
JARS-MAKE :
DID WELL FLOW?: NO SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW THOROUGHOUT, 3 INCH
INTO BUCKET. FINAL FLOW PERIOD NO BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

<u>Feet of Fluid</u>	<u>% Oil</u>	<u>% Gas</u>	<u>% Water</u>	<u>% Mud</u>	<u>Comments</u>
20.0	0.0	0.0	0.0	100.0	DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.0983	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.0983	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1165.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	30.00	30.00
INITIAL SHUT-IN	30.00		405.00
FINAL FLOW	30.00	40.00	40.00
FINAL SHUT-IN	30.00		375.00

FINAL HYDROSTATIC PRESSURE: 1155.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1220.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	50.00	50.00
INITIAL SHUT-IN	30.00		420.00
FINAL FLOW	30.00	53.00	53.00
FINAL SHUT-IN	33.00		388.00

FINAL HYDROSTATIC PRESSURE: 1180.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 10/16/92	TICKET	: 18617
CUSTOMER	: RANGE OIL COMPANY, INC.	LEASE	: BRACE A
WELL	: 1	TEST:	: 1
ELEVATION:	1250 KB	GEOLOGIST:	THOMAS BLAIR
SECTION	: 1	FORMATION:	MISSISSIPPI
RANGE	: 9E	TOWNSHIP	: 31S
GAUGE SN#:	10979	STATE	: KS
		CLOCK	: 12
		COUNTY:	ELK
		RANGE	: 4100

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	50.00	50.00
5.00	50.00	0.00
10.00	50.00	0.00
15.00	50.00	0.00
20.00	50.00	0.00
25.00	50.00	0.00
30.00	50.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	63.00	63.00	0.00
6.00	173.00	110.00	0.00
9.00	275.00	102.00	0.00
12.00	321.00	46.00	0.00
15.00	350.00	29.00	0.00
18.00	368.00	18.00	0.00
21.00	387.00	19.00	0.00
24.00	400.00	13.00	0.00
27.00	410.00	10.00	0.00
30.00	420.00	10.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	53.00	53.00

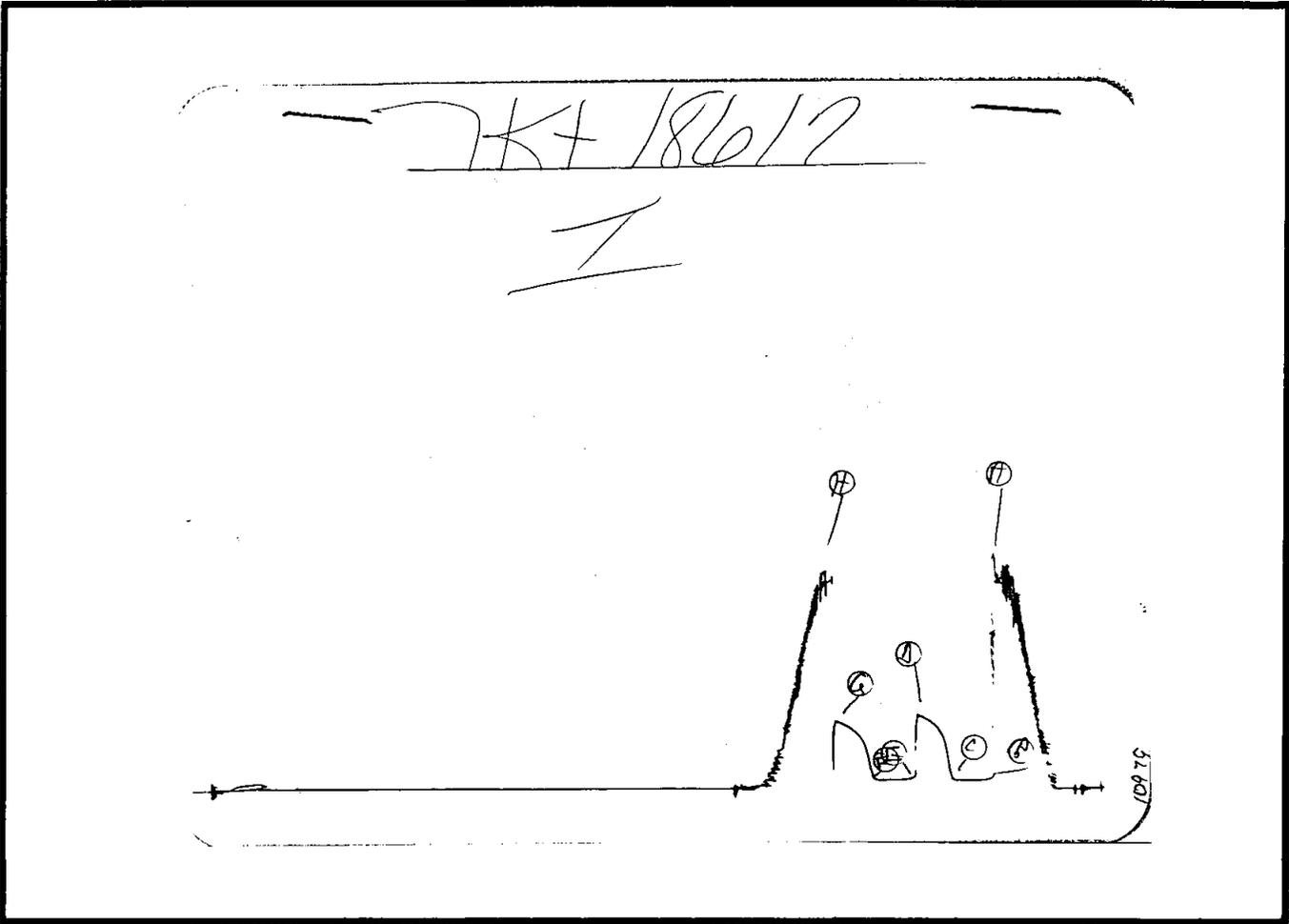
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

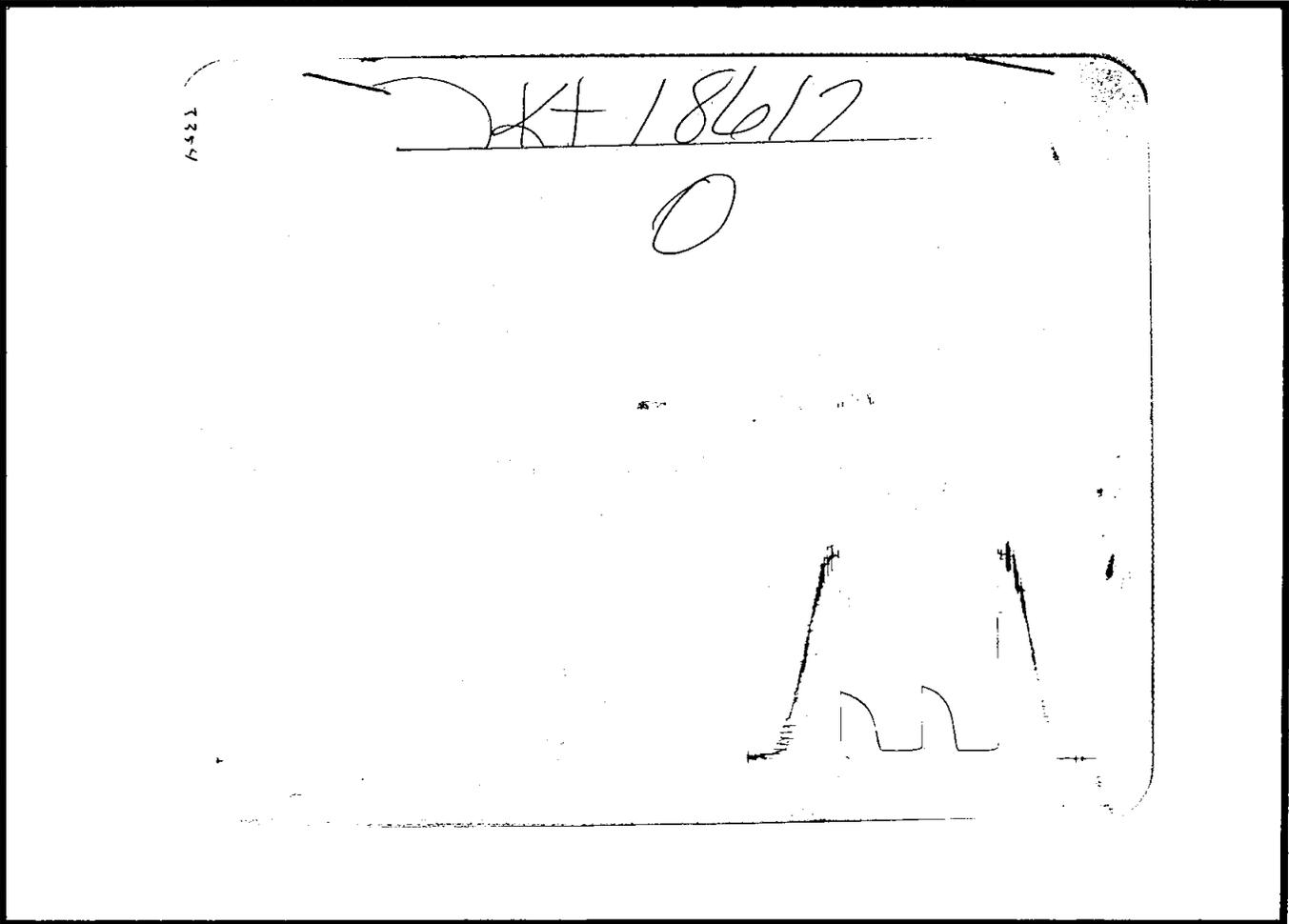
<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
5.00	53.00	0.00
10.00	53.00	0.00
15.00	53.00	0.00
20.00	53.00	0.00
25.00	53.00	0.00
30.00	53.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	82.00	82.00	0.00
6.00	172.00	90.00	0.00
9.00	249.00	77.00	0.00
12.00	286.00	37.00	0.00
15.00	314.00	28.00	0.00
18.00	334.00	20.00	0.00
21.00	346.00	12.00	0.00
24.00	361.00	15.00	0.00
27.00	372.00	11.00	0.00
30.00	380.00	8.00	0.00
33.00	388.00	8.00	0.00



Inside Recorder



Outside Recorder