



WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No 8198

P. O. BOX 1599 PHONE (316) 262-5861

Elevation 1234 KB

Formation Dayton

Eff. Pay - Ft.

WICHITA, KANSAS 67201

District Augusta

Date 8-11-85

Customer Order No.

COMPANY NAME Range Oil Co Inc

ADDRESS 240 Page Court 220 N. Douglas Wichita Ks 67202

LEASE AND WELL NO. Cole A#1 COUNTY Cowley STATE Ks Sec 33 Twp. 31S Rge. 7E

Mail Invoice To Same #1 'A' Cole Co. Name No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 2027 ft. to 2039 ft. Total Depth 2039 ft.

Packer Depth 2027 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2022 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2031 ft.

Recorder Number 13553 Cap. 4025

Bottom Recorder Depth (Outside) 2034 ft.

Recorder Number 13266 Cap. 4000

Below Straddle Recorder Depth - ft.

Recorder Number - Cap. -

Drilling Contractor Ranged Only #2

Drill Collar Length 180 I. D. 2 1/4 in.

Mud Type Chem Viscosity 42

Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 12 cc.

Drill Pipe Length 1827 I. D. 3.8 in.

Chlorides 700 P.P.M.

Test Tool Length 20 ft. Tool Size 5 1/2 00 in.

Jars: Make - Serial Number -

Anchor Length 12 ft. Size 5 1/2 00 in.

Did Well Flow? No Reversed Out No

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x 11 in.

Blow: Break to very weak @ end of test

Recovered 90 ft. of 2) mulling mud & slight show of oil on top of fluid

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides 750 P.P.M. Sample Jars used 3 Remarks:

Time On Location 3:00 8-11 A.M.

Time Pick Up Tool 3:00 P.M.

Time Off Location - A.M.

Time Set Packer(s) 4:00 P.M.

Time Started Off Bottom 6:45 P.M.

Maximum Temperature 99

Initial Hydrostatic Pressure (A) 98.5 P.S.I.

Initial Flow Period Minutes 30 (B) 40 P.S.I. to (C) 30 P.S.I.

Initial Closed In Period Minutes 30 (D) 570 P.S.I.

Final Flow Period Minutes 45 (E) 50 P.S.I. to (F) 40 P.S.I.

Final Closed In Period Minutes 60 (G) 600 P.S.I.

Final Hydrostatic Pressure (H) 96.5 P.S.I.

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.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By

Signature of Customer or his authorized representative

Western Representative

Norman Allen

O/SO.

FIELD INVOICE

Open Hole Test \$ 550
Mistrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

WESTERN TESTING CO., INC.

Pressure Data

Date 8-11Test Ticket No. 8198Recorder No. 13553

Capacity

Location

Ft.

Clock No. _____ Elevation _____

Well Temperature _____

°F

Point	Pressure	
A. Initial Hydrostatic Mud	<u>981</u>	P.S.I.
B. First Initial Flow Pressure	<u>26</u>	P.S.I.
C. First Final Flow Pressure	<u>28</u>	P.S.I.
D. Initial Closed-in Pressure	<u>570</u>	P.S.I.
E. Second Initial Flow Pressure	<u>40</u>	P.S.I.
F. Second Final Flow Pressure	<u>43</u>	P.S.I.
G. Final Closed-in Pressure	<u>598</u>	P.S.I.
H. Final Hydrostatic Mud	<u>962</u>	P.S.I.

Open Tool

Time
GivenTime
Computed

M

First Flow Pressure

30 Mins. 30 Mins.

Initial Closed-in Pressure

30 Mins. 33 Mins.

Second Flow Pressure

45 Mins. 45 Mins.

Final Closed-in Pressure

60 Mins. 60 Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 12 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 10 Inc.
of 5 mins. and a
final inc. of 0 Min.

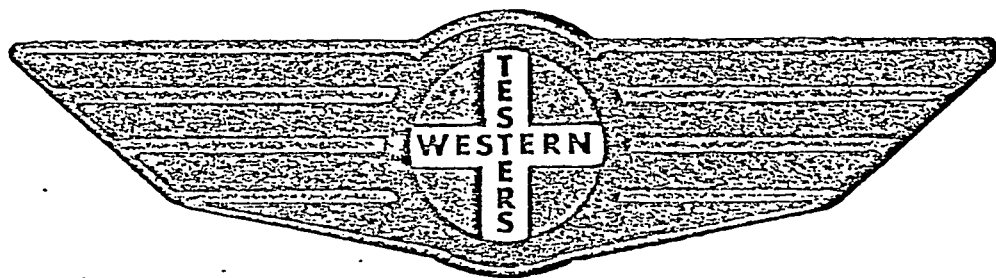
Final Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>26</u>	0	<u>28</u>	0	<u>40</u>	0	<u>43</u>
P 2 5	<u>5</u>	3	<u>78</u>	5	<u>(</u>	3	<u>89</u>
P 3 10	<u>5</u>	6	<u>191</u>	10	<u>(</u>	6	<u>174</u>
P 4 15	<u>26</u>	9	<u>280</u>	15	<u>)</u>	9	<u>274</u>
P 5 20	<u>27</u>	12	<u>350</u>	20	<u>(</u>	12	<u>337</u>
P 6 25	<u>27</u>	15	<u>402</u>	25	<u>40</u>	15	<u>385</u>
P 7 30	<u>28</u>	18	<u>452</u>	30	<u>41</u>	18	<u>423</u>
P 8 35		21	<u>491</u>	35	<u>41</u>	21	<u>451</u>
P 9 40		24	<u>521</u>	40	<u>42</u>	24	<u>474</u>
P10 45		27	<u>544</u>	45	<u>43</u>	27	<u>493</u>
P11 50		30	<u>563</u>	50		30	<u>512</u>
P12 55		33	<u>570</u>	55		33	<u>528</u>
P13 60		36		60		36	<u>540</u>
P14 65		39		65		39	<u>551</u>
P15 70		42		70		42	<u>562</u>
P16 75		45		75		45	<u>571</u>
P17 80		48		80		48	<u>578</u>
P18 85		51		85		51	<u>585</u>
P19 90		54		90		54	<u>591</u>
P20 95		57		95		57	<u>597</u>
100		60		100		60	<u>598</u>

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RANGE OIL COMPANY, INC. Lease & Well No. #1 "A" COLE Sec. 33 Twp. 31S Rge. 7E Test No. 1 Date 8/11/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 8-11-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 1
ELEVATION (KB): 1234 FORMATION: LAYTON
SECTION: 33 TOWNSHIP: 31S
RANGE: 7E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #13553 RANGE: 4025 CLOCK: 12

TICKET #8198
LEASE: "A" COLE
GEOLOGIST: T.J. LAUER

INTERVAL TEST FROM: 2027 FT TO: 2039 FT TOTAL DEPTH: 2039 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2027 FT SIZE: 6 3/4 IN PAKER DEPTH: 2022 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: CHEMICAL VISCOSITY: 42
WEIGHT: 9.3 WATER LOSS (CC): 12
CHLORIDES (P.P.M.): 700

JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO

DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 1827 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 12 FT SIZE: 5 1/2 OD IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: WEAK BLOW TO VERY WEAK BLOW AT END OF TEST.

RECOVERED: 90 FT OF: DRILLING MUD WITH SLIGHT SHOW
RECOVERED: FT OF: OF OIL ON TOP OF FLUID.
RECOVERED: FT OF: CHLORIDES 750 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

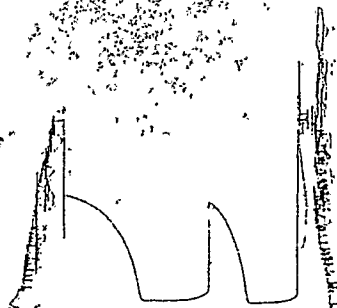
TIME SET PACKER(S): 4:00 PM TIME STARTED OFF BOTTOM: 6:45 PM
WELL TEMPERATURE: 99 °F
INITIAL HYDROSTATIC PRESSURE: (A) 981 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 26 PSI TO (C) 28 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 570 PSI
FINAL FLOW PERIOD MIN: 45 (E) 40 PSI TO (F) 43 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 598 PSI
FINAL HYDROSTATIC PRESSURE (H) 962 PSI

TKT #8198
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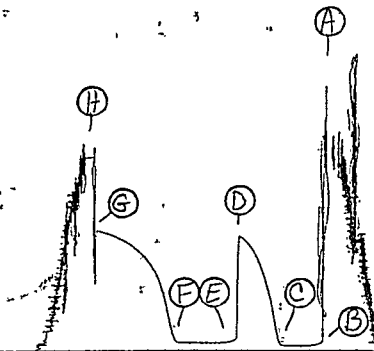
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OST
H
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TKT #8198
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DST#1 8198