



WESTERN TESTING CO., INC.
FORMATION TESTING

Called, OK

TICKET NO. 4128

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 1157 KB Formation K.C. Eff. Pay - Ft.

District 13 August Date 2-1-84 Customer Order No. -

COMPANY NAME Range Oil Co Inc

ADDRESS 240 Page Court 220 W Douglas Wichita, Ks 67202

LEASE AND WELL NO. Wyant #1 COUNTY Ellh STATE Ks Sec. 12 Twp. 30s Rge. 9E

Mail Invoice To Same Co. Name No. Copies Requested 1

Mail Charts To Same #1 Wyant Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 1588 ft. to 1603 ft. Total Depth 1603 ft.

Packer Depth 1588 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1583 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1595 ft. Recorder Number 13266 Cap. 4200

Bottom Recorder Depth (Outside) 1598 ft. Recorder Number 13268 Cap. 4225

Below Saddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Oil Co Inc #2 Drill Collar Length 270 I. D. 2 1/4 in.

Mud Type Chem Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.5 Water Loss 12.8 cc. Drill Pipe Length 1298 I. D. 3.8 in.

Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 15 ft. Size 5 1/2 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 1 1/4 in.

Blow: 2 break 2 minutes

Recovered 5 ft. of Drilling mud

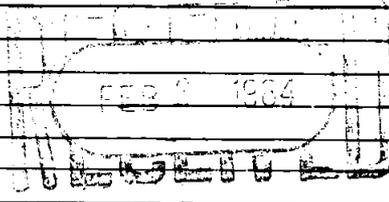
Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides 1400 P.P.M. Sample Jars used 1 Remarks:



Time On Location 12:01 21 P.M. Time Pick Up Tool 1:50 P.M. Time Off Location Standby A.M. P.M.

Time Set Packer(s) 2:45 P.M. Time Started Off Bottom 4:45 P.M. Maximum Temperature 89

Initial Hydrostatic Pressure (A) 785 P.S.I.

Initial Flow Period Minutes 30 (B) 20 P.S.I. to (C) 20 P.S.I.

Initial Closed In Period Minutes 30 (D) 245 P.S.I.

Final Flow Period Minutes 30 (E) 50 P.S.I. to (F) 30 P.S.I.

Final Closed In Period Minutes 30 (G) 245 P.S.I.

Final Hydrostatic Pressure (H) 770 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] TIM J. LAUER Signature of Customer or his authorized representative

Western Representative Norman Allen 0150

FIELD INVOICE

Table with 2 columns: Item, Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, TOTAL. Amounts are handwritten.

WESTERN TESTING CO., INC.

Pressure Data

Date: 2-1 Test Ticket No. 4128
 Recorder No. 13266 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point 785 Pressure _____ Time Given _____ Time Computed _____
 A Initial Hydrostatic Mud _____ P.S.I. Open Tool _____ M
 B First Initial Flow Pressure _____ P.S.I. First Flow Pressure _____ Mins. _____ Mins.
 C First Final Flow Pressure _____ P.S.I. Initial Closed-in Pressure _____ Mins. _____ Mins.
 D Initial Closed-in Pressure _____ P.S.I. Second Flow Pressure _____ Mins. _____ Mins.
 E Second Initial Flow Pressure _____ P.S.I. Final Closed-in Pressure _____ Mins. _____ Mins.
 F Second Final Flow Pressure _____ P.S.I.
 G Final Closed-in Pressure _____ P.S.I.
 H Final Hydrostatic Mud 770 P.S.I.

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 11 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

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

Final Shut-In
 Breakdown: 12 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>18</u> | 0 | <u>18</u> | 0 | <u>49</u> | 0 | <u>24</u> |
| P 2 5 | | 3 | <u>18</u> | 5 | <u>42</u> | 3 | <u>7</u> |
| P 3 10 | | 6 | <u>18</u> | 10 | <u>35</u> | 6 | <u>7</u> |
| P 4 15 | | 9 | <u>18</u> | 15 | <u>28</u> | 9 | <u>24</u> |
| P 5 20 | | 12 | <u>26</u> | 20 | <u>26</u> | 12 | <u>31</u> |
| P 6 25 | | 15 | <u>46</u> | 25 | <u>25</u> | 15 | <u>39</u> |
| P 7 30 | <u>18</u> | 18 | <u>81</u> | 30 | <u>24</u> | 18 | <u>51</u> |
| P 8 35 | | 21 | <u>134</u> | 35 | | 21 | <u>73</u> |
| P 9 40 | | 24 | <u>188</u> | 40 | | 24 | <u>109</u> |
| P10 45 | | 27 | <u>211</u> | 45 | | 27 | <u>150</u> |
| P11 50 | | 30 | <u>236</u> | 50 | | 30 | <u>187</u> |
| P12 55 | | 33 | | 55 | | 33 | <u>235</u> |
| P13 60 | | 36 | | 60 | | 36 | |
| P14 | | 39 | | 65 | | 39 | |
| P15 | | 42 | | 70 | | 42 | |
| P16 | | 45 | | 75 | | 45 | |
| P17 | | 48 | | 80 | | 48 | |
| P18 | | 51 | | 85 | | 51 | |
| P19 | | 54 | | 90 | | 54 | |
| P20 | | 57 | | | | 57 | |
| | | 60 | | | | 60 | |

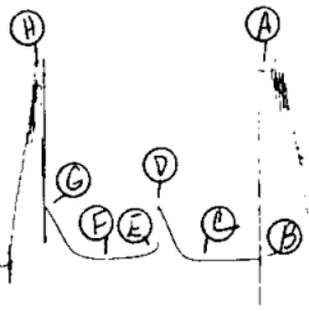
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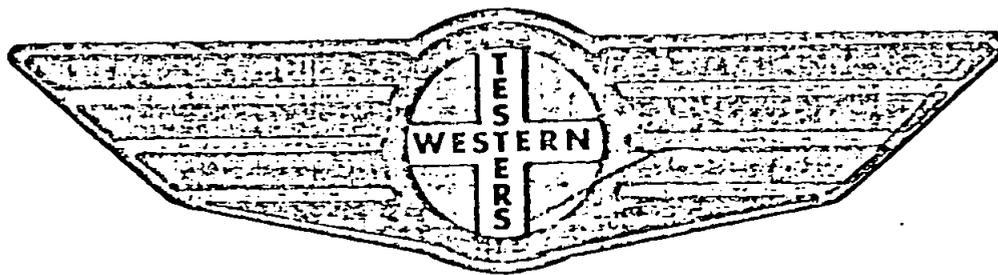


T.KT # 4128

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

spany RANGE OIL COMPANY, INC. Lease and Well No. #1 WYANT Sec. 12 Twp. 30S Rge. 9E Test No. 1 Date 2/1/84

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 2/1/84
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 1
ELEVATION (KB): 1157 FORMATION: KANSAS CITY
SECTION: 12 TOWNSHIP: 30S
RANGE: 9E COUNTY: ELK STATE: KANSAS
GAUGE SN #13266 RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 1588 FT TO: 1603 FT TOTAL DEPTH: 1603 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 1588 FT SIZE: 6 3/4 IN PACKER DEPTH: 1583 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG CO. INC.
MUD TYPE: CHEMICAL VISCOSITY: 45
WEIGHT: 9.5 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 1200
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 270 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 1298 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 15 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 IN 2 MINUTES.

RECOVERED: 5 FT OF: DRILLING MUD. CHLORIDES 1400 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 2:45 PM TIME STARTED OFF BOTTOM: 4:45 PM
WELL TEMPERATURE: 89 °F
INITIAL HYDROSTATIC PRESSURE: (A) 785 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 18 PSI TO (C) 18 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 236 PSI
FINAL FLOW PERIOD MIN: 30 (E) 49 PSI TO (F) 24 PSI
FINAL CLOSED IN PERIOD MIN: 33 (G) 235 PSI
FINAL HYDROSTATIC PRESSURE (H) 770 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

Called on

TICKET N^o 4129

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1157 KB Formation Ft Scott Eff. Pay - Ft.

COMPANY NAME Range Oil Co. District Augusta Date 2-2-84 Customer Order No. -

ADDRESS 240 Pa. Court 220 W Douglas Wichita, Ka 67202

LEASE AND WELL NO. Wyant #1 COUNTY Elk STATE Ka Sec. 12 Twp. 30S Rge. 9E

Mail Invoice To Same Co. Name Address No. Copies Requested 1

Mail Charts To Same #1 Wyant Address No. Copies Requested 5

Formation Test No. 2 Interval Tested From 1931 ft. to 1945 ft. Total Depth 1945 ft.

Packer Depth 1931 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1926 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 1937 ft. Recorder Number 13266 Cap. 4200

Bottom Recorder Depth (Outside) 1940 ft. Recorder Number 13268 Cap. 4225

Below Saddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Oil Co Inc #2 Drill Collar Length 270 I. D. 2 1/4 in.

Mud Type Chem Viscosity 40 Weight Pipe Length - I. D. - in.

Weight 9.5 Water Loss 12. - cc. Drill Pipe Length 1641 I. D. 3.8 in.

Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 14 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: 2 break 10 minutes

Recovered 10 ft. of Drilling mud

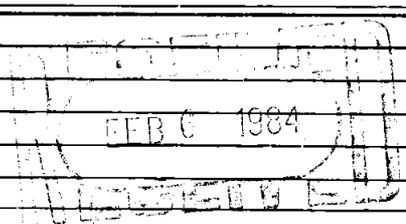
Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides 4000 P.P.M. Sample Jars used 1 Remarks:



Time On Location 11:00 2-2 A.M. Time Pick Up Tool 11:20 A.M. Time Off Location Standby A.M.

Time Set Packer(s) 12:30 P.M. Time Started Off Bottom 2:30 P.M. Maximum Temperature 95 P.M.

Initial Hydrostatic Pressure (A) 970 P.S.I.

Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 40 P.S.I.

Initial Closed In Period Minutes 30 (D) 435 P.S.I.

Final Flow Period Minutes 30 (E) 70 P.S.I. to (F) 50 P.S.I.

Final Closed In Period Minutes 30 (G) 435 P.S.I.

Final Hydrostatic Pressure (H) 970 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 Tim J. Lauer Signature of Customer or his authorized representative

Western Representative Norman Allen 0150

FIELD INVOICE

| | |
|----------------|-----------|
| Open Hole Test | \$ 550.00 |
| Misrun | \$ |
| Straddle Test | \$ |
| Jars | \$ |
| Selective Zone | \$ |
| Safety Joint | \$ |
| Standby | \$ |
| Evaluation | \$ |
| Extra Packer | \$ |
| Circ. Sub. | \$ |
| Mileage | \$ |
| Fluid Sampler | \$ |
| Extra Charts | \$ |
| Insurance | \$ |
| Telecopier | \$ |
| TOTAL | \$ 550.00 |

WESTERN TESTING CO., INC.

Pressure Data

4129

Date 2-2

Test Ticket No. _____

Recorder No. 13266 Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

| Point | Pressure | Open Tool | Time Given | Time Computed |
|--------------------------------|--------------------|----------------------------|------------|---------------|
| A Initial Hydrostatic Mud | <u>1011</u> P.S.I. | | | M |
| B First Initial Flow Pressure | P.S.I. | First Flow Pressure | Mins. | Mins. |
| C First Final Flow Pressure | P.S.I. | Initial Closed-in Pressure | Mins. | Mins. |
| D Initial Closed-in Pressure | P.S.I. | Second Flow Pressure | Mins. | Mins. |
| E Second Initial Flow Pressure | P.S.I. | Final Closed-in Pressure | Mins. | Mins. |
| F Second Final Flow Pressure | P.S.I. | | | |
| G Final Closed-in Pressure | P.S.I. | | | |
| H Final Hydrostatic Mud | <u>966</u> P.S.I. | | | |

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

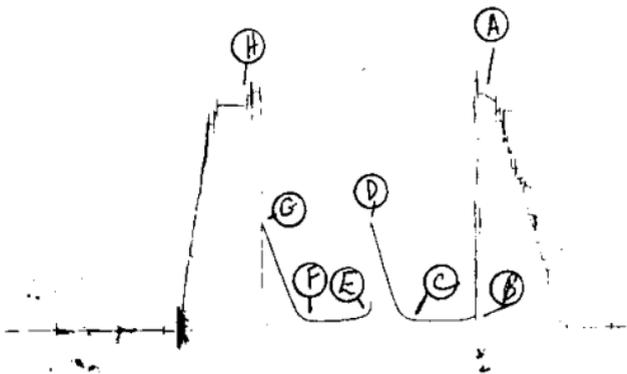
Second Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 10 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>40</u> | 0 | <u>36</u> | 0 | <u>70</u> | 0 | <u>36</u> |
| P 2 5 | <u>40</u> | 3 | <u>36</u> | 5 | <u>50</u> | 3 | <u>45</u> |
| P 3 10 | <u>38</u> | 6 | <u>36</u> | 10 | <u>44</u> | 6 | <u>64</u> |
| P 4 15 | <u>36</u> | 9 | <u>39</u> | 15 | <u>40</u> | 9 | <u>102</u> |
| P 5 20 | <u>36</u> | 12 | <u>52</u> | 20 | <u>36</u> | 12 | <u>155</u> |
| P 6 25 | <u>36</u> | 15 | <u>74</u> | 25 | <u>36</u> | 15 | <u>205</u> |
| P 7 30 | <u>36</u> | 18 | <u>124</u> | 30 | <u>36</u> | 18 | <u>261</u> |
| P 8 35 | | 21 | <u>188</u> | 35 | | 21 | <u>322</u> |
| P 9 40 | | 24 | <u>256</u> | 40 | | 24 | <u>377</u> |
| P 10 45 | | 27 | <u>337</u> | 45 | | 27 | <u>434</u> |
| P 11 50 | | 30 | <u>436</u> | 50 | | 30 | |
| P 12 55 | | 33 | | 55 | | 33 | |
| P 13 60 | | 36 | | 60 | | 36 | |
| P 14 | | 39 | | 65 | | 39 | |
| P 15 | | 42 | | 70 | | 42 | |
| P 16 | | 45 | | 75 | | 45 | |
| P 17 | | 48 | | 80 | | 48 | |
| P 18 | | 51 | | 85 | | 51 | |
| P 19 | | 54 | | 90 | | 54 | |
| P 20 | | 57 | | | | 57 | |
| | | 60 | | | | 60 | |

TKT # 4129

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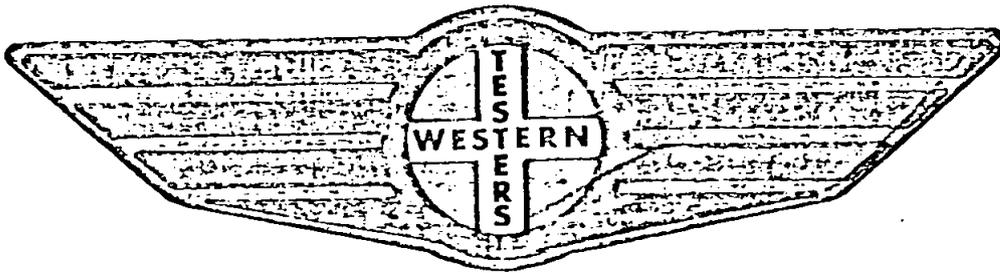


TKT # 4129

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____
LEASE WELL COMPANY, INC.
Lease and Well No. _____
T.L. WILSON
Sec. 17
Typ. 303
Rge. 7D
Test No. _____
Date 4/4/04

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 2/2/84 TICKET #4129
 CUSTOMER: RANGE OIL COMPANY INC. LEASE: WYANT
 WELL: 1 TEST: 2 GEOLOGIST: LAUER
 ELEVATION (KB): 1157 FORMATION: FORT SCOTT
 SECTION: 12 TOWNSHIP: 30S
 RANGE: 9E COUNTY: ELK STATE: KANSAS
 GAUGE SN #13266 RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 1931 FT TO: 1945 FT TOTAL DEPTH: 1945 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 1931 FT SIZE: 6 3/4 IN PACKER DEPTH: 1926 FT SIZE: 6 3/4 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG CO. INC.
 MUD TYPE: CHEMICAL VISCOSITY: 40
 WEIGHT: 9.5 WATER LOSS (CC): 12.0
 CHLORIDES (P.P.M.): 1200
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? NO REVERSED OUT? NO
 DRILL COLLAR LENGTH: 270 FT I.D.: 2.25 IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 1641 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
 ANCHOR LENGTH: 14 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 IN 10 MINUTES.

RECOVERED: 10 FT OF: DRILLING MUD. CHLORIDES 4000 PPM.
 RECOVERED: FT OF:
 RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 12:30 PM TIME STARTED OFF BOTTOM: 2:30 PM
 WELL TEMPERATURE: 95 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 1011 PSI
 INITIAL FLOW PERIOD MIN: 30 (B) 40 PSI TO (C) 36 PSI
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 436 PSI
 FINAL FLOW PERIOD MIN: 30 (E) 70 PSI TO (F) 36 PSI
 FINAL CLOSED IN PERIOD MIN: 27 (G) 434 PSI
 FINAL HYDROSTATIC PRESSURE (H) 966 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

Called, ok

TICKET No 4130

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 11575 B Formation Miss Eff. Pay - Ft.

District 13 Augusta Date 2-3-84 Customer Order No. -

COMPANY NAME Range Oil Co Inc

ADDRESS 240 Page Court 220 W Douglas Wichita, Ks 67202

LEASE AND WELL NO. Wyant #1 COUNTY Clk. STATE Ks Sec. 12 Twp 30S Rge 9E

Mail Invoice To Same Co. Name Range Oil Co Inc Address 240 Page Court No. Copies Requested 1

Mail Charts To Same #1 Wyant Address 240 Page Court No. Copies Requested 5

Formation Test No. 3 Interval Tested From 2255 ft. to 2268 ft. Total Depth 2268 ft.

Packer Depth 2255 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2250 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2260 ft. Recorder Number 13266 Cap. 2260

Bottom Recorder Depth (Outside) 2263 ft. Recorder Number 13268 Cap. 2263

Below Saddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Oil Co Inc #2 Drill Collar Length 150 I. D. 2 1/4 in.

Mud Type Chem Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 10.4 cc. Drill Pipe Length 2185 I. D. 3.8 in.

Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5 200 in.

Jars: Make - Serial Number - Anchor Length 13 ft. Size 5 200 in.

Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

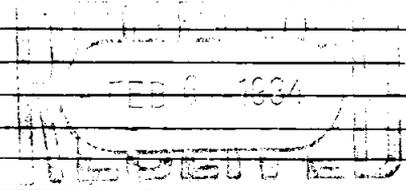
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 X H in.

Blow: Break 17 minutes

Recovered 10 ft. of Drilling mud

Recovered - ft. of -

Chlorides 2200 P.P.M. Sample Jars used 1 Remarks: -



Time On Location 11:00 ~~2:20~~ 2:20 A.M. Time Pick Up Tool 4:20 ~~2:30~~ 2:30 P.M. Time Off Location Standby A.M. P.M.

Time Set Packer(s) 5:20 P.M. Time Started Off Bottom 7:20 P.M. Maximum Temperature 100

Initial Hydrostatic Pressure (A) 1125 P.S.I.

Initial Flow Period Minutes 30 (B) 20 P.S.I. to (C) 10 P.S.I.

Initial Closed In Period Minutes 30 (D) 10 P.S.I.

Final Flow Period Minutes 30 (E) 10 P.S.I. to (F) 10 P.S.I.

Final Closed In Period Minutes 30 (G) 10 P.S.I.

Final Hydrostatic Pressure (H) 1115 P.S.I.

COMPANY TERMS

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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 Tim J. Lauer
Signature of Customer or his authorized representative

Western Representative Norman Allen 0150

FIELD INVOICE

| | |
|----------------|------------------|
| Open Hole Test | \$ <u>550.00</u> |
| Misrun | \$ |
| Straddle Test | \$ |
| Jars | \$ |
| Selective Zone | \$ |
| Safety Joint | \$ |
| Standby | \$ |
| Evaluation | \$ |
| Extra Packer | \$ |
| Circ. Sub. | \$ |
| Mileage | \$ |
| Fluid Sampler | \$ |
| Extra Charts | \$ |
| Insurance | \$ |
| Telecopier | \$ |
| TOTAL | \$ <u>550.00</u> |

WESTERN TESTING CO., INC.

Pressure Data

Date 2-3
 Recorder No. 13266
 Clock No.

Test Ticket No. 4130
 Capacity Location Ft.
 Elevation Well Temperature °F

| Point | Pressure | Open Tool | Time Given | Time Computed |
|--------------------------------|--------------------|----------------------------|-------------|---------------|
| A Initial Hydrostatic Mud | <u>1129</u> P.S.I. | | | M |
| B First Initial Flow Pressure | _____ P.S.I. | First Flow Pressure | _____ Mins. | _____ Mins. |
| C First Final Flow Pressure | _____ P.S.I. | Initial Closed-in Pressure | _____ Mins. | _____ Mins. |
| D Initial Closed-in Pressure | _____ P.S.I. | Second Flow Pressure | _____ Mins. | _____ Mins. |
| E Second Initial Flow Pressure | _____ P.S.I. | Final Closed-in Pressure | _____ Mins. | _____ Mins. |
| F Second Final Flow Pressure | _____ P.S.I. | | | |
| G Final Closed-in Pressure | _____ P.S.I. | | | |
| H Final Hydrostatic Mud | <u>1120</u> P.S.I. | | | |

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 11 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

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

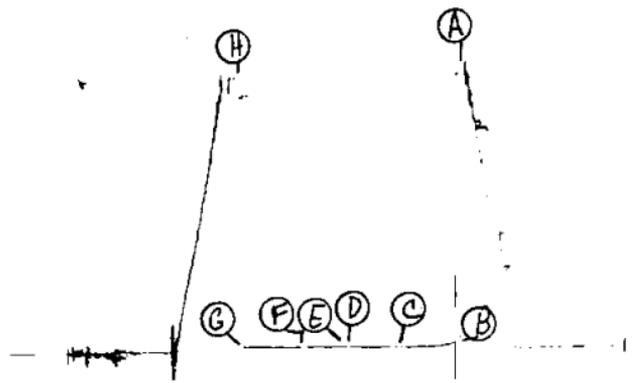
Final Shut-In
 Breakdown: 11 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| P 1 0 | <u>20</u> | 0 | <u>10</u> | 0 | <u>10</u> | 0 | <u>10</u> |
| P 2 5 | <u>20</u> | 3 | | 5 | | 3 | |
| P 3 10 | <u>14</u> | 6 | | 10 | | 6 | |
| P 4 15 | <u>10</u> | 9 | | 15 | | 9 | |
| P 5 20 | | 12 | | 20 | | 12 | |
| P 6 25 | | 15 | | 25 | | 15 | |
| P 7 30 | <u>10</u> | 18 | | 30 | <u>10</u> | 18 | |
| P 8 35 | | 21 | | 35 | | 21 | |
| P 9 40 | | 24 | | 40 | | 24 | |
| P10 45 | | 27 | | 45 | | 27 | |
| P11 50 | | 30 | <u>10</u> | 50 | | 30 | <u>10</u> |
| P12 55 | | 38 | | 55 | | 33 | |
| P13 60 | | 36 | | 60 | | 35 | |
| P14 | | 39 | | 65 | | 39 | |
| P15 | | 42 | | 70 | | 42 | |
| P16 | | 45 | | 75 | | 45 | |
| P17 | | 48 | | 80 | | 48 | |
| P18 | | 51 | | 85 | | 51 | |
| P19 | | 54 | | 90 | | 54 | |
| P20 | | 57 | | | | 57 | |
| | | 60 | | | | 60 | |

TKT # 4130

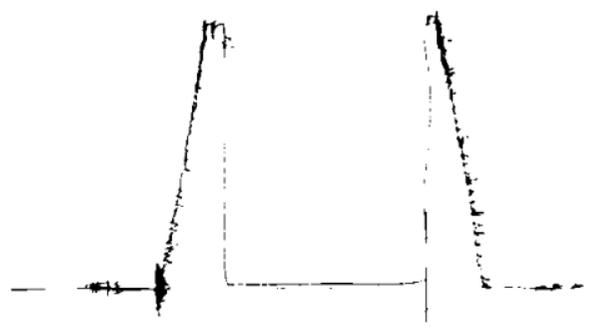
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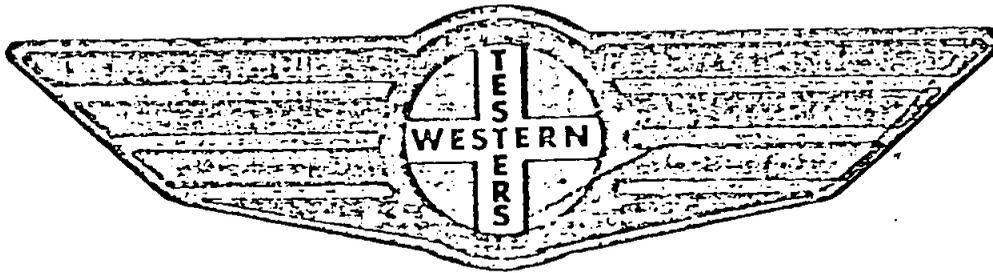


TKT # 4130

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

mpany RANGE OIL COMPANY, INC. Lease and Well No. #1 WYANT. Sec. 17 Twp. 30S Rge. 9E Test No. 3 Date 2/5/84

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 2/3/84
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 3
ELEVATION (KB): 1157 FORMATION: MISSISSIPPI
SECTION: 12 TOWNSHIP: 30S
RANGE: 9E COUNTY: ELK STATE: KANSAS
GAUGE SN #13266 RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 2255 FT TO: 2268 FT TOTAL DEPTH: 2268 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2255 FT SIZE: 6 3/4 IN PACKER DEPTH: 2250 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG CO. INC.
MUD TYPE: CHEMICAL VISCOSITY: 44
WEIGHT: 9.6 WATER LOSS (CC): 10.4
CHLORIDES (P.P.M.): 1200
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 150 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2185 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 13 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 IN 17 MINUTES.

RECOVERED: 10 FT OF: DRILLING MUD. CHLORIDES 2200 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 5:20 PM TIME STARTED OFF BOTTOM: 7:20 PM
WELL TEMPERATURE: 100 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1129 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 20 PSI TO (C) 10 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 10 PSI
FINAL FLOW PERIOD MIN: 30 (E) 10 PSI TO (F) 10 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 10 PSI
FINAL HYDROSTATIC PRESSURE (H) 1120 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

called ok

TICKET NO 4131

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 262-5861

Elevation 1157 KB Formation Mus Eff. Pay - Ft.

2040 District Augusta Date 2-4-84 Customer Order No. -

COMPANY NAME Range Oil Co Inc

ADDRESS 240 Page Court 220 W Douglas Wichita, Ks 67202

LEASE AND WELL NO Wyant #1 COUNTY Elk STATE Ks Sec 12 Twp 30s Rge 9E

Mail Invoice To Same No. Copies Requested 1

Mail Charts To Same #1 Wyant Address No. Copies Requested 5

Formation Test No. 4 Interval Tested From 2268 ft. to 2298 ft. Total Depth 2298 ft.

Packer Depth 2268 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2263 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2290 ft. Recorder Number 13266 Cap 4200

Bottom Recorder Depth (Outside) 2293 ft. Recorder Number 13268 Cap 4225

Below Saddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Range Oil Co Inc #2 Drill Collar Length 150 I. D. 2 1/4 in.

Mud Type Chem Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.8 Water Loss 10.4 cc. Drill Pipe Length 2098 I. D. 3.8 in.

Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 30 ft. Size 5 1/2 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 1 1/2 in.

Blow: Air thru out test

Recovered 210 ft. of Gas in pipe

Recovered 30 ft. of Free oil 30 Gravity

Recovered 60 ft. of Oil & Gas cut mud 40% oil 60% mud

Recovered 120 ft. of Very slightly oil cut muddy water (54,000 PPM Chloride)

Recovered - ft. of - (2 Res @ 56°F)

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

Time On Location 11:00 2:2 P.M. Time Pick Up Tool 2:30 2:4 A.M.

Time Set Packer(s) 3:15 A.M. Time Started Off Bottom 6:15 A.M.

Initial Hydrostatic Pressure (A) 1125 P.S.I. Maximum Temperature 104

Initial Flow Period Minutes 30 (B) 80 P.S.I. to (C) 80 P.S.I.

Initial Closed In Period Minutes 30 (D) 645 P.S.I.

Final Flow Period Minutes 60 (E) 150 P.S.I. to (F) 130 P.S.I.

Final Closed In Period Minutes 60 (G) 645 P.S.I.

Final Hydrostatic Pressure (H) 1125 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 Tim J. Lauer Signature of Customer or his authorized representative

Western Representative Norman Allen 0/50

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

Date: 2-4 Test Ticket No. 4131
 Recorder No. 132106 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

| Point | Pressure | Time Given | Time Computed |
|--------------------------------|--------------------|------------|---------------|
| A Initial Hydrostatic Mud | <u>1131</u> P.S.I. | | M |
| B First Initial Flow Pressure | P.S.I. | Mins. | Mins. |
| C First Final Flow Pressure | P.S.I. | Mins. | Mins. |
| D Initial Closed-in Pressure | P.S.I. | Mins. | Mins. |
| E Second Initial Flow Pressure | P.S.I. | Mins. | Mins. |
| F Second Final Flow Pressure | P.S.I. | Mins. | Mins. |
| G Final Closed-in Pressure | P.S.I. | | |
| H Final Hydrostatic Mud | <u>1118</u> P.S.I. | | |

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 11 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

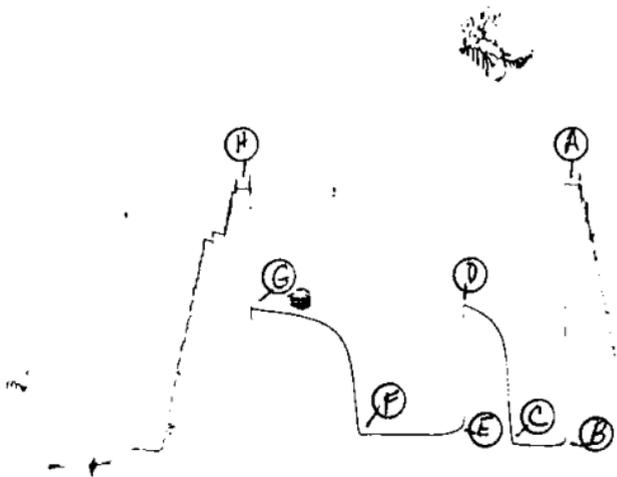
Second Flow Pressure
 Breakdown: 17 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

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 | <u>65</u> | 0 | <u>74</u> | 0 | <u>152</u> | 0 | <u>120</u> |
| P 2 | <u>65</u> | 3 | <u>298</u> | 3 | <u>127</u> | 3 | <u>255</u> |
| P 3 | <u>65</u> | 6 | <u>493</u> | 6 | <u>125</u> | 6 | <u>416</u> |
| P 4 | <u>65</u> | 9 | <u>538</u> | 9 | <u>120</u> | 9 | <u>483</u> |
| P 5 | <u>69</u> | 12 | <u>570</u> | 12 | | 12 | <u>517</u> |
| P 6 | <u>72</u> | 15 | <u>590</u> | 15 | | 15 | <u>538</u> |
| P 7 | <u>74</u> | 18 | <u>605</u> | 18 | <u>120</u> | 18 | <u>555</u> |
| P 8 | | 21 | <u>619</u> | 21 | | 21 | <u>569</u> |
| P 9 | | 24 | <u>630</u> | 24 | | 24 | <u>578</u> |
| P 10 | | 27 | <u>637</u> | 27 | | 27 | <u>586</u> |
| P 11 | | 30 | <u>644</u> | 30 | | 30 | <u>592</u> |
| P 12 | | 33 | | 33 | | 33 | <u>597</u> |
| P 13 | | 36 | | 36 | <u>120</u> | 36 | <u>602</u> |
| P 14 | | 39 | | 39 | | 39 | <u>607</u> |
| P 15 | | 42 | | 42 | | 42 | <u>611</u> |
| P 16 | | 45 | | 45 | | 45 | <u>615</u> |
| P 17 | | 48 | | 48 | | 48 | <u>619</u> |
| P 18 | | 51 | | 48 | | 51 | <u>623</u> |
| P 19 | | 54 | | 51 | | 54 | <u>627</u> |
| P 20 | | 57 | | 54 | | 57 | <u>630</u> |
| | | 60 | | 57 | | 60 | <u>633</u> |

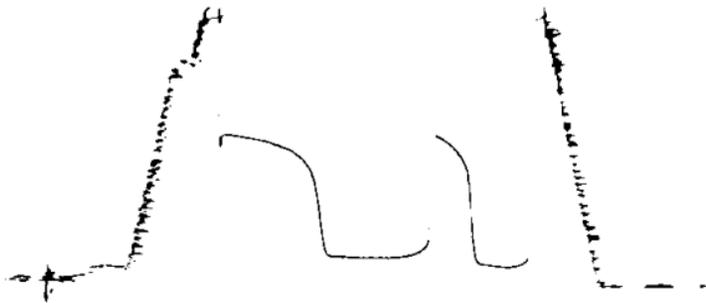
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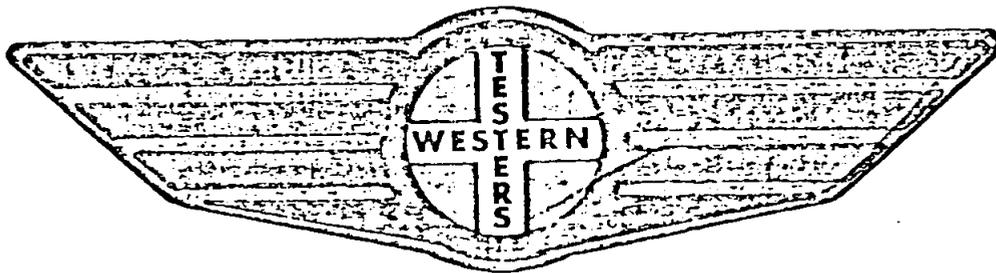


TKT # 41381

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY RANGE OIL COMPANY, INC. Lease and Well No. #1 WYANT Sec. 12 Twp. 30S Rge. 9E Test No. 4 Date 2/4/84

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 2/4/84
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 4
ELEVATION (KB): 1157
SECTION: 12
RANGE: 9E COUNTY: ELK
GAUGE SN #13266 RANGE: 4200

TICKET #4131
LEASE: WYANT
GEOLOGIST: LAUER
FORMATION: MISSISSIPPI
TOWNSHIP: 30S
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 2268 FT TO: 2298 FT TOTAL DEPTH: 2298 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2268 FT SIZE: 6 3/4 IN PAKER DEPTH: 2263 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG CO. INC.
MUD TYPE: CHEMICAL VISCOSITY: 44
WEIGHT: 9.8 WATER LOSS (CC): 10.4
CHLORIDES (P.P.M.): 1200
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 150 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2098 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 30 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: FAIR BLOW THROUGHOUT TEST.

RECOVERED: 210 FT OF: GAS ABOVE FLUID.
RECOVERED: 30 FT OF: FREE OIL. 30 GRAVITY.
RECOVERED: 60 FT OF: OIL & GAS CUT MUD. 40% OIL; 60% MUD.
RECOVERED: 120 FT OF: VERY SLIGHTLY OIL CUT MUDDY WATER.
RECOVERED: FT OF: CHLORIDES 54000 PPM.
RECOVERED: FT OF: .2 RESISTIVITY AT 56 DEGREES.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 3:15 AM TIME STARTED OFF BOTTOM: 6:15 AM
WELL TEMPERATURE: 104 'F
INITIAL HYDROSTATIC PRESSURE: (A) 1131 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 65 PSI TO (C) 74 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 644 PSI
FINAL FLOW PERIOD MIN: 60 (E) 152 PSI TO (F) 120 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 633 PSI
FINAL HYDROSTATIC PRESSURE (H) 1118 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

Call - OK
TICKET No 4132

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

Elevation 1157 KB

Formation Arb

Eff. Pay - Ft.

WICHITA, KANSAS 67201

District Augusta

Date 2-5-84

Customer Order No. -

COMPANY NAME Range Oil Co. Inc.

ADDRESS 240 Page Court 220 N. Douglas Wichita, Ks

LEASE AND WELL NO. WYANT #1 COUNTY Elk STATE Ks Sec 12 Twp 30s Rge 9E

Mail Invoice To Same #1 WYANT No. Copies Requested 1

Mail Charts To Same No. Copies Requested 5

Formation Test No. 5 Interval Tested From 2604 ft. to 2614 ft. Total Depth 2614 ft.

Packer Depth 2604 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2599 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2606 ft. Recorder Number 13266 Cap. 4200

Bottom Recorder Depth (Outside) 2609 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Oil Co. Inc #2 Drill Collar Length 150 I. D. 2 1/4 in.

Mud Type Chem Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 11.2 cc. Drill Pipe Length 2434 I. D. 3.8 in.

Chlorides 1500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 10 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 3/8 in. Tool Joint Size 4 1/2 in.

Blow: Weak to very weak 40 minutes

Recovered 50 ft. of thin drilling mud

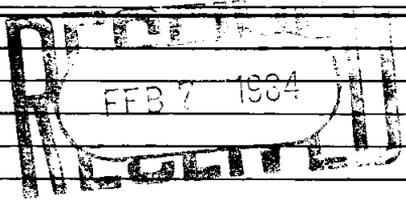
Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides 2800 P.P.M. Sample Jars used 1 Remarks:



Time On Location 7:45 2-5 A.M. Time Pick Up Tool 11:15 A.M. Time Off Location Standby 10:00 PM 2-5 A.M.

Time Set Packer(s) 12:30 A.M. Time Started Off Bottom 2:45 A.M. Maximum Temperature 106 P.M.

Initial Hydrostatic Pressure (A) 1325 P.S.I.

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

Initial Closed In Period Minutes 30 (D) 750 P.S.I.

Final Flow Period Minutes 30 (E) 60 P.S.I. to (F) 60 P.S.I.

Final Closed In Period Minutes 45 (G) 810 P.S.I.

Final Hydrostatic Pressure (H) 1325 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] TIM L. LAUSER
Signature of Customer or his authorized representative

Western Representative Norman Allen 0150

FIELD INVOICE

| | |
|----------------|-----------|
| Open Hole Test | \$ 550.00 |
| Misrun | \$ |
| Straddle Test | \$ |
| Jars | \$ |
| Selective Zone | \$ |
| Safety Joint | \$ |
| Standby | \$ |
| Evaluation | \$ |
| Extra Packer | \$ |
| Circ. Sub. | \$ |
| Mileage | \$ |
| Fluid Sampler | \$ |
| Extra Charts | \$ |
| Insurance | \$ |
| Telecopier | \$ |
| TOTAL | \$ 550.00 |

WESTERN TESTING CO., INC.

Pressure Data

2-5-84

4132

Date: _____ Recorder No. 13266 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

| Point | Pressure | Open Tool | Time Given | Time Computed |
|--------------------------------|-------------|----------------------------|------------|---------------|
| A Initial Hydrostatic Mud | 1322 P.S.I. | | M | |
| B First Initial Flow Pressure | 25 P.S.I. | First Flow Pressure | Mins. | Mins. |
| C First Final Flow Pressure | 25 P.S.I. | Initial Closed-in Pressure | Mins. | Mins. |
| D Initial Closed-in Pressure | 742 P.S.I. | Second Flow Pressure | Mins. | Mins. |
| E Second Initial Flow Pressure | 48 P.S.I. | Final Closed-in Pressure | Mins. | Mins. |
| F Second Final Flow Pressure | 48 P.S.I. | | | |
| G Final Closed-in Pressure | 800 P.S.I. | | | |
| H Final Hydrostatic Mud | 1322 P.S.I. | | | |

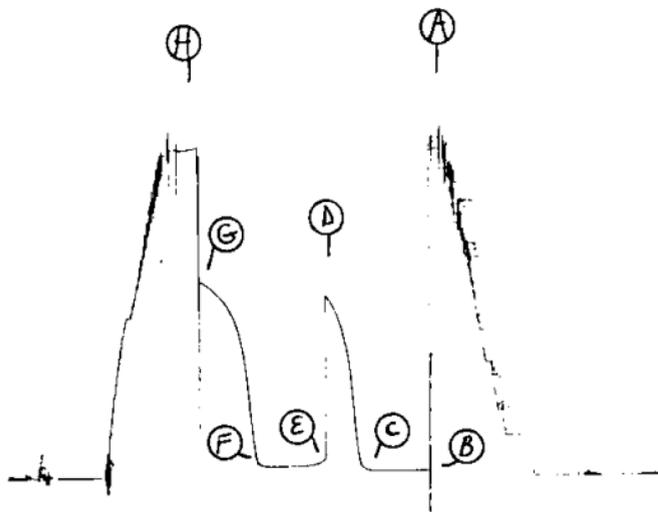
PRESSURE BREAKDOWN

| | | | |
|---|--|--|--|
| <p>First Flow Pressure Breakdown: <u>7</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p> | <p>Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p> | <p>Second Flow Pressure Breakdown: <u>7</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p> | <p>Final Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p> |
|---|--|--|--|

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P 1 | 0 | 0 | 25 | 0 | 48 | 0 | 48 |
| P 2 | 5 | 3 | 29 | 5 | | 3 | 48 |
| P 3 | 10 | 6 | 45 | 10 | | 6 | 51 |
| P 4 | 15 | 9 | 154 | 15 | | 9 | 78 |
| P 5 | 20 | 12 | 376 | 20 | | 12 | 238 |
| P 6 | 25 | 15 | 525 | 25 | | 15 | 420 |
| P 7 | 30 | 18 | 609 | 30 | 148 | 18 | 542 |
| P 8 | 35 | 21 | 668 | 35 | | 21 | 622 |
| P 9 | 40 | 24 | 709 | 40 | | 24 | 670 |
| P10 | 45 | 27 | 742 | 45 | | 27 | 705 |
| P11 | 50 | 30 | | 50 | | 30 | 732 |
| P12 | 55 | 33 | | 55 | | 33 | 754 |
| P13 | 60 | 36 | | 60 | | 36 | 774 |
| P14 | | 39 | | 65 | | 39 | 790 |
| P15 | | 42 | | 70 | | 42 | 800 |
| P16 | | 45 | | 75 | | 45 | |
| P17 | | 48 | | 80 | | 48 | |
| P18 | | 51 | | 85 | | 51 | |
| P19 | | 54 | | 90 | | 54 | |
| P20 | | 57 | | | | 57 | |
| | | 60 | | | | 60 | |

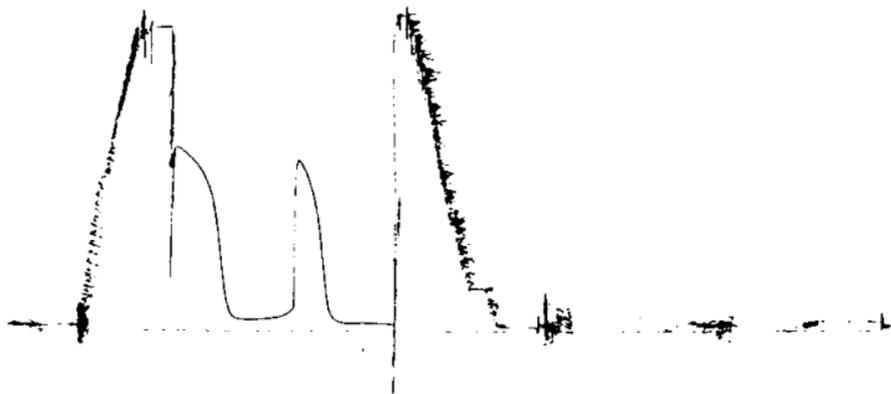
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TKT # 4132

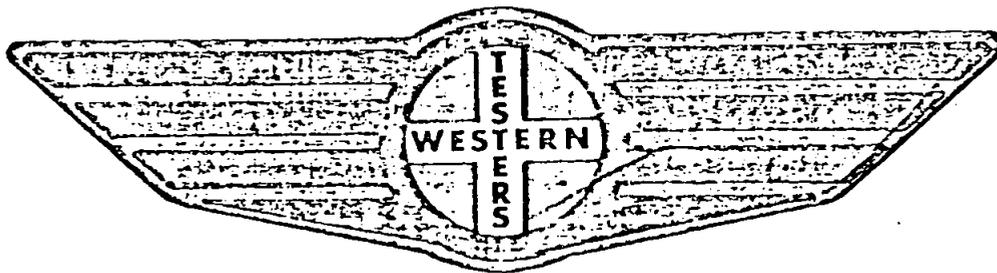
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TKT # 4406

Below Straddle

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 2/5/84
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 5
ELEVATION (KB): 1157 FORMATION: ARBUCKLE
SECTION: 12 TOWNSHIP: 30S
RANGE: 9E COUNTY: ELK STATE: KANSAS
GAUGE SN #13266 RANGE: 4200 CLOCK: 12

TICKET #4132
LEASE: WYANT
GEOLOGIST: TIM LAUER

INTERVAL TEST FROM: 2604 FT TO: 2614 FT TOTAL DEPTH: 2614 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2604 FT SIZE: 6 3/4 IN PAKER DEPTH: 2599 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. #2
MUD TYPE: CHEMICAL VISCOSITY: 45
WEIGHT: 9.6 WATER LOSS (CC): 11.2
CHLORIDES (P.P.M.): 1500
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 150 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2434 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 O.D. IN
ANCHOR LENGTH: 10 FT SIZE: 5 1/2 O.D. 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 X.H. IN

BLOW: WEAK TO VERY WEAK 40 MINUTES.

RECOVERED: 50 FT OF: THIN DRILLING MUD
RECOVERED: FT OF: CHLORIDES 2800 P.P.M.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 12:30 A.M. TIME STARTED OFF BOTTOM: 2:45 P.M.
WELL TEMPERATURE: 106 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1322 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 25 PSI TO (C) 25 PSI
INITIAL CLOSED IN PERIOD MIN: 27 (D) 743 PSI
FINAL FLOW PERIOD MIN: 30 (E) 48 PSI TO (F) 48 PSI
FINAL CLOSED IN PERIOD MIN: 42 (G) 800 PSI
FINAL HYDROSTATIC PRESSURE (H) 1322 PSI

