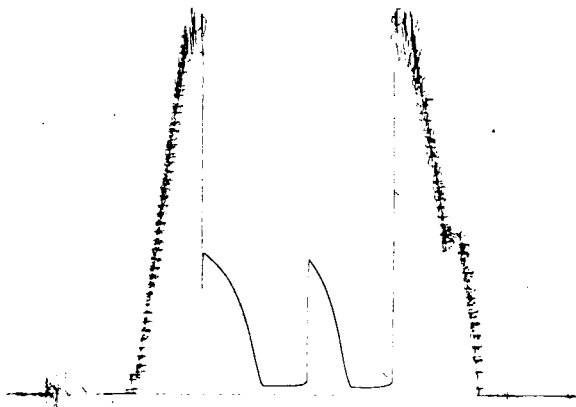
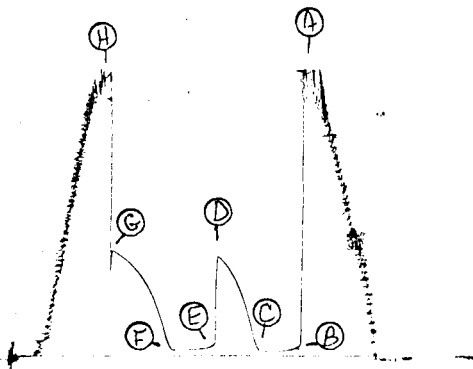


428. #9057
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Lab. #9057
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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 9057

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

Elevation 1359KB Formation Miss Chart Eff. Pay - Ft.

COMPANY NAME Range Oil Co Inc. District Augusta Date 11-10-85 Customer Order No. -
ADDRESS 240 Page Court 220 W Douglas Wichita Ks 67202
LEASE AND WELL NO. Cide #1 COUNTY McPherson STATE Ks Sec. 6 Twp. 17 Rge. 1W
Mail Invoice To Same #1 ADE No. Copies Requested 1
Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 2652 ft. to 2717 ft. Total Depth 2717 ft.
Packer Depth 2652 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 2647 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) - ft. Recorder Number 13553 Cap. 4000
Bottom Recorder Depth (Outside) - ft. Recorder Number 3474 Cap. 3000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Range Oil Co Inc. #1 Drill Collar Length 120 I. D. 2 1/4 in.
Mud Type Chem Viscosity 47 Weight Pipe Length - I. D. - in.
Weight 10. - Water Loss 12.8 cc. Drill Pipe Length 2512 I. D. 3.8 in.
Chlorides 2000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OP in.
Jars: Make - Serial Number - Anchor Length 65 ft. Size 5 1/2 OP 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 XH in.
Blow: 24 sec 30 minutes

Recovered 25 ft. of Drilling mud w/ very slight show of oil (less than 1%)
Recovered - ft. of
Recovered - ft. of
Recovered - ft. of
Recovered - ft. of
Chlorides 2600 P.P.M. Sample Jars used 1 Remarks:

Time On Location 6:45 11:10 A.M. Time Pick Up Tool 7:50 A.M. Time Off Location Standby A.M.
Time Set Packer(s) 9:00 A.M. Time Started Off Bottom 11:15 A.M. Maximum Temperature 100
Initial Hydrostatic Pressure (A) 1430 P.S.I.
Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 30 P.S.I.
Initial Close In Period Minutes 30 (D) 500 P.S.I.
Final Flow Period Minutes 30 (E) 60 P.S.I. to (F) 30 P.S.I.
Final Close In Period Minutes 45 (G) 530 P.S.I.
Final Hydrostatic Pressure (H) 1410 P.S.I. (13553)

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 Robert Olsen
Signature of Customer or his authorized representative

Western Representative Norman Allen

FIELD INVOICE 550-

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

0150

WESTERN TESTING CO., INC.
Pressure Data

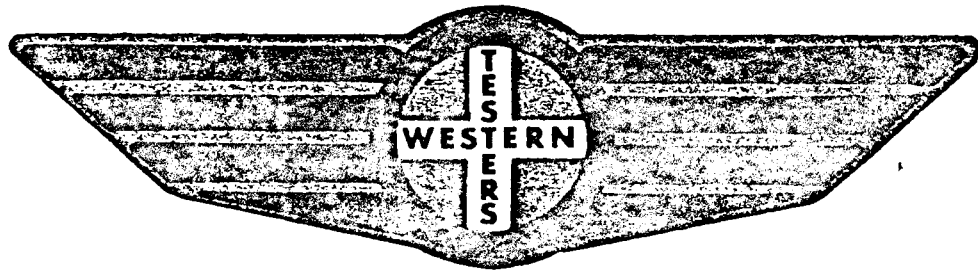
Date 11-10 Recorder No. 13553 Capacity 4000 Location _____ Ft. Test Ticket No. 9057
Clock No. _____ Elevation _____ Well Temperature 100 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1428</u> P.S.I.	Open Tool	<u>9:00 A</u>	<u>11:15 AM</u>
B First Initial Flow Pressure	<u>23</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>23</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>502</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>29</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
F Second Final Flow Pressure	<u>29</u> P.S.I.			
G Final Closed-in Pressure	<u>531</u> P.S.I.			
H Final Hydrostatic Mud	<u>1409</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>17</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>23</u>	0	<u>23</u>	0	<u>29</u>	0	<u>29</u>
P 2 5		3	<u>53</u>	5		3	<u>43</u>
P 3 10		6	<u>125</u>	10		6	<u>104</u>
P 4 15		9	<u>207</u>	15		9	<u>173</u>
P 5 20		12	<u>279</u>	20		12	<u>236</u>
P 6 25		15	<u>332</u>	25		15	<u>287</u>
P 7 30	<u>23</u>	18	<u>381</u>	30	<u>29</u>	18	<u>331</u>
P 8 35		21	<u>413</u>	35		21	<u>371</u>
P 9 40		24	<u>445</u>	40		24	<u>402</u>
P10 45		27	<u>472</u>	45		27	<u>427</u>
P11 50		30	<u>496</u>	50		30	<u>449</u>
P12 55		33	<u>502</u>	55		33	<u>470</u>
P13 60		36		60		36	<u>488</u>
P14 65		39		65		39	<u>503</u>
P15 70		42		70		42	<u>517</u>
P16 75		45		75		45	<u>529</u>
P17 80		48		80		48	<u>531</u>
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11-10-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 1
ELEVATION (KB): 1359 FORMATION: MISSISSIPPI CHERT
SECTION: 6 TOWNSHIP: 17S
RANGE: 1W COUNTY: MCPHERSON STATE: KANSAS
GAUGE SN #13553 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 2652 FT TO: 2717 FT TOTAL DEPTH: 2717 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2652 FT SIZE: 6 3/4 IN PACKER DEPTH: 2647 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: CHEMICAL VISCOSITY: 47
WEIGHT: 10.0 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 2000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2512 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 65 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 FOR 30 MINUTES.

RECOVERED: 25 FT OF: DRILLING MUD WITH VERY SLIGHT
RECOVERED: FT OF: SHOW OF OIL (LESS THAN 1%).
RECOVERED: FT OF: CHLORIDES 2600 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 9:00 AM TIME STARTED OFF BOTTOM: 11:15 AM
WELL TEMPERATURE: 100 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1428 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 23 PSI TO (C) 23 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 502 PSI
FINAL FLOW PERIOD MIN: 30 (E) 29 PSI TO (F) 29 PSI
FINAL CLOSED IN PERIOD MIN: 48 (G) 531 PSI
FINAL HYDROSTATIC PRESSURE (H) 1409 PSI

4kt. #9058

0

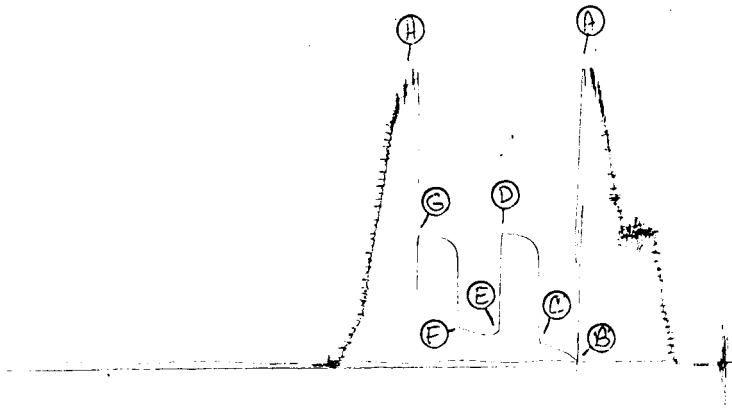
2000

1000

500



Vol #9058
I



12553

ACT #2

0058



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N°

OK
9058

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

WICHITA, KANSAS 67201

Elevation 13591KB

Formation Miss. Dolo.

Eff. Pay - Ft.

District Augusta

Date 11-10-85

Customer Order No. -

COMPANY NAME Range Oil Co. Inc.

ADDRESS 240 Page Court 220th Douglas Wichita, Ks 67202

LEASE AND WELL NO. Ado #1 COUNTY McPherson STATE Ks. Sec. 6 Twp. 17 Rge. 1W

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

Mail Charts To Same No. Copies Requested 5

Formation Test No. 2 Interval Tested From 2717 ft. to 2727 ft. Total Depth 2727 ft.

Packer Depth 2717 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2712 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2721 ft.

Recorder Number 13553 Cap. 4000

Bottom Recorder Depth (Outside) 2724 ft.

Recorder Number 3474 Cap. 3000

Below Straddle Recorder Depth - ft.

Recorder Number - Cap. -

Drilling Contractor Range Oil Co. Inc. #1

Drill Collar Length 120 I. D. 2 1/4 in.

Mud Type Chem Viscosity 48

Weight Pipe Length - I. D. - in.

Weight 9.9 Water Loss 12.8 cc.

Drill Pipe Length 2577 I. D. 3.8 in.

Chlorides 2000 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 7/8 in. Tool Joint Size 4 1/2 X 4 in.

Blow: Blow line plugged off with hulls - No blow time recorded.

Recovered 380 ft. of Saltwater @ .44 Res @ 60°F

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides 51,000 P.P.M. Sample Jars used 2 Remarks:

Time On Location 6:45 11-10 A.M.

Time Pick Up Tool 6:15 11:0 P.M.

Time Off Location 6:00 11-11 A.M.

Time Set Packer(s) 7:15 A.M.

Time Started Off Bottom 9:15 P.M.

Maximum Temperature 104

Initial Hydrostatic Pressure (A) 1470 P.S.I.

Initial Flow Period Minutes 30 (B) 30 P.S.I. to (C) 115 P.S.I.

Initial Close In Period Minutes 30 (D) 665 P.S.I.

Final Flow Period Minutes 30 (E) 165 P.S.I. to (F) 195 P.S.I.

Final Close In Period Minutes 30 (G) 665 P.S.I.

Final Hydrostatic Pressure (H) 1460 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 Robert Dean
Signature of Customer or his authorized representative

Western Representative Norman Allen

D/50

FIELD INVOICE

Open Hole Test \$ 550
Misrun \$
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

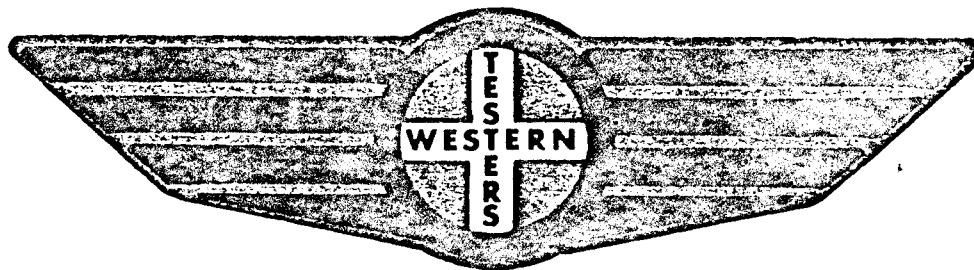
Date 11-10-85 Test Ticket No. 9058
 Recorder No. 13553 Capacity 4000 Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature 104 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1461</u> P.S.I.	Open Tool	<u>7:15 P</u>	<u>9:15 PM</u>
B First Initial Flow Pressure	<u>25</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>116</u> P.S.I.	Initial Closed-in Pressure	<u>(</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>667</u> P.S.I.	Second Flow Pressure	<u>S</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>160</u> P.S.I.	Final Closed-in Pressure	<u></u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>194</u> P.S.I.			
G Final Closed-in Pressure	<u>664</u> P.S.I.			
H Final Hydrostatic Mud	<u>1455</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>7</u> Inc.		Breakdown: <u>11</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>25</u>	<u>0</u>	<u>116</u>	<u>0</u>	<u>160</u>	<u>0</u>	<u>194</u>
P 2 <u>5</u>	<u>52</u>	<u>3</u>	<u>604</u>	<u>5</u>	<u>160</u>	<u>3</u>	<u>602</u>
P 3 <u>10</u>	<u>73</u>	<u>6</u>	<u>629</u>	<u>10</u>	<u>160</u>	<u>6</u>	<u>625</u>
P 4 <u>15</u>	<u>86</u>	<u>9</u>	<u>644</u>	<u>15</u>	<u>167</u>	<u>9</u>	<u>640</u>
P 5 <u>20</u>	<u>100</u>	<u>12</u>	<u>651</u>	<u>20</u>	<u>176</u>	<u>12</u>	<u>648</u>
P 6 <u>25</u>	<u>112</u>	<u>15</u>	<u>657</u>	<u>25</u>	<u>186</u>	<u>15</u>	<u>654</u>
P 7 <u>30</u>	<u>116</u>	<u>18</u>	<u>661</u>	<u>30</u>	<u>194</u>	<u>18</u>	<u>657</u>
P 8 <u>35</u>		<u>21</u>	<u>665</u>	<u>35</u>		<u>21</u>	<u>659</u>
P 9 <u>40</u>		<u>24</u>	<u>666</u>	<u>40</u>		<u>24</u>	<u>661</u>
P10 <u>45</u>		<u>27</u>	<u>667</u>	<u>45</u>		<u>27</u>	<u>663</u>
P11 <u>50</u>		<u>30</u>		<u>50</u>		<u>30</u>	<u>664</u>
P12 <u>55</u>		<u>33</u>		<u>55</u>		<u>33</u>	
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	
P14 <u>65</u>		<u>39</u>		<u>65</u>		<u>39</u>	
P15 <u>70</u>		<u>42</u>		<u>70</u>		<u>42</u>	
P16 <u>75</u>		<u>45</u>		<u>75</u>		<u>45</u>	
P17 <u>80</u>		<u>48</u>		<u>80</u>		<u>48</u>	
P18 <u>85</u>		<u>51</u>		<u>85</u>		<u>51</u>	
P19 <u>90</u>		<u>54</u>		<u>90</u>		<u>54</u>	
P20 <u>95</u>		<u>57</u>		<u>95</u>		<u>57</u>	
<u>100</u>		<u>60</u>		<u>100</u>		<u>60</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 ADE SEC. 6 TWP. 17S RGE. 1W TEST NO. 2 DATE 11/10/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11-10-85 TICKET #9058
CUSTOMER: RANGE OIL COMPANY INC. LEASE: ADE
WELL: 1 TEST: 2 GEOLOGIST: ROBERT OLSEN
ELEVATION (KB): 1359 FORMATION: MISSISSIPPI/DOLOMITE
SECTION: 6 TOWNSHIP: 17S
RANGE: 1W COUNTY: MCPHERSON STATE: KANSAS
GAUGE SN #13553 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 2717 FT TO: 2727 FT TOTAL DEPTH: 2727 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2717 FT SIZE: 6 3/4 IN PACKER DEPTH: 2712 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: CHEMICAL VISCOSITY: 48
WEIGHT: 9.9 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 2000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2577 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 10 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: BLOW LINE PLUGGED OFF WITH HULLS;
NO BLOW TIME RECORDED.

RECOVERED: 380 FT OF: SALT WATER .44 RESISTIVITY AT 60 DEGREES.
RECOVERED: FT OF: CHLORIDES 51000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 7:15 PM

TIME STARTED OFF BOTTOM: 9:15 PM

WELL TEMPERATURE: 104 °F

INITIAL HYDROSTATIC PRESSURE:	(A) 1461	PSI	
INITIAL FLOW PERIOD MIN: 30	(B) 25	PSI TO (C) 116	PSI
INITIAL CLOSED IN PERIOD MIN: 27	(D) 667	PSI	
FINAL FLOW PERIOD MIN: 30	(E) 160	PSI TO (F) 194	PSI
FINAL CLOSED IN PERIOD MIN: 30	(G) 664	PSI	
FINAL HYDROSTATIC PRESSURE	(H) 1455	PSI	

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 11-10-85

CUSTOMER: RANGE OIL COMPANY INC.

TEST: 2

FORMATION: MISSISSIPPI/DOLOMITE

TOWNSHIP: 17S

COUNTY: MCPHERSON

STATE: KANSAS

RANGE: 4000

CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 1461 PSI

(B) FIRST INITIAL FLOW PRESSURE: 25 PSI

(C) FIRST FINAL FLOW PRESSURE: 116 PSI

(D) INITIAL CLOSED-IN PRESSURE: 667 PSI

(E) SECOND INITIAL FLOW PRESSURE: 160 PSI

(F) SECOND FINAL FLOW PRESSURE: 194 PSI

(G) FINAL CLOSED-IN PRESSURE: 664 PSI

(H) FINAL HYDROSTATIC PRESSURE: 1455 PSI

WELL TEMPERATURE: 104 'F

OPEN TOOL: 7:15 PM

TIME - GIVEN TIME - ACTUAL

FIRST FLOW PRESSURE: 30 MIN 30 MIN

INITIAL CLOSED-IN PRESSURE: 30 MIN 27 MIN

SECOND FLOW PRESSURE: 30 MIN 30 MIN

FINAL CLOSED-IN PRESSURE: 30 MIN 30 MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	25	0	116	0	160	0	194
2	5	52	3	604	5	160	3	602
3	10	73	6	629	10	160	6	625
4	15	86	9	644	15	167	9	640
5	20	100	12	651	20	176	12	648
6	25	112	15	657	25	186	15	654
7	30	116	18	661	30	194	18	657
8			21	665			21	659
9			24	666			24	661
10			27	667			27	663
11							30	664

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2627
2820
0029
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