



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 4909

P. O. BOX 1599 WICHITA, KANSAS 67201 PHONE (316) 838-0601

Elevation 1476 Kb Formation Miss Eff. Pay Ft.

District Augusta Date April 4 1980 Customer Order No.

COMPANY NAME Range Oil Co Inc

ADDRESS 240 Page Court 220 West Douglas

LEASE AND WELL NO Entry 1A COUNTY Marion STATE KS Sec 22 Twp 22S Rge 4E

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

Mail Charts To Same Address No. Copies Requested 5

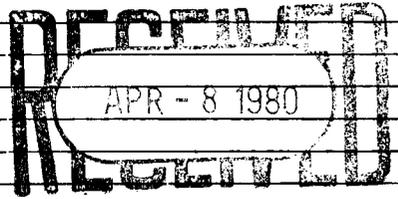
Formation Test No. 1 Interval Tested from 2443 ft. to 2461 ft. Total Depth 2461 ft. Packer Depth 2443 ft. Size 6 3/4 in. Packer Depth 2438 ft. Size 6 3/4 in. Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set Top Recorder Depth (Inside) 2448 ft. Recorder Number 3554 Cap. 4200 Bottom Recorder Depth (Outside) 2452 ft. Recorder Number 2605 Cap. 4150 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Oil # 1 Drill Collar Length 123' I. D. - in. Mud Type Chem Viscosity 41 Weight Pipe Length - I. D. - in. Weight 9.7 Water Loss 12 cc. Drill Pipe Length 2298' I. D. - in. Chlorides 1200 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in. Jars: Make WO Serial Number - Anchor Length 18 ft. Size 5 1/2 in. Did Well Flow? NO Reversed Out - Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in. Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: weak blow throughout first flow period, weak blow throughout second flow

Recovered 2 ft. of free oil Recovered 20 ft. of oil cut mud Recovered - ft. of Recovered - ft. of Recovered - ft. of Recovered - ft. of Remarks:



Time Set Packer(s) 4.25 P.M. Time Started Off Bottom 7.55 P.M. Maximum Temperature Initial Hydrostatic Pressure (A) 1223 P.S.I. Initial Flow Period Minutes 30 (B) 31 P.S.I. to (C) 52 P.S.I. Initial Closed In Period Minutes 30 (D) 348 P.S.I. Final Flow Period Minutes 90 (E) 52 P.S.I. to (F) 63 P.S.I. Final Closed In Period Minutes 60 (G) 379 P.S.I. Final Hydrostatic Pressure (H) 1223 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 Olsen Signature of Customer or his authorized representative

Western Representative Kenny Kurland

FIELD INVOICE

Open Hole Test \$ 500.00 Misrun \$ Straddle Test \$ Jars \$ Selective Zone \$ Safety Joint \$ Standby \$ Evaluation \$ Extra Packer \$ Circ. Sub. \$ Mileage \$ Fluid Sampler \$ Extra Charts \$ TOTAL \$ 500.00

WESTERN TESTING CO., INC.
Pressure Data

Date 4-4-80 Test Ticket No. 4909
 Recorder No. 3564 Capacity 4200 Location 2448 Ft
 Block No. _____ Elevation 1476 KB Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1220</u>	P.S.I.	<u>4125P</u>	M
B First Initial Flow Pressure	<u>34</u>	P.S.I.	<u>30</u>	Mins. <u>30</u> Min.
C First Final Flow Pressure	<u>42</u>	P.S.I.	<u>30</u>	Mins. <u>30</u> Min.
D Initial Closed-in Pressure	<u>340</u>	P.S.I.	<u>90</u>	Mins. <u>90</u> Min.
E Second Initial Flow Pressure	<u>48</u>	P.S.I.	<u>60</u>	Mins. <u>69</u> Min.
F Second Final Flow Pressure	<u>53</u>	P.S.I.		
G Final Closed-in Pressure	<u>378</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1200</u>	P.S.I.		

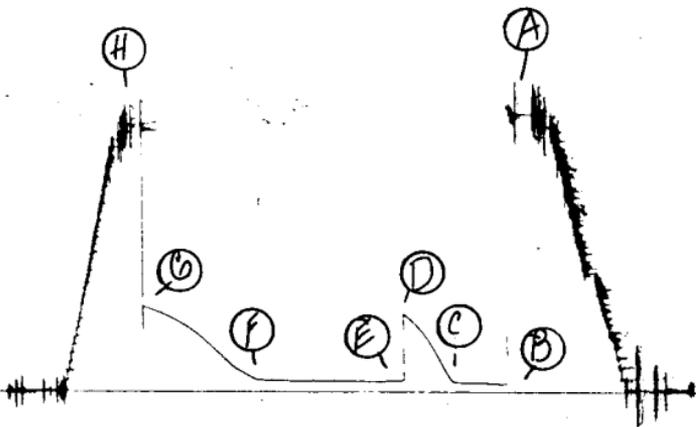
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>18</u> Inc.		Breakdown: <u>63</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>34</u>	0	<u>42</u>	0	<u>48</u>	0	<u>53</u>
P 2	<u>35</u>	3	<u>68</u>	5	<u>48</u>	3	<u>61</u>
P 3	<u>37</u>	6	<u>105</u>	10		6	<u>72</u>
P 4	<u>39</u>	9	<u>150</u>	15		9	<u>87</u>
P 5	<u>40</u>	12	<u>190</u>	20		12	<u>99</u>
P 6	<u>41</u>	15	<u>226</u>	25		15	<u>112</u>
P 7	<u>42</u>	18	<u>258</u>	30		18	<u>133</u>
P 8		21	<u>283</u>	35	<u>48</u>	21	<u>152</u>
P 9		24	<u>308</u>	40	<u>51</u>	24	<u>173</u>
P 10		27	<u>327</u>	45		27	<u>193</u>
P 11		30	<u>346</u>	50		30	<u>213</u>
P 12		33		55		33	<u>230</u>
P 13		36		60		36	<u>247</u>
P 14		39		65	<u>51</u>	39	<u>264</u>
P 15		42		70	<u>53</u>	42	<u>281</u>
P 16		45		75		45	<u>297</u>
P 17		48		80		48	<u>309</u>
P 18		51		85		51	<u>320</u>
P 19		54		90	<u>53</u>	54	<u>332</u>
P 20		57				57	<u>348</u>
		60				60	<u>354</u>
						63	<u>361</u>
						66	<u>369</u>
						70	<u>377</u>

3554

4909

PL # 4909
I



Company Range Oil Company, Inc. Lease & Well No. Entz "A" #1
 Elevation 1476 Kelly Bushing Mississippi Formation ----- Effective Pay ----- Ft. Ticket No. 4909
 Date 4/4/80 Sec. 22 Twp. 22S Range 4E County Marion State Kansas
 Test Approved by Robert Olsen Western Representative Kenny Kirkendall

Formation Test No. 1 Interval Tested from 2443 ft. to 2461 ft. Total Depth 2461 ft.
 Packer Depth 2443 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2438 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2448 ft. Recorder Number 3554 Cap. 4200
 Bottom Recorder Depth (Outside) 2452 ft. Recorder Number 2605 Cap. 4150
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drilling Rig #1 Drill Collar Length 123 I. D. - in.
 Mud Type chemical Viscosity 41 Weight Pipe Length - I. D. - in.
 Weight 9.7 Water Loss 12 cc. Drill Pipe Length 2298 I. D. - in.
 Chlorides 1,200 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.
 Jars: Make NO Serial Number - Anchor Length 18 ft. Size 5 1/2 in.
 Did Well Flow? NO 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 XH in.

Blow: Weak blow throughout first flow period; weak blow throughout second flow.

Recovered 2 ft. of free oil
 Recovered 20 ft. of oil cut mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 4:25 ~~AM~~ P.M. Time Started Off Bottom 7:55 ~~AM~~ P.M. Maximum Temperature ?
 Initial Hydrostatic Pressure (A) 1220 P.S.I.
 Initial Flow Period Minutes 30 (B) 34 P.S.I. to (C) 42 P.S.I.
 Initial Closed In Period Minutes 30 (D) 346 P.S.I.
 Final Flow Period Minutes 90 (E) 48 P.S.I. to (F) 53 P.S.I.
 Final Closed In Period Minutes 69 (G) 378 P.S.I.
 Final Hydrostatic Pressure (H) 1200 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 4/4/80 Test Ticket No. 4909
 Recorder No. 3554 Capacity 4200 Location 2448 Ft.
 Clock No. ----- Elevation 1476 Kelly Bushing Well Temperature - °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1220 P.S.I.	Open Tool	4:25P M	
B First Initial Flow Pressure	34 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	42 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	346 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	48 P.S.I.	Final Closed-in Pressure	60 Mins.	69 Mins.
F Second Final Flow Pressure	53 P.S.I.			
G Final Closed-in Pressure	378 P.S.I.			
H Final Hydrostatic Mud	1200 P.S.I.			

PRESSURE BREAKDOWN

Point	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Mins.	Press.	Minutes	Press.	Minutes	Press.	Minutes	Press.
P 1	0	34	0	42	0	48	0	53
P 2	5	35	3	68	5	48	3	61
P 3	10	37	6	105	10	48	6	72
P 4	15	39	9	150	15	48	9	87
P 5	20	40	12	190	20	48	12	99
P 6	25	41	15	226	25	48	15	112
P 7	30	42	18	258	30	48	18	133
P 8			21	283	35	48	21	152
P 9			24	308	40	51	24	173
P10			27	327	45	51	27	193
P11			30	346	50	51	30	213
P12					55	51	33	230
P13					60	51	36	247
P14					65	51	39	264
P15					70	53	42	281
P16					75	53	45	297
P17					80	53	48	309
P18					85	53	51	320
P19					90	53	54	332
P20							57	343
							60	354
							63	361
							66	369
							69	378



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 4910

P. O. BOX 1599 WICHITA, KANSAS 67201 PHONE (316) 838-0601

Elevation 1476 Kb Formation MISS Eff. Pay Ft.

District Augusta Date April 5 1980 Customer Order No.

COMPANY NAME Range Oil Co. Inc

ADDRESS 240 Page Court 220 West Douglas

LEASE AND WELL NO. Entry 1 A COUNTY Marian STATE KS Sec 22 Twp 23S Rge 4E

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

Mail Charts To Same Address No. Copies Requested 5

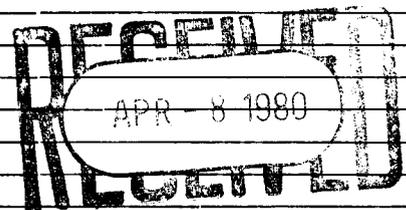
Formation Test No. 2 Interval Tested from 2461 ft. to 2471 ft. Total Depth 2471 ft. Packer Depth 2461 ft. Size 6 3/4 in. Packer Depth 2456 ft. Size 6 3/4 in. Packer Depth - ft. Size - in. Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2465 ft. Recorder Number 3534 Cap 4200 Bottom Recorder Depth (Outside) 2470 ft. Recorder Number 2605 Cap 4150 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Calco H1 Drill Collar Length 123 in. Mud Type Chem Viscosity 41 Weight Pipe Length - in. Weight 9.7 Water Loss 12 cc. Drill Pipe Length 2316 in. Chlorides 1200 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in. Jars: Make WC Serial Number - Anchor Length 19 ft. Size 5 1/2 in. Did Well Flow? NO Reversed Out - Surface Choke Size 1 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Weak blow throughout first flow, weak blow throughout second flow

Recovered 30' ft. of free oil Recovered 65' ft. of oil cut mud Recovered - ft. of Recovered - ft. of Recovered - ft. of



Remarks:

Table with 4 columns: Time Set Packer(s), A.M. P.S.I., Time Started Off Bottom, A.M. P.S.I., Maximum Temperature. Rows include Initial Hydrostatic Pressure, Initial Flow Period, Initial Closed In Period, Final Flow Period, Final Closed In Period, Final Hydrostatic Pressure.

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... Test Approved By Robert Olsen Signature of Customer or his authorized representative Western Representative Kenney Keckel

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, TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

Order No. 4-5-80 3554 Capacity 4200 Location 2465 Test Ticket No. 4910
 Well No. 1476 KB Elevation KB Well Temperature 98 °F

Pressure	Time Given	Time Computed
Initial Hydrostatic Mud <u>1228</u> P.S.I.	Open Tool <u>5:40 A M</u>	
First Initial Flow Pressure <u>32</u> P.S.I.	First Flow Pressure <u>30</u> Mins <u>30</u> Min.	
First Final Flow Pressure <u>42</u> P.S.I.	Initial Closed-in Pressure <u>30</u> Mins <u>30</u> Min.	
Initial Closed-in Pressure <u>424</u> P.S.I.	Second Flow Pressure <u>90</u> Mins <u>95</u> Min.	
Second Initial Flow Pressure <u>55</u> P.S.I.	Final Closed-in Pressure <u>60</u> Mins <u>60</u> Min.	
Second Final Flow Pressure <u>76</u> P.S.I.		
Final Closed-in Pressure <u>464</u> P.S.I.		
Final Hydrostatic Mud <u>1213</u> P.S.I.		

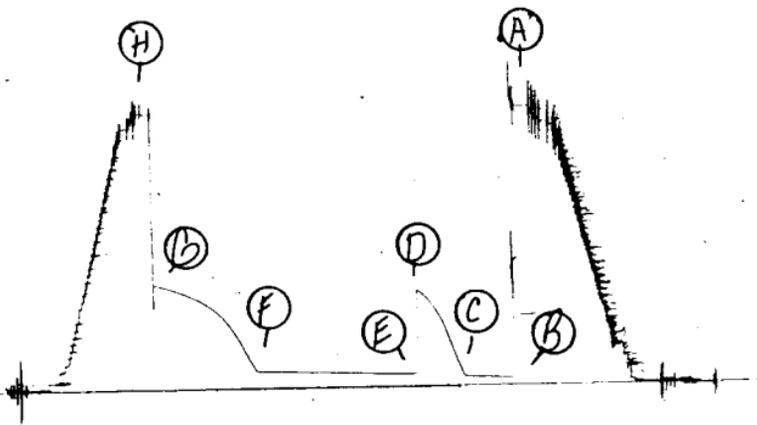
PRESSURE BREAKDOWN

First Flow Pressure Breakdown:	Initial Shut-In Breakdown:	Second Flow Pressure Breakdown:	Final Shut-In Breakdown:
<u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	<u>19</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
Point Minutes	Press.	Point Minutes	Press.
0	<u>32</u>	0	<u>42</u>
5	<u>33</u>	3	<u>87</u>
10	<u>34</u>	6	<u>141</u>
15	<u>35</u>	9	<u>194</u>
20	<u>37</u>	12	<u>249</u>
25	<u>40</u>	15	<u>300</u>
30	<u>42</u>	18	<u>326</u>
35		21	<u>352</u>
40		24	<u>376</u>
45		27	<u>400</u>
50		30	<u>424</u>
55		33	
60		36	
		39	
		42	
		45	
		48	
		51	
		54	
		57	
		60	

3554

4910

TKL# 4910
I



Company Range Oil Company, Inc. Lease & Well No. Entz "A" #1
 Elevation 1476 Kelly Bushing Mississippi Formation Mississippi Effective Pay - Ft. Ticket No. 4910
 Date 4/5/80 Sec. 22 Twp. 22S Range 4E County Marion State Kansas
 Test Approved by Robert Olsen Western Representative Kenny Kirkendall

Formation Test No. 2 Interval Tested from 2461 ft. to 2471 ft. Total Depth 2471 ft.
 Packer Depth 2461 ft. Size 6 3/4. Packer Depth - ft. Size - in.
 Packer Depth 2456 ft. Size 6 3/4. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2465 ft. Recorder Number 3554 Cap. 4200
 Bottom Recorder Depth (Outside) 2470 ft. Recorder Number 2605 Cap. 4150
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drilling Rig #1 Drill Collar Length 123 I. D. - in.
 Mud Type chemical Viscosity 41 Weight Pipe Length - I. D. - in.
 Weight 9.7 Water Loss 12 cc. Drill Pipe Length 2316 I. D. - in.
 Chlorides 1,200 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.
 Jars: Make No Serial Number - Anchor Length 10 ft. Size 5 1/2 in.
 Did Well Flow? NO 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 XH in.

Blow: Weak blow throughout first flow; weak blow throughout second flow.

Recovered 30 ft. of free oil
 Recovered 65 ft. of oil cut mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 5:40 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 9:10 ~~P.M.~~ ^{A.M.} Maximum Temperature 98°
 Initial Hydrostatic Pressure (A) 1228 P.S.I.
 Initial Flow Period Minutes 30 (B) 32 P.S.I. to (C) 42 P.S.I.
 Initial Closed In Period Minutes 30 (D) 424 P.S.I.
 Final Flow Period Minutes 95 (E) 55 P.S.I. to (F) 76 P.S.I.
 Final Closed In Period Minutes 60 (G) 464 P.S.I.
 Final Hydrostatic Pressure (H) 1213 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 4/5/80 Test Ticket No. 4910
 Recorder No. 3554 Capacity 4200 Location 2465 Ft.
 Clock No. - Elevation 1476 Kelly Bushing Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1228	P.S.I.	5:40A	M
B First Initial Flow Pressure	32	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	42	P.S.I.	30	Mins. 30 Mins.
D Initial Closed-in Pressure	424	P.S.I.	90	Mins. 95 Mins.
E Second Initial Flow Pressure	55	P.S.I.	60	Mins. 60 Mins.
F Second Final Flow Pressure	76	P.S.I.		
G Final Closed-in Pressure	464	P.S.I.		
H Final Hydrostatic Mud	1213	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>19</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
--	---	--	---

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1	0	32	0	42	0	55	0	76
P 2	5	33	3	87	5	55	3	112
P 3	10	34	6	141	10	56	6	154
P 4	15	35	9	194	15	56	9	196
P 5	20	37	12	249	20	57	12	234
P 6	25	40	15	300	25	58	15	265
P 7	30	42	18	326	30	59	18	287
P 8			21	352	35	60	21	300
P 9			24	376	40	61	24	324
P10			27	400	45	63	27	350
P11			30	424	50	65	30	376
P12					55	67	33	387
P13					60	68	36	398
P14					65	70	39	408
P15					70	71	42	419
P16					75	72	45	430
P17					80	73	48	437
P18					85	74	51	444
P19					90	75	54	451
P20					95	76	57	458
							60	464



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 4911

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 838-0601

Elevation 1476 K b Formation MISS Eff. Pay Ft.

District Augusta Date April 5 1980 Customer Order No.

COMPANY NAME Range Oil Co Inc.

ADDRESS 240 Page Court 220 West Douglas

LEASE AND WELL NO. Enty #1A COUNTY Marian STATE KS Sec 22 Twp 22S Rge 4E

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

Mail Charts To Same Address No. Copies Requested 5

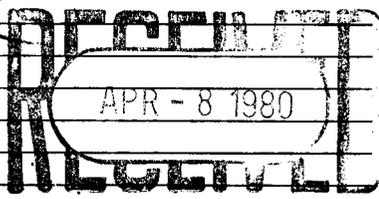
Formation Test No. 3 Interval Tested from 2471 ft. to 2491 ft. Total Depth 2491 ft.
Packer Depth 2471 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 2466 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 2476 ft. Recorder Number 3554 Cap 4200
Bottom Recorder Depth (Outside) 2480 ft. Recorder Number 2605 Cap 4150
Below Straddle Recorder Depth ft. Recorder Number Cap

Drilling Contractor Co Tools #1 Drill Collar Length 123 I. D. in.
Mud Type Chem Viscosity 44 Weight Pipe Length I. D. in.
Weight 9.6 Water Loss 12 cc. Drill Pipe Length 2356 I. D. in.
Chlorides 1400 P.P.M. Test Tool Length 22 ft. Tool Size 5 7/8 in.
Jars: Make NO Serial Number Anchor Length 20 ft. Size 5 1/2 in.
Did Well Flow? Reversed Out Surface Choke Size 3 1/8 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 X H in.

Blow: Good blow throughout first flow, Good blow throughout second flow

Recovered 10' ft. of free oil
Recovered 220 ft. of oil cut mud 5% oil 95% mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks: Slid 6' to bottom



Time Set Packer(s) 6:15 A.M. P.M. Time Started Off Bottom 9:15 A.M. P.M. Maximum Temperature 95°

Initial Hydrostatic Pressure	(A) 1223	P.S.I.
Initial Flow Period	Minutes 30 (B) 73	P.S.I. to (C) 94 P.S.I.
Initial Closed In Period	Minutes 30 (D) 537	P.S.I.
Final Flow Period	Minutes 60 (E) 105	P.S.I. to (F) 137 P.S.I.
Final Closed In Period	Minutes 60 (G) 506	P.S.I.
Final Hydrostatic Pressure	(H) 1223	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 Olsen
Signature of Customer or his authorized representative

Western Representative Kenny Kerker

FIELD INVOICE

Open Hole Test	\$ 500.00
Misrun	\$
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$
Fluid Sampler	\$
Extra Charts	\$
TOTAL	\$ 500.00

WESTERN TESTING CO., INC.
Pressure Data

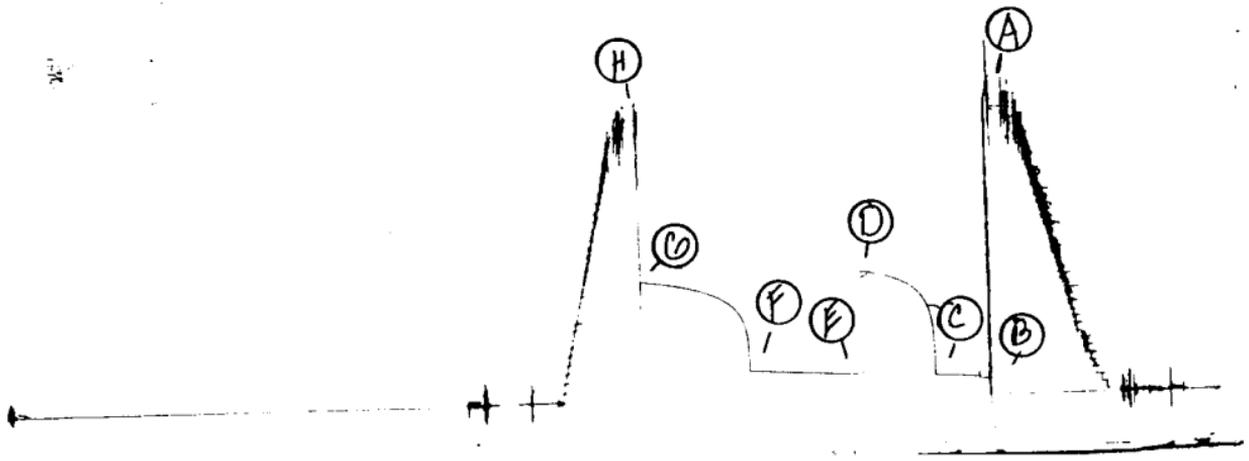
Date 4-5-80 Test Ticket No. 4911
 Recorder No. 3554 Capacity 4200 Location 2476
 Clock No. _____ Elevation 1476 KB Well Temperature 95
 Point _____ Pressure _____ Time Given _____ Time Computed _____
 A Initial Hydrostatic Mud 1232 P.S.I. Open Tool 6:15 P M
 B First Initial Flow Pressure 72 P.S.I. First Flow Pressure 30 Mins. 30 Min
 C First Final Flow Pressure 88 P.S.I. Initial Closed-in Pressure 30 Mins. 30 Min
 D Initial Closed-in Pressure 575 536 P.S.I. Second Flow Pressure 60 Mins. 65 Min
 E Second Initial Flow Pressure 105 P.S.I. Final Closed-in Pressure 60 Mins. 63 Min
 F Second Final Flow Pressure 129 P.S.I.
 G Final Closed-in Pressure 513 P.S.I.
 H Final Hydrostatic Mud 1211 P.S.I.

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Point Minutes	Initial Shut-In	Point Minutes	Second Flow Pressure	Point Minutes	Final Shut-In
	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Breakdown: <u>621</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
	Press.		Press.		Press.		Press.
P 1	<u>72</u>	0	<u>88</u>	0	<u>105</u>	0	<u>129</u>
P 2	<u>72</u>	3	<u>323</u>	3		3	<u>321</u>
P 3	<u>80</u>	6	<u>386</u>	6		6	<u>365</u>
P 4	<u>83</u>	9	<u>422</u>	9	<u>105</u>	9	<u>302</u>
P 5	<u>85</u>	12	<u>445</u>	12	<u>108</u>	12	<u>411</u>
P 6	<u>86</u>	15	<u>468</u>	15	<u>110</u>	15	<u>426</u>
P 7	<u>88</u>	18	<u>481</u>	18	<u>112</u>	18	<u>437</u>
P 8		21	<u>494</u>	21	<u>115</u>	21	<u>447</u>
P 9		24	<u>502</u>	24	<u>118</u>	24	<u>456</u>
P 10		27	<u>508</u>	27	<u>120</u>	27	<u>465 465</u>
P 11		30	<u>515</u>	30	<u>123</u>	30	<u>475</u>
P 12		33	<u>519</u>	33	<u>125</u>	33	<u>479</u>
P 13		36	<u>523</u>	36	<u>127</u>	36	<u>483</u>
P 14		39	<u>528</u>	39	<u>129</u>	39	<u>488</u>
P 15		42	<u>532</u>	42		42	<u>492</u>
P 16		45	<u>536</u>	45		45	<u>496</u>
P 17		48		48		48	<u>499</u>
P 18		51		51		51	<u>502</u>
P 19		54		54		54	<u>505</u>
P 20		57		57		57	<u>508</u>
		60		60		60	<u>511</u>
		63		63		63	<u>513</u>

35°S 4°
4911

TKT # 4911
I



Company Range Oil Company, Inc. Lease & Well No. Entz "A" #1
 Elevation 1476 Kelly Bushing Mississippi Formation ----- Ft. Ticket No. 4911
 Date 4/5/80 Sec. 22 Twp 22S Range 4E County Marion State Kansas

Test Approved by Robert Olsen Western Representative Kenny Kirkendall

Formation Test No. 3 Interval Tested from 2471 ft. to 2491 ft. Total Depth 2491 ft.
 Packer Depth 2471 ft. Size 6 3/4 Packer Depth - ft. Size - in.
 Packer Depth 2466 ft. Size 6 3/4 Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2476 ft. Recorder Number 3554 Cap. 4200
 Bottom Recorder Depth (Outside) 2480 ft. Recorder Number 2605 Cap. 4150
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drilling Rig #1 Drill Collar Length 123 I. D. - in.
 Mud Type chemical Viscosity 44 Weight Pipe Length - I. D. - in.
 Weight 9.6 Water Loss 12 cc. Drill Pipe Length 2326 I. D. - in.
 Chlorides 1,400 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.
 Jars: Make No Serial Number - Anchor Length 20 ft. Size 5 1/2 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 XH in.

Blow: Good blow throughout first flow, good blow throughout second flow.

Recovered 10 ft. of free oil
 Recovered 220 ft. of oil cut mud (5% oil; 95% mud)
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks: SLID SIX FEET TO BOTTOM.

Time Set Packer(s) 6:15 ^{A.M.}/_{P.M.} Time Started Off Bottom 9:15 ^{A.M.}/_{P.M.} Maximum Temperature 95°
 Initial Hydrostatic Pressure (A) 1232 P.S.I.
 Initial Flow Period Minutes 30 (B) 72 P.S.I. to (C) 88 P.S.I.
 Initial Closed In Period Minutes 45 (D) 536 P.S.I.
 Final Flow Period Minutes 65 (E) 105 P.S.I. to (F) 129 P.S.I.
 Final Closed In Period Minutes 63 (G) 513 P.S.I.
 Final Hydrostatic Pressure (H) 1211 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 4/5/80 Test Ticket No. 4911
 Recorder No. 3554 Capacity 4200 Location 2476 Ft.
 Clock No. --- Elevation 1476 Kelly Bushing Well Temperature 95 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1232	P.S.I.	6:15P	M
B First Initial Flow Pressure	72	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	88	P.S.I.	30	Mins. 45 Mins.
D Initial Closed-in Pressure	536	P.S.I.	60	Mins. 65 Mins.
E Second Initial Flow Pressure	105	P.S.I.	60	Mins. 63 Mins.
F Second Final Flow Pressure	129	P.S.I.		
G Final Closed-in Pressure	513	P.S.I.		
H Final Hydrostatic Mud	1211	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Initial Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>21</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
--	---	--	---

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	0	72	0	88	0	105	0	129
P 2	5	72	3	323	5	105	3	321
P 3	10	80	6	386	10	105	6	365
P 4	15	83	9	422	15	105	9	302
P 5	20	85	12	445	20	108	12	411
P 6	25	86	15	468	25	110	15	426
P 7	30	88	18	481	30	112	18	437
P 8			21	494	35	115	21	447
P 9			24	502	40	118	24	456
P10			27	508	45	120	27	465
P11			30	515	50	123	30	475
P12			33	519	55	125	33	479
P13			36	523	60	127	36	483
P14			39	528	65	129	39	488
P15			42	532			42	492
P16			45	536			45	496
P17							48	499
P18							51	502
P19							54	505
P20							57	508
							60	511
							63	513



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 4912

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 838-0601

Elevation 1476 K6 Formation Eff. Pay Ft.

District Augusta Date April 6 1980 Customer Order No.
COMPANY NAME Barac Oil Co. Inc
ADDRESS 240 Page Court 220 West Douglas
LEASE AND WELL NO Entry COUNTY Marian STATE Ka Sec 22 Twp 22S Rge 4E
Mail Invoice To Same Entry #1 No. Copies Requested 1
Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 4 Interval Tested from 2491 ft. to 2521 ft. Total Depth 2521 ft.
Packer Depth 2491 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 2486 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 2496 ft. Recorder Number 3554 Cap.
Bottom Recorder Depth (Outside) 2500 ft. Recorder Number 2605 Cap.
Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Co Tools #1 Drill Collar Length 123 I. D. in.
Mud Type Chem Viscosity 40 Weight Pipe Length I. D. in.
Weight 9.7 Water Loss 12 cc. Drill Pipe Length 2346 I. D. in.
Chlorides 1500 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number 111 Anchor Length 30 ft. Size 5 1/2 in.
Did Well Flow? NO Reversed Out NO Surface Choke Size 24 in. Bottom Choke Size 3 1/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Fair blow decreasing to very weak, very weak blow died in 15 min second flow

Recovered 20' ft. of mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks:

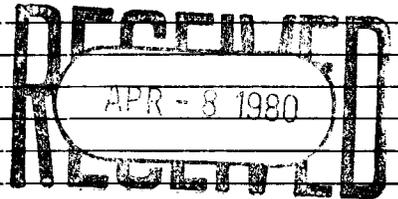


Table with 4 columns: Time Set Packer(s), Time Started Off Bottom, Maximum Temperature, and P.S.I. readings (A-H).

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...

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 Olan
Signature of Customer or his authorized representative
Western Representative Kenny Kirkendall

FIELD INVOICE

Table listing various services and their costs, including Open Hole Test at \$500.00 and TOTAL at \$500.00.

WESTERN TESTING CO., INC.
Pressure Data

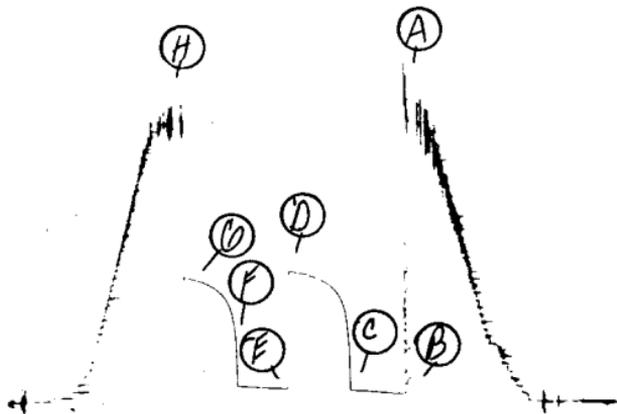
Date 4-6-80 Test Ticket No. 4912
 Recorder No. 3534 Capacity 4200 Location 2496 Ft.
 Clock No. _____ Elevation 1496 KB Well Temperature 97 °F
 Point _____ Pressure _____ Time Given _____ Time Computed _____
 A Initial Hydrostatic Mud 1241 P.S.I. Open Tool 10:00 A.M.
 B First Initial Flow Pressure 46 P.S.I. First Flow Pressure 30 Mins. 30 Min.
 C First Final Flow Pressure 59 P.S.I. Initial Closed-in Pressure 30 Mins. 30 Min.
 D Initial Closed-in Pressure 574 P.S.I. Second Flow Pressure 30 Mins. 30 Min.
 E Second Initial Flow Pressure 65 P.S.I. Final Closed-in Pressure 90 Mins. 30 Min.
 F Second Final Flow Pressure 76 P.S.I.
 G Final Closed-in Pressure 546 P.S.I.
 H Final Hydrostatic Mud 1226 P.S.I.

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>12</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>86</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
	Point Minutes	Point Minutes	Point Minutes	Point Minutes
P 1	0	0	0	0
P 2	5	3	5	3
P 3	10	6	10	6
P 4	15	9	15	9
P 5	20	12	20	12
P 6	25	15	25	15
P 7	30	18	30	18
P 8	33	21	35	21
P 9	40	24	40	24
P10	45	27	45	27
P11	50	30	50	30
P12	55	33	55	33
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

3554 -
4912

TRT # 4912
F



Company Range Oil Company, Inc. Lease & Well No. Entz "A" #1
 Elevation 1476 Kelly Bushing Formation ----- Effective Pay ----- Ft. Ticket No. 4912
 Date 4/6/80 Sec. 22 Twp. 22S Range 4E County Marion State Kansas
 Test Approved by Robert Olsen Western Representative Kenny Kirkendall

Formation Test No. 4 Interval Tested from 2491 ft. to 2521 ft. Total Depth 2521 ft.
 Packer Depth 2491 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2986 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2496 ft. Recorder Number 3554 Cap. -
 Bottom Recorder Depth (Outside) 2500 ft. Recorder Number 2605 Cap. -
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drilling Rig #1 Drill Collar Length 123 I. D. - in.
 Mud Type chemical Viscosity 40 Weight Pipe Length - I. D. - in.
 Weight 9.7 Water Loss 12 cc. Drill Pipe Length 2346 I. D. - in.
 Chlorides 1,500 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.
 Jars: Make NO 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 XH in.

Blow: Fair blow decreasing to very weak; very weak blow, died in fifteen minutes on second flow.

Recovered 90 ft. of mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 10:00 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 12:00 ~~P.M.~~ ^{A.M.} Maximum Temperature 97°
 Initial Hydrostatic Pressure (A) 1241 P.S.I.
 Initial Flow Period Minutes 30 (B) 49 P.S.I. to (C) 59 P.S.I.
 Initial Closed In Period Minutes 36 (D) 574 P.S.I.
 Final Flow Period Minutes 30 (E) 65 P.S.I. to (F) 76 P.S.I.
 Final Closed In Period Minutes 30 (G) 546 P.S.I.
 Final Hydrostatic Pressure (H) 1226 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 4/6/80 Test Ticket No. 4912
 Recorder No. 3554 Capacity 4200 Location 2496 Ft.
 Clock No. ----- Elevation 1476 Kelly Bushing Well Temperature 97 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1241	P.S.I.	10:00A	M
B First Initial Flow Pressure	46	P.S.I.	30	Mins. 30 Mins.
C First Final Flow Pressure	59	P.S.I.	30	Mins. 36 Mins.
D Initial Closed-in Pressure	574	P.S.I.	30	Mins. 30 Mins.
E Second Initial Flow Pressure	65	P.S.I.	30	Mins. 30 Mins.
F Second Final Flow Pressure	76	P.S.I.		
G Final Closed-in Pressure	546	P.S.I.		
H Final Hydrostatic Mud	1226	P.S.I.		

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of 5 mins. and a final inc. of 0 Min.		of 3 mins. and a final inc. of 0 Min.		of 5 mins. and a final inc. of 0 Min.		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	46	0	59	0	65	0	76	
P 2 5	43	3	386	5	65	3	373	
P 3 10	46	6	453	10	68	6	437	
P 4 15	49	9	489	15	70	9	470	
P 5 20	53	12	513	20	72	12	492	
P 6 25	56	15	527	25	74	15	508	
P 7 30	59	18	535	30	76	18	516	
P 8		21	543			21	523	
P 9		24	551			24	531	
P10		27	558			27	539	
P11		30	565			30	546	
P12		33	572					
P13		36	574					
P14								
P15								
P16								
P17								
P18								
P19								
P20								