



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 12822

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

Elevation 1514 KB Formation KC Eff. Pay - Ft.

District Augusta Date 2-17-82 Customer Order No.

COMPANY NAME Range Oil Co. Inc.

ADDRESS 240 Sage Court 220 West Douglas St Wichita, KS 67202

LEASE AND WELL NO. Clark A#1 COUNTY Cowley STATE KS Sec. 17 Twp 30 Rge 8E

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 2130 ft. to 2156 ft. Total Depth 2156 ft.

Packer Depth 2130 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2125 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2149 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 2152 ft. Recorder Number 13268 Cap. 4225

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

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

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

Weight 9.4 Water Loss 10.4 cc. Drill Pipe Length 1958 I. D. 3.8 in.

Chlorides 900 P.P.M. Test Tool Length 22 ft. Tool Size 5 200 in.

Jars: Make - Serial Number - Anchor Length 26 ft. Size 5 200 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 14 in.

Blow: Weak to very weak thruout test

Recovered 120 ft. of Drilling mud

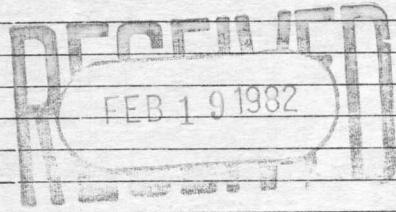
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:



Time On Location 7:00 2-17 A.M. Time Pick Up Tool 10:00 A.M. Time Off Location Standby A.M.

Time Set Packer(s) 11:30 A.M. Time Started Off Bottom 2:30 P.M. Maximum Temperature 97

Initial Hydrostatic Pressure (A) 1065 P.S.I.

Initial Flow Period Minutes 30 (B) 95 P.S.I. to (C) 40 P.S.I.

Initial Closed In Period Minutes 30 (D) 415 P.S.I.

Final Flow Period Minutes 60 (E) 105 P.S.I. to (F) 65 P.S.I.

Final Closed In Period Minutes 60 (G) 415 P.S.I.

Final Hydrostatic Pressure (H) 1055 P.S.I. #13268

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 Joe M Baker Signature of Customer or his authorized representative

Western Representative Norman Allen

FIELD INVOICE

Table with 2 columns: Item, Price. Includes Open Hole Test (\$625), Mileage (\$45.00), and TOTAL (\$670).

WESTERN TESTING CO., INC.

Pressure Data

Date 2-17

Test Ticket No. 12822

Recorder No. 13268

Capacity 4225

Location 2152 Ft.

Clock No. ---

Elevation 1514 KB

Well Temperature 97 °F

Point	Pressure	P.S.I.
A Initial Hydrostatic Mud	<u>1075</u>	P.S.I.
B First Initial Flow Pressure	<u>107</u>	P.S.I.
C First Final Flow Pressure	<u>55</u>	P.S.I.
D Initial Closed-in Pressure	<u>417</u>	P.S.I.
E Second Initial Flow Pressure	<u>118</u>	P.S.I.
F Second Final Flow Pressure	<u>68</u>	P.S.I.
G Final Closed-in Pressure	<u>410</u>	P.S.I.
H Final Hydrostatic Mud	<u>1055</u>	P.S.I.

	Time Given	Time Computed
Open Tool	<u>11:30 A</u> M	
First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 20 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>107</u>	0	<u>55</u>	0	<u>118</u>	0	<u>68</u>
P 2 5	<u>81</u>	3	<u>71</u>	5	<u>96</u>	3	<u>70</u>
P 3 10	<u>66</u>	6	<u>179</u>	10	<u>79</u>	6	<u>76</u>
P 4 15	<u>60</u>	9	<u>237</u>	15	<u>73</u>	9	<u>93</u>
P 5 20	<u>57</u>	12	<u>280</u>	20	<u>70</u>	12	<u>127</u>
P 6 25	<u>55</u>	15	<u>314</u>	25	<u>68</u>	15	<u>177</u>
P 7 30	<u>55</u>	18	<u>346</u>	30	<u>68</u>	18	<u>212</u>
P 8 35		21	<u>373</u>	35	<u>68</u>	21	<u>239</u>
P 9 40		24	<u>395</u>	40	<u>68</u>	24	<u>265</u>
P10 45		27	<u>417</u>	45	<u>68</u>	27	<u>284</u>
P11 50		30		50	<u>70</u>	30	<u>306</u>
P12 55		33		55	<u>68</u>	33	<u>321</u>
P13 60		36		60	<u>68</u>	36	<u>335</u>
P14		39		65		39	<u>347</u>
P15		42		70		42	<u>359</u>
P16		45		75		45	<u>371</u>
P17		48		80		48	<u>381</u>
P18		51		85		51	<u>390</u>
P19		54		90		54	<u>400</u>
P20		57				57	<u>409</u>
		60				60	<u>410</u>

Company Range Oil Company, Inc. Lease & Well No. Clark "A" #1
 Location 1514 Kelly Bushing Kansas City Effective Pay - Ft. Ticket No. 12822
 Date 2/17/82 Sec. 17 Twp. 30S Range 8E County Cowley State Kansas
 Test Approved by Joe Baker Western Representative Norman Allen

Formation Test No. 1 Interval Tested from 2130 ft. to 2156 ft. Total Depth 2156 ft.
 Packer Depth 2130 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2125 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2149 ft. Recorder Number 1559 Cap. 4200
 Bottom Recorder Depth (Outside) 2152 ft. Recorder Number 13268 Cap. 4225
 Flow Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Range Drlg. Rig #2 Drill Collar Length 150 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 45 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss 10.4 cc. Drill Pipe Length 1958 I. D. 3.8 in.
 Chlorides 900 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
 Tools: Make - Serial Number - Anchor Length 26 ft. Size 5 1/2 OD in.
 Mud 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.

Flow: Weak to very weak throughout test.

Covered 120 ft. of drilling mud
 Covered ft. of
 Covered ft. of
 Covered ft. of
 Covered ft. of
 Remarks:

Time Set Packer(s) 11:30 ~~A.M.~~ P.M. Time Started Off Bottom 2:30 ~~A.M.~~ P.M. Maximum Temperature 97°
 Initial Hydrostatic Pressure 1075 P.S.I. (A)
 Initial Flow Period 30 Minutes (B) 107 P.S.I. to (C) 55 P.S.I.
 Initial Closed In Period 27 Minutes (D) 417 P.S.I.
 Final Flow Period 60 Minutes (E) 118 P.S.I. to (F) 68 P.S.I.
 Final Closed In Period 60 Minutes (G) 410 P.S.I.
 Final Hydrostatic Pressure 1055 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 2/17/82 Test Ticket No. 12822
 Recorder No. 13268 Capacity 4225 Location 2152 Ft.
 Clock No. --- Elevation 1514 Kelly Bushing Well Temperature 97 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1075	P.S.I.	11:30A	M
B First Initial Flow Pressure	107	P.S.I.	30	30 Mins.
C First Final Flow Pressure	55	P.S.I.	30	27 Mins.
D Initial Closed-in Pressure	417	P.S.I.	60	60 Mins.
E Second Initial Flow Pressure	118	P.S.I.	60	60 Mins.
F Second Final Flow Pressure	68	P.S.I.		
G Final Closed-in Pressure	410	P.S.I.		
H Final Hydrostatic Mud	1055	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 9 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

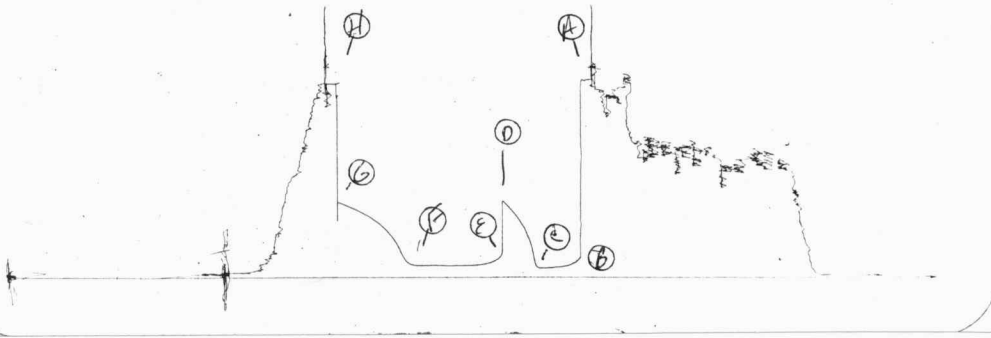
Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 20 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	107	0	55	0	118	0	68
P 2 5	81	3	71	5	96	3	70
P 3 10	66	6	179	10	79	6	76
P 4 15	60	9	237	15	73	9	93
P 5 20	57	12	280	20	70	12	127
P 6 25	55	15	314	25	68	15	177
P 7 30	55	18	346	30	68	18	212
P 8		21	373	35	68	21	239
P 9		24	395	40	68	24	265
P10		27	417	45	68	27	284
P11				50	70	30	306
P12				55	68	33	321
P13				60	68	36	335
P14						39	347
P15						42	359
P16						45	371
P17						48	381
P18						51	390
P19						54	400
P20						57	409
						60	410

JK #12822

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 12823

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

Elevation 1514 KB Formation KC Eff. Pay Ft.

District Augusta Date 2-18-82 Customer Order No.

COMPANY NAME Range Oil Co Inc.

ADDRESS 240 Page Court 220 W Douglas Wichita, Ks 67202

LEASE AND WELL NO. Clark A #1 COUNTY Cowley STATE Ks. Sec. 17 Twp. 30 Rge 8E

Mail Invoice To Same No. Copies Requested 1

Mail Charts To Same No. Copies Requested 5

Formation Test No. 2 Interval Tested from 2195 ft. to 2230 ft. Total Depth 2230 ft.

Packer Depth 2195 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2190 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2223 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 2226 ft. Recorder Number 13268 Cap. 4225

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

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

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

Weight 9.4 Water Loss 10.4 cc. Drill Pipe Length 2023 I. D. 3.8 in.

Chlorides 900 P.P.M. Test Tool Length 22 ft. Tool Size 5 200 in.

Jars: Make - Serial Number - Anchor Length 35 ft. Size 5 3/8 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: Strong diminishing to fair at end of test

Gas to surface 25 minutes See attached sheet for gas measurements

Recovered 330 ft. of Muddy gassy oil 75% oil 25% mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Gas gauged 6,550 CFPD @ 30 minutes & 2810 CFPD @ 90 minutes

Time On Location 7:00 2-17 A.M. Time Pick Up Tool 11:30 P.M. Time Off Location A.M.

Time Set Packer(s) 1:00 A.M. Time Started Off Bottom 4:30 P.M. Maximum Temperature 99

Initial Hydrostatic Pressure (A) 1085 P.S.I.

Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 75 P.S.I.

Initial Closed In Period Minutes 30 (D) 335 P.S.I.

Final Flow Period Minutes 60 (E) 95 P.S.I. to (F) 115 P.S.I.

Final Closed In Period Minutes 90 (G) 355 P.S.I.

Final Hydrostatic Pressure (H) 1054 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] Signature of Customer or his authorized representative

Western Representative Norman Allen

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$625), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, and TOTAL (\$625).



GAS FLOW REPORT

Nº 1323

Date 2-18-82 Ticket 12823 Company Range Oil Co Inc
 Well Name and No. Clark A-#1 Dst No. 2 Interval Tested 2195-2230
 County Cowley State Ks Sec. 17 Twp. 30 Rg. 8E

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
Tool open @ 1:00 AM - 30 minutes Closed in 30 mins					
Gas to surface 25 minutes					
30	15" water	1/4" choke			6,550 CFPD Gas

Tool open 2:00 AM 60 minutes SECOND FLOW Closed 90 minutes					
35	12" water	1/4" choke			5860 CFPD Gas
45	10" "	" "	" "	" "	5320 " "
55	6" "	" "	" "	" "	4120 " "
65	4" "	" "	" "	" "	3370 " "
75	2.8"	" "	" "	" "	2810 " "
90	2.8"	" "	" "	" "	2810 " "

Tool sample gas. @ 1:30 AM

GAS BOTTLE

Serial No. 15282 Date Bottle Filled 2-18-82 Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Range Oil Co Inc.

Authorized by Jacques

WESTERN TESTING CO., INC.

Pressure Data

Date 2-18

Test Ticket No. 12823

Recorder No. 1559

Capacity 4200

Location 2223 Ft.

Clock No. ---

Elevation 1514 KB

Well Temperature 99 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1085</u> P.S.I.		<u>1:00</u> A	
B First Initial Flow Pressure	<u>59</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>73</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>340</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>102</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>96</u> Mins.
F Second Final Flow Pressure	<u>123</u> P.S.I.			
G Final Closed-in Pressure	<u>358</u> P.S.I.			
H Final Hydrostatic Mud	<u>1044</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>9</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>32</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>59</u>	0	<u>73</u>	0	<u>102</u>	0	<u>123</u>
P 2 5	<u>59</u>	3	<u>94</u>	5	<u>5</u>	3	<u>203</u>
P 3 10	<u>59</u>	6	<u>159</u>	10	<u>5</u>	6	<u>251</u>
P 4 15	<u>61</u>	9	<u>215</u>	15	<u>102</u>	9	<u>284</u>
P 5 20	<u>65</u>	12	<u>256</u>	20	<u>106</u>	12	<u>307</u>
P 6 25	<u>69</u>	15	<u>288</u>	25	<u>107</u>	15	<u>320</u>
P 7 30	<u>73</u>	18	<u>309</u>	30	<u>109</u>	18	<u>328</u>
P 8 35		21	<u>324</u>	35	<u>112</u>	21	<u>336</u>
P 9 40		24	<u>332</u>	40	<u>114</u>	24	<u>340</u>
P10 45		27	<u>340</u>	45	<u>116</u>	27	<u>343</u>
P11 50		30		50	<u>119</u>	30	<u>345</u>
P12 55		33		55	<u>122</u>	33	<u>347</u>
P13 60		36		60	<u>123</u>	36	<u>348</u>
P14		39		65		39	<u>349</u>
P15		42		70		42	<u>350</u>
P16		45		75		45	<u>351</u>
P17		48		80		48	<u>352</u>
P18		51		85		51	<u>353</u>
P19		54		90		54	<u>354</u>
P20		57				57	<u>355</u>
		60				60	<u>356</u>

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____

Test Ticket No. 12823

Recorder No. _____ Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	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	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ 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	_____	63	_____	_____	_____	63	357
P 2	_____	66	_____	_____	_____	66	_____
P 3	_____	69	_____	_____	_____	69	_____
P 4	_____	72	_____	_____	_____	72	_____
P 5	_____	75	_____	_____	_____	75	357
P 6	_____	78	_____	_____	_____	78	358
P 7	_____	81	_____	_____	_____	81	_____
P 8	_____	84	_____	_____	_____	84	_____
P 9	_____	87	_____	_____	_____	87	_____
P10	_____	90	_____	_____	_____	90	358
P11	_____	93	_____	_____	_____	93	358
P12	_____	96	_____	_____	_____	96	358
P13	_____	99	_____	_____	_____	99	_____
P14	_____	102	_____	_____	_____	102	_____
P15	_____	105	_____	_____	_____	105	_____
P16	_____	108	_____	_____	_____	108	_____
P17	_____	111	_____	_____	_____	111	_____
P18	_____	114	_____	_____	_____	114	_____
P19	_____	117	_____	_____	_____	117	_____
P20	_____	120	_____	_____	_____	120	_____

Company Range Oil Company, Inc. Lease & Well No. Clark "A" #1
 Elevation 1514 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 12823
 Date 2/18 /82 Sec. 17 Twp. 30S Range 8E County Cowley State Kansas
 Test Approved by Joe Baker Western Representative Norman Allen

Formation Test No. 2 Interval Tested from 2195 ft. to 2230 ft. Total Depth 2230 ft.
 Packer Depth 2195 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 2190 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2223 ft. Recorder Number 1559 Cap. 4200
 Bottom Recorder Depth (Outside) 2226 ft. Recorder Number 13268 Cap. 4225
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Drlg. Rig #2 Drill Collar Length 150 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 45 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss 10.4 cc. Drill Pipe Length 2023 I. D. 3.8 in.
 Chlorides 900 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 35 ft. Size 5 1/2 OD 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: Strong; diminishing to fair at end of test. Gas to surface twenty-five minutes. See attached sheet for gas measurements.

Recovered 330 ft. of muddy gassy oil 75% oil; 25% mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 1:00 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 4:30 ~~P.M.~~ ^{A.M.} Maximum Temperature 99°
 Initial Hydrostatic Pressure 1085 (A) P.S.I.
 Initial Flow Period 30 Minutes (B) 59 P.S.I. to (C) 73 P.S.I.
 Initial Closed In Period 27 Minutes (D) 340 P.S.I.
 Final Flow Period 60 Minutes (E) 102 P.S.I. to (F) 123 P.S.I.
 Final Closed In Period 96 Minutes (G) 358 P.S.I.
 Final Hydrostatic Pressure 1044 (H) P.S.I.

GAS FLOW REPORT

Date 2/18/82 Ticket 12823 Company Range Oil Company, Inc.
 Well Name and No. Clark "A" #1 Dst No. 2 Interval Tested 2195' = 2230'
 County Cowley State Kansas Sec. 17 Twp. 30S Rg. 8E

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
Tool open @ 1:00AM-30 minutes. Closed in PRE FLOW 30 minutes.						
		Gas to surface twenty-five minutes.				
	30 min.	15" of water		1/4" orifice		6,550 CFPD Gas

Tool open 2:00AM 60 minutes. SECOND FLOW Closed in 90minutes.						
	35 min.	12" of water		1/4" orifice		5,860 CFPD Gas
	45 min.	10" of water		1/4" orifice		5,320 CFPD
	55 min.	6" of water		1/4" orifice		4,120 CFPD
	65 min.	4" of water		1/4" orifice		3,370 CFPD
	75 min.	2.8 of water		1/4" orifice		2,810 CFPD
	90 min.	2.8 of water		1/4" orifice		2,810 CFPD
	Took sample gas @1:30 AM					

GAS BOTTLE

Serial No. 15282 Date Bottle Filled 2/18/82 Date to be Invoiced 2/18/82

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Range Oil Company, Inc.
 Joe M. Baker
 Authorized by _____

WESTERN TESTING CO., INC.
Pressure Data

Date 2./18/82

Test Ticket No. 12823

Recorder No. 1559

Capacity 4200

Location 2223 Ft.

Clock No. -- Elevation

1514 Kelly Bushing

Well Temperature 99 °F

Point	Pressure	
A Initial Hydrostatic Mud	<u>1085</u>	P.S.I.
B First Initial Flow Pressure	<u>59</u>	P.S.I.
C First Final Flow Pressure	<u>73</u>	P.S.I.
D Initial Closed-in Pressure	<u>340</u>	P.S.I.
E Second Initial Flow Pressure	<u>102</u>	P.S.I.
F Second Final Flow Pressure	<u>123</u>	P.S.I.
G Final Closed-in Pressure	<u>358</u>	P.S.I.
H Final Hydrostatic Mud	<u>1044</u>	P.S.I.

Open Tool
First Flow Pressure
Initial Closed-in Pressure
Second Flow Pressure
Final Closed-in Pressure

Time Given	Time Computed
<u>1:00A</u>	<u>M</u>
<u>30</u>	<u>30</u> Mins.
<u>30</u>	<u>27</u> Mins.
<u>60</u>	<u>60</u> Mins.
<u>90</u>	<u>96</u> Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 32 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>0</u>	<u>59</u>	<u>0</u>	<u>73</u>	<u>0</u>	<u>102</u>	<u>0</u>	<u>123</u>
P 2 <u>5</u>	<u>59</u>	<u>3</u>	<u>94</u>	<u>5</u>	<u>102</u>	<u>3</u>	<u>203</u>
P 3 <u>10</u>	<u>59</u>	<u>6</u>	<u>159</u>	<u>10</u>	<u>102</u>	<u>6</u>	<u>251</u>
P 4 <u>15</u>	<u>61</u>	<u>9</u>	<u>215</u>	<u>15</u>	<u>102</u>	<u>9</u>	<u>284</u>
P 5 <u>20</u>	<u>65</u>	<u>12</u>	<u>256</u>	<u>20</u>	<u>106</u>	<u>12</u>	<u>307</u>
P 6 <u>25</u>	<u>69</u>	<u>15</u>	<u>288</u>	<u>25</u>	<u>107</u>	<u>15</u>	<u>320</u>
P 7 <u>30</u>	<u>73</u>	<u>18</u>	<u>309</u>	<u>30</u>	<u>109</u>	<u>18</u>	<u>328</u>
P 8		<u>21</u>	<u>324</u>	<u>35</u>	<u>112</u>	<u>21</u>	<u>336</u>
P 9		<u>24</u>	<u>332</u>	<u>40</u>	<u>114</u>	<u>24</u>	<u>340</u>
P10		<u>27</u>	<u>340</u>	<u>45</u>	<u>116</u>	<u>27</u>	<u>343</u>
P11				<u>50</u>	<u>119</u>	<u>30</u>	<u>345</u>
P12				<u>55</u>	<u>122</u>	<u>33</u>	<u>347</u>
P13				<u>60</u>	<u>123</u>	<u>36</u>	<u>348</u>
P14						<u>39</u>	<u>349</u>
P15						<u>42</u>	<u>350</u>
P16						<u>45</u>	<u>351</u>
P17						<u>48</u>	<u>352</u>
P18						<u>51</u>	<u>353</u>
P19						<u>54</u>	<u>354</u>
P20						<u>57</u>	<u>355</u>
						<u>60</u>	<u>356</u>

WESTERN TESTING CO., INC.
Pressure Data

Date 2./18/82

Test Ticket No. 12823

Recorder No. 1559

Capacity 4200

Location 2223 Ft.

Clock No. --

Elevation 1514 Kelly Bushing

Well Temperature 99 °F

Point	Pressure			Time Given	Time Computed
		P.S.I.			
A	Initial Hydrostatic Mud	<u>1085</u>	P.S.I.	Open Tool	
B	First Initial Flow Pressure	<u>59</u>	P.S.I.	First Flow Pressure	
C	First Final Flow Pressure	<u>73</u>	P.S.I.	Initial Closed-in Pressure	
D	Initial Closed-in Pressure	<u>340</u>	P.S.I.	Second Flow Pressure	
E	Second Initial Flow Pressure	<u>102</u>	P.S.I.	Final Closed-in Pressure	
F	Second Final Flow Pressure	<u>123</u>	P.S.I.		
G	Final Closed-in Pressure	<u>358</u>	P.S.I.		
H	Final Hydrostatic Mud	<u>1044</u>	P.S.I.		

Time Given	Time Computed
1:00A	M
30	Mins. 30
30	Mins. 27
60	Mins. 60
90	Mins. 96

PRESSURE BREAKDOWN

Point	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of <u>6</u> mins. and a		of <u>9</u> mins. and a		of <u>12</u> mins. and a		of <u>32</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	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1							63	357
P 2							66	357
P 3							69	357
P 4							72	357
P 5							75	357
P 6							78	358
P 7							81	358
P 8							84	358
P 9							87	358
P10							90	358
P11							93	358
P12							96	358
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								

W # 12823

I

