Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 12755

Date 10/ 18/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D. Bolte Western Representative Kenny Kirkendall

Formation Test No. 1 Interval Tested from 1266 ft. to 1296 ft. Total Depth 1296 ft.

Packer Depth 1266 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1261 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1270 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1274 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Drilling Rig #2 Drill Collar Length 150 I. D. - in.

Mud Type chemical Viscosity 34 Weight Pipe Length - I. D. - in.

Weight 8.8 Water Loss - cc. Drill Pipe Length 1096 I. D. - in.

Chlorides 1,200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 30 ft. Size 5½ 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 4½XH in.

Blow: Very weak initial flow period; very weak blow on final flow period; died in three minutes; flushed tool; very weak blow.

Recovered 20 ft. of mud with oil spots on top of tool

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 12:45 ~~A.M.~~ P.M. Time Started Off Bottom 3:15 A.M. P.M. Maximum Temperature 82°

Initial Hydrostatic Pressure		(A)	581	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)	30	P.S.I.		
Final Flow Period	Minutes 30	(E)	30	P.S.I. to (F)	25	P.S.I.
Final Closed In Period	Minutes 60	(G)	40	P.S.I.		
Final Hydrostatic Pressure		(H)	558	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 10/18/81 Test Ticket No. 12755

Recorder No. 2605 Capacity 4150 Location 1270 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 82 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	581 P.S.I.	Open Tool	12:45P M	
B First Initial Flow Pressure	30 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	30 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	30 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	30 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	25 P.S.I.			
G Final Closed-in Pressure	40 P.S.I.			
H Final Hydrostatic Mud	558 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	30
P 2 5	30
P 3 10	30
P 4 15	30
P 5 20	30
P 6 25	30
P 7 30	30
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	30
3	30
6	30
9	30
12	30
15	30
18	30
21	30
24	30
27	30
30	30

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

Point Minutes	Press.
0	30
5	29
10	28
15	27
20	26
25	25
30	25

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

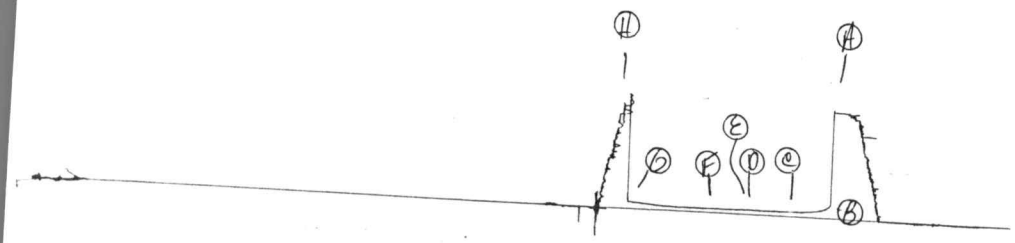
Point Minutes	Press.
0	25
3	25
6	25
9	25
12	25
15	26
18	26
21	26
24	26
27	26
30	26
33	27
36	28
39	29
42	30
45	31
48	32
51	34
54	36
57	38
60	40

DST #1

2605

TKT # 12755

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 12755

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

Elevation 1095 Kb Formation KC Eff. Pay Ft.

District Augusta Date 10-18-81 Customer Order No.

COMPANY NAME BOSI (Range Oil Company Inc.

ADDRESS 240 Page Court 220 West Douglas Wichita Ks 67202

LEASE AND WELL NO. Jacot # 2 COUNTY CQ STATE Ks Sec. 11 Twp. 32S Rge. 10E

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

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 1 Interval Tested from 1266 ft. to 1296 ft. Total Depth 1296 ft.

Packer Depth 1261 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 1261 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 1270 ft. Recorder Number 21605 Cap. 4150

Bottom Recorder Depth (Outside) 1274 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Co tools # 2 Drill Collar Length 150 I. D. in.

Mud Type Chem Viscosity 34 Weight Pipe Length I. D. in.

Weight 8.8 Water Loss cc. Drill Pipe Length 1096 I. D. 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 XH in.

Blow: IFP Very wk blow first flow Very wk blow second flow Died in 3 min Flushed tool Very wk blow

Recovered 20 ft. of mud With oil Spots on to of tool

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
OCT 23 1980

Time On Location	A.M. P.M.	Time Pick Up Tool	A.M. P.M.	Time Off Location	A.M. P.M.
Time Set Packer(s) 12:45	A.M. P.M.	Time Started Off Bottom 3:15	A.M. P.M.	Maximum Temperature 82°	

Initial Hydrostatic Pressure		(A) 570	P.S.I.		
Initial Flow Period	Minutes 30	(B) 31	P.S.I.	to (C) 31	P.S.I.
Initial Closed In Period	Minutes 30	(D) 31	P.S.I.		
Final Flow Period	Minutes 30	(E) 31	P.S.I.	to (F) 31	P.S.I.
Final Closed In Period	Minutes 60	(G) 42	P.S.I.		
Final Hydrostatic Pressure		(H) 570	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 Greg A Bolle
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
72 Mileage	$ 54.00
Fluid Sampler	$
Extra Charts	$

WESTERN TESTING CO., INC.

Pressure Data

Date 10-18-81 Test Ticket No. 12755

Recorder No. 2625 Capacity 4150 Location 1220 Ft

Clock No. — — — — Elevation 1095 KB Well Temperatu 82 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	581	P.S.I.	Open Tool	12:45P M	
B	First Initial Flow Pressure	30	P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	30	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins
D	Initial Closed-in Pressure	30	P.S.I.	Second Flow Pressure	30 Mins.	30 Mins
E	Second Initial Flow Pressure	30	P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins
F	Second Final Flow Pressure	25	P.S.I.			
G	Final Closed-in Pressure	40	P.S.I.			
H	Final Hydrostatic Mud	558	P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	30
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	30
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	30
3	
6	
9	
12	
15	
18	
21	
24	
27	
30	30
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	30
5	29
10	28
15	27
20	26
25	25
30	25
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press
0	25
3	25
6	25
9	25
12	25
15	26
18	
21	
24	
27	
30	26
33	27
36	28
39	29
42	30
45	31
48	32
51	34
54	36
57	38
60	40

Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation Pawnee Effective Pay - Ft. Ticket No. 12756

Date 10/ 19/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D. Bolte Western Representative Kenny Kirkendall

Formation Test No. 2 Interval Tested from 1593 ft. to 1612 ft. Total Depth 1612 ft.

Packer Depth 1593 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

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

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1598 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1604 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Drilling Rig #2 Drill Collar Length 150 I. D. - in.

Mud Type chemical Viscosity 39 Weight Pipe Length - I. D. - in.

Weight 8.9 Water Loss N/A cc. Drill Pipe Length 1423 I. D. - in.

Chlorides 1,200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number Anchor Length 19 ft. Size 5½ 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 4½XH in.

Blow: Fair blow throughout test.

Recovered 225 ft. of gas in pipe

Recovered 75 ft. of heavy oil cut mud 40% oil;60% mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:30 A.M. ~~P.M.~~ Time Started Off Bottom A.M. P.M. Maximum Temperature 86°

Initial Hydrostatic Pressure			(A)	736	P.S.I.	
Initial Flow Period	Minutes	30	(B)	41	P.S.I. to (C)	41 P.S.I.
Initial Closed In Period	Minutes	30	(D)	231	P.S.I.	
Final Flow Period	Minutes	45	(E)	56	P.S.I. to (F)	56 P.S.I.
Final Closed In Period	Minutes	60	(G)	312	P.S.I.	
Final Hydrostatic Pressure			(H)	736	P.S.I.	

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 10/19/81 | Test Ticket No. 12756

Recorder No. 2605 | Capacity 4150 | Location 1598 Ft.

Clock No. -- | Elevation 1095 Kelly Bushing | Well Temperature 86 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	736 P.S.I.	Open Tool		8:30A M	
B	First Initial Flow Pressure	41 P.S.I.	First Flow Pressure		30 Mins.	30 Mins.
C	First Final Flow Pressure	41 P.S.I.	Initial Closed-in Pressure		30 Mins.	30 Mins.
D	Initial Closed-in Pressure	231 P.S.I.	Second Flow Pressure		45 Mins.	45 Mins.
E	Second Initial Flow Pressure	56 P.S.I.	Final Closed-in Pressure		60 Mins.	60 Mins.
F	Second Final Flow Pressure	56 P.S.I.				
G	Final Closed-in Pressure	312 P.S.I.				
H	Final Hydrostatic Mud	736 P.S.I.				

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	41
P 2	5	41
P 3	10	41
P 4	15	41
P 5	20	41
P 6	25	41
P 7	30	41
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	41
3	41
6	42
9	51
12	68
15	82
18	106
21	142
24	176
27	205
30	231

Second Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	56
5	56
10	56
15	56
20	56
25	56
30	56
35	56
40	56
45	56

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

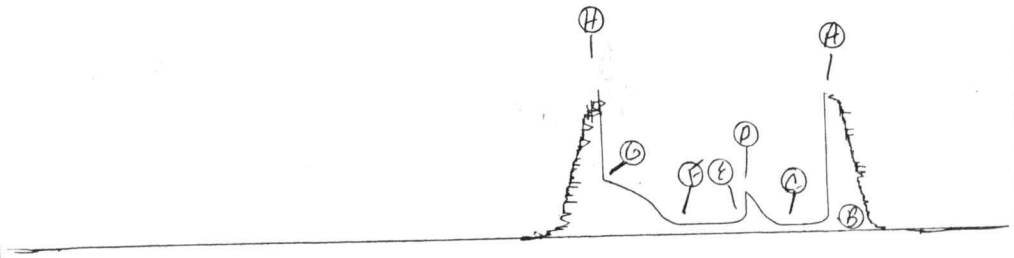
Point Minutes	Press.
0	56
3	56
6	60
9	68
12	81
15	93
18	123
21	152
24	178
27	197
30	213
33	229
36	241
39	253
42	263
45	274
48	284
51	292
54	303
57	309
60	312

DST #2

2605

Tkt # 12756

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 12756

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

Elevation 1095 Kb Formation Pawnee Eff. Pay Ft.

District Augusta Date 10-19-81 Customer Order No.

COMPANY NAME ROCI (Range Oil Company, Inc.)

ADDRESS 240 Page Court 220 West Douglas Wichita Ks 67202

LEASE AND WELL NO. Jacot #2 COUNTY CQ STATE Ks Sec. 11 Twp. 32S Rge. 10E

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

Mail Charts To SAME No. Copies Requested 5
Address

Formation Test No. 2(?) Interval Tested from 1593 ft. to 1612 ft. Total Depth 1612 ft.

Packer Depth 1593 ft. Size 6 3/4 in. Packer Depth — ft. Size in.

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

Depth of Selective Zone Set

Top Recorder Depth (Inside) 1598 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1604 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Co Tools #2 Drill Collar Length 150 I. D. in.

Mud Type Chem Viscosity 39 Weight Pipe Length I. D. in.

Weight 8.9 Water Loss N-A cc. Drill Pipe Length 1423 I. D. in.

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

Jars: Make NO Serial Number Anchor Length 19 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: fair blow, first flow 3"-4", fair blow second flow → Thru out Test

Recovered 225 ft. of GIP

Recovered 75 ft. of Heavy Oil Cut mud 40% Oil 60% mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Std by after DST #1

RECEIVED OCT 23 1980 KCC WICHITA

Time On Location A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location 86° A.M. P.M.

Time Set Packer(s) 8:30 A.M. P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature

Initial Hydrostatic Pressure		(A) 756	P.S.I.	
Initial Flow Period	Minutes 30	(B) 42	P.S.I. to (C) 42	P.S.I.
Initial Closed In Period	Minutes 30	(D) 245	P.S.I.	
Final Flow Period	Minutes 45	(E) 52	P.S.I. to (F) 52	P.S.I.
Final Closed In Period	Minutes 60	(G) 307	P.S.I.	
Final Hydrostatic Pressure		(H) 756	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 Drey D Bolte
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$

WESTERN TESTING CO., INC.

Pressure Data

Date 10-19-81 Test Ticket No. 12756

Recorder No. 2605 Capacity 4150 Location 1598 Ft

Clock No. — — — — Elevation 1095 KB Well Temperature 86 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	736	P.S.I.	Open Tool	8:30 AM	
B	First Initial Flow Pressure	41	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	41	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins
D	Initial Closed-in Pressure	231	P.S.I.	Second Flow Pressure	45 Mins.	45 Mins
E	Second Initial Flow Pressure	56	P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins
F	Second Final Flow Pressure	56	P.S.I.			
G	Final Closed-in Pressure	312	P.S.I.			
H	Final Hydrostatic Mud	736	P.S.I.			

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	41
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	41
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	41
3	41
6	42
9	51
12	68
15	82
18	106
21	142
24	176
27	205
30	231
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	56
5	
10	
15	
20	
25	
30	
35	
40	
45	56
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	56
3	56
6	60
9	68
12	81
15	93
18	123
21	152
24	178
27	197
30	213
33	229
36	241
39	253
42	263
45	274
48	284
51	292
54	303
57	309
60	312

WTC - 4

Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation Fort Scott Effective Pay - Ft. Ticket No. 12757

Date 10/ 19/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D. Bolte Western Representative Kenny Kirkendall

Formation Test No. 3 Interval Tested from 1644 ft. to 1668 ft. Total Depth 1668 ft.

Packer Depth 1640 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1635 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1644 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1648 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Drilling Rig #2 Drill Collar Length 150 I. D. - in.

Mud Type chemical Viscosity 36 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 12.0 cc. Drill Pipe Length I. D. - in.

Chlorides 1,200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number Anchor Length 24 ft. Size 5½ in.

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

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Good blow; gas to surface fifteen minutes. Oil to surface in thirty minutes. See attached sheet for gas measurements.

Recovered 1640 ft. of free gassy oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:25 A.M. P.M. Time Started Off Bottom 10:55 A.M. P.M. Maximum Temperature 91°

Initial Hydrostatic Pressure			(A) 811	P.S.I.		
Initial Flow Period	Minutes 30	(B) 168	P.S.I. to	(C) 356	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 610	P.S.I.			
Final Flow Period	Minutes 30	(E) 411	P.S.I. to	(F) 411	P.S.I.	
Final Closed In Period	Minutes 57	(G) 612	P.S.I.			
Final Hydrostatic Pressure			(H) 800	P.S.I.		

WTC-

GAS FLOW REPORT

Date 10/19/81 Ticket 12757 Company Range Oil Company, Inc.

Well Name and No. Janot #2 Dst No. 3 Interval Tested 1640'-1668'

County Chautauqua State Kansas Sec. 11 Twp. 32S Rg. 10E

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
			PRE FLOW			
	Gas to surface in fifteen minutes					
	20 min.	22" of water		1/4" orifice		7,880 CFPD
	25 min.	22" of water		1/4" orifice		7,880 CFPD
	30 min.	22" of water		1/4" orifice		7,880 CFPD
			SECOND FLOW			
	5 min.	)				
	10 min.	)				
	15 min	)				
	20 min.	)				
	25 min.	)	FLOWING OIL			
	30 min.	)				
	35 min.	)				
	40 min.	)				
	45 min.	)				

GAS BOTTLE

Serial No. 81 Date Bottle Filled 10/19/81 Date to be Invoiced 10/19/81

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.

Authorized by GREG D. BOLTE

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 10/19/81 Test Ticket No. 12757

Recorder No. 2605 Capacity 4150 Location 1644 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 91 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	811 P.S.I.	Open Tool	8:25 M	
B First Initial Flow Pressure	168 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	356 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	610 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	411 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	411 P.S.I.			
G Final Closed-in Pressure	612 P.S.I.			
H Final Hydrostatic Mud	800 P.S.I.			

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	168
P 2	5	168
P 3	10	188
P 4	15	227
P 5	20	271
P 6	25	313
P 7	30	356
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	356
	3	541
	6	565
	9	579
	12	589
	15	596
	18	600
	21	604
	24	608
	27	609
	30	610

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

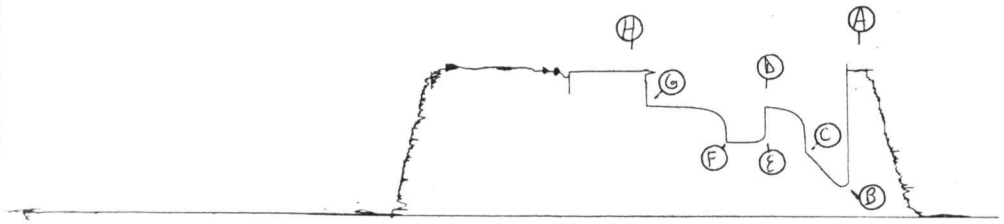
Point	Minutes	Press.
	0	411
	5	411
	10	411
	15	411
	20	411
	25	411
	30	411

Final Shut-In
Breakdown: 19 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	411
	3	560
	6	577
	9	587
	12	593
	15	597
	18	600
	21	604
	24	607
	27	608
	30	608
	33	608
	36	608
	39	609
	42	610
	45	611
	48	611
	51	611
	54	612
	57	612

TKT # 12757 2605

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 12757

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

Elevation 1095 Kb Formation Fort Scott Eff. Pay Ft.

District Augusta Date 10-19-81 Customer Order No.

COMPANY NAME ROOT Kange Oil Company, Inc

ADDRESS 240 Page Court 220 West Douglas Wichita Ks 67202

LEASE AND WELL NO. Jacot #2 COUNTY CQ STATE KS Sec. 11 Twp. 32S Rge. 10E

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

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 3 Interval Tested from 1644 ft. to 1668 ft. Total Depth 1668 ft.

Packer Depth 1640 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 1635 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 1644 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1648 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Co tools #2 Drill Collar Length 150 I. D. in.

Mud Type Chem Viscosity 36 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss 12.0 cc. Drill Pipe Length I. D. in.

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

Jars: Make NO Serial Number Anchor Length 24 ft. Size 5 1/2 in.

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

Main Hole Size 7 7/8 in. Tool Joint Size 7 7/8 in.

Blow: Good Blow 6 ft 5 15 min, Oil to Surface 30 min
See attached sheet for gas measurements

Recovered 1640 ft. of free glassy Oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Real Nice gas Samples

See Oil gas Sheet #1520

RECEIVED OCT 23 1980

Time On Location Stdby A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 8:25 A.M. P.M. Time Started Off Bottom 10:55 A.M. P.M. Maximum Temperature 91°

Initial Hydrostatic Pressure			(A) 808	P.S.I.		
Initial Flow Period	Minutes 30		(B) 158	P.S.I. to (C)	349	P.S.I.
Initial Closed In Period	Minutes 30		(D) 601	P.S.I.		
Final Flow Period	Minutes 30		(E) 391	P.S.I. to (F)	391	P.S.I.
Final Closed In Period	Minutes 60		(G) 601	P.S.I.		
Final Hydrostatic Pressure			(H) 804	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.

RECEIVED OCT 23 1980

Test Approved By Greg Bott
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$ 35.00
Mileage	$
Fluid Sampler	$
Extra Charts	$

Phone 316 838-0601

WESTERN TESTERS

P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Nº 1520

Date 10-19 Ticket 12757 Company ROCI

Well Name and No. Jacot # 2 Dst No. 3 Interval Tested 1640 - 1668

County CQ State Ks Sec. 11 Twp. 32S Rg. 10E

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					
				675	15 min
20	Flow	1/4	22		~~7800~~ 7880
25	Flow	1/4	22		" "
30	Flow	1/4	22		" "
SECOND FLOW					
5					
10					
15					
20					
25		Flowing 0.1			
30					
35					
40					
45					

GAS BOTTLE

Serial No. 81 Date Bottle Filled 10-19-81 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 Greg Isbell

FORM WTC 9

WESTERN TESTING CO., INC.

Pressure Data

Date 10-19-81 Test Ticket No. 12257

Recorder No. 2605 Capacity 4150 Location 1644 Ft.

Clock No. — — — — Elevation 1095 KB Well Temperature 91 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	811 P.S.I.	Open Tool	8:25 M	
B	First Initial Flow Pressure	168 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	356 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	610 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	411 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F	Second Final Flow Pressure	411 P.S.I.			
G	Final Closed-in Pressure	612 P.S.I.			
H	Final Hydrostatic Mud	800 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	168
P 2	5	168
P 3	10	188
P 4	15	227
P 5	20	271
P 6	25	313
P 7	30	356
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	356
3	541
6	565
9	579
12	589
15	596
18	600
21	604
24	608
27	609
30	610
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	411
5	
10	
15	
20	
25	
30	411
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	411
3	560
6	577
9	587
12	593
15	597
18	600
21	604
24	607
27	608
30	608
33	608
36	608
39	609
42	610
45	611
48	611
51	611
54	612
57	612
60	

WTC - 4

Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation Effective Pay - Ft. Ticket No. 12758

Date 10/20 /81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D. Bolte Western Representative Kenny Kirkendall

Formation Test No. 4 Interval Tested from 1964 ft. to 1992 ft. Total Depth 1992 ft.

Packer Depth 1964 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1959 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1968 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1972 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Drilling Rig #2 Drill Collar Length 150 I. D. - in.

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

Weight 9.5 Water Loss 8.8 cc. Drill Pipe Length 1794 I. D. - in.

Chlorides 1,200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number Anchor Length 28 ft. Size 5½ in.

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

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Good blow; gas to surface ten minutes on initial flow period. See attached sheet for gas measurements.

Recovered 130 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 6:00 ~~A.M.~~ P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature 95°

Initial Hydrostatic Pressure			(A)	964	P.S.I.	
Initial Flow Period	Minutes	30	(B)	99 P.S.I. to	(C)	90 P.S.I.
Initial Closed In Period	Minutes	30	(D)	537	P.S.I.	
Final Flow Period	Minutes	60	(E)	87 P.S.I. to	(F)	93 P.S.I.
Final Closed In Period	Minutes	84	(G)	546	P.S.I.	
Final Hydrostatic Pressure			(H)	964	P.S.I.	

GAS FLOW REPORT

Date 10/20/81 Ticket 12758 Company Range Oil Company, Inc.

Well Name and No. Jacot #2 Dst No. 4 Interval Tested 1964'-1992'

County Chautauque State Kansas Sec. 11 Twp. 32S Rg. 10E

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
Gas to surface ten minutes.						**PRE FLOW**
	10 min.	Caught sample				
	15 min.	9.5 PSIG	1" orifice			458,000 CFPD
	20 min.	9.5 PSIG	1" orifice			458,000 CFPD
	25 min.	10.0 PSIG	1" orifice			472,000 CFPD
	30 min.	10.0 PSIG	1" orifice			472,000 CFPD
						SECOND FLOW
	5 min.	10.0 PSIG	1" orifice			472,000 CFPD
	10 min.	12.0 PSIG	1" orifice			526,000 CFPD
	15 min.	12.0 PSIG	1" orifice			526,000 CFPD
	20 min.	12.0 PSIG	1" orifice			526,000 CFPD
	25 min.	12.0 PSIG	1" orifice			526,000 CFPD
	30 min.	12.0 PSIG	1" orifice			526,000 CFPD
	35 min.	12.0 PSIG	1" orifice			526,000 CFPD
	40 min.	12.0 PSIG	1" orifice			526,000 CFPD
	45 min.	12.0 PSIG	1" orifice			526,000 CFPD
	50 min.	12.0 PSIG	1" orifice			526,000 CFPD
	55 min.	12.0 PSIG	1" orifice			526,000 CFPD
	60 min.	12.0 PSIG	1" orifice			526,000 CFPD

GAS BOTTLE

Serial No. 111 Date Bottle Filled 10/20/81 Date to be Invoiced 10/20/81

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.

Authorized by Greg D. Bolte

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 10/20/81 Test Ticket No. 12758

Recorder No. 2605 Capacity 4150 Location 1968 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 95 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	964 P.S.I.	Open Tool	6:00P M	
B First Initial Flow Pressure	99 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	90 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	537 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	87 P.S.I.	Final Closed-in Pressure	90 Mins.	84 Mins.
F Second Final Flow Pressure	93 P.S.I.			
G Final Closed-in Pressure	546 P.S.I.			
H Final Hydrostatic Mud	964 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	99
P 2 5	99
P 3 10	99
P 4 15	92
P 5 20	90
P 6 25	90
P 7 30	90
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	90
3	447
6	477
9	500
12	510
15	519
18	525
21	530
24	535
27	536
30	537

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

Point Minutes	Press.
0	87
5	87
10	87
15	87
20	87
25	87
30	88
35	89
40	90
45	91
50	92
55	93
60	93

Final Shut-In
Breakdown: 28 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	93
3	436
6	463
9	483
12	494
15	504
18	510
21	517
24	525
27	525
30	528
33	530
36	532
39	534
42	536
45	538
48	539
51	540
54	541
57	542
60	543

continued next page

WESTERN TESTING CO., INC.

Pressure Data

Date 10/20/81 Test Ticket No. 12758

Recorder No. 2605 Capacity 4150 Location 1968 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 95 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	964 P.S.I.	Open Tool	6:00P M	
B First Initial Flow Pressure	99 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	90 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	537 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	87 P.S.I.	Final Closed-in Pressure	90 Mins.	84 Mins.
F Second Final Flow Pressure	93 P.S.I.			
G Final Closed-in Pressure	546 P.S.I.			
H Final Hydrostatic Mud	964 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: 10 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.

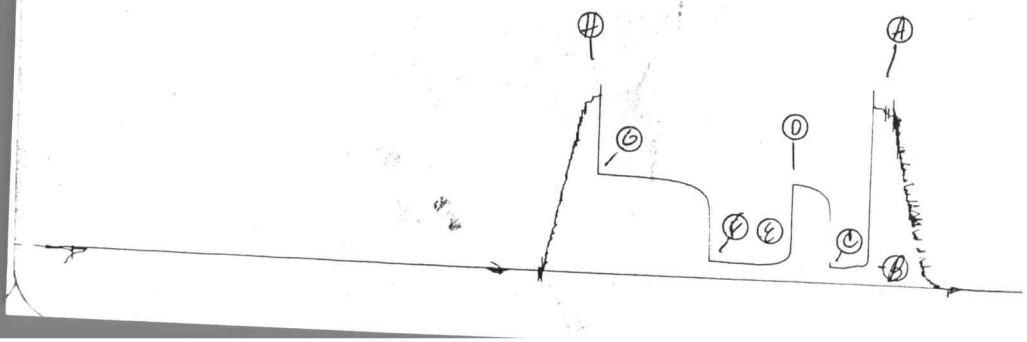
Final Shut-In
Breakdown: 28 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	543
P 2						66	543
P 3						69	543
P 4						72	543
P 5						75	543
P 6						78	544
P 7						81	545
P 8						84	546
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

D-4

TK # 12758

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 12758

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

Elevation 1095 Kb Formation Miss Eff. Pay Ft.

District Augusta Date 10-20-81 Customer Order No.

COMPANY NAME ROCI Energy Oil Company, Inc.

ADDRESS 240 Cage Court 220 West Douglas Wichita Ks 67202

LEASE AND WELL NO. Jacot #2 COUNTY CQ STATE Ks Sec. 11 Twp. 32S Rge. 10E

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

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 4 Interval Tested from 1964 ft. to 1992 ft. Total Depth 1992 ft.

Packer Depth 1964 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 1959 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 1968 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 1972 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Cotoats #2

Mud Type Chem Viscosity 45

Weight 9.5 Water Loss 8.8 cc.

Chlorides 1200 P.P.M.

Jars: Make NO Serial Number

Did Well Flow? GAS Reversed Out

Drill Collar Length 150 I. D. in.

Weight Pipe Length I. D. in.

Drill Pipe Length 1794 I. D. in.

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

Anchor Length 28 ft. Size 5 1/2 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: Good blow of 45 10 mjn First flow Surface thru out. for gas measurments.

Recovered 130 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

RECEIVED
OCT 23 1980

See Attached Sheet

Remarks: Geol has gas sample # 1522

Time On Location	Stdby A.M. P.M.	Time Pick Up Tool	A.M. P.M.	Time Off Location	A.M. P.M.
Time Set Packer(s)	600 A.M. P.M.	Time Started Off Bottom	A.M. P.M.	Maximum Temperature	95°

Initial Hydrostatic Pressure			(A)	964	P.S.I.		
Initial Flow Period	Minutes	30	(B)	73	P.S.I. to (C)	73	P.S.I.
Initial Closed In Period	Minutes	30	(D)	539	P.S.I.		
Final Flow Period	Minutes	60	(E)	73	P.S.I. to (F)	73	P.S.I.
Final Closed In Period	Minutes	90	(G)	539	P.S.I.		
Final Hydrostatic Pressure			(H)	964	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 Gary D Bates
Signature of Customer or his authorized representative

Western Representative Kenny Kurkendall

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$

Phone 316 838-0601

WESTERN TESTERS

P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Nº 1522

Date 10-20-81 Ticket 12758 Company ROCI

Well Name and No. Taco #2 Dst No. 4 Interval Tested 1964-1992

County CQ State KS Sec. 11 Twp. 32S Rg. 10E

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					
GTS 10 min					
10	Caught Sample				
15	PSI	1"	9.5		458,000 MCFPD
20	"	1"	9.5		"
25	"	1"	10		472,000
30	"	1"	10		"
SECOND FLOW					
5	PSI	1"	10		472,000
10	"	"	12		526,000
15	"	"	12		"
20	"	"	12		"
25	"	"	12		"
30	"	"	12		"
35	"	"	12		"
40	"	"	"		"
45	"	"	"		"
50	"	"	"		"
55	"	"	"		"
60	"	"			

GAS BOTTLE

Serial No. 111 Date Bottle Filled 10-20-81 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 Greg A Botts

FORM WTC 9

WESTERN TESTING CO., INC.

Pressure Data

Date 10-20 Test Ticket No. 12758

Recorder No. 2605 Capacity 4150 Location 1968 Ft.

Clock No. — — — — Elevation 1095 KB Well Temperature 95 °F

Point		Pressure	
A	Initial Hydrostatic Mud	964	P.S.I.
B	First Initial Flow Pressure	99	P.S.I.
C	First Final Flow Pressure	90	P.S.I.
D	Initial Closed-in Pressure	537	P.S.I.
E	Second Initial Flow Pressure	87	P.S.I.
F	Second Final Flow Pressure	93	P.S.I.
G	Final Closed-in Pressure	546	P.S.I.
H	Final Hydrostatic Mud	964	P.S.I.

	Time Given	Time Computed
Open Tool	6:00 PM	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	90 Mins.	84 Mins.

PRESSURE BREAKDOWN

First Flow Pressure

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

Point	Mins.	Press.
P 1	0	99
P 2	5	99
P 3	10	99
P 4	15	92
P 5	20	90
P 6	25	90
P 7	30	90
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In

Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	90
	3	447
	6	477
	9	500
	12	510
	15	519
	18	525
	21	530
	24	535
	27	536
	30	537
	33	
	36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	

Second Flow Pressure

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

Point	Minutes	Press.
	0	87
	5	
	10	
	15	
	20	
	25	87
	30	88
	35	89
	40	90
	45	91
	50	92
	55	93
	60	93
	65	
	70	
	75	
	80	
	85	
	90	

Final Shut-In

Breakdown: 21 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	93
	3	436
	6	464
	9	483
	12	494
	15	504
	18	510
	21	517
	24	522
	27	525
	30	528
	33	530
	36	532
	39	534
	42	536
	45	538
	48	539
	51	540
	54	541
	57	542
	60	543

con't

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 12758

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
Breakdown: _____ Inc.
of 5 mins. and a
final inc. of 0 Min.

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

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

Final Shut-In
Breakdown: _____ 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		63				63	543
P 2		66				66	
P 3		69				69	
P 4		72				72	
P 5		75				75	543
P 6		78				78	544
P 7		81				81	545
P 8		84				84	546
P 9		87				87	
P10		90				90	
P11		93				93	
P12		96				96	
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. Jacot #2

Elevation 1095 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 12759

Date 10/ 21/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D. Bolte Western Representative Kenny Kirkendall

Formation Test No. 5 Interval Tested from 1992 ft. to 2022 ft. Total Depth 2022 ft.

Packer Depth 1992 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1987 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1997 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2002 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Drilling Rig #2 Drill Collar Length 150 I. D. - in.

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

Weight 9.6 Water Loss 8.8 cc. Drill Pipe Length 1822 I. D. - in.

Chlorides 1,200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 30 ft. Size 5½ 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 4½XH in.

Blow: Fair blow throughout test. Three inches in bucket.

Recovered 10 ft. of oil cut mud 40% oil

Recovered 55 ft. of very slightly oil cut mud Less than 4%

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:40 A.M. P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature 95°

Initial Hydrostatic Pressure			(A)	985	P.S.I.	
Initial Flow Period	Minutes 30		(B)	44	P.S.I. to (C) 44	P.S.I.
Initial Closed In Period	Minutes 30		(D)	216	P.S.I.	
Final Flow Period	Minutes 60		(E)	53	P.S.I. to (F) 53	P.S.I.
Final Closed In Period	Minutes 60		(G)	466	P.S.I.	
Final Hydrostatic Pressure			(H)	985	P.S.I.	

WT

WESTERN TESTING CO., INC.

Pressure Data

Date 10/21/81 Test Ticket No. 12759

Recorder No. 2605 Capacity 4150 Location 1997 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 95 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	985 P.S.I.	Open Tool	8:40 M	
B First Initial Flow Pressure	44 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	44 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	216 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	53 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	53 P.S.I.			
G Final Closed-in Pressure	466 P.S.I.			
H Final Hydrostatic Mud	985 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	44
P 2 5	44
P 3 10	44
P 4 15	44
P 5 20	44
P 6 25	44
P 7 30	44
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	44
3	46
6	53
9	65
12	80
15	96
18	121
21	144
24	176
27	206
30	216

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

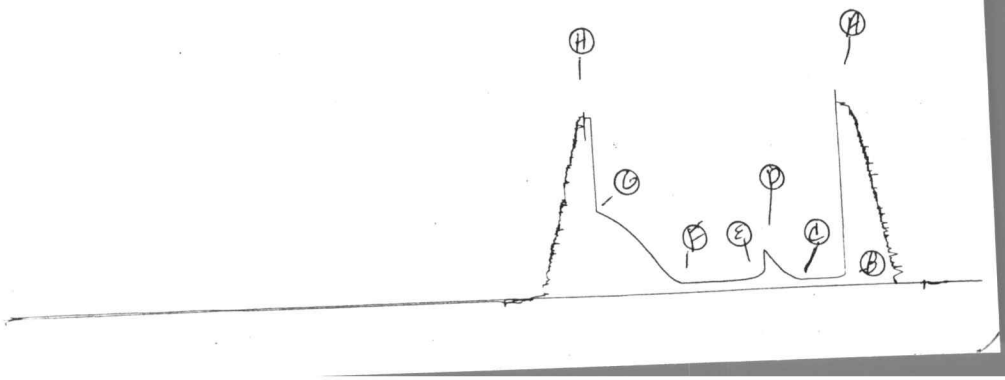
Point Minutes	Press.
0	53
5	53
10	53
15	53
20	53
25	53
30	53
35	53
40	53
45	53
50	53
55	53
60	53

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	53
3	63
6	76
9	93
12	119
15	146
18	178
21	212
24	236
27	265
30	292
33	320
36	343
39	364
42	386
45	400
48	416
51	429
54	443
57	455
60	466

TKt #12759

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 12759

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

Elevation 1095 Kb Formation Miss Eff. Pay Ft.

District Augusta Date 10-21-81 Customer Order No.

COMPANY NAME ROCK Range Oil Company, Inc
ADDRESS 240 Page Court 220 West Douglas Wichita Ks 67202
LEASE AND WELL NO. Jacot #2 COUNTY CQ STATE Ks Sec. 11 Twp. 32S Rge. 10E

Mail Invoice To Same Co. Name Address No. Copies Requested 1
Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 5 Interval Tested from 1992 ft. to 2022 ft. Total Depth 2022 ft.
Packer Depth 1992 ft. Size 6 3/4 in. Packer Depth — ft. Size in.
Packer Depth 1987 ft. Size 6 3/4 in. Packer Depth — ft. Size in.
Depth of Selective Zone Set —

Top Recorder Depth (Inside) 1997 ft. Recorder Number 2605 Cap. 4150
Bottom Recorder Depth (Outside) 2002 ft. Recorder Number 10979 Cap. 4100
Below Straddle Recorder Depth ft. Recorder Number — Cap. —

Drilling Contractor Co. tools #2 Drill Collar Length 156 I. D. in.
Mud Type Chem Viscosity 45 Weight Pipe Length I. D. in.
Weight 9.6 Water Loss 8.8 cc. Drill Pipe Length 1822 I. D. in.
Chlorides 1200 P.P.M. Test Tool Length 20 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 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: fair blow throughout test 3"

Recovered 10 ft. of Oil Cut mud 40% Oil
Recovered 55 ft. of Very slightly Oil Cut mud Less than 4%
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks:

RECEIVED
OCT 23 1980

Time On Location Stdbx A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location A.M. P.M.
Time Set Packer(s) 8:40 A.M. P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature 95

Initial Hydrostatic Pressure		(A)	1006	P.S.I.	
Initial Flow Period	Minutes 30	(B)	52	P.S.I. to (C)	52 P.S.I.
Initial Closed In Period	Minutes 30	(D)	222	P.S.I.	
Final Flow Period	Minutes 60	(E)	63	P.S.I. to (F)	63 P.S.I.
Final Closed In Period	Minutes 60	(G)	455	P.S.I.	
Final Hydrostatic Pressure		(H)	1006	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 Greg A Bolte
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$

WESTERN TESTING CO., INC.

Pressure Data

Date 10-21 Test Ticket No. 2759

Recorder No. 2605 Capacity 4150 Location 1997 Ft.

Clock No. — — — — Elevation 1095 KB Well Temperature 95 °F

Point		Pressure	
A	Initial Hydrostatic Mud	985	P.S.I.
B	First Initial Flow Pressure	44	P.S.I.
C	First Final Flow Pressure	44	P.S.I.
D	Initial Closed-in Pressure	216	P.S.I.
E	Second Initial Flow Pressure	53	P.S.I.
F	Second Final Flow Pressure	53	P.S.I.
G	Final Closed-in Pressure	466	P.S.I.
H	Final Hydrostatic Mud	985	P.S.I.

	Time Given	Time Computed
Open Tool	8:40 M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	60 Mins.	60 Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 4 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.		Press.
P 1	0	44
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	44
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	44
3	46
6	53
9	65
12	80
15	96
18	121
21	144
24	176
27	206
30	216
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	53
5	
10	
15	
20	
25	
30	
35	
40	
45	
50	
55	
60	53
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	53
3	63
6	76
9	93
12	119
15	146
18	178
21	212
24	236
27	265
30	292
33	320
36	343
39	364
42	386
45	400
48	416
51	429
54	443
57	455
60	466

Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 12760

Date 10/ 21/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D. Bolte Western Representative Kenny Kirkendall

Formation Test No. 6 Interval Tested from 2022 ft. to 2052 ft. Total Depth 2052 ft.

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

Packer Depth 2017 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2027 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2032 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Drilling Rig #2 Drill Collar Length 150 I. D. - in.

Mud Type chemical Viscosity 51 Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 9.4 cc. Drill Pipe Length - I. D. - in.

Chlorides 1,200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number Anchor Length 30 ft. Size 5½ 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 4½XH in.

Blow: Very weak ; died in five minutes on initial flow period. VEry weak and died in seven minutes on final flow period.

Recovered 65 ft. of muddy salt water with scum of oil on top

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:55 A.M. P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature 95°

Initial Hydrostatic Pressure			(A)	996	P.S.I.	
Initial Flow Period	Minutes 30	(B)	40	P.S.I. to (C)	40	P.S.I.
Initial Closed In Period	Minutes 27	(D)	216	P.S.I.		
Final Flow Period	Minutes 30	(E)	54	P.S.I. to (F)	54	P.S.I.
Final Closed In Period	Minutes 63	(G)	362	P.S.I.		
Final Hydrostatic Pressure			(H)	985	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 10/21/81 Test Ticket No. 12760

Recorder No. 2605 Capacity 4150 Location 2027 Ft.

Clock No. ---- Elevation 1095 Kelly Bushing Well Temperature 95 °F

Point		Pressure	
A	Initial Hydrostatic Mud	996	P.S.I.
B	First Initial Flow Pressure	40	P.S.I.
C	First Final Flow Pressure	40	P.S.I.
D	Initial Closed-in Pressure	216	P.S.I.
E	Second Initial Flow Pressure	54	P.S.I.
F	Second Final Flow Pressure	54	P.S.I.
G	Final Closed-in Pressure	362	P.S.I.
H	Final Hydrostatic Mud	985	P.S.I.

	Time Given	Time Computed
Open Tool	8:40 M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	27 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	60 Mins.	63 Mins.

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	40
P 2	5	40
P 3	10	40
P 4	15	40
P 5	20	40
P 6	25	40
P 7	30	40
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point	Minutes	Press.
	0	40
	3	40
	6	42
	9	44
	12	53
	15	68
	18	95
	21	133
	24	169
	27	216

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

Point	Minutes	Press.
	0	54
	5	54
	10	54
	15	54
	20	54
	25	54
	30	54

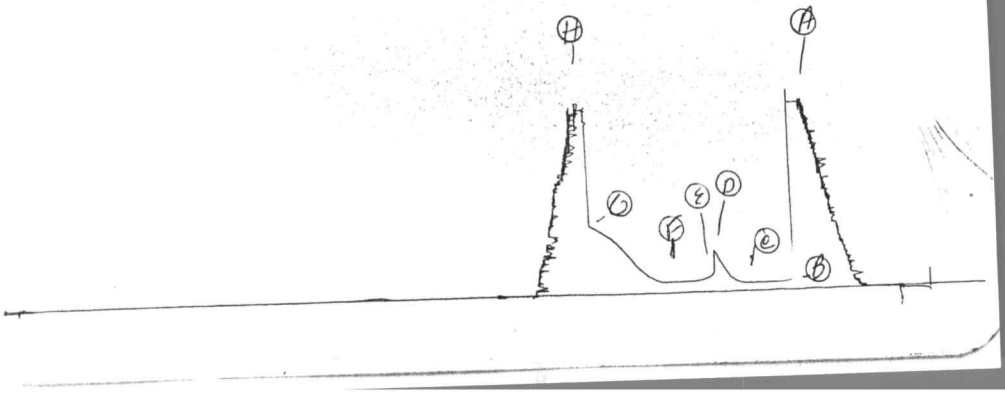
Final Shut-In
Breakdown: 21 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	54
	3	54
	6	54
	9	55
	12	59
	15	68
	18	80
	21	95
	24	114
	27	133
	30	161
	33	190
	36	216
	39	241
	42	265
	45	286
	48	303
	51	316
	54	330
	57	345
	60	357
	63	362

DST #6 2605

Tkt # 12760

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 12760

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

Elevation 1095 Kb Formation Miss. Eff. Pay Ft.

District Augusta Date 10-21-81 Customer Order No.

COMPANY NAME BOCE Range Oil Company, Inc

ADDRESS 240 Page Court 220 West Douglas Wichita KS 67202

LEASE AND WELL NO. Jacot # 1 COUNTY CQ STATE Ks Sec. 11 Twp. 32S Rge. 10E

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 6 Interval Tested from 2022 ft. to 2052 ft. Total Depth 2052 ft.

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

Packer Depth 2017 ft. Size 6 3/4 in. Packer Depth — ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2027 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2032 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Co tools # 2 Drill Collar Length 150 I. D. in.

Mud Type Chem Viscosity 51 Weight Pipe Length I. D. in.

Weight 9.6 Water Loss 9.4 cc. Drill Pipe Length I. D. in.

Chlorides 1200 P.P.M. Test Tool Length 30 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: Very weak died in 5 min first flow, very weak died in 7 min second flow PFP.

Recovered 65 ft. of muddy saltwater with scum of oil on top

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
OCT 23 1980

Time On Location Stdby A.M. P.M.	Time Pick Up Tool A.M. P.M.	Time Off Location A.M. P.M.
Time Set Packer(s) 8:55 A.M. P.M.	Time Started Off Bottom A.M. P.M.	Maximum Temperature 95-0

Initial Hydrostatic Pressure		(A)	954	P.S.I.		
Initial Flow Period	Minutes 30	(B)	42	P.S.I. to (C)	42	P.S.I.
Initial Closed In Period	Minutes 30	(D)	222	P.S.I.		
Final Flow Period	Minutes 30	(E)	63	P.S.I. to (F)	63	P.S.I.
Final Closed In Period	Minutes 60	(G)	370	P.S.I.		
Final Hydrostatic Pressure		(H)	954	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 Greg Bolton
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$

WESTERN TESTING CO., INC.

Pressure Data

Date 10-21 Test Ticket No. 12760

Recorder No. 2605 Capacity 4150 Location 2027 Ft.

Clock No. — — — — Elevation 1095 KB Well Temperature 95 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	996 P.S.I.		Open Tool	8:40 M	
B	First Initial Flow Pressure	40 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	40 P.S.I.		Initial Closed-in Pressure	30 Mins.	27 Mins.
D	Initial Closed-in Pressure	216 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	54 P.S.I.		Final Closed-in Pressure	60 Mins.	63 Mins.
F	Second Final Flow Pressure	54 P.S.I.				
G	Final Closed-in Pressure	362 P.S.I.				
H	Final Hydrostatic Mud	985 P.S.I.				

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	40
P 2	5	40
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	40
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point Minutes	Press.
0	40
3	40
6	42
9	44
12	53
15	68
18	95
21	133
24	169
27	216
30	
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	54
5	
10	
15	
20	
25	
30	54
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	54
3	54
6	54
9	55
12	59
15	68
18	80
21	95
24	114
27	133
30	161
33	190
36	216
39	241
42	265
45	286
48	303
51	316
54	330
57	345
60	357
63	362

WTC - 4

Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation - Effective Pay - Ft. Ticket No. 12761

Date 10/22/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D Bolte Western Representative Kenny Kirkendall

Formation Test No. 7 Interval Tested from 2300 ft. to 2310 ft. Total Depth 2310 ft.

Packer Depth 2300 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2295 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2304 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2308 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Oil Co., Inc. Rig #2 Drill Collar Length 150 I. D. - in.

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

Weight 9.7 Water Loss 8.8 cc. Drill Pipe Length - I. D. - in.

Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 10 ft. Size 5½ 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 4½XH in.

Blow: Very weak throughout test.

Recovered 20 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) - A.M. P.M. Time Started Off Bottom - A.M. P.M. Maximum Temperature 101

Initial Hydrostatic Pressure (A) 1182 P.S.I.

Initial Flow Period Minutes 30 (B) 34 P.S.I. to (C) 34 P.S.I.

Initial Closed In Period Minutes 27 (D) 837 P.S.I.

Final Flow Period Minutes 30 (E) 40 P.S.I. to (F) 40 P.S.I.

Final Closed In Period Minutes 63 (G) 843 P.S.I.

Final Hydrostatic Pressure (H) 1182 P.S.I.

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 10/22/81 Test Ticket No. 12761

Recorder No. 2605 Capacity 4150 Location 2304 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 101 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1182 P.S.I.	Open Tool	- M	
B First Initial Flow Pressure	34 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	34 P.S.I.	Initial Closed-in Pressure	30 Mins.	27 Mins.
D Initial Closed-in Pressure	837 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	40 P.S.I.	Final Closed-in Pressure	60 Mins.	63 Mins.
F Second Final Flow Pressure	40 P.S.I.			
G Final Closed-in Pressure	843 P.S.I.			
H Final Hydrostatic Mud	1182 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	34
P 2 5	34
P 3 10	34
P 4 15	34
P 5 20	34
P 6 25	34
P 7 30	34
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	34
3	37
6	388
9	775
12	813
15	825
18	831
21	834
24	837
27	837

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

Point Minutes	Press.
0	40
5	40
10	40
15	40
20	40
25	40
30	40

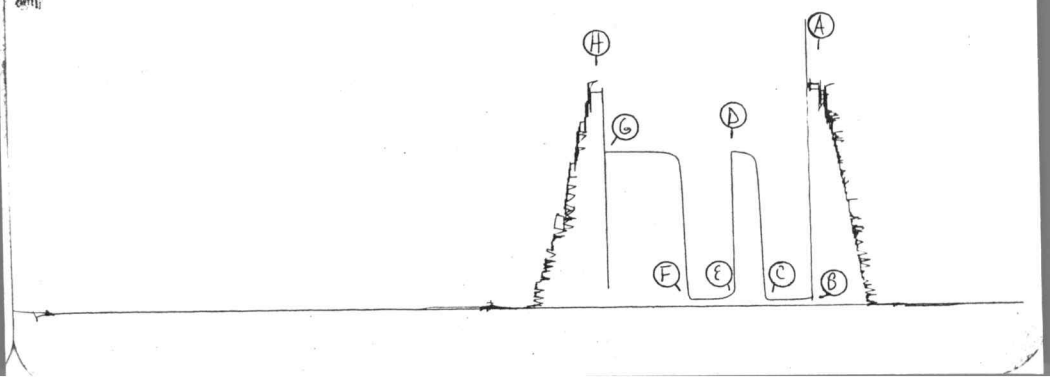
Final Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	40
3	53
6	432
9	482
12	815
15	827
18	830
21	833
24	836
27	838
30	840
33	841
36	842
39	842
42	842
45	842
48	842
51	842
54	842
57	842
60	843
63	843

DST #7 2605

IKT # 12761

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 12761

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

Elevation 1095 Kb Formation _____ Eff. Pay _____ Ft.

District Augusta Date 10-22-81 Customer Order No. _____

COMPANY NAME ROCI (Kanza Oil Company, Inc)

ADDRESS 240 Page Court 220 West Douglas Wichita Ks 67202

LEASE AND WELL NO. Facot # 2 COUNTY CQ STATE Ks Sec. 11 Twp. 32S Rge. 10E
CHAUTAUQUA

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 7 Interval Tested from 2300 ft. to 2310 ft. Total Depth 2310 ft.

Packer Depth 2300 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 2295 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 2304 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2308 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth _____ ft. Recorder Number — Cap. —

Drilling Contractor Co tools # 2 Drill Collar Length 150 I. D. _____ in.

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

Weight 9.7 Water Loss 8.8 cc. Drill Pipe Length _____ I. D. _____ in.

Chlorides 1200 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 XH in.

Blow: Very wk throughout Test

Recovered 20 ft. of mud

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

RECEIVED
OCT 26 1980

Time On Location 4:00 A.M. P.M. Time Pick Up Tool _____ A.M. P.M. Time Off Location _____ A.M. P.M.

Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature 101

Initial Hydrostatic Pressure		(A)	1182	P.S.I.	
Initial Flow Period	Minutes 30	(B)	31	P.S.I. to (C)	31 P.S.I.
Initial Closed In Period	Minutes 30	(D)	839	P.S.I.	
Final Flow Period	Minutes 30	(E)	42	P.S.I. to (F)	42 P.S.I.
Final Closed In Period	Minutes 60	(G)	839	P.S.I.	
Final Hydrostatic Pressure		(H)	1182	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 Greg Bolte Greg Bolte
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE 625.00

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 1/2	$ 54.00
Fluid Sampler	$
Extra Charts	$

WESTERN TESTING CO., INC.
Pressure Data

Date 10-22-81 Test Ticket No. 12761

Recorder No. 2605 Capacity 4150 Location 2304 Ft.

Clock No. — — — — Elevation 1095 KB Well Temperature 101 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1182	P.S.I.
B	First Initial Flow Pressure	34	P.S.I.
C	First Final Flow Pressure	34	P.S.I.
D	Initial Closed-in Pressure	837	P.S.I.
E	Second Initial Flow Pressure	40	P.S.I.
F	Second Final Flow Pressure	40	P.S.I.
G	Final Closed-in Pressure	843	P.S.I.
H	Final Hydrostatic Mud	1182	P.S.I.

	Time Given	Time Computed
Open Tool	M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	27 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	60 Mins.	63 Mins.

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	34
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	34
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point Minutes	Press.
0	34
3	37
6	388
9	775
12	813
15	825
18	831
21	834
24	837
27	837
30	
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	40
5	
10	
15	
20	
25	
30	40
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	40
3	53
6	432
9	482
12	815
15	827
18	830
21	833
24	836
27	838
30	840
33	841
36	842
39	
42	
45	842
48	
51	
54	
57	842
60	843
63	843

WTC - 4

Company Range Oil Company, Inc. Lease & Well No. Jacot #2

Elevation 1095 Kelly Bushing Formation Arbuckle Effective Pay - Ft. Ticket No. 12762

Date 10/23/81 Sec. 11 Twp. 32S Range 10E County Chautauqua State Kansas

Test Approved by Greg D Bolte Western Representative Kenny Kirkendall

Formation Test No. 8 Interval Tested from 2300 ft. to 2315 ft. Total Depth 2315 ft.

Packer Depth 2300 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 2295 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2305 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2309 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Range Oil Co., Inc. Rig #2 Drill Collar Length 150 I. D. - in.

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

Weight 9.7 Water Loss 8.8 cc. Drill Pipe Length 2130 I. D. - in.

Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make No Serial Number - Anchor Length 15 ft. Size 5½ in.

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

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Good blow initial flow period. Good blow decreasing to fair final flow period.

Recovered 1900 ft. of salt water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 12:50 A.M. P.M. Time Started Off Bottom - A.M. P.M. Maximum Temperature 101

Initial Hydrostatic Pressure			(A)	1193	P.S.I.	
Initial Flow Period	Minutes	30	(B)	76 P.S.I. to (C)	527	P.S.I.
Initial Closed In Period	Minutes	30	(D)	839	P.S.I.	
Final Flow Period	Minutes	60	(E)	586 P.S.I. to (F)	832	P.S.I.
Final Closed In Period	Minutes	87	(G)	841	P.S.I.	
Final Hydrostatic Pressure			(H)	1166	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 10/23/81 Test Ticket No. 12762

Recorder No. 2605 Capacity 4150 Location 2305 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 101 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1193 P.S.I.	Open Tool		12:50 M	
B	First Initial Flow Pressure	76 P.S.I.	First Flow Pressure		30 Mins.	30 Mins.
C	First Final Flow Pressure	527 P.S.I.	Initial Closed-in Pressure		30 Mins.	30 Mins.
D	Initial Closed-in Pressure	839 P.S.I.	Second Flow Pressure		69 Mins.	60 Mins.
E	Second Initial Flow Pressure	586 P.S.I.	Final Closed-in Pressure		90 Mins.	87 Mins.
F	Second Final Flow Pressure	832 P.S.I.				
G	Final Closed-in Pressure	841 P.S.I.				
H	Final Hydrostatic Mud	1166 P.S.I.				

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	76
P 2 5	184
P 3 10	273
P 4 15	360
P 5 20	436
P 6 25	504
P 7 30	527
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	527
3	788
6	804
9	817
12	825
15	829
18	833
21	837
24	838
27	839
30	839

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

Point Minutes	Press.
0	586
5	597
10	645
15	684
20	718
25	745
30	767
35	786
40	800
45	813
50	820
55	826
60	832

Final Shut-In
Breakdown: 29 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	832
3	834
6	836
9	838
12	839
15	840
18	841
21	841
24	841
27	841
30	841
33	841
36	841
39	841
42	841
45	841
48	841
51	841
54	841
57	841
60	841

CONT'D NEXT PAGE

WESTERN TESTING CO., INC.

Pressure Data

Date 10/23/81 Test Ticket No. 12762

Recorder No. 2605 Capacity 4150 Location 2305 Ft.

Clock No. - Elevation 1095 Kelly Bushing Well Temperature 101 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1193 P.S.I.	Open Tool	12:50 M	
B First Initial Flow Pressure	76 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	527 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	839 P.S.I.	Second Flow Pressure	69 Mins.	60 Mins.
E Second Initial Flow Pressure	586 P.S.I.	Final Closed-in Pressure	90 Mins.	87 Mins.
F Second Final Flow Pressure	832 P.S.I.			
G Final Closed-in Pressure	841 P.S.I.			
H Final Hydrostatic Mud	1166 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: 10 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: 29 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						63	841
P 2						66	841
P 3						69	841
P 4						72	841
P 5						75	841
P 6						78	841
P 7						81	841
P 8						84	841
P 9						87	841
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

IKT # 12762

I

