WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 10905

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

Elevation 1113 KB Formation Miss Eff. Pay Ft.

District Augusta Date 7-13-85 Customer Order No.

COMPANY NAME Ranger Oil Co Inc 240 Page Court

ADDRESS 220 West Douglas Chautauqua

LEASE AND WELL NO. Malone # 3 COUNTY CQ STATE Ks Sec. 17 Twp. 32S Rge. 10E

Mail Invoice To Same # 3 "A" Malone No. Copies Requested 1
Co. Name Address

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 3 Interval Tested From 2130 ft. to 2150 ft. Total Depth 2150 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) 2125 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 2130 ft. Recorder Number 2608 Cap. 4178

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor R.D.C. # 2

Mud Type Chem Viscosity 37 Drill Collar Length 180 I. D. 2.25 in.

Weight 9.5 Water Loss 12 cc. Weight Pipe Length I. D. in.

Chlorides 1500 P.P.M. Drill Pipe Length 1930 I. D. 3.8 in.

Jars: Make NO Serial Number Test Tool Length 20 ft. Tool Size 5 1/2 in.

Did Well Flow? Reversed Out Anchor Length 20 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: Weak blow died 10 min

Recovered 15 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks: One Chart

RECEIVED
JUL 15 1985

Time On Location Stibby A.M. P.M. Time Pick Up Tool 8:30 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 9:45 A.M. P.M. Time Started Off Bottom 11:45 A.M. P.M. Maximum Temperature 103°

Initial Hydrostatic Pressure		(A) 1068	P.S.I.	
Initial Flow Period	Minutes 30	(B) 52	P.S.I. to (C) 31	P.S.I.
Initial Closed In Period	Minutes 30	(D) 653	P.S.I.	
Final Flow Period	Minutes 30	(E) 63	P.S.I. to (F) 42	P.S.I.
Final Closed In Period	Minutes 30	(G) 549	P.S.I.	
Final Hydrostatic Pressure		(H) 1068	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 H.G. McMahon, III
Signature of Customer or his authorized representative

Western Representative Kenny Kuckendall

FIELD INVOICE

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

WESTERN TESTING CO., INC.

Pressure Data

Date 7-13-85 Test Ticket No. 10905

Recorder No. 2605 Capacity 4150 Location

Clock No. Elevation Well Temperature

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1072	P.S.I.	Open Tool	M	
B	First Initial Flow Pressure	34	P.S.I.	First Flow Pressure	30 Mins.	30 Min
C	First Final Flow Pressure	34	P.S.I.	Initial Closed-in Pressure	1 Mins.	33 Min
D	Initial Closed-in Pressure	633	P.S.I.	Second Flow Pressure	Mins.	30 Min
E	Second Initial Flow Pressure	48	P.S.I.	Final Closed-in Pressure	Mins.	33 Min
F	Second Final Flow Pressure	48	P.S.I.			
G	Final Closed-in Pressure	550	P.S.I.			
H	Final Hydrostatic Mud	1072	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 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	65	
P15	70	
P16	75	
P17	80	
P18	85	
P19	90	
P20	95	
	100	

Initial Shut-In
Breakdown: 12 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	34
3	133
6	288
9	379
12	443
15	489
18	521
21	549
24	570
27	587
30	610
33	633
36	
39	
42	
45	
48	
51	
54	
57	
60	

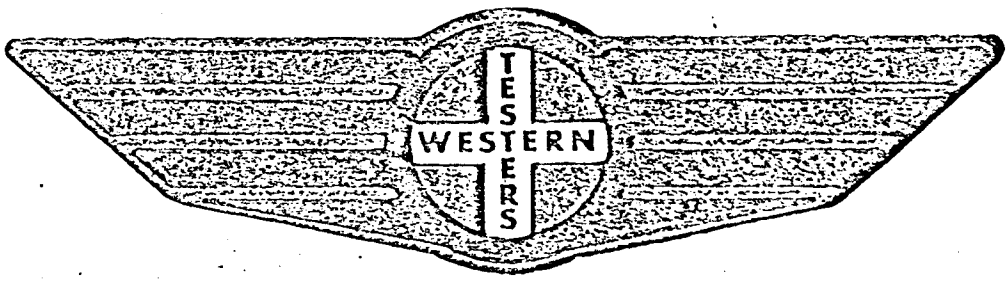
Second Flow Pressure
Breakdown: 7 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	48
5	
10	
15	
20	
25	
30	48
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	

Final Shut-In
Breakdown: 12 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	48
3	84
6	205
9	294
12	364
15	410
18	450
21	477
24	497
27	520
30	537
33	550
36	
39	
42	
45	
48	
51	
54	
57	
60	

FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone (316) 262-5861

Company _____ Lease & Well No. _____ Sec. ___ Twp. ___ Rge. ___ Test No. ___ Date ___

WESTERN TESTING CO., INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7/13/85 TICKET #10905
CUSTOMER: RANGE OIL COMPANY INC. LEASE: "A" MALONE
WELL: 3 TEST: 3 GEOLOGIST: MCMAHON
ELEVATION (KB): 1113 FORMATION: MISSISSIPPI
SECTION: 17 TOWNSHIP: 32S
RANGE: 10E COUNTY: CHAUTAUQUA STATE: KANSAS
GAUGE SN #2605 RANGE: 4150 CLOCK: 12

INTERVAL TEST FROM: 2130 FT TO: 2150 FT TOTAL DEPTH: 2150 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2130 FT SIZE: 6 3/4 IN PACKER DEPTH: 2125 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG
MUD TYPE: CHEMICAL VISCOSITY: 37
WEIGHT: 9.5 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 1500
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 1930 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 20 FT SIZE: 5 1/2 OD IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 XH IN

BLOW: WEAK BLOW; DIED IN 10 MINUTES.

RECOVERED: 15 FT OF: MUD.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: ONLY RECEIVED ONE CHART.

TIME SET PACKER(S): 9:45 AM TIME STARTED OFF BOTTOM: 11:45 AM
WELL TEMPERATURE: 103 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1072 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 34 PSI TO (C) 34 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 633 PSI
FINAL FLOW PERIOD MIN: 30 (E) 48 PSI TO (F) 48 PSI
FINAL CLOSED IN PERIOD MIN: 33 (G) 550 PSI
FINAL HYDROSTATIC PRESSURE (H) 1072 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 7/13/85 TICKET #10905
CUSTOMER: RANGE OIL COMPANY INC. LEASE: "A" MALONE
WELL: 3 TEST: 3 GEOLOGIST: MCMAHON
ELEVATION (KB): 1113 FORMATION: MISSISSIPPI
SECTION: 17 TOWNSHIP: 32S
RANGE: 10E COUNTY: CHAUTAUQUA STATE: KANSAS
GAUGE SN #2605 RANGE: 4150 CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE:	1072	PSI
(B) FIRST INITIAL FLOW PRESSURE:	34	PSI
(C) FIRST FINAL FLOW PRESSURE:	34	PSI
(D) INITIAL CLOSED-IN PRESSURE:	633	PSI
(E) SECOND INITIAL FLOW PRESSURE:	48	PSI
(F) SECOND FINAL FLOW PRESSURE:	48	PSI
(G) FINAL CLOSED-IN PRESSURE:	550	PSI
(H) FINAL HYDROSTATIC PRESSURE:	1072	PSI
WELL TEMPERATURE:	103	'F

OPEN TOOL: 9:45 AM

	TIME - GIVEN	TIME - ACTUAL
FIRST FLOW PRESSURE:	30 MIN	30 MIN
INITIAL CLOSED-IN PRESSURE:	30 MIN	33 MIN
SECOND FLOW PRESSURE:	30 MIN	30 MIN
FINAL CLOSED-IN PRESSURE:	30 MIN	33 MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	34	0	34	0	48	0	48
2	5	34	3	133	5	48	3	84
3	10	34	6	288	10	48	6	205
4	15	34	9	379	15	48	9	294
5	20	34	12	443	20	48	12	364
6	25	34	15	489	25	48	15	410
7	30	34	18	521	30	48	18	450
8			21	549			21	477
9			24	570			24	497
10			27	587			27	520
11			30	610			30	537
12			33	633			33	550
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

2605

TKT #10905

I

