



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8124

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

Elevation 1180 KB Formation Layton Eff. Pay Ft.

WICHITA, KANSAS 67201

COMPANY NAME Range Oil Co. Inc. District Augusta Date 4-14-85 Customer Order No. 240 Page Court

ADDRESS 220 West Douglas LEASE AND WELL No. Berrie # 2 COUNTY Cowley STATE KS Sec. 11 Twp. 34 S Rge. 3 E

Mail Invoice To Same # 2 Berrie Co. Name Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 2630 ft. to 2648 ft. Total Depth 2648 ft.
Packer Depth 2630 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 2635 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set
Top Recorder Depth (Inside) 2634 ft. Recorder Number 3494 Cap. 3009
Bottom Recorder Depth (Outside) 2640 ft. Recorder Number 2605 Cap. 415
Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Reg # 2 Drill Collar Length 180 I. D. 2.25 in.
Mud Type Chem Viscosity 40 Weight Pipe Length I. D. in.
Weight 9.7 Water Loss 12.0 cc. Drill Pipe Length 2524 I. D. 3.8 in.
Chlorides 2000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number Anchor Length 18 ft. Size 5 1/2 in.
Did Well Flow? gas 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 in.

Blow: strong blow gas to surface 4 min

Recovered 45 ft. of mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides P.P.M. Sample Jars used Remarks: See All gas flow Report 3469

Time On Location 4:00 A.M. Time Pick Up Tool 7:30 A.M. Time Off Location P.M.
Time Set Packer(s) A.M. Time Started Off Bottom P.M. Maximum Temperature P.M.
Initial Hydrostatic Pressure (A) 1340 P.S.I.
Initial Flow Period Minutes 30 (B) 83 P.S.I. to (C) 166 P.S.I.
Initial Closed In Period Minutes 30 (D) 787 P.S.I.
Final Flow Period Minutes 45 (E) 174 P.S.I. to (F) 204 P.S.I.
Final Closed In Period Minutes 60 (G) 787 P.S.I.
Final Hydrostatic Pressure (H) 1340 P.S.I.

COMPANY TERMS APR 16 1985

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 Kurbael 1127

FIELD INVOICE

Table with 2 columns: Item and Price. Items include Open Hole Test (\$550), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.



Nº 3469

GAS FLOW REPORT

Date 4-14-85 Ticket 8124 Company Range Oil Co Inc
 Well Name and No. Berrie #2 Dst No. 1 Interval Tested 2630-2648
 County Cowley State Ks Sec. 11 Twp. 34 Rg. 3E

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					
5	30	1/2			231,000
10	50	1/2			337,000
15	80	1/2			491,000
20	34	1			1,043,000 Shut 2" Valve Changed Check
25	26	1			865,000
30	26	1			865,000

SECOND FLOW					
5	27	1			887,000
10	30	1			951,000
15	30	1			951,000
20	30	"			"
25	"	"			"
30	"	"			"
35	"	"			"
40	"	"			"
45					"
50					
55					
60					

GAS BOTTLE

Serial No. 44 Date Bottle Filled 4-14-85 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 1/2% per month, equal to 18% 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

Authorized by H.G. McMAHON, III

WESTERN TESTING CO., INC.

Pressure Data

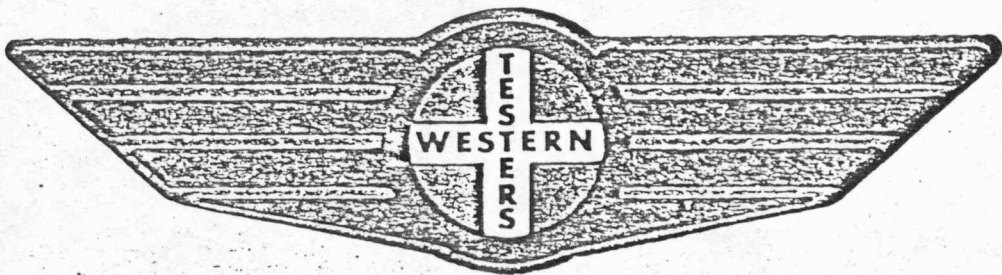
Date 4-14 Test Ticket No. 8124
 Recorder No. 3474 Capacity 3000 Location _____ Ft
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1343</u>	P.S.I.		M
B. First Initial Flow Pressure	<u>96</u>	P.S.I.	<u>30</u> Mins.	Mins.
C. First Final Flow Pressure	<u>167</u>	P.S.I.	<u>30</u> Mins.	Mins.
D. Initial Closed-in Pressure	<u>800</u>	P.S.I.	<u>45</u> Mins.	Mins.
E. Second Initial Flow Pressure	<u>177</u>	P.S.I.	<u>60</u> Mins.	Mins.
F. Second Final Flow Pressure	<u>212</u>	P.S.I.		
G. Final Closed-in Pressure	<u>802</u>	P.S.I.		
H. Final Hydrostatic Mud	<u>1327</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown:	<u>8</u> Inc.	Breakdown:	<u>13</u> Inc.	Breakdown:	<u>11</u> 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 0	<u>96</u>	0	<u>167</u>	0	<u>177</u>	0	<u>212</u>
P 2 5	<u>96</u>	3	<u>706</u>	5	<u>178</u>	3	<u>756</u>
P 3 10	<u>118</u>	6	<u>777</u>	10	<u>182</u>	6	<u>778</u>
P 4 15	<u>143</u>	9	<u>788</u>	15	<u>186</u>	9	<u>786</u>
P 5 20	<u>162</u>	12	<u>792</u>	20	<u>189</u>	12	<u>791</u>
P 6 25	<u>174</u> (OK)	15	<u>795</u>	25	<u>195</u>	15	<u>794</u>
P 7 30	<u>170</u>	18	<u>794</u>	30	<u>199</u>	18	<u>795</u>
P 8 35	<u>167</u>	21	<u>797</u>	35	<u>202</u>	21	<u>796</u>
P 9 40		24	<u>798</u>	40	<u>205</u>	24	<u>797</u>
P10 45		27	<u>799</u>	45	<u>208</u>	27	<u>798</u>
P11 50		30	<u>799</u>	50	<u>212</u>	30	<u>799</u>
P12 55		33	<u>800</u>	55		33	<u>799</u>
P13 60		36	<u>800</u>	60		36	<u>800</u>
P14 65		39		65		39	<u>800</u>
P15 70		42		70		42	<u>801</u>
P16 75		45		75		45	<u>802</u>
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	
						63	<u>802</u>

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ RANGE OIL COMPANY, INC. Lease & Well No. #2 BEKKLE Sec. 11 Twp. 34S Rge. 3E Test No. 1 Date 4/14/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-14-85
CUSTOMER: RANGE OIL CO. INC.
WELL: 2 TEST: 1
ELEVATION (KB): 1180 FORMATION: LAYTON
SECTION: 11 TOWNSHIP: 34S
RANGE: 3E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

INTERVAL TEST FROM: 2630 FT TO: 2648 FT TOTAL DEPTH: 2648 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2630 FT SIZE: 6 3/4 IN PAKER DEPTH: 2625 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: CHEMICAL VISCOSITY: 40
WEIGHT: 9.7 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 2000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? GAS REVERSED OUT? NO
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2524 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 18 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: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE IN 4 MINUTES.

RECOVERED: 45 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:
RECOVERED: FT OF:

REMARKS: SEE ATTACHED GAS FLOW REPORT.

TIME SET PACKER(S): TIME STARTED OFF BOTTOM:
WELL TEMPERATURE: 0 'F
INITIAL HYDROSTATIC PRESSURE: (A) 1343 PSI
INITIAL FLOW PERIOD MIN: 35 (B) 96 PSI TO (C) 167 PSI
INITIAL CLOSED IN PERIOD MIN: 36 (D) 800 PSI
FINAL FLOW PERIOD MIN: 50 (E) 177 PSI TO (F) 212 PSI
FINAL CLOSED IN PERIOD MIN: 63 (G) 802 PSI
FINAL HYDROSTATIC PRESSURE (H) 1327 PSI

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 4-14-85
CUSTOMER: RANGE OIL CO. INC.
WELL: 2 TEST: 1
ELEVATION (KB): 1180 FORMATION: LAYTON
SECTION: 11 TOWNSHIP: 34S
RANGE: 3E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

TIME GAUGE TESTER TYPE ORIFICE PRESSURE FLOW DESCRIPTION
(MIN) (MIN) SIZE (PSI)

PRE FLOW

5	MERLA	1/2 IN	30 PSIG	231000 CFPD
10			50	337000
15			80	491000
20	MERLA	1 IN	34 PSIG	1043000 CFPD
25			26	865000
30			26	865000

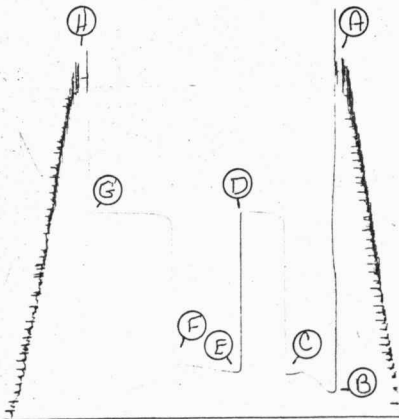
SECOND FLOW

5	MERLA	1 IN	27 PSIG	887000 CFPD
10			30	951000
15			30	951000
20			30	951000
25			30	951000
30			30	951000
35			30	951000
40			30	951000
45			30	951000

GAS BOTTLE SN #: 44
DATE BOTTLE FILLED: 4-14-85
DATE TO BE INVOICED:

TKT #8124

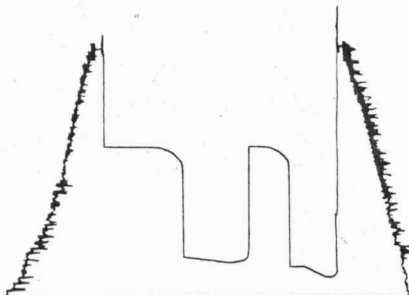
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3474

TKT #8124

O



2605



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 8125

OK

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

Elevation 1180 Kb Formation Layton Eff. Pay Ft.

District 13 Augusta Date 4-14-85 Customer Order No.
COMPANY NAME Range Oil Co Inc 240 Page Court
ADDRESS 220 West Douglas
LEASE AND WELL NO Berrie # 2 COUNTY Cowley STATE KS Sec. 11 Twp. 34S Rge. 3E
Mail Invoice To Same # 2 Berrie Co. Name Address No. Copies Requested 1
Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested From 2648 ft. to 2653 ft. Total Depth 2653 ft.
Packer Depth 2648 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 2643 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) AP 2638 ft. Recorder Number 3474 Cap. 3000
Bottom Recorder Depth (Outside) ft. Recorder Number 2605 Cap. 4150
Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor RDC # 2 Drill Collar Length 180 I. D. 2.25 in.
Mud Type Chemu Viscosity 40 Weight Pipe Length I. D. in.
Weight 97 Water Loss 12 cc. Drill Pipe Length 2443 I. D. 3.8 in.
Chlorides 200g P.P.M. Test Tool Length 25 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number Anchor Length 5 ft. Size 5 1/2 in.
Did Well Flow? Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 x H in.

Blow: gas to surface 7 min, shut tool in early gas and oil blowing to surface

Recovered 305 ft. of free gassy oil
Recovered 60 ft. of salt water
Recovered ft. of
Recovered ft. of See Oil gas flow report
Recovered ft. of
Chlorides P.P.M. Sample Jars used Remarks: 3470

only one chart

Time On Location Stdy A.M. Time Pick Up Tool A.M. Time Off Location A.M.
P.M. P.M. P.M.
Time Set Packer(s) 5:00 A.M. Time Started Off Bottom A.M. Maximum Temperature 101 P.M.
P.M. P.M.
Initial Hydrostatic Pressure (A) 1395 P.S.I.
Initial Flow Period Minutes 30 (B) 128 P.S.I. to (C) 174 P.S.I.
Initial Closed In Period Minutes 30 (D) 795 P.S.I.
Final Flow Period Minutes 30 (E) 181 P.S.I. to (F) 204 P.S.I.
Final Closed In Period Minutes 60 (G) 795 P.S.I.
Final Hydrostatic Pressure (H) 1395 P.S.I.

COMPANY TERMS APR 16 1985

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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. McTANOH III
Signature of Customer or his authorized representative

Western Representative Kenny Kirkendall

FIELD INVOICE

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



No 3470

GAS FLOW REPORT

Date 4-14-85 Ticket 8125 Company Range Oil Co
 Well Name and No. Berrie # 2 Dst No. 2 Interval Tested 2648-2653
 County Cowley State Ka Sec. 11 Twp. 34 Rg. 3

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					
5	12	1/2			129,000
10	13	1/2			134,000
15	16	1/2			153,000
20	18	1/2			166,000
25	18	1/2			166,000
30	18	1/2			166,000

SECOND FLOW					
5	19	1/2			171,000
10	22				189,000
15	22				189,000
20	22				189,000
25	22				189,000
30	22				189,000
35					
40					
45					

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ 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 1/2% per month, equal to 18% 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 _____

WESTERN TESTING CO., INC.

Pressure Data

Date: 4-14-85 Test Ticket No. 8125
 Recorder No. 3474 Capacity 3000 Location _____ Ft
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	P.S.I.	Open Tool	M	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1365</u>	P.S.I.				
B. First Initial Flow Pressure	<u>139</u>	P.S.I.	First Flow Pressure		<u>30</u> Mins.	
C. First Final Flow Pressure	<u>178</u>	P.S.I.	Initial Closed-in Pressure		<u>30</u> Mins.	
D. Initial Closed-in Pressure	<u>800</u>	P.S.I.	Second Flow Pressure		<u>20</u> Mins.	
E. Second Initial Flow Pressure	<u>187</u>	P.S.I.	Final Closed-in Pressure		<u>60</u> Mins.	
F. Second Final Flow Pressure	<u>210</u>	P.S.I.				
G. Final Closed-in Pressure	<u>802</u>	P.S.I.				
H. Final Hydrostatic Mud	<u>1309</u>	P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 8 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 13 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

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

Final Shut-In
 Breakdown: 26 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>139</u>	0	<u>178</u>	0	<u>187</u>	0	<u>210</u>
P 2 5	<u>142</u>	3	<u>448</u>	5	<u>187</u>	3	<u>462</u>
P 3 10	<u>155</u>	6	<u>773</u>	10	<u>192</u>	6	<u>777</u>
P 4 15	<u>162</u>	9	<u>788</u>	15	<u>195</u>	9	<u>787</u>
P 5 20	<u>168</u>	12	<u>793</u>	20	<u>204</u>	12	<u>792</u>
P 6 25	<u>174</u>	15	<u>795</u>	25	<u>210</u>	15	<u>795</u>
P 7 30	<u>177</u>	18	<u>796</u>	30		18	<u>796</u>
P 8 35	<u>178</u>	21	<u>797</u>	35		21	<u>797</u>
P 9 40		24	<u>798</u>	40		24	<u>798</u>
P10 45		27	<u>799</u>	45		27	<u>799</u>
P11 50		30	<u>800</u>	50		30	<u>800</u>
P12 55		33	<u>800</u>	55		33	
P13 60		36	<u>800</u>	60		36	
P14 65		39		65		39	<u>800</u>
P15 70		42		70		42	<u>801</u>
P16 75		45		75		45	<u>801</u>
P17 80		48		80		48	<u>801</u>
P18 85		51		85		51	<u>801</u>
P19 90		54		90		54	<u>802</u>
P20 95		57		95		57	<u>802</u>
100		60		100		60	<u>802</u>

cont

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 8125

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.			

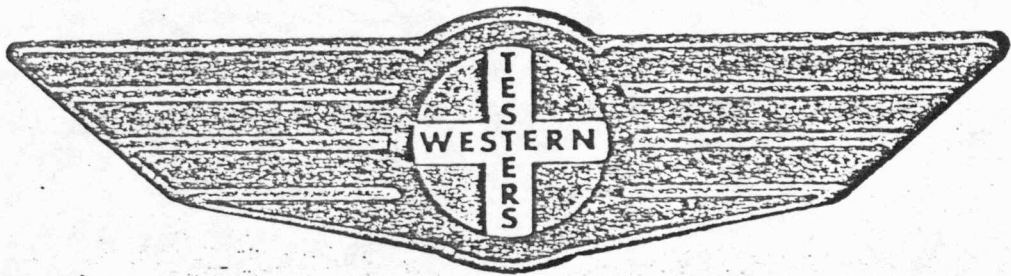
PRESSURE BREAKDOWN

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 1 105		63		105		63	802
P 2 110		66		110		66	
P 3 115		69		115		69	
P 4 120		72		120		72	
P 5 125		75		125		75	802
P 6 130		78		130		78	
P 7 135		81		135		81	
P 8 140		84		140		84	
P 9 145		87		145		87	
P10 150		90		150		90	
P11 155		93		155		93	
P12 160		96		160		96	
P13 165		99		165		99	
P14 170		102		170		102	
P15 175		105		175		105	
P16 180		108		180		108	
P17 185		111		185		111	
P18 190		114		190		114	
P19 195		117		195		117	
P20 200		120		200		120	

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company

RANGE OIL COMPANY, INC.

Lease & Well No.

#2 BERRIE

Sec.

11 Twp.

34S Rge.

3E Test No.

2

Date 4/14/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-14-85
CUSTOMER: RANGE OIL CO. INC.
WELL: 2 TEST: 2
ELEVATION (KB): 1180 FORMATION: LAYTON
SECTION: 11 TOWNSHIP: 34S
RANGE: 3E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

INTERVAL TEST FROM: 2648 FT TO: 2653 FT TOTAL DEPTH: 2653 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2648 FT SIZE: 6 3/4 IN PACKER DEPTH: 2643 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: CHEMICAL VISCOSITY: 40
WEIGHT: 9.7 WATER LOSS (CC): 12
CHLORIDES (P.P.M.): 2000
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: 2443 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 25 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 5 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: INITIAL FLOW PERIOD GAS TO SURFACE IN 7 MINUTES.
SHUT TOOL IN EARLY; GAS AND OIL
BLOWING TO SURFACE.

RECOVERED: 305 FT OF: FREE GASSY OIL.
RECOVERED: 60 FT OF: SALT WATER.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: SEE ATTACHED GAS FLOW REPORT.
RECEIVED ONLY ONE CHART - #3474.

TIME SET PACKER(S): 5:00 PM TIME STARTED OFF BOTTOM: 7:20 PM
WELL TEMPERATURE: 101 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1365 PSI
INITIAL FLOW PERIOD MIN: 35 (B) 139 PSI TO (C) 178 PSI
INITIAL CLOSED IN PERIOD MIN: 36 (D) 800 PSI
FINAL FLOW PERIOD MIN: 25 (E) 187 PSI TO (F) 210 PSI
FINAL CLOSED IN PERIOD MIN: 75 (G) 802 PSI
FINAL HYDROSTATIC PRESSURE (H) 1309 PSI

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 4-14-85
CUSTOMER: RANGE OIL CO. INC.
WELL: 2 TEST: 2
ELEVATION (KB): 1180 FORMATION: LAYTON
SECTION: 11 TOWNSHIP: 34S
RANGE: 3E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

TIME GAUGE TESTER TYPE ORIFICE PRESSURE FLOW DESCRIPTION
(MIN) SIZE (PSI)

PRE FLOW

5	MERLA	1/2 IN	12 PSIG	129000	CFPD
10			13	134000	
15			16	153000	
20			18	166000	
25			18	166000	
30			18	166000	

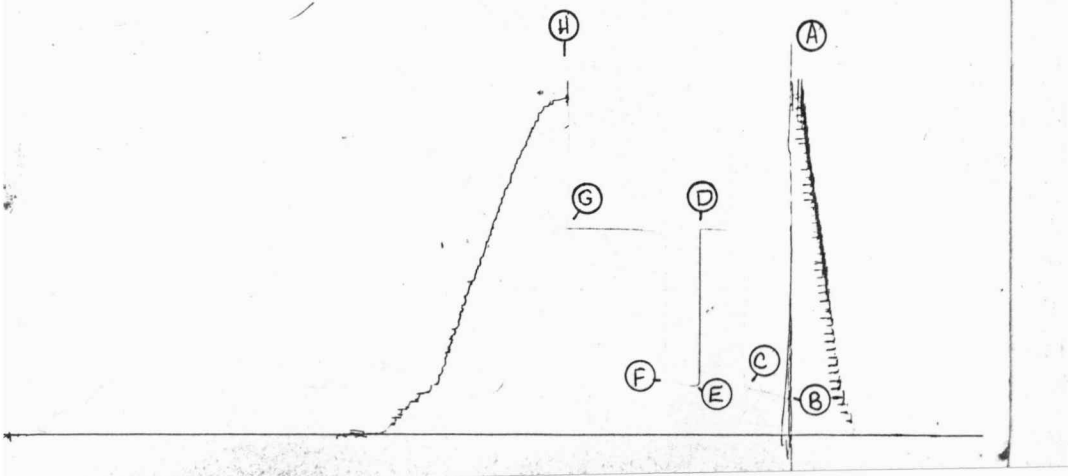
SECOND FLOW

5	MERLA	1/2 IN	19 PSIG	171000	CFPD
10			22	189000	
15			22	189000	
20			22	189000	
25			22	189000	
30			22	189000	

GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED:

DST#2
3474

TKT #8125
I





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 8151

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

Elevation 1180 Kb Formation Cleveland Eff. Pay Ft.

COMPANY NAME R040 Barge Oil Co Inc District Augusta Date 4-15-85 Customer Order No.

ADDRESS 220 West Douglas

LEASE AND WELL NO Berrie #2 COUNTY Cowley STATE Ks Sec. 11 Twp. 34 Rge. 3E

Mail Invoice To Same Berrie #2 Co. Name Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 3 Interval Tested From 2948 ft. to 2978 ft. Total Depth 2978 ft.

Packer Depth 2948 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 2943 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2950 ft. Recorder Number 3474 Cap. 3000

Bottom Recorder Depth (Outside) 2955 ft. Recorder Number 2605 Cap. 4150

Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Rig #2 Drill Collar Length 180 I. D. 2.25 in.

Mud Type Chem Viscosity 47 Weight Pipe Length I. D. in.

Weight 9.6 Water Loss 128 cc. Drill Pipe Length 2748 I. D. 3.8 in.

Chlorides 2300 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? 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 1 1/2 in.

Blow: fair building to good blow first flow, fair blow decreasing second flow, gas to surface during second shut in period

Recovered 60 ft. of Very slightly oil cut mud Less than 2% Oil

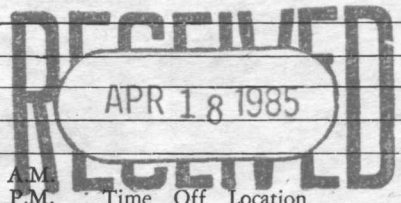
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

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



Time On Location 5:30 A.M. Time Pick Up Tool 7:00 A.M. Time Off Location P.M.

Time Set Packer(s) 8:15 A.M. Time Started Off Bottom 11:15 A.M. Maximum Temperature P.M.

Initial Hydrostatic Pressure (A) 1469 P.S.I.

Initial Flow Period Minutes 30 (B) 37 P.S.I. to (C) 30 P.S.I.

Initial Closed In Period Minutes 30 (D) 136 P.S.I.

Final Flow Period Minutes 60 (E) 37 P.S.I. to (F) 45 P.S.I.

Final Closed In Period Minutes 60 (G) 893 P.S.I.

Final Hydrostatic Pressure (H) 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.

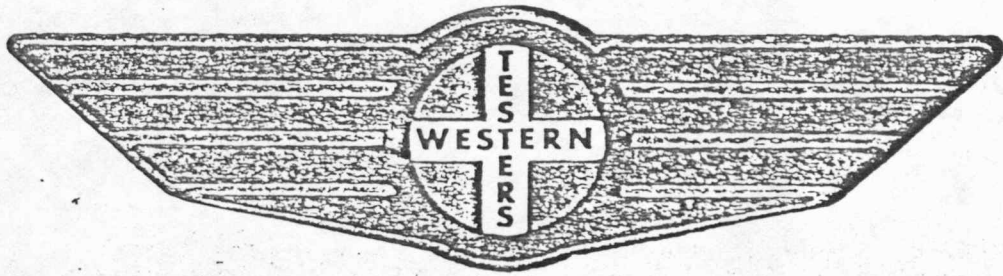
Test Approved By [Signature] Signature of Customer or his authorized representative

Western Representative Kenny Kurland 1127

FIELD INVOICE

Table with 2 columns: Item and Price. Items include Open Hole Test (\$550), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RANGE OIL COMPANY, INC. Lease & Well No. #2 BERRIE Sec. 11 Twp. 34S Rge. 3E Test No. 3 Date 4/15/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-15-85
CUSTOMER: RANGE OIL CO. INC.
WELL: 2 TEST: 3
ELEVATION (KB): 1180 FORMATION: CLEVELAND
SECTION: 11 TOWNSHIP: 34S
RANGE: 3E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

TICKET #8151
LEASE: BERRIE
GEOLOGIST: H.G. MCMAHON III

INTERVAL TEST FROM: 2948 FT TO: 2978 FT TOTAL DEPTH: 2978 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2948 FT SIZE: 6 3/4 IN PACKER DEPTH: 2943 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: CHEMICAL VISCOSITY: 47
WEIGHT: 9.6 WATER LOSS (CC): 12.8

CHLORIDES (P.P.M.): 2300
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: 2748 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 30 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: INITIAL FLOW PERIOD FAIR BUILDING TO GOOD BLOW.
FINAL FLOW PERIOD FAIR BLOW DECREASING
SECOND FLOW. GAS TO SURFACE SECOND
SHUT IN PERIOD.

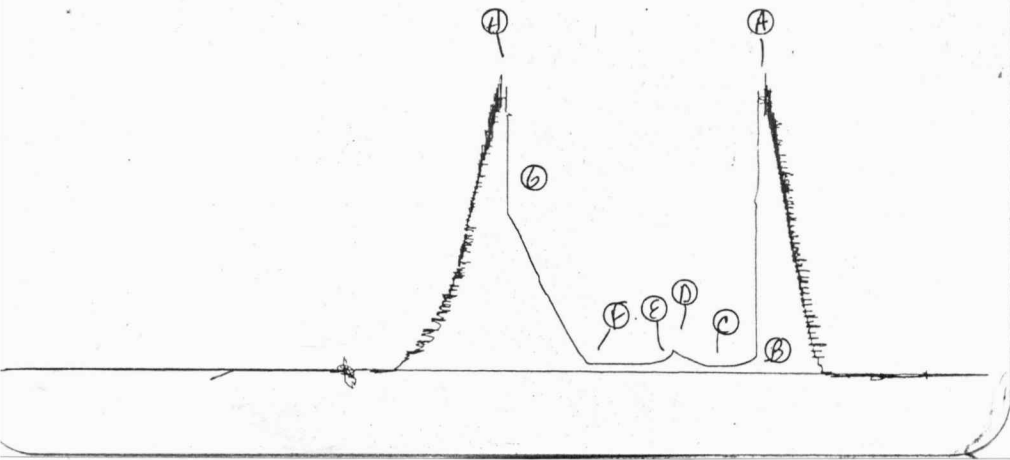
RECOVERED: 60 FT OF: VERY SLIGHTLY OIL CUT MUD. LESS THAN 2% OIL.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 8:15 PM TIME STARTED OFF BOTTOM: 11:15 PM
WELL TEMPERATURE: 0 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1091 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 26 PSI TO (C) 26 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 88 PSI
FINAL FLOW PERIOD MIN: 60 (E) 30 PSI TO (F) 30 PSI
FINAL CLOSED IN PERIOD MIN: 63 (G) 615 PSI
FINAL HYDROSTATIC PRESSURE (H) 1068 PSI

3474

JK #8151
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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8152

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

Elevation 1180 Kb Formation Mess Eff. Pay Ft.

COMPANY NAME Range Oil Co Inc
ADDRESS 220 West Douglas Wichita Ks
LEASE AND WELL NO. Berrie #2 COUNTY Cowley STATE Ks
Mail Invoice To Same #2 Berrie No. Copies Requested 1
Mail Charts To Same No. Copies Requested 5

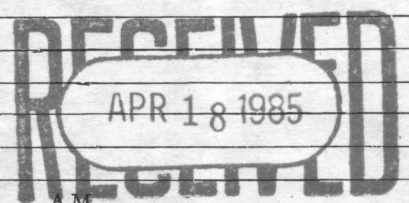
Formation Test No. 4 Interval Tested From 3392 ft. to 3415 ft. Total Depth 3415 ft.
Packer Depth 3392 ft. Size 6 3/4 in.
Packer Depth 3387 ft. Size 6 3/4 in.

Top Recorder Depth (Inside) 3392 ft. Recorder Number 3474 Cap. 3000
Bottom Recorder Depth (Outside) 3396 ft. Recorder Number 2605 Cap. 4150
Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Rig #2 Drill Collar Length 180 I. D. 2.25 in.
Mud Type Chem Viscosity 47 Weight Pipe Length I. D. in.
Weight 9.6 Water Loss 12.8 cc Drill Pipe Length 3192 I. D. 3.8 in.
Chlorides 2300 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make NU Serial Number Anchor Length 23 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: Weak blow throughout first flow, Very wk second flow

Recovered 10 ft. of mud with oil spots on top of tool
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides P.P.M. Sample Jars used Remarks:



Time On Location 12:30 A.M. Time Pick Up Tool 1:45 P.M. Time Off Location P.M.
Time Set Packer(s) 3:20 A.M. Time Started Off Bottom P.M. Maximum Temperature 122 degrees
Initial Hydrostatic Pressure (A) 1783 P.S.I.
Initial Flow Period (B) 30 P.S.I. to (C) 30 P.S.I.
Initial Closed In Period (D) 53 P.S.I.
Final Flow Period (E) 30 P.S.I. to (F) 30 P.S.I.
Final Closed In Period (G) 45 P.S.I.
Final Hydrostatic Pressure (H) 1783 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 of Customer or his authorized representative
Western Representative: Kenny Kurland 127

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

WESTERN TESTING CO., INC.

Pressure Data

Date 4-17-85 Test Ticket No. 8152
 Recorder No. 3474 Capacity 3000 Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure			Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1782</u>	P.S.I.	Open Tool		M
B. First Initial Flow Pressure	<u>29</u>	P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>29</u>	P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D. Initial Closed-in Pressure	<u>55</u>	P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E. Second Initial Flow Pressure	<u>26</u>	P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>51</u> Mins.
F. Second Final Flow Pressure	<u>26</u>	P.S.I.			
G. Final Closed-in Pressure	<u>62</u>	P.S.I.			
H. Final Hydrostatic Mud	<u>1736</u>	P.S.I.			

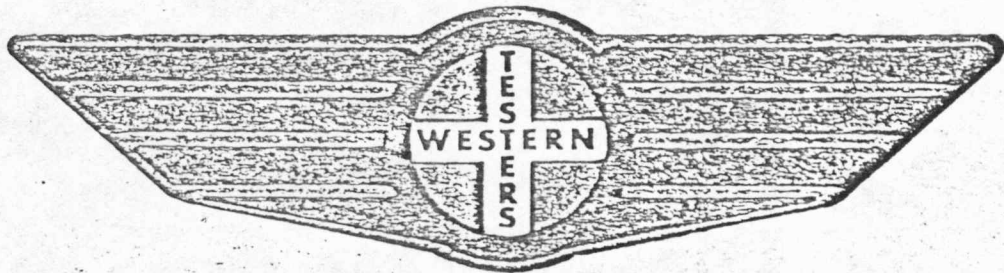
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>18</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>29</u>	0	<u>29</u>	0	<u>26</u>	0	<u>26</u>
P 2 5		3	<u>29</u>	5		3	<u>26</u>
P 3 10		6	<u>30</u>	10		6	<u>26</u>
P 4 15		9	<u>32</u>	15		9	<u>26</u>
P 5 20		12	<u>33</u>	20		12	<u>29</u>
P 6 25		15	<u>36</u>	25		15	<u>31</u>
P 7 30	<u>29</u>	18	<u>40</u>	30		18	<u>33</u>
P 8 35		21	<u>44</u>	35		21	<u>36</u>
P 9 40		24	<u>47</u>	40	<u>26</u>	24	<u>40</u>
P10 45		27	<u>51</u>	45	<u>26</u>	27	<u>43</u>
P11 50		30	<u>55</u>	50		30	<u>46</u>
P12 55		33		55		33	<u>49</u>
P13 60		36		60		36	<u>52</u>
P14 65		39		65		39	<u>54</u>
P15 70		42		70		42	<u>56</u>
P16 75		45		75		45	<u>58</u>
P17 80		48		80		48	<u>60</u>
P18 85		51		85		51	<u>62</u>
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

pany RANGE OIL COMPANY, INC. Lease & Well No. #2 BERRIE Sec. 11 Twp. 34S Rge. 3E Test No. 4 Date 4/17/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-17-85
CUSTOMER: RANGE OIL CO. INC.
WELL: 2 TEST: 4
ELEVATION (KB): 1180 FORMATION: MISSISSIPPI
SECTION: 11 TOWNSHIP: 34S
RANGE: 3E COUNTY: COWLEY STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

INTERVAL TEST FROM: 3392 FT TO: 3415 FT TOTAL DEPTH: 3415 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3392 FT SIZE: 6 3/4 IN PAKER DEPTH: 3387 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: CHEMICAL VISCOSITY: 47
WEIGHT: 9.6 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 2300
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT?
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3192 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 23 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: INITIAL FLOW PERIOD WEAK BLOW.
FINAL FLOW PERIOD VERY WEAK BLOW.

RECOVERED: 10 FT OF: MUD WITH OIL SPOTS ON TOP OF TOOL.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

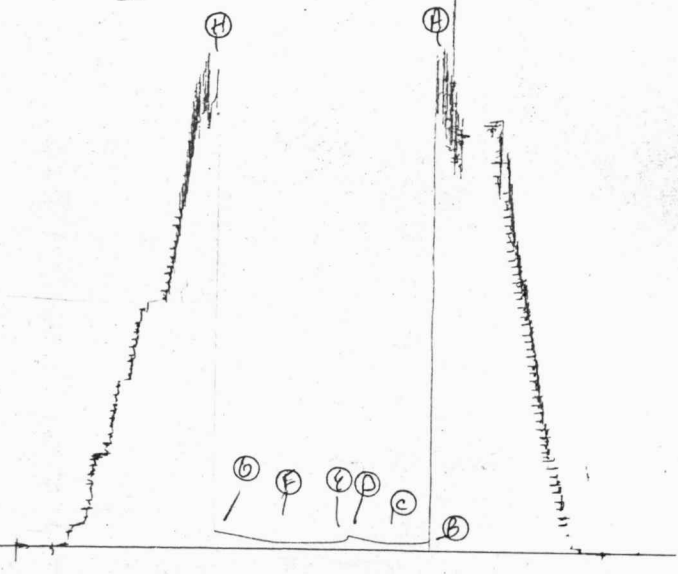
REMARKS:

TIME SET PACKER(S): 3:20 AM TIME STARTED OFF BOTTOM: 5:50 AM
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1782 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 29 PSI TO (C) 29 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 55 PSI
FINAL FLOW PERIOD MIN: 45 (E) 26 PSI TO (F) 26 PSI
FINAL CLOSED IN PERIOD MIN: 51 (G) 62 PSI
FINAL HYDROSTATIC PRESSURE (H) 1736 PSI

JK # 8152

DST # 4

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JK # 8152

DST # 4

2605

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