



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N° 19784

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

WICHITA, KANSAS 67201

Elevation 1127 KB Formation Stallacker Eff. Pay _____ Ft.District Augusta Date 9-9-93 Customer Order No. _____COMPANY NAME Range Oil Co. Inc.ADDRESS 125 N Market Suite 1120 Wichita KS 67202LEASE AND WELL NO. Walker "H" #3 COUNTY Elk STATE KS Secs 24 Twp 31 Rge 10EMail Invoice To Same #3 Co. Name WALKER G Address _____ No. Copies Requested 1Mail Charts To Same Address _____ No. Copies Requested 5Formation Test No. DST #1 Interval Tested From 632 ft. to 700 ft. Total Depth 700 ft.Packer Depth 627 ft. Size 6 7/8 in. Packer Depth _____ ft. Size _____ in.Packer Depth 632 ft. Size 6 7/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 694 ft. Recorder Number 10979 Cap. 4100Bottom Recorder Depth (Outside) 697 ft. Recorder Number 3354 Cap. 4200

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

Drilling Contractor Shave Rig Drill Collar Length 456 I. D. 2.25 in.Mud Type Chem Viscosity 38 Weight Pipe Length _____ I. D. _____ in.Weight 9.0 Water Loss _____ cc. Drill Pipe Length 156 I. D. 3.8 in.Chlorides _____ P.P.M. Test Tool Length 20 ft. Tool Size 5/200 in.Jars: Make _____ Serial Number _____ Anchor Length 68 ft. Size 5/200 in.Did Well Flow? _____ Reversed Out _____ Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.Main Hole Size 7/8 in. Tool Joint Size 4 1/2 FH in.Blow: Weak to Strong Blow on (FFP) 12" into bucket Weak to Strong blow 14" into bucket on (FFP)Recovered 140 ft. of drilling mud

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

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

Time On Location 2:00 A.M. Time Pick Up Tool 3:00 A.M. Time Off Location _____ A.M.Time Set Packer(s) 3:00 P.M. Time Started Off Bottom 6:30 P.M. Maximum Temperature 882Initial Hydrostatic Pressure _____ (A) 315 P.S.I.Initial Flow Period _____ Minutes 30 (B) 75 P.S.I. to (C) 50 P.S.I.Initial Closed In Period _____ Minutes 30 (D) 150 P.S.I.Final Flow Period _____ Minutes 60 (E) 85 P.S.I. to (F) 85 P.S.I.Final Closed In Period _____ Minutes 60 (G) 180 P.S.I.Final Hydrostatic Pressure _____ (H) 305 P.S.I. 10979

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 Tim J. Laner Signature of Customer or his authorized representativeWestern Representative Jerry A. Patton

FIELD INVOICE

Open Hole Test	\$
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 9-9-95 Test Ticket No. 19784
 Recorder No. 10979 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

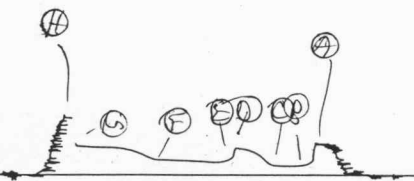
Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	290 <u>297</u> P.S.I.			M
B First Initial Flow Pressure	_____ P.S.I.	First Flow Pressure	_____ Mins.	_____ Mins.
C First Final Flow Pressure	_____ P.S.I.	Initial Closed-in Pressure	_____ Mins.	_____ Mins.
D Initial Closed-in 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	<u>297</u> 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 0	<u>67</u>	0	<u>54</u>	0	<u>79</u>	0	<u>90</u>
P 2 5	<u>67</u>	3	<u>67</u>	5	<u>79</u>	3	<u>100</u>
P 3 10	<u>58</u>	6	<u>86</u>	10	<u>79</u>	6	<u>111</u>
P 4 15	<u>56</u>	9	<u>107</u>	15	<u>79</u>	9	<u>120</u>
P 5 20	<u>7</u>	12	<u>110</u>	20	<u>79</u>	12	<u>128</u>
P 6 25	<u>7</u>	15	<u>132</u>	25	<u>81</u>	15	<u>135</u>
P 7 30	<u>56</u>	18	<u>141</u>	30	<u>82</u>	18	<u>142</u>
P 8 35		21	<u>144</u>	35	<u>85</u>	21	<u>148</u>
P 9 40		24	<u>148</u>	40	<u>86</u>	24	<u>151</u>
P10 45		27	<u>150</u>	45	<u>87</u>	27	<u>154</u>
P11 50		30	<u>152</u>	50	<u>88</u>	30	<u>156</u>
P12 55		33		55	<u>89</u>	33	<u>157</u>
P13 60		36		60	<u>90</u>	36	<u>158</u>
P14 65		39		65		39	<u>158</u>
P15 70		42		70		42	<u>158</u>
P16 75		45		75		45	<u>158</u>
P17 80		48		80		48	<u>159</u>
P18 85		51		85		51	<u>159</u>
P19 90		54		90		54	<u>160</u>
P20 95		57		95		57	<u>161</u>
100		60		100		60	<u>162</u>

K+ 19784

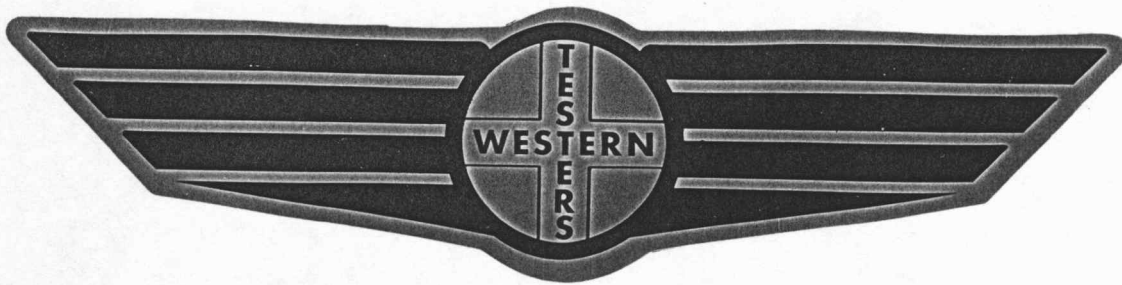
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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

DST REPORT

GENERAL INFORMATION

DATE : 9/9/93
CUSTOMER : RANGE OIL COMPANY INC.
WELL : #3 TEST: 1
ELEVATION: 1127 KB
SECTION : 34
RANGE : 10E COUNTY: ELK
GAUGE SN#: 10979 RANGE : 4100

TICKET : 19784
LEASE : WALKER G
GEOLOGIST: LAUER
FORMATION: STALNECKER
TOWNSHIP : 31S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 632.00 ft TO: 700.00 ft TVD: 700.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 694.0 ft 697.0 ft
TEMPERATURE: 88.0

DRILL COLLAR LENGTH:	456.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	156.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	68.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5FH
PACKER DEPTH:	627.0 ft	SIZE:	6.630 in
PACKER DEPTH:	632.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : GLAVE RIG 1
MUD TYPE : CHEMICAL
WEIGHT : 9.000 ppg
CHLORIDES : 0 ppm
JARS-MAKE :
DID WELL FLOW?: NO

VISCOSITY : 38.00 cp
WATER LOSS: 0.000 cc

SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK TO STRONG BLOW. FINAL
FLOW PERIOD WEAK TO STRONG BLOW - 14 INCHES INTO
BUCKET.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
140.0	0.0	0.0	0.0	100.0	DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.6884	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.6884	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 315.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	75.00	50.00
INITIAL SHUT-IN	30.00		150.00
FINAL FLOW	60.00	85.00	85.00
FINAL SHUT-IN	60.00		180.00

FINAL HYDROSTATIC PRESSURE: 305.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 297.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	67.00	56.00
INITIAL SHUT-IN	30.00		152.00
FINAL FLOW	60.00	79.00	90.00
FINAL SHUT-IN	60.00		162.00

FINAL HYDROSTATIC PRESSURE: 297.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 9/9/93	TICKET : 19784
CUSTOMER : RANGE OIL COMPANY INC.	LEASE : WALKER G
WELL : #3	GEOLOGIST: LAUER
ELEVATION: 1127 KB	FORMATION: STALNECKER
SECTION : 34	TOWNSHIP : 31S
RANGE : 10E	STATE : KS
GAUGE SN#: 10979	CLOCK : 12
COUNTY: ELK	
RANGE : 4100	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	67.00	67.00
5.00	67.00	0.00
10.00	58.00	-9.00
15.00	56.00	-2.00
20.00	56.00	0.00
25.00	56.00	0.00
30.00	56.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	67.00	67.00	0.00
6.00	86.00	19.00	0.00
9.00	107.00	21.00	0.00
12.00	120.00	13.00	0.00
15.00	132.00	12.00	0.00
18.00	141.00	9.00	0.00
21.00	144.00	3.00	0.00
24.00	148.00	4.00	0.00
27.00	150.00	2.00	0.00
30.00	152.00	2.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	79.00	79.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
5.00	79.00	0.00
10.00	79.00	0.00
15.00	79.00	0.00
20.00	79.00	0.00
25.00	81.00	2.00
30.00	83.00	2.00
35.00	85.00	2.00
40.00	86.00	1.00
45.00	87.00	1.00
50.00	88.00	1.00
55.00	89.00	1.00
60.00	90.00	1.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	100.00	100.00	0.00
6.00	111.00	11.00	0.00
9.00	120.00	9.00	0.00
12.00	128.00	8.00	0.00
15.00	135.00	7.00	0.00
18.00	143.00	8.00	0.00
21.00	148.00	5.00	0.00
24.00	151.00	3.00	0.00
27.00	154.00	3.00	0.00
30.00	156.00	2.00	0.00
33.00	157.00	1.00	0.00
36.00	158.00	1.00	0.00
39.00	158.00	0.00	0.00
42.00	158.00	0.00	0.00
45.00	158.00	0.00	0.00
48.00	159.00	1.00	0.00
51.00	159.00	0.00	0.00
54.00	160.00	1.00	0.00
57.00	161.00	1.00	0.00
60.00	162.00	1.00	0.00



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 19785

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

Elevation 1127 KB Formation FT Scott Pounce Eff. Pay _____ Ft.

COMPANY NAME Range Oil Co District Augusta Date 9-11-63 Customer Order No. _____

ADDRESS 125 N Market Smith 1120 Wichita Ks 67202

LEASE AND WELL NO. Walker "J" #5 COUNTY Elk STATE Ks Sec. 34 Twp. 31 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. DST #2 Interval Tested From 1626 ft. to 1685 ft. Total Depth 1685 ft.

Packer Depth 1621 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 1626 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 1679 ft. Recorder Number 10979 Cap. 4100

Bottom Recorder Depth (Outside) 1682 ft. Recorder Number 3354 Cap. 4200

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

Drilling Contractor Blaine Ryt Drill Collar Length 330 I. D. 2 1/2 in.

Mud Type Chun Viscosity 40 Weight Pipe Length _____ I. D. _____ in.

Weight 9.7 Water Loss 120 cc. Drill Pipe Length 1276 I. D. 3.8 in.

Chlorides 1100 P.P.M. Test Tool Length 20 ft. Tool Size 5/8 00 in.

Jars: Make _____ Serial Number _____ Anchor Length 59 ft. Size 5/8 00 in.

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

Main Hole Size 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Work to Day Strong Blow on BPP Gas to surface in 17 min

Recovered 390 ft. of drilling mud

Recovered 1365 ft. of gas in pipe

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

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

Time On Location Start by A.M. Time Pick Up Tool 9:00 A.M. Time Off Location _____ A.M.

Time Set Packer(s) 10:00 A.M. Time Started Off Bottom 1:00 A.M. Maximum Temperature 92°

Initial Hydrostatic Pressure _____ (A) 845 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 85 P.S.I. to (C) 95 P.S.I.

Initial Closed In Period _____ Minutes 30 (D) 605 P.S.I.

Final Flow Period _____ Minutes 60 (E) 105 P.S.I. to (F) 95 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 605 P.S.I.

Final Hydrostatic Pressure _____ (H) 835 P.S.I. 10979

COMPANY TERMS

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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 Tim J. Lauer Signature of Customer or his authorized representative

Western Representative Jerry A. Roth

FIELD INVOICE

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



GAS FLOW REPORT

Nº 3999

Date 9-11-93 Ticket 19785 Company Range Oil Co
 Well Name and No. Walker #3 184 Dst No. 1626 Interval Tested 1685
 County Elk State KS Sec. 34 Twp. 31s 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					
0					
17	816 PSI	3/8 3/8			57,300
20	7420	3/4			57,400
30	7	3/4			57,400

SECOND FLOW					
10	9	3/4			42,500
20	12	3/4			49,300
30	12	3/4			49,300
40	18	3/4			60,200
50	17	3/4			58,500
60	18	3/4			60,200

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

Authorized by

Range Oil Co
Tim J. James

WESTERN TESTING CO., INC.

Pressure Data

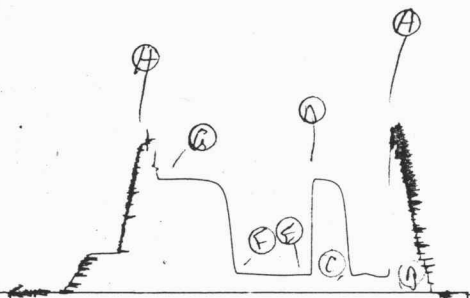
Date 9-11-92 Test Ticket No. 19785
 Recorder No. 10979 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>898</u> P.S.I.		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	<u>828</u> P.S.I.			

PRESSURE BREAKDOWN

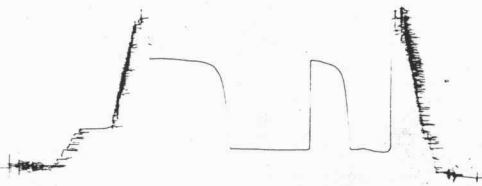
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final 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 0	<u>92</u>	0	<u>97</u>	0	<u>102</u>	0	<u>108</u>
P 2 5	<u>92</u>	3	<u>276</u>	5		3	<u>125</u>
P 3 10	<u>96</u>	6	<u>487</u>	10		6	<u>272</u>
P 4 15	<u>105</u>	9	<u>5107</u>	15		9	<u>504</u>
P 5 20	<u>108</u>	12	<u>592</u>	20		12	<u>568</u>
P 6 25	<u>100</u>	15	<u>607</u>	25		15	<u>590</u>
P 7 30	<u>97</u>	18	<u>613</u>	30	<u>102</u>	18	<u>601</u>
P 8 35		21	<u>619</u>	35	<u>102</u>	21	<u>608</u>
P 9 40		24	<u>620</u>	40	<u>102</u>	24	<u>612</u>
P10 45		27	<u>624</u>	45	<u>104</u>	27	<u>615</u>
P11 50		30	<u>624</u>	50	<u>106</u>	30	<u>617</u>
P12 55		33		55	<u>108</u>	33	<u>617</u>
P13 60		36		60		36	<u>618</u>
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	<u>618</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	<u>618</u>

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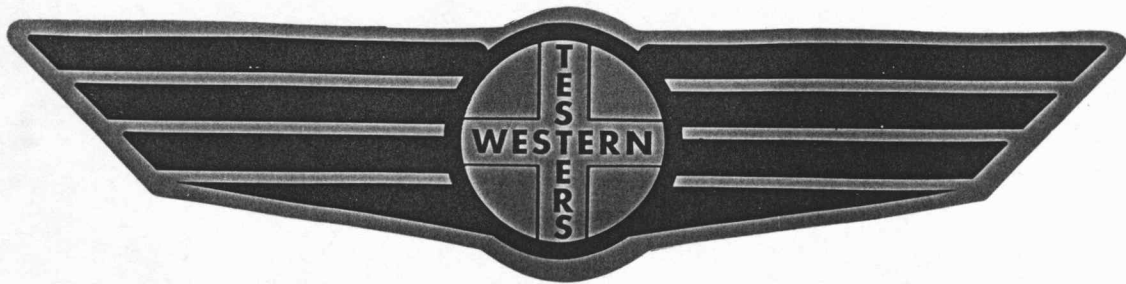


10979

K4 19785
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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

DST REPORT

GENERAL INFORMATION

DATE	: 9/11/93	TICKET	: 19785
CUSTOMER	: RANGE OIL COMPANY INC.	LEASE	: WALKER G
WELL	: #3	TEST:	2
ELEVATION:	1127 KB	GEOLOGIST:	LAUER
SECTION	: 34	FORMATION:	FT SCOTT/PAWNEE
RANGE	: 10E	TOWNSHIP	: 31S
GAUGE SN#:	10979	STATE	: KS
		CLOCK	: 12
	COUNTY: ELK		
	RANGE : 4100		

WELL INFORMATION

PERFORATION INTERVAL FROM:	1626.00 ft	TO:	1685.00 ft	TVD:	1685.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	1679.0 ft		1682.0 ft		
TEMPERATURE:	92.0				
DRILL COLLAR LENGTH:	330.0 ft	I.D.:	2.250 in		
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in		
DRILL PIPE LENGTH :	1276.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in		
ANCHOR LENGTH :	59.0 ft	ANCHOR SIZE:	5.500 in		
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in		
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5FH		
PACKER DEPTH:	1621.0 ft	SIZE:	6.630 in		
PACKER DEPTH:	1626.0 ft	SIZE:	6.630 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		

MUD INFORMATION

DRILLING CON. :	GLAVE RIG 1	VISCOSITY :	40.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	12.000 cc
WEIGHT :	9.700 ppg		
CHLORIDES :	1100 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK TO VERY STRONG BLOW.
GAS TO SURFACE IN 17 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
390.0	0.0	0.0	0.0	100.0	DRILLING MUD
0.0	0.0	0.0	0.0	0.0	1365 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	2.4643	STB	TOTAL FLOW TIME:	85.0000 min.
WATER VOLUME:	0.0000	STB	AVERAGE OIL RATE:	0.0000 STB/D
TOTAL FLUID :	2.4643	STB	AVERAGE WATER RATE:	0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 845.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	85.00	95.00
INITIAL SHUT-IN	30.00		605.00
FINAL FLOW	60.00	105.00	95.00
FINAL SHUT-IN	60.00		605.00

FINAL HYDROSTATIC PRESSURE: 835.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 898.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	93.00	97.00
INITIAL SHUT-IN	30.00		621.00
FINAL FLOW	55.00	102.00	108.00
FINAL SHUT-IN	60.00		618.00

FINAL HYDROSTATIC PRESSURE: 828.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 9/11/93	TICKET : 19785
CUSTOMER : RANGE OIL COMPANY INC.	LEASE : WALKER G
WELL : #3	GEOLOGIST: LAUER
ELEVATION: 1127 KB	FORMATION: FT SCOTT/PAWNEE
SECTION : 34	TOWNSHIP : 31S
RANGE : 10E	STATE : KS
Gauge SN#: 10979	CLOCK : 12
COUNTY: ELK	
RANGE : 4100	

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
17 MIN	MERLA	0.380	8 PSIG	57300 SCF/D
20 MIN	MERLA	0.750	7" WATER	37400 SCF/D
30 MIN	MERLA	0.750	7" WATER	37400 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	0.750	9 PSIG	42500 SCF/D
20 MIN	MERLA	0.750	12 PSIG	49300 SCF/D
30 MIN	MERLA	0.750	12 PSIG	49300 SCF/D
40 MIN	MERLA	0.750	18 PSIG	60200 SCF/D
50 MIN	MERLA	0.750	17 PSIG	58500 SCF/D
60 MIN	MERLA	0.750	18 PSIG	60200 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 9/11/93	TICKET	: 19785
CUSTOMER	: RANGE OIL COMPANY INC.	LEASE	: WALKER G
WELL	: #3	GEOLOGIST	: LAUER
ELEVATION	: 1127 KB	FORMATION	: FT SCOTT/PAWNEE
SECTION	: 34	TOWNSHIP	: 31S
RANGE	: 10E	STATE	: KS
Gauge SN#	: 10979	CLOCK	: 12
	COUNTY: ELK		
	RANGE : 4100		

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	93.00	93.00
5.00	93.00	0.00
10.00	96.00	3.00
15.00	105.00	9.00
20.00	108.00	3.00
25.00	100.00	-8.00
30.00	97.00	-3.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	276.00	276.00	0.00
6.00	487.00	211.00	0.00
9.00	567.00	80.00	0.00
12.00	593.00	26.00	0.00
15.00	607.00	14.00	0.00
18.00	613.00	6.00	0.00
21.00	619.00	6.00	0.00
24.00	620.00	1.00	0.00
27.00	621.00	1.00	0.00
30.00	621.00	0.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	102.00	102.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
5.00	102.00	0.00
10.00	102.00	0.00
15.00	102.00	0.00
20.00	102.00	0.00
25.00	102.00	0.00
30.00	102.00	0.00
35.00	102.00	0.00
40.00	102.00	0.00
45.00	104.00	2.00
50.00	106.00	2.00
55.00	108.00	2.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	175.00	175.00	0.00
6.00	372.00	197.00	0.00
9.00	504.00	132.00	0.00
12.00	568.00	64.00	0.00
15.00	590.00	22.00	0.00
18.00	601.00	11.00	0.00
21.00	608.00	7.00	0.00
24.00	613.00	5.00	0.00
27.00	615.00	2.00	0.00
30.00	617.00	2.00	0.00
33.00	617.00	0.00	0.00
36.00	618.00	1.00	0.00
39.00	618.00	0.00	0.00
42.00	618.00	0.00	0.00
45.00	618.00	0.00	0.00
48.00	618.00	0.00	0.00
51.00	618.00	0.00	0.00
54.00	618.00	0.00	0.00
57.00	618.00	0.00	0.00
60.00	618.00	0.00	0.00



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 19786

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

Elevation 1127 KB Formation Miss Eff. Pay Ft.

District Augusta Date 9-12-93 Customer Order No.

COMPANY NAME Range Oil Co
ADDRESS 125 N Mayhew Suite 1120 Wichita KS 67202
LEASE AND WELL NO. Walker "G" #3 COUNTY Elk STATE KS Sec 34 Twp 31 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. DST #3 Interval Tested From 1994 ft. to 2023 ft. Total Depth 2023 ft.
Packer Depth 1989 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.
Packer Depth 1994 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 2017 ft. Recorder Number 10979 Cap. 4100
Bottom Recorder Depth (Outside) 2020 ft. Recorder Number 3354 Cap. 4200
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —
Drilling Contractor Slave Rig 1 Drill Collar Length 330 I. D. 2.25 in.
Mud Type Chem Viscosity 44 Weight Pipe Length — I. D. — in.
Weight 95 Water Loss 12.0 cc. Drill Pipe Length 1649 I. D. 3.8 in.
Chlorides 1000 P.P.M. Test Tool Length 20 ft. Tool Size 5/200 in.
Jars: Make — Serial Number — Anchor Length 29 ft. Size 5900 in.
Did Well Flow? — Reversed Out. Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 1/2 in. Tool Joint Size 4 1/2 in.

Blow: Strong to Very Strong Blow on (FP) Gas to surface in 22 min.

Recovered 30 ft. of Drilling mud
Recovered 1988 ft. of Gas in pipe
Recovered — ft. of
Recovered — ft. of
Recovered — ft. of
Chlorides — P.P.M. Sample Jars used — Remarks: —

Time On Location Stand-by A.M. Time Pick Up Tool 11:00 A.M. Time Off Location — A.M.
Time Set Packer(s) 12:00 A.M. Time Started Off Bottom 3:00 A.M. Maximum Temperature 100°F
Initial Hydrostatic Pressure — (A) 1010 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) 645 P.S.I.
Final Flow Period — Minutes 60 (E) 30 P.S.I. to (F) 30 P.S.I.
Final Closed In Period — Minutes 60 (G) 645 P.S.I.
Final Hydrostatic Pressure — (H) 1000 P.S.I. 10979

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: [Signature]

FIELD INVOICE

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



GAS FLOW REPORT

N^o 4000

Date 9-12-93 Ticket 19786 Company Ranger Oil Co
 Well Name and No. Walker 12" #3 Dst No. 1st #3 Interval Tested 1994-2023
 County Elk State Ks Sec. 34 Twp. 31s 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					
0					
22	2	3/4			20,000
30	4	1/2			12,500

SECOND FLOW					
0	10	1"			81,600
10	5	3/4			31,600
20	3	3/4			24,500
30	2	3/4			20,000
40	2	3/4			20,000
50	1.5	3/4			17,200
60	1.5	3/4			17,200

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 1½% 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

Authorized by

WESTERN TESTING CO., INC.

Pressure Data

Date 9-12-93 Test Ticket No. 19786
 Recorder No. 10979 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

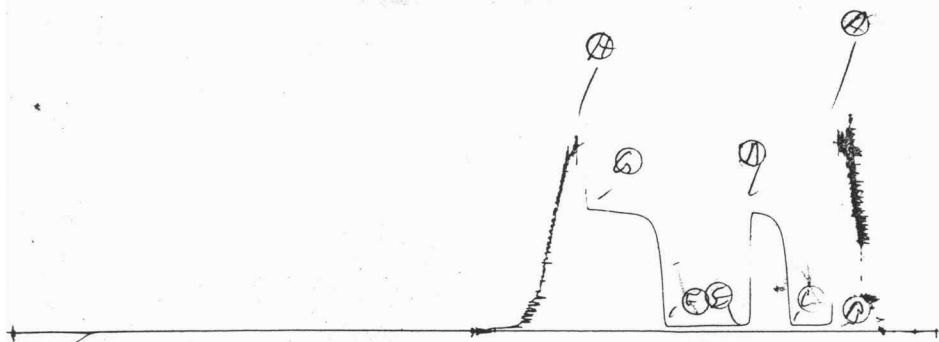
Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1022</u> P.S.I.			M
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	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	<u>1012</u> 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 0	<u>27</u>	0	<u>27</u>	0	<u>29</u>	0	<u>29</u>
P 2 5		3	<u>246</u>	5		3	<u>148</u>
P 3 10		6	<u>405</u>	10		6	<u>287</u>
P 4 15		9	<u>521</u>	15		9	<u>541</u>
P 5 20		12	<u>525</u>	20		12	<u>521</u>
P 6 25		15	<u>606</u>	25		15	<u>601</u>
P 7 30		18	<u>625</u>	30		18	<u>617</u>
P 8 35		21	<u>622</u>	35		21	<u>628</u>
P 9 40		24	<u>628</u>	40		24	<u>632</u>
P10 45		27	<u>641</u>	45		27	<u>636</u>
P11 50		30	<u>646</u>	50		30	<u>639</u>
P12 55		33		55		33	<u>641</u>
P13 60		36		60	<u>29</u>	36	<u>642</u>
P14 65		39		65		39	<u>645</u>
P15 70		42		70		42	<u>647</u>
P16 75		45		75		45	<u>649</u>
P17 80		48		80		48	<u>651</u>
P18 85		51		85		51	<u>652</u>
P19 90		54		90		54	<u>655</u>
P20 95		57		95		57	<u>657</u>
100		60		100		60	<u>659</u>

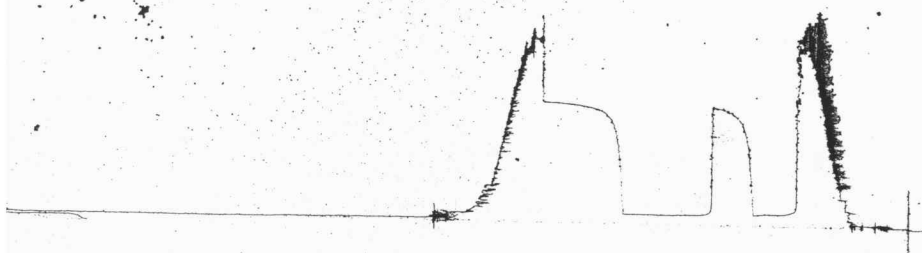
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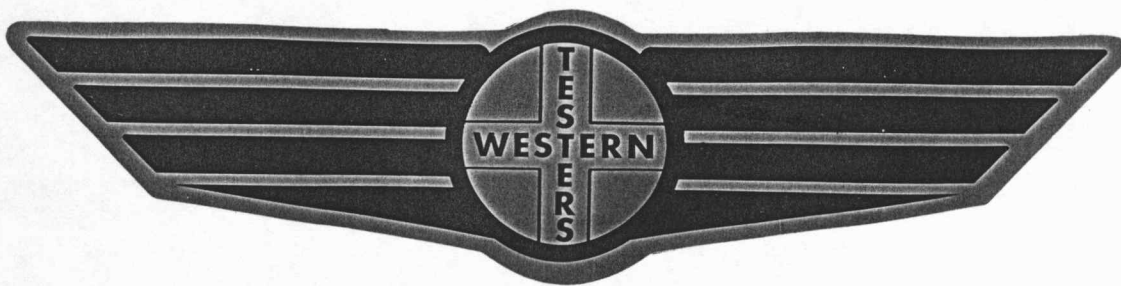


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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

DST REPORT

GENERAL INFORMATION

DATE	: 9/12/93	TICKET	: 19786
CUSTOMER	: RANGE OIL COMPANY INC.	LEASE	: WALKER G
WELL	: #3	TEST: 3	GEOLOGIST: LAUER
ELEVATION	: 1127 KB	FORMATION	: MISSISSIPPI
SECTION	: 34	TOWNSHIP	: 31S
RANGE	: 10E	COUNTY: ELK	STATE : KS
GAUGE SN#	: 10979	RANGE : 4100	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	1994.00 ft	TO:	2023.00 ft	TVD:	2023.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	2017.0 ft		2020.0 ft		
TEMPERATURE:	100.0				
DRILL COLLAR LENGTH:	330.0 ft	I.D.:		2.250 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	1644.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	29.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5FH	
PACKER DEPTH:	1989.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	1994.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	GLAVE RIG 1	VISCOSITY :	44.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	12.000 cc
WEIGHT :	9.500 ppg	SERIAL NUMBER:	
CHLORIDES :	1000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG TO VERY STRONG BLOW.
GAS TO SURFACE IN 22 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	0.0	0.0	100.0	DRILLING MUD
0.0	0.0	0.0	0.0	0.0	1988 FT GAS ABOVE FLUID

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	0.1475	STB	TOTAL FLOW TIME:	90.0000 min.
WATER VOLUME:	0.0000	STB	AVERAGE OIL RATE:	0.0000 STB/D
TOTAL FLUID :	0.1475	STB	AVERAGE WATER RATE:	0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1010.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	30.00	30.00
INITIAL SHUT-IN	30.00		645.00
FINAL FLOW	60.00	30.00	30.00
FINAL SHUT-IN	60.00		645.00

FINAL HYDROSTATIC PRESSURE: 1000.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1022.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	37.00	37.00
INITIAL SHUT-IN	30.00		646.00
FINAL FLOW	60.00	29.00	29.00
FINAL SHUT-IN	60.00		659.00

FINAL HYDROSTATIC PRESSURE: 1012.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 9/12/93	TICKET : 19786
CUSTOMER : RANGE OIL COMPANY INC.	LEASE : WALKER G
WELL : #3	GEOLOGIST: LAUER
ELEVATION: 1127 KB	FORMATION: MISSISSIPPI
SECTION : 34	TOWNSHIP : 31S
RANGE : 10E	STATE : KS
Gauge SN#: 10979	CLOCK : 12
COUNTY: ELK	
RANGE : 4100	

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
22 MIN	MERLA	0.750	2 PSIG	20000 SCF/D
30 MIN	MERLA	0.500	4 PSIG	12500 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
0 MIN	MERLA	1.000	10 " WATER	81600 SCF/D
10 MIN	MERLA	0.750	5" WATER	31600 SCF/D
20 MIN	MERLA	0.750	3" WATER	24500 SCF/D
30 MIN	MERLA	0.750	2" WATER	20000 SCF/D
40 MIN	MERLA	0.750	2" WATER	20000 SCF/D
50 MIN	MERLA	0.750	1.5" WATER	17200 SCF/D
60 MIN	MERLA	0.750	1.5" WATER	17200 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 9/12/93	TICKET : 19786
CUSTOMER : RANGE OIL COMPANY INC.	LEASE : WALKER G
WELL : #3	GEOLOGIST: LAUER
ELEVATION: 1127 KB	FORMATION: MISSISSIPPI
SECTION : 34	TOWNSHIP : 31S
RANGE : 10E	STATE : KS
GAUGE SN#: 10979	CLOCK : 12
COUNTY: ELK	
RANGE : 4100	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	37.00	37.00
5.00	37.00	0.00
10.00	37.00	0.00
15.00	37.00	0.00
20.00	37.00	0.00
25.00	37.00	0.00
30.00	37.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	246.00	246.00	0.00
6.00	405.00	159.00	0.00
9.00	531.00	126.00	0.00
12.00	575.00	44.00	0.00
15.00	606.00	31.00	0.00
18.00	622.00	16.00	0.00
21.00	632.00	10.00	0.00
24.00	638.00	6.00	0.00
27.00	641.00	3.00	0.00
30.00	646.00	5.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	29.00	29.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
5.00	29.00	0.00
10.00	29.00	0.00
15.00	29.00	0.00
20.00	29.00	0.00
25.00	29.00	0.00
30.00	29.00	0.00
35.00	29.00	0.00
40.00	29.00	0.00
45.00	29.00	0.00
50.00	29.00	0.00
55.00	29.00	0.00
60.00	29.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	148.00	148.00	0.00
6.00	387.00	239.00	0.00
9.00	511.00	124.00	0.00
12.00	571.00	60.00	0.00
15.00	601.00	30.00	0.00
18.00	617.00	16.00	0.00
21.00	628.00	11.00	0.00
24.00	632.00	4.00	0.00
27.00	636.00	4.00	0.00
30.00	639.00	3.00	0.00
33.00	641.00	2.00	0.00
36.00	643.00	2.00	0.00
39.00	645.00	2.00	0.00
42.00	647.00	2.00	0.00
45.00	649.00	2.00	0.00
48.00	651.00	2.00	0.00
51.00	653.00	2.00	0.00
54.00	655.00	2.00	0.00
57.00	657.00	2.00	0.00
60.00	659.00	2.00	0.00



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 19787

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

Elevation 1127 4.8 Formation Miss Eff. Pay Ft.

District Augusta Date 9-13-93 Customer Order No.

COMPANY NAME Range Oil Co

ADDRESS 125 N Market Suite 1120 Wichita Ks 67202

LEASE AND WELL NO. Walker 1483 COUNTY Elk STATE KS Sec. 34 Twp 31 S Rge 10 E

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. DST #4 Interval Tested From 2025 ft. to 2073 ft. Total Depth 2073 ft.

Packer Depth 2020 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Packer Depth 2025 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2067 ft. Recorder Number 10999 Cap. 4100

Bottom Recorder Depth (Outside) 2070 ft. Recorder Number 3354 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Slave Rig 1 Drill Collar Length 330 I. D. 2.25 in.

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

Weight 9.2 Water Loss 12.8 cc. Drill Pipe Length 1675 I. D. 3.8 in.

Chlorides 900 P.P.M. Test Tool Length 20 ft. Tool Size 5/16 in.

Jars: Make Serial Number Anchor Length 48 ft. Size 5/16 in.

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

Main Hole Size 7 1/2 in. Tool Joint Size 4 1/2 in.

Blow: Very Weak blow die in 5 min or (FFP) Very Weak blow die in 5 min or (FFP) flush tool die in 5 min or (FFP)

Recovered 30 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

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

Time On Location Stand by A.M. P.M. Time Pick Up Tool 3:00 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 4:00 A.M. P.M. Time Started Off Bottom 6:00 A.M. P.M. Maximum Temperature 98°F

Initial Hydrostatic Pressure (A) 1020 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) 520 P.S.I.

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

Final Closed In Period Minutes 30 (G) 430 P.S.I.

Final Hydrostatic Pressure (H) 1020 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 [Signature]

FIELD INVOICE

Open Hole Test	\$
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 9-12-92 Test Ticket No. 19787
 Recorder No. 10979 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

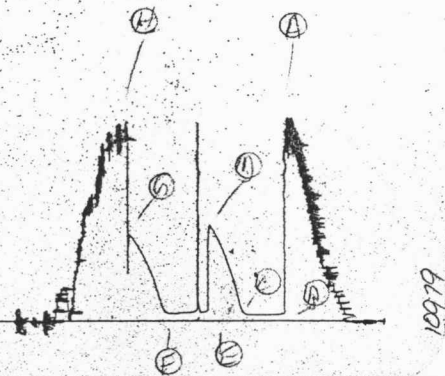
Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1052</u> P.S.I.		M
B First Initial Flow Pressure	P.S.I.	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.	Mins.	Mins.
G Final Closed-in Pressure	P.S.I.		
H Final Hydrostatic Mud	<u>1034</u> 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 0	<u>45</u>	0	<u>45</u>	0	<u>54</u>	0	<u>50</u>
P 2 5	<u>72</u>	3	<u>100</u>	5	<u>56</u>	3	<u>76</u>
P 3 10	<u>72</u>	6	<u>129</u>	10	<u>59 FT</u>	6	<u>140</u>
P 4 15	<u>72</u>	9	<u>244</u>	15	<u>53</u>	9	<u>200</u>
P 5 20	<u>72</u>	12	<u>312</u>	20	<u>51</u>	12	<u>208</u>
P 6 25	<u>72</u>	15	<u>374</u>	25	<u>51</u>	15	<u>210</u>
P 7 30	<u>72</u>	18	<u>417</u>	30	<u>50</u>	18	<u>258</u>
P 8 35		21	<u>467</u>	35		21	<u>401</u>
P 9 40		24	<u>502</u>	40		24	<u>431</u>
P10 45		27	<u>527</u>	45		27	<u>467</u>
P11 50		30		50		30	<u>472</u>
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

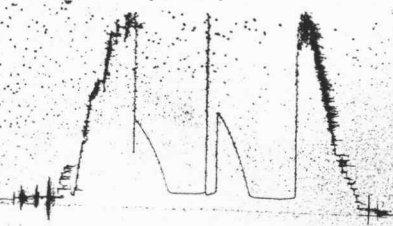
KT 19787

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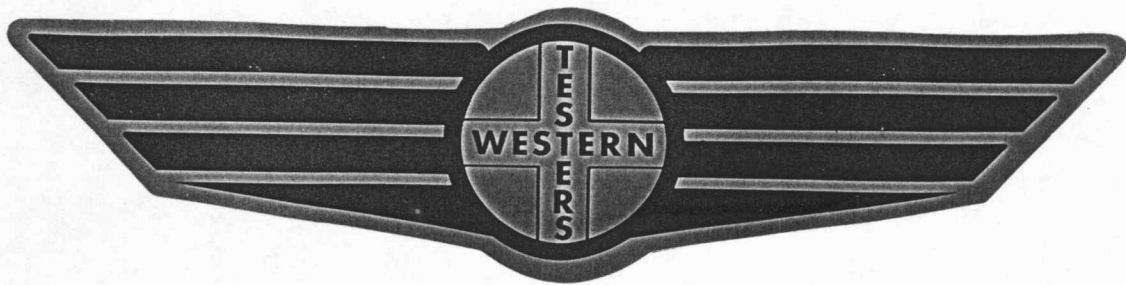


KT 19787

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

COMPANY RANGE OIL COMPANY, INC. LEASE & WELL NO. #3 WALKER G SEC. 34 TWP. 31S RGE. 10E TEST NO. 4 DATE 9/13/93

DST REPORT

GENERAL INFORMATION

DATE	: 9/13/93	TICKET	: 19787
CUSTOMER	: RANGE OIL COMPANY INC.	LEASE	: WALKER G
WELL	: #3	TEST:	4
ELEVATION:	1127 KB	GEOLOGIST:	LAUER
SECTION	: 34	FORMATION:	MISSISSIPPI
RANGE	: 10E	TOWNSHIP	: 31S
GAUGE SN#:	10979	STATE	: KS
	COUNTY: ELK	CLOCK	: 12
	RANGE : 4100		

WELL INFORMATION

PERFORATION INTERVAL FROM:	2025.00 ft	TO:	2073.00 ft	TVD:	2073.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	2067.0 ft		2070.0 ft		
TEMPERATURE:	98.0				
DRILL COLLAR LENGTH:	330.0 ft	I.D.:		2.250 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	1675.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	48.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5FH	
PACKER DEPTH:	2020.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	2025.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	GLAVE RIG 1	VISCOSITY :	39.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	12.800 cc
WEIGHT :	9.200 ppg		
CHLORIDES :	900 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD VERY WEAK BLOW - DIED IN 8 MINUTES. FINAL FLOW PERIOD VERY WEAK BLOW - DIED IN 5 MINUTES. FLUSHED TOOL - DIED IN 5 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	0.0	0.0	100.0	DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.1475	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.1475	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1020.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	30.00	30.00
INITIAL SHUT-IN	30.00		520.00
FINAL FLOW	30.00	30.00	30.00
FINAL SHUT-IN	30.00		430.00

FINAL HYDROSTATIC PRESSURE: 1010.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1053.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	42.00	42.00
INITIAL SHUT-IN	27.00		527.00
FINAL FLOW	30.00	56.00	50.00
FINAL SHUT-IN	30.00		473.00

FINAL HYDROSTATIC PRESSURE: 1036.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 9/13/93	TICKET : 19787
CUSTOMER : RANGE OIL COMPANY INC.	LEASE : WALKER G
WELL : #3	GEOLOGIST: LAUER
ELEVATION: 1127 KB	FORMATION: MISSISSIPPI
SECTION : 34	TOWNSHIP : 31S
RANGE : 10E	STATE : KS
GAUGE SN#: 10979	CLOCK : 12
COUNTY: ELK	
RANGE : 4100	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	42.00	42.00
5.00	42.00	0.00
10.00	42.00	0.00
15.00	42.00	0.00
20.00	42.00	0.00
25.00	42.00	0.00
30.00	42.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	100.00	100.00	0.00
6.00	179.00	79.00	0.00
9.00	244.00	65.00	0.00
12.00	312.00	68.00	0.00
15.00	374.00	62.00	0.00
18.00	427.00	53.00	0.00
21.00	467.00	40.00	0.00
24.00	502.00	35.00	0.00
27.00	527.00	25.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	56.00	56.00
5.00	56.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
10.00	59.00	3.00
15.00	53.00	-6.00
20.00	52.00	-1.00
25.00	51.00	-1.00
30.00	50.00	-1.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	76.00	76.00	0.00
6.00	140.00	64.00	0.00
9.00	200.00	60.00	0.00
12.00	268.00	68.00	0.00
15.00	320.00	52.00	0.00
18.00	358.00	38.00	0.00
21.00	401.00	43.00	0.00
24.00	431.00	30.00	0.00
27.00	467.00	36.00	0.00
30.00	473.00	6.00	0.00



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 19801

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

WICHITA, KANSAS 67201

Elevation

11274B

Formation

Crb

Eff. Pay

Ft.

District

Augusta

Date

9-14-93

Customer Order No.

COMPANY NAME

Range Oil Co

ADDRESS

125 N Market Suite 1120 Wichita Ks 67202

LEASE AND WELL NO.

Walker "S" #3

COUNTY

Elk

STATE

KS

Sec.

34 Twp

31, Rge.

105

Mail Invoice To

Same

No. Copies Requested

1

Mail Charts To

Same

Address

No. Copies Requested

5

Formation Test No.

WST#5

Interval Tested From

2266

ft. to

2310

ft. Total Depth

2310

ft.

Packer Depth

2261

ft. Size

6 7/8

in.

Packer Depth

—

ft. Size

—

in.

Packer Depth

2266

ft. Size

6 7/8

in.

Packer Depth

—

ft. Size

—

in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

2307

ft.

Recorder Number

10979

Cap.

4100

Bottom Recorder Depth (Outside)

2304

ft.

Recorder Number

3354

Cap.

4200

Below Straddle Recorder Depth

—

ft.

Recorder Number

—

Cap.

—

Drilling Contractor

Glenn R. J.

Drill Collar Length

330

I. D.

2.25

in.

Mud Type

G. M.

Viscosity

48

Weight Pipe Length

—

I. D.

—

in.

Weight

9.5

Water Loss

10.4

cc.

Drill Pipe Length

1916

I. D.

3.8

in.

Chlorides

9.00

P.P.M.

Test Tool Length

20-20

ft. Tool Size

5/8 x 20

in.

Jars: Make

—

Serial Number

—

Anchor Length

44

ft. Size

5/8 x 20

in.

Did Well Flow?

—

Reversed Out

—

Surface Choke Size

3/4

in. Bottom Choke Size

3/4

in.

Main Hole Size

7/8

in. Tool Joint Size

4 1/2 x 1 1/2 in.

Blow: Very Weak, blow during 8 min on (FFP) No blow on FFP flush tool Very weak

Recovered 2 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used

Remarks:

Time On Location

Stand by

A.M.

P.M.

Time Pick Up Tool

10:00

A.M.

P.M.

Time Off Location

99°F

A.M.

P.M.

Time Set Packer(s)

11:00

A.M.

P.M.

Time Started Off Bottom

1:00

A.M.

P.M.

Maximum Temperature

99°F

Initial Hydrostatic Pressure

(A) 1165

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)

30

P.S.I.

Final Closed In Period

Minutes 30

(G) 30

P.S.I.

Final Hydrostatic Pressure

(H) 1155

P.S.I.

10979

COMPANY TERMS

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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

T.M. J. LAUER

Signature of Customer or his authorized representative

Western Representative

Jeff A. Pelt

FIELD INVOICE

Open Hole Test	\$
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 9-14-55 Test Ticket No. 19801
 Recorder No. 10979 Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

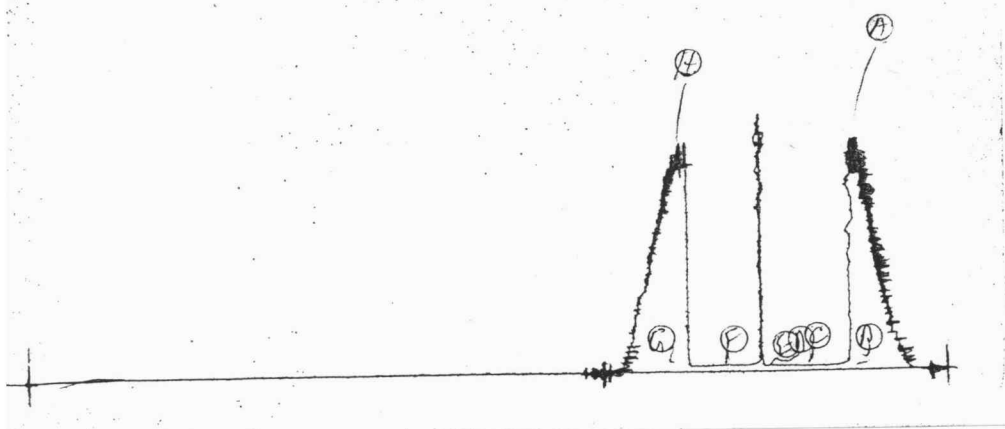
Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>1521</u>	P.S.I.	Open Tool	M
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins. Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins. Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins. 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 <u>1148</u>	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 0	<u>52</u>	0	<u>52</u>	0	<u>59</u>	0	<u>54</u>
P 2 5		3		5	<u>58 F-7</u>	3	
P 3 10		6		10	<u>41</u>	6	
P 4 15		9		15	<u>37</u>	9	
P 5 20		12		20	<u>36</u>	12	
P 6 25		15		25	<u>35</u>	15	
P 7 30		18		30	<u>36</u>	18	
P 8 35		21		35		21	
P 9 40		24		40		24	
P10 45		27		45		27	
P11 50		30	<u>52</u>	50		30	<u>56</u>
P12 55		33		55		33	
P13 60		36		60		36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

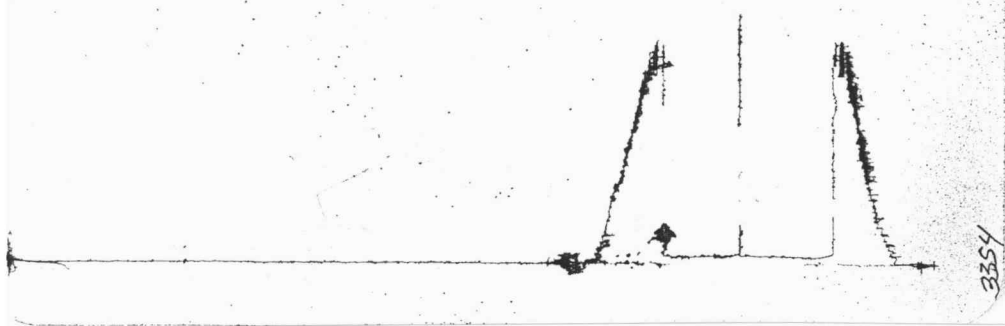
7K+19801

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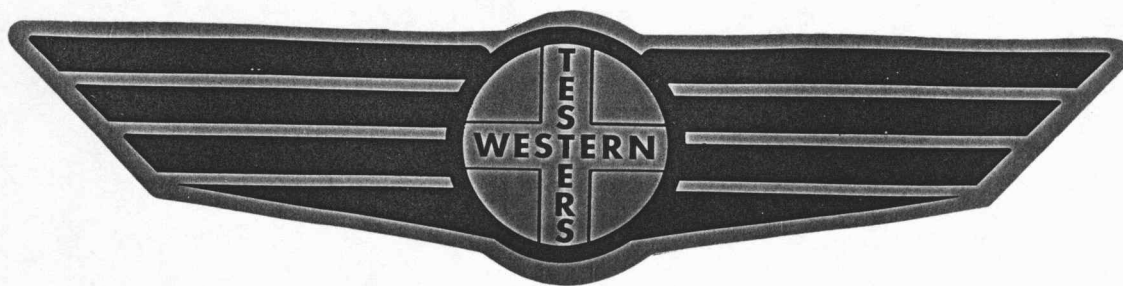


7K+19801

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 80 - 688 - 7021

DST REPORT

GENERAL INFORMATION

DATE : 9/14/93
CUSTOMER : RANGE OIL COMPANY INC.
WELL : #3 TEST: 5
ELEVATION: 1127 KB
SECTION : 34
RANGE : 10E COUNTY: ELK
GAUGE SN#: 10979 RANGE : 4100

TICKET : 19801
LEASE : WALKER G
GEOLOGIST: LAUER
FORMATION: ARBUCKLE
TOWNSHIP : 31S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2266.00 ft TO: 2310.00 ft TVD: 2310.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2307.0 ft 2304.0 ft
TEMPERATURE: 99.0

DRILL COLLAR LENGTH:	330.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	1916.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	44.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5FH
PACKER DEPTH:	2261.0 ft	SIZE:	6.630 in
PACKER DEPTH:	2266.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : GLAVE RIG 1
MUD TYPE : CHEMICAL
WEIGHT : 9.500 ppg
CHLORIDES : 900 ppm
JARS-MAKE :
DID WELL FLOW?: NO

VISCOSITY : 48.00 cp
WATER LOSS: 10.400 cc

SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD VERY WEAK BLOW - DIED IN 8
MINUTES. FINAL FLOW PERIOD NO BLOW - FLUSHED TOOL
VERY WEAK BLOW FOR 1 MINUTE.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
2.0	0.0	0.0	0.0	100.0	DRILLING MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.0098	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.0098	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1165.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	30.00	30.00
INITIAL SHUT-IN	30.00		30.00
FINAL FLOW	30.00	30.00	30.00
FINAL SHUT-IN	30.00		30.00

FINAL HYDROSTATIC PRESSURE: 1155.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1231.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	32.00	32.00
INITIAL SHUT-IN	30.00		32.00
FINAL FLOW	30.00	29.00	36.00
FINAL SHUT-IN	30.00		36.00

FINAL HYDROSTATIC PRESSURE: 1148.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 9/14/93
 CUSTOMER : RANGE OIL COMPANY INC.
 WELL : #3 TEST: 5
 ELEVATION: 1127 KB
 SECTION : 34
 RANGE : 10E COUNTY: ELK
 GAUGE SN#: 10979 RANGE : 4100

TICKET : 19801
 LEASE : WALKER G
 GEOLOGIST: LAUER
 FORMATION: ARBUCKLE
 TOWNSHIP : 31S
 STATE : KS
 CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	32.00	32.00
5.00	32.00	0.00
10.00	32.00	0.00
15.00	32.00	0.00
20.00	32.00	0.00
25.00	32.00	0.00
30.00	32.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	32.00	32.00	0.00
6.00	32.00	0.00	0.00
9.00	32.00	0.00	0.00
12.00	32.00	0.00	0.00
15.00	32.00	0.00	0.00
18.00	32.00	0.00	0.00
21.00	32.00	0.00	0.00
24.00	32.00	0.00	0.00
27.00	32.00	0.00	0.00
30.00	32.00	0.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	29.00	29.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
5.00	58.00	29.00
10.00	41.00	-17.00
15.00	37.00	-4.00
20.00	36.00	-1.00
25.00	36.00	0.00
30.00	36.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	36.00	36.00	0.00
6.00	36.00	0.00	0.00
9.00	36.00	0.00	0.00
12.00	36.00	0.00	0.00
15.00	36.00	0.00	0.00
18.00	36.00	0.00	0.00
21.00	36.00	0.00	0.00
24.00	36.00	0.00	0.00
27.00	36.00	0.00	0.00
30.00	36.00	0.00	0.00