



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 7870

OK

P. O. BOX 1599
WICHITA, KANSAS 67201

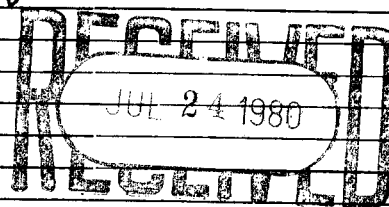
Elevation 1147 K6 Formation Meso Eff. Pay Ft.

District Augusta Date 7-22-81 Customer Order No.
COMPANY NAME BOCL George Oil Company, Inc.
ADDRESS 240 Page Court 220 West Douglas, Wichita, KS 67202
LEASE AND WELL NO Hockett #1 COUNTY Sumner STATE KS Sec. 30 Twp. 33S Rge. 2E
Mail Invoice To Same Co. Name Address No. Copies Requested 1
Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 3408 ft. to 3419 ft. Total Depth 3419 ft.
Packer Depth 3408 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3403 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 3413 ft. Recorder Number 2605 Cap. 4100
Bottom Recorder Depth (Outside) 3418 ft. Recorder Number 10979 Cap. 4150
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Co tools #3 Drill Collar Length 240 I. D. in.
Mud Type Chem Viscosity 43 Weight Pipe Length I. D. in.
Weight 9.8 Water Loss 16 cc Drill Pipe Length 3150 I. D. in.
Chlorides 8000 P.P.M. Test Tool Length 18 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number Anchor Length 1 1/4 ft. Size 5 1/2 in.
Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x 1 1/2 in.

Blow: Weak 3" decreasing diesel in 20 min. "partial flow" permit
surge as tool opened NO blow on final flow

Recovered 80 ft. of Drilling mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks: Slid tool 6'



Time On Location 5:45 A.M. Time Pick Up Tool 7:00 A.M.
Time Set Packer(s) 9:00 A.M. Time Started Off Bottom A.M.
Initial Hydrostatic Pressure (A) 1702 P.S.I. Maximum Temperature 117°
Initial Flow Period Minutes 30 (B) 42 P.S.I. to (C) 52 P.S.I.
Initial Closed In Period Minutes 30 (D) 1037 P.S.I.
Final Flow Period Minutes 30 (E) 52 P.S.I. to (F) 59 P.S.I.
Final Closed In Period Minutes 45 (G) 1068 P.S.I.
Final Hydrostatic Pressure (H) 1702 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 Stephen D. White
Signature of Customer or his authorized representative

Western Representative Kenny Kerkendall

FIELD INVOICE

Open Hole Test \$ 625.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage 45 \$ 33.75?
Fluid Sampler \$
Extra Charts \$
Insurance \$
TOTAL \$ 658.75

WESTERN TESTING CO., INC.

Pressure Data

Date 7-22 Recorder No. 2605 Capacity 4100 Location 3413 F
 Clock No. Elevation 1147 KB Well Temperature 117 °

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1724</u> P.S.I.	<u>9:00</u> A M	
B First Initial Flow Pressure	<u>59</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Min.
C First Final Flow Pressure	<u>59</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Min.
D Initial Closed-in Pressure	<u>1043</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Min.
E Second Initial Flow Pressure	<u>63</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Min.
F Second Final Flow Pressure	<u>63</u> P.S.I.	<u>45</u> Mins.	<u>48</u> Min.
G Final Closed-in Pressure	<u>1079</u> P.S.I.		
H Final Hydrostatic Mud	<u>1686</u> P.S.I.		

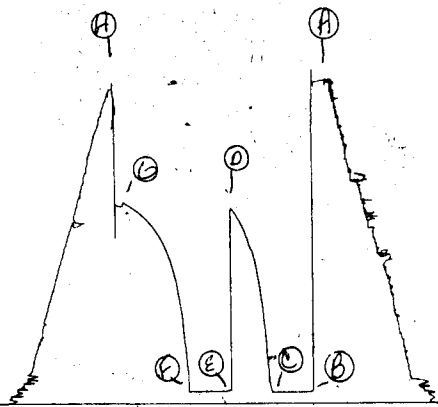
PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>16</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>59</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>63</u>	<u>0</u>	<u>63</u>
P 2 <u>5</u>		<u>3</u>	<u>224</u>	<u>5</u>		<u>3</u>	<u>330</u>
P 3 <u>10</u>		<u>6</u>	<u>434</u>	<u>10</u>		<u>6</u>	<u>510</u>
P 4 <u>15</u>		<u>9</u>	<u>606</u>	<u>15</u>		<u>9</u>	<u>622</u>
P 5 <u>20</u>		<u>12</u>	<u>728</u>	<u>20</u>		<u>12</u>	<u>715</u>
P 6 <u>25</u>		<u>15</u>	<u>815</u>	<u>25</u>		<u>15</u>	<u>780</u>
P 7 <u>30</u>	<u>59</u>	<u>18</u>	<u>869</u>	<u>30</u>	<u>63</u>	<u>18</u>	<u>836</u>
P 8 <u>35</u>		<u>21</u>	<u>927</u>	<u>35</u>		<u>21</u>	<u>881</u>
P 9 <u>40</u>		<u>24</u>	<u>969</u>	<u>40</u>		<u>24</u>	<u>913</u>
P10 <u>45</u>		<u>27</u>	<u>1008</u>	<u>45</u>		<u>27</u>	<u>948</u>
P11 <u>50</u>		<u>30</u>	<u>1043</u>	<u>50</u>		<u>30</u>	<u>971</u>
P12 <u>55</u>		<u>33</u>		<u>55</u>		<u>33</u>	<u>996</u>
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	<u>1019</u>
P14		<u>39</u>		<u>65</u>		<u>39</u>	<u>1035</u>
P15		<u>42</u>		<u>70</u>		<u>42</u>	<u>1048</u>
P16		<u>45</u>		<u>75</u>		<u>45</u>	<u>1062</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>1079</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	
P19		<u>54</u>		<u>90</u>		<u>54</u>	
P20		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

2605

TK# # 7870

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Company Range Oil Company, Inc. Lease & Well No. Hackett #1
 Elevation 1147 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 7870
 Date 7/22/81 Sec. 30 Twp. 33S Range 2E County Sumner State Kansas
 Test Approved by Stephen D Wade Western Representative Kenny Kirkendall
 Formation Test No. 1 Interval Tested from 3408 ft. to 3419 ft. Total Depth 3419 ft.
 Packer Depth 3408 ft. Size 6 3/4 Packer Depth - ft. Size - in.
 Packer Depth 3403 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3413 ft. Recorder Number 2605 Cap. 4100
 Bottom Recorder Depth (Outside) 3418 ft. Recorder Number 10979 Cap. 4150
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Range Oil Company Rig #3 Drill Collar Length 240 I. D. - in.
 Mud Type Chemical Viscosity 43 Weight Pipe Length - I. D. - in.
 Weight 9.8 Water Loss 16.0 cc. Drill Pipe Length 3150 I. D. - in.
 Chlorides 8000 P.P.M. Test Tool Length 18 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 11 ft. Size 5 1/2 in.
 Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Weak 3 inch decreasing died in 20 minutes initial flow period. Surge as tool opened
No blow on final flow period.

Recovered 80 ft. of drilling mud
 Recovered - ft. of -
 Recovered - ft. of -
 Recovered - ft. of -
 Recovered - ft. of -

Remarks: Slid tool 6 ft.

Time Set Packer(s) 9:00 ~~P.M.~~ ^{A.M.} Time Started Off Bottom - ~~P.M.~~ ^{A.M.} Maximum Temperature 117
 Initial Hydrostatic Pressure (A) 1724 P.S.I.
 Initial Flow Period Minutes 30 (B) 59 P.S.I. to (C) 59 P.S.I.
 Initial Closed In Period Minutes 30 (D) 1043 P.S.I.
 Final Flow Period Minutes 30 (E) 63 P.S.I. to (F) 63 P.S.I.
 Final Closed In Period Minutes 48 (G) 1079 P.S.I.
 Final Hydrostatic Pressure (H) 1686 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7/22/81
 Recorder No. 2605 Capacity 4100 Test Ticket No. 7870
 Clock No. - Elevation 1147 Kelly Bushing Location 3413 Ft.
 Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1724</u>	P.S.I.	<u>9:00A</u>	<u>M</u>
B First Initial Flow Pressure	<u>59</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u>
C First Final Flow Pressure	<u>59</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u>
D Initial Closed-in Pressure	<u>1043</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u>
E Second Initial Flow Pressure	<u>63</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u>
F Second Final Flow Pressure	<u>63</u>	P.S.I.	<u>45</u>	<u>Mins. 48</u>
G Final Closed-in Pressure	<u>1079</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1686</u>	P.S.I.		

PRESSURE BREAKDOWN

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

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

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

Final Shut-In
 Breakdown: 16 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>59</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>63</u>	<u>0</u>	<u>63</u>
P 2 <u>5</u>	<u>59</u>	<u>3</u>	<u>224</u>	<u>5</u>	<u>63</u>	<u>3</u>	<u>330</u>
P 3 <u>10</u>	<u>59</u>	<u>6</u>	<u>434</u>	<u>10</u>	<u>63</u>	<u>6</u>	<u>510</u>
P 4 <u>15</u>	<u>59</u>	<u>9</u>	<u>606</u>	<u>15</u>	<u>63</u>	<u>9</u>	<u>622</u>
P 5 <u>20</u>	<u>59</u>	<u>12</u>	<u>728</u>	<u>20</u>	<u>63</u>	<u>12</u>	<u>715</u>
P 6 <u>25</u>	<u>59</u>	<u>15</u>	<u>815</u>	<u>25</u>	<u>63</u>	<u>15</u>	<u>780</u>
P 7 <u>30</u>	<u>59</u>	<u>18</u>	<u>869</u>	<u>30</u>	<u>63</u>	<u>18</u>	<u>836</u>
P 8		<u>21</u>	<u>927</u>			<u>21</u>	<u>881</u>
P 9		<u>24</u>	<u>969</u>			<u>24</u>	<u>913</u>
P10		<u>27</u>	<u>1008</u>			<u>27</u>	<u>948</u>
P11		<u>30</u>	<u>1043</u>			<u>30</u>	<u>971</u>
P12						<u>33</u>	<u>996</u>
P13						<u>36</u>	<u>1019</u>
P14						<u>39</u>	<u>1035</u>
P15						<u>42</u>	<u>1048</u>
P16						<u>45</u>	<u>1062</u>
P17						<u>48</u>	<u>1079</u>
P18							
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P20							