



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 9095

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

Elevation \_\_\_\_\_ Formation Mississippi Eff. Pay \_\_\_\_\_ Ft.

District PgH Date 1-19-81 Customer Order No. \_\_\_\_\_  
COMPANY NAME Miller Oil Graves Drilling Company Inc.  
ADDRESS Wichita KS 910 Union Center - Wichita KS 67202  
LEASE AND WELL NO. Johnson #1 COUNTY Kingman STATE KS Sec. 9 Twp. 30s Rge. 7w  
Mail Invoice To Same No. Copies Requested Reg  
Co. Name \_\_\_\_\_ Address \_\_\_\_\_  
Mail Charts To Same No. Copies Requested Reg  
Address \_\_\_\_\_

Formation Test No. 1 Interval Tested from 4195 ft. to 4225 ft. Total Depth 4225 ft.  
Packer Depth 4190 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 4195 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 4198 ft. Recorder Number 5673 Cap. 5400  
Bottom Recorder Depth (Outside) 4222 ft. Recorder Number 1565 Cap. 4900  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_  
Drilling Contractor Graves Drlg Drill Collar Length 120 I. D. 2 1/2 in.  
Mud Type Chem Viscosity 41 Weight Pipe Length \_\_\_\_\_ I. D. \_\_\_\_\_ in.  
Weight 9.6 Water Loss 13.6 cc. Drill Pipe Length 4055 I. D. 3.8 in.  
Chlorides 9,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
Jars: Make \_\_\_\_\_ Serial Number \_\_\_\_\_ Anchor Length 30 ft. Size 5 1/2 OD 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 FH in.

Blow: Fair Building to strong - In Flow period Strong thru Flow Period

Recovered 70 ft. of Gas & Slightly Oil Cut Mud  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: \_\_\_\_\_

Time On Location 12:00 A.M. Time Pick Up Tool 12:30 A.M. Time Off Location 8:00 A.M.  
P.M. P.M. P.M.  
Time Set Packer(s) 2:25 P.M. Time Started Off Bottom 5:25 P.M. Maximum Temperature 120  
Initial Hydrostatic Pressure \_\_\_\_\_ (A) 2176 P.S.I.  
Initial Flow Period \_\_\_\_\_ Minutes 30 (B) 13 P.S.I. to (C) 27 P.S.I.  
Initial Closed In Period \_\_\_\_\_ Minutes 30 (D) 34 P.S.I.  
Final Flow Period \_\_\_\_\_ Minutes 60 (E) 40 P.S.I. to (F) 40 P.S.I.  
Final Closed In Period \_\_\_\_\_ Minutes 60 (G) 560 P.S.I.  
Final Hydrostatic Pressure \_\_\_\_\_ (H) 2095 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 Clyde R. Karber  
Signature of Customer or his authorized representative

Western Representative Jeff Piotrowski  
Thank you

FIELD INVOICE

Open Hole Test \$ 100.00  
Misrun \$ \_\_\_\_\_  
Straddle Test \$ \_\_\_\_\_  
Jars \$ \_\_\_\_\_  
Selective Zone \$ \_\_\_\_\_  
Safety Joint \$ \_\_\_\_\_  
Standby \$ \_\_\_\_\_  
Evaluation \$ \_\_\_\_\_  
Extra Packer \$ \_\_\_\_\_  
Circ. Sub. \$ \_\_\_\_\_  
Mileage 50 \$ 37.50  
Fluid Sampler \$ \_\_\_\_\_  
Extra Charts \$ \_\_\_\_\_  
Insurance \$ \_\_\_\_\_  
TOTAL \$ 737.50

WESTERN TESTING CO., INC.

Pressure Data

Date 1-19 Test Ticket No. 9095  
 Recorder No. 5673 Capacity 5400 Location 4198 Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 120 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2178</u> P.S.I.		<u>2:25 A</u>	
B First Initial Flow Pressure	<u>14</u> P.S.I.	First Flow Pressure	<u>30</u> Mins	<u>30</u> Mins.
C First Final Flow Pressure	<u>25</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>352</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>46</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins	<u>60</u> Mins.
F Second Final Flow Pressure	<u>44</u> P.S.I.			
G Final Closed-in Pressure	<u>587</u> P.S.I.			
H Final Hydrostatic Mud	<u>2100</u> P.S.I.			

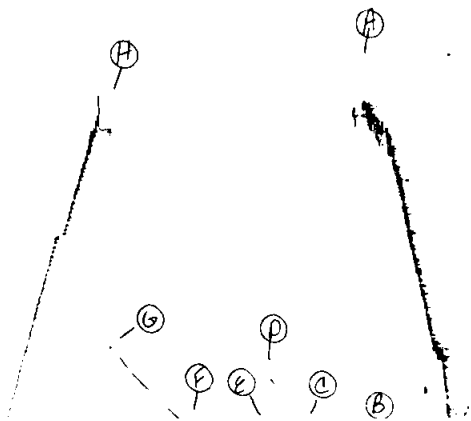
PRESSURE BREAKDOWN

<b>First Flow Pressure</b> Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Initial Shut-In</b> Breakdown: <u>9</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	<b>Second Flow Pressure</b> Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Final Shut-In</b> Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>14</u>	0	<u>25</u>	0	<u>46</u>	0	<u>44</u>
P 2	<u>15</u>	3	<u>46</u>	5	<u>41</u>	3	<u>52</u>
P 3	<u>15</u>	6	<u>77</u>	10	<u>41</u>	6	<u>63</u>
P 4	<u>19</u>	9	<u>104</u>	15	<u>44</u>	9	<u>79</u>
P 5	<u>24</u>	12	<u>137</u>	20	<u>46</u>	12	<u>104</u>
P 6	<u>25</u>	15	<u>175</u>	25		15	<u>134</u>
P 7	<u>25</u>	18	<u>213</u>	30		18	<u>156</u>
P 8		21	<u>260</u>	35		21	<u>186</u>
P 9		24	<u>306</u>	40	<u>46</u>	24	<u>216</u>
P10		27	<u>352</u>	45	<u>45</u>	27	<u>249</u>
P11		30		50	<u>45</u>	30	<u>276</u>
P12		33		55	<u>44</u>	33	<u>301</u>
P13		36		60	<u>44</u>	36	<u>331</u>
P14		39		65		39	<u>358</u>
P15		42		70		42	<u>391</u>
P16		45		75		45	<u>429</u>
P17		48		80		48	<u>462</u>
P18		51		85		51	<u>497</u>
P19		54		90		54	<u>536</u>
P19		57				57	<u>566</u>
P20		60				60	<u>587</u>

5673  
DST #1

NKT # 9095  
I



Company Graves Drilling Company, Inc. Lease & Well No. Johnson #1

Elevation ---- Formation Mississippi Effective Pay - Ft. Ticket No. 9095

Date 1/19/81 Sec. 8 Twp. 30S Range 7W County Kingman State Kansas

Test Approved by Clyde R. Kuhn Western Representative Jeff Piotrowski

Formation Test No. 1 Interval Tested from 4195 ft. to 4225 ft. Total Depth 4225 ft.

Packer Depth 4190 Size 6 3/4 Packer Depth - ft. Size - in.

Packer Depth 4195 Size 6 3/4 Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4198 ft. Recorder Number 5673 Cap 5400

Bottom Recorder Depth (Outside) 4222 ft. Recorder Number 1565 Cap 4900

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

Drilling Contractor Graves Drilling Company Drill Collar Length 120 I. D. 2.2 in.

Mud Type chemical Viscosity 41 Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 13.6 cc. Drill Pipe Length 4055 I. D. 3.8 in.

Chlorides 9,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 30 ft. Size 5 1/2 OD 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 FH in.

Blow: Fair building to strong initial flow period. Strong throughout final flow period.

Recovered 70 ft. of gas and slightly oil cut mud

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 2:25 A.M. Time Started Off Bottom 5:25 A.M. Maximum Temperature 120°

Initial Hydrostatic Pressure 2178 P.S.I. (A)

Initial Flow Period 30 Minutes (B) 14 P.S.I. to (C) 25 P.S.I.

Initial Closed In Period 27 Minutes (D) 352 P.S.I.

Final Flow Period 60 Minutes (E) 46 P.S.I. to (F) 44 P.S.I.

Final Closed In Period 60 Minutes (G) 587 P.S.I.

Final Hydrostatic Pressure 2100 P.S.I. (H)

**WESTERN TESTING CO., INC.**

**Pressure Data**

Date 1/19/81 Test Ticket No. 9095  
 Recorder No. 5673 Capacity 5400 Location 4198 Ft.  
 Clock No. --- Elevation --- Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2178</u> P.S.I.	Open Tool	<u>2:25A</u> M	
B First Initial Flow Pressure	<u>14</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>25</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>352</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>46</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>44</u> P.S.I.			
G Final Closed-in Pressure	<u>587</u> P.S.I.			
H Final Hydrostatic Mud	<u>2100</u> P.S.I.			

**PRESSURE BREAKDOWN**

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of <u>6</u> mins. and a final inc. of <u>0</u> Min.		of <u>9</u> mins. and a final inc. of <u>0</u> Min.		of <u>12</u> mins. and a final inc. of <u>0</u> Min.		of <u>20</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>14</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>46</u>	<u>0</u>	<u>44</u>	
P 2 <u>5</u>	<u>15</u>	<u>3</u>	<u>46</u>	<u>5</u>	<u>41</u>	<u>3</u>	<u>52</u>	
P 3 <u>10</u>	<u>15</u>	<u>6</u>	<u>77</u>	<u>10</u>	<u>41</u>	<u>6</u>	<u>63</u>	
P 4 <u>15</u>	<u>19</u>	<u>9</u>	<u>104</u>	<u>15</u>	<u>44</u>	<u>9</u>	<u>79</u>	
P 5 <u>20</u>	<u>24</u>	<u>12</u>	<u>137</u>	<u>20</u>	<u>46</u>	<u>12</u>	<u>104</u>	
P 6 <u>25</u>	<u>25</u>	<u>15</u>	<u>175</u>	<u>25</u>	<u>46</u>	<u>15</u>	<u>134</u>	
P 7 <u>30</u>	<u>25</u>	<u>18</u>	<u>213</u>	<u>30</u>	<u>46</u>	<u>18</u>	<u>156</u>	
P 8		<u>21</u>	<u>260</u>	<u>35</u>	<u>46</u>	<u>21</u>	<u>186</u>	
P 9		<u>24</u>	<u>306</u>	<u>40</u>	<u>46</u>	<u>24</u>	<u>216</u>	
P10		<u>27</u>	<u>352</u>	<u>45</u>	<u>45</u>	<u>27</u>	<u>249</u>	
P11				<u>50</u>	<u>45</u>	<u>30</u>	<u>276</u>	
P12				<u>55</u>	<u>44</u>	<u>33</u>	<u>301</u>	
P13				<u>60</u>	<u>44</u>	<u>36</u>	<u>331</u>	
P14						<u>39</u>	<u>358</u>	
P15						<u>42</u>	<u>391</u>	
P16						<u>45</u>	<u>429</u>	
P17						<u>48</u>	<u>462</u>	
P18						<u>51</u>	<u>497</u>	
P19						<u>54</u>	<u>536</u>	
P20						<u>57</u>	<u>566</u>	
						<u>60</u>	<u>587</u>	