



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 227

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation 1515 KB Formation Miss. Eff. Pay Ft.

District Augusta Date 5-23-78 Customer Order No.

COMPANY NAME Graves Etal

ADDRESS 910 Union Center Wichita, Kans.

LEASE AND WELL NO. Bauer #1 COUNTY Barber STATE Kans. Sec. 4 Twp. 33S Rge. 10W

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

Mail Charts To Same Co. Name Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 4512 ft. to 4530 ft. Total Depth 4530 ft.

Packer Depth 4507 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4512 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4523 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 4526 ft. Recorder Number 1558 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Co. Tools #1 Drill Collar Length 89 I. D. 2 1/2 in.

Mud Type Chem Viscosity 42 Weight Pipe Length 304 I. D. 2.7 in.

Weight 9.3 Water Loss 18.5 cc. Drill Pipe Length 4100 I. D. 3.8 in.

Chlorides 13,500 P.P.M. Test Tool Size 5 1/2 in. Tool Joint Size 4 1/2 7/8 in.

Jars: Make Serial Number Anchor Length 18 ft. Size 5 1/2 in.

Did Well Flow? yes Reversed Out no Surface Choke Size 7/8 in. Bottom Choke Size 7/8 in.

Main Hole Size 7 7/8 in.

Blow: Very strong Gas to surface 3 min. - Unauged 25,000 - 153,000 stabilized at 101,000
C.F.P.D. in 50 min on F.F.P. 65 min Total - Gas bottle # 639 Gas Flow Report # 814

Recovered 65 ft. of Gas cut Only. mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
MAY 25 1978
RECEIVED

Time Set Packer(s) 2:36 A.M. Time Started Off Bottom 5:23 P.M. Maximum Temperature 119

Initial Hydrostatic Pressure (A) 2242 2279 P.S.I.

Initial Flow Period 15 Minutes (B) 73 63 P.S.I. to (C) 62 50 P.S.I.

Initial Closed In Period 45 Minutes (D) 1514 1499 P.S.I.

Final Flow Period 70 Minutes (E) 62 61 P.S.I. to (F) 52 48 P.S.I.

Final Closed In Period 45 Minutes (G) 1336 1322 P.S.I.

Final Hydrostatic Pressure (H) 2168 2160 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 K W Johnson
Signature of Customer or his authorized representative

Western Representative Jim Wilson

on location 12:15 p.m.
job Complete 7:30 p.m.

FIELD INVOICE

Open Hole Test \$ 440.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Extra Charts \$

TOTAL \$ 440.00

Phone 316 262-5861
316 838-0601



P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

N^o 814

Date 5-23-78 Ticket 227 Company Graves, Etal
Well Name and No. Bauer #1 Dst No. 1 Interval Tested 4512-4530
County Barber State Kans. Sec. 4 Twp. 335 Rg. 10 W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
Foot opens 2:38 p.m. PRE FLOW Flow to surface 3 min.						
2:43	5 min	7 PSI	$\frac{1}{4}$ inch	orifice		25,000 C.F.P.D.
2:48	10	19				45,500
2:58	15	26				56,300
Foot shut down 4:5 min. <u>Flow to surface in 3 min.</u>						

SECOND FLOW						
3:38	0 min	11 PSI	$\frac{1}{4}$ inch	orifice		32,400 C.F.P.D.
3:48	10	31	"			63,200
3:58	20	16	$\frac{1}{2}$ inch	orifice		153,000
4:08	30	10				116,000
4:18	40	9				112,000
4:28	50	8				101,000
4:38	60	8				101,000
4:48	70	8				101,000
Foot shut down 4:5 min. Flow to surface 3 min. Flow to surface 3 min.						

GAS BOTTLE

Serial No. 639 Date Bottle Filled 5-23-78 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% per month, equal to 12% 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 Graves Etal

Authorized by K.W. Johnson

WESTERN TESTING CO., INC.

Pressure Data

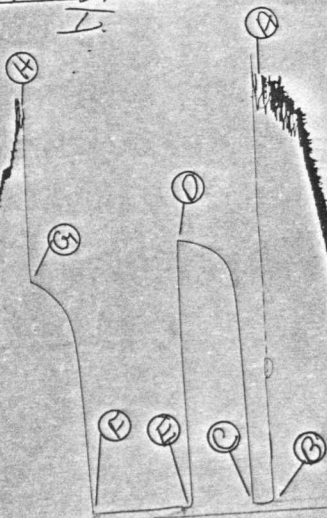
Date 5-23-78 Test Ticket No. 227
 Recorder No. 1589 Capacity 4200 Location 4523 Ft.
 Clock No. — Elevation 1515 K.B. Well Temperature 119 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2270</u>	P.S.I.	<u>2:30 P</u>	<u>M</u>
B First Initial Flow Pressure	<u>65</u>	P.S.I.	<u>15</u>	<u>15</u> Mins.
C First Final Flow Pressure	<u>50</u>	P.S.I.	<u>45</u>	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>1499</u>	P.S.I.	<u>70</u>	<u>70</u> Mins.
E Second Initial Flow Pressure	<u>61</u>	P.S.I.	<u>45</u>	<u>36</u> Mins.
F Second Final Flow Pressure	<u>48</u>	P.S.I.		
G Final Closed-in Pressure	<u>1322</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2160</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>12</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 <u>0</u>	<u>65</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>61</u>	<u>0</u>	<u>48</u>
P 2 <u>5</u>	<u>44</u>	<u>3</u>	<u>881</u>	<u>5</u>	<u>48</u>	<u>3</u>	<u>733</u>
P 3 <u>10</u>	<u>44</u>	<u>6</u>	<u>1276</u>	<u>10</u>	<u>54</u>	<u>6</u>	<u>969</u>
P 4 <u>15</u>	<u>50</u>	<u>9</u>	<u>1353</u>	<u>15</u>	<u>54</u>	<u>9</u>	<u>1084</u>
P 5 <u>20</u>		<u>12</u>	<u>1389</u>	<u>20</u>	<u>52</u>	<u>12</u>	<u>1146</u>
P 6 <u>25</u>		<u>15</u>	<u>1412</u>	<u>25</u>	<u>49</u>	<u>15</u>	<u>1188</u>
P 7 <u>30</u>		<u>18</u>	<u>1431</u>	<u>30</u>	<u>48</u>	<u>18</u>	<u>1217</u>
P 8 <u>35</u>		<u>21</u>	<u>1445</u>	<u>35</u>		<u>21</u>	<u>1242</u>
P 9 <u>40</u>		<u>24</u>	<u>1457</u>	<u>40</u>		<u>24</u>	<u>1263</u>
P10 <u>45</u>		<u>27</u>	<u>1466</u>	<u>45</u>		<u>27</u>	<u>1284</u>
P11 <u>50</u>		<u>30</u>	<u>1477</u>	<u>50</u>		<u>30</u>	<u>1301</u>
P12 <u>55</u>		<u>33</u>	<u>1483</u>	<u>55</u>		<u>33</u>	<u>1316</u>
P13 <u>60</u>		<u>36</u>	<u>1490</u>	<u>60</u>		<u>36</u>	<u>1322</u>
P14		<u>39</u>	<u>1494</u>	<u>65</u>		<u>39</u>	
P15		<u>42</u>	<u>1499</u>	<u>70</u>	<u>48</u>	<u>42</u>	
P16		<u>45</u>		<u>75</u>		<u>45</u>	
P17		<u>48</u>		<u>80</u>		<u>48</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>	

TKT # 227
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P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Company <u>Graves Etal</u>		Lease & Well No. <u>Bauer #1</u>	
Elevation <u>1515 Kelly Bushing</u>	Formation <u>Mississippi</u>	Effective Pay <u>--</u>	Ft. Ticket No. <u>227</u>
Date <u>5/23/78</u>	Sec. <u>4</u> Twp <u>33S</u> Range <u>10W</u>	County <u>Barber</u>	State <u>Kansas</u>
Test Approved by <u>K. W. Johnson</u>		Western Representative <u>Tim Wilson</u>	
Formation Test No. <u>1</u>	Interval Tested from <u>4512</u> ft. to <u>4530</u> ft.	Total Depth <u>4530'</u>	ft.
Packer Depth <u>4507</u> ft.	Size <u>6 3/4</u> in.	Packer Depth <u>-----</u> ft.	Size <u>---</u> in.
Packer Depth <u>4512</u> ft.	Size <u>6 3/4</u> in.	Packer Depth <u>-----</u> ft.	Size <u>---</u> in.
Depth of Selective Zone Set <u>-----</u>			
Top Recorder Depth (Inside) <u>4523</u> ft.	Recorder Number <u>1559</u>	Cap. <u>4200</u>	
Bottom Recorder Depth (Outside) <u>4526</u> ft.	Recorder Number <u>1558</u>	Cap. <u>4200</u>	
Below Straddle Recorder Depth <u>--</u> ft.	Recorder Number <u>--</u>	Cap. <u>--</u>	
Drilling Contractor <u>Company Tools #1</u>	Drill Collar Length <u>89</u>	I. D. <u>2 1/4</u> in.	
Mud Type <u>chemical</u> Viscosity <u>47</u>	Weight Pipe Length <u>304</u>	I. D. <u>2.7</u> in.	
Weight <u>9.3</u> Water Loss <u>18.4</u> cc.	Drill Pipe Length <u>4100</u>	I. D. <u>3.8</u> in.	
Chlorides <u>13,500</u> P.P.M.	Test Tool Size <u>5 1/2</u> in.	Tool Joint Size <u>4 1/2 FH</u> in.	
Jars: Make <u>--</u> Serial Number <u>--</u>	Anchor Length <u>18</u> ft.	Size <u>5 1/2</u> in.	
Did Well Flow? <u>Yes</u> Reversed Out <u>No</u>	Surface Choke Size <u>3/4</u> in.	Bottom Choke Size <u>3/4</u> in.	
Main Hole Size <u>7 7/8</u> in.			
Blow: <u>Very strong. Gas to surface three minutes. Gauged 25,000 - 153,000 stabilized at 101,000</u>			
<u>CFPD in 50 minutes on final flow period. 65 minutes total. Gas bottle #639. Gas flow report</u>			
Recovered <u>65</u> ft. of <u>gas cut drilling mud</u>	#814		
Recovered <u> </u> ft. of <u> </u>			
Recovered <u> </u> ft. of <u> </u>			
Recovered <u> </u> ft. of <u> </u>			
Recovered <u> </u> ft. of <u> </u>			
Remarks: <u> </u>			
<u> </u>			
<u> </u>			
Time Set Packer(s) <u>2:36</u> <u>AM</u> P.M.	Time Started Off Bottom <u>5:23</u> <u>AM</u> P.M.	Maximum Temperature <u>119</u>	
Initial Hydrostatic Pressure <u>2270</u> P.S.I.	(A) <u>65</u> P.S.I. to (C) <u>50</u> P.S.I.		
Initial Flow Period <u>15</u> Minutes	(B) <u>1499</u> P.S.I.		
Initial Closed In Period <u>45</u> Minutes	(D) <u>61</u> P.S.I. to (F) <u>48</u> P.S.I.		
Final Flow Period <u>70</u> Minutes	(E) <u>1322</u> P.S.I.		
Final Closed In Period <u>45</u> Minutes	(G) <u>2160</u> P.S.I.		
Final Hydrostatic Pressure <u> </u> P.S.I.	(H) <u> </u> P.S.I.		

WESTERN TESTING CO., INC.

Pressure Data

Date 5/23/78 Test Ticket No. 227
 Recorder No. 1559 Capacity 4200 Location 4523
 Clock No. -- Elevation 1515 Kelly Bushing Well Temperature 119

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2270 P.S.I.	Open Tool	2:30P M	
B First Initial Flow Pressure	65 P.S.I.	First Flow Pressure	15 Mins.	15 Mi
C First Final Flow Pressure	50 P.S.I.	Initial Closed-in Pressure	45 Mins.	42 Mi
D Initial Closed-in Pressure	1499 P.S.I.	Second Flow Pressure	70 Mins.	70 Mi
E Second Initial Flow Pressure	61 P.S.I.	Final Closed-in Pressure	45 Mins.	36 Mi
F Second Final Flow Pressure	48 P.S.I.			
G Final Closed-in Pressure	1322 P.S.I.			
H Final Hydrostatic Mud	2160 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>3</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>14</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>14</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>12</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>65</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>61</u>	<u>0</u>	<u>48</u>
P 2 <u>5</u>	<u>46</u>	<u>3</u>	<u>881</u>	<u>5</u>	<u>48</u>	<u>3</u>	<u>733</u>
P 3 <u>10</u>	<u>46</u>	<u>6</u>	<u>1276</u>	<u>10</u>	<u>54</u>	<u>6</u>	<u>969</u>
P 4 <u>15</u>	<u>50</u>	<u>9</u>	<u>1353</u>	<u>15</u>	<u>54</u>	<u>9</u>	<u>1084</u>
P 5		<u>12</u>	<u>1389</u>	<u>20</u>	<u>52</u>	<u>12</u>	<u>1146</u>
P 6		<u>15</u>	<u>1412</u>	<u>25</u>	<u>49</u>	<u>15</u>	<u>1188</u>
P 7		<u>18</u>	<u>1431</u>	<u>30</u>	<u>48</u>	<u>18</u>	<u>1217</u>
P 8		<u>21</u>	<u>1445</u>	<u>35</u>	<u>48</u>	<u>21</u>	<u>1242</u>
P 9		<u>24</u>	<u>1457</u>	<u>40</u>	<u>48</u>	<u>24</u>	<u>1263</u>
P10		<u>27</u>	<u>1466</u>	<u>45</u>	<u>48</u>	<u>27</u>	<u>1284</u>
P11		<u>30</u>	<u>1477</u>	<u>50</u>	<u>48</u>	<u>30</u>	<u>1301</u>
P12		<u>33</u>	<u>1483</u>	<u>55</u>	<u>48</u>	<u>33</u>	<u>1316</u>
P13		<u>36</u>	<u>1490</u>	<u>60</u>	<u>48</u>	<u>36</u>	<u>1322</u>
P14		<u>39</u>	<u>1494</u>	<u>65</u>	<u>48</u>		
P15		<u>42</u>	<u>1499</u>	<u>70</u>	<u>48</u>		
P16							
P17							
P18							
P19							
P20							



Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

GAS FLOW REPORT

Date 5-23-78 Ticket 227 Company Graves Etal
Well Name and No. Bauer #1 Dst No. 1 Interval Tested 4512' - 4530'
County Barber State Kansas Sec. 4 Twp. 33S Rg. 10W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
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PRE FLOW

2:43	5 min.	7 PSIG	1/4" orifice			25,000 C.F.P.D.
2:48	10 min.	19 PSIG	1/4" orifice			45,500 C.F.P.D.
2:58	15 min.	26 PSIG	1/4" orifice			56,300 C.F.P.D.
Gas to surface in 3 minutes.						

SECOND FLOW

3:38	0 min.	11 PSIG	1/4" orifice			32,400 C.F.P.D.
3:48	10 min.	31 PSIG	1/4" orifice			63,200 C.F.P.D.
3:58	20 min.	16 PSIG	1/2" orifice			153,000 C.F.P.D.
4:08	30 min.	10 PSIG	1/2" orifice			116,000 C.F.P.D.
4:18	40 min.	9 PSIG	1/2" orifice			112,000 C.F.P.D.
4:28	50 min.	8 PSIG	1/2" orifice			101,000 C.F.P.D.
4:38	60 min.	8 PSIG	1/2" orifice			101,000 C.F.P.D.
4:48	70 min.	8 PSIG	1/2" orifice			101,000 C.F.P.D.

GAS BOTTLE

Serial No. 639 Date Bottle Filled 5-23-78 Date to be Invoiced 5-23-78

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.

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COMPANY'S NAME Graves Etal

Authorized by K. W. Johnson