



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 8527

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

Elevation 1490 RB Formation Cherokee St Eff. Pay Ft.

District Pratt Date 10-25 Customer Order No.

COMPANY NAME K.B.W Oil + Gas

ADDRESS 3632 N.W. 5th St Suite 205 OK City OK

LEASE AND WELL NO Sterling #1 COUNTY Barber STATE KS Sec 26 Twp 34s Rge 13w

Mail Invoice To Same No. Copies Requested Reg

Co. Name Same Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No 1 Interval Tested from 4796 ft. to 4840 ft. Total Depth 4840 ft.

Packer Depth 4796 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4796 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4799 ft. Recorder Number 5673 Cap. 5400

Bottom Recorder Depth (Outside) 4837 ft. Recorder Number 1565 Cap. 4900

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Sweetman #1 Drill Collar Length 240 I. D. 2.2 in.

Mud Type starch Viscosity 46 Weight Pipe Length I. D. in.

Weight 9.0 Water Loss 10.2 cc. Drill Pipe Length 4527 I. D. 3.8 in.

Chlorides P.P.M. Test Tool Length 29 ft. Tool Size 5/8 OD in.

Jars: Make WTC Serial Number 405 Anchor Length 44 ft. Size 5/8 OD in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: Fair Building to Strong - Strong throughout flow period

Recovered 65 ft. of Mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time On Location 5:00 P.M. Time Pick Up Tool 6:00 P.M. Time Off Location 3:00 A.M.

Time Set Packer(s) 7:37 P.M. Time Started Off Bottom 11:22 P.M. Maximum Temperature 128

Initial Hydrostatic Pressure (A) 2502 P.S.I.

Initial Flow Period Minutes 30 (B) 40 P.S.I. to (C) 40 P.S.I.

Initial Closed In Period Minutes 45 (D) 218 P.S.I.

Final Flow Period Minutes 60 (E) 54 P.S.I. to (F) 54 P.S.I.

Final Closed In Period Minutes 90 (G) 368 P.S.I.

Final Hydrostatic Pressure (H) 2421 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.

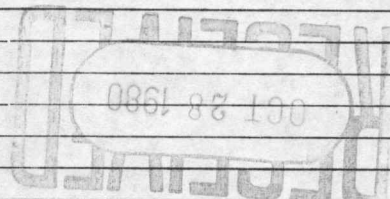
Test Approved By Gordon W. Ken Signature of Customer or his authorized representative

Western Representative Jeff Piotrowski

Thank you

FIELD INVOICE

Open Hole Test	\$ 600.00
Misrun	\$
Straddle Test	\$
Jars	\$ 3.00
Selective Zone	\$
Safety Joint	\$ 50.00
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage 60	\$ 45.00
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$
TOTAL	\$ 995.00



WESTERN TESTING CO., INC.

Pressure Data

Date 10-25-80 Test Ticket No. 8527
 Recorder No. 5673 Capacity 5400 Location 4799 Ft.
 Clock No. — Elevation 1490 KB Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2487</u>	P.S.I.	<u>7:37</u>	M
B First Initial Flow Pressure	<u>35</u>	P.S.I.	<u>30</u>	Mins. <u>30</u> Mins.
C First Final Flow Pressure	<u>38</u>	P.S.I.	<u>45</u>	Mins. <u>42</u> Mins.
D Initial Closed-in Pressure	<u>220</u>	P.S.I.	<u>60</u>	Mins. <u>60</u> Mins.
E Second Initial Flow Pressure	<u>41</u>	P.S.I.	<u>90</u>	Mins. <u>84</u> Mins.
F Second Final Flow Pressure	<u>55</u>	P.S.I.		
G Final Closed-in Pressure	<u>362</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2433</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: 14 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 28 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>0</u>	<u>38</u>	<u>0</u>	<u>41</u>	<u>0</u>	<u>55</u>
P 2	<u>5</u>	<u>3</u>	<u>55</u>	<u>5</u>	<u>41</u>	<u>3</u>	<u>74</u>
P 3	<u>10</u>	<u>6</u>	<u>66</u>	<u>10</u>	<u>41</u>	<u>6</u>	<u>85</u>
P 4	<u>15</u>	<u>9</u>	<u>78</u>	<u>15</u>	<u>42</u>	<u>9</u>	<u>96</u>
P 5	<u>20</u>	<u>12</u>	<u>92</u>	<u>20</u>	<u>44</u>	<u>12</u>	<u>107</u>
P 6	<u>25</u>	<u>15</u>	<u>107</u>	<u>25</u>	<u>46</u>	<u>15</u>	<u>117</u>
P 7	<u>30</u>	<u>18</u>	<u>115</u>	<u>30</u>	<u>48</u>	<u>18</u>	<u>126</u>
P 8	<u>35</u>	<u>21</u>	<u>137</u>	<u>35</u>	<u>50</u>	<u>21</u>	<u>137</u>
P 9	<u>40</u>	<u>24</u>	<u>150</u>	<u>40</u>	<u>51</u>	<u>24</u>	<u>148</u>
P10	<u>45</u>	<u>27</u>	<u>161</u>	<u>45</u>	<u>52</u>	<u>27</u>	<u>160</u>
P11	<u>50</u>	<u>30</u>	<u>175</u>	<u>50</u>	<u>53</u>	<u>30</u>	<u>172</u>
P12	<u>55</u>	<u>33</u>	<u>188</u>	<u>55</u>	<u>54</u>	<u>33</u>	<u>183</u>
P13	<u>60</u>	<u>36</u>	<u>201</u>	<u>60</u>	<u>55</u>	<u>36</u>	<u>194</u>
P14		<u>39</u>	<u>212</u>	<u>65</u>		<u>39</u>	<u>203</u>
P15		<u>42</u>	<u>220</u>	<u>70</u>		<u>42</u>	<u>213</u>
P16		<u>45</u>		<u>75</u>		<u>45</u>	<u>224</u>
P17		<u>48</u>		<u>80</u>		<u>48</u>	<u>232</u>
P18		<u>51</u>		<u>85</u>		<u>51</u>	<u>246</u>
P19		<u>54</u>		<u>90</u>		<u>54</u>	<u>257</u>
P20		<u>57</u>				<u>57</u>	<u>268</u>
		<u>60</u>				<u>60</u>	<u>279</u>

Cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 8527
 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 _____	_____	63 _____	_____	_____	_____	63 _____	<u>289</u>
P 2 _____	_____	66 _____	_____	_____	_____	66 _____	<u>300</u>
P 3 _____	_____	69 _____	_____	_____	_____	69 _____	<u>309</u>
P 4 _____	_____	72 _____	_____	_____	_____	72 _____	<u>320</u>
P 5 _____	_____	75 _____	_____	_____	_____	75 _____	<u>333</u>
P 6 _____	_____	78 _____	_____	_____	_____	78 _____	<u>343</u>
P 7 _____	_____	81 _____	_____	_____	_____	81 _____	<u>355</u>
P 8 _____	_____	84 _____	_____	_____	_____	84 _____	<u>362</u>
P 9 _____	_____	87 _____	_____	_____	_____	87 _____	_____
P10 _____	_____	90 _____	_____	_____	_____	90 _____	_____
P11 _____	_____	93 _____	_____	_____	_____	93 _____	_____
P12 _____	_____	96 _____	_____	_____	_____	96 _____	_____
P13 _____	_____	99 _____	_____	_____	_____	99 _____	_____
P14 _____	_____	102 _____	_____	_____	_____	102 _____	_____
P15 _____	_____	105 _____	_____	_____	_____	105 _____	_____
P16 _____	_____	108 _____	_____	_____	_____	108 _____	_____
P17 _____	_____	111 _____	_____	_____	_____	111 _____	_____
P18 _____	_____	114 _____	_____	_____	_____	114 _____	_____
P19 _____	_____	117 _____	_____	_____	_____	117 _____	_____
P20 _____	_____	120 _____	_____	_____	_____	120 _____	_____

Company K.W.B. Oil & Gas Company Lease & Well No. Sterling #1
 Elevation 1490 Kelly Bushing Formation Cherokee Sand Effective Pay - Ft. Ticket No. 8527
 Date 10/25/80 Sec. 26 Twp. 34S Range 13W County Barber State Kansas
 Test Approved by Gordon W. Keen Western Representative Jeff Piotrowski

Formation Test No. 1 Interval Tested from 4796 ft. to 4840 ft. Total Depth 4840 ft.
 Packer Depth 4991 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4796 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4799 ft. Recorder Number 5673 Cap. 5400
 Bottom Recorder Depth (Outside) 4837 ft. Recorder Number 1565 Cap. 4900
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Sweetman Drilling Rig #1 Drill Collar Length 240 I. D. 2.2 in.
 Mud Type starch Viscosity 46 Weight Pipe Length - I. D. - in.
 Weight 9.0 Water Loss 10.2 cc. Drill Pipe Length 4527 I. D. 3.8 in.
 Chlorides - P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
 Jars: Make WTC Serial Number 405 Anchor Length 44 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 blow building to strong initial flow period. Strong throughout final flow period.

Recovered 65 ft. of mud
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks: _____

Time Set Packer(s) 7:37 ~~A.M.~~ P.M. Time Started Off Bottom 11:22 ~~A.M.~~ P.M. Maximum Temperature 128°
 Initial Hydrostatic Pressure (A) 2487 P.S.I.
 Initial Flow Period Minutes 30 (B) 35 P.S.I. to (C) 38 P.S.I.
 Initial Closed In Period Minutes 42 (D) 220 P.S.I.
 Final Flow Period Minutes 60 (E) 41 P.S.I. to (F) 55 P.S.I.
 Final Closed In Period Minutes 84 (G) 362 P.S.I.
 Final Hydrostatic Pressure (H) 2433 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/25/80 Test Ticket No. 8527
 Recorder No. 5673 Capacity 5400 Location 4799 Ft.
 Clock No. --- Elevation 1490 Kelly Bushing Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2487</u>	P.S.I.	<u>7:37</u>	<u>M</u>
B First Initial Flow Pressure	<u>35</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u> Mins.
C First Final Flow Pressure	<u>38</u>	P.S.I.	<u>45</u>	<u>Mins. 42</u> Mins.
D Initial Closed-in Pressure	<u>220</u>	P.S.I.	<u>60</u>	<u>Mins. 60</u> Mins.
E Second Initial Flow Pressure	<u>41</u>	P.S.I.	<u>90</u>	<u>Mins. 84</u> Mins.
F Second Final Flow Pressure	<u>55</u>	P.S.I.		
G Final Closed-in Pressure	<u>362</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2433</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>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>35</u>	<u>0</u>	<u>38</u>	<u>0</u>	<u>41</u>	<u>0</u>	<u>55</u>	
P 2 <u>5</u>	<u>35</u>	<u>3</u>	<u>55</u>	<u>5</u>	<u>41</u>	<u>3</u>	<u>74</u>	
P 3 <u>10</u>	<u>36</u>	<u>6</u>	<u>66</u>	<u>10</u>	<u>41</u>	<u>6</u>	<u>85</u>	
P 4 <u>15</u>	<u>36</u>	<u>9</u>	<u>78</u>	<u>15</u>	<u>41</u>	<u>9</u>	<u>96</u>	
P 5 <u>20</u>	<u>37</u>	<u>12</u>	<u>92</u>	<u>20</u>	<u>44</u>	<u>12</u>	<u>107</u>	
P 6 <u>25</u>	<u>38</u>	<u>15</u>	<u>107</u>	<u>25</u>	<u>46</u>	<u>15</u>	<u>117</u>	
P 7 <u>30</u>	<u>38</u>	<u>18</u>	<u>115</u>	<u>30</u>	<u>48</u>	<u>18</u>	<u>126</u>	
P 8 _____		<u>21</u>	<u>137</u>	<u>35</u>	<u>50</u>	<u>21</u>	<u>137</u>	
P 9 _____		<u>24</u>	<u>150</u>	<u>40</u>	<u>51</u>	<u>24</u>	<u>148</u>	
P10 _____		<u>27</u>	<u>161</u>	<u>45</u>	<u>52</u>	<u>27</u>	<u>160</u>	
P11 _____		<u>30</u>	<u>175</u>	<u>50</u>	<u>53</u>	<u>30</u>	<u>172</u>	
P12 _____		<u>33</u>	<u>188</u>	<u>55</u>	<u>54</u>	<u>33</u>	<u>183</u>	
P13 _____		<u>36</u>	<u>201</u>	<u>60</u>	<u>55</u>	<u>36</u>	<u>194</u>	
P14 _____		<u>39</u>	<u>212</u>			<u>39</u>	<u>203</u>	
P15 _____		<u>42</u>	<u>220</u>			<u>42</u>	<u>213</u>	
P16 _____		<u>45</u>				<u>45</u>	<u>224</u>	
P17 _____						<u>48</u>	<u>232</u>	
P18 _____						<u>51</u>	<u>246</u>	
P19 _____						<u>54</u>	<u>257</u>	
P20 _____						<u>57</u>	<u>268</u>	
						<u>60</u>	<u>279</u>	

WESTERN TESTING CO., INC.

Pressure Data

Date 10/25/80 Test Ticket No. 8527
 Recorder No. 5673 Capacity 5400 Location 4799 Ft.
 Clock No. --- Elevation 1490 Kelly Bushing Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2487</u>	P.S.I.	<u>7:37</u>	<u>M</u>
B First Initial Flow Pressure	<u>35</u>	P.S.I.	<u>30</u>	<u>Mins.</u>
C First Final Flow Pressure	<u>38</u>	P.S.I.	<u>45</u>	<u>Mins.</u>
D Initial Closed-in Pressure	<u>220</u>	P.S.I.	<u>60</u>	<u>Mins.</u>
E Second Initial Flow Pressure	<u>41</u>	P.S.I.	<u>90</u>	<u>Mins.</u>
F Second Final Flow Pressure	<u>55</u>	P.S.I.		
G Final Closed-in Pressure	<u>362</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2433</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: 14 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

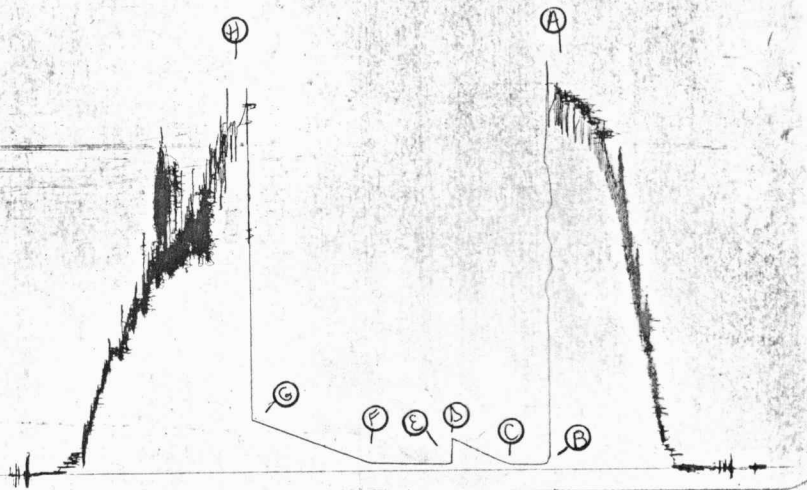
Second Flow Pressure
 Breakdown: 12 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 28 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>63</u>	<u>289</u>
P 2						<u>66</u>	<u>300</u>
P 3						<u>69</u>	<u>309</u>
P 4						<u>72</u>	<u>320</u>
P 5						<u>75</u>	<u>333</u>
P 6						<u>78</u>	<u>343</u>
P 7						<u>81</u>	<u>355</u>
P 8						<u>84</u>	<u>362</u>
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

5673
DST #1

TRT #8527
I





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 8528

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

Elevation 1490 KB Formation Mississippi Eff. Pay Ft.

District Pratt Date 10-26-80 Customer Order No.

COMPANY NAME K.B.W. Oil & Gas

ADDRESS 3632 N.W. 51st St. Suite 205 OK. City, OK

LEASE AND WELL NO. Sterling #1 COUNTY Barber STATE KS Sec 26 Twp 34s Rge 13w

Mail Invoice To Same No. Copies Requested Reg

Co. Name Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 2 Interval Tested from 4904 ft. to 4925 ft. Total Depth 4925 ft.

Packer Depth 4899 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4904 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4909 ft. Recorder Number 5673 Cap. 5400

Bottom Recorder Depth (Outside) 4921 ft. Recorder Number 1565 Cap. 4900

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Sweetman #1 Drill Collar Length 240 I. D. 2.2 in.

Mud Type starch Viscosity 46 Weight Pipe Length I. D. in.

Weight 9.0 Water Loss 10.2 cc. Drill Pipe Length 4635 I. D. 3.8 in.

Chlorides P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 405 Anchor Length 21 3/4 ft. Size 5 1/2 OD in. 3/4 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 2 1/4 in. Bottom Choke Size 3/4 in.

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

Blow: Strong through both flow periods - GTS 30 min. into final flow - FSTM. To small to measure

Recovered 65 ft. of Gas Cut Mud

Recovered 120 ft. of Watery Mud

Recovered 180 ft. of Water

Recovered ft. of

Recovered ft. of

Remarks:

Time On Location 1:30 P.M. Time Pick Up Tool 2:30 P.M. Time Off Location 11:30 P.M.

Time Set Packer(s) 4:26 P.M. Time Started Off Bottom 8:11 P.M. Maximum Temperature 128

Initial Hydrostatic Pressure (A) 2529 P.S.I.

Initial Flow Period Minutes 30 (B) 68 P.S.I. to (C) 109 P.S.I.

Initial Closed In Period Minutes 45 (D) 1037 P.S.I.

Final Flow Period Minutes 60 (E) 122 P.S.I. to (F) 177 P.S.I.

Final Closed In Period Minutes 90 (G) 1065 P.S.I.

Final Hydrostatic Pressure (H) 2489 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.

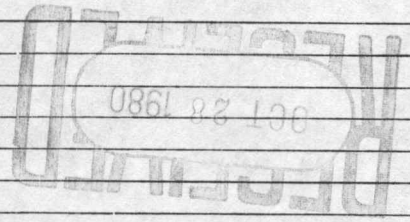
Test Approved By Gordon W. Keen Signature of Customer or his authorized representative

Western Representative Jeff Piotrowski

Thank you

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test \$600.00, Mileage 60 \$45.00, TOTAL \$995.00



WESTERN TESTING CO., INC.
Pressure Data

Date 10-26-80 Test Ticket No. 8528
 Recorder No. 5673 Capacity 5400 Location 4909 Ft.
 Clock No. _____ Elevation 1490 KB Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2559</u> P.S.I.	Open Tool	<u>4:26 P</u> M	
B First Initial Flow Pressure	<u>65</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>115</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>1043</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>120</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>87</u> Mins.
F Second Final Flow Pressure	<u>171</u> P.S.I.			
G Final Closed-in Pressure	<u>1073</u> P.S.I.			
H Final Hydrostatic Mud	<u>2502</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>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>65</u>	0	<u>115</u>	0	<u>120</u>	0	<u>171</u>	
P 2	<u>71</u>	3	<u>369</u>	3	<u>128</u>	3	<u>478</u>	
P 3	<u>85</u>	6	<u>552</u>	6	<u>134</u>	6	<u>628</u>	
P 4	<u>96</u>	9	<u>669</u>	9	<u>142</u>	9	<u>716</u>	
P 5	<u>104</u>	12	<u>768</u>	12	<u>150</u>	12	<u>776</u>	
P 6	<u>113</u>	15	<u>831</u>	15	<u>156</u>	15	<u>817</u>	
P 7	<u>115</u>	18	<u>883</u>	18	<u>156</u>	18	<u>850</u>	
P 8		21	<u>921</u>	21	<u>162</u>	21	<u>880</u>	
P 9		24	<u>953</u>	24	<u>168</u>	24	<u>904</u>	
P 10		27	<u>975</u>	27	170 <u>169</u>	27	<u>926</u>	
P 11		30	<u>997</u>	30	<u>170</u>	30	<u>945</u>	
P 12		33	<u>1008</u>	33	<u>171</u>	33	<u>962</u>	
P 13		36	<u>1023</u>	36		36	<u>975</u>	
P 14		39	<u>1033</u>	39		39	<u>985</u>	
P 15		42	<u>1043</u>	42		42	<u>995</u>	
P 16		45		45		45	<u>1005</u> 1006	
P 17		48		48		48	<u>1010</u>	
P 18		51		51		51	<u>1024</u>	
P 19		54		54		54	<u>1032</u>	
P 20		57		57		57	<u>1034</u>	
		60		60		60	<u>1035</u>	

WESTERN TESTING CO., INC.
Pressure Data

Date _____

Test Ticket No. 8528

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 _____	_____	<u>63</u>	_____	_____	_____	<u>63</u>	<u>1040</u>
P 2 _____	_____	<u>66</u>	_____	_____	_____	<u>66</u>	<u>1046</u>
P 3 _____	_____	<u>69</u>	_____	_____	_____	<u>69</u>	<u>1051</u>
P 4 _____	_____	<u>72</u>	_____	_____	_____	<u>72</u>	<u>1054</u>
P 5 _____	_____	<u>75</u>	_____	_____	_____	<u>75</u>	<u>1059</u>
P 6 _____	_____	<u>78</u>	_____	_____	_____	<u>78</u>	<u>1065</u>
P 7 _____	_____	<u>81</u>	_____	_____	_____	<u>81</u>	<u>1069</u>
P 8 _____	_____	<u>84</u>	_____	_____	_____	<u>84</u>	<u>1073</u>
P 9 _____	_____	<u>87</u>	_____	_____	_____	<u>87</u>	<u>1073</u>
P10 _____	_____	<u>90</u>	_____	_____	_____	<u>90</u>	_____
P11 _____	_____	<u>93</u>	_____	_____	_____	<u>93</u>	_____
P12 _____	_____	<u>96</u>	_____	_____	_____	<u>96</u>	_____
P13 _____	_____	<u>99</u>	_____	_____	_____	<u>99</u>	_____
P14 _____	_____	<u>102</u>	_____	_____	_____	<u>102</u>	_____
P15 _____	_____	<u>105</u>	_____	_____	_____	<u>105</u>	_____
P16 _____	_____	<u>108</u>	_____	_____	_____	<u>108</u>	_____
P17 _____	_____	<u>111</u>	_____	_____	_____	<u>111</u>	_____
P18 _____	_____	<u>114</u>	_____	_____	_____	<u>114</u>	_____
P19 _____	_____	<u>117</u>	_____	_____	_____	<u>117</u>	_____
P20 _____	_____	<u>120</u>	_____	_____	_____	<u>120</u>	_____

Company K.W.B. Oil & Gas Company Lease & Well No. Sterling #1
 Elevation 1490 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 8528
 Date 10/26/80 Sec. 26 Twp. 34S Range 13W County Barber State Kansas
 Test Approved by Gordon W. Keen Western Representative Jeff Piotrowski

Formation Test No. 2 Interval Tested from 4904 ft. to 4925 ft. Total Depth 4925 ft.
 Packer Depth 4899 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4904 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4909 ft. Recorder Number 5673 Cap. 5400
 Bottom Recorder Depth (Outside) 4921 ft. Recorder Number 1565 Cap. 4900
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Sweetman Drilling Rig #1 Drill Collar Length 240 I. D. 2.2 in.
 Mud Type starch Viscosity 46 Weight Pipe Length - I. D. - in.
 Weight 9.0 Water Loss 10.2 cc. Drill Pipe Length 4635 I. D. 3.8 in.
 Chlorides - P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
 Jars: Make WTC Serial Number 405 Anchor Length 21 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: Strong through both flow periods. Gas to surface thirty minutes into final flow--
too small to measure.

Recovered 65 ft. of gas cut mud
 Recovered 120 ft. of watery mud
 Recovered 180 ft. of water
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 4:26 ~~AM~~ P.M. Time Started Off Bottom 8:11 ~~AM~~ P.M. Maximum Temperature 128°
 Initial Hydrostatic Pressure (A) 2559 P.S.I.
 Initial Flow Period Minutes 30 (B) 65 P.S.I. to (C) 115 P.S.I.
 Initial Closed In Period Minutes 42 (D) 1043 P.S.I.
 Final Flow Period Minutes 55 (E) 120 P.S.I. to (F) 171 P.S.I.
 Final Closed In Period Minutes 87 (G) 1073 P.S.I.
 Final Hydrostatic Pressure (H) 2502 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/26/80 Test Ticket No. 8528
 Recorder No. 5673 Capacity 5400 Location 4909 Ft.
 Clock No. --- Elevation 1490 Kelly Bushing Well Temperature 128 °F

Point	Pressure		Time Given	M	Time Computed
A Initial Hydrostatic Mud	2559	P.S.I.	4:26P		
B First Initial Flow Pressure	65	P.S.I.	30	Mins.	30 Mins.
C First Final Flow Pressure	115	P.S.I.	45	Mins.	42 Mins.
D Initial Closed-in Pressure	1043	P.S.I.	60	Mins.	55 Mins.
E Second Initial Flow Pressure	120	P.S.I.	90	Mins.	87 Mins.
F Second Final Flow Pressure	171	P.S.I.			
G Final Closed-in Pressure	1073	P.S.I.			
H Final Hydrostatic Mud	2502	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>29</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	65	0	115	0	120	0	171
P 2	71	3	369	5	128	3	478
P 3	85	6	552	10	134	6	628
P 4	96	9	669	15	142	9	716
P 5	104	12	768	20	150	12	776
P 6	113	15	831	25	156	15	817
P 7	115	18	883	30	156	18	850
P 8		21	921	35	162	21	880
P 9		24	953	40	168	24	904
P10		27	975	45	169	27	926
P11		30	997	50	170	30	945
P12		33	1008	55	171	33	962
P13		36	1023			36	975
P14		39	1033			39	985
P15		42	1043			42	995
P16		45				45	1005
P17						48	1010
P18						51	1025
P19						54	1032
P20						57	1034
						60	1035

WESTERN TESTING CO., INC.

Pressure Data

Date 10/26/80 Test Ticket No. 8528
 Recorder No. 5673 Capacity 5400 Location 4909 Ft.
 Clock No. --- Elevation 1490 Kelly Bushing Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2559</u>	P.S.I.	<u>4:26P</u>	<u>M</u>
B First Initial Flow Pressure	<u>65</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u>
C First Final Flow Pressure	<u>115</u>	P.S.I.	<u>45</u>	<u>Mins. 42</u>
D Initial Closed-in Pressure	<u>1043</u>	P.S.I.	<u>60</u>	<u>Mins. 55</u>
E Second Initial Flow Pressure	<u>120</u>	P.S.I.	<u>90</u>	<u>Mins. 87</u>
F Second Final Flow Pressure	<u>171</u>	P.S.I.		
G Final Closed-in Pressure	<u>1073</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2502</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>14</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>29</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				63	1040		
P 2				66	1046		
P 3				69	1051		
P 4				72	1054		
P 5				75	1059		
P 6				78	1065		
P 7				81	1069		
P 8				84	1073		
P 9				87	1073		
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

5673.

TKT # 8528

DST #2

I

