



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5460

Elevation 1809 KB Formation Lansing Eff. Pay Ft.

District Great Bend Date 6-1-80 Customer Order No.
COMPANY NAME PV Properties Inc.
ADDRESS 360 Sutton Place, Wichita KS- 67202
LEASE AND WELL NO. Phelan #1 COUNTY Ellsworth STATE Ks Sec 12 Twp 17S Rge 10W
Mail Invoice To Same As Above No. Copies Requested 5
Co. Name Address
Mail Charts To No. Copies Requested 5

Formation Test No. 1 Interval Tested from 3020 ft. to 3045 ft. Total Depth 3045 ft.
Packer Depth 3015 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3020 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 3033 ft. Recorder Number 969 Cap. 4150
Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 10207 Cap. 3400
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Duke - Rig 140 Drill Collar Length 302 I. D. 2.7 in.
Mud Type STARCA Viscosity 40 Weight Pipe Length 403 I. D. in.
Weight 10.1 Water Loss 14.6 cc. Drill Pipe Length 2294 I. D. 3.8 in.
Chlorides 82,000 P.P.M. Test Tool Length 25 ft. Tool Size 3 1/2 in.
Jars: Make Serial Number Anchor Length 25 ft. Size 3 1/2 in.
Did Well Flow? Yes 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 in.

Blow: STRONG Blow Throughout Both Flow Periods

Recovered 186 ft. of Very slightly oil cut gassy mud
Recovered 150 ft. of gassy water cut mud
Recovered 60 ft. of gas cut mud
Recovered 60 ft. of gas cut water
Recovered ft. of

Remarks: 456' (gas to surface see gas recovery report)
on location 11 AM first test 6:30 PM

Time Set Packer(s) 2:13 P.M. Time Started Off Bottom 4:25 P.M. Maximum Temperature
Initial Hydrostatic Pressure (A) 1675 P.S.I.
Initial Flow Period 35 Minutes (B) 92 P.S.I. to (C) 112 P.S.I.
Initial Closed In Period 30 Minutes (D) 1045 P.S.I.
Final Flow Period 30 Minutes (E) 174 P.S.I. to (F) 184 P.S.I.
Final Closed In Period 30 Minutes (G) 1955 P.S.I.
Final Hydrostatic Pressure (H) 1654 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 Will Price
Signature of Customer or his authorized representative

Western Representative Gene Cherbat Heck

FIELD INVOICE

Open Hole Test \$500.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage 31 \$23.25
Fluid Sampler \$
Extra Charts \$
TOTAL \$573.25

WESTERN TESTING CO., INC.

Pressure Data

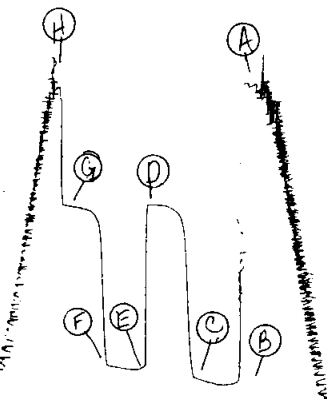
Date 6-1-80 Test Ticket No. 5460
 Recorder No. 969 Capacity 4150 Location 3033 Ft.
 Clock No. _____ Elevation 1809 K B Well Temperature _____ °F
 Point _____ Pressure _____ Time Given _____ Time Computed _____
 A Initial Hydrostatic Mud 1465 P.S.I. Open Tool 2:13 P M
 B First Initial Flow Pressure 100 P.S.I. First Flow Pressure 35 Mins 35 Mins.
 C First Final Flow Pressure 123 P.S.I. Initial Closed-in Pressure 30 Mins 36 Mins.
 D Initial Closed-in Pressure 1044 P.S.I. Second Flow Pressure 30 Mins 30 Mins.
 E Second Initial Flow Pressure 186 P.S.I. Final Closed-in Pressure 30 Mins 32 Mins.
 F Second Final Flow Pressure 188 P.S.I.
 G Final Closed-in Pressure 1045 P.S.I.
 H Final Hydrostatic Mud 1655 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>6</u> 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>100</u>	0	<u>123</u>	0	<u>186</u>	0	<u>188</u>
P 2 5	<u>92</u>	3	<u>336</u>	5	<u>168</u>	3	<u>512</u>
P 3 10	<u>86</u>	6	<u>645</u>	10	<u>170</u>	6	<u>813</u>
P 4 15	<u>86</u>	9	<u>889</u>	15	<u>172</u>	9	<u>959</u>
P 5 20	<u>94</u>	12	<u>975</u>	20	<u>178</u>	12	<u>992</u>
P 6 25	<u>104</u>	15	<u>1002</u>	25	<u>186</u>	15	<u>1012</u>
P 7 30	<u>119</u>	18	<u>1019</u>	30	<u>188</u>	18	<u>1019</u>
P 8 35	<u>123</u>	21	<u>1031</u>	35		21	<u>1025</u>
P 9 40		24	<u>1039</u>	40		24	<u>1029</u>
P10 45		27	<u>1041</u>	45		27	<u>1035</u>
P11 50		30	<u>1043</u>	50		30	<u>1039</u>
P12 55		33	<u>1044</u>	55		33	<u>1045</u>
P13 60		36	<u>1044</u>	60		36	
P14		39		65		39	
P15		42		70		42	
P16		45		75		45	
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

709

TKT#5400
I



Company P.V. Properties, Inc. Lease & Well No. Phelan #1
 Elevation 1809 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 5460
 Date 6-1-80 Sec. 12 Twp. 17S Range 10W County Ellsworth State Kansas
 Test Approved by Will Price Western Representative Gene Eberhart
 Formation Test No. 1 Interval Tested from 3020 ft. to 3045 ft. Total Depth 3045 ft.
 Packer Depth 3015 ft. Size 6 3/4 in. Packer Depth ft. Size in.
 Packer Depth 3020 ft. Size 6 3/4 in. Packer Depth ft. Size in.
 Depth of Selective Zone Set
 Top Recorder Depth (Inside) 3033 ft. Recorder Number 696 Cap. 4150
 Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 10207 Cap. 3400
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Duke Drilling Rig #1 Drill Collar Length 302 I. D. 2.7 in.
 Mud Type Starch Viscosity 40 Weight Pipe Length 403 I. D. - in.
 Weight 10.1 Water Loss 14.6 cc. Drill Pipe Length 2294 I. D. 3.8 in.
 Chlorides 82,000 P.P.M. Test Tool Length 21 ft. Tool Size 3 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 25 ft. Size 3 1/2 OD in.
 Did Well Flow? Yes Reversed Out - 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 blow throughout both flow periods.

Recovered 186' ft. of Very slightly oil cut gassy mud.

Recovered 150' ft. of Gassy watery cut mud

Recovered 60' ft. of gas cut mud

Recovered 60' ft. of gas cut water

Recovered ft. of

Remarks: See attached sheet for gas measurements.

Time Set Packer(s) 2:13 ^{AM} P.M. Time Started Off Bottom 4:25 ^{AM} P.M. Maximum Temperature -
 Initial Hydrostatic Pressure 1665 P.S.I. (A)
 Initial Flow Period 35 Minutes (B) 100 P.S.I. to (C) 123 P.S.I.
 Initial Closed In Period 36 Minutes (D) 1044 P.S.I.
 Final Flow Period 30 Minutes (E) 186 P.S.I. to (F) 188 P.S.I.
 Final Closed In Period 33 Minutes (G) 1045 P.S.I.
 Final Hydrostatic Pressure 1655 P.S.I. (H)

GAS FLOW REPORT

Date 6-1-80 Ticket 5460 Company P.V. Properties, Inc.
 Well Name and No. Phelan #1 Dst No. 1 Interval Tested 3020' - 3045'
 County Ellsworth State Kansas Sec. 12 Twp. 17S 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
PRE FLOW						

SECOND FLOW						
	30 min.	28lbs.	1/8" orifice			2,790 C.F.P.D.

GAS BOTTLE

Serial No. 402 Date Bottle Filled 6-1-80 Date to be Invoiced 6-1-80

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 P.V. Properties, Inc.
 Authorized by Will Price

WESTERN TESTING CO., INC.

Pressure Data

Date 6-1-80 Recorder No. 969 Capacity 4150 Test Ticket No. 5460 Location 3033 Ft.
 Clock No. _____ Elevation 1809 Kelly Bushing Well Temperature - °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1665	P.S.I.	2:13 P	M.
B First Initial Flow Pressure	100	P.S.I.	35	Mins. 35
C First Final Flow Pressure	123	P.S.I.	30	Mins. 36
D Initial Closed-in Pressure	1044	P.S.I.	30	Mins. 30
E Second Initial Flow Pressure	186	P.S.I.	30	Mins. 33
F Second Final Flow Pressure	188	P.S.I.		
G Final Closed-in Pressure	1045	P.S.I.		
H Final Hydrostatic Mud	1655	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>11</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>100</u>	<u>0</u>	<u>123</u>	<u>0</u>	<u>186</u>	<u>0</u>	<u>188</u>
P 2 <u>5</u>	<u>92</u>	<u>3</u>	<u>336</u>	<u>5</u>	<u>168</u>	<u>3</u>	<u>512</u>
P 3 <u>10</u>	<u>86</u>	<u>6</u>	<u>645</u>	<u>10</u>	<u>170</u>	<u>6</u>	<u>813</u>
P 4 <u>15</u>	<u>86</u>	<u>9</u>	<u>889</u>	<u>15</u>	<u>172</u>	<u>9</u>	<u>959</u>
P 5 <u>20</u>	<u>94</u>	<u>12</u>	<u>975</u>	<u>20</u>	<u>178</u>	<u>12</u>	<u>992</u>
P 6 <u>25</u>	<u>104</u>	<u>15</u>	<u>1002</u>	<u>25</u>	<u>186</u>	<u>15</u>	<u>1012</u>
P 7 <u>30</u>	<u>119</u>	<u>18</u>	<u>1019</u>	<u>30</u>	<u>188</u>	<u>18</u>	<u>1019</u>
P 8 <u>35</u>	<u>123</u>	<u>21</u>	<u>1031</u>			<u>21</u>	<u>1025</u>
P 9		<u>24</u>	<u>1039</u>			<u>24</u>	<u>1029</u>
P10		<u>27</u>	<u>1041</u>			<u>27</u>	<u>1035</u>
P11		<u>30</u>	<u>1043</u>			<u>30</u>	<u>1039</u>
P12		<u>33</u>	<u>1044</u>			<u>33</u>	<u>1045</u>
P13		<u>36</u>	<u>1044</u>				
P14							
P15							
P16							
P17							
P18							
P19							
P20							



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 5461

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

Elevation 1809 KB Formation Arb Eff. Pay Ft.

District Greentown Date 6-2-80 Customer Order No.
COMPANY NAME P. U. Properties, Inc.
ADDRESS 360 Sutton Place, Wichita, KS 67202
LEASE AND WELL NO. Phelan #1 COUNTY Elkworth STATE Ks Sec. 12 Twp. 17S Rge. 10W
Mail Invoice To Same As Above No. Copies Requested 5
Co. Name Address
Mail Charts To No. Copies Requested 5
Address

Formation Test No. 2 Interval Tested from 3233 ft. to 3265 ft. Total Depth 3265 ft.
Packer Depth 3228 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3233 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 3242 ft. Recorder Number 969 Cap. 4150
Bottom Recorder Depth (Outside) 3245 ft. Recorder Number 10207 Cap. 5400
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Duke Drilling Rig #1 Drill Collar Length 302 I. D. 2.7 in.
Mud Type SPERCH Viscosity 39 Weight Pipe Length 403 I. D. in.
Weight 10 Water Loss 80 cc. Drill Pipe Length 2507 I. D. 3.8 in.
Chlorides 85000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
Jars: Make Serial Number Anchor Length 37 ft. Size 5 1/2 in.
Did Well Flow? Reversed Out Surface Choke Size 3 1/2 in. Bottom Choke Size 3 1/2 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Very Weak, died in 12 min of first FP
No Blow 2nd FP, Flushed Tool, a few bubbles, died in 15 sec

Recovered 5' ft. of D. Mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 12:32 AM Time Started Off Bottom 1:40 AM Maximum Temperature 115
Initial Hydrostatic Pressure (A) 1811 P.S.I.
Initial Flow Period 15 Minutes (B) 51 P.S.I. to (C) 51 P.S.I.
Initial Closed In Period 15 Minutes (D) 51 P.S.I.
Final Flow Period 15 Minutes (E) 51 P.S.I. to (F) 51 P.S.I.
Final Closed In Period 15 Minutes (G) 30 P.S.I.
Final Hydrostatic Pressure (H) 1800 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 Will Paine
Signature of Customer or his authorized representative

Western Representative Gene Eberhart

FIELD INVOICE

Open Hole Test 1550.00
Misrun
Straddle Test
Jars
Selective Zone
Safety Joint
Standby
Evaluation
Extra Packer
Circ. Sub.
Mileage
Fluid Sampler
Extra Charts

TOTAL 1550.00

WESTERN TESTING CO., INC.

Pressure Data

are 6-3-80 Test Ticket No. 5461
 order No. 969 Capacity 4150 Location 3242 Ft.
 ock No. 1809 KB Elevation 1809 Well Temperature 115 °F
 int

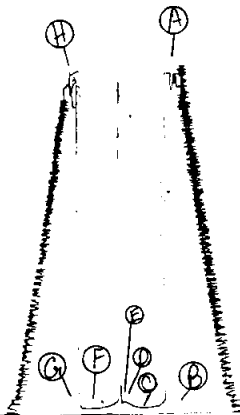
	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	<u>1817</u> P.S.I.	Open Tool	<u>12:32</u> A.M.	
First Initial Flow Pressure	<u>63</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
First Final Flow Pressure	<u>35</u> P.S.I.	Initial Closed-in Pressure	<u>15</u> Mins.	<u>12</u> Mins.
Initial Closed-in Pressure	<u>65</u> P.S.I.	Second Flow Pressure	<u>15</u> Mins.	
Second Initial Flow Pressure	<u>59</u> P.S.I.	Final Closed-in Pressure	<u>15</u> Mins.	
Second Final Flow Pressure	<u>36</u> P.S.I.			
Final Closed-in Pressure	<u>31</u> P.S.I.			
Final Hydrostatic Mud	<u>1791</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>4</u> Inc.		Breakdown: <u>3</u> 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 ins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1 0	<u>63</u>	0	<u>35</u>	0	<u>59</u>	0	<u>36</u>
2 5	<u>43</u>	3	<u>35</u>	5	<u>Flushed tool</u>	3	<u>31</u>
3 10	<u>35</u>	6	<u>37</u>	10	<u>50</u>	6	
4 15	<u>35</u>	9	<u>49</u>	15	<u>36</u>	9	
5 20		12	<u>65</u>	20		12	
6 25		15		25		15	<u>31</u>
7 30		18		30		18	
8 35		21		35		21	
9 40		24		40		24	
0 45		27		45		27	
1 50		30		50		30	
2 55		33		55		33	
3 60		36		60		36	
4		39		65		39	
5		42		70		42	
6		45		75		45	
7		48		80		48	
8		51		85		51	
9		54		90		54	
0		57				57	
		60				60	

TK # 5461

I.



Company P.V. Properties, Inc. Lease & Well No. Phelan #1
 Elevation 1809 Kelly Bush Formation Arbuckle Effective Pay - Ft. Ticket No. 5461
 Date 6-3-80 Sec. 12 Twp. 17S Range 10W County Ellsworth State Kansas
 Test Approved by Will Price Western Representative Gene Eberhart
 Formation Test No. 2 Interval Tested from 3233 ft. to 3265 ft. Total Depth 3265 ft.
 Packer Depth 3228 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3233 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3242 ft. Recorder Number 969 Cap. 4150
 Bottom Recorder Depth (Outside) 3245 ft. Recorder Number 10207 Cap. 5400
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Duke Drilling (Rig #1) Drill Collar Length 302 I. D. 2.7 in.
 Mud Type Starch Viscosity 39 Weight Pipe Length 403 I. D. - in.
 Weight 10.0 Water Loss 20.0 cc. Drill Pipe Length 2507 I. D. 3.8 in.
 Chlorides 85,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 32 ft. Size 5 1/2 OD in.
 Did Well Flow? No Reversed Out - 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: Very weak, died in 12 minutes on initial flow period. Nob low on final flow period, flushed tool, a few bubbles, died in 15 seconds.

Recovered 5 ft. of drilling mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 12:32 ~~PM~~ ^{AM} Time Started Off Bottom 1:40 ~~PM~~ ^{AM} Maximum Temperature 115
 Initial Hydrostatic Pressure (A) 1817 P.S.I.
 Initial Flow Period Minutes 15 (B) 63 P.S.I. to (C) 35 P.S.I.
 Initial Closed In Period Minutes 12 (D) 65 P.S.I.
 Final Flow Period Minutes 15 (E) 59 P.S.I. to (F) 36 P.S.I.
 Final Closed In Period Minutes 15 (G) 31 P.S.I.
 Final Hydrostatic Pressure (H) 1791 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 6-3-80 Test Ticket No. 5461
Recorder No. 969 Capacity 4150 Location 3242 Ft.
Clock No. - Elevation 1809 Kelly Bushing Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1817</u> P.S.I.	Open Tool	<u>12:32 A.</u> M	
B First Initial Flow Pressure	<u>63</u> P.S.I.	First Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
C First Final Flow Pressure	<u>35</u> P.S.I.	Initial Closed-in Pressure	<u>15</u> Mins.	<u>12</u> Mins.
D Initial Closed-in Pressure	<u>65</u> P.S.I.	Second Flow Pressure	<u>15</u> Mins.	<u>15</u> Mins.
E Second Initial Flow Pressure	<u>59</u> P.S.I.	Final Closed-in Pressure	<u>15</u> Mins.	<u>15</u> Mins.
F Second Final Flow Pressure	<u>36</u> P.S.I.			
G Final Closed-in Pressure	<u>31</u> P.S.I.			
H Final Hydrostatic Mud	<u>1791</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>4</u> Inc.		Breakdown: <u>3</u> Inc.		Breakdown: <u>5</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>63</u>	<u>0</u>	<u>35</u>	<u>0</u>	<u>59</u>	<u>0</u>	<u>36</u>
P 2 <u>5</u>	<u>43</u>	<u>3</u>	<u>35</u>	<u>5</u>	<u>Flushed Tool</u>	<u>3</u>	<u>31</u>
P 3 <u>10</u>	<u>35</u>	<u>6</u>	<u>37</u>	<u>10</u>	<u>50</u>	<u>6</u>	<u>31</u>
P 4 <u>15</u>	<u>35</u>	<u>9</u>	<u>49</u>	<u>15</u>	<u>36</u>	<u>9</u>	<u>31</u>
P 5		<u>12</u>	<u>65</u>			<u>12</u>	<u>31</u>
P 6						<u>15</u>	<u>31</u>
P 7							
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5462

Elevation 1809 KB Formation ARB Eff. Pay Ft.

District Great Bend Date 6-3-80 Customer Order No.
COMPANY NAME PV Properties, Inc.
ADDRESS 360 Sutton Place, Wichita, Ks 67202
LEASE AND WELL NO. Phelan #1 COUNTY Ellsworth STATE Ks Sec 12 Twp 17S Rge 10E
Mail Invoice To Same As Above No. Copies Requested 5
Co. Name Address
Mail Charts To No. Copies Requested 5
Address

Formation Test No. 3 Interval Tested from 3234 ft. to 3282 ft. Total Depth 3282 ft.
Packer Depth 3229 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3234 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 3242 ft. Recorder Number 969 Cap. 4150
Bottom Recorder Depth (Outside) 3245 ft. Recorder Number 10207 Cap. 3400
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Duke Drilling Rig 1 Drill Collar Length 302 I. D. 2.7 in.
Mud Type STARCH Viscosity 39 Weight Pipe Length 403 I. D. in.
Weight 98 Water Loss 18 cc. Drill Pipe Length 2508 I. D. 3.8 in.
Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 5/200 in.
Jars: Make Serial Number Anchor Length 48 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 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very Weak flow died in 10 min of 7 P. flushed tool
died after 10 min - no flow found 7 P.
Recovered 67 ft. of Drilling Mud w/ few spots of O.I. on Tool
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks: STARTED 12:30 Finished Test 6:30

Time Set Packer(s) 2:45 AM Time Started Off Bottom 4:55 AM Maximum Temperature 116
Initial Hydrostatic Pressure 1821 P.S.I.
Initial Flow Period 30 Minutes (B) 81 P.S.I. to (C) 81 P.S.I.
Initial Closed In Period 30 Minutes (D) 259 P.S.I.
Final Flow Period 30 Minutes (E) 95 P.S.I. to (F) 81 P.S.I.
Final Closed In Period 30 Minutes (G) 218 P.S.I.
Final Hydrostatic Pressure 1794 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 RH. Whit
Signature of Customer or his authorized representative

Western Representative Gene Eberhart

FIELD INVOICE

Open Hole Test \$550.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$

TOTAL \$550.00

WESTERN TESTING CO., INC.

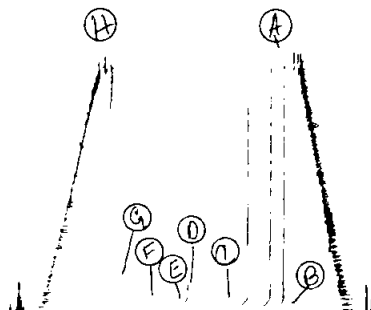
Pressure Data

Date 6-3-80 Test Ticket No. 5462
 Recorder No. 10207 Capacity 5400 Location 3245 Ft.
 Clock No. — Elevation 1809 KB Well Temperature 116 °F
 Point Pressure Time Given Time Computed
 A Initial Hydrostatic Mud 1795 P.S.I. Open Tool 2:45 P M
 B First Initial Flow Pressure 127 P.S.I. First Flow Pressure 30 Mins. 30 Mins.
 C First Final Flow Pressure 84 P.S.I. Initial Closed-in Pressure 30 Mins. 27 Mins.
 D Initial Closed-in Pressure 255 P.S.I. Second Flow Pressure 30 Mins. 30 Mins.
 E Second Initial Flow Pressure 138 ~~185~~ P.S.I. Final Closed-in Pressure 30 Mins. 27 Mins.
 F Second Final Flow Pressure 87 P.S.I.
 G Final Closed-in Pressure 217 P.S.I.
 H Final Hydrostatic Mud 1781 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>—</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 0	<u>127</u>	0	<u>84</u>	0	<u>138</u>	0	<u>87</u>
P 2 5	<u>84</u>	3	<u>100</u>	5	<u>87</u>	3	<u>100</u>
P 3 10	<u>79</u>	6	<u>117</u>	10	<u>—</u>	6	<u>115</u>
P 4 15	<u>Flushed tool</u>	9	<u>136</u>	15	<u>—</u>	9	<u>130</u>
P 5 20	<u>98</u>	12	<u>156</u>	20	<u>—</u>	12	<u>144</u>
P 6 25	<u>87</u>	15	<u>171</u>	25	<u>—</u>	15	<u>163</u>
P 7 30	<u>84</u>	18	<u>190</u>	30	<u>87</u>	18	<u>176</u>
P 8 35	<u>—</u>	21	<u>210</u>	35	<u>—</u>	21	<u>192</u>
P 9 40	<u>—</u>	24	<u>230</u>	40	<u>—</u>	24	<u>206</u>
P10 45	<u>—</u>	27	<u>255</u>	45	<u>—</u>	27	<u>217</u>
P11 50	<u>—</u>	30	<u>—</u>	50	<u>—</u>	30	<u>—</u>
P12 55	<u>—</u>	33	<u>—</u>	55	<u>—</u>	33	<u>—</u>
P13 60	<u>—</u>	36	<u>—</u>	60	<u>—</u>	36	<u>—</u>
P14	<u>—</u>	39	<u>—</u>	65	<u>—</u>	39	<u>—</u>
P15	<u>—</u>	42	<u>—</u>	70	<u>—</u>	42	<u>—</u>
P16	<u>—</u>	45	<u>—</u>	75	<u>—</u>	45	<u>—</u>
P17	<u>—</u>	48	<u>—</u>	80	<u>—</u>	48	<u>—</u>
P18	<u>—</u>	51	<u>—</u>	85	<u>—</u>	51	<u>—</u>
P19	<u>—</u>	54	<u>—</u>	90	<u>—</u>	54	<u>—</u>
P20	<u>—</u>	57	<u>—</u>	<u>—</u>	<u>—</u>	57	<u>—</u>
		60	<u>—</u>		<u>—</u>	60	<u>—</u>

TKT# 5462
10



Company P.V. Properties, Inc. Lease & Well No. Phelan #1
 Elevation 1809 Kelly Bush Formation Arbuckle Effective Pay - Ft. Ticket No. 5462
 Date 6-3-80 Sec. 12 Twp. 17S Range 10W County Ellsworth State Kansas
 Test Approved by Will Price Western Representative Gene Eberhart
 Formation Test No. 3 Interval Tested from 3234 ft. to 3282 ft. Total Depth 3282 ft.
 Packer Depth 3229 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3234 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3242 ft. Recorder Number 969 Cap. 4150
 Bottom Recorder Depth (Outside) 3245 ft. Recorder Number 10207 Cap. 5400
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Duke Drilling (#1) Drill Collar Length 302 I. D. 2.7 in.
 Mud Type Starch Viscosity 39 Weight Pipe Length 403 I. D. - in.
 Weight 9.9 Water Loss 18. cc. Drill Pipe Length 2508 I. D. 3.8 in.
 Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 48 ft. Size 5 1/2 OD in.
 Did Well Flow? No Reversed Out - 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: Very weak blow died in 10 minutes of initial flow period. Flushed tool,
died after 10 minutes. No blow on final flow period.

Recovered 67 ft. of drilling mud with a few spots of oil on tool
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 2:45 ~~==AM==~~ P.M. Time Started Off Bottom 4:55 ~~==AM==~~ P.M. Maximum Temperature 116
 Initial Hydrostatic Pressure (A) 1795 P.S.I.
 Initial Flow Period Minutes 30 (B) 127 P.S.I. to (C) 84 P.S.I.
 Initial Closed In Period Minutes 27 (D) 255 P.S.I.
 Final Flow Period Minutes 30 (E) 138 P.S.I. to (F) 87 P.S.I.
 Final Closed In Period Minutes 27 (G) 217 P.S.I.
 Final Hydrostatic Pressure (H) 1781 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 6-3-80 Test Ticket No. 5426
 Recorder No. 10207 Capacity 5400 Location 3245 Ft.
 Clock No. - Elevation 1809 Kelly Bushing Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1795</u>	P.S.I.	<u>2:45P.</u>	<u>M</u>
B First Initial Flow Pressure	<u>127</u>	P.S.I.	<u>30</u>	<u>30</u>
C First Final Flow Pressure	<u>84</u>	P.S.I.	<u>30</u>	<u>27</u>
D Initial Closed-in Pressure	<u>255</u>	P.S.I.	<u>30</u>	<u>30</u>
E Second Initial Flow Pressure	<u>138</u>	P.S.I.	<u>30</u>	<u>27</u>
F Second Final Flow Pressure	<u>87</u>	P.S.I.		
G Final Closed-in Pressure	<u>217</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1781</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>9</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>127</u>	<u>0</u>	<u>84</u>	<u>0</u>	<u>138</u>	<u>0</u>	<u>87</u>
P 2 <u>5</u>	<u>84</u>	<u>3</u>	<u>100</u>	<u>5</u>	<u>87</u>	<u>3</u>	<u>100</u>
P 3 <u>10</u>	<u>79</u>	<u>6</u>	<u>117</u>	<u>10</u>	<u>87</u>	<u>6</u>	<u>115</u>
P 4 <u>15</u>	<u>Flushed Tool</u>	<u>9</u>	<u>136</u>	<u>15</u>	<u>87</u>	<u>9</u>	<u>130</u>
P 5 <u>20</u>	<u>98</u>	<u>12</u>	<u>156</u>	<u>20</u>	<u>87</u>	<u>12</u>	<u>144</u>
P 6 <u>25</u>	<u>87</u>	<u>15</u>	<u>171</u>	<u>25</u>	<u>87</u>	<u>15</u>	<u>163</u>
P 7 <u>30</u>	<u>84</u>	<u>18</u>	<u>190</u>	<u>30</u>	<u>87</u>	<u>18</u>	<u>176</u>
P 8		<u>21</u>	<u>210</u>			<u>21</u>	<u>192</u>
P 9		<u>24</u>	<u>230</u>			<u>24</u>	<u>206</u>
P10		<u>27</u>	<u>255</u>			<u>27</u>	<u>217</u>
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 5463

Elevation 1809 KB Formation Arb Eff. Pay Ft.

District Great Bend Date 6-4-80 Customer Order No.
COMPANY NAME P V Properties
ADDRESS 360 Sutton Place, Wichita Ks 67202
LEASE AND WELL NO. Phelan #1 COUNTY Ellsworth STATE Ks Sec. 12 Twp. 17S Rge. 10W
Mail Invoice To Same As Above Co. Name Address No. Copies Requested 5
Mail Charts To Address No. Copies Requested 5

Formation Test No. 4 Interval Tested from 3280 ft. to 3295 ft. Total Depth 3295 ft.
Packer Depth 3275 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3280 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set
Top Recorder Depth (Inside) 3285 ft. Recorder Number 696 Cap. 4150
Bottom Recorder Depth (Outside) 3288 ft. Recorder Number 10207 Cap. 5400
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Duke Drilling Rig 1 Drill Collar Length 302 I. D. 2.7 in.
Mud Type Storch Viscosity 39 Weight Pipe Length 403 I. D. in.
Weight 9.9 Water Loss 18 cc. Drill Pipe Length 2554 I. D. 3.8 in.
Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make Serial Number Anchor Length 15 ft. Size 5 1/2 OD 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: Strong Blow, Caused by Packer Making

Recovered 437' ft. of Drilling Mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks: Packer Failed on test at first opening.
Tried 3 times to set Packers - dropped full string weight of 29,000

Time Set Packer(s) 3:40 A.M. Time Started Off Bottom 4:01 A.M. Maximum Temperature 116
Initial Hydrostatic Pressure (A) 1759 P.S.I.
Initial Flow Period Minutes (B) P.S.I. to (C) P.S.I.
Initial Closed In Period Minutes (D) P.S.I.
Final Flow Period Minutes (E) P.S.I. to (F) P.S.I.
Final Closed In Period Minutes (G) P.S.I.
Final Hydrostatic Pressure (H) 1738 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 RH Whit
Signature of Customer or his authorized representative

Western Representative Gene Oberhart

FIELD INVOICE

Open Hole Test \$
Misrun \$ 300.00
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$

TOTAL \$ 300.00

TK#5463

I.

(H) (A)

TK#5463

O.

Company P. V. Properties, Inc. Lease & Well No. Phelan #1
Elevation 1809 Kelly Bushing Formation Arbuckle Effective Pay - Ft. Ticket No. 5463
Date 6-4-80 Sec. 12 Twp. 17S Range 10W County Ellsworth State Kansas
Test Approved by R. H. White Western Representative Gene Eberhart
Formation Test No. #4 Interval Tested from 3280 ft. to 3295 ft. Total Depth 3295 ft.
Packer Depth 3275 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3280 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3285 ft. Recorder Number 969 Cap. 4150
Bottom Recorder Depth (Outside) 3288 ft. Recorder Number 10207 Cap. 5400
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Duke Drilling #1 Rig Drill Collar Length 302 I. D. 2.7 in.
Mud Type Starch Viscosity 39 Weight Pipe Length 403 I. D. - in.
Weight 9.9 Water Loss 18 cc. Drill Pipe Length 2554 I. D. 3.8 in.
Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 15 ft. Size 5 1/2 OD in.
Did Well Flow? - Reversed Out - 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 blow caused by packer leaking

Recovered 437 ft. of Drilling Mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Packer failed on test at first opening, tried 3 times to set packers, dropped
full string, weight of 29,000

Time Set Packer(s) 3:40 ^{A.M.}~~P.M.~~ Time Started Off Bottom 4:01 ^{A.M.}~~P.M.~~ Maximum Temperature 116
Initial Hydrostatic Pressure (A) 1759 P.S.I.
Initial Flow Period Minutes (B) P.S.I. to (C) P.S.I.
Initial Closed In Period Minutes (D) P.S.I.
Final Flow Period Minutes (E) P.S.I. to (F) P.S.I.
Final Closed In Period Minutes (G) P.S.I.
Final Hydrostatic Pressure (H) 1738 P.S.I.



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 5464

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

Elevation 1809 KB Formation ARB Eff. Pay Ft.

District GREAT BEND Date 6-7-80 Customer Order No.
COMPANY NAME P U Properties, Inc.
ADDRESS 360 Sutton Place, Wichita, Ks 67202
LEASE AND WELL NO. Phelan #1 COUNTY Ellsworth STATE Ks Sec. 12 Twp 17S Rge 10W
Mail Invoice To Same As Above No. Copies Requested 5
Co. Name " " " Address " " " No. Copies Requested 5
Mail Charts To " " " Address " " " No. Copies Requested 5

Formation Test No. 5 Interval Tested from 3247 ft. to 3295 ft. Total Depth 3295 ft.
Packer Depth 3242 ft. Size 6 3/4 in. Packer Depth 3247 ft. Size 6 3/4 in.
Packer Depth 3247 ft. Size 6 3/4 in. Packer Depth 3247 ft. Size 6 3/4 in.
Depth of Selective Zone Set 969
Top Recorder Depth (Inside) 3256 ft. Recorder Number 696 Cap. 4150
Bottom Recorder Depth (Outside) 3259 ft. Recorder Number 10207 Cap. 5400
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor Duke Drilling #1 Drill Collar Length 302 I. D. 2.7 in.
Mud Type Starch Viscosity 39 Weight Pipe Length 403 I. D. in.
Weight 9.9 Water Loss 18 cc Drill Pipe Length 252 I. D. 3.8 in.
Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 5/8 in.
Jars: Make Serial Number Anchor Length 48 ft. Size 5/8 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: Fair, 1" Blow, died to 1/2 during F.P.

Recovered 129' ft. of Drilling Mud
Recovered ft. of
Recovered 310' ft. of Slightly Water Cut Mud
Recovered ft. of
Recovered ft. of
Remarks: A Couple of Oil spots on top of Tool

STARTED TEST 5:30 AM TEST 11:40 AM
Time Set Packer(s) 7:15 P.M. Time Started Off Bottom 9:20 P.M. Maximum Temperature 117
Initial Hydrostatic Pressure (A) 1811 P.S.I.
Initial Flow Period Minutes 30 (B) 163 P.S.I. to (C) 153 P.S.I.
Initial Closed In Period Minutes 30 (D) 983 P.S.I.
Final Flow Period Minutes 30 (E) 153 P.S.I. to (F) 184 P.S.I.
Final Closed In Period Minutes 30 (G) 973 P.S.I.
Final Hydrostatic Pressure (H) 1811 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 Will Price
Signature of Customer or his authorized representative

Western Representative Gene Oberholser

FIELD INVOICE

Open Hole Test 530.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
TOTAL \$ 530.00

WESTERN TESTING CO., INC.

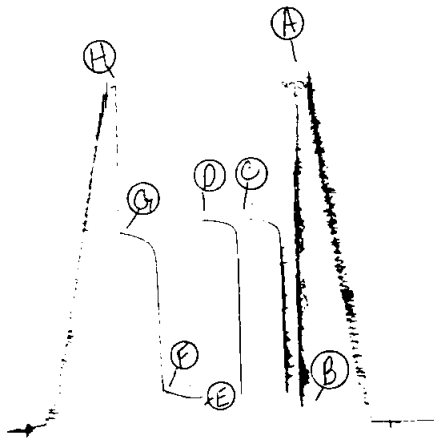
Pressure Data

Date 6-4-80 Test Ticket No. 5464
 Recorder No. 969 Capacity 4150 Location 3256 Ft.
 Clock No. _____ Elevation 1809 KB Well Temperature 117 °F
 Point _____ Pressure _____ Time Given _____ Time Computed _____
 A Initial Hydrostatic Mud 1814 P.S.I. Open Tool 7:15 P.M.
 B First Initial Flow Pressure 156 P.S.I. First Flow Pressure 30 Mins. 30 Mins.
 C First Final Flow Pressure plugging P.S.I. Initial Closed-in Pressure 30 Mins. 27 Mins.
 D Initial Closed-in Pressure 1086 P.S.I. Second Flow Pressure 30 Mins. _____ Mins.
 E Second Initial Flow Pressure 160 P.S.I. Final Closed-in Pressure 30 Mins. _____ Mins.
 F Second Final Flow Pressure 193 P.S.I.
 G Final Closed-in Pressure 1026 P.S.I.
 H Final Hydrostatic Mud 1814 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>10</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 0	<u>156</u>	0	<u>plugging</u>	0	<u>160</u>	0	<u>193</u>
P 2 5	<u>plugging</u>	3	<u>1033</u>	5	<u>153</u>	3	<u>869</u>
P 3 10		6	<u>1055</u>	10	<u>158</u>	6	<u>143</u>
P 4 15		9	<u>1066</u>	15	<u>164</u>	9	<u>971</u>
P 5 20		12	<u>1073</u>	20	<u>176</u>	12	<u>984</u>
P 6 25		15	<u>1077</u>	25	<u>189</u>	15	<u>996</u>
P 7 30		18	<u>1081</u>	30	<u>193</u>	18	<u>1006</u>
P 8 35		21	<u>1085</u>	35		21	<u>1014</u>
P 9 40		24	<u>1086</u>	40		24	<u>1019</u>
P10 45		27	<u>1086</u>	45		27	<u>1024</u>
P11 50		30		50		30	<u>1026</u>
P12 55		33		55		33	
P13 60		36		60		36	
P14		39		65		39	
P15		42		70		42	
P16		45		75		45	
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

TK#5464
I.



Company P.V. Properties, Inc. Lease & Well No. Phelan #1
Elevation 1809 Kelly Bush Formation Arbuckle Effective Pay - Ft. Ticket No. 5464
Date 6-4-80 Sec. 12 Twp. 17S Range 10W County Ellsworth State Kansas
Test Approved by Will Price Western Representative Gene Eberhart

Formation Test No. 5 Interval Tested from 3247 ft. to 3295 ft. Total Depth 3295 ft.

Packer Depth 3242 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3247 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3256 ft. Recorder Number 969 Cap. 4150

Bottom Recorder Depth (Outside) 3259 ft. Recorder Number 10207 Cap. 5400

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

Drilling Contractor Duke Drilling (#1) Drill Collar Length 302 I. D. 2.7 in.

Mud Type Starch Viscosity 39 Weight Pipe Length 403 I. D. - in.

Weight 9.9 Water Loss 18 cc. Drill Pipe Length 2521 I. D. 3.8 in.

Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 48 ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out - 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, 1" blow, died to 1/2" during final flow period.

Recovered 129 ft. of drilling mud

Recovered 210 ft. of slightly water cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:15 ~~PM~~ ^{AM} Time Started Off Bottom 9:20 ~~PM~~ ^{AM} Maximum Temperature 117

Initial Hydrostatic Pressure (A) 1814 P.S.I.

Initial Flow Period Minutes 30 (B) 156 P.S.I. to (C) Plugging Action P.S.I.

Initial Closed In Period Minutes 27 (D) 1086 P.S.I.

Final Flow Period Minutes 30 (E) 160 P.S.I. to (F) 193 P.S.I.

Final Closed In Period Minutes 30 (G) 1026 P.S.I.

Final Hydrostatic Pressure (H) 1814 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 6-4-80 Test Ticket No. 5464
 Recorder No. 969 Capacity 4150 Location 3256 Ft.
 Clock No. - Elevation 1809 Kelly Bushing Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1814</u> P.S.I.	Open Tool	<u>7:15A.</u> M	
B First Initial Flow Pressure	<u>156</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>Plugging Action</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>1086</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>160</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>193</u> P.S.I.			
G Final Closed-in Pressure	<u>1026</u> P.S.I.			
H Final Hydrostatic Mud	<u>1814</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>9</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>156</u>	<u>0</u> <u>Plugging Action</u>	<u>0</u>	<u>0</u>	<u>160</u>	<u>0</u>	<u>193</u>
P 2 <u>5</u>	<u>Plugging Action</u>	<u>3</u>	<u>1033</u>	<u>5</u>	<u>153</u>	<u>3</u>	<u>869</u>
P 3 <u>10</u>	<u>Plugging Action</u>	<u>6</u>	<u>1055</u>	<u>10</u>	<u>158</u>	<u>6</u>	<u>943</u>
P 4 <u>15</u>	<u>Plugging Action</u>	<u>9</u>	<u>1066</u>	<u>15</u>	<u>164</u>	<u>9</u>	<u>971</u>
P 5 <u>20</u>	<u>Plugging Action</u>	<u>12</u>	<u>1073</u>	<u>20</u>	<u>176</u>	<u>12</u>	<u>984</u>
P 6 <u>25</u>	<u>Plugging Action</u>	<u>15</u>	<u>1077</u>	<u>25</u>	<u>189</u>	<u>15</u>	<u>996</u>
P 7 <u>30</u>	<u>Plugging Action</u>	<u>18</u>	<u>1081</u>	<u>30</u>	<u>193</u>	<u>18</u>	<u>1006</u>
P 8		<u>21</u>	<u>1085</u>			<u>21</u>	<u>1014</u>
P 9		<u>24</u>	<u>1086</u>			<u>24</u>	<u>1019</u>
P10		<u>27</u>	<u>1086</u>			<u>27</u>	<u>1024</u>
P11						<u>30</u>	<u>1026</u>
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							