

Company Bow Valley Petroleum, Inc. Lease & Well No. Hibbert #1  
 Elevation ---- Formation Swope Effective Pay - Ft. Ticket No. 15861  
 Date 5/7/82 Sec. 17 Twp. 34S Range 19W County Comanche State Kansas  
 Test Approved by Dwight Williams Western Representative Richard Howell

Formation Test No. 1 Interval Tested from 4888 ft. to 4898 ft. Total Depth 4898 ft.  
 Packer Depth 4883 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 4888 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 4892 ft. Recorder Number 13402 Cap. 4025  
 Bottom Recorder Depth (Outside) 4895 ft. Recorder Number 13267 Cap. 4050  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Husky Drilling Rig #2 Drill Collar Length 366 I. D. 2.2 in.  
 Mud Type drispac Viscosity 42 Weight Pipe Length 310 I. D. 3.2 in.  
 Weight 9.1 Water Loss 10.2 cc. Drill Pipe Length 4182 I. D. 3.8 in.  
 Chlorides 20,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 in.  
 Jars: Make WTC Serial Number 405 Anchor Length 10 ft. Size 5 1/2 in.  
 Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Intial flow period fair building to strong then decreasing to five inches in bucket. Final flow period weak building to five inches and then steady blow.

Recovered 62 ft. of 24% oil; 4% water; 22% mud; 50% gas  
 Recovered 62 ft. of 15% oil; 6% water; 29% mud; 50% gas  
 Recovered 120 ft. of gassy muddy water  
 Recovered 300 ft. of water Chlorides 112,000 ppm  
 Recovered          ft. of         

Remarks:         

Time Set Packer(s) 6:00 A.M. Time Started Off Bottom 10:30 A.M. Maximum Temperature 137°  
P.M. P.M.  
 Initial Hydrostatic Pressure ..... (A) 2429 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 119 P.S.I. to (C) 177 P.S.I.  
 Initial Closed In Period ..... Minutes 57 (D) 1574 P.S.I.  
 Final Flow Period ..... Minutes 60 (E) 223 P.S.I. to (F) 310 P.S.I.  
 Final Closed In Period ..... Minutes 120 (G) 1533 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 2429 P.S.I.

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 5/7/82

Test Ticket No. 15861

Recorder No. 13402

Capacity 4025

Location 4892 Ft.

Clock No. --- Elevation ---

Well Temperature 137 °F

Point	Pressure			Time Given	Time Computed
A	2429	P.S.I.	Open Tool	6:00A	M
B	119	P.S.I.	First Flow Pressure	30	Mins. 30 Mins.
C	177	P.S.I.	Initial Closed-in Pressure	60	Mins. 57 Mins.
D	1574	P.S.I.	Second Flow Pressure	60	Mins. 60 Mins.
E	223	P.S.I.	Final Closed-in Pressure	120	Mins. 120 Mins.
F	310	P.S.I.			
G	1533	P.S.I.			
H	2429	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>19</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>40</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	0	119	0	177	0	223	0	310
P 2	5	119	3	921	5	226	3	769
P 3	10	135	6	1070	10	235	6	913
P 4	15	169	9	1163	15	245	9	1000
P 5	20	169	12	1235	20	255	12	1054
P 6	25	172	15	1287	25	265	15	1102
P 7	30	177	18	1333	30	273	18	1142
P 8			21	1366	35	282	21	1175
P 9			24	1392	40	286	24	1205
P10			27	1426	45	292	27	1227
P11			30	1449	50	299	30	1251
P12			33	1470	55	305	33	1272
P13			36	1486	60	310	36	1292
P14			39	1502			39	1311
P15			42	1523			42	1327
P16			45	1538			45	1342
P17			48	1550			48	1355
P18			51	1561			51	1369
P19			54	1571			54	1378
P20			57	1574			57	1389
							60	1397

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 5/7/82

Test Ticket No. 15861

Recorder No. 13402

Capacity 4025

Location 4892 Ft.

Clock No. --- Elevation ---

Well Temperature 137 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2429</u> P.S.I.	Open Tool	<u>6:00A</u> M	
B First Initial Flow Pressure	<u>119</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>177</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
D Initial Closed-in Pressure	<u>1574</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>223</u> P.S.I.	Final Closed-in Pressure	<u>120</u> Mins.	<u>120</u> Mins.
F Second Final Flow Pressure	<u>310</u> P.S.I.			
G Final Closed-in Pressure	<u>1533</u> P.S.I.			
H Final Hydrostatic Mud	<u>2429</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: 19 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

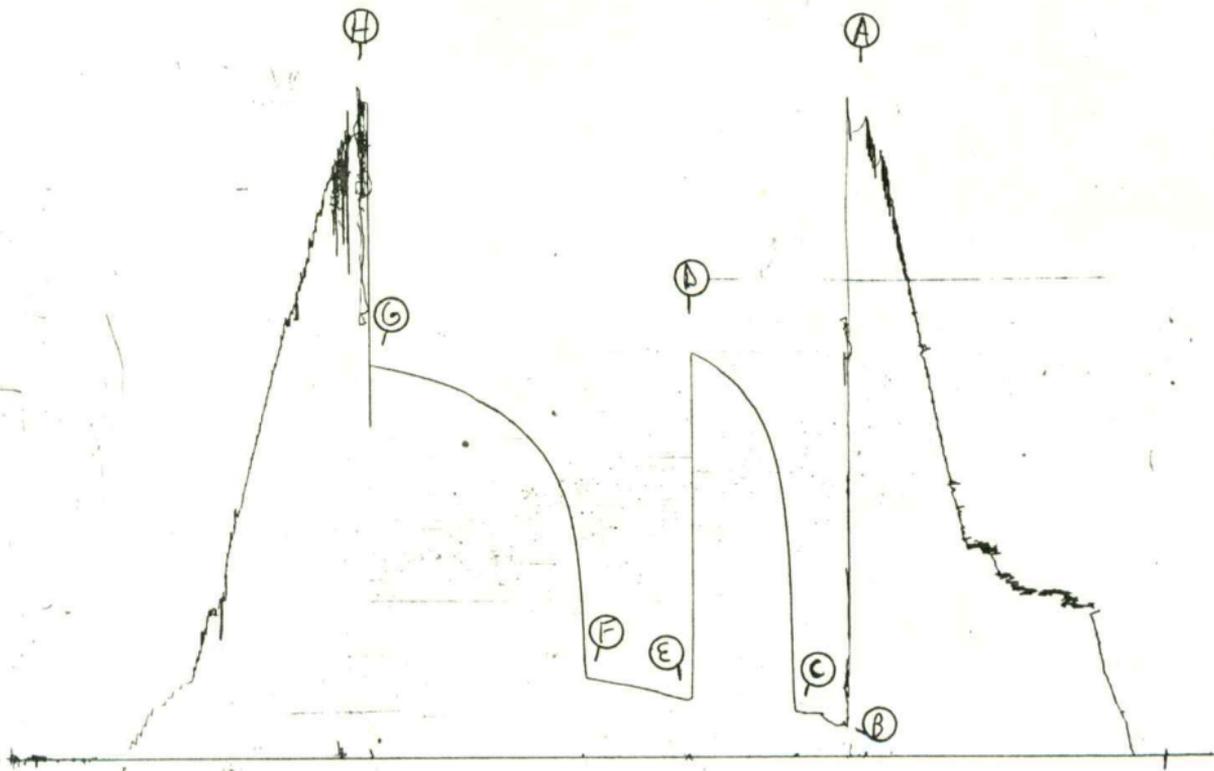
**Second Flow Pressure**  
Breakdown: 12 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

**Final Shut-In**  
Breakdown: 40 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						63	1414
P 2						66	1427
P 3						69	1435
P 4						72	1443
P 5						75	1451
P 6						78	1459
P 7						81	1466
P 8						84	1472
P 9						87	1479
P10						90	1485
P11						93	1490
P12						96	1495
P13						99	1500
P14						102	1505
P15						105	1510
P16						108	1515
P17						111	1520
P18						114	1525
P19						117	1530
P20						120	1533

TKT # 15861

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Company Bow Valley Exploration Lease & Well No. Hibbert #1  
 Elevation 1828 Ground Level Formation Mississippi Effective Pay - Ft. Ticket No. 15312  
 Date 5/9/82 Sec. 17 Twp. 34S Range 19W County Comanche State Kansas  
 Test Approved by Dwight J. Williams Western Representative Rod Tritt

Formation Test No. 2 Interval Tested from 5270 ft. to 5340 ft. Total Depth 5340 ft.  
 Packer Depth 5265 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Packer Depth 5270 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 5274 ft. Recorder Number 2606 Cap 4150  
 Bottom Recorder Depth (Outside) 5277 ft. Recorder Number 4332 Cap 4200  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -

Drilling Contractor Husky Drilling Rig #2 Drill Collar Length 375 I. D. 2 1/4 in.  
 Mud Type drispac Viscosity 54 Weight Pipe Length 305 I. D. 2 1/2 in.  
 Weight 9.1 Water Loss 9.8 cc. Drill Pipe Length 4590 I. D. 3.8 in.  
 Chlorides 21,000 P.P.M. Test Tool Length 31 ft. Tool Size 5 1/2 OD in.  
 Jars: Make WTC Serial Number 402 Anchor Length 70 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 blow throughout test. No gas to surface

Recovered 130 ft. of slightly oil cut mud  
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of      
 Recovered     ft. of    

Remarks: Clock #2606 stopped during final shut-in.  
Read #4332

Time Set Packer(s) 12:15 <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 4:45 <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 133°  
 Initial Hydrostatic Pressure (A) 2666 P.S.I.  
 Initial Flow Period Minutes 25 (B) 101 P.S.I. to (C) 101 P.S.I.  
 Initial Closed In Period Minutes 57 (D) 573 P.S.I.  
 Final Flow Period Minutes 60 (E) 104 P.S.I. to (F) 104 P.S.I.  
 Final Closed In Period Minutes 126 (G) 874 P.S.I.  
 Final Hydrostatic Pressure (H) 2571 P.S.I.



### Fluid Sample Report

Date May 9, 1982 Ticket No. 15312  
 Company Bow Valley Exploration  
 Well Name & No. #1 Hibbert DST No. 2  
 County Comanche State Kansas  
 Sampler No. 2 Test Interval 5270'-5340'

Pressure in Sampler 210 PSIG BHT 133 OF

Total Volume of Sampler	3150	cc.
Total Volume of Sample:	2700	cc.
Oil:	Trace	cc.
Water:	None	cc.
Mud:	2700	cc.
Gas:	None	cu. ft.
Other:	----	

#### Resistivity

Water: 10% @ 18,500 of Chloride Content ppm.  
 Mud Pit Sample 9.8 @ 21,000 of Chloride Content ppm.  
 Gas/Oil Ratio ---- Gravity --- °API @ ----- of

Where was sample drained Pratt Shop

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
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**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 5/9/82 Test Ticket No. 15312  
 Recorder No. 4332 Capacity 4200 Location 5277 Ft.  
 Clock No. -- Elevation 1828 Ground Level Well Temperature 133 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2666 P.S.I.	Open Tool	12:15P	
B First Initial Flow Pressure	101 P.S.I.	First Flow Pressure	30 Mins.	25 Mins.
C First Final Flow Pressure	101 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	573 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	104 P.S.I.	Final Closed-in Pressure	120 Mins.	126 Mins.
F Second Final Flow Pressure	104 P.S.I.			
G Final Closed-in Pressure	874 P.S.I.			
H Final Hydrostatic Mud	2571 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 5 mins. and a final inc. of 0 Min.		of 3 mins. and a final inc. of 0 Min.		of 5 mins. and a final inc. of 0 Min.		of 3 mins. and a final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1 0	101	0	101	0	104	0	104	
P 2 5	101	3	112	5	104	3	107	
P 3 10	101	6	135	10	104	6	126	
P 4 15	101	9	154	15	104	9	143	
P 5 20	101	12	182	20	104	12	161	
P 6 25	101	15	223	25	104	15	179	
P 7		18	251	30	104	18	213	
P 8		21	277	35	104	21	241	
P 9		24	303	40	104	24	272	
P10		27	339	45	104	27	301	
P11		30	367	50	104	30	328	
P12		33	387	55	104	33	352	
P13		36	409	60	104	36	372	
P14		39	441			39	394	
P15		42	468			42	416	
P16		45	493			45	441	
P17		48	514			48	461	
P18		51	530			51	482	
P19		54	553			54	500	
P20		57	573			57	526	
						60	549	

**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 5/9/82 Test Ticket No. 15312  
 Recorder No. 4332 Capacity 4200 Location 5277 Ft.  
 Clock No. -- Elevation 1828 Ground Level Well Temperature 133 °F

Point	Pressure			Time Given	Time Computed
				12:15P	M
A Initial Hydrostatic Mud	2666	P.S.I.	Open Tool	30	25
B First Initial Flow Pressure	101	P.S.I.	First Flow Pressure	60	57
C First Final Flow Pressure	101	P.S.I.	Initial Closed-in Pressure	60	60
D Initial Closed-in Pressure	573	P.S.I.	Second Flow Pressure	120	126
E Second Initial Flow Pressure	104	P.S.I.	Final Closed-in Pressure		
F Second Final Flow Pressure	104	P.S.I.			
G Final Closed-in Pressure	874	P.S.I.			
H Final Hydrostatic Mud	2571	P.S.I.			

**PRESSURE BREAKDOWN**

<b>First Flow Pressure</b> Breakdown: <u>5</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Initial Shut-In</b> Breakdown: <u>19</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>42</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point	Press.	Point	Press.	Point	Press.	Point	Press.
Minutes		Minutes		Minutes		Minutes	
P 1						63	567
P 2						66	582
P 3						69	602
P 4						72	623
P 5						75	643
P 6						78	663
P 7						81	681
P 8						84	702
P 9						87	716
P10						90	734
P11						93	753
P12						96	769
P13						99	784
P14						102	799
P15						105	801
P16						108	805
P17						111	814
P18						114	820
P19						117	834
P19						120	849
P20						123	869
						126	874

4332

UST #2

TKT # 15312

