



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No

1438

OK

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

Elevation _____ Formation Miss Eff. Pay _____ Ft.

District Pratt Date 6-28-83 Customer Order No. _____

COMPANY NAME Bow Valley Petroleum Inc.

ADDRESS 1700 Broadway Suite 900 Denver Colo. 80290

LEASE AND WELL NO. K.V. 2-32 COUNTY Comanche STATE KS Sec. 32 Twp. 33 Rge. 19W

Mail Invoice To Same #2-32 KANSAS UNIVERSITY No. Copies Requested Reg

Co. Name Same Address _____ No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 5212 ft. to 5360 ft. Total Depth 5360 ft.

Packer Depth 5207 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 5212 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 5280 ft. Recorder Number 13402 Cap. 4025

Bottom Recorder Depth (Outside) 5283 ft. Recorder Number 1559 Cap. 4200

Below Scaddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Husky #2 Drill Collar Length 240 I. D. 2.2 in.

Mud Type Discpac Viscosity 40 Weight Pipe Length 300 I. D. 3.2 in.

Weight 9.8 Water Loss 16.0 cc. Drill Pipe Length 4650 I. D. 3.8 in.

Chlorides 30000 P.P.M. Test Tool Length 32 ft. Tool Size 5/8 OD in.

Jars: Make WTC Serial Number 411 Anchor Length D.C. 122 + 26 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.

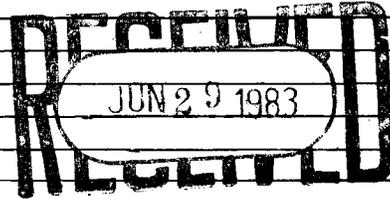
Main Hole Size 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Strong thru F.F. GTS 1 min F.F. See Gas Flow Report.

Recovered 130 ft. of Gas Cut Mud

Recovered _____ ft. of _____

Chlorides _____ P.P.M. Sample Jars used _____ Remarks: _____



Time On Location 1:00 AM Time Pick Up Tool 2:00 AM Time Off Location 2:00 AM

Time Set Packer(s) 6:10 AM Time Started Off Bottom 10:40 AM Maximum Temperature 122 °

Initial Hydrostatic Pressure _____ (A) 2656 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 88 P.S.I. to (C) 108 P.S.I.

Initial Closed In Period _____ Minutes 60 (D) 1865 P.S.I.

Final Flow Period _____ Minutes 60 (E) 108 P.S.I. to (F) 108 P.S.I.

Final Closed In Period _____ Minutes 120 (G) 1945 P.S.I.

Final Hydrostatic Pressure _____ (H) 2656 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 Paul M. Ruera Signature of Customer or his authorized representative

Western Representative Alf Ristowalski

Thank you

FIELD INVOICE

Table with 2 columns: Item and Price. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL. Prices are handwritten in dollars.



Fluid Sample Report

Date 6-28-83 Ticket No. 1438
 Company Bow Valley
 Well Name & No. K.V. 2-32 DST No. 1
 County Comanche State KS
 Sampler No. 1 Test Interval 5212 - 5360

Pressure in Sampler 72 PSIG BHT 122° OF

Total Volume of Sampler 3150 cc.
 Total Volume of Sample: 1600 cc.
 Oil: _____ cc.
 Water: _____ cc.
 Mud: 1600 cc.
 Gas: _____ cu. ft.
 Other: _____

Resistivity

Water: .15 @ 78° of Chloride Content 30,000 ppm.
 Mud Pit Sample .15 @ 78° of Chloride Content 30,000 ppm.
 Gas/Oil Ratio _____ Gravity _____ °API @ _____ OF

Where was sample drained Pratt Shop

Remarks: _____

WESTERN TESTING CO., INC.

Pressure Data

Date 6-28 Test Ticket No. 1438
 Recorder No. 13402 Capacity 4025 Location 5280 Ft.
 Clock No. --- Elevation --- Well Temperature 122 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2646</u> P.S.I.	<u>6:10</u> A.M.	
B First Initial Flow Pressure	<u>93</u> P.S.I.	<u>30</u> Mins.	<u>25</u> Mins.
C First Final Flow Pressure	<u>110</u> P.S.I.	<u>60</u> Mins.	<u>51</u> Mins.
D Initial Closed-in Pressure	<u>1868</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>94</u> P.S.I.	<u>120</u> Mins.	<u>120</u> Mins.
F Second Final Flow Pressure	<u>96</u> P.S.I.		
G Final Closed-in Pressure	<u>1938</u> P.S.I.		
H Final Hydrostatic Mud	<u>2646</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: 18 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 13 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 41 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 0	93	0	110	0	94	0	96
P 2 5	93	3	311	5	94	3	323
P 3 10	95	6	500	10	95	6	524
P 4 15	100	9	694	15	96	9	725
P 5 20	105	12	862	20	(	12	897
P 6 25	110	15	1002	25	(	15	1030
P 7 30		18	1133	30	96	18	1157
P 8 35		21	1257	35	(	21	1285
P 9 40		24	1365	40	(	24	1382
P10 45		27	1466	45	96	27	1484
P11 50		30	1554	50	(	30	1564
P12 55		33	1622	55	(	33	1637
P13 60		36	1683	60	96	36	1698
P14		39	1735	65		39	1745
P15		42	1783	70		42	1787
P16		45	1815	75		45	1823
P17		48	1847	80		48	1851
P18		51	1868	85		51	1878
P19		54		90		54	1894
P20		57				57	1905
		60				60	1915

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____

Test Ticket No. 1438

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. _____			

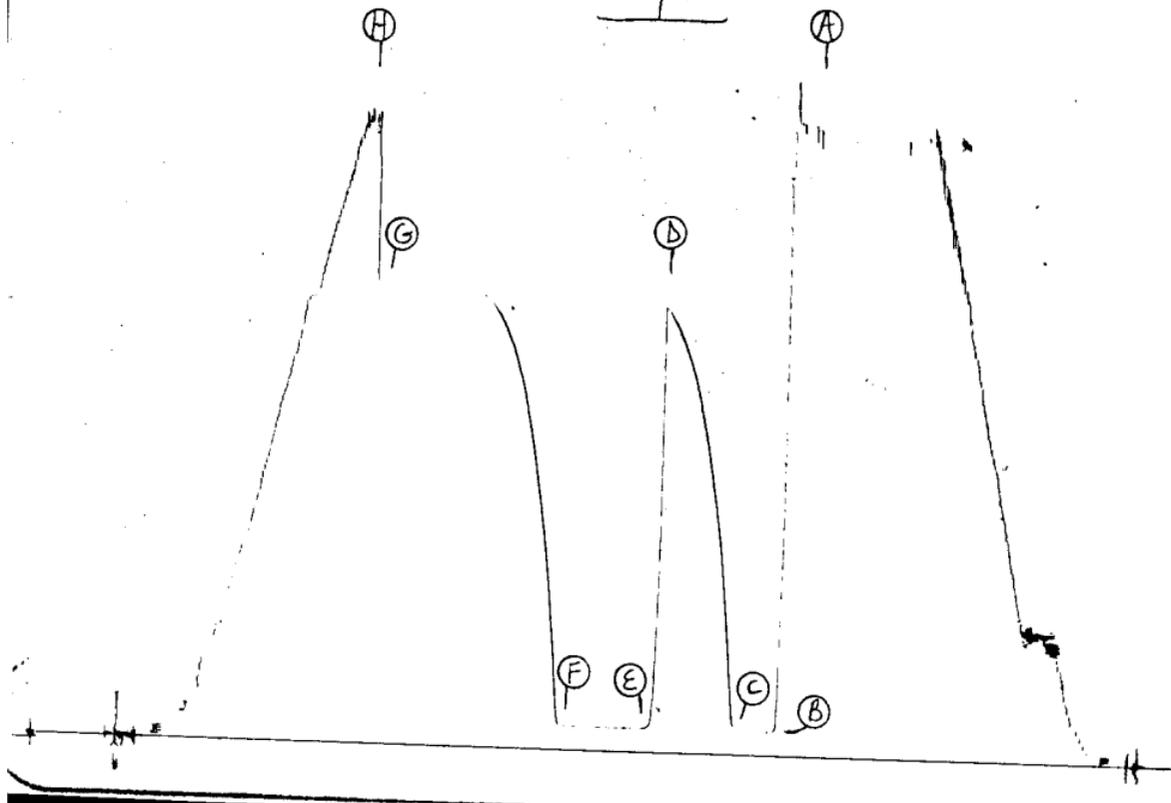
PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Point Minutes	Initial Shut-In	Point Minutes	Second Flow Pressure	Point Minutes	Final Shut-In
	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
	Press.		Press.		Press.		Press.
P 1	_____	63	_____	_____	_____	63	1922
P 2	_____	66	_____	_____	_____	66	1926
P 3	_____	69	_____	_____	_____	69	1928
P 4	_____	72	_____	_____	_____	72	1930
P 5	_____	75	_____	_____	_____	75	1932
P 6	_____	78	_____	_____	_____	78	1933
P 7	_____	81	_____	_____	_____	81	1934
P 8	_____	84	_____	_____	_____	84	1935
P 9	_____	87	_____	_____	_____	87	1936
P10	_____	90	_____	_____	_____	90	1937
P11	_____	93	_____	_____	_____	93	1938
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	1938

13402
DST#1

TKT # 1438

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WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 6/28/83	TICKET #1438
CUSTOMER: BOW VALLEY PETROLEUM INC.	LEASE: KANSAS UNIVERSITY
WELL: 2-32 TEST: 1	GEOLOGIST: P M RWERA
ELEVATION (KB): 0	FORMATION: MISSISSIPPI
SECTION: 32	TOWNSHIP: 33S
RANGE: 19W	COUNTY: COMANCHE STATE: KANSAS
GAUGE SN #13402	RANGE: 4025 CLOCK: 12

INTERVAL TEST FROM: 5212	FT	TO: 5360	FT	TOTAL DEPTH: 5360	FT
DEPTH OF SELECTIVE ZONE:					FT
PACKER DEPTH: 5207	FT	SIZE: 6 3/4	IN	PACKER DEPTH: 5212	FT
PACKER DEPTH:	FT	SIZE:	IN	PACKER DEPTH:	FT
				SIZE: 6 3/4	IN
				SIZE:	IN

DRILLING CONTRACTOR: HUSKY			
MUD TYPE: DRISPAC	VISCOSITY: 40		
WEIGHT: 9.8	WATER LOSS (CC): 16.0		
CHLORIDES (P.P.M.): 30000			
JARS - MAKE: WTC	SERIAL NUMBER: 411		
DID WELL FLOW? NO	REVERSED OUT? NO		
DRILL COLLAR LENGTH: 240	FT I.D.: 2.2	IN	
WEIGHT PIPE LENGTH: 300	FT I.D.: 3.2	IN	
DRILL PIPE LENGTH: 4650	FT I.D.: 3.8	IN	
TEST TOOL LENGTH: 32	FT	TOOL SIZE: 5 1/2 OD	IN
ANCHOR LENGTH: DC122+26	FT	SIZE: 5 1/2 OD	IN
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: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE IN 1 MINUTE ON FINAL FLOW.
SEE ATTACHED GAS SHEET.

RECOVERED: 130	FT	OF: GAS CUT MUD
RECOVERED:	FT	OF:

REMARKS:

TIME SET PACKER(S): 6:10 AM	TIME STARTED OFF BOTTOM: 10:40 AM
WELL TEMPERATURE: 122 °F	
INITIAL HYDROSTATIC PRESSURE:	(A) 2646 PSI
INITIAL FLOW PERIOD MIN: 25	(B) 93 PSI TO (C) 110 PSI
INITIAL CLOSED IN PERIOD MIN: 51	(D) 1868 PSI
FINAL FLOW PERIOD MIN: 60	(E) 94 PSI TO (F) 96 PSI
FINAL CLOSED IN PERIOD MIN: 120	(G) 1938 PSI
FINAL HYDROSTATIC PRESSURE	(H) 2646 PSI

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 6/28/83
CUSTOMER: BOW VALLEY PETROLEUM INC.
WELL: 2-32 TEST: 1
ELEVATION (KB): 0 FORMATION: MISSISSIPPI
SECTION: 32 TOWNSHIP: 33S
RANGE: 19W COUNTY: COMANCHE STATE: KANSAS
GAUGE SN #13402 RANGE: 4025 CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

SECOND FLOW

TIME	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
1				GAS TO SURFACE
10	MERLA	1/2	19" WTR	27300 CFPD
20		1/2	20" WTR	28000 CFPD
30		1/2	22" WTR	29400 CFPD
40		1/2	24" WTR	30700 CFPD
50		1/2	24" WTR	30700 CFPD
60		1/2	24" WTR	30700 CFPD

GAS BOTTLE SN #: 631
DATE BOTTLE FILLED: 6/28/83
DATE TO BE INVOICED: 6/28/83

