



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO: 216

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

Elevation 945 ft. Ct. Formation Miss Eff. Pay Ft.

District Augusta Date 5-8-78 Customer Order No.

COMPANY NAME Brunson - Spines Inc.

ADDRESS 615 Fourth Financial Center - Wichita, Kans. 67202

LEASE AND WELL NO. Bell #1 COUNTY Elk STATE Kans. Sec. 15 Twp. 305 Rge. 12E

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested from 1570 ft. to 1580 ft. Total Depth 1580 ft.
Packer Depth 1570 ft. Size 5 1/2 in. Packer Depth ft. Size in.
Packer Depth ft. Size in. Packer Depth ft. Size in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 1573 ft. Recorder Number 1559 Cap. 4200
Bottom Recorder Depth (Outside) 1576 ft. Recorder Number 1558 Cap. 4200
Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Also #6 Drill Collar Length 92 I. D. 2 in.
Mud Type Chem Viscosity 50 Weight Pipe Length I. D. in.
Weight 9.5 Water Loss N.C. cc. Drill Pipe Length 1465 I. D. 2.7 in.
Chlorides 500 P.P.M. Test Tool Size 4 1/2 in. Tool Joint Size 3 1/2 ch. F. in.
Jars: Make Serial Number Anchor Length 10 ft. Size 4 1/2 in.
Did Well Flow? Yes Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 6 1/4 in.

Blow: Very strong flow throughout test. Gas to surface 2 min. Started flowing a mist of Drly. mud in 15 min. on 4 1/2". 45 min total. Gas flow Report # 812 Draged 317,000 - 517,000

Recovered 120 ft. of Possibly water cut & gas cut Drly. mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks:

Time Set Packer(s) 7:01 ^{A.M.}/_{P.M.} Time Started Off Bottom 10:05 ^{A.M.}/_{P.M.} Maximum Temperature 91
Initial Hydrostatic Pressure (A) 720 714 P.S.I.
Initial Flow Period Minutes 30 (B) 104 109 P.S.I. to (C) 125 125 P.S.I.
Initial Closed In Period Minutes 30 (D) 564 555 P.S.I.
Final Flow Period Minutes 60 (E) 135 163 P.S.I. to (F) 146 131 P.S.I.
Final Closed In Period Minutes 60 (G) 564 555 P.S.I.
Final Hydrostatic Pressure (H) 720 714 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 [Signature]
Signature of Customer or his authorized representative.
TOM WRIGHT
Western Representative Jim Wilson

FIELD INVOICE
Open Hole Test \$ 415.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Extra Charts \$
TOTAL \$ 415.00

Phone 316 262-5861
316 838-0601



P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

No 812

Date 5-8-78 Ticket 216 Company Brunson & Spines Inc.
Well Name and No. Bell #1 Dst No. 2 Interval Tested 1570 - 1580
County Ellis State Kansas Sec. 15 Twp. 30S Rg. 12E

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						
						<i>Tool open 7:05 a.m. Gas to surface 2 min.</i>
7:15	10	14	$\frac{3}{4}$ inch orifice			317,000 C.F.P.D.
7:25	20	17.5				363,500
7:35	30	17.5				363,500
			<i>Tool shut down 30 min.</i>			

SECOND FLOW						
8:05	0	16	$\frac{3}{4}$ in. orifice			344,000 C.F.P.D.
8:15	10	19.5	<i>started flowing only mud Mat</i>			391,000
8:25	20	<u>15 min. F.F.P.</u>	14 inches	Water		517,000
8:35	30			12		481,000
8:45	40			13		504,235
8:55	50			13		504,235
9:05	60			14		517,000
			<i>Tool shut down 60 min.</i>			

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1% per month, equal to 12% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

WESTERN TESTING CO., INC.

Pressure Data

Date 5-8-78 Test Ticket No. 216
 Recorder No. 1559 Capacity 4200 Location 1573 Ft.
 Block No. --- Elevation 945 Well Temperature 91 °F

Point	Pressure		Time Given	Time Computed
1 Initial Hydrostatic Mud	<u>716</u>	P.S.I.	<u>7:01A</u>	M
2 First Initial Flow Pressure	<u>109</u>	P.S.I.	<u>30</u>	Mins. <u>30</u> Mins.
3 First Final Flow Pressure	<u>125</u>	P.S.I.	<u>30</u>	Mins. <u>30</u> Mins.
4 Initial Closed-in Pressure	<u>555</u>	P.S.I.	<u>60</u>	Mins. <u>60</u> Mins.
5 Second Initial Flow Pressure	<u>163</u>	P.S.I.	<u>60</u>	Mins. <u>60</u> Mins.
6 Second Final Flow Pressure	<u>131</u>	P.S.I.		
7 Final Closed-in Pressure	<u>555</u>	P.S.I.		
8 Final Hydrostatic Mud	<u>716</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>10</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>20</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.
1 0	<u>109</u>	0	<u>125</u>	0	<u>163</u>	0	<u>131</u>
2 5	<u>105</u>	3	<u>531</u>	5	<u>136</u>	3	<u>521</u>
3 10	<u>112</u>	6	<u>544</u>	10	<u>132</u>	6	<u>537</u>
4 15	<u>119</u>	9	<u>550</u>	15	<u>134</u>	9	<u>544</u>
5 20	<u>120</u>	12	<u>552</u>	20	<u>134</u>	12	<u>548</u>
6 25	<u>125</u>	15	<u>553</u>	25	<u>134</u>	15	<u>551</u>
7 30	<u>125</u>	18	<u>554</u>	30	<u>137</u>	18	<u>552</u>
8 35		21	<u>554</u>	35	<u>136</u>	21	<u>553</u>
9 40		24	<u>555</u>	40	<u>135</u>	24	<u>554</u>
10 45		27	<u>555</u>	45	<u>133</u>	27	<u>554</u>
11 50		30	<u>555</u>	50	<u>132</u>	30	<u>554</u>
12 55		33		55	<u>131</u>	33	<u>554</u>
13 60		36		60	<u>131</u>	36	<u>554</u>
14		39		65		39	<u>554</u>
15		42		70		42	<u>554</u>
16		45		75		45	<u>555</u>
17		48		80		48	<u>555</u>
18		51		85		51	<u>555</u>
19		54		90		54	<u>555</u>
20		57				57	<u>555</u>
		60				60	<u>555</u>



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

Company Brunson-Spines, Inc. Lease & Well No. Bell #1
 Elevation 945 Ground Level Est. Formation Mississippi Effective Pay ----- Ft. Ticket No. 216
 Date 5/8/78 Sec. 15 Twp. 39s Range 12e County Elk State Kansas
 Test Approved by Tom Wright Western Representative Tim Wilson

Formation Test No. 2 Interval Tested from 1570' ft. to 1580' ft. Total Depth 1580' ft.
 Packer Depth 1570 ft. Size 5½ in. Packer Depth ----- ft. Size ----- in.
 Packer Depth ----- ft. Size ----- in. Packer Depth ----- ft. Size ----- in.
 Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 1573' ft. Recorder Number 1559 Cap. 4200
 Bottom Recorder Depth (Outside) 1576' ft. Recorder Number 1558 Cap. 4200
 Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. -----

Drilling Contractor Alco #6 Drill Collar Length 92 I. D. 2 in.
 Mud Type chemical Viscosity 50 Weight Pipe Length ----- I. D. ----- in.
 Weight 9.5 Water Loss N.C. cc. Drill Pipe Length 1465 I. D. 2.7 in.
 Chlorides 500 P.P.M. Test Tool Size 4½ in. Tool Joint Size 3½ I.F. in.
 Jars: Make ----- Serial Number ----- Anchor Length 10 ft. Size 4½ in.
 Did Well Flow? yes Reversed Out no Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
 Main Hole Size 6 ¼ in.

Blow: Very strong. Gas to surface 2 minutes. Started flowing a mist of drilling mud in 15 minutes on final flow period. 45 minutes total. Gas flow report #812.

Recovered 120 ft. of water cut and gas cut drilling mud
 Recovered ----- ft. of -----
 Recovered ----- ft. of -----
 Recovered ----- ft. of -----
 Recovered ----- ft. of -----

Remarks: -----

Time Set Packer(s) 7:01 A.M. Time Started Off Bottom 10:05 A.M. Maximum Temperature 91
P.M. P.M.
 Initial Hydrostatic Pressure 716 P.S.I. (A)
 Initial Flow Period 30 Minutes (B) 109 P.S.I. to (C) 125 P.S.I.
 Initial Closed In Period 30 Minutes (D) 555 P.S.I.
 Final Flow Period 60 Minutes (E) 163 P.S.I. to (F) 131 P.S.I.
 Final Closed In Period 60 Minutes (G) 555 P.S.I.
 Final Hydrostatic Pressure 716 P.S.I. (H)

WESTERN TESTING CO., INC.
Pressure Data

Date 5/8/78 Test Ticket No. 216
 Recorder No. 1559 Capacity 4200 Location 1573
 Clock No. ----- Elevation 945 Ground Level Well Temperature 91

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	716	P.S.I.	7:01 A.M.	
B. First Initial Flow Pressure	109	P.S.I.	30 Mins.	30 M
C. First Final Flow Pressure	125	P.S.I.	30 Mins.	30 M
D. Initial Closed-in Pressure	555	P.S.I.	60 Mins.	60 M
E. Second Initial Flow Pressure	163	P.S.I.	60 Mins.	60 M
F. Second Final Flow Pressure	131	P.S.I.		
G. Final Closed-in Pressure	555	P.S.I.		
H. Final Hydrostatic Mud	716	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>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	0	0	125	0	163	0	131
P 2	5	3	531	5	136	3	521
P 3	10	6	544	10	132	6	537
P 4	15	9	550	15	134	9	544
P 5	20	12	552	20	134	12	548
P 6	25	15	553	25	134	15	551
P 7	30	18	554	30	137	18	552
P 8		21	554	35	136	21	553
P 9		24	555	40	135	24	554
P10		27	555	45	133	27	554
P11		30	555	50	132	30	554
P12				55	131	33	554
P13				60	131	36	554
P14						39	554
P15						42	554
P16						45	555
P17						48	555
P18						51	555
P19						54	555
P20						57	555
						60	555



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

GAS FLOW REPORT

Date 5-8-78 Ticket 216 Company Brunson-Spines, Inc.
Well Name and No. Bell #1 Dst No. 2 Interval Tested 1570' - 1580'
County Elk State Kansas Sec. 15 Twp. 30S Rg. 12E

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

7:15	10 min.	14 PSIG	3/4" orifice			317,000 C.F.P.D.
7:25	20 min.	17.5 PSIG	3/4" orifice			363,500 C.F.P.D.
7:35	30 min.	17.5 PSIG	3/4" orifice			363,500 C.F.P.D.

SECOND FLOW

8:05	0 min.	16 PSIG	3/4" orifice			344,000 C.F.P.D.
8:15	10 min.	19.5 PSIG	3/4" orifice			391,000 C.F.P.D.
8:25	20 min.	14" of water	2" orifice			517,000 C.F.P.D.
8:35	30 min.	12" of water	2" orifice			481,000 C.F.P.D.
8:45	40 min.	13" of water	2" orifice			504,235 C.F.P.D.
8:55	50 min.	13" of water	2" orifice			504,235 C.F.P.D.
9:05	60 min.	14" of water	2" orifice			517,000 C.F.P.D.

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

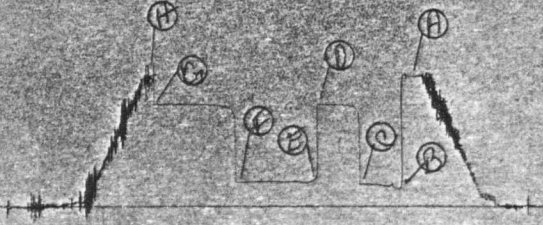
Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

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COMPANY'S NAME Brunson-Spines, Inc.

Authorized by Tim Wilson

TKH #216
I.



1559