

**WELL NAME:** Bower "B" # 1  
**COMPANY:** Foundation Resources L.L.C.  
**LOCATION:** 8-17-26W  
Ness County Kansas  
**DATE:** 11/12/97

TRILOBITE TESTING L.L.C.

OPERATOR : Foundation Res. LLC  
WELL NAME: #1 Bower "B"  
LOCATION : 8-17-26W Ness Co Ks  
INTERVAL : 4435.00 To 4472.00 ft

DATE 11-11-97  
KB 2632.00 ft TICKET NO: 10708 DST #1  
GR 2624.00 ft FORMATION: Ft Scott  
TD 4472.00 ft TEST TYPE: CONV

RECORDER DATA

| Mins              | Field  | 1      | 2      | 3   | 4   | TIME DATA-----         |
|-------------------|--------|--------|--------|-----|-----|------------------------|
| PF 15 Rec.        | 13754  | 13754  | 2357   |     |     | PF Fr. 0045 to 0100 hr |
| SI 30 Range(Psi ) | 4000.0 | 4000.0 | 4995.0 | 0.0 | 0.0 | IS Fr. 0100 to 0130 hr |
| SF 15 Clock(hrs)  | 12 hr  | 12 hr  | Elec   |     |     | SF Fr. 0130 to 0145 hr |
| FS 15 Depth(ft )  | 4469.0 | 4469.0 | 4438.0 | 0.0 | 0.0 | FS Fr. 0145 to 0200 hr |

|                | Field  | 1      | 2      | 3   | 4   |                               |
|----------------|--------|--------|--------|-----|-----|-------------------------------|
| A. Init Hydro  | 2289.0 | 2257.0 | 2218.0 | 0.0 | 0.0 | T STARTED 2239 hr             |
| B. First Flow  | 39.0   | 4.0    | 9.0    | 0.0 | 0.0 | T ON BOTM 0042 hr             |
| B1. Final Flow | 39.0   | 48.0   | 11.0   | 0.0 | 0.0 | T OPEN 0045 hr                |
| C. In Shut-in  | 620.0  | 640.0  | 617.0  | 0.0 | 0.0 | T PULLED 0200 hr              |
| D. Init Flow   | 39.0   | 54.0   | 11.0   | 0.0 | 0.0 | T OUT 0400 hr                 |
| E. Final Flow  | 39.0   | 41.0   | 15.0   | 0.0 | 0.0 |                               |
| F. Fl Shut-in  | 78.0   | 74.0   | 62.0   | 0.0 | 0.0 | TOOL DATA-----                |
| G. Final Hydro | 2228.0 | 2183.0 | 2209.0 | 0.0 | 0.0 | Tool Wt. 1000.00 lbs          |
| Inside/Outside | 0      | 0      | I      |     |     | Wt Set On Packer 30000.00 lbs |
|                |        |        |        |     |     | Wt Pulled Loose 60000.00 lbs  |
|                |        |        |        |     |     | Initial Str Wt 42000.00 lbs   |
|                |        |        |        |     |     | Unseated Str Wt 42000.00 lbs  |
|                |        |        |        |     |     | Bot Choke 0.75 in             |
|                |        |        |        |     |     | Hole Size 7.88 in             |
|                |        |        |        |     |     | D Col. ID 2.25 in             |
|                |        |        |        |     |     | D. Pipe ID 3.80 in            |
|                |        |        |        |     |     | D.C. Length 30.00 ft          |
|                |        |        |        |     |     | D.P. Length 4408.00 ft        |

RECOVERY

Tot Fluid 5.00 ft of 5.00 ft in DC and 0.00 ft in DP  
5.00 ft of Drilling mud  
0.00 ft of  
0.00 ft of  
0.00 ft of  
0.00 ft of  
0.00 ft of  
0.00 ft of  
0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:  
Weak blow, died in 12 mins

Final Flow:

SAMPLES:  
SENT TO:

Test Successful: Y

MUD DATA-----

|                |                |
|----------------|----------------|
| Mud Type       | Chemical       |
| Weight         | 9.40 lb/cf     |
| Vis.           | 48.00 S/L      |
| W.L.           | 9.60 in3       |
| F.C.           | 0.00 in        |
| Mud Drop N     |                |
| Amt. of fill   | 0.00 ft        |
| Btm. H. Temp.  | 113.00 F       |
| Hole Condition | Good           |
| % Porosity     | 0.00           |
| Packer Size    | 6.75 in        |
| No. of Packers | 2              |
| Cushion Amt.   | 0.00           |
| Cushion Type   |                |
| Reversed Out N |                |
| Tool Chased N  |                |
| Tester         | Dan Bangle     |
| Co. Rep.       | Robert Stolzle |
| Contr.         | Discovery      |
| Rig #          | 2              |
| Unit #         |                |
| Pump T.        |                |

\*\*\* TOOL DIAGRAM \*\*\* CONV

WELL NAME: #1 Bower "B"

LOCATION : 8-17S-26W Ness Co Ks

TICKET No. 10708 D.S.T. No. 1 DATE 11-11-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 23

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 37

TOTAL TOOL ..... 60

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY ..... 60

D.C. ABOVE TOOLS.Stands Single 1 Total 30

D.P. ABOVE TOOLS.Stands Single Total 4408

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4498

TOTAL DEPTH ..... 4472

TOTAL DRILL PIPE ABOVE K.B. .... 26

REMARKS:

Hit bridge @ 900'

|                      |      |
|----------------------|------|
| P.O. SUB             | 4288 |
| C.O. SUB             | 4412 |
| S.I. TOOL            | 4418 |
| HMV                  | 4423 |
| JARS n/a             |      |
| SAFETY JOINT         | 4426 |
| PACKER               | 4430 |
| PACKER               | 4435 |
| DEPTH 4435           |      |
| STUBB 1'             | 4436 |
| ANCHOR 1'Perfs       | 4437 |
| Alpine @ 4438        |      |
| 5' Perfs             | 4442 |
| 5' Perfs             | 4447 |
| 5' Perfs             | 4452 |
| 5' Perfs             | 4457 |
| T.C.                 |      |
| DEPTH                |      |
| 5' Perfs             | 4462 |
| 5' Perfs             | 4467 |
| AK-1 @ 4469          |      |
| BULLNOSE 5' Bullplug | 4472 |
| T.D.                 |      |

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING  
 TEST: Tk #10708 DST #1 Bower #1 'B' Foundation Res. LLC  
 DATE: 11/10/97 TIME: 22:40:03  
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|                      | Time   | Pressure<br>PSIg | delta P<br>PSIg | Temp.<br>DEG F | (T+dT)/dT | P^2/10^6 |
|----------------------|--------|------------------|-----------------|----------------|-----------|----------|
| ***** Initial Hydro. | 122.00 | 2218.5           | 0.0             | 111.28         |           |          |
| ***** Start Flow 1   | 0.00   | 9.0              | 0.0             | 111.59         |           |          |
|                      | 1.00   | 10.2             | 1.3             | 111.67         |           |          |
|                      | 2.00   | 10.4             | 1.4             | 111.72         |           |          |
|                      | 3.00   | 10.7             | 1.8             | 111.74         |           |          |
|                      | 4.00   | 10.9             | 1.9             | 111.75         |           |          |
|                      | 5.00   | 10.9             | 1.9             | 111.76         |           |          |
|                      | 6.00   | 10.8             | 1.9             | 111.76         |           |          |
|                      | 7.00   | 10.8             | 1.9             | 111.76         |           |          |
|                      | 8.00   | 11.2             | 2.2             | 111.77         |           |          |
|                      | 9.00   | 11.1             | 2.1             | 111.77         |           |          |
|                      | 10.00  | 11.1             | 2.1             | 111.77         |           |          |
|                      | 11.00  | 11.2             | 2.3             | 111.78         |           |          |
|                      | 12.00  | 11.3             | 2.4             | 111.80         |           |          |
|                      | 13.00  | 11.4             | 2.4             | 111.81         |           |          |
|                      | 14.00  | 11.3             | 2.4             | 111.82         |           |          |
| ***** End Flow 1     | 15.00  | 11.5             | 2.5             | 111.84         |           |          |
| ***** Start Shutin 1 | 0.00   | 11.5             | 0.0             | 111.84         | 0.0000    | 0.000    |
|                      | 1.00   | 12.8             | 1.3             | 111.85         | 16.0000   | 0.000    |
|                      | 2.00   | 15.9             | 4.4             | 111.87         | 8.5000    | 0.000    |
|                      | 3.00   | 19.2             | 7.7             | 111.89         | 6.0000    | 0.000    |
|                      | 4.00   | 22.8             | 11.3            | 111.91         | 4.7500    | 0.001    |
|                      | 5.00   | 27.1             | 15.6            | 111.93         | 4.0000    | 0.001    |
|                      | 6.00   | 31.8             | 20.3            | 111.96         | 3.5000    | 0.001    |
|                      | 7.00   | 37.8             | 26.3            | 111.99         | 3.1429    | 0.001    |
|                      | 8.00   | 44.6             | 33.1            | 112.01         | 2.8750    | 0.002    |
|                      | 9.00   | 53.1             | 41.6            | 112.04         | 2.6667    | 0.003    |
|                      | 10.00  | 62.8             | 51.3            | 112.07         | 2.5000    | 0.004    |
|                      | 11.00  | 75.8             | 64.3            | 112.10         | 2.3636    | 0.006    |
|                      | 12.00  | 92.0             | 80.5            | 112.13         | 2.2500    | 0.008    |
|                      | 13.00  | 112.0            | 100.5           | 112.16         | 2.1538    | 0.013    |
|                      | 14.00  | 136.1            | 124.6           | 112.19         | 2.0714    | 0.019    |
|                      | 15.00  | 164.2            | 152.7           | 112.23         | 2.0000    | 0.027    |
|                      | 16.00  | 196.1            | 184.6           | 112.27         | 1.9375    | 0.038    |
|                      | 17.00  | 230.5            | 219.0           | 112.30         | 1.8824    | 0.053    |
|                      | 18.00  | 266.5            | 255.1           | 112.35         | 1.8333    | 0.071    |
|                      | 19.00  | 303.6            | 292.2           | 112.39         | 1.7895    | 0.092    |
|                      | 20.00  | 341.2            | 329.8           | 112.43         | 1.7500    | 0.116    |
|                      | 21.00  | 378.8            | 367.4           | 112.48         | 1.7143    | 0.144    |
|                      | 22.00  | 415.8            | 404.3           | 112.52         | 1.6818    | 0.173    |
|                      | 23.00  | 451.9            | 440.5           | 112.57         | 1.6522    | 0.204    |
|                      | 24.00  | 487.0            | 475.5           | 112.61         | 1.6250    | 0.237    |
|                      | 25.00  | 520.8            | 509.3           | 112.65         | 1.6000    | 0.271    |
|                      | 26.00  | 553.2            | 541.8           | 112.69         | 1.5769    | 0.306    |
|                      | 27.00  | 584.4            | 572.9           | 112.74         | 1.5556    | 0.342    |
|                      | 28.00  | 614.2            | 602.7           | 112.79         | 1.5357    | 0.377    |
| ***** End Shut-in 1  | 29.00  | 617.0            | 605.5           | 112.84         | 1.5172    | 0.381    |
| ***** Start Flow 2   | 0.00   | 11.5             | 0.0             | 112.84         |           |          |
|                      | 1.00   | 11.7             | 0.2             | 112.85         |           |          |
|                      | 2.00   | 11.9             | 0.4             | 112.86         |           |          |
|                      | 3.00   | 12.2             | 0.7             | 112.87         |           |          |

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk #10708 DST #1 Bower #1 'B' Foundation Res. LLC

DATE: 11/10/97 TIME: 22:40:03  
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|                      | Time   | Pressure<br>PSIg | delta P<br>PSIg | Temp.<br>DEG F | (T+dT)/dT | P^2/10^6 |
|----------------------|--------|------------------|-----------------|----------------|-----------|----------|
|                      | 4.00   | 12.3             | 0.8             | 112.88         |           |          |
|                      | 5.00   | 12.2             | 0.8             | 112.90         |           |          |
|                      | 6.00   | 12.4             | 0.9             | 112.92         |           |          |
|                      | 7.00   | 12.5             | 1.0             | 112.95         |           |          |
|                      | 8.00   | 12.5             | 1.0             | 112.98         |           |          |
|                      | 9.00   | 15.4             | 3.9             | 113.02         |           |          |
|                      | 10.00  | 15.7             | 4.2             | 113.04         |           |          |
|                      | 11.00  | 15.7             | 4.2             | 113.07         |           |          |
|                      | 12.00  | 15.7             | 4.2             | 113.11         |           |          |
|                      | 13.00  | 15.6             | 4.1             | 113.14         |           |          |
|                      | 14.00  | 15.6             | 4.1             | 113.17         |           |          |
|                      | 15.00  | 15.9             | 4.4             | 113.20         |           |          |
| ***** End Flow 2     | 16.00  | 15.2             | 3.7             | 113.23         |           |          |
| ***** Start Shutin 2 | 0.00   | 15.2             | 0.0             | 113.23         | 0.0000    | 0.000    |
|                      | 1.00   | 17.3             | 2.1             | 113.27         | 32.0000   | 0.000    |
|                      | 2.00   | 19.4             | 4.2             | 113.30         | 16.5000   | 0.000    |
|                      | 3.00   | 21.6             | 6.4             | 113.33         | 11.3333   | 0.000    |
|                      | 4.00   | 23.7             | 8.6             | 113.37         | 8.7500    | 0.001    |
|                      | 5.00   | 26.2             | 11.0            | 113.41         | 7.2000    | 0.001    |
|                      | 6.00   | 28.9             | 13.7            | 113.45         | 6.1667    | 0.001    |
|                      | 7.00   | 31.7             | 16.5            | 113.47         | 5.4286    | 0.001    |
|                      | 8.00   | 34.8             | 19.6            | 113.51         | 4.8750    | 0.001    |
|                      | 9.00   | 38.3             | 23.1            | 113.56         | 4.4444    | 0.001    |
|                      | 10.00  | 42.2             | 27.0            | 113.59         | 4.1000    | 0.002    |
|                      | 11.00  | 46.4             | 31.2            | 113.63         | 3.8182    | 0.002    |
|                      | 12.00  | 51.1             | 35.9            | 113.67         | 3.5833    | 0.003    |
|                      | 13.00  | 56.5             | 41.3            | 113.71         | 3.3846    | 0.003    |
| ***** End Shut-in 2  | 14.00  | 62.4             | 47.3            | 113.75         | 3.2143    | 0.004    |
| ***** Final Hydro.   | 201.00 | 2209.2           | 0.0             | 113.98         |           |          |

# TEST HISTORY

Tk #10708 DST #1 Bower #1 'B' Foundation Res. LLC

Flag Points

t(Min.) P(PSig)

A: 0.00 2218.46  
 B: 0.00 8.97  
 C: 15.00 11.49  
 D: 29.00 617.03  
 E: 0.00 11.49  
 F: 16.00 15.18  
 G: 14.00 62.43  
 Q: 0.00 2209.22

