

# CHENEY TESTING COMPANY

P. O. BOX 3

HILL CITY, KANSAS 67642

## DRILL-STEM TEST DATA

|                                                       |                       |                  |                |
|-------------------------------------------------------|-----------------------|------------------|----------------|
| Company                                               | A.L. Abercrombie Inc. | Test No.         | 1              |
| Well Name & Number                                    | Stienberg Twin        | Zone Tested      |                |
| Company Address                                       | Wichita, Ks.          | Date             | 12-13-82       |
| Comp. Rep.                                            | Bill Darrow           | Tester           | Steven Holdren |
| Contractor                                            | Abercrombie Drlg. Inc | Elevation        | 2924 C.L.      |
| Location: Sec. 2 Twp. 19 Rge. 31w Co. Scott State Ks. |                       | Est. Feet of Pay |                |

Recorder No. 13366 Type AK-1 Range 3850 PSI

Recorder Depth 4396

(A) Initial Hydrostatic Mud 2707 PSI

(B) First Initial Flow Pressure 54 PSI

(C) First Final Flow Pressure 152 PSI

(D) Initial Closed-in Pressure 1341 PSI

(E) Second Initial Flow Pressure 228 PSI

(F) Second Final Flow Pressure 282 PSI

(G) Final Closed-in Pressure 1244 PSI

(H) Final Hydrostatic Mud 2664 PSI

Temperature 118

Mud Weight 9.8 Viscosity 46

Fluid Loss 12.8

Interval Tested 4375-4402

Anchor Length 27

Top Packer Depth 4370

Bottom Packer Depth 4375

Total Depth 4402

Drill Pipe Size 4 1/2 XH

Wt. Pipe I. D. 3.25 Ft. Run 384

Recovery—Total Feet 510

Recovered 138 Feet Of OIL CUT MUD. 10% GAS, 18% OIL, 72% MUD.

Recovered 372 Feet Of OIL CUT SALT WATER. 5% GAS, 2% OIL, 93% SALT WATER.

Recovered        Feet Of       

Recovered        Feet Of       

Extra Equipment NONE

Recorder No. 10290 Type AK-1 Range 4250 PSI

Recorder Depth 4399

Tool Open Before I. S. I. 30 Mins.

Initial Shut-in 60 Mins.

Flow Period 60 Mins.

Final Shut-in 60 Mins.

Surface Choke Size 1"

Bottom Choke Size 3/4"

Main Hole Size 7 7/8"

Rubber Size 6 3/4"

Tool Open @ 2:40 A.M.

Blow STRONG.

Remarks 1ST OPEN-BLOW OFF BOTTOM OF BUCKET

IN 17 MIN.

2ND OPEN-BLOW OFF BOTTOM OF BUCKET IN 28 MIN.

CHLORIDES-WELL-52,000 P.P.M.

SAMPLE-86,000 P.P.M.

Drill Collar I. D.        Ft. Run       

Price of Job \$675.00

## CHENEY TESTING COMPANY

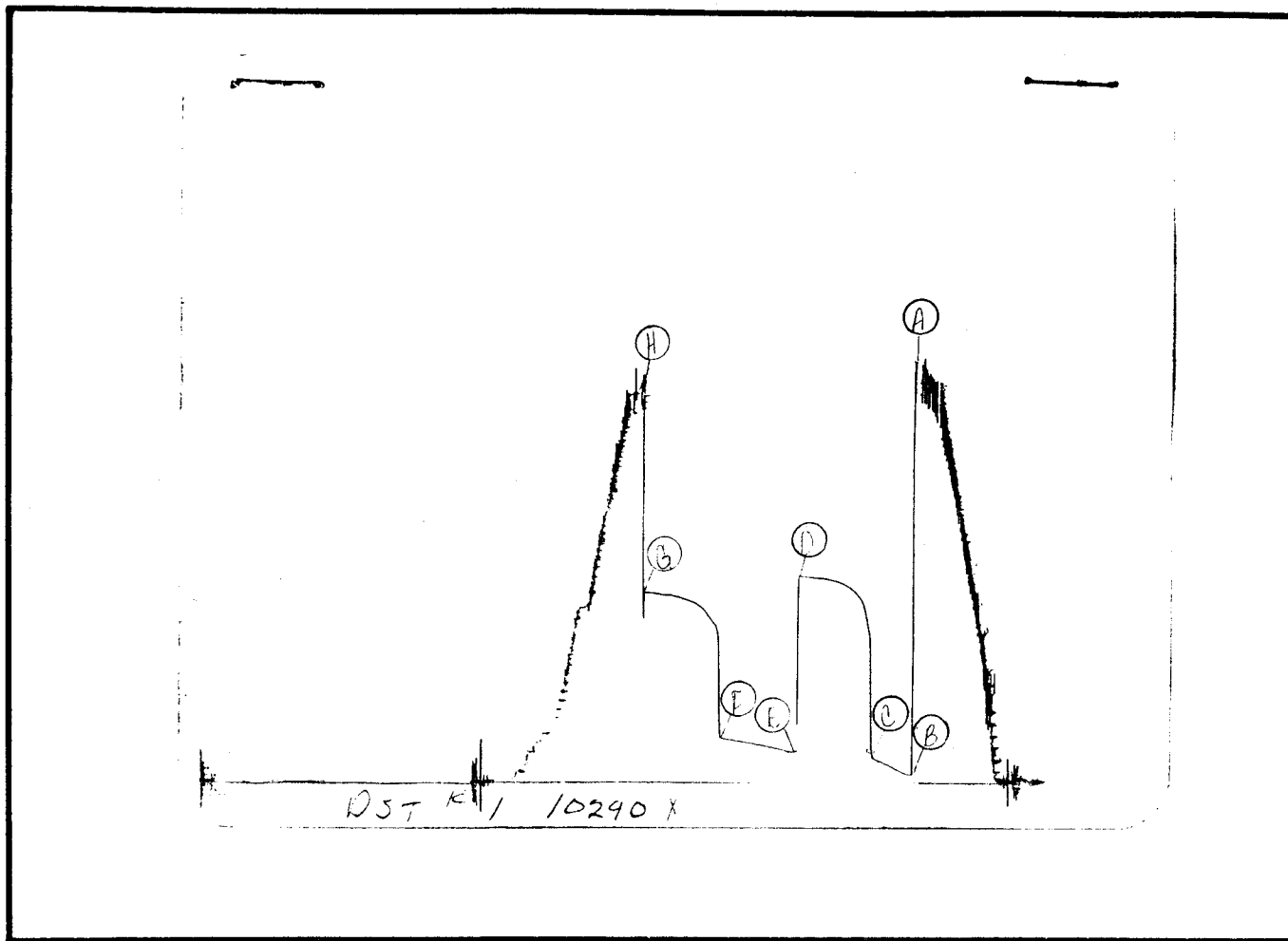
## Pressure Data

Date 12-13-82 Test Ticket No. 8292  
 Recorder No. 10290 Capacity 4250 Location 4399 Ft.  
 Clock No. 26193 Elevation 2924 G.L. Well Temperature 118 °F

| Point                          | Pressure           |                            | Time Given        | Time Computed   |
|--------------------------------|--------------------|----------------------------|-------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2704</u> P.S.I. | Open Tool                  | <u>2:40 A. M.</u> |                 |
| B First Initial Flow Pressure  | <u>48</u> P.S.I.   | First Flow Pressure        | <u>30</u> Mins.   | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>142</u> P.S.I.  | Initial Closed-in Pressure | <u>60</u> Mins.   | <u>55</u> Mins. |
| D Initial Closed-in Pressure   | <u>1182</u> P.S.I. | Second Flow Pressure       | <u>60</u> Mins.   | <u>60</u> Mins. |
| E Second Initial Flow Pressure | <u>176</u> P.S.I.  | Final Closed-in Pressure   | <u>60</u> Mins.   | <u>60</u> Mins. |
| F Second Final Flow Pressure   | <u>255</u> P.S.I.  |                            |                   |                 |
| G Final Closed-in Pressure     | <u>1084</u> P.S.I. |                            |                   |                 |
| H Final Hydrostatic Mud        | <u>2260</u> P.S.I. |                            |                   |                 |

## PRESSURE BREAKDOWN

| First Flow Pressure<br>Breakdown: <u>6</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |            | Initial Shut-In<br>Breakdown: <u>11</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |             | Second Flow Pressure<br>Breakdown: <u>12</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |            | Final Shut-In<br>Breakdown: <u>12</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |             |
|-----------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------|-------------|
| Point<br>Mins.                                                                                            | Press.     | Point<br>Minutes                                                                                       | Press.      | Point<br>Minutes                                                                                            | Press.     | Point<br>Minutes                                                                                     | Press.      |
| P 1 <u>0</u>                                                                                              | <u>48</u>  | <u>0</u>                                                                                               | <u>142</u>  | <u>0</u>                                                                                                    | <u>176</u> | <u>0</u>                                                                                             | <u>255</u>  |
| P 2 <u>5</u>                                                                                              | <u>52</u>  | <u>5</u>                                                                                               | <u>932</u>  | <u>5</u>                                                                                                    | <u>176</u> | <u>5</u>                                                                                             | <u>192</u>  |
| P 3 <u>10</u>                                                                                             | <u>70</u>  | <u>10</u>                                                                                              | <u>1052</u> | <u>10</u>                                                                                                   | <u>186</u> | <u>10</u>                                                                                            | <u>959</u>  |
| P 4 <u>15</u>                                                                                             | <u>91</u>  | <u>15</u>                                                                                              | <u>1097</u> | <u>15</u>                                                                                                   | <u>194</u> | <u>15</u>                                                                                            | <u>1004</u> |
| P 5 <u>20</u>                                                                                             | <u>110</u> | <u>20</u>                                                                                              | <u>1123</u> | <u>20</u>                                                                                                   | <u>202</u> | <u>20</u>                                                                                            | <u>1027</u> |
| P 6 <u>25</u>                                                                                             | <u>127</u> | <u>25</u>                                                                                              | <u>1142</u> | <u>25</u>                                                                                                   | <u>210</u> | <u>25</u>                                                                                            | <u>1042</u> |
| P 7 <u>30</u>                                                                                             | <u>142</u> | <u>30</u>                                                                                              | <u>1156</u> | <u>30</u>                                                                                                   | <u>217</u> | <u>30</u>                                                                                            | <u>1055</u> |
| P 8                                                                                                       |            | <u>35</u>                                                                                              | <u>1165</u> | <u>35</u>                                                                                                   | <u>225</u> | <u>35</u>                                                                                            | <u>1064</u> |
| P 9                                                                                                       |            | <u>40</u>                                                                                              | <u>1170</u> | <u>40</u>                                                                                                   | <u>230</u> | <u>40</u>                                                                                            | <u>1073</u> |
| P10                                                                                                       |            | <u>45</u>                                                                                              | <u>1173</u> | <u>45</u>                                                                                                   | <u>238</u> | <u>45</u>                                                                                            | <u>1074</u> |
| P11                                                                                                       |            | <u>50</u>                                                                                              | <u>1178</u> | <u>50</u>                                                                                                   | <u>244</u> | <u>50</u>                                                                                            | <u>1080</u> |
| P12                                                                                                       |            | <u>55</u>                                                                                              | <u>1182</u> | <u>55</u>                                                                                                   | <u>250</u> | <u>55</u>                                                                                            | <u>1083</u> |
| P13                                                                                                       |            |                                                                                                        |             | <u>60</u>                                                                                                   | <u>255</u> | <u>60</u>                                                                                            | <u>1084</u> |
| P14                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |
| P15                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |
| P16                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |
| P17                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |
| P18                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |
| P19                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |
| P20                                                                                                       |            |                                                                                                        |             |                                                                                                             |            |                                                                                                      |             |



This is an actual photograph of recorder chart.

| POINT                            | PRESSURE      |                |     |
|----------------------------------|---------------|----------------|-----|
|                                  | Field Reading | Office Reading |     |
| (A) Initial Hydrostatic Mud      | 2707          | 2704           | PSI |
| (B) First Initial Flow Pressure  | 54            | 48             | PSI |
| (C) First Final Flow Pressure    | 152           | 142            | PSI |
| (D) Initial Closed-in Pressure   | 1341          | 1182           | PSI |
| (E) Second Initial Flow Pressure | 228           | 176            | PSI |
| (F) Second Final Flow Pressure   | 282           | 255            | PSI |
| (G) Final Closed-in Pressure     | 1244          | 1084           | PSI |
| (H) Final Hydrostatic Mud        | 2664          | 2260           | PSI |