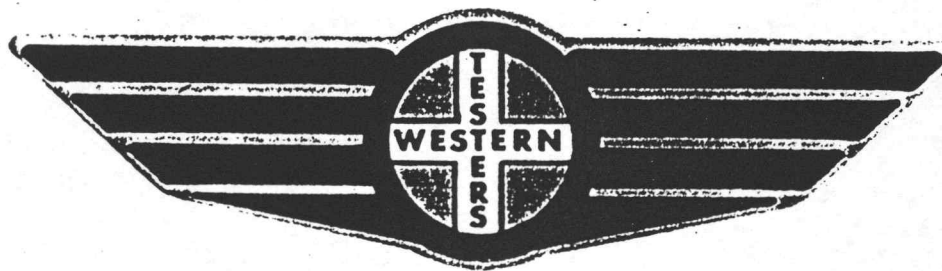


# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY A & A DISCOVERY, INC. LEASE & WELL NO. HOLLAND A-1 SEC. 8 TWP. 27S RGE. 11W TEST NO. 3 DATE 6/25/88

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

|           |   |                      |           |   |                 |    |
|-----------|---|----------------------|-----------|---|-----------------|----|
| DATE      | : | 6/25&26/88           | TICKET    | : | 13711           |    |
| CUSTOMER  | : | A & A DISCOVERY INC. | LEASE     | : | HOLLAND         |    |
| WELL      | : | #A-1                 | TEST:     | : | 3               |    |
| ELEVATION | : | 1829 KB              | GEOLOGIST | : | S ALBERG        |    |
| SECTION   | : | 8                    | FORMATION | : | KANSAS CITY "K" |    |
| RANGE     | : | 11W                  | TOWNSHIP  | : | 27S             |    |
| GAUGE SN# | : | 4332                 | STATE     | : | KANSAS          |    |
|           |   | COUNTY :             | PRATT     |   | CLOCK :         | 12 |
|           |   | RANGE :              | 4200      |   |                 |    |

|                         |   |      |      |   |      |             |   |      |
|-------------------------|---|------|------|---|------|-------------|---|------|
| INTERVAL FROM           | : | 3890 | TO   | : | 3914 | TOTAL DEPTH | : | 4485 |
| DEPTH OF SELECTIVE ZONE | : |      |      |   |      |             |   |      |
| PACKER DEPTH            | : | 3885 | SIZE | : | 6.63 |             |   |      |
| PACKER DEPTH            | : | 3890 | SIZE | : | 6.63 |             |   |      |
| PACKER DEPTH            | : | 3914 | SIZE | : | 6.63 |             |   |      |
| PACKER DEPTH            | : | 3919 | SIZE | : | 6.63 |             |   |      |

|                 |   |          |                 |   |      |  |  |
|-----------------|---|----------|-----------------|---|------|--|--|
| DRILLING CON.   | : | DUKE     | RIG             | 3 |      |  |  |
| MUD TYPE        | : | CHEMICAL | VISCOSITY       | : | 49   |  |  |
| WEIGHT          | : | 9.0      | WATER LOSS (CC) | : | 18.2 |  |  |
| CHLORIDES (PPM) | : | 14000    |                 |   |      |  |  |
| JARS-MAKE       | : | WTC      | SERIAL NUMBER   | : | 411  |  |  |
| DID WELL FLOW ? | : | YES      | REVERSED OUT ?  | : | YES  |  |  |

|                     |   |       |    |                   |   |        |
|---------------------|---|-------|----|-------------------|---|--------|
| DRILL COLLAR LENGTH | : | 0     | FT | I.D. inch         | : | 0.00   |
| WEIGHT PIPE LENGTH  | : | 0     | FT | I.D. inch         | : | 0.00   |
| DRILL PIPE LENGTH   | : | 3867  | FT | I.D. inch         | : | 3.80   |
| TEST TOOL LENGTH    | : | 28    | FT | TOOL SIZE         | : | 5.50   |
| ANCHOR LENGTH       | : | 24    | FT | ANCHOR SIZE       | : | 5.50   |
| SURFACE CHOKE SIZE  | : | .75   | IN | BOTTOM CHOKE SIZE | : | .75    |
| MAIN HOLE SIZE      | : | 7.875 | IN | TOOL JOINT SIZE   | : | 4.5 XH |

BLOW COMMENT #1 : STRONG BLOW ON THE INITIAL FLOW-GAS TO SURFACE  
BLOW COMMENT #2 : IN 10 MINUTES: SEE ATTACHED FLOW CHART.  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :

RECOVERED : 3800 FT OF: GASSY OIL  
30 GRAVITY @ 60 DEG.F.

Total Barrels Fluid = 53.30  
Total Fluid Prod Rate = 1096.46 BFPD  
Indicated Oil Rate = 1096.46 BOPD  
Corrected Oil Rate = 486.76 BOPD

REMARK 1 :  
REMARK 2 : 566 FEET OF TAIL PIPE.  
REMARK 3 :  
REMARK 4 :

|                               |          |                           |                       |
|-------------------------------|----------|---------------------------|-----------------------|
| SET PACKER(S) :               | 12:55 AM | TIME STARTED OFF BOTTOM : | 4:30 AM               |
| WELL TEMPERATURE :            | 0        |                           |                       |
| INITIAL HYDROSTATIC PRESSURE  |          | (A)                       | 1883                  |
| INITIAL FLOW PERIOD MIN:      | 30       | (B)                       | 372 PSI TO (C) : 659  |
| INITIAL CLOSED IN PERIOD MIN: | 57       | (D)                       | 1418                  |
| FINAL FLOW PERIOD MIN:        | 40       | (E)                       | 795 PSI TO (F) : 1012 |
| FINAL CLOSED IN PERIOD MIN:   | 93       | (G)                       | 1412                  |
| FINAL HYDROSTATIC PRESSURE    |          | (H)                       | 1824                  |

# GAS FLOW REPORT

|                                                        |                      |
|--------------------------------------------------------|----------------------|
| Date : 6-26-88                                         | Ticket # : 13711     |
| Customer : A & A DISCOVERY INC.                        | Lease : HOLLAND      |
| Well : #A-1      Test : 3                              | Geologist : S ALBERG |
| Elevation (KB) : 1928      Formation : KANSAS CITY "K" |                      |
| Section : 8      Township : 27S                        |                      |
| Range : 11W      County : PRATT                        | State : KANSAS       |
| Gauge SN # : 4332      Range : 4200                    | Clock : 12           |

| TIME GAUGE<br>(MIN) | TESTER TYPE | ORFICE<br>SIZE | PRESSURE<br>(PSI) | FLOW DESCRIPTION |
|---------------------|-------------|----------------|-------------------|------------------|
|---------------------|-------------|----------------|-------------------|------------------|

## PRE FLOW =====

|    |       |      |    |                           |
|----|-------|------|----|---------------------------|
| 10 | MERLA | 3/4" |    | INCH OF WTRGAS TO SURFACE |
| 20 |       |      | 20 | 63500 CFPD                |
| 30 |       |      | 8  | 40000 CFPD                |

## SECOND FLOW =====

|    |       |      |           |            |
|----|-------|------|-----------|------------|
| 10 | MERLA | 3/4" | 3" of WTR | 24500 CFPD |
| 20 |       |      | 2         | 20000 CFPD |
| 25 |       |      |           |            |

WELL FLOWED OIL  
SHUT-IN TOOL

Gas Bottle SN # : 34 P  
Date Bottle Filled : 6-26-88  
Date to be Invoiced :

WESTERN TESTING CO. INC.  
WICHITA-KANSAS

Pressure Transient Report

COMPANY : A & A DISCOVERY INC.  
RIG : PRATT-KANSAS  
FIELD : HOLLAND  
WELL : #A-1  
DATE : 6/25&26/88  
GAUGE NO : 4332

OPERATIONAL COMMENTS

566 FEET OF TAIL PIPE.

COMPANY : A & A DISCOVERY INC.  
WELL : #A-1  
GAUGE # : 4332  
DATE : 25/ 6/88

FIELD : HOLLAND  
JOB # : 13711  
DEPTH : 4485  
TEST :

| DATA<br>No. | REAL TIME<br>HR:MN:SS | ELAPSE TIME<br>DELTA HOURS | PRESSURE<br>PSIG | TEMP<br>DEG F | DELTA P<br>Pi-P(i-1) |
|-------------|-----------------------|----------------------------|------------------|---------------|----------------------|
| 1           | 12:55: 0              | 0.000                      | 372.000          | 0.00          | 0.000                |
| 2           | 12:59:59              | 0.083                      | 379.000          | 0.00          | 7.000                |
| 3           | 13: 5: 0              | 0.167                      | 404.000          | 0.00          | 25.000               |
| 4           | 13:10: 0              | 0.250                      | 469.000          | 0.00          | 65.000               |
| 5           | 13:14:59              | 0.333                      | 531.000          | 0.00          | 62.000               |
| 6           | 13:20: 0              | 0.417                      | 596.000          | 0.00          | 65.000               |
| 7           | 13:25: 0              | 0.500                      | 659.000          | 0.00          | 63.000               |
| 8           | 13:28: 0              | 0.550                      | 1265.000         | 0.00          | 606.000              |
| 9           | 13:31: 0              | 0.600                      | 1306.000         | 0.00          | 41.000               |
| 10          | 13:34: 0              | 0.650                      | 1331.000         | 0.00          | 25.000               |
| 11          | 13:37: 0              | 0.700                      | 1353.000         | 0.00          | 22.000               |
| 12          | 13:40: 0              | 0.750                      | 1368.000         | 0.00          | 15.000               |
| 13          | 13:43: 0              | 0.800                      | 1376.000         | 0.00          | 8.000                |
| 14          | 13:46: 0              | 0.850                      | 1384.000         | 0.00          | 8.000                |
| 15          | 13:49: 0              | 0.900                      | 1390.000         | 0.00          | 6.000                |
| 16          | 13:52: 0              | 0.950                      | 1397.000         | 0.00          | 7.000                |
| 17          | 13:55: 0              | 1.000                      | 1401.000         | 0.00          | 4.000                |
| 18          | 13:58: 0              | 1.050                      | 1403.000         | 0.00          | 2.000                |
| 19          | 14: 1: 0              | 1.100                      | 1408.000         | 0.00          | 5.000                |
| 20          | 14: 4: 0              | 1.150                      | 1410.000         | 0.00          | 2.000                |
| 21          | 14: 7: 0              | 1.200                      | 1412.000         | 0.00          | 2.000                |
| 22          | 14:10: 0              | 1.250                      | 1414.000         | 0.00          | 2.000                |
| 23          | 14:13: 0              | 1.300                      | 1416.000         | 0.00          | 2.000                |
| 24          | 14:16: 0              | 1.350                      | 1417.000         | 0.00          | 1.000                |
| 25          | 14:19: 0              | 1.400                      | 1418.000         | 0.00          | 1.000                |
| 26          | 14:22: 0              | 1.450                      | 1418.000         | 0.00          | 0.000                |
| 27          | 14:23: 0              | 1.467                      | 795.000          | 0.00          | -623.000             |
| 28          | 14:26:59              | 1.533                      | 795.000          | 0.00          | 0.000                |
| 29          | 14:32: 0              | 1.617                      | 812.000          | 0.00          | 17.000               |
| 30          | 14:37: 0              | 1.700                      | 853.000          | 0.00          | 41.000               |
| 31          | 14:41:59              | 1.783                      | 898.000          | 0.00          | 45.000               |
| 32          | 14:47: 0              | 1.867                      | 942.000          | 0.00          | 44.000               |
| 33          | 14:52: 0              | 1.950                      | 978.000          | 0.00          | 36.000               |
| 34          | 14:56:59              | 2.033                      | 1009.000         | 0.00          | 31.000               |
| 35          | 15: 2: 0              | 2.117                      | 1012.000         | 0.00          | 3.000                |
| 36          | 15: 5: 0              | 2.167                      | 1242.000         | 0.00          | 230.000              |
| 37          | 15: 8: 0              | 2.217                      | 1301.000         | 0.00          | 59.000               |
| 38          | 15:11: 0              | 2.267                      | 1328.000         | 0.00          | 27.000               |
| 39          | 15:14: 0              | 2.317                      | 1344.000         | 0.00          | 16.000               |
| 40          | 15:17: 0              | 2.367                      | 1355.000         | 0.00          | 11.000               |
| 41          | 15:20: 0              | 2.417                      | 1364.000         | 0.00          | 9.000                |
| 42          | 15:23: 0              | 2.467                      | 1370.000         | 0.00          | 6.000                |
| 43          | 15:26: 0              | 2.517                      | 1376.000         | 0.00          | 6.000                |
| 44          | 15:29: 0              | 2.567                      | 1380.000         | 0.00          | 4.000                |
| 45          | 15:32: 0              | 2.617                      | 1383.000         | 0.00          | 3.000                |
| 46          | 15:35: 0              | 2.667                      | 1386.000         | 0.00          | 3.000                |
| 47          | 15:38: 0              | 2.717                      | 1389.000         | 0.00          | 3.000                |
| 48          | 15:41: 0              | 2.767                      | 1391.000         | 0.00          | 2.000                |
| 49          | 15:44: 0              | 2.817                      | 1393.000         | 0.00          | 2.000                |
| 50          | 15:47: 0              | 2.867                      | 1395.000         | 0.00          | 2.000                |
| 51          | 15:50: 0              | 2.917                      | 1397.000         | 0.00          | 2.000                |
| 52          | 15:53: 0              | 2.967                      | 1398.000         | 0.00          | 1.000                |

COMPANY : A & A DISCOVERY INC.  
WELL : #A-1  
GAUGE # : 4332  
DATE : 25/ 6/88

FIELD : HOLLAND  
JOB # : 13711  
DEPTH : 4485  
TEST :

| DATA<br>No. | REAL TIME<br>HR:MN:SS | ELAPSE TIME<br>DELTA HOURS | PRESSURE<br>PSIG | TEMP<br>DEG F | DELTA P<br>Pi-P(i-1) |
|-------------|-----------------------|----------------------------|------------------|---------------|----------------------|
| 53          | 15:56: 0              | 3.017                      | 1399.000         | 0.00          | 1.000                |
| 54          | 15:59: 0              | 3.067                      | 1400.000         | 0.00          | 1.000                |
| 55          | 16: 2: 0              | 3.117                      | 1401.000         | 0.00          | 1.000                |
| 56          | 16: 5: 0              | 3.167                      | 1402.000         | 0.00          | 1.000                |
| 57          | 16: 8: 0              | 3.217                      | 1403.000         | 0.00          | 1.000                |
| 58          | 16:11: 0              | 3.267                      | 1404.000         | 0.00          | 1.000                |
| 59          | 16:14: 0              | 3.317                      | 1406.000         | 0.00          | 2.000                |
| 60          | 16:17: 0              | 3.367                      | 1408.000         | 0.00          | 2.000                |
| 61          | 16:20: 0              | 3.417                      | 1409.000         | 0.00          | 1.000                |
| 62          | 16:23: 0              | 3.467                      | 1410.000         | 0.00          | 1.000                |
| 63          | 16:26: 0              | 3.517                      | 1411.000         | 0.00          | 1.000                |
| 64          | 16:29: 0              | 3.567                      | 1412.000         | 0.00          | 1.000                |
| 65          | 16:32: 0              | 3.617                      | 1412.000         | 0.00          | 0.000                |
| 66          | 16:35: 0              | 3.667                      | 1412.000         | 0.00          | 0.000                |

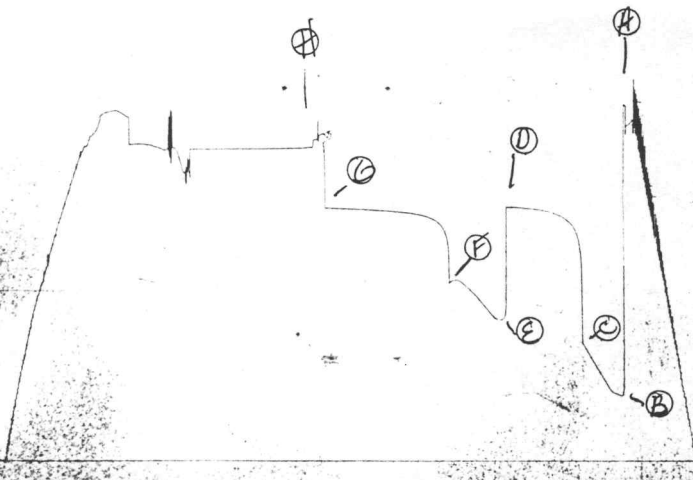
WESTERN TESTING CO. INC.

4332. DST #3



JK # 13711

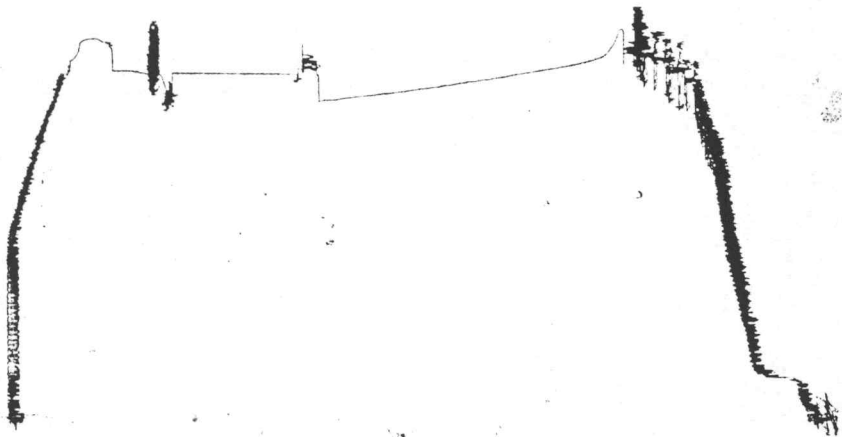
I





It # 13711

Below Straddle



13520 DST#3

2ke # 13711

