

## TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

|                 |                                    |             |              |                 |         |
|-----------------|------------------------------------|-------------|--------------|-----------------|---------|
| Well Name & No. | DEUTSCH "A" -2                     | Test No.    | 1            | Date            | 6/17/90 |
| Company         | QUINOCO PETROLEUM INC              | Zone Tested | KS CITY "A"  |                 |         |
| Address         | 4582 S ULSTER PKWY #1700 DENVER CO | Elevation   | 1925 GL      |                 |         |
| Co. Rep./Geo.   | SCOTT ALBERG                       | Cont.       | DUKE DRLG CO | Est. Ft. of Pay | 0       |
| Location: Sec.  | 16                                 | Twp.        | 16S          | Rge.            | 13W     |
|                 |                                    | Co.         | BARTON       | State           | KANSAS  |

|                     |                              |                             |                                     |
|---------------------|------------------------------|-----------------------------|-------------------------------------|
| Interval Tested     | 3152-3200                    | Drill Pipe Size             | 4.5" XH                             |
| Anchor Length       | 48                           | Top Choke — 1"              | Bottom Choke — 3/4"                 |
| Top Packer Depth    | 3147                         | Hole Size — 77/8"           | Rubber Size — 63/4"                 |
| Bottom Packer Depth | 3152                         | Wt. Pipe I.D. — 2.7 Ft. Run | 248                                 |
| Total Depth         | 3200                         | Drill Collar — 2.25 Ft. Run | 0                                   |
| Mud Wt.             | 9.2                          | lb/gal.                     | Viscosity 43 Filtrate 12.2          |
| Tool Open @         | 9:15 AM                      | Initial Blow                | VERY WEAK FOR 10 MINUTES-TOOLS SLID |
|                     | 12' TO BOTTOM                |                             |                                     |
| Final Blow          | NO BLOW-FLUSHED TOOL-NO BLOW |                             |                                     |

|                                  |        |              |                                        |
|----------------------------------|--------|--------------|----------------------------------------|
| Recovery — Total Feet            | 90     | Flush Tool?  | YES                                    |
| Rec.                             | 90     | Feet of      | DRILLING MUD                           |
| Rec.                             | 0      | Feet of      |                                        |
| Rec.                             | 0      | Feet of      |                                        |
| Rec.                             | 0      | Feet of      |                                        |
| Rec.                             | 0      | Feet of      |                                        |
| BHT                              | 106    | °F Gravity   | °API @ 0 °F Corrected Gravity 0 °API   |
| RW                               | @      | °F Chlorides | ppm Recovery Chlorides 7200 ppm System |
| (A) Initial Hydrostatic Mud      | 1631.2 | PSI          | AK1 Recorder No. 2023 Range 4000       |
| (B) First Initial Flow Pressure  | 73.2   | PSI          | @ (depth) 3195 w/Clock No. 31152       |
| (C) First Final Flow Pressure    | 86.9   | PSI          | AK1 Recorder No. 13308 Range 4700      |
| (D) Initial Shut-In Pressure     | 478.2  | PSI          | @ (depth) 3200 w/Clock No. 17642       |
| (E) Second Initial Flow Pressure | 88.5   | PSI          | AK1 Recorder No. 0 Range 0             |
| (F) Second Final Flow Pressure   | 88.5   | PSI          | @ (depth) 0 w/Clock No. 0              |
| (G) Final Shut-In Pressure       | 455.2  | PSI          | Initial Opening 30                     |
| (H) Final Hydrostatic Mud        | 1601.2 | PSI          | Initial Shut-In 30                     |
|                                  |        |              | Final Flow 30                          |
|                                  |        |              | Final Shut-In 30                       |

MR HARRY SCHMIDT

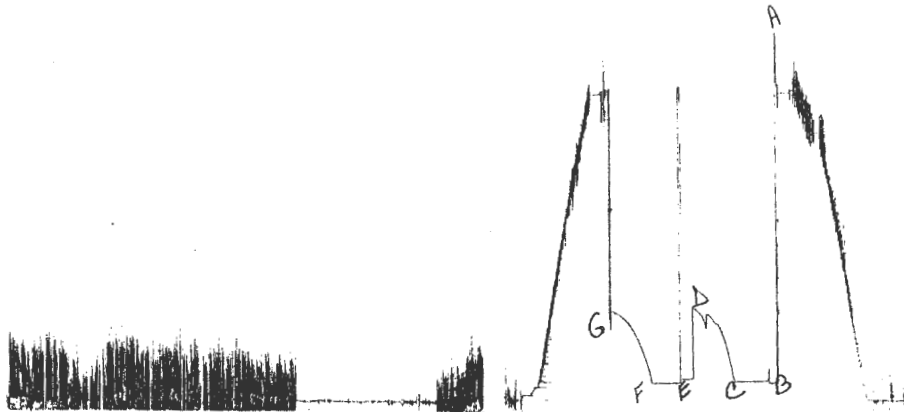
500

Our Representative \_\_\_\_\_

TOTAL PRICE \$ \_\_\_\_\_

DST# 1RECORDER# 2023

TICKET #2983 #2023



This is an actual photograph of recorder chart.

## PRESSURE

| POINT                                 | Field Reading | Office Reading |     |
|---------------------------------------|---------------|----------------|-----|
| (A) Initial Hydrostatic Mud.....      | 1630          | 1631.2         | PSI |
| (B) First Initial Flow Pressure.....  | 72            | 73.2           | PSI |
| (C) First Final Flow Pressure.....    | 85            | 86.9           | PSI |
| (D) Initial Closed-In Pressure.....   | 477           | 478.2          | PSI |
| (E) Second Initial Flow Pressure..... | 85            | 88.5           | PSI |
| (F) Second Final Flow Pressure.....   | 85            | 88.5           | PSI |
| (G) Final Closed-In Pressure.....     | 454           | 455.2          | PSI |
| (H) Final Hydrostatic Mud.....        | 1600          | 1601.2         | PSI |

# TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 2983 Date 6/17/90  
Company Name QUINOCO PETROLEUM INC  
Lease DEUTSCH "A" -2 Test No. 1  
County BARTON Sec. 16 Twp. 16S Rng. 13W

### SAMPLER RECOVERY

Gas 0 ML Chlorides 7200 ppm.  
Oil 0 ML Resistivity 0.8 ohms @ 80 F  
Mud 4200 ML Viscosity 43  
Water 0 ML Mud Weight 9.2  
Other 0 ML Filtrate 12.2  
Pressure 0 PSI Other \_\_\_\_\_  
Total 0 ML \_\_\_\_\_

### PIT MUD ANALYSIS

### SAMPLER ANALYSIS

Resistivity .8 ohms @ 80 F  
Chlorides 7200 ppm.  
Gravity \_\_\_\_\_ corrected @ 60 F

### PIPE RECOVERY

TOP  
Resistivity 0.8 ohms @ 80 F  
Chlorides 7,200 ppm.  
MIDDLE  
Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F  
Chlorides \_\_\_\_\_ ppm.  
BOTTOM  
Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F  
Chlorides \_\_\_\_\_ ppm.

# TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

## TEST TICKET

No 2983

|                                                      |                                     |                                                   |
|------------------------------------------------------|-------------------------------------|---------------------------------------------------|
| Well Name & No. <u>DEUTSCH A-2</u>                   | Test No. <u>ONIE</u>                | Date <u>6-17-90</u>                               |
| Company <u>QUINOCO PET. INC.</u>                     | Zone Tested <u>A" KC</u>            |                                                   |
| Address <u>4582 S ULSTER ST. PIKWAY #1700 DENVER</u> | Elevation <u>1925 C.L.</u>          |                                                   |
| Co. Rep. / Geo. <u>SCOTT</u>                         | Cont. <u>DUKIE DRILL CO.</u>        | Est. Ft. of Pay _____                             |
| Location: Sec. <u>16</u>                             | Twp. <u>16</u>                      | Rge. <u>13</u> Co. <u>DARTON</u> State <u>KS.</u> |
| No. of Copies <u>ARC.</u>                            | Distribution Sheet <u>BREATHEND</u> | No Turnkey _____ Yes _____ No _____               |

|                                                                      |                                                                     |
|----------------------------------------------------------------------|---------------------------------------------------------------------|
| Interval Tested <u>3152 TO 3200</u>                                  | Drill Pipe Size <u>4 1/2" X.17.</u>                                 |
| Anchor Length <u>48'</u>                                             | Top Choke — 1" <u>1"</u> Bottom Choke — 3/4" <u>3/4"</u>            |
| Top Packer Depth <u>3147</u>                                         | Hole Size — 7 7/8" <u>7 7/8"</u> Rubber Size — 6 3/4" <u>6 3/4"</u> |
| Bottom Packer Depth <u>3152</u>                                      | Wt. Pipe I.D. — 2.7 Ft. Run <u>248'</u>                             |
| Total Depth <u>3200</u>                                              | Drill Collar — 2.25 Ft. Run _____                                   |
| Mud Wt. <u>9.2</u> lb / gal.                                         | Viscosity <u>43</u> Filtrate <u>12.2</u>                            |
| Tool Open @ <u>9.15 AM</u> Initial Blow <u>VERY WEAK FOR 10 MIN.</u> |                                                                     |
| <u>TOOLS SLID 12' TO BOT.</u>                                        |                                                                     |
| Final Blow <u>NO BLOW, FLUSHED TOOL, NO BLOW</u>                     |                                                                     |

Recovery — Total Feet \_\_\_\_\_ Flush Tool? YES

|                |                           |
|----------------|---------------------------|
| Rec. <u>90</u> | Feet of <u>DRILL. MUD</u> |
| Rec. _____     | Feet of _____             |
| Rec. _____     | Feet of _____             |
| Rec. _____     | Feet of _____             |
| Rec. _____     | Feet of _____             |

BHT \_\_\_\_\_ °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides 7200 ppm System

|                                            |     |                               |                          |
|--------------------------------------------|-----|-------------------------------|--------------------------|
| (A) Initial Hydrostatic Mud <u>1630</u>    | PSI | AK1 Recorder No. <u>2023</u>  | Range <u>4000</u>        |
| (B) First Initial Flow Pressure <u>72</u>  | PSI | @ (depth) <u>3195</u>         | w/Clock No. <u>31152</u> |
| (C) First Final Flow Pressure <u>85</u>    | PSI | AK1 Recorder No. <u>13308</u> | Range <u>4700</u>        |
| (D) Initial Shut-In Pressure <u>477</u>    | PSI | @ (depth) <u>3200</u>         | w/Clock No. <u>17642</u> |
| (E) Second Initial Flow Pressure <u>85</u> | PSI | AK1 Recorder No. _____        | Range _____              |
| (F) Second Final Flow Pressure <u>85</u>   | PSI | @ (depth) _____               | w/Clock No. _____        |
| (G) Final Shut-In Pressure <u>454</u>      | PSI | Initial Opening <u>30</u>     | Test <u>X 400-00</u>     |
| (H) Final Hydrostatic Mud <u>1600</u>      | PSI | Initial Shut-In <u>30</u>     | Jars <u>X</u>            |
|                                            |     | Final Flow <u>30</u>          | Safety Joint <u>X</u>    |
|                                            |     | Final Shut-In <u>30</u>       | Straddle _____           |

Approved By [Signature] Circ. Sub \_\_\_\_\_  
 Our Representative [Signature] Sampler X 100-00  
 Extra Packer \_\_\_\_\_  
 Other \_\_\_\_\_

TOTAL PRICE \$ 5000

# TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

|                 |                                    |             |              |                 |         |
|-----------------|------------------------------------|-------------|--------------|-----------------|---------|
| Well Name & No. | DEUTSCH "A" -2                     | Test No.    | 2            | Date            | 6/18/90 |
| Company         | QUINOCO PETROLEUM INC              | Zone Tested | ARBUCKLE     |                 |         |
| Address         | 4582 S ULSTER PKWY #1700 DENVER CO | Elevation   | 1925 GL      |                 |         |
| Co. Rep./Geo.   | SCOTT ALBERG                       | Cont.       | DUKE DRLG CO | Est. Ft. of Pay | 4       |
| Location: Sec.  | 16                                 | Twp.        | 16S          | Rge.            | 13W     |
|                 |                                    | Co.         | BARTON       | State           | KANSAS  |

|                     |                                          |                             |                                              |
|---------------------|------------------------------------------|-----------------------------|----------------------------------------------|
| Interval Tested     | 3360-3392                                | Drill Pipe Size             | 4.5" XH                                      |
| Anchor Length       | 32                                       | Top Choke — 1"              | Bottom Choke — 1/4"                          |
| Top Packer Depth    | 3355                                     | Hole Size — 7 7/8"          | Rubber Size — 6 3/4"                         |
| Bottom Packer Depth | 3360                                     | Wt. Pipe I.D. — 2.7 Ft. Run | 279                                          |
| Total Depth         | 3392                                     | Drill Collar — 2.25 Ft. Run | 0                                            |
| Mud Wt.             | 9.5                                      | lb/gal.                     | Viscosity 47 Filtrate 12.0                   |
| Tool Open @         | 9:45 AM                                  | Initial Blow                | VERY WEAK FOR 15 MINUTES-DEAD FOR 15 MINUTES |
| Final Blow          | DEAD FOR 30 MINUTES-FLUSHED TOOL-NO BLOW |                             |                                              |

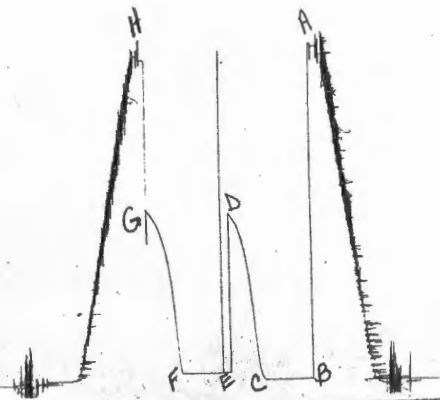
|                                  |        |              |                                        |
|----------------------------------|--------|--------------|----------------------------------------|
| Recovery — Total Feet            | 35     | Flush Tool?  | YES                                    |
| Rec.                             | 30     | Feet of      | OIL CUT MUD-10% OIL/ 90% MUD           |
| Rec.                             | 0      | Feet of      |                                        |
| Rec.                             | 5      | Feet of      | CLEAN OIL                              |
| Rec.                             | 0      | Feet of      |                                        |
| Rec.                             | 0      | Feet of      |                                        |
| BHT                              | 106    | °F Gravity   | °API @ 0 °F Corrected Gravity 0 °API   |
| RW                               | @      | °F Chlorides | ppm Recovery Chlorides 7500 ppm System |
| (A) Initial Hydrostatic Mud      | 1751.2 | PSI          | AK1 Recorder No. 2023 Range 4000       |
| (B) First Initial Flow Pressure  | 25.2   | PSI          | @ (depth) 3365 w/Clock No. 31152       |
| (C) First Final Flow Pressure    | 25.2   | PSI          | AK1 Recorder No. 13308 Range 4700      |
| (D) Initial Shut-In Pressure     | 914.6  | PSI          | @ (depth) 3392 w/Clock No. 17642       |
| (E) Second Initial Flow Pressure | 25.2   | PSI          | AK1 Recorder No. 0 Range 0             |
| (F) Second Final Flow Pressure   | 37.4   | PSI          | @ (depth) 0 w/Clock No. 0              |
| (G) Final Shut-In Pressure       | 915.6  | PSI          | Initial Opening 30                     |
| (H) Final Hydrostatic Mud        | 1741.2 | PSI          | Initial Shut-In 30                     |
|                                  |        |              | Final Flow 30                          |
|                                  |        |              | Final Shut-In 30                       |

MR HARRY SCHMIDT

500

Our Representative \_\_\_\_\_

TOTAL PRICE \$ \_\_\_\_\_

DST# 2RECORDER# 2023TICKET# 2984 # 2023

This is an actual photograph of recorder chart.

### PRESSURE

| POINT                                 | Field Reading | Office Reading |     |
|---------------------------------------|---------------|----------------|-----|
| (A) Initial Hydrostatic Mud.....      | 1748          | 1751.2         | PSI |
| (B) First Initial Flow Pressure.....  | 24            | 25.2           | PSI |
| (C) First Final Flow Pressure.....    | 24            | 25.2           | PSI |
| (D) Initial Closed-In Pressure.....   | 912           | 914.6          | PSI |
| (E) Second Initial Flow Pressure..... | 24            | 25.2           | PSI |
| (F) Second Final Flow Pressure.....   | 36            | 37.4           | PSI |
| (G) Final Closed-In Pressure.....     | 912           | 915.6          | PSI |
| (H) Final Hydrostatic Mud.....        | 1740          | 1741.2         | PSI |

# TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 2984 Date 6/18/90  
Company Name QUINOCO PETROLEUM INC  
Lease DEUTSCH "A" -2 Test No. 2  
County BARTON Sec. 16 Twp. 16S Rng. 13W

## SAMPLER RECOVERY

Gas 0 ML Chlorides 7500 ppm.  
Oil 250 ML Resistivity .8 ohms @ 75 F  
Mud 3950 ML Viscosity 47  
10% Oil ML Mud Weight 9.5  
Other 90% Mud ML Filtrate 12.0  
Pressure 110 PSI Other \_\_\_\_\_  
Total \_\_\_\_\_ ML

## PIT MUD ANALYSIS

## SAMPLER ANALYSIS

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F TOP  
Chlorides \_\_\_\_\_ ppm.  
Gravity \_\_\_\_\_ corrected @ 60 F

## PIPE RECOVERY

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F  
Chlorides \_\_\_\_\_ ppm.

### MIDDLE

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F  
Chlorides \_\_\_\_\_ ppm.

### BOTTOM

Resistivity \_\_\_\_\_ ohms @ \_\_\_\_\_ F  
Chlorides \_\_\_\_\_ ppm.

# TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

## TEST TICKET

No 2984

Well Name & No. DEUTSCH A-2 Test No. TWO Date 6-18-90  
 Company QUINOCO PET. INC. Zone Tested ARB.  
 Address 4582 S. VESTER ST. PKWY. #1700 DENVER Elevation 1925 GL  
 Co. Rep. / Geo. SCOTT Cont. DUISE DRLO. CO. Est. Ft. of Pay 4'  
 Location: Sec. 16 Twp. 16 Rge. 13 Co. BARTON State KS  
 No. of Copies REG. Distribution Sheet TO GREAT BEND OFFICE Yes NO Turnkey Yes NO

Interval Tested 3360' to 3392' Drill Pipe Size 4 1/2" XH.  
 Anchor Length 32' Top Choke — 1" R/H Bottom Choke — 3/4" 3/4"  
 Top Packer Depth 3355' Hole Size — 7 7/8" 7 7/8" Rubber Size — 6 3/4" 6 3/4"  
 Bottom Packer Depth 3360' Wt. Pipe I.D. — 2.7 Ft. Run 279  
 Total Depth 3392' Drill Collar — 2.25 Ft. Run —  
 Mud Wt. 9.5 lb / gal. Viscosity 47 Filtrate 12-0  
 Tool Open @ 9:45 AM Initial Blow VERY WEAK FOR 15 MIN. DEAD FOR 15 MIN.

Final Blow DEAD FOR 30 MIN., FLUSHED TOOL, NO BLOW

Recovery — Total Feet 35 Flush Tool? YES  
 Rec. 30 Feet of OIL CUT MUD 10% OIL 90% MUD  
 Rec. 5 Feet of CLEAN OIL  
 Rec. — Feet of —  
 Rec. — Feet of —

BHT 106 °F Gravity — °API @ — °F Corrected Gravity — °API  
 RW — @ — °F Chlorides — ppm Recovery Chlorides 7500 ppm System

(A) Initial Hydrostatic Mud 1748 PSI AK1 Recorder No. 2023 Range 4000  
 (B) First Initial Flow Pressure 24 PSI @ (depth) 3365 w/Clock No. 31152  
 (C) First Final Flow Pressure 24 PSI AK1 Recorder No. 13308 Range 4500  
 (D) Initial Shut-In Pressure 912 PSI @ (depth) 3392 w/Clock No. 17642  
 (E) Second Initial Flow Pressure 24 PSI AK1 Recorder No. — Range —  
 (F) Second Final Flow Pressure 36 PSI @ (depth) — w/Clock No. —  
 (G) Final Shut-In Pressure 912 PSI Initial Opening 30 Test X  
 (H) Final Hydrostatic Mud 1740 PSI Initial Shut-In 30 Jars X  
 Final Flow 30 Safety Joint X  
 Final Shut-In 30 Straddle —

Approved By [Signature]

Our Representative [Signature]

Circ. Sub —  
 Sampler X  
 Extra Packer —  
 Other —  
 TOTAL PRICE \$ —

# TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

|                                                   |                             |                                                       |
|---------------------------------------------------|-----------------------------|-------------------------------------------------------|
| Well Name & No. <u>DEUTSCH "A" -2</u>             | Test No. <u>3</u>           | Date <u>6/18/90</u>                                   |
| Company <u>QUINOCO PETROLEUM INC</u>              | Zone Tested <u>ARBUCKLE</u> |                                                       |
| Address <u>4582 S ULSTER PKWY #1700 DENVER CO</u> | Elevation <u>1925 GL</u>    |                                                       |
| Co. Rep./Geo. <u>SCOTT ALBERG</u>                 | Cont. <u>DUKE DRLG CO</u>   | Est. Ft. of Pay <u>7</u>                              |
| Location: Sec. <u>16</u>                          | Twp. <u>16S</u>             | Rge. <u>13W</u> Co. <u>BARTON</u> State <u>KANSAS</u> |

|                                                                                |                                                     |
|--------------------------------------------------------------------------------|-----------------------------------------------------|
| Interval Tested <u>3360-3396</u>                                               | Drill Pipe Size <u>4.5" XH</u>                      |
| Anchor Length <u>36</u>                                                        | Top Choke — 1" _____ Bottom Choke — ¾" _____        |
| Top Packer Depth <u>3355</u>                                                   | Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____ |
| Bottom Packer Depth <u>3360</u>                                                | Wt. Pipe I.D. — 2.7 Ft. Run <u>279</u>              |
| Total Depth <u>3396</u>                                                        | Drill Collar — 2.25 Ft. Run <u>0</u>                |
| Mud Wt. <u>9.6</u> lb/gal.                                                     | Viscosity <u>40</u> Filtrate <u>14.4</u>            |
| Tool Open @ <u>10:30 PM</u> Initial Blow <u>GOOD BLOW THROUGHOUT-BOTTOM OF</u> |                                                     |
| <u>BUCKET IN 5 MINUTES</u>                                                     |                                                     |
| Final Blow <u>GOOD THROUGHOUT FINAL FLOW</u>                                   |                                                     |

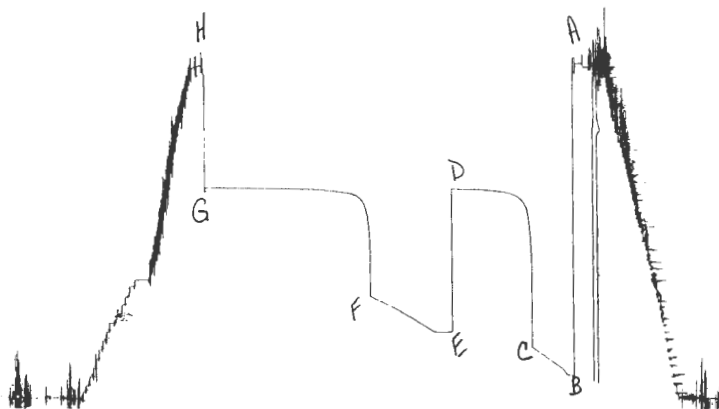
|                                                                                                   |                          |
|---------------------------------------------------------------------------------------------------|--------------------------|
| Recovery — Total Feet <u>1300</u>                                                                 | Flush Tool? <u>NO</u>    |
| Rec. <u>180</u> Feet of <u>OIL CUT MUD-30% OIL/10% WTR/60% MUD</u>                                |                          |
| Rec. <u>435</u> Feet of <u>OIL &amp; MUD CUT WTR-10% OIL/15% MUD/75% WTR</u>                      |                          |
| Rec. <u>685</u> Feet of <u>WATER WITH SHOW OF OIL-LESS THAN 1%</u>                                |                          |
| Rec. <u>0</u> Feet of _____                                                                       |                          |
| Rec. <u>0</u> Feet of _____                                                                       |                          |
| BHT <u>112</u> °F Gravity _____ °API @ <u>0</u> °F Corrected Gravity <u>0</u> °API                |                          |
| RW <u>0.3</u> @ <u>80</u> °F Chlorides <u>19000</u> ppm Recovery Chlorides <u>7500</u> ppm System |                          |
| (A) Initial Hydrostatic Mud <u>1745.6</u> PSI AK1 Recorder No. <u>2023</u> Range <u>4000</u>      |                          |
| (B) First Initial Flow Pressure <u>101.2</u> PSI @ (depth) <u>3396</u> w/Clock No. <u>31152</u>   |                          |
| (C) First Final Flow Pressure <u>289.7</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4700</u>    |                          |
| (D) Initial Shut-In Pressure <u>1065.3</u> PSI @ (depth) <u>3365</u> w/Clock No. <u>17642</u>     |                          |
| (E) Second Initial Flow Pressure <u>314.5</u> PSI AK1 Recorder No. <u>0</u> Range <u>0</u>        |                          |
| (F) Second Final Flow Pressure <u>541.2</u> PSI @ (depth) <u>0</u> w/Clock No. <u>0</u>           |                          |
| (G) Final Shut-In Pressure <u>1065.3</u> PSI Initial Opening <u>30</u>                            |                          |
| (H) Final Hydrostatic Mud <u>1735.5</u> PSI Initial Shut-In <u>60</u>                             |                          |
|                                                                                                   | Final Flow <u>60</u>     |
|                                                                                                   | Final Shut-In <u>120</u> |

MR HARRY SCHMIDT

500

Our Representative \_\_\_\_\_

TOTAL PRICE \$ \_\_\_\_\_

DST# 1RECORDER# 2023TICKET #2985 4 2023

This is an actual photograph of recorder chart.

| POINT                                 | PRESSURE      |                |
|---------------------------------------|---------------|----------------|
|                                       | Field Reading | Office Reading |
| (A) Initial Hydrostatic Mud.....      | 1743          | 1745.6         |
| (B) First Initial Flow Pressure.....  | 97            | 101.2          |
| (C) First Final Flow Pressure.....    | 288           | 289.7          |
| (D) Initial Closed-In Pressure.....   | 1064          | 1065.3         |
| (E) Second Initial Flow Pressure..... | 312           | 314.5          |
| (F) Second Final Flow Pressure.....   | 536           | 541.2          |
| (G) Final Closed-In Pressure.....     | 1064          | 1065.3         |
| (H) Final Hydrostatic Mud.....        | 1733          | 1735.5         |

# TRILOBITE TESTING COMPANY

P.O. Box 362 - Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 2985 Date 6/18/90  
Company Name QUINOCO PETROLEUM INC  
Lease DEUTSCH "A" -2 Test No. 3  
County BARTON Sec. 16 Twp. 16S Rng. 13W

### SAMPLER RECOVERY

Gas 0 ML  
Oil (trace) ML  
Mud 4200 ML  
Water 0 ML  
Other 0 ML  
Pressure 500 PSI  
Total 4200 ML

### PIT MUD ANALYSIS

Chlorides 7500 ppm.  
Resistivity .8 ohms @ 75 F  
Viscosity 40  
Mud Weight 9.6  
Filtrate 14.4  
Other \_\_\_\_\_

### SAMPLER ANALYSIS

Resistivity 0.3 ohms @ 80 F  
Chlorides 19,000 ppm.  
Gravity \_\_\_\_\_ corrected @ 60 F

### PIPE RECOVERY

TOP  
Resistivity 0.3 ohms @ 80 F  
Chlorides 19,000 ppm.

#### MIDDLE

Resistivity 0.3 ohms @ 80 F  
Chlorides 19,000 ppm.

#### BOTTOM

Resistivity 0.3 ohms @ 80 F  
Chlorides 19,000 ppm.

# TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

## TEST TICKET

No 2985

|                                                    |                                                |                                                      |
|----------------------------------------------------|------------------------------------------------|------------------------------------------------------|
| Well Name & No. <u>DEUTSCH A-2</u>                 | Test No. <u>THREE</u>                          | Date <u>6-18-90</u>                                  |
| Company <u>QUINOCO PET INC.</u>                    | Zone Tested <u>ARB</u>                         |                                                      |
| Address <u>4582 S. ULSTER ST. PKWY 1700 DENVER</u> | Elevation <u>1925 GL</u>                       |                                                      |
| Co. Rep./Geo. <u>SCOTT</u>                         | Cont. _____                                    | Est. Ft. of Pay <u>7</u>                             |
| Location: Sec. <u>16</u>                           | Twp. <u>16 S</u>                               | Rge. <u>13 W</u> Co. <u>BARTON</u> State <u>K.S.</u> |
| No. of Copies <u>REG</u>                           | Distribution Sheet <u>TO GREAT BEND OFFICE</u> | Yes <u>Yes</u> No <u>No</u> Turnkey <u>No</u>        |

|                                                                             |                                                                   |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------|
| Interval Tested <u>3360 TO 3396</u>                                         | Drill Pipe Size <u>4 1/2" X 14</u>                                |
| Anchor Length <u>36</u>                                                     | Top Choke — 1" <u>B/H</u> Bottom Choke — 3/4" <u>3/4</u>          |
| Top Packer Depth <u>3355</u>                                                | Hole Size — 7 7/8" <u>7 7/8</u> Rubber Size — 6 3/4" <u>6 3/4</u> |
| Bottom Packer Depth <u>3360</u>                                             | Wt. Pipe I.D. — 2.7 Ft. Run <u>279</u>                            |
| Total Depth <u>3396</u>                                                     | Drill Collar — 2.25 Ft. Run <u>—</u>                              |
| Mud Wt. <u>9.6</u> lb/gal.                                                  | Viscosity <u>40</u> Filtrate <u>14.4</u>                          |
| Tool Open @ <u>10:30 P.M.</u> Initial Blow <u>GOOD BLOW THROUGHOUT F.P.</u> |                                                                   |
| <u>BOTT. OF BUCKET IN 5 MIN.</u>                                            |                                                                   |
| Final Blow <u>GOOD THROUGHOUT F.P.</u>                                      |                                                                   |

|                                                                                                   |                       |
|---------------------------------------------------------------------------------------------------|-----------------------|
| Recovery — Total Feet <u>1300</u>                                                                 | Flush Tool? <u>NO</u> |
| Rec. <u>180</u> Feet of <u>OIL CUT 100% 30% OIL / 10% WATER / 60% M.</u>                          |                       |
| Rec. _____ Feet of _____                                                                          |                       |
| Rec. <u>435</u> Feet of <u>OIL &amp; MUD CUT WATER 10% OIL / 15% MUD / 75% W.</u>                 |                       |
| Rec. _____ Feet of _____                                                                          |                       |
| Rec. <u>685</u> Feet of <u>WATER 4/A SHOW OF OIL LESS THEN 1%</u>                                 |                       |
| BHT <u>112</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API                      |                       |
| RW <u>0.3</u> @ <u>80</u> °F Chlorides <u>19000</u> ppm Recovery Chlorides <u>7500</u> ppm System |                       |
| (A) Initial Hydrostatic Mud <u>1743</u> PSI AK1 Recorder No. <u>2023</u> Range <u>4000</u>        |                       |
| (B) First Initial Flow Pressure <u>97</u> PSI @ (depth) <u>3396</u> w/Clock No. <u>31152</u>      |                       |
| (C) First Final Flow Pressure <u>288</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4500</u>      |                       |
| (D) Initial Shut-In Pressure <u>1064</u> PSI @ (depth) <u>3365</u> w/Clock No. <u>17642</u>       |                       |
| (E) Second Initial Flow Pressure <u>312</u> PSI AK1 Recorder No. <u>—</u> Range <u>—</u>          |                       |
| (F) Second Final Flow Pressure <u>536</u> PSI @ (depth) <u>—</u> w/Clock No. <u>—</u>             |                       |
| (G) Final Shut-In Pressure <u>1064</u> PSI Initial Opening <u>30</u> Test <u>X</u>                |                       |
| (H) Final Hydrostatic Mud <u>1733</u> PSI Initial Shut-In <u>60</u> Jars <u>X</u>                 |                       |
| Final Flow <u>60</u> Safety Joint <u>X</u>                                                        |                       |
| Final Shut-In <u>120</u> Straddle _____                                                           |                       |

Approved By Scott Albright

Our Representative John P. Smith

Circ. Sub \_\_\_\_\_  
 Sampler X  
 Extra Packer \_\_\_\_\_  
 Other \_\_\_\_\_  
 TOTAL PRICE \$ \_\_\_\_\_