# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name: KISNER #2-36 | Test No.: 1 | Date: 10/4/92

Company: BEREXCO INC | Zone: KS CITY "A"

Address: 970 4th FINANCIAL CNTR WICHITA KS 67202 | Elevation: 2926

Co. Rep./Geo.: CHARLIE SPRADLIN | Cont.: BEREDCO RIG #4 | Est. Ft. of Pay: 9

Location: Sec.: 36 | Twp.: 26S | Rge.: 33W | Co.: FINNEY | State: KS

---

Interval Tested: 4448-4471 | Drill Pipe Size: 4.5" XH

Anchor Length: 23 | Wt. Pipe I.D. - 2.7 Ft. Run:

Top Packer Depth: 4443 | Drill Collar – 2.25 Ft. Run:

Bottom Packer Depth: 4448 | Mud Wt.: 9 lb/Gal.

Total Depth: 4471 | Viscosity: 53 | Filtrate: 8.8

Tool Open @: 1:00 AM | Initial Blow: WEAK SURFACE BLOW STEADY THROUGHOUT

Final Blow: NO RETURN BLOW

Recovery - Total Feet: 100 | Flush Tool?: NO

Rec. 100 Feet of DRILLING MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT: 120 °F | Gravity: °API | @ °F | Corrected Gravity °API

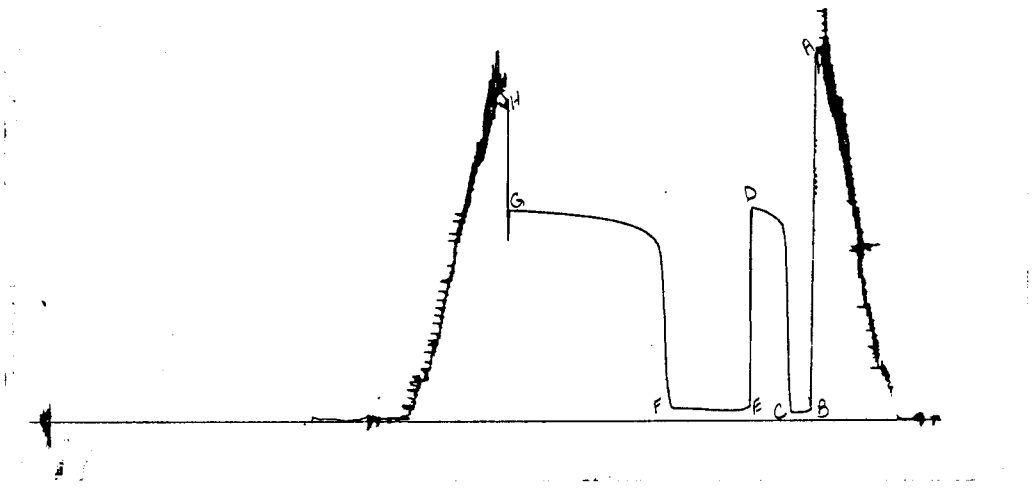
RW: @ °F | Chlorides: ppm Recovery | Chlorides: 3000 ppm System

| | | | |
|---|---|---|---|
| (A) Initial Hydrostatic Mud | 2280.6 PSI | AK1 Recorder No. | 13309 Range 4700 |
| (B) First Initial Flow Pressure | 40.3 PSI | @ (depth) | 4461 w / Clock No. 25810 |
| (C) First Final Flow Pressure | 41.4 PSI | AK1 Recorder No. | 13339 Range 4025 |
| (D) Initial Shut-in Pressure | 1294.7 PSI | @ (depth) | 4466 w / Clock No. 27566 |
| (E) Second Initial Flow Pressure | 85.6 PSI | AK1 Recorder No. | Range |
| (F) Second Final Flow Pressure | 97.3 PSI | @ (depth) | w / Clock No. |
| (G) Final Shut-in Pressure | 1270.9 PSI | Initial Opening | 15 Final Flow 60 |
| (H) Final Hydrostatic Mud | 2109.7 PSI | Initial Shut-in | 30 Final Shut-in 120 |

Our Representative: ROD STEINBRINK

# CHART PAGE

DST #1
13389




This is an actual photograph of recorder chart

| | FIELD READING | OFFICE READING |
|---|---|---|
| (A) INITIAL HYDROSTATIC MUD | 2273 | 2280.6 |
| (B) FIRST INITIAL FLOW PRESSURE | 41 | 40.3 |
| (C) FIRST FINAL FLOW PRESSURE | 41 | 41.4 |
| (D) INITIAL CLOSED-IN PRESSURE | 1291 | 1294.7 |
| (E) SECOND INITIAL FLOW PRESSURE | 83 | 85.6 |
| (F) SECOND FINAL FLOW PRESSURE | 93 | 97.3 |
| (G) FINAL CLOSED-IN PRESSURE | 1271 | 1270.9 |
| (H) FINAL HYDROSTATIC MUD | 2103 | 2109.7 |

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

№ 5262

Well Name & No. Kisner #2 Test No. 1 Date 10/4/92

Company Berexco, Inc. Zone Tested Kans. City 'A'

Address 970 Fourth Financial Ctr. Wichita, KS. 67202 Elevation 2926 (KB)

Co. Rep./Geo. Charlie Spradlin Cont. Beredco #4 Est. Ft. of Pay 9'

Location: Sec. 36 Twp. 26 S Rge. 33 W Co. Finney State KS.

No. of Copies ____ Distribution Sheet ____ Yes ____ No Turnkey ____ Yes X No ____ Evaluation

Interval Tested 4448 - 4471 Drill Pipe Size 4½" XH

Anchor Length 23' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4443 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4448 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 4471 Drill Collar — 2.25 Ft. Run ____

Mud Wt. 9.0 lb/gal. Viscosity 53 Filtrate 8.8

Tool Open @ 1:00 am Initial Blow Weak surface blow steady throughout.

Final Blow No return blow.

Recovery — Total Feet 100' Feet of Gas in Pipe ____ Flush Tool? No

| | | | | | | |
|---|---|---|---|---|---|---|
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. 100' | Feet Of Drlg. Mud | %gas | %oil | %water | %mud |
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |

BHT 120° °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 3,000 ppm System

| | | | | | |
|---|---|---|---|---|---|
| (A) Initial Hydrostatic Mud | 2273 PSI | AK1 Recorder No. | 13309 | Range | 4700 |
| (B) First Initial Flow Pressure | 41 PSI | @ (depth) | 4461 | w/Clock No. | 25810 |
| (C) First Final Flow Pressure | 41 PSI | AK1 Recorder No. | 13339 | Range | 4025 |
| (D) Initial Shut-In Pressure | 1291 PSI | @ (depth) | 4466 | w/Clock No. | 27566 |
| (E) Second Initial Flow Pressure | 83 PSI | AK1 Recorder No. | — | Range | — |
| (F) Second Final Flow Pressure | 93 PSI | @ (depth) | — | w/Clock No. | — |
| (G) Final Shut-In Pressure | 1271 PSI | Initial Opening | 15 | Test | 550 |
| (H) Final Hydrostatic Mud | 2103 PSI | Initial Shut-In | 30 | Jars | X 200 |
| | | Final Flow | 60 | Safety Joint | X 50 |
| | | Final Shut-In | 120 | Straddle | ____ |
| | | | | Circ. Sub | X N/C |
| | | | | Sampler | ____ |
| | | | | Extra Packer | ____ |
| | | | | Other | ____ |
| | | | | TOTAL PRICE $ | 800.00 |



Approved By Charles R Spradlin

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name KISNER #2-36 Test No. 2 Date 10/4/92

Company BEREXCO INC Zone KS CITY "C"

Address 970 4th FINANCIAL CNTR WICHITA KS 67202 Elevation 2926

Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #4 Est. Ft. of Pay 7

Location: Sec. 36 Twp. 26S Rge. 33W Co. FINNEY State KS

---

Interval Tested 4535-4555 Drill Pipe Size 4.5" XH

Anchor Length 20 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4530 Drill Collar – 2.25 Ft. Run 614

Bottom Packer Depth 4535 Mud Wt. 9 lb/Gal.

Total Depth 4555 Viscosity 63 Filtrate 7.2

Tool Open @ 8:40 PM Initial Blow WEAK 1/4" BLOW DECREASED AND DIED IN 13 MINUTES

Final Blow NO RETURN BLOW

Recovery - Total Feet 60 Flush Tool? NO

Rec. 60 Feet of DRILLING MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 119 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 3600 ppm System

(A) Initial Hydrostatic Mud 2271.3 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 32.1 PSI @ (depth) 4545 w / Clock No. 25810

(C) First Final Flow Pressure 32.1 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 1310.6 PSI @ (depth) 4550 w / Clock No. 27566

(E) Second Initial Flow Pressure 54.7 PSI AK1 Recorder No. Range

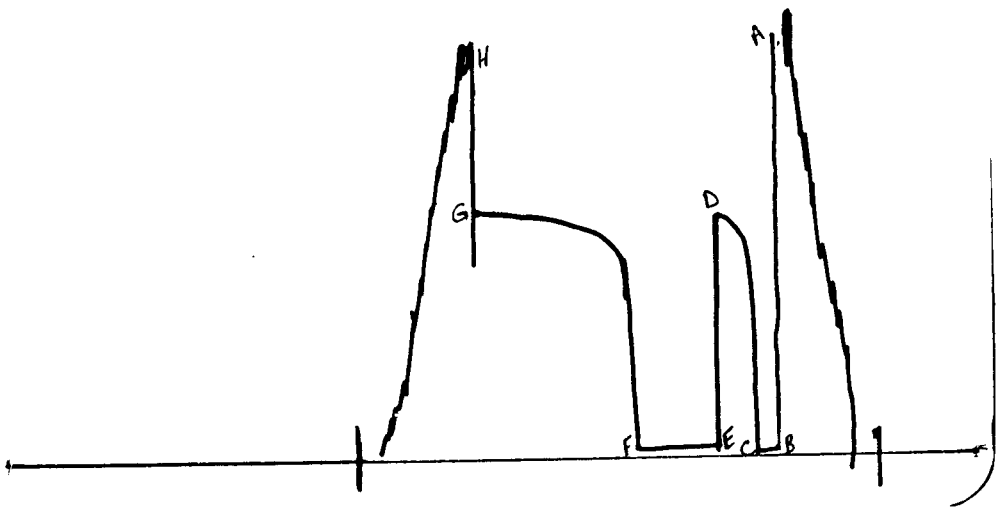
(F) Second Final Flow Pressure 54.7 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1310.6 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2055.4 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative ROD STEINBRINK

# CHART PAGE




This is an actual photograph of recorder chart

| | FIELD READING | OFFICE READING |
|---|---|---|
| (A) INITIAL HYDROSTATIC MUD | 2263 | 2271.3 |
| (B) FIRST INITIAL FLOW PRESSURE | 31 | 32.1 |
| (C) FIRST FINAL FLOW PRESSURE | 31 | 32.1 |
| (D) INITIAL CLOSED-IN PRESSURE | 1301 | 1310.6 |
| (E) SECOND INITIAL FLOW PRESSURE | 52 | 54.7 |
| (F) SECOND FINAL FLOW PRESSURE | 52 | 54.7 |
| (G) FINAL CLOSED-IN PRESSURE | 1301 | 1310.6 |
| (H) FINAL HYDROSTATIC MUD | 2053 | 2055.4 |

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 5263

Well Name & No. Kisner #2 Test No. 2 Date 10/4/92

Company Berexco, Inc. Zone Tested Kans. City 'C'

Address 970 Fourth Financial Ctr. Wichita, KS. 67202 Elevation 2926 (KB)

Co. Rep./Geo. Charlie Spradlin Cont. Beredco #4 Est. Ft. of Pay 7'

Location: Sec. 36 Twp. 26 S Rge. 33 W Co. Finney State KS.

No. of Copies ____ Distribution Sheet X Yes ____ No Turnkey ____ Yes X No ____ Evaluation

Interval Tested 4535 - 4555 Drill Pipe Size 4½" XH.

Anchor Length 20' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4530 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4535 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4555 Drill Collar — 2.25 Ft. Run 614'

Mud Wt. 9.0 lb/gal. Viscosity 63 Filtrate 7.2

Tool Open @ 8:40 pm Initial Blow Weak 1/4" blow decreased and died in 13 mins

Final Blow No return blow.

Recovery — Total Feet 60' Feet of Gas in Pipe — Flush Tool? No

| | | | | | |
|---|---|---|---|---|---|
| Rec. ____ Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. 60' Feet Of Drlg. Mud | %gas | %oil | %water | %mud |
| Rec. ____ Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. ____ Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. ____ Feet Of ____ | %gas | %oil | %water | %mud |

BHT 119° °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 3,600 ppm System

| | | | | | |
|---|---|---|---|---|---|
| (A) Initial Hydrostatic Mud | 2263 PSI | Ak1 Recorder No. | 13309 | Range | 4700 |
| (B) First Initial Flow Pressure | 31 PSI | @ (depth) | 4545 | w/Clock No. | 25810 |
| (C) First Final Flow Pressure | 31 PSI | AK1 Recorder No. | 13339 | Range | 4025 |
| (D) Initial Shut-In Pressure | 1301 PSI | @ (depth) | 4550 | w/Clock No. | 27566 |
| (E) Second Initial Flow Pressure | 52 PSI | AK1 Recorder No. | — | Range | — |
| (F) Second Final Flow Pressure | 52 PSI | @ (depth) | — | w/Clock No. | — |
| (G) Final Shut-In Pressure | 1301 PSI | Initial Opening | 15 | Test | |
| (H) Final Hydrostatic Mud | 2053 PSI | Initial Shut-In | 30 | Jars | X N/C |
| | | Final Flow | 60 | Safety Joint | X |
| | | Final Shut-In | 120 | Straddle | |
| | | | | Circ. Sub | X N/C |
| | | | | Sampler | |
| | | | | Extra Packer | |
| | | | | Other | |
| | | | | TOTAL PRICE $ | 600 |



Approved By Edward M. Spradlin

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name KISNER #2-36 Test No. 3 Date 10/5/92

Company BEREXCO INC Zone MARMATON

Address 970 4th FINANCIAL CNTR WICHITA KS 67202 Elevation 2926

Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #4 Est. Ft. of Pay 3

Location: Sec. 36 Twp. 26S Rge. 33W Co. FINNEY State KS

Interval Tested 4622-4643 Drill Pipe Size 4.5" XH

Anchor Length 21 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4617 Drill Collar – 2.25 Ft. Run 614

Bottom Packer Depth 4622 Mud Wt. 9 lb/Gal.

Total Depth 4643 Viscosity 54 Filtrate 8

Tool Open @ 4:46 PM Initial Blow STRONG BLOW OFF BOTTOM IN 30 SECONDS

ISI:BLED OFF BLOW-(GTS WHILE BLEEDING THROUGH 2")-SURFACE TO BOTTOM 4 MIN

Final Blow SURFACE RETURN BUILT TO BOTTOM IN 4 MINUTES - GAUGED

20"WTR ON 1/4" ORIFICE = 7.51 MCF/DAY

Recovery - Total Feet 480 Flush Tool? NO

Rec. 480 Feet of CLEAN GASSY OIL-25%GAS/75%OIL

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 121 °F Gravity 38 °API @ 72 °F Corrected Gravity 36.8 °API

RW @ °F Chlorides ppm Recovery Chlorides 3800 ppm System

(A) Initial Hydrostatic Mud 2275.5 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 110.2 PSI @ (depth) 4633 w / Clock No. 17640

(C) First Final Flow Pressure 114.3 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 356.5 PSI @ (depth) 4638 w / Clock No. 27566

(E) Second Initial Flow Pressure 135.1 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 180.9 PSI @ (depth) w / Clock No.

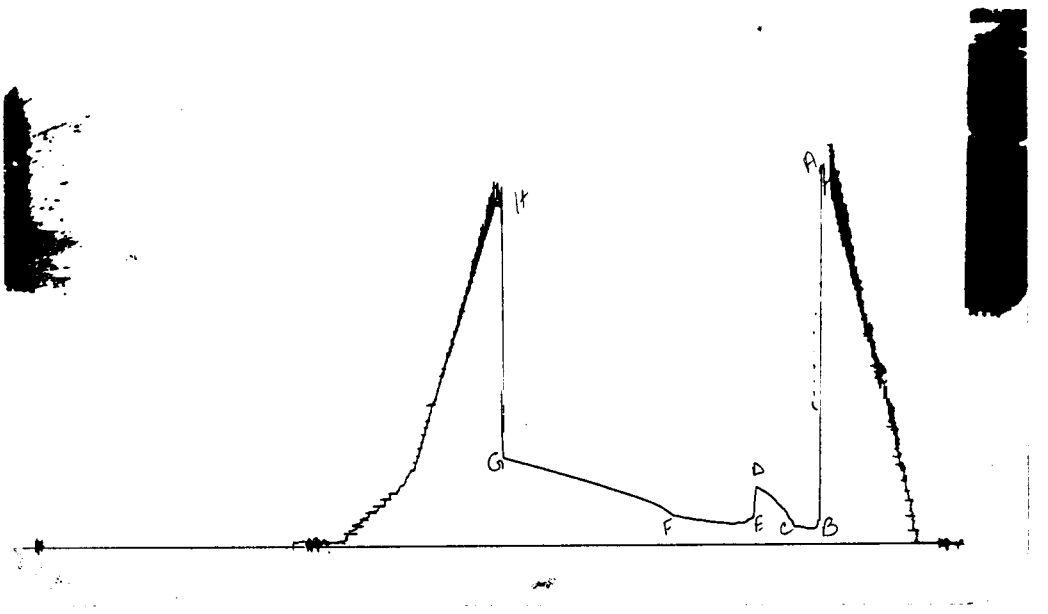
(G) Final Shut-in Pressure 518.2 PSI Initial Opening 15 Final Flow 60

(H) Final Hydrostatic Mud 2208.4 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative ROD STEINBRINK

# CHART PAGE

DST#3
13309



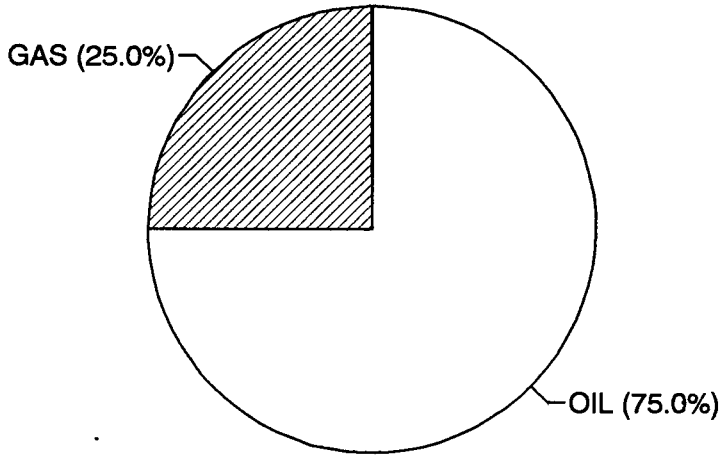

This is an actual photograph of recorder chart

| | FIELD READING | OFFICE READING |
|---|---|---|
| (A) INITIAL HYDROSTATIC MUD | 2323 | 2275.5 |
| (B) FIRST INITIAL FLOW PRESSURE | 93 | 110.2 |
| (C) FIRST FINAL FLOW PRESSURE | 104 | 114.3 |
| (D) INITIAL CLOSED-IN PRESSURE | 332 | 356.5 |
| (E) SECOND INITIAL FLOW PRESSURE | 124 | 135.1 |
| (F) SECOND FINAL FLOW PRESSURE | 166 | 180.9 |
| (G) FINAL CLOSED-IN PRESSURE | 519 | 518.2 |
| (H) FINAL HYDROSTATIC MUD | 2203 | 2208.4 |

DST # 3 TICKET 5264

| SAMPLE | TOTAL | | GAS | | OIL | | WATER | | MUD |
|---|---|---|---|---|---|---|---|---|---|
| # | FEET | % | FEET | % | FEET | % | FEET | % | FEET |
| 1 | 480 | 25 | 120 | 75 | 360 | 0 | 0 | 0 | 0 |
| 2 | | | 0 | | 0 | | 0 | | 0 |
| 3 | | | 0 | | 0 | | 0 | | 0 |
| 4 | | | 0 | | 0 | | 0 | | 0 |
| 5 | | | 0 | | 0 | | 0 | | 0 |
| TOTAL | 480 | 25.00 | 120 | 75.00 | 360 | 0.00 | 0 | 0 | 0 |

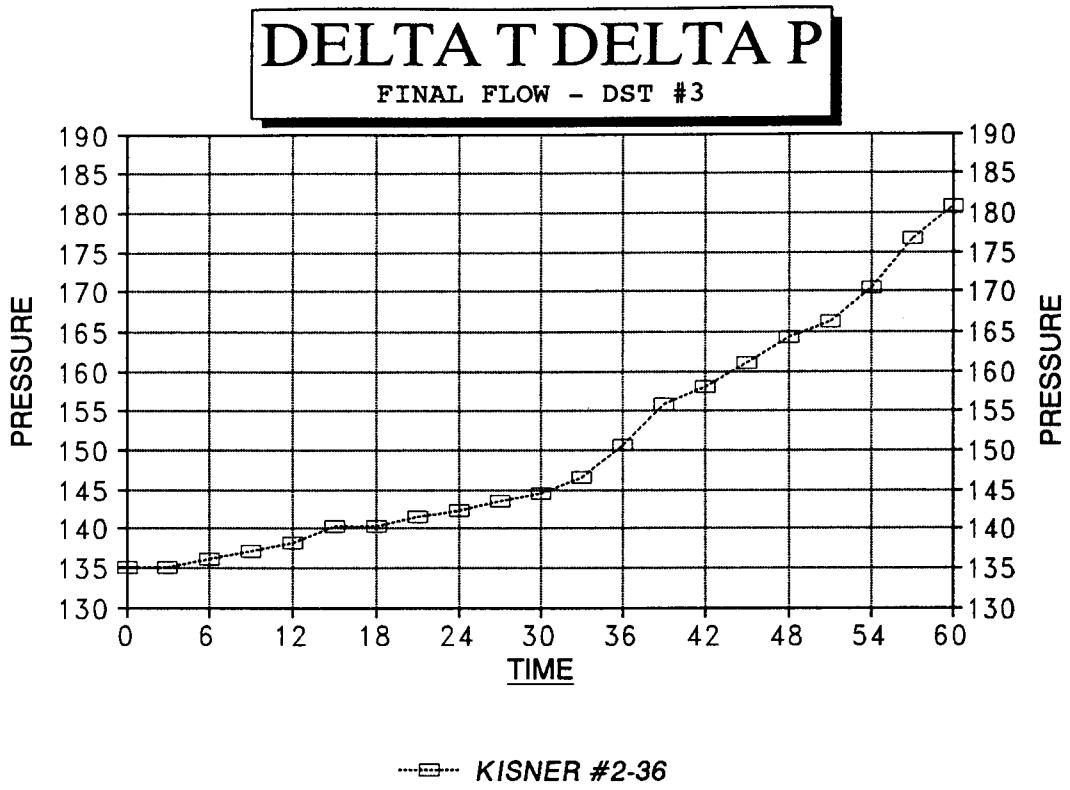
| | | | HRS OP | BBL/DAY |
|---|---|---|---|---|
| BBL OIL= | 1.7604 | * | 1.25 | 33.79968 |
| BBL WATER= | 0 | * | | 0 |
| BBL MUD= | 0 | | | |
| BBL GAS= | 0.5868 | | | |



FINAL FLOW

RECORDER # 13339 DST # DST #3

| TIME(MIN) | PRESSURE | <> PRESSURE |
|---|---|---|
| 0 | 135.1 | 135.1 |
| 3 | 135.1 | 0 |
| 6 | 136.1 | 1 |
| 9 | 137.2 | 1.1 |
| 12 | 138.2 | 1 |
| 15 | 140.3 | 2.1 |
| 18 | 140.3 | 0 |
| 21 | 141.4 | 1.1 |
| 24 | 142.4 | 1 |
| 27 | 143.5 | 1.1 |
| 30 | 144.5 | 1 |
| 33 | 146.5 | 2 |
| 36 | 150.7 | 4.2 |
| 39 | 155.9 | 5.2 |
| 42 | 158 | 2.1 |
| 45 | 161.1 | 3.1 |
| 48 | 164.2 | 3.1 |
| 51 | 166.3 | 2.1 |
| 54 | 170.5 | 4.2 |
| 57 | 176.7 | 6.2 |
| 60 | 180.9 | 4.2 |




INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE: 24.343

KISNER #2-36 DST #3
INITIAL SHUTIN

15 TOTAL FLOW TIME

Slope 805.28 psi/cycle
P * 498 psi

| | TIME(MIN) | Pws (psi) | Log Horn T | <> PRESSURE | Horn T |
|---|---|---|---|---|---|
| | 3 | 141.4 | 0.778 | 141.4 | 6 |
| | 6 | 180.9 | 0.544 | 39.5 | 4 |
| | 9 | 212.1 | 0.426 | 31.2 | 3 |
| | 12 | 243.2 | 0.352 | 31.1 | 2 |
| | 15 | 268.2 | 0.301 | 25.0 | 2 |
| | 18 | 289.0 | 0.263 | 20.8 | 2 |
| X | 21 | 309.8 | 0.234 | 20.8 | 2 |
| | 24 | 328.5 | 0.211 | 18.7 | 2 |
| | 27 | 345.1 | 0.192 | 16.6 | 2 |
| X | 30 | 356.5 | 0.176 | 11.4 | 2 |

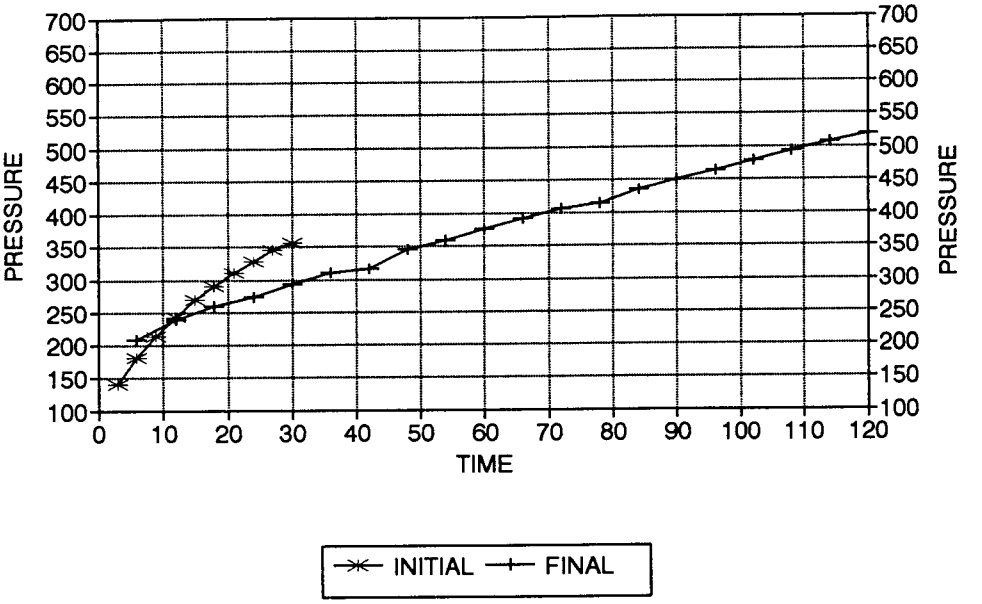
KISNER #2-36 DST #3
FINAL SHUTIN

75 TOTAL FLOW TIME

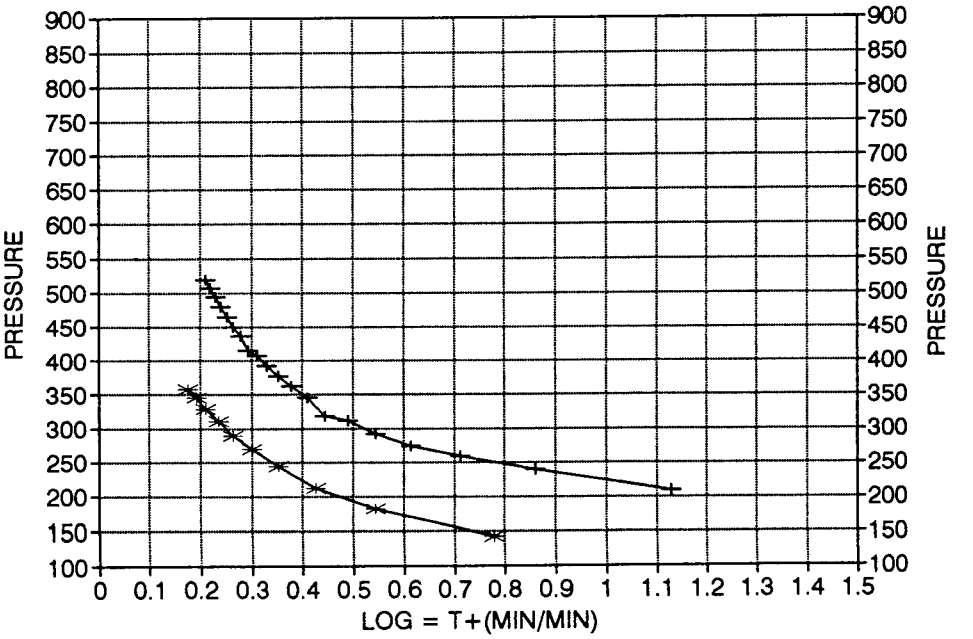
Slope 1321.29 psi/cycle
P * 797 psi

| | | Pws (psi) | Log Horn T | <> PRESSURE | Horn T |
|---|---|---|---|---|---|
| | 6 | 207.9 | 1.130 | 207.9 | 14 |
| | 12 | 237.9 | 0.860 | 30.0 | 7 |
| | 18 | 258.8 | 0.713 | 20.9 | 5 |
| | 24 | 273.3 | 0.615 | 14.5 | 4 |
| | 30 | 292.1 | 0.544 | 18.8 | 4 |
| | 36 | 310.8 | 0.489 | 18.7 | 3 |
| | 42 | 317.0 | 0.445 | 6.2 | 3 |
| | 48 | 345.2 | 0.409 | 28.2 | 3 |
| | 54 | 360.7 | 0.378 | 15.5 | 2 |
| | 60 | 376.3 | 0.352 | 15.6 | 2 |
| | 66 | 391.9 | 0.330 | 15.6 | 2 |
| | 72 | 406.4 | 0.310 | 14.5 | 2 |
| | 78 | 414.7 | 0.293 | 8.3 | 2 |
| | 84 | 435.5 | 0.277 | 20.8 | 2 |
| | 90 | 449.1 | 0.263 | 13.6 | 2 |
| | 96 | 464.2 | 0.251 | 15.1 | 2 |
| | 102 | 479.2 | 0.239 | 15.0 | 2 |
| | 108 | 492.8 | 0.229 | 13.6 | 2 |
| X | 114 | 506.7 | 0.220 | 13.9 | 2 |
| X | 120 | 518.2 | 0.211 | 11.5 | 2 |

# KISNER #2-36 / DST #3
# DELTA T DELTA P




# HORNER PLOT



# GAS VOLUME REPORT

BEREXCO INC

KISNER #2-36 DST # 3

| MIN | PSIG | ORIFICE | MCF/D | MIN | PSIG | ORIFICE | MCF/D |
|---|---|---|---|---|---|---|---|
| GAS TO SURFACE WHILE BLEEDING OFF ON INITIAL SHUT IN | | | | 15 | 38 | 0.5 | 38.6 |
| | | | | 25 | 10 | 0.5 | 19.9 |
| | | | | 35 | 2 | 0.5 | 8.87 |
| | | | | 45 | 22 | 0.25 | 7.88 |
| | | | | 60 | 20 | 0.25 | 7.51 |

Remarks: RICH SMELLING-DOES BURN BRIGHT ORANGE FLAME

TRILOBITE TESTING

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

# GAS VOLUME REPORT

Berexco, Inc. (OPERATOR) | Kisner #2 (WELL NAME AND NO.) | #3 (DST NO.)

| Min. | Ins. of Water PSIG | Orifice Size | MCF/D | Min. | Ins. of Water PSIG | Orifice Size | MCF/D |
|---|---|---|---|---|---|---|---|
| | | | | 15 | 38 | 1/2" | 38.6 |
| | GTS while bleeding off on | | | 25 | 10 | 1/2" | 19.9 |
| | | | initial Shut-in | 35 | 2 | 1/2" | 8.87 |
| | | | | 45 | 22 | 1/4" | 7.88 |
| | | | | 60 | 20 | 1/4" | 7.51 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Remarks: Rich smelling - does burn bright orange flame.

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

№ 5264

Well Name & No. Kisner #2 Test No. 3 Date 10/5/92

Company Berexco, Inc. Zone Tested Marmaton

Address 970 Fourth Financial Ctr. Wichita, KS. 67202 Elevation 2926 (KB)

Co. Rep./Geo. Charlie Spradlin Cont. Beredco #4 Est. Ft. of Pay 3'

Location: Sec. 36 Twp. 26 S Rge. 33 W Co. Finney State KS.

No. of Copies 9 Distribution Sheet X Yes ____ No Turnkey ____ Yes X No ____ Evaluation

Interval Tested 4622 - 4643 Drill Pipe Size 4½" XH

Anchor Length 21' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4617 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4622 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 4643 Drill Collar — 2.25 Ft. Run 614'

Mud Wt. 9.0 lb/gal. Viscosity 54 Filtrate 8.0

Tool Open @ 4:36 pm Initial Blow Strong blow off bottom in 30 secs.

ISI: Bled off blow - (GTS white bleeding thru 2") surface to bottom 4 mins

Final Blow Surface return built to bottom in 4 mins. Gauged

20 in/wtr on 1/4" orifice = 7.51 mcf/day

Recovery — Total Feet 480' Feet of Gas in Pipe ____ Flush Tool? No

| | | | | | | |
|---|---|---|---|---|---|---|
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. 480' | Feet Of CGO | 25 %gas | 75 %oil | — %water | — %mud |
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |
| Rec. ____ | Feet Of ____ | %gas | %oil | %water | %mud |

BHT 121° °F Gravity 38 °API @ 72° °F Corrected Gravity 36.8 °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 3,800 ppm System

| | | | | | |
|---|---|---|---|---|---|
| (A) Initial Hydrostatic Mud | 2323 PSI | AK1 Recorder No. | 13309 | Range | 4700 |
| (B) First Initial Flow Pressure | 93 PSI | @ (depth) | 4633 | w/Clock No. | 17640 |
| (C) First Final Flow Pressure | 104 PSI | AK1 Recorder No. | 13339 | Range | 4025 |
| (D) Initial Shut-In Pressure | 332 PSI | @ (depth) | 4638 | w/Clock No. | 27566 |
| (E) Second Initial Flow Pressure | 124 PSI | AK1 Recorder No. | — | Range | — |
| (F) Second Final Flow Pressure | 166 PSI | @ (depth) | — | w/Clock No. | — |
| (G) Final Shut-In Pressure | 519 PSI | Initial Opening | 15 | Test | 550 |
| (H) Final Hydrostatic Mud | 2203 PSI | Initial Shut-In | 30 | Jars | ____ |
| | | Final Flow | 60 | Safety Joint | X |
| | | Final Shut-In | 120 | Straddle | ____ |
| | | | | Circ. Sub | X N/C |
| | | | | Sampler | ____ |
| | | | | Extra Packer | ____ |
| | | | | Other | eval - partial |
| | | | | TOTAL PRICE $ | 600 |



Approved By Charles B Spradlin

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS

# TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Drill-Stem Test Data

Well Name KISNER #2-36 Test No. 4 Date 10/7/92

Company BEREXCO INC Zone MORROW

Address 970 4th FINANCIAL CNTR WICHITA KS 67202 Elevation 2926

Co. Rep./Geo. CHARLIE SPRADLIN Cont. BEREDCO RIG #4 Est. Ft. of Pay 5

Location: Sec. 36 Twp. 26S Rge. 33W Co. FINNEY State KS

---

Interval Tested 5006-5080 Drill Pipe Size 4.5" XH

Anchor Length 74 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5001 Drill Collar – 2.25 Ft. Run 583

Bottom Packer Depth 5006 Mud Wt. 8.9 lb/Gal.

Total Depth 5080 Viscosity 54 Filtrate 6.8

Tool Open @ 4:25 PM Initial Blow WEAK TO FAIR BLOW BUILT TO 10"

ISI:BLED OFF BLOW-NO RETURN

Final Blow STRONG RETURN OFF BOTTOM IN 2 MIN/STAYED OFF BOTTOM THROUGHOUT

FSI:BLED OFF BLOW-NO RETURN

Recovery - Total Feet 120 Flush Tool? NO

Rec. 30 Feet of GSY OIL CUT MUD-20%GAS/30%OIL/50%MUD

Rec. 90 Feet of OIL CUT MUD-40%OIL/60%MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 128 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 1950 ppm System

(A) Initial Hydrostatic Mud 2525.7 PSI AK1 Recorder No. 13309 Range 4700

(B) First Initial Flow Pressure 80.0 PSI @ (depth) 5038 w / Clock No. 17640

(C) First Final Flow Pressure 72.8 PSI AK1 Recorder No. 13339 Range 4025

(D) Initial Shut-in Pressure 323.2 PSI @ (depth) 5075 w / Clock No. 27566

(E) Second Initial Flow Pressure 90.4 PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure 95.6 PSI @ (depth) w / Clock No.

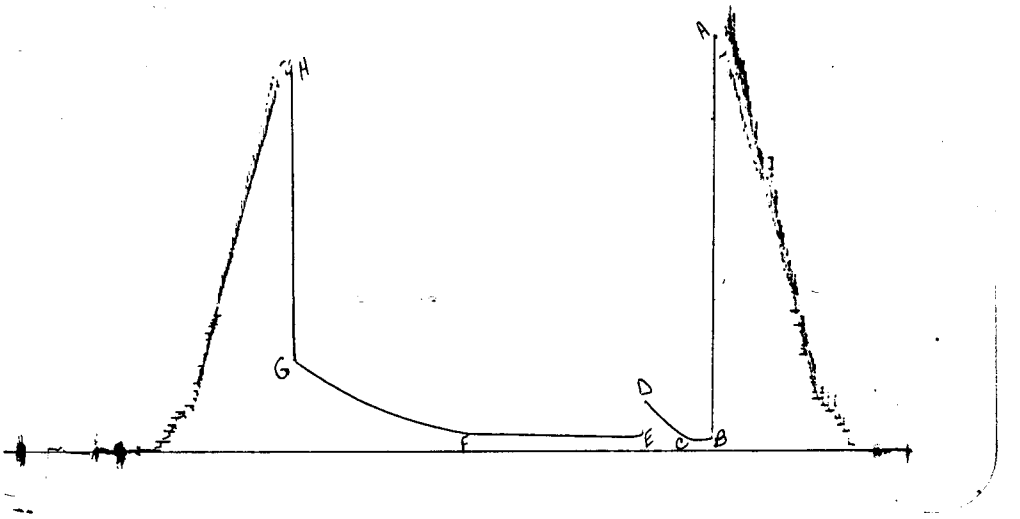
(G) Final Shut-in Pressure 549.1 PSI Initial Opening 15 Final Flow 120

(H) Final Hydrostatic Mud 2390.7 PSI Initial Shut-in 30 Final Shut-in 120

Our Representative ROD STEINBRINK

# CHART PAGE

DST #4
13309



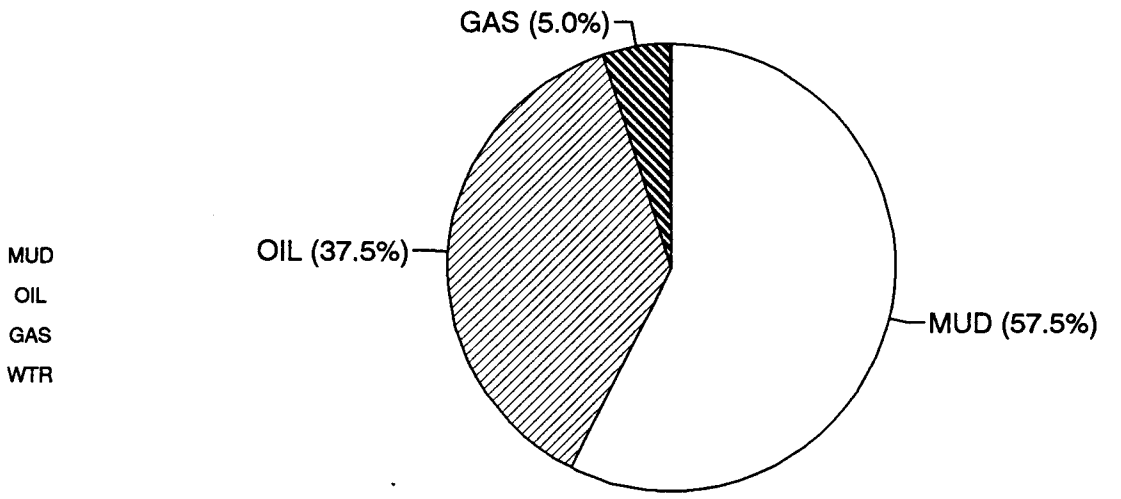

This is an actual photograph of recorder chart

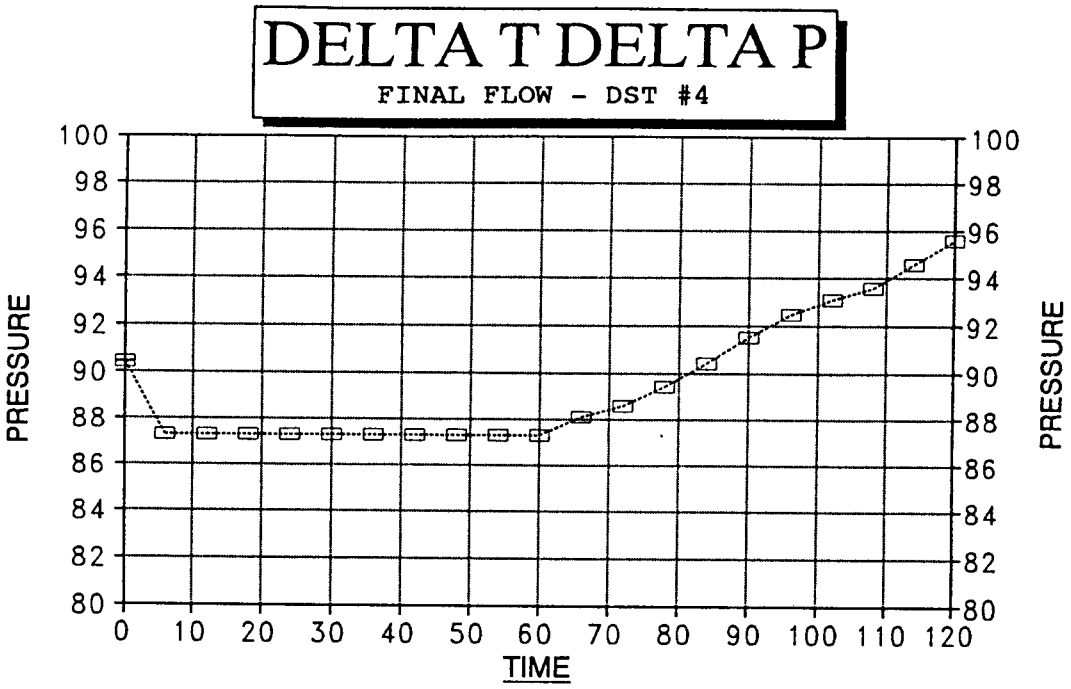
| | FIELD READING | OFFICE READING |
|---|---|---|
| (A) INITIAL HYDROSTATIC MUD | 2410 | 2525.7 |
| (B) FIRST INITIAL FLOW PRESSURE | 62 | 80 |
| (C) FIRST FINAL FLOW PRESSURE | 62 | 72.8 |
| (D) INITIAL CLOSED-IN PRESSURE | 311 | 323.2 |
| (E) SECOND INITIAL FLOW PRESSURE | 72 | 90.4 |
| (F) SECOND FINAL FLOW PRESSURE | 83 | 95.6 |
| (G) FINAL CLOSED-IN PRESSURE | 539 | 549.1 |
| (H) FINAL HYDROSTATIC MUD | 2363 | 2390.7 |

DST # 4 TICKET 5265

| SAMPLE # | TOTAL FEET | GAS % | GAS FEET | OIL % | OIL FEET | WATER % | WATER FEET | MUD % | MUD FEET |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | 20 | 6 | 30 | 9 | 0 | 0 | 50 | 15 |
| 2 | 90 | 0 | 0 | 40 | 36 | 0 | 0 | 60 | 54 |
| 3 | | | 0 | | 0 | | 0 | | 0 |
| 4 | | | 0 | | 0 | | 0 | | 0 |
| 5 | | | 0 | | 0 | | 0 | | 0 |
| TOTAL | 120 | 5.00 | 6 | 37.50 | 45 | 0.00 | 0 | 57.5 | 69 |

| | | | HRS OP | BBL/DAY |
|---|---|---|---|---|
| BBL OIL= | 0.22005 | * | 2.25 | 2.3472 |
| BBL WATER= | 0 | * | | 0 |
| BBL MUD= | 0.33741 | | | |
| BBL GAS= | 0.02934 | | | |






FINAL FLOW

RECORDER # 13339 DST # DST #4

| TIME(MIN) | PRESSURE | <> PRESSURE |
|---|---|---|
| 0 | 90.4 | 90.4 |
| 6 | 87.3 | -3.1 |
| 12 | 87.3 | 0 |
| 18 | 87.3 | 0 |
| 24 | 87.3 | 0 |
| 30 | 87.3 | 0 |
| 36 | 87.3 | 0 |
| 42 | 87.3 | 0 |
| 48 | 87.3 | 0 |
| 54 | 87.3 | 0 |
| 60 | 87.3 | 0 |
| 66 | 88.1 | 0.8 |
| 72 | 88.6 | 0.5 |
| 78 | 89.4 | 0.8 |
| 84 | 90.4 | 1 |
| 90 | 91.5 | 1.1 |
| 96 | 92.5 | 1 |
| 102 | 93.1 | 0.6 |
| 108 | 93.6 | 0.5 |
| 114 | 94.6 | 1 |
| 120 | 95.6 | 1 |

KISNER #2-36 DST #4
INITIAL SHUTIN

15 TOTAL FLOW TIME

Slope 1772.80 psi/cycle
P * 635 psi

| | TIME(MIN) | Pws (psi) | Log Horn T | <> PRESSURE | Horn T |
|---|---|---|---|---|---|
| | 3 | 96.6 | 0.778 | 96.6 | 6 |
| | 6 | 118.9 | 0.544 | 22.3 | 4 |
| | 9 | 140.7 | 0.426 | 21.8 | 3 |
| | 12 | 163.3 | 0.352 | 22.6 | 2 |
| | 15 | 186.0 | 0.301 | 22.7 | 2 |
| | 18 | 217.2 | 0.263 | 31.2 | 2 |
| | 21 | 241.2 | 0.234 | 24.0 | 2 |
| | 24 | 270.3 | 0.211 | 29.1 | 2 |
| X | 27 | 295.2 | 0.192 | 24.9 | 2 |
| X | 30 | 323.2 | 0.176 | 28.0 | 2 |

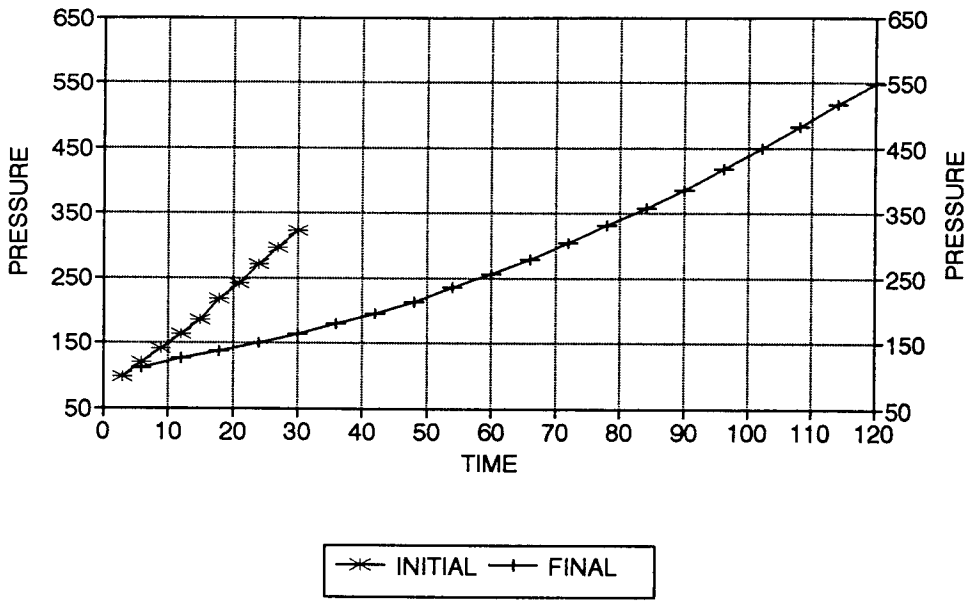
KISNER TRUST # DST #4
FINAL SHUTIN

135 TOTAL FLOW TIME

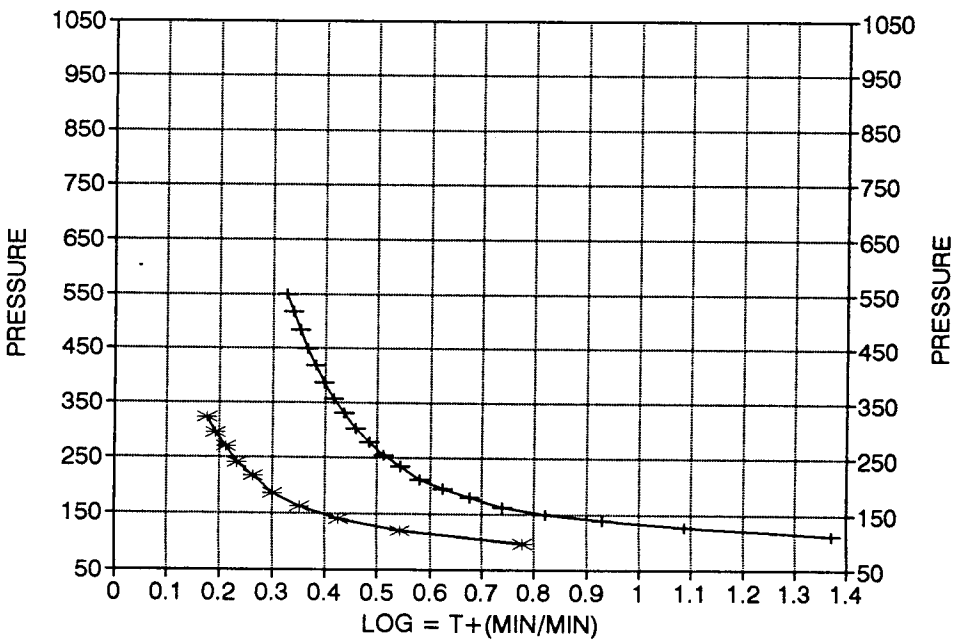
Slope 419.47 psi/cycle
P * 686 psi

| | | Pws (psi) | Log Horn T | <> PRESSURE | Horn T |
|---|---|---|---|---|---|
| X | 6 | 111.3 | 1.371 | 111.3 | 24 |
| | 12 | 126.8 | 1.088 | 15.5 | 12 |
| | 18 | 137.2 | 0.929 | 10.4 | 9 |
| | 24 | 149.7 | 0.821 | 12.5 | 7 |
| | 30 | 163.2 | 0.740 | 13.5 | 6 |
| | 36 | 178.8 | 0.677 | 15.6 | 5 |
| | 42 | 194.3 | 0.625 | 15.5 | 4 |
| | 48 | 212.1 | 0.581 | 17.8 | 4 |
| | 54 | 234.9 | 0.544 | 22.8 | 4 |
| | 60 | 255.7 | 0.512 | 20.8 | 3 |
| | 66 | 278.6 | 0.484 | 22.9 | 3 |
| | 72 | 303.5 | 0.459 | 24.9 | 3 |
| | 78 | 331.6 | 0.436 | 28.1 | 3 |
| | 84 | 358.6 | 0.416 | 27.0 | 3 |
| | 90 | 385.6 | 0.398 | 27.0 | 3 |
| | 96 | 417.9 | 0.381 | 32.3 | 2 |
| | 102 | 449.1 | 0.366 | 31.2 | 2 |
| | 108 | 483.3 | 0.352 | 34.2 | 2 |
| | 114 | 517.0 | 0.339 | 33.7 | 2 |
| X | 120 | 549.1 | 0.327 | 32.1 | 2 |

# KISNER #2-36 / DST #4
# DELTA T DELTA P




# HORNER PLOT



WELL NAME Lee Kinder #4-36 DST # 4 RECORDER # 13339

INIT. HYD. MUD 2502 2525.7 FINAL HYD. MUD 2367 2390.7

INITIAL FLOW
MINUTES 15
INTERVAL 3

INITIAL SHUTIN
MINUTES 30
INTERVAL 3

FINAL FLOW
MINUTES 120
INTERVAL 6

FINAL SHUTIN
MINUTES 120
INTERVAL 6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 77 | 80.0 | 10 | 72.8 | 1 | 82 | 404 | 95.6 |
| | 70 | 72.8 | 93 | 96.6 | 2 | 84 | 87.3 | 111.3 |
| | | | 114 | 118.9 | 3 | | | 126.8 |
| | | | 135 | 149.7 | | | | 137.2 |
| | | | 157 | 163.3 | | | | 149.7 |
| | 70 | 72.8 | 179 | 186.0 | 6 | 84 | | 157 163.2 |
| | | | 209 | 217.2 | 7 | | | 172 178.8 |
| | | | 232 | 241.2 | 8 | | | 187 194.3 |
| | | | 260 | 270.3 | 9 | | | 204 212.1 |
| | | | 284 | 295.2 | 10 | | | 226 234.9 |
| | | | 311 | 323.2 | 11 | 84 | 87.3 | 246 255.7 |
| | | | | | 12 | 85 | 88.3 | 268 278.6 |
| | | | | | 13 | 85 | 88.3 | 292 303.5 |
| | | | | | 14 | 86 | 89.4 | 319 331.6 |
| | | | | | 15 | 87 | 90.4 | 345 358.6 |
| | | | | | 16 | 88 | 91.5 | 371 385.6 |
| | | | | | 17 | 89 | 92.5 | 402 417.9 |
| | | | | | 18 | 90 | 93.6 | 432 449.1 |
| | | | | | 19 | 90 | 93.6 | 465 483.3 |
| | | | | | 20 | 91 | 94.6 | 498 517.0 |
| | | | | | 21 | 92 | 95.6 | 530 549.1 |
| | | | | | 22 | | | |
| | | | | | 23 | | | |
| | | | | | 24 | | | |
| | | | | | 25 | | | |
| | | | | | 26 | | | |
| | | | | | 27 | | | |

J-635 C-11

F-

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 5265

Well Name & No. Kisner #2 Test No. 4 Date 10-7-92

Company Berexco, Inc. Zone Tested Morrow

Address 970 Fourth Financial Ctr. Wichita, KS 67202 Elevation 2926 (KB)

Co. Rep./Geo. Charlie Spradlin Cont. Beredco #4 Est. Ft. of Pay 5'

Location: Sec. 36 Twp. 26 S Rge. 33 W Co. Finney State KS.

No. of Copies 9 Distribution Sheet X Yes ____ No Turnkey ____ Yes X No ____ Evaluation

Interval Tested 5006 - 5080 Drill Pipe Size 4½" XH

Anchor Length 74' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 5001 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 5006 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 5080 Drill Collar — 2.25 Ft. Run 583'

Mud Wt. 8.9 lb/gal. Viscosity 54 Filtrate 6.8

Tool Open @ 4:25 pm Initial Blow Weak to fair blow built to 10".

ISI: Bled off blow - no return.

Final Blow Strong return off bottom in 2 mins stayed off bottom thru. open

FSI: Bled off blow - no return.

Recovery — Total Feet 120' Feet of Gas in Pipe ____ Flush Tool? No

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Rec. ____ | Feet Of ____ | | %gas | %oil | %water | %mud |
| Rec. 30' | Feet Of GOCM | 20 | %gas | 30 | %oil | — | %water | 50 | %mud |
| Rec. ____ | Feet Of ____ | | %gas | %oil | %water | %mud |
| Rec. 90' | Feet Of OCM | — | %gas | 40 | %oil | — | %water | 60 | %mud |
| Rec. ____ | Feet Of ____ | | %gas | %oil | %water | %mud |

BHT 128° °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 1950 ppm System

| | | | | | |
|---|---|---|---|---|---|
| (A) Initial Hydrostatic Mud | 2410 PSI | AK1 Recorder No. | 13309 | Range | 4700 |
| (B) First Initial Flow Pressure | 62 PSI | @ (depth) | 5038 | w/Clock No. | 17640 |
| (C) First Final Flow Pressure | 62 PSI | AK1 Recorder No. | 13339 | Range | 4025 |
| (D) Initial Shut-In Pressure | 311 PSI | @ (depth) | 5075 | w/Clock No. | 27566 |
| (E) Second Initial Flow Pressure | 72 PSI | AK1 Recorder No. | — | Range | — |
| (F) Second Final Flow Pressure | 83 PSI | @ (depth) | — | w/Clock No. | — |
| (G) Final Shut-In Pressure | 539 PSI | Initial Opening | 15 | Test | |
| (H) Final Hydrostatic Mud | 2363 PSI | Initial Shut-In | 30 | Jars | X |
| | | Final Flow | 120 | Safety Joint | X |
| | | Final Shut-In | 120 | Straddle | |
| | | | | Circ. Sub | X N/C |
| | | | | Sampler | |
| | | | | Extra Packer | |
| | | | | Other | |
| | | | | TOTAL PRICE $ | |



Approved By Charles R Spradlin

Our Representative Rod Steinbrink

Printcraft Printers - Hays, KS