

TRILOBITE TESTING, INC.

# DRILL STEM TEST REPORT

Prepared For: **Castle Resources Inc**

P O Box 87
Schoechen Ks 67667

ATTN: Jerry Green

**26-17s-21w Ness Ks**

**Ridge #1**

Start Date: 2004.04.19 @ 20:25:18
End Date: 2004.04.20 @ 02:24:47
Job Ticket #: 19419 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
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ATTN: Jerry Green

**Ridge #1**

**26-17s-21w Ness Ks**

Job Ticket: 19419 **DST#: 1**

Test Start: 2004.04.19 @ 20:25:18

## GENERAL INFORMATION:

Formation: **Cher Sd**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:07:17
Time Test Ended: 02:24:47

Test Type: Conventional Bottom Hole
Tester: Ray Schwager
Unit No: 28

**Interval: 4070.00 ft (KB) To 4089.00 ft (KB) (TVD)**
Total Depth: 4089.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

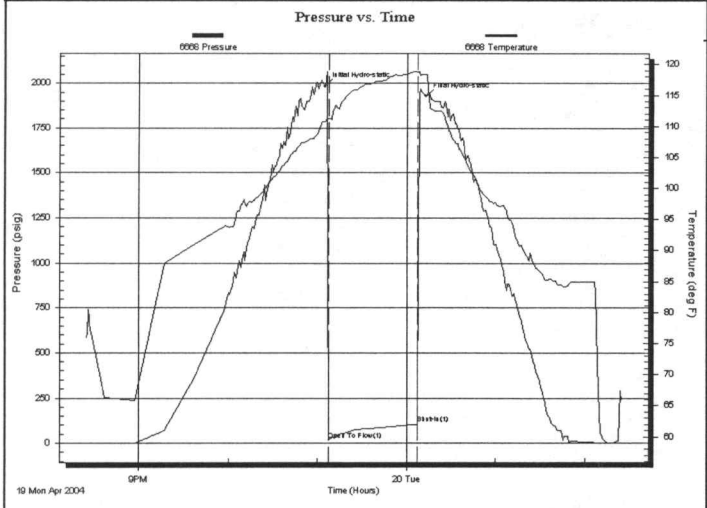
Reference Elevations: 2195.00 ft (KB)
2190.00 ft (CF)
KB to GR/CF: 5.00 ft

**Serial #: 6668** **Inside**

Press@RunDepth: psig @ 4071.01 ft (KB)
Start Date: 2004.04.19 End Date: 2004.04.20
Start Time: 20:25:18 End Time: 02:24:47

Capacity: 7000.00 psig
Last Calib.: 2004.04.20
Time On Btm: 2004.04.19 @ 23:04:47
Time Off Btm: 2004.04.20 @ 00:12:47

TEST COMMENT: IFP-w k to a gd bl 1/2" to 7"bl Sampler Data 200ml mud 3800 ml w ater
Times 60-out PSI 80 RW .21@67F




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1982.71 | 110.80 | Initial Hydro-static |
| 3 | 17.51 | 111.15 | Open To Flow (1) |
| 63 | 105.17 | 118.73 | Shut-In(1) |
| 68 | 1926.91 | 118.30 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 70.00 | MW 30%mud 70%w ater | 0.34 |
| 120.00 | w ater RW .21 @ 67F | 1.23 |
| | | |
| | | |
| | | |
| | | |

## Gas Rates

| | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|---|---|---|---|

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Castle Resources Inc

P O Box 87
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**Ridge #1**

**26-17s-21w Ness Ks**

Job Ticket: 19419 **DST#: 1**

Test Start: 2004.04.19 @ 20:25:18

## Tool Information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Drill Pipe: | Length: | 3931.00 ft | Diameter: | 3.80 inches | Volume: | 55.14 bbl | |
| Heavy Wt. Pipe: | Length: | 0.00 ft | Diameter: | 0.00 inches | Volume: | 0.00 bbl | |
| Drill Collar: | Length: | 120.00 ft | Diameter: | 2.25 inches | Volume: | 0.59 bbl | |
| | | | | | Total Volume: | 55.73 bbl | |

| | |
|---|---|
| Drill Pipe Above KB: | 11.00 ft |
| Depth to Top Packer: | 4070.00 ft |
| Depth to Bottom Packer: | ft |
| Interval between Packers: | 19.02 ft |
| Tool Length: | 49.02 ft |
| Number of Packers: | 2 Diameter: 6.75 inches |

| | |
|---|---|
| Tool Weight: | 2500.00 lb |
| Weight set on Packer: | 25000.00 lb |
| Weight to Pull Loose: | 60000.00 lb |
| Tool Chased | 0.00 ft |
| String Weight: Initial | 49000.00 lb |
| Final | 50000.00 lb |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths | |
|---|---|---|---|---|---|---|
| Change Over Sub | 1.00 | | | 4041.00 | | |
| Shut In Tool | 5.00 | | | 4046.00 | | |
| Sampler | 2.00 | | | 4048.00 | | |
| Hydraulic tool | 5.00 | | | 4053.00 | | |
| Jars | 5.00 | | | 4058.00 | | |
| Safety Joint | 2.00 | | | 4060.00 | | |
| Packer | 5.00 | | | 4065.00 | 30.00 | Bottom Of Top Packer |
| Packer | 5.00 | | | 4070.00 | | |
| Stubb | 1.00 | | | 4071.00 | | |
| Recorder | 0.01 | 6668 | Inside | 4071.01 | | |
| Perforations | 15.00 | | | 4086.01 | | |
| Recorder | 0.01 | | | 4086.02 | | |
| Bullnose | 3.00 | | | 4089.02 | 19.02 | Bottom Packers & Anchor |
| **Total Tool Length:** | **49.02** | | | | | |

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Castle Resources Inc

P O Box 87
Schoechen Ks 67667

ATTN: Jerry Green

**Ridge #1**

**26-17s-21w Ness Ks**

Job Ticket: 19419 **DST#: 1**

Test Start: 2004.04.19 @ 20:25:18

## Mud and Cushion Information

| | | | | | |
|---|---|---|---|---|---|
| Mud Type: | Gel Chem | Cushion Type: | | Oil API: | deg API |
| Mud Weight: | 9.00 lb/gal | Cushion Length: | ft | Water Salinity: | 42000 ppm |
| Viscosity: | 53.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 9.95 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | 5000.00 ppm | | | | |
| Filter Cake: | 2.00 inches | | | | |

## Recovery Information

Recovery Table

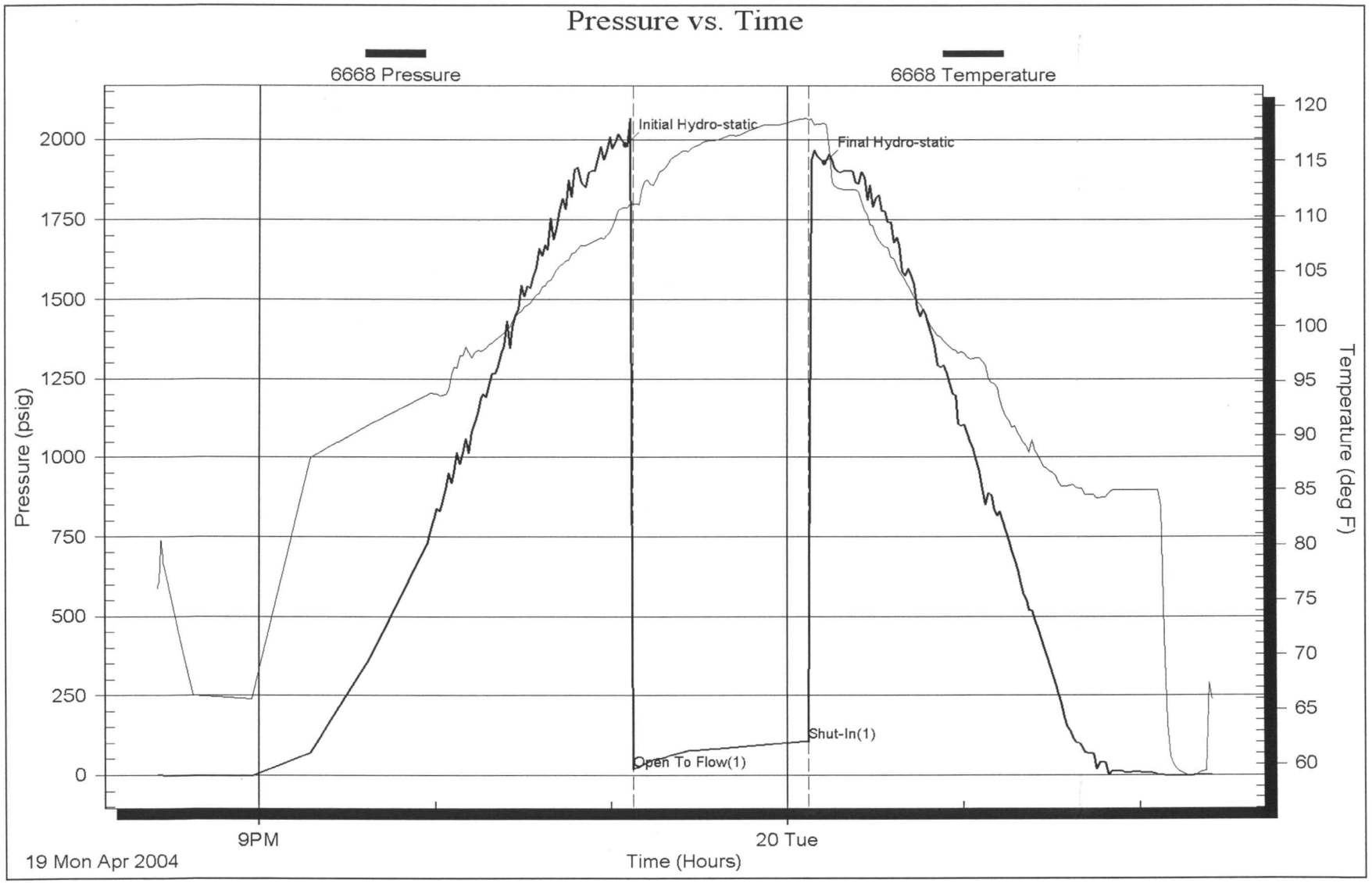
| Length ft | Description | Volume bbl |
|---|---|---|
| 70.00 | MW 30%mud 70%w ater | 0.344 |
| 120.00 | w ater RW .21 @ 67F | 1.228 |

Total Length: 190.00 ft Total Volume: 1.572 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6668 Pressure
6668 Temperature
Initial Hydro-static
Final Hydro-static
Shut-In(1)
Open To Flow(1)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
120
115
110
105
100
95
90
85
80
75
70
65
60
9PM
20 Tue
19 Mon Apr 2004
Time (Hours)

# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 6357

№ 19419

05/03

## Test Ticket

Well Name & No. Ridge #1 Test No. 1 Date 4-19-04

Company CASTLE Resources Inc Zone Tested Cher Sd

Address P.O. Box 87 Schoenchen, Ks 67667 Elevation 2195 KB 2190 GL

Co. Rep / Geo. JERRY Green Cont. Murfin 24 Est. Ft. of Pay — Por. — %

Location: Sec. 26 Twp. 17S Rge. 21W Co. Ness State Ks

No. of Copies Reg Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4070 - 4089 Initial Str Wt./Lbs. 49000 Unseated Str Wt/Lbs. 50000

Anchor Length 19 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000

Top Packer Depth 4065 Tool Weight 2500

Bottom Packer Depth 4070 Hole Size 7 7/8" — Rubber Size 6 3/4" —

Total Depth 4089 Wt. Pipe Run — Drill Collar Run 120

Mud Wt. 9.4 LCM — Vis. 53 WL 10 Drill Pipe Size 4½XH Ft. Run 3931

Blow Description IFP - WEAK TO A Good Blow ½" TO 7" Blow
~~FFP~~.

Recovery - Total Feet 190 GIP — Ft. in DC 120 Ft. in DP 70

| | | | | | | |
|---|---|---|---|---|---|---|
| Rec. 70 | Feet of MW | %gas | %oil | 70 | %water 30 | %mud |
| Rec. 120 | Feet of WATER | %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 115 °F Gravity — °API D @ — °F Corrected Gravity — °API

RW .21 @ 67 °F Chlorides 42000 ppm Recovery _____ Chlorides 5000 ppm System

| | AK-1 | Alpine | | | | | |
|---|---|---|---|---|---|---|---|
| (A) Initital Hydrostatic Mud | | 1982 PSI | Recorder No. | 6668 | | Test ✓ | 800 |
| (B) First Initial Flow Pressure | | 17 PSI | (depth) | 4071 | | Elec. Rec. ✓ | 150 |
| (C) First Final Flow Pressure | | 105 PSI | Recorder No. | ~~13687~~ | | Jars ✓ | 200 |
| (D) Initial Shut-In Pressure | | — PSI | (depth) | 4086 | | Safety Jt. ✓ | 50 |
| (E) Second Initial Flow Pressure | | — PSI | Recorder No. | — | | Circ Sub | |
| (F) Second Final Flow Pressure | | — PSI | (depth) | — | | Sampler ✓ | 250 |
| (G) Final Shut-In Pressure | | — PSI | **Initial Opening** | 60 | | Straddle | |
| (Q) Final Hydrostatic Mud | | 1926 PSI | Initial Shut-In | — | | Ext. Packer | |
| | | | Final Flow | — | | Shale Packer | |
| | | | Final Shut-In | — | | Mileage ✓ 40 one way | 68 |
| | | | **T-On Location** | 1800 | | Sub Total: | 1518 |
| | | | T-Started | 2025 | | Std. By | |
| | | | T-Open | 2310 | | Other | |
| | | | T-Pulled | 0010 | | Total: Bill @ $3250.00 | |
| | | | T-Out | 0224 | | | |

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Approved By _____

Our Representative RAY Schwager Thank you

# TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 19419 Date 4-19-04

Company Name Castle Resources Inc

Lease Ridge #1 Test No. 1

County Ness Sec. 26 Twp. 17S Rng. 21W

## SAMPLER RECOVERY

Gas — ML

Oil — ML

Mud 200 ML

Water 3800 ML

Other ML

Pressure 80 ML

Total ML

## PIT MUD ANALYSIS

Chlorides 5000 ppm.

Resistivity .8 ohms @ 65 F

Viscosity 53

Mud Weight 9.4

Filtrate 10

Other

## SAMPLER ANALYSIS

Resistivity .21 ohms @ 67 F

Chlorides 42000 ppm.

Gravity corrected @60F

## PIPE RECOVERY

**TOP**

Resistivity ohms @ F

Chlorides ppm.

**MIDDLE**

Resistivity ohms @ F

Chlorides ppm.

**BOTTOM**

Resistivity ohms @ F

Chlorides ppm.

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# CHART PAGE

**This is a photocopy of the actual AK-1 recorder chart**

