

DRILL STEM TEST REPORT

Prepared For: **J.K.Brown, Inc.**

1732 Wazee St.#204
Denver, CO 80202

ATTN: Jamie Brown

24--34S--25W

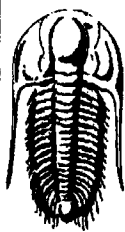
Mary Cox#1

Start Date: 2002.12.14 @ 16:41:38

End Date: 2002.12.15 @ 03:48:08

Job Ticket #: 16601 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

J.K.Brown, Inc.

1732 Wazee St.#204
Denver, CO 80202

ATTN: Jamie Brown

Mary Cox#1

24-34S-25W

Job Ticket: 16601

DST#: 1

Test Start: 2002.12.14 @ 16:41:38

GENERAL INFORMATION:

Formation: **Chester**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 20:44:38

Time Test Ended: 03:48:08

Test Type: **Conventional Bottom Hole**

Tester: **Darren L.Amerine**

Unit No: **19**

Interval: **5623.00 ft (KB) To 5700.00 ft (KB) (TVD)**

Total Depth: **5700.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2033.00 ft (KB)**

2023.00 ft (CF)

KB to GR/CF: **10.00 ft**

Serial #: 2346

Inside

Press@RunDepth: **105.53 psig @ 5634.00 ft (KB)**

Start Date: **2002.12.14**

End Date:

2002.12.15

Start Time: **16:42:40**

End Time:

03:48:08

Capacity: **7000.00 psig**

Last Calib.: **2002.12.15**

Time On Btm: **2002.12.14 @ 20:41:08**

Time Off Btm: **2002.12.14 @ 23:49:38**

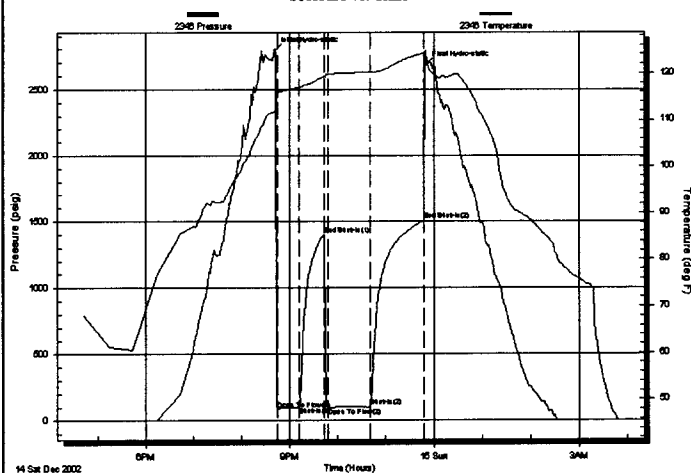
TEST COMMENT: F:Strong blow b.o.b in 60 sec.GTS in 10 mins.gauge gas.

IS:Bled down n for 7 mins.no blow back.

FF:Strong blow b.o.b in 15 sec.Gauge gas.

FS:Bled down n for 5 mins.no blow back.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2789.34	111.78	Initial Hydro-static
4	86.24	115.63	Open To Flow (1)
30	103.18	117.01	Shut-In(1)
63	1400.45	119.35	End Shut-In(1)
67	100.04	119.71	Open To Flow (2)
120	105.53	120.21	Shut-In(2)
187	1507.51	124.16	End Shut-In(2)
189	2682.37	124.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5263.00	01 - Gas	69.12
335.00	Gas cut mud	4.70

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	11.00	171.34
Last Gas Rate	0.38	8.00	82.06
Max. Gas Rate	0.50	11.00	171.34



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

J.K.Brown, Inc.

Mary Cox#1

1732 Wazee St.#204
Denver, CO 80202

24-34S-25W

Job Ticket: 16601

DST#: 1

ATTN: Jamie Brown

Test Start: 2002.12.14 @ 16:41:38

Tool Information

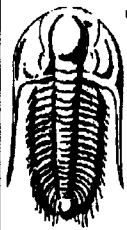
Drill Pipe:	Length: 5083.82 ft	Diameter: 3.80 inches	Volume: 71.31 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 516.18 ft	Diameter: 2.25 inches	Volume: 2.54 bbl	Weight to Pull Loose: 88000.00 lb
			Total Volume: 73.85 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 83000.00 lb
Depth to Top Packer:	5623.00 ft			Final 83000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.00 ft			
Tool Length:	108.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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C.O. Sub	1.00			5593.00	
S.I. Tool	5.00			5598.00	
Sampler	3.00			5601.00	
HMV	5.00			5606.00	
Jars	5.00			5611.00	
Safety Joint	2.00			5613.00	
Packer	5.00			5618.00	31.00 Bottom Of Top Packer
Packer	5.00			5623.00	
Stubb	1.00			5624.00	
Anchor	10.00			5634.00	
Recorder	0.00	2346	Inside	5634.00	
Blank Spacing	63.00			5697.00	
Recorder	0.00	10991	Outside	5697.00	
Bullnose	3.00			5700.00	77.00 Bottom Packers & Anchor

Total Tool Length: 108.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

J.K.Brown, Inc.

Mary Cox#1

1732 Wazee St.#204
Denver, CO 80202

24-34S-25W

Job Ticket: 16601

DST#: 1

ATTN: Jamie Brown

Test Start: 2002.12.14 @ 16:41:38

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:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.39 in³

Gas Cushion Type:

Resistivity: 1.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5263.00	01 - Gas	69.124
335.00	Gas cut mud	4.699

Total Length: 5598.00 ft Total Volume: 73.823 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler recovery

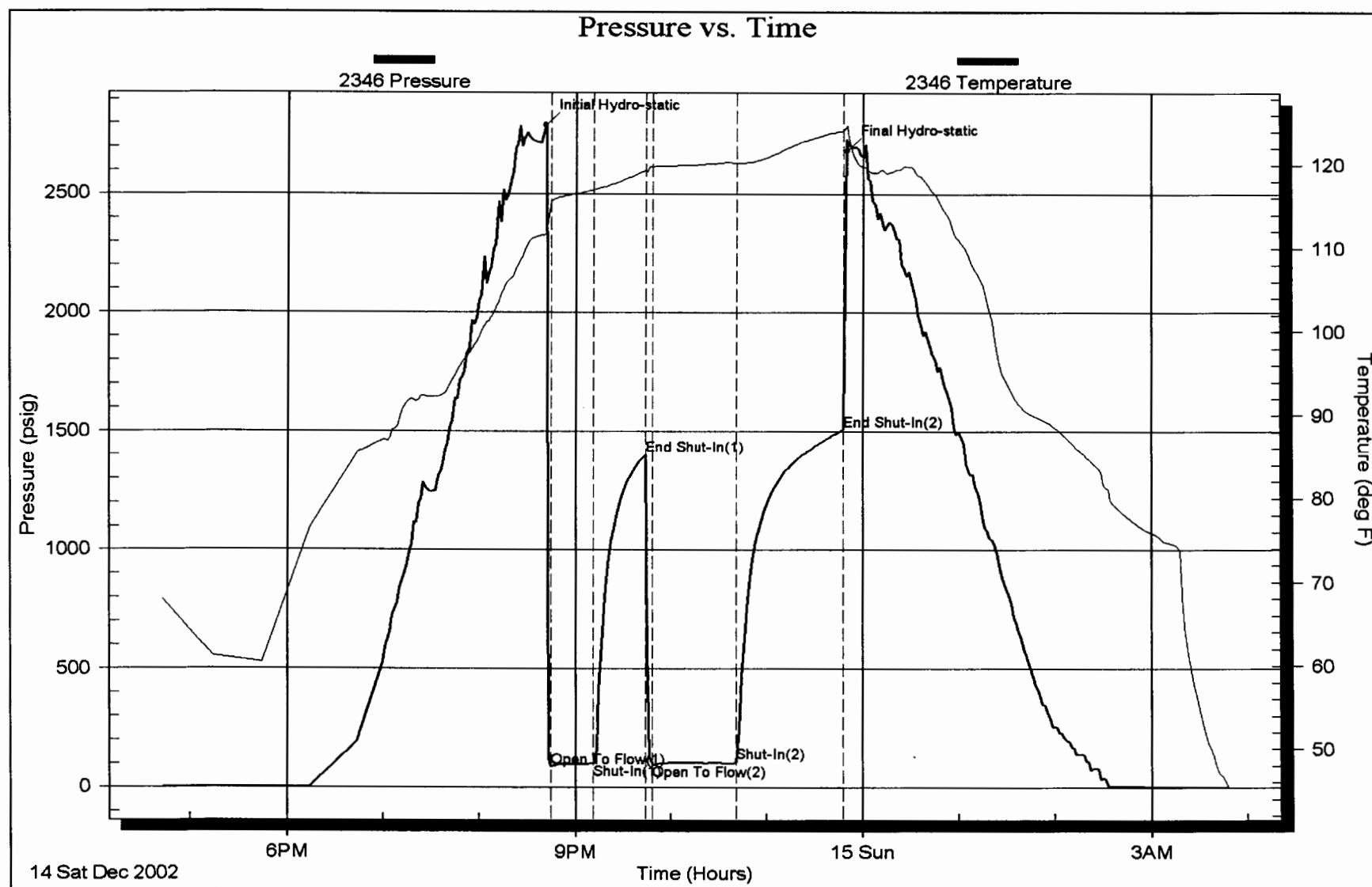
4000 ML. of Gas @ 650 PSI. 8.5Cf

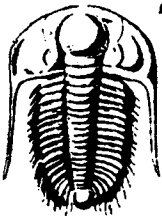
Serial #: 2346

Inside J.K.Brown, Inc.

24-34S-25W

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

TW
#5306
#1686

No 16601

Test Ticket

Well Name & No. <u>Mary Cox #1</u>	Test No. <u>#1</u>	Date <u>12-14-02</u>
Company <u>J. K. Brown, Inc.</u>	Zone Tested <u>Chester</u>	
Address <u>1732 Wazee St, #204 Denver, Co. 80202</u>	Elevation <u>2033</u>	KB <u>2023</u> GL
Co. Rep / Geo. <u>Jamie Brown</u>	Cont. <u>Martin #21</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>24</u>	Twp. <u>34S</u>	Rge. <u>25 W</u> Co. <u>Clark</u> State <u>Ks</u>
No. of Copies <u>5</u>	Distribution Sheet (Y, N) <u> </u>	Turnkey (Y, N) <u> </u> Evaluation (Y, N) <u> </u>

Interval Tested <u>5623 - 5700</u>	Initial Str Wt./Lbs. <u>83000</u>	Unseated Str Wt./Lbs. <u>83000</u>
Anchor Length <u>77</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>89000</u>
Top Packer Depth <u>5618</u>	Tool Weight <u>2100</u>	
Bottom Packer Depth <u>5623</u>	Hole Size — 7 7/8" <u>✓</u>	Rubber Size — 6 3/4" <u>✓</u>
Total Depth <u>5700</u>	Wt. Pipe Run <u>N/A</u>	Drill Collar Run <u>516.18</u>
Mud Wt. <u>9.1</u> LCM <u>2#</u> Vis. <u>55</u> WL <u>10.4</u>	Drill Pipe Size <u>4 1/2 x H</u>	Ft. Run <u>5145.82</u>
Blow Description <u>TF: Strong blow b.o.b in 60 sec 6TS in 10 min Gauge Gas</u>		
<u>TSI: Bled down for 7 mins No blow back</u>		
<u>TF: Strong blow b.o.b in 1.5 sec Gauge Gas</u>		
<u>TSI: Bled down for 5 mins. No blow back.</u>		

Recovery — Total Feet <u>335</u>	GIP <u>5263</u>	Ft. in DC <u>335</u>	Ft. in DP <u>Gas</u>
Rec. <u>335</u> Feet Of <u>56CM</u>	<u>10% gas</u>	<u>%oil</u>	<u>%water 90</u> <u>%mud</u>
Rec. <u>5263</u> Feet Of <u>Gas In pipe</u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u> <u>%mud</u>
Rec. <u> </u> Feet Of <u> </u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u> <u>%mud</u>
Rec. <u> </u> Feet Of <u> </u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u> <u>%mud</u>
Rec. <u> </u> Feet Of <u> </u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u> <u>%mud</u>
BHT <u>124 °</u> °F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u>	°API <u> </u>
RW <u> </u> @ <u> </u> °F	Chlorides <u> </u> ppm Recovery	Chlorides <u>4500</u>	ppm System

(A) Initial Hydrostatic Mud	AK-1 <u>2789</u> Alpine	PSI Recorder No. <u>2346</u>	T-On Location <u>1510</u>
(B) First Initial Flow Pressure	<u>86</u>	PSI (depth) <u>5634</u>	T-Started <u>1641</u>
(C) First Final Flow Pressure	<u>183</u>	PSI Recorder No. <u>10991</u>	T-Open <u>2040</u>
(D) Initial Shut-In Pressure	<u>1400</u>	PSI (depth) <u>5696</u>	T-Pulled <u>2340</u>
(E) Second Initial Flow Pressure	<u>100</u>	PSI Recorder No. <u> </u>	T-Out <u>0348</u>
(F) Second Final Flow Pressure	<u>106</u>	PSI (depth) <u> </u>	T-Off Location <u>0530</u>
(G) Final Shut-in Pressure	<u>1508</u>	PSI Initial Opening <u>30</u>	Test <u>✓</u> <u>900</u>
(Q) Final Hydrostatic Mud	<u>2682</u>	PSI Initial Shut-in <u>60 30</u>	Jars <u>✓</u> <u>200</u>
		Final Flow <u>60</u>	Safety Joint <u>✓</u> <u>50</u>
		Final Shut-in <u>8060</u>	Straddle <u> </u>
			Circ. Sub <u> </u>
			Sampler <u>✓</u> <u>200</u>
			Extra Packer <u> </u>
			Elec. Rec. <u>✓</u> <u>150</u>
			Mileage <u>96</u> <u>96</u>
			Other <u>3 hrs ext</u> <u>1596</u>
			TOTAL PRICE \$ <u>1646</u> <u>80 90</u>
			<u>\$1686</u>

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Approved By J. K. Brown

Our Representative Darren L. Lawrence

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 16601 Date 12-14-02
Company Name J.K. Brown
Lease Mary Cox #1 Test No. #1 Chester
County Clark Co, Ks Sec. 24 Twp. 34S Rng. 25W

SAMPLER RECOVERY

Gas 4000 8.5 CF ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 650 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 4500 ppm.
Resistivity 1.0 ohms @ 62 F
Viscosity 55
Mud Weight 9.1
Filtrate 10.4
Other 2H

SAMPLER ANALYSIS

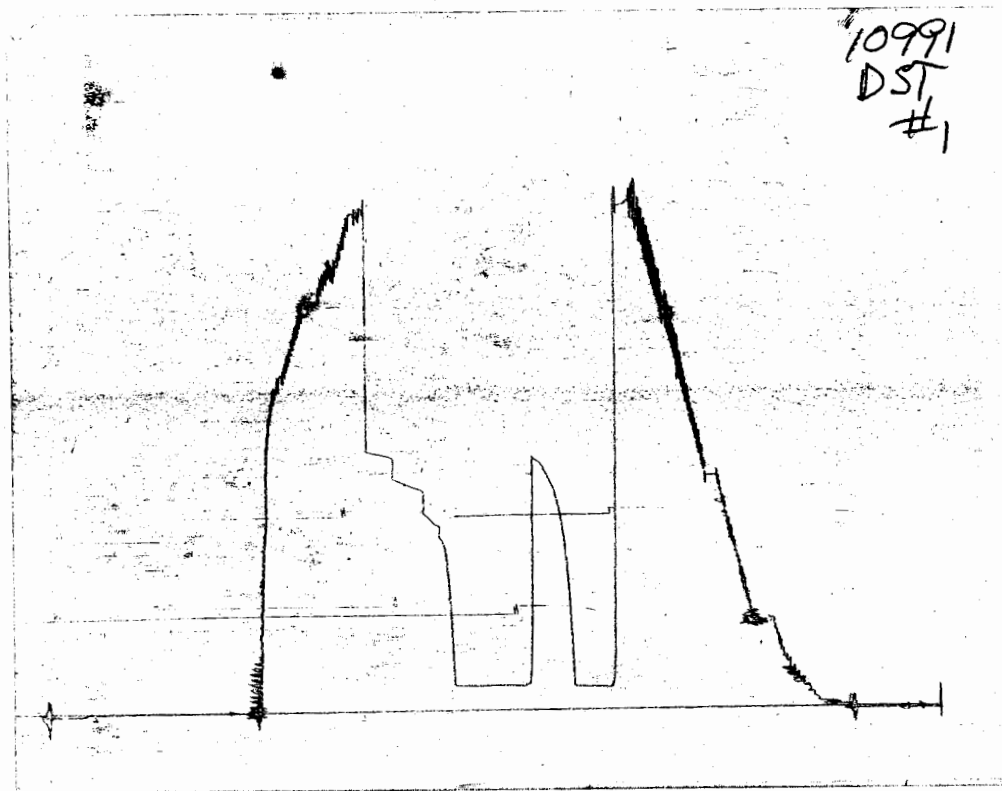
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

CHART PAGE

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





GAS VOLUME REPORT

LUME REPORT
Mary Cox
WELL NAME

OPERATOR

WELL NAME AND NO.

Chester

DST NO

GTS in 10 mins on initial flow

Remarks: