

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

8/23/12

Form ACO-1
June 2009

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 8914
Name: H&C Oil Operating, Inc.
Address 1: P.O. Box 86
Address 2: _____
City: Plainville State: KS Zip: 67663 + _____
Contact Person: Charles Ramsay
Phone: (785) 434-7434
CONTRACTOR: License # 33493
Name: American Eagle Drilling LLC
Wellsite Geologist: Clayton Erickson
Purchaser: none

Designate Type of Completion:

- New Well
- Re-Entry
- Workover
- Oil
- WSW
- SWD
- SIOW
- Gas
- D&A
- ENHR
- SIGW
- OG
- GSW
- Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic
- Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening
- Re-perf.
- Conv. to ENHR
- Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

<u>8/2/2011</u>	<u>8/8/2011</u>	<u>8/9/2011</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 065-23759-00-00

Spot Description: _____

W2 SW SE NW Sec. 28 Twp. 6 S. R. 23 East West

2,310 Feet from North / South Line of Section

1,350 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE
- NW
- SE
- SW

County: Graham

Lease Name: Tien Well #: 28-3

Field Name: Wildcat

Producing Formation: none

Elevation: Ground: 2430 Kelly Bushing: 2435

Total Depth: 3940 Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 260 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: RECEIVED bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: AUG 24 2011

Operator Name: KCC WICHITA

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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AUG 23 2012

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. M KCC hita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Charles B Ramsay
Title: President Date: 8/23/11

KCC Office Use ONLY

- Letter of Confidentiality Received Date: 8/23/11 - 8/23/12
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: MS Date: 8-29-11

Operator Name: H&C Oil Operating, Inc. Lease Name: Tien Well #: 28-3
 Sec. 28 Twp. 6 S. R. 23 East West County: Graham

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken Yes No
 (Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No

Electric Log Submitted Electronically Yes No
 (If no, Submit Copy)

List All E. Logs Run:

Microresistivity, Dual induction, Dual compensated porosity log

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
Anhydrite	2088	+347
Base Anhydrite	2120	+311
Heebner	3656	-1221
Lansing	3698	-1263
BKC	3886	-1451

CASING RECORD New Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
surface	12 1/4"	8 5/8"	23	260	common	160	3%cc, 2% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth

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 AUG 24 2011
 KCC WICHITA

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift Other (Explain) _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
<input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, Submit ACO-18.)	<input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled (Submit ACO-5) (Submit ACO-4)	_____ _____
	<input type="checkbox"/> Other (Specify) _____	CONFIDENTIAL AUG 23 2012

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 5318

Date	8-2-11	Sec.	28	Twp.	6	Range	23	County	Corning	State	KS	On Location		Finish	6:45 p.m.
Lease	Tien	Well No.	28-3		Location Hill City N 4th W to 250rd 1/2 N W into										
Contractor	American Eagle #3							Owner							
Type Job	Surface							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Hole Size	12 1/4		T.D.		263		Charge To								
Csg.	8 5/8		Depth		263		H + C								
Tbg. Size			Depth				Street								
Tool			Depth				City				State				
Cement Left in Csg.	15'		Shoe Joint				The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line			Displace		15 1/2 BCL		Cement Amount Ordered				160 cum 390cc 2 1/2 Gal				

EQUIPMENT

Pumptrk	9	No.	Cementer	Craig	Common	160
			Helper			
Bulktrk		No.	Driver	Jimmy Paul	Poz. Mix	
			Driver			
Bulktrk	8	No.	Driver	Doug	Gel.	3
			Driver			

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Cgllar	CFL-117 or CD110 CAF 38
8 5/8 on bottom Est. Circulation.	Sand
Mix Karsic + Displace.	Handling 168
Cement Circulated!	Mileage

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	RECEIVED
AFU Inserts	AUG 24 2011
Float Shoe	
Latch Down	KCC WICHITA
Pumptrk Charge	Surface
Mileage	41

Thanks!
Signature: *Bruce Paul Baker*

Tax
Discount
Total Charge
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AUG 23 2012
KCC

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 5322

Date	8-9-11	Sec.	28	Twp.	6	Range	23	County	Graham	State	KS	On Location	Finish	3:45 A.M.	
Lease	Tien			Well No.	28-3			Location	Hill City, 1/2 Yrd wtu 250' rd 1/2 w into						
Contractor	American Page #3							Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job	Rotary Plug							Hole Size	7 7/8		T.D.	3940			
Csg.								Depth							
Tbg. Size								Depth							
Tool								Depth							
Cement Left in Csg.								Shoe Joint							
Meas Line								Displace	Cement Amount Ordered 205 @ 40 40% gel 1/4 Flowseal						

EQUIPMENT

Pumptrk	5	No.	Cementer	Craig	Common	123	
			Helper				
Bulktrk		No.	Driver	Paul	Poz. Mix	E2	
			Driver				
Bulktrk	8	No.	Driver	Jason	Gel.	6	
			Driver				

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	304K
Mouse Hole	
Centralizers	Flowseal 50#
Baskets	Kol-Seal
D/V or Port Collar	Mud CLR 48
	CFL-117 or CD110 CAF 38
1st	2106 255K
2nd	1280 1005K
3rd	310 405K
4th	40 105K
	Sand
	Handling 211
	Mileage

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	8 5/8 wear-in plug
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	plug
Mileage	41

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AUG 24 2011

KCC WICHITA

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AUG 23 2012

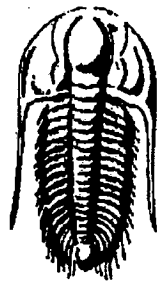
KCC

Tax

Discount

Total Charge

X Signature *Broadhead Kishner*



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **H&C Operating**
Box 87
Plainville, KS 67663

ATTN: Charles Ramsey

28-6s-23w Graham KS

Tien #28-3

Start Date: 2011.08.06 @ 16:58:16
End Date: 2011.08.06 @ 23:25:46
Job Ticket #: 39728 DST #: 1

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AUG 24 2011
KCC WICHITA

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

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AUG 23 2012
Printed: 2011.08.17 @ 11:19:11 Page 1

KCC

H&C Operating

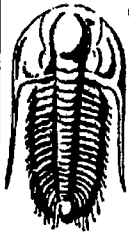
Tien #28-3

28-6s-23w Graham KS

DST # 1

Kansas City C-D

2011.08.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39728

DST#: 1

ATTN: Charles Ramsey

Test Start: 2011.08.06 @ 16:58:16

GENERAL INFORMATION:

Formation: **Kansas City C-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:45:16
 Time Test Ended: 23:25:46

Test Type: Conventional Bottom Hole
 Tester: Paul Simpson
 Unit No: 44

Interval: **3712.00 ft (KB) To 3750.00 ft (KB) (TVD)**
 Total Depth: 3750.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2435.00 ft (KB)
 2430.00 ft (CF)
 KB to GR/CF: 5.00 ft

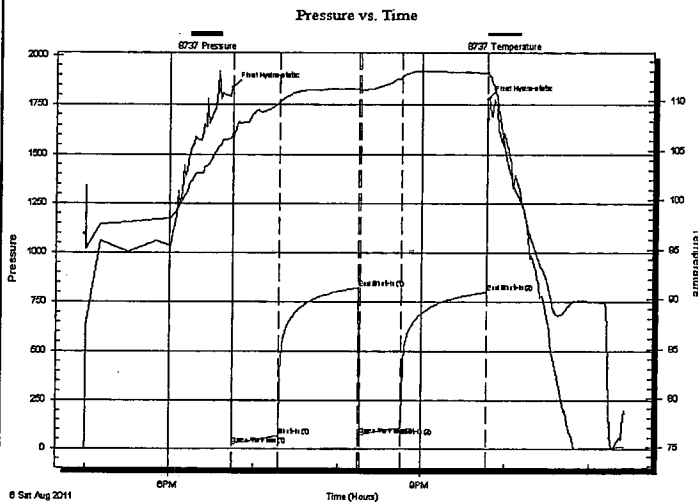
Serial #: 8737

Outside

Press@RunDepth: 109.33 psig @ 3713.00 ft (KB)
 Start Date: 2011.08.06 End Date: 2011.08.06
 Start Time: 16:58:17 End Time: 23:25:46

Capacity: 8000.00 psig
 Last Calib.: 2011.08.06
 Time On Btm
 Time Off Btm 2011.08.06 @ 18:44:46

TEST COMMENT: IF- 1/2" blow building to 8"
 ISI no blow
 FF no blow for 3 minutes then weak surface blow building to 5"
 30-60-30-60



PRESSURE SUMMARY

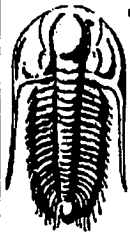
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1840.53	106.89	Final Hydro-static
1	22.34	106.11	Open To Flow (1)
33	68.59	109.80	Shut-In(1)
90	821.79	111.22	End Shut-In(1)
91	72.41	110.99	Open To Flow (2)
121	109.33	112.36	Shut-In(2)
182	798.76	112.86	End Shut-In(2)
183	1779.68	113.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	mw 80%w 20%m	1.68
70.00	w m 10W 90%m	0.98

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (MMcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39728 **DST#: 1**

ATTN: Charles Ramsey

Test Start: 2011.08.06 @ 16:58:16

Tool Information

Drill Pipe:	Length: 3699.00 ft	Diameter: 3.80 inches	Volume: 51.89 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 51.89 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial: 38000.00 lb
Depth to Top Packer:	3712.00 ft			Final: 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3685.00	
Shut In Tool	5.00			3690.00	
Hydraulic tool	5.00			3695.00	
Jars	5.00			3700.00	
Safety Joint	2.00			3702.00	
Packer	5.00			3707.00	28.00 Bottom Of Top Packer
Packer	5.00			3712.00	
Stubb	1.00			3713.00	
Recorder	0.00	8321	Inside	3713.00	
Recorder	0.00	8737	Outside	3713.00	
Perforations	34.00			3747.00	
Bullnose	3.00			3750.00	38.00 Bottom Packers & Anchor

Total Tool Length: 66.00

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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39728

DST#: 1

ATTN: Charles Ramsey

Test Start: 2011.08.06 @ 16:58:16

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:

44000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 in³

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	mw 80%w 20%m	1.683
70.00	w m 10W 90%m	0.982

Total Length: 190.00 ft Total Volume: 2.665 bbl

Num Fluid Samples: 0

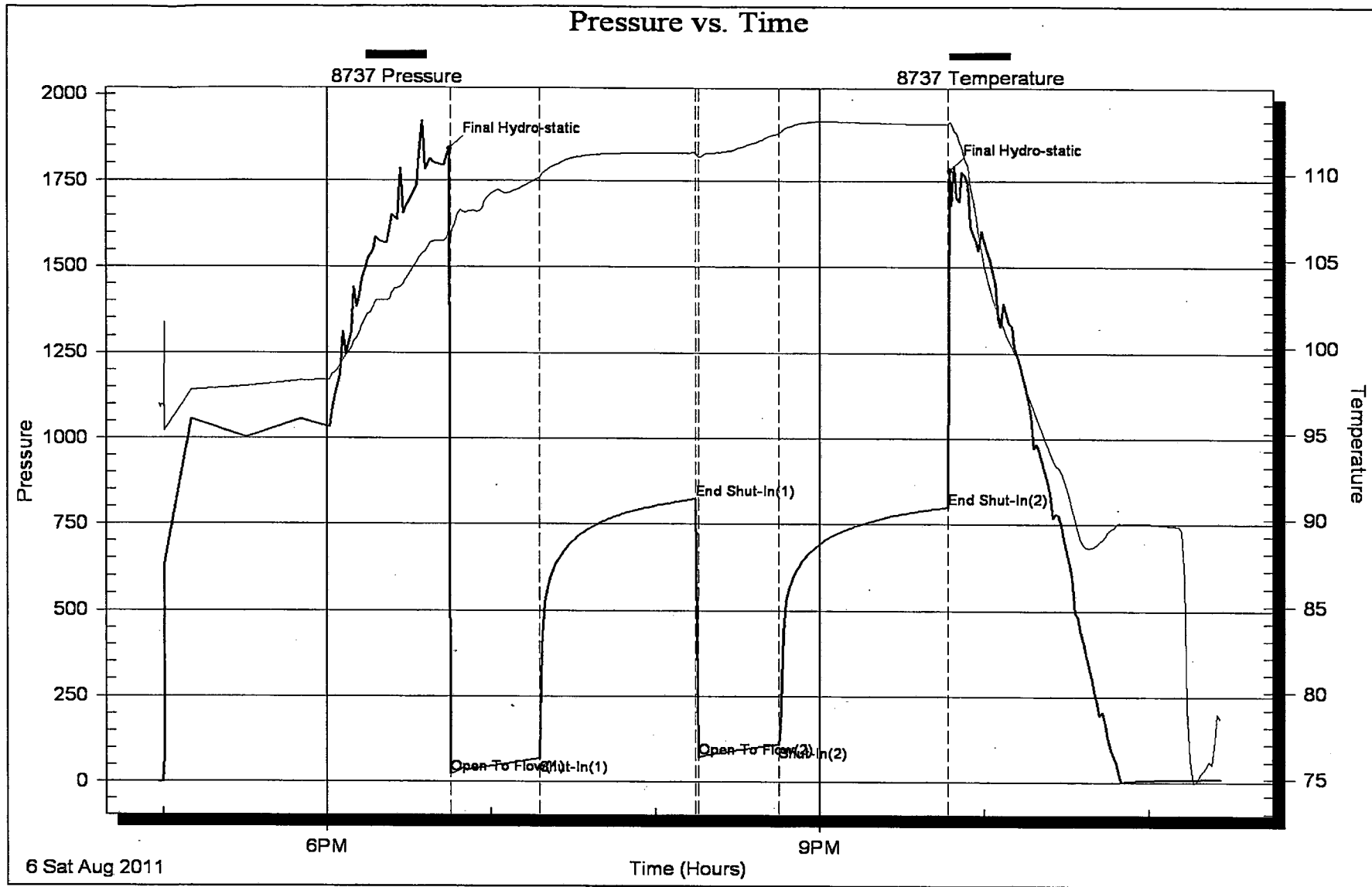
Num Gas Bombs: 0

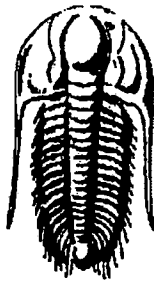
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .15 @ 80 deg





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **H&C Operating**
Box 87
Plainville, KS 67663

ATTN: Charles Ramsey

28-6s-23w Graham KS

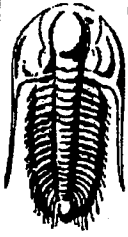
Tien #28-3

Start Date: 2011.08.07 @ 11:54:04

End Date: 2011.08.07 @ 16:54:04

Job Ticket #: 39729 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39729

DST#: 2

ATTN: Charles Ramsey

Test Start: 2011.08.07 @ 11:54:04

GENERAL INFORMATION:

Formation: **Lansing H**

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

Time Tool Opened: 13:22:04

Time Test Ended: 16:54:04

Test Type: Conventional Bottom Hole

Tester: Paul Simpson

Unit No: 44

Interval: **3796.00 ft (KB) To 3830.00 ft (KB) (TVD)**

Total Depth: 3830.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2435.00 ft (KB)

2430.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8737

Outside

Press@RunDepth: 29.06 psig @ 3797.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.08.07

End Date: 2011.08.07

Last Calib.: 2011.08.07

Start Time: 11:54:05

End Time: 16:54:04

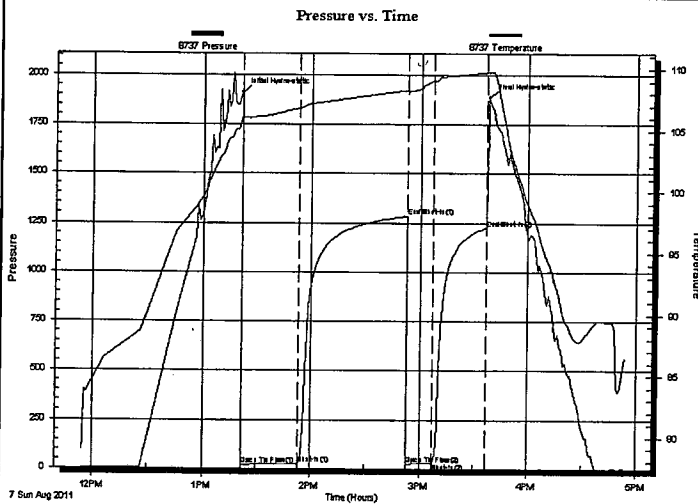
Time On Btrr: 2011.08.07 @ 13:21:34

Time Off Btrr: 2011.08.07 @ 15:38:04

TEST COMMENT: IF very weak surface blow built to 1/8"

FF- no blow

30-60-15-30



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1911.75	106.28	Initial Hydro-static
1	20.02	106.03	Open To Flow (1)
32	25.07	106.79	Shut-In(1)
91	1282.21	108.30	End Shut-In(1)
92	25.49	108.01	Open To Flow (2)
106	29.06	109.03	Shut-In(2)
135	1225.42	109.72	End Shut-In(2)
137	1885.53	109.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud with oil specks in tool	0.21

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39729

DST#: 2

ATTN: Charles Ramsey

Test Start: 2011.08.07 @ 11:54:04

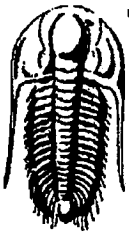
Tool Information

Drill Pipe:	Length: 3786.00 ft	Diameter: 3.80 inches	Volume: 53.11 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 42000.00 lb
			Total Volume: 53.11 bbl	Tool Chased ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3796.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3769.00	
Shut In Tool	5.00			3774.00	
Hydraulic tool	5.00			3779.00	
Jars	5.00			3784.00	
Safety Joint	2.00			3786.00	
Packer	5.00			3791.00	28.00 Bottom Of Top Packer
Packer	5.00			3796.00	
Stubb	1.00			3797.00	
Recorder	0.00	8321	Inside	3797.00	
Recorder	0.00	8737	Outside	3797.00	
Perforations	30.00			3827.00	
Bullnose	3.00			3830.00	34.00 Bottom Packers & Anchor

Total Tool Length: 62.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39729

DST#: 2

ATTN: Charles Ramsey

Test Start: 2011.08.07 @ 11:54:04

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: 71.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.85 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
15.00	mud with oil specks in tool	0.210

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 0

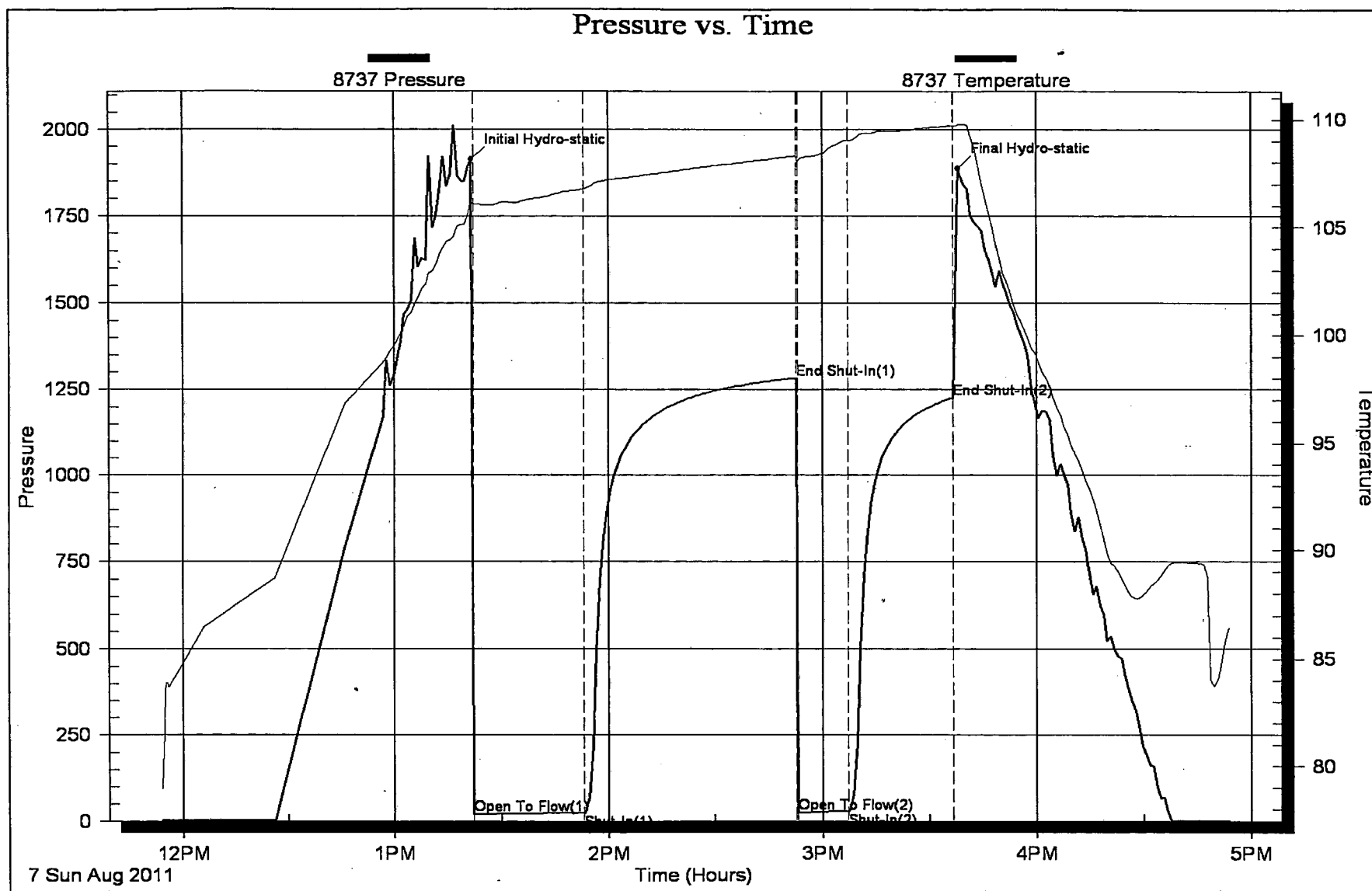
Num Gas Bombs: 0

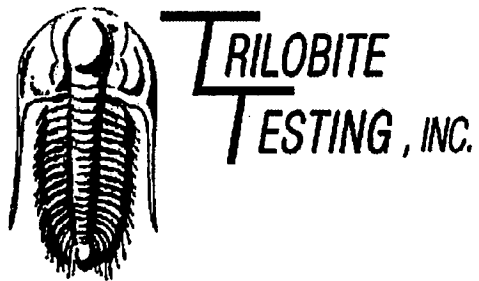
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **H&C Operating**

Box 87
Plainville, KS 67663

ATTN: Charles Ramsey

28-6s-23w Graham KS

Tien #28-3

Start Date: 2011.08.08 @ 00:25:06

End Date: 2011.08.08 @ 06:29:05

Job Ticket #: 39730 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

H&C Operating

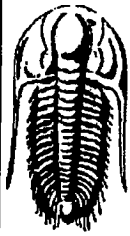
Tien #28-3

28-6s-23w Graham KS

DST # 3

Lansing I-J

2011.08.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39730

DST#: 3

ATTN: Charles Ramsey

Test Start: 2011.08.08 @ 00:25:06

GENERAL INFORMATION:

Formation: **Lansing I-J**

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

Time Tool Opened: 02:19:05

Time Test Ended: 06:29:05

Test Type: **Conventional Bottom Hole**

Tester: **Paul Simpson**

Unit No: **44**

Interval: **3825.00 ft (KB) To 3855.00 ft (KB) (TVD)**

Reference Elevations: **2435.00 ft (KB)**

Total Depth: **3855.00 ft (KB) (TVD)**

2430.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Good**

KB to GR/CF: **5.00 ft**

Serial #: 8321

Inside

Press@RunDepth: **27.55 psig @ 3826.00 ft (KB)**

Capacity: **8000.00 psig**

Start Date: **2011.08.08**

End Date:

2011.08.08

Last Calib.: **2011.08.08**

Start Time: **00:25:06**

End Time:

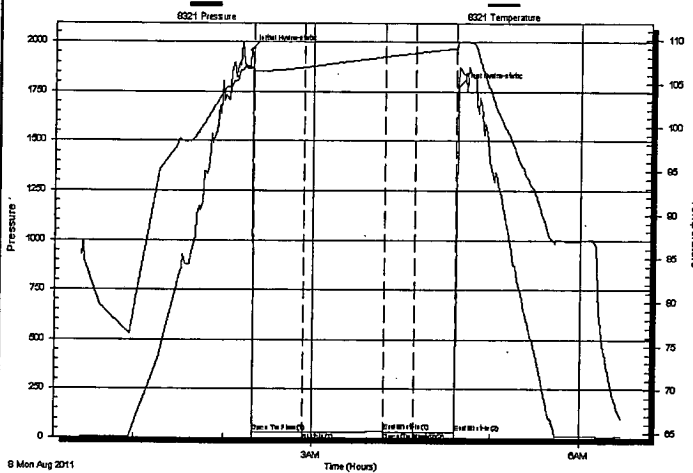
06:29:05

Time On Btm: **2011.08.08 @ 02:17:35**

Time Off Btm: **2011.08.08 @ 04:36:35**

TEST COMMENT: IF weak surface blow died in 9 minutes
FF no blow
30-60-15-30

Pressure vs. Time



PRESSURE SUMMARY

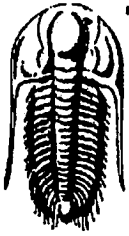
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1962.19	106.72	Initial Hydro-static
2	28.48	106.50	Open To Flow (1)
36	29.51	106.85	Shut-In(1)
90	31.51	108.08	End Shut-In(1)
91	27.85	108.09	Open To Flow (2)
110	27.55	108.50	Shut-In(2)
138	28.05	109.05	End Shut-In(2)
139	1776.39	109.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (MMcfd)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39730

DST#: 3

ATTN: Charles Ramsey

Test Start: 2011.08.08 @ 00:25:06

Tool Information

Drill Pipe:	Length: 3818.00 ft	Diameter: 3.80 inches	Volume: 53.56 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 53.56 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3825.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3798.00	
Shut In Tool	5.00			3803.00	
Hydraulic tool	5.00			3808.00	
Jars	5.00			3813.00	
Safety Joint	2.00			3815.00	
Packer	5.00			3820.00	28.00 Bottom Of Top Packer
Packer	5.00			3825.00	
Stubb	1.00			3826.00	
Recorder	0.00	8321	Inside	3826.00	
Recorder	0.00	8737	Outside	3826.00	
Perforations	34.00			3860.00	
Bullnose	3.00			3863.00	38.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Operating

Tien #28-3

Box 87
Plainville, KS 67663

28-6s-23w Graham KS

Job Ticket: 39730

DST#: 3

ATTN: Charles Ramsey

Test Start: 2011.08.08 @ 00:25:06

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: 71.00 sec/qt

Cushion Volume:

bbf

Water Loss: 9.07 in³

Gas Cushion Type:

Resistivity: ohm m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
1.00	mud	0.014

Total Length: 1.00ft

Total Volume: 0.014 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

