



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1092336
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

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.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1092336

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

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: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	H & C Oil Operating Inc.
Well Name	Chipman 23-1
Doc ID	1092336

Tops

Name	Top	Datum
Anhydrite	1732	+431
Base Anhydrite	1770	+393
Topeka	3163	-1000
Heebner	3377	-1214
Toronto	3401	-1238
Lansing	3414	-1252
BKC	3626	-1463
Marmaton	3661	-1498
Arbuckle	3451	-1588

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner

Sam Brownback, Governor

August 30, 2012

Charles Ramsay
H & C Oil Operating Inc.
PO BOX 86
PLAINVILLE, KS 67663-0086

Re: ACO1
API 15-065-23821-00-00
Chipman 23-1
SW/4 Sec.23-08S-22W
Graham County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Charles Ramsay

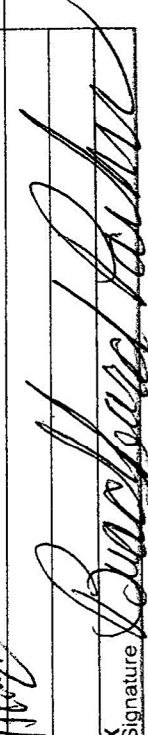
QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 997

Date	17-31-12	Sec.		Twp.		Range		County	Grady	State	Kansas	On Location		Finish	9:45 PM
Lease	Chipman	Well No.	23-1	Location Bogus SW 1/4 S 7 Sub											
Contractor	American Eagle Rig 3														
Type Job	Plug														
Hole Size	7 7/8"	T.D.													
Csg.	HAC Oil														
Tbg. Size															
Tool															
Cement Left in Csg.															
Meas Line															
EQUIPMENT															
Pumprk	No. 9	Cementer	Steve												
Bulktrk	No. 14	Helper	Matt												
Bulktrk	No. 1	Driver	Steve												
	No. 2	Driver	Steve												
	No. 3	Driver	Steve												
JOB SERVICES & REMARKS															
Remarks:	The above was done to satisfaction and supervision of owner agent or contractor.														
Rat Hole	305x														
Mouse Hole															
Centralizers	Kol-Seal 50H														
Baskets	Mud CLR 48														
D/N or Port Collar	CFL-117 or CD110 CAF 38														
1st Plug @	3731 255x														
2nd "	1730 255x														
3rd "	985 1005x														
4th "	285 415x														
5th "	41 105x														
Port Hole	305x														
	Pumprk Charge . plwq														
	Mileage 46														
	Tax														
	Discount														
	Total Charge														
Signature															

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 812

Sec. 23	Twp. 8	Range 22	County GRAHAM	State KANSAS	On Location	Finish
Date 7-24-12	Well No. #23-1		Location BOYUE TO PEEB- W-300-Sa-W INTD			5:15 pm
Lease CHIPMAN						
Contractor AMERICAN EAGLE #3						
Type Job SURFACE						
Hole Size 12 1/4"						
Csg. 8 5/8"						
Tbg. Size						
Tool						
Cement Left in Csg. Shoe Joint 15'						
Meas Line Displace 14 BLS						
EQUIPMENT						
Pumptrk #15	No. Cementer	Helper	Common 165			
Bulktrk #14	No. Driver	Driver	Poz. Mix			
Bulktrk P1u	No. Driver	Driver	Gel. 3			
JOB SERVICES & REMARKS						
Remarks: Calcium 6						
Rat Hole Hulls						
Mouse Hole Salt						
Centralizers Flowseal						
Baskets Kol-Seal						
DV or Port Collar Mud CLR 48						
Sand CFL-117 or CD110 CAF 38						
Cement DTD CIRCULATE x Handling 174						
Mileage						
FLOAT EQUIPMENT						
Guide Shoe						
Centralizer						
Baskets						
AFU Inserts						
Float Shoe						
Latch Down						
Pumptrk Charge 46						
Mileage Surface						
						Tax
						Discount
						Total Charge

THANK YOU
Signature: *[Handwritten Signature]*



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operations, Inc.**

PO Box 86
Plainville KS 67663

ATTN: Clayton Erickson

Chipman #23-1

23-8s-22w Graham,KS

Start Date: 2012.07.29 @ 14:40:00

End Date: 2012.07.29 @ 21:57:00

Job Ticket #: 47083 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.03 @ 10:09:59



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47083

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.07.29 @ 14:40:00

GENERAL INFORMATION:

Formation: **KC "I-K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:38:00

Time Test Ended: 21:57:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3552.00 ft (KB) To 3606.00 ft (KB) (TVD)

Reference Elevations: 2163.00 ft (KB)

Total Depth: 3606.00 ft (KB) (TVD)

2158.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8369

Inside

Press @ Run Depth: 58.51 psig @ 3590.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.07.29

End Date:

2012.07.29

Last Calib.:

2012.07.29

Start Time: 14:40:05

End Time:

21:56:59

Time On Btm:

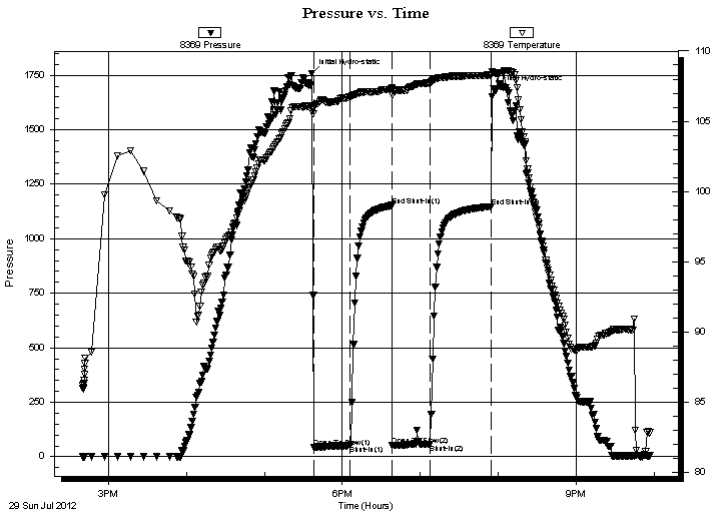
2012.07.29 @ 17:36:30

Time Off Btm:

2012.07.29 @ 19:57:30

TEST COMMENT: IF-1" blow
IS- No blow
FF-1/4" blow
FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1758.19	106.12	Initial Hydro-static
2	44.26	105.96	Open To Flow (1)
30	51.28	106.74	Shut-In(1)
62	1153.27	107.35	End Shut-In(1)
62	51.62	106.86	Open To Flow (2)
91	58.51	107.73	Shut-In(2)
138	1147.91	108.30	End Shut-In(2)
141	1683.47	108.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	Oil spotted mud	0.98

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47083

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.07.29 @ 14:40:00

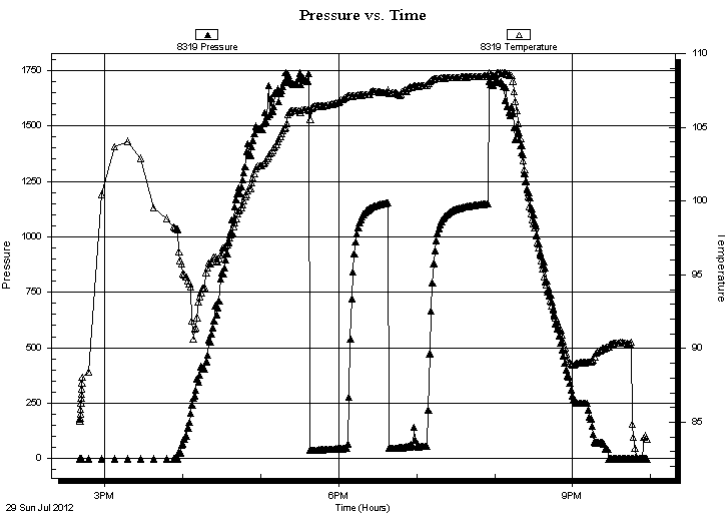
GENERAL INFORMATION:

Formation: KC "I-K"			Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)			Tester: Brett Dickinson
Time Tool Opened: 17:38:00			Unit No: 59
Time Test Ended: 21:57:00			
Interval: 3552.00 ft (KB) To 3606.00 ft (KB) (TVD)		Reference Elevations: 2163.00 ft (KB)	
Total Depth: 3606.00 ft (KB) (TVD)		2158.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Good	KB to GR/CF: 5.00 ft	

Serial #: 8319 Outside

Press @ Run Depth: psig @ 3590.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2012.07.29	End Date: 2012.07.29
Start Time: 14:40:35	End Time: 21:57:29
	Last Calib.: 2012.07.29
	Time On Btm:
	Time Off Btm:

TEST COMMENT: IF-1" blow
IS- No blow
FF- 1/4" blow
FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
70.00	Oil spotted mud	0.98

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47083

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.07.29 @ 14:40:00

Tool Information

Drill Pipe:	Length: 3553.00 ft	Diameter: 3.80 inches	Volume: 49.84 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 49.84 bbl</u>	Tool Chased 5.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 41000.00 lb
Depth to Top Packer:	3552.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	82.00 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			3525.00	
Shut In Tool	5.00			3530.00	
Hydraulic tool	5.00			3535.00	
Jars	5.00			3540.00	
Safety Joint	2.00			3542.00	
Packer	5.00			3547.00	28.00 Bottom Of Top Packer
Packer	5.00			3552.00	
Stubb	1.00			3553.00	
Perforations	4.00			3557.00	
Change Over Sub	1.00			3558.00	
Blank Spacing	31.00			3589.00	
Change Over Sub	1.00			3590.00	
Recorder	0.00	8369	Inside	3590.00	
Recorder	0.00	8319	Outside	3590.00	
Perforations	13.00			3603.00	
Bullnose	3.00			3606.00	54.00 Bottom Packers & Anchor
Total Tool Length:	82.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47083

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.07.29 @ 14:40:00

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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
70.00	Oil spotted mud	0.982

Total Length: 70.00 ft Total Volume: 0.982 bbl

Num Fluid Samples: 0

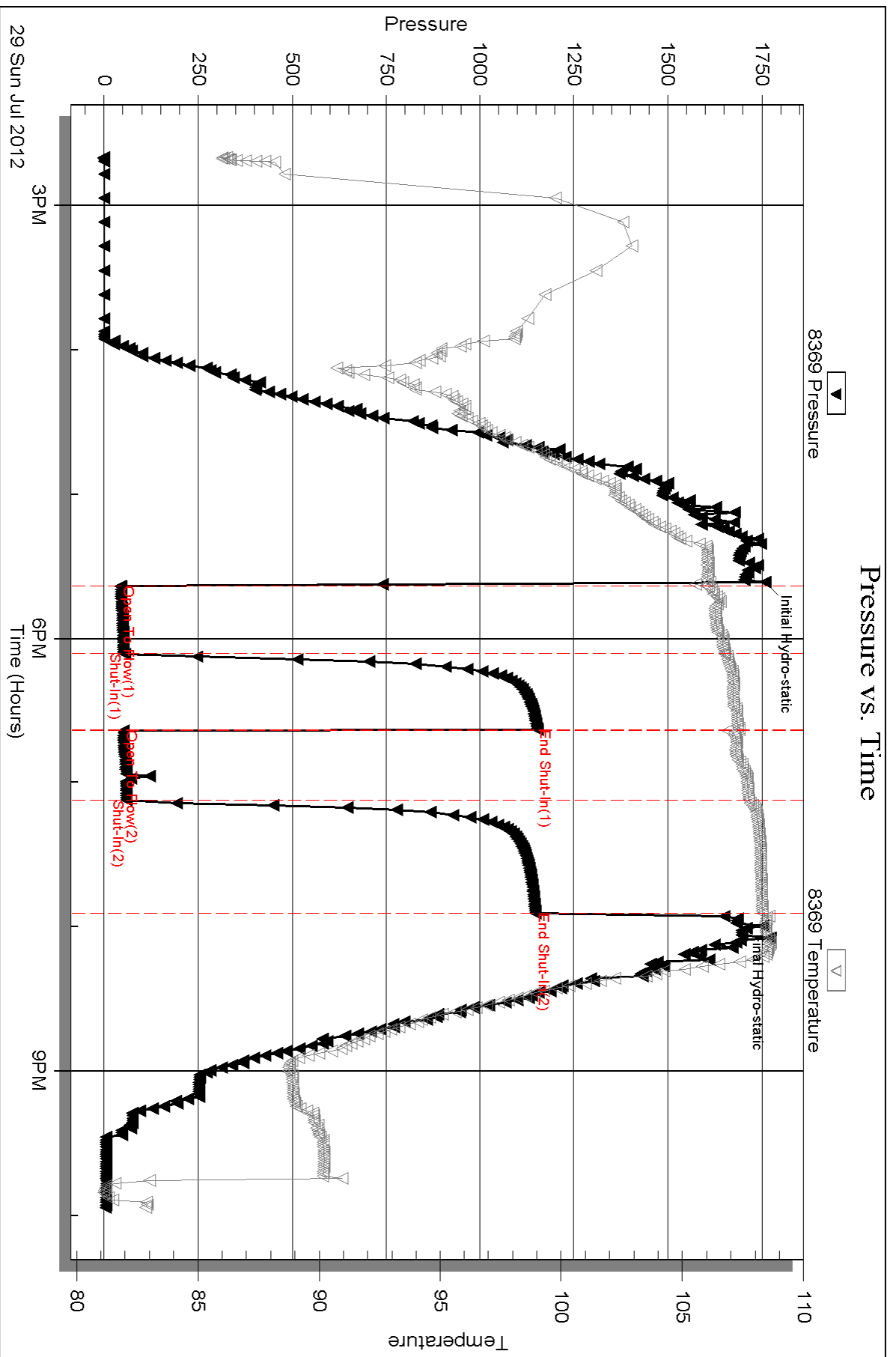
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

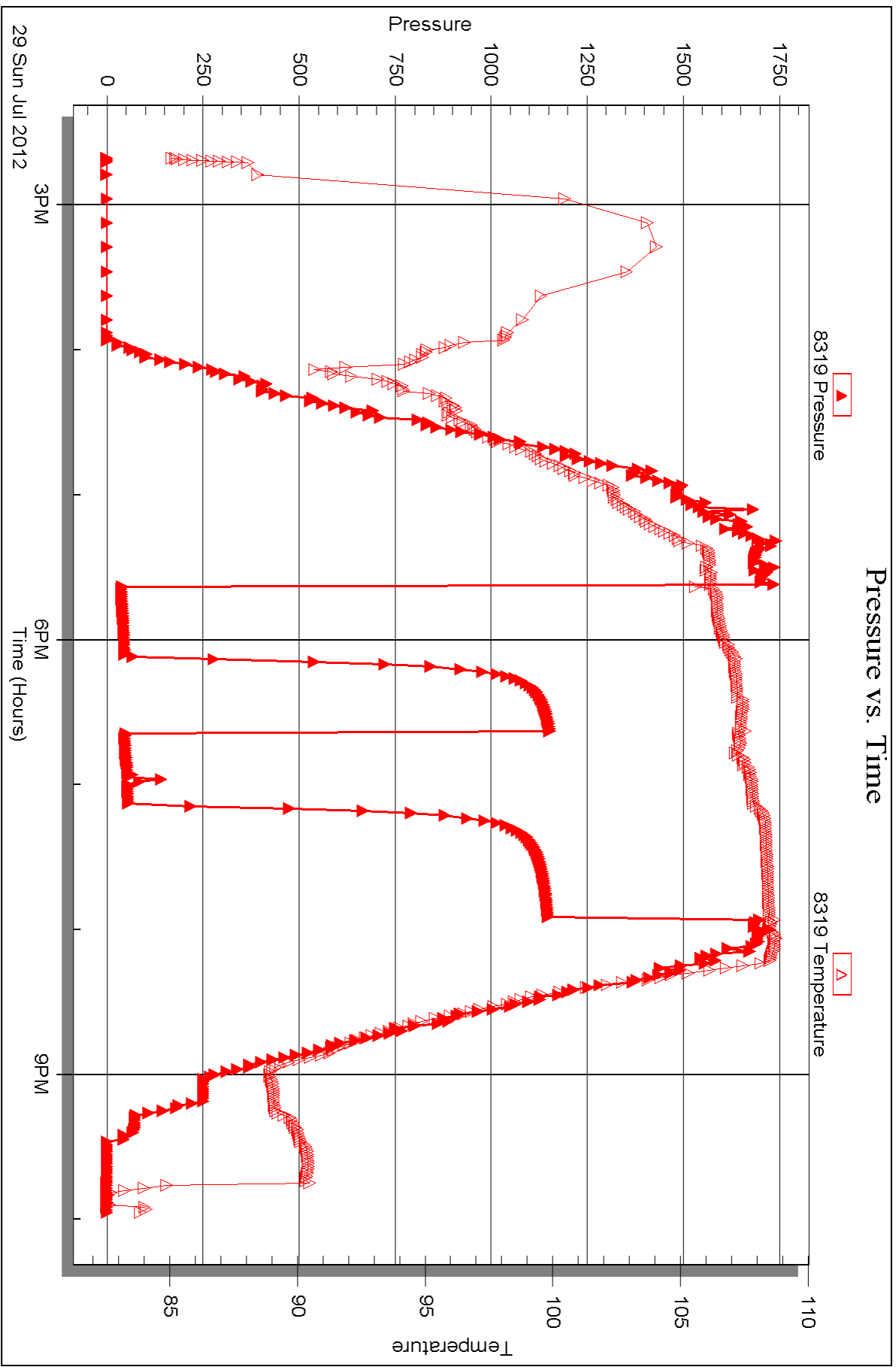


Serial #: 8319

Outside H&C Oil Operations, Inc.

Chipman #23-1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 47083

Printed: 2012.08.03 @ 10:10:03



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operations, Inc.**

PO Box 86
Plainville KS 67663

ATTN: Clayton Erickson

Chipman #23-1

23-8s-22w Graham,KS

Start Date: 2012.07.30 @ 09:20:00

End Date: 2012.07.30 @ 14:39:30

Job Ticket #: 47084 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.03 @ 10:08:06



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47084

DST#: 2

ATTN: Clayton Erickson

Test Start: 2012.07.30 @ 09:20:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:51:00

Time Test Ended: 14:39:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3615.00 ft (KB) To 3705.00 ft (KB) (TVD)

Reference Elevations: 2163.00 ft (KB)

Total Depth: 3705.00 ft (KB) (TVD)

2158.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8369 Inside

Press @ Run Depth: 24.82 psig @ 3684.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.07.30

End Date: 2012.07.30

Last Calib.: 2012.07.30

Start Time: 09:20:05

End Time: 14:39:29

Time On Btm: 2012.07.30 @ 10:48:30

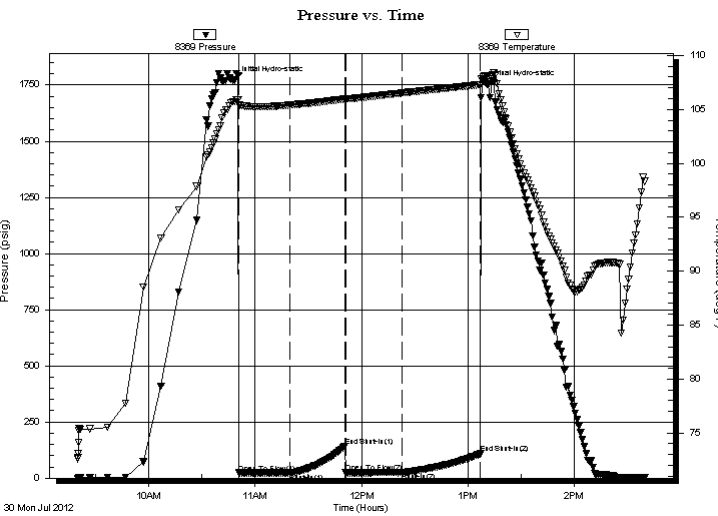
Time Off Btm: 2012.07.30 @ 13:10:30

TEST COMMENT: IF-1/4" blow died back to very weak surface blow

ISI-No blow

FF-No blow

FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1768.82	105.74	Initial Hydro-static
3	23.44	105.41	Open To Flow (1)
31	23.62	105.40	Shut-In(1)
62	141.68	105.97	End Shut-In(1)
63	23.93	105.95	Open To Flow (2)
94	24.82	106.51	Shut-In(2)
139	109.05	107.30	End Shut-In(2)
142	1754.46	108.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.07

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil Operations, Inc.
PO Box 86
Plainville KS 67663
ATTN: Clayton Erickson

23-8s-22w Graham, KS

Chipman #23-1

Job Ticket: 47084

DST#: 2

Test Start: 2012.07.30 @ 09:20:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:51:00

Time Test Ended: 14:39:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: **3615.00 ft (KB) To 3705.00 ft (KB) (TVD)**

Reference Elevations: 2163.00 ft (KB)

Total Depth: 3705.00 ft (KB) (TVD)

2158.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8319 Outside

Press @ RunDepth: psig @ 3684.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.07.30 End Date: 2012.07.30

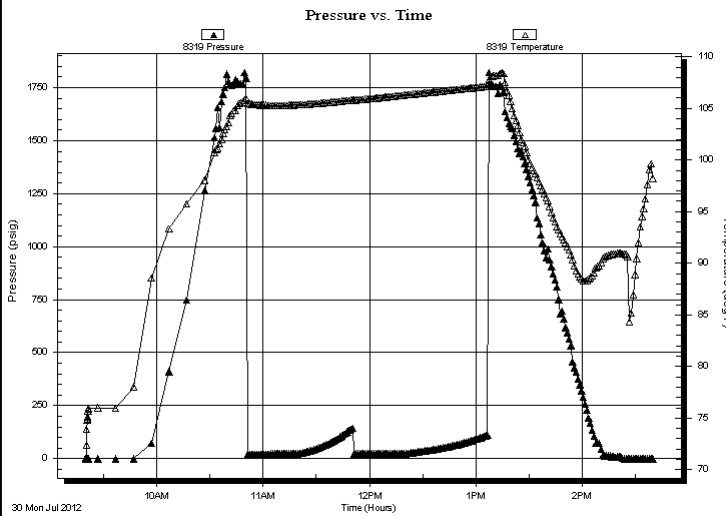
Last Calib.: 2012.07.30

Start Time: 09:20:05 End Time: 14:39:29

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-1/4" blow died back to very weak surface blow
IS-No blow
FF-No blow
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.07

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47084

DST#: 2

ATTN: Clayton Erickson

Test Start: 2012.07.30 @ 09:20:00

Tool Information

Drill Pipe:	Length: 3619.00 ft	Diameter: 3.80 inches	Volume: 50.77 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 50.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3615.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.00 ft			
Tool Length:	118.00 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			3588.00	
Shut In Tool	5.00			3593.00	
Hydraulic tool	5.00			3598.00	
Jars	5.00			3603.00	
Safety Joint	2.00			3605.00	
Packer	5.00			3610.00	28.00 Bottom Of Top Packer
Packer	5.00			3615.00	
Stubb	1.00			3616.00	
Perforations	4.00			3620.00	
Change Over Sub	1.00			3621.00	
Blank Spacing	62.00			3683.00	
Change Over Sub	1.00			3684.00	
Recorder	0.00	8369	Inside	3684.00	
Recorder	0.00	8319	Outside	3684.00	
Perforations	18.00			3702.00	
Bullnose	3.00			3705.00	90.00 Bottom Packers & Anchor
Total Tool Length:	118.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operations, Inc.

23-8s-22w Graham,KS

PO Box 86
Plainville KS 67663

Chipman #23-1

Job Ticket: 47084

DST#: 2

ATTN: Clayton Erickson

Test Start: 2012.07.30 @ 09:20:00

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8369

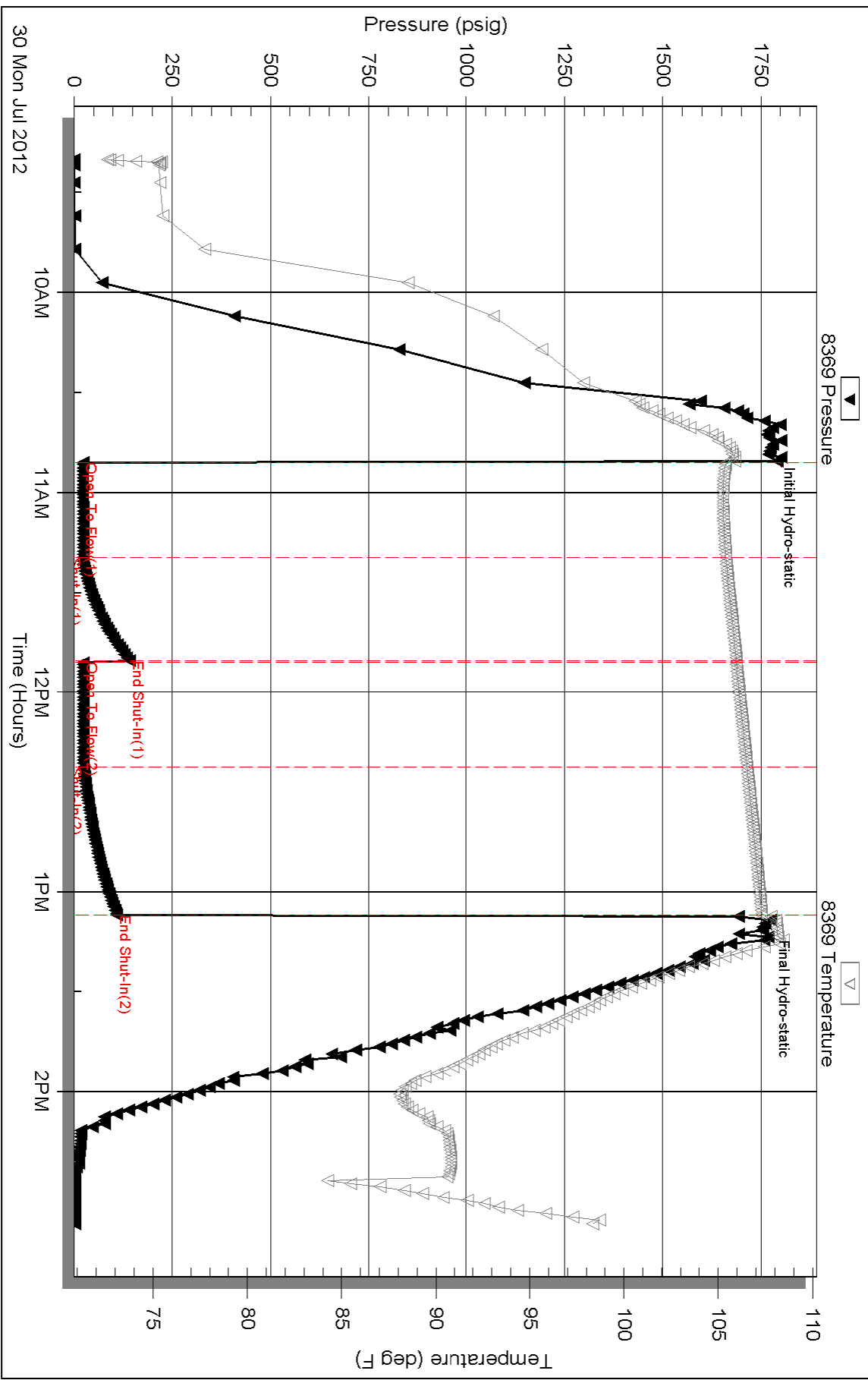
Inside

H&C Oil Operations, Inc.

Chipman #23-1

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 47084

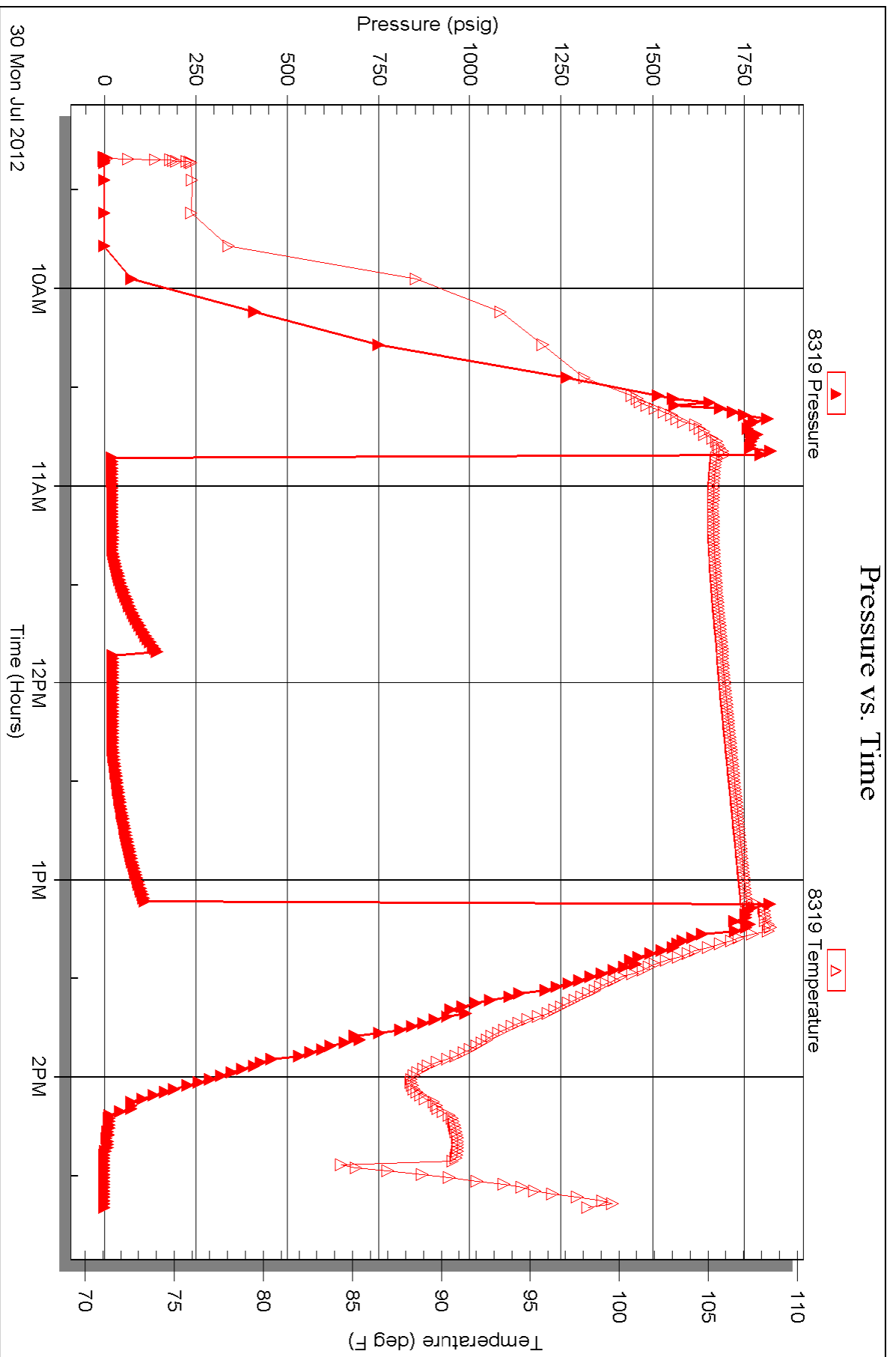
Printed: 2012.08.03 @ 10:08:10

Serial #: 8319

Outside H&C Oil Operations, Inc.

Chipman #23-1

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47083

4/10

Well Name & No. chipman #23-1 Test No. 1 Date 7/29/12
 Company H+C Oil Operations, Inc Elevation 2163 KB 2158 GL
 Address PO Box 86 Plainville KS 67663
 Co. Rep / Geo. Richard Bell Rig American Eagle #3
 Location: Sec. 23 Twp. 8s Rge. 22w Co. Graham State KS

Interval Tested 3552 - 3606 Zone Tested KC" I - K
 Anchor Length 34 Drill Pipe Run 3553 Mud Wt. 8.8
 Top Packer Depth 3547 Drill Collars Run — Vis 57
 Bottom Packer Depth 3552 Wt. Pipe Run — WL 8.0
 Total Depth 3606 Chlorides 2,000 ppm System LCM 2
 Blow Description IF - 1 in blow
ISZ - No blow
FI - 1/4 in blow
FSZ - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>oil spotted Mud</u>				
Rec	Feet of	%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

Rec Total 70 BHT 106 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 4,758 Test 1150 T-On Location 14:15
 (B) First Initial Flow 44 Jars 250 T-Started 14:40
 (C) First Final Flow 51 Safety Joint 75 T-Open 17:30
 (D) Initial Shut-In 1,153 Circ Sub _____ T-Pulled 19:45
 (E) Second Initial Flow 52 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 39 Mileage 128 rt 198.40 Comments _____
 (G) Final Shut-In 1,148 Sampler _____
 (H) Final Hydrostatic 1,683 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1673.40
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1673.40

Approved By _____ Our Representative Beth Dine

TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47084

4/10

Well Name & No. Chipman #23-1 Test No. 2 Date 7/30/12
 Company H&C Oil Operations, Inc Elevation 2163 KB 2158 GL
 Address PO Box 86 Plainville KS 67663
 Co. Rep / Geo. Clayton Erickson Rig American Eagle #3
 Location: Sec. 23 Twp. 8s Rge. 22w Co. Graham State KS

Interval Tested 3615 - 3705 Zone Tested Marmaton
 Anchor Length 90 Drill Pipe Run 3619 Mud Wt. 9.1
 Top Packer Depth 3610 Drill Collars Run — Vis 60
 Bottom Packer Depth 3615 Wt. Pipe Run — WL 8.8
 Total Depth 3705 Chlorides 2,000 ppm System LCM 1 1/2
 Blow Description IF - Min blow died back to very weat surface blow
FSI - No blow
FF - N 6
FSI - N 6

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</u>				
Rec	Feet of	%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

Rec Total 5 BHT 107 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1,769</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>9:00</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>10:00 9:20</u>
(C) First Final Flow <u>24</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>10:50</u>
(D) Initial Shut-In <u>142</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>13:05</u>
(E) Second Initial Flow <u>24</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>14:40</u>
(F) Second Final Flow <u>25</u>	<input checked="" type="checkbox"/> Mileage <u>128 RT</u> 198.40	Comments <u>Pickup Tools</u>
(G) Final Shut-In <u>109</u>	<input type="checkbox"/> Sampler	<u>7/31/12 16:00</u>
(H) Final Hydrostatic <u>1,754</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>800</u>
Final Shut-In <u>45</u>	<input checked="" type="checkbox"/> Day Standby	Total <u>2671.80</u>
	<input type="checkbox"/> Accessibility <u>1d 1.25hrs</u>	MP/DST Disc't _____
	Sub Total <u>1871.80</u>	

Approved By _____ Our Representative Bruce D. [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

LITHOLOGIC STRIP LOG

WellSight Systems

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Chipman #23-1
 Location: Sec23 T8S R22W
 License Number: 7/24/2012
 Spud Date: 2000' FSL & 800' FWL
 Surface Coordinates: 2000' FSL & 800' FWL
 Region: Graham County, KS
 Drilling Completed: 7/31/2012

Bottom Hole Coordinates:
 Ground Elevation (ft): 2158
 Logged Interval (ft): 3050 To: TD
 K.B. Elevation (ft): 2163
 Total Depth (ft): 3805
 Formation: TD
 Type of Drilling Fluid: Chemical Mud

Printed by MUD LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: H&C Oil Operating Inc.
 Address: P.O. Box 86
 Plainville, KS 67663

GEOLOGIST

Name: Clayton Erickson
 Company: Erickson Well Site Geology
 Address: 402 Palmer Street
 P.O. Box 294
 Loomis, NE 68958

Formation Tops

Formation	Elog	Sample
Anhydrite	1732(+431)	1727(+436)
Base Anhy	1770(+393)	1764(+398)
TOPEKA	3163(-1000)	3157(-994)
HEEBNER	3377(-1214)	3372(-1209)
TORONTO	3401(-1238)	3395(-1232)
LANGING	3414(-1252)	3408(-1245)
BKC	3626(-1463)	3620(-1457)
MARMATON	3661(-1498)	3650(-1495)
ARBUCKLE	3451(-1588)	3745(-1582)
TD	3810(-1647)	3805(-1642)

DSTs

DST #1 3552-3606; 30-30-30-45; Hydro: 1758-1683 IFP: 44-51 ISIP: 1153 FFP: 52-59 FSIP: 1148; Rec: 70' oil sptd mud; IF: 1" ISI; dead FF; dead FSI; dead

DST #2 3615-3705; 30-30-30-45; Hydro: 1769-1754 IFP: 23-24 ISIP: 142 FFP: 24-25 FSIP: 109; Rec: 5' mud; IF: 1/4" died back to surface ISI; dead FF; dead FSI; dead

Comments

Based upon examination of rock samples, DST results and e-logs I recommend abandoning this location.

ROCK TYPES

Anhy	Clyst	Gyp	Mrlst	Shgy
Bent	Coal	Igne	Salt	Sstst
Brec	Congl	Lmst	Shale	Ss
Cht	Dol	Meta	Shcol	Tll

ACCESSORIES

<input type="checkbox"/> MINERAL	<input type="checkbox"/> Gyp	<input type="checkbox"/> FOSSIL	<input type="checkbox"/> Ostra	<input type="checkbox"/> Siltstrg
<input type="checkbox"/> Anhy	<input type="checkbox"/> Hvymin	<input type="checkbox"/> Algae	<input type="checkbox"/> Pellet	<input type="checkbox"/> Ssstrg
<input type="checkbox"/> Arggrn	<input type="checkbox"/> Kaol	<input type="checkbox"/> Amph	<input type="checkbox"/> Pisolite	<input type="checkbox"/> Boundst
<input type="checkbox"/> Arg	<input type="checkbox"/> Marl	<input type="checkbox"/> Belm	<input type="checkbox"/> Plant	<input type="checkbox"/> Chalky
<input type="checkbox"/> Bent	<input type="checkbox"/> Minxl	<input type="checkbox"/> Bioclst	<input type="checkbox"/> Strom	<input type="checkbox"/> Earthn
<input type="checkbox"/> Bit	<input type="checkbox"/> Nodule	<input type="checkbox"/> Bryozoa	<input type="checkbox"/> STRINGER	<input type="checkbox"/> Finexln
<input type="checkbox"/> Breclrag	<input type="checkbox"/> Phos	<input type="checkbox"/> Cephal	<input type="checkbox"/> Anhy	<input type="checkbox"/> Lithogr
<input type="checkbox"/> Calc	<input type="checkbox"/> Pyr	<input type="checkbox"/> Coral	<input type="checkbox"/> Arg	<input type="checkbox"/> Microxln
<input type="checkbox"/> Chdsk	<input type="checkbox"/> Salt	<input type="checkbox"/> Crin	<input type="checkbox"/> Bent	<input type="checkbox"/> Mudst
<input type="checkbox"/> Chdt	<input type="checkbox"/> Sandy	<input type="checkbox"/> Echin	<input type="checkbox"/> Coal	<input type="checkbox"/> Packet
<input type="checkbox"/> Dol	<input type="checkbox"/> Silt	<input type="checkbox"/> Fish	<input type="checkbox"/> Dol	<input type="checkbox"/> Wackest
<input type="checkbox"/> Feldspar	<input type="checkbox"/> Sil	<input type="checkbox"/> Foram	<input type="checkbox"/> Gyp	
<input type="checkbox"/> Ferrpel	<input type="checkbox"/> Sulphur	<input type="checkbox"/> Fossil	<input type="checkbox"/> Ls	
<input type="checkbox"/> Ferr	<input type="checkbox"/> Tuff	<input type="checkbox"/> Gastro	<input type="checkbox"/> Mrst	
<input type="checkbox"/> Glau		<input type="checkbox"/> Oolite		

OTHER SYMBOLS

<input type="checkbox"/> POROSITY	<input type="checkbox"/> Vuggy	<input type="checkbox"/> ROUNDING	<input type="checkbox"/> Spotted	<input type="checkbox"/> EVENT
<input type="checkbox"/> Earthy	<input type="checkbox"/> Sorting	<input type="checkbox"/> Rounded	<input type="checkbox"/> Ques	<input type="checkbox"/> Rft
<input type="checkbox"/> Fenest	<input type="checkbox"/> Well	<input type="checkbox"/> Subrnd	<input type="checkbox"/> Dead	<input type="checkbox"/> Sidewall
<input type="checkbox"/> Fracture	<input type="checkbox"/> Moderate	<input type="checkbox"/> Subang	<input type="checkbox"/> INTERVAL	
<input type="checkbox"/> Moldic	<input type="checkbox"/> Poor	<input type="checkbox"/> Angular	<input type="checkbox"/> Core	
<input type="checkbox"/> Organic		<input type="checkbox"/> OIL SHOW	<input type="checkbox"/> Dat	
<input type="checkbox"/> Pinpoint		<input type="checkbox"/> Even		

