



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1076509
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
-----------------------------------	-----------------	---

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: _____

1076509

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
--	---

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
----------------	-------	---------	------------	---

Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

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> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Moore 1-27
Doc ID	1076509

Tops

Name	Top	Datum
Anhydrite	680	+1817
Topeka	3019	-1134
Heebner	3340	-1455
Lansing	3522	-1637
Base Lansing	3785	-1900
Viola	3928	-2043
Simpson Shale	4050	-2165
Simpson Sand	4071	-2186
Arbuckle	4110	-2225
TD	4150	-2265



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Rama Operating Co
 101 S Main
 Stafford, KS 67578
 ATTN: Josh Austin

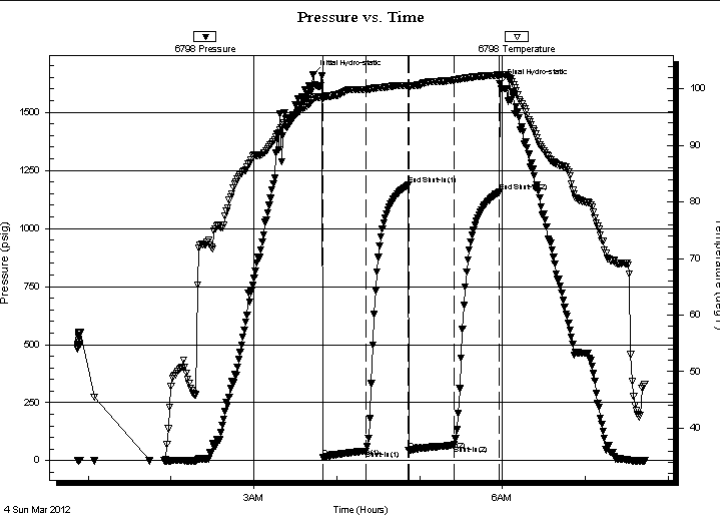
27-24S-12W Stafford
Moore 1-27
 Job Ticket: 45765 **DST#: 1**
 Test Start: 2012.03.04 @ 00:52:15

GENERAL INFORMATION:

Formation: **Toronto**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 03:50:00 Tester: Leal Cason
 Time Test Ended: 07:43:00 Unit No: 45
 Interval: **3336.00 ft (KB) To 3370.00 ft (KB) (TVD)** Reference Elevations: 1885.00 ft (KB)
 Total Depth: 3370.00 ft (KB) (TVD) 1876.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

Serial #: 6798 Inside
 Press @ Run Depth: 68.59 psig @ 3337.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.04 End Date: 2012.03.04 Last Calib.: 2012.03.04
 Start Time: 00:52:16 End Time: 07:43:00 Time On Btm: 2012.03.04 @ 03:43:00
 Time Off Btm: 2012.03.04 @ 05:58:15

TEST COMMENT: IF: Weak Blow 1/2 inch
 IS: No Blow Back
 FF: Weak 3/4 inch Blow
 FS: No Blow Back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1662.97	98.09	Initial Hydro-static
7	14.58	98.28	Open To Flow (1)
39	43.56	99.91	Shut-In(1)
69	1186.37	100.64	End Shut-In(1)
69	45.80	100.44	Open To Flow (2)
102	68.59	101.57	Shut-In(2)
135	1156.24	102.47	End Shut-In(2)
136	1622.63	102.55	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
65.00	SGCM 1%G 99%M	0.32

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Rama Operating Co

27-24S-12W Stafford

101 S Main
Stafford, KS 67578

Moore 1-27

Job Ticket: 45765

DST#: 1

ATTN: Josh Austin

Test Start: 2012.03.04 @ 00:52:15

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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	SGCM 1%G 99%M	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

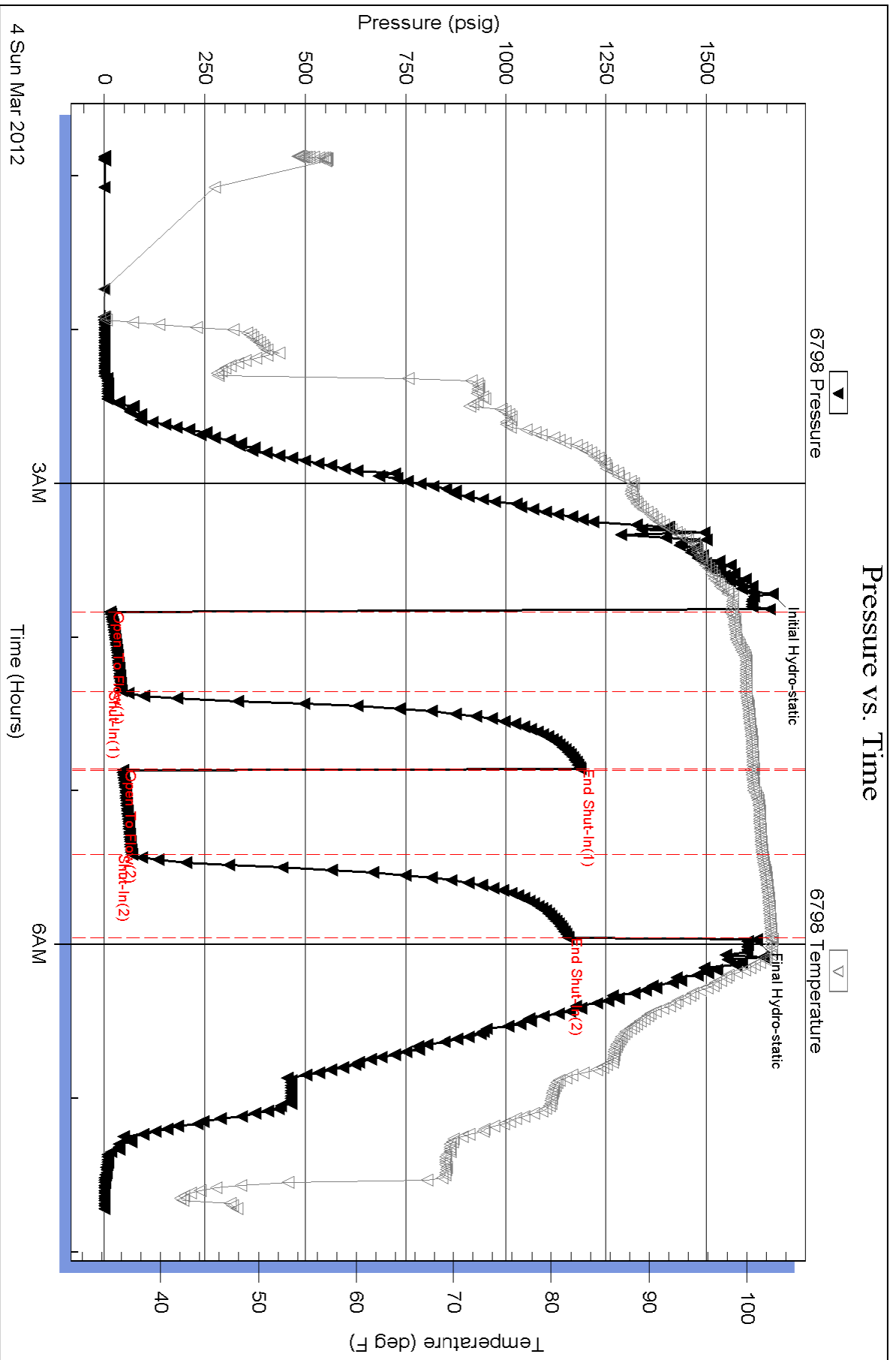
Serial #:

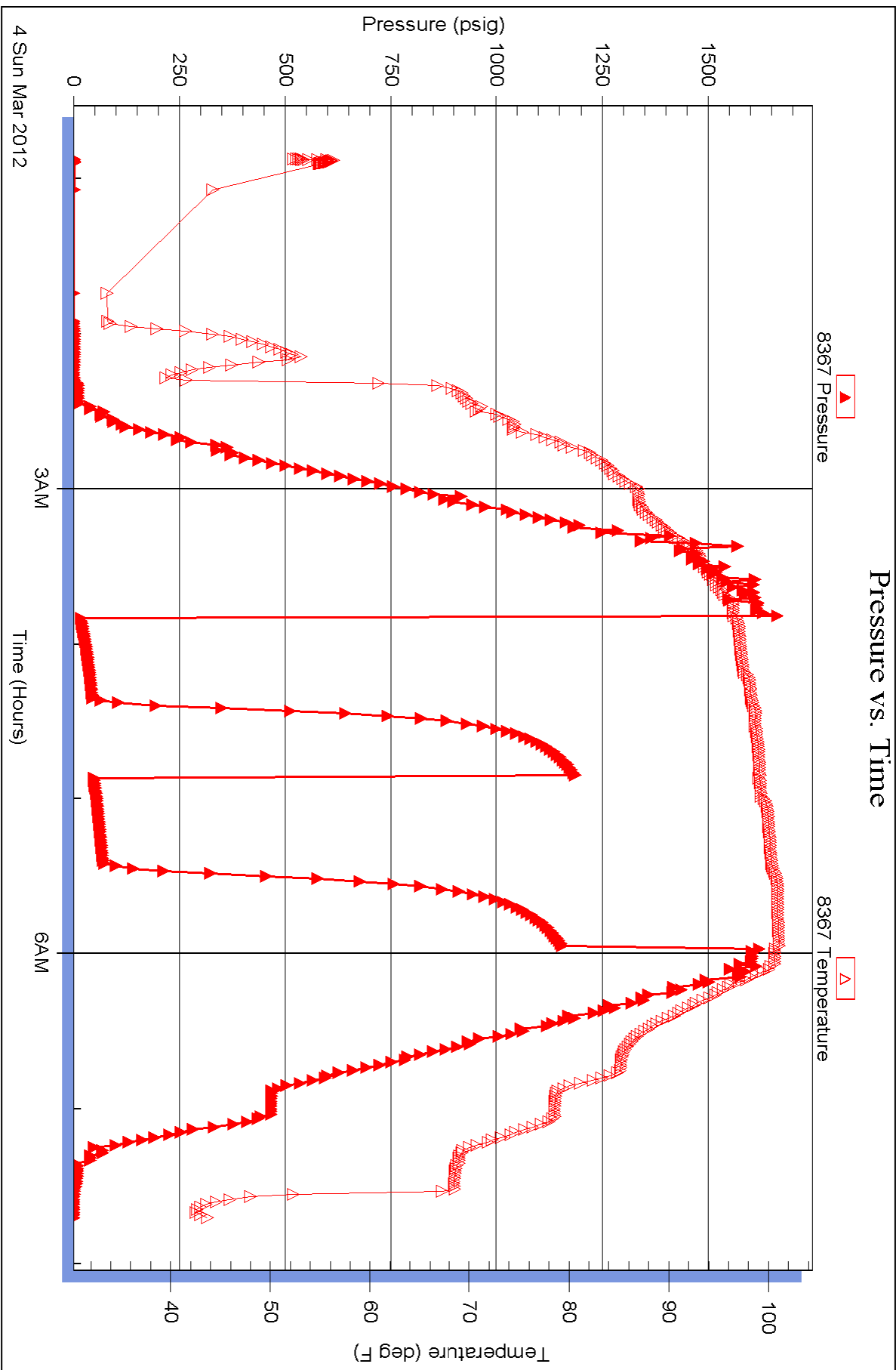
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Rama Operating Co
 101 S Main
 Stafford, KS 67578
 ATTN: Josh Austin

27-24S-12W Stafford
Moore 1-27
 Job Ticket: 45766 **DST#: 2**
 Test Start: 2012.03.05 @ 04:07:15

GENERAL INFORMATION:

Formation: **Lansing " H, I, & J"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 06:30:30 Tester: Leal Cason
 Time Test Ended: 10:54:30 Unit No: 45
 Interval: **3650.00 ft (KB) To 3710.00 ft (KB) (TVD)** Reference Elevations: 1885.00 ft (KB)
 Total Depth: 3710.00 ft (KB) (TVD) 1876.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

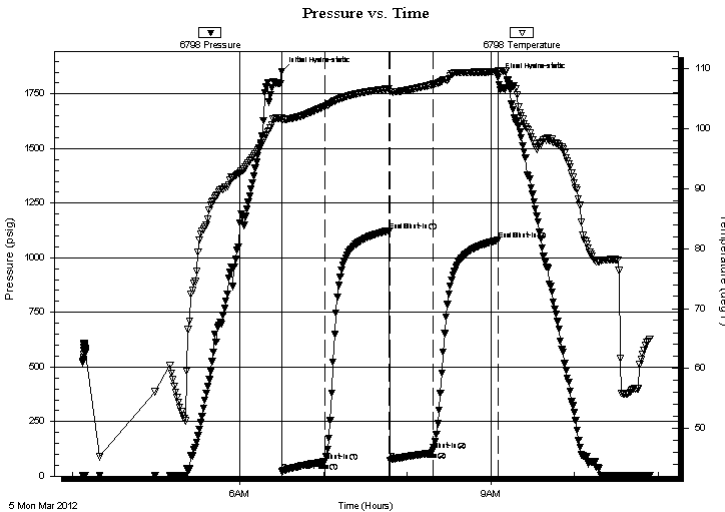
Serial #: 6798

Inside

Press @ Run Depth: 118.97 psig @ 3651.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.05 End Date: 2012.03.05 Last Calib.: 2012.03.05
 Start Time: 04:07:16 End Time: 10:54:30 Time On Btm: 2012.03.05 @ 06:30:00
 Time Off Btm: 2012.03.05 @ 09:05:15

TEST COMMENT: IF: Fair Blow , 6 1/2 inches
 IS: No Blow Back
 FF: Weak Blow , 1 inch
 FS: NO Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1853.56	101.81	Initial Hydro-static
1	20.58	101.38	Open To Flow (1)
31	67.15	103.69	Shut-In(1)
77	1124.25	106.61	End Shut-In(1)
78	73.71	106.16	Open To Flow (2)
109	118.97	107.33	Shut-In(2)
155	1080.16	109.44	End Shut-In(2)
156	1824.51	109.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	SOGMCW 5%G 5%O 42%M 48%W	0.30
120.00	SOGCM 5%G 10%O 85%M	0.59

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Rama Operating Co

27-24S-12W Stafford

101 S Main
Stafford, KS 67578

Moore 1-27

Job Ticket: 45766

DST#: 2

ATTN: Josh Austin

Test Start: 2012.03.05 @ 04:07:15

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	SOGMCW 5%G 5%O 42%M 48%W	0.305
120.00	SOGCM 5%G 10%O 85%M	0.590

Total Length: 182.00 ft Total Volume: 0.895 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6798

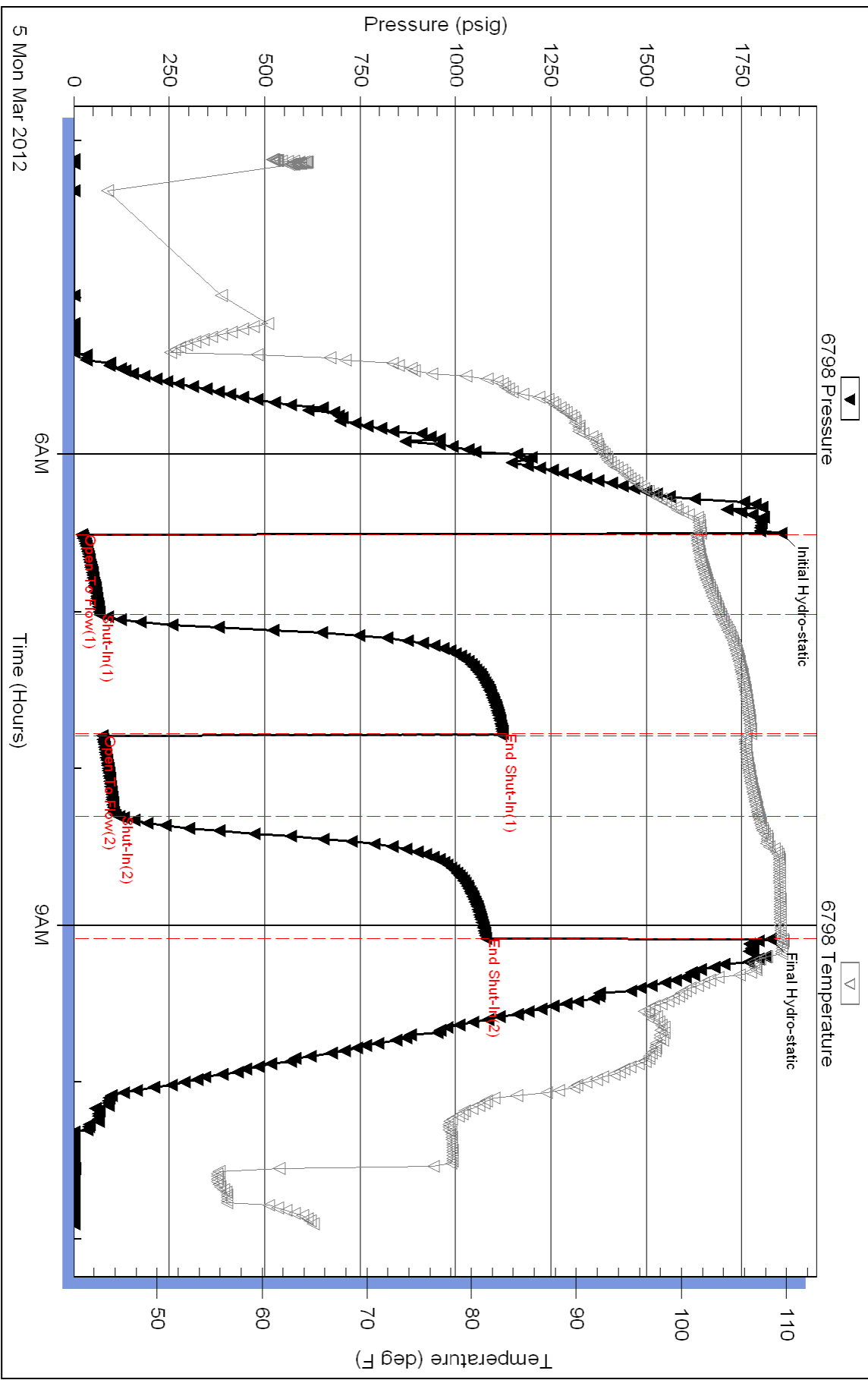
Inside

Rama Operating Co

Moore 1-27

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45766

Printed: 2012.03.05 @ 12:12:51



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Rama Operating Co
101 S Main
Stafford, KS 67578
ATTN: Josh Austin

27-24S-12W Stafford
Moore 1-27
Job Ticket: 45767 **DST#: 3**
Test Start: 2012.03.05 @ 21:00:26

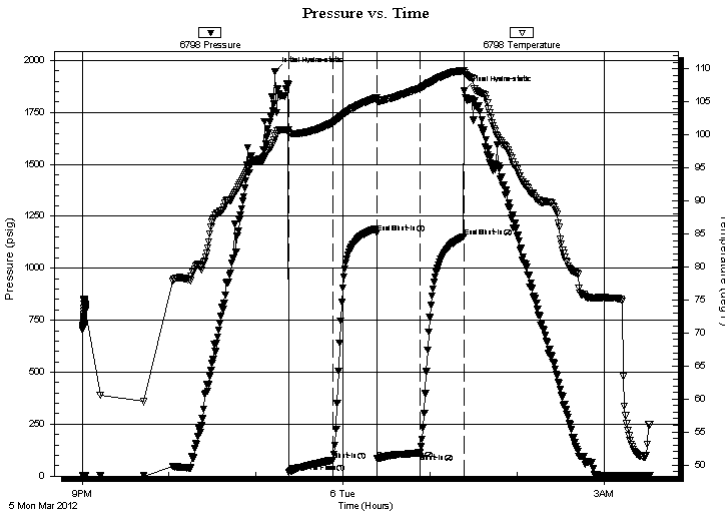
GENERAL INFORMATION:

Formation: **Lansing "K & L"**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 23:22:41 Tester: Leal Cason
Time Test Ended: 03:31:41 Unit No: 45
Interval: 3719.00 ft (KB) To 3779.00 ft (KB) (TVD) Reference Elevations: 1885.00 ft (KB)
Total Depth: 3779.00 ft (KB) (TVD) 1876.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

Serial #: 6798 Inside
Press @ Run Depth: 111.99 psig @ 3720.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.03.05 End Date: 2012.03.06 Last Calib.: 2012.03.06
Start Time: 21:00:27 End Time: 03:31:41 Time On Btm: 2012.03.05 @ 23:13:11
Time Off Btm: 2012.03.06 @ 01:23:26

TEST COMMENT: IF: Weak Blow , 3 1/2 inches
IS: No Blow Back
FF: Weak Blow , 1 inch
FS: No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1947.55	99.78	Initial Hydro-static
10	18.14	100.22	Open To Flow (1)
40	77.50	101.85	Shut-In(1)
70	1171.59	105.57	End Shut-In(1)
70	83.34	105.19	Open To Flow (2)
100	111.99	107.03	Shut-In(2)
130	1152.69	109.69	End Shut-In(2)
131	1853.03	109.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MCW 5%M 95%W	0.59
90.00	SOWCM 5%O 30%W 65%M	0.70

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Rama Operating Co

27-24S-12W Stafford

101 S Main
Stafford, KS 67578

Moore 1-27

Job Ticket: 45767

DST#: 3

ATTN: Josh Austin

Test Start: 2012.03.05 @ 21:00:26

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:

90000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	MCW 5%M 95%W	0.590
90.00	SOWCM 5%O 30%W 65%M	0.698

Total Length: 210.00 ft Total Volume: 1.288 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

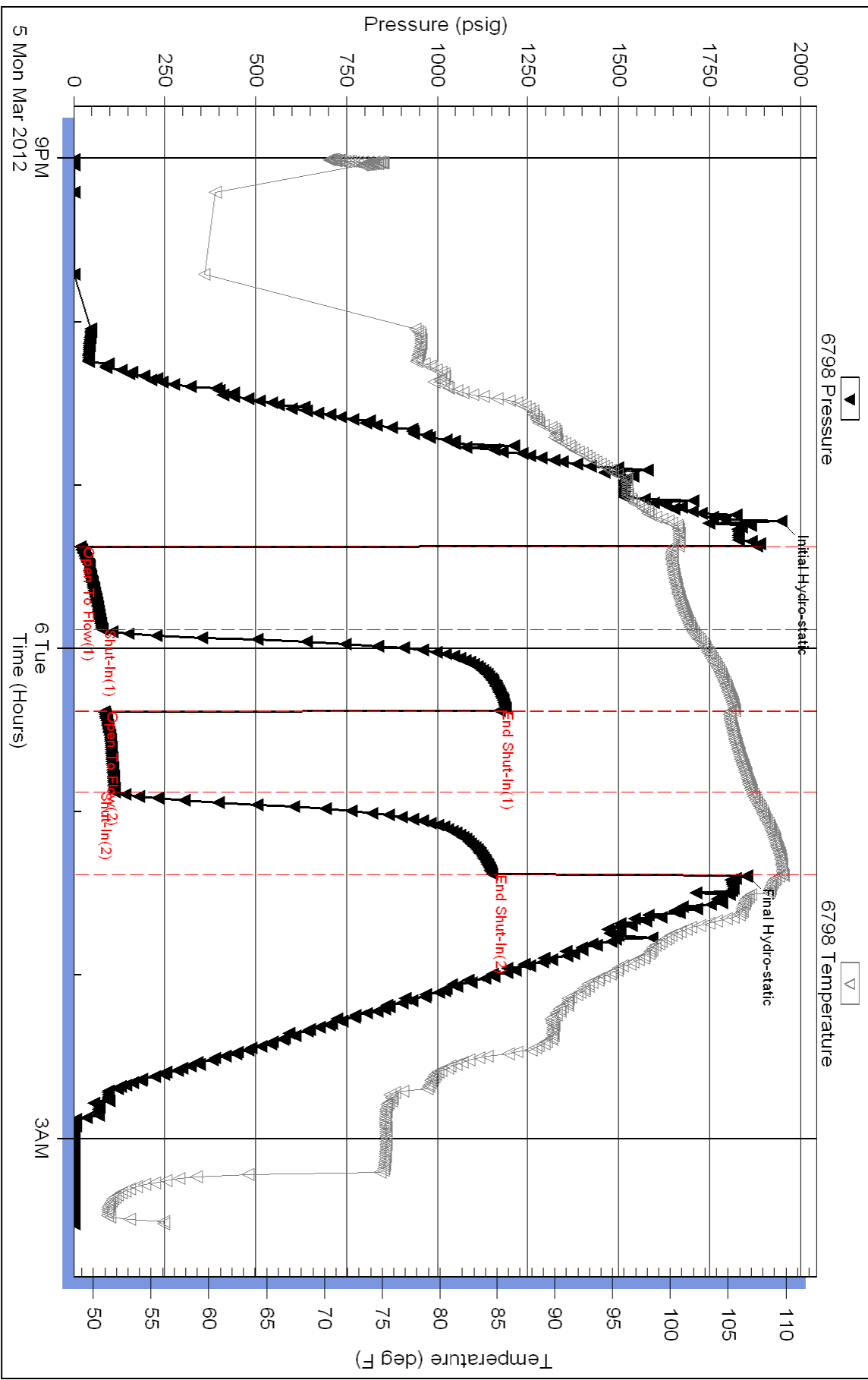
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .12 @ 55 degrees

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co
101 S Main
Stafford, KS 67578
ATTN: Josh Austin

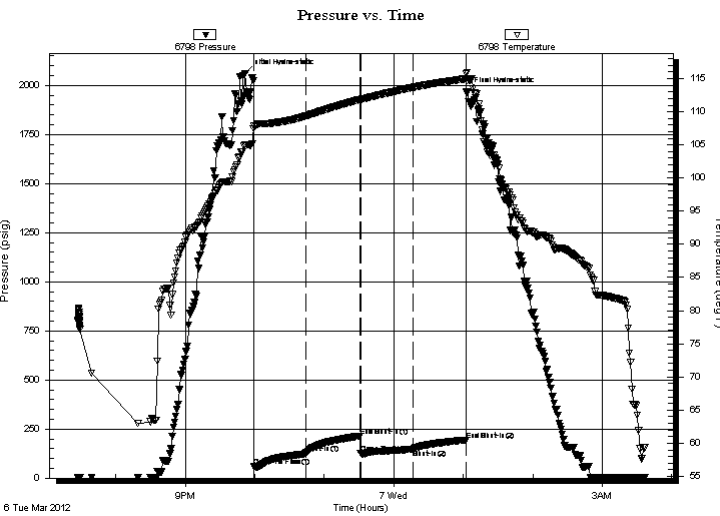
27-24S-12W Stafford
Moore 1-27
Job Ticket: 45768 **DST#: 4**
Test Start: 2012.03.06 @ 19:26:54

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 21:59:24 Tester: Leal Cason
Time Test Ended: 03:37:09 Unit No: 45
Interval: 3925.00 ft (KB) To 3931.00 ft (KB) (TVD) Reference Elevations: 1885.00 ft (KB)
Total Depth: 3931.00 ft (KB) (TVD) 1876.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

Serial #: 6798 Inside
Press @ Run Depth: 146.08 psig @ 3926.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.03.06 End Date: 2012.03.07 Last Calib.: 2012.03.07
Start Time: 19:26:55 End Time: 03:37:09 Time On Btm: 2012.03.06 @ 21:51:39
Time Off Btm: 2012.03.07 @ 01:03:09

TEST COMMENT: IF: Strong Blow , BOB in 30 seconds
IS: No Blow Back
FF: Fair Blow , BOB in 8 minutes, GTS in 25 minutes, Gas w as TSTM
FS: 1 inch Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2061.26	105.06	Initial Hydro-static
8	58.39	107.82	Open To Flow (1)
53	124.19	109.34	Shut-In(1)
100	213.32	111.85	End Shut-In(1)
100	127.73	111.85	Open To Flow (2)
145	146.08	113.66	Shut-In(2)
191	194.60	114.98	End Shut-In(2)
192	1966.03	115.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3631 GIP	0.00
182.00	Water	0.90
62.00	OMCW 12% O 10%M 78%W	0.87
40.00	GSY WMCO 40%G 10%M 22%W 28%O	0.56

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Rama Operating Co

27-24S-12W Stafford

101 S Main
Stafford, KS 67578

Moore 1-27

Job Ticket: 45768

DST#: 4

ATTN: Josh Austin

Test Start: 2012.03.06 @ 19:26:54

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:

60000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6800.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	3631 GIP	0.000
182.00	Water	0.895
62.00	OMCW 12% O 10%M 78%W	0.870
40.00	GSY WMCO 40%G 10%M 22%W 28%O	0.561

Total Length: 284.00 ft Total Volume: 2.326 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .17 @ 53 degrees

Serial #: 6798

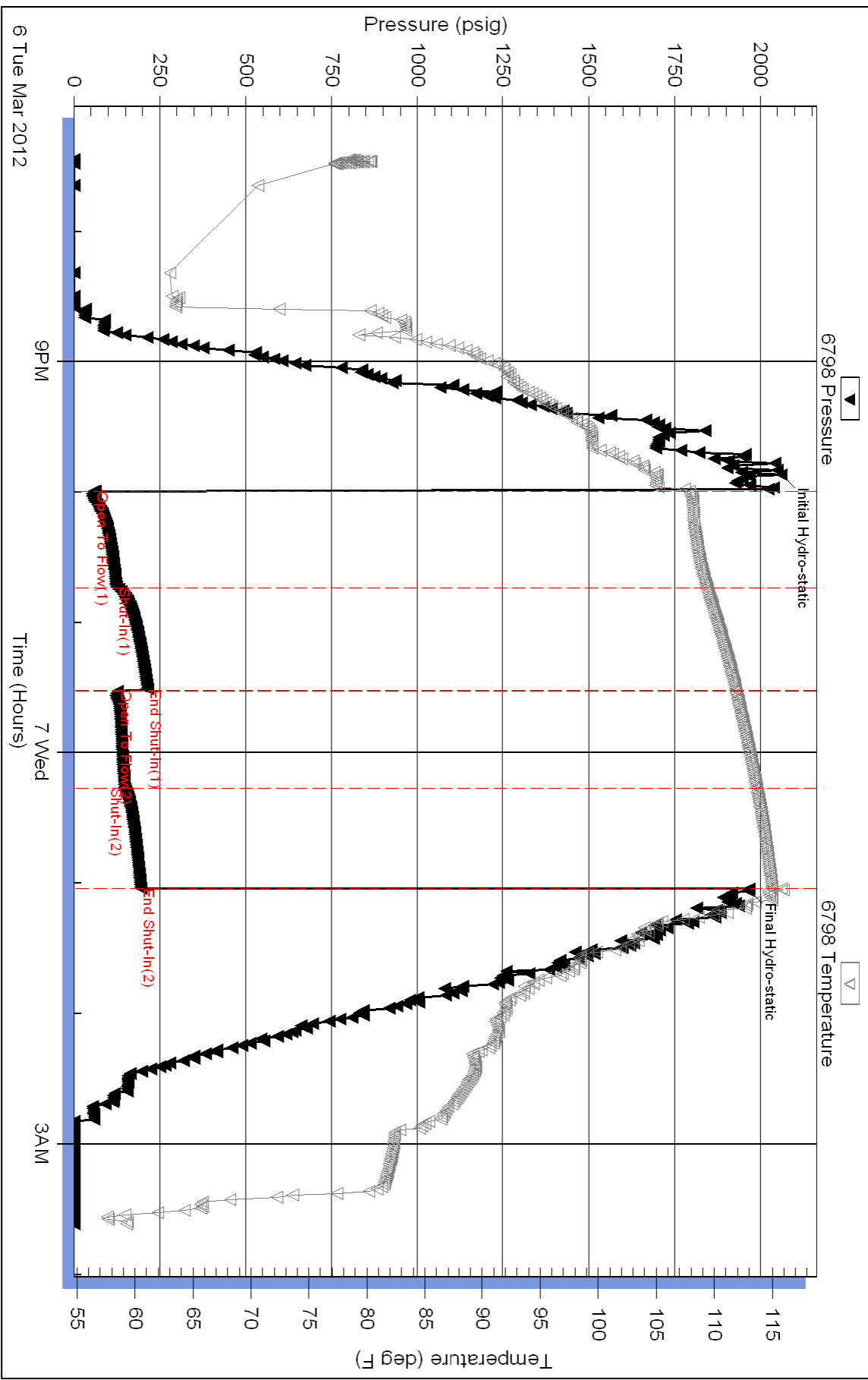
Inside

Rama Operating Co

Moore 1-27

DST Test Number: 4

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45768

Printed: 2012.03.07 @ 08:09:05

OPERATOR

Company: RAMA Operating Co.,INC.
 Address: 101 S. Main St.
 Stafford, Kansas 67578

Contact Geologist:
 Contact Phone Nbr: 620-234-5191
 Well Name: Moore # 1-27
 Location: 8 5/8" @ 280'
 Pool:
 State: Kansas, Stafford County

API: 15-185-23738-00-00
 Field: North Star
 Country: USA

Scale 1:240 Imperial

Well Name: Moore # 1-27
 Surface Location: 8 5/8" @ 280'
 Bottom Location:
 API: 15-185-23738-00-00
 License Number:
 Spud Date: 2/29/2012 Time: 3:30 PM
 Region: NE-SE-NW-NE 27-24s-12w
 Drilling Completed: 3/8/2012 Time: 5:50 PM
 Surface Coordinates: 765' From North Line & 1560' From East Line
 Bottom Hole Coordinates:
 Ground Elevation: 1876.00ft
 K.B. Elevation: 1885.00ft
 Logged Interval: 2900.00ft To: 4150.00ft
 Total Depth: 4150.00ft
 Formation: Viola
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 765' From North Line
 E/W Co-ord: 1560' From East Line

LOGGED BY

Company:
 Address:
 Phone Nbr: 620-546-3960
 Logged By: Geologist Name: Josh Austin

CONTRACTOR

Contractor: Sterling Drilling Company
 Rig #: 4
 Rig Type: mud rotary
 Spud Date: 2/29/2012 Time: 3:30 PM
 TD Date: 3/8/2012 Time: 5:50 PM
 Rig Release: Time:

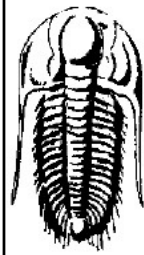
ELEVATIONS

K.B. Elevation: 1885.00ft Ground Elevation: 1876.00ft
 K.B. to Ground: 9.00ft

NOTES

On the basis of the positive structural position and marginal drill stem test it was recommended by all parties involved in the Moore 1-27 that 5 1/2" production casing be set and cemented to further test the following zones; Toronto, Lansing H, Lansing L, Viola, and Simpson Sand

DRILLING WELL					COMPARISON WELL				COMPARISON WELL				
Moore #1-27					Jenkins #2				Reed #1				
1885 KB					1876 KB				1879 KB				
					Structural Relationship				Structural Relationship				
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	LOG	Log	Sub-Sea	LOG	Log	Sub-Sea	LOG
Topeka	3018	-1133	3019	-1134									
Heebner	3338	-1453	3340	-1455	3340	-1464	9		3333	-1454	-1		
Toronto	3356	-1471	3354	-1469					3344	-1465	-4		
Douglas	3380	-1495	3377	-1492					3370	-1491	-1		
Brown Lime	3494	-1609	3495	-1610	3496	-1620	10		3488	-1609	-1		
Lansing	3520	-1635	3522	-1637	3518	-1642	5		3512	-1633	-4		
Base KC	3785	-1900	3785	-1900	3763	-1887	-13		3757	-1878			
Marmaton	3818	-1933	3820	-1935									
Kinderhook	3848	-1963	3844	-1959									
Viola	3925	-2040	3928	-2043	3922	-2046	3		3920	-2041	-2		
Simpson Shale	4047	-2162	4050	-2165	4044	-2168	3		4045	-2166	1		
Simpson Sand	4069	-2184	4071	-2186	4061	-2185	-1		4068	-2189	3		
Arbuckle	4106	-2221	4110	-2225	4115	-2239	14		4108	-2229	4		
Total Depth	4150	-2265	4150	-2265	4072	-2196			4150	-2271			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Rama Operating Co
101 S Main
Stafford, KS 67578
ATTN: Josh Austin

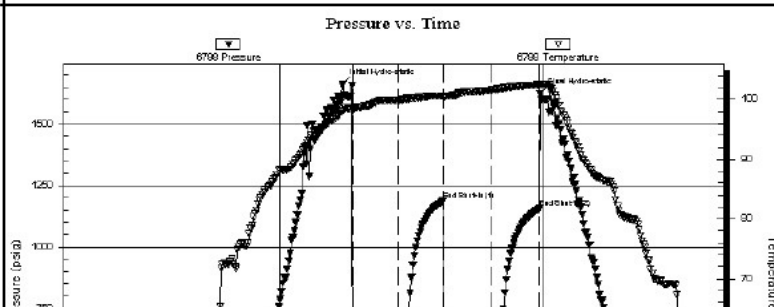
27-24S-12W Stafford
Moore 1-27
Job Ticket: 45765 **DST#: 1**
Test Start: 2012.03.04 @ 00:52:15

GENERAL INFORMATION:

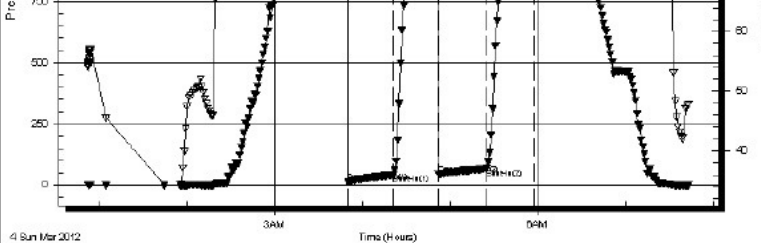
Formation: Toronto	Deviated: No Whipstock: ft (KB)	Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 03:50:00	Time Test Ended: 07:43:00	Tester: Leal Cason
Interval: 3336.00 ft (KB) To 3370.00 ft (KB) (TVD)		Unit No: 45
Total Depth: 3370.00 ft (KB) (TVD)	Hole Diameter: 7.88 inches	Reference Elevations: 1885.00 ft (KB)
Hole Condition: Good		1876.00 ft (CF)
		KB to GR/CF: 9.00 ft

Serial #: 6798	Inside	Capacity: 8000.00 psig
Press@RunDepth: 68.59 psig @ 3337.00 ft (KB)	Start Date: 2012.03.04	Last Calib.: 2012.03.04
End Date: 2012.03.04	Start Time: 00:52:16	Time On Btm: 2012.03.04 @ 03:43:00
End Time: 07:43:00		Time Off Btm: 2012.03.04 @ 05:58:15

TEST COMMENT: IF: Weak Blow 1/2 inch
IS: No Blow Back
FF: Weak 3/4 inch Blow
FSI: No Blow Back



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1662.97	98.09	Initial Hydro-static
7	14.58	98.28	Open To Flow (1)
39	43.56	99.91	Shut-In(1)
69	1186.37	100.64	End Shut-In(1)
69	45.80	100.44	Open To Flow (2)
102	68.59	101.57	Shut-In(2)



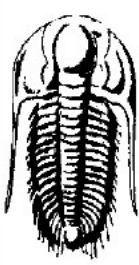
135	1156.24	102.47	End Shut-In(2)
136	1622.63	102.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	SGCM 1%G 99%M	0.32

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Rama Operating Co
 101 S Main
 Stafford, KS 67578
 ATTN: Josh Austin

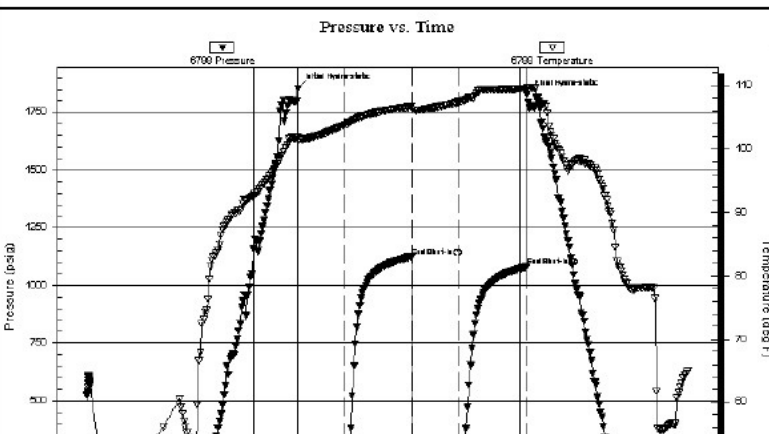
27-24S-12W Stafford
Moore 1-27
 Job Ticket: 45766 **DST#: 2**
 Test Start: 2012.03.05 @ 04:07:15

GENERAL INFORMATION:

Formation: **Lansing " H, I, & J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:30:30
 Time Test Ended: 10:54:30
 Interval: **3650.00 ft (KB) To 3710.00 ft (KB) (TVD)**
 Total Depth: 3710.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Leal Cason
 Unit No: 45
 Reference Elevations: 1885.00 ft (KB)
 1876.00 ft (CF)
 KB to GR/CF: 9.00 ft

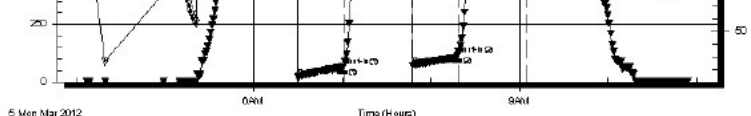
Serial #: 6798 Inside
 Press@RunDepth: 118.97 psig @ 3651.00 ft (KB)
 Start Date: 2012.03.05 End Date: 2012.03.05
 Start Time: 04:07:16 End Time: 10:54:30
 Capacity: 8000.00 psig
 Last Calib.: 2012.03.05
 Time On Btm: 2012.03.05 @ 06:30:00
 Time Off Btm: 2012.03.05 @ 09:05:15

TEST COMMENT: IF: Fair Blow , 6 1/2 inches
 IS: No Blow Back
 FF: Weak Blow , 1 inch
 FSI: NO Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1853.56	101.81	Initial Hydro-static
1	20.58	101.38	Open To Flow (1)
31	67.15	103.69	Shut-In(1)
77	1124.25	106.61	End Shut-In(1)
78	73.71	106.16	Open To Flow (2)
109	118.97	107.33	Shut-In(2)
155	1080.16	109.44	End Shut-In(2)
156	1824.51	109.65	Final Hydro-static



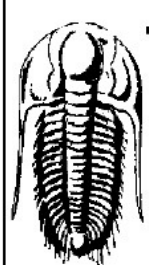
Recovery

Length (ft)	Description	Volume (bbl)
62.00	SOGMCW 5%G 5%O 42%M 48%W	0.30
120.00	SOGCM 5%G 10%O 85%M	0.59

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Rama Operating Co

27-24S-12W Stafford

101 S Main
Stafford, KS 67578

Moore 1-27

Job Ticket: 45767

DST#: 3

ATTN: Josh Austin

Test Start: 2012.03.05 @ 21:00:26

GENERAL INFORMATION:

Formation: **Lansing "K & L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:22:41

Time Test Ended: 03:31:41

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 45

Interval: 3719.00 ft (KB) To 3779.00 ft (KB) (TVD)

Total Depth: 3779.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1885.00 ft (KB)

1876.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 6798 Inside

Press@RunDepth: 111.99 psig @ 3720.00 ft (KB)

Start Date: 2012.03.05 End Date: 2012.03.06

Start Time: 21:00:27 End Time: 03:31:41

Capacity: 8000.00 psig

Last Calib.: 2012.03.06

Time On Btm: 2012.03.05 @ 23:13:11

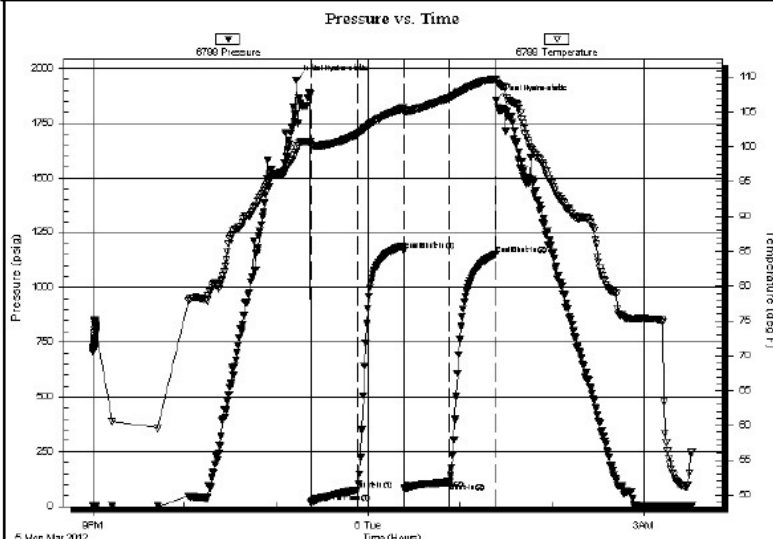
Time Off Btm: 2012.03.06 @ 01:23:26

TEST COMMENT: IF: Weak Blow, 3 1/2 inches

ISI: No Blow Back

FF: Weak Blow, 1 inch

FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1947.55	99.78	Initial Hydro-static
10	18.14	100.22	Open To Flow (1)
40	77.50	101.85	Shut-In(1)
70	1171.59	105.57	End Shut-In(1)
70	83.34	105.19	Open To Flow (2)
100	111.99	107.03	Shut-In(2)
130	1152.69	109.69	End Shut-In(2)
131	1853.03	109.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MCW 5%M 95%W	0.59
90.00	SOWCM 5%O 30%W 65%M	0.70

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co

27-24S-12W Stafford

101 S Main
Stafford, KS 67578

Moore 1-27

Job Ticket: 45768

DST#: 4

ATTN: Josh Austin

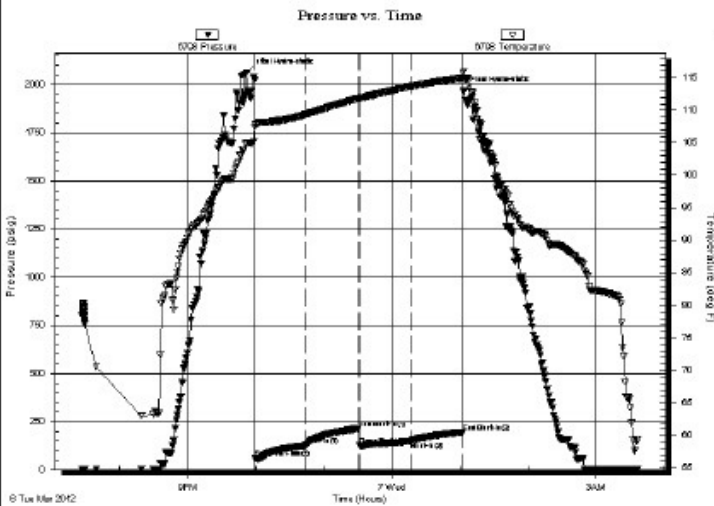
Test Start: 2012.03.06 @ 19:26:54

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: **21:59:24**
 Time Test Ended: **03:37:09**
 Interval: **3925.00 ft (KB) To 3931.00 ft (KB) (TVD)**
 Total Depth: **3931.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 Test Type: **Conventional Bottom Hole (Reset)**
 Tester: **Leal Cason**
 Unit No: **45**
 Reference Elevations: **1885.00 ft (KB)**
1876.00 ft (CF)
 KB to GR/CF: **9.00 ft**

Serial #: 6798 **Inside**
 Press@RunDepth: **146.08 psig @ 3926.00 ft (KB)**
 Start Date: **2012.03.06** End Date: **2012.03.07** Capacity: **8000.00 psig**
 Start Time: **19:26:55** End Time: **03:37:09** Last Calib.: **2012.03.07**
 Time On Btm: **2012.03.06 @ 21:51:39**
 Time Off Btm: **2012.03.07 @ 01:03:09**

TEST COMMENT: IF: Strong Blow, BOB in 30 seconds
 IS: No Blow Back
 FF: Fair Blow, BOB in 8 minutes, GTS in 25 minutes, Gas was TSTM
 FS: 1 inch Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2061.26	105.06	Initial Hydro-static
8	58.39	107.82	Open To Flow (1)
53	124.19	109.34	Shut-In(1)
100	213.32	111.85	End Shut-In(1)
100	127.73	111.85	Open To Flow (2)
145	146.08	113.66	Shut-In(2)
191	194.60	114.98	End Shut-In(2)
192	1966.03	115.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3631 GIP	0.00
182.00	Water	0.90
62.00	OMCW 12% O 10%M 78%W	0.87

Gas Rates

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

40.00	GSY WMOO 40%G 10%M 22%W 28%D 0.56

* Recovery from multiple tests

ROCK TYPES

Cht	shale, grn	shale, red	Sltst
Dolprim	shale, gry	Shcol	
Lmst fw7>	Carbon Sh	Ss	

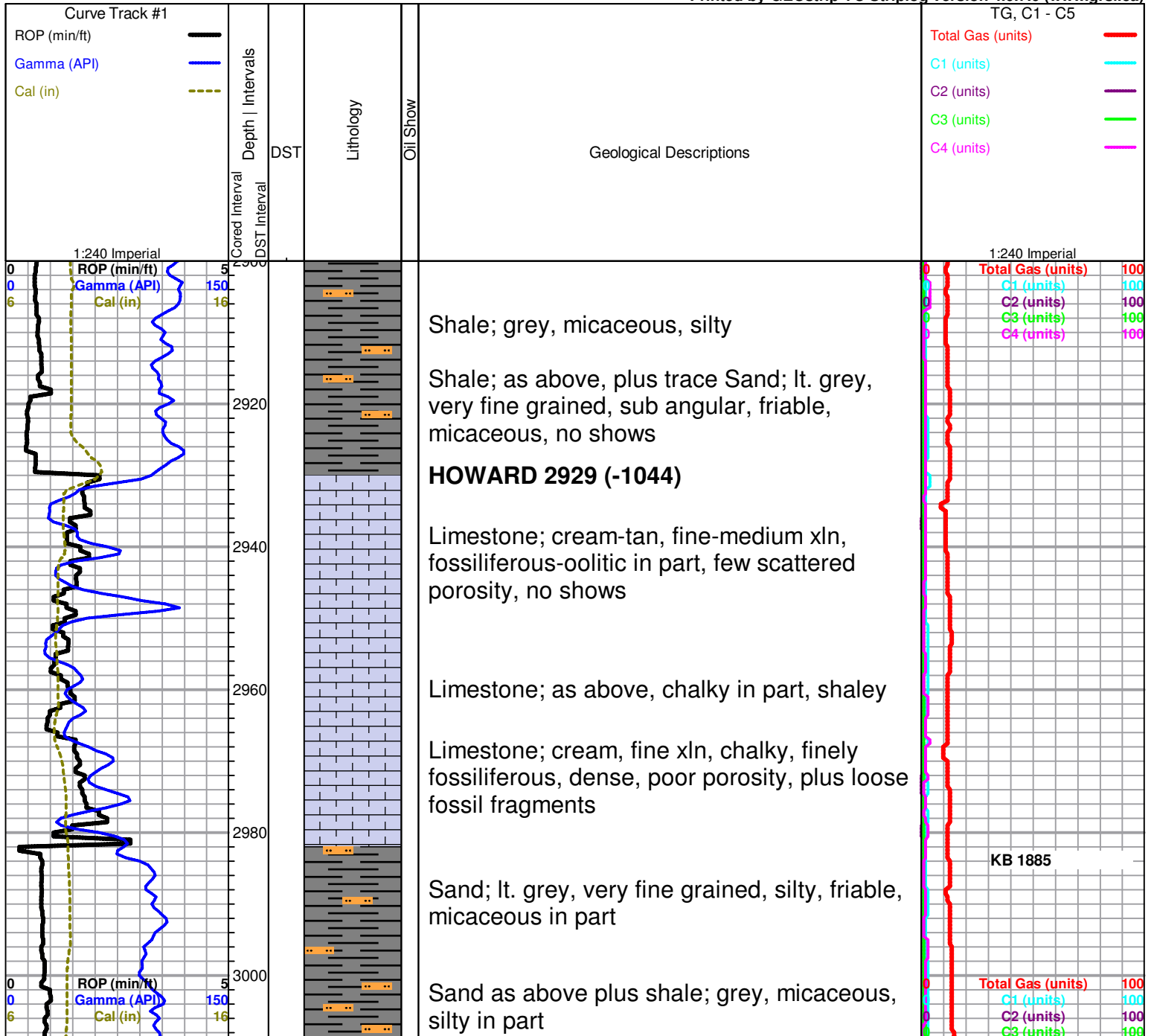
ACCESSORIES

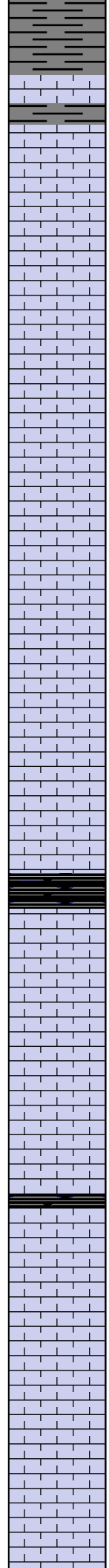
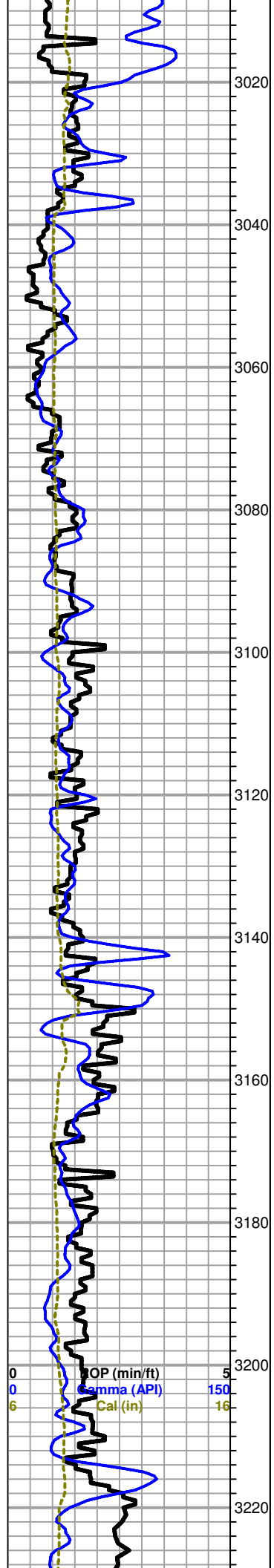
STRINGER
 Siltstone

OTHER SYMBOLS

DST
 DST Int
 DST alt
 Core
 tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





TOPEKA 3018 (-1133)

Limestone; cream, fine xln, chalky, fossiliferous, oolitic in part, poor visible porosity, no shows
dark grey-black shale

Limestone; grey-cream, highly oolitic, dense, chalky in part, poorly develop porosity

Limestone; tan-cream, fine-medium xln, granular in part, fossiliferous, slightly cherty, poor porosity

Limestone; cream, medium xln, fossiliferous, sparry calcite in porosity, chalky in part

Limestone; as above, scattered porosity

Limestone, buff-cream, fine xln, slightly sucrosic, dolomitic in part, poorly developed porosity, no shows

black carboniferous shale

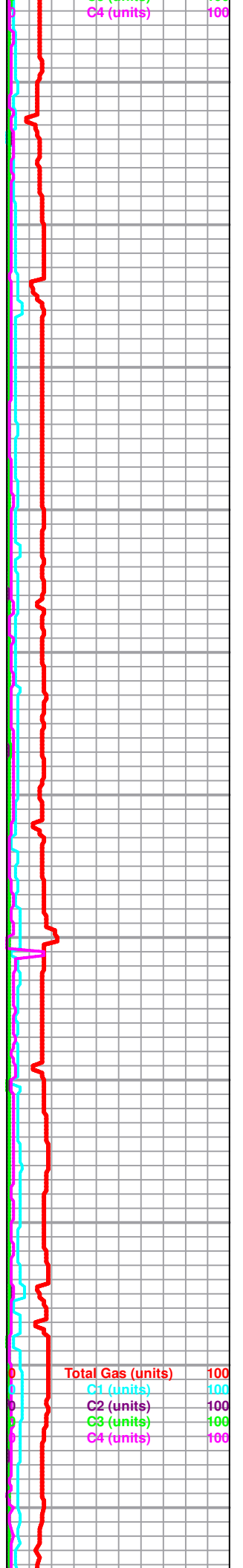
Limestone; cream-buff-tan, fine xln, fossiliferous in part, slightly granular, plus grey boney chert

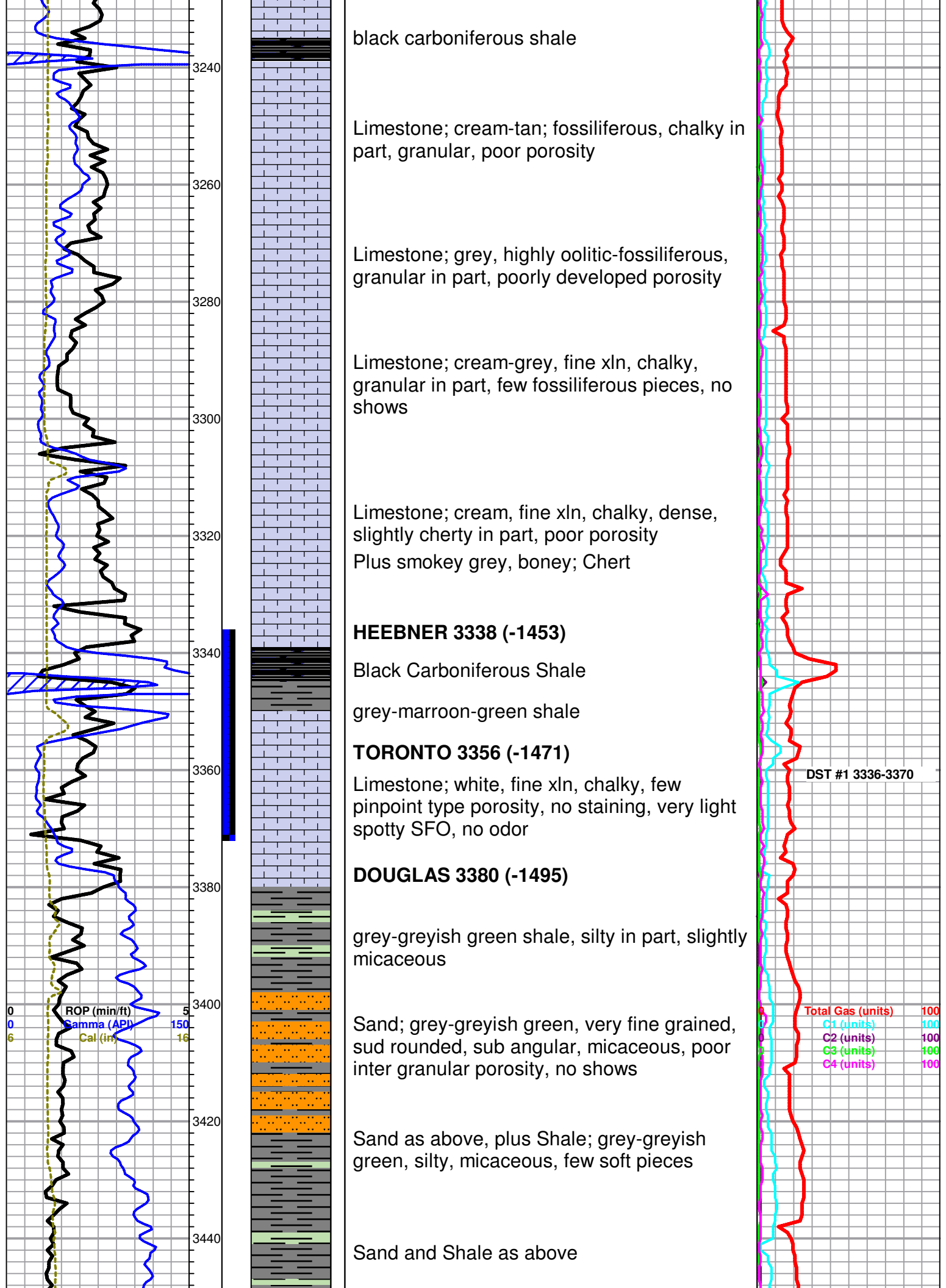
Limestone; cream-buff-grey, fine xln, chalky, fossilifeous in part, poor visible porosity, N/S

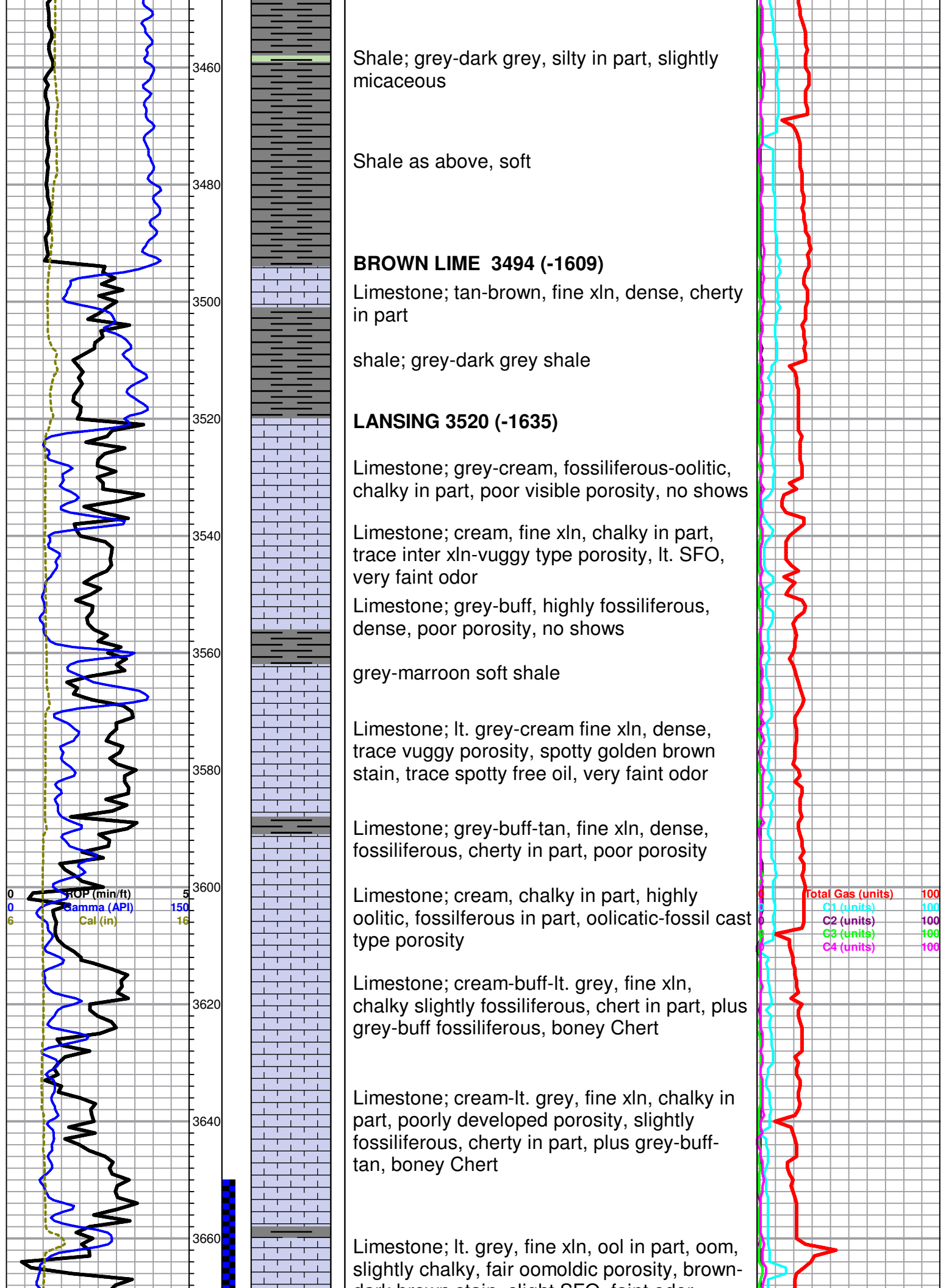
Shale; black-grey, fissile

Limestone; cream-buff, fine xln, chalky, dense, slightly fossiliferous, poor porosity, N/S

Limestone; as above, highly fossiliferous in part, plus grey,opaque boney chert







3460
3480
3500
3520
3540
3560
3580
3600
3620
3640
3660

Shale; grey-dark grey, silty in part, slightly micaceous

Shale as above, soft

BROWN LIME 3494 (-1609)
Limestone; tan-brown, fine xln, dense, cherty in part

shale; grey-dark grey shale

LANSING 3520 (-1635)
Limestone; grey-cream, fossiliferous-oolitic, chalky in part, poor visible porosity, no shows

Limestone; cream, fine xln, chalky in part, trace inter xln-vuggy type porosity, lt. SFO, very faint odor

Limestone; grey-buff, highly fossiliferous, dense, poor porosity, no shows

grey-maroon soft shale

Limestone; lt. grey-cream fine xln, dense, trace vuggy porosity, spotty golden brown stain, trace spotty free oil, very faint odor

Limestone; grey-buff-tan, fine xln, dense, fossiliferous, cherty in part, poor porosity

Limestone; cream, chalky in part, highly oolitic, fossiliferous in part, oolitic-fossil cast type porosity

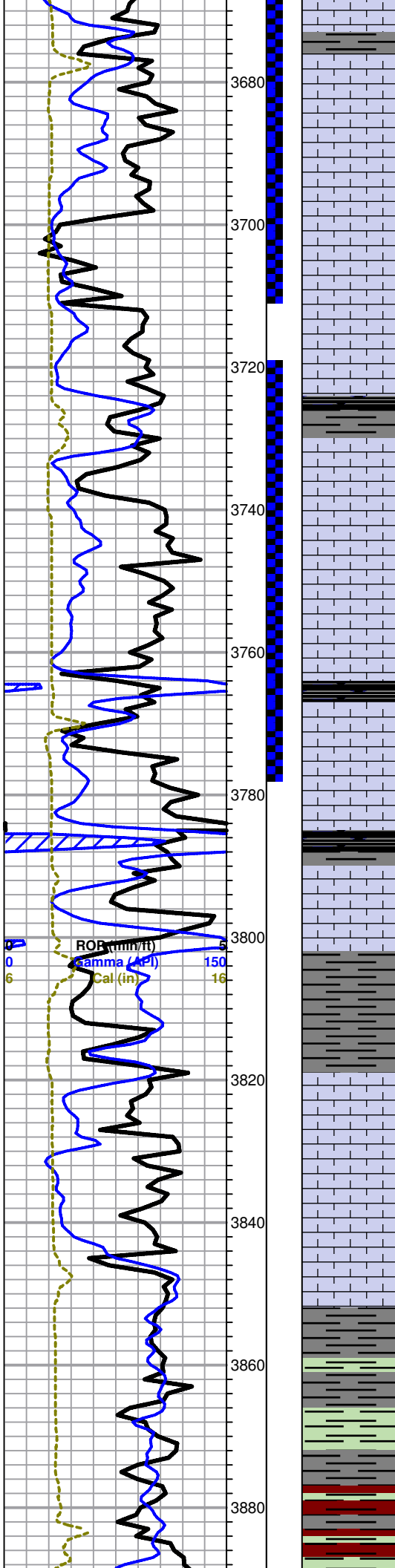
Limestone; cream-buff-lt. grey, fine xln, chalky slightly fossiliferous, chert in part, plus grey-buff fossiliferous, boney Chert

Limestone; cream-lt. grey, fine xln, chalky in part, poorly developed porosity, slightly fossiliferous, cherty in part, plus grey-buff-tan, boney Chert

Limestone; lt. grey, fine xln, ool in part, oom, slightly chalky, fair oomoldic porosity, brown-dark brown stain, light SFO, faint odor

0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16

Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100



dark brown stain, slight SFO, faint odor

Limestone; cream-white, very chalky, poor porosity, black stain, NSFO, no odor

Limestone; white-cream, sub oomoldic, chalky, few oomoldic type porosity, trace golden brown stain, NSFO, no odor

black-dark grey shale

Limestone; cream-buff, fine xln, chalky in part, finely fossiliferous, poorly developed porosity, brown stain, trace spotty free oil, faint odor

Limestone; cream-lt. grey, fine xln, chalky, dense, slightly fossiliferous, poor porosity N/S

black carboniferous shale

Limestone; cream, fine-medium xln, fair inter xln, porosity, brown stain, SFO, faint odor

BASE KANSAS CITY 3785 (-1900)

black-grey-maroon shale

Limestone; cream-tan, fine xln, dense, fossiliferous in part, poor visible porosity, cherty in part

Shale; grey-greyish green, soft/gummy

MARMATON 3818 (-1933)

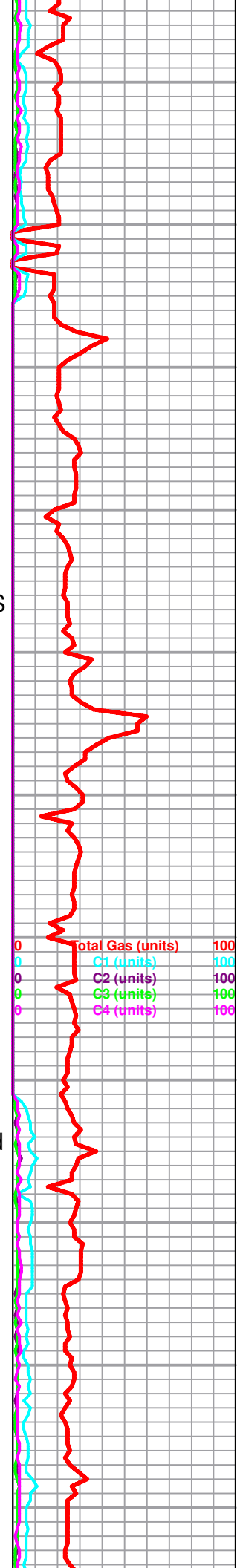
Limestone; cream-buff, fine xln, dense, cherty, slightly fossiliferous, poorly developed porosity, plus tan-smokey grey boney chert

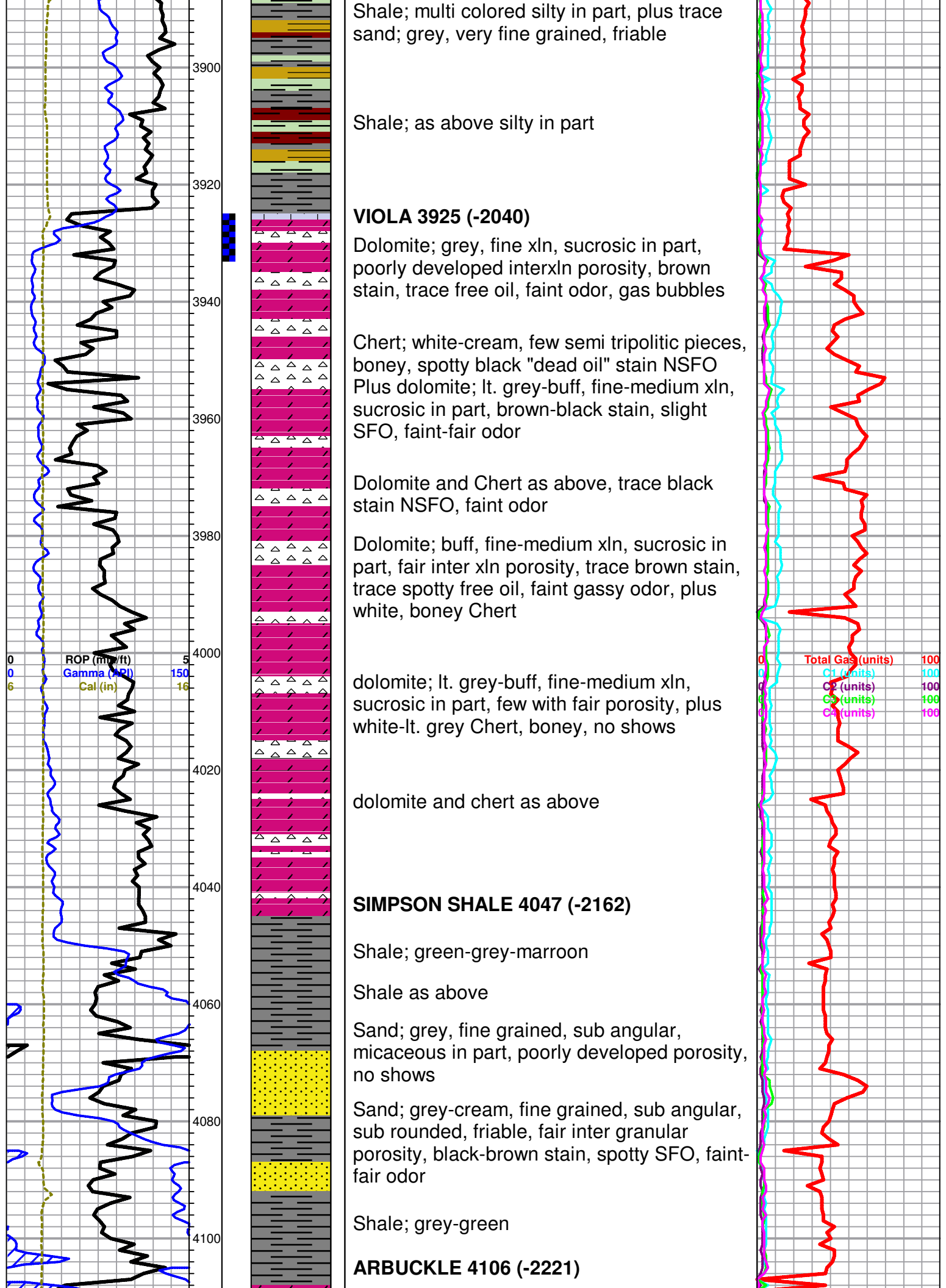
Limestone; white-cream, fine xln, chalky, few sparry calcite, trace brown stain, NSFO, no odor

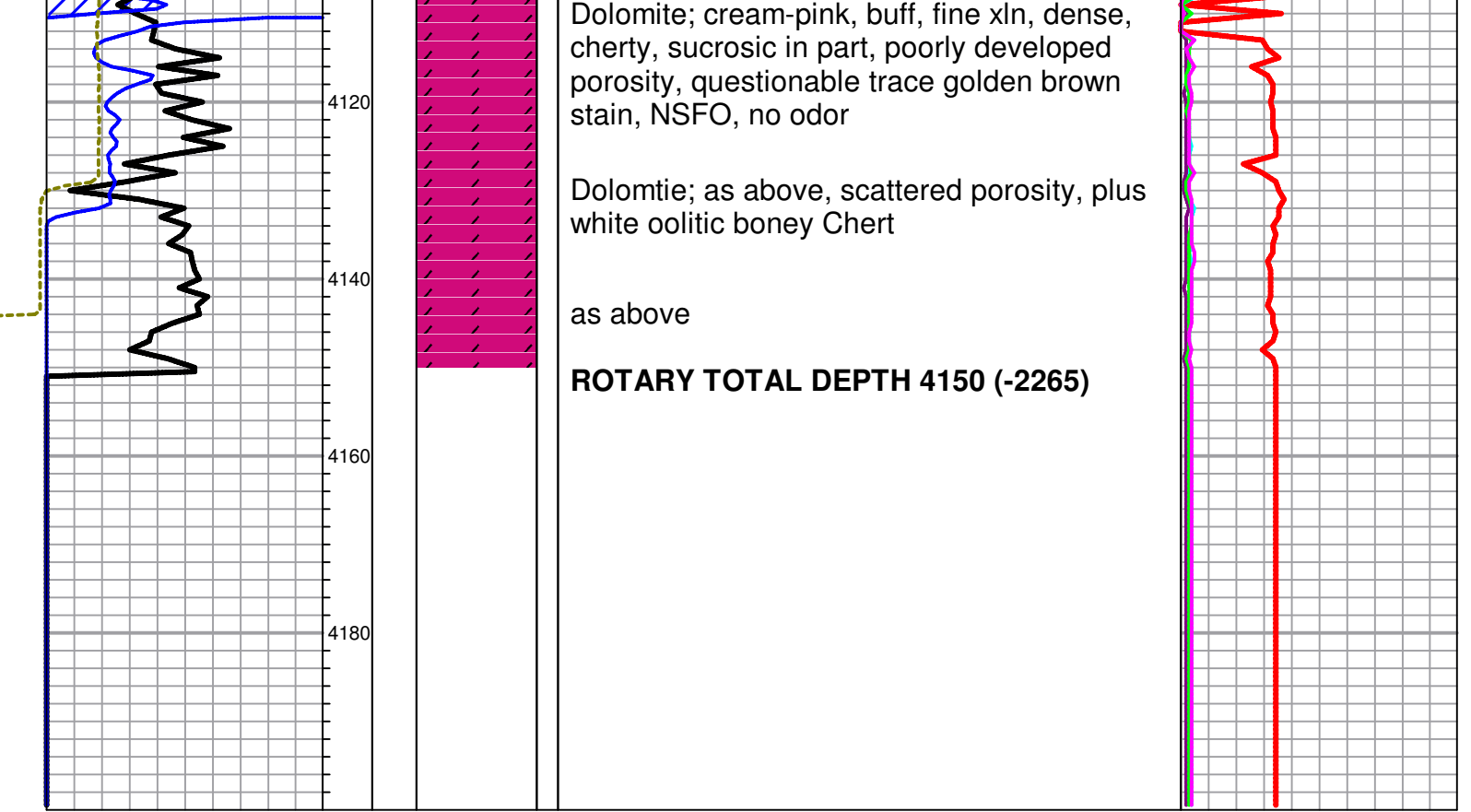
KINDERHOOK 3848 (-1963)

Shale; maroon, greyish green, silty in part

Shale; brown-grey-greyish green, soft, slightly silty in part







Customer Rama Operating Company, Inc.		Lease No. Inc.		Date 2-29-12	
Lease Moore		Well # 1-27			
Field Order # 4305	Station Pratt, Kansas	Casing 8 5/8"	Depth 230 Feet	County Stafford	State Kansas
Type Job C.N.W. - Surface			Formation	Legal Description 27-25-12W	

PIPE DATA		PERFORATING DATA		CEMENT USED		TREATMENT RESUME		
Casing Size 8 5/8"	Tubing Size 2 3/8"	Shots/Ft 250	Sacks 250	60/40 Poz	with	RATE	PRESS	ISIP
Depth 230 Feet	Depth	From	To	38 Calcium Chloride		25 Lb./sh.	5 Min.	cell plate
Volume 1.92 Bbl.	Volume	From	To	14.8 Lb./Gal., 5.2 Gal.	Min.	1.2	10 Min.	10 CU.F.T./SH.
Max Press 300 P.S.I.	Max Press	From	To	18	Avg		15 Min.	
Well Connection Plug container	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth 265 Feet	Packer Depth	From	To	Flush	17 Bbl. Fresh Water	Gas Volume		Total Load

Customer Representative Lanny Saloga	Station Manager David Scott	Treater Clarence R. Messich
---	--------------------------------	--------------------------------

Service Units	37,216	33,708	20,920	19,832	21,010				
Driver Names	Messich	Mattal	Young						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
6:30					Trucks on location and hold safety meeting.
8:30					Sterling Drilling start to run 6 Joints new 23 Lb./Ft. 8 5/8" casing.
9:40					Casing in well. Circulate for 5 minutes.
9:50	250			5	start Fresh water Pre-Flush.
	275		10	5	start mixing 250 sacks 60/40 Poz cement.
	-0-		64		stop pumping. Shut in well. Release Wooden Plug. Open Well.
10:00	100			5	start Fresh water Displacement.
10:10	300		17		Plug down. Shut in well.
					Circulated cement to bottom of cellar.
					Wash up pump truck.
11:00					Job complete.
					Thank You.
					Clarence, Mite, Steve

Customer <i>Rama Operations</i>	Lease No.	Date <i>3-8-10</i>
Lease <i>Moore</i>	Well # <i>1-27</i>	
Field Order # <i>57188</i>	Station <i>Pratt</i>	Casing <i>5 7/8"</i>
		Depth <i>4145</i>
Type Job <i>CNW - 5 1/2 L.S.</i>	Formation	County <i>St. Louis</i>
		State <i>KS</i>
		Legal Description <i>27-24-12</i>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid		RATE	PRESS	ISIP
<i>5 7/8"</i>			<i>1605</i>	<i>AAJ 11/12/26</i>				5 Min.
Depth	Depth	From	To	Pre Pad	Max			
<i>4145</i>								10 Min.
Volume	Volume	From	To	Pad	Min			
<i>101.14</i>			<i>5000</i>	<i>AAJ 11/12/26</i>				15 Min.
Max Press	Max Press	From	To	Frac	Avg			
Well Connection	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume			Total Load
<i>1130</i>				<i>100.77</i>				

Customer Representative <i>Randy Givens</i>	Station Manager <i>Dave Scott</i>	Treater <i>Steve (L.S.)</i>
Service Units <i>27385</i>	<i>19203</i>	<i>19905</i>
Driver Names <i>Orlando</i>	<i>M. J. Bell</i>	<i>MacLusk</i>

Time	Casing Pressure	Tubing Pressure	Bbbls. Pumped	Rate	Service Log
<i>11:40</i>					<i>On location - Safety Meeting</i>
					<i>Run 99' spacer - 55.15'</i>
					<i>Centralizer 1352-9 11-13-1970</i>
					<i>Casing on bottom</i>
					<i>Break Circ w/RTG</i>
<i>2:40</i>	<i>350</i>		<i>10</i>	<i>6</i>	<i>Mod Stop</i>
<i>2:41</i>	<i>300</i>		<i>3</i>	<i>6</i>	<i>AJO Spacer</i>
<i>2:43</i>	<i>300</i>		<i>32.7</i>	<i>6</i>	<i>Run 1605s AAJ @ 15.3"/min</i>
					<i>Start Down</i>
					<i>Clear Ann P + Lin</i>
					<i>Release PLOS</i>
<i>2:55</i>	<i>0</i>		<i>0</i>	<i>6</i>	<i>Start AJO Displacement</i>
<i>3:08</i>	<i>300</i>		<i>70</i>	<i>5</i>	<i>LIFT Pressure</i>
<i>3:12</i>	<i>700</i>		<i>90</i>	<i>4</i>	<i>Slow Rate</i>
<i>3:15</i>	<i>1500</i>		<i>101</i>	<i>4</i>	<i>Plug Down - Hold</i>
					<i>Phon. RTG/min 11 - 5000 bbl/1000 ft</i>
					<i>Circulation Time 500</i>
					<i>Sub. Con. PLOS</i>
					<i>Trans. 1500</i>

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
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

April 03, 2012

Robin L. Austin
Rama Operating Co., Inc.
101 S MAIN ST
STAFFORD, KS 67578-1429

Re: ACO1
API 15-185-23738-00-00
Moore 1-27
NE/4 Sec.27-24S-12W
Stafford 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,
Robin L. Austin