Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1234661

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 # 5039
Name: AGV Corp.
Address 1: PO BOX 377
Address 2: 123 N MAIN
City: ATTICA State: KS Zip: 67009 + 0377
Contact Person: Kent Roberts
Phone: (316) 215-1683
CONTRACTOR: License # 34484
Name: Fossil Drilling, Inc.
Wellsite Geologist: Kent Roberts
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
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

12/01/2014	12/08/2014	12/08/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-167-24019-00-00
Spot Description:
SW NE NE SW Sec. 30 Twp. 15 S. R. 15 ☐ East ☑ West
2279 Feet from ☐ North / ☑ South Line of Section
3024 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Russell
Lease Name: AR15 Yarmer Well #: 1
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 1841 Kelly Bushing: 1849
Total Vertical Depth: 3472 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 958 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: 55000 ppm Fluid volume: 400 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: H&W Oil Company
Lease Name: Boxberger A SWD License #: 33700
Quarter NW Sec. 32 Twp. 13 S. R. 14 ☐ East ☑ West
County: Russell Permit #: D23310

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: 12/11/2014
☑ **Confidential Release Date:** 12/10/2016
☐ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/15/2014

[redacted] 1234661

Operator Name: AGV Corp. Lease Name: AR15 Yarmer Well #: 1

Sec. 30 Twp. 15 S. R. 15 ☐ East ☑ West County: Russell

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☐ Yes ☑ No

List All E. Logs Run:

☐ Log Formation (Top), Depth and Datum ☑ Sample

Name	Top	Datum
Anhydrite	924	925
Topeka	2841	-992
Heebner	3070	-1221
Lansing	3127	-1278
Base Kansas City	3354	-1505
Arbuckle	3425	-1576

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	12.25	8.625	24	958	Light and Common	400	2%gel, 3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	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:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
None

Form	ACO1 - Well Completion
Operator	AGV Corp.
Well Name	AR15 Yarmer 1
Doc ID	1234661

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	958	Light and Common	400	2%gel, 3% cc

ALLIED OIL & GAS SERVICES, LLC 055603

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Russell

DATE 12.2.14	SEC. 30	TWP. 15	RANGE 15	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE Varner AR-15	WELL # 1		LOCATION Russell			COUNTY Russell	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Fossil Drilling
TYPE OF JOB 12¼ Surface. (Long)
HOLE SIZE 12¼ T.D.
CASING SIZE 8 5/8 DEPTH 958'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 44.52
CEMENT LEFT IN CSG. 44.52
PERFS.
DISPLACEMENT 57.1 bbl/Lbs

OWNER

EQUIPMENT

PUMP TRUCK CEMENTER Anthony Hammerstad
417 HELPER Danny S
BULK TRUCK
995-292 DRIVER Tracy J.
BULK TRUCK
378 DRIVER Tim P

CEMENT

AMOUNT ORDERED 200sk Allied Lite. 3% cc 4% Gel
200sk Com + 3% cc 2% Gel

Allied Lite. COMMON	200sk	@	19.88	$3,976.00
POZMIX		@		
GEL	376 lb	@	.50	$ 188.00
CHLORIDE	1,128 lb	@	1.10	$1,240.00
ASC		@		
Common - 200sk		@	17.90	$3,580.00
		@		
Cell Flake @ 10lb		@	2.97	$ 297.00
		@		
		@		
		@		
		@		
		@		
HANDLING	400sk Ft3	@	2.48	$992.00
MILEAGE	188 Tim		2.75	$ 517.00

TOTAL $10,790.00

REMARKS:

See Cementing Job Log
Cement to Surface

SERVICE

DEPTH OF JOB			958'
PUMP TRUCK CHARGE			$ 2058.50
EXTRA FOOTAGE	@		
MILEAGE	Daily 10	@ 7.7	$ 77.0
MANIFOLD	Light 10	@ 4.4	$ 44.0
		@	
1x 8 5/8 Plug Container		@ —	$ 275.00

TOTAL $ 2,454.50

CHARGE TO: AGV Corp.
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

1x 8 5/8 Top Rubber Plug	@	—	$ 131.00
3x 8 5/8 Centralizers	@	75.0	$ 225.00
1x 8 5/8 Flapper Insert	@	—	$ 447.00
	@		
	@		

TOTAL $ 803.0

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES $ 14,048.30
DISCOUNT $ 3,933.30 IF PAID IN 30 DAYS

PRINTED NAME Craig Grant

SIGNATURE

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "ALLIED" shall mean Allied Oil & Gas Services, LLC, and "CUSTOMER" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "Merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

—TERMS: Unless satisfactory credit has been established, CUSTOMER must tender full cash payment to ALLIED before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, CUSTOMER agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that CUSTOMER may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate. Any amounts previously paid as excess interest shall be deducted from the amounts owing from the CUSTOMER or at the option of ALLIED, refunded directly to CUSTOMER. For purposes of this paragraph, ALLIED and CUSTOMER agree that Kansas law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

—ATTORNEY FEES: In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees.

—PRICES AND TAXES: All merchandise listed in ALLIED'S current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.

—TOWING CHARGES: ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.

—PREPARATION CHARGES: If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.

—DEADHAUL CHARGES: Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED's current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

—SERVICE CONDITIONS AND LIABILITIES:

1. ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. CUSTOMER shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.

3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES:

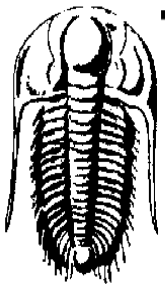
1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent, and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **AGV corp**

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

AR 15 Yarmer #1

30-15s-15w Russell

Start Date: 2014.12.06 @ 11:00:00

End Date: 2014.12.06 @ 16:03:57

Job Ticket #: 61891 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.12.11 @ 13:05:00

DRILL STEM TEST REPORT

AGV corp

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

30-15s-15w Russell

AR 15 Yarmer #1

Job Ticket: 61891 **DST#: 1**

Test Start: 2014.12.06 @ 11:00:00

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:56:16
Time Test Ended: 16:03:57

Test Type: Conventional Bottom Hole (Initial)
Tester: Jared Scheck
Unit No: S5-Great Bend-70

Interval: 3186.00 ft (KB) To 3236.00 ft (KB) (TVD)
Total Depth: 3236.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

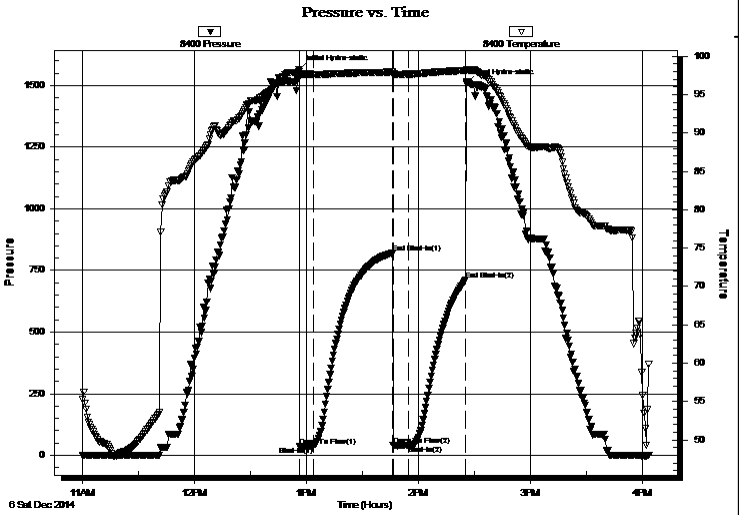
Reference Elevations: 1850.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8400

Press@RunDepth: 40.07 psig @ ft (KB)
Start Date: 2014.12.06 End Date: 2014.12.06
Start Time: 11:00:01 End Time: 16:03:56

Capacity: 5000.00 psig
Last Calib.: 2014.12.06
Time On Btm: 2014.12.06 @ 12:55:57
Time Off Btm: 2014.12.06 @ 14:25:42

TEST COMMENT: IFP- 5 Minutes-Weak blow built 1 inch into bucket
ISIP-45 Minutes-No blow back
FFP-5 Minutes-Very w eak surge did not build
FSIP-30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1565.00	97.99	Initial Hydro-static
1	37.53	97.60	Open To Flow (1)
8	37.72	97.67	Shut-In(1)
51	819.57	97.94	End Shut-In(1)
51	39.84	97.56	Open To Flow (2)
59	40.07	97.69	Shut-In(2)
90	710.04	98.14	End Shut-In(2)
90	1505.52	98.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

AGV corp

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

30-15s-15w Russell

AR 15 Yarmer #1

Job Ticket: 61891 **DST#: 1**

Test Start: 2014.12.06 @ 11:00:00

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:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5400.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.025

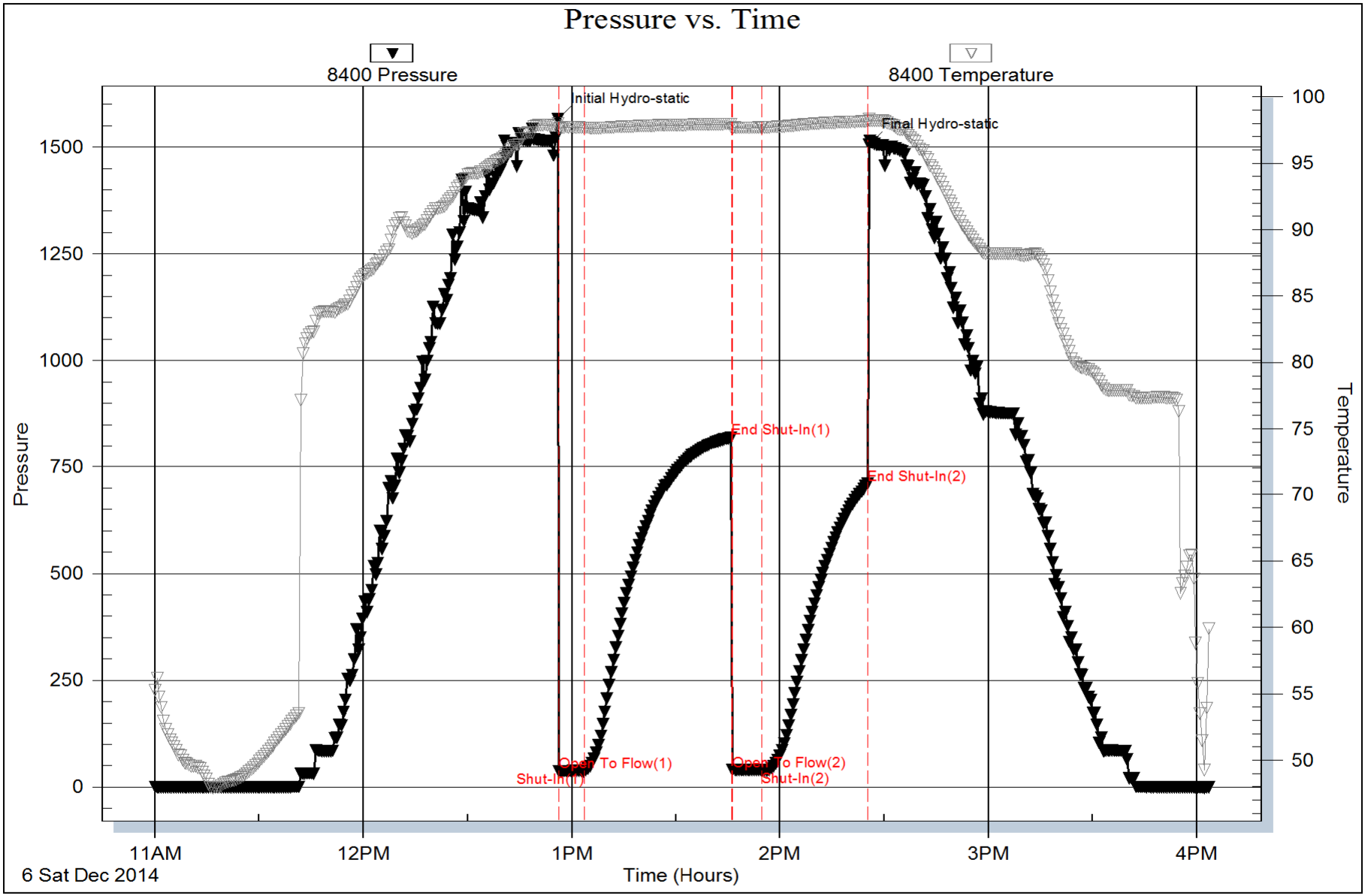
Total Length: 5.00 ft Total Volume: 0.025 bbl

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

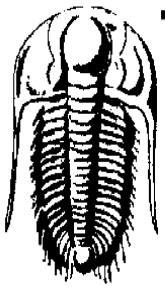
Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8400 AGV corp AR 15 Yarmer #1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 61891 Printed: 2014.12.11 @ 13:05:00



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **AGV corp**

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

AR 15 Yarmer #1

30-15s-15w Russell

Start Date: 2014.12.07 @ 03:20:00

End Date: 2014.12.07 @ 09:50:25

Job Ticket #: 61892 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.12.11 @ 13:05:55

DRILL STEM TEST REPORT

AGV corp

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

30-15s-15w Russell

AR 15 Yarmer #1

Job Ticket: 61892 **DST#: 2**

Test Start: 2014.12.07 @ 03:20:00

GENERAL INFORMATION:

Formation: **LKC ' I J K'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:18:28
Time Test Ended: 09:50:25

Test Type: Conventional Bottom Hole (Initial)
Tester: Jared Scheck
Unit No: S5-Great Bend -70

Interval: 3274.00 ft (KB) To 3354.00 ft (KB) (TVD)
Total Depth: 3354.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

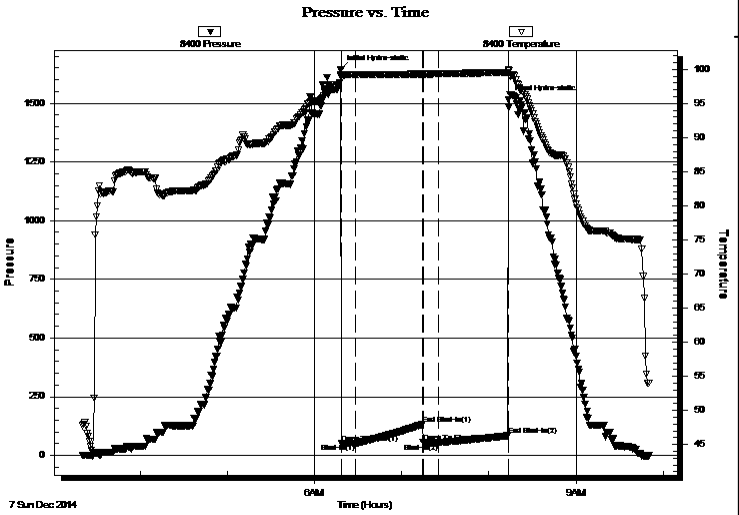
Reference Elevations: 1850.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8400

Press@RunDepth: 53.99 psig @ ft (KB)
Start Date: 2014.12.07 End Date: 2014.12.07
Start Time: 03:20:01 End Time: 09:50:25

Capacity: 5000.00 psig
Last Calib.: 2014.12.07
Time On Btm: 2014.12.07 @ 06:17:54
Time Off Btm: 2014.12.07 @ 08:13:24

TEST COMMENT: IFP-10 Minutes-Weak blow built 1 inch into w ater
ISIP-45 Minutes-No blow back
FFP-10 Minutes-Very w eak surge did not build
FSIP-45 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1643.65	99.22	Initial Hydro-static
1	52.55	99.11	Open To Flow (1)
11	52.40	99.22	Shut-In(1)
57	132.69	99.33	End Shut-In(1)
57	55.98	99.29	Open To Flow (2)
68	53.99	99.35	Shut-In(2)
116	83.81	99.57	End Shut-In(2)
116	1516.57	100.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud spot oil 1%oil 99%mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

AGV corp

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

30-15s-15w Russell

AR 15 Yarmer #1

Job Ticket: 61892 **DST#: 2**

Test Start: 2014.12.07 @ 03:20:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4600.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud spot oil 1%oil 99%mud	0.025

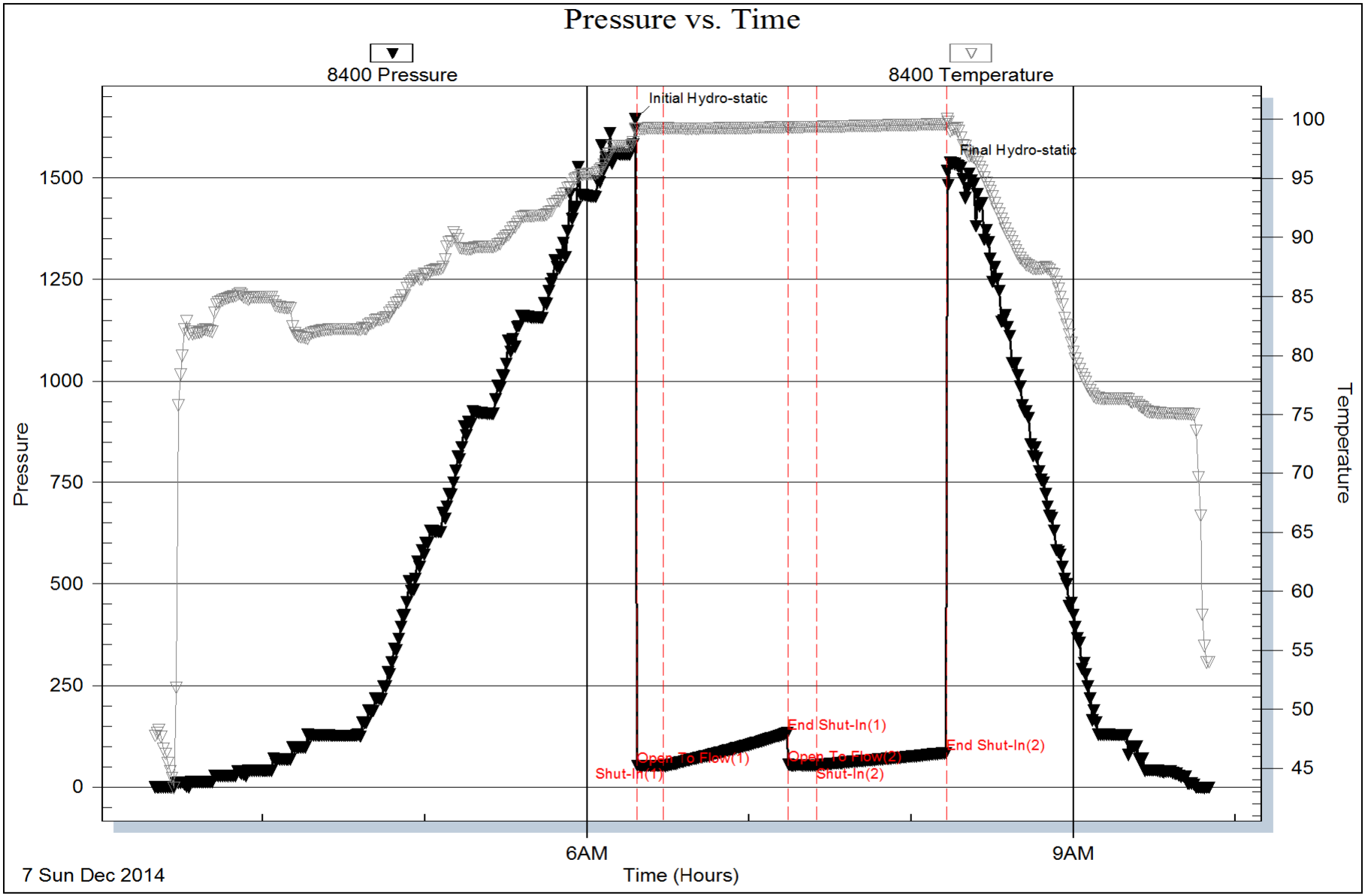
Total Length: 5.00 ft Total Volume: 0.025 bbl

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

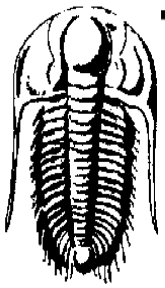
Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8400 AGV corp AR 15 Yarmer #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 61892 Printed: 2014.12.11 @ 13:05:55



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **AGV corp**

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

AR 15 Yarmer #1

30-15s-15w Russell

Start Date: 2014.12.08 @ 19:25:00

End Date: 2014.12.09 @ 01:19:58

Job Ticket #: 61893 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.12.11 @ 13:06:35

DRILL STEM TEST REPORT

AGV corp

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

30-15s-15w Russell

AR 15 Yarmer #1

Job Ticket: 61893 **DST#: 3**

Test Start: 2014.12.08 @ 19:25:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:51:23
Time Test Ended: 01:19:58

Test Type: Conventional Bottom Hole (Initial)
Tester: Jared Scheck
Unit No: S5-Great Bend-70

Interval: 3430.00 ft (KB) To 3440.00 ft (KB) (TVD)
Total Depth: 3440.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

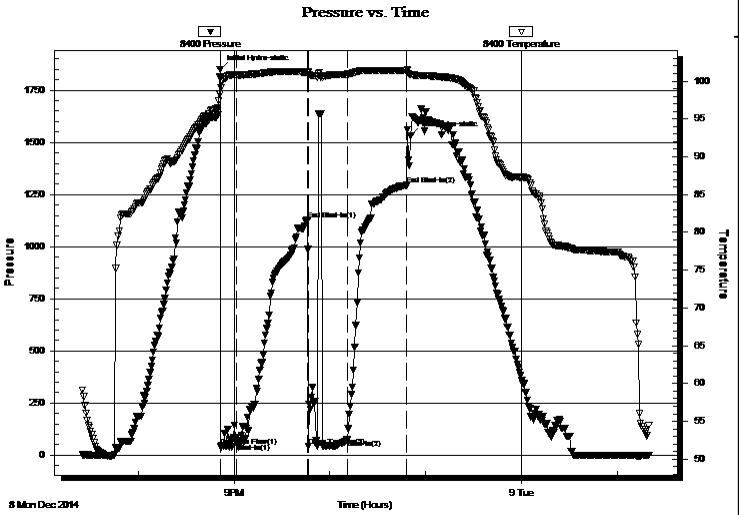
Reference Elevations: 1850.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8400

Press@RunDepth: 77.36 psig @ ft (KB)
Start Date: 2014.12.08 End Date: 2014.12.09
Start Time: 19:25:01 End Time: 01:19:58

Capacity: 5000.00 psig
Last Calib.: 2014.12.08
Time On Btm: 2014.12.08 @ 20:51:08
Time Off Btm: 2014.12.08 @ 22:50:35

TEST COMMENT: IFP-10 Minutes-Weak blow built 1 1/2 inches into bucket
ISIP-45 Minutes-No blow back
FFP-10 Minutes-No blow flushed tool w eak surge did not build
FSIP-45 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1849.91	98.34	Initial Hydro-static
1	43.08	98.35	Open To Flow (1)
11	55.47	100.84	Shut-In(1)
55	1129.65	101.19	End Shut-In(1)
56	43.17	100.78	Open To Flow (2)
80	77.36	100.91	Shut-In(2)
118	1294.78	101.34	End Shut-In(2)
120	1530.54	100.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

AGV corp

Po Box 377 Attica KS 67009+0377

ATTN: Kent Roberts

30-15s-15w Russell

AR 15 Yarmer #1

Job Ticket: 61893 **DST#: 3**

Test Start: 2014.12.08 @ 19:25:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4600.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.025

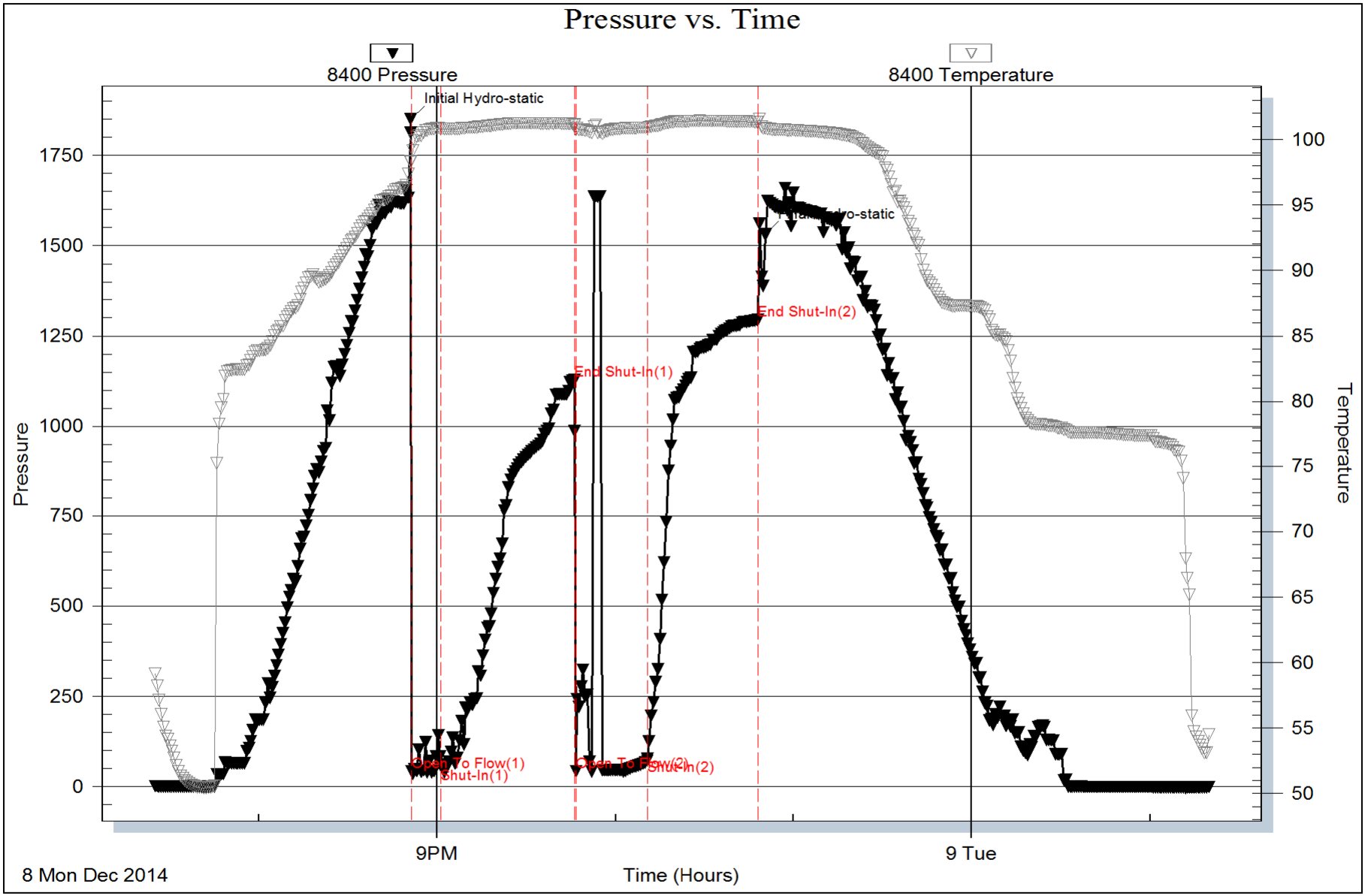
Total Length: 5.00 ft Total Volume: 0.025 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8400 AGV corp AR 15 Yarmer #1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 61893 Printed: 2014.12.11 @ 13:06:36

AGV CORP.

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

Well Name:	**AR-15 Yarmer #1**		
Location:	**Sec. 30-T15S-R15W Russell County, Kansas**		
Licence Number:	**15-167-24019-00-00**	**Region:**	**Wildcat**
Spud Date:	**12/1/2014**	**Drilling Completed:**	**12/8/2014**
Surface Coordinates:	**2279' FSL & 3024' FEL**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**1841'**	**K.B. Elevation (ft):**	**1849'**
Logged Interval (ft):	**2500'** **To: RTD**	**Total Depth (ft):**	**3472'**
Formation:	**Arbuckle**		
Type of Drilling Fluid:	**Chemical Mud by Mud-Co**		

GEOLOGIST

Name: **Kent Roberts**
Company: **Roberts Resources, Inc.**
Address: **2020 N. Tyler, Suite 106**
Wichita, KS 67212
Phone 316-721-2817

INFORMATION

DRILLING CONTRACTOR: Fossil Drilling Rig #2

MUD TYPE: Chemical

DRILLING TIME KEPT FROM: 2500' to RTD

SAMPLES SAVED FROM: 2500' to RTD

SAMPLES EXAMINED FROM: 2850' to RTD

GEOLOGICAL SUPERVISION FROM: 2600' to RTD

ELECTRICAL SURVEYS: None

DAILY ACTIVITY @ 0700 HRS

12/01/2014 MIRT, Spud well 7:30 PM
12/02/2014 Depth 725', drilling w/ 12-1/4 bit
12/03/2014 Depth 965', Wait on Cement (12 hrs)
12/04/2014 Depth 1820', Drilling
12/05/2014 Depth 2703', Drilling
12/06/2014 Depth 3236'. Short trip prior to DST #1
12/07/2014 Depth 3354'. On bottom w/ DST #2
12/08/2014 Depth 3448'. Drilling after DST #3

CASING DATA

CONDUCTOR CASING: None

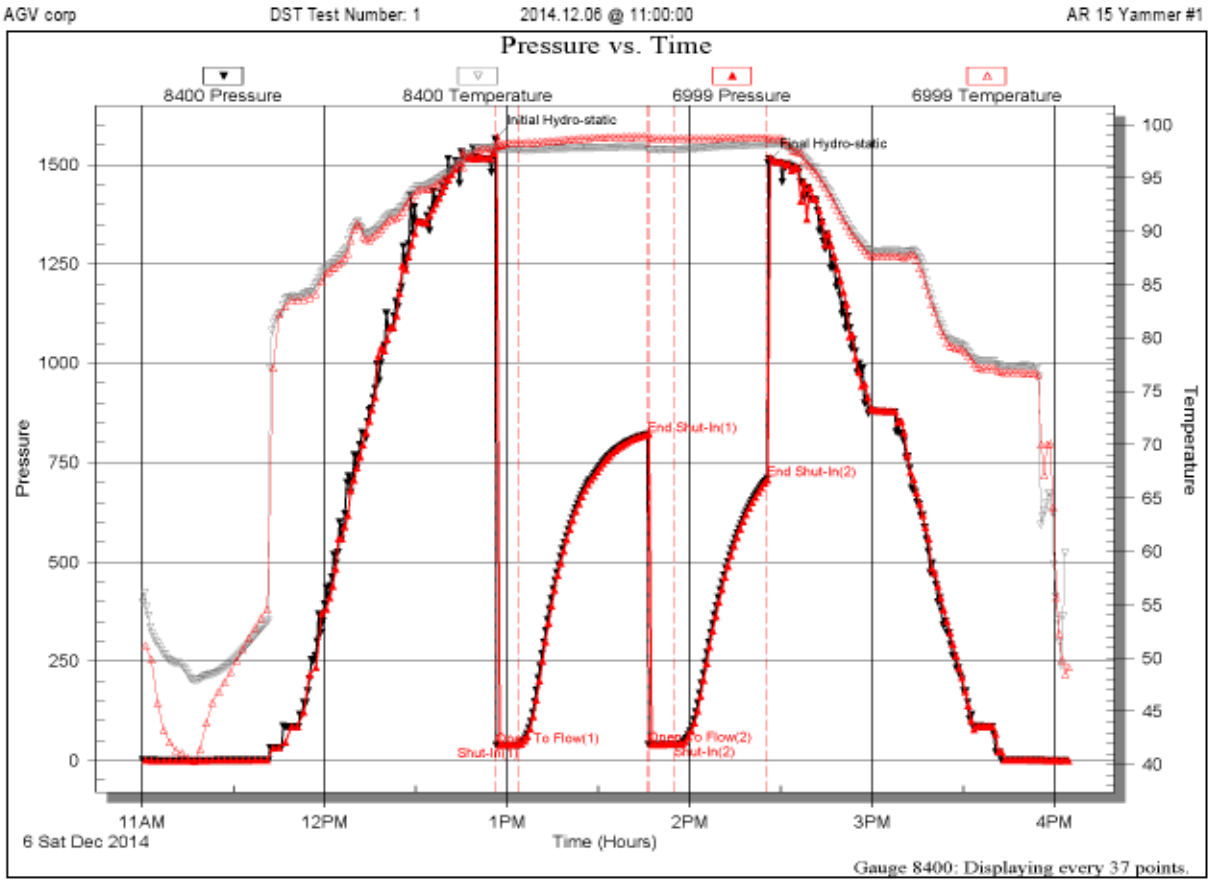
SURFACE CASING: 8-5/8" x 24# LS @ 958' w/ 200 sx Allied Light and 200 sx Common (2% gel, 3% cc)

PRODUCTION : None

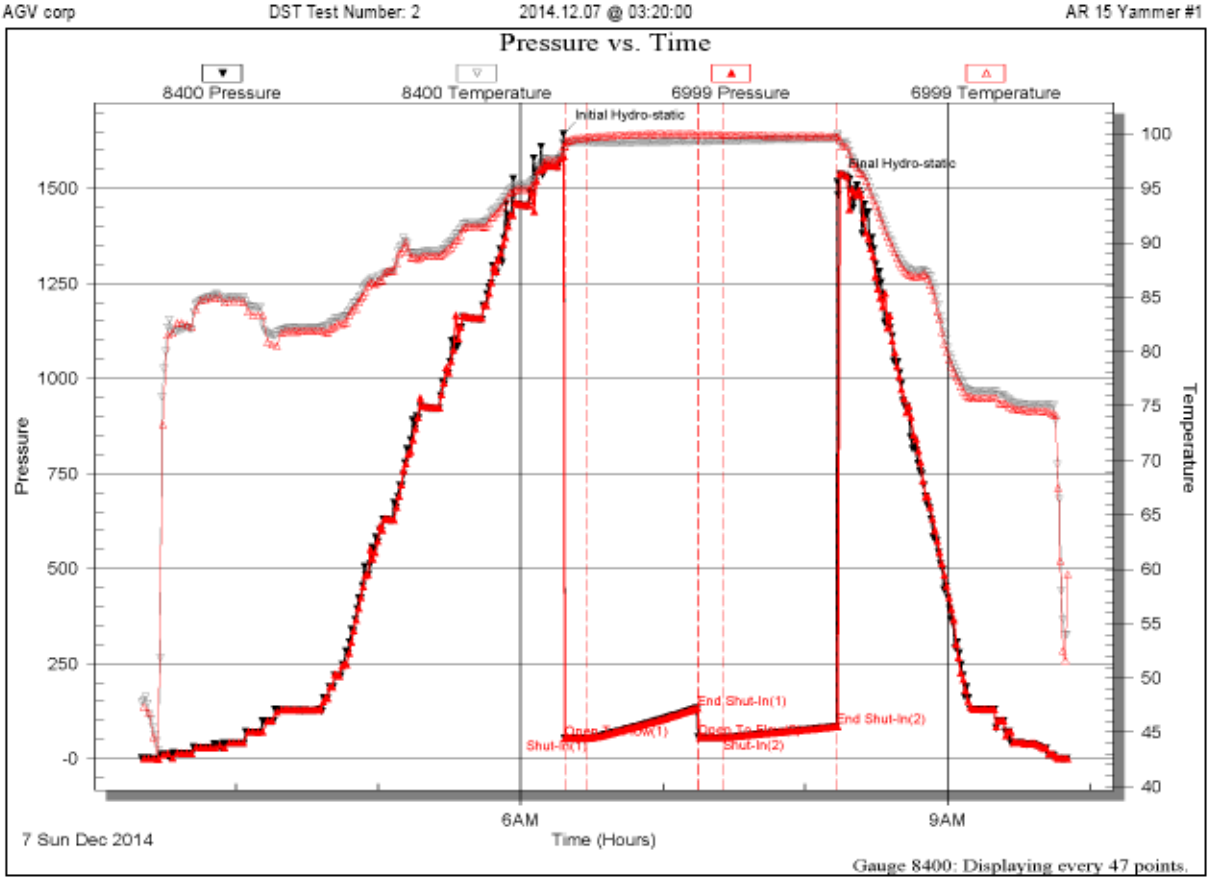
FORMATION TOPS

WELL NAME: AR-15 Yarmer #1 **ELEV. K.B.= 1849**

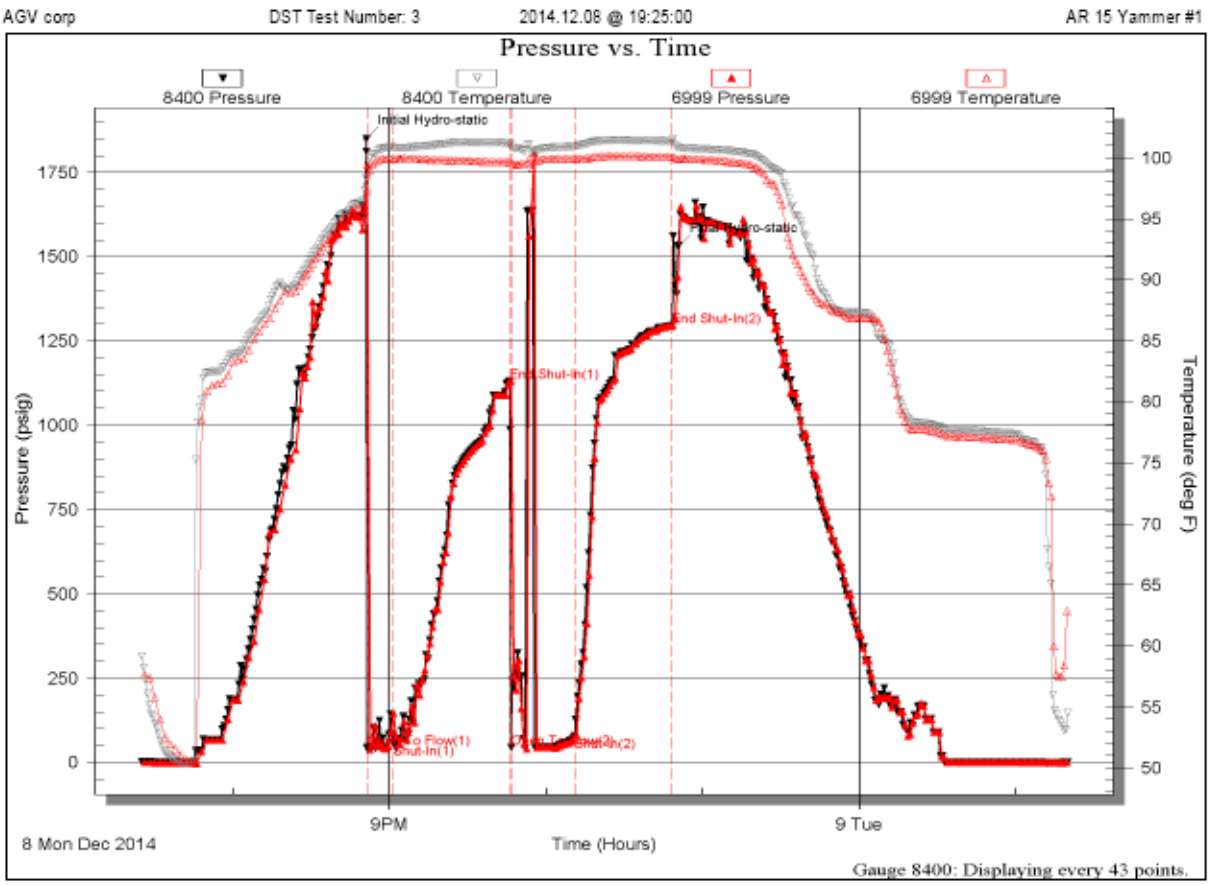
FORMATION TOPS	Sample	E- Log
Anhydrite	924	925
Heebner	3070	-1221
Lansing	3127	-1278
B/KC	3354	-1505
Arbuckle	3425	-1576
TD	3472	-1623



DST #1
3186' to 3236'
5-45-5-30
IF: Weak built to 1 Inch
ISI: No blow
FF: Weak surge, then died
FSI: No blow
Rec: 5' Mud
HP: 1565-1505
FP: 37-37 / 39-40
SIP: 819-710



DST #2
3274' to 3354'
10-45-10-45
IF: Weak built to 1 inch
ISI: No blow
FF: Weak surge, did not build
FSI: No blow
Rec: 5' Oil spotted mud
HP: 1643-1516
FP: 52-52 / 55-53
SIP: 132-83



DST #3
3430' to 3440'
10-45-10-45
IF: Weak built to 1-1/2 inch
ISI: No blow
FF: Weak surge, did not build, Flushed Tool, surge and died
FSI: No blow
Rec: 5' mud
HP: 1849-1530
FP: 43-55 / 43-77
SIP: 1129-1294

COMMENTS

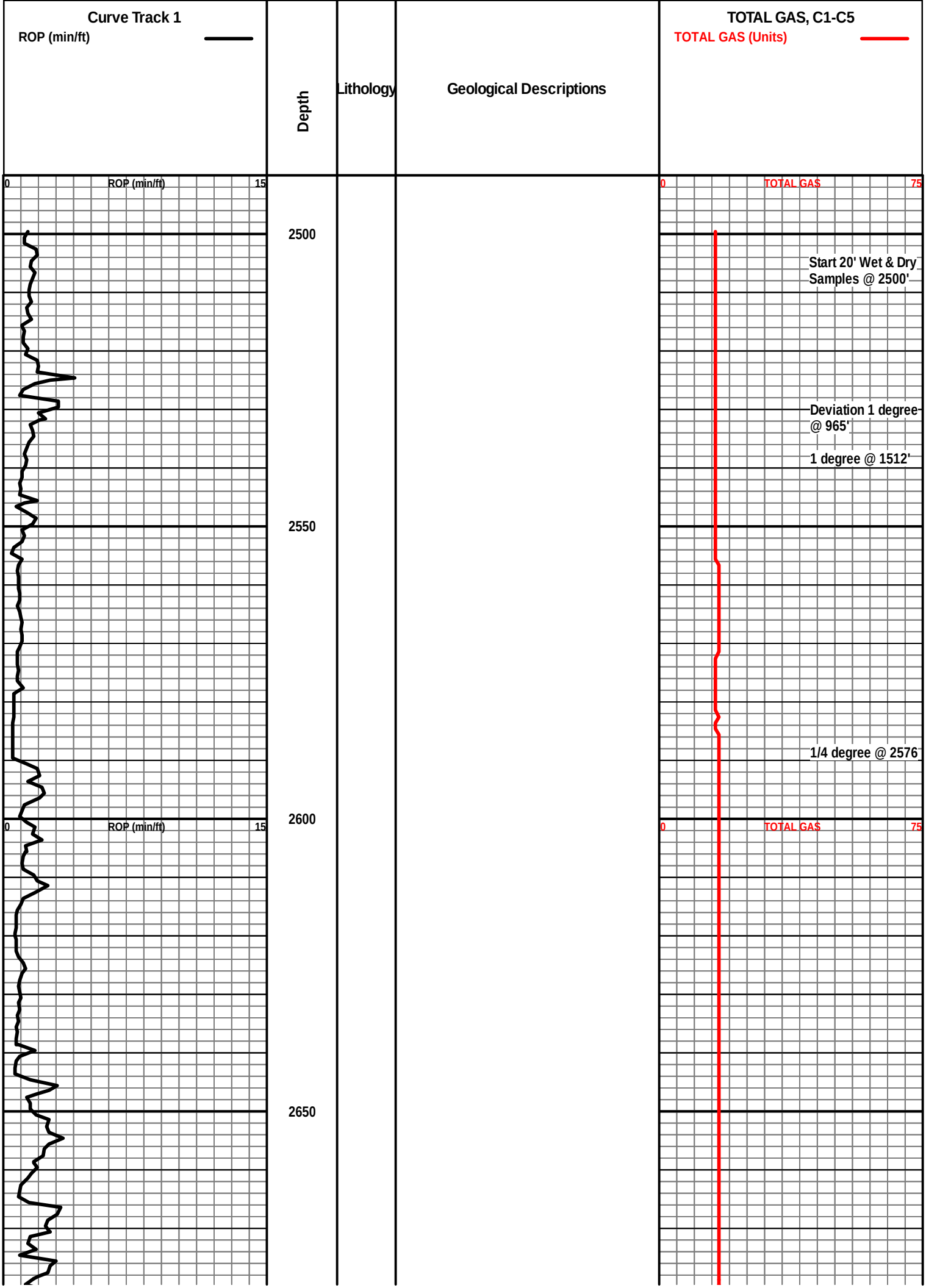
Based upon sample analysis and negative DST results it is recommended the AR-15 Yarmer #1 be plugged and abandoned as a dry hole.

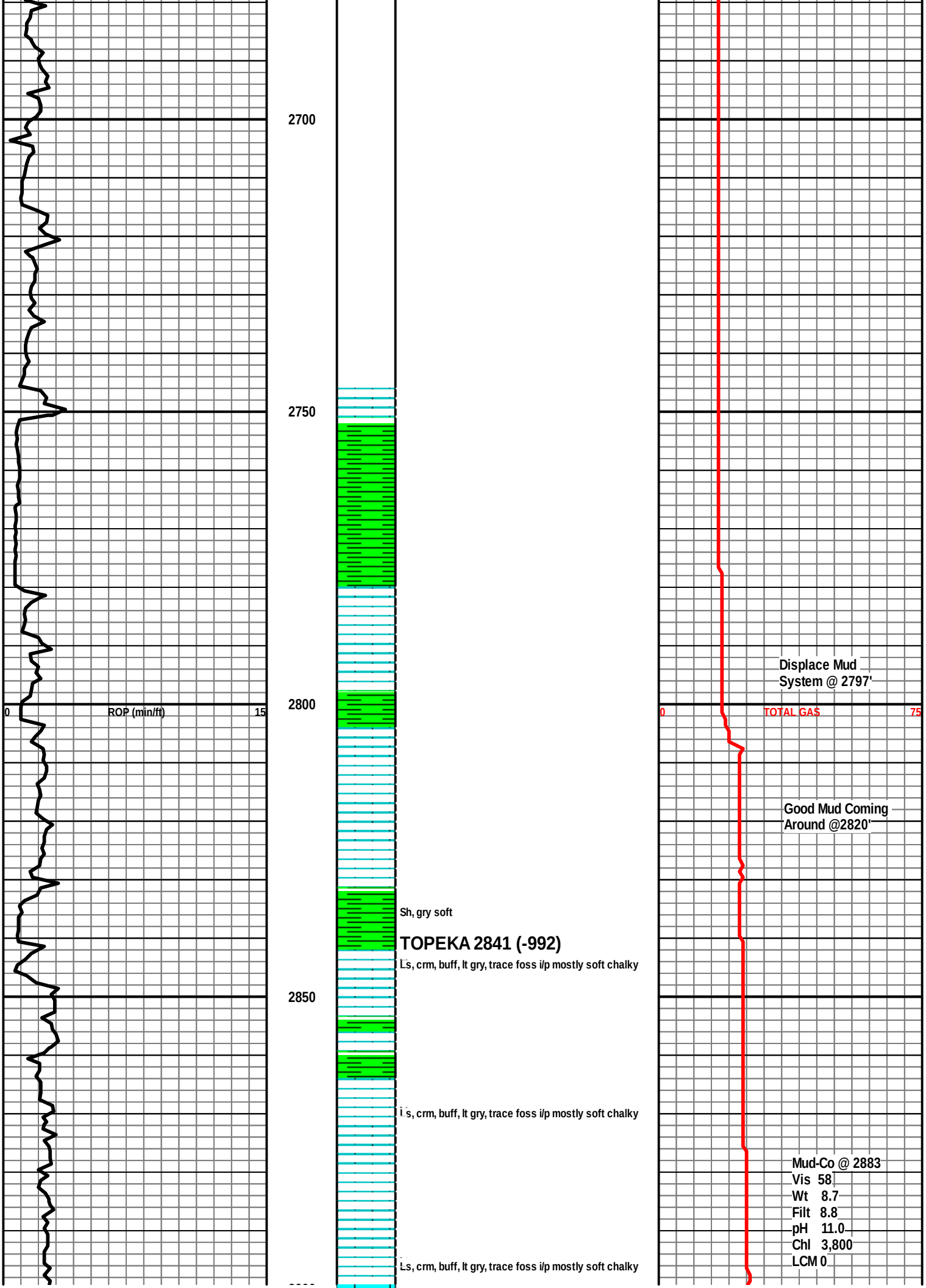
Respectfully Submitted

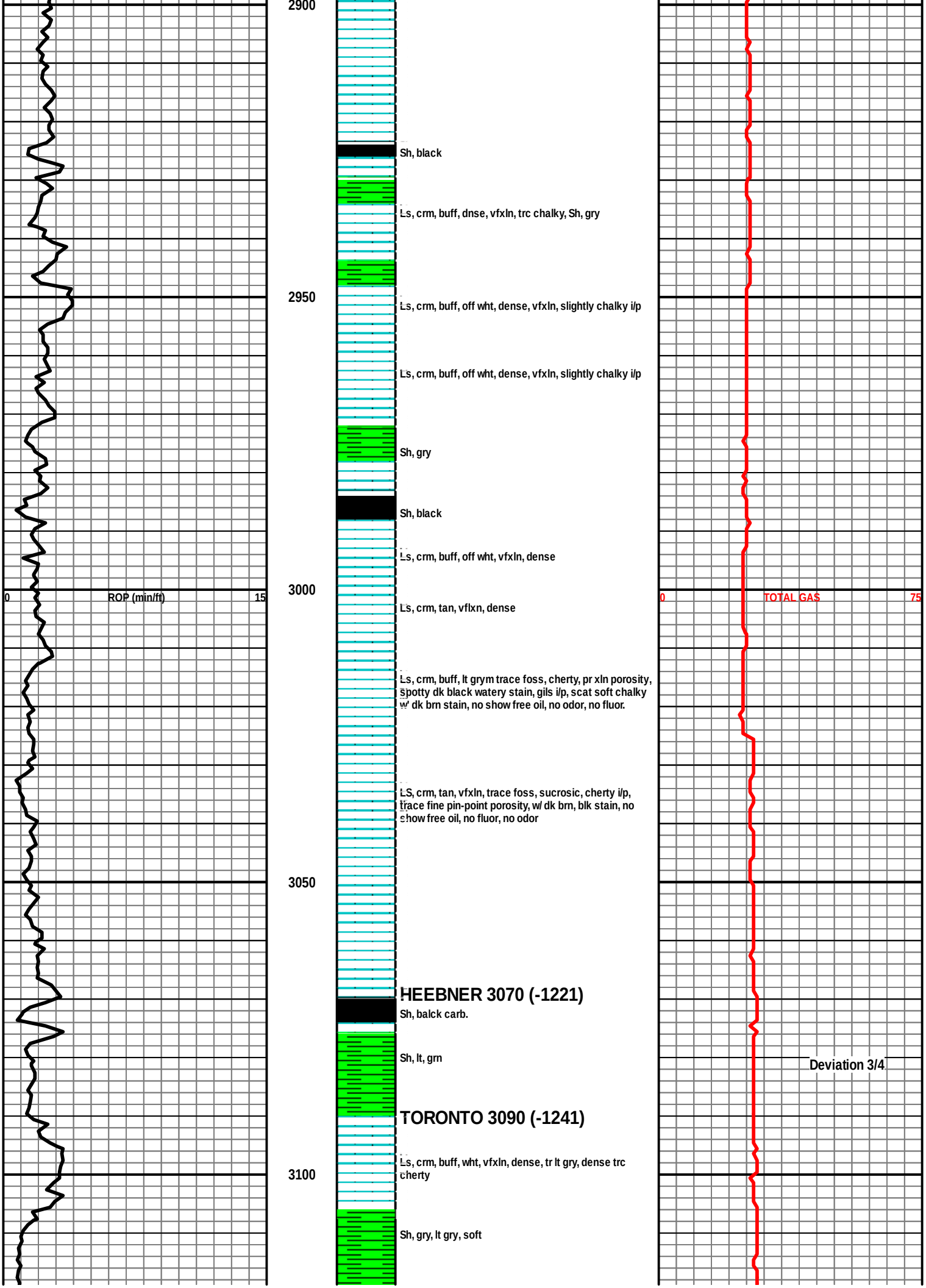
Kent R. Roberts
Geologist

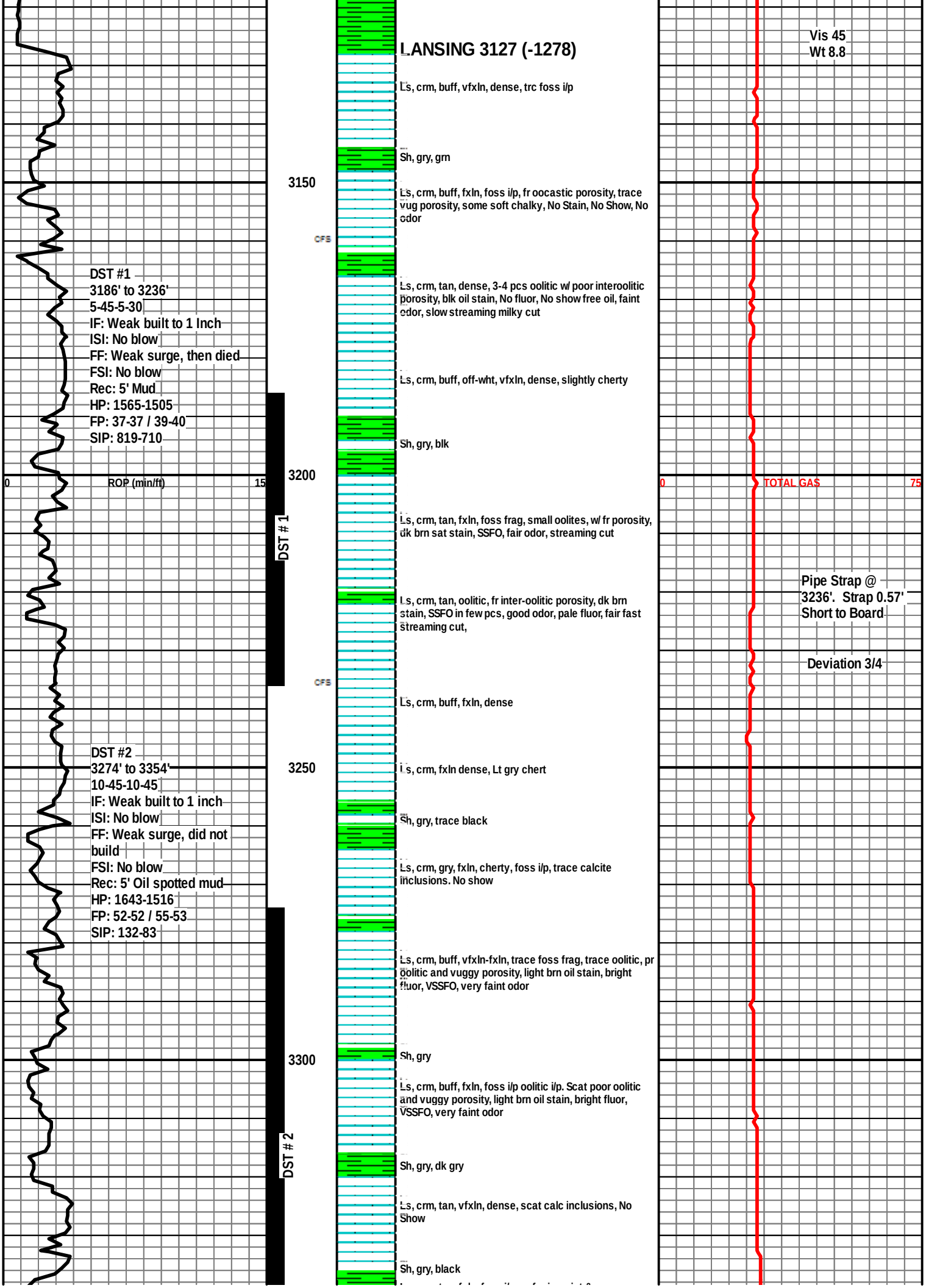
ROCK TYPES

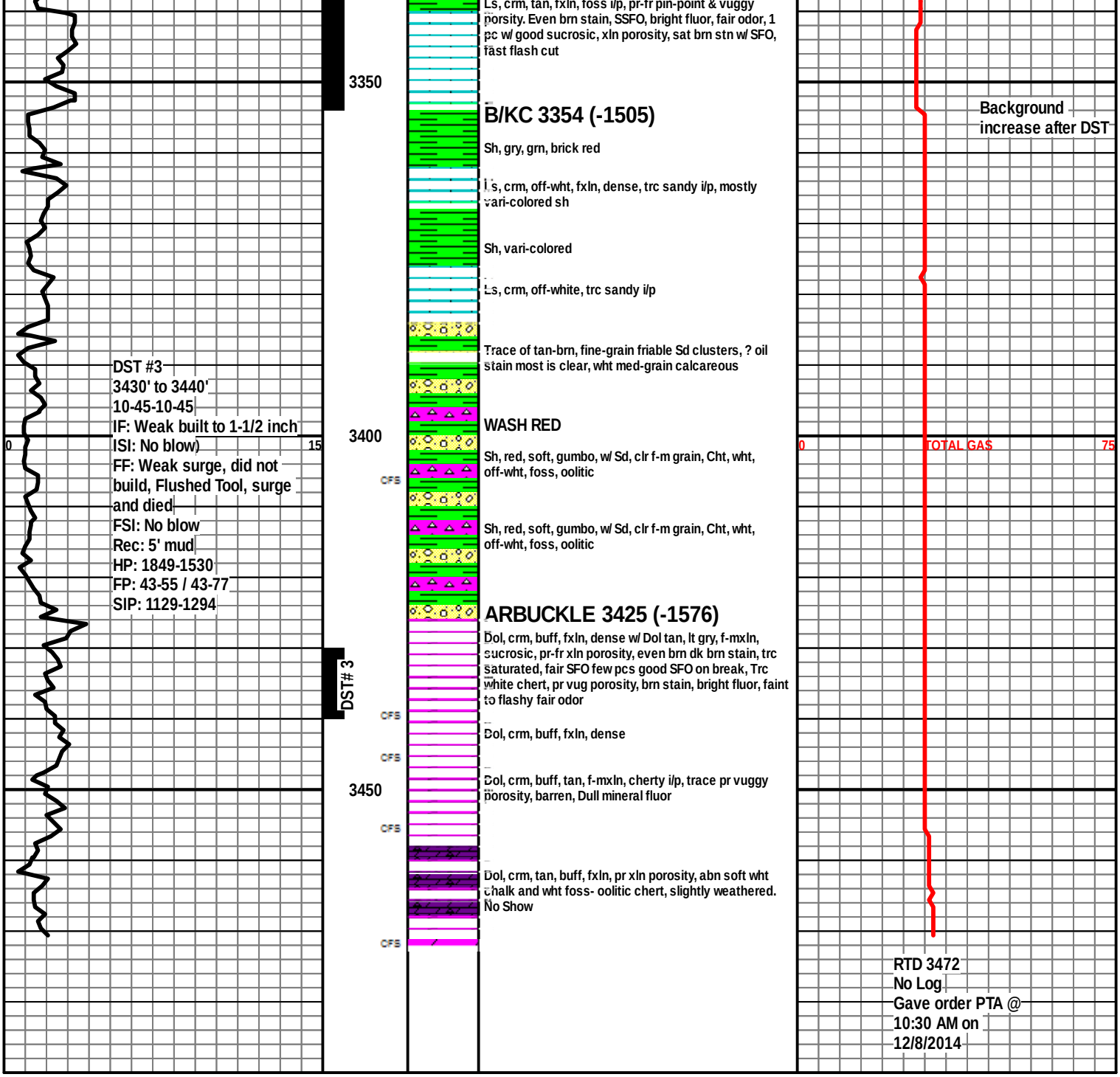
- Anhy
- Cht
- Black shale
- Congl
- Dolomite
- Limestone
- Salt
- Shale
- Cherty dol.
- Siltstone
- Sandstone


Curve Track 1
ROP (min/ft)
Depth
Lithology
Geological Descriptions
TOTAL GAS, C1-C5
TOTAL GAS (Units)
0
ROP (min/ft)
15
0
TOTAL GAS
75
2500
2550
2600
2650
Start 20' Wet & Dry Samples @ 2500'
Deviation 1 degree @ 965'
1 degree @ 1512'
1/4 degree @ 2576'


2700
2750
2800
2850
0
ROP (min/ft)
15
Displace Mud
System @ 2797'
0
TOTAL GAS
75
Good Mud Coming
Around @2820'
Sh, gry soft
TOPEKA 2841 (-992)
Ls, crm, buff, lt gry, trace foss i/p mostly soft chalky
Ls, crm, buff, lt gry, trace foss i/p mostly soft chalky
Mud-Co @ 2883
Vis 58
Wt 8.7
Filt 8.8
pH 11.0
Chl 3,800
LCM 0
Ls, crm, buff, lt gry, trace foss i/p mostly soft chalky


2900
2950
3000
3050
3100
0
ROP (min/ft)
15
0
TOTAL GAS
75
Sh, black
Ls, crm, buff, dnse, vfxln, trc chalky, Sh, gry
Ls, crm, buff, off wht, dense, vfxln, slightly chalky i/p
Ls, crm, buff, off wht, dense, vfxln, slightly chalky i/p
Sh, gry
Sh, black
Ls, crm, buff, off wht, vfxln, dense
Ls, crm, tan, vflxn, dense
Ls, crm, buff, lt grym trace foss, cherty, pr xln porosity, spotty dk black watery stain, gils i/p, scat soft chalky w/ dk brn stain, no show free oil, no odor, no fluor.
LS, crm, tan, vfxln, trace foss, sucrosic, cherty i/p, trace fine pin-point porosity, w/ dk brn, blk stain, no show free oil, no fluor, no odor
HEEBNER 3070 (-1221)
Sh, balck carb.
Sh, lt, grn
TORONTO 3090 (-1241)
Ls, crm, buff, wht, vfxln, dense, tr lt gry, dense trc cherty
Sh, gry, lt gry, soft
Deviation 3/4


LANSING 3127 (-1278)
Ls, crm, buff, vfxln, dense, trc foss i/p
Sh, gry, grn
Ls, crm, buff, fxln, foss i/p, fr oocastic porosity, trace vug porosity, some soft chalky, No Stain, No Show, No odor
Ls, crm, tan, dense, 3-4 pcs oolitic w/ poor interoolitic porosity, blk oil stain, No fluor, No show free oil, faint odor, slow streaming milky cut
Ls, crm, buff, off-wht, vfxln, dense, slightly cherty
Sh, gry, blk
Ls, crm, tan, fxln, foss frag, small oolites, w/ fr porosity, dk brn sat stain, SSFO, fair odor, streaming cut
Ls, crm, tan, oolitic, fr inter-oolitic porosity, dk brn stain, SSFO in few pcs, good odor, pale fluor, fair fast streaming cut,
Ls, crm, buff, fxln, dense
Ls, crm, fxln dense, Lt gry chert
Sh, gry, trace black
Ls, crm, gry, fxln, cherty, foss i/p, trace calcite inclusions. No show
Ls, crm, buff, vfxln-fxln, trace foss frag, trace oolitic, pr oolitic and vuggy porosity, light brn oil stain, bright fluor, VSSFO, very faint odor
Sh, gry
Ls, crm, buff, fxln, foss i/p oolitic i/p. Scat poor oolitic and vuggy porosity, light brn oil stain, bright fluor, VSSFO, very faint odor
Sh, gry, dk gry
Ls, crm, tan, vfxln, dense, scat calc inclusions, No Show
Sh, gry, black
3150
3200
3250
3300
CFS
CFS
DST #1
3186' to 3236'
5-45-5-30
IF: Weak built to 1 Inch
ISI: No blow
FF: Weak surge, then died
FSI: No blow
Rec: 5' Mud
HP: 1565-1505
FP: 37-37 / 39-40
SIP: 819-710
DST #2
3274' to 3354'
10-45-10-45
IF: Weak built to 1 inch
ISI: No blow
FF: Weak surge, did not build
FSI: No blow
Rec: 5' Oil spotted mud
HP: 1643-1516
FP: 52-52 / 55-53
SIP: 132-83
DST # 1
DST # 2
0
ROP (min/ft)
15
0
TOTAL GA$
75
Vis 45
Wt 8.8
Pipe Strap @ 3236'. Strap 0.57' Short to Board
Deviation 3/4


Ls, crm, tan, fxln, foss i/p, pr-fr pin-point & vuggy porosity. Even brn stain, SSFO, bright fluor, fair odor, 1 pc w/ good sucrosic, xln porosity, sat brn stn w/ SFO, fast flash cut
3350
B/KC 3354 (-1505)
Sh, gry, grn, brick red
Ls, crm, off-wht, fxln, dense, trc sandy i/p, mostly vari-colored sh
Sh, vari-colored
Ls, crm, off-white, trc sandy i/p
Trace of tan-brn, fine-grain friable Sd clusters, ? oil stain most is clear, wht med-grain calcareous
WASH RED
3400
Sh, red, soft, gumbo, w/ Sd, clr f-m grain, Cht, wht, off-wht, foss, oolitic
CFS
Sh, red, soft, gumbo, w/ Sd, clr f-m grain, Cht, wht, off-wht, foss, oolitic
ARBUCKLE 3425 (-1576)
Dol, crm, buff, fxln, dense w/ Dol tan, lt gry, f-mxln, sucrosic, pr-fr xln porosity, even brn dk brn stain, trc saturated, fair SFO few pcs good SFO on break, Trc white chert, pr vug porosity, brn stain, bright fluor, faint to flashy fair odor
DST# 3
CFS
Dol, crm, buff, fxln, dense
CFS
3450
Dol, crm, buff, tan, f-mxln, cherty i/p, trace pr vuggy porosity, barren, Dull mineral fluor
CFS
Dol, crm, tan, buff, fxln, pr xln porosity, abn soft wht chalk and wht foss- oolitic chert, slightly weathered. No Show
CFS
DST #3
3430' to 3440'
10-45-10-45
IF: Weak built to 1-1/2 inch
ISI: No blow)
FF: Weak surge, did not build, Flushed Tool, surge and died
FSI: No blow
Rec: 5' mud
HP: 1849-1530
FP: 43-55 / 43-77
SIP: 1129-1294
0
15
0
TOTAL GAS
75
Background increase after DST
RTD 3472
No Log
Gave order PTA @ 10:30 AM on 12/8/2014