

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:		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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:
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Form	ACO1 - Well Completion
Operator	White Exploration, Inc.
Well Name	PLUMMER UNIT 1
Doc ID	1360544

All Electric Logs Run

Compensated Density/Neutron Log
Dual Induction Log
Microlog
Sonic Log

Form	ACO1 - Well Completion
Operator	White Exploration, Inc.
Well Name	PLUMMER UNIT 1
Doc ID	1360544

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	5458-5468	see attachment	

Attached to and Made a Part of
ACO-1 Form for
WHITE EXPLORATION, INC.
PLUMMER UNIT #1
255' FNL and 3810' FEL
Section 6-29S-40W
Stanton County, Kansas
API# 15-187-21336-00-00

Surface Casing Cement

Cemented with 400 sacks of H-con Cement with 6% gel, 3% CC and ¼#/sack of Pheno-seal followed by 225 sacks of Common Cement with 2% CC and ¼#/sack of Pheno-seal.

Production Casing Cement

Cemented with 60 sacks of H-Con Cement with 3% CC, and ¼# Pheno Seal/sack and 200 sacks of H-Long Cement with 10% salt, 5% Cal-set, 5# Kol-Seal/sack, .25% Defoamer and .6% Fluid Loss additive.

Cemented thru DV Tool @ 3199' with 265 sacks of H-Con Cement with 3% CC, and ¼# Pheno-Seal/sack, followed by 150 sacks of Common Cement with 2% CC and ¼# Pheno-Seal/sack.

Plug Mouse Hole with 20 sacks and Rat Hole with 30 sacks of Common Cement with 2 % CC and ¼# Pheno-Seal/sack.

Acid/Fracture Record

Acidized with 1500 gallons of 12% MCA Acid

Frac with 26,712 gallons of 25# Crosslinked Gel, 19,000# of 16/30 Sand and 6,000# of 16/30 Resin Coated San

TREATMENT REPORT



HURRICANE SERVICES INC

Customer:	White Exploration Inc.	Date:	4/27/2017	Ticket No.:	100732
Field Rep:	Terry Baird				
Address:					
City, State:					
County, Zip:					

Field Order No.:	100732	Open Hole:		Perf Depths (ft)	Perfs
Well Name:	Plummer Unit #1	Casing Depth:	1750.09'		
Location:	Johnson City Ks.	Casing Size:	8 5/8 24#		
Formation:		Tubing Depth:			
Type of Service:	Surface	Tubing Size:			
Well Type:	Oil	Liner Depth:			
Age of Well:	New	Liner Size:			
Packer Type:		Liner Top:			
Packer Depth:		Liner Bottom:			
Treatment Via:	Casing	Total Depth:	1750	Total Perfs	0

TIME	INJECTION RATE		PRESSURE		REMARKS	PROP (lbs)	HCL (gls)	FLUID (bbls)
	FLUID	N ₂ /CO ₂	STP	ANNULUS				
5:00 PM					Called Out			
10:30 PM					On Location W/ FE			
8:00 AM					On Location W/ Trucks			
					Hold Safety Meeting Spot & Set Up Trucks			
					Run 41 Joints 8 5/8 24# Casing Set @ 1750.09			
					Reg Guide Shoe & AFU Insert First Jt=42.70'			
					Centralizers on Jt's 1/2 way First Jt 30-31			
					Cement Basket On Jt Pin 31			
9:30 AM					Start Casing			
10:45 AM					Casing On Bottom Drop Ball			
10:55 AM					Hook Up To Casing & Break Circulation W Rig			
11:10 AM	3.5		150.0		Start Pumping H2O			10.00
11:15 AM	5.0		200.0		Start Mix Lead 400 8x H-Con 3%C.C. 1/4#8x Pheno-Seal			
					11.6 #Gal			
12:00 PM	5.5		220.0		Start Mix Tail 200 8x Common 3%C.C. 1/4#8x Pheno-Seal			219.00
					2% Gel 14.8 #Gal			
12:16 PM					Shut Down Release 8 5/8 Top Rubber Plug			55.00
12:18 PM	3.0		100.0		Start Displacement H2O			
TOTAL:						-	-	395.00

SUMMARY

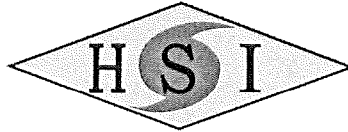
Max Fl. Rate	Avg Fl. Rate	Max PSI	Avg PSI
6.5	3.8	1,000.0	334.0

PRODUCTS USED

Treater: Todd Seba

Customer: Juan

TREATMENT REPORT



HURRICANE SERVICES INC

Customer: White Exploration Inc.	Date: 5/5/2017	Ticket No.: 100733
Field Rep:		
Address:		
City, State:		
County, Zip:		

Field Order No.: 100733	Open Hole:	Perf Depths (ft)	Perfs
Well Name: Plummer Unit #1	Casing Depth: 5651'		
Location: Johnson City	Casing Size: 5 1/2 15.5 Lb		
Formation:	Tubing Depth:		
Type of Service: 2 Stage 5 1/2 L.S.	Tubing Size:		
Well Type: Oil	Liner Depth:		
Age of Well: New	Liner Size:		
Packer Type:	Liner Top:		
Packer Depth:	Liner Bottom:		
Treatment Via: Casing	Total Depth: 5652'		
		Total Perfs	0

TIME	INJECTION RATE		PRESSURE		REMARKS	PROP (lbs)	HCL (gls)	FLUID (bbls)
	FLUID	N2/CO2	STP	ANNULUS				
3:30 PM					Called Out			
7:30 PM					On Location W/Float Equipment			
					TD= 5652' TP=5652' Sj=22.51'			
					Rotate Scratchers On Jt's 4-5-6-7 = 120'			
					AFU Float Shoe & LD Plug & Baffle 1 St=22.51'			
					Turbolizers on Jt's 2-3-4-5-6-7-9-11-14-18-22-28-34-40-46			
					Cement Baskets on Jt's 2-57			
					DV Tool =3200' Collar Jt 57 pin Jt 58			
6:30 AM					Start Casing			
7:44 AM					Break Circulation W/Rig Jt 57			
9:40 AM					Casing on Bottom Drop Ball			
10:05 AM					Hook Up to Casing Break Circulation W/Rig			
					Ball went thru 1000 Psi Start Rotate Casing 600 Psi 1 Hour			
					Start Pumping Preflushes			
11:05 AM	4.5		250.0		5 BBI's H2O			5.00
					12 BBI's Mud Flush			12.00
					5 BBI's H2O			5.00
11:13 AM	4.0		300.0		Start Mix & Pump 60 Sk H-Con @ 12.1 Lb/Gal			27.35
TOTAL:						-	-	518.14

SUMMARY

Max Fl. Rate	Avg Fl. Rate	Max PSI	Avg PSI
6.0	3.7	1,500.0	511.9

PRODUCTS USED

Treater: Todd Seba

Customer: Terry Baird

TREATMENT REPORT



HURRICANE SERVICES INC

TIME	INJECTION RATE		PRESSURE		REMARKS	PROP (lbs)	HCL (gls)	FLUID (bbls)
	FLUID	N2/CO2	STP	ANNULUS				
11:22 AM	4.0		350.0		Start Mix & Pump 200 sk H-Long @ 15 Lb/Gal			51.29
11:45 AM					Shut Down Clear Pump & Lines Release LD Plug			15.00
11:51 AM	1.0		150.0		Start Displacement 2% KCL			
	6.0		200.0		Inc Rate			2.00
	5.0		750.0		90 Out Lift Psi Slow Rate			88.00
			850.0		110 Out			
12:15 PM	3.0		1,500.0		137 Out Plug Down			47.00
					Release Psi Float Held 3/4 BBI Back			
					Drop Open Tool & Load Closing Plug			
12:20 PM	4.5		800.0		Open DV Tool 800 Psi circulate 400 W/ Pump Truck			5.00
					Shut Down Hook Up to Rig Circulation 2 Hours			
2:43 PM	3.0		100.0		Start Plug Rat & Mouse Holes 50 Sk H-Con			10.00
2:58 PM	4.5		200.0		Start Mix & Pump 265 Sk H-Con @ 12 Lb/Gal			121.00
3:30 PM	4.0		200.0		Start Mix & Pump 150 Sk Common @ 14.8 Lb/Gal			37.00
3:40 PM					Shut Down Clear Pump & Lines Release Closing Plug			15.00
3:51 PM	1.0		120.0		Start Displacement			
	5.5		170.0		Inc Rate			1.00
	4.0		750.0		54 Out Slow Rate			53.00
4:10 PM	1.0		1,500.0		Plug Down Psi up 2000 Lb			23.50
					Release Psi Held 1/2 BBI Back			
					Wash Up & Rack Up			
5:00 PM					Off Location			
					Thank You			
					Please Call Again			
					Todd Tony Darren Sheldon Cody			
					1 St Stage			
					Lead 60 Sk H-Con 3% C.C. 1/4 Lb/sk Pheno-Seal			
					200 Sk H-long 10% Salt 5% Calset 5 Lb/sk Koseal			
					.6% CFL-160 .25% CAF-38			
					2 nd Stage			
					265 Sk H-Con 3% C.C. 1/4 Lb/sk Pheno-Seal			
					150 Sk Common 2% C.C. 1/4 Lb/sk Pheno-Seal			
					Circulate Cement To Pit			
					50 Sk H-Con 3% C.C. 1/4 Lb/Sk Pheno-Seal			



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

White Exploration, Inc.

6/29/40

1635 N Waterfront PKWY Suite 100 Wichita, KS 67206

Plummer Unit 1

Job Ticket: 59463

DST#: 1

ATTN:

Test Start: 2017.05.03 @ 09:34:00

GENERAL INFORMATION:

Formation: **Keys**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:45:10

Time Test Ended: 18:24:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

Interval: 5350.00 ft (KB) To 5450.00 ft (KB) (TVD)

Reference Elevations: 3331.00 ft (KB)

Total Depth: 5450.00 ft (KB) (TVD)

3321.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8289

Inside

Press@RunDepth: 136.96 psig @ 5382.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.05.03

End Date:

2017.05.03

Last Calib.:

1899.12.30

Start Time:

09:34:02

End Time:

18:24:45

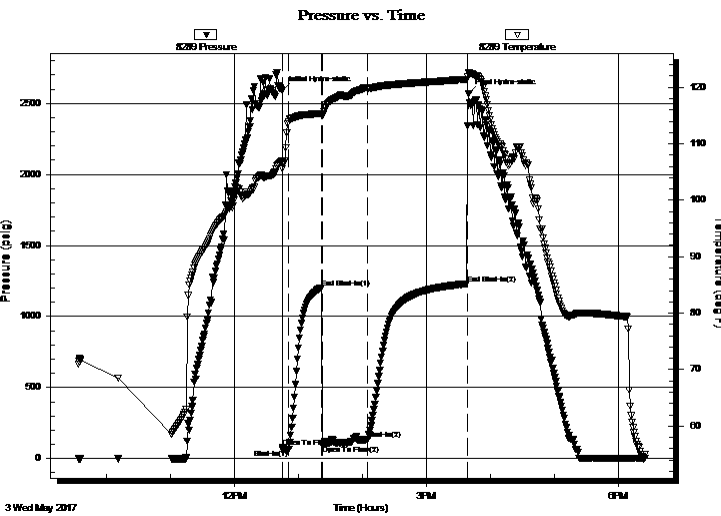
Time On Btm:

2017.05.03 @ 12:44:45

Time Off Btm:

2017.05.03 @ 15:39:45

TEST COMMENT: IF: BOB 2 min., strong building blow
 IS: No blow back
 FF: BOB ASAO, strong dieing blow
 FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2588.76	106.95	Initial Hydro-static
1	76.22	105.56	Open To Flow (1)
7	65.11	113.95	Shut-In(1)
37	1203.01	115.37	End Shut-In(1)
38	92.35	115.13	Open To Flow (2)
81	136.96	119.81	Shut-In(2)
174	1229.89	121.42	End Shut-In(2)
175	2570.18	122.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
275.00	gassy oily mud 10%G,5%O,85%M	1.62

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

White Exploration, Inc.

6/29/40

1635 N Waterfront PKWY Suite 100 Wichita, KS 67206

Plummer Unit 1

Job Ticket: 59463

DST#: 1

ATTN:

Test Start: 2017.05.03 @ 09:34:00

GENERAL INFORMATION:

Formation: **Keys**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:45:10

Time Test Ended: 18:24:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

Interval: 5350.00 ft (KB) To 5450.00 ft (KB) (TVD)

Reference Elevations: 3331.00 ft (KB)

Total Depth: 5450.00 ft (KB) (TVD)

3321.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6672 Outside

Press@RunDepth: psig @ 5382.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.05.03

End Date:

2017.05.03

Last Calib.:

1899.12.30

Start Time: 09:34:02

End Time:

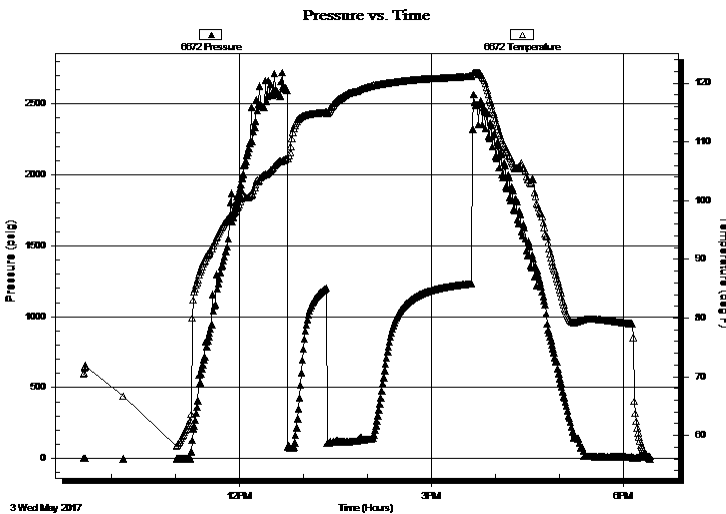
18:24:45

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: BOB 2 min., strong building blow
 IS: No blow back
 FF: BOB ASAO, strong dieing blow
 FS: No blow back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
275.00	gassy oily mud 10%G,5%O,85%M	1.62

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

White Exploration, Inc.

6/29/40

1635 N Waterfront PKWY Suite 100 Wichita, KS
67206

Plummer Unit 1

Job Ticket: 59463

DST#: 1

ATTN:

Test Start: 2017.05.03 @ 09:34:00

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:

3600 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
275.00	gassy oily mud 10%G,5%O,85%M	1.617

Total Length: 275.00 ft Total Volume: 1.617 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler=1000psi, 25%G,5%O,70%M 3600ppm

RW=1.450@85=3600ppm

2230' GIP

Serial #: 8289

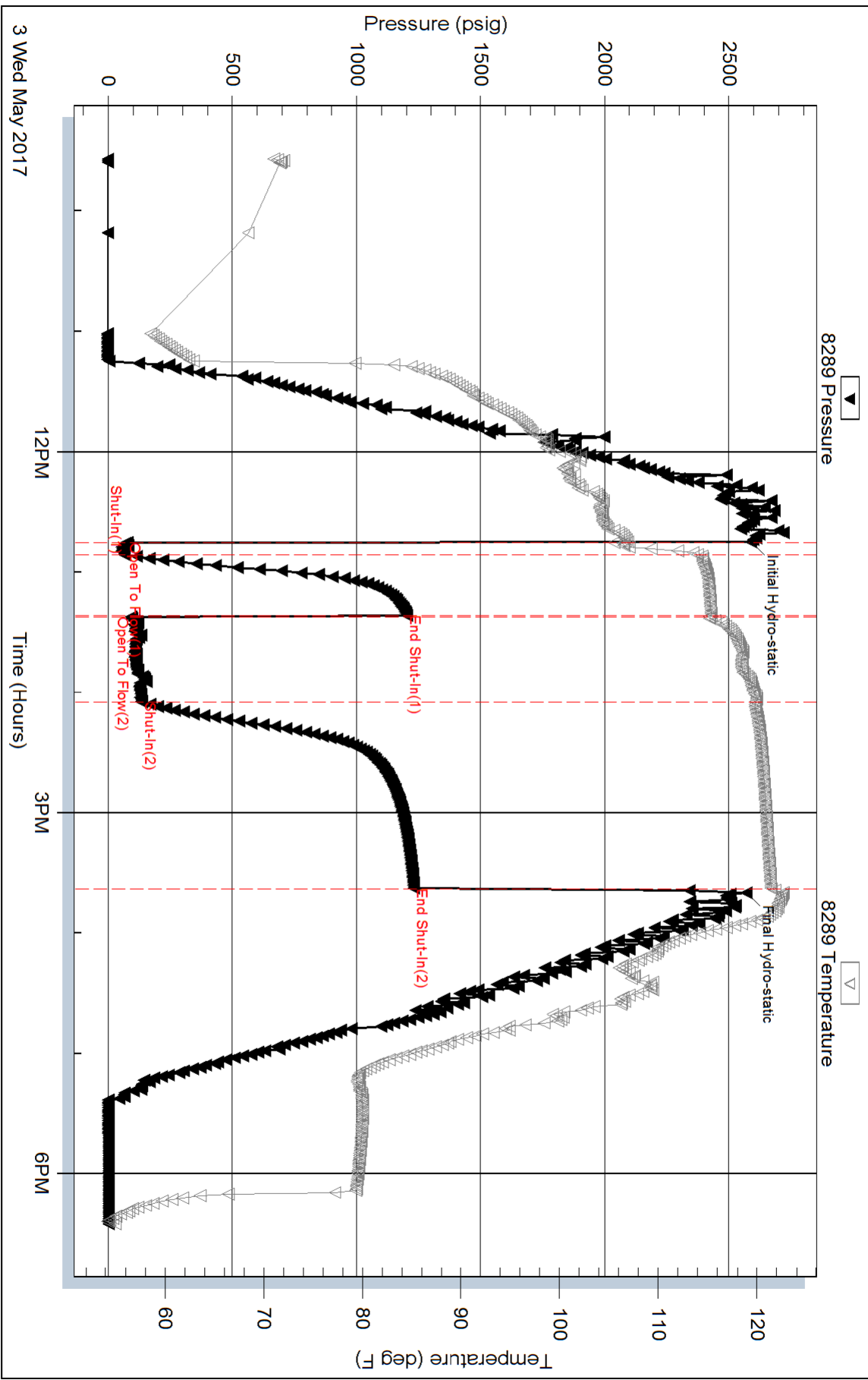
Inside

White Exploration, Inc.

Pumper Unit 1

DST Test Number: 1

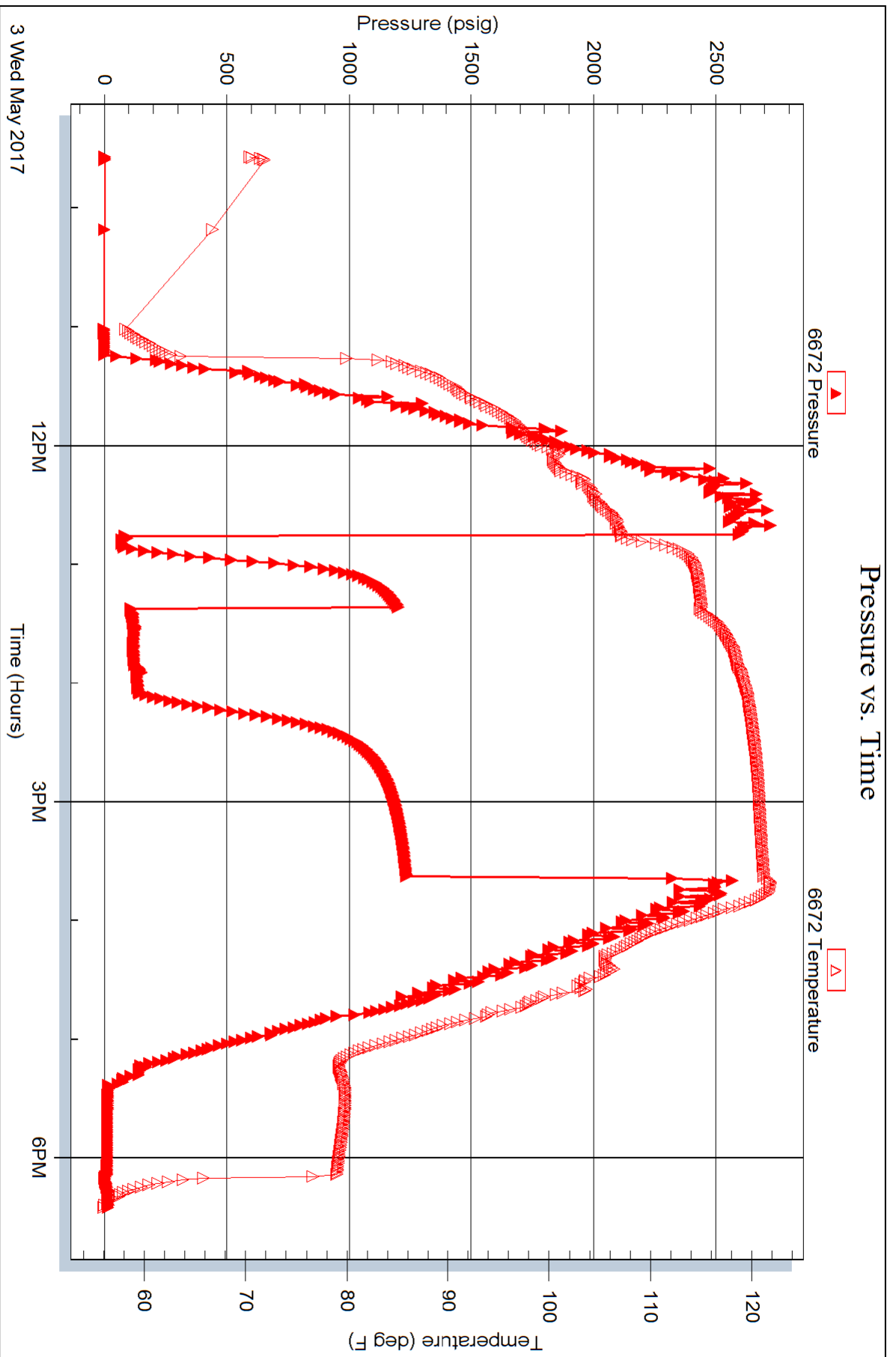
Pressure vs. Time



Triobite Testing, Inc

Ref. No: 59463

Printed: 2017.05.03 @ 19:13:24





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

Well Name: Plummer Unit #1
Location: 6-29SW-40W
License Number: API: 15-187-21336
Spud Date: 04/25/2017
Surface Coordinates: 255' FNL, 3810' FEL

Region: Stanton Co., KS
Drilling Completed: 05/04/2017

Bottom Hole
Coordinates:
Ground Elevation (ft): 3319 K.B. Elevation (ft): 3330
Logged Interval (ft): 4200 To: 5650 Total Depth (ft): 5650
Formation: Mississippian
Type of Drilling Fluid: Chemical

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

OPERATOR

Company: White Exploration, Inc.
Address: 1635 N. Waterfront Pkwy
Ste. 100
Wichita, KS, 67206

GEOLOGIST

Name: Andrew White
Company: White Exploration, Inc.
Address:

Remarks

Due to positive DST results and log evaluation, the decision to run pipe was made to test the Keyes Sand interval.

General Info

Drilling Contractor: Murfin Rig 21

Logs: ELI Wireline Services
Compensated Density/Neutron, Dual, Micro, Sonic

Drilling Mud: Mudco/Service Mud, Inc.

DST: Trilobite

Surveys: 499'-.5, 1003'-.4, 1750'-.7, 2274'-.6, 3097'-.2, 3794'-.6, 5450'-1.6, 5650'-1.5

Daily Status

04/25/17: MIRT and spud @ 2:30 p.m.

04/26/17: Drilling ahead @ 992'

04/27/17: Conditioning hole for Surface casing, set 41 jts 8-5/8" 24# casing @ 1750', 400 sacks H-con cement w/ 6% gel, 3% cc and 1/4 sac Phenoseal, 225 sacks common w/ 2%cc and 1/4 sac Phenoseal

04/28/17: Drilling ahead @ 1917'

04/29/17: Drilling ahead @ 2973'

04/30/17: Drilling ahead @ 4105', Storm shut down rig, come out of hole to circ in Surface casing

05/01/17: circ behind surface, waiting on dozer @ 4359'

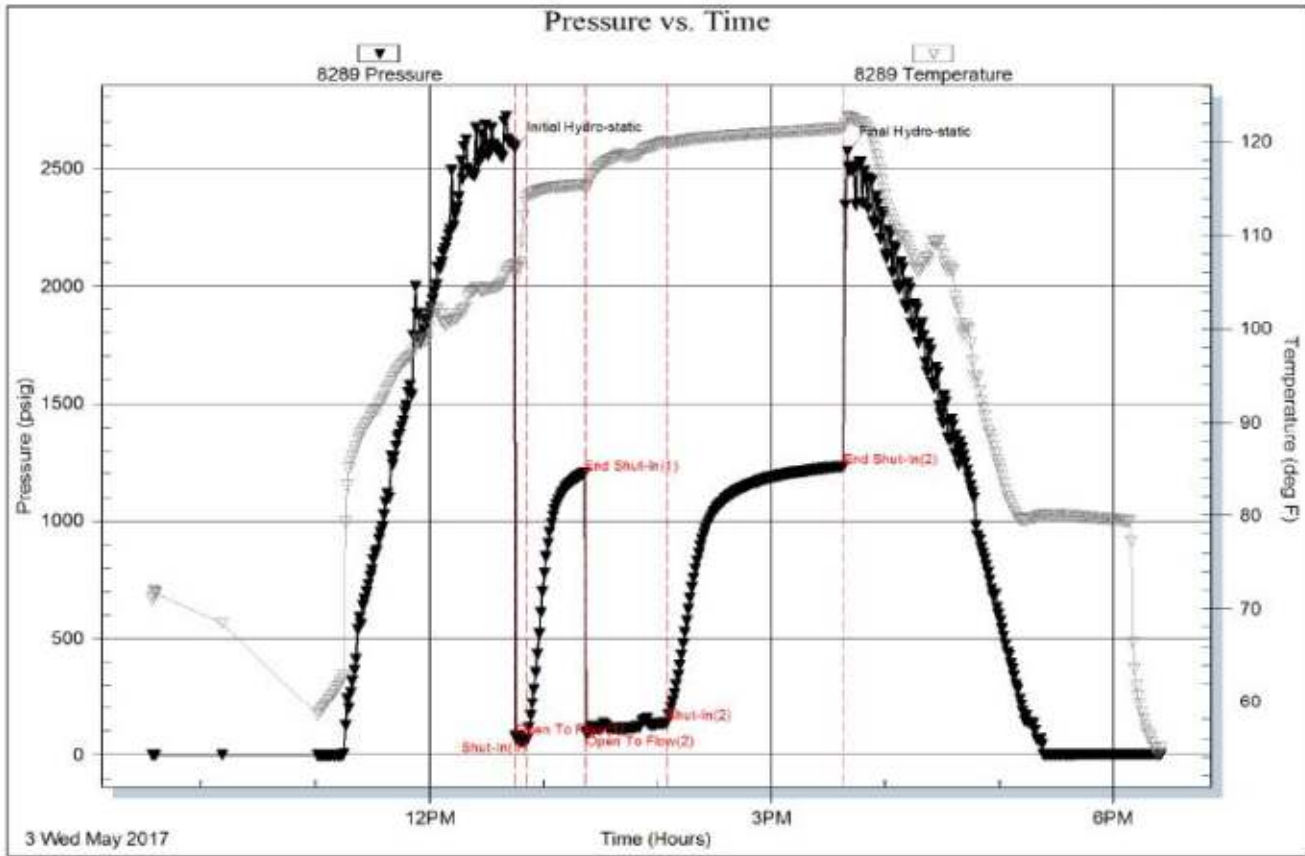
05/02/17: Drilling ahead @ 4753'

05/03/17: Circ @ 5450' for DST #1

05/04/17: Drilling ahead @ 5634'

05/05/17: Running 5-1/2" 15.5# production casing @ 5652', cemented with 200 sacks H-Long Cement, DV tool @ 3199', cemented with 415 sacks of H-Con common

	White Ex				White			Berexco			White			Stelbar	
	Arnold #2				Arnold #1			RA 1-6			Arnold #2			Plummer 1-31	
	6-29S-40W				6-29S-41W			6-29S-40W			6-29S-40W			31-28S-40W	
	1285' FSL, 2240' FEL				490'FSL, 1515' FEL			800' FSL, 2975' FEL			1285' FSL, 2240' FEL			1310' FSL, 1300' FEL	
	KB:3330				KB: 3322			KB: 3330			KB: 3325			KB: 3321	
	Sample	Log	Datum		Relationship			Relationship			Relationship			Relationship	
Heebner		3687	-357		+14			+12			+3			+10	
Lansing		3746	-416		+13			+21			+5			+5	
Cherokee	4538	4541	-1211		+14			+3			-1			+11	
Morrow	5014	5025	-1695		+4			-4			-10			+2	
LMM	5340	5342	-2012		+7			+2			-3			-8	
Miss	5560	5546	-2216		-17			-5			-33			+19	



ROCK TYPES

LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl

- Dol
- Gyp
- Ign
- Lmst
- Meta
- Mrlst
- Salt
- Shale

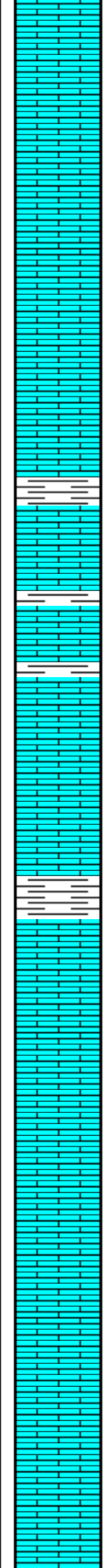
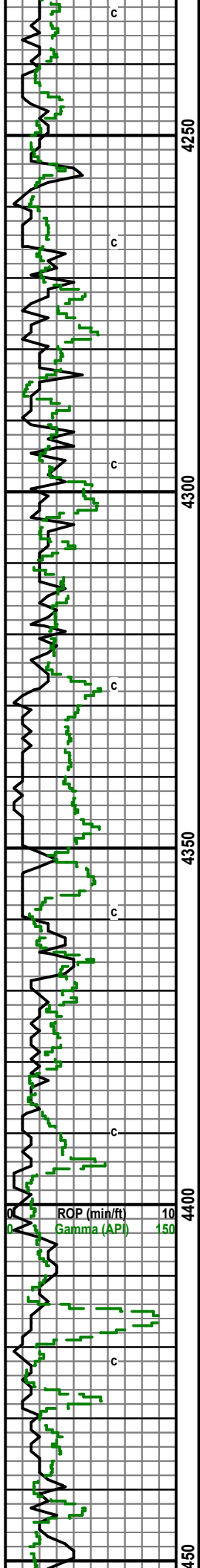
- Shcol
- Shgy
- Sltst
- Ss
- Till

- STRINGER**
- Anhy

- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg

- OIL SHOW**
- Even
 - Spotted
 - Ques
 - Dead

Curve Track 1		Depth	Lithology	Geological Descriptions	TG, C1-C5				
ROP (min/ft)	Gamma (API)				TG (Units)	C1 (units)	C2 (units)	C3 (units)	C4 (units)
0	0	42	LS: gry, mcxln, Sh: gry						



LS: gry-crm, mcrxln

LS: gry-crm, mcrxln, some fxln, sli fos

LS: gry-crm, fxln, some mcrxln, fos

LS: crm, sli gry, f-mcrxln, sli fos, sli chalky, Sh: gry-lt gry

LS: crm-gry, fxln, some mcrxln-gran, fos, sli chalky, Sh: A.A.

No Sample

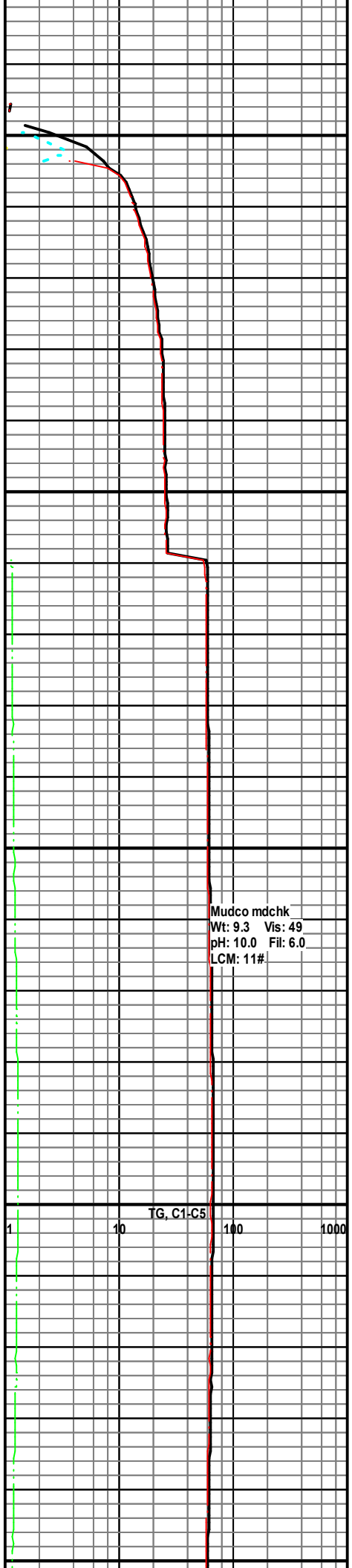
LS: tan-crm, sli gry, mcrxln, some fxln, few ool, Sh: gry-lt gry

LS: crm, sli tan-gry, mcrxln, sli fos

LS: crm, mcrxln, ool, chalky

A.A.

LS: gry, mcrxln, sli chalky



Mudco mdchk
 Wt: 9.3 Vis: 49
 pH: 10.0 Fil: 6.0
 LCM: 11#

TG, C1-C5

ROP (min/ft) 10
 Gamma (API) 150

4250

4300

4350

4400

4500

c

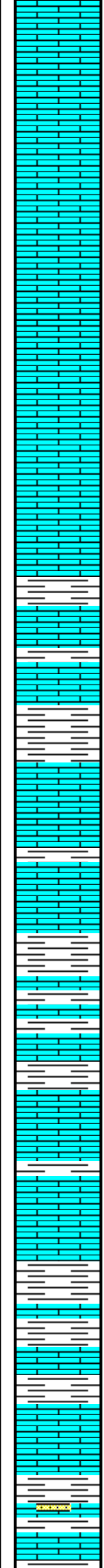
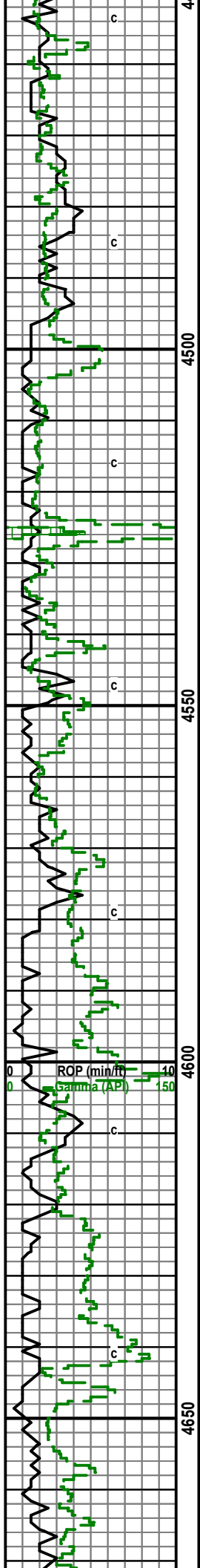
c

c

c

c

c



Pr. Sample, A.A. ?

LS; crm, sli tan, mcrxln

LS: crm-gry, mcrxln, chalky

Pr. Sample

LS: crm-tan, f-mcrxln, fos, Sh: gry

Sh: gry-drk gry, LS: gry-crm, mcrxln, chalky

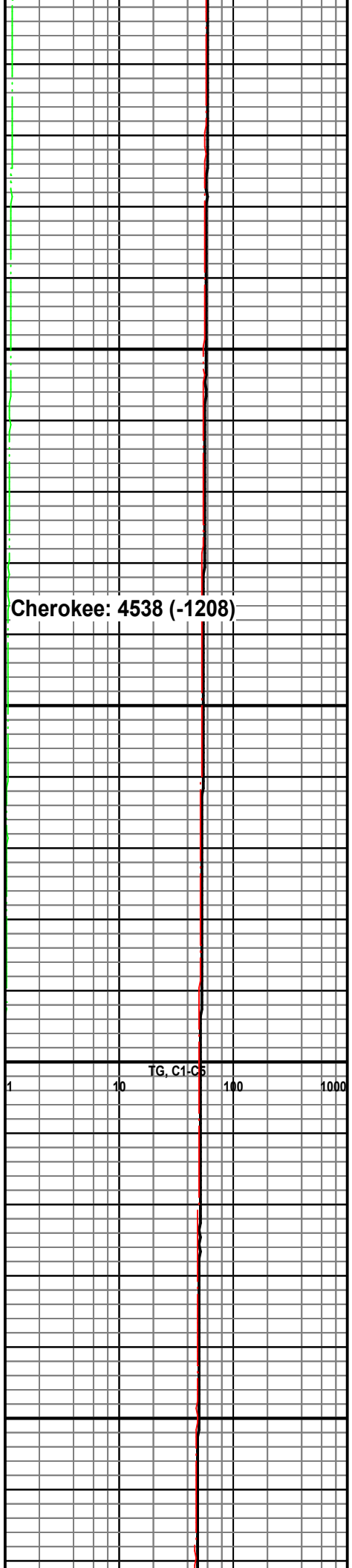
Sh: gry, some LS: crm-tan-gry, mcrxln

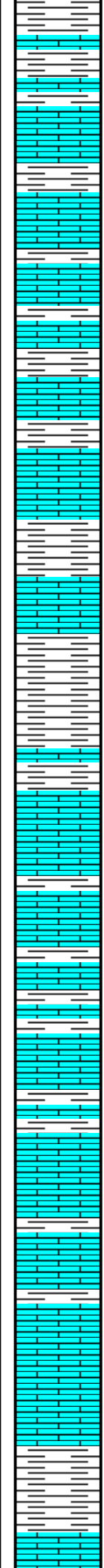
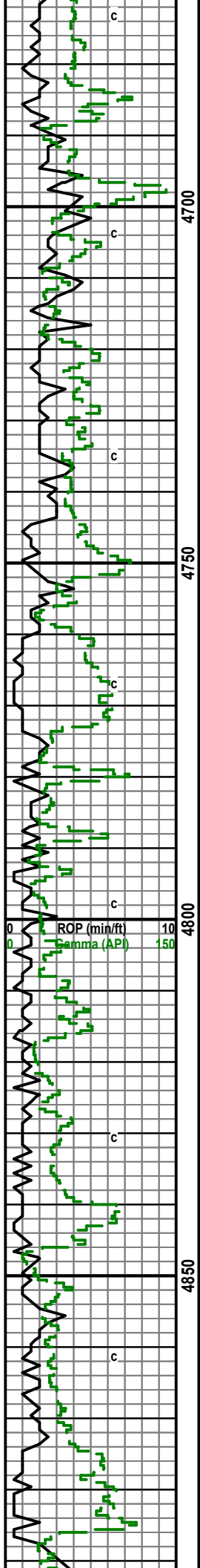
A.A.

LS: crm-gry, mcrxln, some fxln, sli fos, Sh: gry

Sh: gry-drk gry, some LS: A.A.

Sh: A.A., some LS: A.A., some SS: clear-opaq, sub ang-ang, pr srt, limey, glauc, no vis por, NS





Sh: gry, some LS: gry-crm, mcrxln, sli sandy

LS: crm, mcrxln, sli fos, Sh: gry-lt gry

LS: crm-gry, mcrxln, sli fos, Sh: gry

Sh: gry-drk gry- lt gry, some LS: A.A.

Sh: gry-drk gry-lt gry, some LS: crm, sli gry, mcrxln, chalky

Sh: A.A. some LS, crm-gry, mcrxln sli fos

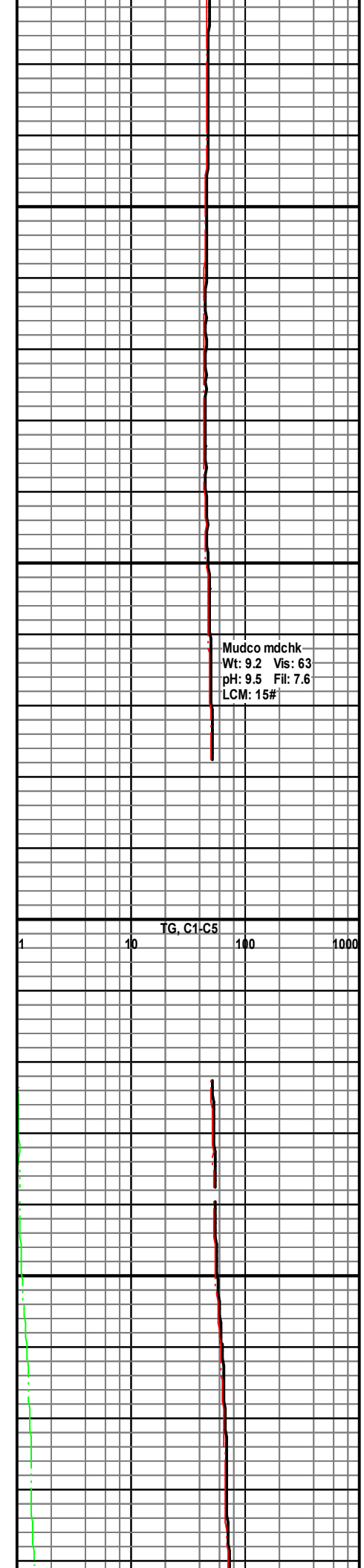
LS: crm-gry, sli tan, f-mcrxln, sli fos, Sh: gry

LS: crm-tan, sli gry, f-mcrxln, sli fos, Sh: A.A.

LS: A.A., Sh: A.A.

LS: gry-crm, f-mcrxln, sli fos, some Sh: gry

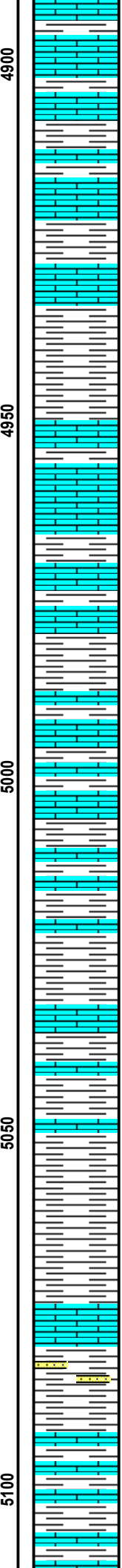
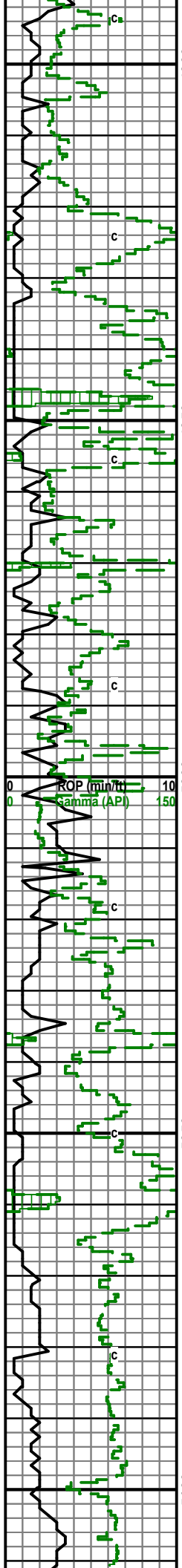
Sh: gry-drk gry, LS: A.A.



Mudco mdchk
 Wt: 9.2 Vis: 63
 pH: 9.5 Fil: 7.6
 LCM: 15#

TG, C1-C5

1 10 100 1000



LS: gry, sli crm, mcrxln, Sh: gry

LS: gry-crm, mcrxln, sli fos, Sh: gry-drk gry

LS: crm-gry, mcr-fxln, Sh: gry-drk gry-blck

LS: gry-crm, mcr-fxln, Sh: A.A.

LS: brwn, sli crm-gry, mcrxln, Sh: A.A.

Sh: gry-drk gry-blck, some LS: gry-crm, mcrxln

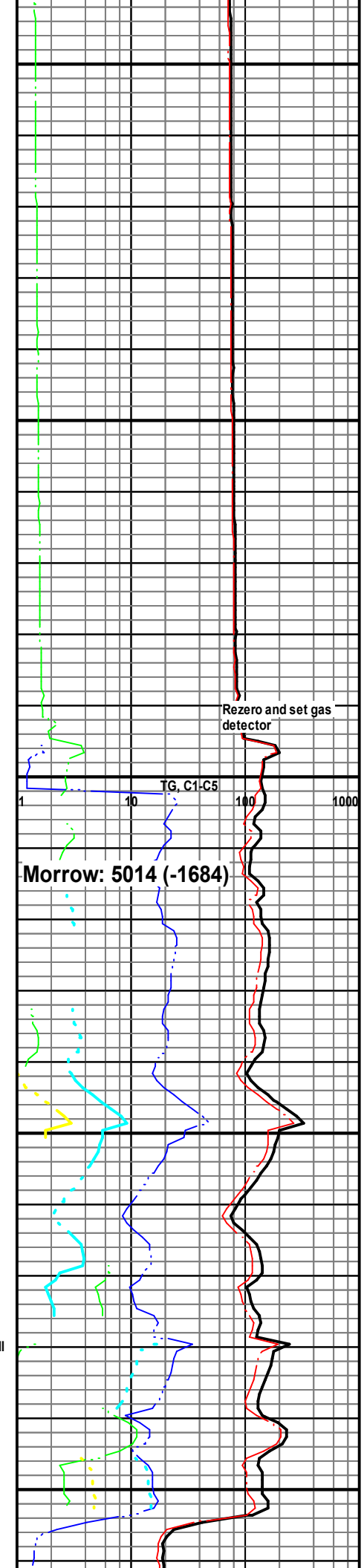
Sh: A.A. some LS: gry, sli crm, mcrxln

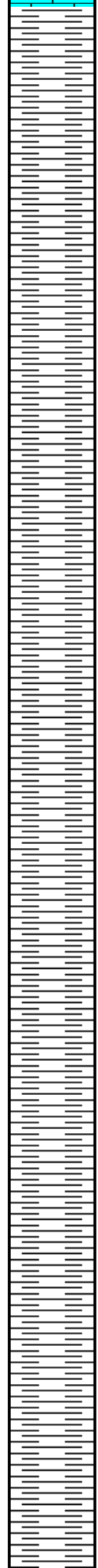
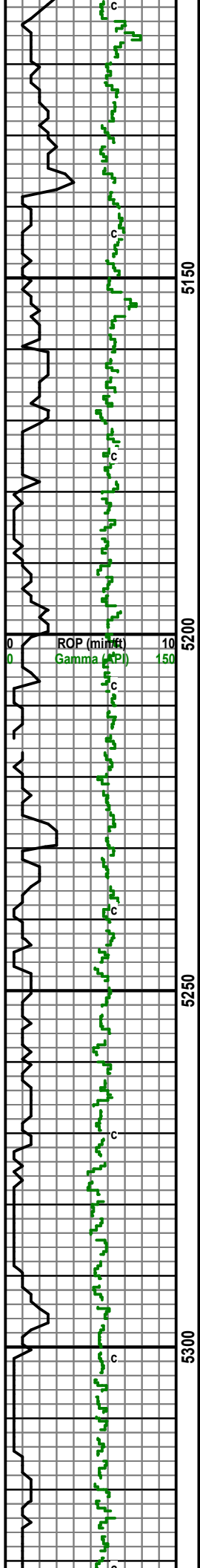
A.A.

Sh: drk gry-gry-blck, some LS: crm-gry, f-mcrxln, sli sandy

Sh: A.A. some LS: A.A. and SS: white-opaque, sli tan, f-vfgm, sub rnd, well sort, limey, no vis por, no fluor NS

LS: crm-tan, mcr-fxln, sli fos, sli sandy, Sh: gry-drk gry





Sh: gry-drk gry-lt gry, some LS: gry-crm, mcrxln, sli sandy

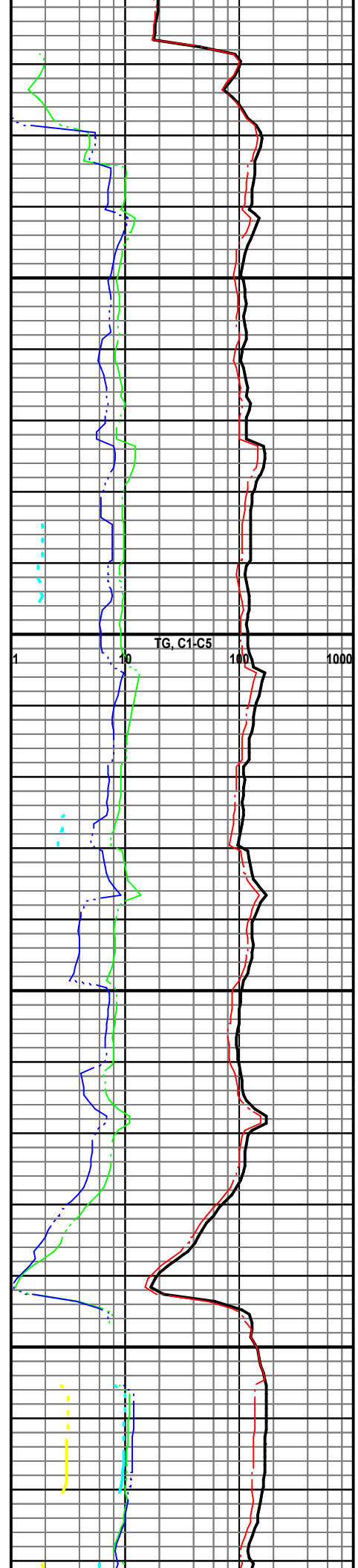
Sh: A.A. with LS: A.A.

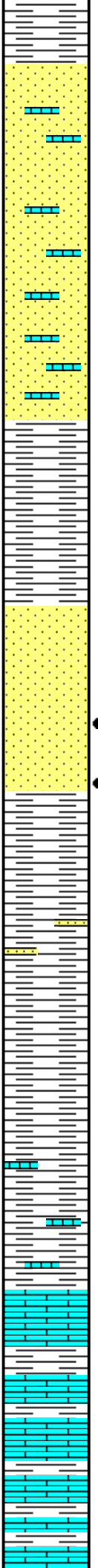
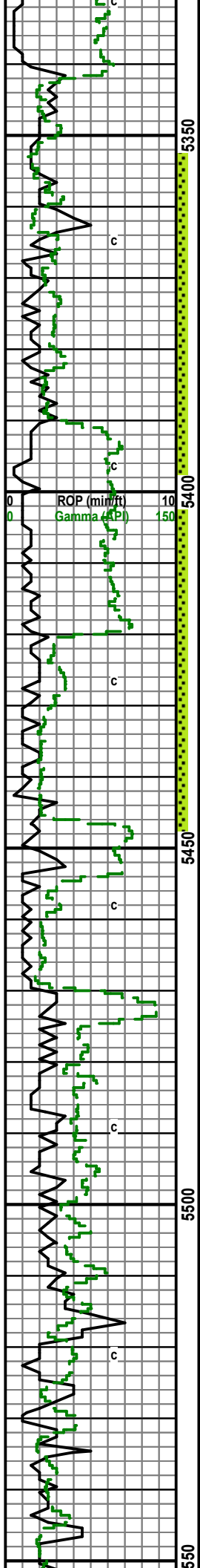
Sh: gry-drk gry-lt gry

Sh: A.A.

Sh: A.A.

Sh: A.A.





Mostly Sh: gry-drk gry, some SS: clear-opaque, sub ang, pr sort, limey

A.A.

SS: opaque-crm, fgm, few mgrn, sub ang-sub rnd, fr sort, sli glauc, sli lime, pos show gas cond, no fluor, no odor

SS: opaque, sli gry-tan, some sli crm, fgm, few mgrn, sub ang-sub rnd, fr sort, sli glauc, calc,

Sh: gry-drk gry

SS: opaque, sli crm, fgcn, sub ang-sub rnd, fr sort, sli glauc, NS

SS: A.A. one piece had fr SFO

SS: clear-opaque, mgrn-fgm, sub ang-sub rnd, fr-pr sort, sli glauc, no odor, dull yellow fluor, fr SFO in few pieces, sli SFO in few dead oil in few

Sample mostly Sh, some SS: opaque-crm, vf-fgm, some mgrn, sub ang, fr-pr sort, calc

Sh: gry-drk gry, some grn-red, LS: crm, sli grn, fxln, prt sandy

LS: crm-grm-red fxln, sandy, Sh: A.A.

A.A.

LMM: 5340 (-2010)

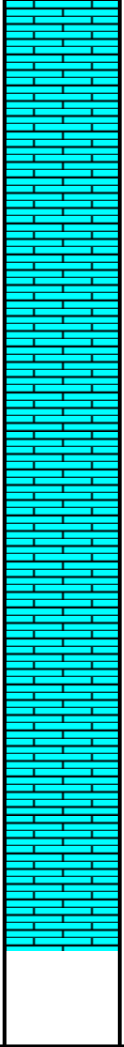
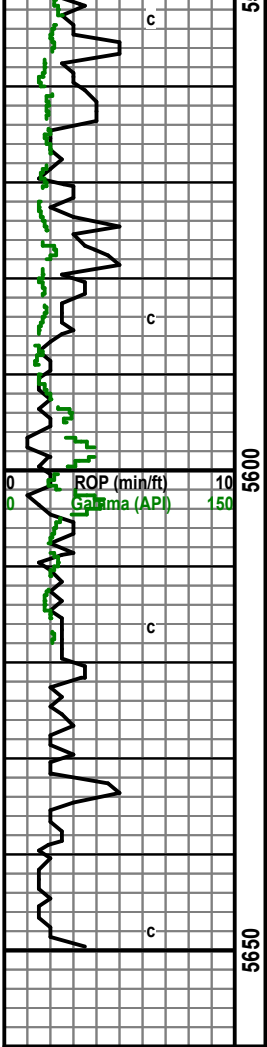
DST #1 5350-5450
 5-30-45-90
 IF: BOB 2"
 FF: BOB ASAO
 Rec: 2230' GIP, 275' GOM
 (10% G, 5% O, 85%M)
 Sample: 1000#, 25% G, 5%O,
 85%M, Rw=1.45 @ 85
 IFP: 65 ISIP: 1203
 FFP: 137 FFIP: 1230

CFS 60 min

CFS 60 min
 Strap 1.27 long

Mudco mdchk
 Wt: 9.3 Vis: 65
 pH: 9.5 Fil: 8.0
 LCM: 12#

CFS 60 min



sample mostly Sh: LS: crm, fxIn

A.A.

LS: crm, mcr-fxIn, (sample mostly Sh)

LS: crm mcr-fxIn, sli cherty, sli fos (sample mostly Sh)

RTD: 5650

LTD: 5652

