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 # 35483
Name: Ramshorn Resources, LLC
Address 1: 300 N. MEAD SUITE 200
Address 2:
City: WICHITA State: KS Zip: 67202 + 2745
Contact Person: JD Dubwig
Phone: (620) 242-4825
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: James Musgrove
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 #:

02/08/2021	02/25/2021	02/26/2021
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-007-24377-00-00
Spot Description:
__ - SW - NE - SE Sec. 3 Twp. 33 S. R. 15 ☐ East ☑ West
1345 Feet from ☐ North / ☑ South Line of Section
2018 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: Barber
Lease Name: DEGEER Well #: 03-01
Field Name: Deeger
Producing Formation: None
Elevation: Ground: 1975 Kelly Bushing: 1987
Total Vertical Depth: 5575 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 225 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: 3500 ppm Fluid volume: 500 bbls
Dewatering method used: Evaporated

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:** Karen Ritter **Date:** 07/26/2021

Operator Name: Ramshorn Resources, LLC   Lease Name: DEGEER   Well #: 03-01

Sec. 3 Twp. 33 S. R. 15 ☐ East ☑ West   County: Barber

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

Geologist Report / Mud Logs ☑ Yes ☐ No

List All E. Logs Run:

Induction
Porosity

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

Name	Top	Datum
Herrington	2338	MD
Topeka	3728	MD
Viola	5216	MD
Arbuckle	5444	MD

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	17.25	13.375	54	225	A	260	2% CaCl

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
	-			
	-			

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: ☐ 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)*

PRODUCTION INTERVAL: Top	Bottom

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

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Ramshorn Resources, LLC
Well Name	DEGEER 03-01
Doc ID	1583467

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	17.25	13.375	54	225	A	260	2% CaCl

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Ramshorn Resources LLC

300 N Mead Suite 200
Wichita KS 67202+2745

ATTN: Jim Musgrove

03-33s-15w Barber KS

DeGeer #03-01

Job Ticket: 66908 **DST#: 1**

Test Start: 2021.02.23 @ 04:37:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:42:57
Time Test Ended: 15:41:11

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J Staab
Unit No: 84

Interval: 5185.00 ft (KB) To 5248.00 ft (KB) (TVD)
Total Depth: 5248.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

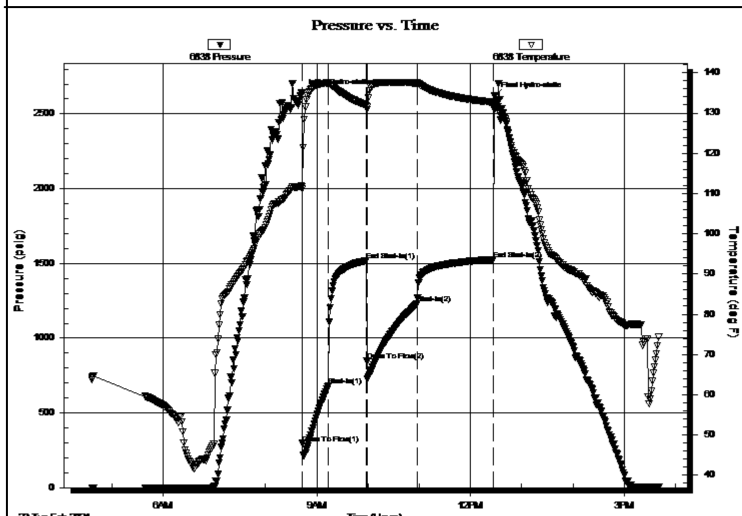
Reference Elevations: 2002.00 ft (KB)
1990.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 6838 **Inside**

Press@RunDepth: 1232.27 psig @ 5188.00 ft (KB)
Start Date: 2021.02.23 End Date: 2021.02.23
Start Time: 04:37:01 End Time: 15:41:12

Capacity: psig
Last Calib.: 2021.02.23
Time On Btm: 2021.02.23 @ 08:42:42
Time Off Btm: 2021.02.23 @ 12:28:17

TEST COMMENT: 30-IF-BOB 1 min Built to 87"
45-ISI-6 mins to bleed off Weak Surface Died in 10 mins
60-FF-BOB 2 1/2 min Built to 40" Died back to 26"
90-FSI-3 mins to bleed off Weak Surface Died in 15 mins



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2637.22	111.77	Initial Hydro-static
1	296.28	111.11	Open To Flow (1)
31	680.03	137.53	Shut-In(1)
76	1518.12	131.84	End Shut-In(1)
76	845.64	131.46	Open To Flow (2)
136	1232.27	137.42	Shut-In(2)
224	1526.93	132.65	End Shut-In(2)
226	2619.45	130.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2500.00	Water 100%W	35.44
200.00	MW w /scum oil 30%M 70%W	2.84
0.00	180 GIP 100%G	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Ramshorn Resources LLC

300 N Mead Suite 200
Wichita KS 67202+2745

ATTN: Jim Musgrove

03-33s-15w Barber KS

DeGeer #03-01

Job Ticket: 66908 **DST#: 1**

Test Start: 2021.02.23 @ 04:37:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:42:57
Time Test Ended: 15:41:11

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J Staab
Unit No: 84

Interval: 5185.00 ft (KB) To 5248.00 ft (KB) (TVD)
Total Depth: 5248.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

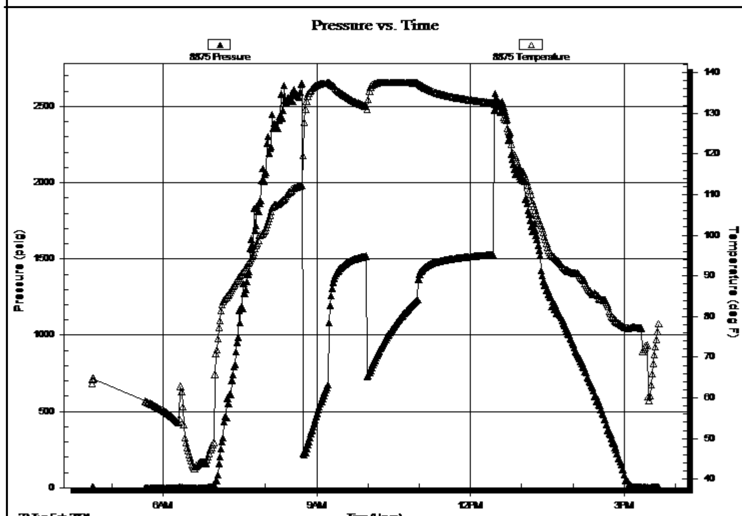
Reference Elevations: 2002.00 ft (KB)
1990.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8875 **Inside**

Press@RunDepth: psig @ 5188.00 ft (KB)
Start Date: 2021.02.23 End Date: 2021.02.23
Start Time: 04:37:01 End Time: 15:41:12

Capacity: psig
Last Calib.: 2021.02.23
Time On Btm:
Time Off Btm:

TEST COMMENT: 30-IF-BOB 1 min Built to 87"
45-ISI-6 mins to bleed off Weak Surface Died in 10 mins
60-FF-BOB 2 1/2 min Built to 40" Died back to 26"
90-FSI-3 mins to bleed off Weak Surface Died in 15 mins



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
2500.00	Water 100%W	35.44
200.00	MW w/scum oil 30%M 70%W	2.84
0.00	180 GIP 100%G	0.00

Gas Rates

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

TRILOBITE TESTING, INC	**DRILL STEM TEST REPORT**	**FLUID SUMMARY**
	Ramshorn Resources LLC 300 N Mead Suite 200 Wichita KS 67202+2745 ATTN: Jim Musgrove	**03-33s-15w Barber KS** **DeGeer #03-01** Job Ticket: 66908 **DST#: 1** Test Start: 2021.02.23 @ 04:37:00

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:	53000 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.39 in^3	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4300.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2500.00	Water 100%W	35.439
200.00	MW w /scum oil 30%M 70%W	2.835
0.00	180 GIP 100%G	0.000

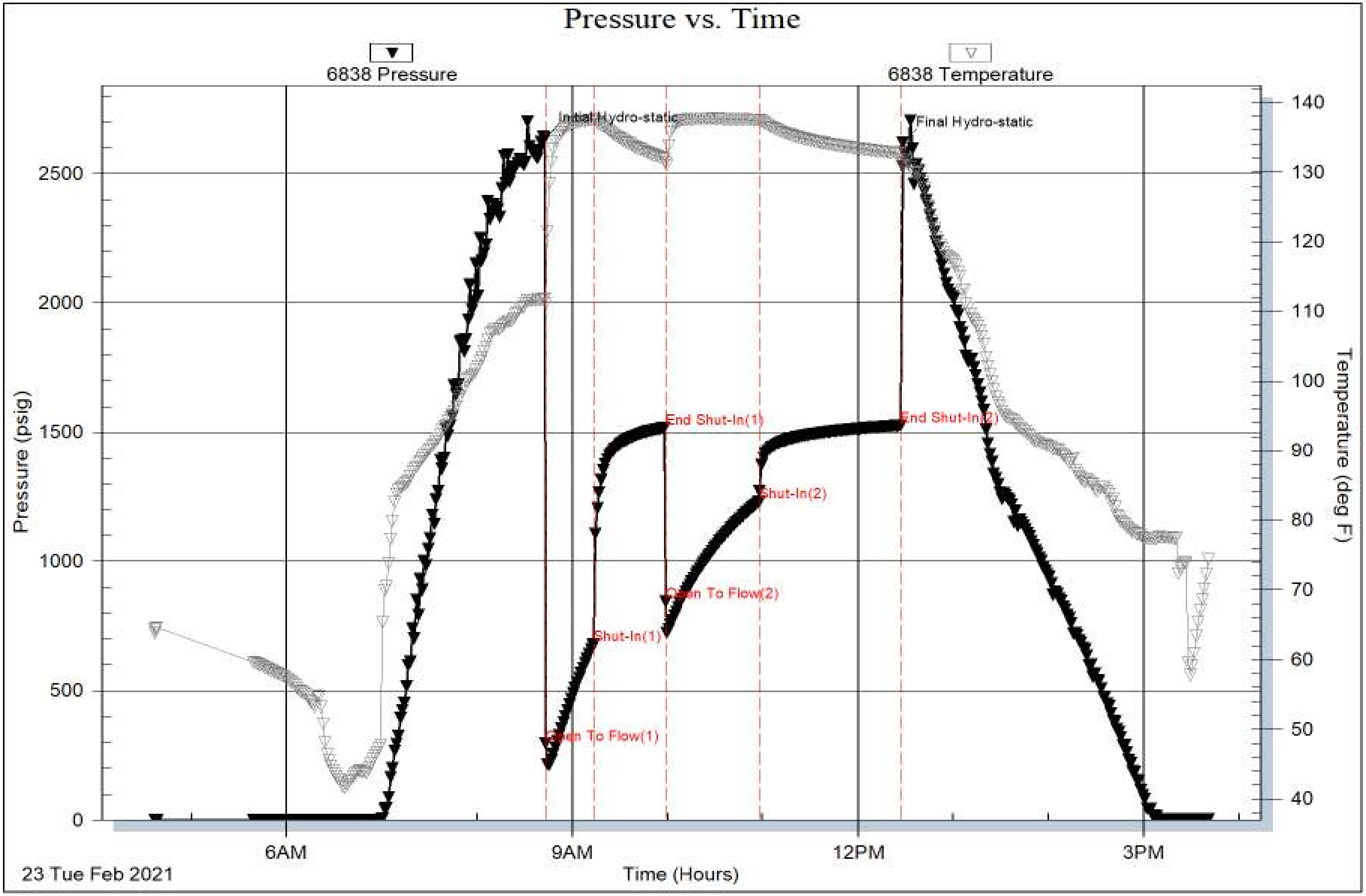
Total Length: 2700.00 ft Total Volume: 38.274 bbl

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

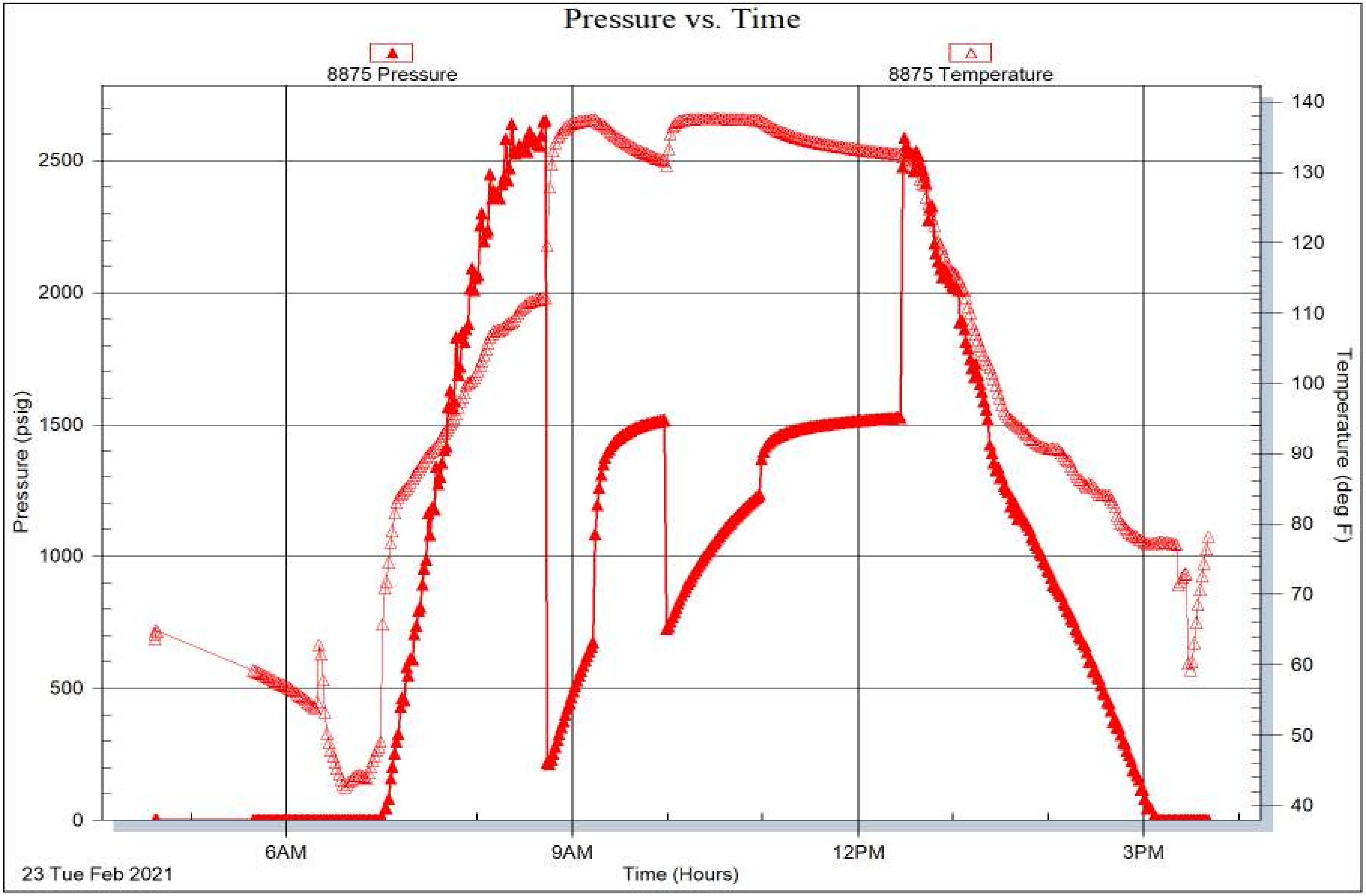
Laboratory Name: Laboratory Location:

Recovery Comments: 4#LCM
RW=.144@70F

Serial #: 6838 **Inside** Ramshorn Resources LLC DeGeer #03-01 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 66908 Printed: 2021.02.23 @ 17:00:51


Pressure vs. Time
8875 Pressure
8875 Temperature
Pressure (psig)
0
500
1000
1500
2000
2500
Temperature (deg F)
40
50
60
70
80
90
100
110
120
130
140
6AM
9AM
12PM
3PM
23 Tue Feb 2021
Time (Hours)

PETROLEUM CORPORATION
Claflin, Kansas

Ramshorn RESOURCES

Scale 1:240 Imperial

Well Name:	DEGEER # 03-01		
Surface Location:	[03-33S-15W] 1345' FSL 2018 FEL		
Bottom Location:			
API:	15-007-24377-00-00		
License Number:	35483		
Spud Date:	2/8/2021	Time:	10:34 AM
Region:	BARBER CO.		
Drilling Completed:	2/24/2021	Time:	10:00 AM
Surface Coordinates:			
Bottom Hole Coordinates:			
Ground Elevation:	1975.00ft		
K.B. Elevation:	1987.00ft		
Logged Interval:	2000.00ft	To:	5575.00ft
Total Depth:	5575.00ft		
Formation:	Simpson Sd. / Viola		
Drilling Fluid Type:	Chemical/Fresh Water Gel		

OPERATOR

Company:	RAMSHORN RESOURCES		
Address:	300 N. Mead, Ste. 200 Wichita KS 67202-2745 www.ramshornresources.com		
Contact Geologist:	Ben Crouch		
Contact Phone Nbr:	620-242-4825		
Well Name:	DEGEER # 03-01		
Location:	[03-33S-15W] 1345' FSL 2018 FEL		
API:	15-007-24377-00-00		
Pool:		Field:	DEGEER
State:	KANSAS	Country:	USA

Ramshorn RESOURCES

A2:F6A2:F63

DRILLING				
RAMSHORN RESOURCES				
DEGEER #03-01				
3-33S-15W NW/4, SW/4 (1345' FSL &2018' FEL)				
	KB	1987	GL	1975
	LOG TOPS		SAMPLE	
FORMATION	M.D.	S.S.	MD	S.S
HERRINGTON	2338	-351	2348	-361
KRIDER	2373	-386	2383	-396

WINFIELD	2418	-431	2415	-428
TOWANDA	2463	-476	2485	-498
FT. RILEY	2536	-549	2537	-550
WREFORD	2682	-695	2685	-698
COUNCIL GROVE	2718	-731	2724	-737
COTTONWOOD	2923	-936	2930	-943
NEVA	2958	-971	2963	-976
FORAKER	3052	-1065	3057	-1070
INDIAN CAVE	3177	-1190	3187	-1200
WABUNSSEE	3228	-1241	3238	-1251
STOTLER	3378	-1391	3385	-1398
EMPORIA	3456	-1469	3466	-1479
HOWARD	3645	-1658	3657	-1670
TOPEKA	3728	-1741	3734	-1747
KANAWAKA SH.	3890	-1903	3896	-1909
HEEBNER	4157	-2170	4164	-2177
TORONTO	4174	-2187	4178	-2191
DOUGLAS	4183	-2196	4190	-2203
LANSING	4327	-2340	4325	-2338
BKC	4746	-2759	4751	-2764
MARMATON	4757	-2770	4768	-2781
CHEROKEE TOP	4886	-2899	4895	-2908
MISS.	4856	-2869	4912	-2925
WOODFORD	5179	-3192	5189	-3202
VIOLA	5216	-3229	5225	-3238
SIMPSON	5334	-3347	5345	-3358
ARBUCKLE	5444	-3457	5441	-3454
RTD	5555	-3568	5575	-3588
LTD	5568	-3581	5568	-3581

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Ramshorn Resources LLC

300 N Mead Suite 200
Wichita KS 67202-2745

ATTN: Jim Musgrove

3-33s-15w Barber,KS

DeGeer #03-01

Job Ticket: 66908 **DST#: 1**

Test Start: 2021.02.23 @ 04:37:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:42:57
Time Test Ended: 15:41:11

Interval: 5185.00 ft (KB) To 5248.00 ft (KB) (TVD)
Total Depth: 5248.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

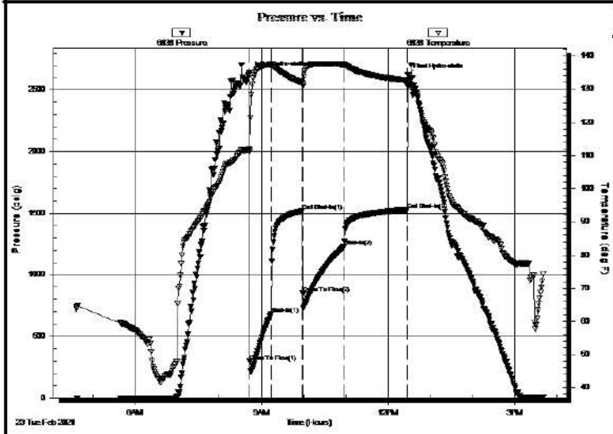
Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J Staab
Unit No: 84

Reference Elevations: 1987.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 6838 **Inside**
Press@RunDepth: 1232.27 psig @ 5188.00 ft (KB) Capacity: psig

Start Date:	2021.02.23	End Date:	2021.02.23	Last Calib.:	2021.02.23
Start Time:	04:37:01	End Time:	15:41:12	Time On Btm:	2021.02.23 @ 08:42:42
				Time Off Btm:	2021.02.23 @ 12:28:17

TEST COMMENT: 30-IF-BOB 1 min Built to 87"
45-ISI-6 mins to bleed off Weak Surface Died in 10 mins
60-FF-BOB 2 1/2 min Built to 40" Died back to 26"
90-FSI-3 mins to bleed off Weak Surface Died in 15 mins



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2637.22	111.77	Initial Hydro-static
1	296.28	111.11	Open To Flow (1)
31	680.03	137.53	Shut-In(1)
76	1518.12	131.84	End Shut-In(1)
76	845.64	131.46	Open To Flow (2)
136	1232.27	137.42	Shut-In(2)
224	1526.93	132.65	End Shut-In(2)
226	2619.45	130.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2500.00	Water 100%W	35.44
200.00	MW w/scum oil 30%M 70%W	2.84
0.00	180 GIP 100%G	0.00

Gas Rates

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

Trilobite Testing, Inc Ref. No: 66908 Printed: 2021.02.24 @ 15:54:31

DRILLSTEM TESTS

No	Interval	Formation
1	5185-5248	Viola

LOGGED BY

Musgrove Petroleum Geology 212 Main Street, Claflin KS

Company: MUSGROVE PETROLEUM
Address: 212 MAIN ST.
CLAFLIN KS 67525

Phone Nbr: 620-639-1948 / 620-786-0839
Logged By: Geologist Name: JIM MUSGROVE / WYATT URBAN

NOTES

Operator :[Operator Company Name]

Lease:Degeer #03-01

Field: DeGeer

Surface Location: SW-NE-SE [1345'FSL &2018' FEL]

Sec:3 Twsp:33S Rge:15W

County:Barber State:Kansas

KB:1987' GL:1975'

API #:15-007-24377-00-00

Contractor:Duke Drilling Inc. (Rig #1)

Spud:02/08/2021 Comp:02/24/2021

RTD:5575' LTD: 5568'

Mud Up: 2300' Type Mud: Chemical

Samples Saved From: 2300' to RTD
Drilling Time Kept From:2000' to RTD
Samples Examined From: 2300' to RTD
Geological Supervision from:2420' to RTD
Geologist on Well: James C. Musgrove & Wyatt Urban

Surface Casing: 13 3/8" @ 210'

Electronic Surveys:CDL/CNL,PE, ,DIL/BHCS, CNL/CDL, MEL

REMARKS : LOG TOPS CONSISTENTLY 7-10' HIGH TO DRILLER MEASUREMENTS

ELEVATIONS

K.B. Elevation:	1987.00ft	Ground Elevation:	1975.00ft
K.B. to Ground:	12.00ft		

OPEN HOLE LOGS

Logging Company:	WIRELINE LOGGING SOLUTIONS		
Logging Engineer:	H. GARCIA		
Truck #:	11008		
Logging Date:	2/24/2021	Time Spent:	4.5
# Logs Run:	2	# Logs Run Successful:	2

LOGS RUN

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
COMP. NEUTR(	220.00ft	5568.00ft	2.00		1
IAT	220.00ft	5568.00ft	2.50		2

LOGGING OPERATION SUMMARY

Date	From	To	Description Of Operation
3/9/2021	0.00ft	0.00ft	

ROCK TYPES

Anhy vert
Cht
Cht vari
Coal
Chtcongl
Dolprim
Dolsec
sdy lmst
Lmst fw<7
Lmst fw7>
shale, grn
shale, gry
Carbon Sh
shale, red
Ss

OTHER SYMBOLS

Oil Show
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- Gas

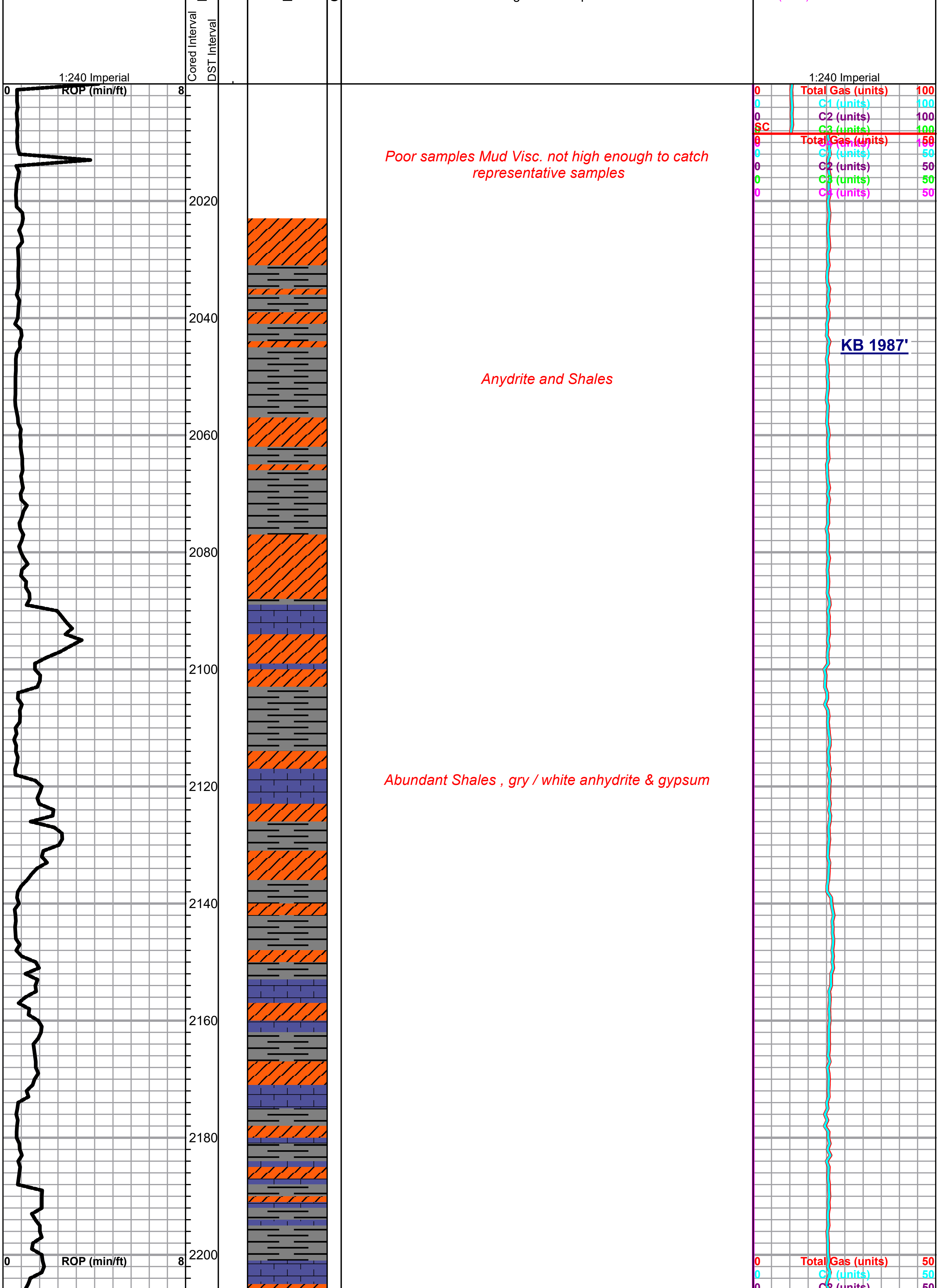
DST
- DST Int
- DST alt
- Core
- tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #1
ROP (min/ft)

Depth | Intervals
DST
Lithology
Oil Show
Geological Descriptions

TG, C1 - C5
Total Gas (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)



Cored Interval
DST Interval
1:240 Imperial
0 ROP (min/ft) 8
1:240 Imperial
0 Total Gas (units) 100
0 C1 (units) 100
0 C2 (units) 100
0 C3 (units) 100
0 C4 (units) 100
SC
0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50
Poor samples Mud Visc. not high enough to catch representative samples
2020
2040
KB 1987'
Anydrite and Shales
2060
2080
2100
Abundant Shales , gry / white anhydrite & gypsum
2120
2140
2160
2180
2200
0 ROP (min/ft) 8
0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50

0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

Tr. gry/white Anhydrite

2220

Samples A/a

2240

2260

2280

2300

2320

2340

HERINGTON 2348.0 (-361.0)

LOSS OF CIRCULATION - SHUT DOWN DUE TO WEATHER

Dol,. & dol. LS, Tan, scattered por., no shows

2360

2380

KRIDER 2383.0 (-406.0)

Dol, gry, v fxl, shaley. in part

0 ROP (min/ft) 8

2400

0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

2420

WINFIELD 2419.0 (-428.0)

System not turned on.

2440

Poor Samples

Dolomite white/ gry . fxl, sl. cherty + gry white/ opaque chert

2460

2480

TOWANDA 2492.0 (-498.0)

2500

Dol. & Dolomitic LS,

2520

A/a

2540

LS, white, gry highly dol. fxl, suc. in pt , no shows

FT. RILEY 2537.0 (-550.0)

2560

SC

0 ROP (min/ft) 5

2580

LS gry tan, foss, poor - fair scattered p.p. type por.

0 ROP (min/ft) 5

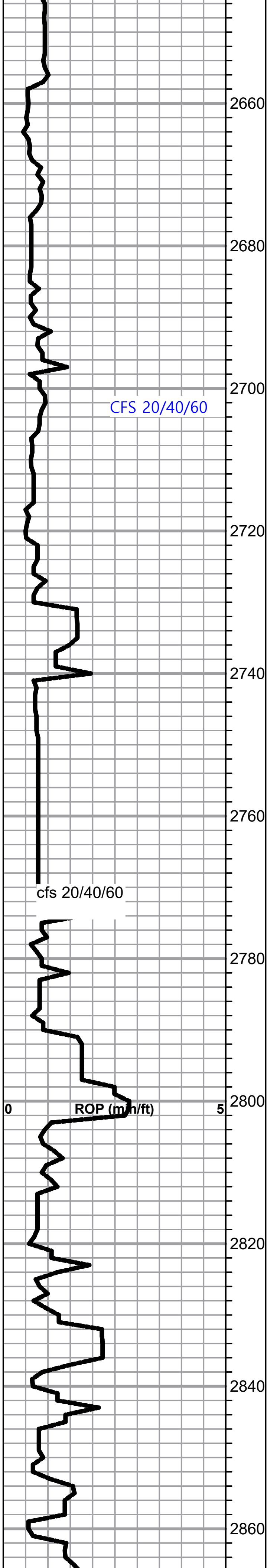
2600

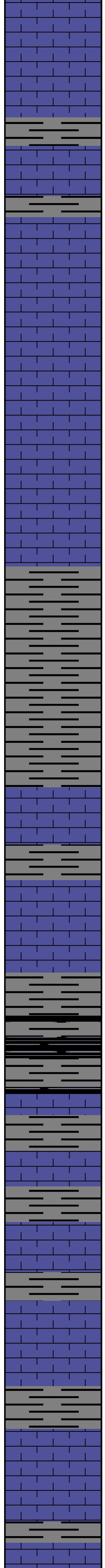
0	Total Gas (units)	50
0	C1 (units)	50
0	C2 (units)	50
0	C3 (units)	50
0	C4 (units)	50

2620

LS gry / crm, poorly developed por., chalky in pts tr. brn, tan, cherts, no shows

2640





LS, tan/ brn, few foss/ ool, chalky, poorly develped por, tr. blk flakey stain, no odor , no shows free oil

WREFORD 2685.0 (-698.0)

LS, gry, chalky, tr. foss, poor vis. por., + white gry boney chert

abd. gry, silty dk shale

LS, crm, white, fxl, poorly developed por, no sfo, no odor

LS, crm, white, dol. dense, poor por. no shows, no odor Tr. dk gry, blk sh.

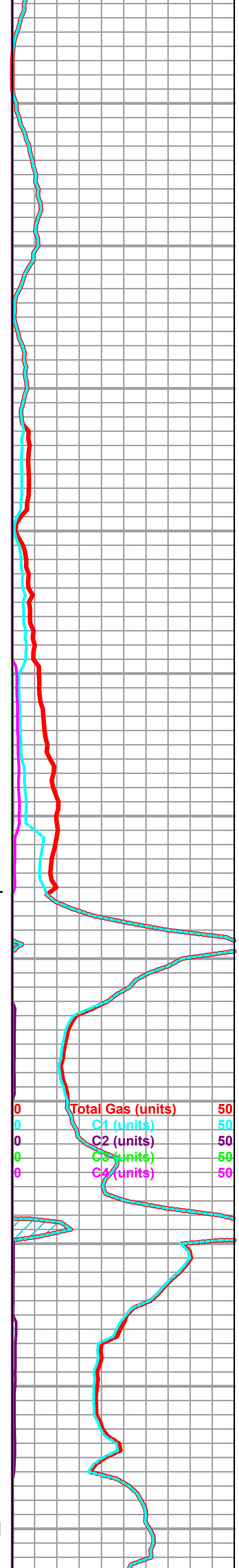
Sh, gry, dk gry

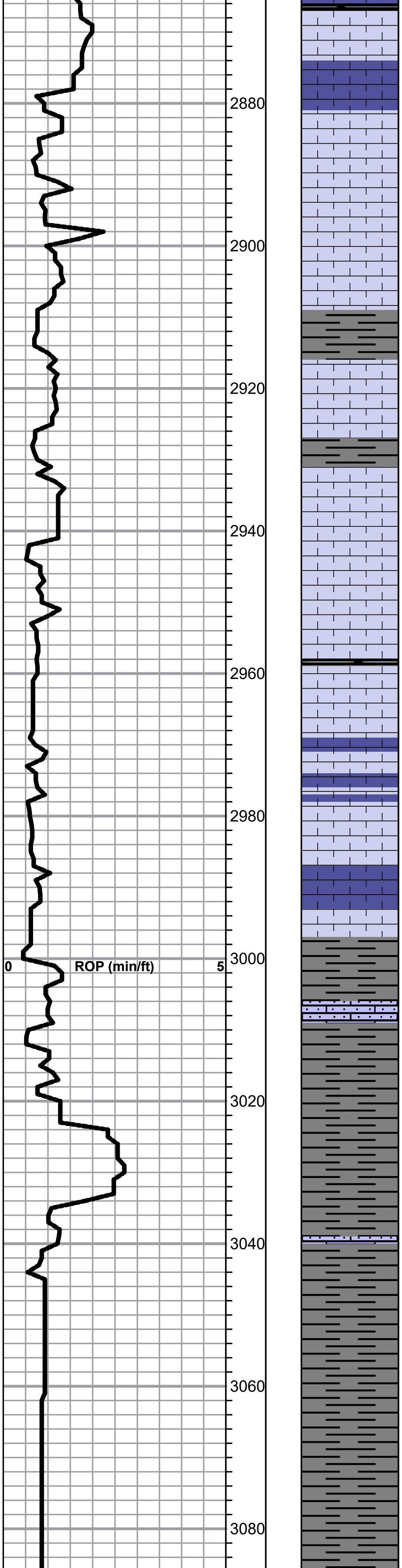
Sh, a/ a tr. white LS, dense, poor vis. porosity no shows.

Slug blk sh.

LS white, ool / foss, dense, poorly developed oom porosity, no shows, no odor

Sh, blk gry, tr. white / crm, LS, dense, poorly developed porosity, no shows, no odor .





LS white crm, few foss poor vis. porosity, no shows no odor

COTTONWOOD 2930.0 (-943.0)

LS, tan, buff , fxl dense, few foss, poor scatt. por. no shows, no odor

NEVA 2963.0 (-976.0)

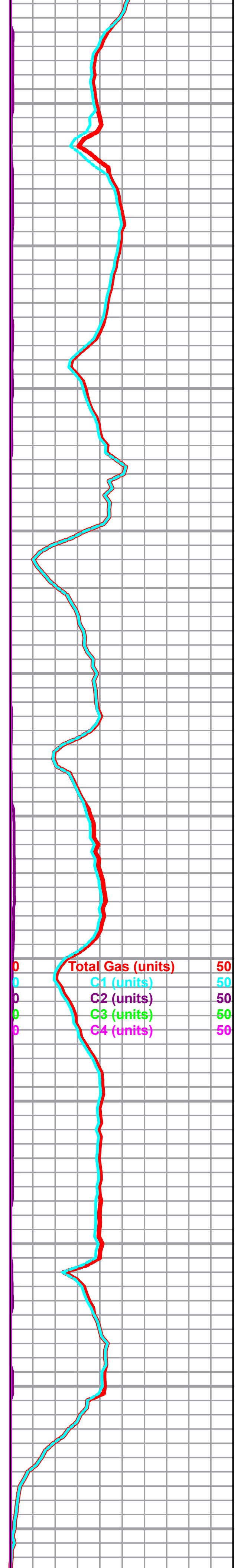
LS, tan, buff, dense , tr. gry sh , tr.

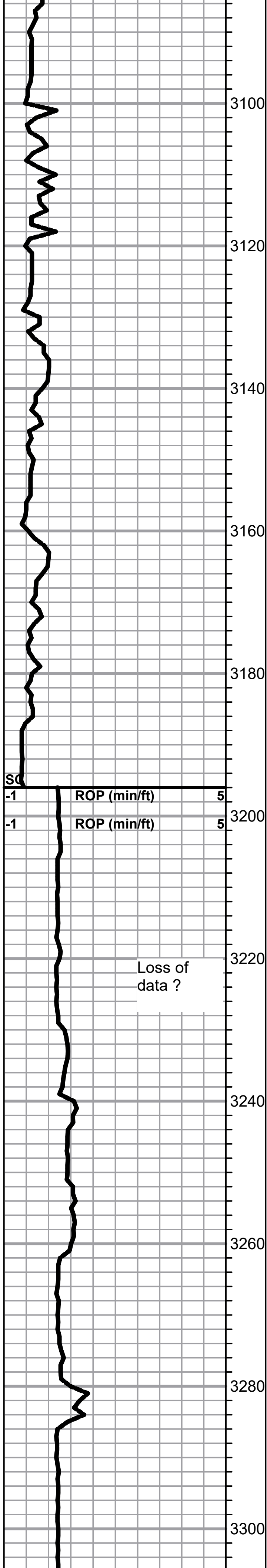
tr. Sd. clr, / tan, f- med grain fair scattered porosity, lt. brn, flky stain, no live shows of oil , no odor

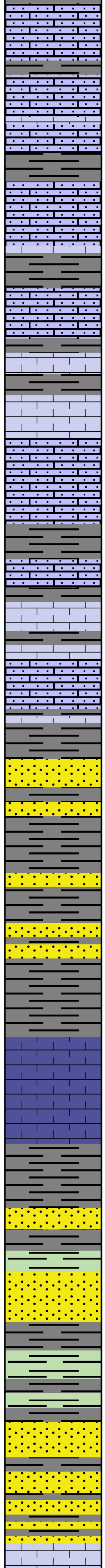
LS, tan, brn fxl, dense, poor vis. porsity, . chalky in pts, no shows

FORAKER 3057.0 (-1070.0)

LS, white, gry, fxl, sl. cherty (dense)







Slug of dk gry, blk carb sh.

LS, tan, buff, foss poorly developed scatt. porosity, chalky in pts, no shows, tr pyrite.

LS, tan, crm , gry, fxl dense, poor vis. porosity, chalky, Abd, dk gry, blk carb sh.

LS, & shale a/a

INDIAN CAVE 3187.0 (-1200.0)

Sh, gry, silty tr. sd. med grain, poorly sorted sub angular, no shows,

Sh gry , lt. gry, silty mica, no shows

WABUNSEE 3238.0 (-1251.0)

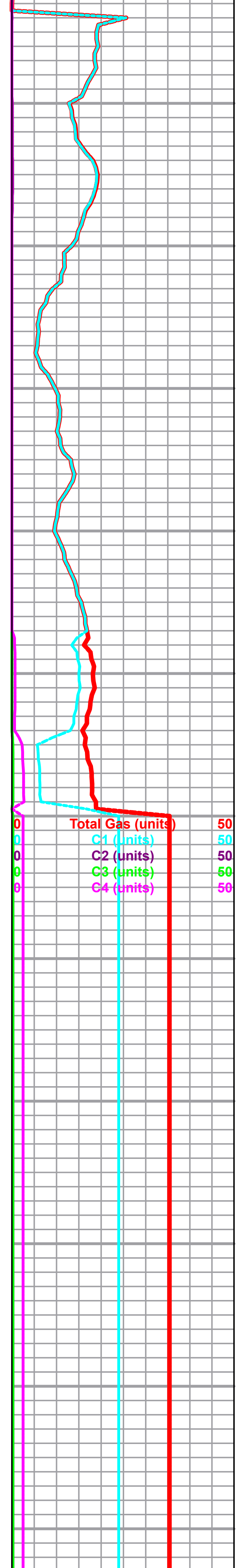
LS, gry , white, fxl, foss in parts

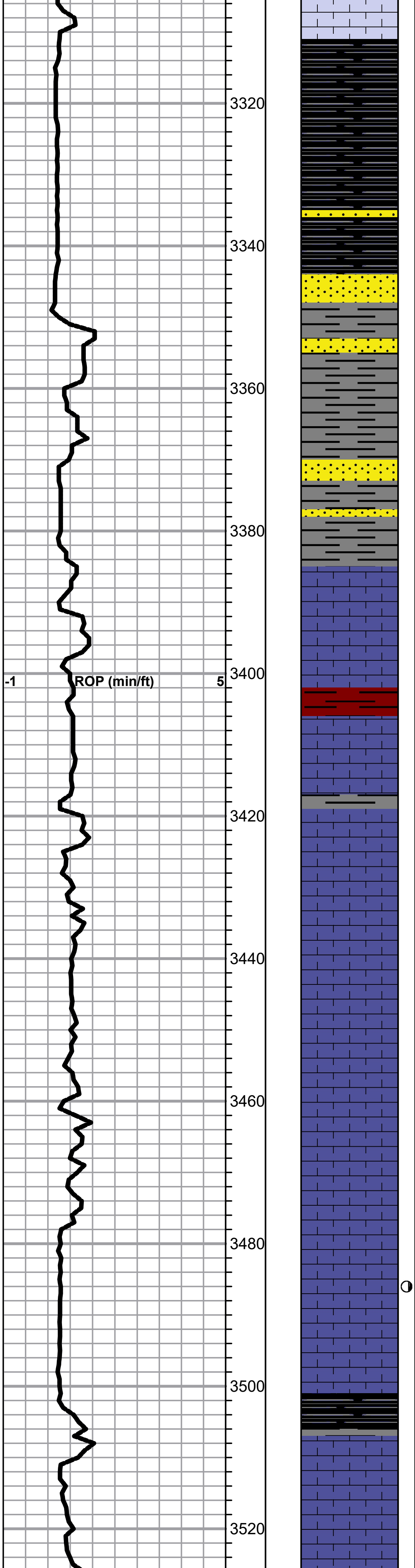
abd. sh, gry, dk gry, black carb .

Tr. Sd , white, clr, tan, med grain, poorly sorted, sub angular, sparry calc.cement , no shows, no odor

a/a + gry green silty sh.

Tr, sd clr med grain, angular, poorly sorted, nsfo, +shale





20" sample - Abd dk gry sh.tr. Sd, gry, fine - med grain, sub angular, fairly sorted, nsfo

40" sample-- Sh , gry -->gry increase in mica, few clusters of f.grain, well sorted, white sd. good inner gran. porosity, dk blk flakey (dead in app.) oil , no odor, no vis. gas bubbles in samples, Inc. in pyrite on sampels

Sh/ sand a/a

STOTTLER 3385.0 (-1398.0)

LS, gry, tan, brn, fxl, sl. chalky, poor vis. por.

LS, tan, brn, foss, poorly dev. p.p-scatt por. dense, no shows, no odor . Tr. Sh,brick red, soft sh.

LS, tan, white, highly ool, poor oom. type por. dense, no shows no odor

LS tan, brn, dense poorly developed porosity, chalky in pt,
Tr LS white, ool, poorly developed oom type porosity,no sfo

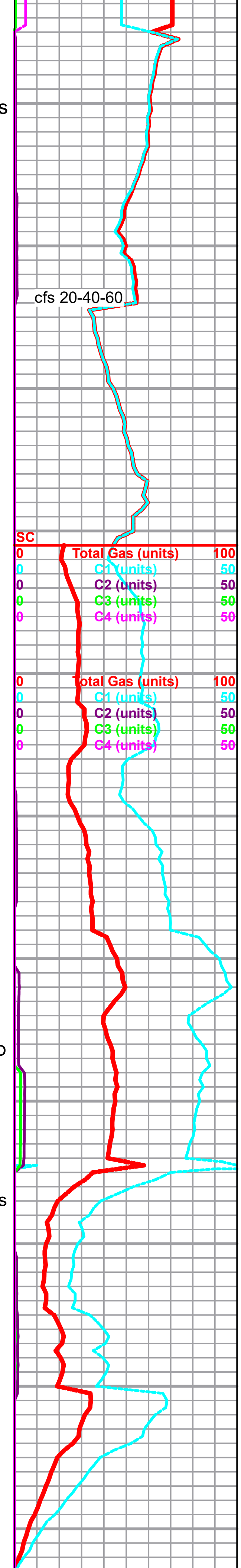
EMPORIA 3466.0 (-1479.0)

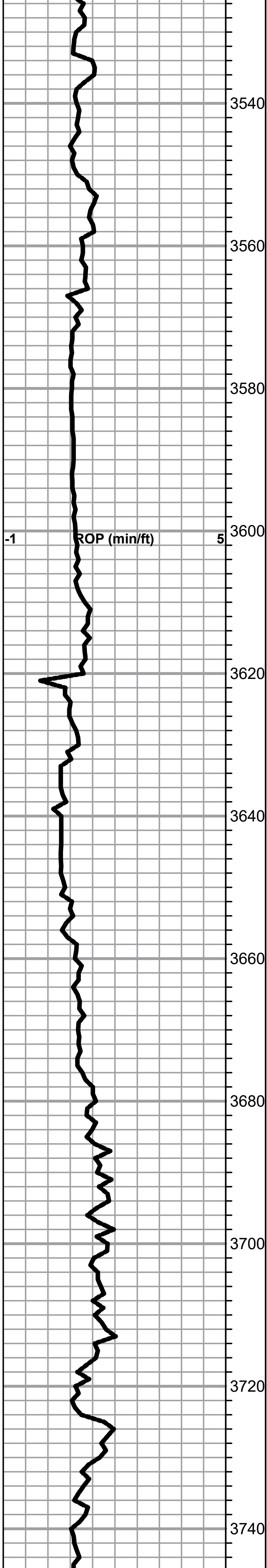
LS, white, gry, fxl, foss in pt, scatt. por., ??? stain, no vis. gas bubbles, no sfo, no odor

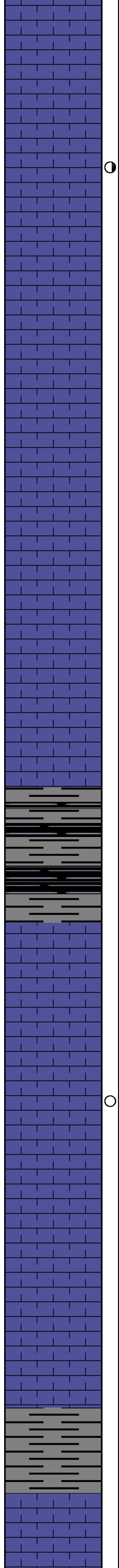
3495' sample -
LS, crm white, fxl, good vuggy / ix-L type por.

Sh, gry, dk gry,

LS, white, gry, gran, chalky in pt, few fossils, no shows,







LS tan, buff - tan, fxl, dense, poor vis. por. cherty in pts, nsfo, no odor

Tr. LS, tan, foss, poorly developed scattered por. sl. chalky, tr. dk brn - blk stain, v. weak sptty dark brn sfo (flakey ; dead in app)

LS, tan, buff few foss, poor - fair p.p type por. poor blk stain on few , nsfo,

LS tan brn, fxl dense poor vis. porosity no shows, Abd blk carb sh in sample

LS, white gry, sl. cherty, foss, chalky, no shows

Abd. dk gry - black carb sh.

Slug black carb sh & green / hunter green sh. LS, tan, buff mottled. chalky, poor vis. por. no shows,

HOWARD 3657.0 (0.0)

LS, tan, crm, -brn, mottled, few foss, fair scattered p.p. to vuggy type por, tr. blk stain on few , nsfo, no odor

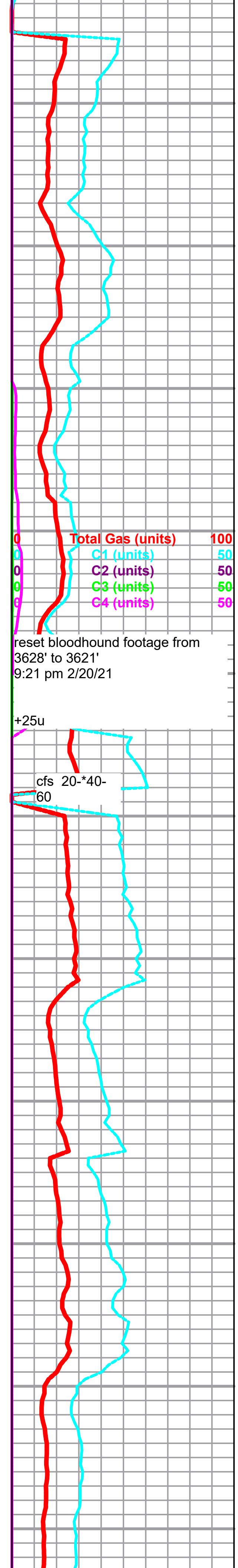
LS, crm, tan, buff, mottled. poor vis. porosity, dense , no shows , no odor

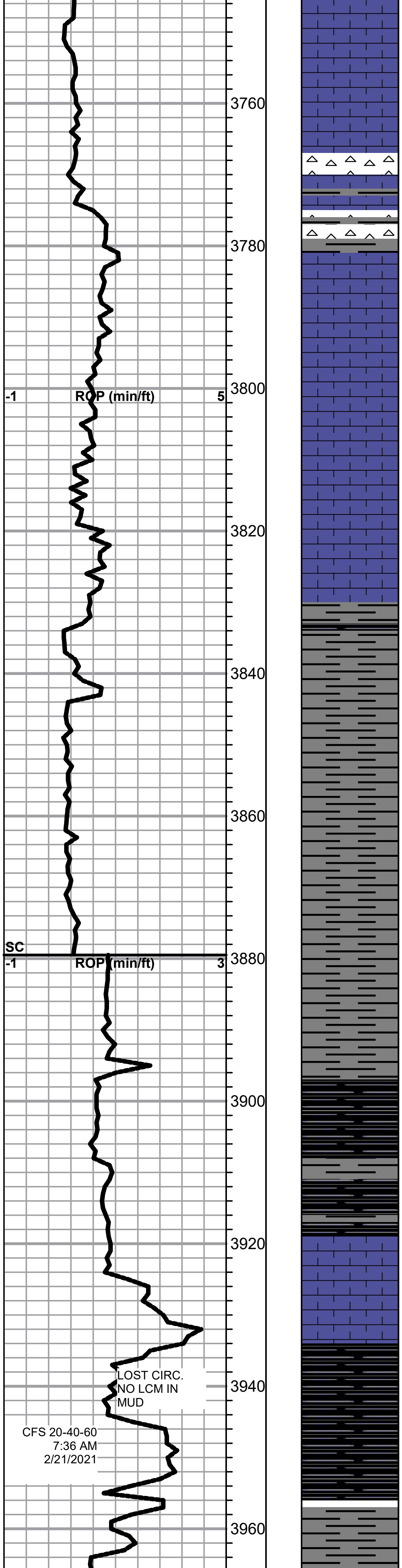
LS, white, gry, foss, chalky, poor vis. porosity

Slug dk gry silty sh

TOPEKA 3734.0 (-1747.0)

LS, crm, tan, highly foss, chalky in pts, scattered p.p porosity, no shows, tr. maroon, opaque chert, Abd. dk





gry sh in samples

LS, tan, foss , few sparry calcite cement, no shows, no odor , plus foss chert

LS, tan, gry, foss, fr. fossil cast vuggy type porosity, no shows

Slug dk gry - black sh. , waxey

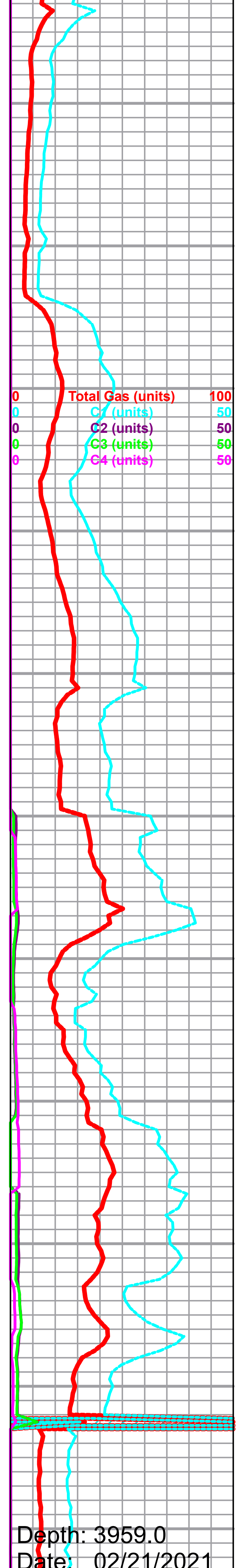
Sh, green mica, shale tr. blk carb sh .

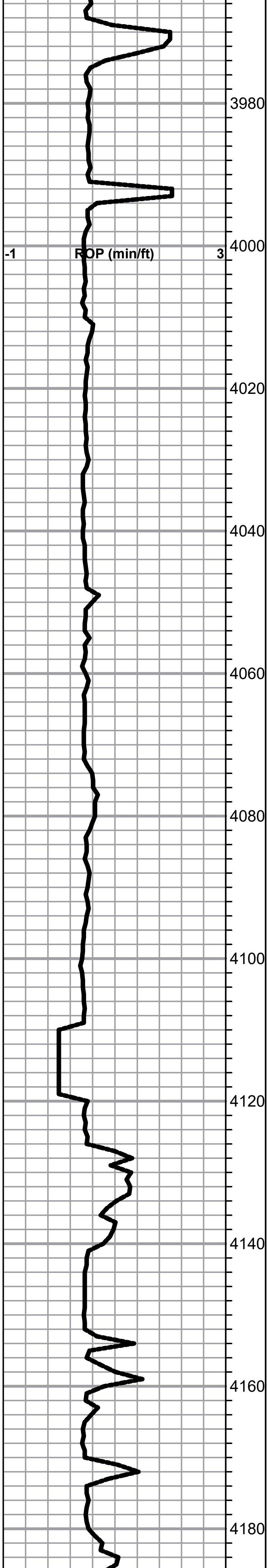
KONAWAKA 3896.0 (-1909.0)

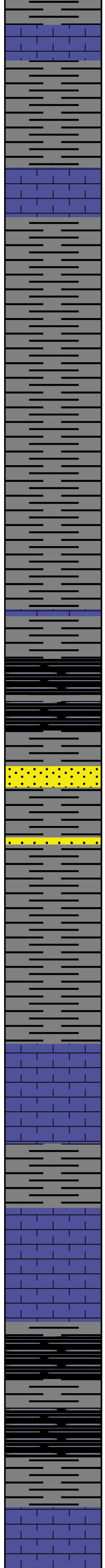
Sh, gry, dk gry, few green limey + blk fissle sh.

Abd, dk gry, blk carb . sh.

Sh, black carb, tr. gry silty sh.
few LS, tan, fxl, dense, poor vis. porosity







tr. LS, tan , crm , few ool, poorly dev. p.p. por, sl chalky, no shows,

Abd. Gry- Dk gry shales in samples.

Tr. sde. vfg , mica, poorlyh developed

Sh, gry, silty mica,   scatt tr. blk carb sh

Slug black carb sh.

Sh gry, sandy
tr. sd.,f- med grain , well sorted,

Sh. gry sd. f- med grain, wel sorted

LS, white, crm, fxl, sl. chalky, few cherty

Slug dk gry sh

LS a/a

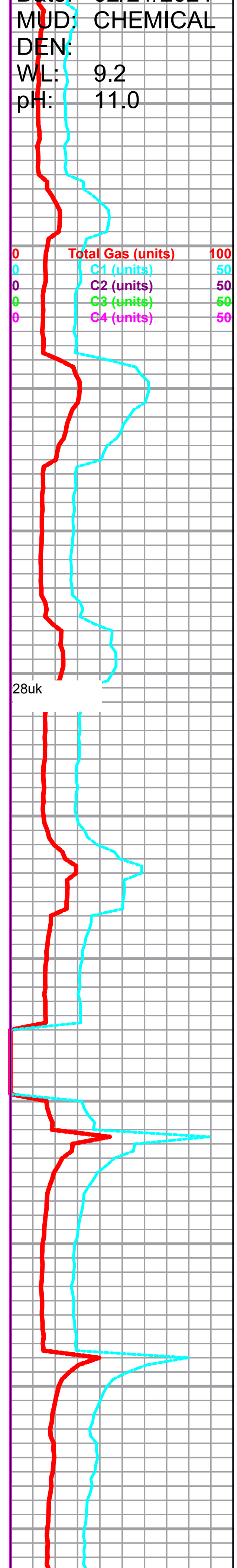
LS, white, crm, fxl, slgithly cherty, few dense,

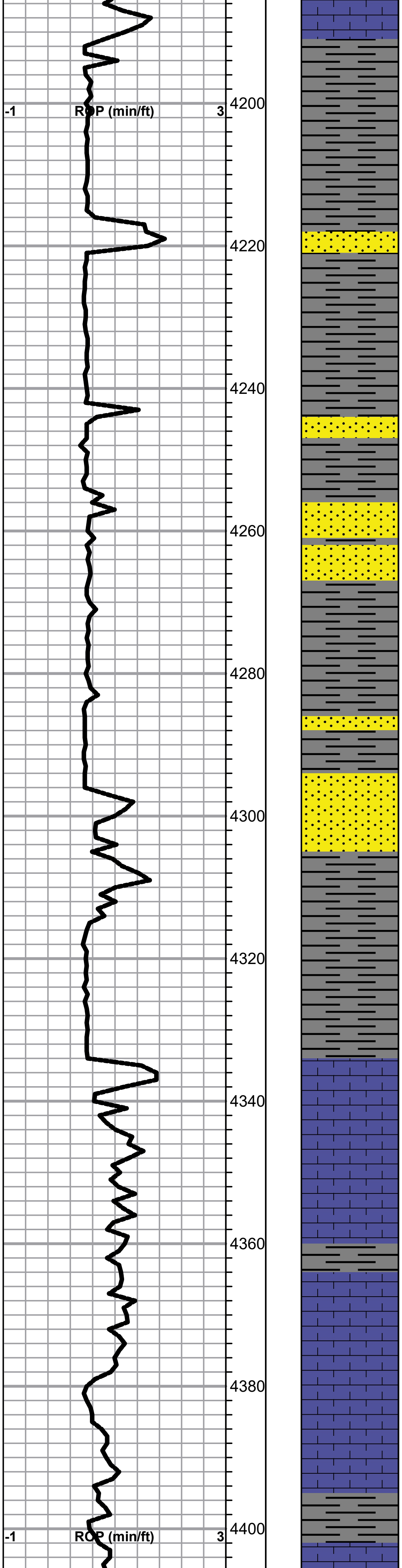
Sh, black carb

HEEBNER SH 4164.0 (-2177.0)

Sh blk carb

TORONTO 4178.0 (-2191.0)





LS, white, fxl, sl. chalky , poorly developed

DOUGLAS 4190.0 (-2203.0)

Sh, gry , gryish green, dk gry silty mica

Sh, silty dark gry

Sh, gry dkr gry silty mica.

Sh, gry, tr. sd, f. grain mica, no shows

Tr. Sd. gry , f- med grain, fair sorted, no shows, no odor

Sh, gry dk gry silty

LANSING 4335.0 (-2348.0)

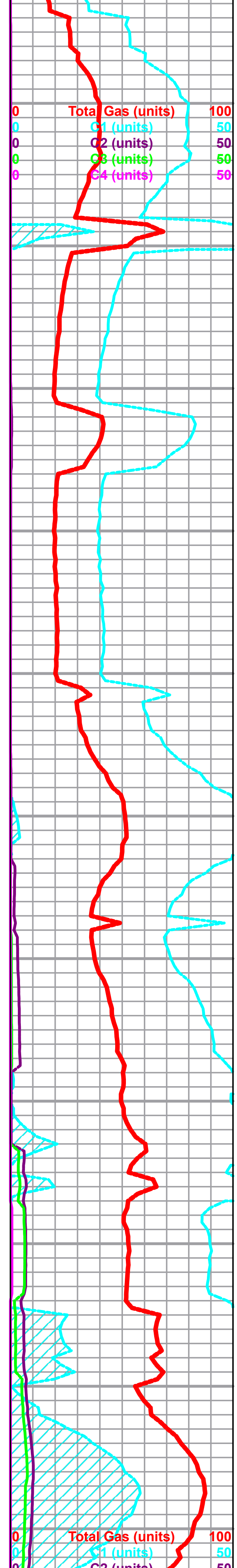
LS white/ gry, chalky, few foss, poor vis. porosity, no shows

LS, gry white, fxl, foss, chalky in prt, tr. ool. boney chert

Sh , gry, silty, tr. gry green

LS white, gry, crm, fxl, ool in pt. foss, scattered vuggy porosity

Sh, gry, blk



cfs 20-40-60

4420

LS, crm white, fxl, foss, scattered inxln por. no shows

4440

LS, tan , crm wh, fxl, foss scatt. inxln por., no shows

tr. slug dk gry sh.

4460

4480

LS, gry white, foss, chalk, tr gry chert

4500

LS cream, tan, fxl, poor vis. porosity, dense no shows

4520

LS, tan, buff, mottled, dense, poor porosity, chalky in pts, no shows, no odor

4540

LS white, crm,fxl, few foss, poorly dev. scattered por. dense, no shows,no odor

Tr. gry white chert

4560

D

LS, white, gry, foss/ ool, chalky, fair por, tr. lt brown stain , tr. free oil (dead appearing) ?? weak gas bubbles

4580

-1 ROP (min/ft) 3

4600

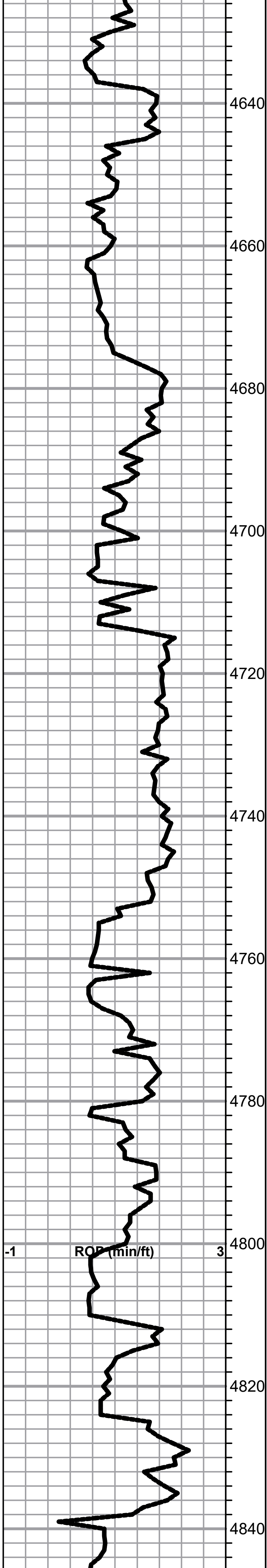
LS, tan, crm, oom, chalky, poor - fair scatterd porosity, vis. gas bubbles when broken, no odor, nsfo,,

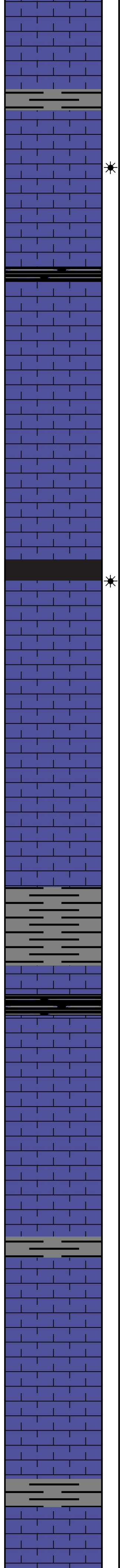
LS, tan, brn, fxl, dense, poor vis. porosity, v. chalky, few foss, no shows, no odor tr. dk black carb sh.

4620

0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

0 Total Gas (units) 100
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50





LS, tan brn, few mottled. dense poor vis. porosity, chalky in pt, no shows, no odor tr. amber & gry chert,

LS, tan, crm, dol. ool , fair scatt. por., weak gas bubbles when broken, no odor (yellow viscous discoloration on few??)

LS, white, gry fxl, foss, scatt. fossil cast por., + gry chert

LS, tan, gry fxl, dense, poorly dev. p,p, por. chalky, no shows Tr. dk gry sh

Sh, dk gry, silty, Tr. LS, tan, dol., fair p.p. porosity, tr. red viscous (flakey) dead in app., no odor . few vis. gas bubbles

LS, tan, brn, fxl, dense , cherty, no shows, abd. gry- dk gry sh silty, tr. white ool chert + white chalk

LS, gry, buff, gran, "crumbly" fair scatt por. , tr. dk blk / gry stain, nsfo, no odor abd. sh, gry dk gry.

BKC 4751.0 (-2764.0)

Sh, dk gry/ blk

MARMATON 4768.0 (-2781.0)

LS, tan, fxl dense, poor vis. porosity, few chalky, no shows, no odor

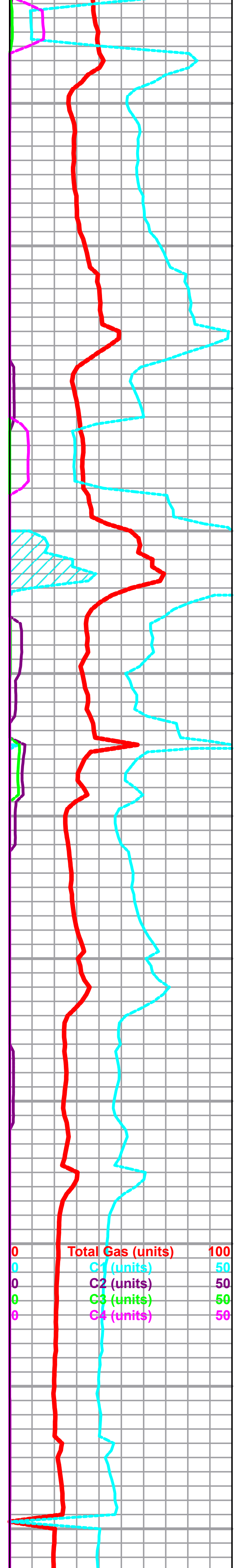
LS, tan, buff foss, ool, sl cherty

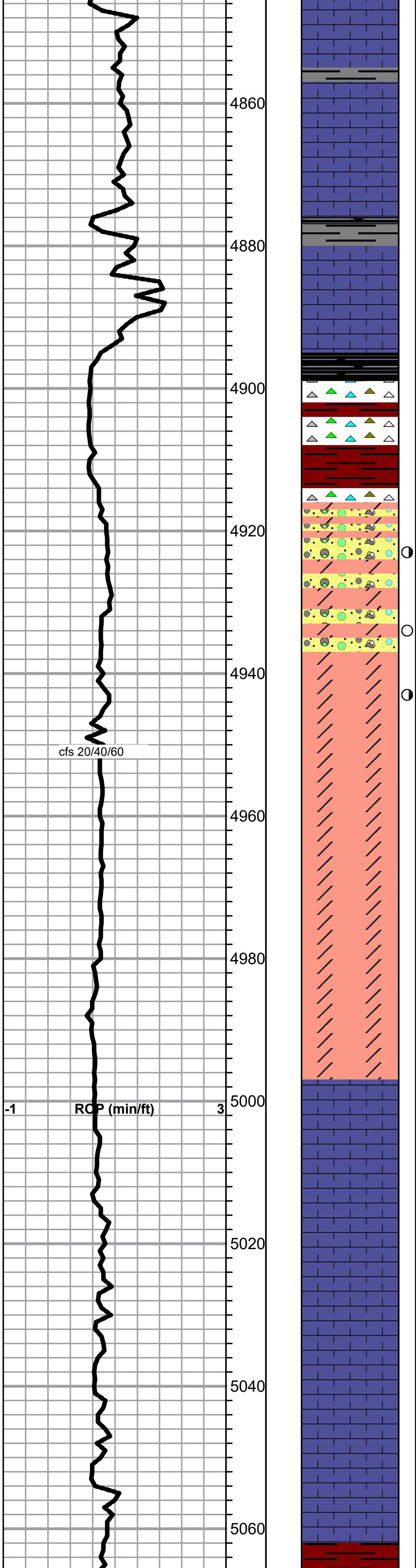
Sh, gry, dk gry

LS, white, gry chalky poor vis. porosity,

Sh, dk gry,

LS, white, gry chalky poor vis. por.





Sh, dk gry / blk

LS, gry white, fxl, cherty tr. gry white opaque chert

Sh, gry / blk , LS, tan, buff,

CHEROKEE SH. 4895.0 (-2908.0)

Slug dk gry sh, tr.chert . white, tripolitic + ool chert

Sh, maroon, + v.c. chert , no shows, no odor

lug chert tan, white, / ool

MISS 4912.0 (-2925.0)

Chert white, ool, fresh sharp ,tr. poor tripolitic por.
tr. dol white crm, tr. blk stain on few poor dk blk sptty sfo
(v. weak) tr. gas bubbles in 2 crushed samples.

Chert a/a tr. white dolomitic LS, tr. blk / brn stain , in
chert , no free oil, faint odor

Dol., / chert white, tan, , poor inxln por. tr. lt. blk stain , tr.
sfo in crushed samples. faint odor

Dol . / LS, tan, brn gry & chert

Chert , white, gry, dol., poor porosity, +wh/ gry opaque
chert

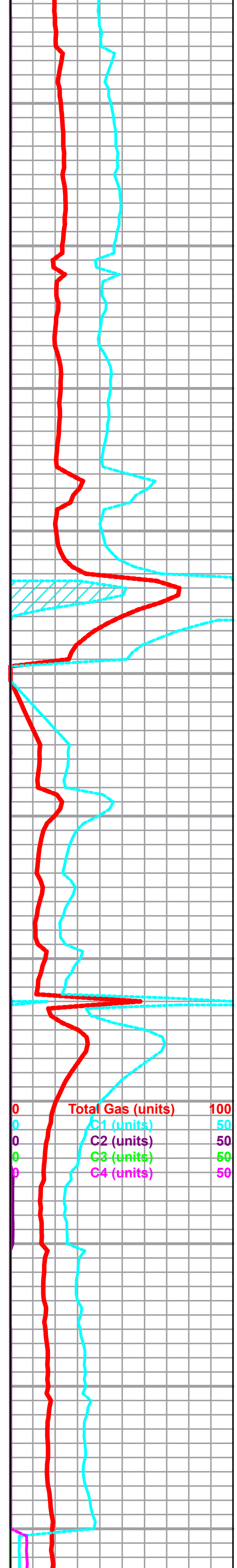
LS, tan, brn, fxl, dense, cherty poor vis. porosity no shows

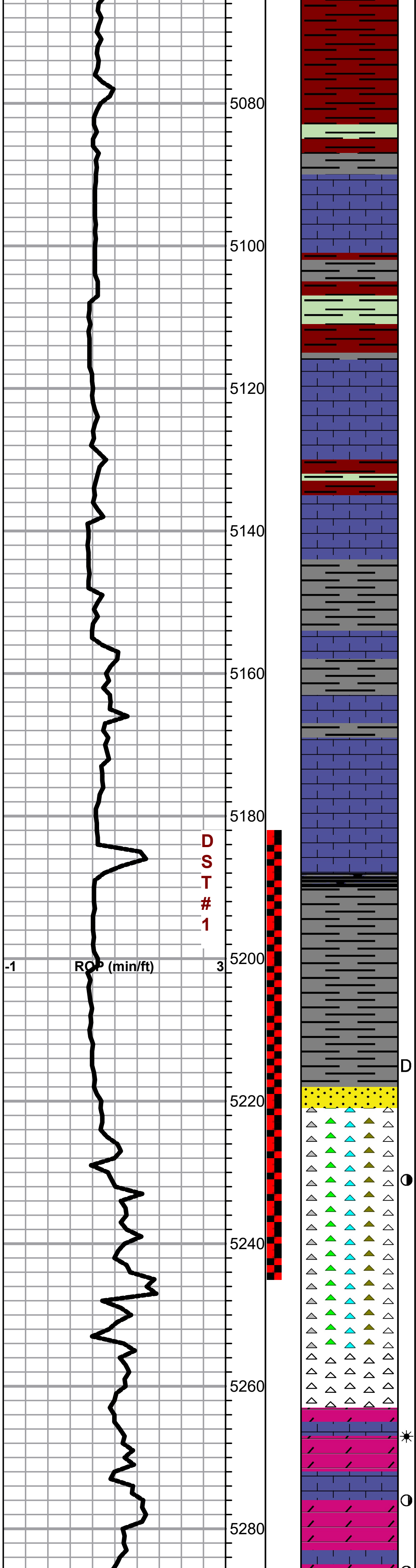
LS, tan, brn, fxl, dense poor vis. poroisty tr. blk stain (v.
weak) no shows no odor

LS, cream - tan, brn, , poor inxln por. few cherty , dense no
shows, no odor ,
few dolomitic LS, dense, poor inxln porosity few cherty tr
white, tran. cher , nsfo no odor

LS, a/a tr. chert tr. dol.

Sh, LS, interbeded





increase in red greenissh shale

Tr. LS, white, chlaky no shows

LS, white, dol., fair scatt por. fair inxln por.

LS, tan, brn, dense, cherty, tr. dol gry white, dense, poor inxln nno shows

Incearese in lt. gry , green and maroon shales

Sh, gry, few sdy,
LS, tan, brn fxl dense , no shows

Sh, a/a, + LS, white, tan, few dolomitic , fair inxln por. fair scattered p.,p. por.,no shows, no odor

WOODFORD SH. 5189.0 (-3202.0)

black carb sh .

Show of HC on surface in sample cup ,

Slug choc. brown cal. sh , tr. gas bubbles tr. distillate/ condensate

Sd. white, clr, fine to med tr. brn stain , dk blk sptty sfo, faint odor , no vis. gas bub.

VIOLA 5225.0 (-3238.0)

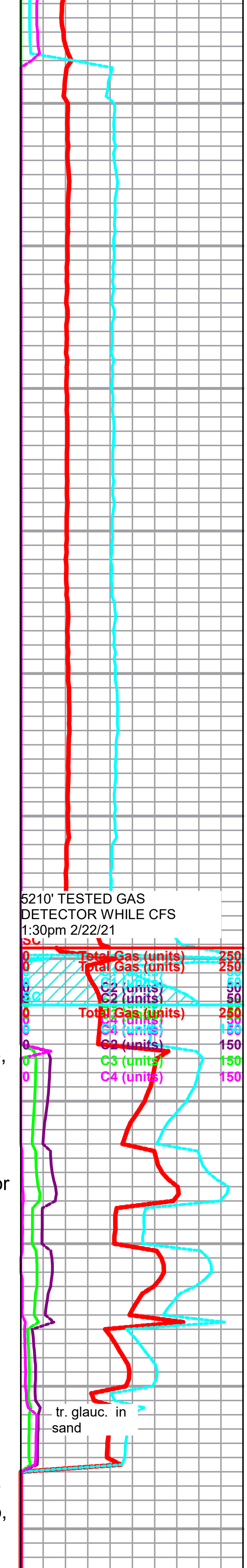
Chert white, boney opaque , tr. brn stain , nsfo, ft. odor

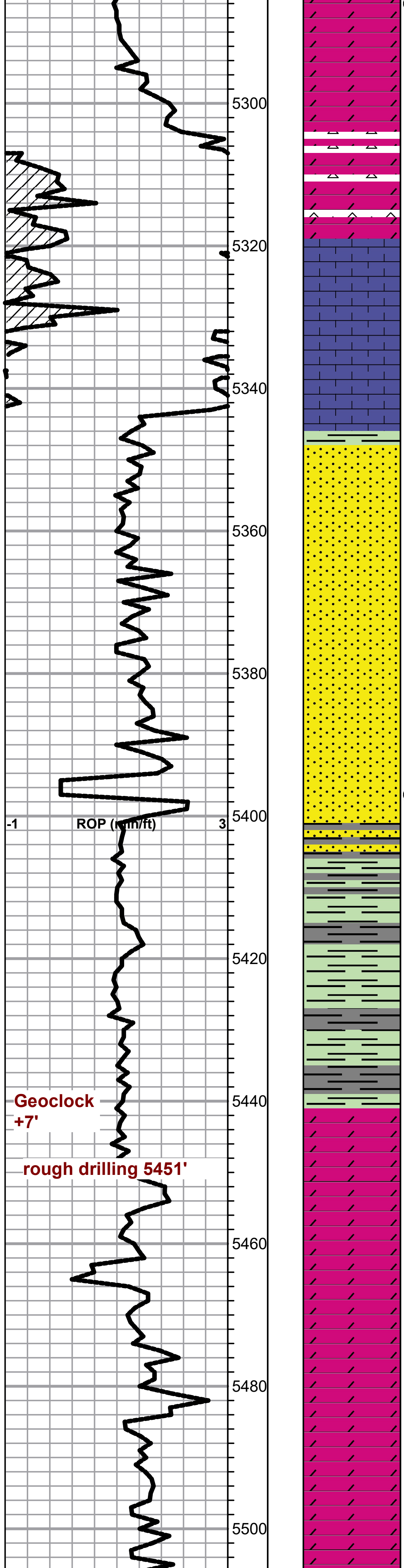
Chert , white, trans., tr. pyrite on few .,

Chert, a/a

Dol., gry gran., chalky luster , tr. gas bub, no sfo

Tr. dol med xln, dol. fair inxln por., brn stain , sfo, odor
Dol, wht, crmy , med xln , good inxln por, ?? stain nsfo, sour odor (sulfuric/ sour)





Dol., wht , tan, med xln , fair inxln por, tr. blk stain, tr. (dead in app. /) oil stains

Dol white , med xln, coarse xln fair inxln por.+, white chert no shows

Dol. a/a, + white boney chert , tr. LS, dol , no shows

LS, tan, gran. dol+ white tan chert

LS, a/a , + gry spck chert + white chalk

SIMPSON 5345.0 (-3358.0)

Sh, bloky, blue, green, sh. Sd. green tinted qtz, sub angular , friable in part,

Sd. white,- f. grain, well rounded good I. G. por., no shows, no odor., few green glauc.,

Sd. a/a

Sh, gry, green, maroon, sub waxy/ waxy"
Abd. Sd. clear f- med grain rounded , well sorted sd. good I.G. porosity, tr. blk dead oil stain

Sh, green maroon few sub waxy/ sandy, tr. pyrite
Tr. Chert, white, ool, sharp, no shows

Sh, gry , green, black , banded, inc. tr. white chalk , tr. pyrite

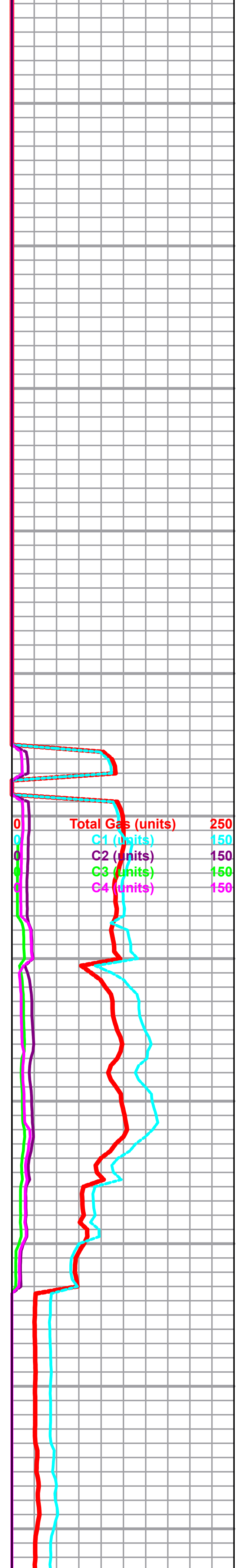
ARBUCKLE 5441.0 (-3454.0)

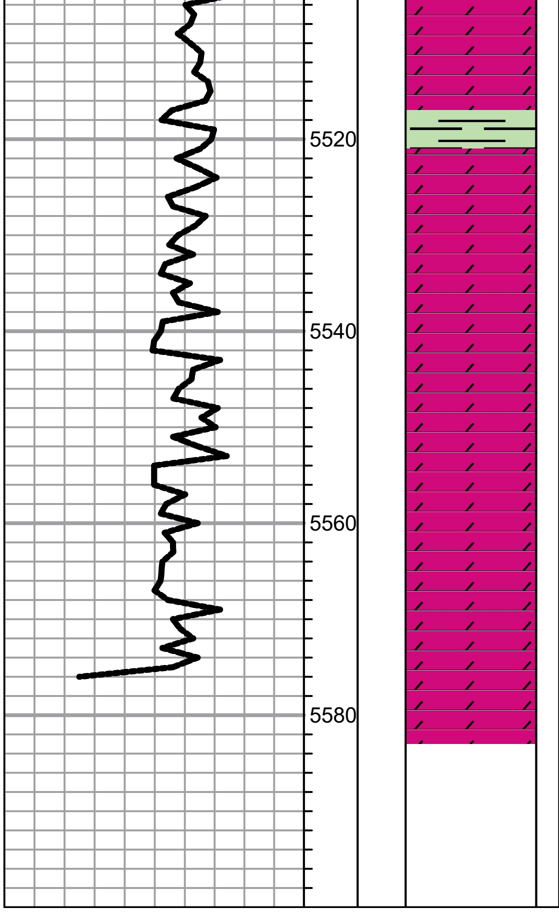
Dol. tan, suc., fxln, scattereded p.p. type por.

Dol. white, gry, fxl, few cherty, Slug white chalk

Dol. tan, , gry, fxl, suc . scattered p.p. type por.,

Dol, white, fx, dense, poor inxln porosity, nsfo, no odor



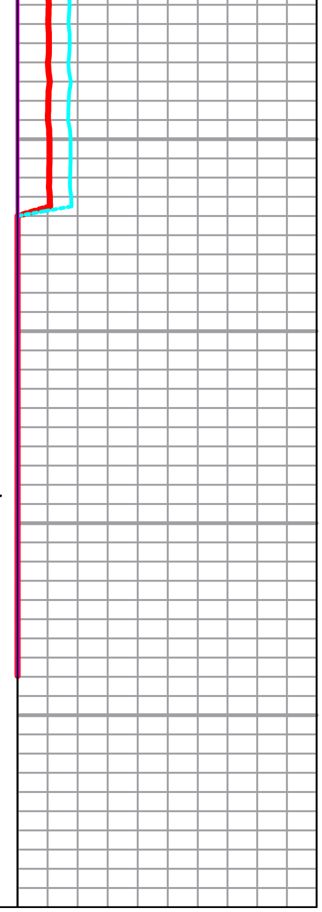


Dol.. tan, brn , fxl, fair scattered p.p. type por., few dense poor vis. por., no shows, no odor,   Slug aqua green sh in samples.

Dol. tan, gry, suc, fair inxln por., no shows, no odor

Tr. dol white, fxl, suc. good inxln por. no shows no odor few chert white, ool,

RTD 5575.0 (-3581.0)



HSI

CEMENT TREATMENT REPORT

Customer:	Ramshorn Resources LLC	Well:	DeGeer 0301	Ticket:	WP1125
City, State:		County:	Barber,KS	Date:	2/8/2021
Field Rep:	DJ	S-T-R:	3-33S-15W	Service:	13 3/8 COND. PIPE

Downhole Information	
Hole Size:	17 1/2 in
Hole Depth:	225 ft
Casing Size:	13 3/8 in
Casing Depth:	ft
Tubing / Liner:	in
CEMENT DEP	205 ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	32.0 bbls

Calculated Slurry - Lead	
Blend:	CLASS A
Weight:	15.6 ppg
Water / Sx:	5.2 gal / sx
Yield:	1.20 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	55.5 bbls
Total Sacks:	260 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
4:00PM			-	-	ON LOCATION SPOT EQUIPMENT
4:10PM				-	RUN 5 JTS. 13 3/8" CASING
8:00PM				-	CASING ON BOTTOM - BREAK CIRCULATION WITH RIG PUMP
2:20AM	4.0	100.0	5.0	5.0	H2o AHEAD
2:30AM	4.0	100.0	56.0	61.0	MIX 260 SKS CLASS A CEMENT @ 15.6 PPG
2:45AM	4.0	200.0	-	61.0	DISPLACEMENT
3:00AM	4.0	200.0	32.0	93.0	CEMENT @ DESIRED DEPTH
				93.0	CIRCULATION THRU JOB
				93.0	CIRCULATED 10 BBL TO PIT
				93.0	
				93.0	
					JOB COMPLETE,
					KEVEN LESLEY

CREW		UNIT
Cementer:	BRUNGARDT	916
Pump Operator:	OSBORN	267
Bulk #1:	WHITFIELD	181-532
Bulk #2:	LESLEY	

SUMMARY		
Average Rate	Average Pressure	Total Fluid
4.0 bpm	150 psi	93 bbls

QUALITY WELL SERVICE, INC.

7601

Federal Tax I.D. # 481187368
Home Office 30060 N. Hwy 281, Pratt, KS 67124
Mailing Address P.O. Box 468
Office 620-727-3410
Fax 620-672-3663
Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish
2-25-21	3	33S	15W	Barber	Ks		

Lease: DEGEER | Well No.: 3-1 | Location: MED Lodge, Ks W to Deerhead AETNA Rd

Contractor: DUKE DLRG RG #1 | Owner: S to Estill Rd 1/2 W to Cattle Guard 1S into

Type Job	PTA		To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Hole Size	7 7/8	T.D. 5575'	
Csg.		Depth	Charge To: Ramshorn Resources LLC
Tbg. Size	4 1/2 DP	Depth 5443'	Street
Tool		Depth	City / State
Cement Left in Csg.		Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.
Meas Line		Displace	Cement Amount Ordered 260 sx 60/40 4% GEL

EQUIPMENT				
Pumptrk	8	No.		
Bulktrk	12	No.		
Bulktrk		No.		
Pickup		No.		

Common	156 sx
Poz. Mix	104 sx
Gel.	895
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	269
Mileage	25 / 6725'

JOB SERVICES & REMARKS

Rat Hole	30 sx
Mouse Hole	20 sx
Centralizers	
Baskets	
D/V or Port Collar	

1st Plug @ 5443' 50sx 60/40 4% GEL
Pump H2O
Mix & Pump 50sx 60/40 4% GEL
Pump H2O
Pump MUD
2nd Plug @ 690' 50sx 60/40 4% GEL
Pump H2O
Mix & Pump 50sx 60/40 4% GEL
Pump H2O
3rd Plug @ 270' 70sx 60/40 4% GEL
Pump H2O
Mix & Pump 70sx 60/40 4% GEL
Pump H2O
4th Plug @ 60' 40sx 60/40 4% GEL
Mix & Pump 40 sx 60/40 4% GEL   Todd Mike
THANK YOU PLEASE CALL AGAIN   MATT

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
SERVICE SUP	1 EA
LMV	25
Pumptrk Charge	PTA
Mileage	50
Tax	
Discount	
Total Charge	

X Signature [signature]