Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1168484

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 # 5210
Name: Lebsack Oil Production Inc.
Address 1: PO BOX 354
Address 2:
City: CHASE State: KS Zip: 67524 + ____
Contact Person: Wayne Lebsack
Phone: (620) 938-2396
CONTRACTOR: License # 33793
Name: H2 Drilling LLC
Wellsite Geologist: Josh Austin
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover

☑ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

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

09/10/2013 Spud Date or Recompletion Date
09/20/2013 Date Reached TD
10/03/2013 Completion Date or Recompletion Date

API No. 15 - 15-055-22236-00-00
Spot Description:
S2 - NW - NW - SE Sec. 12 Twp. 22 S. R. 34 ☐ East ☑ West
2304 Feet from ☐ North / ☑ South Line of Section
2310 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: Finney
Lease Name: Garden City Well #: 4-12
Field Name: Damme
Producing Formation: St. Louis
Elevation: Ground: 2909 Kelly Bushing: 2909
Total Vertical Depth: 4860 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 437 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 2800 Feet
If Alternate II completion, cement circulated from: 2800
feet depth to: 0 w/ 550 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 2100 ppm Fluid volume: 160 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Lebsack Oil Production
Lease Name: Bidwell License #: 5210
Quarter SW Sec. 13 Twp. 23 S. R. 34 ☐ East ☑ West
County: Finney Permit #: D26490

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: 12/23/2013
☑ **Confidential Release Date:** 12/23/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 12/23/2013

1168484

Operator Name: Lebsack Oil Production Inc. Lease Name: Garden City Well #: 4-12

Sec. 12 Twp. 22 S. R. 34 ☐ East ☑ West County: Finney

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:

DUCP
DIL
MICRO

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

Name	Top	Datum
Heebner	3796	-876
Toronto	3812	-892
Lansing	3892	-972
Base KC	4315	-1395
Cherokee Sh	4466	-1546
Mississippi	4717	-1797
RTD	4860	-1940

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	12.250	8.625	23	437	common	440	Gel & CC
Production	7.875	5.5	14	4858	ASC	210	

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	0-2800	Lite	550	Gil, Salt & Flo Seal
	-			

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
3		700 gal 15% MCA	4774-80
3			4796-4800

TUBING RECORD: Size: 2.875 Set At: 4802 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 11/15/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio	Gravity
	32				48			

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:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

ALLIED OIL & GAS SERVICES, LLC 061134

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
9/21/13	17	22	34		6:30 a.m.	11:20 a.m 1:3_	11:30 a.m 2:30 pm

LEASE Garden City WELL # 4-17 LOCATION Tennis Rd w to Bisbane 1W 3/4 S W into
COUNTY Finney STATE KS
OLD OR NEW (Circle one): NEW (circled)

7,3
1.02

CONTRACTOR H 2 OWNER Same
TYPE OF JOB Production (2 stage)
HOLE SIZE 7 7/8 T.D. 4860
CASING SIZE 5 1/2 14# DEPTH 4858
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DV Tool DEPTH 2800
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 15.00'
CEMENT LEFT IN CSG. 15.00'
PERFS.
DISPLACEMENT Bottom 49.85 water 68.15 mud Top 68.32 water

CEMENT
AMOUNT ORDERED 210 sks ASC 10% salt 5 gilsonite, 2% gel, 12 Bbl super flush, 550 sks Lite 1/4# Flo-Seal

COMMON		@	
POZMIX		@	
GEL	4 sks	@ 23.40	93.60
CHLORIDE		@	
ASC	210 sks	@ 20.90	4389.00
Lite	550 sks	@ 15.95	~~8607.50~~ 8772.50
Salt	22 sks	@ 26.35	579.70
Gilsonite	1184 lbs	@ .98	1160.32
Flo-seal	138#	@ 2.97	409.86
Super flush WF 5.T 12 bbl		@ 58.70	704.40
		@	
		@	
		@	
HANDLING	897.87 ft³	@ 2.48	2226.72
MILEAGE	37.85 ton x 75 x 2.60		7383.25
		TOTAL	~~25,454.35~~ 25,619.35

EQUIPMENT

PUMP TRUCK # 170 CEMENTER Paul Beaver / Andrew Fisher
HELPER Tyler Flipse
BULK TRUCK # 600 DRIVER Chris Helpingstine 3
BULK TRUCK # 566 DRIVER David Sentano 3

REMARKS:

Drop ball circulate ball went through @ 600#, mix 12 bbl WFBT, mix 210 sks ASC, wash up pump + lines. Displace with water/mud. Plug didn't land @ lost of ___, 4 bbl before 100% displacement, 2801.25 Lift pressure 700#. Drop dart open tool @ ___#, circulate 1 hour. Mix 20 sks m.H mix 30 sks R.H mix 550 sks lite down 5 1/2, wash up pump + lines, displace with water, plug did land @ 1900# Lift pressure 1200# Cement did circulate 20 Bbls to the pit.

Thank You!

SERVICE

DEPTH OF JOB	4858'		
PUMP TRUCK CHARGE	2443.75		2765.75
EXTRA FOOTAGE		@	
MILEAGE m1HV	75	@ 7.70	577.50
MANIFOLD Head		@	275.00
m1 LV		@ 4.40	330.00
		@	
		TOTAL	6392.00

CHARGE TO: Lebsack Oil
STREET
CITY ________ STATE ________ ZIP ________

PLUG & FLOAT EQUIPMENT

Weatherford 5 1/2

DV tool	@	5335.26
Guide shoe	@	280.80
AFU Float insert	@	334.62
Basket	@	394.29
Centralizers 7	@ 57.33	401.31
	TOTAL	6746.28

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) ~~1655.97~~ 1668.46
TOTAL CHARGES ~~38,___.63~~ 38,___.63
DISCOUNT ~~7,___~~ IF PAID IN 30 DAYS
~~30,___~~ 6402.27
25609.08

PRINTED NAME Bert Musto
SIGNATURE

ALLIED OIL & GAS SERVICES, LLC 061103

Federal Tax I.D. # 20-8651476

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Oakley KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
9-11-13	12	22	34	6:00PM	8:00PM	8:00 AM	8:30 AM

LEASE Gaines City WELL # 1-12 LOCATION Tennis Rd 1 45E 1/2 S OLD OR (NEW) (Circle one) Lane Rd 1 W 3/4 S 1/2 W

COUNTY Logan STATE KS

CONTRACTOR H2 #2
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 439
CASING SIZE 8 5/8 12 1/4 DEPTH 437
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 26 3/4

OWNER Same

EQUIPMENT

PUMP TRUCK CEMENTER Kelly Gabel
322 HELPER Wayne McGlothlin
BULK TRUCK
373 DRIVER Alex (TWS)
BULK TRUCK
DRIVER

REMARKS:

Safety meeting, rigged up, hooked up to circulate, mix & 290 sks Com 3% cc 2% gel, released plug & displaced w/ 26 3/4 bbl water, shut in, cement did not circulate so ran 1" pipe & mixed 150 sks, waiting cement to surface, rigged down

Thank You
Kelly Gabel

CHARGE TO: Lebsack
STREET
CITY STATE ZIP

CEMENT

AMOUNT ORDERED 290 sks Com 3% cc 2% gel + 300 sks Com 3% cc 2% gel

COMMON	440	@	17.00	7480.00
POZMIX		@		
GEL	8	@	23.50	188.00
CHLORIDE	16	@	64.00	1024.00
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
	729	@		
HANDLING	1458 sacks	@	2.75	1659.92
MILEAGE	20,68 TON X 25¢		2.68	2403.28
			TOTAL	14,729.73

1551.

SERVICE

DEPTH OF JOB	437		
PUMP TRUCK CHARGE	1512.25		
EXTRA FOOTAGE		@	
MILEAGE	MI HV 76	@ 7.70	577.50
MANIFOLD	Head Rent	@	275.00
	MI LV 75	@ 4.40	330.00
		@	
		TOTAL	2694.75

PLUG & FLOAT EQUIPMENT

8 5/8 Wooden Plug		@	107.64
		@	
		@	
		@	
		@	
		TOTAL	107.64

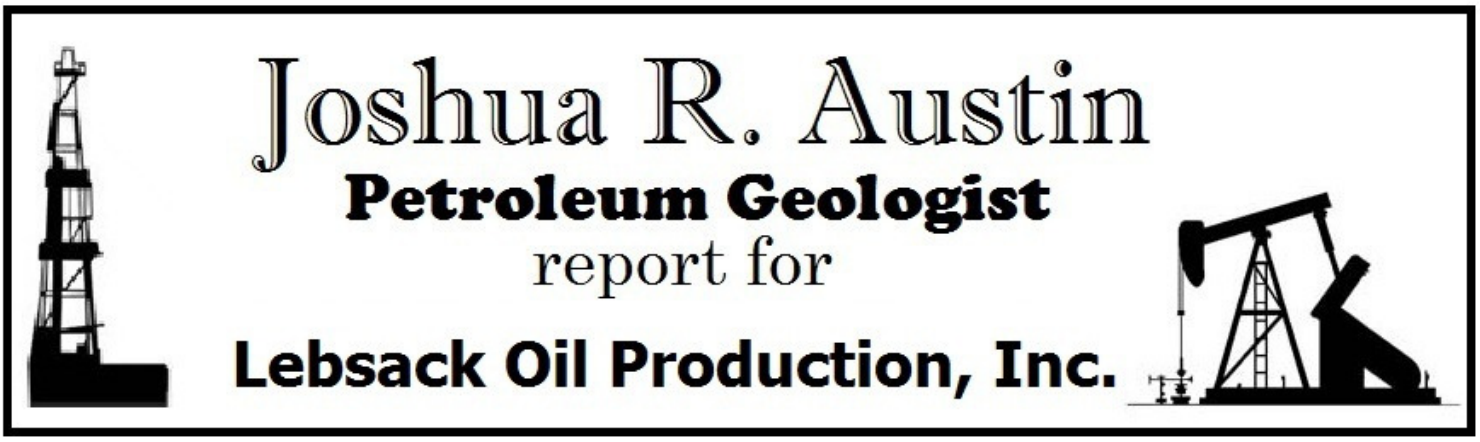
To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL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

PRINTED NAME
SIGNATURE Armando Vale

SALES TAX (If Any) 671.22
TOTAL CHARGES 17,482.12
DISCOUNT 3,496.40 IF PAID IN 30 DAYS
13,985.68 Net.

OPERATOR

Company:	Lebsack Oil production		
Address:	PO Box 354 Chase, KS 67524		
Contact Geologist:			
Contact Phone Nbr:	620-938-2396		
Well Name:	Garden City 4-12		
Location:	8 5/8" @ 437'	API:	15-055-22236-00-00
Pool:		Field:	Tanker
State:	Kansas, Finney County	Country:	USA



Scale 1:240 Imperial

Well Name:	Garden City 4-12		
Surface Location:	8 5/8" @ 437'		
Bottom Location:			
API:	15-055-22236-00-00		
License Number:			
Spud Date:	9/10/2013	Time:	3:34 PM
Region:	S2-NW-NW-SE 12-22s-34w		
Drilling Completed:	9/20/2013	Time:	5:50 PM
Surface Coordinates:	2,304' From South Line & 2310' From East Line		
Bottom Hole Coordinates:			
Ground Elevation:	2909.00ft		
K.B. Elevation:	2920.00ft		
Logged Interval:	3600.00ft	To:	4860.00ft
Total Depth:	4860.00ft		
Formation:	Mississippi		
Drilling Fluid Type:	Chemical Mud was displaced at 3462'		

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:		Latitude:	
N/S Co-ord:	2,304' From South Line		
E/W Co-ord:	2310' From East Line		

LOGGED BY

Company:	Joshua R. Austin, Petroleum Geologist		
Address:	732 NE 110th Ave Stafford, KS 67578		
Phone Nbr:	620-546-3960		
Logged By:	Geologist	Name:	Josh Austin

CONTRACTOR

Contractor:	H2 Drilling Company		
Rig #:	2		
Rig Type:	mud rotary		
Spud Date:	9/10/2013	Time:	3:34 PM
TD Date:	9/20/2013	Time:	5:50 PM
Rig Release:		Time:	

Rig Release: Time:

ELEVATIONS

K.B. Elevation: 2920.00ft Ground Elevation: 2909.00ft
K.B. to Ground: 11.00ft

NOTES

On the basis of the electric logs and after running DST number 3, it was recommended by all parties involved in the Garden City #4-12 to run 5 1/2" production casing at 4847'

Lebsack Oil Production, Inc.
well comparison sheet

	DRILLING WELL Garden City #4-12				COMPARISON WELL Garden City #2-12				COMPARISON WELL Loomis 2-12			
	2920 KB				2921 KB		Structural Relationship		2922 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	3798	-878	3796	-876	3794	-873	-5	-3	3801	-879	1	3
Toronto	3817	-897	3812	-892	3809	-888	-9	-4	3822	-900	3	8
Lansing	3892	-972	3892	-972	3887	-966	-6	-6	3898	-976	4	4
Base KC	4316	-1396	4315	-1395	4312	-1391	-5	-4	4322	-1400	4	5
Marmaton	4338	-1418	4348	-1428	4340	-1419	1	-9	4348	-1426	8	-2
Pawnee	4420	-1500	4426	-1506	4417	-1496	-4	-10	4432	-1510	10	4
Ft. Scott	4456	-1536	4456	-1536	4453	-1532	-4	-4	4462	-1540	4	4
Cherokee Sh.	4467	-1547	4466	-1546	4460	-1539	-8	-7	4477	-1555	8	9
Morrow Shale	4646	-1726	4646	-1726	4638	-1717	-9	-9	4673	-1751	25	25
Mississippi	4716	-1796	4717	-1797	4690	-1769	-27	-28	4777	-1855	59	58
St. louis C	4776	-1856	4775	-1855	4777	-1856	0	1	4848	-1926	70	71
RTD	4860	-1940	4860	-1940	4860	-1939		-1	4900	-1978		38
LTD	4858	-1938	4860	-1940	4860	-1939		-1				

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

LebSack Oil Production

P.O. Box 354
Chase, KS 67524

ATTN: Josh Austin

12-22s-34w-Finney, KS

Garden City #4-12

Job Ticket: 54508 **DST#: 1**

Test Start: 2013.09.17 @ 19:30:00

GENERAL INFORMATION:

Formation: Pawnee
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:48:15
Time Test Ended: 03:19:15

Test Type: Conventional Bottom Hole (Initial)
Tester: Cornelio Landa III (
Unit No: 69

Interval: **4417.00 ft (KB) To 4440.00 ft (KB) (TVD)**
Total Depth: 4440.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

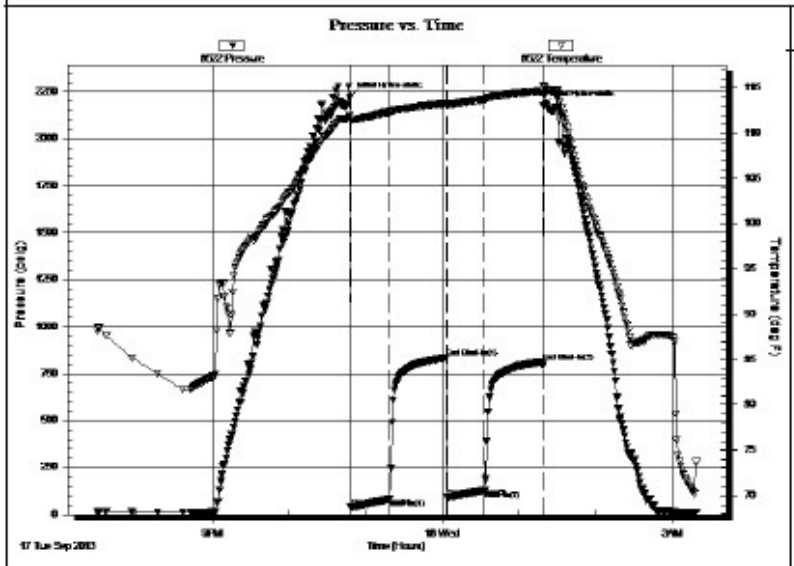
Reference Elevations: 2920.00 ft (KB)
2909.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8522 Outside
Press@RunDepth: 128.57 psig @ 4419.00 ft (KB)
Start Date: 2013.09.17 End Date: 2013.09.18
Start Time: 19:30:05 End Time: 03:19:14

Capacity: 8000.00 psig
Last Calib.: 2013.09.18
Time On Btm: 2013.09.17 @ 22:48:00
Time Off Btm: 2013.09.18 @ 01:19:30

TEST COMMENT: IF: 3 in. of Blow
ISI: No return

ISI: No Return
FF: 2 1/2 in. of Blow
FSI: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2220.24	112.01	Initial Hydro-static
1	36.62	111.36	Open To Flow (1)
31	82.14	112.31	Shut-In(1)
76	833.69	113.25	End Shut-In(1)
76	91.21	113.02	Open To Flow (2)
106	128.57	113.74	Shut-In(2)
151	812.46	114.63	End Shut-In(2)
152	2175.92	115.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Wm 50w 50m	0.59
120.00	Wm 10w 90m with oil specs	0.59

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

LebSack Oil Production

P.O. Box 354
Chase, KS 67524

ATTN: Josh Austin

12-22s-34w-Finney, KS

Garden City #4-12

Job Ticket: 54999 **DST#: 2**

Test Start: 2013.09.19 @ 04:06:00

GENERAL INFORMATION:

Formation: **Morrow Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:18:45
Time Test Ended: 10:12:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Cornelio Landa III (
Unit No: 69

Interval: 4636.00 ft (KB) To 4700.00 ft (KB) (TVD)
Total Depth: 4700.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

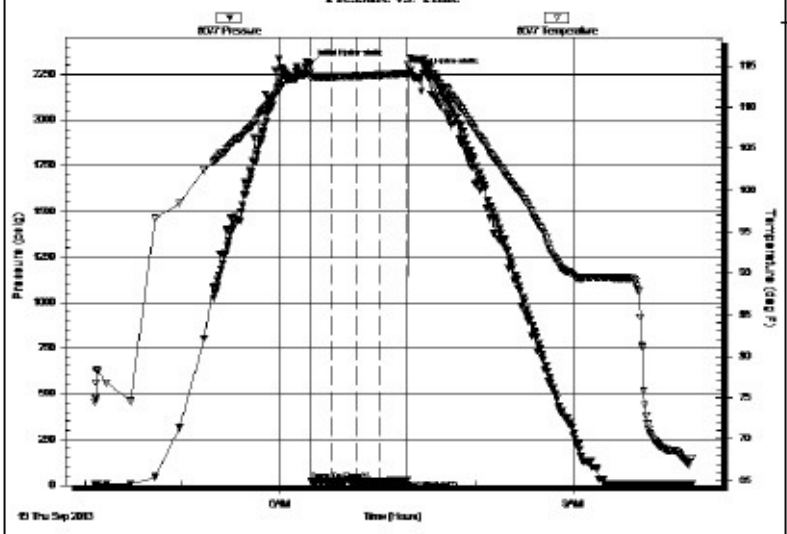
Reference Elevations: 2920.00 ft (KB)
2909.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8677 **Inside**

Press@RunDepth: 22.71 psig @ 4637.00 ft (KB)
Start Date: 2013.09.19 End Date: 2013.09.19
Start Time: 04:06:05 End Time: 10:12:29

Capacity: 8000.00 psig
Last Calib.: 2013.09.19
Time On Btm: 2013.09.19 @ 06:18:30
Time Off Btm: 2013.09.19 @ 07:18:30

TEST COMMENT: IF: Surface blow , died @ 13 min.
ISI: No return.
FF: No blow .
FSI: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2304.80	114.24	Initial Hydro-static
1	20.48	113.45	Open To Flow (1)
13	21.92	113.66	Shut-In(1)
28	31.54	113.77	End Shut-In(1)
29	22.08	113.77	Open To Flow (2)
43	22.71	113.92	Shut-In(2)
60	27.09	114.13	End Shut-In(2)
60	2252.97	115.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Mud 100m	0.59

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

LebSack Oil Production

P.O. Box 354
Chase, KS 67524

ATTN: Josh Austin

12-22s-34w-Finney, KS

Garden City #4-12

Job Ticket: 55000 **DST#: 3**

Test Start: 2013.09.20 @ 11:03:00

GENERAL INFORMATION:

Formation: **Mississippian**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:51:00
Time Test Ended: 19:57:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 69

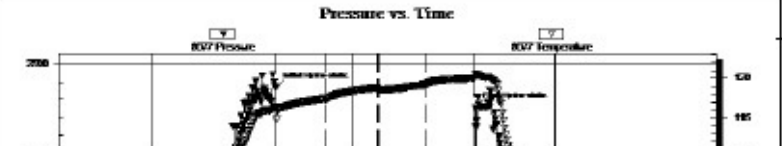
Interval: **4760.00 ft (KB) To 4860.00 ft (KB) (TVD)**
Total Depth: 4860.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2920.00 ft (KB)
2909.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8677 **Inside**
Press@RunDepth: 142.32 psig @ 4761.00 ft (KB)
Start Date: 2013.09.20 End Date: 2013.09.20
Start Time: 11:03:05 End Time: 19:57:00

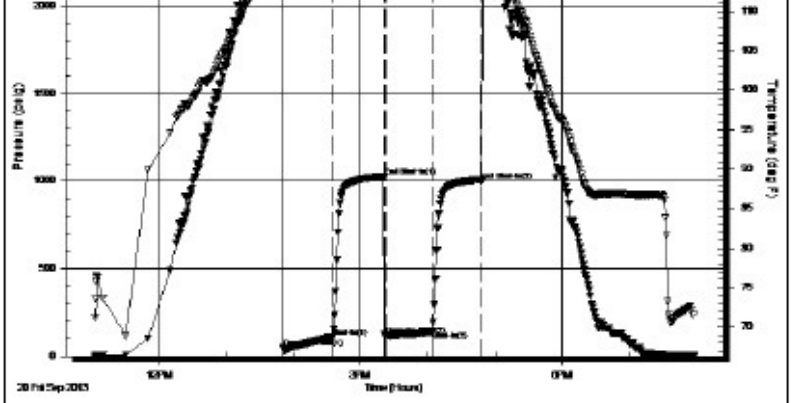
Capacity: 8000.00 psig
Last Calib.: 2013.09.20
Time On Btm: 2013.09.20 @ 13:50:45
Time Off Btm: 2013.09.20 @ 16:49:00

TEST COMMENT: IF: BOB @ 23 min.
ISI: 2" return.
FF: BOB @ 19 min.
FSI: 3" return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2369.13	116.41	Initial Hydro-static



1	48.08	114.86	Open To Flow (1)
44	106.02	117.42	Shut-In(1)
91	1026.07	118.84	End Shut-In(1)
92	120.57	118.60	Open To Flow (2)
134	142.32	119.22	Shut-In(2)
177	1005.95	120.03	End Shut-In(2)
179	2251.67	120.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	mco 50m 50o	0.59
120.00	mco 30m 70o	0.59
60.00	mco 20m 80o	0.84
0.00	480' GIP	0.00

* Recovery from multiple tests

Gas Rates

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

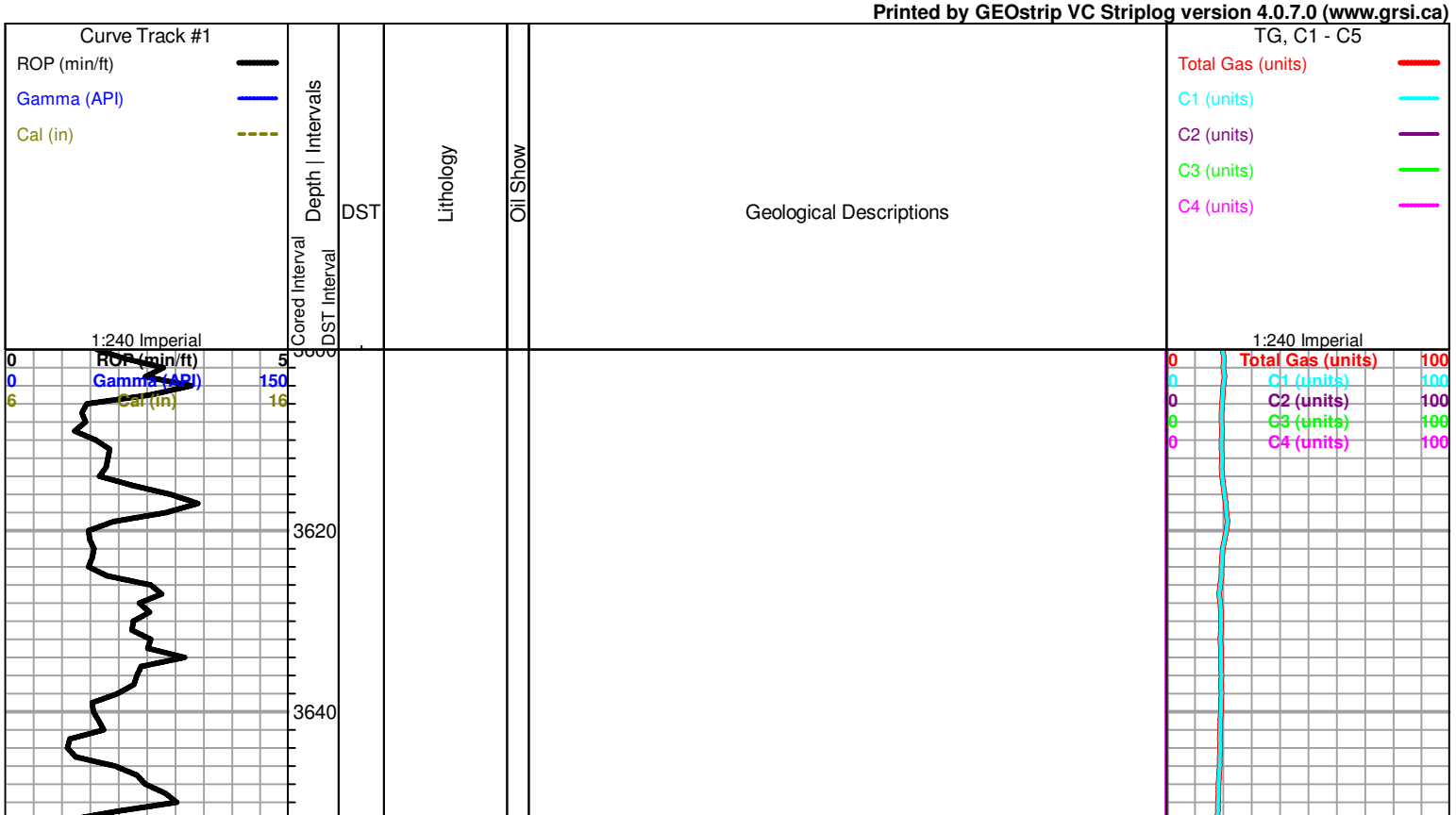
ROCK TYPES

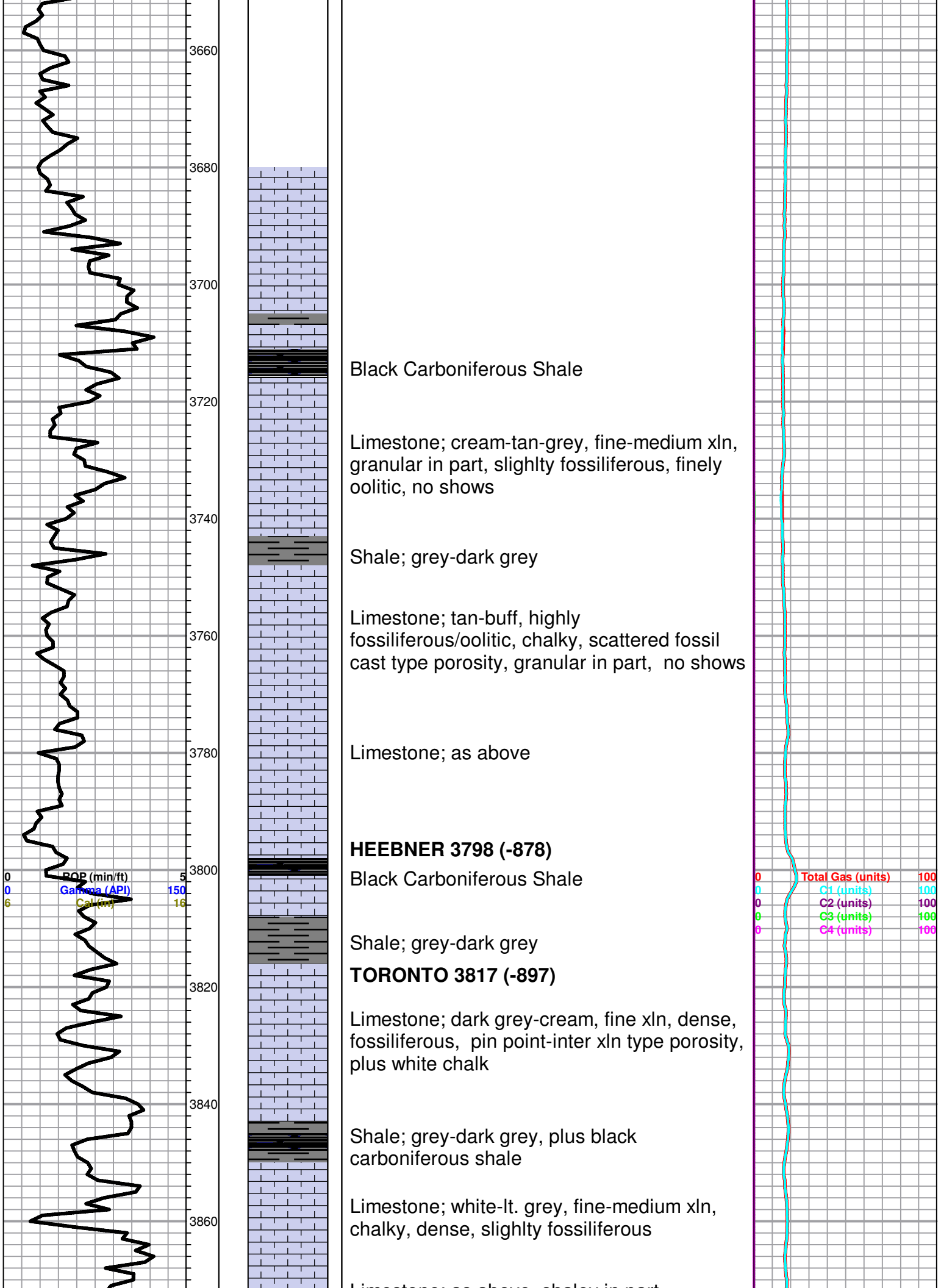
sdy lmst
Lmst fw7>
shale, grn
shale, gry
Carbon Sh
Ss

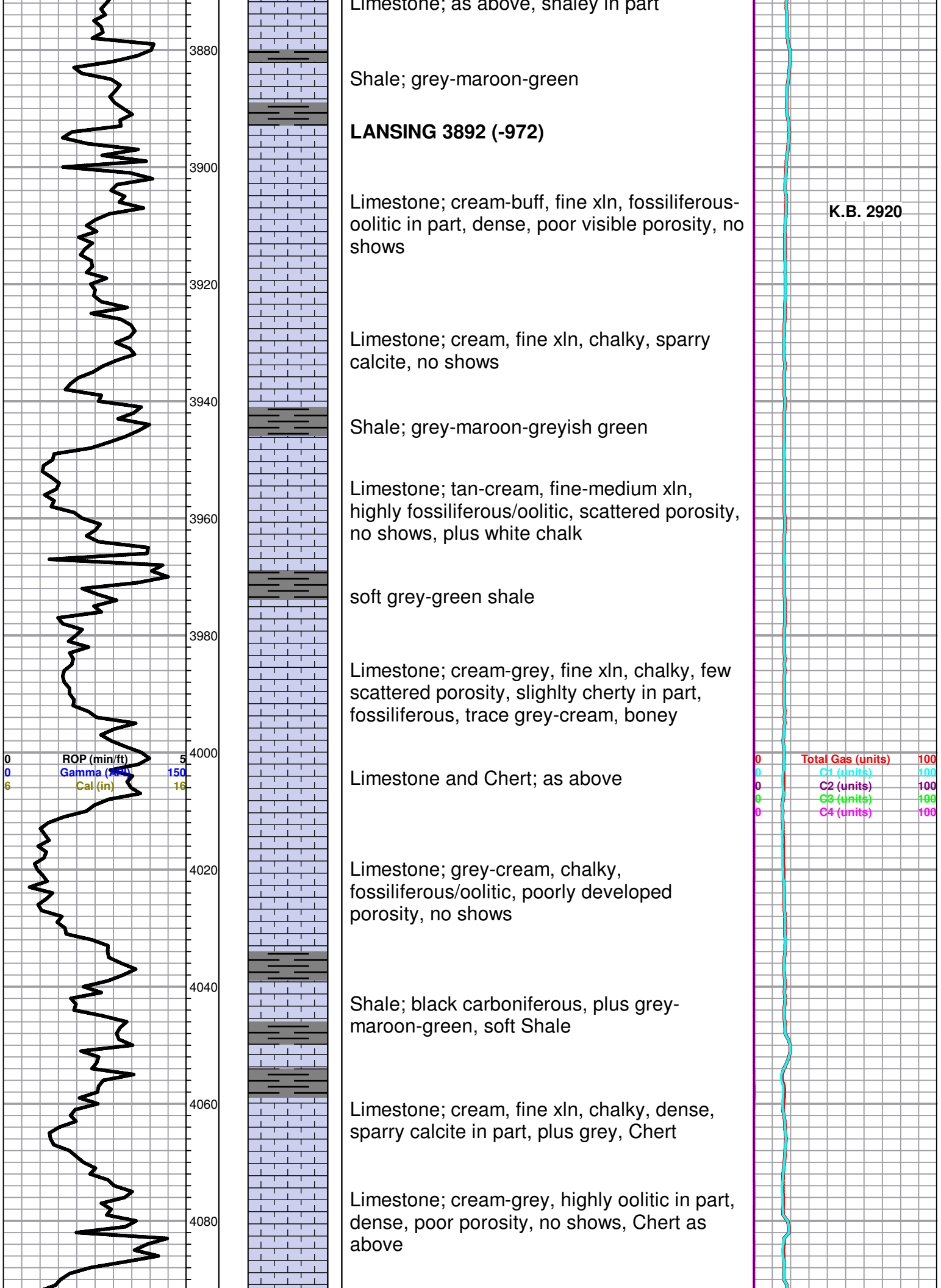
OTHER SYMBOLS

DST
DST Int
DST alt
Core
tail pipe

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




3660
3680
3700
3720
3740
3760
3780
3800
3820
3840
3860
0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16
0 Total Gas (units) 100
0 C1 (units) 100
0 C2 (units) 100
0 C3 (units) 100
0 C4 (units) 100
Black Carboniferous Shale
Limestone; cream-tan-grey, fine-medium xln, granular in part, slighlty fossiliferous, finely oolitic, no shows
Shale; grey-dark grey
Limestone; tan-buff, highly fossiliferous/oolitic, chalky, scattered fossil cast type porosity, granular in part, no shows
Limestone; as above
HEEBNER 3798 (-878)
Black Carboniferous Shale
Shale; grey-dark grey
TORONTO 3817 (-897)
Limestone; dark grey-cream, fine xln, dense, fossiliferous, pin point-inter xln type porosity, plus white chalk
Shale; grey-dark grey, plus black carboniferous shale
Limestone; white-lt. grey, fine-medium xln, chalky, dense, slighlty fossiliferous



Limestone; as above, shaley in part

Shale; grey-maroon-green

LANSING 3892 (-972)

Limestone; cream-buff, fine xln, fossiliferous-oolitic in part, dense, poor visible porosity, no shows

K.B. 2920

Limestone; cream, fine xln, chalky, sparry calcite, no shows

Shale; grey-maroon-greyish green

Limestone; tan-cream, fine-medium xln, highly fossiliferous/oolitic, scattered porosity, no shows, plus white chalk

soft grey-green shale

Limestone; cream-grey, fine xln, chalky, few scattered porosity, slighlty cherty in part, fossiliferous, trace grey-cream, boney

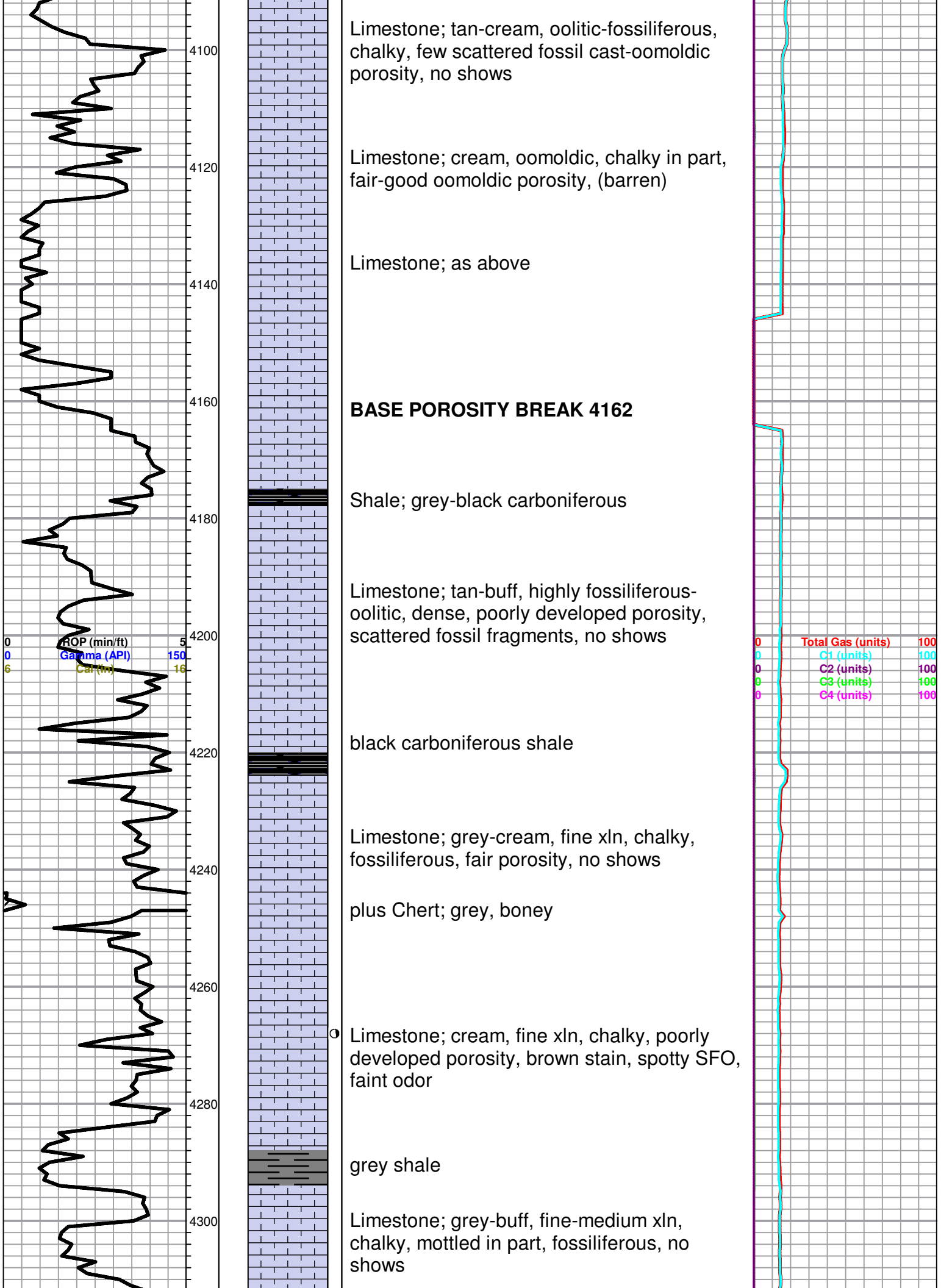
Limestone and Chert; as above

Limestone; grey-cream, chalky, fossiliferous/oolitic, poorly developed porosity, no shows

Shale; black carboniferous, plus grey-maroon-green, soft Shale

Limestone; cream, fine xln, chalky, dense, sparry calcite in part, plus grey, Chert

Limestone; cream-grey, highly oolitic in part, dense, poor porosity, no shows, Chert as above



Limestone; tan-cream, oolitic-fossiliferous, chalky, few scattered fossil cast-oomoldic porosity, no shows

Limestone; cream, oomoldic, chalky in part, fair-good oomoldic porosity, (barren)

Limestone; as above

BASE POROSITY BREAK 4162

Shale; grey-black carboniferous

Limestone; tan-buff, highly fossiliferous-oolitic, dense, poorly developed porosity, scattered fossil fragments, no shows

black carboniferous shale

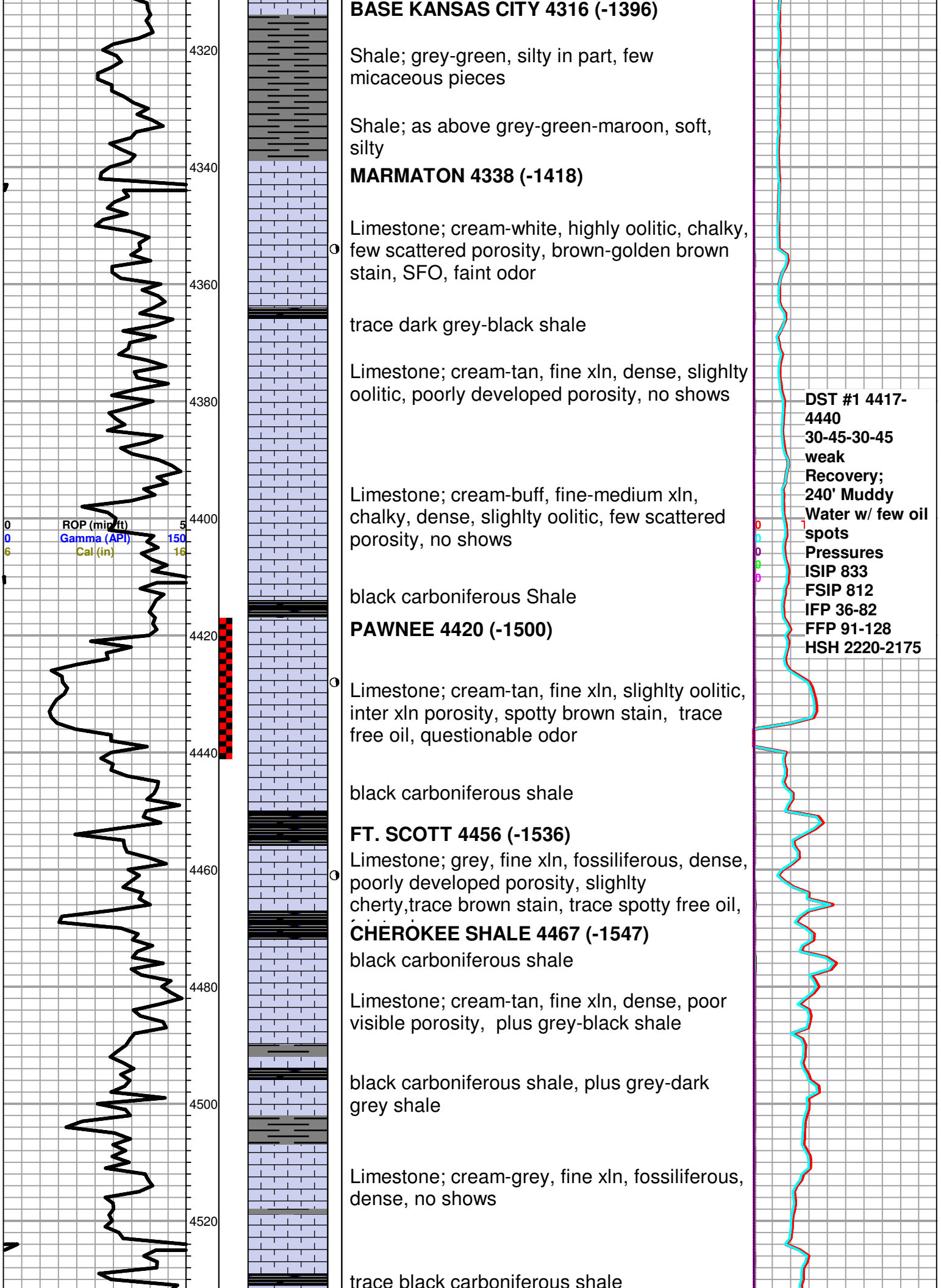
Limestone; grey-cream, fine xln, chalky, fossiliferous, fair porosity, no shows

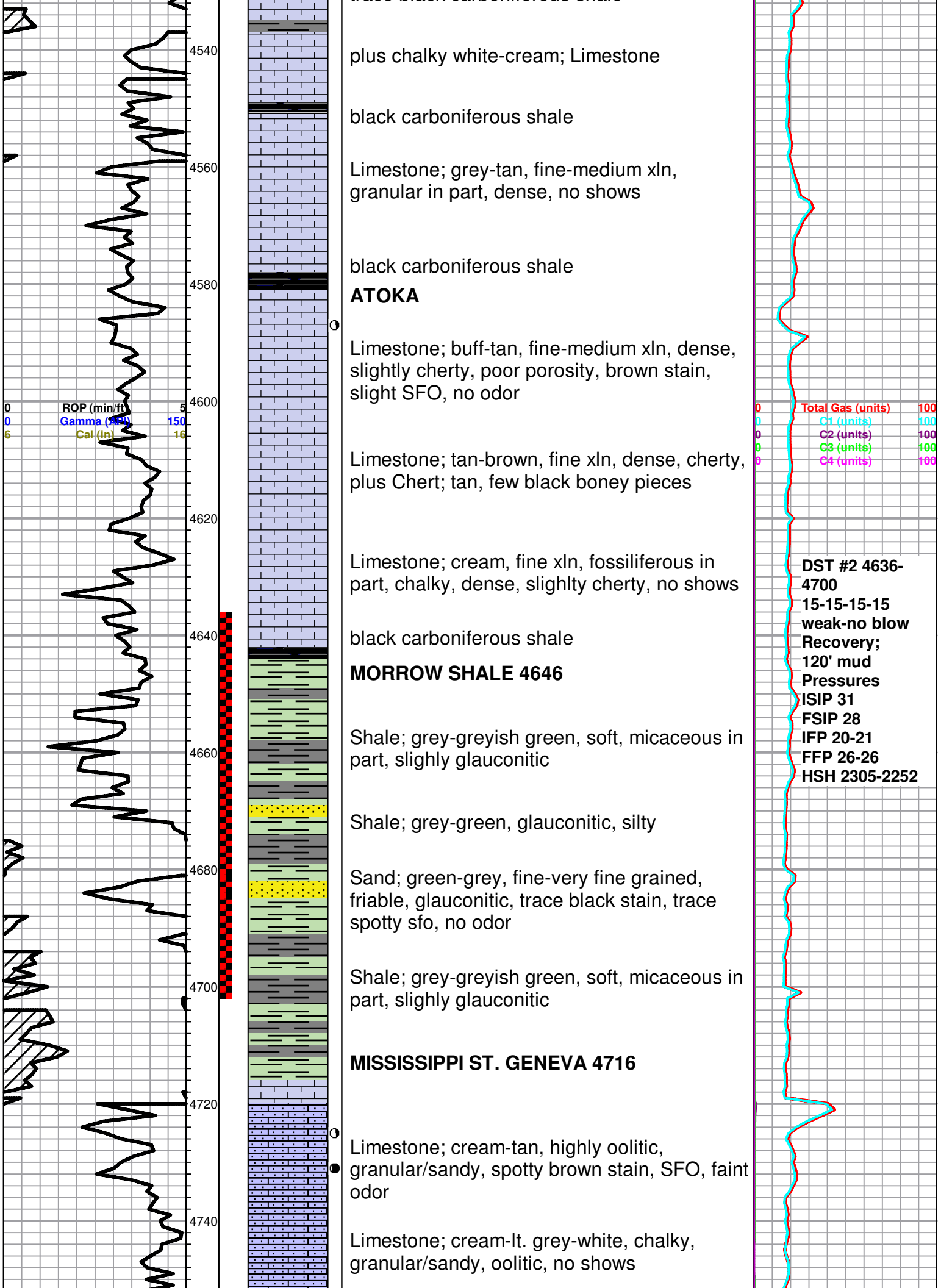
plus Chert; grey, boney

Limestone; cream, fine xln, chalky, poorly developed porosity, brown stain, spotty SFO, faint odor

grey shale

Limestone; grey-buff, fine-medium xln, chalky, mottled in part, fossiliferous, no shows


4320
4340
4360
4380
4400
4420
4440
4460
4480
4500
4520
0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16
BASE KANSAS CITY 4316 (-1396)
Shale; grey-green, silty in part, few micaceous pieces
Shale; as above grey-green-maroon, soft, silty
MARMATON 4338 (-1418)
Limestone; cream-white, highly oolitic, chalky, few scattered porosity, brown-golden brown stain, SFO, faint odor
trace dark grey-black shale
Limestone; cream-tan, fine xln, dense, slighlty oolitic, poorly developed porosity, no shows
Limestone; cream-buff, fine-medium xln, chalky, dense, slighlty oolitic, few scattered porosity, no shows
black carboniferous Shale
PAWNEE 4420 (-1500)
Limestone; cream-tan, fine xln, slighlty oolitic, inter xln porosity, spotty brown stain, trace free oil, questionable odor
black carboniferous shale
FT. SCOTT 4456 (-1536)
Limestone; grey, fine xln, fossiliferous, dense, poorly developed porosity, slighlty cherty,trace brown stain, trace spotty free oil,
CHEROKEE SHALE 4467 (-1547)
black carboniferous shale
Limestone; cream-tan, fine xln, dense, poor visible porosity, plus grey-black shale
black carboniferous shale, plus grey-dark grey shale
Limestone; cream-grey, fine xln, fossiliferous, dense, no shows
trace black carboniferous shale
DST #1 4417-4440
30-45-30-45
weak
Recovery;
240' Muddy Water w/ few oil spots
Pressures
ISIP 833
FSIP 812
IFP 36-82
FFP 91-128
HSH 2220-2175



plus chalky white-cream; Limestone

black carboniferous shale

Limestone; grey-tan, fine-medium xln, granular in part, dense, no shows

black carboniferous shale

ATOKA

Limestone; buff-tan, fine-medium xln, dense, slightly cherty, poor porosity, brown stain, slight SFO, no odor

Limestone; tan-brown, fine xln, dense, cherty, plus Chert; tan, few black boney pieces

Limestone; cream, fine xln, fossiliferous in part, chalky, dense, slighlty cherty, no shows

black carboniferous shale

MORROW SHALE 4646

Shale; grey-greyish green, soft, micaceous in part, slighly glauconitic

Shale; grey-green, glauconitic, silty

Sand; green-grey, fine-very fine grained, friable, glauconitic, trace black stain, trace spotty sfo, no odor

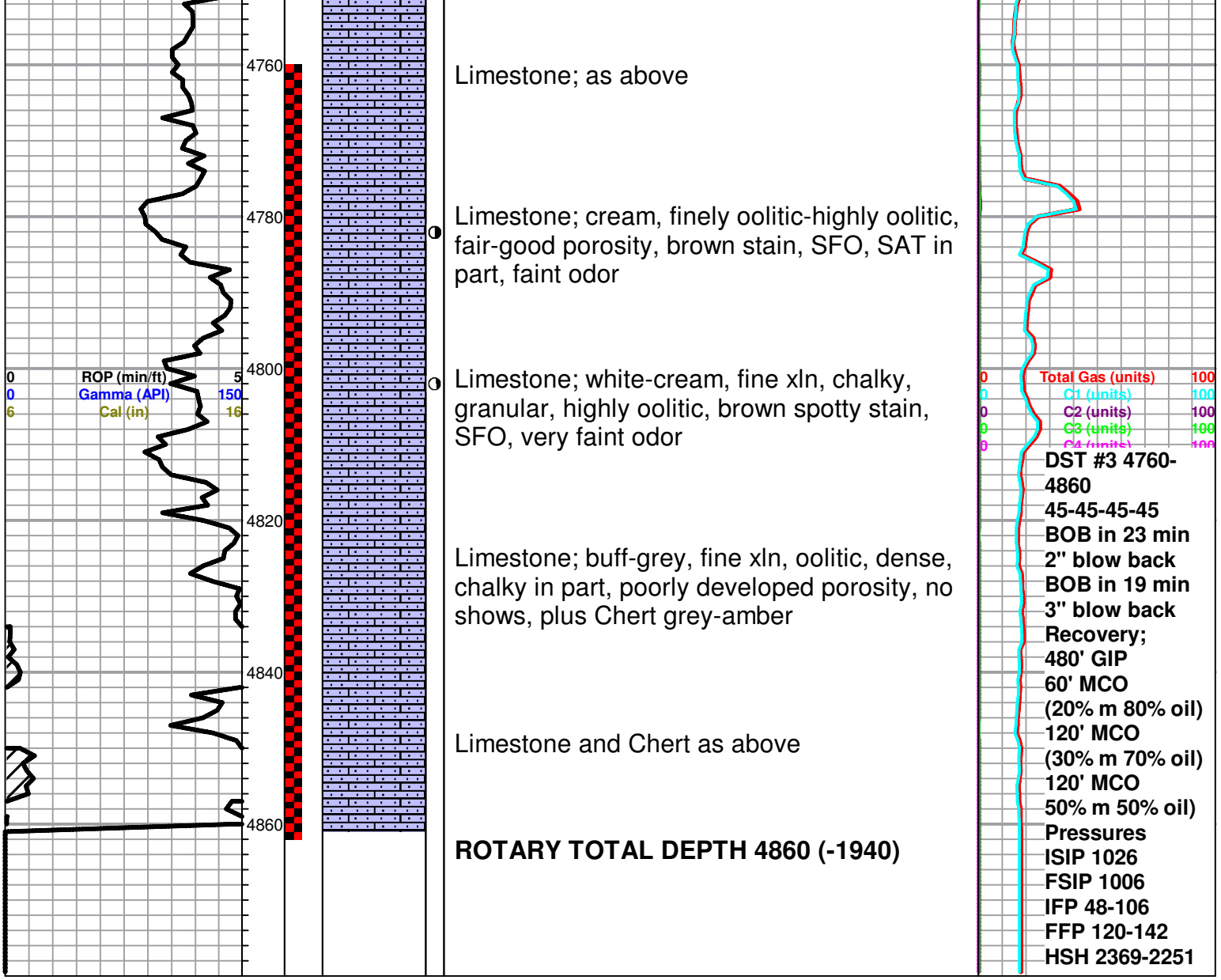
Shale; grey-greyish green, soft, micaceous in part, slighly glauconitic

MISSISSIPPI ST. GENEVA 4716

Limestone; cream-tan, highly oolitic, granular/sandy, spotty brown stain, SFO, faint odor

Limestone; cream-lt. grey-white, chalky, granular/sandy, oolitic, no shows

DST #2 4636-4700
15-15-15-15
weak-no blow
Recovery;
120' mud
Pressures
ISIP 31
FSIP 28
IFP 20-21
FFP 26-26
HSH 2305-2252



Limestone; as above

Limestone; cream, finely oolitic-highly oolitic, fair-good porosity, brown stain, SFO, SAT in part, faint odor

Limestone; white-cream, fine xln, chalky, granular, highly oolitic, brown spotty stain, SFO, very faint odor

Limestone; buff-grey, fine xln, oolitic, dense, chalky in part, poorly developed porosity, no shows, plus Chert grey-amber

Limestone and Chert as above

ROTARY TOTAL DEPTH 4860 (-1940)

DST #3 4760-4860
45-45-45-45
BOB in 23 min
2" blow back
BOB in 19 min
3" blow back
Recovery;
480' GIP
60' MCO
(20% m 80% oil)
120' MCO
(30% m 70% oil)
120' MCO
50% m 50% oil)
Pressures
ISIP 1026
FSIP 1006
IFP 48-106
FFP 120-142
HSH 2369-2251