## WVU Well Log Viewer

## User Guide

PREPARED BY: WEST VIRGINA GIS TECHNICAL CENTER AND WEST VIRGINIA UNIVERSITY DEPARTMENT OF GEOGRAPHY AND GEOLOGY



## Log Viewer

WVU Well log viewer is a web enabled application to quickly visualize and interpret well log data. User can upload a LAS file to the log viewer and visualize logs in different tracks. At present, viewer can automatically display gamma ray logs, caliper logs, spectral gamma ray logs, resistivity-induction logs, density log, neutron log, bulk density log, PE index logs and formation tops. The viewer also interprets spectral gamma ray and plots colorlith for Th/U-Th/K which makes it easier to identify Leached-U and Fixed-U zones. Additionally, user has the ability to assign tracks for any additional log. At present, a maximum of 5 logs can be plotted in a single track.



Image: EQT Marcellus Rig. Elk County, Pennsylvania. Photo Courtesy: Travis Warner

- 1) Upload Well Log File: User can upload a LAS file
- 2) Download sample LAS file: User can download sample LAS file to view in the Well Log Viewer

<u>۱</u> ۱	WVU Well Log Vi	ew	er	1	2							1	GIB TO	₩	0	¢۳.
	C	0ι	pload	LAS File 🛄 Assign Ti	acks										Abou	t Help
🗸 Well	Information	2	<	GR-SP-CAL-TEMP	Resistivity-Induction	0	Porosity-Density-PE 🧃	9	Spectral GR/Sonic	0	Computed	Logs	0	₽ <b>₽</b>		
Mnem	3	P E	Shal					-10	URAN	30				V- Co		
(Unit)	Data	3	°	6 CAL 12	1 AT90 1	k 0	PE 20	0 0	THOR	80	0.1 Th/K		100	orlitt		
SIRLE	37.0000	37		2											-	
STOP.F	7042.5000				37											
STEP.F	0.5000							-								
NULL.	-999.25							-					1			
COMP.				2												
FLD.	Weston-Jane Lew	397	-													
LOC.																
DATE.	02-JUL-2014				- 🐔 -								=   I			
WELL.	4704105432															
LABL.	4704105432		-	<u> </u>				-								
APIN.	4704105432		1			HE							- 1			
UWI.	4704105432	737														
NUMB.	33241		-											-		
OPER.	Dominion Exploration & Production															
LEAS.	W G Bennett															
								-								
No form	ation lops	1087											- 1			
upload I	formation top text	1														
(.txt) file.				Į –												
💙 Trac	k Orders		_	2 <u></u>										-		
✓V-Shale	J J						4									
Referenc	e Logs			E			3	-					i			
Image: Second secon	CAL-TEMP	1437				-	5									
Resistivit	y and Induction Logs				- ţ		3									
Resisti	vity-Induction			⊨/ <u>≤</u>	<u> </u>		<u>}</u>						Ш.,			
Litho Den	sity Logs				5		2									
Porosit	y-Density-PE						4									
Spectral	Gamma Ray and Computed Logs	1787			1			-							*	

Sample LAS file upload into the Well Log Viewer

- 1) Upload LAS file: User can upload a new LAS file
- 2) Assign Tracks: User can click on assign tracks button and choose specific tracks for

the logs

- A. Change tracks for a specific log
- B. Set scale range for a track
- 3) Well Information: User can view detailed well information
- **4)** Formation Tops: User can view formation information or upload formation information if it is not part of the LAS file
- 5) Track Order: User can turn on/off track order by clicking on check box

Name	Description	Track List 🖌	Configuration
CAL	Caliper	Reference	Set Left/Right     Current left/right: (6,12)     Left(9.376 Right(14.377
SGR	Total Gamma-Ray	Reference	Set Left/Right
CGR	Computed Gamma Ray (Th plus K)	Reference	Set Left/Right
THOR	Thorium	Spectral Gamma Ray	Set Left/Right
URAN	Uranium	Spectral Gamma Ray	<ul> <li>Set Left/Right</li> </ul>
ΡΟΤΑ	Potassium	Spectral Gamma Ray	Set Left/Right
LD	Deep Induction Resistivity	Dual Induction	Set Left/Right
LM	Medium Induction Resistivity	Dual Induction	✓ Set Left/Right
SFLU	Spherically-focussed Resistivity	Dual Induction	✓ Set Left/Right
PE	Photo-Electric Factor	Litho-Density	<ul> <li>Set Left/Right</li> </ul>
NPHI	Neutron Porosity (Is equiv.)	Litho-Density	▼ Set Left/Right
RHOB	Bulk Density	Litho-Density	Set Left/Right

Assign Tracks

## **Contact Information**

WV GIS Technical Center

Email: natcarb@mail.wvu.edu

WV GIS Technical Center WVU Department of Geology & Geography 330 Brooks Hall P.O. Box 6300 Morgantown, WV 26506 Phone: (304) 293-6694