State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

API <u>47</u>	County	Distri	ct			
Quad	Pad Name Field/Pool Name					
Farm name		Well Number				
Operator (as registered with the	OOG)					
Address	City	S	state	Zip		
As Drilled location NAD 83/ Top hole		ed plat, profile view, and devi	•			
Landing Point of Curv						
Bottom Hole	Northing	Easting _				
Elevation (ft)	GL Type of Well	□New □ Existing	Гуре of Report	□Interim □Final		
Permit Type	□ Horizontal □ Horizon	ntal 6A	Depth Type	□ Deep □ Shallow		
Type of Operation □ Convert	□ Deepen □ Drill □	□ Plug Back □ Redrilling	□ Rework	□ Stimulate		
Well Type □ Brine Disposal	□ CBM □ Gas □ Oil □ Se	condary Recovery	n Mining 🗆 Sto	rage Other		
Type of Completion □ Single	□ Multiple Fluids Produ	ıced □ Brine □Gas □ l	NGL □ Oil	□ Other		
Drilled with □ Cable □ Ro	-					
Drilling Media Surface hole Production hole □ Air □ Mo Mud Type(s) and Additive(s)			□ Air □ Mud	□ Fresh Water □ Brine		
Date permit issued	Date drilling com	menced	Date drilling c	eased		
Date completion activities bega	n	_ Date completion activities	ceased			
Verbal plugging (Y/N)	Date permission grante	d G	ranted by			
Please note: Operator is require	ed to submit a plugging applic	cation within 5 days of verbal	permission to pl	ug		
Freshwater depth(s) ft		Open mine(s) (Y/N) depths				
Salt water depth(s) ft		Void(s) encountered (Y/N)	depths			
Coal depth(s) ft		Cavern(s) encountered (Y/I	N) depths			
Is coal being mined in area (Y/N	N)					
				Reviewed by:		

WR-35 Rev. 8/23/13

API 47		Well number							
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		ment circulate (Y/N) ide details below*
Conductor			•				* ``		
Surface									
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production									
Tubing									
Packer type and de	epth set	•		,		•			
Comment Details									
CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)		eld /sks)	Volume $(ft^{\frac{3}{2}})$	Ceme Top (M		WOC (hrs)
Conductor									
Surface									
Coal									
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production									
Tubing									
Drillers TD (ft) Loggers TD (ft) Deepest formation penetrated Plug back to (ft) Plug back procedure									
Kick off depth	(ft)								
Check all wireline logs run □ caliper □ density □ deviated/directional □ induction □ neutron □ resistivity □ gamma ray □ temperature □ sonic									
Well cored □ Yes □ No □ Conventional □ Sidewall Were cuttings collected □ Yes □ No									
DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING									
WAS WELL (COMPLETED A	S SHOT HOLE	□ Yes □ No	o DE	TAILS _				
WAS WELL O	COMPLETED O	PEN HOLE?	Yes No	DETA	ILS				
WERE TRACERS USED Yes No TYPE OF TRACER(S) USED									

API 47	Farm name	Well number	

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					Ţ,

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

Please insert additional pages as applicable.

Stimulating Company _____

Please insert additional pages as applicable.

Completed by _____

_____ City _____ State ____ Zip ____

Telephone _____

Signature _____ Title ____ Date ____

LATERAL WELLBORE

Maximum TVD of wellbore: 6658 ft TVD @ 8184 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SLTSTN/LS	0	0	260	260
SS/SLTSTN	260	260	380	380
LS/SS	380	380	659	659
PITTSBURGH COAL	659	659	669	669
SLTSTN/SS	669	669	770	770
SHALE	770	770	800	800
SS/SLTSTN	800	800	860	860
SLTSTN/SS	860	860	890	890
SHALE/SS	890	890	1040	1040
SHALE	1040	1040	1070	1070
SHALE/SS	1070	1070	1220	1220
SHALE/SLTSTN	1220	1220	1280	1280
SHALE/SS	1280	1280	1340	1340
SHALE	1340	1340	1370	1370
SS/SHALE	1370	1370	1520	1520
SHALE/SLTSTN	1520	1520	1550	1550
SS/SHALE	1550	1550	1580	1580
SS	1580	1580	1640	1640
SHALE/SS	1640	1640	1744	1744
BIG INJUN	1744	1744	2060	2060
SS/SHALE	2060	2060	2120	2120
SHALE	2120	2120	6925	6457
GENESEO	6925	6457	6958	6477
TULLY	6958	6477	7010	6505
HAMILTON	7010	6505	7319	6623
MARCELLUS	7319	6623	14171	6580
TD	14171	6580		0