WR-35 Rev. 8/23/13

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

API 47 033 05736	County Harrison	District Grant	
Quad Mount Clare		Field/Pool Name L	ost Creek
Farm name Rudy L. McWhorter		Well Number 131	
Operator (as registered with the OOG)	Dominion Transmission, I	nc.	
Address 445 W. Main St	City Clarksburg	State WV	Zip 26301
As Drilled location NAD 83/UTM Top hole	Attach an as-drilled plat, properties 4326254.2196	rofile view, and deviation survey Easting 567354.2993	
	NorthingNorthing		
Elevation (ft) 1355.08 GL	Type of Well ■New	□ Existing Type of Report	□Interim ■Final
Permit Type Deviated H	orizontal Horizontal 6A	■ Vertical Depth Type	□ Deep ■ Shallow
Type of Operation □ Convert □ □	Deepen ■ Drill □ Plug Ba	ck □ Redrilling □ Rework	■ Stimulate
Well Type □ Brine Disposal □ CBM	1 ■ Gas □ Oil □ Secondary F	Recovery Solution Mining St	orage Other
Type of Completion □ Single ■ Mu Drilled with □ Cable ■ Rotary	Itiple Fluids Produced 🗆 E	rine ■Gas □ NGL □ Oil	□ Other
Drilling Media Surface hole Air	☐ Mud ■Fresh Water	Intermediate hole Air Muc	d ■ Fresh Water □ Brine
Production hole ■ Air □ Mud □			
Mud Type(s) and Additive(s) Fresh water based drilling mud,	composed of water, sodium	ı chloride, starch, xanthan gun	n, sodium bicabonate,
caustic soda, soda ash, and bio	cide.		
Date permit issued 3-21-13	Date drilling commenced	5-17-13 Date drilling	ceased 6-3-13
Date completion activities began	6-24-13 Date of	ompletion activities ceased	7-3-13
Verbal plugging (Y/N)	Date permission granted	Office of EVEL	
Please note: Operator is required to st	ıbmit a plugging application wit	hin 5 days of verbal permission to p	blug
Freshwater depth(s) ft	76' Open n	nine(1)(1)/N) depths	None
		Period (PRIT depths	None
		(s) encountered (YN) depths	None
Is coal being mined in area (Y/N)	N	1-1-2	ν,
			Reviewed by:

• WR-35

Rev. 8/23/13									rage 01
API 47- 033 - 05736 Farm name_Rudy L. McWhorter Well number_13151									
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Baske Depth(id cement circulate (Y/N) Provide details below*
Conductor	17-1/2"	16"	40'	N	65#	, H-40			Sanded in
Surface	14-3/4"	10-3/4"	794'	N	40.5	i#, J-55	<u> </u>		Yes
Coal									
Intermediate 1	9-7/8"	7"	2089'	N	20#	ŧ, J-55			Yes
Intermediate 2									
Intermediate 3									
Production	6-1/4"	4-1/2 "	4660'	N	10.5	#, M-65			N
Tubing									
Packer type and de	pth set						•		
Comment Details top @ approximately CEMENT	/ 1765'). Class/Type	Numbe	r SI	lurry	Yield	Volum	ne	Cement	WOC
DATA Conductor	of Cement	of Sack	s wt	(ppg)	(ft ³/sks)	(<u>ft ¹)</u>		Top (MD)	(hrs)
Surface	Class A	650		5.6	1.20	780		CTS	8
Coal	Class A	030		0.0	1.20	700			
Intermediate I	Class A	550	1	5.4	1.23	676		CTS	24
Intermediate 2	Oldos A	140		5.9	1.15	161	_		
Intermediate 3		140		0.0					
Production	Poz	270	1	3.5	1.53	413		1765	504
Tubing	1 02					1			
Drillers TD (ft) 4700 Loggers TD (ft) 4693' Deepest formation penetrated Siltstone immediately below Benson Plug back to (ft) Plug back procedure									
Kick off depth (ft)									
Check all wireline logs run Check all wireline logs run Check									
Well cored □ Yes □ No □ Conventional □ Sidewall Were cuttings collected ■ Yes □ No									
DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING									
7" centralizers: 45', 9	0', 135', 180', 225', 270	', 316', 361', 405', 450', 49					, 2015'		
4-1/2" centralizers: 1	32', 176', 220', 793', 83	7', 881', 1234', 1278', 132	ce, 10/4', 1/18', 20	J/U, 2114, 208/,	2131, 2110, 2820				
WAS WELL	COMPLETED	AS SHOT HOLE	E □ Yes	■ No	DETAILS				
WAS WELL	COMPLETED	OPEN HOLE?	□ Yes 🛔	No D	ETAILS _	·····	_ <u>-</u>		
WERE TRAC	ERS USED	Yes No	TYPE OF	TRACER(S) USED _				

• WR-35 Rev. 8/23/13

API	47- 033 -	05736	Farm name	Rudy L. McWhorter	_Well number_	13151

PERFORATION RECORD

DauGamatian dasa		Perforated to	Number of	
Perforation date	MD ft.	MD fl.	Perforations	Formation(s)
6-21-13	4512'	4522'	20	Benson
6-24-13	3758'	3808'	18	Bradford
6-24-13	3144'	3368'	20	Balltown
6-24-13	2846'	2940'	20	Speechley
6-24-13	2530'	2536'	20	Bayard
	6-21-13 6-24-13 6-24-13 6-24-13	6-21-13 4512' 6-24-13 3758' 6-24-13 3144' 6-24-13 2846'	6-21-13 4512' 4522' 6-24-13 3758' 3808' 6-24-13 3144' 3368' 6-24-13 2846' 2940'	6-21-13 4512' 4522' 20 6-24-13 3758' 3808' 18 6-24-13 3144' 3368' 20 6-24-13 2846' 2940' 20

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)
1	6-24-13	27.0	2720	2830	2400	40000	158	528000 scf
2	6-24-13	30.0	2852	2590	2323	20000	137	325000 scf
3	6-24-13	28.0	2425	2500	1970	30000	128	350000 scf
4	6-24-13	30.0	2423	2130	2100	20000	116	273000 scf
5	6-24-13	28.0	2752	2270	1625	20000	138	290000 scf

Please insert additional pages as applicable.

- WR-35 Rev. 8/23/13

API 47- 033	_ 05736		Farm :	name Rudy L. Mo	Whorter		Well n	umber_	13151		
PRODUCING	<u>FORMATI</u>	ON(S)		<u>DEPTHS</u>							
Comingled:				2530' - 4522'	TVD 2	2530' - 4522'	MD				
(Benson, Bradfor	d, Balltown, S	Speechl	 ey,								
Bayard). See in											
information and											
Please insert ac											
riease msert ac	•	_									
GAS TEST	□ Build up		Drawdown	■ Open Flow	(OIL TEST o	Flow	Pump			
SHUT-IN PRE	SSURE	Surfac	e 520	_psi Botto	m Hole Not r	measured psi	DURAT	O MOI	F TEST	24 hrs	
OPEN FLOW	Gas 363	mcfpc	Oil I l	NGL opd	bpd	Water bpd	GAS M □ Estin		RED B		
LITHOLOGY/ FORMATION	TOP DEPTH IN NAME T		BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN F MD	T DESCRIBE) QUANTITYAND IE, OIL, GAS, H₂S, ETC)
0 40 40 40	0_		·	0					·		
See Attached Sheet					_		 				
									-		
						_					
			······································								
Please insert ac	dditional pa	ges as	applicable.						_		
Drilling Contra	actor Nexus	: Drilling	g, Inc.								
Address P.O. B	ox 903			City	Jane Lew	- 1. · 2-·	State	wv	Zip _	26378	_
Logging Comp		erford l	nternational	i td							
Address 121 Hi	llpointe Drive	. Suite 3	00	City	Canonsburg	3	State	PA	Zip	15317	
											-
Cementing Co	mpany Nab	ors Con	npletion and Pr	roduction Services			Caras	wv	7:	26378	
Address 1650 H	Hackers Creek	K Road		City	Jane Lew		State		Zip .		-
Stimulating Co		niversa	Well Service	9	<u> </u>	_				00004	
Address 5 Bridge				City	Buckhannoi	n	State	WV_	Zip	26201	-
Please insert a	dditional pa	iges as	appiicable.								
Completed by	Jason Bad	ch					e 304.669	.4850			
Signature				Title	echnical Spec	cialist III		Date 1	2-16-13		
Submittal of H	ydraulic Fr	acturin	g Chemical 1	Disclosure Info	rmation	Attach copy	of FRACI	OCUS	Regist	ry	

Formation Description Dominion Transmission Well # 13143

Formation	Тор	Bottom	Show
Fill	0	21	
Sand	21	84	Hole damp @ 76'
Red rock	84	102	
Sand/shale	102	195	
Sand	195	270	
Sand/shale	270	378	
Red rock/shale	378	391	
Sand/shale	391	838	
Sand	838	882	
Sand/shale	882	986	
Sand	986	997	
Sand/shale	997	1500	
Little Lime	1500	1519	
Shale	1519	1544	
Big Lime	1544	1672	
Big Injun	1672	1724	
Sand/shale	1724	1881	
Red rock/shale	1881	1900	
Sand/shale	1900	1940	
Gantz	1940	1985	
Sand/shale	1985	2465	
Fifth Sand	2465	2485	
Siltstone/shale	2485	2522	Gas check @ 2509': Odor
Bayard	2522	2555	
Siltstone/shale	2555	3003	
Speechley	3003	3015	Gas check @ 3018': Odor
Siltstone/shale	3015	3260	
Balltown	3260	3382	
Siltstone/shale	3382	4518	Gas check @ 3520': Nothing
Benson	4518	4533	Gas check @ 4311': Odor
Siltstone	4533	TD	Gas check @ TD: Odor