

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

API 47-033-05737 County Harrison District Union  
Quad West Milford Pad Name \_\_\_\_\_ Field/Pool Name Kennedy  
Farm name A.C. Thrash Well Number 13169  
Operator (as registered with the OOG) Dominion Transmission, Inc.  
Address 445 W. Main St City Clarksburg State WV Zip 26301

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4333551.0457 Easting 543425.3800  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 1086.78 GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine  
Mud Type(s) and Additive(s)  
\_\_\_\_\_  
\_\_\_\_\_

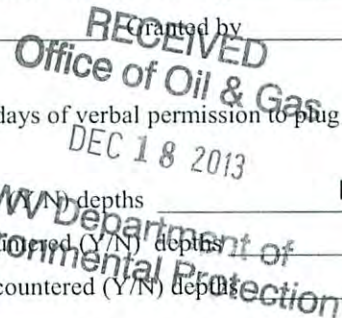
Date permit issued 3-21-13 Date drilling commenced 6-7-13 Date drilling ceased 6-16-13  
Date completion activities began 7-9-13 Date completion activities ceased 8-7-13  
Verbal plugging (Y/N) \_\_\_\_\_ Date permission granted \_\_\_\_\_

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 83' Open mine(s) (Y/N) depths None  
Salt water depth(s) ft None Void(s) encountered (Y/N) depths None  
Coal depth(s) ft None Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) N

Reviewed by: \_\_\_\_\_

02/28/2014



API 47- 033 - 05737 Farm name A.C. Thrash Well number 13169

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	17-1/2"	13-3/8"	40'	N	48#, A-500		Sanded in
Surface	12-1/4"	9-5/8"	793'	N	36#, J-55		Yes
Coal							
Intermediate 1	8-3/4"	7"	2016'	N	20#, J-55		Yes
Intermediate 2							
Intermediate 3							
Production	6-1/4"	4-1/2"	4930'	N	10.5#, M-65		N
Tubing							
Packer type and depth set							

Comment Details Surface job circulated 20 bbls of cement to surface. Intermediate job circulated 20 bbls to surface. Production job not designed to bring cement to surface (cement top @ approximately 1820').

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Class A	350	15.6	1.20	420	CTS	8
Coal							
Intermediate 1	Class A	315	15.4	1.23	387	CTS	12
Intermediate 2		67	15.9	1.15	77		
Intermediate 3							
Production	Poz	270	13.5	1.53	413	1765	504
Tubing							

Drillers TD (ft) 4950' Loggers TD (ft) 4945'  
 Deepest formation penetrated Siltstone immediately below Alexander 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 \_\_\_\_\_

9-5/8" centralizers: 250', 375', 542', 666', 708', 750'  
 7" centralizers: 167', 293', 334', 418', 794', 877', 961', 1086', 1211', 1336', 1461', 1545', 1586', 1628', 1670', 1712', 1753', 1795', 1837', 1878', 1920', 1962', 2004'  
 4-1/2" centralizers: 2082', 2125', 2521', 2563', 2608', 3102', 2145', 3187', 3230', 3400', 3442', 3485', 4462', 4509', 4760', 4802', 4845"

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_





**Formation Description**  
**Dominion Transmission**  
**Well # 13169**

Formation	Top	Bottom	Show
Fill	0	15	
Shale	15	25	Damp @ 83'
Shale & Red Rock	25	452	
Sand & Shale	452	850	
Sand	850	900	
Shale	895	960	
Salt Sands	960	1218	
Shale	1218	1450	
Little Lime	1450	1480	
Shale	1480	1530	
Big Lime	1530	1623	
Big Injun	1623	1697	
Shale	1697	1862	Gas Check @ 1809 : No Show
Gantz/Gantz A	1862	1918	Gas Check @ 1935 : No Show
Shale	1918	1975	
Fifty Foot	1975	2000	
Shale	2000	2170	
Thirty Foot	2170	2108	
Shale	2108	2170	
Gordons	2170	2234	
Shale	2234	2242	
4th Sand	2242	2248	
Shale	2248	2374	
5th Sand	2374	2412	
Shale	2412	2456	
Bayard	2456	2468	
Shale	2468	2980	Gas Check @ 2525 : No Show
Speechley	2980	3004	
Shale & Siltstone	3004	3082	
Balltowns	3082	3350	
Shale & Siltstone	3350	3830	Gas Check @ 3506 : Show
Bradford	3830	3852	
Siltstone/Shale	3852	4240	
Riley	4240	4245	
Siltstone/Shale	4245	4406	
Benson	4406	4412	
Siltstone/Shale	4412	4762	Gas Check @ 4525 : 103 mcf
Alexander	4762	4794	
Siltstone	4794	4950	
TD	4950		Gas Check @ TD : 60 mcf

02/28/2014