

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

API 47 - 069 - 00188 County OHIO District LIBERTY
Quad VALLEY GROVE Pad Name GLENN DIDRIKSEN-OHI-PAD1 Field/Pool Name PANHANDLE
Farm name GLENN DIDRIKSEN Well Number GLENN DIDRIKSEN OHI 6
Operator (as registered with the OOG) SWN PRODUCTION COMPANY LLC
Address P.O. BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4440482.184 Easting 534509.575
Landing Point of Curve Northing 4440190.645 Easting 534316.490
Bottom Hole Northing 4438569.864 Easting 535308.220

Elevation (ft) 1382.2 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)
SOBM

Date permit issued 05/04/2015 Date drilling commenced 06/12/2015 Date drilling ceased 07/19/2015
Date completion activities began 10/21/2015 Date completion activities ceased 11/22/2015
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 232' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 775' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 663' Cavern(s) encountered (Y/N) depths N

Is coal being mined in area (Y/N) N
APPROVED
NAME: Jackie Shanta
DATE: 9/22/16

SEP 16 2016
Reviewed by:
WV Department of
Environmental Protection
10/28/2016

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CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24	20	126'	N	J-55/ 94#		Y
Surface	17.5	13.375	755'	N	H-40/48#		Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	2330'	N	J-55/ 36#		Y
Intermediate 2							
Intermediate 3							
Production	8.75 TO 8.50	5.5	13139'	N	HCP-110/20#		Y
Tubing		2.375	6724'	N	P-110/4.70#		N
Packer type and depth set	N/A						

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	A	24	15.6	1.18	28	GROUT TO SURFACE	24
Surface	A	800	15.6	1.19	952	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	A	868	15.6	1.19	1032.92	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	A	1002/1570	15.6	1.24/1.19	1242/1868	SURFACE	24
Tubing							

Drillers TD (ft) 13139' Loggers TD (ft) 13139'

Deepest formation penetrated MARCELLUS Plug back to (ft) NA

Plug back procedure NA

Kick off depth (ft) 5894'

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 _____

ALL CASING STRINGS RAN WITH A CENTRALIZER AT A MINIMUM OF 1 PER EVERY 3RD JOINT OF CASING

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 _____

REGISTERED
Office of Oil and Gas
SEP 16 2016
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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>MARCELLUS</u>	<u>6393'</u>	<u>TVD</u>	<u>6666'</u> <u>MD</u>

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1947 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 2471 mcfpd Oil 220 bpd NGL _____ bpd Water 101 bpd
 GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		
		SEE ATTACHED			

Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY
 Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company JW WIRELINE COMPANY
 Address 515 N SAM HOUSTON PKWY EAST STE 640 City HOUSTON State TX Zip 77060

Cementing Company SCHLUMBERGER
 Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company DCWELL SCHLUMBERGER
 Address 1121 BUSCHONG ST City HOUSTON State TX Zip 77039

Please insert additional pages as applicable.

Completed by ELIZABETH GEE Telephone 832-796-7632
 Signature  Title SR. REGULATORY ANALYST Date 02/11/2016 7/15/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

10/28/2016