Chevron

Jackie M. Scholar
Regulatory Reporting Coordinator

January 15, 2018

CERTIFIED MAIL: 7016 0340 0000 4903 5464

WV DEP
Office of Oil and Gas
601 – 57th Street
Charleston, WV 25304

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JAN 18 2018

WV Department of
Environmental Protection

RE: Well Operator's Report of Well Work WR-35
Taylor C 7H

Dear Sir/Madam,

Enclosed here within please find one (1) Well Operator's Report of Well Work WR-35 and one (1) copy of the Directional Survey for **Taylor C 7H, (API 47-051-01805).** The Taylor C 7H was not drilled to TD therefore no FracFocus or As Drilled Plat are attached.

If you have any questions, please contact me at (412) 865-3422. Thank you.

Sincerely,
Chevron Appalachia, LLC

Jackie M. Scholar

Enclosures

Appalachian/Mountain Business Unit
Chevron North America Exploration & Production Company (a division of Chevron U.S.A. Inc.)
700 Cherrington Parkway, Coraopolis, PA 15108
Tel 412-865-3422
jscholar@chevron.com

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 - 051 - 01805 County Marshall District Clay
Quad Glen Easton Pad Name Taylor C Field/Pool Name
Farm name Williams Ohio Valley Midstream LLC Well Number Taylor C 7H
Operator (as registered with the OOG) 49449935
Address 700 Cherrington Parkway City Coraopolis State PA Zip 15108

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As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4411357.60 Easting 525892.69
Landing Point of Curve Northing Easting
Bottom Hole Northing Easting

Elevation (ft) 1257' 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)
Barite, fluid loss, emulsifiers, rheological control

Date permit issued 3/31/2015 Date drilling commenced 8/22/2015 Date drilling ceased 12/27/2017
Date completion activities began n/a Date completion activities ceased n/a
Verbal plugging (Y/N) Y Date permission granted 1/16/2018 Granted by James Nicholson

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

Freshwater depth(s) ft 765' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2248' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 800' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Y

Reviewed by:

Reviewed 2/8/18

WR-35
Rev. 8/23/13

API 47- 051 - 01805 Farm name Williams Ohio Valley Midstream LLC Well number Taylor C 7H

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	26"	20"	76'	N		N/A	Y
Surface	17 1/2"	13 3/8	542'	N	J-55 / 54.50#	N/A	N
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details Primary cement job on 13-3/8" casing no returns were seen during the job. CBL was ran and determined Top of cement to be at 200'. DEP Inspector Jim Nicholson gave approval to cement remainder of annulus with pour string from surface

Utilized same Class A cement from 13-3/8" surface cement job. Pumped 34 bbls (191 ft3) with 5 bbls returned to surface

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	Type 1	Bulk Cement	Bulk Cement	Bulk Cement	Bulk Cement	Surface	8
Surface	Class A	444	15.6	1.2	528	Surface	8+
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 2,273' Loggers TD (ft) 2,273'

Deepest formation penetrated Squaw Plug back to (ft) 465'

Plug back procedure Air rig drill to 2,273' and unable to run 9-5/8" casing. 7H Temporarily abandoned until fluid rig arrive. Fluid rig attempt to cleanout to 2,273' and become stuck multiple times.

Decision made to pump cement plug (2,000' - 960') and side track. Side track to 1,977 and bit trip. Pipe stuck at 1217' unable to free, run free point and back off at 938'. 280' of BHA lost in hole. Attempt to fix with jars, no success. Pump 444' cement plug from top of fish to 495'. Set CIBP at 465'

Kick off depth (ft) N/A

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 Surface: (1) on shoe track w/ stop collar & (1) per jt over coupling to surface

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

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	n/a				

Please insert additional pages as applicable.

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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)
	n/a							

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
	TVD	MD

Please insert additional pages as applicable.

GAS TEST □ Build up □ Drawdown □ Open Flow OIL TEST □ Flow □ Pump

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

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY □ Estimated □ Orifice □ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H_2S, ETC)
	0		0		
Dunkard	0	475'	0	475'	
Waynesburg Coal	475	800'	475	800'	
Pittsburgh Coal	800'	806'	800'	806'	
Conemaugh	806'	1289'	806'	1289'	Observed Red Rock in cuttings 950'-1000'
Allegheny	1289'	1499'	1289'	1499'	
Pottsville	1499'	1739'	1499'	1739'	Connection gas 600-1000 Units
Mauch Chunk	1739'	1846'	1739'	1846'	
Big Lime	1846'	1934'	1846'	1934'	
Burgoon	1934'	2154'	1934'	2154'	Hole produced 300 BBLS of water @ 2098'
Squaw	2154'	2273'	2154'	2273'	Hole produced 200 BBLS of water @ 2248'

Please insert additional pages as applicable.

Drilling Contractor SEE ATTACHED
Address _____ City _____ State _____ Zip _____

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Logging Company n/a
Address _____ City _____ State _____ Zip _____

Cementing Company SEE ATTACHED
Address _____ City _____ State _____ Zip _____

Stimulating Company n/a
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by Jackie M. Scholar Telephone 412-865-3422
Signature _____ Title Regulatory Compliance Team Lead Date 1/16/2018

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

API: 47-051-01805	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 7H

DRILLING CONTRACTORS		
Driller	**Driller**	**Driller**
Name Rocky Mountain Drilling	Name Highlands Drilling LLC	Name Precision Drilling Holdings Company
Address 185 North Vernal Avenue, Suite 2	Address 900 Virginia Street East	Address 10350 Richmond Avenue, Suite 700
City – State – Zip Vernal, UT 84078	City – State – Zip Charlestown, WV 25301	City – State – Zip Houston, TX 77042

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API: 47-051-01805	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 7H

CEMENTING CONTRACTORS		
Name Baker Hughes	Name BJ Services	Name
Address 5373 West Alabama, Suite 300	Address 3415 Millinnium Boulevard SE	Address
City – State – Zip Houston, TX 77056	City – State – Zip Massillon, OH 44646	City – State – Zip

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Actual Wellpath Report

Taylor C 7H ST01 AWP Proj:

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Environmental Protection

REFERENCE WELLPATH IDENTIFICATION			
Operator	**CHEVRON APPALACHIA, LLC**	Slot	**Slot #07**
Area	**Marshall County, WV**	Well	**Taylor C 7H ST01**
Field	**Marshall County**	Wellbore	**Taylor C 7H ST01 AWB**
Facility	**Taylor C Pad**	Sidetrack from	**Taylor C 7H AWP Proj: 2265' at 790.33 MD**

REPORT SETUP INFORMATION			
Projection System	**NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet**	Software System	**WellArchitect® 5.0**
North Reference	**True**	User	**Smitgre01**
Scale	**0.999948**	Report Generated	**31/Dec/2017 at 17:16**
Convergence at slot	**0.77° West**	Database/Source file	**WellArchitectDB/Taylor_C_7H_ST01_AWP_Proj_.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	14.14	42.72	**1632359.46**	**494625.95**	39°51'06.645"N	80°41'50.342"W
Facility Reference Pt			**1632316.56**	**494612.38**	39°51'06.506"N	80°41'50.889"W
Field Reference Pt			1644569.15	516963.83	**39°54'48.972"N**	**80°39'17.476"W**

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Precision 560 (RKB) to Facility Vertical Datum	**25.00ft**
Horizontal Reference Pt	**Slot**	Precision 560 (RKB) to Mean Sea Level	**1260.00ft**
Vertical Reference Pt	**Precision 560 (RKB)**	Precision 560 (RKB) to Mud Line at Slot (Slot #07)	**25.00ft**
MD Reference Pt	**Precision 560 (RKB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**320.41°**

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Actual Wellpath Report

Taylor C 7H ST01 AWP Proj:

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REFERENCE WELLPATH IDENTIFICATION			
Operator	CHEVRON APPALACHIA, LLC	Slot	Slot #07
Area	Marshall County, WV	Well	Taylor C 7H ST01
Field	Marshall County	Wellbore	Taylor C 7H ST01 AWB
Facility	Taylor C Pad	Sidetrack from	Taylor C 7H AWP Proj: 2265' at 790.33 MD

WELLPATH DATA (40 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	323.730	0.00	0.00	0.00	0.00	1632359.46	494625.95	39°51'06.645"N	80°41'50.342"W	0.00	0.00	0.00
25.00	0.000	323.730	25.00	0.00	0.00	0.00	1632359.46	494625.95	39°51'06.645"N	80°41'50.342"W	0.00	0.00	0.00
58.33	0.300	323.730	58.33	0.09	0.07	-0.05	1632359.41	494626.02	39°51'06.646"N	80°41'50.342"W	0.90	0.90	-108.82
83.33	0.320	318.650	83.33	0.22	0.18	-0.14	1632359.33	494626.13	39°51'06.647"N	80°41'50.344"W	0.14	0.08	-20.32
108.33	0.140	310.930	108.33	0.32	0.25	-0.21	1632359.26	494626.20	39°51'06.648"N	80°41'50.344"W	0.73	-0.72	-30.88
133.33	0.120	344.350	133.33	0.38	0.29	-0.24	1632359.23	494626.25	39°51'06.648"N	80°41'50.345"W	0.31	-0.08	133.68
158.33	0.090	273.500	158.33	0.41	0.32	-0.26	1632359.20	494626.27	39°51'06.649"N	80°41'50.345"W	0.50	-0.12	-283.40
183.33	0.120	223.850	183.33	0.42	0.30	-0.30	1632359.16	494626.26	39°51'06.648"N	80°41'50.346"W	0.37	0.12	-198.60
208.33	0.150	192.720	208.33	0.40	0.25	-0.33	1632359.14	494626.21	39°51'06.648"N	80°41'50.346"W	0.31	0.12	-124.52
233.33	0.080	161.210	233.33	0.36	0.20	-0.33	1632359.14	494626.16	39°51'06.647"N	80°41'50.346"W	0.37	-0.28	-126.04
258.33	0.060	51.560	258.33	0.35	0.19	-0.31	1632359.15	494626.15	39°51'06.647"N	80°41'50.346"W	0.46	-0.08	-438.60
283.33	0.060	334.840	283.33	0.36	0.21	-0.31	1632359.16	494626.17	39°51'06.647"N	80°41'50.346"W	0.30	0.00	-306.88
308.33	0.070	31.260	308.33	0.38	0.24	-0.30	1632359.16	494626.19	39°51'06.648"N	80°41'50.346"W	0.25	0.04	225.68
333.33	0.160	78.970	333.33	0.37	0.26	-0.26	1632359.20	494626.21	39°51'06.648"N	80°41'50.345"W	0.50	0.36	190.84
358.33	0.270	90.040	358.33	0.31	0.27	-0.17	1632359.29	494626.22	39°51'06.648"N	80°41'50.344"W	0.47	0.44	44.28
383.33	0.160	92.630	383.33	0.25	0.26	-0.08	1632359.39	494626.21	39°51'06.648"N	80°41'50.343"W	0.44	-0.44	10.36
408.33	0.140	98.540	408.33	0.20	0.26	-0.01	1632359.45	494626.21	39°51'06.648"N	80°41'50.342"W	0.10	-0.08	23.64
433.33	0.190	103.880	433.33	0.15	0.24	0.06	1632359.52	494626.19	39°51'06.648"N	80°41'50.341"W	0.21	0.20	21.36
458.33	0.210	74.190	458.33	0.10	0.25	0.14	1632359.61	494626.19	39°51'06.648"N	80°41'50.340"W	0.42	0.08	-118.76
483.33	0.150	71.180	483.33	0.07	0.27	0.22	1632359.68	494626.22	39°51'06.648"N	80°41'50.339"W	0.24	-0.24	-12.04
508.33	0.170	61.110	508.33	0.05	0.30	0.28	1632359.75	494626.24	39°51'06.648"N	80°41'50.338"W	0.14	0.08	-40.28
518.33	0.180	59.360	518.33	0.04	0.31	0.31	1632359.77	494626.26	39°51'06.648"N	80°41'50.338"W	0.11	0.10	-17.50
634.33	0.460	65.360	634.33	-0.11	0.60	0.89	1632360.36	494626.54	39°51'06.651"N	80°41'50.330"W	0.24	0.24	5.17
665.33	0.190	78.480	665.33	-0.16	0.66	1.05	1632360.52	494626.60	39°51'06.652"N	80°41'50.328"W	0.90	-0.87	42.32
696.33	0.440	33.850	696.33	-0.15	0.77	1.17	1632360.64	494626.71	39°51'06.653"N	80°41'50.327"W	1.07	0.81	-143.97
728.33	0.380	29.300	728.32	-0.08	0.97	1.29	1632360.76	494626.90	39°51'06.655"N	80°41'50.325"W	0.21	-0.19	-14.22
790.33	0.270	23.780	790.32	0.06	1.28	1.45	1632360.93	494627.21	39°51'06.658"N	80°41'50.323"W	0.18	-0.18	-8.90
884.00	0.310	54.010	883.99	0.14	1.63	1.74	1632361.23	494627.56	39°51'06.661"N	80°41'50.319"W	0.17	0.04	32.27
976.00	0.690	14.090	975.99	0.46	2.31	2.08	1632361.57	494628.23	39°51'06.668"N	80°41'50.315"W	0.54	0.41	-43.39
1066.00	2.560	20.730	1065.95	1.77	4.72	2.92	1632362.45	494630.63	39°51'06.692"N	80°41'50.304"W	2.08	2.08	7.38

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Actual Wellpath Report

Taylor C 7H ST01 AWP Proj:

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REFERENCE WELLPATH IDENTIFICATION

Operator	CHEVRON APPALACHIA, LLC	Slot	Slot #07
Area	Marshall County, WV	Well	Taylor C 7H ST01
Field	Marshall County	Wellbore	Taylor C 7H ST01 AWB
Facility	Taylor C Pad	Sidetrack from	Taylor C 7H AWP Proj: 2265' at 790.33 MD

WELLPATH DATA (40 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
1155.00	4.720	13.700	1154.76	4.95	10.14	4.49	1632364.09	494636.02	39°51'06.746"N	80°41'50.284"W	2.47	2.43	-7.90
1245.00	5.310	13.930	1244.42	9.64	17.78	6.37	1632366.07	494643.64	39°51'06.821"N	80°41'50.260"W	0.66	0.66	0.26
1334.00	5.510	12.780	1333.02	14.69	25.94	8.31	1632368.12	494651.77	39°51'06.902"N	80°41'50.235"W	0.26	0.22	-1.29
1423.00	4.550	15.400	1421.68	19.33	33.51	10.19	1632370.10	494659.32	39°51'06.977"N	80°41'50.211"W	1.11	-1.08	2.94
1513.00	2.760	22.490	1511.49	22.39	38.95	11.97	1632371.95	494664.74	39°51'07.030"N	80°41'50.188"W	2.05	-1.99	7.88
1602.00	1.970	20.540	1600.42	24.16	42.37	13.33	1632373.35	494668.13	39°51'07.064"N	80°41'50.171"W	0.89	-0.89	-2.19
1692.00	1.680	28.370	1690.37	25.42	44.98	14.50	1632374.55	494670.73	39°51'07.090"N	80°41'50.156"W	0.42	-0.32	8.70
1781.00	1.010	43.220	1779.35	26.01	46.70	15.65	1632375.73	494672.43	39°51'07.107"N	80°41'50.141"W	0.84	-0.75	16.69
1870.00	0.720	12.140	1868.34	26.45	47.81	16.31	1632376.40	494673.54	39°51'07.118"N	80°41'50.133"W	0.61	-0.33	-34.92
1937.00	0.720	12.140	1935.33	26.97	48.64	16.49	1632376.59	494674.36	39°51'07.126"N	80°41'50.130"W	0.00	0.00	0.00

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Taylor C 7H BHL Rev-2	6471.22	8294.74	-4658.57	1627812.09	502981.59	39°52'28.614"N	80°42'50.093"W	point
Taylor C 7H LP Rev-2	6575.00	1749.58	755.15	**1633137.82**	**496365.22**	39°51'23.936"N	80°41'40.659"W	point
Taylor C LL1	7008.33	-14.14	-42.72	1632316.56	494612.38	39°51'06.506"N	80°41'50.889"W	polygon
Taylor C LL2	7008.33	-14.14	-42.72	1632316.56	494612.38	39°51'06.506"N	80°41'50.889"W	polygon
Taylor C LL3	7008.33	-14.14	-42.72	1632316.56	494612.38	39°51'06.506"N	80°41'50.889"W	polygon

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Actual Wellpath Report

Taylor C 7H ST01 AWP Proj:

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REFERENCE WELLPATH IDENTIFICATION			
Operator	**CHEVRON APPALACHIA, LLC**	Slot	**Slot #07**
Area	**Marshall County, WV**	Well	**Taylor C 7H ST01**
Field	**Marshall County**	Wellbore	**Taylor C 7H ST01 AWB**
Facility	**Taylor C Pad**	Sidetrack from	**Taylor C 7H AWP Proj: 2265' at 790.33 MD**

WELLPATH COMPOSITION - Ref Wellbore: Taylor C 7H ST01 AWB Ref Wellpath: Taylor C 7H ST01 AWP Proj:

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	518.33	BHI Generic gyro - northseeking (Standard)	01_Gyrodata MS Gyro <17-1/2"> (50'-510')	Taylor C 7H AWB
518.33	790.33	BHI NaviTrak (Axial)	02_APS EM <12-1/4"> (510')(626'-2190') Proj:2265'	Taylor C 7H AWB
790.33	1870.00	BHI NaviTrak (Axial)	03_BHI NaviTrak (1358.33')(xxxx'-	Taylor C 7H ST01 AWB
1870.00	1937.00	Blind Drilling (std)	Projection to bit	Taylor C 7H ST01 AWB