



---

**west virginia** department of environmental protection

---

Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

March 23, 2016

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-5101801, issued to CHEVRON APPALACHIA, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: TAYLOR C 2H  
Farm Name: WILLIAMS OHIO VALLEY MIDS7  
**API Well Number: 47-5101801**  
**Permit Type: Plugging**  
Date Issued: 03/23/2016

## PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

### CONDITIONS

---

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

1) Date \_\_\_\_\_, 20\_\_\_\_  
2) Operator's  
Well No. \_\_\_\_\_  
3) API Well No. 47- \_\_\_\_\_

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil \_\_\_\_\_ / Gas X / Liquid injection \_\_\_\_\_ / Waste disposal \_\_\_\_\_  
(If "Gas, Production \_\_\_\_\_ or Underground storage \_\_\_\_\_) Deep \_\_\_\_\_ / Shallow X

5) Location: Elevation 1257' Watershed Middle Grave Creek - Grave Creek  
District Clay County Marshall Quadrangle Glen Easton, WV

6) Well Operator Chevron Appalachia, LLC 7) Designated Agent n/a  
Address 800 Mountain View Drive Address \_\_\_\_\_  
Smithfield, PA 15478

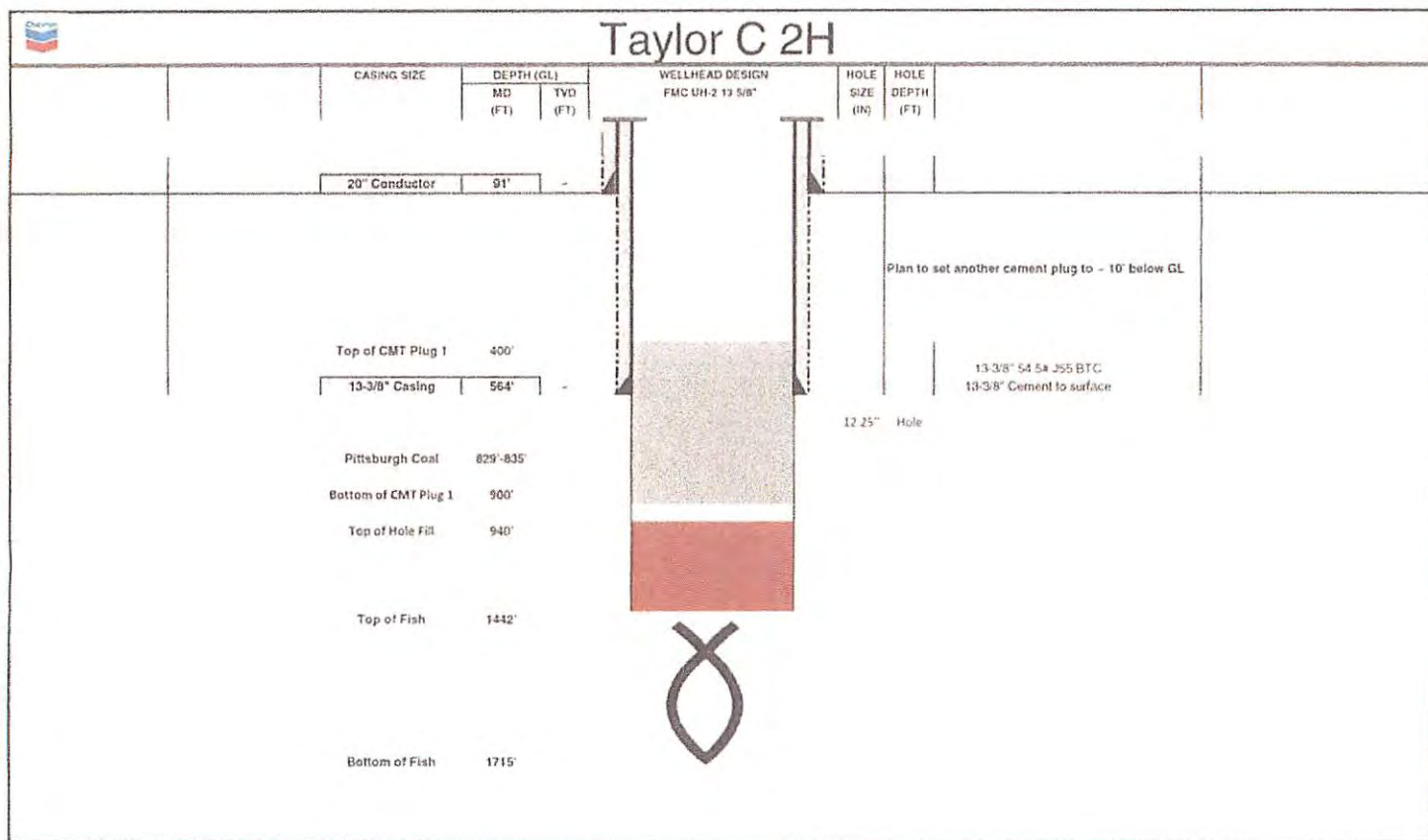
8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Eric Blend Name \_\_\_\_\_  
Address P.O. Box 2115 Address \_\_\_\_\_  
Wheeling, WV 26003

10) Work Order: The work order for the manner of plugging this well is as follows:

**See attached**

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector  Date 12.3.15



*E. BLO 12/3/15*

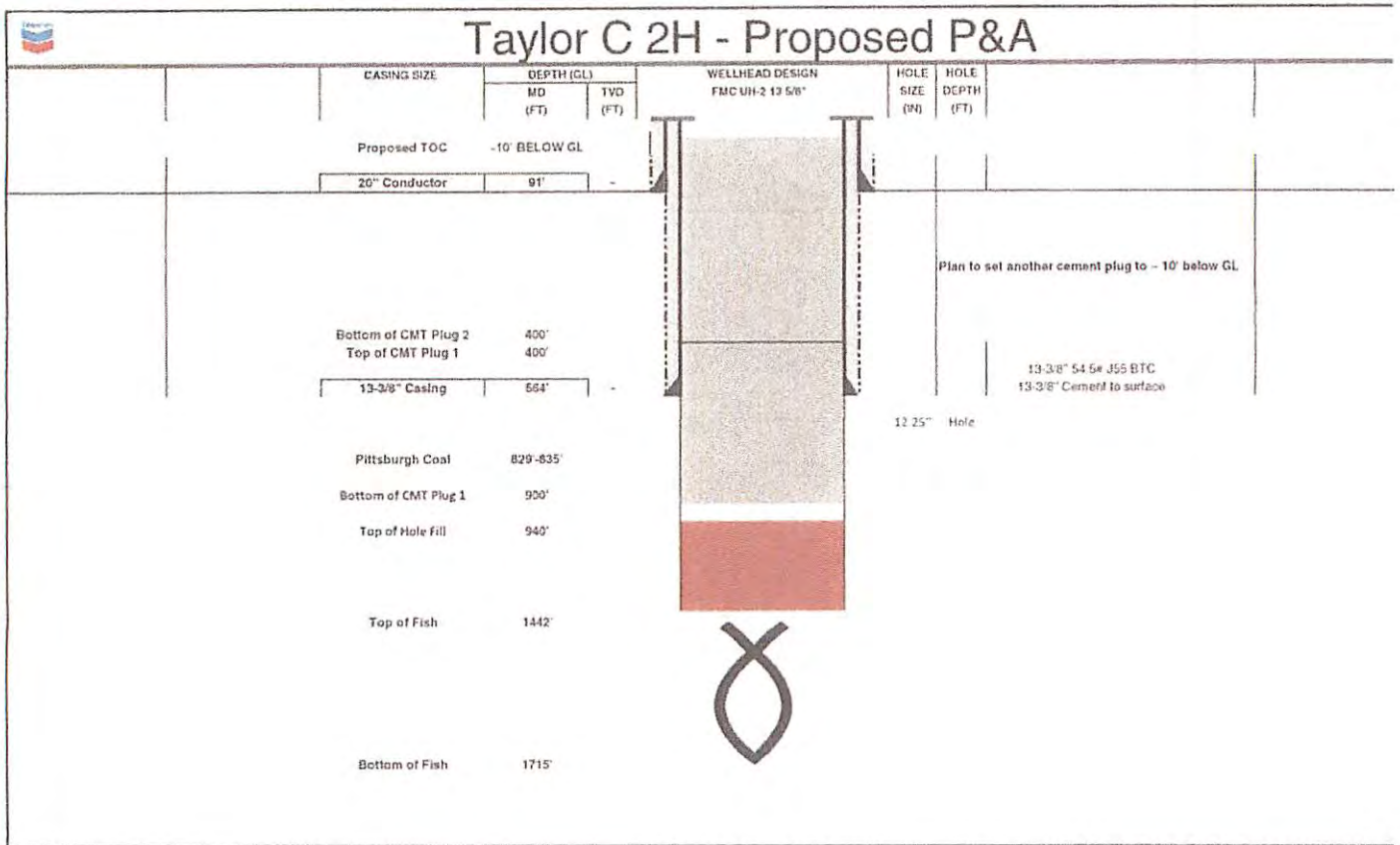
RECEIVED  
Office of Oil and Gas

DEC 08 2015

WV Department of  
Environmental Protection

03/25/2016





E. W. RO

12/3/15

**RECEIVED**  
Office of Oil and Gas

DEC 08 2015

WV Department of  
Environmental Protection

03/25/2016



**Taylor C 2H P&A Procedure**

*Plug Set from ~400' to a maximum TOC of 10' below GL*

1. N/U 13 5/8" Annular. Test break.
2. TIH with 4" 14.0# DP
3. RU Cementers
4. Pressure test lines
5. Pump ~57 bbls of Class A or G cement
6. POOH slowly (<30'/min)
7. N/D BOPE and skid rig

***Offline***

1. Cut off 20" landing ring, 13-3/8" hanger, and 13 5/8" Wellhead.
2. Install permanent monument (pipe to surface)
  - Cement remaining wellbore to surface
  - Minimum diameter of 6"
  - Pipe shall extend to a depth of 10' below GL into well
  - Pipe shall extend to a depth of >30" above GL
  - Monument shall be sealed with concrete
  - API well identification number shall be stamped on monument with lettering no smaller than 1/2"

C. TSE 12/3/15

RECEIVED  
Office of Oil and Gas

DEC 08 2015

WV Department of  
Environmental Protection

03/25/2016



WR-35  
Rev. 8/23/13

API 47- 051 - 01801 Farm name Williams Ohio Valley Midstream LLC Well number 2H

PRODUCING FORMATION(S)	DEPTHS	
	TVD	MD

RECEIVED  
OFFICE OF OIL AND GAS

JAN 06 2016

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	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
Dunkard Group	100	530	100	530	SLTST, SH, Freshwater
Waynesburg Coal	530	531	530	531	Coal
Pittsburgh Coal	820	828	820	828	Coal
Big Lime	1885	1920	1885	1920	LS, trace SLTST
Burgoon	1980	2185	1980	2185	SS
Squaw	2185	TD	2185	TD	SLTST

Please insert additional pages as applicable.

Drilling Contractor SEE ATTACHED  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Logging Company n/a  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company Baker Hughes  
Address 5373 West Alabama, Suite 300 City Houston State TX Zip 77056

Stimulating Company n/a  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please insert additional pages as applicable.

Completed by Jackie M. Schlar Telephone 724-564-3721  
Signature *Jackie M. Schlar* Title Regulatory Compliance Team Lead Date 1/5/2016

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



JAN 06 2016

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

API 47-051-01801 County Marshall District Clay  
Quad Glen Easton Pad Name Taylor C Field/Pool Name \_\_\_\_\_  
Farm name Williams Ohio Valley Midstream LLC Well Number 2H  
Operator (as registered with the OOG) Chevron Appalachia, LLC  
Address 800 Mountain View Drive City Smithfield State PA Zip 15478

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing \_\_\_\_\_ Easting \_\_\_\_\_  
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)  
Fluid loss control, emulsifier, and shale stabilizer

Date permit issued 3/31/2015 Date drilling commenced 8/25/2015 Date drilling ceased 12/4/2015  
Date completion activities began n/a Date completion activities ceased \_\_\_\_\_  
Verbal plugging (Y/N) N Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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

Freshwater depth(s) ft 1" stream @ 495' MD Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 'slight show' ML @ 1755' MD Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 530' MD Waynesburg , 835' Pittsburgh Coal Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) No, already mined out 135' to the West

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

03/25/2016

WR-35  
Rev. 8/23/13

API 47-051 - 01801 Farm name Williams Ohio Valley Midstream LLC Well number 2H

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	73	New			
Surface	17 1/2	13 3/8	547	New	J-55; 54.50		
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

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		113					
Surface	Class A	443	15.60	1.20	532		
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 1757 Loggers TD (ft) 1757

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 Bow spring centralizers every two joints

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RECEIVED

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS OFFICE OF OIL AND GAS

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS

JAN 06 2016

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



API: 47-5101801	Well Name: Taylor C	Well Number: 2H
-----------------	---------------------	-----------------

DRILLING CONTRACTORS		
Driller	Driller	Driller
Name Rocky Mountain Drilling	Name Highlands Drilling LLC	Name
Address 185 North Vernal Avenue, Suite 2	Address 900 Virginia Street East	Address
City - State - Zip Vernal, UT 84078	City - State - Zip Charlestown, WV 25301	City - State - Zip

RECEIVED  
OFFICE OF OIL AND GAS

JAN 06 2016



5101801P

## Calculated by Baker Hughes, Inc.

**Job Number: 7636325**  
**Company: Chevron**  
**Lease/Well: Taylor C 2H**  
**Location: MARSHALL COUNTY**  
**Rig Name: Highlands 14**  
**State/County: WV/ MARSHALL**  
**Country: US**

**Elevation GL: 1235.00 ft**  
**RKB: 16.67 ft**  
**Projection System: US State Plane 1983**  
**Projection Group: West Virginia Northern Zone**  
**Projection Datum: GRS80**  
**Magnetic Declination: -8.68°**  
**Grid Convergence: 0.76 W (NOT APPLIED - TRUE NORTH)**  
**Date: 11/18/2015**

RECEIVED  
**OFFICE OF OIL AND GAS**

JAN 06 2016

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	Closure Distance (Ft)	DLS %/100	Northing (US ft)	Easting (US ft)	AB/NS From-Plan	LR/EW From-Plan
16.67	0	151.58	16.67	0	0	0	0	0	494606.89	1632365.5	.00	.00
50	0.37	78.58	50	0.02	0.11	0.05	0.11	1.11	1632322.7	494593.33	.00	.00
75	0.37	125	75	-0.01	0.25	0.17	0.25	1.17	1632322.84	494593.3	.00	.00
100	0.66	162.09	100	-0.19	0.36	0.38	0.41	1.71	1632322.95	494593.11	.00	.00
125	0.82	182.7	125	-0.51	0.4	0.64	0.64	1.23	1632322.98	494592.8	.00	.00
150	0.45	181.85	149.99	-0.78	0.39	0.85	0.87	1.48	1632322.96	494592.52	.00	.00
175	0.26	131.21	174.99	-0.92	0.42	0.98	1.01	1.4	1632323	494592.38	.00	.00
200	0.28	215.69	199.99	-1.01	0.43	1.05	1.1	1.45	1632323.01	494592.3	.00	.00
225	0.26	218.94	224.99	-1.1	0.36	1.08	1.16	0.1	1632322.94	494592.2	.00	.00
250	0.23	216.54	249.99	-1.19	0.3	1.1	1.22	0.13	1632322.87	494592.12	.00	.00
275	0.28	218.9	274.99	-1.27	0.23	1.13	1.29	0.2	1632322.8	494592.03	.00	.00
300	0.41	220.65	299.99	-1.39	0.13	1.16	1.39	0.52	1632322.7	494591.92	.00	.00
325	0.73	230.5	324.99	-1.56	-0.05	1.17	1.56	1.33	1632322.52	494591.75	.00	.00
350	0.79	233.58	349.99	-1.76	-0.31	1.17	1.79	0.29	1632322.25	494591.55	.00	.00
375	0.6	232.75	374.99	-1.94	-0.56	1.15	2.02	0.76	1632322.01	494591.37	.00	.00
400	0.47	241.52	399.99	-2.07	-0.75	1.13	2.2	0.61	1632321.81	494591.25	.00	.00
425	0.46	241.56	424.99	-2.17	-0.93	1.09	2.36	0.04	1632321.63	494591.15	.00	.00
450	0.42	258.56	449.98	-2.23	-1.11	1.03	2.49	0.54	1632321.45	494591.09	.00	.00
475	0.46	263.77	474.98	-2.26	-1.3	0.93	2.61	0.23	1632321.26	494591.06	.00	.00
495	0.36	261.71	494.98	-2.28	-1.44	0.85	2.7	0.51	1632321.12	494591.05	.00	.00
590	0.27	87.68	589.98	-2.31	-1.51	0.84	2.76	0.66	1632321.05	494591.02	-.52	-.02
621	0.03	61.28	620.98	-2.31	-1.43	0.88	2.71	0.79	1632321.13	494591.02	-.80	-.03
653	0.39	66.4	652.98	-2.26	-1.32	0.91	2.62	1.13	1632321.24	494591.07	-1.11	.00
684	0.42	66.15	683.98	-2.17	-1.12	0.97	2.44	0.1	1632321.44	494591.15	-1.52	.06
715	0.35	64.59	714.98	-2.09	-0.93	1.02	2.28	0.23	1632321.63	494591.24	-1.91	.12
746	0.48	46.16	745.98	-1.95	-0.75	1.04	2.09	0.6	1632321.81	494591.37	-2.30	.22
778	0.63	45.67	777.98	-1.74	-0.53	1.01	1.82	0.47	1632322.04	494591.58	-2.75	.41
809	0.43	76.32	808.98	-1.59	-0.3	1.05	1.62	1.1	1632322.27	494591.72	-3.20	.52
840	0.3	34.88	839.98	-1.5	-0.14	1.07	1.5	0.92	1632322.43	494591.81	-3.57	.59
871	0.27	226.46	870.98	-1.48	-0.14	1.06	1.49	1.83	1632322.43	494591.83	-3.76	.60
902	0.46	224.15	901.98	-1.62	-0.28	1.08	1.65	0.61	1632322.29	494591.69	-3.86	-.79
933	1.09	242.92	932.97	-1.85	-0.63	1.03	1.95	2.16	1632321.93	494591.47	-3.98	-1.17
965	1.52	243.82	964.96	-2.17	-1.28	0.87	2.52	1.35	1632321.28	494591.16	-4.22	-1.23
996	1.99	224.25	995.95	-2.74	-2.03	0.83	3.41	2.44	1632320.53	494590.6	-4.56	-1.15
1027	2.43	237.83	1026.93	-3.47	-2.96	0.81	4.56	2.2	1632319.58	494589.88	-5.01	-1.05
1058	2.86	235.89	1057.89	-4.26	-4.16	0.66	5.95	1.42	1632318.38	494589.11	-5.55	-.98
1089	3.38	232.67	1088.85	-5.24	-5.52	0.56	7.62	1.77	1632317	494588.14	-6.17	-.94
1120	4.03	225.68	1119.78	-6.56	-7.03	0.63	9.61	2.55	1632315.47	494586.84	-6.81	-1.05
1151	4.83	223.74	1150.69	-8.26	-8.71	0.88	12.01	2.63	1632313.77	494585.16	-7.36	-1.34
1183	5.11	223.77	1182.57	-10.27	-10.63	1.22	14.78	0.88	1632311.83	494583.19	-7.68	-1.69
1214	5.59	222.31	1213.44	-12.38	-12.6	1.6	17.66	1.61	1632309.83	494581.1	-7.79	-2.09
1245	6.02	218.49	1244.28	-14.77	-14.63	2.17	20.79	1.86	1632307.77	494578.74	-7.68	-2.67
1276	6.14	215.57	1275.1	-17.39	-16.6	2.94	24.04	1.07	1632305.76	494576.14	-7.46	-3.46
1307	6.25	215.52	1305.92	-20.11	-18.55	3.82	27.36	0.36	1632303.78	494573.45	-7.15	-4.35
1339	6.75	213.19	1337.72	-23.1	-20.59	4.84	30.95	1.77	1632301.69	494570.48	-6.42	-5.39
1370	6.9	211.82	1368.5	-26.21	-22.57	5.99	34.59	0.71	1632299.67	494567.4	-5.33	-6.56
1401	6.73	212.6	1399.28	-29.32	-24.53	7.16	38.23	0.62	1632297.67	494564.32	-4.00	-7.75
1432	5.66	213.77	1430.1	-32.12	-26.36	8.17	41.55	3.48	1632295.81	494561.54	-2.72	-8.77
1463	4.59	214.92	1460.97	-34.41	-27.92	8.95	44.31	3.47	1632294.22	494559.28	-1.73	-9.57
1495	4.03	219.27	1492.88	-36.33	-29.36	9.53	46.71	2.03	1632292.75	494557.37	-.84	-10.15
1526	3.38	224.86	1523.82	-37.82	-30.7	9.83	48.71	2.4	1632291.39	494555.9	-.01	-10.47
1557	3.02	235.61	1554.77	-38.93	-32.02	9.86	50.41	2.25	1632290.06	494554.81	.82	-10.50
1588	2.99	243.07	1585.72	-39.76	-33.41	9.62	51.93	1.26	1632288.65	494554	1.78	-10.27
1619	2.77	254.23	1616.69	-40.33	-34.88	9.28	53.88	1.26	1632287.23	494554	1.78	-10.27



5101801 P

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	Closure Distance (Ft)	DLS %/100	Northing (US ft)	Easting (US ft)	AB/NS From-Plan	LR/EW From-Plan
1650	2.37	255.14	1647.65	-40.7	-36.19	8.58	54.46	1.3	1632285.86	494553.1	3.99	-9.25
1681	1.75	266.31	1678.63	-40.89	-37.28	8.04	55.34	2.37	1632284.77	494552.92	5.04	-8.67
1774	1.75	266.31	1771.59	-40.77	-40.34	6.01	57.35	.00	1632281.72	494553.08	7.35	7.00

RECEIVED  
OFFICE OF OIL AND GAS

JAN 06 2016

03/25/2016

WW-4A  
Revised 6-07

1) Date: 11/30/2015  
2) Operator's Well Number  
Taylor C 2H  
3) API Well No.: 47 - 51 - 01801

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL**

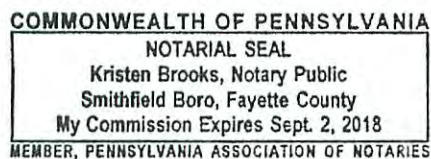
4) Surface Owner(s) to be served:	✓	5) (a) Coal Operator	
(a) Name	<u>Williams Ohio Valley Midstream LLC</u>	Name	<u>Murray Energy Corporation</u> ✓
Address	<u>100 Teletech Drive, Suite 2</u> <u>Moundsville, WV 26041</u>	Address	<u>46226 National Road</u> <u>St. Clairsville, OH 43950</u>
(b) Name	_____	(b) Coal Owner(s) with Declaration	
Address	_____	Name	<u>Consolidated Coal Company</u> ✓
(c) Name	_____	Address	<u>1000 Consol Energy Drive</u> <u>Canonsburg, PA 15317</u>
Address	_____	Name	_____
		Address	_____
6) Inspector	<u>Eric Blend</u>	(c) Coal Lessee with Declaration	
Address	<u>P.O. Box 2115</u> <u>Wheeling, WV 26003</u>	Name	_____
Telephone	<u>304-552-1179</u>	Address	_____

**TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:**

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator Chevron Appalachia, LLC  
 By: [Signature]  
 Its: Attorney in Fact  
 Address 800 Mountain View Drive  
Smithfield, PA 15478  
 Telephone 724-564-3700

Subscribed and sworn before me this 2nd day of December, 2015  
Kristen Brooks Notary Public

My Commission Expires Sept 2, 2018

**RECEIVED**  
**Office of Oil and Gas**  
**DEC 08 2015**

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of protection regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

**03/25/2016**

WW-9  
(2/15)

API Number 47 - 51 - 01801  
Operator's Well No. Taylor C 2H

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 49449935  
Watershed (HUC 10) Middle Grave Creek - Grave Creek Quadrangle Glen Easton, WV

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No   
Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- \_\_\_\_\_ Land Application
- \_\_\_\_\_ Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- \_\_\_\_\_ Reuse (at API Number \_\_\_\_\_ )
- \_\_\_\_\_ Off Site Disposal (Supply form WW-9 for disposal location)
- \_\_\_\_\_ Other (Explain \_\_\_\_\_)

*C. B. R. 12/3/15*

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. NA Plugging Well

-If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_

Additives to be used in drilling medium? \_\_\_\_\_

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

-Landfill or offsite name/permit number? \_\_\_\_\_

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Nicholas A. Stathis*  
Company Official (Typed Name) Nicholas A. Stathis  
Company Official Title ATTORNEY IN FACT

RECEIVED  
Office of Oil and Gas

Subscribed and sworn before me this 2nd day of December, 2015

Kristen Brooks

Notary Public

DEC 08 2015  
COMMONWEALTH OF PENNSYLVANIA  
NOTARY PUBLIC  
Kristen Brooks, Notary Public  
WV Department of Environmental Protection  
Commission Expires Sept. 2, 2018  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

My commission expires Sept 2, 2018



5701801P

Form WW-9

Operator's Well No. Taylor C 2H

**Chevron Appalachia, LLC**

Proposed Revegetation Treatment: Acres Disturbed 22.0 Prevegetation pH 5.5 - 6.3

Lime Soil Test Tons/acre or to correct to pH 5.0 - 7.5

Fertilizer type 10-20-20

Fertilizer amount 1,000 lbs/acre

Mulch Straw 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Winter Rye	170	Birdsfoot Trefoil	15
Plant	8/15 - 2/28	Weeping Lovegrass	45
		Perennial Ryegrass	10
		Plant 3/1 - 6/15	8/15 - 9/15

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: C. T. [Signature] 12/3/15

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Oil + Gas Inspector

Date: 12/3/15

Field Reviewed?  Yes  No

RECEIVED  
Office of Oil and Gas

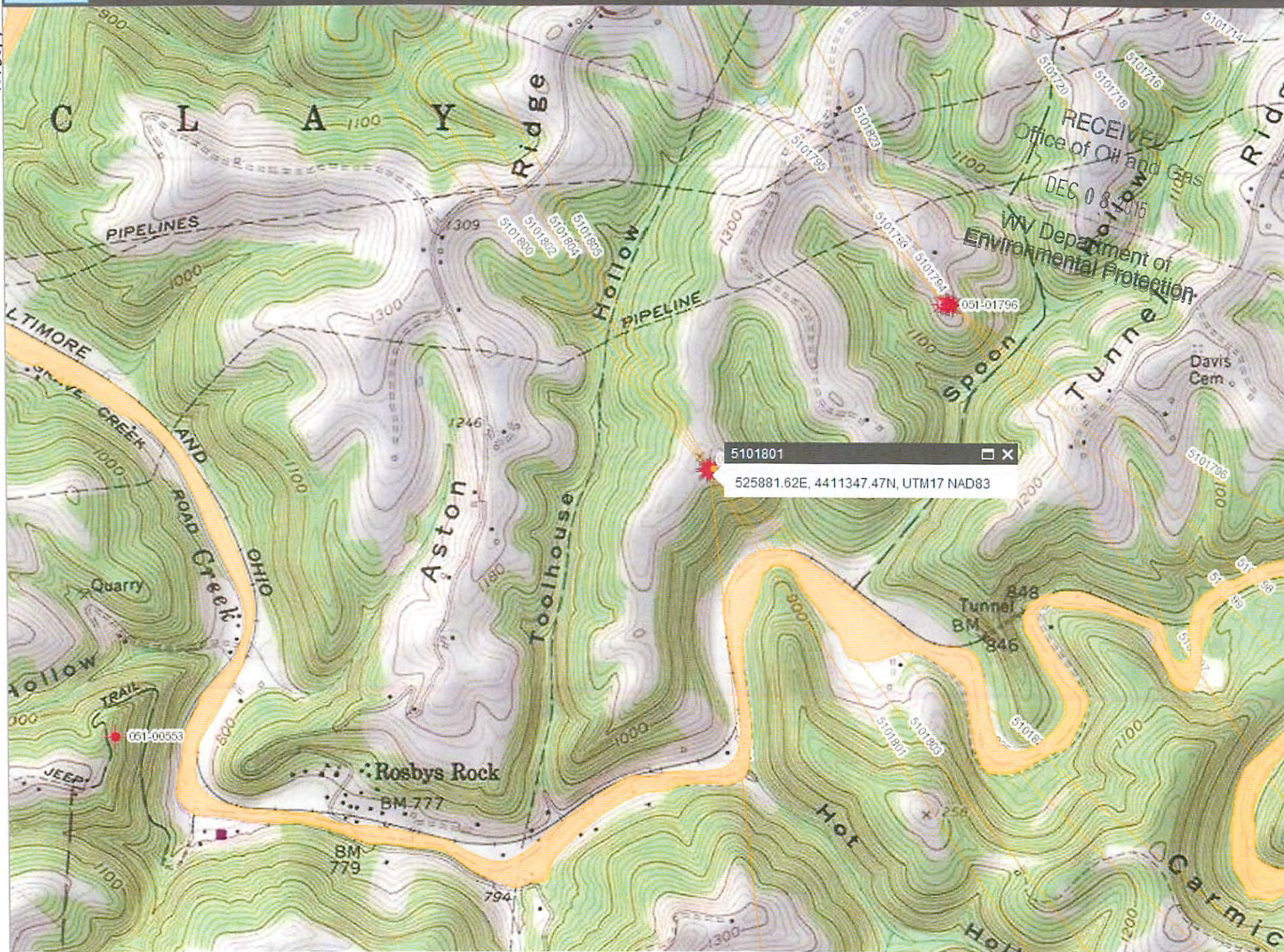
DEC 08 2015

WV Department of  
Environmental Protection

03/25/2016



5101801 P



5101801

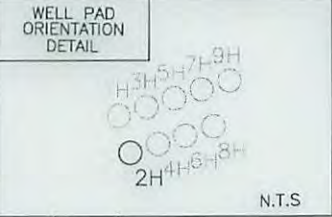
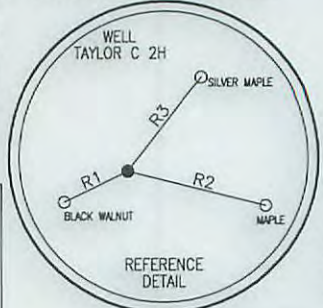
525881.62E, 4411347.47N, UTM17 NAD83



SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

Well is located on topo map 8,467 feet south of Latitude: 39° 52' 30"

LINE	BEARING	DISTANCE
R1	S 64°08'48" W	66.64'
R2	S 75°54'24" E	134.07'
R3	N 38°10'49" E	110.59'
R4	N 24°41'55" E	1079.02'
R5	N 86°09'30" E	766.30'
R6	S 60°13'45" W	1628.64'



**SURFACE HOLE LOCATION (SHL)**

UTM 17-NAD83  
 N:4411347.47  
 E:525881.62  
 NAD 83, WV NORTH  
 N:494593.31  
 E:1632322.59  
 LAT/LON DATUM-NAD83  
 LAT:39.851755  
 LON:-80.697447

**APPROX. LANDING POINT**

UTM 17-NAD83  
 N:4411053.21  
 E:525829.53  
 NAD 83, WV NORTH  
 N:493630.55  
 E:1632135.51  
 LAT/LON DATUM-NAD83  
 LAT:39.849105  
 LON:-80.698067

**BOTTOM HOLE LOCATION (BHL)**

UTM 17-NAD83  
 N:4409362.71  
 E:527222.44  
 NAD 83, WV NORTH  
 N:488006.81  
 E:1636613.62  
 LAT/LON DATUM-NAD83  
 LAT:39.833831  
 LON:-80.681856

**LEGEND**

- ⊕ - TOPO MAP POINT
- ⊙ - WELL
- - ALL ARE POINTS UNLESS OTHERWISE NOTED
- - MINERAL TRACT BOUNDARY
- - - - - PARCEL LINES
- - - - - WELL REFERENCE
- - - - - PROPOSED HORIZONTAL WELL
- - - - - ROAD
- - - - - STREAM CENTER LINE
- Ⓐ - LESSORS
- ① - SURFACE OWNERS

**GAS WELLS**

- - EXISTING WELLS
- ⦿ - PLUGGED WELLS

- NOTES:**
1. There are no water wells or developed springs within 250' of proposed well.
  2. There are no existing buildings within 625' of proposed well.
  3. Proposed well pad is within 100' from perennial stream, wetland, pond, reservoir or lake.
  4. There are no native trout streams within 300' of proposed well.
  5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
  6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

**Blue Mountain Inc.**  
 11023 MASON DIXON HIGHWAY  
 BURTON, WV 26562  
 PHONE: (304) 662-6486

Well is located on topo map 8,641 feet west of Longitude: 80° 40' 00"

FILE #: TAYLOR C 2H  
 DRAWING #: TAYLOR C 2H  
 SCALE: 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY: 1/2500  
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *George D. Six*  
 R.P.E.: \_\_\_\_\_ L.L.S.: P.S. No. 2000

**GEORGE D. SIX**  
 LICENSED  
 No. 2000  
 STATE OF  
 WEST VIRGINIA  
 PROFESSIONAL SURVEYOR

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP  
 OFFICE OF OIL & GAS  
 601 57TH STREET  
 CHARLESTON, WV 25304

DATE: DECEMBER 1, 2015  
 OPERATOR'S WELL #: TAYLOR C 2H  
 API WELL #: 47 51 **01801 P**  
 STATE COUNTY PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK ELEVATION: 1257.00'  
 COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: GLEN EASTON, WV 7.5'  
 SURFACE OWNER: WILLIAMS OHIO VALLEY MIDSTREAM LLC ACREAGE: 265.439±  
 OIL & GAS ROYALTY OWNER: LEE R. & SHERRI L. TAYLOR ACREAGE: 741.135±

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
 CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,555'± TMD: 14,376.3'±  
 WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY  
 Address 800 MOUNTAIN VIEW DRIVE Address 500 LEE STREET, EAST SUITE 1600  
 City SMITHFIELD State PA Zip Code 15478 City CHARLESTON State WV Zip Code 25301-3202

03/25/2016



# TAYLOR C

## 2H

### PAGE 2 OF 2

	SURFACE OWNER	DIST-TM/PAR
1	WILLIAMS OHIO VALLEY MIDSTREAM LLC	4-10/21
2	ROBERT MORRIS SULLIVAN	4-10/15
3	ROBERT MORRIS SULLIVAN	4-10/22
4	DAVID SHAWN CONNER	4-10/16
5	MURRAY ENERGY	4-10/23
6	CNX LAND RESOURCES INC.	9-2/3
7	GEORGE B. & MARY L. CROW	9-2/6
8	CNX LAND, LLC	9-2/12.1
9	HARRY J. CRAWFORD ET UX - LIFE	9-2/12

	LESSOR
A	LEE R. & SHERRI L. TAYLOR
B	ROBERT MORRIS SULLIVAN
C	ROBERT MORRIS SULLIVAN
D	DAVID SHAWN CONNER
E	CONSOL
F	OKEY D. & JANINA A. BURTON
G	ROSS AVENUE MINERALS 2012, LLC BELMONT ROYALTY AND MINERALS 2012, LLC
H	HARRY J. CRAWFORD ET AL
J	HARRY J. CRAWFORD ET AL

SURFACE HOLE LOCATION (SHL)
UTM_17-NAD83
N:4411347.47
E:525881.62
NAD_83_WV_NORTH
N:494593.31
E:1632322.59
LAT/LON_DATUM-NAD83
LAT:39.851755
LON:-80.697447

APPROX. LANDING POINT
UTM_17-NAD83
N:4411053.21
E:525829.53
NAD_83_WV_NORTH
N:493630.55
E:1632135.51
LAT/LON_DATUM-NAD83
LAT:39.849105
LON:-80.698067

BOTTOM HOLE LOCATION (BHL)
UTM_17-NAD83
N:4409362.71
E:527222.44
NAD_83_WV_NORTH
N:488006.81
E:1636613.62
LAT/LON_DATUM-NAD83
LAT:39.833831
LON:-80.681856

03/25/2016

DECEMBER 1, 2015