



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Wednesday, February 12, 2020
WELL WORK PERMIT
Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

Re: Permit approval for WOODS M04H
47-051-02299-00-00

This well work permit 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 any additional specific 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: WOODS M04H
Farm Name: RICHARD WILEY WOODS E₆
U.S. WELL NUMBER: 47-051-02299-00-00
Horizontal 6A New Drill
Date Issued: 2/12/2020



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**ORDER
ISSUED UNDER
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 6A**

TO: Chevron Appalachia, LLC
P.O. Box 611
Moon Township, PA 15108

DATE: February 12, 2020
ORDER NO.: 2020-W-1

INTRODUCTION

This Order (hereinafter “Order”) is issued by the Office of Oil and Gas (hereinafter “OOG”), by and through its Chief, pursuant to the authority of W. Va. Code §§ 22-1-1, 22-6-1 and 22-6A-1 *et seq.* to Chevron Appalachia, LLC (hereinafter “Operator”), collectively the “Parties.”

FINDINGS OF THE CHIEF

In support of this Order, the Chief hereby finds the following:

1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 *et seq.*, and the rules and regulations promulgated thereunder.
2. Chevron Appalachia, LLC is a “person” as defined by W. Va. Code §22-6-1(n), with a corporate address as P.O. Box 611, Moon Township, Pennsylvania.
3. On April 30, 2019, Chevron Appalachia, LLC submitted a well work permit application identified as API# 47-051-02299. The proposed well is to be located on the Woods Pad in the Clay District of Marshall County, West Virginia.
4. On April 30, 2019, Chevron Appalachia, LLC requested a waiver for Wetland W-DAZ-005 as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-051-02299. Wetlands W-DAZ-006, 007 and 008 are not subject to a wetland waiver due to the distance from the LOD of the pad.

CONCLUSIONS OF LAW

1. West Virginia Code §22-1-6(d) requires, in part, that “[i]n addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to...(3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing.”

2. West Virginia Code §22-6A-2(a)(6) requires, in part, that “Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter.”

3. West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the Office of Oil and Gas shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The Office of Oil and Gas may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.”

ORDER

West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland W-DAZ-005 from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-051-02299. The Office of Oil and Gas hereby **ORDERS** that Chevron Appalachia, LLC shall meet the following site construction and operational requirements for the Woods Well Pad:

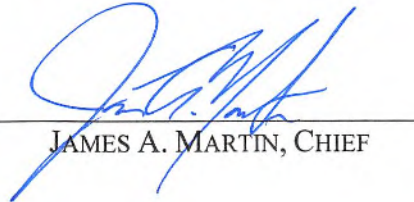
- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least twenty-four inches (24”) in height;
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. Wetland W-DAZ-005 shall have a riprap apron on the end of the permanent interceptor channel (diverted clean water) and two layers of forty-two inch (42”) Smart-fence on the downhill side to prevent any sediment from reaching the wetland from the well pad. This along with rip-rap aprons, temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- d. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- e. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- f. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- g. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- h. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- i. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½”) rain within any twenty-four (24) hour period;
- j. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- k. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 12th day of February, 2020.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

By: _____



JAMES A. MARTIN, CHIEF

Attachment 1



**SITE LOCATION MAP
USGS MOUNDSVILLE QUADS
1" = 2000'**

- NOTES:**
1. THE SITE WAS INVESTIGATED FOR UNDERGROUND UTILITIES BY THG GEOPHYSICS, LTD ON NOVEMBER 17-19, 2015. NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. PLAN PROVIDED FOR REFERENCE ONLY. MICHAEL BAKER INTERNATIONAL DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE AT THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.
 2. EXISTING TOPOGRAPHICAL DATA COURTESY FIELD SURVEY PERFORMED BY MICHAEL BAKER INTERNATIONAL ON SEPTEMBER 11-19, 2016. DATA BASED ON NAD 83 WEST VIRGINIA STATE PLANE, NORTH-ZONE, U.S. FOOT. CONTRACTOR SHALL VERIFY TOPOGRAPHIC MAPPING AND LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.
 3. ENVIRONMENTAL SCREENING PERFORMED ON JUNE 21, 2016 BY MICHAEL BAKER INTERNATIONAL.
 4. THE ASPHALT PAVED ENTRANCE TO THE WELL PAD ACCESS ROAD SHALL BE INSTALLED IMMEDIATELY AFTER THE ACCESS ROAD REACHES FINAL GRADE.
 5. GRADE ALL CHANNELS TO PROVIDE POSITIVE FLOW TO THE OUTFALL.
 6. SIX INCHES OF TOPSOIL SHALL BE PLACED ON ALL FINAL SLOPES PRIOR TO FINAL STABILIZATION.
 7. NO TREE CLEARING MAY OCCUR FROM MARCH 31ST UNTIL NOVEMBER 15TH.
 8. CELLAR ROW M01H - M07H TO BE INSTALLED WITH CONSTRUCTION.
 9. FROM STATION 15+26 AND CONTINUING AROUND THE WELL PAD, THE SUT FENCE WILL BE SMARTFENCE 42.

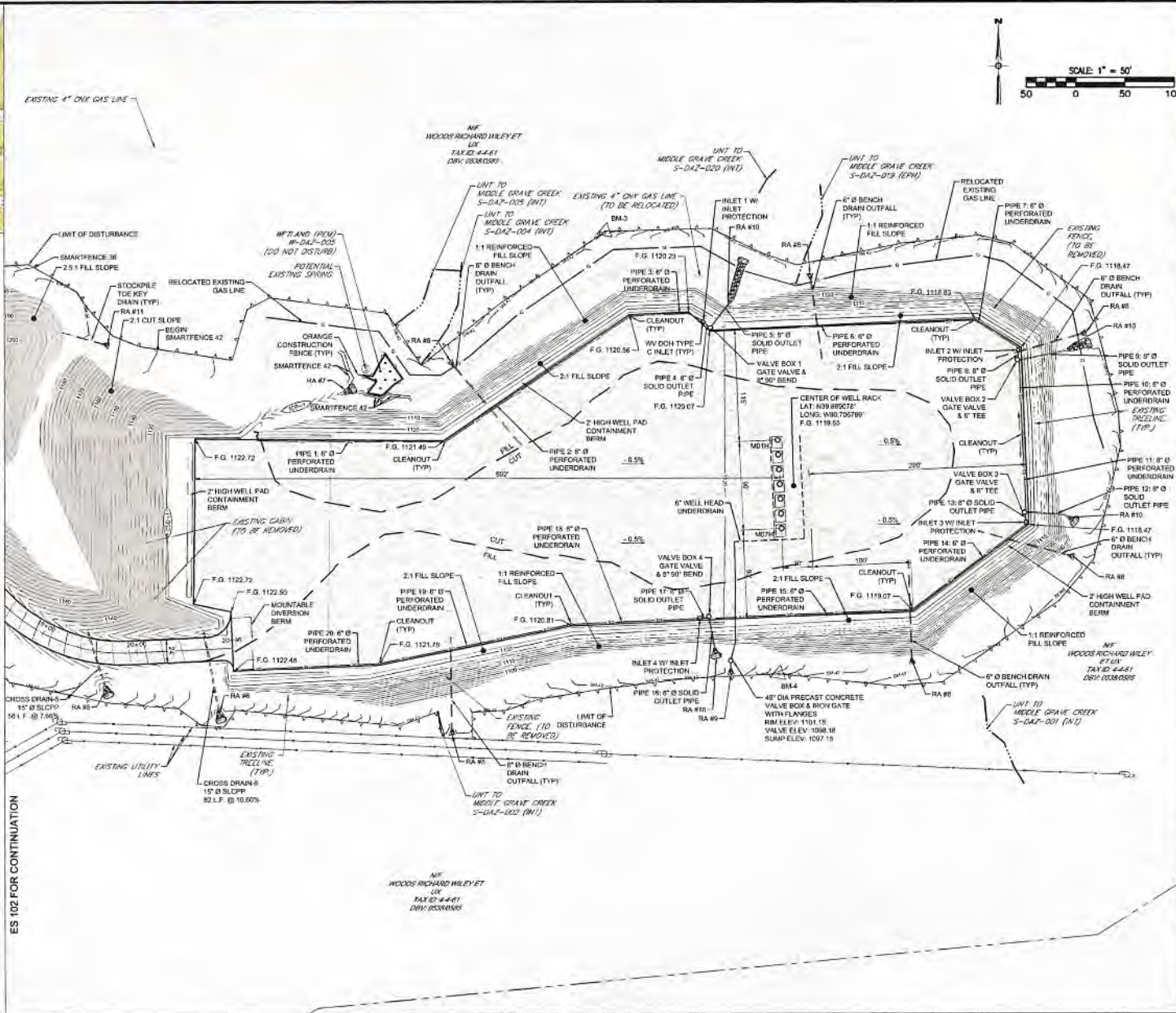
**TOTAL AREA = 19.8 ACRES
DISTURBED AREA = 19.8 ACRES**



Know what's below
Call before you dig

EROSION & SEDIMENT CONTROL LEGEND

- LIMITS OF DISTURBANCE/PROJECT LIMIT
- 38-36 SMARTFENCE 38
- 38-42 SMARTFENCE 42
- ORANGE CONSTRUCTION FENCE
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET
- ROCK FILTER
- RIP RAP APRON
- PERMANENT INTERCEPTOR CHANNEL
- ACCESS ROAD CHANNEL
- CUT SLOPE DITCH



Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
CONSULTING ENGINEERS
MOON TOWNSHIP, PENNSYLVANIA

WOODS WELL PAD A
2600 FORK RIDGE ROAD
CLAY DISTRICT, MARSHALL COUNTY, WV
PREPARED FOR
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

EROSION AND SEDIMENT CONTROL PLAN

Project Number: 25102
Drawing Scale: AS SHOWN
Date Issued: DEC 2019
Drawn By: HSB
Checked By: THB
Project Manager: THB

ES 103

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: _____

Operator's Well Number: _____

Well Operator: Chevron Appalachia, LLC

Well Number: _____ Well Pad Name: Woods Well Site

County, District, Quadrangle of Well Location: Marshall County, Clay District, Moundsville, WV

Answer the questions below to request a waiver from West Virginia Department of Environmental Protection for any wetlands or perennial streams which lie within one hundred feet of proposed project Limit of Disturbance (LOD), which includes any erosion and sediment control devices to be used.

This waiver shall be requested pursuant to Chapter 22 Article 6A Section 12 of West Virginia Code, which states:

§22-6A-12(b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows:

- (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir.
- (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake.
- (3) For a groundwater source, the distance shall be measured from the wellhead or spring.

The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.

§22-6A-12(c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section.

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: _____

Operator's Well Number: _____

Answer in the space provided, or use additional pages as necessary to fully answer the questions below:

- 1. Describe the proposed project location, including unique identifying names of all wetlands, and the names of perennial streams for which the waiver is sought.**

The project site consists of forest and meadow with an existing road. The proposed alterations to the project area include clearing approximately 2.3 acres of forest, construction of a well pad and the construction of new access road for natural gas operations. The proposed development will disturb approximately 19.8 acres. The waiver is sought for wetlands W-DAZ-005, W-DAZ-006, W-DAZ-007 and W-DAZ-008. No perennial streams are located within the project area. Please refer to the Erosion and Sediment Control Drawings for the location of the wetlands.

- 2. Justify the proposed activity by describing alternatives to this project that were considered.**

- a. Include a No-Action Alternative as to show "the future without the project"
- b. Location Alternatives must be shown
- c. Must demonstrate why a one hundred foot buffer cannot be maintained
- d. Describe how the proposed project is the least environmentally damaging practicable alternative

A. The No-Action Alternative for this site would involve the construction of three additional pad sites to access the natural gas resources that will be covered by the Woods Site. The construction of the three alternate locations would cause a greater disturbance to the surrounding environment and region.

B. Chevron investigated several alternate locations in conjunction with the Woods site. The Woods Well site was designed to combine all of three separate locations into one pad site. By combining these alternate sites, the total disturbance to the existing land, forested areas and other critical natural resources has been minimized.

C. Due to the surrounding topography and site conditions, maintaining a 100 foot buffer between the limit of disturbance and the wetlands is not viable.

D. The Woods Well site was designed to utilize the topography of the site in the most practical and efficient manner. Temporary soil stock piles were placed to minimize the overall disturbance to the site. Alternate locations would increase disturbed area and expand the overall limit of disturbance. The proposed stockpile locations minimize the surface area of the stockpile, thus minimizing the disturbed area. Additional E&S controls will be implemented to protect the wetland from adverse impacts.

- 3. Identify sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. This description should include all additional erosion and sediment control measures and devices that will be used.**

Temporary erosion and sediment control measures including, erosion control blanket, rock filters, riprap aprons, channels, silt fence (SMART Fence), stone construction entrances, mountable berms and temporary seeding and mulching will be used to protect the waters of the state.

Permanent erosion control measures include permanent seeding and mulching and aggregate surfacing. Any areas that are not permanently stabilized with aggregate will be seeded and mulched according to the seeding specifications. Temporary erosion and sediment control measures will remain in place until the site has reached a uniform 70% perennial vegetative cover on all disturbed areas.

Additional details, including maintenance guidelines, have been included on the attached Erosion and Sediment Control Plan. The contractor(s) will be responsible for inspecting and maintaining all temporary and permanent erosion and sediment control best management practices.

- 4. Provide mapping, plans, specifications and design analysis for the preferred alternative to the project.**

- a. Specify in writing what additional controls, measures, devices, monitoring, etc. will be used to protect these wetlands and/or perennial streams for which the waiver is sought.

All erosion and sediment control features have been designed and shall be installed in accordance with the 2006 West Virginia Erosion and Sediment Control Best Management Practice Manual and the West Virginia Erosion and Sediment Control Field Manual (dated 2012).

Wetlands will be surrounded by orange construction fence to limit disturbance. Where possible, a double layer of 36-inch or 42-inch SMART Fence will be installed as additional protection between the disturbed area and the wetlands.

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number: _____

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Chevron Appalachia, LLC 49449935 Marshall Clay Moundsville, WV
Operator ID County District Quadrangle

2) Operator's Well Number: M04H Well Pad Name: Woods Pad A

3) Farm Name/Surface Owner: Woods Public Road Access: CR 17 Fork Ridge Road

4) Elevation, current ground: 1121 Elevation, proposed post-construction: 1120

5) Well Type (a) Gas Oil _____ Underground Storage _____

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus; 6,316' below GL; 50' thick, Pore Pressure Gradient 0.65 psi/ft

8) Proposed Total Vertical Depth: 6,376 ✓

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 16,776 ✓

11) Proposed Horizontal Leg Length: 9,990

12) Approximate Fresh Water Strata Depths: 418' below GL

13) Method to Determine Fresh Water Depths: Based on deepest water well within 1 mile radius

14) Approximate Saltwater Depths: 1,344', 1,586', 1,652', 1,827', 2,001' below GL

15) Approximate Coal Seam Depths: Pittsburgh Coal top 651' below GL

16) Approximate Depth to Possible Void (coal mine, karst, other): No Void - in solid coal pillar

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No _____

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: Murray Energy Corp.

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18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	N/A	N/A	40	40 ✓	CTS
Fresh Water	13.375	New	J-55	54.5	468	468 ✓	CTS
Coal							
Intermediate	9.625	New	J-55	40	2051	2051 ✓	CTS
Production	5.5	New	P110	20	16776	16776	500' Below 9.625" shoe
Tubing							
Liners							

John
11/20/19

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26	N/A	N/A	N/A	N/A	N/A
Fresh Water	13.375	17.5	0.38	2730	400	Class A	1.2
Coal							
Intermediate	9.625	12.375 & 12.25	0.395	3950	500	Class A	1.19
Production	5.5	8.75 & 8.5	0.361	14360	2050	Class A, G, or H	1.25
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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WW-6B
(10/14)

API NO. 47- 4705102299
OPERATOR WELL NO. M04H
Well Pad Name: Woods Pad A

J
11/29/19

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill vertical depth to the Marcellus at an estimated total vertical depth of approximately 6,376 feet. Drill horizontal leg.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

9525 bbl fluid - 400,000 lbm sand/stage - 9,400 anticipated max psi - 100 bpm anticipated max rate

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 18.61

22) Area to be disturbed for well pad only, less access road (acres): 7.04

23) Describe centralizer placement for each casing string:

Surface: (1) on shoe track w/ stop collar & (1) per jt over coupling to surface; Intermediate: (1) on shoe track w/ stop collar & (1) per 3 jts over coupling; Production String: (1) centralizer every jt in the lateral and curve & (1) every other joint from KOP to surface.

24) Describe all cement additives associated with each cement type:

For the Water String the blend will contain class A cement, 3% CaCl₂, and flake. The intermediate will contain class A cement, 3% CaCl₂, Salt, and flake. The Production cement will have a lead and tail cement. The lead will contain class A, G, or H cement, KCl, dispersant, suspension agent, and retarder. The tail will contain class A, G, or H cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

25) Proposed borehole conditioning procedures:

Air sections ensured to be clean via air circulation once TD is reached. Fluid sections will be circulated a minimum of 2 bottoms up once casing point has been reached and until uniform mud properties are achieved.

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*Note: Attach additional sheets as needed.

DEC 04 2019

Page 3 of 3

WV Department of
Environmental Protection

Woods M04H

WW-6B Information Attachment

Line 15 – Pittsburgh Coal top 651' below GL

Line 16 – No Void – In solid coal pillar

Line 17 – Technically Yes, It is adjacent to an abandoned section of a mine. That abandoned section is not fully sealed and connects to an active mine.

Line 17 (a) – The abandoned section is a section of the Ireland Mine, it connects to the active Marshall County Mine to the south. It is owned and operated by Murray Energy Inc. They are mining the Pittsburgh Coal. The coal in the abandoned section of Ireland is about 650' below GL.

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Cement Additives

The Water String the blend will contain class A cement, 3% CaCl₂, and flake.

The intermediate will contain class A cement, 10% CaCl₂, Salt, and flake.

The Production cement will have a lead and tail cement.

The lead will contain class A, G, or H cement, KCl, dispersant, suspension agent, and retarder.

The tail will contain class A, G, or H cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

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Well M04H

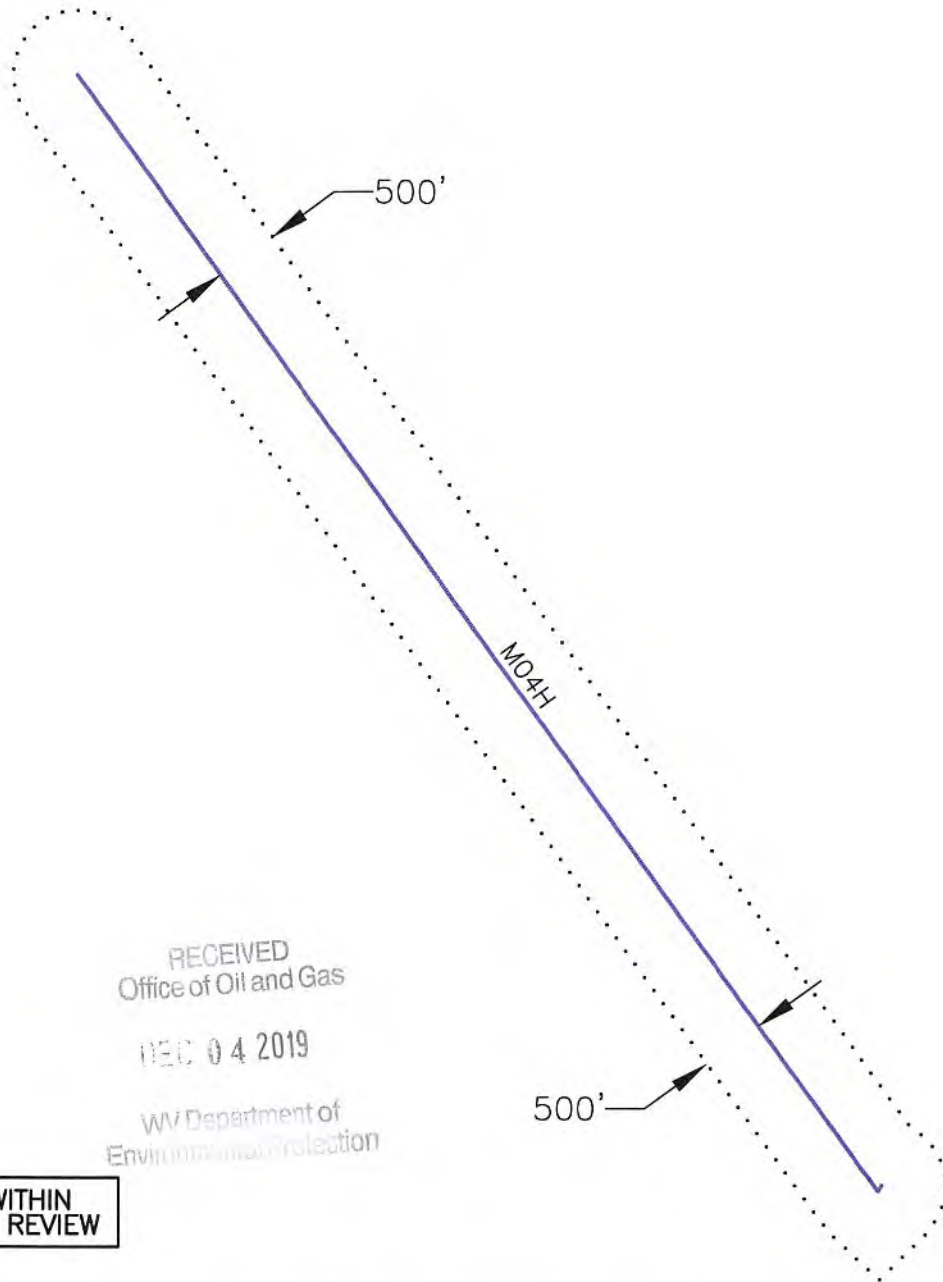
Clay Twp, Marshall Co, WV		Ground Level Elev. (ft above SL):		1,121				
DRILLING FLUID / BIT TYPE / TFA	CENTRALIZER PROGRAM	CASING SIZE / FORMATION	DEPTH		WELLHEAD DESIGN	HOLE SIZE (IN)	CASING SPECS	CEMENT PROGRAM
			MD (FT)	TVD (FT)				
Core Barrel / Auger	2 Bowspring per jt	20" Conductor	40	40	INC AZM	30	Conductor 20" API 5L Minimum 40 ft from GL or at least 10 ft into bedrock	Grout to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per jt over coupling to surface	13-3/8" Casing	468	468		17.5	Surface Casing 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (Jt Strength 1,000 lbs) 853	Surface Blend (Class A) Cement to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per 9 jts over coupling	9-5/8" Casing	2,051	2,051		12.375 - 12.25	Intermediate Casing 9-5/8" 40# J-55 BTC Wall (in) 0.395 Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.679 Burst (psi) 3950 Collapse (psi) 2570 Yield (Jt Strength 1,000 lbs) 630	Intermediate II Blend (Class A) Cement to Surface
	Bow Spring: (1) per every other jt over coupling SpiraGlider or Centek: (1) per jt of csg to KOP	5-1/2" Casing	16,776			8.75 - 8.5	Production Casing 5-1/2" 20# P-110, 0.361" Wall Coupling OD (in) 6.300 ID (in) 4.778 Drift ID (in) 4.653 Burst (psi) 14,360 Collapse (psi) 12,090 Yield (Jt Strength 1,000 lbs) 729	Production Lead Slurry Cement to 500' below 9-5/8" shoe Production Tail Slurry TOC minimum 200' above Marcellus
	Float Equip. Float Equip.	5-1/2" Casing	16,776			8.75 - 8.5		

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WV Department of
Environmental Protection

NO WELLS WITHIN
THE AREA OF REVIEW


THRASHER

CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7831

PREPARED FOR:

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

LEGEND

 - WELL LOCATION

WOODS
AREA OF REVIEW MAP
MARSHALL COUNTY
CLAY DISTRICT
WEST VIRGINIA

TOPO QUAD: MOUNDSVILLE, WV

SCALE: 1" = 1500'

DATE: OCTOBER 09, 2019

4705102299

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
NO WELLS WITHIN AREA OF REVIEW								

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Office of Oil and Gas
DEC 04 2019
WV Department of
Environmental Protection

WW-9
(4/16)

API Number 47 - _____ - _____
Operator's Well No. M04H

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 494499935

Watershed (HUC 10) Middle Grave Creek - Grave Creek Quadrangle Moundsville, WV 7.5'

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 _____ at next anticipated well _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: Yes, we will be utilizing multiple open/closed top tanks

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air to KOP/Oil Based KOP to TMD

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

Additives to be used in drilling medium? Barite, fluid loss, emulsifiers, rheological control

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed Offsite

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

-Landfill or offsite name/permit number? Short Creek Landfill/SWF-1034/WV0109517 and Arden Landfill #100172

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 [Signature]
Company Official (Typed Name) Branden Weimer
Company Official Title Senior Permitting Advisor

RECEIVED
Office of Oil and Gas
DEC 04 2019

Subscribed and sworn before me this 18th day of November, 2019

Laura Savage Notary Public

My commission expires September 17, 2022

Commonwealth of Pennsylvania
County of Allegheny

Commonwealth of Pennsylvania - Notary Seal
Laura Savage, Notary Public
Allegheny County
My commission expires September 17, 2022
Commission number 1285773
Member, Pennsylvania Association of Notaries

Chevron Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 18.61 Prevegetation pH 6.5 - 7.0

Lime 3 Tons/acre or to correct to pH _____

Fertilizer type 10/20/20

Fertilizer amount 300 lbs/acre

Mulch 3 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

See Attached

See Attached

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Jim Unblake*

Comments: _____

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DEC 04 2019

WV Department of
Environmental Protection

Title: *Oil & Gas Inspector* Date: *11/20/19*

Field Reviewed? (*2*) Yes () No

Seed Mixtures

<u>Permanent</u>	
Seed Type	lbs/acre
<u>Non Agricultural Upland</u>	<u>175.00 and</u>
<u>Tall Fescue</u>	<u>99.75</u>
<u>Perennial Ryegrass</u>	<u>33.25</u>
<u>Ladino Clover</u>	<u>17.50</u>
<u>Birdsfoot - Trefoil</u>	<u>17.50</u>
<u>Red Top</u>	<u>7.00</u>

<u>Permanent</u>	
Seed Type	lbs/acre
<u>Hayfield, Pastureland, and Cropland</u>	<u>200.00</u>
<u>Orchard Grass</u>	<u>80.00</u>
<u>Timothy</u>	<u>80.00</u>
<u>Birdsfoot - Trefoil</u>	<u>20.00</u>
<u>Ladino Clover</u>	<u>20.00</u>

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Office of Oil and Gas

DEC 04 2019

WV Department of
Environmental Protection



Chevron

Appalachian LLC
WV Well Site Safety Plan
Pad: Woods Pad A
Well # M04H

John
11/20/19

2600 Fork Ridge Road
Moundsville, WV 26041
Clay District
Marshall County, WV

Access Point – [39.889003°N, 80.715417°W]
Well Site – [39.889111°N, 80.707103°W]
Marshall County, West Virginia

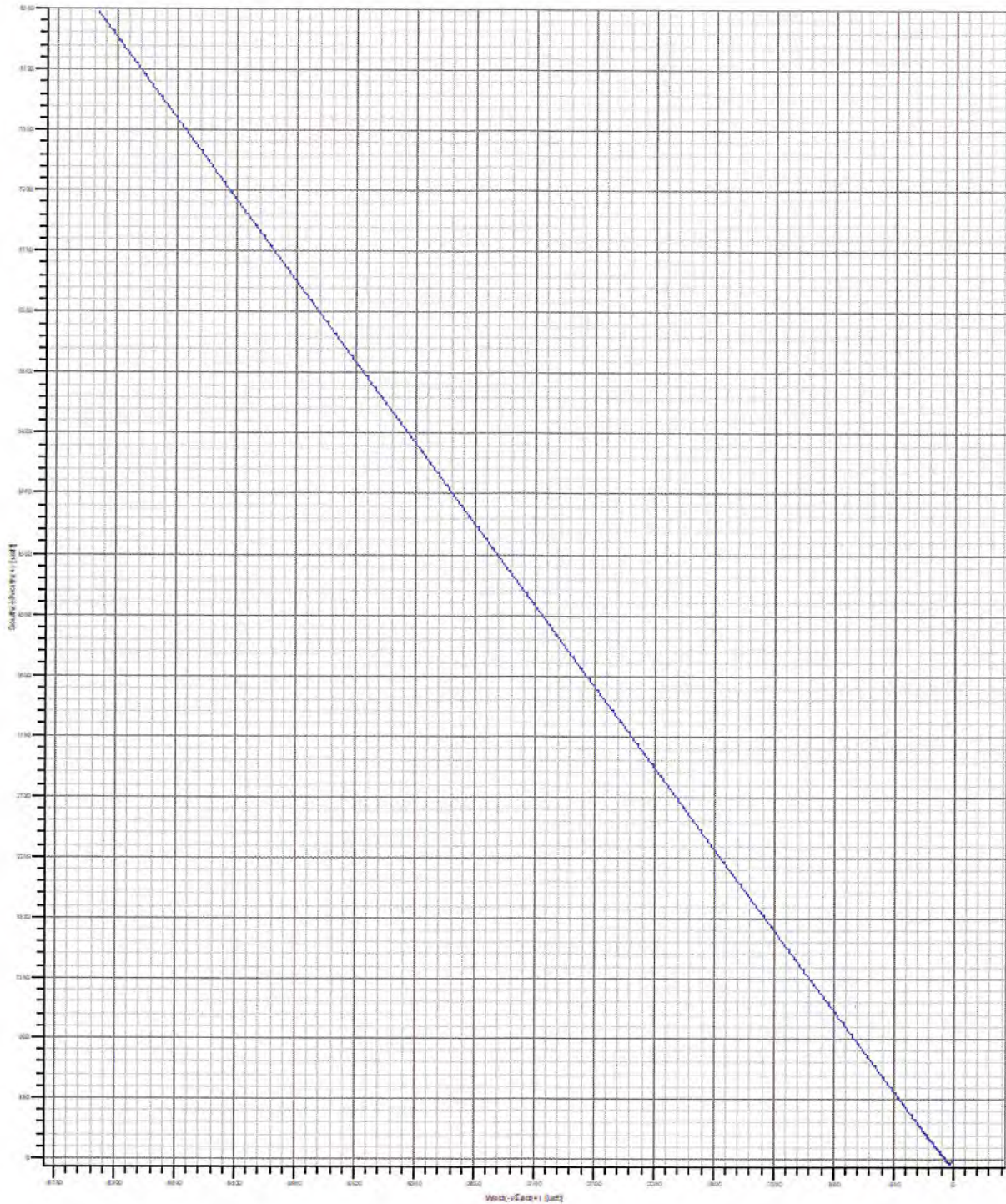
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Office of Oil and Gas

DEC 04 2019

WV Department of
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8. Spider Plot

Plan: BH WP (Ex-01) (H04M/OH)



COMPASS 5000.15 Build 91D

RECEIVED
Office of Oil and Gas

11/6/2019 9:47 AM

DEC 04 2019

WV Department of
Environmental Protection

BHL is located on topo map 1,523 feet south of Latitude: 39° 55' 00"
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6. There are no existing buildings within 625' of proposed well.

WELL PAD ORIENTATION DETAIL

H110C	H110U
H039C	H111U
H04M	H112U
H050C	H113U
H051C	H099H
H073C	H119U

N.T.S.

SURFACE HOLE LOCATION (SHL)

UTM 17-NAD83(M)
 N:4415487.65
 E:525066.22

NAD83, WV NORTH
 N:508224.010
 E:1629873.950

APPROX. LANDING POINT

UTM 17-NAD83(M)
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LEGEND

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- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- LESSORS
- SURFACE OWNERS

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS



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SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

FILE #: WOODS M04H

DRAWING #: WOODS M04H

SCALE: 1" = 2000'

MINIMUM DEGREE OF ACCURACY: 1/2500

PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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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

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

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1121.00'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: MOUNDVILLE, WV 7.5'

SURFACE OWNER: RICHARD WILEY WOODS ET UX ACREAGE: 96.39±

OIL & GAS ROYALTY OWNER: RICHARD WILEY & NANCY J. WOODS ACREAGE: 471.567±

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: 6,376± TMD: 16,775.55±

WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
 Address 700 CHERRINGTON PARKWAY Address 500 LEE STREET, EAST SUITE 1600
 City CORAOPOLIS State PA Zip Code 15108 City CHARLESTON State WV Zip Code 25301-3202



DATE: NOVEMBER 12, 2019

OPERATOR'S WELL #: WOODS M04H

API WELL #: 47 51 02299 HGA

STATE COUNTY PERMIT

WOODS

M04H

PAGE 2 OF 2

	SURFACE OWNER	DIST-TM/PAR
1	RICHARD WILEY WOODS ET UX	4-4/61
2	JAMES W. & KELLY R. TAYLOR	4-4/62.4
3	DAVID A. YOUNG & SHARON LILLEY	4-4/35
4	NORMA JEAN BRADFORD REVOCABLE TRUST	4-3/41
5	NORAM JEAN BRADFORD REVOCABLE TRUST	4-3/42
6	CHARLES & DEBORAH RATLIFF	4-3/36
7	CHARLES & DEBORAH RATLIFF	4-3/35
8	JERRY F. STEWART ET UX	4-3/34
9	*LARRY R. & JOAN P. TRUEX	4-3/33.1
10	CHARLES H. RATLIFF ET UX	4-3/31
11	W VA DEPT OF HIGHWAYS	4-3/1.1
12	MARSHALL CO COMMISSION	4-3/28
13	W VA REGIONAL JAIL & CORRECTIONAL AUTHORITY	4-3/2.1
14	CITY OF MOUNDSVILLE	4-3/2

	LESSOR	DIST-TM/PAR
A	RICHARD WILEY & NANCY J. WOODS	4-4/61
B	BRENDA ZAHNOW	4-4/62.4
	BEVERLY BURNS	
	REBECCA SHUTLER	
	WILLIAM COFFIELD	
	DANA Q. COFFIELD	
	ERIC COFFIELD	
	ALAN B. COFFIELD	
	HAROLD DALE COFFIELD	
	JOBE N. McGRANE	
	MICHAEL L. COFFIELD	
	ANNE E. ANDREATOS	
	MAXINE P. GRIBBEN	
	TWILA COFFIELD	
	CHARLES O. COFFIELD	
	LLOYD DEXTER COFFIELD	
	JACK HUNTSMAN	
	LOIS NEIDERT	
	RUDOLPH E. HORVAT	
	KAREN KNIGHT	
	EDWARD A. DANKMER	
	PATRICIA McPEEK	
	FRANK WELLS	
	DOROTHY McPEEK	
	DELORES MURDOCK	
	KAREN S. CATLETT	
	JOHN CATLETT	
	KEVIN POLINSKI	
	JOHN POLINSKI	
	MELVIN POLINSKI	
	JAMES DOMBO	
	ROY E. BENCZO A/K/A EDWARD BENCZO	
	MICHELINE PICCIN	
	RORY A. STALLINGS	
	MARY SIEBEL	
	VICKIE L. MOFFITT	
	REBECCA SUE FAHEY	
	KATHY LEE JONES	
	TAMMY L. REYNOLDS	
	LARRY DANKMER	
C	DAVID A. YOUNG	4-4/35
D	NORMA JEAN BRADFORD	4-3/41
E	NORMA JEAN BRADFORD	4-3/42
F	NILA L. KLEINEDLER & ATHENA R. KLEINEDLER	4-3/36
	ATHENA R. KLEINEDLER & NILA L. KLEINEDLER	
	NILA L. KLEINEDLER & ATHENA R. KLEINEDLER	4-3/35
	ATHENA R. KLEINEDLER & NILA L. KLEINEDLER	
G	JERRY F. & LINDA ANN STEWART	4-3/34
H	*LARRY R. & JOAN P. TRUEX	4-3/33.1
J	CHARLES RATCLIFF A/K/A CHARLES H. RATCLIFF	4-3/31
	DEBORAH RATCLIFF A/K/A DEBBIE ANN RATCLIFF	
K	CNX GAS COMPANY LLC	4-3/1.1
L	THE COUNTY COMMISSION OF MARSHALL COUNTY	4-3/28
M	THE WEST VIRGINIA DIVISION OF CORRECTIONS AND REHABILITATION	4-3/2.1
N	CITY OF MOUNDSVILLE	4-3/2

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M) N:4415487.65 E:525066.22
NAD83, WV NORTH N:508224.010 E:1629873.950

APPROX. LANDING POINT
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UTM 17-NAD83(M) N:4418079.86 E:523095.66
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NOVEMBER 12, 2019

THRASHER

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PHONE (304) 624-4108 • FAX (304) 624-7831

API WELL #: 47 51 02299 H44
STATE COUNTY PERMIT



NOVEMBER 15, 2014

E:1858813'820 N:208534'010 W083' ML NOVIN E:252088'55 N:441284'82 TOWN 13-NAD83(M) SURFACE NOTE ГОСУДИН (ВНГ)	E:1858418'810 N:208122'010 W083' ML NOVIN E:254852'51 N:441284'11 TOWN 13-NAD83(M) УБРОХ ГРАДИС БОИЛ	E:1852248'120 N:218838'480 W083' ML NOVIN E:252088'88 N:4418018'88 TOWN 13-NAD83(M) BOTTOM NOTE ГОСУДИН (ВНГ)
---	--	---

* - DENOTES SURFACE WITHIN 30 FEET OF GRABBED WEIGHT BOBE

I	CITY OF MOUNDSVILLE AND BEHAVIORAL THE WEST VIRGINIA DIVISION OF CORRECTIONS	+2\5
M	THE COUNTY COMMISSION OF MARSHALL COUNTY	+2\5.1
G	THE COUNTY COMMISSION OF MARSHALL COUNTY	+2\58
K	SIX CAS COMPANY LLC DEBORAH BAUCHE A/K/A DEBBIE ANN BAUCHE	+2\1.1
7	CHARGES BAUCHE A/K/A CHARGES H. BAUCHE	+2\21
H	*GARY B. & JOAN B. TRUX	+2\22.1
C	GARY E. & PANDA ANN STEWART VINEVA B. KEINER & IGA G. KEINER IGA G. KEINER & VINEVA B. KEINER VINEVA B. KEINER & IGA G. KEINER	+2\24
E	IGA G. KEINER & VINEVA B. KEINER	+2\28
E	IOBMA LEVI BRADFORD	+2\45
D	IOBMA LEVI BRADFORD	+2\41
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B	VERENA SANNON	+4\85.4
A	RICHARD WIGLEY & MARY L. WOODS GESSOR	+4\81
		DIST-TM\PAR

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1	RICHARD WIGLEY WOODS ET UX SURFACE OWNER	+4\81
		DIST-TM\PAR

PAGE 3 OF 3
 MONTH
 MOODS

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WELL PAD ORIENTATION DETAIL	
H01MC	O H13U
H02MO	O H11U
H03MO	O H12U
H04MO	O H10U
H05MO	O H09U
H06MO	O H08U
H07MO	
N.T.S.	

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- PLUGGED WELLS



THRASHER

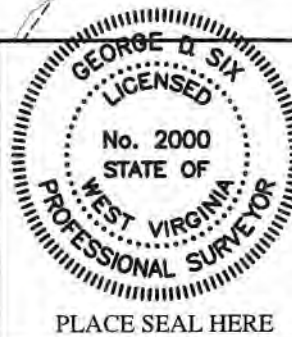
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 DRAWING #: WOODS M04H
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Signed: George D. Six
 R.P.E.: _____ L.L.S.: P.S. No. 2000



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



DATE: NOVEMBER 12, 2019
 OPERATOR'S WELL #: WOODS M04H
 API WELL #: 47 51 02299 H6A
 STATE COUNTY PERMIT

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

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COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: MOUNDSVILLE, WV 7.5'

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OIL & GAS ROYALTY OWNER: RICHARD WILEY & NANCY J. WOODS ACREAGE: 471.567±

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: 6,376± TMD: 16,775.55±

WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
 Address 700 CHERRINGTON PARKWAY Address 500 LEE STREET, EAST SUITE 1600
 City CORAOPOLIS State PA Zip Code 15108 City CHARLESTON State WV Zip Code 25301-3202

WOODS

M04H

PAGE 2 OF 2

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9	*LARRY R. & JOAN P. TRUEX	4-3/33.1
10	CHARLES H. RATLIFF ET UX	4-3/31
11	W VA DEPT OF HIGHWAYS	4-3/1.1
12	MARSHALL CO COMMISSION	4-3/28
13	W VA REGIONAL JAIL & CORRECTIONAL AUTHORITY	4-3/2.1
14	CITY OF MOUNDSVILLE	4-3/2

	LESSOR	DIST-TM/PAR
A	RICHARD WILEY & NANCY J. WOODS	4-4/61
B	BRENDA ZAHNOW	4-4/62.4
	BEVERLY BURNS	
	REBECCA SHUTLER	
	WILLIAM COFFIELD	
	DANA Q. COFFIELD	
	ERIC COFFIELD	
	ALAN B. COFFIELD	
	HAROLD DALE COFFIELD	
	JOBE N. McGRANE	
	MICHAEL L. COFFIELD	
	ANNE E. ANDREATOS	
	MAXINE P. GRIBBEN	
	TWILA COFFIELD	
	CHARLES O. COFFIELD	
	LLOYD DEXTER COFFIELD	
	JACK HUNTSMAN	
	LOIS NEIDERT	
	RUDOLPH E. HORVAT	
	KAREN KNIGHT	
	EDWARD A. DANKMER	
	PATRICIA McPEEK	
	FRANK WELLS	
	DOROTHY McPEEK	
	DELORES MURDOCK	
	KAREN S. CATLETT	
	JOHN CATLETT	
	KEVIN POLINSKI	
	JOHN POLINSKI	
	MELVIN POLINSKI	
	JAMES DOMBO	
	ROY E. BENCZO A/K/A EDWARD BENCZO	
	MICHELINE PICCIN	
	RORY A. STALLINGS	
	MARY SIEBEL	
	VICKIE L. MOFFITT	
	REBECCA SUE FAHEY	
	KATHY LEE JONES	
	TAMMY L. REYNOLDS	
	LARRY DANKMER	
C	DAVID A. YOUNG	4-4/35
D	NORMA JEAN BRADFORD	4-3/41
E	NORMA JEAN BRADFORD	4-3/42
F	NILA L. KLEINEDLER & ATHENA R. KLEINEDLER	4-3/36
	ATHENA R. KLEINEDLER & NILA L. KLEINEDLER	
	NILA L. KLEINEDLER & ATHENA R. KLEINEDLER	4-3/35
	ATHENA R. KLEINEDLER & NILA L. KLEINEDLER	
G	JERRY F. & LINDA ANN STEWART	4-3/34
H	*LARRY R. & JOAN P. TRUEX	4-3/33.1
J	CHARLES RATCLIFF A/K/A CHARLES H. RATCLIFF	4-3/31
	DEBORAH RATCLIFF A/K/A DEBBIE ANN RATCLIFF	
K	CNX GAS COMPANY LLC	4-3/1.1
L	THE COUNTY COMMISSION OF MARSHALL COUNTY	4-3/28
M	THE WEST VIRGINIA DIVISION OF CORRECTIONS AND REHABILITATION	4-3/2.1
N	CITY OF MOUNDSVILLE	4-3/2

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M) N:4415487.65 E:525066.22
NAD83_WV NORTH N:508224.010 E:1629873.950

APPROX. LANDING POINT
UTM 17-NAD83(M) N:4415647.11 E:524925.21
NAD83_WV NORTH N:508755.010 E:1629419.970

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M) N:4418079.86 E:523095.66
NAD83_WV NORTH N:516838.460 E:1623549.730

NOVEMBER 12, 2019

THRASHER

CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
PHONE (304) 624-4108 • FAX (304) 624-7831

API WELL #: 47 51 02291 H6A
STATE COUNTY PERMIT

WW-6A1
(5/13)

Operator's Well No. M04H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Attached				

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**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

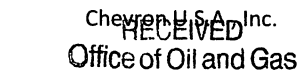
- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Chevron Appalachia, LLC
 By: Branden Weimer 
 Its: Senior Permitting Advisor

WOODS UNIT M04H

Plat ID	Parcel Number	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-4-61	Woods, Richard Wiley and Nancy J., his wife	TriEnergy, Inc.	No Less Than 1/8	99115	19/138 TriEnergy, Inc. to AB Resources LLC	756/397 AB Resources LLC to Chevron U.S.A., Inc.	N/A
B	4-4-62.4	Zahnow, Brenda, a married woman dealing in her sole and separate properties	TriEnergy Holdings, LLC	No Less Than 1/8	1308838	25/449 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Beverly, Burns, a married woman dealing in her sole and separate property	Chevron U.S.A., Inc.	Minerals Owned by Chevron U.S.A., Inc. in Fee	1455332	N/A	N/A	N/A
B	4-4-62.4	Shutler, Rebecca, a married woman dealing in her sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1311476	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
B	4-4-62.4	Coffield, William, a married man dealing in his sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1315793	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
B	4-4-62.4	Coffield, Dana Q., a married man dealing in his sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1343321	N/A	N/A	N/A
B	4-4-62.4	Coffield, Eric, a single man	Chevron U.S.A., Inc.	No Less Than 1/8	1345174	N/A	N/A	N/A
B	4-4-62.4	Coffield, Alan B., a single man	Chevron U.S.A., Inc.	No Less Than 1/8	1343688	N/A	N/A	N/A
B	4-4-62.4	Coffield, Harold Dale, a married man dealing in his sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1305651	25/449 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	McGrane, Jobe N., a married woman dealing in her sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1371772	N/A	N/A	N/A
B	4-4-62.4	Coffield, Michael, L.	TriEnergy Holdings, LLC	No Less Than 1/8	1308845	26/123 TriEnergy Holdings, LLC to NPAR, LLC	26/201 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Andreatos, Anne E., a married woman dealing in her sole and separate property	Chevron U.S.A. Inc. Office of Oil and Gas	No Less Than 1/8	1394130	N/A	N/A	N/A


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WOODS UNIT M04H

Plat ID	Parcel Number	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-4-61	Woods, Richard Wiley and Nancy J., his wife	TriEnergy, Inc.	No Less Than 1/8	99115	19/138 TriEnergy, Inc. to AB Resources LLC	756/397 AB Resources LLC to Chevron U.S.A., Inc.	N/A
B	4-4-62.4	Murdock Delores, a married woman dealing in her sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1353043	N/A	N/A	N/A
B	4-4-62.4	Catlett, Karen S., a widow	Chevron U.S.A., Inc.	No Less Than 1/8	1353041	N/A	N/A	N/A
B	4-4-62.4	Catlett, John, a married man dealing in his sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1353044	N/A	N/A	N/A
B	4-4-62.4	Polinski, Kevin, a married man dealing in his sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1355038	N/A	N/A	N/A
B	4-4-62.4	Polinski, John, a single man	Chevron U.S.A., Inc.	No Less Than 1/8	1355041	N/A	N/A	N/A
B	4-4-62.4	Polinski Melvin, a married man dealing in his sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1366238	N/A	N/A	N/A
B	4-4-62.4	Dombo, James, a widower	Chevron U.S.A., Inc.	No Less Than 1/8	1370875	N/A	N/A	N/A
B	4-4-62.4	Benczo Roy E., A/K/A Edward Benczo, a married man dealing in his sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1371093	N/A	N/A	N/A
B	4-4-62.4	Piccin, Micheline, a married woman dealing in her sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1377471	N/A	N/A	N/A
B	4-4-62.4	Stallings Rory A., a married man dealing in his sole and separate property	Chevron U.S.A., Inc.	No Less Than 1/8	1374522	N/A	N/A	N/A
B	4-4-62.4	Siebel, Mary, a single woman	Chevron U.S.A., Inc.	No Less Than 1/8	1374519	N/A	N/A	N/A
B	4-4-62.4	Moffitt, Vickie L., a married woman dealing in her sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1309654	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
B	4-4-62.4	Fahey, Rebecca Sue	TriEnergy Holdings, LLC	No Less Than 1/8	1309647	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A

WOODS UNIT M04H

Plat ID	Parcel Number	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-4-61	Woods, Richard Wiley and Nancy J., his wife	TriEnergy, Inc.	No Less Than 1/8	99115	19/138 TriEnergy, Inc. to AB Resources LLC	756/397 AB Resources LLC to Chevron U.S.A., Inc.	N/A
B	4-4-62.4	Gribben, Maxine P., a single woman	TriEnergy Holdings, LLC	No Less Than 1/8	1308014	26/123 TriEnergy Holdings, LLC to NPAR, LLC	26/201 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Coffield, Twila, a widow	TriEnergy Holdings, LLC	No Less Than 1/8	1305652	25/449 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Coffield, Charles O., a married man dealing in his sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1305650	25/449 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Coffield, Lloyd Dexter	TriEnergy Holdings, LLC	No Less Than 1/8	1305653	25/449 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Huntsman, Jack, a married man dealing in his sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1307739	26/123 TriEnergy Holdings, LLC to NPAR, LLC	26/201 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Neidert, Lois, a married woman dealing in her sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1307744	26/123 TriEnergy Holdings, LLC to NPAR, LLC	26/201 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Horvat, Rudolph, E., a married man dealing in his sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1307767	26/123 TriEnergy Holdings, LLC to NPAR, LLC	26/201 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Knight, Karen, a married woman dealing in her sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1309493	26/123 TriEnergy Holdings, LLC to NPAR, LLC	26/201 NPAR, LLC to Chevron U.S.A. Inc.	N/A
B	4-4-62.4	Dankmer, Edward A., a single man	TriEnergy Holdings, LLC	No Less Than 1/8	1309650	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
B	4-4-62.4	Mcpeek, Patricia, a widow	Chevron U.S.A., Inc.	No Less Than 1/8	1354319	N/A	N/A	N/A
B	4-4-62.4	Wells, Frank a single man	Chevron U.S.A., Inc.	No Less Than 1/8	1354113	N/A	N/A	N/A
B	4-4-62.4	Mcpeek, Dorothy, a single woman	Chevron U.S.A., Inc.	No Less Than 1/8	1353042	N/A	N/A	N/A

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Plat ID	Parcel Number	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-4-61	Woods, Richard Wiley and Nancy J., his wife	TriEnergy, Inc.	No Less Than 1/8	99115	19/138 TriEnergy, Inc. to AB Resources LLC	756/397 AB Resources LLC to Chevron U.S.A., Inc.	N/A
B	4-4-62.4	Jones, Kathy Lee, a married woman deaing in her sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1309645	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
B	4-4-62.4	Reynolds, Tammy L., a married woman dealing in her sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1309649	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
B	4-4-62.4	Dankmer, Larry, a married man dealing in his sole and separate property	TriEnergy Holdings, LLC	No Less Than 1/8	1309652	28/348 TriEnergy Holdings, LLC and TriEnergy, Inc. to Chevron U.S.A. Inc.	N/A	N/A
C	4-4-35	Young, David A., a single man and Sharon L. Lilley, a single woman	Chevron U.S.A., Inc.	No Less Than 1/8	1371036	N/A	N/A	N/A
D	4-3-41	Bradford, Norma Jean, a single woman	NPAR, LLC	No Less Than 1/8	1324405	29/277 AB Resources LLC to Chevron U.S.A., Inc.	N/A	N/A
E	4-3-42	Bradford, Norma Jean, a single woman	NPAR, LLC	No Less Than 1/8	1324405	29/277 AB Resources LLC to Chevron U.S.A., Inc.	N/A	N/A
F	4-3-36	Kleinedler, Nila L. and Athena R. Kleinedler	TriEnergy Holdings, LLC	No Less Than 1/8	1292174	24/180 TriEnergy Holdings, LLC, to NPAR, LLC	24/466 AB Resources LLC and NPAR, LLC to Chief Exploration & Development LLC and Radler 2000 Limited Partnership	25/1 Chief Exploration & Development LLC, Chief Oil and Gas LLC, and Radler 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron U.S.A. Inc.

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Plat ID	Parcel Number	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-4-61	Woods, Richard Wiley and Nancy J., his wife	TriEnergy, Inc.	No Less Than 1/8	99115	19/138 TriEnergy, Inc. to AB Resources LLC	756/397 AB Resources LLC to Chevron U.S.A., Inc.	N/A
F	4-3-35	Kleinedler, Nila L. and Athena R. Kleinedler	TriEnergy Holdings, LLC	No Less Than 1/8	1292174	24/180 TriEnergy Holdings, LLC, to NPAR, LLC	24/466 AB Resources LLC and NPAR, LLC to Chief Exploration & Development LLC and Radler 2000 Limited Partnership	25/1 Chief Exploration & Development LLC, Chief Oil and Gas LLC, and Radler 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron U.S.A. Inc.
F	4-3-36	Kleinedler, Athena R., a widow and Nila L. Kleinedler	TriEnergy Holdings, LLC	No Less Than 1/8	1294203	24/180 TriEnergy Holdings, LLC, to NPAR, LLC	24/466 AB Resources LLC and NPAR, LLC to Chief Exploration & Development LLC and Radler 2000 Limited Partnership	25/1 Chief Exploration & Development LLC, Chief Oil and Gas LLC, and Radler 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron U.S.A. Inc.
F	4-3-35	Kleinedler, Athena R., a widow and Nila L. Kleinedler	TriEnergy Holdings, LLC	No Less Than 1/8	1294203	24/180 TriEnergy Holdings, LLC, to NPAR, LLC	24/466 AB Resources LLC and NPAR, LLC to Chief Exploration & Development LLC and Radler 2000 Limited Partnership	25/1 Chief Exploration & Development LLC, Chief Oil and Gas LLC, and Radler 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron U.S.A. Inc.
G	4-3-34	Stewart, Jerry F. and Linda Ann, his wife	TriEnergy Holdings, LLC	No Less Than 1/8	1284489	24/180 TriEnergy Holdings, LLC, to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	N/A

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WOODS UNIT M04H

Plat ID	Parcel Number	Lessor/Grantor	Lessee/Grantee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-4-61	Woods, Richard Wiley and Nancy J., his wife	TriEnergy, Inc.	No Less Than 1/8	99115	19/138 TriEnergy, Inc. to AB Resources LLC	756/397 AB Resources LLC to Chevron U.S.A., Inc.	N/A
H	4-3-33.1	Truex, Larry R. and Joan P., his wife	TriEnergy Holdings, LLC	No Less Than 1/8	1291407	24/180 TriEnergy Holdings, LLC, to NPAR, LLC	24/466 AB Resources LLC and NPAR, LLC to Chief Exploration & Development LLC and Radler 2000 Limited Partnership	25/1 Chief Exploration & Development LLC, Chief Oil and Gas LLC, and Radler 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron U.S.A. Inc.
J	4-3-31	Ratcliff, Charles, A/K/A Charles H. Ratliff and Deborah Ratliff, A/K/A Debbie Ann Ratliff, his wife	Chevron U.S.A., Inc.	No Less Than 1/8	1364250	N/A	N/A	N/A
K	4-3-1.1	CNX Gas Company LLC	Chevron U.S.A., Inc.	No Less Than 1/8	1356523	N/A	N/A	N/A
L	4-3-28	The County Commission of Marshall County	TH Exploration, LLC	No Less Than 1/8	1390483	42/328 TH Exploration, LLC to Chevron U.S.A., Inc.	N/A	N/A
M	4-3-2.1	The West Virginia Division of Corrections and Rehabilitation	Chevron U.S.A., Inc.	No Less Than 1/8	1453191	N/A	N/A	N/A
N	4-3-2	City of Moundsville	Chevron U.S.A., Inc.	No Less Than 1/8	1377884	N/A	N/A	N/A

4705102299



Gerald S. Robinson, III
Land Representative

October 17, 2019

West Virginia D.E.P.
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304-2345

RE: Woods M04H

To whom it may concern:

This letter is to confirm that Chevron U.S.A. Inc. has the rights to access minerals under any road along the above referenced laterals. If you should have any further questions or need additional documentation, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "G. S. Robinson, III".

Gerald S. Robinson, III
Land Representative

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Appalachian Mountain Business Unit
Chevron North America Exploration and Production Company
A Division of Chevron U.S.A. Inc.
700 Cherrington Parkway, Coraopolis, PA 15108
Tel 412 865 2593
geraldrobinson@chevron.com

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE CERTIFICATION

Date of Notice Certification: _____

API No. 47- _____
Operator's Well No. M04H _____
Well Pad Name: Woods Pad A _____

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: West Virginia
County: Marshall
District: Clay
Quadrangle: Moundsville, WV 7.5'
Watershed: Middle Grave Creek - Grave Creek

UTM NAD 83 Easting: 525066.22
Northing: 4415487.65
Public Road Access: CR 17 Fork Ridge Road
Generally used farm name: Woods

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

*PLEASE CHECK ALL THAT APPLY

- 1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- 2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED
- 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- 4. NOTICE OF PLANNED OPERATION
- 5. PUBLIC NOTICE
- 6. NOTICE OF APPLICATION

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OOG OFFICE USE ONLY

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NOT REQUIRED

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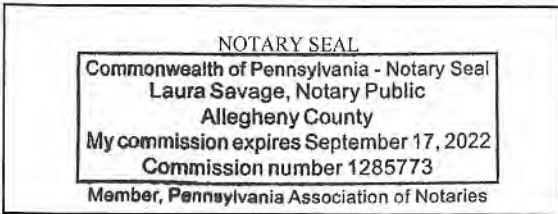
Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

THEREFORE, I Branden Weimer, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, 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 and imprisonment.

Well Operator:	<u>Chevron Appalachia, LLC</u>	Address:	<u>700 Cherrington Parkway</u>
By:	<u>Branden Weimer</u> 		<u>Coraopolis, PA 15108</u>
Its:	<u>Senior Permitting Advisor</u>	Facsimile:	<u>412-865-2403</u>
Telephone:	<u>412-865-3140</u>	Email:	<u>BWeimer@chevron.com</u>



Commonwealth of Pennsylvania
County of Allegheny
 Subscribed and sworn before me this 18th day of November 2019.
Laura Savage Notary Public
 My Commission Expires September 17, 2022

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WV Department of
Environment

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 11/18/19 Date Permit Application Filed: _____

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)
Name: Richard Wiley Woods, ET UX / Nancy J. Woods ✓
Address: 2588 Fork Ridge Road
Moundsville, WV 26041

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: _____
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)
Name: _____
Address: _____

COAL OWNER OR LESSEE
Name: Murray Energy Corp.
Address: 46226 National Road
St. Clairsville, OH 43905

COAL OPERATOR
Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: See Attached
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: _____
Address: _____

*Please attach additional forms if necessary

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 Office of Oil and Gas
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 WV Department of
 Environmental Protection

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

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WV Department of

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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WV Department of
Environmental Protection

WW-6A
(8-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. M04H
Well Pad Name: Woods Pad A

Notice is hereby given by:

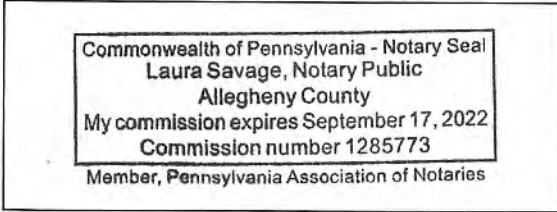
Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-3140
Email: BWeimer@chevron.com



Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Facsimile: 412-865-2403

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our 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 or your personal information, please contact DEP's Chief Privacy Officer at deprivacyofficer@wv.gov.



Commonwealth of Pennsylvania
County of Allegheny

Subscribed and sworn before me this 18th day of November, 2019.

Laura Savage

Notary Public

My Commission Expires September 17, 2022

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WV Department of
Environmental Protection

Attachment to WW-6A

4705102299

API No. 47-____ - _____

OPERATOR WELL NO. M04H

Well Pad Name: Woods

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name: Michael J. Carr
Address: 2751 Middle Grave Creek Road
Moundsville, WV 26041

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name: William F. Cox ET UX
Address: PO Box 69
Moundsville, WV 26041

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name: Nancy Jane Woods
2588 Fork Ridge Road
Moundsville, WV 26041

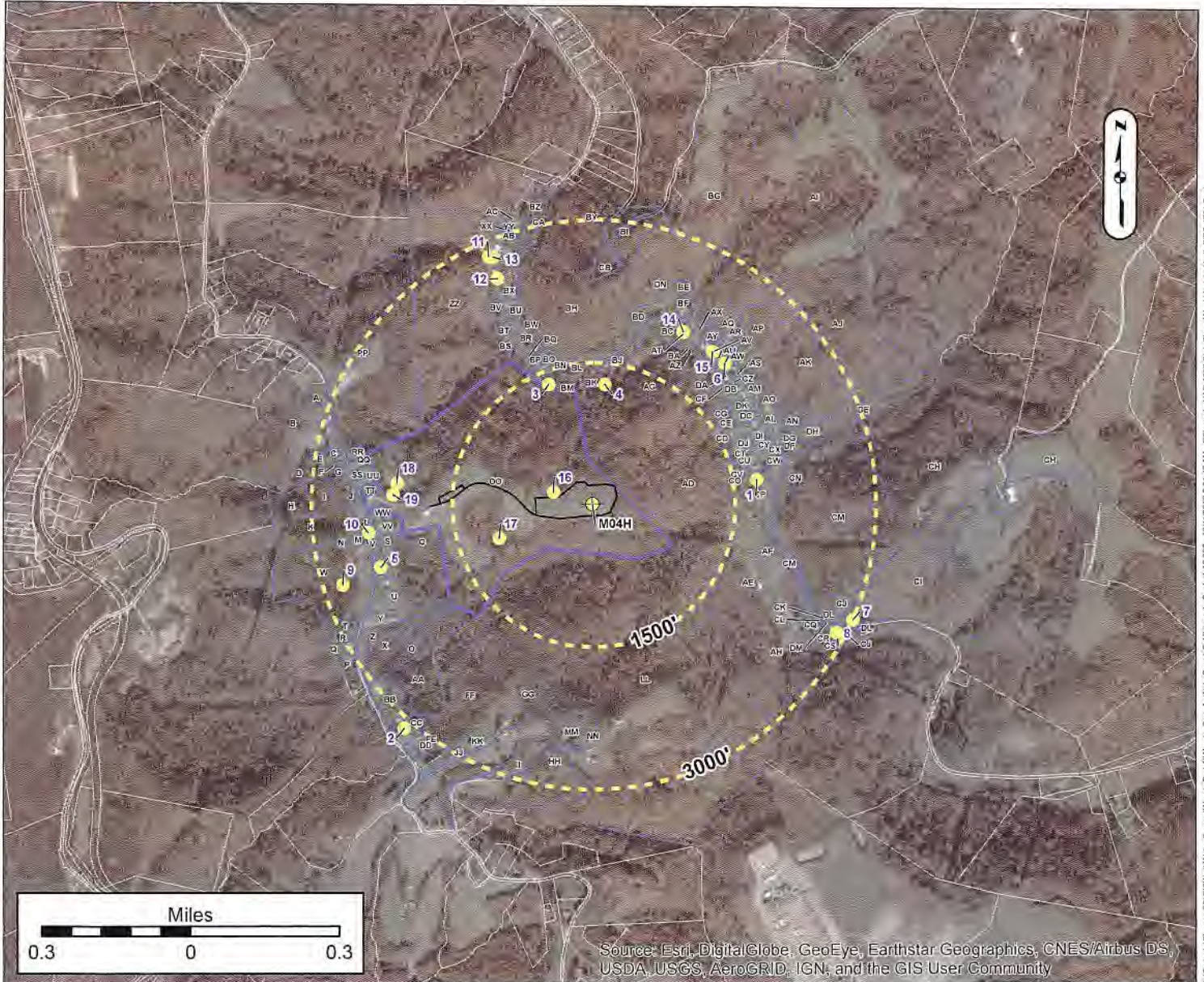
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Office of Oil and Gas

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WV Department of
Environmental Protection



WATER SUPPLY EXHIBIT WOODS PAD A



LOT OWNERS

LOT	OWNER	LOT	OWNER	LOT	OWNER	LOT	OWNER
1	WILSON, JAMES E & BARBARA L	11	WILSON, JAMES E & BARBARA L	21	WILSON, JAMES E & BARBARA L	31	WILSON, JAMES E & BARBARA L
2	WILSON, JAMES E & BARBARA L	12	WILSON, JAMES E & BARBARA L	22	WILSON, JAMES E & BARBARA L	32	WILSON, JAMES E & BARBARA L
3	WILSON, JAMES E & BARBARA L	13	WILSON, JAMES E & BARBARA L	23	WILSON, JAMES E & BARBARA L	33	WILSON, JAMES E & BARBARA L
4	WILSON, JAMES E & BARBARA L	14	WILSON, JAMES E & BARBARA L	24	WILSON, JAMES E & BARBARA L	34	WILSON, JAMES E & BARBARA L
5	WILSON, JAMES E & BARBARA L	15	WILSON, JAMES E & BARBARA L	25	WILSON, JAMES E & BARBARA L	35	WILSON, JAMES E & BARBARA L
6	WILSON, JAMES E & BARBARA L	16	WILSON, JAMES E & BARBARA L	26	WILSON, JAMES E & BARBARA L	36	WILSON, JAMES E & BARBARA L
7	WILSON, JAMES E & BARBARA L	17	WILSON, JAMES E & BARBARA L	27	WILSON, JAMES E & BARBARA L	37	WILSON, JAMES E & BARBARA L
8	WILSON, JAMES E & BARBARA L	18	WILSON, JAMES E & BARBARA L	28	WILSON, JAMES E & BARBARA L	38	WILSON, JAMES E & BARBARA L
9	WILSON, JAMES E & BARBARA L	19	WILSON, JAMES E & BARBARA L	29	WILSON, JAMES E & BARBARA L	39	WILSON, JAMES E & BARBARA L
10	WILSON, JAMES E & BARBARA L			30	WILSON, JAMES E & BARBARA L	40	WILSON, JAMES E & BARBARA L

Surface Owner: RICHARD W. WOODS
 Oil/Gas Owner: RICHARD W. WOODS
 Well Operator: CHEVRON APPALACHIA, LLC
 Address: 700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108
 Phone: 412-865-0088

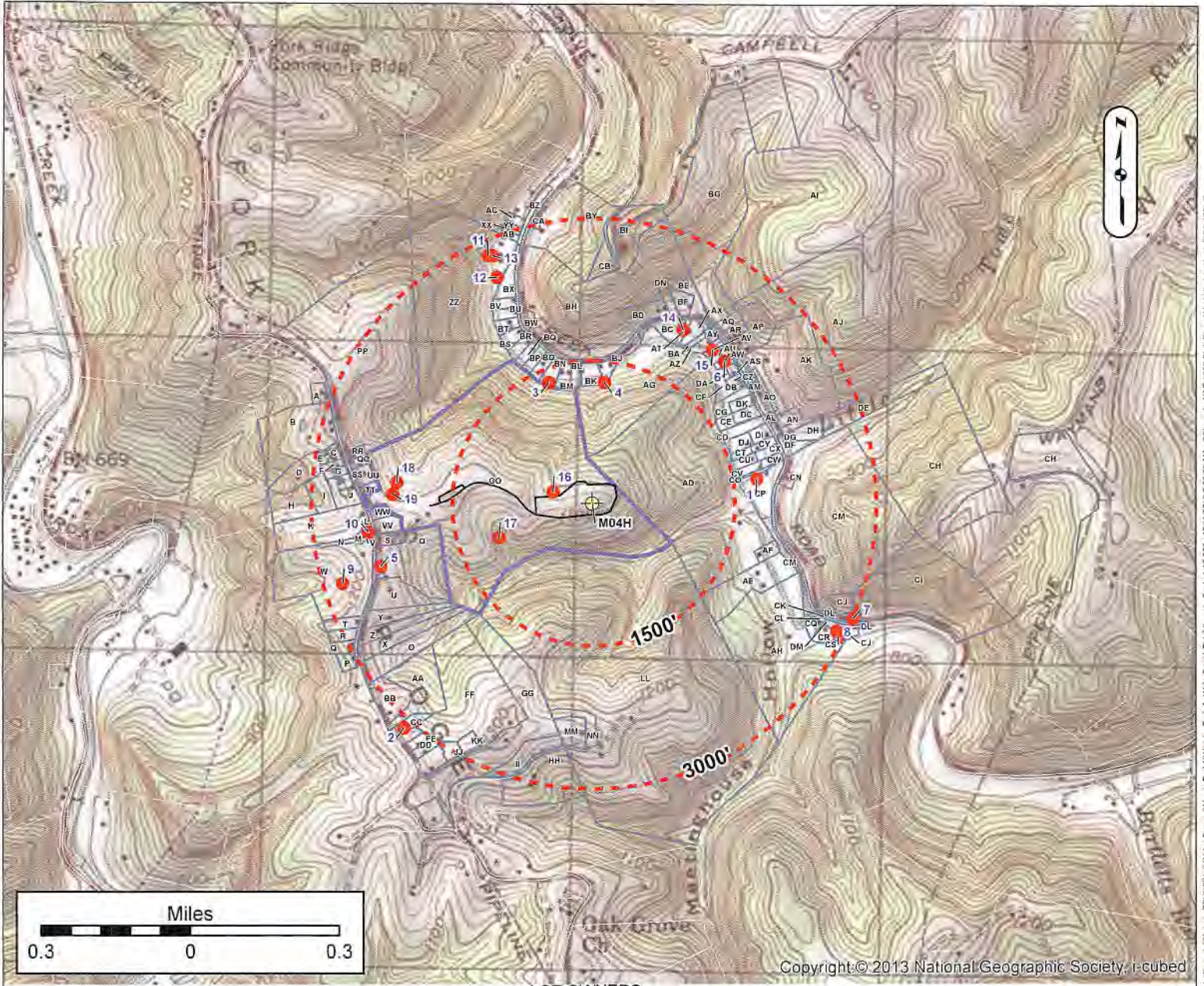
County: MARSHALL
 Township: MOUNDSVILLE, WV
 Surveyor: GROUNDWATER & ENVIRONMENTAL SERVICES, INC.
 Address: 301 COMMERCE PARK DR
CRANBERRY TOWNSHIP, PA 16066
 Phone: 800-267-2549

NOTICE: THE INTENT OF THIS EXHIBIT IS TO IDENTIFY EXISTING WATER SUPPLIES IN THE VICINITY OF A PROPOSED GAS WELL, AND IS NOT A COMPLETE BOUNDARY SURVEY. PROPERTY LINES AND OWNER INFORMATION WERE OBTAINED FROM DEEDS, TAX RECORDS, AERIAL PHOTOGRAPHY, GIS, AND FIELD SURVEYED EVIDENCE.

L:\Projects\Chevron\EPGIS\Water_Supply\Woods_Pad_A_WaterSupplyExhibit.mxd - Scale 1:15000 - 10/11/2019 9:31:36 AM - G:\Survey - M04 Moundsville West Virginia North RIPS 4701 Feet



WATER SUPPLY EXHIBIT WOODS PAD A



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LOT OWNERS

Lot #	Owner Name	Lot #	Owner Name	Lot #	Owner Name	Lot #	Owner Name	Lot #	Owner Name	Lot #	Owner Name	Lot #	Owner Name
01	CHAMBERT ALBERT J ET LX	11	ENGLISHMAN GRIFFIN & ET LX	21	GAMES KELLY KEF LX	31	CROW KELLIE & TODD R	41	WATKINS EMERLYN & ARTHUR R	51	HEFF PAUL BRADLEY		
02	CARMENWAL MATTHEW A ET AL	12	WELLS VERA M	22	WATKINS EMERLYN & ARTHUR R	32	PROFF STEPHEN P	42	WATKINS EMERLYN & ARTHUR R	52	CLARK BARRY C & MARGARET B		
03	DAVIS JAMES W & KYLE E	13	WATKINS EMERLYN & ARTHUR R	23	WATKINS EMERLYN & ARTHUR R	33	WATKINS EMERLYN & ARTHUR R	43	WATKINS EMERLYN & ARTHUR R	53	WATKINS EMERLYN & ARTHUR R		
04	GRAY JACQUELYN LYNN HILL	14	WATKINS EMERLYN & ARTHUR R	24	WATKINS EMERLYN & ARTHUR R	34	WATKINS EMERLYN & ARTHUR R	44	WATKINS EMERLYN & ARTHUR R	54	WATKINS EMERLYN & ARTHUR R		
05	WATKINS EMERLYN & ARTHUR R	15	WATKINS EMERLYN & ARTHUR R	25	WATKINS EMERLYN & ARTHUR R	35	WATKINS EMERLYN & ARTHUR R	45	WATKINS EMERLYN & ARTHUR R	55	WATKINS EMERLYN & ARTHUR R		
06	WATKINS EMERLYN & ARTHUR R	16	WATKINS EMERLYN & ARTHUR R	26	WATKINS EMERLYN & ARTHUR R	36	WATKINS EMERLYN & ARTHUR R	46	WATKINS EMERLYN & ARTHUR R	56	WATKINS EMERLYN & ARTHUR R		
07	WATKINS EMERLYN & ARTHUR R	17	WATKINS EMERLYN & ARTHUR R	27	WATKINS EMERLYN & ARTHUR R	37	WATKINS EMERLYN & ARTHUR R	47	WATKINS EMERLYN & ARTHUR R	57	WATKINS EMERLYN & ARTHUR R		
08	WATKINS EMERLYN & ARTHUR R	18	WATKINS EMERLYN & ARTHUR R	28	WATKINS EMERLYN & ARTHUR R	38	WATKINS EMERLYN & ARTHUR R	48	WATKINS EMERLYN & ARTHUR R	58	WATKINS EMERLYN & ARTHUR R		
09	WATKINS EMERLYN & ARTHUR R	19	WATKINS EMERLYN & ARTHUR R	29	WATKINS EMERLYN & ARTHUR R	39	WATKINS EMERLYN & ARTHUR R	49	WATKINS EMERLYN & ARTHUR R	59	WATKINS EMERLYN & ARTHUR R		
10	WATKINS EMERLYN & ARTHUR R	20	WATKINS EMERLYN & ARTHUR R	30	WATKINS EMERLYN & ARTHUR R	40	WATKINS EMERLYN & ARTHUR R	50	WATKINS EMERLYN & ARTHUR R	60	WATKINS EMERLYN & ARTHUR R		

Surface Owner: RICHARD W. WOODS
Oil/Gas Owner: RICHARD W. WOODS
Well Operator: CHEVRON APPALACHIA, LLC
Address: 700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108
Phone: 412-865-0088

County: MARSHALL
Township: MOUNDSVILLE, WV
GROUNDWATER & ENVIRONMENTAL
Surveyor: SERVICES, INC.
Address: 301 COMMERCE PARK DR
CRANBERRY TOWNSHIP, PA 16066
Phone: 800-267-2549

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 11/18/19 **Date Permit Application Filed:** _____

RECEIVED
Office of Oil and Gas

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

HAND DELIVERY **CERTIFIED MAIL RETURN RECEIPT REQUESTED**

DEC 04 2019

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Richard Wiley Woods, ET UX / Nancy J. Woods
Address: 2588 Fork Ridge Road
Moundsville, WV 26041

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 525066.22
County: Marshall Northing: 4415487.65
District: Clay Public Road Access: CR 17 Fork Ridge Road
Quadrangle: Moundsville, WV 7.5' Generally used farm name: Woods
Watershed: Middle Grave Creek - Grave Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: Chevron Appalachia, LLC
Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Telephone: 412-865-3140
Email: BWeimer@chevron.com
Facsimile: 412-865-2403

Authorized Representative: _____
Address: _____
Telephone: _____
Email: _____
Facsimile: _____

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our 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.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 11/18/19 Date Permit Application Filed: _____

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: Richard Wiley Woods ET UX / Nancy J. Woods Name: _____
Address: 2588 Fork Ridge Road Address: _____
Moundsville, WV 26041

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 525066.22
County: Marshall Northing: 4415487.65
District: Clay Public Road Access: CR 17 Fork Ridge Road
Quadrangle: Moundsville, WV 7.5' Generally used farm name: Woods
Watershed: Middle Grave Creek - Grave Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: Chevron Appalachia, LLC Address: 700 Cherrington Parkway
Telephone: 412-865-3140 Coraopolis, PA 15108
Email: BWeimer@chevron.com Facsimile: 412-865-2403

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

DEC 04 2019

WV Department of
Envi...

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

Comment and Waiver Provisions

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

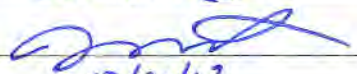
Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

I, Mason Smilt, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>525086.221</u>
County: <u>Marshall</u>	UTM NAD 83 Northing: <u>4415487.652</u>
District: <u>Clay</u>	Public Road Access: <u>Fork Ridge Road</u>
Quadrangle: <u>Moundsville 7.5'</u>	Generally used farm name: <u>Woods</u>
Watershed: <u>Upper Ohio-Beaver</u>	

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

<p>*Please check the box that applies</p> <p><input type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input checked="" type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p>	<p style="text-align: center;">FOR EXECUTION BY A NATURAL PERSON</p> <p>Signature: _____</p> <p>Print Name: _____</p> <p>Date: _____</p> <p style="text-align: center;">FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: <u>CONSOLIDATIONS COAL CO.</u></p> <p>By: <u>JASON D. SMILT</u></p> <p>Its: <u>SECRETARY</u></p> <p>Signature: </p> <p>Date: <u>10/31/17</u></p>
--	--

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Byrd E. White, III
Secretary of Transportation/
Commissioner of Highways

October 9, 2019

Jimmy Wriston, P. E.
Deputy Secretary/
Deputy Commissioner

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Woods Pad A, Marshall County
Woods Pad A-M04H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2015-0161 issued for the subject site to Chevron Appalachia, LLC for access to the State Road for a well site located off Marshall County Route 17 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

RECEIVED
Office of Oil and Gas

DEC 04 2019

WV Department of
Environmental Protection

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

Cc: Chris Rerko
Chevron Appalachia, LLC
CH, OM, D-6
File

Hydraulic Fracturing Fluid Additives

Supplier	Name	Purpose
Universal	7.5% HCl Acid	Acid - To open perforations
Universal	Unislick ST50	Friction Reducer for Water and Brine (Anionic)
Universal	Scale Inhibitor A	Scale Inhibitor
Universal	Iron Control A	Iron Control
Universal	Unihib G	Corrosion Inhibitor for Acid
Universal	K-Bac 1020	Biocide/Bactericide
Universal	CMHPG (Polyfrac Gel)	Gel
Universal	LEB 10X	Gel Breaker
Universal	100 Mesh White Sand	Proppant
Universal	40-70 Mesh White Sand	Proppant

RECEIVED
Office of Oil and Gas

DEC 04 2019

WV Department of
Environmental Protection



Know what's below
Call before you dig

WOODS WELL PAD A EROSION AND SEDIMENT CONTROL PLAN

2600 FORK RIDGE ROAD (C.R. 17)
CLAY DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

PREPARED FOR:

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

APPROVED
WVDEP OOG
2/12/2020

CONSULTANTS

- BLUE MOUNTAIN AERIAL MAPPING
11023 MASON DIXON HIGHWAY
BURTON, WEST VIRGINIA 25902
304-622-0229
- TERRA TESTINO
282 MEADOW ACRES BLVD
WASHINGTON, PA 15391



SITE LOCATION MAP
USGS 7.5' TOPOGRAPHIC QUADRANGLE MAP
MOUNDSVILLE, WV 1997
1" = 2000'

WOODS WELL PAD LIMITS OF DISTURBANCE AREA (LCA)	
TOTAL SITE IMPACTS:	
ACCESS ROADS	5.8
WELL PAD	5.0
TOTAL WOODED ACRES DISTURBED	2.3
TOTAL MEADOW ACRES DISTURBED	17.5
TOTAL AFFECTED AREA	19.8
IMPACTS TO WOODS, RICHARD WILEY ET LX TAX ID 44-61	
ACCESS ROADS	1.6
WELL PAD	5.0
TOTAL WOODED ACRES DISTURBED	2.3
TOTAL MEADOW ACRES DISTURBED	19.8
TOTAL AFFECTED AREA	19.1
IMPACTS TO WOODS, HAZEL JEST TAX ID 44-89	
ACCESS ROADS	0.2
WELL PAD	9.0
TOTAL WOODED ACRES DISTURBED	0.02
TOTAL MEADOW ACRES DISTURBED	9.7
TOTAL AFFECTED AREA	9.7

START OF ACCESS ROAD AT FORK RIDGE ROAD
LATITUDE: N39 480017' LONGITUDE: W80 715419'

WELL PIN "101H"
LATITUDE: N39 489104' LONGITUDE: W80 706429'

WELL PIN "102H"
LATITUDE: N39 488559' LONGITUDE: W80 705813'

WELL PIN "108H"
LATITUDE: N39 489103' LONGITUDE: W80 706719'

WELL PIN "110H"
LATITUDE: N39 489132' LONGITUDE: W80 706659'

BASED ON MD 81 WEST VIRGINIA, STATE PLANE, NORTH ZONE,
U.S. FOOT

WATER/SHEEP NAME (WV WATER PLAN), UPPER OHIO - WHEELING
RECLAIMING STREAM (USGS BLUE LINE), MIDDLE GRAVE CREEK
DISTANCE TO NEAREST USGS BLUE LINE STREAM = 629 FT
NO ANTICIPATED WETLAND IMPACTS

SHEET INDEX		
Sheet Number	Sheet Title	Revision Date
CS 000	COVER SHEET E&S PLAN	
ES 050	EXISTING TOPOGRAPHIC PLAN	
UP 040	EXISTING UTILITY PLAN	
ES 100	OVERALL EROSION AND SEDIMENT CONTROL PLAN	
ES 101	EROSION AND SEDIMENT CONTROL PLAN	
ES 102	EROSION AND SEDIMENT CONTROL PLAN	
ES 103	EROSION AND SEDIMENT CONTROL PLAN	
ES 110	EROSION AND SEDIMENT CONTROL NOTES	
ES 111	EROSION AND SEDIMENT CONTROL NOTES	
ES 120	EROSION AND SEDIMENT CONTROL DETAILS	
ES 121	EROSION AND SEDIMENT CONTROL DETAILS	
ES 122	EROSION AND SEDIMENT CONTROL DETAILS	
ES 123	EROSION AND SEDIMENT CONTROL DETAILS	
ES 124	EROSION AND SEDIMENT CONTROL DETAILS	
ES 125	EROSION AND SEDIMENT CONTROL DETAILS	
ES 210	EAS CROSS SECTION	
ES 211	EAS CROSS SECTIONS	
ES 212	EAS CROSS SECTIONS	
ES 400	ACCESS ROAD PLAN AND PROFILE	
ES 401	ACCESS ROAD CROSS SECTIONS	
GE 500	OVERALL GEOTECHNICAL SUBSURFACE SUMMARY	
GE 501	GEOTECHNICAL SUBSURFACE SUMMARY	
GE 502	GEOTECHNICAL SUBSURFACE SUMMARY	
GE 510	TEST BORINGS INFORMATION	
GE 520	GEOTECHNICAL CROSS SECTIONS	
GE 521	WELL PAD REINFORCEMENT PLAN	
GE 522	REINFORCEMENT SECTIONS	
GE 523	REINFORCEMENT PROFILE	
GE 524	REINFORCEMENT PROFILE	
GE 530	GEOTECHNICAL DETAILS	
GE 531	GEOTECHNICAL DETAILS	
GE 532	GEOTECHNICAL DETAILS	
GE 533	GEOTECHNICAL DETAILS	
PC 500	RECLAMATION PLAN WITH AERIAL	
PC 501	RECLAMATION PLAN	

LEGEND	EXISTING	PROPOSED
TC - TOP OF CURB	— 0 — CABLE TV	○ SHOWER
G - GUTTER	— 0 — CLEANOUT	○ CLEANOUT
TW - TOP OF WALL	— 0 — CONTOUR (MAJOR)	○ CONTOUR (MAJOR)
BTW - BOTTOM OF WALL	— 0 — CONTOUR (MINOR)	○ CONTOUR (MINOR)
TS - TOP OF SURF	— 0 — DATA LINE	— (---) — DATA LINE
RS - BOTTOM OF SURF	— 0 — ELECTRIC LINE	— (---) — DATA LINE
SAV - SANITARY	— 0 — ELEC-TEL-COM	— (---) — CASHEMANT
ST - STORM	— 0 — FENCE LINE	— (---) — ELECTRIC LINE
MS - MANHOLE	— 0 — FENCE MAN	— (---) — ELEC-TEL-COM
TDR - TOP OF CASTING	— 0 — GAS LINE	— (---) — FENCE LINE
FC - FLOWLINE	— 0 — LOT LINE	— (---) — FENCE MAN
WV - WATER VALVE	— 0 — OVERHEAD WRES	— (---) — GAS
GV - GAS VALVE	— 0 — PROPERTY LINE	— (---) — OVERHEAD WRES
MH - FIRE HYDRANT	— 0 — RIGHT-OF-WAY	— (---) — PROPERTY LINE
EO - CLEANOUT	— 0 — ROAD CENTERLINE	— (---) — NIGHT-OF-WAY
STB - STANDING	— 0 — SEWER	— (---) — ROAD CENTERLINE
PH - PARABOLIC METER	— 0 — TELEPHONE UNIT	— (---) — SANITARY LINE
MH - MANHOLE	— 0 — TRAIL LINE	— (---) — SANITARY LATERAL
DB - DRAIN BALL	— 0 — WATER LINE	— (---) — SPOT ELEVATIONS
		— (---) — STORM SEWER
		— (---) — TELEPHONE UNIT
		— (---) — TREE
		— (---) — WATER LAC
		— (---) — WATER LAC LATERAL
		— (---) — YARD DRAIN
		— (---) — YARD DRAIN

Michael Baker International
MICHAEL BAKER INTERNATIONAL
CONSULTING ENGINEERS
MOON TOWNSHIP, PENNSYLVANIA

WOODS WELL PAD A
2600 FORK RIDGE ROAD
CLAY DISTRICT, MARSHALL COUNTY, WV
PREPARED FOR
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

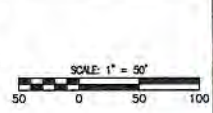
Project Number: 152066
Drawing Scale: AS SHOWN
Date Issued: 02/12/2020
Index Number:
Drawn By: STS
Checked By: TBP
Project Manager: TBP

CS000



APPROVED
WVDEP OOG

8/2/20 2/12/2020



SITE LOCATION MAP
USGS MOUNDSVILLE QUADS
1" = 2000'

- NOTES:**
1. THE SITE WAS INVESTIGATED FOR UNDERGROUND UTILITIES BY TWO GEOPHYSICALS, LTD ON NOVEMBER 17-18, 2016. NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED. PLAN PROVIDED FOR REFERENCE ONLY. MICHAEL BAKER INTERNATIONAL DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.
 2. EXISTING TOPOGRAPHICAL DATA COURTESY FIELD SURVEY PERFORMED BY MICHAEL BAKER INTERNATIONAL ON SEPTEMBER 13-18, 2019. DATA BASED ON NAD 83 WEST VIRGINIA STATE PLANE, NORTH ZONE, U.S. FOOT. CONTRACTOR SHALL VERIFY TOPOGRAPHIC MAPPING AND LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.
 3. ENVIRONMENTAL SCREENING PERFORMED ON JUNE 21, 2018 BY MICHAEL BAKER INTERNATIONAL.
 4. THE ASPHALT PAVED ENTRANCE TO THE WELL PAD ACCESS ROAD SHALL BE INSTALLED IMMEDIATELY AFTER THE ACCESS ROAD REACHES FINAL GRADE.
 5. GRADE ALL CHANNELS TO PROVIDE POSITIVE FLOW TO THE OUTFALL.
 6. SIX INCHES OF TOPSOIL SHALL BE PLACED ON ALL FINAL SLOPES PRIOR TO FINAL STABILIZATION.
 7. NO TREE CLEARING MAY OCCUR FROM MARCH 31ST UNTIL NOVEMBER 15TH.
 8. CELLAR FLOW MATH - MATH TO BE INSTALLED WITH CONSTRUCTION.
 9. FROM STATION 10+26 AND CONTINUING AROUND THE WELL PAD, THE SET FENCE WILL BE SMARTFENCE 42.

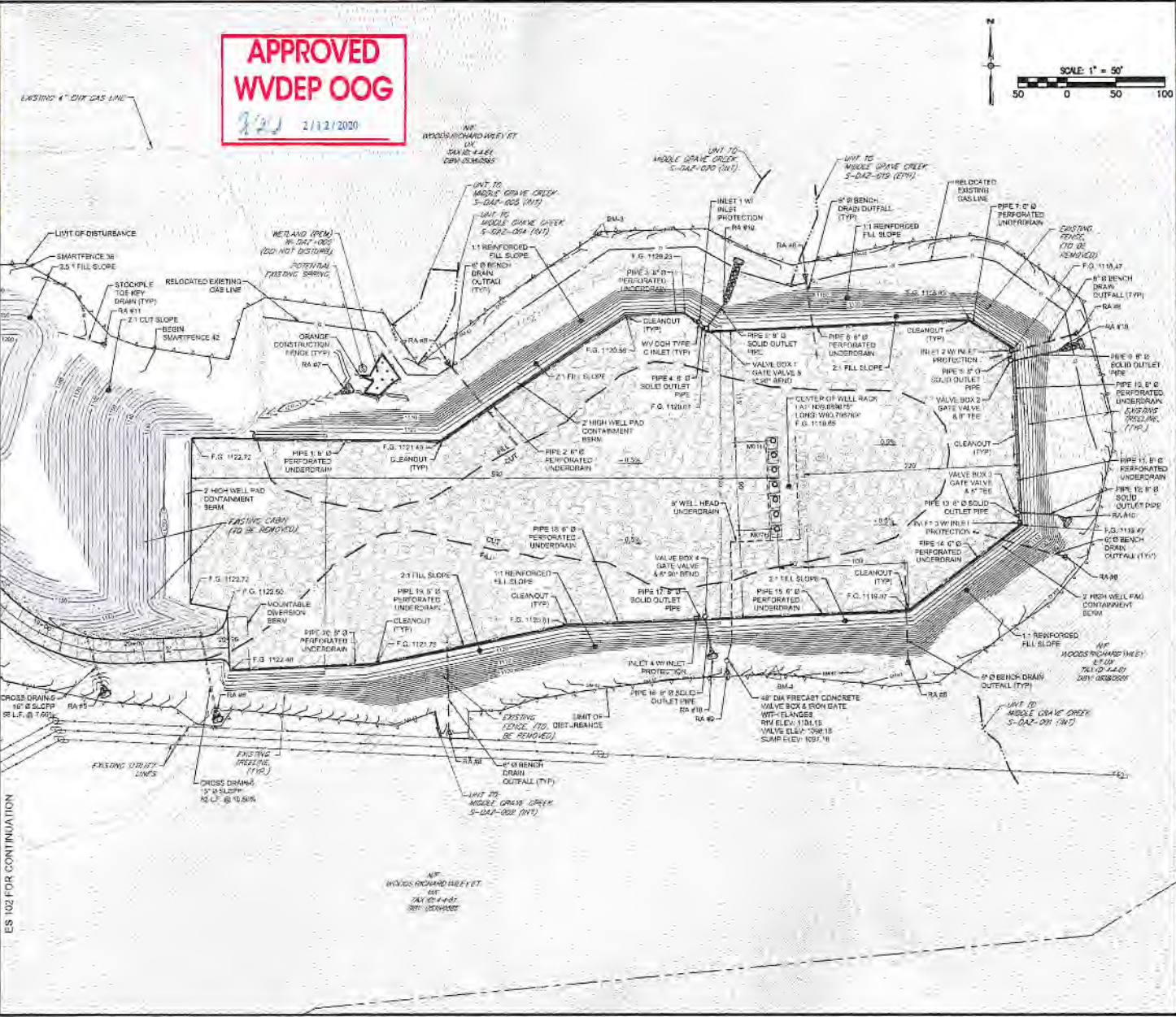
TOTAL AREA = 19.8 ACRES
DISTURBED AREA = 19.8 ACRES



Know what's below
Call before you dig

EROSION & SEDIMENT CONTROL LEGEND

- ▲ LIMITS OF DISTURBANCE/PROJECT LIMIT
- SMARTFENCE 36
- SMARTFENCE 38
- SMARTFENCE 42
- ORANGE CONSTRUCTION FENCE
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET
- ROCK FILTER
- RIP RAP APRON
- PERMANENT INTERCEPTOR CHANNEL
- ACCESS ROAD CHANNEL
- CUT SLOPE DITCH



Michael Baker INTERNATIONAL
MICHAEL BAKER INTERNATIONAL
MOON TOWNSHIP, PENNSYLVANIA



REVISION RECORD

No.	Date	Description
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

WOODS WELL PAD A
2600 FORK RIDGE ROAD
CLAY DISTRICT, MARSHALL COUNTY, WV

PREPARED FOR
CHEVRON APPALACHIA, LLC
700 CHERINGTON PARKWAY
CORAOPOLIS, PA 15105

EROSION AND SEDIMENT CONTROL PLAN

Project Number: 202005
Drawing Scale: AS SHOWN
Date Issued: 02/12/2020
Issue Number:
Drawn By: JTS
Checked By: TRP
Project Manager: TRP