



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

Friday, November 30, 2018
WELL WORK PERMIT
Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Re: Permit approval for HAZLETT M08H
47-051-02100-00-00

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: HAZLETT M08H
Farm Name: IRENE HAZLETT - LIFE
U.S. WELL NUMBER: 47-051-02100-00-00
Horizontal 6A New Drill
Date Issued: 11/30/2018

PERMIT CONDITIONS 4705102100

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 4705102100

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.



west virginia department of environmental protection

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

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

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

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

DATE: November 27, 2018
ORDER NO.: 2018-W-12

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 August 3, 2018, Chevron Appalachia, LLC submitted well work permit applications identified as API#s 47-051-02092, 47-051-02093, 47-051-02094, 47-051-02095, 47-051-02096, 47-051-02097, 47-051-02099 and 47-051-02100. Then on August 7, 2018 Chevron Appalachia, LLC submitted well work permit applications identified as API#s 47-051-02107, 47-051-02108, 47-051-02109, 47-051-02110, 47-051-02111 and 47-051-02112. The proposed wells are to be located on the Hazlett Pad in Union District of Marshall County, West Virginia.
4. On August 3, 2018, Chevron Appalachia, LLC requested a waiver for Wetlands 1A, 3A, 3B and 4 outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-051-02092, 47-051-02093, 47-051-02094, 47-051-02095, 47-051-02096, 47-051-02097, 47-051-02099, 47-051-02100, 47-051-02107, 47-051-02108, 47-051-02109, 47-051-02110, 47-051-02111 and 47-051-02112. Wetlands 1A and 4 will be excluded from this waiver because they are more than 100' 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 Wetlands 3A and 3B from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-051-02092, 47-051-02093, 47-051-02094, 47-051-02095, 47-051-02096, 47-051-02097, 47-051-02099, 47-051-02100, 47-051-02107, 47-051-02108, 47-051-02109, 47-051-02110, 47-051-02111 and 47-051-02112. The Office of Oil and Gas hereby **ORDERS** that Chevron Appalachia, LLC shall meet the following site construction and operational requirements for the Hazlett Well Pad:

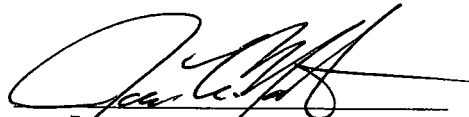
- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least twenty-four inches (24”) in height;
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. Wetland 3A shall have both a compost filter sock trap and a layer of thirty two-inch (32”) compost filter sock to prevent any sediment from reaching the wetland from the well pad. This along with temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- d. Wetland 3B shall have two layers of eighteen-inch (18”) compost filter sock to prevent any sediment from reaching the wetland from the well pad. This along with temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- e. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- f. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- g. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- h. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- i. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- j. 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;
- k. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- l. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 27th day of November, 2018.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

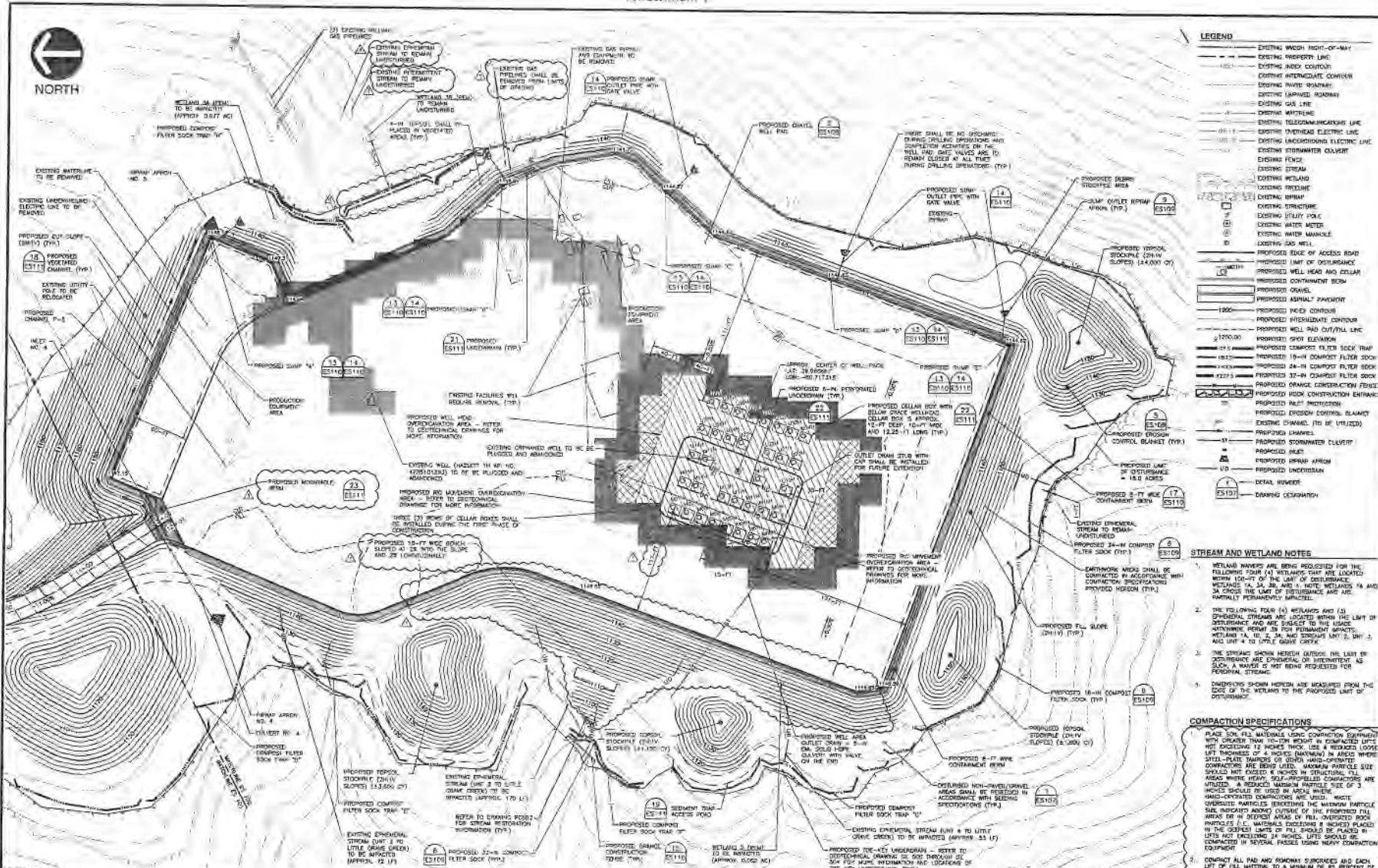
OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF WEST VIRGINIA

By:



JAMES A. MARTIN, CHIEF

Attachment I



LEGEND

| | |
|----------|---|
| (Symbol) | EXISTING WASH RIGHT-OF-WAY |
| (Symbol) | EXISTING PROPERTY LINE |
| (Symbol) | EXISTING ARROYO CORRIDOR |
| (Symbol) | EXISTING INTERMEDIATE CONTOUR |
| (Symbol) | EXISTING PAVED ROADWAY |
| (Symbol) | EXISTING UNPAVED ROADWAY |
| (Symbol) | EXISTING GAS LINE |
| (Symbol) | EXISTING WATERLINE |
| (Symbol) | EXISTING TELECOMMUNICATIONS LINE |
| (Symbol) | EXISTING OVERHEAD ELECTRIC LINE |
| (Symbol) | EXISTING UNDERGROUND ELECTRIC LINE |
| (Symbol) | EXISTING STORMWATER CONDUIT |
| (Symbol) | EXISTING FENCE |
| (Symbol) | EXISTING STREAM |
| (Symbol) | EXISTING WETLAND |
| (Symbol) | EXISTING FILLING |
| (Symbol) | EXISTING BRUSH |
| (Symbol) | EXISTING STRUCTURE |
| (Symbol) | EXISTING UTILITY POLE |
| (Symbol) | EXISTING WASTE PILE |
| (Symbol) | EXISTING WATER MANHOLE |
| (Symbol) | EXISTING GAS WELL |
| (Symbol) | PROPOSED EDGE OF ACCESS ROAD |
| (Symbol) | PROPOSED LIMIT OF DISTURBANCE |
| (Symbol) | PROPOSED WELL HEAD AND CELLAR |
| (Symbol) | PROPOSED CONTAINMENT BOW |
| (Symbol) | PROPOSED DRIVEWAY |
| (Symbol) | PROPOSED ASPHALT PAVEMENT |
| (Symbol) | PROPOSED PILES CONDUIT |
| (Symbol) | PROPOSED INTERMEDIATE CONTOUR |
| (Symbol) | PROPOSED WELL PAD OUTFILL LINE |
| (Symbol) | PROPOSED 24-IN COMPACT FILTER SOCK TRAP |
| (Symbol) | PROPOSED 32-IN COMPACT FILTER SOCK TRAP |
| (Symbol) | PROPOSED 24-IN COMPACT FILTER SOCK |
| (Symbol) | PROPOSED 32-IN COMPACT FILTER SOCK |
| (Symbol) | PROPOSED CHANGELINE CONSTRUCTION FENCE |
| (Symbol) | PROPOSED ROOM CONSTRUCTION ENTRANCE |
| (Symbol) | PROPOSED PILE PROTECTION |
| (Symbol) | PROPOSED EROSION CONTROL BLANKET |
| (Symbol) | EXISTING CHANGELINE (TO BE UTILIZED) |
| (Symbol) | PROPOSED CHANGELINE |
| (Symbol) | PROPOSED DRAINAGE CONTROL BLANKET (TP) |
| (Symbol) | PROPOSED STORMWATER CULVERT |
| (Symbol) | PROPOSED BRUSH APRON |
| (Symbol) | PROPOSED UNDERDRAIN |
| (Symbol) | DETAIL NUMBER |
| (Symbol) | DRAINAGE SEPARATION |

- STREAM AND WETLAND NOTES**
1. WETLAND VALUES ARE BEING REQUESTED FOR THE FOLLOWING FOUR (4) WETLANDS THAT ARE LOCATED WITHIN 100-YD OF THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE USACE WETLANDS REPORT (W) FOR PERMIT TRACKS: WETLAND 1A, 1B, 2, 3A, AND 3B. WETLANDS 1A AND 3A CROSS THE LIMIT OF DISTURBANCE AND ARE PARTIALLY PERMANENTLY IMPACTED.
 2. THE FOLLOWING FOUR (4) WETLANDS AND (3) SPERMATOPHYTES ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE USACE WETLANDS REPORT (W) FOR PERMIT TRACKS: WETLAND 1A, 1B, 2, 3A, AND 3B. WETLANDS 1B, 2, AND 3A CROSS THE LIMIT OF DISTURBANCE.
 3. THE STREAM CHANNEL WETLAND SURFACES THE LIMIT OF DISTURBANCE ARE EROSIONAL OR EROSIONAL AS SUCH, A WETLAND IS NOT BEING REQUESTED FOR PERMANENT STREAMS.
 4. DIMENSIONS SHOWN HEREIN ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

- COMPACTION SPECIFICATIONS**
- PLACE 50% FILL MATERIALS USING COMPACTION EQUIPMENT WITH OPERATOR THAN 10-TON WEIGHT IN COMPACTED LIFTES NOT EXCEEDING 12 INCHES THICK. USE A REDUCED LIFTES LIFT THICKNESS OF 4 INCHES (MAXIMUM) IN AREAS WHERE STEEL-PLATE WHEELS OF OTHER COMPACTORS ARE BEING USED. MAXIMUM PARTICLE SIZE SHOULD NOT EXCEED 4 INCHES IN STRUCTURAL FILL AREAS WHERE HEAVY, SELF-PROPELLED COMPACTORS ARE USED. A REDUCED MAXIMUM PARTICLE SIZE OF 3 INCHES SHOULD BE USED IN AREAS WHERE HAND-COMPACTED COMPACTORS ARE USED. WASTE SUBSTRATE PARTICLES (EXCEPTING THE MAXIMUM PARTICLE SIZE INDICATED ABOVE) COURSE OF THE PROPOSED FILL AREAS OR IN DEEPER AREAS OF FILL, OVERSIZED ROCK PARTICLES OR MATERIALS EXCEEDING 8 INCHES BLADED IN THE GROUND LAYER OF FILL SHOULD BE PLACED IN LIFTS NOT EXCEEDING 14 INCHES THICK. FILL SHOULD BE COMPACTED IN SEVERAL PASSES USING HEAVY COMPACTION EQUIPMENT.
3. CONTACT ALL PAD AND ROADWAY SURFACES AND EACH LIFT OF FILL MATERIAL TO A MINIMUM OF 85 PERCENT OF THE MAXIMUM DRY DENSITY WITHIN 3% OF THE DRY UNIT WEIGHT SPECIFIED IN ACCORDANCE WITH ASTM D698 (STANDARD PROCTOR).

- REFERENCES**
1. STREAMS AND WETLANDS REGULATED BY CML & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/13/2017
 2. LANDSCAPE UTILITIES LOCATED BY A GEOLOGICAL SURVEY CONDUCTED BY THE GEOLOGISTS LTD. DATED 05/17/2017 TO 05/23/2017.
 3. INFORMATION WITHIN THE PROJECT AREA AND MARKED UTILITY FEATURES SERVICED BY CML & ENVIRONMENTAL CONSULTANTS, INC. DATED 03/23/2017 TO 03/30/2017 AND 05/22/2017 TO 05/25/2017. INFORMATION OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH WEST VIRGINIA LEGAL DATA. 2002.
 4. NEIGHBORLY BOUNDARIES WERE PROVIDED BY CHEVRON.

MISS UTILITY OF WEST VIRGINIA
 1-800-245-4848
 West Virginia State Law
 (Section 36c Chapter 24-5 requires that you call first to determine where before you dig in the state of West Virginia.)
IT'S THE LAW

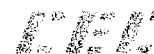
CML & Environmental Consultants, Inc.
 4001 Friends Lane, Suite 200, Export, PA 15622
 724.327.0200 • 600-846-8187

HAZLETT WELL PAD
 UNDER DISTRICT
 MORGAN COUNTY, WEST VIRGINIA
 PREPARED FOR
CHEVRON APPALACHIA, LLC
 700 CHERIINGTON PARKWAY
 CHARLOTTE, NC 28202

EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)

Project Number: 1642700
 Drawing Scale: 1"=50'
 Date Issued: 9/10/2019
 Initial Number:
 Drawn by: RCB
 Checked by: JAB
 Project Manager: U.S.

ES 102



May 3, 2018

West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, West Virginia 25304

Dear Reviewer:

Subject: Wetland Waiver Request
Chevron Appalachia, LLC
Hazlett Well Pad Project
Union District, Marshall County, West Virginia
CEC Project 164-755

1.0 INTRODUCTION

On behalf of Chevron Appalachia, LLC (Chevron), Civil & Environmental Consultants, Inc. (CEC) is submitting a Wetland Waiver Request pursuant to Chapter 22 Article 6A Section 12 of the West Virginia Code. Chevron is requesting a waiver to construct a natural gas well pad within 100 feet of three palustrine emergent wetlands and one palustrine scrub-shrub wetland for their proposed Hazlett Well Pad Project located in Union District, Marshall County, West Virginia.

Chevron is proposing to expand an existing natural gas well pad and widen the associated existing access road. The total limit of disturbance (LOD) for the project is approximately 18 acres. The waiver request form is included in Attachment A. The following figures are included in Attachment B: Site Location Map, Aquatics Impact Map, and Wetland Waiver Request Figure. The Erosion & Sediment Control (E&S) Plan is included in Attachment C. Existing wetlands and streams were delineated by qualified CEC biologists on May 23, 2017. The following section provides additional information as required by the waiver.

2.0 WETLAND WAIVER REQUEST

Question 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 proposed Hazlett Well Pad Project is located off Grandview Road/WV-86 in Union District, Marshall County, West Virginia, east of the city of Glen Dale, as shown on the Site Location Map. The project's proposed LOD is located within 100 feet of three palustrine emergent wetlands and one palustrine scrub-shrub wetland, as shown on the Aquatic Impacts Map. The approximate distance of each wetland to the nearest boundary of the LOD is as follows:

- Wetland 1A – 0 linear feet; ^h
- Wetland 3A – 0 linear feet;
- Wetland 3B – 53 linear feet; and
- Wetland 4 – 1 linear foot. ^x

No perennial streams are located within 100 feet of the project LOD. A waiver is not being requested for the Wetlands 1B and 2 which are located entirely within the LOD. Chevron is requesting authorization from the U.S. Army Corps of Engineers (USACE) for impacts to these wetlands, impacts to the portions of Wetlands 1A and 3A within the LOD, and for impacts to three ephemeral unnamed tributaries to Little Grave Creek. A copy of the Application for Department of the Army Permit is included in Attachment D.

Question 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”.*

The No-Action alternative represents “no alteration” of the existing environment, meaning the well pad and access road would not be expanded and no immediate environmental impacts would occur. Natural gas extraction would not occur at this site, and Chevron would be required to find an alternative site. This option is highly undesirable and would not fulfill the project’s purpose and need.

- b. Location alternatives must be shown.*

Due to the size of the proposed well pad, the steep topography of the surrounding area, and the location of the subsurface coal boundary, the current location of the proposed Hazlett Well Pad is the primary location desired by Chevron. Further, this project expands an existing well pad and access road. Siting the proposed well pad at an alternative location will likely result in additional earth and vegetation disturbance. Minor adjustments to the dimensions of the proposed well pad were made during the conceptual planning phase of the project; however, the current location of the well pad has remained unchanged due to the limitations listed above. The size of the well pad is optimized for the extraction and production equipment that will be set on the well pad. As such, minimizing the dimensions of the well pad beyond the dimensions provided is not feasible. The location of the well pad and LOD are shown on Figure 3 – Wetland Waiver Request Figure provided in Attachment B.

c. Must demonstrate why a one hundred foot buffer cannot be maintained.

Maintaining a 100-foot buffer from all on-site wetlands is not feasible due to topographic constraints and locations of the existing features. Two of the wetlands are located on the southwest side of the access road and two of the wetlands are located on the eastern side of the well pad. If the access road was shifted northeast, it would result in significantly more earth disturbance due to the steep topography. Similarly, if the well pad was shifted west to avoid the two wetlands, additional permanent stream impacts would occur on the western side of the pad.

The other alternative to meet the setback requirements would be a reduction in the project's footprint; however, the proposed design represents the minimum footprint required to meet the project's purpose and need. A reduction in the well pad's limits would mean the project could not be developed.

d. Describe how the proposed project is the least environmentally damaging practicable alternative.

The proposed Hazlett Well Site design represents the alternative which reduces permanent impacts to the greatest degree practicable. Shifting the proposed well pad east or west would create higher fill slopes and result in more disturbance to existing streams and wetlands.

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

As part of the well pad permitting process, an E&S Plan has been prepared for the Hazlett Well Pad project which stipulates implementations to reduce soil erosion, compaction, and sedimentation of receiving streams and wetlands. The following measures will be implemented as part of the E&S Plan to protect the existing wetlands and streams:

- Compost filter sock traps will be positioned downslope of larger drainage areas and upslope of the existing wetlands and/or ephemeral streams;
- Compost filter socks will be positioned downslope of smaller drainage areas and upslope of the existing wetlands and/or ephemeral streams;
- Orange construction fence will be erected along the edge of the LOD to clearly mark and help protect the wetlands from being impacted during construction operations;

- Erosion control blanket will be placed on slopes greater than 3 Horizontal to 1 Vertical (3H:1V) to limit erosion and promote vegetative growth;
- Riprap aprons will be constructed at the outfalls of pipes to dissipate runoff;
- Disturbed areas within the LOD shall be stabilized within 21 days of construction activity temporarily or permanently ceasing; and
- One ephemeral stream (UNT 3 to Little Grave Creek) located within the LOD will be realigned and restored to approximate original dimensions downgradient of the proposed fill slope toe-key outlet drain and lined with riprap.

Question 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 wetlands and/or perennial streams for which the waiver is sought.*

Refer to the E&S Plan and details in Attachment C for locations of erosion control measures, specifications on installation and maintenance requirements, and the construction sequence.

3.0 CLOSING

We appreciate your review of this Wetland Waiver Request. Please contact Mallory Owens at 724-327-5200 or mowens@cecinc.com if you have any questions or require additional information.

Respectfully submitted,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC



Sarah V. Parker
Assistant Project Manager



Mallory A. Owens, M.S.
Project Manager

SVP:MAO/jg/hm
Enclosures

cc: Jenny Hayes, Chevron Appalachia, LLC (PDF only)

L-164755.May3/P

ATTACHMENT A

WETLAND AND PERENNIAL STREAM WAIVER REQUEST FORM

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: Hazlett Well Pad

County, District, Quadrangle of Well Location: Marshall County, Union District, Moundsville Quad

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.**

Please refer to Section 2.0, Question 1 of the letter.

- 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

Please refer to Section 2.0, Question 2 of the letter.

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: _____

Operator's Well Number: _____

- 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.**

Please refer to Section 2.0, Question 3 of the letter.

- 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.

Please refer to Section 2.0, Question 4 of the letter.

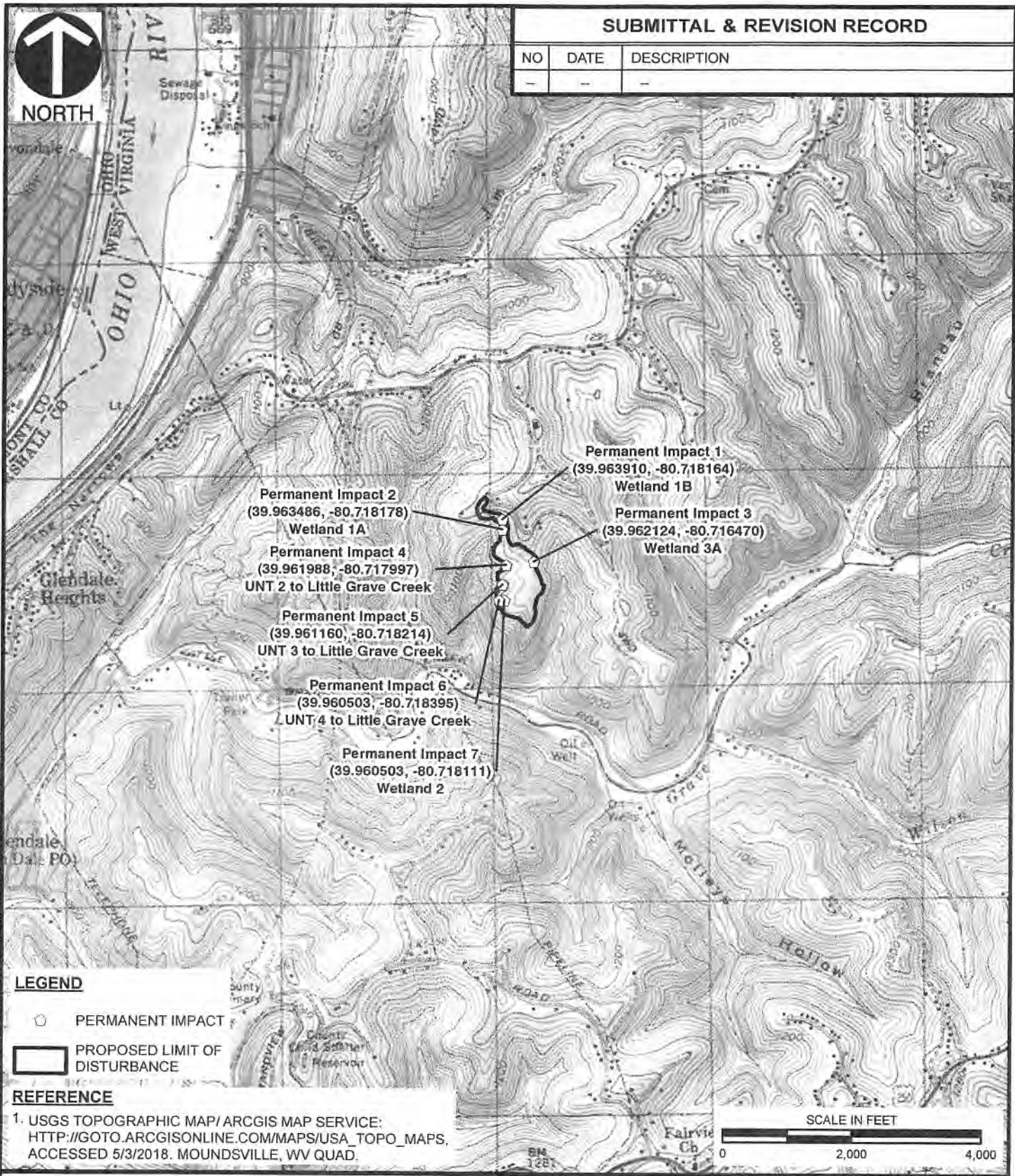
ATTACHMENT B
FIGURES



NORTH

SUBMITTAL & REVISION RECORD

| NO | DATE | DESCRIPTION |
|----|------|-------------|
| - | - | - |



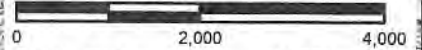
LEGEND

- PERMANENT IMPACT
- PROPOSED LIMIT OF DISTURBANCE

REFERENCE

1. USGS TOPOGRAPHIC MAP/ARCGIS MAP SERVICE:
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/USA_TOPO_MAPS](http://gto.arcgis.com/maps/usa_topo_maps),
 ACCESSED 5/3/2018. MOUNDSVILLE, WV QUAD.

SCALE IN FEET



Civil & Environmental Consultants, Inc.

4000 Triangle Lane, Suite 200 - Export, PA 15632
 724-327-5200 • 800-899-3610
www.cecinc.com

CHEVRON APPALACHIA, LLC
 HAZLETT WELL PAD
 UNION DISTRICT,
 MARSHALL COUNTY, WEST VIRGINIA

SITE LOCATION MAP

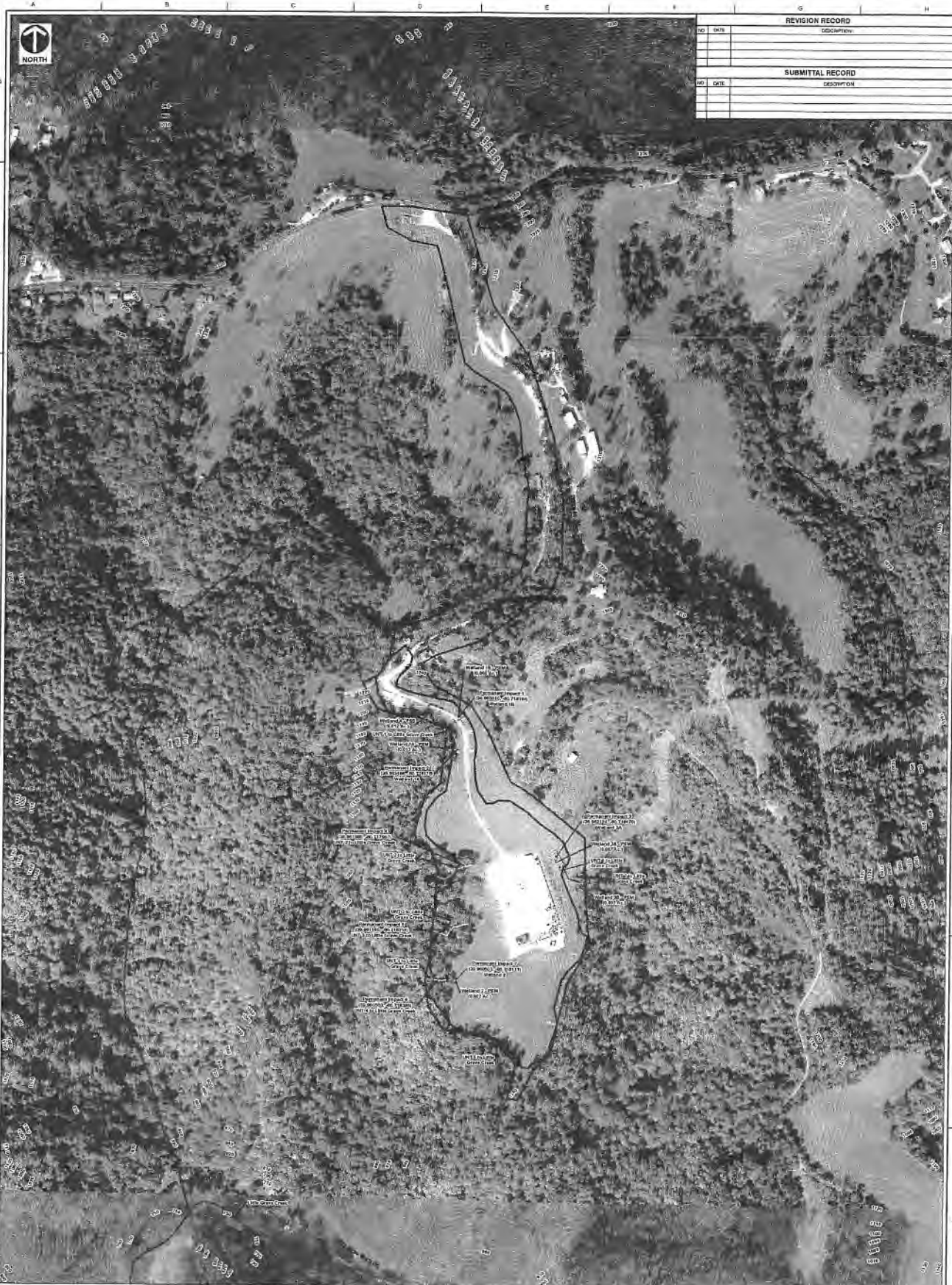
| | | | | | | | |
|-----------|------------|-------------|-------------|--------------|---------|--------------------------|----------|
| DRAWN BY: | KMC | CHECKED BY: | SVP | APPROVED BY: | PAK* | FIGURE NO: | 1 |
| DATE: | 05/03/2018 | SCALE: | 1" = 2,000' | PROJECT NO: | 164-755 | * Hand signature on file | |

P:\2016\164-755-GIS\Maps\EC05 NWP\164755_EC05 FIG 1 SITE LOC MAP.mxd 5/3/2018 8:33 AM (kcolajzi)



| REVISION RECORD | |
|-----------------|-------------|
| NO | DESCRIPTION |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| SUBMITTAL RECORD | | |
|------------------|------|-------------|
| NO | DATE | DESCRIPTION |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |



LEGEND

| | |
|--------------------------|---|
| ○ PERMANENT IMPACT | WETLAND CONTINUES BEYOND DELINEATION BOUNDARY |
| ▨ PROPOSED STREAM IMPACT | ▨ PROPOSED WETLAND IMPACT |
| — EPHEMERAL STREAM | ▨ WETLAND - PEM |
| — INTERMITTENT STREAM | ▨ WETLAND - P65 |
| — WW AND STREAM | ▨ PROPOSED LIMIT OF DISTURBANCE |
| | ▨ DELINEATION BOUNDARY |
| | ▨ INDEX CONTOUR |

- REFERENCES**
1. USGS NATIONAL HYDROGRAPHY DATASET FOR WEST VIRGINIA, 2014
 2. WINGS CLEARING HOUSE, 10' CONTOURS MOUNDSVILLE, WV Q140, 2005
 3. ESRI WORLD IMAGERY (ARCGIS MAP SERVICE) HTTP://GEOID.ARCGISONLINE.COM/IMAPS/ WORLD_IMAGERY, ACCESSED 8/5/2018, IMAGERY DATE: 2015

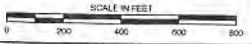
NOTES

1. THE WETLAND AND STREAM DELINEATION WAS CONDUCTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. ON 05/22/2017
2. CIVIL & ENVIRONMENTAL CONSULTANTS, INC. CONDUCTED THE WETLAND DELINEATION IN A MANNER CONSISTENT WITH THE CRITERIA CONTAINED IN THE 1987 U.S. ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, 1987 MANUAL AND THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, EASTERN MOUNTAINS AND THE LEVEL OF CARE AND SKILL ORDINARILY EXERCISED BY MEMBERS OF THE ENVIRONMENTAL CONSULTING PROFESSION PRACTICING CONTEMPORANEOUSLY AND CIVIL & ENVIRONMENTAL CONSULTANTS' PROFESSIONAL INTERPRETATION OF THE CRITERIA IN THE 1987 MANUAL AND THE 2012 REGIONAL SUPPLEMENT. WETLAND DETERMINATIONS MAY CHANGE SUBSEQUENT TO CIVIL & ENVIRONMENTAL CONSULTANTS' DELINEATION BASED ON CHANGES TO REGULATORY CRITERIA, CHANGES TO DRAINAGE AND OTHER HUMAN ACTIVITIES AND/OR LAND DISTURBANCES.

CEC
Civil & Environmental Consultants, Inc.
 4000 Tounge Lane, Suite 200 - Export, PA 15652
 PH: 724-237-8200 - FAX: 724-237-8010
 www.cecinc.com

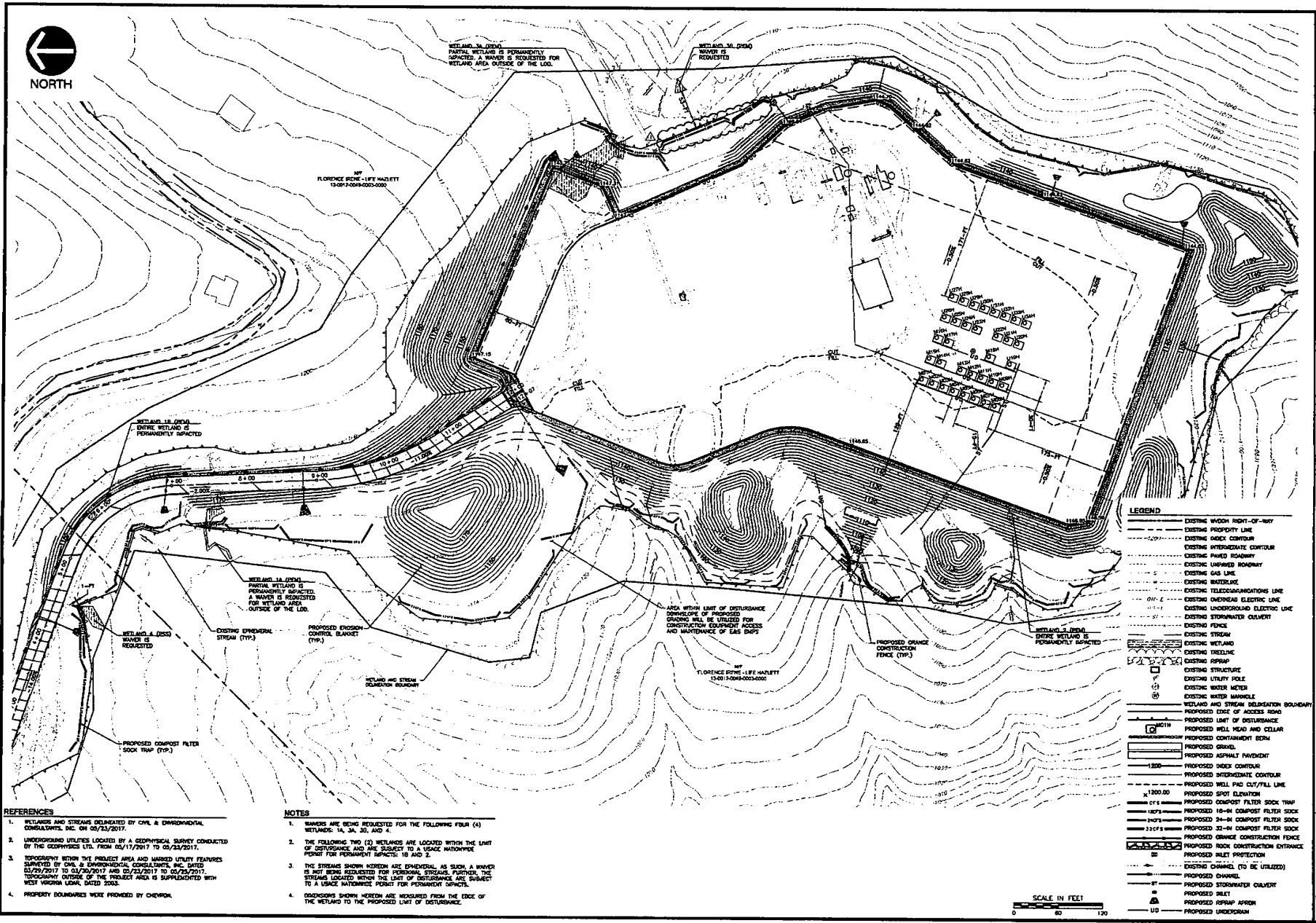
CHEVRON APPALACHIA, LLC
HAZLETT WELL PAD
UNION DISTRICT,
MARSHALL COUNTY, WEST VIRGINIA

| | | | | | |
|---------------|-----------------|--------------|------------------|------------------|--------------------|
| DRAWN BY: JMC | CHECKED BY: JMC | APP. BY: JMC | DATE: 08/01/2018 | SCALE: 1" = 200' | FIGURE NO: 164-755 |
|---------------|-----------------|--------------|------------------|------------------|--------------------|



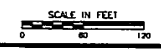
AQUATIC IMPACTS MAP

PROJECT: MARSHALL COUNTY, WEST VIRGINIA, HAZLETT WELL PAD, UNION DISTRICT, MARSHALL COUNTY, WEST VIRGINIA



LEGEND

- EXISTING WOOD RIGHT-OF-WAY
- - - EXISTING PROPERTY LINE
- - - EXISTING INDEX CONTOUR
- - - EXISTING INTERMEDIATE CONTOUR
- - - EXISTING PAVED ROADWAY
- - - EXISTING UNPAVED ROADWAY
- - - EXISTING GAS LINE
- - - EXISTING WIRELINE
- - - EXISTING TELECOMMUNICATIONS LINE
- - - EXISTING OVERHEAD ELECTRIC LINE
- - - EXISTING UNDERGROUND ELECTRIC LINE
- - - EXISTING STORMWATER CULVERT
- - - EXISTING FENCE
- - - EXISTING STREAM
- - - EXISTING WETLAND
- - - EXISTING TRAILLINE
- - - EXISTING ASPHALT DRIVE
- - - EXISTING STRUCTURE
- - - EXISTING UTILITY POLE
- - - EXISTING WATER METER
- - - EXISTING WATER MANHOLE
- - - WETLAND AND STREAM DELINEATION BOUNDARY
- - - PROPOSED EDGE OF ACCESS ROAD
- - - PROPOSED LIMIT OF DISTURBANCE
- - - PROPOSED WELL HEAD AND CELLAR
- - - PROPOSED CONTAINMENT BERM
- - - PROPOSED SAND
- - - PROPOSED ASPHALT PAVEMENT
- - - PROPOSED INDEX CONTOUR
- - - PROPOSED INTERMEDIATE CONTOUR
- - - PROPOSED WELL PAD CUT/FILL LINE
- - - PROPOSED SPOT ELEVATION
- - - PROPOSED COMPOST FILTER SOCK TRAP
- - - PROPOSED 18-IN COMPOST FILTER SOCK
- - - PROPOSED 24-IN COMPOST FILTER SOCK
- - - PROPOSED 32-IN COMPOST FILTER SOCK
- - - PROPOSED 6-INCH CONSTRUCTION FENCE
- - - PROPOSED ROCK CONSTRUCTION ENTRANCE
- - - PROPOSED INLET PROTECTION
- - - EXISTING CHANNEL (TO BE UTILIZED)
- - - PROPOSED CHANNEL
- - - PROPOSED FOR
- - - PROPOSED SUBMERGED CULVERT
- - - PROPOSED INLET
- - - PROPOSED ASPHALT DRIVE
- - - PROPOSED UNDERDRAIN



- REFERENCES**
1. WETLANDS AND STREAMS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. ON 05/23/2017.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICS LTD. FROM 03/17/2017 TO 03/23/2017.
 3. TOPOGRAPHY WITHIN THE PROJECT AREA AND MARKED UTILITY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 03/29/2017 TO 03/30/2017 AND 03/31/2017 TO 04/03/2017. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH NEAREST NEIGHBOR LOTS DATED 2008.
 4. PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.

- NOTES**
1. WAIVERS ARE BEING REQUESTED FOR THE FOLLOWING FOUR (4) WETLANDS: 1A, 3A, 3B, AND 4.
 2. THE FOLLOWING TWO (2) WETLANDS ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO A USAGE HAZARD PERMIT FOR PERMANENT IMPACTS: 1B AND 2.
 3. THE STREAMS SHOWN HEREON ARE ESSENTIAL AS SUCH A WAIVER IS NOT BEING REQUESTED FOR PERMANENT STREAMS. FURTHER, THE STREAMS LOCATED WITHIN THE LIMIT OF DISTURBANCE ARE SUBJECT TO A USAGE HAZARD PERMIT FOR PERMANENT IMPACTS.
 4. BOUNDARIES SHOWN HEREON ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

CEE
 Civil & Environmental Consultants, Inc.
 4000 Through Lane, Suite 200 - Exton, PA 19341
 761-377-9300 - 800-498-8310

REVISION RECORD

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

HAZLETT WELL PAD
 UNION DISTRICT
 MARSHALL COUNTY, WEST VIRGINIA
 PREPARED FOR
CHEVRON APPALACHIA, LLC
 700 CHERINGTON PARKWAY
 COBLENCE, PA 15108

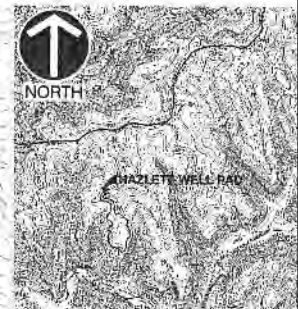
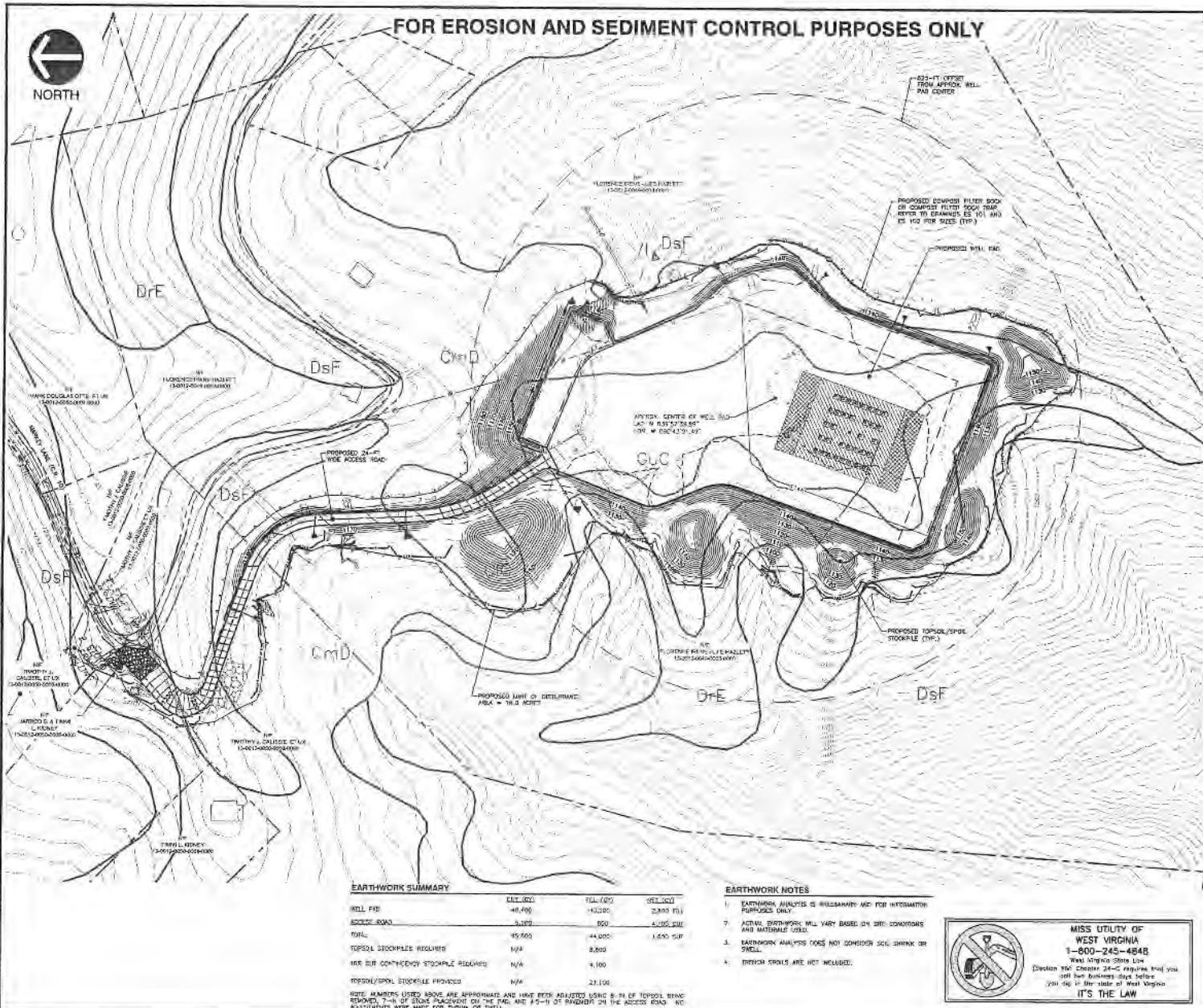
WETLAND WAIVER REQUEST FIGURE

Project Number: 164,795
 Drawing Scale: 1"=20'
 Date Issued: 02/20/18
 Index Number:
 Drawn By: RDB
 Checked By: MAG
 Project Manager: PAK

FIG. 3

ATTACHMENT C
EROSION AND SEDIMENT CONTROL PLAN

FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY



SCALE IN FEET
0 2000 4000

REFERENCE
U.S.G.S. 7.5' TOPOGRAPHIC MAP, HAZLETT WELLS QUADRANGLE, WY-III DATED 1978.

- LEGEND**
- EXISTING WOOD FRONT-OF-WAY
 - EXISTING PROPERTY LINE
 - EXISTING HOSE CONTOUR
 - EXISTING INTERMEDIATE CONTOUR
 - EXISTING HOSE BOUNDARY
 - EXISTING UNPAVED ROADWAY
 - EXISTING GAS LINE
 - EXISTING WATER LINE
 - EXISTING TELECOMMUNICATIONS LINE
 - EXISTING OVERHEAD ELECTRIC LINE
 - EXISTING UNDERGROUND ELECTRIC LINE
 - EXISTING STORMWATER CULVERT
 - EXISTING FENCE
 - EXISTING STREAM
 - EXISTING WETLAND
 - EXISTING TREE LINE
 - EXISTING SPRING
 - EXISTING STRUCTURE
 - EXISTING UTILITY POLE
 - EXISTING WATER METER
 - EXISTING WATER MAIN/VALVE
 - EXISTING GAS METER
 - PROPOSED EDGE OF ACCESS ROAD
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED WELL HEAD AND CELLAR
 - PROPOSED CONFINEMENT BERM
 - PROPOSED DRIVE
 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED HOSE CONTOUR
 - PROPOSED INTERMEDIATE CONTOUR
 - PROPOSED WELL PAD CR/PILE LINE
 - PROPOSED SPOT ELEVATION
 - PROPOSED DEMONSTR FILTER SOCK TRAP
 - PROPOSED 18-IN COMPOST FILTER SOCK
 - PROPOSED 24-IN COMPOST FILTER SOCK
 - PROPOSED 32-IN COMPOST FILTER SOCK
 - PROPOSED ORANGE CONSTRUCTION FENCE
 - PROPOSED ROCK CONSTRUCTION FENCE
 - PROPOSED PILE PROTECTION
 - EXISTING CHANNEL (TO BE UTILIZED)
 - PROPOSED CHANNEL
 - PROPOSED STORMWATER CULVERT
 - PROPOSED PILE
 - PROPOSED SPRING SPRING
 - PROPOSED UNDERPAVING
 - LOCAL SOIL BOUNDARY
 - SOIL BOUNDARY LABEL

- REFERENCES**
1. STREAMS AND WETLANDS DELINEATED BY CMC & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/23/2017.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY TMC GEOPHYSICS LTD. DATED 05/17/2017 TO 05/23/2017.
 3. TOPOGRAPHY WITHIN THE PROJECT AREA AND ADJACENT UTILITY FEATURES SUPPLIED BY CMC & ENVIRONMENTAL CONSULTANTS, INC. DATED 03/29/2017 TO 03/30/2017 AND 05/23/2017 TO 05/29/2017. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH WEST VIRGINIA LDM, DATED 2003.
 4. PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.

EARTHWORK SUMMARY

| | EST. (SQ) | FILL (CUB) | EST. (CUB) |
|---------------------------------------|-----------|------------|------------|
| WELL PAD | 40,400 | 14,000 | 2,800 (CU) |
| SCOPE ROAD | 3,200 | 800 | 4,000 (CU) |
| TOTAL | 43,600 | 14,800 | 6,800 (CU) |
| TOPSOIL STOCKPILES REQUIRED | N/A | 8,800 | |
| NET SUB CONTRACTOR STOCKPILE REQUIRED | N/A | 8,800 | |
| TOPSOIL/SPIN STOCKPILE PROVIDED | N/A | 23,100 | |

- EARTHWORK NOTES**
1. EARTHWORK ANALYSIS IS PRELIMINARY AND FOR INFORMATION PURPOSES ONLY.
 2. ACTUAL EARTHWORK WILL VARY BASED ON SITE CONDITIONS AND MATERIAL USED.
 3. EARTHWORK ANALYSIS DOES NOT CONSIDER SOIL SHRINK OR SWELL.
 4. DESIGN PROFILES ARE NOT INCLUDED.

MISS UTILITY OF WEST VIRGINIA
1-800-245-4848
West Virginia State Law
Section 20C Chapter 24-C requires that you call for utilities **before** you dig in the state of West Virginia
IT'S THE LAW

SCALE IN FEET
0 100 200

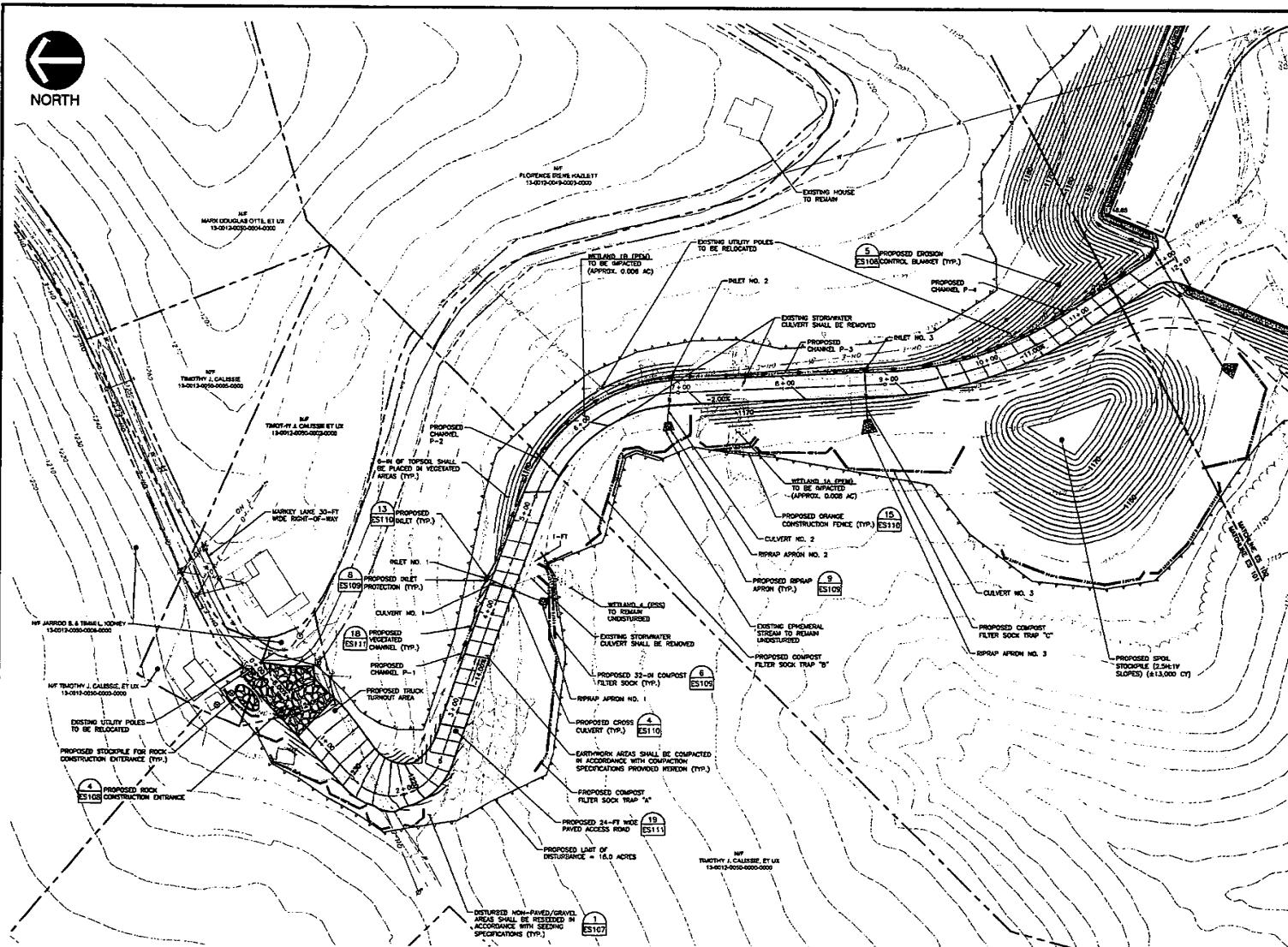
HAZLETT WELL PAD
UNION DISTRICT
JAMESHILL COUNTY, WEST VIRGINIA

CHEVRON APPALACHIA, LLC
PREPARED FOR
700 CHERIMON PARKWAY
CORAOPOLIS, PA 15108

OVERALL EROSION AND SEDIMENTATION CONTROL PLAN

Project Number: 158-755
Drawing Scale: 1"=100'
Date Issued: 03/05/2018
Inch Number:
Checked By: JAM
Project Manager: CRAFT

ES 100



LEGEND

| | |
|-----|-------------------------------------|
| --- | EXISTING WOOD RIGHT-OF-WAY |
| --- | EXISTING PROPERTY LINE |
| --- | EXISTING INDEX CONTOUR |
| --- | EXISTING INTERMEDIATE CONTOUR |
| --- | EXISTING PAVED ROADWAY |
| --- | EXISTING UNPAVED ROADWAY |
| --- | EXISTING GAS LINE |
| --- | EXISTING WATERLINE |
| --- | EXISTING TELECOMMUNICATIONS LINE |
| --- | EXISTING OVERHEAD ELECTRIC LINE |
| --- | EXISTING UNDERGROUND ELECTRIC LINE |
| --- | EXISTING STORMWATER CULVERT |
| --- | EXISTING FENCE |
| --- | EXISTING STREAM |
| --- | EXISTING WETLAND |
| --- | EXISTING TIE/DRAIN |
| --- | EXISTING RIPRAP |
| --- | EXISTING STRUCTURE |
| --- | EXISTING UTILITY POLE |
| --- | EXISTING WATER METER |
| --- | EXISTING WATER MANHOLE |
| --- | EXISTING GAS WELL |
| --- | PROPOSED LIMIT OF DISTURBANCE |
| --- | PROPOSED WELL HEAD AND CELLAR |
| --- | PROPOSED COMBINATION BERM |
| --- | PROPOSED GRASS |
| --- | PROPOSED ASPHALT PAVEMENT |
| --- | PROPOSED INDEX CONTOUR |
| --- | PROPOSED INTERMEDIATE CONTOUR |
| --- | PROPOSED WELL BAY CUT/PILL LINE |
| --- | PROPOSED SPOT ELEVATION |
| --- | PROPOSED COMPOST FILTER SOCK TRAP |
| --- | PROPOSED 18-IN COMPOST FILTER SOCK |
| --- | PROPOSED 24-IN COMPOST FILTER SOCK |
| --- | PROPOSED 32-IN COMPOST FILTER SOCK |
| --- | PROPOSED 36-IN COMPOST FILTER SOCK |
| --- | PROPOSED ROCK CONSTRUCTION ENTRANCE |
| --- | PROPOSED ROCK CONSTRUCTION ENTRANCE |
| --- | PROPOSED PILE PROTECTION |
| --- | PROPOSED EROSION CONTROL BLANKET |
| --- | EXISTING CHANNEL (TO BE UTILIZED) |
| --- | PROPOSED CHANNEL |
| --- | PROPOSED STORMWATER CULVERT |
| --- | PROPOSED PILE |
| --- | PROPOSED RIPRAP APRON |
| --- | PROPOSED UNDERDRAIN |
| --- | METAL HANGER |
| --- | GRADE DESIGNATION |

STREAM AND WETLAND NOTES

1. WETLAND BOUNDARIES ARE BEING REQUESTED FOR THE FOLLOWING FOUR (4) WETLANDS THAT ARE LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE. WETLAND 1A, 1B, 2, 3A, AND 3B. WETLANDS 1A AND 3A CROSS THE LIMIT OF DISTURBANCE AND ARE PARTIALLY PERMANENTLY IMPACTED.
2. THE FOLLOWING FOUR (4) WETLANDS AND (3) EPHEMERAL STREAMS ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE USACE WATERFOWL HARBOR 30 FOR PERMANENT BROWNS WETLAND 1A, 1B, 2, 3A, AND STREAMS 1B, 2, 3, AND 4 TO LITTLE ROCK CREEK.
3. THE STREAMS SHOWN HEREON OUTSIDE THE LIMIT OF DISTURBANCE ARE EPHEMERAL OR INTERMITTENT, AS SUCH, A HARBOR IS NOT BEING REQUESTED FOR PERMANENT STREAMS.
4. DIMENSIONS SHOWN HEREON ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

COMPACTION SPECIFICATIONS

1. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY WITHIN 8.5 PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR METHOD. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY WITHIN 8.5 PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR METHOD. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY WITHIN 8.5 PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR METHOD.
2. COMPACT ALL FILL AND ROADWAY SUBBASES AND EACH LIFT OF FILL MATERIAL TO BE COMPACTED TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY DENSITY WITHIN 8.5 PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR METHOD.

- REFERENCES**
1. STREAMS AND WETLANDS DELINEATED BY OIR & ENVIRONMENTAL CONSULTANTS, INC. DATED 02/21/2017.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE COOPERVILLE LTD. DATED 05/11/2017 TO 05/23/2017.
 3. TOPOGRAPHY WITHIN THE PROJECT AREA AND MARKED UTILITY FEATURES SURVEYED BY OIR & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/19/2017 TO 05/23/2017 AND 05/23/2017 TO 05/27/2017. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH NEXT WORTHY DATA, DATED 2003.
 4. PROPERTY BOUNDARIES WERE PROVIDED BY ONEWELL.

MISS UTILITY OF WEST VIRGINIA
 1-800-245-4848
 West Virginia State Law
 (Section 20A Chapter 24-C requires that you call the business days before you dig in the state of West Virginia.)
IT'S THE LAW

REVISION RECORD

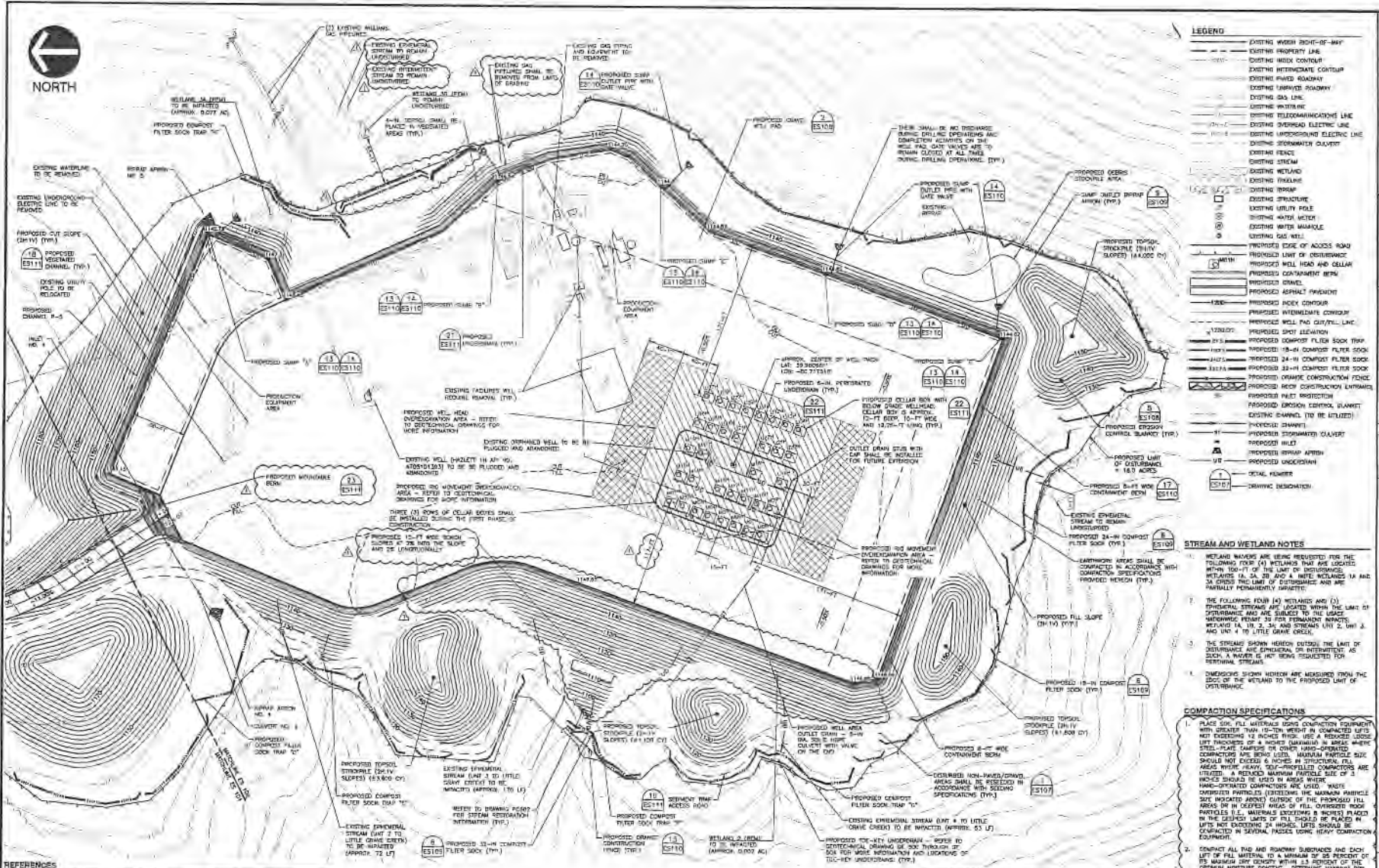
| Date | By | Issue |
|------|----|-------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

ES 101

HAZZLETT WELL PAD
 UNION DISTRICT
 MARSHALL COUNTY, WEST VIRGINIA
 PREPARED FOR:
CHEVRON APPALACHIA, LLC
 700 CHERRINGTON PARKWAY
 CORAOPOLIS, PA 15108

EROSION AND SEDIMENT CONTROL PLAN (1 OF 2)

Project Number: 164,295
 Drawing Scale: 1"=50'
 Date Issued: 01/20/18
 Issue Number:
 Drawn By: RDB
 Checked By: JAL
 Project Manager: DBOYT



LEGEND

- EXISTING WOOD RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING PLACED ROADWAY
- EXISTING FARMHOUSE ROADWAY
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING TELECOMMUNICATIONS LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING SEWER/STORM DRAINAGE
- EXISTING FENCE
- EXISTING STREAM
- EXISTING WETLAND
- EXISTING FENCELINE
- EXISTING TRAP
- EXISTING STRUCTURE
- EXISTING UTILITY POLE
- EXISTING WATER METER
- EXISTING WATER MANHOLE
- EXISTING GAS WELL
- PROPOSED EDGE OF ACCESS ROAD
- PROPOSED WELL HEAD AND CELLAR
- PROPOSED CONTAINMENT BERM
- PROPOSED DRIVE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED WELL PAD CITY/LLC LINE
- PROPOSED DIRT LEADING
- PROPOSED 18-IN COMPACT FILTER SOOK TRAP
- PROPOSED 24-IN COMPACT FILTER SOOK TRAP
- PROPOSED 30-IN COMPACT FILTER SOOK TRAP
- PROPOSED ORANGE CONSTRUCTION FENCE
- PROPOSED REEF CONSTRUCTION ENTRANCE
- PROPOSED PALET RESTRICTION
- PROPOSED DRAINAGE CONTROL BLANKET
- EXISTING CHANNEL (TO BE UTILIZED)
- PROPOSED CHANNEL
- PROPOSED STORMWATER CHAUVET
- PROPOSED HOLE
- PROPOSED BRUSH APRON
- PROPOSED UNDERDRAIN
- DETAIL FURNISH
- DRAINAGE RESTRICTION

STREAM AND WETLAND NOTES

- WETLAND WAIVERS ARE BEING REQUESTED FOR THE FOLLOWING FEET (4) WETLAND THAT ARE LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE. WETLAND WAIVER IS FOR PERMANENT IMPACTS, WETLAND 1A, 1B, 2, 3, 4, AND STREAMS 1B, 2, 3, 4, AND 4.4 TO LITTLE CHANE CREEK. AND ARE PARTIALLY PERMANENTLY DAMAGED.
- THE FOLLOWING FEET (4) WETLAND AND (3) PERMANENT STREAMS ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE LIMIT OF DISTURBANCE PERMIT IS FOR PERMANENT IMPACTS, WETLAND 1A, 1B, 2, 3, 4, AND STREAMS 1B, 2, 3, 4, AND 4.4 TO LITTLE CHANE CREEK.
- THE STREAMS SHOWN HEREIN OUTSIDE THE LIMIT OF DISTURBANCE ARE CONSIDERED AS INTERMITTENT AS SUCH A WAIVER IS NOT BEING REQUESTED FOR PERMANENT STREAMS.
- DISTURBANCE SHOWN HEREIN ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

COMPACTION SPECIFICATIONS

- PLACE SUE FILLS MATERIALS BEHIND CONVICTION EQUIPMENT WITH GREATER THAN 10-TON WEIGHT IN COMPACTED LIFT NOT EXCEEDING 12 INCHES THICK. USE A REDUCED LOOSE LIFT THICKNESS OF 4 INCHES (MAXIMUM) IN AREAS WHERE STEEL-PLATE ROLLERS OR OTHER HAND-OPERATED COMPACTORS ARE BEING USED. MAXIMUM PARTICLE SIZE SHOULD NOT EXCEED 6 INCHES IN STRUCTURAL FILL. ANGLES WHERE HEAVY, SELF-OPERATED COMPACTORS ARE UTILIZED, A REDUCED MAXIMUM PARTICLE SIZE OF 3 INCHES SHOULD BE USED IN AREAS WHERE HAND-OPERATED COMPACTORS ARE USED. WASTE COMPACTING MATERIALS EXCEEDING MAXIMUM PARTICLE SIZE INDICATED ABOVE OUTSIDE OF THE PROPOSED FILL SHOULD BE PLACED IN SEVERAL LIFTS. WASTE PARTICLES EXCEEDING 6 INCHES IN SIZE SHOULD BE PLACED IN SEVERAL LIFTS. WASTE SHOULD BE PLACED IN SEVERAL LIFTS USING HEAVY COMPACTION EQUIPMENT.
- CONTACT ALL THE AED ROADWAY SUBSTRATES AND EACH LIFT OF FILL MATERIAL TO MINIMUM OF 95 PERCENT OF ITS MAXIMUM DRY WEIGHT WITHIN 2.5 PERCENT OF THE OPTIMUM MOISTURE CONTENT. DETERMINE MAXIMUM DRY WEIGHT AND OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698 (STANDARD PROCTOR).

- REFERENCES**
- STREAMS AND WETLANDS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 02/22/2017.
 - UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICAL LTD. DATED 05/17/2017 TO 02/23/2017.
 - TOPOGRAPHY WITHIN THE PROJECT AREA AND ADJACENT UTILITY LOCATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 02/22/2017 TO 05/26/2017 AND 02/23/2017 TO 02/23/2017. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH WEST VIRGINIA 100' DATED 2002.
 - PROPERTY BOUNDARIES WERE PROVIDED BY CLIENT.

MISS UTILITY OF WEST VIRGINIA
 1-800-245-4848
 West Virginia State Sewer
 Division 24-C requires that you call before you dig in the state of West Virginia.
IT'S THE LAW

CCC
 Civil & Environmental Consultants, Inc.
 1400 Tenthon Lane, Suite 200 • Exeter, VA 24540
 754-871-5200 FAX 754-871-5315
 www.cccinc.com

PROFESSIONAL SEAL
 CIVIL ENGINEER
 1780
 STATE OF WEST VIRGINIA

| | | | |
|-----------------|-----|------------|-------------------|
| REVISION RECORD | NO. | DATE | DESCRIPTION |
| 1 | 01 | 02/22/2017 | ISSUE FOR PERMITS |
| 2 | 02 | 02/23/2017 | ISSUE FOR PERMITS |
| 3 | 03 | 02/23/2017 | ISSUE FOR PERMITS |
| 4 | 04 | 02/23/2017 | ISSUE FOR PERMITS |
| 5 | 05 | 02/23/2017 | ISSUE FOR PERMITS |
| 6 | 06 | 02/23/2017 | ISSUE FOR PERMITS |
| 7 | 07 | 02/23/2017 | ISSUE FOR PERMITS |
| 8 | 08 | 02/23/2017 | ISSUE FOR PERMITS |
| 9 | 09 | 02/23/2017 | ISSUE FOR PERMITS |
| 10 | 10 | 02/23/2017 | ISSUE FOR PERMITS |

HAZLETT WELL PAD
 UNION DISTRICT
 MARSHALL COUNTY, WEST VIRGINIA
 PREPARED FOR:
CHEVRON APPALACHIA, LLC
 700 CHERINGTON PARKWAY
 CORAOPOLIS, PA 15008

EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)

Project Number: 164,765
 Drawing Scale: 1"=50'
 Date Issued: 02/20/17
 Issue Number:
 Drawn By: RBE
 Checked By: JAM
 Project Manager: KSR

ES 102

ATTACHMENT D

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

17. DIRECTIONS TO THE SITE

From I-70 W, continue onto I-470 W, following signs for Columbus. Take Exit 1 for US 250 S/WV-2 S toward Moundsville. Drive 0.5 mile, turn left, and use the right 2 lanes to merge onto US-250 S/WV-2 S via the ramp to Moundsville. Drive 5.1 miles, and turn left onto 21st Street and then right onto Marshall Street. Marshall Street turns slightly left and becomes 23rd Street and then Riley Hill Road. Drive approximately 1 mile, and turn left onto WV-86 N/Grandview Road. Drive 0.5 mile, and turn right onto Markey Lane/CR-10.

18. Nature of Activity (Description of project, include all features)

Chevron Appalachia, LLC is proposing to expand an existing natural gas well pad site and widen the associated existing access road. The proposed limit of disturbance (LOD) is approximately 26 acres. The proposed project area includes an existing well pad and access road, residential areas, upland hay field, and wooded hillslopes. The project will require fill to be placed in 0.101 acre of palustrine emergent (PEM) wetlands and 288 linear feet of ephemeral streams.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of the project is to construct a natural gas well pad and access road for shale operations.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

The construction of the facility will require the placement of fill material into three unnamed tributaries (UNTs) to Little Grave Creek and four palustrine emergent (PEM) wetlands. These permanent impacts are associated with grading activities for expansion of the well pad and access road. Underdrains are being installed beneath the proposed fill slopes to maintain stream flow.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

| Type Amount in Cubic Yards | Type Amount in Cubic Yards | Type Amount in Cubic Yards |
|--|--|-------------------------------|
| 390 CY of earthen material into wetlands | 80 CY of earthen material into streams | N/A |

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres 0.101 acre of PEM wetlands
or
Linear Feet 288 linear feet of ephemeral streams

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Chevron analyzed numerous on-site configurations for the siting of the facility, and the proposed site plan represents the layout which minimizes impacts to the furthest extent while still meeting the project's purpose and need. Grading was minimized to avoid impacts to UNTs 1, 5, 6, and 7 to Little Grave Creek and Wetlands 3B and 4. Orange construction fencing will be installed around the downstream portions of UNTs 1, 2, 3, and 6 to Little Grave Creek to avoid additional impacts.

24. Agency Portals of the Work Activity Described in Block 11. IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If Applicable) and with whom you have communicated.

a. Address- See attached table.

City - State Zip -

b. Address-

City - State Zip -

c. Address-

City - State Zip -

d. Address-

City - State Zip -

e. Address-

City - State Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State or Local Agencies for Work Described in This Application.

| AGENCY | TYPE APPROVAL* | IDENTIFICATION NUMBER | DATE APPLIED | DATE APPROVED | DATE DENIED |
|-----------|----------------------|-----------------------|---------------|---------------|-------------|
| WVDNR OLS | Right of Entry | Not yet assigned | December 2017 | Pending | |
| WVDEP | Horizontal 6A Well P | Not yet assigned | Pending | Pending | |

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant

Jenny Hayes
SIGNATURE OF APPLICANT

1-15-18
DATE

Malroy A. Owens
SIGNATURE OF AGENT

1/15/18
DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that Whoever in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

4705102100

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 Union Moundsville, WV 26041
Operator ID County District Quadrangle

2) Operator's Well Number: 8H Well Pad Name: Hazlett

3) Farm Name/Surface Owner: Hazlett Public Road Access: CR 10 Markey Lane

4) Elevation, current ground: 1148' Elevation, proposed post-construction: 1144'

5) Well Type (a) Gas Oil Underground Storage

Other _____

(b) If Gas Shallow Deep

Horizontal

6) Existing Pad: Yes or No Yes

JW
6/26/18

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6150', 50' thick; pore pressure gradient 0.64 psi/ft

8) Proposed Total Vertical Depth: 6,170

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 21,778

11) Proposed Horizontal Leg Length: 14,472

12) Approximate Fresh Water Strata Depths: 541' below GL

13) Method to Determine Fresh Water Depths: Deepest known water well w/in 3 mi radius

14) Approximate Saltwater Depths: Potential Brine @ 1754 ft and 2066 ft below GL

15) Approximate Coal Seam Depths: Pittsburgh Coal top @ 624 ft below GL

16) Approximate Depth to Possible Void (coal mine, karst, other): 624 ft below GL

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: _____

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

18) **CASING AND TUBING PROGRAM**

| TYPE | <u>Size (in)</u> | <u>New or Used</u> | <u>Grade</u> | <u>Weight per ft. (lb/ft)</u> | <u>FOOTAGE: For Drilling (ft)</u> | <u>INTERVALS: Left in Well (ft)</u> | <u>CEMENT: Fill-up (Cu. Ft.)/CTS</u> |
|--------------|------------------|--------------------|--------------|-------------------------------|-----------------------------------|-------------------------------------|--------------------------------------|
| Conductor | 30" | New | | | 50' | 50' | CTS |
| Fresh Water | 20" | New | J-55 | 94 | 591' | 591' | CTS |
| Coal | 13-3/8" | New | J-55 | 54.5 | 724' | 724' | CTS |
| Intermediate | 9-5/8" | New | L-80 | 40 | 2,116' | 2,116' | CTS |
| Production | 5-1/2" | New | P-110 | 20 | 21,778' | 21,778' | 2,616' (500' below 9-5/8" shoe) |
| Tubing | | | | | | | |
| Liners | | | | | | | |

6/26/18

| TYPE | <u>Size (in)</u> | <u>Wellbore Diameter (in)</u> | <u>Wall Thickness (in)</u> | <u>Burst Pressure (psi)</u> | <u>Anticipated Max. Internal Pressure (psi)</u> | <u>Cement Type</u> | <u>Cement Yield (cu. ft./k)</u> |
|--------------|------------------|-------------------------------|----------------------------|-----------------------------|---|--------------------|---------------------------------|
| Conductor | 30" | 36" | | | | | |
| Fresh Water | 20" | 26" | 0.438" | 2,110 | | Class A | 1.2 |
| Coal | 13-3/8" | 17-1/2" | 0.38" | 2,730 | 400 | Class A | 1.19 |
| Intermediate | 9-5/8" | 12-3/8" to 12-1/4" | 0.395" | 5,750 | 500 | Class A | 1.19 |
| Production | 5-1/2" | 8-1/2" to 8-3/4" | 0.361" | 14,360 | 2050 | Class A, G, or H | 1.25 |
| Tubing | | | | | | | |
| Liners | | | | | | | |

PACKERS

| | | | | |
|-------------|--|--|--|--|
| Kind: | | | | |
| Sizes: | | | | |
| Depths Set: | | | | |

RECEIVED
 Office of Oil and Gas
 AUG 3 2018
 WV Department of
 Environmental Protection

4705 02100
6/26/18

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 6,170'. 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): 25.6

22) Area to be disturbed for well pad only, less access road (acres): 15

23) Describe centralizer placement for each casing string:

Surface: (1) on shoe track w/ stop collar & (1) per jt to surface; Intermediate: (1) on shoe track w/ stop collar & (1) per 3 jts; Production String: (1) centralizer every jt from TMD to planned TOC & (1) every other joint from planned TOC 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 coal will contain class A cement, 3% CaCl₂, Salt, 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.

will be EOP
Held Circulated
mud properties are
AUG 3 2018
WV Department of
Environmental Protection

*Note: Attach additional sheets as needed.

4705702100

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.

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection



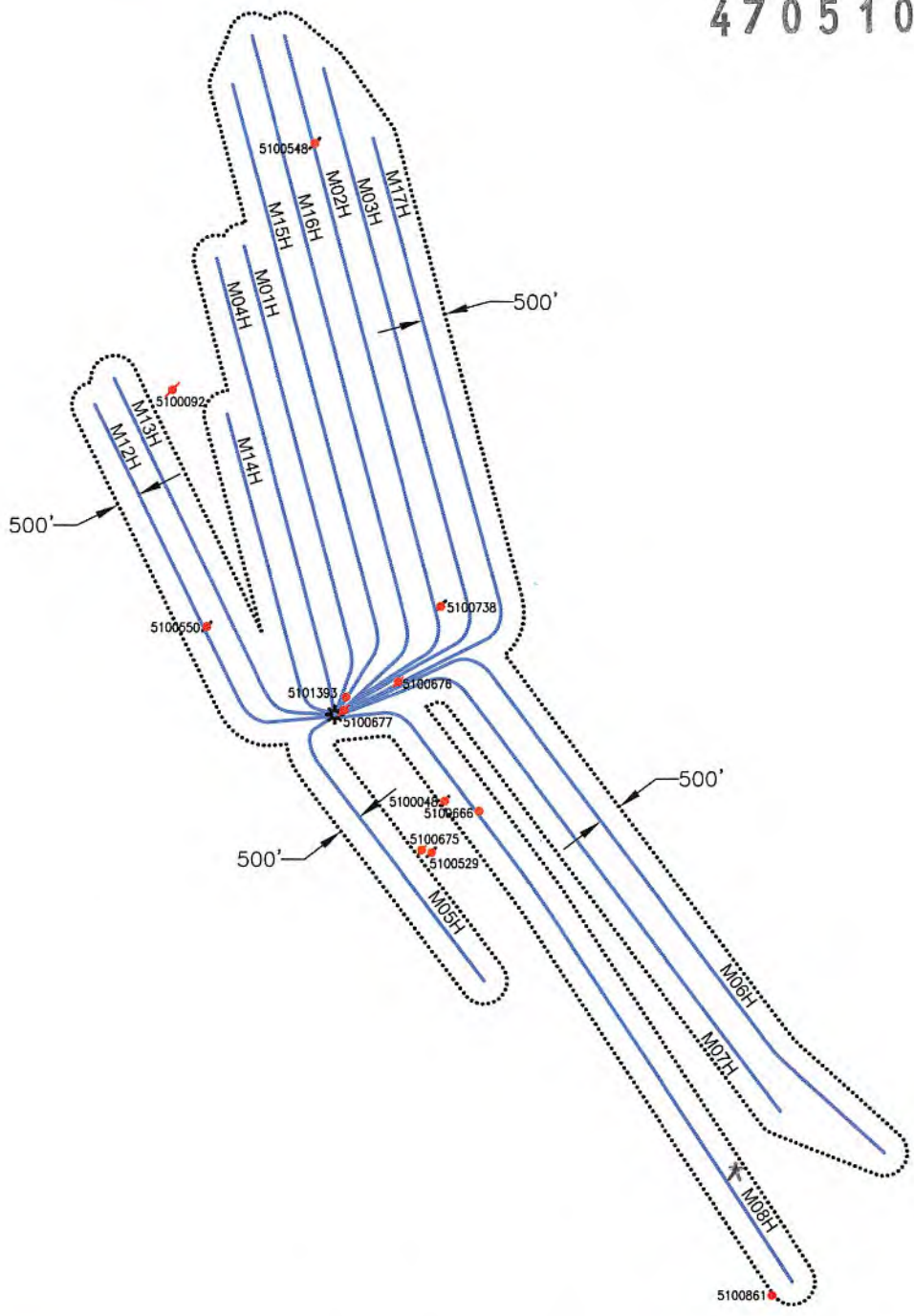
Hazlett M08H

4705102100

| Permit# | | Union District, Marshall Co, WV | | | | Ground Level Elev. (ft above SL): | | 1144 | |
|--|--|---|---------|--------------|-------------------------------------|-----------------------------------|-----------------|--|--|
| 6/5/2018 14:49 | | | | | | **All depths below reference GL** | | | |
| DRILLING FLUID / BIT TYPE / TFA | CENTRALIZER PROGRAM | CASING SIZE / FORMATION | DEPTH | | WELLHEAD DESIGN FMC UH-S 13 5/8" | HOLE SIZE (IN) | HOLE DEPTH (FT) | CASING SPECS | CEMENT PROGRAM |
| | | | MD (FT) | TVD (FT) | | | | | |
| Core Barrel / Auger | 2 Bowspring per jt | 30" Conductor | 50 | 50 | INC AZM | 36 | 50 | Conductor 30" 118.2# X-42 29.25 Minimum 40 ft from GL or at least 10 ft into bedrock | Grout to Surface |
| Air DRL with Mist and additives / 26" Hammer | Bow Spring: (1) on shoe track w/ stop collar & (1) per jt over coupling to surface | 20" Casing | 591 | 591 | | 26 | 621 | Surface Casing 20" 94# J-55 BTC 0.436" Wall Coupling OD (in) 21.000 ID (in) 19.124 Drift ID (in) 18.937 Burst (psi) 2110 Collapse (psi) 520 Yield (Jt Strength 1,000 lbs) 1402 Capacity (bbl/ft) 0.3553 Annulus (bbl/ft) 0.2681 | Surface Blend (Class A) Cement to surface 30% Excess |
| Air DRL with Mist and additives | Bow Spring: (1) on shoe track w/ stop collar & (1) per jt over coupling (1) installed 100 ft from surface Basket Placement Secured w/ (2) lock rings above and (1) below | Basket Placement Top of Coal Deepest Coal | 724 | 724 | | 17.50 | 754 | Coal String 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) 2730 Collapse (psi) 1130 Yield (Jt Strength 1,000 lbs) 853 | Intermediate I Blend (Class A) Cement grout to surface Shoe Job Vol. (50% Excess) Grout Job Vol. (100% Excess) |
| Air DRL with Mist and additives | Bow Spring: (1) on shoe track w/ stop collar & (1) per 3 jts over coupling | 13-3/8" Casing | 2,116 | 2,116 | | 12.25 | 2,176 | Intermediate Casing 9-5/8" 40# L-80IC BTC 0.395" Wall Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.675 Burst (psi) 5750 Collapse (psi) 3080 Yield (Jt Strength 1,000 lbs) 916 | Intermediate II Blend (Class A) Cement to surface 30% Excess |
| | Surface - TOC (1) per every other jt TOC-Curve KOP (1) per jt of csg Curve KOP-TMD (1) per jt of csg 10' Marker Jt of Csg 100' above KOP | KOP | | | | 8.5 to 8.75 | | Production Casing 5-1/2" 20# P110EC DW/C-IS-Plus .361" Wall Coupling OD (in) 6.300 ID (in) 4.778 Drift ID (in) 4.653 Burst (psi) 14350 Collapse (psi) 12090 Yield (Jt Strength 1,000 lbs) 729 | Production Lead Slurry (Class A, G, H) Cement top approximately 500' below 9-5/8" shoe |
| Planned MW: 11.5ppg SBM - 12.5ppg SBM | Float Equip. (2) jts of Csg Float Equip. | Est. BHT deg. F 5-1/2" Casing | 21,778 | 144 6,170 | | 8.500 | 21,793 | | |

RECEIVED
 Office of Oil and Gas
 AUG 3 2018
 WV Department of Environmental Protection
 6/25/18

4705102100



RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection


Blue Mountain Inc.
10125 MASON DIXON HIGHWAY
BURTON, WV 26562
PHONE: (304) 662-6486

PREPARED FOR:
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

LEGEND
 - WELL LOCATION
 - ACTIVE WELL
 - PLUGGED WELL
 - ABANDON WELL

HAZLETT
AREA OF REVIEW MAP
MARSHALL COUNTY
UNION DISTRICT
WEST VIRGINIA

TOPO QUAD: MOUNDSVILLE, WV
SCALE: 1" = 4000'
DATE: MAY 4, 2018

4705102100

| Well ID | Prior Operator On Record | Operator - DEP | Status | Latitude | Longitude | Vertical ID | Producing Formation | Producing Zones (NOT Reported) |
|--------------|----------------------------|----------------------------|-----------|-----------|------------|-------------|---------------------|--------------------------------|
| 47-051-00548 | PACE, PREBLE & BOWER INC. | PACE, PREBLE & BOWER INC. | PLUGGED | 39.994422 | -80.719818 | UNKNOWN | BEREA SANDSTONE | UNKNOWN |
| 47-051-00738 | MID-CON PETROLEUM CO., INC | MID-CON PETROLEUM CO., INC | PLUGGED | 39.967281 | -80.709460 | 1100' | COW RUN SANDSTONE | UNKNOWN |
| 47-051-01393 | CHIEF OIL & GAS LLC | CHEVRON APPALACHIA LLC | ACTIVE | 39.961821 | -80.716665 | 6250' | MARCELLUS SHALE | UNKNOWN |
| 47-051-00677 | COLEMAN, C R | UNIVERSAL MINERAL, INC. | ABANDONED | 39.961040 | -80.716806 | 3100' | GORDON SANDSTONE | UNKNOWN |
| 47-051-00676 | COLEMAN, C R | UNIVERSAL MINERAL, INC. | ABANDONED | 39.962782 | -80.712662 | 3100' | GORDON SANDSTONE | UNKNOWN |
| 47-051-00092 | RUDDER OIL & GAS | CONLEY & ASSOC | ABANDONED | 39.979762 | -80.730517 | UNKNOWN | UNKNOWN | UNKNOWN |
| 47-051-00650 | PACE, PREBLE & BOWER INC. | PACE, PREBLE & BOWER INC. | PLUGGED | 39.965829 | -80.727542 | 2512' | BIG INJUN | UNKNOWN |
| 47-051-00048 | WASMUTH - CALLAHAN GAS CO. | WASMUTH - CALLAHAN GAS CO. | PLUGGED | 39.955803 | -80.708895 | 1626 | BIG INJUN | UNKNOWN |
| 47-051-00666 | COLEMAN, C R | UNIVERSAL MINERAL, INC. | ABANDONED | 39.955223 | -80.706218 | 2700' | GORDON SANDSTONE | UNKNOWN |
| 47-051-00675 | COLEMAN, C R | UNIVERSAL MINERAL, INC. | ABANDONED | 39.952901 | -80.710590 | 2700' | GORDON SANDSTONE | UNKNOWN |
| 47-051-00529 | PACE-BOWER CONSTRUCTION | PACE-BOWER CONSTRUCTION | PLUGGED | 39.952756 | -80.709837 | 1624' | BIG INJUN | UNKNOWN |
| 47-051-00861 | CNX GAS COMPANY, LLC | CNX GAS COMPANY, LLC | ACTIVE | 39.927045 | -80.682911 | 378' | PITTSBURGH | UNKNOWN |

RECEIVED
Office of Oil and Gas
AUG 7 2018
WV Department of
Environmental Protection

4705102100

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 49449935

Watershed (HUC 10) Short Creek - Ohio River 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 (if selected provide a completed form WW-9-GPP)
- 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 from 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) N/A

-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 April 1, 2016, 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 _____

Company Official (Typed Name) Jenny Hayes

Company Official Title Permitting Team Lead

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

Subscribed and sworn before me this 27th day of June, 2018

Notary Public

Commonwealth of Pennsylvania
County of Allegheny

My commission expires September 17, 2018

Commonwealth of Pennsylvania - Notary Seal
Laura Savage, Notary Public
Allegheny County
My commission expires September 17, 2018
Commission number 1285773
Member, Pennsylvania Association of Notaries

~~4705-02100~~

Proposed Revegetation Treatment: Acres Disturbed 15.4 Prevegetation pH Per soils testing report

Lime 3 Tons/acre or to correct to pH unless otherwise noted in soils report

Fertilizer type 10-20-20

Fertilizer amount 300 lbs/acre

Mulch 3, 5 for winter stabilization 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, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Jim Unkester*

Comments: _____

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

Title: Oil & Gas Inspector

Date: 6/26/18

Field Reviewed? () Yes () No

4705 + 02100

| SEED MIXTURE | | | | |
|-----------------|----|----------|-----------------------------------|----------|
| Temporary | | | Permanent | |
| Seed Type | | Lbs/Acre | Seed Type | Lbs/Acre |
| Annual Ryegrass | or | 50 | Hayfield, Pastureland, & Cropland | |
| Winter Wheat | | 75 | Orchard Grass | 80 |
| | | | Timothy | 80 |
| | | | Birdsfoot – Trefoil | 20 |
| | | | Ladino Clover | 20 |

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection



Chevron

**Appalachian LLC
WV Well Site Safety Plan
Pad: Hazlett Pad A
Well # M08H**

**28 Timmi Lane
Glen Dale, WV 26038
Glen Dale District
Marshall County, WV**

JN 7/19/18

**Access Point – [39.964486°N, 80.719328°W]
Well Site – [39.961756°N, 80.717081°W]
Marshall County, West Virginia**

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection



WATER SUPPLY EXHIBIT HAZLETT PAD A BATCH #2



4705 + 02100



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LOT OWNERS

| Label | Owner | TM | Label | Owner | TM | Label | Owner | TM | Label | Owner | TM |
|-------|-------------------------------|----------------------|-------|------------------------------|-----------------------|-------|------------------------------|----------------------|-------|----------------------------|----------------------|
| A | KEY GLADYS E - LIFE | 25-13 12002700000000 | N | OTTE MICHAEL P | 25-13 12003100000000 | AB | CALISSIE TIMOTHY J | 25-13 12005000050000 | AO | OTTE HUBERT C ET AL | 25-13 12004300000000 |
| B | OTTE MARK DOUGLAS ET UX | 25-13 12005000040000 | O | OTTE HUBERT CHAS & JANE E | 25-13 12003300010000 | AC | KIDNEY JARROD S & TIMMI L | 25-13 12005000060000 | AP | HAZLETT IRENE - LIFE | 25-13 12004700000000 |
| C | OTTE MICHAEL P & DENISE A | 25-13 12003500010000 | P | OTTE MARK D | 25-13 12003300000000 | AD | MAST LEVI E ET AL | 25-13 12005100000000 | AQ | KOSKI TEDDY F & EMMA JANE | 25-13 12004800030000 |
| D | ANGEL ADAM S JR | 25-13 11006100000000 | Q | OTTE MARK D & KELLY J | 25-13 12003500000000 | AE | MCCINTOCK LARRY L & ALICIA S | 25-14 10016000040000 | AR | RHODES LISA & NORMAN L | 25-13 12004800040000 |
| E | LEACH CHARLES L JR | 25-13 12005000070000 | R | GLENDALE CITY OF | 25-13 12004400000000 | AF | YODER ELI A ET AL | 25-14 10016000000000 | AS | YODER ELI A ET AL | 25-14 10016000010000 |
| F | CALISSIE TIMOTHY J ET UX | 25-13 12005000020000 | S | GLEN DALE TOWN OF | 25-13 12004500000000 | AG | KOSKI TEDDY F ET UX | 25-14 10017000000000 | AT | YODER ELI A ET AL | 25-14 10016000020000 |
| G | KIDNEY JARROD S & TIMMI L | 25-13 12005000080000 | T | HAZLETT IRENE - LIFE | 25-13 12004600000000 | AH | SPRINGER BARBARA K | 25-13 12005000010000 | AU | NGUYEN LAMSON N ET UX | 25-14 10016000030000 |
| H | KURELAC PATRICIA A | 25-13 12003600000000 | U | HAZLETT FLORENCE IRENE- LIFE | 25-13 120046000010000 | AI | VOELLINGER JOHN B LORI | 25-13 12005000090000 | AV | SPRINGER BARBARA K | 25-13 12004900050000 |
| I | REILLY JOHN WILLIAM III ET AL | 25-13 12001400000000 | V | HAZLETT IRENE - LIFE | 25-13 12004900000000 | AJ | LINZY LINDA A | 25-13 12004800020000 | AW | LINZY LINDA A | 25-13 12004800020000 |
| J | HAZLETT FLORENCE IRENE - LIFE | 25-13 12004900030000 | W | HAZLETT MICHAEL C - LIFE | 25-13 120049000010000 | AK | VICKERS MARY E EST | 25-13 12004800000000 | AX | MARSHALL COUNTY PARK & REC | 25-14 30001000000000 |
| K | OTTE HUBERT CHAS & JANE E | 25-13 12003300000000 | X | HAZLETT MICHAEL C - LIFE | 25-13 120049000020000 | AL | VICKERS THOMAS D & JANET E | 25-13 12004800010000 | AY | MARSHALL COUNTY PARK & REC | 25-14 30001000000000 |
| L | BURCH LESTER M ET UX | 25-13 12002600000000 | Y | CALISSIE TIMOTHY J ET UX | 25-13 12005000000000 | AM | ROBINSON GARY A | 25-13 12004300010000 | AZ | OTTE HUBERT C ET AL | 25-14 30002000000000 |
| M | OTTE THOMAS L ET AL - LIFE | 25-13 12002800000000 | AA | CALISSIE TIMOTHY J ET UX | 25-13 12005000030000 | AN | RICHARDS CHRISTINE | 25-13 12004200010000 | Z | OTTE HUBERT C ET AL | 25-14 30002000000000 |

Surface Owner: IRENE HAZLETT
 Oil/Gas Owner: IRENE HAZLETT
 Well Operator: CHEVRON APPALACHIA, LLC
 Address: 700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108
 Phone: 724-564-3700

County: MARSHALL
 Township: GLEN DALE, 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\FPS\GIS\Water_Sources\Hazlett_Pad_A\Hazlett_Pad_A_WaterSupplyExhibit_Batch2.mxd - Scale: 1:65,840 - 5/7/2018 8:46:25 AM - C:\swat - NAD 1983 StatePlane West Virginia North FIPS 4701 Feet



Water Supply Exhibit
Hazlett Pad A Batch #2



| No. | WATER PURVEYOR | SUPPLY | ELEV. | ADDRESS | PHONE # |
|-----|---|--------|-------|-------------------------------|--------------|
| 1 | VICKERS THOMAS D & JANET E | Creek | 766 | 1526 LITTLE GRAVE CREEK DRIVE | 304-845-4568 |
| 2 | OTTE, MICHAEL; OTTE, MARK; OTTE, HUBERT & JANE; KEY, GLADYS | Spring | 1,167 | 224 MARKEY HILL LANE | 304-232-0478 |
| 3 | KEY GLADYS E - LIFE | Spring | 1,179 | 1875 GLEN DALE HIGHTS ROAD | 304-312-1408 |
| 4 | OTTE, MICHAEL; OTTE, MARK; OTTE, HUBERT & JANE; KEY, GLADYS | Spring | 1,169 | 224 MARKEY HILL LANE | 304-232-0478 |
| 5 | OTTE MICHAEL P & DENISE A | Spring | 1,192 | 26 JOHN DEERE DRIVE | 304-312-9337 |
| 6 | OTTE, MICHAEL; OTTE, MARK; OTTE, HUBERT & JANE; KEY, GLADYS | Spring | 1,173 | 224 MARKEY HILL LANE | 304-232-0478 |
| 7 | OTTE MICHAEL P & DENISE A | Spring | 1,199 | 26 JOHN DEERE DRIVE | 304-312-9337 |
| 8 | MCCLINTOCK LARRY L & ALICIA S | Well | 718 | 1456 LITTLE GRAVE CK DRIVE | 304-810-0571 |
| 9 | OTTE MICHAEL P | Well | 1,349 | 26 JOHN DEERE DRIVE | 304-312-9337 |
| 10 | REILLY JOHN WILLIAM III ET AL | Well | 1,160 | 80 RED FARM LANE | 304-233-7824 |

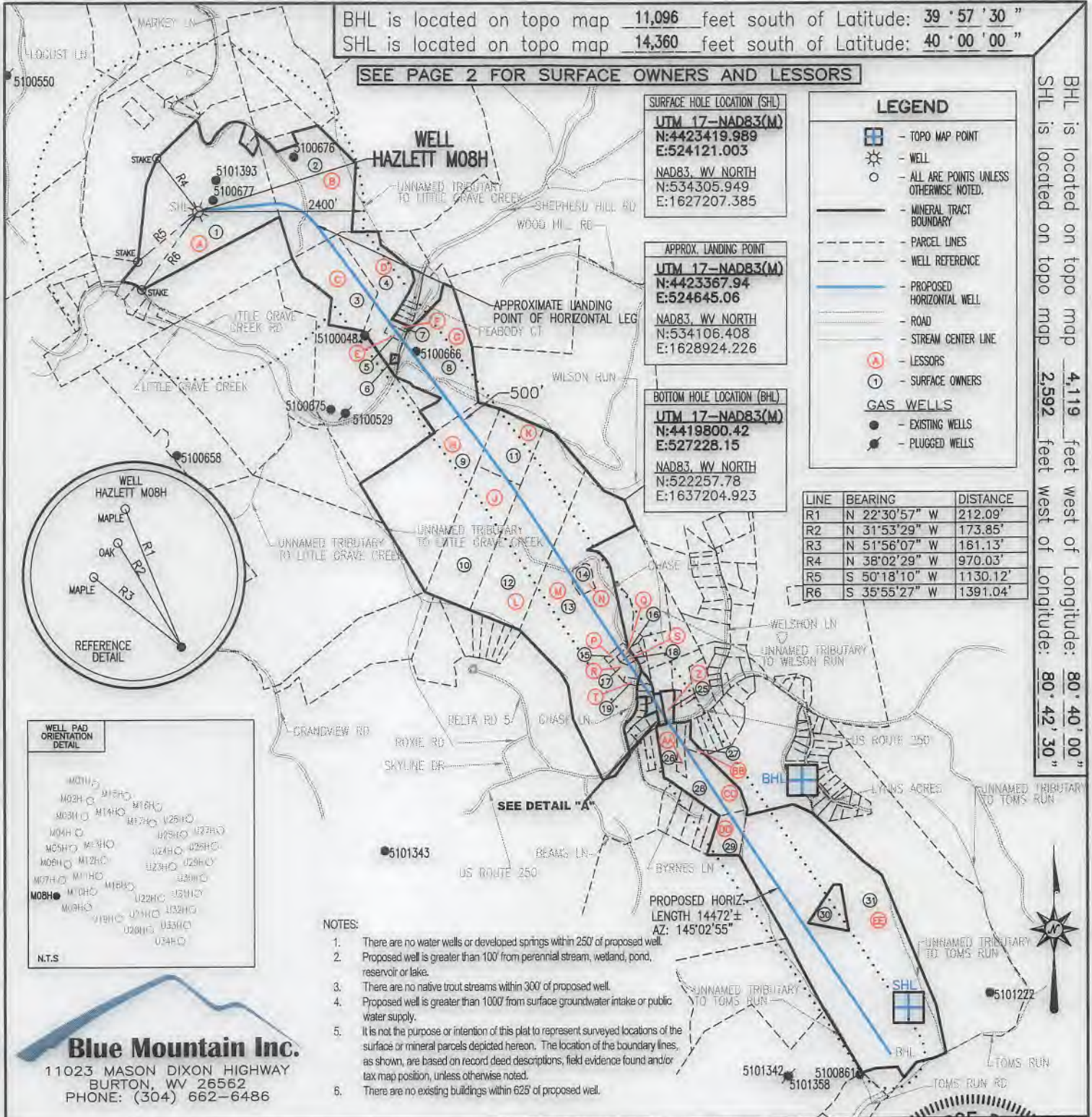
| No. | SUPPLY COORDINATES | M12H | M13H | M14H | M15H | M16H | M17H | | |
|-----|-----------------------------------|-------|-------|-------|-------|-------|-------|--|--|
| 1 | 39°57'23.25240"N 80°43'11.50320"W | 1,677 | 1,693 | 1,723 | 1,738 | 1,740 | 1,725 | | |
| 2 | 39°58'00.68520"N 80°43'06.23640"W | 2,271 | 2,258 | 2,230 | 2,217 | 2,231 | 2,245 | | |
| 3 | 39°58'02.65440"N 80°43'17.77080"W | 2,719 | 2,708 | 2,687 | 2,676 | 2,698 | 2,709 | | |
| 4 | 39°58'05.77200"N 80°43'11.60400"W | 2,854 | 2,842 | 2,816 | 2,804 | 2,821 | 2,834 | | |
| 5 | 39°58'07.12560"N 80°42'53.30160"W | 2,998 | 2,983 | 2,953 | 2,938 | 2,941 | 2,956 | | |
| 6 | 39°58'11.03880"N 80°43'12.64800"W | 3,392 | 3,379 | 3,353 | 3,341 | 3,357 | 3,370 | | |
| 7 | 39°58'11.79480"N 80°42'54.45000"W | 3,440 | 3,425 | 3,395 | 3,380 | 3,385 | 3,400 | | |
| 8 | 39°57'23.72400"N 80°43'40.66680"W | 3,305 | 3,316 | 3,338 | 3,349 | 3,370 | 3,359 | | |
| 9 | 39°58'07.43880"N 80°43'00.60240"W | 2,943 | 2,928 | 2,899 | 2,885 | 2,894 | 2,908 | | |
| 10 | 39°58'15.08160"N 80°43'50.22120"W | 5,238 | 5,232 | 5,219 | 5,212 | 5,240 | 5,246 | | |

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

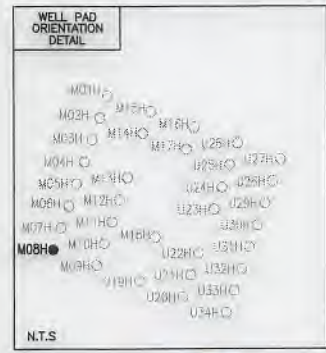
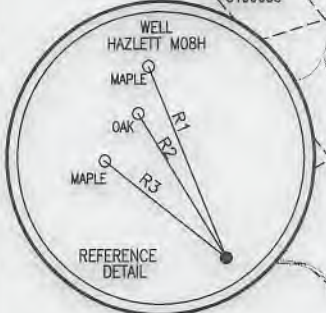
*ELEVATIONS SHOWN ARE INTERPOLATED FROM LIDAR TOPO AND SUPPLY COORDINATES ARE FROM OTHERS.

BHL is located on topo map 11,096 feet south of Latitude: 39° 57' 30"
 SHL is located on topo map 14,360 feet south of Latitude: 40° 00' 00"

SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS



BHL is located on topo map 4,119 feet west of Longitude: 80° 40' 00"
 SHL is located on topo map 2,592 feet west of Longitude: 80° 42' 30"



NOTES:

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

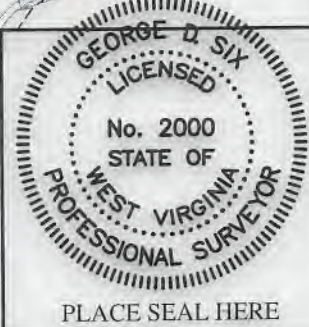
PROPOSED HORIZ. LENGTH 14472±
 AZ: 145°02'55"

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

FILE #: HAZLETT M08H
 DRAWING #: HAZLETT M08H
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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

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



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



DATE: MAY 09, 2018
 OPERATOR'S WELL #: HAZLETT M08H
 API WELL #: 47 51 02100
 STATE COUNTY PERMIT

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

WATERSHED: SHORT CREEK-OHIO RIVER ELEVATION: 1148.00'

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

SURFACE OWNER: IRENE HAZLETT-LIFE ACREAGE: 77.24±

OIL & GAS ROYALTY OWNER: DONALD BOYD YOHO, KELLY ANN WEASE, ZANE EDWARD NEILSEN, NANCY A. BAKER, LARRY JOHN MCCrackEN, PATRICIA ANN MCCrackEN, ROBERT JAY MCCrackEN, FLORENCE HAZLETT ET AL ACREAGE: 584.161±

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: 6,200'± TMD: 21,777.72'±

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

HAZLETT

M08H

PAGE 2 OF 2

| | SURFACE OWNER | DIST-TM/PAR |
|----|---------------------------------|-------------|
| 1 | IRENE HAZLETT-LIFE | 13-12/49 |
| 2 | CITY OF GLENDALE | 13-12/44 |
| 3 | HUBERT C. OTTE ET AL | 13-12/43 |
| 4 | GARY A. ROBINSON | 13-12/43.1 |
| 5 | DAVID R. & JOAN M. BURKETT | 13-12/42.2 |
| 6 | SAMUEL RICHARD DERROW ET UX | 13-12/42.8 |
| 7 | DAVID R. & JOAN M. BURKETT | 13-12/42.5 |
| 8 | DAVID R. BURKETT ET UX | 14-3/5 |
| 9 | HUBERT C. OTTE ET AL | 14-3/44 |
| 10 | DONNA L. CLAYTON | 14-3/42 |
| 11 | DONALD HILL | 14-3/43 |
| 12 | DONNA L. CLAYTON | 14-3/41 |
| 13 | DENNIS G. O'NEIL ET UX | 14-3/40 |
| 14 | GARRETT D. O'NEIL | 14-3/40.3 |
| 15 | ARCHIE KURTIS & SABRINA STEVEY | 14-3B/19 |
| 16 | MICHAEL SNEIGLE | 14-3B/15 |
| 17 | DANIEL L. STEVEY ET UX | 14-3B/21 |
| 18 | ARCHIE K. & SABRINA STEVEY | 14-3B/14 |
| 19 | DAVID L. & MALINDA L. STEVEY | 14-3B/16 |
| 20 | WILLIAM L. BANDY ET UX | 14-3B/11 |
| 21 | RONALD D. & SANDRA SUE MARTIN | 14-3B/10 |
| 22 | NANCY S. & CHAD M. DAVIS | 14-3B/9 |
| 23 | *HARRY LEE SNEIGLE - LIFE | 14-3B/20 |
| 24 | SANDREA M. SCHANE | 14-3/35 |
| 25 | DAVID W. & DENISE ARMS | 14-3/33 |
| 26 | OLLIE C. HUGGINS | 14-7/31.1 |
| 27 | WANDA K. SULLIVAN | 14-7/32 |
| 28 | HAROLD C. SCHWING ET UX | 14-7/31 |
| 29 | MICHAEL J. & ANGELA PHILLIPS | 14-7/30 |
| 30 | WHEELING POWER CO. | 14-7/42.1 |
| 31 | WILLIAM H., III & LINDA BARDALL | 14-7/42 |

| | LESSOR | DIST-TM/PAR |
|----|---------------------------|-------------|
| A | DONALD BOYD YOHO | 13-12/49 |
| | KELLY ANN MEASE | |
| | ZANE EDWARD NEILSEN | |
| | NANCY A. BAKER | |
| | LARRY JOHN MCCrackEN | |
| | PATRICIA ANN MCCrackEN | |
| | ROBERT JAY MCCrackEN | |
| | FLORENCE HAZLETT ET AL | |
| B | JOHN CARL HAZLETT | 13-12/44 |
| | FLORENCE HAZLETT | |
| C | RICHARD JOSEPH OTTE | 13-12/43 |
| | CAROLINE PENTZIEH | |
| | PATRICIA GAIL FOSTER | |
| | NANCY JEAN CUNNINGHAM | |
| | REBECCA ANN YOHO | |
| | HUBERT C. OTTE ET UX | |
| | MICHAEL P. OTTE | |
| | MARK DOUGLAS OTTE | |
| D | GARY A. ROBINSON | 13-12/43.1 |
| E | DAVID & JOAN BURKETT | 13-12/42.2 |
| F | DAVID & JOAN BURKETT | 13-12/42.5 |
| G | DAVID & JOAN BURKETT | 14-3/5 |
| H | RICHARD JOSEPH OTTE | 14-3/44 |
| | CAROLINE PENTZIEH | |
| | PATRICIA GAIL FOSTER | |
| | NANCY JEAN CUNNINGHAM | |
| | REBECCA ANN YOHO | |
| | HUBERT C. OTTE ET UX | |
| | MICHAEL P. OTTE | |
| | MARK DOUGLAS OTTE | |
| J | DONNA L. CLAYTON | 14-3/42 |
| K | DONALD HILL | 14-3/43 |
| L | DONNA L. CLAYTON | 14-3/41 |
| M | DENNIS O'NEIL ET UX | 14-3/40 |
| N | GARRET D. O'NEIL | 14-3/40.3 |
| P | DENNIS O'NEIL ET UX | 14-3B/19 |
| Q | DENNIS O'NEIL ET UX | 14-3B/15 |
| R | DENNIS O'NEIL ET UX | 14-3B/21 |
| S | DENNIS O'NEIL ET UX | 14-3B/14 |
| T | DENNIS O'NEIL ET UX | 14-3B/16 |
| U | DENNIS O'NEIL ET UX | 14-3B/11 |
| V | DENNIS O'NEIL ET UX | 14-3B/10 |
| W | DENNIS O'NEIL ET UX | 14-3B/9 |
| X | *DENNIS O'NEIL ET UX | 14-3B/20 |
| Y | THOMAS L. SCHANE ET UX | 14-3/35 |
| Z | BRIDGET MARIE CARMICHAEL | 14-3/33 |
| AA | OLLIE C. HUGGINS | 14-7/31.1 |
| BB | WANDA K. SULLIVAN | 14-7/32 |
| CC | HAROLD C. SCHWING ET UX | 14-7/31 |
| DD | MICHAEL J. PHILLIPS ET UX | 14-7/30 |
| EE | EDWARD LOUIS LEHASKY JR. | 14-7/42 |
| | ELLEN BEAM RUDY ET VIR | |
| | WILLIAM DORSEY BEAM ET UX | |
| | ROSS BELL JR. | |
| | WILLIAM DORSEY ET UX | |

SURFACE HOLE LOCATION (SHL)

UTM 17-NAD83(M)
N:4423419.989
E:524121.003

NAD83, WV NORTH
N:534305.949
E:1627207.385

APPROX. LANDING POINT

UTM 17-NAD83(M)
N:4423367.94
E:524645.06

NAD83, WV NORTH
N:534106.408
E:1628924.226

BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83(M)
N:4419800.42
E:527228.15

NAD83, WV NORTH
N:522257.78
E:1637204.923



* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

MAY 09, 2018

**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:

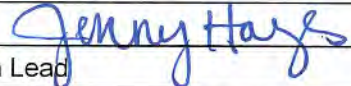
| Lease Name or Number | Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
|-------------------------|-----------------------|-----------------------|---------|-----------|
| See Attached | | | | |

**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: Jenny Hayes 
 Its: Permitting Team Lead

4705102100

Hazlett Unit #8H - MARC - BATCH 1 MLS - FINAL

| QLS NO | % Owned | Plat ID | Parcel | Lessor | Lessee | Royalty | Book/Page | Assignment #1 | Assignment #2 | Assignment #3 | Assignment #4 |
|--------|---------|---------|------------------------|-------------------------|-------------------------|---------|-----------|---|---|--|--|
| 934442 | 6.25% | 1 | 13-0012-0049-0000-0000 | Yoho, Donald Boyd | Chevron U.S.A. Inc. | 0.18 | 854/74 | - | - | - | - |
| 934443 | 6.25% | 1 | 13-0012-0049-0000-0000 | Mease, Kelly Ann | Chevron U.S.A. Inc. | 0.18 | 859/86 | - | - | - | - |
| 934444 | 12.50% | 1 | 13-0012-0049-0000-0000 | Neilsen, Zane Edward | Chevron U.S.A. Inc. | 0.18 | 848/632 | - | - | - | - |
| 934837 | 12.50% | 1 | 13-0012-0049-0000-0000 | Baker, Nancy A | Chevron U.S.A. Inc. | 0.18 | 911/615 | - | - | - | - |
| 934842 | 4.17% | 1 | 13-0012-0049-0000-0000 | McCracken, Larry John | Chevron U.S.A. Inc. | 0.18 | 848/581 | - | - | - | - |
| 934843 | 4.17% | 1 | 13-0012-0049-0000-0000 | McCracken, Patricia Ann | Chevron U.S.A. Inc. | 0.18 | 848/586 | - | - | - | - |
| 934846 | 4.17% | 1 | 13-0012-0049-0000-0000 | McCracken, Robert Jay | Chevron U.S.A. Inc. | 0.18 | 848/591 | - | - | - | - |
| 951834 | 50.00% | 1 | 13-0012-0049-0000-0000 | Hazlett, Florence et al | Chevron U.S.A. Inc. | 0.1875 | 949/19 | - | - | - | - |
| | | | | Hazlett, John Carl | TriEnergy Holdings, LLC | 0.16 | 705/270 | 24/180 TriEnergy Holdings, LLC to NPAR, LLC | 24/466 AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 867363 | 50.00% | 2 | 13-0012-0044-0000-0000 | | | | | | | | |
| 951832 | 50.00% | 2 | 13-0012-0044-0000-0000 | Hazlett, Florence | Chevron U.S.A. Inc. | 0.1875 | 949/26 | - | - | - | - |
| 951838 | 6.67% | 3 | 13-0012-0043-0000-0000 | Otte, Richard Joseph | Chevron U.S.A. Inc. | 0.1875 | 939/130 | - | - | - | - |
| 951840 | 6.67% | 3 | 13-0012-0043-0000-0000 | Pentzlen, Caroline | Chevron U.S.A. Inc. | 0.1875 | 950/196 | - | - | - | - |
| 951841 | 6.67% | 3 | 13-0012-0043-0000-0000 | Foster, Patricia Gail | Chevron U.S.A. Inc. | 0.1875 | 950/218 | - | - | - | - |
| 951842 | 6.67% | 3 | 13-0012-0043-0000-0000 | Cunningham, Nancy Jean | Chevron U.S.A. Inc. | 0.1875 | 950/215 | - | - | - | - |
| 951843 | 6.67% | 3 | 13-0012-0043-0000-0000 | Yoho, Rebecca Ann | Chevron U.S.A. Inc. | 0.1875 | 950/212 | - | - | - | - |
| 951844 | 33.20% | 3 | 13-0012-0043-0000-0000 | Otte, Hubert C. et ux | Chevron U.S.A. Inc. | 0.1875 | 939/127 | - | - | - | - |
| 951846 | 16.58% | 3 | 13-0012-0043-0000-0000 | Otte, Michael P. | Chevron U.S.A. Inc. | 0.1875 | 935/16 | - | - | - | - |
| 951847 | 16.60% | 3 | 13-0012-0043-0000-0000 | Otte, Mark Douglas | Chevron U.S.A. Inc. | 0.1875 | 939/180 | - | - | - | - |
| 949682 | 100.00% | 4 | 13-0012-0043-0001-0000 | Robinson, Gary A. | Chevron U.S.A. Inc. | 0.16 | 912/448 | - | - | - | - |
| | | | | Burkett, David & Joan | TriEnergy Holdings, LLC | 0.1875 | 696/198 | 24/180 TriEnergy Holdings, LLC to NPAR, LLC | 24/490 AB Resources LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 867075 | 100.00% | 5 | 13-0012-0042-0002-0000 | | | | | | | | |
| 943147 | 100.00% | 6 | 13-0012-0042-0008-0000 | Darrow, Samuel R. et ux | Chevron U.S.A. Inc. | 0.17 | 889/422 | - | - | - | - |
| | | | | Burkett, David & Joan | TriEnergy Holdings, LLC | 0.1875 | 696/198 | 24/180 TriEnergy Holdings, LLC to NPAR, LLC | 24/490 AB Resources LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 867075 | 100.00% | 7 | 13-0012-0042-0005-0000 | | | | | | | | |
| | | | | Burkett, David & Joan | TriEnergy Holdings, LLC | 0.1875 | 696/198 | 24/180 TriEnergy Holdings, LLC to NPAR, LLC | 24/490 AB Resources LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 867075 | 100.00% | 8 | 14-0003-0005-0000-0000 | | | | | | | | |
| 951823 | 100.00% | 9 | 14-0003-0004-0000-0000 | Burkett, David R. et ux | Chevron U.S.A. Inc. | 0.1875 | 939/145 | - | - | - | - |
| 951838 | 6.67% | 9 | 14-0003-0044-0000-0000 | Otte, Richard Joseph | Chevron U.S.A. Inc. | 0.1875 | 939/130 | - | - | - | - |
| 951840 | 6.67% | 9 | 14-0003-0044-0000-0000 | Pentzlen, Caroline | Chevron U.S.A. Inc. | 0.1875 | 950/196 | - | - | - | - |
| 951841 | 6.67% | 9 | 14-0003-0044-0000-0000 | Foster, Patricia Gail | Chevron U.S.A. Inc. | 0.1875 | 950/218 | - | - | - | - |
| 951842 | 6.67% | 9 | 14-0003-0044-0000-0000 | Cunningham, Nancy Jean | Chevron U.S.A. Inc. | 0.1875 | 950/215 | - | - | - | - |
| 951843 | 6.67% | 9 | 14-0003-0044-0000-0000 | Yoho, Rebecca Ann | Chevron U.S.A. Inc. | 0.1875 | 950/212 | - | - | - | - |
| 951844 | 33.33% | 9 | 14-0003-0044-0000-0000 | Otte, Hubert C. et ux | Chevron U.S.A. Inc. | 0.1875 | 939/127 | - | - | - | - |
| 951846 | 16.67% | 9 | 14-0003-0044-0000-0000 | Otte, Michael P. | Chevron U.S.A. Inc. | 0.1875 | 935/16 | - | - | - | - |
| 951847 | 16.67% | 9 | 14-0003-0044-0000-0000 | Otte, Mark Douglas | Chevron U.S.A. Inc. | 0.1875 | 939/180 | - | - | - | - |
| | | | | Clayton, Donna L. | TriEnergy Holdings, LLC | 0.16 | 694/272 | 23/80 TriEnergy Holdings, LLC to NPAR, LLC | 24/490 AB Resources LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 866907 | 100.00% | 10 | 14-0003-0042-0000-0000 | | | | | | | | |
| 951516 | 100.00% | 11 | 14-0003-0043-0000-0000 | Hill, Donald | Chevron U.S.A. Inc. | 0.1875 | 948/155 | - | - | - | - |

RECEIVED
 Office of Oil and Gas
 NOV 27 2018
 WV Department of
 Environmental Protection

4705102100

Hazlett Unit #8H - MARC - BATCH 1 MLS - FINAL

| QLS NO | % Owned | Plat ID | Parcel | Lessor | Lessee | Royalty | Book/Page | Assignment #1 | Assignment #2 | Assignment #3 | Assignment #4 |
|---------|---------|---------|------------------------|--|-------------------------|---------|-----------|---|--|--|---|
| 866907 | 100.00% | 12 | 14-0003-0041-0000-0000 | Clayton, Donna L. | TriEnergy Holdings, LLC | 0.16 | 694/272 | 23/80 TriEnergy Holdings, LLC to NPAR, LLC | 24/490 AB Resources LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 866910 | 100.00% | 13 | 14-0003-0040-0000-0000 | O'Neil, Dennis et ux | TriEnergy Holdings, LLC | 0.1875 | 694/278 | 23/80 TriEnergy Holdings, LLC to NPAR, LLC | 24/490 AB Resources LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 937329 | 100.00% | 14 | 14-0003-0040-0003-0000 | O'Neil, Garret D. | Chevron U.S.A. Inc. | 0.18 | 861/455 | - | - | - | - |
| 937333 | 100.00% | 15 | 14-0038-0019-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 16 | 14-0038-0015-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 17 | 14-0038-0021-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 18 | 14-0038-0014-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 19 | 14-0038-0016-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 20 | 14-0038-0011-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 21 | 14-0038-0010-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 22 | 14-0038-0009-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 937333 | 100.00% | 23 | 14-0038-0020-0000-0000 | O'Neil, Dennis et ux | Chevron U.S.A. Inc. | 0.18 | 874/604 | - | - | - | - |
| 951442 | 100.00% | 24 | 14-0003-0035-0000-0000 | Schane, Thomas L. et ux | Fossil Creek Ohio, LLC | 0.18 | 833/235 | 32/307 Fossil Creek Ohio, LLC to Gulfport Energy Corporation | 36/588 Gulfport Energy Corporation & Fossil Creek Ohio, LLC to American Petroleum Operating, LLC | 40/99 American Petroleum Partners Operating, LLC to Chevron U.S.A. Inc. | 40/354 American Petroleum Partners Operating, LLC to Chevron U.S.A. Inc. |
| 868160 | 100.00% | 25 | 14-0003-0033-0000-0000 | Carmichael, Bridget Marie | NPAR, LLC | 0.18 | 729/467 | 756/332 NPAR, LLC to Chevron U.S.A. Inc. | - | - | - |
| Pending | 100.00% | | Route 250 | The West Virginia Department of Transportation, Division of Highways | Chevron U.S.A. Inc. | 0.2 | 968/489 | - | - | - | - |
| 923654 | 100.00% | 26 | 14-0007-0031-0001-0000 | Huggins, Ollie C. | Chevron U.S.A. Inc. | 0.18 | 835/25 | - | - | - | - |
| 867436 | 100.00% | 27 | 14-0007-0032-0000-0000 | Sullivan, Wanda K. | TriEnergy Holdings, LLC | 0.16 | 706/627 | 24/180 TriEnergy Holdings, LLC to NPAR, LLC | 24/466 AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 936619 | 100.00% | 28 | 14-0007-0031-0000-0000 | Schwing, Harold C. et ux | Chevron U.S.A. Inc. | 0.18 | 864/25 | - | - | - | - |
| 867303 | 100.00% | 29 | 14-0007-0030-0000-0000 | Phillips, Michael J. et ux | TriEnergy Holdings, LLC | 0.18 | 704/34 | 24/180 TriEnergy Holdings, LLC to NPAR, LLC | 24/466 AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 Limited Partnership | 25/105 Chief Exploration & Development LLC et al & Radler 2000 Limited Partnership to Chevron U.S.A. Inc. | 756/332 NPAR, LLC to Chevron U.S.A. Inc. |
| 894421 | 29.17% | 30 | 14-0007-0042-0001-0000 | Lahasky, Edward Louis Jr. | Chevron U.S.A. Inc. | 0.16 | 773/556 | - | - | - | - |
| 903839 | 6.25% | 30 | 14-0007-0042-0001-0000 | Rudy, Ellen Beam et vir | Chevron U.S.A. Inc. | 0.16 | 776/39 | - | - | - | - |
| 903843 | 6.25% | 30 | 14-0007-0042-0001-0000 | Beam, William Dorsey et ux | Chevron U.S.A. Inc. | 0.16 | 781/507 | - | - | - | - |
| 903980 | 29.17% | 30 | 14-0007-0042-0001-0000 | Bell, Ross Jr. | Chevron U.S.A. Inc. | 0.16 | 776/46 | - | - | - | - |
| 904349 | 29.17% | 30 | 14-0007-0042-0001-0000 | Dorsey, William et ux | Chevron U.S.A. Inc. | 0.16 | 776/70 | - | - | - | - |
| 894421 | 29.17% | 31 | 14-0007-0042-0000-0000 | Lahasky, Edward Louis Jr. | Chevron U.S.A. Inc. | 0.16 | 773/556 | - | - | - | - |
| 903839 | 6.25% | 31 | 14-0007-0042-0000-0000 | Rudy, Ellen Beam et vir | Chevron U.S.A. Inc. | 0.16 | 776/39 | - | - | - | - |
| 903843 | 6.25% | 31 | 14-0007-0042-0000-0000 | Beam, William Dorsey et ux | Chevron U.S.A. Inc. | 0.16 | 781/507 | - | - | - | - |
| 903980 | 29.17% | 31 | 14-0007-0042-0000-0000 | Bell, Ross Jr. | Chevron U.S.A. Inc. | 0.16 | 776/46 | - | - | - | - |
| 904349 | 29.17% | 31 | 14-0007-0042-0000-0000 | Dorsey, William et ux | Chevron U.S.A. Inc. | 0.16 | 776/70 | - | - | - | - |

RECEIVED
 Office of Oil and Gas
 NOV 27 2018
 WV Department of
 Environmental Protection



Mitchell G. Limbert
Land Representative, AMBU

4705 102100

June 4, 2018

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

RE: Hazlett 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 12H, 13H, 14H, 15H, 16H, 17H

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,

Mitchell G. Limbert
Land Representative

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

4705 + 02100

Date of Notice Certification: 06/07/2018

API No. 47- _____
Operator's Well No. M08H _____
Well Pad Name: Hazlett _____

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: | <u>West Virginia</u> | UTM NAD 83 | Easting: | <u>524121.003</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4423419.989</u> |
| District: | <u>Union</u> | Public Road Access: | <u>CR 10 Markey Lane</u> | |
| Quadrangle: | <u>Moundsville, WV 7.5'</u> | Generally used farm name: | <u>Hazlett</u> | |
| Watershed: | <u>Short Creek - Ohio River</u> | | | |

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

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

OOG OFFICE USE ONLY

- RECEIVED/NOT REQUIRED
- RECEIVED
- RECEIVED/NOT REQUIRED
- RECEIVED
- RECEIVED
- RECEIVED

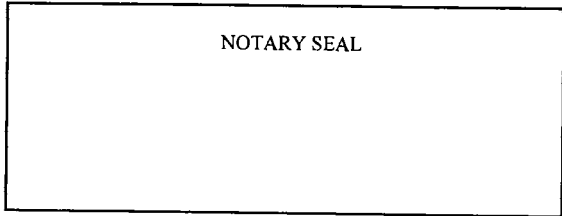
Required Attachments:

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 Jenny Hayes, 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>Jenny Hayes</u> | | <u>Coraopolis, PA 15108</u> |
| Its: | <u>Permitting Team Lead</u> | Facsimile: | <u>412-865-2403</u> |
| Telephone: | <u>412-865-1533</u> | Email: | <u>JZYK@chevron.com</u> |



Subscribed and sworn before me this ____ day of _____.

Notary Public
My Commission Expires _____

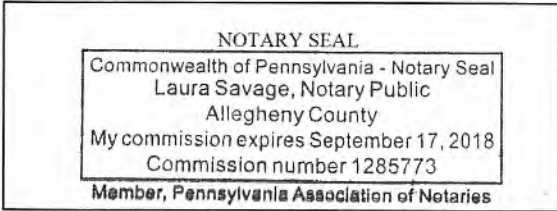
Oil and Gas Privacy Notice:

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.

Certification of Notice is hereby given:

THEREFORE, I Jenny Hayes, 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>Jenny Hayes</u> | | <u>Coraopolis, PA 15108</u> |
| Its: | <u>Permitting Team Lead</u> | Facsimile: | <u>412-865-2403</u> |
| Telephone: | <u>412-865-1533</u> | Email: | <u>JZYK@chevron.com</u> |



Jenny Hayes COMMONWEALTH OF PENNSYLVANIA
 COUNTY OF ALLEGHENY
 Subscribed and sworn before me this 7th day of June 2018.
Laura Savage Notary Public
 My Commission Expires September 17, 2018

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
 AUG 3 2018
 WV Department of
 Environmental Protection

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

4705 - 02100

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

Date of Notice: 6/7/18 Date Permit Application Filed: 8/2/18

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: Florence Irene Hazlett (Life Estate Interest)
 Address: 648 Markey Hill Lane
Glen Dale, WV 26038
 Name: Michael C. Hazlett (Remainder Interest)
 Address: 648 Markey Hill Lane
Glen Dale, WV 26038

COAL OWNER OR LESSEE
 Name: Consol Mining Company, LLC
 Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

COAL OPERATOR
 Name: _____
 Address: _____

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

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

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

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

*Please attach additional forms if necessary

RECEIVED
 Office of Oil and Gas
 AUG 3 2018
 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 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 and Gas Office that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

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

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.**

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

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.

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

WW-6A
(8-13)

4705102100
API NO. 47-
OPERATOR WELL NO. M08H
Well Pad Name: Hazlett

Notice is hereby given by:

Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-1533
Email: jzyk@chevron.com

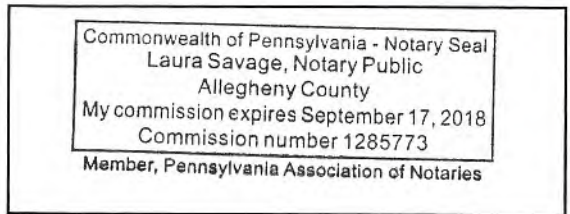
Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Facsimile: 412-865-2403

4705102100

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.

Jerry Hayes



Commonwealth of Pennsylvania
County of Allegheny
Subscribed and sworn before me this 7th day of June, 2018.
Laura Savage Notary Public
My Commission Expires September 17, 2018

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

4705 + 02100

Attachment to WW-6A

API No. 47- _____ - _____

OPERATOR WELL NO. M08H

Well Pad Name: Hazlett

- SURFACE OWNER**
Name: Loretta Kay Wallace (Remainder Interest)
Address: 1485 Missy Court
Hamilton, OH 45013
- COAL OWNER OR LESSEE**
Name: Consol Mining Company, LLC
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317
- COAL OPERATOR**
Name:
Address:
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name: Thomas D & Janet E. Vickers
Address: 1526 Little Grave Creek Drive
Glen Dale, WV 26038
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name:
Address:
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name:
Address:
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name:
Address:
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name:
Address:

RECEIVED
Office of Oil and Gas

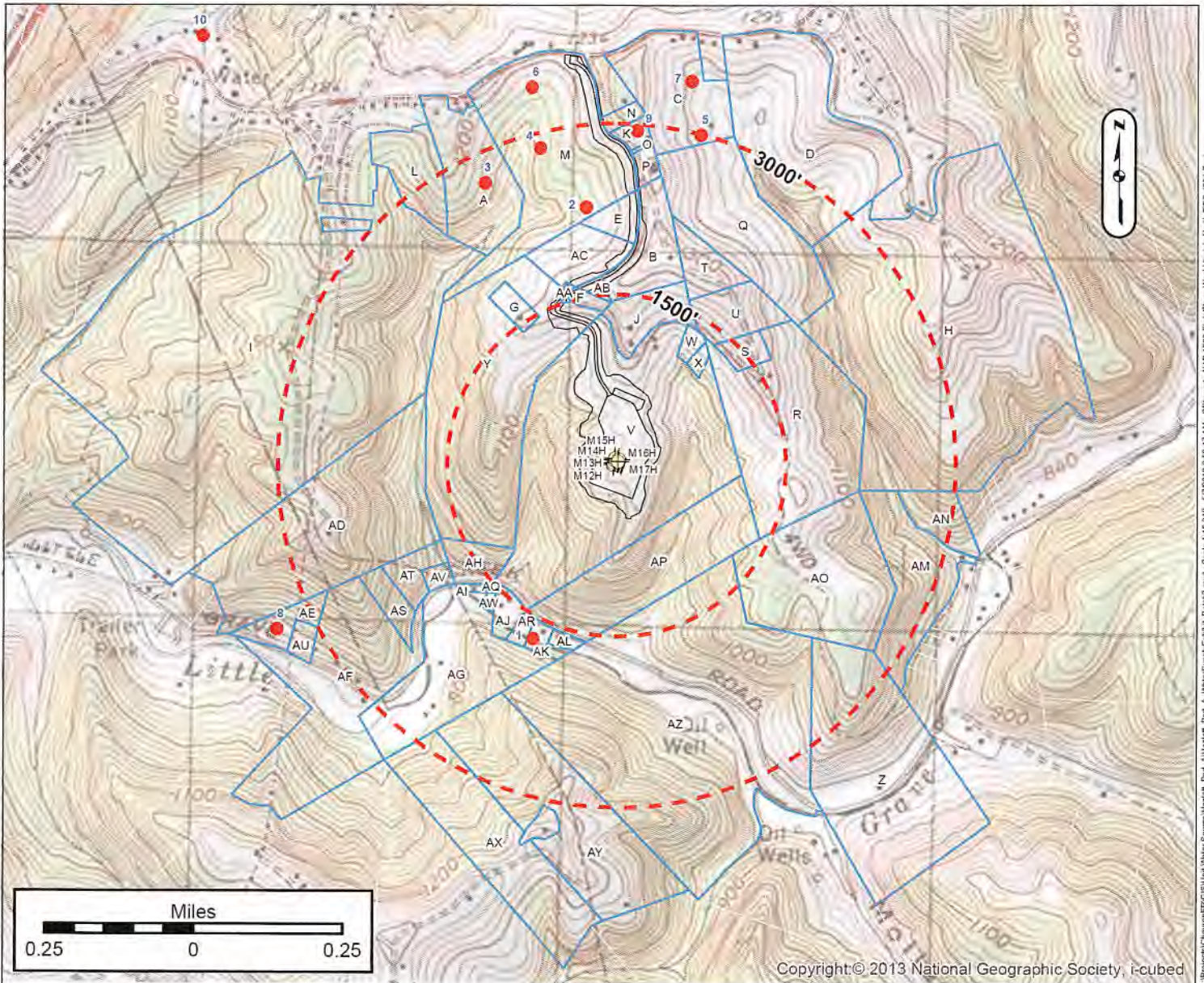
AUG 3 2018

WV Department of
Environmental Protection



WATER SUPPLY EXHIBIT HAZLETT PAD A BATCH #2

4705 + 02100



Copyright © 2013 National Geographic Society, i-cubed

LOT OWNERS

| Label | Owner | TM | Label | Owner | TM | Label | Owner | TM |
|-------|-------------------------------|----------------------|-------|-------------------------------|----------------------|-------|-------------------------------|----------------------|
| A | KEY GLADYS E - LIFE | 25-13 12002700000000 | N | OTTE MICHAEL P | 25-13 12003100000000 | AB | CALISSIE TIMOTHY J | 25-13 12005000050000 |
| B | OTTE MARK DOUGLAS ET UX | 25-13 12005000040000 | O | OTTE HUBERT CHAS & JANE E | 25-13 12003200010000 | AC | KIDNEY JARROD S & TIMMI L | 25-13 12005000060000 |
| C | OTTE MICHAEL P & DENISE A | 25-13 12003500010000 | P | OTTE MARK D | 25-13 12003800000000 | AD | MAST LEVI E ET AL | 25-13 12005100000000 |
| D | ANGEL ADAM S JR | 25-13 11006100000000 | Q | OTTE MARK D & KELLY J | 25-13 12003500000000 | AE | MCCLINTOCK LARRY L & ALICIA S | 25-14 10016000040000 |
| E | LEACH CHARLES L JR | 25-13 12005000070000 | R | GLEN DALE CITY OF | 25-13 12004400000000 | AF | YODER ELI A ET AL | 25-14 10016000000000 |
| F | CALISSIE TIMOTHY J ET UX | 25-13 12005000020000 | S | GLEN DALE TOWN OF | 25-13 12004500000000 | AG | KOSKI TEDDY F ET UX | 25-14 10017000000000 |
| G | KIDNEY JARROD S & TIMMI L | 25-13 12005000080000 | T | HAZLETT IRENE - LIFE | 25-13 12004600000000 | AH | SPRINGER BARBARA K | 25-13 12005000010000 |
| H | KURELAC PATRICIA A | 25-13 12003600000000 | U | HAZLETT FLORENCE IRENE - LIFE | 25-13 12004600010000 | AI | VOELLINGER JOHN & LORI | 25-13 12005000050000 |
| I | REILLY JOHN WILLIAM III ET AL | 25-13 12001400000000 | V | HAZLETT IRENE - LIFE | 25-13 12004900000000 | AJ | LINZY LINDA A | 25-13 12004800020000 |
| J | HAZLETT FLORENCE IRENE - LIFE | 25-13 12004900030000 | W | HAZLETT MICHAEL C - LIFE | 25-13 12004900010000 | AK | VICKERS MARY E EST | 25-13 12004800000000 |
| K | OTTE HUBERT CHAS & JANE E | 25-13 12003200000000 | X | HAZLETT MICHAEL C - LIFE | 25-13 12004900020000 | AL | VICKERS THOMAS D & JANET E | 25-13 12004800010000 |
| L | BURCH LESTER M ET UX | 25-13 12002600000000 | Y | CALISSIE TIMOTHY J ET UX | 25-13 12005000000000 | AM | ROBINSON GARY A | 25-13 12004300010000 |
| M | OTTE THOMAS L ET AL - LIFE | 25-13 12002800000000 | AA | CALISSIE TIMOTHY J ET UX | 25-13 12005000030000 | AN | RICHARDS CHRISTINE | 25-13 12004200010000 |
| | | | | | | AO | OTTE HUBERT C ET AL | 25-13 12004300000000 |
| | | | | | | AP | HAZLETT IRENE - LIFE | 25-13 12004700000000 |
| | | | | | | AQ | KOSKI TEDDY F & EMMA JANE | 25-13 12004800030000 |
| | | | | | | AR | RHODES LISA & NORMAN L | 25-13 12004800040000 |
| | | | | | | AS | YODER ELI A ET AL | 25-14 10016000100000 |
| | | | | | | AT | YODER ELI A ET AL | 25-14 10016000200000 |
| | | | | | | AU | NGUYEN LAMSON N ET UX | 25-14 10016000300000 |
| | | | | | | AV | SPRINGER BARBARA K | 25-14 10016000500000 |
| | | | | | | AW | LINZY LINDA A | 25-14 10017000100000 |
| | | | | | | AX | MARSHALL COUNTY PARK & REC | 25-14 20008000000000 |
| | | | | | | AY | MARSHALL COUNTY PARK & REC | 25-14 30001000000000 |
| | | | | | | AZ | OTTE HUBERT C ET AL | 25-14 30002000000000 |
| | | | | | | Z | OTTE HUBERT C ET AL | 25-14 30003000000000 |

Surface Owner: IRENE HAZLETT

Oil/Gas Owner: IRENE HAZLETT

Well Operator: CHEVRON APPALACHIA, LLC

Address: 700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

Phone: 724-564-3700

County: MARSHALL

Township: GLEN DALE, WV
RECEIVED
GROUNDWATER & ENVIRONMENTAL Office of Oil and Gas
Surveyor: SERVICES, INC.

Address: 301 COMMERCE PARK DR
CRANBERRY TOWNSHIP, PA 16066

Phone: 800-267-2549
Department of Environmental Protection

AUG 3 2018

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.

4705102100

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: 06/07/2018 **Date Permit Application Filed:** 8/2/18

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

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

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: Florence Irene Hazlett (Life Estate Interest)
Address: 1078 Markey Hill Lane
Glen Dale, WV 26038

Name: Michael C. Hazlett (Remainder Interest)
Address: 1078 Markey Hill Lane
Glen Dale, WV 26038

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: 524121.003
County: Marshall Northing: 4423419.989
District: Union Public Road Access: CR 10 Markey Lane
Quadrangle: Moundsville, WV 7.5' Generally used farm name: Hazlett
Watershed: Short Creek - Ohio River

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: 412-865-2504
Email: slaird@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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

AUG 3 2018

WV Department of
Environmental Protection

4705102100

**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: 06/07/2018 **Date Permit Application Filed:** 8/2/18

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

- HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

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: Loretta Kay Wallace (Remainder Interest)
Address: 1485 Missy Court
Hamilton, OH 45013

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: | <u>West Virginia</u> | UTM NAD 83 Easting: | <u>524121.003</u> |
| County: | <u>Marshall</u> | Northing: | <u>4423419.989</u> |
| District: | <u>Union</u> | Public Road Access: | <u>CR 10 Markey Lane</u> |
| Quadrangle: | <u>Moundsville, WV 7.5'</u> | Generally used farm name: | <u>Hazlett</u> |
| Watershed: | <u>Short Creek - Ohio River</u> | | |

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: 412-865-2504
Email: slaird@chevron.com
Facsimile: 412-865-2403

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

RECEIVED
Office of Oil and Gas

AUG 3 2018

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.

WV Department of
Environmental Protection

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS 47 05 GAS 02 100
NOTICE OF PLANNED OPERATION

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

Date of Notice: 06/07/2018 **Date Permit Application Filed:** 8/2/18

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

- | | |
|--|-------------------------------|
| <input checked="" type="checkbox"/> CERTIFIED MAIL | <input type="checkbox"/> HAND |
| RETURN RECEIPT REQUESTED | 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: Florence Irene Hazlett (Life Estate Interest)
Address: 648 Markey Hill Lane
Glen Dale, WV 26038

Name: Michael C. Hazlett (Remainder Interest)
Address: 648 Markey Hill Lane
Glen Dale, WV 26038

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: <u>West Virginia</u> | Easting: <u>524121.003</u> |
| County: <u>Marshall</u> | UTM NAD 83 Northing: <u>4423419.989</u> |
| District: <u>Union</u> | Public Road Access: <u>CR 10 Markey Road</u> |
| Quadrangle: <u>Moundsville, WV 7.5'</u> | Generally used farm name: <u>Hazlett</u> |
| Watershed: <u>Short Creek - Ohio River</u> | |

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
Telephone: 412-865-2504
Email: slaird@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 depprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

AUG 3 2018

WV Department of
Environmental Protection

4705102100

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: 06/07/2018 **Date Permit Application Filed:** 8/21/18

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

- CERTIFIED MAIL HAND
- RETURN RECEIPT REQUESTED 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: Loretta Kay Wallace (Remainder Interest)
Address: 1485 Missy Court
Hamilton, OH 45013

Name: _____
Address: _____

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: | <u>West Virginia</u> | UTM NAD 83 | Easting: | <u>524121.003</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4423419.989</u> |
| District: | <u>Union</u> | Public Road Access: | <u>CR 10 Markey Road</u> | |
| Quadrangle: | <u>Moundsville, WV 7.5'</u> | Generally used farm name: | <u>Hazlett</u> | |
| Watershed: | <u>Short Creek - Ohio River</u> | | | |

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
Telephone: 412-865-2504
Email: slaird@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 depprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

AUG 3 2018

WV Department of
Environmental Protection

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, Loretta K Wallace 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>524121.003</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4423419.989</u> |
| District: | <u>Union</u> | Public Road Access: | <u>CR 10 Markey Lane</u> | |
| Quadrangle: | <u>Moundsville, WV 7.5'</u> | Generally used farm name: | <u>Hazlett</u> | |
| Watershed: | <u>Short Creek/Ohio River</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.

| | |
|--|---|
| *Please check the box that applies <input type="checkbox"/> SURFACE OWNER <input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance) <input type="checkbox"/> SURFACE OWNER (Impoundments/Pits) <input type="checkbox"/> COAL OWNER OR LESSEE <input type="checkbox"/> COAL OPERATOR <input type="checkbox"/> WATER PURVEYOR <input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD | FOR EXECUTION BY A NATURAL PERSON Signature: <u>Loretta K. Wallace</u> Print Name: <u>Loretta K. Wallace</u> Date: <u>June 24, 2018</u> |
| | FOR EXECUTION BY A CORPORATION, ETC. Company: _____ By: _____ Its: _____ Signature: _____ Date: _____ |

RECEIVED
Office of Oil and Gas
AUG 3 2018

WV Department of
Environmental Protection

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.

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, Casey V. Saunders, 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: West Virginia UTM NAD 83 Easting: 524121.003
County: Marshall Northing: 4423419.989
District: Union Public Road Access: _____
Quadrangle: _____ Generally used farm name: _____
Watershed: _____

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 checked="" 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>FOR EXECUTION BY A NATURAL PERSON</p> <p>Signature: _____</p> <p>Print Name: _____</p> <p>Date: _____</p> |
| | <p>FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: <u>CONSOL Energy</u></p> <p>By: <u>Casey V. Saunders</u></p> <p>Its: <u>Manager Coal/Gas Coordination</u></p> <p>Signature: <u><i>Casey V. Saunders</i></u></p> <p>Date: <u>02/23/2018</u></p> |

RECEIVED
Office of Oil and Gas

AUG 3 2018

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.



4705 02100

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Thomas J. Smith, P. E.
Secretary of Transportation/
Commissioner of Highways

June 13, 2018

Jill M. Newman
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 Hazlett Pad A Well Site, Marshall County
Hazlett A Unit 8H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2018-0433 for the subject site to Chevron Appalachia, LLC for access to the State Road for the well site located off of Marshall County Route 10 SLS.

The 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 January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office Oil & Gas Coordinator

Cc: Mandy Fordyce
Chevron Appalachia, LLC
CH, OM, D-6
File

RECEIVED
Office of Oil and Gas
AUG 3 2018
WV Department of
Environmental Protection

4705 + 02100

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
AUG 3 2018
WV Department of
Environmental Protection

HAZLETT WELL PAD

EROSION AND SEDIMENT CONTROL PLAN

MARKEY LANE (C.R.-10)
UNION DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

PREPARED FOR:

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108



REVISION RECORD

| NO. | DATE | DESCRIPTION |
|-----|------------|---------------------------------------|
| 1 | 11/29/2018 | ISSUE FOR PERMITTING AND CONSTRUCTION |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

CONSULTANTS
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
400 TRIANGLE LANE, SUITE 200
EXPORT, PA 15632
PHONE: 724-327-5300

DRAWING ENGINEER CONTACT: JOSHUA A. MARGARIE
EMAIL ADDRESS: jmargin@cecinc.com
GEOTECHNICAL ENGINEER CONTACT: MARIN W. LAVAGE
EMAIL ADDRESS: mlavage@cecinc.com

SITE COORDINATES AND WATERHEAD

STATION OF ACCESS ROAD
LATITUDE: 39.84785° N, LONGITUDE: 80.711022° W
END OF ACCESS ROAD
LATITUDE: 39.92233° N, LONGITUDE: 80.717580° W
APPROXIMATE CENTER OF WELL PAD
LATITUDE: 39.941081° N, LONGITUDE: 80.717080° W
APPROXIMATE CENTER OF WELL PAD
LATITUDE: 39.950661° N, LONGITUDE: 80.712316° W

*BASED ON TMD 83, WEST VIRGINIA NORTH ZONE

WATERHEAD NAME: UPPER OHIO SOUTH RECEIVING STREAM: UNNAMED TRIBUTARIES TO LITTLE GRAVE CREEK

STREAM AND WETLAND PERMANENT IMPACTS (SUBJECT TO USACE NATIONWIDE PERMIT 30)

UNIT 2 TO LITTLE GRAVE CREEK (EPH) - 72 LF
UNIT 3 TO LITTLE GRAVE CREEK (EPH) - 170 LF
UNIT 4 TO LITTLE GRAVE CREEK (EPH) - 56 LF

WETLAND 1A (PEM) - 0.005 AC
WETLAND 1B (PEM) - 0.006 AC
WETLAND 2A (PEM) - 0.002 AC
WETLAND 3A (PEM) - 0.078 AC

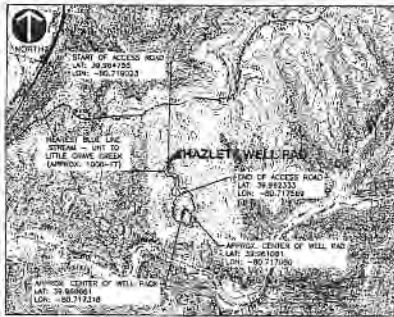
WETLANDS WITHIN 100 LF OF THE LIMIT OF DISTURBANCE (SUBJECT TO WETLAND WAIVER REQUEST)

WETLAND 1A (PEM) - 10 FT FROM LOD
WETLAND 3A (PEM) - 10 FT FROM LOD
WETLAND 3B (PEM) - 55 LF FROM LOD
WETLAND 4 (PEM) - 1 LF FROM LOD

REFERENCES

- STORM AND WETLANDS Delineated by CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 02/23/2017.
- UNDERGROUND UTILITIES LOCATED BY A GEOTECHNICAL SURVEY CONDUCTED BY THE USGS/USGS (D. DATED 05/11/2017 TO 05/23/2017).
- TOPOGRAPHY WITHIN THE PROJECT AREA AND MARKED UTILITY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 01/22/2017 TO 01/30/2017 AND 02/23/2017 TO 03/02/2017. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH WEST VIRGINIA CORNER 3400 2001.
- HYDROLOGICAL DATA FROM THE DOUGLE SOUTH PAD, DATED 2018.
- PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.

| Wellhead No. | Northing | Eastng | Latitude (North) | Longitude (West) |
|--------------|--------------|-------------|------------------|------------------|
| W02H | 534404.2077 | 347724.0491 | 39.848651 | 80.714759 |
| W03H | 534405.8981 | 347727.6199 | 39.848812 | 80.714777 |
| W07H | 5344376.4169 | 347722.4553 | 39.850778 | 80.714764 |
| W08H | 534432.8485 | 347727.7313 | 39.850734 | 80.712512 |
| W09H | 534442.2741 | 347733.8477 | 39.850949 | 80.717619 |
| W10H | 534436.6557 | 347717.2713 | 39.850916 | 80.715247 |
| W07E | 534326.2918 | 347251.8789 | 39.850617 | 80.712564 |
| W08E | 534205.8469 | 347207.1845 | 39.850076 | 80.712527 |
| W09E | 534257.9051 | 347253.2693 | 39.850551 | 80.712661 |
| W12E | 534209.8882 | 347240.8557 | 39.850296 | 80.712643 |
| W10E | 534121.9765 | 347245.7303 | 39.850529 | 80.712640 |
| W11E | 534382.6137 | 347250.8845 | 39.850688 | 80.712420 |
| W13E | 534212.5512 | 347251.9719 | 39.850707 | 80.712611 |
| W14E | 534202.8100 | 347264.1877 | 39.850765 | 80.712576 |
| W15E | 534464.5399 | 347252.2412 | 39.852824 | 80.712348 |
| W16E | 534464.3701 | 347258.4718 | 39.852937 | 80.712357 |
| W17E | 534520.2213 | 347318.5449 | 39.853258 | 80.712275 |
| W20E | 534533.7413 | 347314.6069 | 39.853602 | 80.712385 |
| W21E | 534498.8213 | 347324.8181 | 39.853324 | 80.712380 |
| W22E | 534276.3823 | 347324.0949 | 39.853694 | 80.712378 |
| W23E | 534289.4959 | 347327.3233 | 39.853638 | 80.712281 |
| W24E | 534262.4711 | 347320.2217 | 39.853073 | 80.712283 |
| W25E | 534311.8411 | 347321.4125 | 39.853653 | 80.712101 |
| W26E | 534465.8445 | 347323.5069 | 39.853992 | 80.712185 |
| W27E | 534460.6329 | 347324.5015 | 39.854073 | 80.712173 |
| W28E | 534354.4342 | 347327.2917 | 39.853970 | 80.712156 |
| W29E | 534443.9529 | 347331.8125 | 39.854074 | 80.712054 |
| W30E | 534458.8441 | 347325.8141 | 39.853989 | 80.712072 |
| W31E | 534485.2517 | 347343.7281 | 39.854069 | 80.711990 |
| W32E | 534511.6771 | 347342.6273 | 39.854026 | 80.712101 |
| W33E | 534607.5319 | 347344.8448 | 39.854587 | 80.712123 |
| W34E | 534703.8405 | 347350.8409 | 39.854948 | 80.712142 |
| W35E | 534710.7002 | 347351.3442 | 39.854930 | 80.712163 |
| W36E | 534740.1537 | 347373.2512 | 39.855911 | 80.712317 |



REFERENCE
U.S.G.S. 7.5' (QUAD) MAP: MARSHALLVILLE, MARSHALL CO., W. VA. DATED: 1986. PHOTOGRAPHIC: 1972 APR. 15/86.

| SITE LIMITS OF DISTURBANCE (AC) | |
|---|-----|
| WELL PAD | 2.7 |
| ACCESS ROAD | 3.6 |
| STOCKPILES | 1.7 |
| TOTAL AREA | 8.0 |
| WOODED AREA DISTURBED | 2.7 |
| LIMIT OF DISTURBANCE IMPACTS (NOW/FORMER LANDOWNERS) (AC) | |
| IMPACTS TO FLORENCE BENE HAZLETT (AC) | |
| WELL PAD | 2.1 |
| ACCESS ROAD | 1.1 |
| STOCKPILES | 1.7 |
| TOTAL AREA | 5.1 |
| WOODED AREA DISTURBED | 2.4 |
| IMPACTS TO TIMOTHY J. CAULISE (AC) | |
| (MULTIPLE PARCELS) | |
| WELL PAD | 2.3 |
| ACCESS ROAD | 0.0 |
| STOCKPILES | 0.0 |
| TOTAL AREA | 2.3 |
| WOODED AREA DISTURBED | 0.1 |
| IMPACTS TO JARROD L. & TAMMY HONEY (AC) | |
| WELL PAD | 0.0 |
| ACCESS ROAD | 0.1 |
| STOCKPILES | 0.0 |
| TOTAL AREA | 0.1 |
| WOODED AREA DISTURBED | 0.0 |

| DWG NO. | SHEET TITLE | ISSUED | LAST REVISED |
|---------|---|--------|--------------|
| CS100 | COVER SHEET | X | 11/01/2018 |
| CS101 | EXISTING TOPOGRAPHIC PLAN | X | 11/01/2018 |
| CS102 | OVERALL EROSION AND SEDIMENT CONTROL PLAN | X | 11/01/2018 |
| CS103 | EROSION AND SEDIMENT CONTROL PLAN (1 OF 2) | X | 11/01/2018 |
| CS104 | EROSION AND SEDIMENT CONTROL PLAN (2 OF 2) | X | 11/01/2018 |
| CS105 | STOCKPILE CROSS-SECTIONS | X | 11/01/2018 |
| CS106 | WELL PAD PLAN VIEW | X | 11/01/2018 |
| CS107 | WELL PAD CROSS-SECTIONS | X | 11/01/2018 |
| CS108 | EROSION AND SEDIMENT CONTROL DETAILS (1 OF 6) | X | 11/01/2018 |
| CS109 | EROSION AND SEDIMENT CONTROL DETAILS (2 OF 6) | X | 11/01/2018 |
| CS110 | EROSION AND SEDIMENT CONTROL DETAILS (3 OF 6) | X | 11/01/2018 |
| CS111 | EROSION AND SEDIMENT CONTROL DETAILS (4 OF 6) | X | 11/01/2018 |
| CS112 | EROSION AND SEDIMENT CONTROL DETAILS (5 OF 6) | X | 11/01/2018 |
| CS113 | EROSION AND SEDIMENT CONTROL DETAILS (6 OF 6) | X | 11/01/2018 |
| CS114 | ACCESS ROAD PLAN AND PROFILE | X | 11/01/2018 |
| CS115 | ACCESS ROAD CROSS-SECTIONS (1 OF 2) | X | 11/01/2018 |
| CS116 | ACCESS ROAD CROSS-SECTIONS (2 OF 2) | X | 11/01/2018 |
| CS117 | GEOTECHNICAL SUBSURFACE SUMMARY | X | 11/01/2018 |
| CS118 | GEOTECHNICAL SITE PLAN WITH SOILS DATA | X | 11/01/2018 |
| CS119 | GEOTECHNICAL SITE PLAN WITH SOILS DATA | X | 11/01/2018 |
| CS120 | GEOTECHNICAL SITE PLAN WITH SOILS DATA | X | 11/01/2018 |
| CS121 | CROSS-SECTIONS | X | 11/01/2018 |
| CS122 | GEOTECHNICAL TABLES AND NOTES | X | 11/01/2018 |
| CS123 | GEOTECHNICAL DETAILS | X | 11/01/2018 |
| CS124 | SITE PLAN WITH AERIAL | X | 11/01/2018 |
| CS125 | POST-CONSTRUCTION RECLAMATION PLAN | X | 11/01/2018 |
| CS126 | POST-CONSTRUCTION RECLAMATION DETAILS | X | 11/01/2018 |

LEGEND

| | | | | | | | |
|--|-----------------------------|--|-------------------------------|--|--------------------------------|--|-----------------------------------|
| | EXISTING PROPERTY LINE | | PROPOSED EDGE OF ACCESS ROAD | | 1:200 - PROPOSED INDEX CONTOUR | | EXISTING CHANNEL (TO BE UTILIZED) |
| | EXISTING WATER CONTOUR | | PROPOSED LIMIT OF DISTURBANCE | | PROPOSED INTERMEDIATE CONTOUR | | PROPOSED STORMWATER DIVERTOR |
| | EXISTING PAVED ROADWAY | | PROPOSED WELL HEAD AND COLLAR | | PROPOSED WET PAD CUT/FILL LINE | | INCREASED SILT |
| | EXISTING UNIMPROVED ROADWAY | | PROPOSED GOVERNMENT BERM | | PROPOSED SPOT ELEVATION | | PROPOSED RIPRAP APRON |
| | EXISTING GAS LINE | | PROPOSED GRAVEL PAVEMENT | | PROPOSED SILT FENCE (WITH) | | PROPOSED SILT FENCE (BLANK) |
| | EXISTING WATERLINE | | PROPOSED SILT FENCE (WITH) | | PROPOSED SILT FENCE (BLANK) | | PROPOSED SILT FENCE (WITH) |
| | EXISTING UTILITY POLE | | PROPOSED SILT FENCE (WITH) | | PROPOSED SILT FENCE (BLANK) | | PROPOSED SILT FENCE (WITH) |
| | EXISTING WATER METER | | PROPOSED SILT FENCE (WITH) | | PROPOSED SILT FENCE (BLANK) | | PROPOSED SILT FENCE (WITH) |
| | EXISTING WATER MAIN | | PROPOSED SILT FENCE (WITH) | | PROPOSED SILT FENCE (BLANK) | | PROPOSED SILT FENCE (WITH) |
| | EXISTING GAS WELL | | PROPOSED SILT FENCE (WITH) | | PROPOSED SILT FENCE (BLANK) | | PROPOSED SILT FENCE (WITH) |

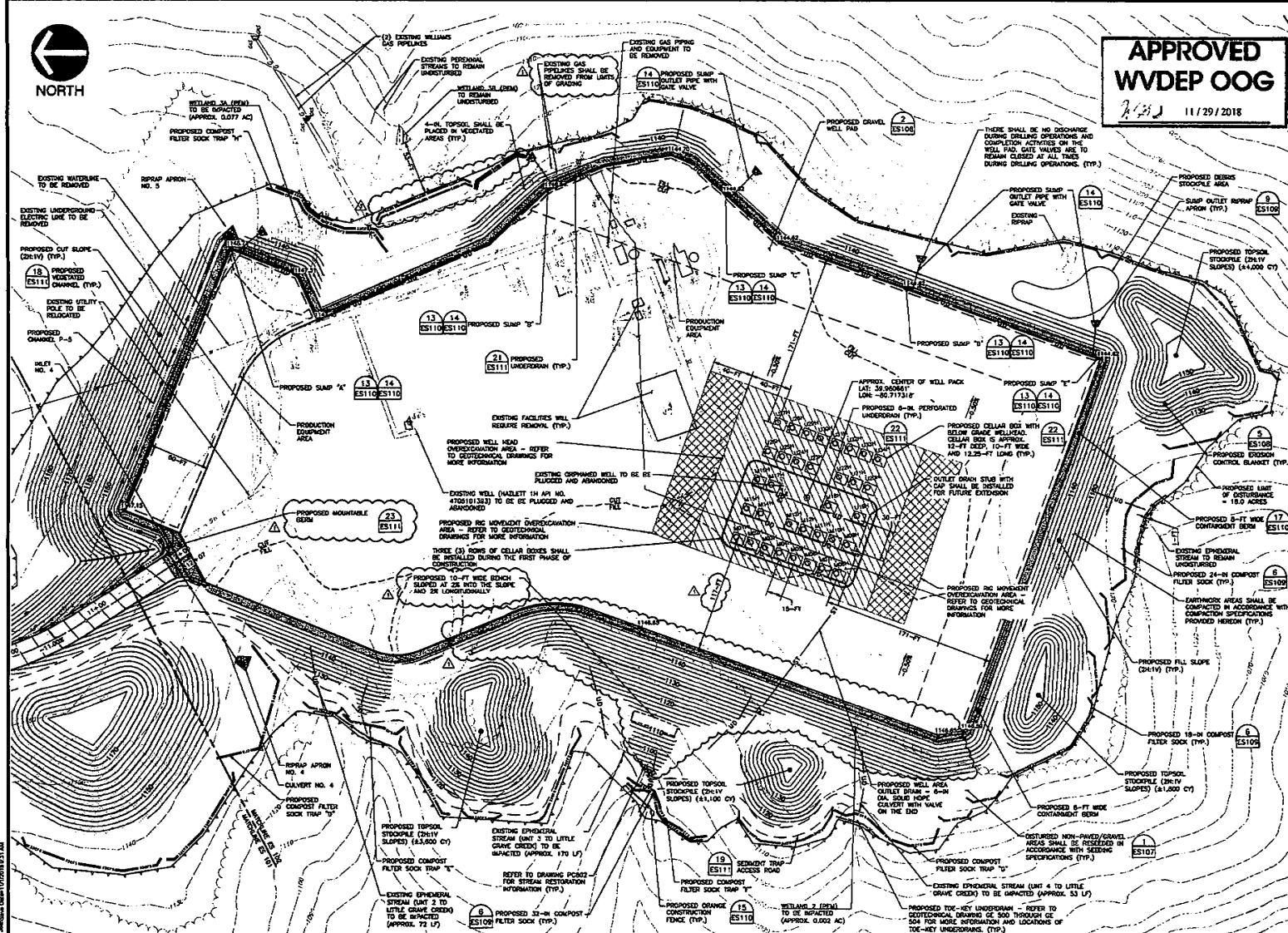
MISS UTILITY OF WEST VIRGINIA
1-800-245-4648
West Virginia State Law
Section 20-2-2 requires that you call to locate any utility before you dig in the state of West Virginia.
IT'S THE LAW

HAZLETT WELL PAD
UNION DISTRICT
MARSHALL COUNTY, WEST VIRGINIA
PREPARED FOR
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

Project Number: 150720
Drawing Code: 120018
Sheet Number: 01/01
Drawn By: RSB
Checked By: JMB
Project Manager: JMB

CS 000

APPROVED WVDEP OOG
11/29/2018



LEGEND

| | |
|-----|---|
| --- | EXISTING WOOD BENT-OF-WAY |
| --- | EXISTING PROPERTY LINE |
| --- | EXISTING INDEX CONTOUR |
| --- | EXISTING INTERMEDIATE CONTOUR |
| --- | EXISTING PAVED ROADWAY |
| --- | EXISTING UNPAVED ROADWAY |
| --- | EXISTING GAS LINE |
| --- | EXISTING WATERLINE |
| --- | EXISTING TELECOMMUNICATIONS LINE |
| --- | EXISTING OVERHEAD ELECTRIC LINE |
| --- | EXISTING UNDERGROUND ELECTRIC LINE |
| --- | EXISTING STORMWATER CULVERT |
| --- | EXISTING FENCE |
| --- | EXISTING STREAM |
| --- | EXISTING WETLAND |
| --- | EXISTING TREELINE |
| --- | EXISTING RRRAIP |
| --- | EXISTING STRUCTURE |
| --- | EXISTING UTILITY POLE |
| --- | EXISTING WATER METER |
| --- | EXISTING WATER MANHOLE |
| --- | EXISTING GAS WELL |
| --- | PROPOSED INDEX OF ACCESS ROAD |
| --- | PROPOSED CONTAMINATION BERM |
| --- | PROPOSED BOUNDARY |
| --- | PROPOSED ASPHALT DRIVEWAY |
| --- | PROPOSED INDEX CONTOUR |
| --- | PROPOSED INTERMEDIATE CONTOUR |
| --- | PROPOSED WELL PAD CURB/FILL LINE |
| --- | PROPOSED SHOT BERM |
| --- | PROPOSED 10-IN COMPOST FILTER SOCK TRAP |
| --- | PROPOSED 18-IN COMPOST FILTER SOCK TRAP |
| --- | PROPOSED 24-IN COMPOST FILTER SOCK TRAP |
| --- | PROPOSED 32-IN COMPOST FILTER SOCK TRAP |
| --- | PROPOSED ORANGE CONSTRUCTION FENCE |
| --- | PROPOSED ROCK CONSTRUCTION ENTRANCE |
| --- | PROPOSED MALET PROTECTION |
| --- | PROPOSED EROSION CONTROL, BLANKET |
| --- | EXISTING CHANNEL (TO BE W/REMOVED) |
| --- | PROPOSED CHANNEL |
| --- | PROPOSED STORMWATER CULVERT |
| --- | PROPOSED MALET |
| --- | PROPOSED RRRAIP APRON |
| --- | PROPOSED UNDERDRAIN |
| --- | DETAIL HEADER |
| --- | DRAWING DESIGNATION |

- STREAM AND WETLAND NOTES**
1. WETLAND BANDS ARE BEING REQUESTED FOR THE FOLLOWING FOUR (4) WETLANDS THAT ARE LOCATED WITHIN 100-FT OF THE PROPOSED WELL PAD. WETLANDS 1A, 1B, 2, 2A, AND 2B ARE PARTIALLY PERMANENTLY IMPACTED.
 2. THE FOLLOWING FOUR (4) WETLANDS AND (3) CHANNELS ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE USACE REGULATORY PROGRAM. WETLAND 1A, 1B, 2, 2A, AND 2B ARE PARTIALLY PERMANENTLY IMPACTED.
 3. THE STREAMS SHOWN HEREON OUTSIDE THE LIMIT OF DISTURBANCE ARE EPHEMERAL OR INTERMITTENT. AS SUCH, A PERMIT IS NOT BEING REQUESTED FOR PERMANENT STREAMS.
 4. DISTURBANCES SHOWN HEREON ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

COMPACTION SPECIFICATIONS

PLACE SOIL FILL MATERIALS USING COMPACTION EQUIPMENT TO ACHIEVE A MINIMUM OF 95% RELATIVE COMPACTION. ALL FILL MATERIALS SHALL BE COMPACTED TO A MINIMUM OF 12 INCHES THICK USING A ROLLER EXCEEDING 12 INCHES THICK. USE A REDUCED WEIGHT ROLLER FOR AREAS WITHIN 100-FT OF STREAMS. ALL FILL MATERIALS SHALL BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES. ALL FILL MATERIALS SHOULD NOT EXCEED 6 INCHES IN STRUCTURAL FILL AREAS WHERE HEAVY, SELF-PROPELLED COMPACTORS ARE UTILIZED. A REDUCED MAXIMUM PARTICLE SIZE OF 3/8 INCH SHALL BE USED FOR ALL FILL MATERIALS. ALL HAND-OPERATED COMPACTORS ARE USED. WASTE OVERLAP PARTICLES (EXCEEDING THE MAXIMUM PARTICLE SIZE SPECIFIED ABOVE) OUTSIDE OF THE PROPOSED FILL AREAS OR IN DEEPEST AREAS OF FILL OVERLAP SHOULD BE REMOVED. ALL MATERIALS EXCEEDING 6 INCHES SHOULD BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES. LIFTS SHOULD BE COMPACTIONED IN SEVERAL PASSES USING HEAVY COMPACTION EQUIPMENT.

2. COMPACT ALL PAD AND ROADWAY SUBBASES AND EACH LIFT OF FILL MATERIAL TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY WITHIN 1/2 INCH OF THE OPTIMUM MOISTURE CONTENT. EXTERIOR MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698 (STANDARD PROCTOR).

- REFERENCES**
1. STREAMS AND WETLANDS DELINEATED BY CHEVON & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/13/2017.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICS LTD. DATED 05/17/2017 TO 05/23/2017.
 3. TOPOGRAPHY WITHIN THE PROJECT AREA AND MARKED UTILITY FEATURES SURVEYED BY CHEVON & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/29/2017 TO 05/30/2017 AND 05/23/2017 TO 05/25/2017. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH WEST VIRGINIA LOAD, DATED 2003.
 4. PROPERTY BOUNDARIES WERE PROVIDED BY CHEVON.

MISS UTILITY OF WEST VIRGINIA
1-800-245-4848
West Virginia State Law
(Section 207, Chapter 24-C requires that you call two business days before you dig in the state of West Virginia.)
IT'S THE LAW

HAZLETT WELL PAD
UNION DISTRICT
MARSHALL COUNTY, WEST VIRGINIA

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

Project Number: 164-756
Drawing Scale: 1"=50'
Date Issued: 05/01/18
Index Number:
Drawn By: RGS
Checked By: JLM
Project Manager: KAS

ES 102