



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

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

Tuesday, August 15, 2017
WELL WORK PERMIT
Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Re: Permit approval for HINES M09H
47-051-01931-00-00

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: HINES M09H
Farm Name: DONALD HINES ET UX
U.S. WELL NUMBER: 47-051-01931-00-00
Horizontal 6A / New Drill
Date Issued: 8/15/2017

Promoting a healthy environment.

08/18/2017

PERMIT CONDITIONS 70510193

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.

PERMIT CONDITIONS 47 05 10 19 39

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
800 Mountain View Drive
Smithfield, PA 15478

DATE: August 14, 2017
ORDER NO.: 2017-W-9

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 “Chevron” or “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 is a “person” as defined by W. Va. Code §22-6-1(n), with a corporate address as 800 Mountain View Drive, Smithfield, Pennsylvania.
3. On April 24, 2017, Chevron submitted well work permit applications identified as API#s 47-051-01926, 47-051-01927, 47-051-01928, 47-051-01929, 47-051-01930, 47-051-01931, 47-051-01932 and 47-051-01933. The eight proposed wells are to be located on the Hines Pad in Washington District of Marshall County, West Virginia.
4. On April 24, 2017, Civil and Environmental Consultants, Inc. (CEC), on behalf of Chevron, requested a waiver for Wetlands 2A, 2B, 3A, and 3B 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 47-051-01926, 47-051-01927, 47-051-01928, 47-051-01929, 47-051-01930, 47-051-01931, 47-051-01932 and 47-051-01933. Wetlands 3A and 3B will be excluded from this waiver due to being located outside the area of the pad LOD.

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

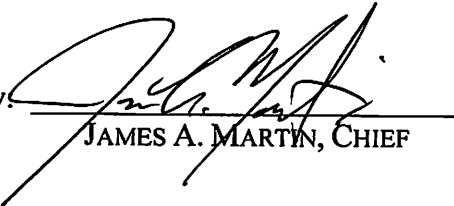
West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetlands 2A and 2B from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-051-01926, 47-051-01927, 47-051-01928, 47-051-01929, 47-051-01930, 47-051-01931, 47-051-01932 and 47-051-01933. The Office of Oil and Gas hereby **ORDERS** that Chevron shall meet the following site construction and operational requirements for the Hines 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 2A shall have two layers of eighteen-inch (18”) compost filter sock trap to prevent sediment from reaching the wetlands.
- d. Wetland 2B shall have two layers of twenty-four inch (24”) compost filter sock trap to prevent sediment from reaching the wetlands.
- 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 14th day of August, 2017.

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

Approved WUDEP OOG
8/11/2017

REVISION RECORD

NO.	DATE	REVISION
17	07/20/17	REVISED PER WDEP COMMENT

Civil & Environmental Consultants, Inc.
1609 Traylor Lane, Suite 200 - Exports, PA 15622
724-272-2200 - 608-898-3818

FIG. 3

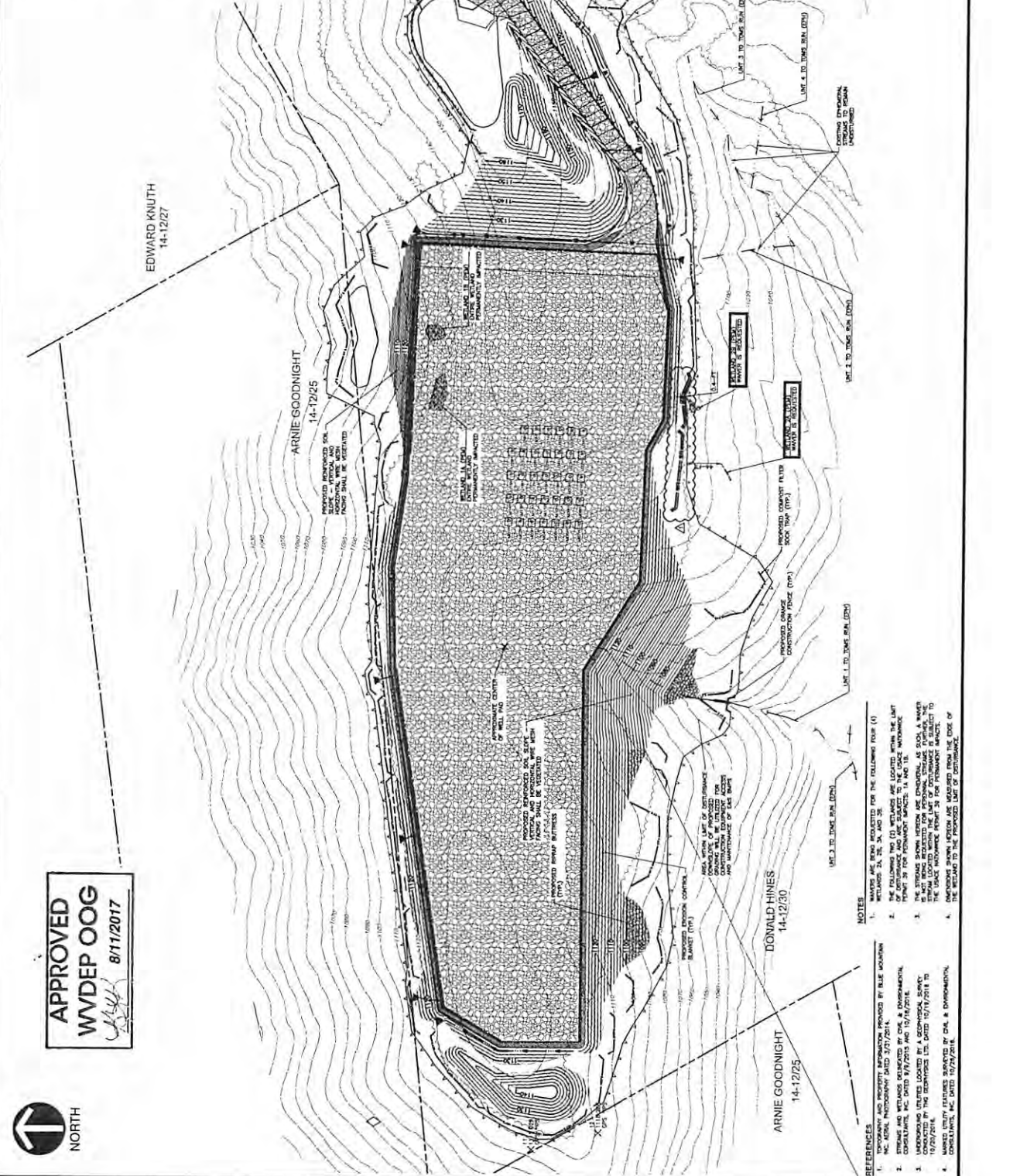
HINES WELL PAD
WASHINGTON DISTRICT
MARSHALL COUNTY, WEST VIRGINIA
PREPARED FOR
CHEVRON APPALACHIA, LLC
800 MOUNTAIN VIEW DRIVE
SMITHFIELD, PA 15478

METLAND NUMBER REQUEST FIGURE

Project Number: 14-001-0203
Drawing Number: 11100
Date: 07/20/2017
Scale: 1" = 40'
Drawn By: JHM
Checked By: JEM
Project Number: 220

LEGEND

EXISTING PROPERTY LINE
EXISTING HOOD CONTOUR
EXISTING INTERMEDIATE CONTOUR
EXISTING PADDED ROADWAY
EXISTING GAS LINE
EXISTING WATERLINE
EXISTING OVERHEAD ELECTRIC LINE
EXISTING TELEPHONE/COMMUNICATION LINE
EXISTING STREAM
EXISTING METEAD
EXISTING STRUCTURE
EXISTING UTILITY POLE
EXISTING PIPE ALIGNMENT
PROPOSED LIMIT OF CONTINUANCE
PROPOSED WELL, HOOD AND CELLAR
PROPOSED FILTER BED
PROPOSED INTERMEDIATE CONTOUR
PROPOSED INTERMEDIATE CONTOUR
PROPOSED STORMWATER CULVERT
PROPOSED INLET
PROPOSED SWAMP APOPH
PROPOSED SWAMP CONTROL BANKET
PROPOSED SWAMP CONTROL BANKET



APPROVED WUDEP OOG
8/11/2017

EDWARD KNUTH
14-12/27

ARNIE GOODNIGHT
14-12/25

DONALD HINES
14-12/30

ARNIE GOODNIGHT
14-12/25

NOTES

1. WELLS ARE BEING REQUESTED FOR THE FOLLOWING FROM (A) WELLS 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2L, 2M, 2N, 2O, 2P, 2Q, 2R, 2S, 2T, 2U, 2V, 2W, 2X, 2Y, 2Z.
2. ALL FOLLOWING WELLS (A) WELLS ARE LOCATED WITHIN THE LIMIT OF CONTINUANCE AS SHOWN ON THIS DRAWING. THE WELLS ARE REQUESTED FOR FURNISHMENT, 14 AND 15.
3. THE STREAMS SHOWN HEREON ARE ENCLOSED, AS SUCH A WATER TREATMENT FACILITY MUST BE PROVIDED TO TREAT THE WATER. THE STREAMS SHOWN HEREON ARE ENCLOSED, AS SUCH A WATER TREATMENT FACILITY MUST BE PROVIDED TO TREAT THE WATER. THE STREAMS SHOWN HEREON ARE ENCLOSED, AS SUCH A WATER TREATMENT FACILITY MUST BE PROVIDED TO TREAT THE WATER.
4. ALL METEAD TO THE PROPOSED LIMIT OF CONTINUANCE.

REFERENCES

1. TOPOGRAPHIC AND PROPERTY INFORMATION PROVIDED BY JULIE MCKENNA, 7/27/2016.
2. STREAM AND WELLS DATA PROVIDED BY WELLS DATA, 8/1/2016.
3. UNDERGROUND UTILITIES LOCATED BY A GEOTECHNICAL SURVEY, 10/20/2016 BY THE CONSULTING ENGINEERS, DATED 10/19/2016 TO 10/20/2016.
4. MARKET UTILITY FEATURES SHOWN BY CHS & DOWNSIDE, CONSULTANTS, INC. DATED 10/27/2016.

08/18/2017



March 2, 2017

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

Dear Reviewer:

Subject: Wetland and Perennial Stream Waiver Request Form
Chevron Appalachia, LLC
Hines Well Pad Project
Washington District, Marshall County, West Virginia
CEC Project 164-052

1.0 INTRODUCTION

On behalf of Chevron Appalachia, LLC (Chevron), Civil & Environmental Consultants, Inc. (CEC) is submitting a Wetland and Perennial Stream Waiver Request form 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 four (4) palustrine emergent wetlands for their proposed Hines Well Pad Project located in Washington District, Marshall County, West Virginia.

Chevron is proposing to construct a natural gas well pad and associated access road. The total limit of disturbance (LOD) for the project is approximately 19 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 September 9, 2015 and October 18, 2016. 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 Hines Well Pad Project is located off Campbell Hill Road in Washington District, Marshall County, West Virginia southeast of the City of Moundsville, as shown on the Site Location Map. The project's proposed LOD is located within 100 feet of four (4) wetlands, as shown on the Aquatic Impacts Map. The approximate distance of each wetland to the nearest boundary of the LOD is as follows:

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- Wetland 2A – 44 linear feet;
- Wetland 2B – 0.4 linear feet;
- Wetland 3A – 25 linear feet; and
- Wetland 3B – 41 linear feet.

No perennial streams are located within 100 feet of the project LOD. A waiver is not being requested for the wetlands and the ephemeral stream located within the LOD, which includes Wetlands 1A and 1B and an unnamed tributary (UNT) 1 to Toms Run. Chevron is requesting authorization from the U.S. Army Corps of Engineers (USACE) Pittsburgh District for impacts to these features. A copy of the Nationwide Permit 39 Application to the USACE for these impacts 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 site would not be developed and no immediate environmental impacts would occur. Oil and 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.*

The current single well pad and access road design approach of the Hines Well Pad combines three separate well pads and access roads that were conceptually planned by Chevron in the vicinity of the Hines Well Pad location. The overall earth disturbance of three separate projects would have been greater than the current one pad and access road project. Further, on the Hines property, the current location is the primary desired location due to the size of the proposed well pad and the steep topography of the surrounding area. 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.

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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. The four (4) wetlands that are located within 100 feet of the LOD are located on the southern side of the proposed well pad and access road. In order to maintain a 100-foot buffer from the four (4) wetlands, the well pad and access road would need to be shifted north, which is not feasible due to the steep topography located to the north of the proposed well pad. In addition, shifting the access to the north would cause the LOD to be within 100 feet of Wetland 5.

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.

As stated above, the current Hines Well Pad has been designed to take the place of three separate well pad and access road projects. As such, the singular well pad and access road will have less earth disturbance than the three separate projects. The current proposed Hines Well Pad design represents the alternative which reduces permanent impacts to the greatest degree practicable. Shifting the proposed well pad south or north would create higher fill slopes, and greater 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 Hines 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
- The ephemeral stream located within the LOD and downgradient of the proposed fill slope toe-key outlet drain will be restored to approximate original dimensions 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 and Perennial Stream Waiver Request Form. Please contact Katie Moberg at 724-327-5200 or kmoberg@cecinc.com, if you have any questions or require additional information.

Respectfully submitted,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC


Sarah V. Parker
Assistant Project Manager


Katie L. Moberg
Project Manager

SVP:KLM/jg
Enclosures

cc: Jenny Hayes, Chevron Appalachia, LLC

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ATTACHMENT A

WETLAND AND PERENNIAL STREAM WAIVER REQUEST FORM

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11/3/14

Wetland and Perennial Stream Waiver Request

API Number: 47-051-01931

Operator's Well Number: MO9H

Well Operator: Chevron Appalachia, LLC

Well Number: _____ Well Pad Name: Hines Well Pad

County, District, Quadrangle of Well Location: Marshall County, Washington 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.

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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.

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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.

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ATTACHMENT B

FIGURES

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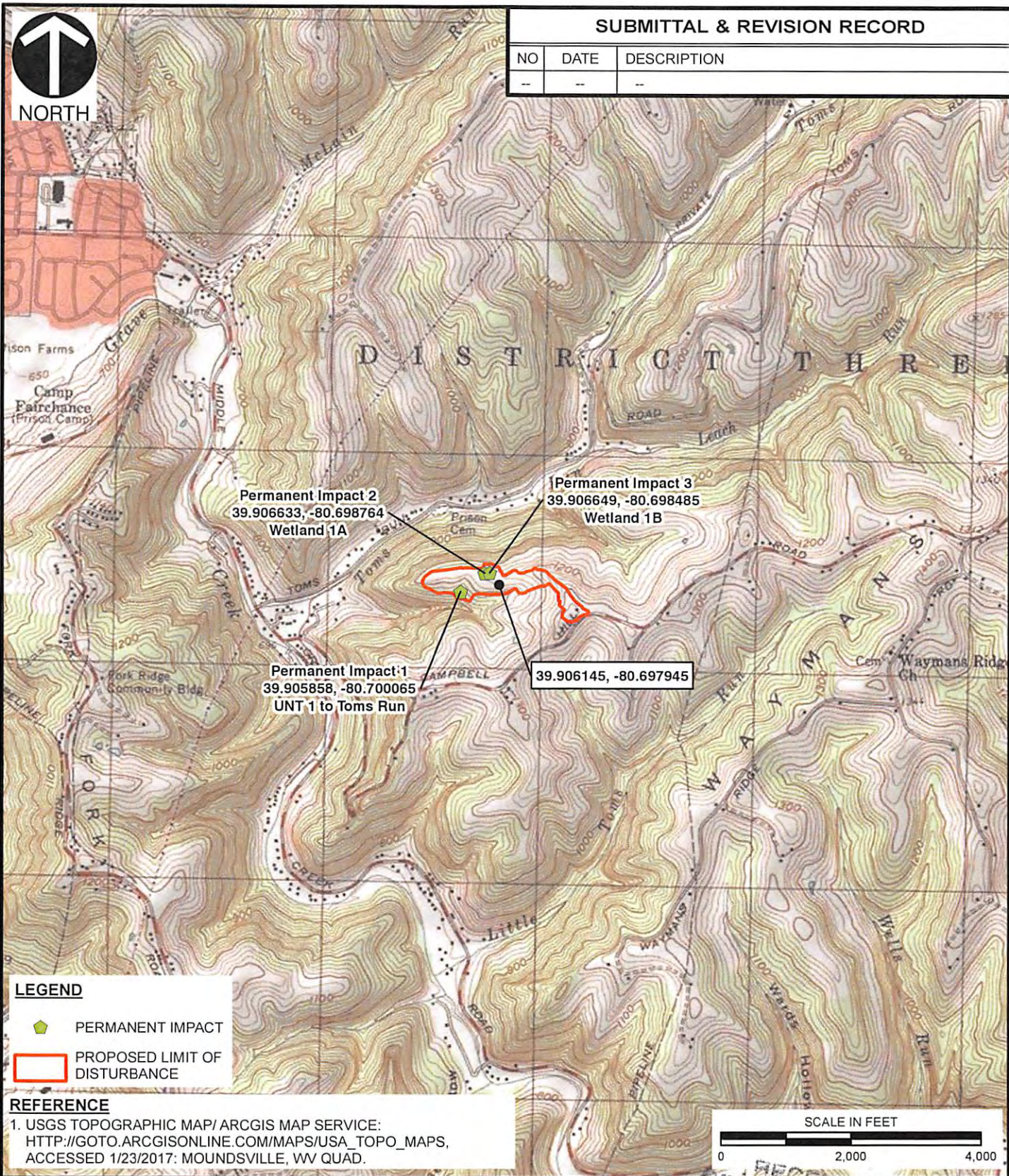
WV Department of
Environmental Protection **08/18/2017**



NORTH

SUBMITTAL & REVISION RECORD

NO	DATE	DESCRIPTION
--	--	--





Permanent Impact 2
39.906633, -80.698764
Wetland 1A

Permanent Impact 3
39.906649, -80.698485
Wetland 1B

Permanent Impact 1
39.905858, -80.700065
UNT 1 to Toms Run

39.906145, -80.697945

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 1/23/2017: MOUNDSVILLE, WV QUAD.



Civil & Environmental Consultants, Inc.

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

CHEVRON APPALACHIA, LLC
HINES WELL PAD
WASHINGTON DISTRICT
MARSHALL COUNTY, WEST VIRGINIA

USGS SITE LOCATION MAP

DRAWN BY:	JDM	CHECKED BY:	SVP	APPROVED BY:	<i>Hand signature</i> PAK* <small>-on file</small>	FIGURE NO:	164-052
DATE:	01/24/2017	SCALE:	1" = 2,000'	PROJECT NO:	164-052	08/18/2017	

P:\2016\164-052\GIS\maps\NWP\164052.FIG 1 NWP SITE LOC.MXD 1/23/2017 7:24 PM (imendicino)

Civil & Environmental Consultants, Inc.
 4000 Tringram Lane, Suite 200 - Export, PA 15622
 724-271-0200 800-888-2810


REVISION RECORD

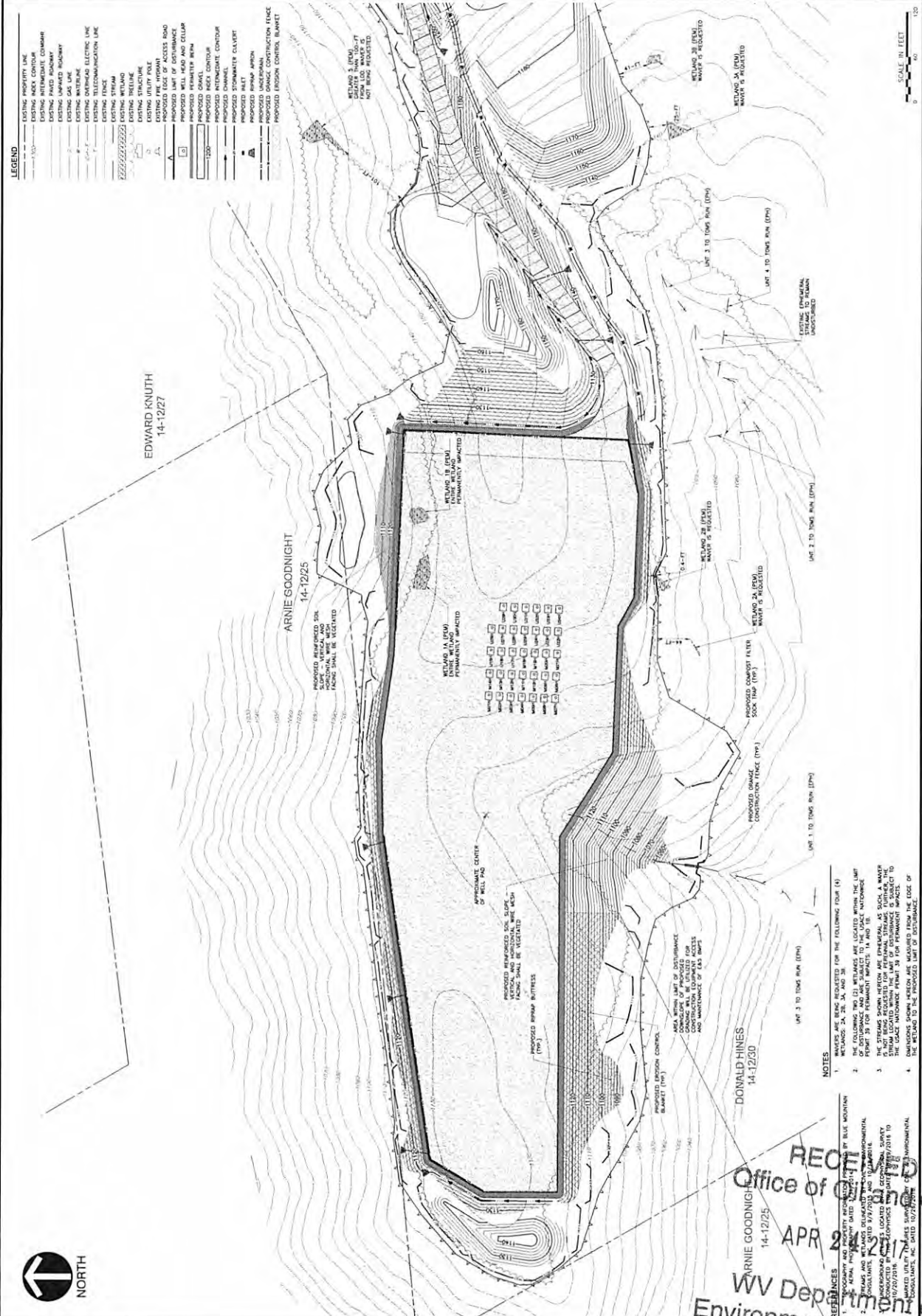
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2	01/11/11	REVISIONS TO PERMIT
3	02/11/11	REVISIONS TO PERMIT
4	03/11/11	REVISIONS TO PERMIT
5	04/11/11	REVISIONS TO PERMIT
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15	02/12/12	REVISIONS TO PERMIT
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20	07/12/12	REVISIONS TO PERMIT
21	08/12/12	REVISIONS TO PERMIT
22	09/12/12	REVISIONS TO PERMIT
23	10/12/12	REVISIONS TO PERMIT
24	11/12/12	REVISIONS TO PERMIT
25	12/12/12	REVISIONS TO PERMIT

HINES WELL PAD
 WASHINGTON DISTRICT
 MARSHALL COUNTY, WEST VIRGINIA
 PREPARED FOR
CHEVRON APPALACHIA, LLC
 800 MOUNTAIN VIEW DRIVE
 SMITHFIELD, PA 15478

WETLAND WAIVER
 REQUEST FIGURE

Project Number: 16A00250308
 Drawing Number: 16A00250308-01
 Date Issued: 03/07/2017
 Issue Number: 003
 Checked By: SVP
 Project Manager: DAK

FIG. 3



LEGEND

- EXISTING PROPERTY LINE
- EXISTING INTERMEDIATE CONDUIT
- EXISTING PAVED ROADWAY
- EXISTING UNPAVED ROADWAY
- EXISTING WATERLINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TELECOMMUNICATION LINE
- EXISTING STREAM
- EXISTING WETLAND
- EXISTING TRAIL
- EXISTING UTILITY POLE
- EXISTING FIRE HYDRANT
- PROPOSED WETLAND WAIVER
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED PERMITTER BERM
- PROPOSED PERMITS
- PROPOSED INTERMEDIATE CONDUIT
- PROPOSED DRAINAGE
- PROPOSED BUMP APRON
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED EROSION CONTROL BLANKET

NOTES

- THE AREA SHOWN AS PERMANENTLY IMPACTED FOR THE FOLLOWING FOUR (4) WETLANDS: 1A, 2A, 3A, AND 3B.
- THE FOLLOWING TWO (2) WETLANDS ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE: 1B AND 2B. THESE WETLANDS WILL BE RESTORED TO ORIGINAL CONDITION AND WILL BE UTILIZED FOR CROPPING AND MAINTENANCE OF GAS BUMP APRON.
- THE STREAMS SHOWN HEREON ARE EPHEMERAL. AS SUCH, A WETLAND WAIVER IS REQUIRED FOR THESE STREAMS LOCATED WITHIN THE LIMIT OF DISTURBANCE. SUBJECT TO THE LOCAL AGENCIES' REVIEW, THESE STREAMS WILL BE RESTORED TO ORIGINAL CONDITION AND WILL BE UTILIZED FOR CROPPING AND MAINTENANCE OF GAS BUMP APRON.
- THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE EDGE OF THE WETLAND WAIVER IS RESTORED TO ORIGINAL CONDITION.

REFERENCES

- PROSODY AND PROPERTY RECORDS FILED BY BLUE MOUNTAIN SURVEYING, INC. ON 08/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 01/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 02/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 03/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 04/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 05/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 06/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 07/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 08/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 09/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 10/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 11/11/2011.
- ASMA PHOTO AND VIDEO SURVEY REPORT FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INC. DATED 12/11/2011.

EDWARD KNUTH
14-1227

ARNIE GOODNIGHT
14-1225

DONALD HINES
14-1230

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APR 24 2017
WV Dept of Environmental Protection
10/21/2017

ATTACHMENT C

EROSION AND SEDIMENT CONTROL PLAN

RECEIVED
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APR 24 2017
WV Department of Environmental Protection
08/18/2017



NO.	DATE	REVISION
01	05/11/16	ISSUED FOR PERMIT
02	05/11/16	REVISED PER PERMIT COMMENTS
03	05/11/16	REVISED PER PERMIT COMMENTS
04	05/11/16	REVISED PER PERMIT COMMENTS
05	05/11/16	REVISED PER PERMIT COMMENTS
06	05/11/16	REVISED PER PERMIT COMMENTS
07	05/11/16	REVISED PER PERMIT COMMENTS
08	05/11/16	REVISED PER PERMIT COMMENTS

TEMPORARY SEEDING SPECIFICATIONS:

1. ALL TEMPORARY SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
 2. ALL TEMPORARY SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
 3. ALL TEMPORARY SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
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 8. ALL TEMPORARY SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
 9. ALL TEMPORARY SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
 10. ALL TEMPORARY SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.

SEEDING TYPE	PERMANENT SEEDING	TEMPORARY SEEDING	PERCENTAGE
GRASS	100%	100%	100%
LEGUMES	100%	100%	100%
WOODS	100%	100%	100%
WETLANDS	100%	100%	100%
ROADS	100%	100%	100%
ROAD CUTS	100%	100%	100%
ROAD DITCHES	100%	100%	100%
ROAD EMBANKMENTS	100%	100%	100%
ROAD SHOULDER	100%	100%	100%
ROAD CUTS	100%	100%	100%
ROAD DITCHES	100%	100%	100%
ROAD EMBANKMENTS	100%	100%	100%
ROAD SHOULDER	100%	100%	100%

PERMANENT SEEDING SPECIFICATIONS:

1. ALL PERMANENT SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
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 9. ALL PERMANENT SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.
 10. ALL PERMANENT SEEDING SHALL BE PLACED ON ALL DISTURBED AREAS FOR SITE RECLAMATION.

SEEDING TYPE	PERMANENT SEEDING	TEMPORARY SEEDING	PERCENTAGE
GRASS	100%	100%	100%
LEGUMES	100%	100%	100%
WOODS	100%	100%	100%
WETLANDS	100%	100%	100%
ROADS	100%	100%	100%
ROAD CUTS	100%	100%	100%
ROAD DITCHES	100%	100%	100%
ROAD EMBANKMENTS	100%	100%	100%
ROAD SHOULDER	100%	100%	100%
ROAD CUTS	100%	100%	100%
ROAD DITCHES	100%	100%	100%
ROAD EMBANKMENTS	100%	100%	100%
ROAD SHOULDER	100%	100%	100%

NOTES:

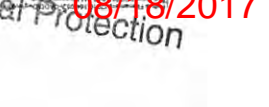
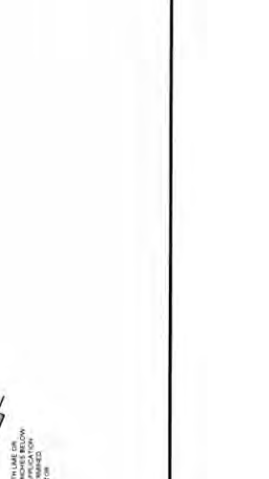
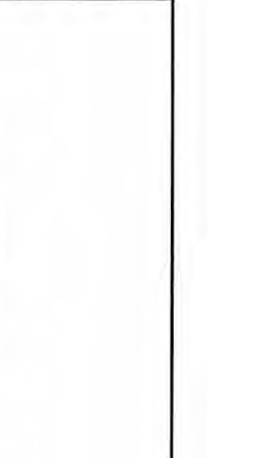
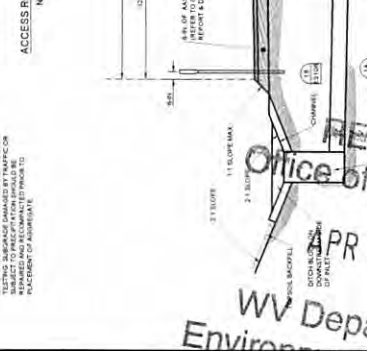
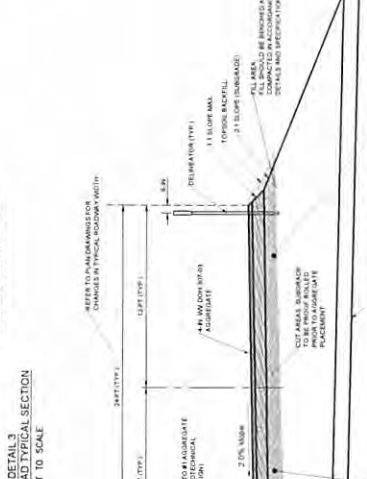
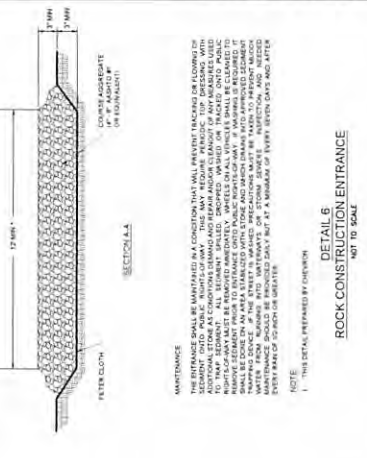
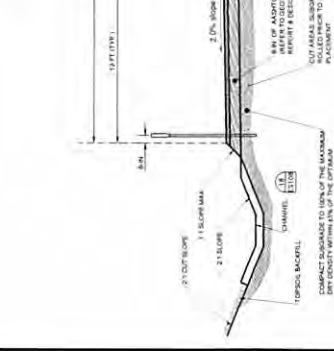
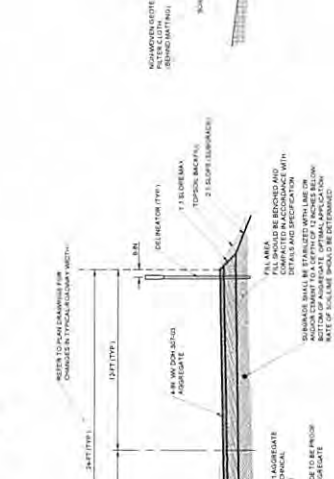
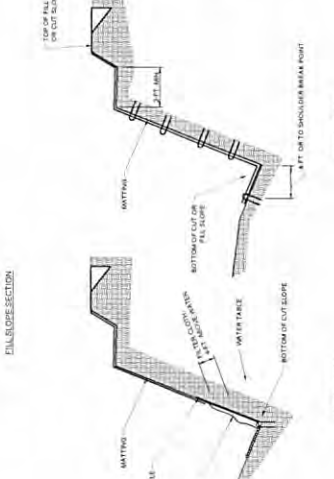
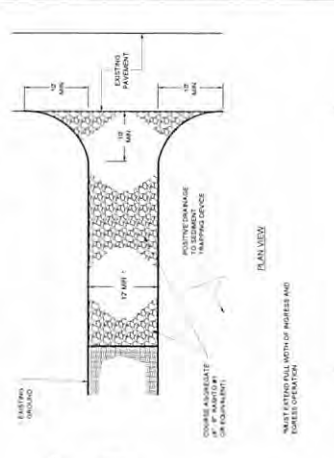
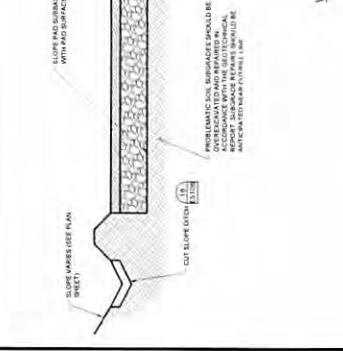
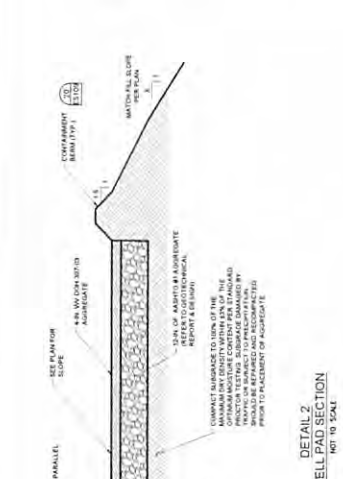
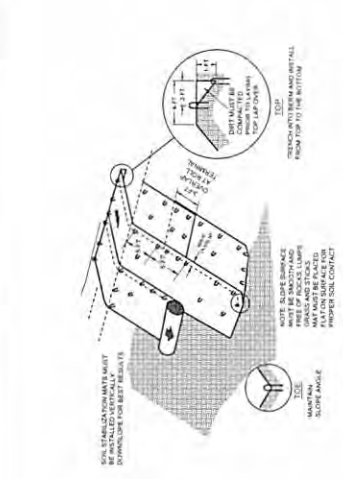
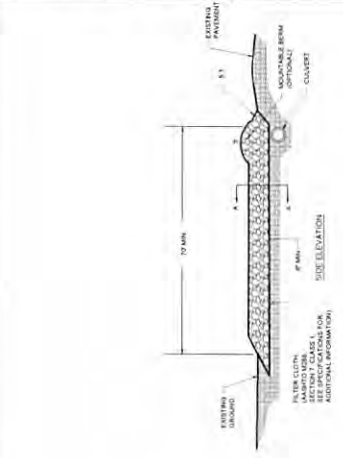
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 Environmental Protection



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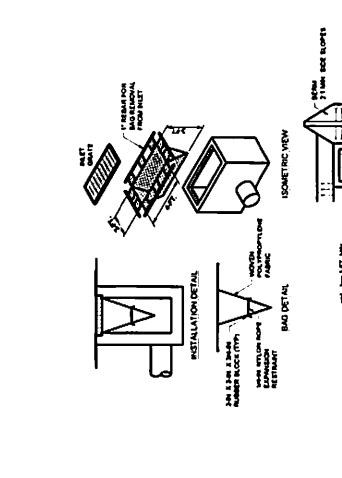
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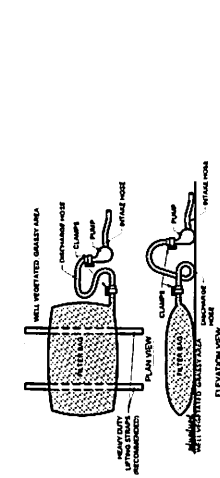
REVISION RECORD

No.	Description	Date
1	As Shown	08/15/18
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DETAIL 17
PUMPED WATER FILTER BAG
NOT TO SCALE

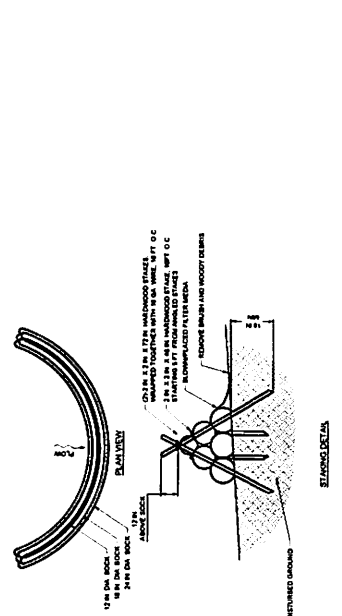
ITEM NO.	DESCRIPTION	QTY	UNIT
1	1/2" DIA. FILTER BAG	1	EA
2	1/2" DIA. FILTER BAG	1	EA
3	1/2" DIA. FILTER BAG	1	EA
4	1/2" DIA. FILTER BAG	1	EA
5	1/2" DIA. FILTER BAG	1	EA
6	1/2" DIA. FILTER BAG	1	EA
7	1/2" DIA. FILTER BAG	1	EA
8	1/2" DIA. FILTER BAG	1	EA
9	1/2" DIA. FILTER BAG	1	EA
10	1/2" DIA. FILTER BAG	1	EA



DETAIL 9
FILTER BAG INLET PROTECTION
NOT TO SCALE

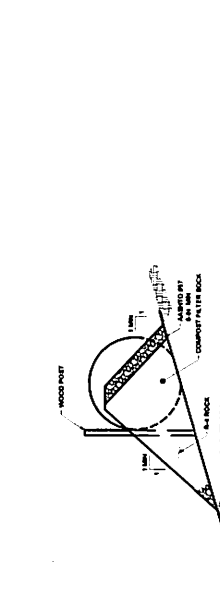
ITEM NO.	DESCRIPTION	QTY	UNIT
1	1/2" DIA. FILTER BAG	1	EA
2	1/2" DIA. FILTER BAG	1	EA
3	1/2" DIA. FILTER BAG	1	EA
4	1/2" DIA. FILTER BAG	1	EA
5	1/2" DIA. FILTER BAG	1	EA
6	1/2" DIA. FILTER BAG	1	EA
7	1/2" DIA. FILTER BAG	1	EA
8	1/2" DIA. FILTER BAG	1	EA
9	1/2" DIA. FILTER BAG	1	EA
10	1/2" DIA. FILTER BAG	1	EA

NOTES:
 1. THE DETAIL PREPARED BY CHEVRON.
 2. FABRIC FOR THE BAG SHOULD HAVE LOW FLOW PERMEABILITY (GDS/CM/HR).
 3. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 4. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 5. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 6. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 7. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 8. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 9. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 10. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.



DETAIL 12
ROCK FILTER SOCK (COMPOST FILTER SOCK)
NOT TO SCALE

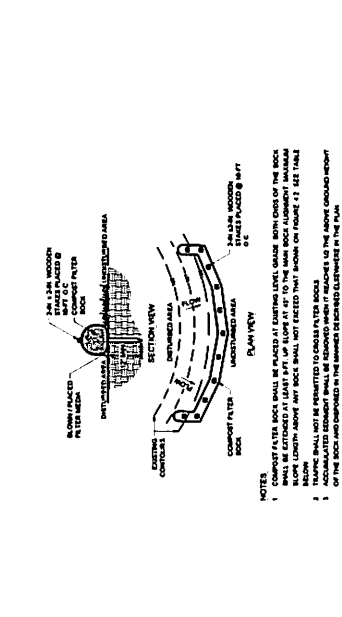
TRAP DESIGNATION	BOTTOM FL. OF SOCK	TOP FL. OF SOCK	VOLUME (CU. YD)	REQUIRED SOCKS
A	1000.00	1025.00	200	200
B	1000.00	1050.00	400	400
C	1000.00	1075.00	600	600
D	1000.00	1100.00	800	800
E	1000.00	1125.00	1000	1000
F	1000.00	1150.00	1200	1200
G	1000.00	1175.00	1400	1400
H	1000.00	1200.00	1600	1600
I	1000.00	1225.00	1800	1800
J	1000.00	1250.00	2000	2000



DETAIL 8
COMPOST FILTER SOCK SEDIMENT TRAP
NOT TO SCALE

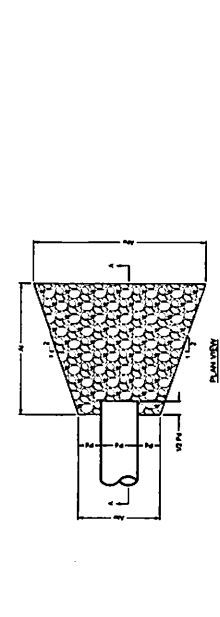
ITEM NO.	DESCRIPTION	QTY	UNIT
1	1/2" DIA. FILTER SOCK	1	EA
2	1/2" DIA. FILTER SOCK	1	EA
3	1/2" DIA. FILTER SOCK	1	EA
4	1/2" DIA. FILTER SOCK	1	EA
5	1/2" DIA. FILTER SOCK	1	EA
6	1/2" DIA. FILTER SOCK	1	EA
7	1/2" DIA. FILTER SOCK	1	EA
8	1/2" DIA. FILTER SOCK	1	EA
9	1/2" DIA. FILTER SOCK	1	EA
10	1/2" DIA. FILTER SOCK	1	EA

NOTES:
 1. THE DETAIL PREPARED BY CHEVRON.
 2. FABRIC FOR THE SOCK SHALL BE MADE FROM POLYPROPYLENE OR POLYESTER WITH A TENSILE STRENGTH OF AT LEAST 100 LBS PER YD.
 3. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 4. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 5. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 6. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 7. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 8. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 9. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 10. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.



DETAIL 11
ROCK FILTER OUTLET (COMPOST FILTER SOCK)
NOT TO SCALE

ITEM NO.	DESCRIPTION	QTY	UNIT
1	1/2" DIA. FILTER SOCK	1	EA
2	1/2" DIA. FILTER SOCK	1	EA
3	1/2" DIA. FILTER SOCK	1	EA
4	1/2" DIA. FILTER SOCK	1	EA
5	1/2" DIA. FILTER SOCK	1	EA
6	1/2" DIA. FILTER SOCK	1	EA
7	1/2" DIA. FILTER SOCK	1	EA
8	1/2" DIA. FILTER SOCK	1	EA
9	1/2" DIA. FILTER SOCK	1	EA
10	1/2" DIA. FILTER SOCK	1	EA



DETAIL 7
COMPOST FILTER SOCK
NOT TO SCALE

ITEM NO.	DESCRIPTION	QTY	UNIT
1	1/2" DIA. FILTER SOCK	1	EA
2	1/2" DIA. FILTER SOCK	1	EA
3	1/2" DIA. FILTER SOCK	1	EA
4	1/2" DIA. FILTER SOCK	1	EA
5	1/2" DIA. FILTER SOCK	1	EA
6	1/2" DIA. FILTER SOCK	1	EA
7	1/2" DIA. FILTER SOCK	1	EA
8	1/2" DIA. FILTER SOCK	1	EA
9	1/2" DIA. FILTER SOCK	1	EA
10	1/2" DIA. FILTER SOCK	1	EA

NOTES:
 1. THE DETAIL PREPARED BY CHEVRON.
 2. FABRIC FOR THE SOCK SHALL BE MADE FROM POLYPROPYLENE OR POLYESTER WITH A TENSILE STRENGTH OF AT LEAST 100 LBS PER YD.
 3. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 4. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 5. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 6. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 7. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 8. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 9. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.
 10. FABRIC SHOULD BE 1/2" THICK AND 1/2" DIA. HOLES SHOULD BE 1/2" DIA. HOLES.



REVISION RECORD

No.	Description	Date
1	Issue for Review	10/10/16
2	Issue for Construction	10/10/16
3	Issue for Construction	10/10/16
4	Issue for Construction	10/10/16
5	Issue for Construction	10/10/16
6	Issue for Construction	10/10/16
7	Issue for Construction	10/10/16
8	Issue for Construction	10/10/16
9	Issue for Construction	10/10/16
10	Issue for Construction	10/10/16

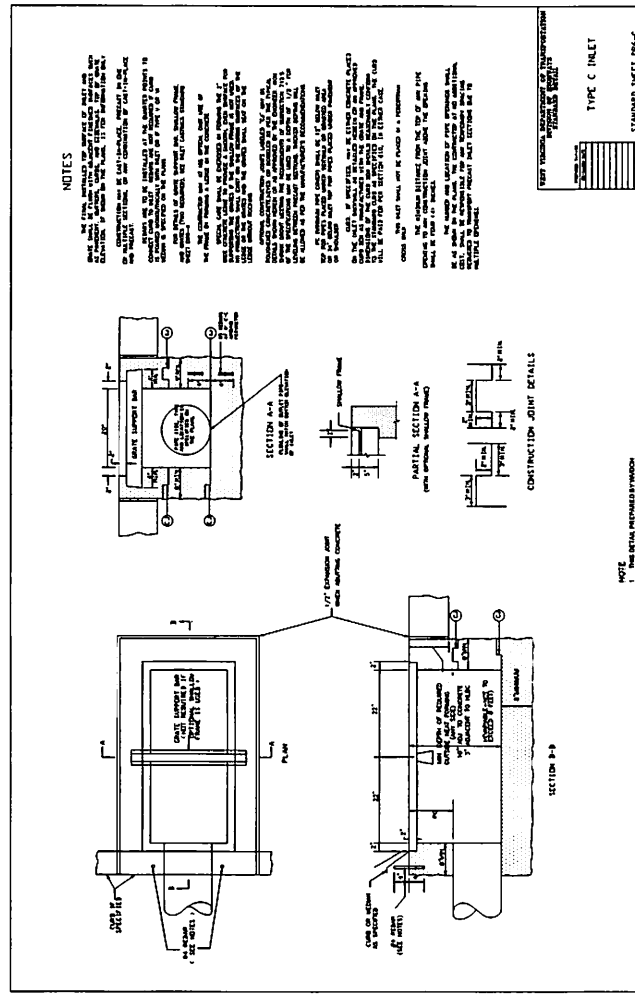


TABLE 1: MINIMUM TRENCH WIDTHS

PIPE DIAMETER (in.)	TRENCH WIDTH (in.)
4-8	36
12	36
15	36
18	36
24	36
30	36
36	36
42	36
48	36
54	36
60	36
66	36
72	36
78	36
84	36
90	36

TABLE 2: BACKFILL MATERIALS AND CONSTRUCTION REQUIREMENTS

DESCRIPTION	PIPE CLASSIFICATION	MIN. COMPACTED DENSITY (%)	MAX. PARTICLE SIZE (in.)	MIN. FREE WATER (%)	MIN. FREE WATER (%)
SHOWN ON DRAWING	CLASS 1	95	1/2	10	10
SHOWN ON DRAWING	CLASS 2	95	3/4	10	10
SHOWN ON DRAWING	CLASS 3	95	1	10	10
SHOWN ON DRAWING	CLASS 4	95	1 1/2	10	10
SHOWN ON DRAWING	CLASS 5	95	2	10	10
SHOWN ON DRAWING	CLASS 6	95	2 1/2	10	10
SHOWN ON DRAWING	CLASS 7	95	3	10	10
SHOWN ON DRAWING	CLASS 8	95	3 1/2	10	10
SHOWN ON DRAWING	CLASS 9	95	4	10	10
SHOWN ON DRAWING	CLASS 10	95	4 1/2	10	10
SHOWN ON DRAWING	CLASS 11	95	5	10	10
SHOWN ON DRAWING	CLASS 12	95	5 1/2	10	10
SHOWN ON DRAWING	CLASS 13	95	6	10	10
SHOWN ON DRAWING	CLASS 14	95	6 1/2	10	10
SHOWN ON DRAWING	CLASS 15	95	7	10	10
SHOWN ON DRAWING	CLASS 16	95	7 1/2	10	10
SHOWN ON DRAWING	CLASS 17	95	8	10	10
SHOWN ON DRAWING	CLASS 18	95	8 1/2	10	10
SHOWN ON DRAWING	CLASS 19	95	9	10	10
SHOWN ON DRAWING	CLASS 20	95	9 1/2	10	10
SHOWN ON DRAWING	CLASS 21	95	10	10	10

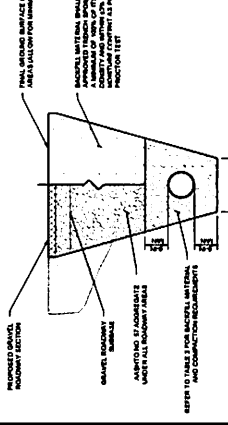


TABLE 3: GRANITE SLOPES

Column No.	Column Type	Column Diameter (in.)	Column Depth (in.)	Column Diameter (in.)	Column Depth (in.)	Column Diameter (in.)	Column Depth (in.)
1	HOPE	1200	15	1200	15	1200	15
2	HOPE	1200	15	1200	15	1200	15
3	HOPE	1200	15	1200	15	1200	15
4	HOPE	1200	15	1200	15	1200	15
5	HOPE	1200	15	1200	15	1200	15
6	HOPE	1200	15	1200	15	1200	15
7	HOPE	1200	15	1200	15	1200	15

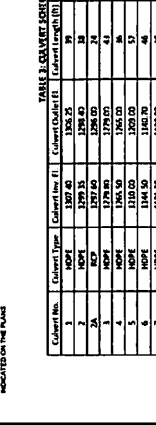


TABLE 4: SHEET SCHEDULE

Sheet No.	Sheet Title	Sheet Depth	Sheet Width
1	Sheet C	1200	15
2	Sheet C	1200	15
3	Sheet C	1200	15
4	Sheet C	1200	15
5	Sheet C	1200	15
6	Sheet C	1200	15
7	Sheet C	1200	15

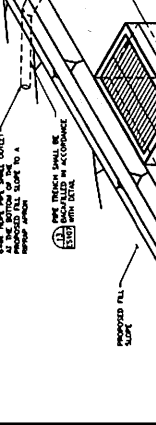
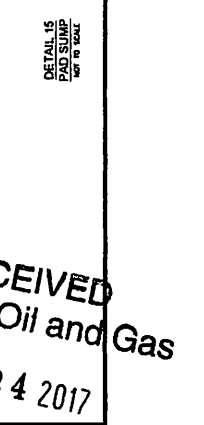


TABLE 5: BACKFILL MATERIALS AND CONSTRUCTION REQUIREMENTS

DESCRIPTION	PIPE CLASSIFICATION	MIN. COMPACTED DENSITY (%)	MAX. PARTICLE SIZE (in.)	MIN. FREE WATER (%)	MIN. FREE WATER (%)
SHOWN ON DRAWING	CLASS 1	95	1/2	10	10
SHOWN ON DRAWING	CLASS 2	95	3/4	10	10
SHOWN ON DRAWING	CLASS 3	95	1	10	10
SHOWN ON DRAWING	CLASS 4	95	1 1/2	10	10
SHOWN ON DRAWING	CLASS 5	95	2	10	10
SHOWN ON DRAWING	CLASS 6	95	2 1/2	10	10
SHOWN ON DRAWING	CLASS 7	95	3	10	10
SHOWN ON DRAWING	CLASS 8	95	3 1/2	10	10
SHOWN ON DRAWING	CLASS 9	95	4	10	10
SHOWN ON DRAWING	CLASS 10	95	4 1/2	10	10
SHOWN ON DRAWING	CLASS 11	95	5	10	10
SHOWN ON DRAWING	CLASS 12	95	5 1/2	10	10
SHOWN ON DRAWING	CLASS 13	95	6	10	10
SHOWN ON DRAWING	CLASS 14	95	6 1/2	10	10
SHOWN ON DRAWING	CLASS 15	95	7	10	10
SHOWN ON DRAWING	CLASS 16	95	7 1/2	10	10
SHOWN ON DRAWING	CLASS 17	95	8	10	10
SHOWN ON DRAWING	CLASS 18	95	8 1/2	10	10
SHOWN ON DRAWING	CLASS 19	95	9	10	10
SHOWN ON DRAWING	CLASS 20	95	9 1/2	10	10
SHOWN ON DRAWING	CLASS 21	95	10	10	10



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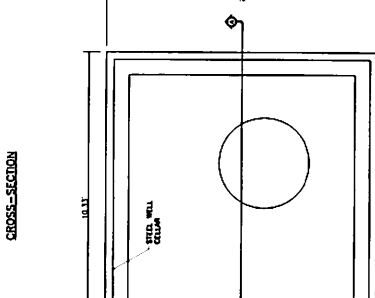
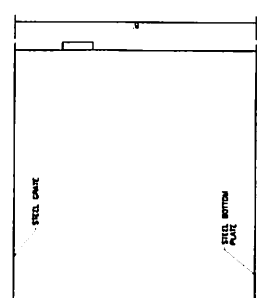
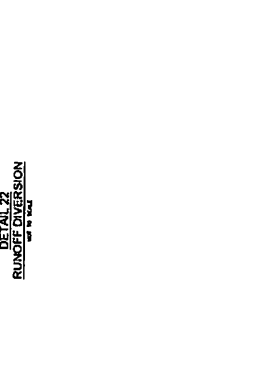
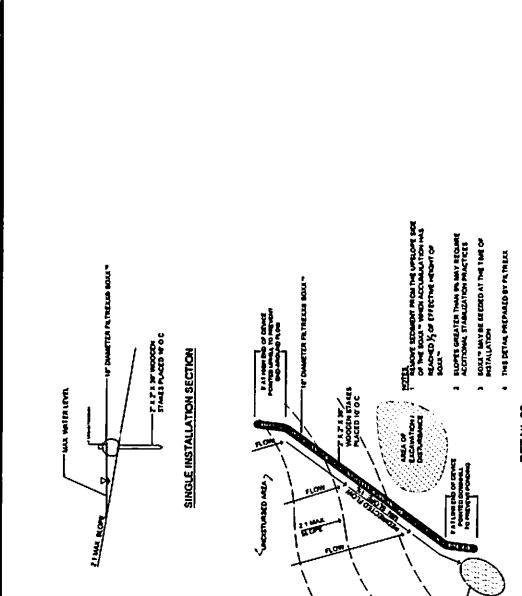
REVISION RECORD

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

HINES WELL SITE
 WASHINGTON DISTRICT
 MARSHALL COUNTY WEST VIRGINIA
CHEVRON APPALACHIA, LLC
 PREPARED FOR
 800 MOUNTAIN VIEW DRIVE
 SMITHFIELD, PA 15478

DETAILS (7 OF 7)
 Project Number: 0163202 (040)
 Drawing Number: 1747 (0001)
 Drawing Title: D0100107
 Issue Number: 003
 Issue Date: 2016
 Checked By: EDS
 Prepared By: JMS
 Project Manager: MGS

ES 109



NOTE: 1. PROVIDE BACKFILL ALONG EXTERIOR TO BEM EXISTING AND CONSTRUCTION TO 1.5% SWELLS (GRAVEL) ON TOP OF BERM. 2. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION. 3. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION. 4. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION. 5. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION.

NOTE: 1. PROVIDE BACKFILL ALONG EXTERIOR TO BEM EXISTING AND CONSTRUCTION TO 1.5% SWELLS (GRAVEL) ON TOP OF BERM. 2. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION. 3. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION. 4. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION. 5. BERM SHALL BE PLACED WITHIN 24 HOURS OF COMPLETION OF BERM CONSTRUCTION.

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ATTACHMENT D

USACE NATIONWIDE PERMIT 39 APPLICATION

**U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
33 CFR 325. The proponent agency is CECW-CO-R.**

*Form Approved -
OMB No. 0710-0003
Expires: 30-SEPTEMBER-2015*

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please **DO NOT RETURN** your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Jenny Middle - Last - Hayes Company - Chevron Appalachia, LLC E-mail Address - jhayes@chevron.com			8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Katie Middle - L Last - Moberg Company - Civil & Environmental Consultants, Inc. E-mail Address - kmoberg@cecinc.com		
6. APPLICANT'S ADDRESS: Address- 800 Mountain View Drive City - Smithfield State - PA Zip - 15478 Country - US			9. AGENT'S ADDRESS: Address- 4000 Triangle Lane, Suite 200 City - Export State - PA Zip - 15632 Country - US		
7. APPLICANT'S PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax 724-564-3781 724-564-3894			10. AGENTS PHONE NOS. w/AREA CODE a. Residence b. Business c. Fax 724-327-5200 724-327-5280		

STATEMENT OF AUTHORIZATION

11. I hereby authorize, CEC, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

Jenny Hayes 1-24-17
SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) Hines Well Pad		14. PROJECT STREET ADDRESS (if applicable) Address Campbell Hill Road City - Moundsville State- WV Zip- 26041	
13. NAME OF WATERBODY, IF KNOWN (if applicable) Refer to Waters Impact Summary Table in Attachment D		15. LOCATION OF PROJECT Latitude: •N 39.906145 Longitude: •W -80.697938	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality Section - Township - Washington District Range - Marshall County			

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17. DIRECTIONS TO THE SITE

From I-470 W, take Exit 2 toward Bethlehem Drive 0.2 mile, and turn left onto Co Hwy 91/1. Drive 0.4 mile, and continue onto 29th St Blvd/W Bethlehem Blvd. Drive 2.2 miles, turn left onto State Rte 2 Alt, and turn left again onto Roberts Ridge Road. Drive 0.1 mile, and turn right onto WV-88 S/Ridgecrest Road. Drive 8.2 miles and turn left onto US-250 S. Drive 2 miles, and turn right onto Campbell Hill Road/Waymans Ridge Road. Drive 2.2 miles, and turn slight right onto Campbell Hill Road. Drive 0.2 mile, and the entrance to the site will be on the right.

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

Chevron Appalachia, LLC is proposing to construct a new natural gas well pad and associated access road. The proposed limit of disturbance is approximately 19 acres and includes an active cattle pasture and wooded hillslopes. The construction of the well pad will require permanent impacts to 0.026 acre of palustrine emergent (PEM) wetlands and 192 linear feet of an ephemeral stream.

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.

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 one unnamed tributary (UNT) to Toms Run and one PEM wetland. A second PEM wetland will be excavated. These permanent impacts are associated with grading activities for construction of the well pad.

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
30 CY of earthen material into wetlands	500 CY of earthen material into streams	N/A

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

Acres 0.026 acre of PEM wetlands
or
Linear Feet 192 linear feet of stream

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 practicable while still meeting the project's purpose and need. Grading was minimized along the southern side of the well pad to limit the impact to UNT 1 to Toms Run and to avoid impacts to Wetlands 2A and 2B. Compost filter sock traps and orange construction fencing will be installed around the downstream portion of the impacted stream to avoid additional impacts.

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list)

a. Address- Hines Donald ET UX - 301 4TH Street

City - Glen Dale State - West Virginia Zip - 26038

b. Address- Gossett Lance J ET UX - RD 1 BOX 428 A

City - Moundsville State - West Virginia Zip - 26041

c. Address- Goodnight Arnie N ET UX - RD 1 BOX 437

City - Moundsville State - West Virginia Zip - 26041

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	January 2017	Pending	
WVDEP	Special Condition A	Not yet assigned	January 2017	Pending	
WVDEP	Horizontal 6A Well P	Not yet assigned	January 2017	Pending	
WVDEP	Wetland Waiver	Not yet assigned	January 2017	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

1-24-17
DATE

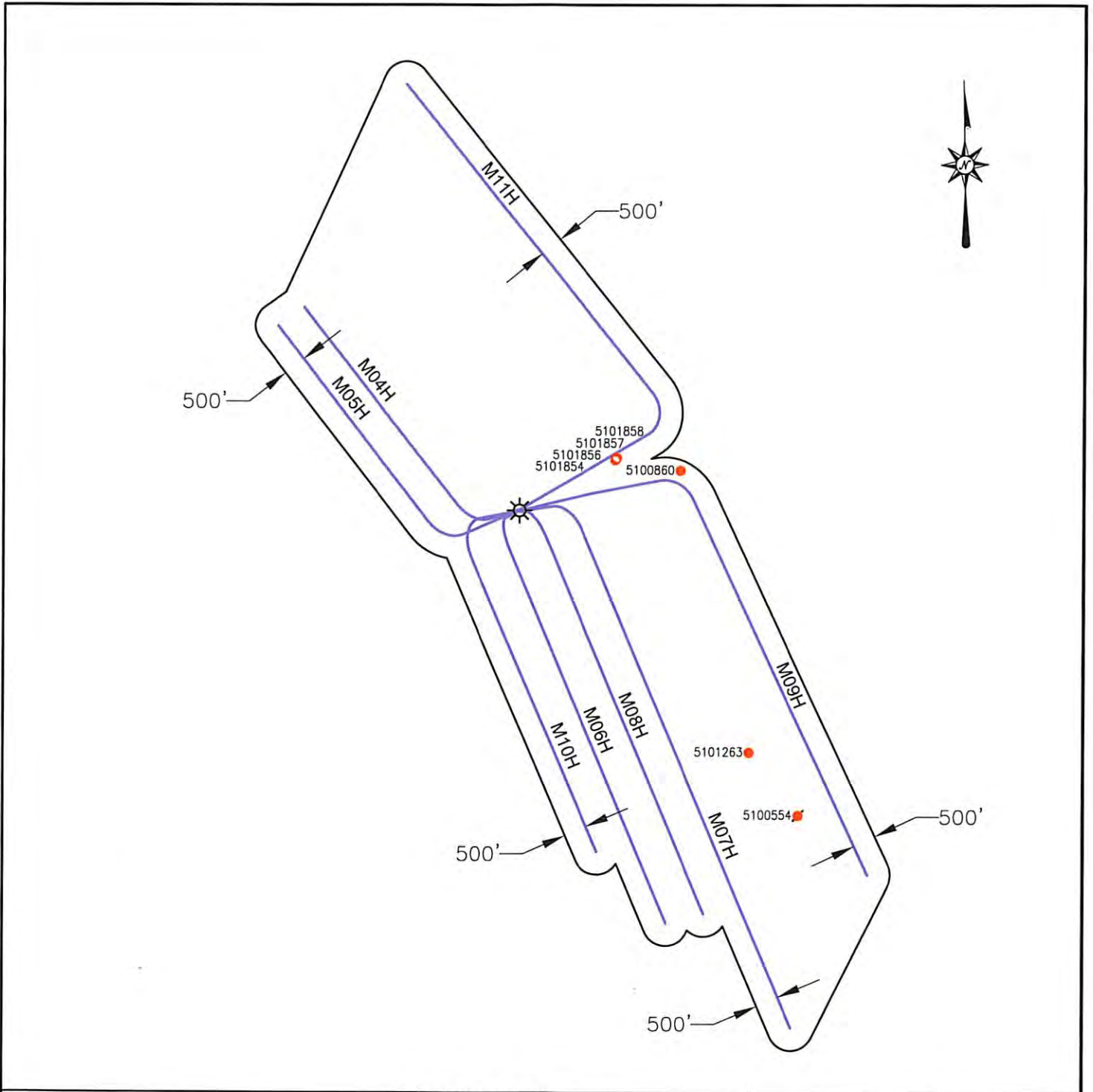
Katie Moberg
SIGNATURE OF AGENT

1-24-17
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.

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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.



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

PREPARED FOR:
 CHEVRON APPALACHIA, LLC
 800 MOUNTAIN VIEW DRIVE
 SMITHFIELD, PA 15478

- LEGEND
- WELL LOCATION
 - ACTIVE WELL
 - PLUGGED WELL
 - PERMITTED WELL

HINES
 AREA OF REVIEW MAP
 MARSHALL COUNTY
 WASHINGTON DISTRICT
 WEST VIRGINIA
 RECEIVED
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TOPO QUAD: MOUNDSVILLE, WV
 SCALE: 1" = 300'
 DATE: MARCH 2, 2017

WV Department of
 Environmental Protection
 08/18/2017

WW-6B
(04/15)

API NO. 47- _____ - _____
OPERATOR WELL NO. Hines M09H
Well Pad Name: Hines

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 Washington Moundsville, WV
Operator ID County District Quadrangle

2) Operator's Well Number: Hines M09H Well Pad Name: Hines

3) Farm Name/Surface Owner: Donald Hines and Wanda L. Hines Public Road Access: Route 38/Campbell Hill Road

4) Elevation, current ground: 1125' Elevation, proposed post-construction: 1125'

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

(b) If Gas Shallow Deep _____
Horizontal

6) Existing Pad: Yes or No No

JN 3/26/17

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6260' GL, 50' and 0.64 psi/ft

8) Proposed Total Vertical Depth: 6260

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 17491

11) Proposed Horizontal Leg Length: 9641

12) Approximate Fresh Water Strata Depths: 360' GL

13) Method to Determine Fresh Water Depths: 1.5 mi radius offset wells, freshwater wells, and freshwater base level

14) Approximate Saltwater Depths: 840', 1620', and 1961' GL

15) Approximate Coal Seam Depths: 360' and 635' GL

16) Approximate Depth to Possible Void (coal mine, karst, other): NA - solid coal anticipated

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: Ireland Mine
Depth: 635' GL
Seam: Pittsburgh Coal
Owner: Murray Energy Corporation

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18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New			60	60	CTS
Fresh Water	13.375	New	J-55	54.5	410	410	CTS
Coal							
Intermediate	9.625	New	L-80	40	1,858	1,858	CTS
Production	5.50	New	P110	20	17,491	17,491	2,358
Tubing							
Liners							

JN 3/26/17

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26					
Fresh Water	13.375	17.5	0.38	2730	1911	Class A	1.2
Coal							
Intermediate	9.625	12.375 & 12.25	0.395	5750	2768	Class A	1.19
Production	5.5	8.75 & 8.5	0.361	14360	9975	Class A, G, or H	1.25
Tubing							
Liners							

PACKERS

4703101937

Kind:				
Sizes:				
Depths Set:				

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Environmental Protection

Page 2 of 3

08/18/2017

WW-6B
(10/14)

API NO. 47- _____ - _____
OPERATOR WELL NO. Hines M00H
Well Pad Name: Hines

JN 3/26/17

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 6,260 feet. Drill horizontal leg.

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

18,762 bbl fluid - 1,000,000 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): 19.0

22) Area to be disturbed for well pad only, less access road (acres): 10.3

23) Describe centralizer placement for each casing string:

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

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

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

25) Proposed borehole conditioning procedures:

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

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*Note: Attach additional sheets as needed.

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08/18/2017

HINES PAD CEMENT ADDITIVES

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

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WV Department of
Environmental Protection

08/18/2017



Hines M09H

Washington Twp, Marshall Co, WV Ground Level Elev. (ft above SL): 1,120

DRILLING FLUID / BIT TYPE / TFA	CENTRALIZER PROGRAM	CASING SIZE / FORMATION	DEPTH		WELLHEAD DESIGN	HOLE SIZE (IN)	CASING SPECS	CEMENT PROGRAM
			MD (FT)	TVD (FT)				
Core Barrel / Auger	2 Bowspring per Jt	20" Conductor	60	60	INC AZH	26	<u>Conductor</u> 20" API 5L Minimum 40 ft from GL or at least 10 ft into bedrock	Grout to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per jt over coupling to surface	13-3/8" Casing	410	410		17.5	<u>Surface Casing</u> 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (ft Strength 1,000 lbs) 853	<u>Surface Blend (Class A)</u> Cement to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per 3 jts over coupling	9-5/8" Casing	1,858	1,858		12.375 - 12.25	<u>Intermediate Casing</u> 9-5/8" 40# L-80 BTC 0.395" Wall Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.679 Burst (psi) 5,750 Collapse (psi) 3,080 Yield (Jt Strength 1,000 lbs) 916	<u>Intermediate II Blend (Class A)</u> Cement to Surface
	Bow Spring: (1) per every other jt over coupling SpiralGlider or Centek: (1) per jt of csq to KOP	5-1/2" Casing	12,977 - 20,778			8.75 - 8.5	<u>Production Casing</u> 5-1/2" 20# P-110, 0.361" Wall Coupling OD (in) 6.300 ID (in) 4.778 Drift ID (in) 4.653 Burst (psi) 14,360 Collapse (psi) 12,090 Yield (Jt Strength 1,000 lbs) 729	<u>Production Lead Slurry</u> Cement to 500' below 9-5/8" shoe

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Production Tail Slurry
TOC minimum 200' above Marcellus

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Hines Pad Area of Review

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
47-051-00860	CNX Gas Company LLC	CNX Gas Company LLC	Active	39.908767	-80.686817	840'	Pittsburgh Seam	None
47-051-01263	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Active	39.892007	-80.681121	Unknown	Unknown	None
47-051-00554	Kentucky Central & Co.	Unknown	Plugged	39.888303	-80.677210	1441'	Pottsville	None
47-051-01854	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909336	-80.691893	6317'	Marcellus	None
47-051-01856	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909383	-80.691856	6317'	Marcellus	None
47-051-01857	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909430	-80.691819	6317'	Marcellus	None
47-051-01858	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909477	-80.691782	6317'	Marcellus	None

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

Operator Name Chevron Appalachia, LLC OP Code 49449935

Watershed (HUC 10) Middle Grave Creek - Grave Creek Quadrangle 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 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, SBM KOP to TMD

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

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

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

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

-Landfill or offsite name/permit number? Arden Landfill #100172, South Hills Landfill #100592, Short Creek Landfill #WV0109517

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 Jenny Hayes

Company Official (Typed Name) Jenny Hayes

Company Official Title Permitting Team Lead

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Subscribed and sworn before me this 13th day of March, 2017

Kristen Brooks

My commission expires Sept. 2, 2018

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COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Kristen Brooks, Notary Public
Smithfield Twp, Clay County
My Commission Expires Sept. 2, 2018
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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Proposed Revegetation Treatment: Acres Disturbed 11.6 acres 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 [Signature]*

Comments: _____

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Title: *Oil & Gas Inspector*

Date: *3/27/17*

Field Reviewed? () Yes () No

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SEED MIXTURES

<u>Temporary</u>			<u>Permanent</u>			<u>Permanent</u>	
Seed Type		lbs/acre	Seed Type	lbs/acre		Seed Type	lbs/acre
Annual Ryegrass	or	50	Non Agricultural Upland		and	Hayfield, Pastureland, and Cropland	
Winter Wheat		75	Tall Fescue	100		Orchard Grass	80
			Perennial Ryegrass	33		Timothy	80
			Ladino Clover	18		Birdsfoot - Trefoil	20
			Birdsfoot - Trefoil	18		Ladino Clover	20
			Red Top	6			

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Chevron

**Appalachian LLC
WV Well Site Safety Plan**

Pad: Hines Pad A

JN 3/26/17

Well # M06H

1256 Campbell Hill Road

Moundsville, WV 26041

Washington District

Marshall County, WV

Access Point – [39.904947°N, 80.693363°W]

Well Site – [39.906387°N, 80.699914°W]

Marshall County, West Virginia

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BHL is located on topo map 11,598 feet south of Latitude: 39° 55' 00"
 SHL is located on topo map 3,822 feet south of Latitude: 39° 55' 00"

SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

LINE	BEARING	DISTANCE
R1	S 08°54'09" W	152.92'
R2	S 37°32'49" W	169.41'
R3	S 89°30'26" W	183.56'
R4	N 80°17'22" W	925.75'
R5	S 43°17'56" E	1331.24'
R6	S 67°58'28" E	1368.23'

- 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.

SURFACE HOLE LOCATION (SHL)
 UTM 17-NAD83(M)
 N:4417386.81
 E:525707.95
 NAD83, WV NORTH
 N:514420.899
 E:1632083.959

APPROX. LANDING POINT
 UTM 17-NAD83(M)
 N:4417485.13
 E:526860.86
 NAD83, WV NORTH
 N:514680.297
 E:1635872.648

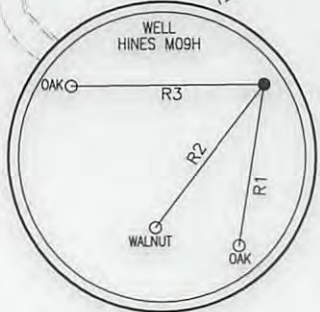
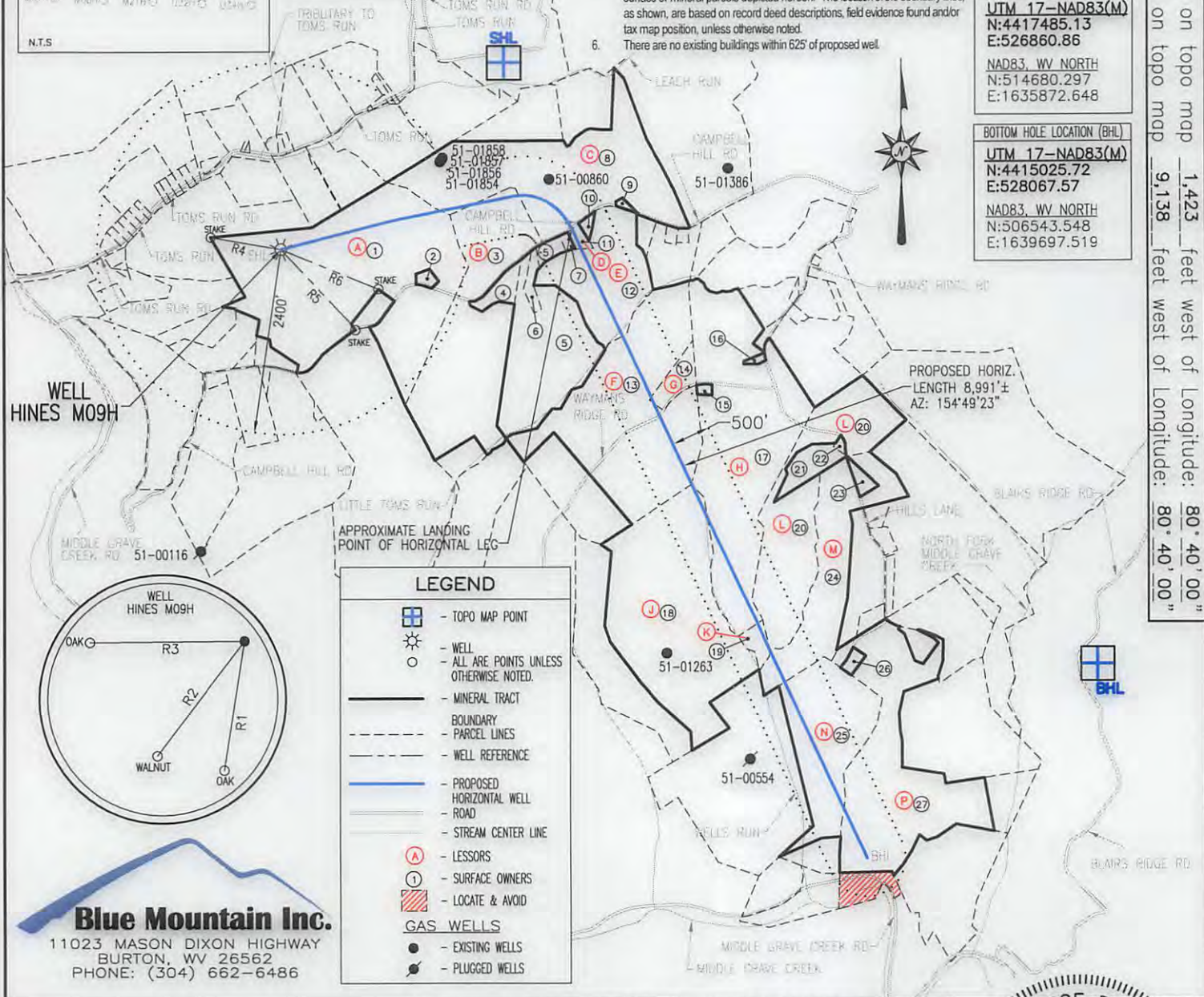
BOTTOM HOLE LOCATION (BHL)
 UTM 17-NAD83(M)
 N:4415025.72
 E:528067.57
 NAD83, WV NORTH
 N:506543.548
 E:1639697.519

BHL is located on topo map 1,423 feet west of Longitude: 80° 40' 00"
 SHL is located on topo map 9,138 feet west of Longitude: 80° 40' 00"

WELL PAD ORIENTATION DETAIL

M01H	M14H	M15H	M28H
M02H	M13H	M16H	M29H
M03H	M12H	M17H	M30H
M04H	M11H	M18H	M31H
M05H	M10H	M19H	M32H
M06H	M09H	M20H	M33H
M07H	M08H	M21H	M34H
M08H	M07H	M22H	M35H
M09H	M06H	M23H	M36H
M10H	M05H	M24H	M37H
M11H	M04H	M25H	M38H
M12H	M03H	M26H	M39H
M13H	M02H	M27H	M40H
M14H	M01H	M28H	M41H

N.T.S.



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

FILE #: HINES M09H
 DRAWING #: HINES M09H
 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: MARCH 7, 2017
 OPERATOR'S WELL #: HINES M09H
 API WELL #: 47 51 01991 MGA
 STATE COUNTY PERMIT

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

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1125.45'

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

SURFACE OWNER: DONALD HINES ET UX ACREAGE: 114.934±
 OIL & GAS ROYALTY OWNER: DONALD HINES ET UX ACREAGE: 768.473± **08/18/2017**

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: 6,400'± TMD: 17,491'±

WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
 Address 800 MOUNTAIN VIEW DRIVE Address 500 LEE STREET, EAST SUITE 1600
 City SMITHFIELD State PA Zip Code 15478 City CHARLESTON State WV Zip Code 25301-3202

HINES M09H PAGE 2 OF 2

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
B	PATRICIA S. HOSKINS	14-12/31
C	OKEY L. RINE JR.	14-11/1
D	CARL A. COCHRAN ET UX	14-11/16.1
E	FRANCIS TURNER ET UX	14-11/2
F	PATRICIA C. LINDGREN	14-11/14
G	PATRICIA C. LINDGREN	14-11/14.1
H	ELLEN I. HEATH	14-11/13
	COLLEEN MCLAIN MOORE	
J	JAMES J. CAVENEY ET UX	14-13/8
K	ELLEN I. HEATH ET AL	14-11/12
L	ELLEN I. HEATH	14-11/11
	COLLEEN MCLAIN MOORE	
M	DENNIS W. CROW ET UX	14-11/11.3
N	DENNIS W. CROW ET UX	14-13/11
P	BARBARA BEVERIDGE	14-13/13
	DAVID L. BEVERIDGE ET UX	

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX	14-12/30
2	TERRY L. DERROW ET UX	14-12/30.3
3	PATRICIA SUE HOSKINS	14-12/31
4	EARNEST L. ROBERTS ET UX	14-12/31.1
5	PAUL E. & BRENT L. SHIPLEY	14-11/16
6	BRENT L. & LORI L. SHIPLEY	14-11/16.3
7	JODY L. & ERIC M. WADE	14-11/16.2
8	OKEY L. RINE JR.	14-11/1
9	STEVEN M. LAVENSKI	14-11/1.1
10	FRANCIS D. TURNER ET UX	14-11/2.1
11	CARL A. COCHRAN ET UX	14-11/16.1
12	D. FRANCIS TURNER ET UX	14-11/2
13	COUNTRY ROADS PROPERTIES LLC	14-11/14
14	DONALD A. & PATTIANNE PARSONS	14-11/14.1
15	QUAY A. HORNER, ET UX	14-11/13.1
16	COLLEEN MCLAIN	14-11/13.2
17	JOHN D. & WM K. HEATH ESTS	14-11/13
18	JAMES J. CAVENEY ET UX	14-13/8
19	WM K. & JOHN D. HEATH ESTS	14-11/12
20	JOHN D. & WM K. HEATH ESTS	14-11/11
21	CHAD E. FRANCIS	14-11/11.2
22	KATHLEEN I. FRANCIS	14-11/11.1
23	DARYL A. CROW	14-11/11.4
24	DENNIS W. & DONNA CROW	14-11/11.3
25	DENNIS W. CROW ET UX	14-13/11
26	DAVID LEE BEVERIDGE ET UX	14-13/13.1
27	DAVID LEE BEVERIDGE	14-13/13

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M) N:4417386.81 E:525707.95
NAD83, WV NORTH N:514420.899 E:1632083.959

APPROX. LANDING POINT
UTM 17-NAD83(M) N:4417485.13 E:526860.86
NAD83, WV NORTH N:514680.297 E:1635872.648

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M) N:4415025.72 E:528067.57
NAD83, WV NORTH N:506543.548 E:1639697.519

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
see attached				

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

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

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

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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: *Jeremy Hayes*
 Its: Permitting Team Lead

HINES M09H

Plat ID	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
14-0012-0030-0000-0000	HINES DONALD ET UX	CHEVRON U.S.A. INC.	0.160	774/290	N/A	N/A	N/A
14-0012-0031-0000-0000	HOSKINS PATRICIA S	CHEVRON U.S.A. INC.	0.150	655/564	N/A	N/A	N/A
14-0011-0001-0000-0000	RINE OKEY L JR	CHEVRON U.S.A. INC.	0.160	1366613	N/A	N/A	N/A
14-0011-0016-0001-0000	COCHRAN CARL A ET UX	CHEVRON U.S.A. INC.	0.150	815/130	N/A	N/A	N/A
14-0011-0002-0000-0000	TURNER FRANCIS ET UX	TRIENERGY, INC.	0.125	677/471	21/531 TRIENERGY, INC. to AB RESOURCES LLC	24/466 AB RESOURCES LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC	25/1 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.
14-0011-0014-0000-0000	LINDGREN PATRICIA C	TRIENERGY, INC.	0.160	691/102	23/74 TRIENERGY, INC. to NPAR, LLC	24/490 NPAR, LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC	25/1 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.
14-0011-0014-0001-0000	LINDGREN PATRICIA C	TRIENERGY, INC.	0.160	691/102	23/74 TRIENERGY, INC. to NPAR, LLC	24/490 NPAR, LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC	25/1 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.
14-0011-0013-0000-0000	HEATH ELLEN I	NPAR, LLC	0.170	701/142	24/466 NPAR, LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC/ RADLER 2000	25/1 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.	756/332 NPAR, LLC to CHEVRON U.S.A. INC.
14-0011-0013-0000-0000	MOORE COLLEEN MCLAIN SFX	NPAR, LLC	0.170	701/140	24/466 NPAR, LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC/ RADLER 2000	26/130 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.	756/332 NPAR, LLC to CHEVRON U.S.A. INC.
14-0013-0008-0000-0000	CAVENEY	TRIENERGY, INC.	0.125	663/497	20/252 TRIENERGY, INC. to AB RESOURCES LLC	24/319 AB RESOURCES LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC	25/1 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.
14-0011-0012-0000-0000	HEATH ELLEN I ET AL	CHEVRON U.S.A. INC.	0.160	811/396	N/A	N/A	N/A
14-0011-0011-0000-0000	HEATH ELLEN I	NPAR, LLC	0.170	701/142	24/466 NPAR, LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC/ RADLER 2000	25/1 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.	756/332 NPAR, LLC to CHEVRON U.S.A. INC.
14-0011-0011-0000-0000	MOORE COLLEEN MCLAIN SFX	NPAR, LLC	0.170	701/140	24/466 NPAR, LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC/ RADLER 2000	26/130 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.	756/332 NPAR, LLC to CHEVRON U.S.A. INC.
14-0011-0011-0003-0000	CROW DENNIS W ET UX	CHEVRON U.S.A. INC.	0.180	853/249	N/A	N/A	N/A
14-0013-0011-0000-0000	CROW DENNIS W ET UX	CHEVRON U.S.A. INC.	0.180	853/249	N/A	N/A	N/A

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HINES M09H

Plat ID	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
14-0013-0013-0000-0000	BEVERIDGE BARBARA	TRIENERGY, INC.	0.125	356/631 & 748/19:	19/623 TRIENERGY, INC. to AB RESOURCES LLC	24/319 AB RESOURCES LLC to CHIEF EXPLORATION & DEVELOPMENT, LLC	25/105 CHIEF EXPLORATION & DEVELOPMENT, LLC to CHEVRON U.S.A. INC.
	BEVERIDGE DAVID L ET UX	CHEVRON U.S.A. INC.	0.180	844/483	N/A	N/A	N/A

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08/18/2017



Kelly Bass
Land Representative

April 12, 2017

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

RE: Hines 4H, 5H, 6H, 7H, 8H, 9H, 10H, 11H

To whom it may concern,

This letter shall serve as confirmation of Chevron U.S.A. Inc.'s right to access the minerals under all roads traversed by the above referenced laterals. Please do not hesitate to contact myself, the undersigned, for any additional questions or to request further information.

Sincerely,

Kelly Bass
Land Representative

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Appalachian Mountain Business Unit
Chevron North America Exploration and Production Company
A division of Chevron U.S.A. Inc.
700 Cherrington Parkway, Coraopolis, PA 15108
Tel 412 865 1488
KellyBass@Chevron.com

08/18/2017

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

Date of Notice Certification: 04/13/2017

API No. 47- _____
Operator's Well No. Hines M09H
Well Pad Name: Hines

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>525707.95</u>
County: <u>Marshall</u>	UTM NAD 83 Northing: <u>4417386.81</u>
District: <u>Washington</u>	Public Road Access: <u>Route 38/Campbell Hill Road</u>
Quadrangle: <u>Moundsville, WV 7.5'</u>	Generally used farm name: <u>Hines</u>
Watershed: <u>Middle Grave Creek - Grave Creek</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.

<p>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:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been notified 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 provided by electronic service, the return receipt card or other postal receipt for certified mailing.

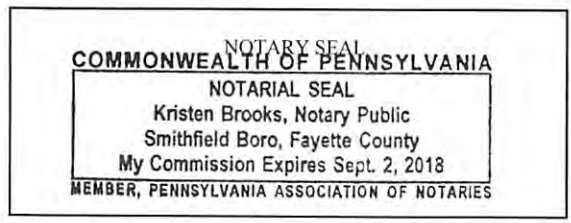
APR 04 2017
WV Department of
Environmental Protection

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: Chevron Appalachia, LLC
By: *Jenny Hayes*
Its: Permitting Team Lead
Telephone: 724-564-3755

Address: 800 Mountain View Drive
Smithfield, PA 15478
Facsimile: 724-564-3894
Email: _____



Subscribed and sworn before me this 13th day of April, 2017
Kristen Brooks Notary Public
My Commission Expires Sept. 2, 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.

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08/18/2017

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

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

Date of Notice: 3/16/17 **Date Permit Application Filed:** 4/20/17

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: Donald Hines and Wanda L Hines
 Address: 301 4th Street
Glen Dale, WV 26038
 Name: _____
 Address: _____

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

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

COAL OWNER OR LESSEE
 Name: 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(s)
 Name: see attached
 Address: _____

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

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*Please attach additional forms if necessary **APR 24 2017**

**WV Department of
Environmental Protection**
08/18/2017

WW-6A Notice of Application Attachment (Hines Pad)

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEOR(S):

Bobby G Baker
RD 3 Box 249
Moundsville, WV 26041

Mark G. Grandstaff
762 Toms Run Rd
Moundsville, WV 26041

Tobias & Jessica Brown
873 Toms Run Lane
Moundsville, WV 26041

Edward D. Knuth
747 Toms Run Lane
Moundsville, WV 26041

Morgan Lacefield
77 Bridge St. Plz
Moundsville, WV 26041

Gerald Oliver
816 Toms Run Lane
Moundsville, WV 26041

Chevron U.S.A. Inc.
800 Mountain View Drive
Smithfield, PA 15478



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Environmental Protection
08/18/2017

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A variance 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 401 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 multi-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. If a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to the items

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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 copy of the permit decision to persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

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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.

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

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

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WW-6A
(8-13)

API NO. 47- _____
OPERATOR WELL NO. Hines M09H
Well Pad Name: Hines

Notice is hereby given by:

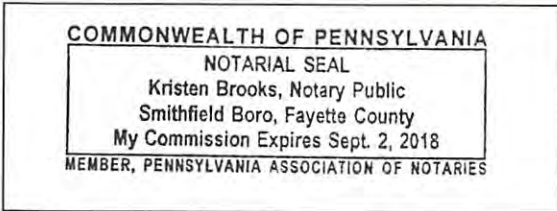
Well Operator: Chevron Appalachia, LLC
Telephone: 724-564-3700
Email: _____

Address: 800 Mountain View Drive
Smithfield, PA 15478
Facsimile: 724-564-3894

Jenny Hays

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.



Subscribed and sworn before me this 13th day of March 2017.

Kristen Brooks Notary Public

My Commission Expires Sept. 2, 2018

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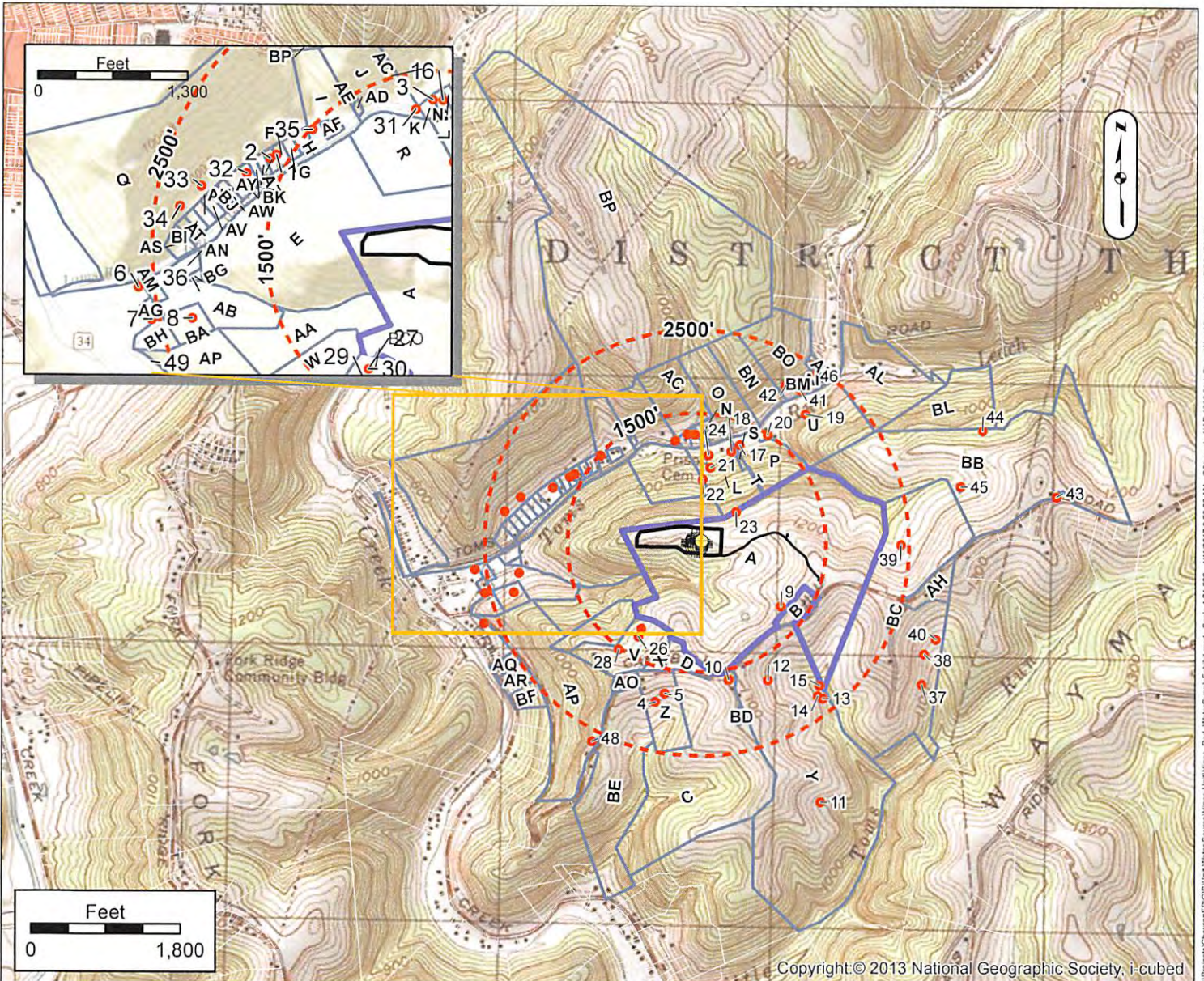
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08/18/2017



WATER SUPPLY EXHIBIT HINES PAD



LOT OWNERS

Label	OWNER	TM	Label	OWNER	TM	Label	OWNER	TM	Label	OWNER	TM
A	HINES DONALD ET UX	25-14 12003000000000	Q	HALL CHARLES R	25-14 12002400000000	AG	GOODNIGHT ARNIE	25-14 12006700020000	AW	YDHO LYLE WAYNE	25-14 12A000700000000
B	GOSSETT LANCE J ET UX	25-14 12003000020000	R	STATE OF W VA	25-14 12002600000000	AH	ROBERTS EARNEST L ET UX	25-14 1200310000100000	AX		25-14 12A00090000000000
C	PARSONS HENRY T EST ET AL	25-14 1200310000000000	S	FITZSIMMONS JOHN E & ANGELA L	25-14 1200270001000000	AJ	PYLES RONNIE E ET UX	25-14 9004000000000000	AY	SMITH PAUL K & BETTY - LIFE	25-14 12A00090000000000
D	WOOD CLESTERNE HINES	25-14 1200300004000000	T	KNUETH EDWARD DAVID & KATHY JO	25-14 1200280001000000	AK	THOMAS WILLIAM H ET UX	25-14 9003900010000000	AZ	ANDLINGER SANDRA SUE & LORRI A	25-14 12A00100000000000
E	GOODNIGHT ARNIE N ET UX	25-14 1200250000000000	U	BEUCKE JOHN A ET UX	25-14 1200290000000000	AL	THOMAS WILLIAM H ET UX	25-14 9003900020000000	BA	GOODNIGHT OSCAR J	25-14 1200670008000000
F	BROWN TERRY L ET UX	25-14 12A00110000000000	V	LACEFIELD MORGAN T	25-14 1200300001000000	AM	BRADY ROGER A ET UX	25-14 9003800000000000	BB	RINE OREN L JR	25-14 1100010000000000
G	TUCKER JESS L & HELEN	25-14 12A00120000000000	W	LACEFIELD MORGAN T	25-14 1200300005000000	AN	HARTLEY PHYLIS C	25-14 1200570002000000	BC	HOSKINS PATRICIA SUE	25-14 1200310000000000
H	YDHO RAYMOND P	25-14 12A00130000000000	X	WOODS C E SIE	25-14 1200300000000000	AO	PARSONS HENRY T JR & VIOLET	25-14 1200450000100000	BD	FULLER ROBERT E ET UX	25-14 1200310000100000
I	MCCARTNEY MICHAEL J ET UX	25-14 9004400000000000	Y	GOULDSBERRY DOUGLAS EDWARD ET	25-14 1200320000000000	AP	PARSONS HENRY T JR & VIOLET	25-14 1200450000200000	BE	PARSONS HENRY T EST ET AL	25-14 1200450000000000
J	LUCAS LEONARD L ET UX	25-14 9004500000000000	Z	BOSTON DONALD M ET UX	25-14 1200330000200000	AQ	SCYOC DELBERT MET UX	25-14 1200650000000000	BF	HARVETH GEORGE R ET UX	25-14 1200640000000000
K	BAKER ROBBY B ET UX	25-14 9004400010000000	AA	GOODNIGHT ARNIE N ET UX	25-14 1200660000000000	AR	JENNINS MICHAEL LEE ET UX	25-14 1200640006000000	BG		25-14 1200660001700000
L	KNUETH EDWARD DAVID ET UX	25-14 1200270000000000	AB	GOODNIGHT GEORGE ET UX ESTS	25-14 1200670000000000	AS	SCHNEIDER JOHN W & TALINE J	25-14 1200640008000000	BH	GOODNIGHT ARNIE	25-14 1200670001000000
M	GRANDSTAFF ELMER JR ET UX	25-14 9004400030000000	AC	LUCAS LEONARD L ET UX	25-14 9004400020000000	AT	THOMAS HARRY ET UX	25-14 12A00010000000000	BI	HOLT MARVIN JUNIOR ET UX-LIFE	25-14 12A00010000000000
N	BAKER BRUCE W ET UX	25-14 9004400040000000	AD	LUCAS LEONARD L ET UX	25-14 9004500010000000	AU	WHITELATCH DEBBIE ANN	25-14 12A00030000000000	BJ	YDHO LYLE WAYNE	25-14 12A00030000000000
O	OLIVER GERALD ET AL	25-14 9004400000000000	AE	LUCAS LEONARD L ET UX	25-14 9004500020000000	AV	FOSTER NORMA	25-14 12A00040000000000	BK	CHURCH OF GOD 7TH DAY TRUSTEES	25-14 12A00040000000000
P	BROWN TOBIAS & JESSICA	25-14 1200280000000000	AF	MCCARTNEY MICHAEL J ET UX	25-14 9004600010000000				BL	BRADY ROGER A ET UX	25-14 9003500000000000

Surface Owner: DONALD HINES
 Oil/Gas Owner: DONALD HINES
 Well Operator: CHEVRON APPALACHIA, LLC
 Address: 800 MOUNTAIN VIEW DRIVE
SMITHFIELD, PA. 15478
 Phone: 724-564-3700

County: MARSHALL
 Township: MOUNDSVILLE, WV
 Surveyor: SERVICES, INC.
 Address: 301 COMMERCE PARK DR
CRANBERRY TOWNSHIP, PA 15066
 Phone: 800-267-2549

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 Office of Oil and Gas
 GROUNDWATER & ENVIRONMENTAL
 SERVICES, INC.
 APR 24 2017

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 LISTING OF ALL WATER SUPPLIES. PROPERTY LINES AND OWNER INFORMATION WERE OBTAINED FROM DEEDS, TAX RECORDS, AERIAL PHOTOGRAPHY, GIS, AND FIELD SURVEYED EVIDENCE.

L:\Projects\Chevron\CPD\GIS Use Water Sources\Hines_Pad_WaterSupply\Exhibit.mxd - Scale: 1:21,000 - 4/11/2017 9:58:22 AM - G:\Gis\swat - NAD 1983 StatePlane West Virginia North FIPS 4701 Feet



WATER SUPPLY EXHIBIT
HINES PAD



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
1	ANDLINGER, SANDRA S. & KORN, LORI A.	Well	724	2315 HANCOCK STREET	304-280-1108
2	ANDLINGER, SANDRA S. (& D. ANDLINGER)	Well	754	2315 HANCOCK STREET	304-280-1108
3	BAKER, BOBBY G.	Well	621	RD 3 BOX 249	304-845-1836
4	BOSTON, DONALD M.	Spring	1,029	1770 CAMPBELL HILL ROAD	304-845-2506
5	BOSTON, DONALD M.	Spring	1,075	1770 CAMPBELL HILL ROAD	304-845-2506
6	GOODNIGHT, ARNIE N.	Well	556	102 GOODNIGHT LANE	304-845-8505
7	GOODNIGHT, ARNIE N.	Well	654	102 GOODNIGHT LANE	304-845-8505
8	GOODNIGHT, OSCAR J.	Well	654	77 GOODNIGHT LANE	304-845-3813
9	GOSSETT, LANCE J.	Spring	1,134	1256 CAMPBELL HILL RD	304-639-4065
10	GOULDSBERRY, DOUGLAS E.	Dug well	1,293*	1584 CAMPBELL HILL RD	304-830-1265
11	GOULDSBERRY, DOUGLAS E.	Spring	1,112*	1584 CAMPBELL HILL RD	304-830-1265
12	GOULDSBERRY, DOUGLAS E.	Spring	1,177*	1584 CAMPBELL HILL RD	304-830-1265
13	GOULDSBERRY, DOUGLAS E.	Spring	1,062*	1584 CAMPBELL HILL RD	304-830-1265
14	GOULDSBERRY, DOUGLAS E.	Stream	1,072*	1584 CAMPBELL HILL RD	304-830-1265
15	GOULDSBERRY, DOUGLAS E.	Stream	1,078*	1584 CAMPBELL HILL RD	304-830-1265

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No.	SUPPLY COORDINATES	H04M	H05M	H06M	H07M	H08M	H09M	H10M	H11M
1	39°54'30.344" N 80°42'15.973" W	1,634	1,641	1,648	1,655	1,681	1,674	1,667	1,660
2	39°54'30.006" N 80°42'16.667" W	1,665	1,672	1,679	1,685	1,712	1,706	1,699	1,693
3	39°54'35.290" N 80°41'58.567" W	1,294	1,309	1,324	1,339	1,341	1,326	1,312	1,297
4	39°54'03.560" N 80°42'02.858" W	1,963	1,948	1,933	1,919	1,924	1,939	1,954	1,969
5	39°54'04.579" N 80°42'01.465" W	1,841	1,827	1,812	1,797	1,801	1,816	1,831	1,846
6	39°54'18.882" N 80°42'31.161" W	2,640	2,637	2,635	2,632	2,662	2,664	2,667	2,669
7	39°54'16.135" N 80°42'29.577" W	2,573	2,569	2,565	2,561	2,590	2,594	2,598	2,602
8	39°54'16.293" N 80°42'25.095" W	2,232	2,227	2,223	2,218	2,247	2,251	2,256	2,260
9	39°54'15.123" N 80°41'43.681" W	1,321	1,313	1,305	1,297	1,272	1,280	1,288	1,296
10	39°54'06.289" N 80°41'51.626" W	1,709	1,695	1,681	1,667	1,658	1,672	1,686	1,701
11	39°53'52.097" N 80°41'37.093" W	3,472	3,459	3,446	3,433	3,418	3,431	3,444	3,458
12	39°54'06.339" N 80°41'45.499" W	1,892	1,880	1,867	1,854	1,838	1,851	1,864	1,877
13	39°54'04.283" N 80°41'37.017" W	2,449	2,438	2,427	2,416	2,395	2,406	2,417	2,428
14	39°54'04.579" N 80°41'37.755" W	2,388	2,377	2,366	2,355	2,335	2,346	2,357	2,368
15	39°54'05.810" N 80°41'37.546" W	2,306	2,295	2,285	2,274	2,253	2,264	2,274	2,285

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Environmental Protection
08/18/2017

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



WATER SUPPLY EXHIBIT
HINES PAD



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
16	GRANDSTAFF, MARK G.	Well	617	762 TOMS RUN RD	304-780-8287
17	BROWN, TOBIAS & JESSICA	Well	769	873 TOMS RUN LANE	304-374-3857
18	KNUTH, EDWARD D	Spring	811	747 TOMS RUN LANE	304-845-7519
19	HARDING, JODI L. & TERRY A.	Spring	752	899 TOMS RUN LANE	304-845-6315
20	HARDING, JODI L. & TERRY A.	Stream	712	899 TOMS RUN LANE	304-845-6315
21	KNUTH, EDWARD D	Spring	747	747 TOMS RUN LANE	304-845-7519
22	KNUTH, EDWARD D	Spring	826	747 TOMS RUN LANE	304-845-7519
23	KNUTH, EDWARD D	Spring	996	747 TOMS RUN LANE	304-845-7519
24	KNUTH, EDWARD D	Well	692	747 TOMS RUN LANE	304-845-7519
25	LACEFIELD, MORGAN	Spring	1,142	77 BRIDGE STREET PLZ	304-639-0727
26	LACEFIELD, MORGAN	Spring	1,195	77 BRIDGE STREET PLZ	304-639-0727
27	LACEFIELD, MORGAN	Spring	1,145	77 BRIDGE STREET PLZ	304-639-0727
28	LACEFIELD, MORGAN	Spring	1,142	77 BRIDGE STREET PLZ	304-639-0727
29	LACEFIELD, MORGAN	Spring	1,195	77 BRIDGE STREET PLZ	304-639-0727
30	LACEFIELD, MORGAN	Spring	1,145	77 BRIDGE STREET PLZ	304-639-0727

No.	SUPPLY COORDINATES	H04M	H05M	H06M	H07M	H08M	H09M	H10M	H11M
16	39°54'35.265" N 80°41'57.447" W	1,289	1,304	1,319	1,334	1,335	1,320	1,305	1,290
17	39°54'34.110" N 80°41'50.506" W	1,297	1,311	1,325	1,339	1,327	1,313	1,299	1,285
18	39°54'33.332" N 80°41'51.777" W	1,185	1,199	1,213	1,227	1,217	1,203	1,189	1,175
19	39°54'37.871" N 80°41'40.362" W	2,056	2,067	2,079	2,091	2,072	2,060	2,048	2,037
20	39°54'35.305" N 80°41'46.201" W	1,571	1,583	1,596	1,609	1,593	1,580	1,567	1,555
21	39°54'31.392" N 80°41'54.974" W	921	935	950	965	960	945	930	915
22	39°54'29.966" N 80°41'56.148" W	762	777	791	806	803	788	773	758
23	39°54'26.226" N 80°41'50.920" W	644	653	662	672	649	639	629	620
24	39°54'32.857" N 80°41'55.287" W	1,061	1,076	1,091	1,106	1,102	1,087	1,072	1,057
25	39°54'09.647" N 80°42'08.715" W	1,564	1,551	1,539	1,526	1,543	1,555	1,568	1,580
26	39°54'11.242" N 80°42'05.723" W	1,305	1,292	1,278	1,265	1,280	1,293	1,306	1,319
27	39°54'12.196" N 80°42'05.270" W	1,203	1,190	1,177	1,164	1,179	1,192	1,205	1,218
28	39°54'09.647" N 80°42'08.715" W	1,564	1,551	1,539	1,526	1,543	1,555	1,568	1,580
29	39°54'11.242" N 80°42'05.723" W	1,305	1,292	1,278	1,265	1,280	1,293	1,306	1,319
30	39°54'12.196" N 80°42'05.270" W	1,203	1,190	1,177	1,164	1,179	1,192	1,205	1,218

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



WATER SUPPLY EXHIBIT
HINES PAD



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
31	OLIVER, GERALD	Stream	734*	816 TOMS RUN LANE	304-845-7675
32	SCAMELHORN, DENISE	Well	705	432 TOMS RUN LANE	304-810-0336
33	SCAMELHORN, DENISE	Spring	737	432 TOMS RUN LANE	304-810-0336
34	SCAMELHORN, DENISE	Spring	767	432 TOMS RUN LANE	304-810-0336
35	YOHO, RAYMOND P.	Well	726	524 TOMS RUN LANE	304-845-5250
36	GOODNIGHT OSCAR J	Well	642	77 GOODNIGHT LANE MOUNDSVILLE, WV 26041	304-845-3813
37	HOSKINS PATRICIA SUE	Spring	1026	19 CHARLES DRIVE MOUNDSVILLE, WV 26041	304-845-9769
38	HOSKINS PATRICIA SUE	Spring	1094	19 CHARLES DRIVE MOUNDSVILLE, WV 26041	304-845-9769
39	HOSKINS PATRICIA SUE	Spring	1016	19 CHARLES DRIVE MOUNDSVILLE, WV 26041	304-845-9769
40	HOSKINS PATRICIA SUE	Pond	1117	19 CHARLES DRIVE MOUNDSVILLE, WV 26041	304-845-9769
41	PYLES RONNIE E ET UX	Well	895	1056 TOMS RUN LANE MOUNDSVILLE, WV 26041	304-845-2288
42	PYLES RONNIE E ET UX	Spring	705	1056 TOMS RUN LANE MOUNDSVILLE, WV 26041	304-845-2288
43	RINE OKEY L JR	Well	1307	6 TRACY LANE MOUNDSVILLE, WV 26041	304-845-1533
44	RINE OKEY L JR	Pond	1130	6 TRACY LANE MOUNDSVILLE, WV 26041	304-845-1533
45	RINE OKEY L JR	Pond	1132	6 TRACY LANE MOUNDSVILLE, WV 26041	304-845-1533

No.	SUPPLY COORDINATES	H04M	H05M	H06M	H07M	H08M	H09M	H10M	H11M
31	39°54'34.462" N 80°42'00.486" W	1,228	1,243	1,258	1,272	1,279	1,264	1,249	1,235
32	39°54'28.713" N 80°42'19.263" W	1,798	1,803	1,808	1,813	1,842	1,837	1,832	1,827
33	39°54'27.565" N 80°42'24.278" W	2,139	2,142	2,145	2,149	2,178	2,174	2,171	2,168
34	39°54'25.851" N 80°42'26.683" W	2,289	2,291	2,293	2,295	2,325	2,323	2,321	2,319
35	39°54'32.558" N 80°42'11.984" W	1,510	1,520	1,530	1,540	1,563	1,553	1,543	1,533
36	39°54'18.6012"N 80°42'24.3252"W	2,117	2,114	2,111	2,108	2,137	2,140	2,144	2,147
37	39°54'06.1092"N 80°41'21.7284"W	3,254	3,247	3,240	3,233	3,214	3,215	3,221	3,228
38	39°54'09.6840"N 80°41'21.4440"W	3,106	3,100	3,094	3,088	3,066	3,067	3,072	3,078
39	39°54'22.6440"N 80°41'25.2816"W	2,521	2,522	2,522	2,523	2,492	2,493	2,492	2,491
40	39°54'11.4516"N 80°41'19.6764"W	3,163	3,159	3,154	3,149	3,125	3,126	3,130	3,135
41	39°54'40.6620"N 80°41'41.1648"W	2,239	2,252	2,264	2,277	2,261	2,262	2,235	2,223
42	39°54'41.2812"N 80°41'43.4832"W	2,194	2,208	2,220	2,234	2,220	2,221	2,194	2,180
43	39°54'28.5516"N 80°41'01.3488"W	4,428	4,431	4,433	4,436	4,404	4,405	4,401	4,399
44	39°54'36.2196"N 80°41'12.9444"W	3,748	3,754	3,760	3,766	3,732	3,733	3,726	3,720
45	39°54'29.6064"N 80°41'16.2096"W	3,307	3,310	3,314	3,318	3,285	3,286	3,281	3,278

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WATER SUPPLY EXHIBIT
HINES PAD



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
46	THOMAS WILLIAM H ET UX	Well	689	TOMS RUN RD MOUNDSVILLE, WV 26041	304-845-6459
47	THOMAS WILLIAM H ET UX	Well	689	TOMS RUN RD MOUNDSVILLE, WV 26041	304-845-6459
48	VAN SCYOC DELBERT M ET UX	Spring	1137	2074 CAMPBELL HILL ROAD MOUNDSVILLE, WV	304-280-5104
49	VAN SCYOC DELBERT M ET UX	Spring	693	2074 CAMPBELL HILL ROAD MOUNDSVILLE, WV	304-280-5104

No.	SUPPLY COORDINATES	H04M	H05M	H06M	H07M	H08M	H09M	H10M	H11M
46	39°54'42.4584"N 80°41'39.0876"W	2,481	2,493	2,506	2,518	2,502	2,489	2,477	2,464
47	39°54'42.4584"N 80°41'39.0876"W	2,481	2,493	2,506	2,518	2,502	2,489	2,477	2,464
48	39°53'58.7400"N 80°42'12.6180"W	2,675	2,662	2,648	2,634	2,647	2,661	2,674	2,688
49	39°54'12.5064"N 80°42'29.6208"W	2,690	2,685	2,679	2,673	2,701	2,707	2,712	2,718

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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: 03/16/2017 **Date Permit Application Filed:** 4/20/17

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: Donald Hines and Wanda L Hines
Address: 301 4th Street
Glen Dale, WV 26038

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>525707.95</u>
County: <u>Marshall</u>		Northing: <u>4417386.81</u>
District: <u>Washington</u>	Public Road Access: <u>Route 38/Campbell Hill Road</u>	
Quadrangle: <u>Moundsville, WV 7.5'</u>	Generally used farm name: <u>Hines</u>	
Watershed: <u>Middle Grave Creek - Grave Creek</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: 724-564-3781
Email: _____

Address: 800 Mountain View Dr
Smithfield, PA 15478
Facsimile: 724-564-3894

Oil and Gas Privacy Notice:

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

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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.

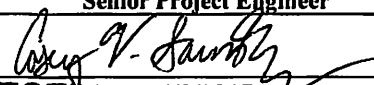
Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except 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:	<u>West Virginia</u>	WVSPN NAD 27	Easting:	<u>1,663,520.156</u>
County:	<u>Marshall</u>		Northing:	<u>514,384.289</u>
District:	<u>Washington</u>	Public Road Access:	_____	
Quadrangle:	<u>MOUNDSVILLE</u>	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, provided that Chevron U.S.A. Inc. drills the well on WV North NAD27 coordinates of North 514,384.289, East 1,663,520.156. This statement does not serve as notice that has waived its rights to mine all the coal or accept any responsibility for any damage to the well or surface facilities associated with the well by mining activity. This Voluntary Statement of No Objection does not waive's Common Law Property Rights in the State of West Virginia.

<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 Mining Company, LLC</u></p> <p>By: <u>Casey V. Saunders</u></p> <p>Its: <u>Senior Project Engineer</u></p> <p>Signature: </p> <p>Date: <u>RECEIVED 4/3/2017</u></p> <p style="text-align: center;">Office of Oil and Gas</p>
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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 protect 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.

APR 07 2017
WV Department of
Environmental Protection
08/18/2017

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:	<u>West Virginia</u>	WVSPN NAD 27	Easting:	<u>1,663,520.156</u>
County:	<u>Marshall</u>		Northing:	<u>514,384.289</u>
District:	<u>Washington</u>	Public Road Access:		
Quadrangle:	<u>MOUNDSVILLE</u>	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, provided that Chevron U.S.A. Inc. drills the well on WV North NAD27 coordinates of North 514,384.289, East 1,663,520.156. This statement does not serve as notice that has waived its rights to mine all the coal or accept any responsibility for any damage to the well or surface facilities associated with the well by mining activity. This Voluntary Statement of No Objection does not waive 's Common Law Property Rights in the State of West Virginia.

<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 Mining Company, LLC</u></p> <p>By: <u>Casey V. Saunders</u></p> <p>Its: <u>Senior Project Engineer</u></p> <p>Signature: <u><i>Casey V. Saunders</i></u></p> <p>Date: <u>4/3/2017</u></p>

Oil and Gas Privacy Notice:

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

RECEIVED
Office of Oil and Gas
 APR 24 2017
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, _____, 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>525707.95</u>
County:	<u>Marshall</u>	UTM NAD 83 Northing:	<u>4417386.81</u>
District:	<u>Washington</u>	Public Road Access:	<u>Route 38/Campbell Hill Road</u>
Quadrangle:	<u>Moundsville, WV 7.5'</u>	Generally used farm name:	<u>Hines</u>
Watershed:	<u>Middle Grave Creek - Grave Creek</u>		

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

<p>*Please check the box that applies</p> <p><input type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input type="checkbox"/> COAL OPERATOR</p> <p><input checked="" 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: <u><i>Gerald Oliver</i></u></p> <p>Print Name: <u>GERALD OLIVER</u></p> <p>Date: <u>3-22-17</u></p> <hr/> <p>FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: <u>4305107031</u></p> <p>By: _____</p> <p>Its: _____</p> <p>Signature: _____</p> <p>Date: _____</p>
---	--

Oil and Gas Privacy Notice:

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

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Office of Oil and Gas

APR 24 2017

WV Department of
Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Jim Justice
Governor

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

February 14, 2017

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 Hines Pad A Well Site, Marshall County

Hines A Unit M4H	Hines A Unit M5H	Hines A Unit M6H
Hines A Unit M7H	Hines A Unit M8H	Hines A Unit M9H - 51-01931
Hines A Unit M10H	Hines A Unit M11H	

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2017-0073 for the subject site to Chevron Appalachia, LLC for access to the State Road for the well site located off of Marshall County Route 38 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

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Office of Oil and Gas
APR 24 2017

WV Department of
Environmental Protection

08/18/2017

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

4705101031

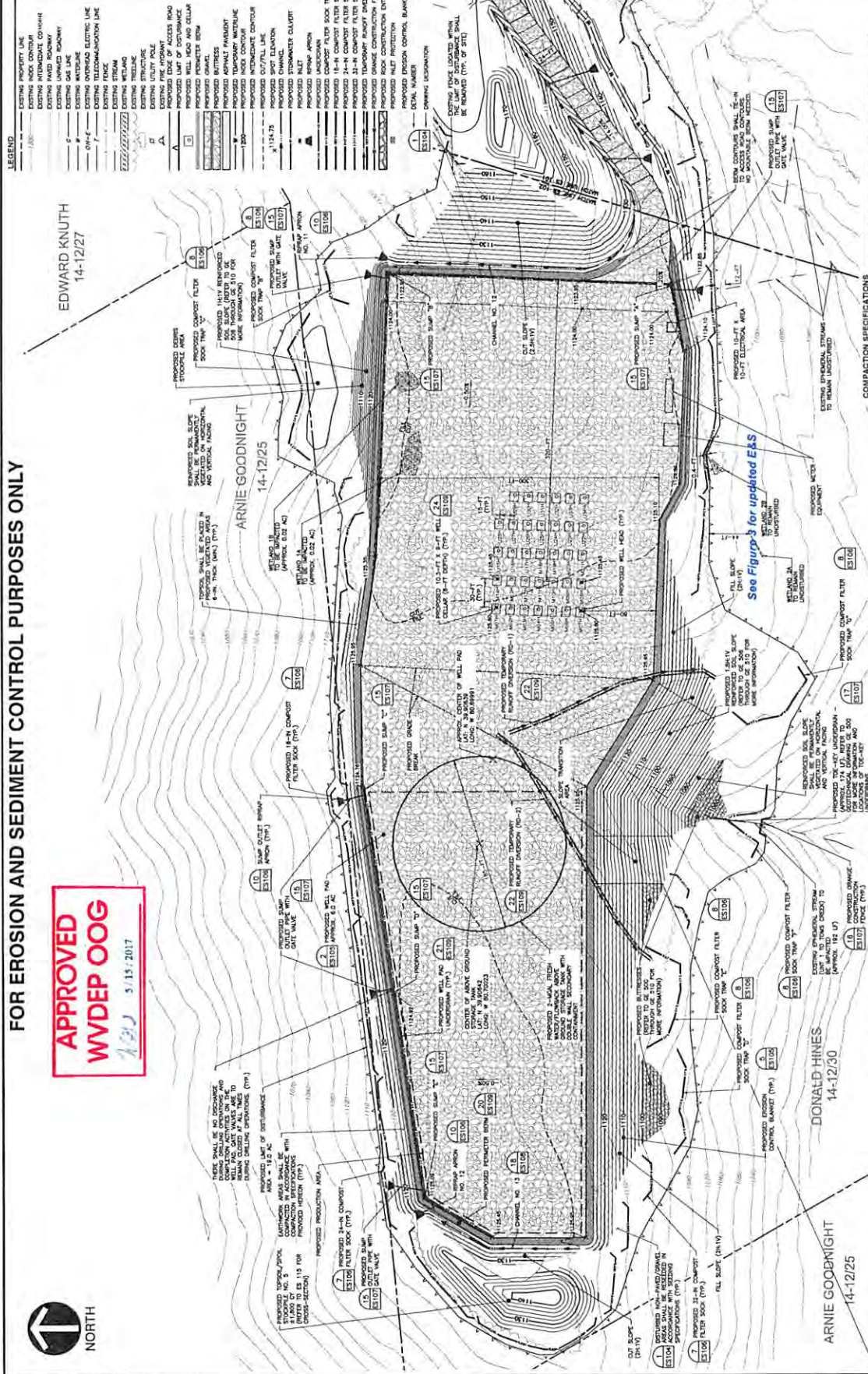
RECEIVED
Office of Oil and Gas

APR 24 2017

WV Department of
Environmental Protection
08/19/2017

FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY

APPROVED
WVDEP OOG
3/13/2017



CHEV & Environmental Consultants, Inc.
4000 Triadelphia Lakes, Suite 200 • Fayetteville, PA 15783
724-271-0200 • Fax: 724-271-0201
www.chev.com



REVISION RECORD

NO.	DATE	DESCRIPTION
1	03/13/17	ISSUED FOR PERMIT
2	03/13/17	ISSUED FOR PERMIT
3	03/13/17	ISSUED FOR PERMIT
4	03/13/17	ISSUED FOR PERMIT
5	03/13/17	ISSUED FOR PERMIT
6	03/13/17	ISSUED FOR PERMIT
7	03/13/17	ISSUED FOR PERMIT
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27	03/13/17	ISSUED FOR PERMIT
28	03/13/17	ISSUED FOR PERMIT
29	03/13/17	ISSUED FOR PERMIT
30	03/13/17	ISSUED FOR PERMIT

CHEVRON APPALACHIA, LLC
PREPARED FOR
MARSHALL COUNTY WEST VIRGINIA
WASHINGTON DISTRICT
SMITHFIELD, PA 15478
800 MOUNTAIN DRIVE

ES 102
EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)
PROJECT NO. 14-12127
DATE: 03/13/2017
DRAWN BY: JAM
CHECKED BY: JAM
SCALE: AS SHOWN

- LEGEND**
- EXISTING PROPERTY LINE
 - EXISTING INTERSTATE DIVISION
 - EXISTING PAVED ROADWAY
 - EXISTING UNPAVED ROADWAY
 - EXISTING SIDEWALK
 - EXISTING DRIVEWAY
 - EXISTING OVERHEAD ELECTRIC LINE
 - EXISTING TELECOMMUNICATION LINE
 - EXISTING TELEPHONE
 - EXISTING FENCE
 - EXISTING STRUCTURE
 - EXISTING FIRE HYDRANT
 - PROPOSED EDGE OF ACCESS ROAD
 - PROPOSED WELLS AND CULVERT
 - PROPOSED PERMETER FENCE
 - PROPOSED CHANNEL
 - PROPOSED SPOT ELEVATION
 - PROPOSED TYPICAL MATRIQUE
 - PROPOSED ROAD CENTERLINE
 - PROPOSED 18" COMPUST FILTER SOCK (TYPE 1)
 - PROPOSED 24" COMPUST FILTER SOCK (TYPE 2)
 - PROPOSED 30" COMPUST FILTER SOCK (TYPE 3)
 - PROPOSED 36" COMPUST FILTER SOCK (TYPE 4)
 - PROPOSED 42" COMPUST FILTER SOCK (TYPE 5)
 - PROPOSED 48" COMPUST FILTER SOCK (TYPE 6)
 - PROPOSED 54" COMPUST FILTER SOCK (TYPE 7)
 - PROPOSED 60" COMPUST FILTER SOCK (TYPE 8)
 - PROPOSED 66" COMPUST FILTER SOCK (TYPE 9)
 - PROPOSED 72" COMPUST FILTER SOCK (TYPE 10)
 - PROPOSED 78" COMPUST FILTER SOCK (TYPE 11)
 - PROPOSED 84" COMPUST FILTER SOCK (TYPE 12)
 - PROPOSED 90" COMPUST FILTER SOCK (TYPE 13)
 - PROPOSED 96" COMPUST FILTER SOCK (TYPE 14)
 - PROPOSED 102" COMPUST FILTER SOCK (TYPE 15)
 - PROPOSED 108" COMPUST FILTER SOCK (TYPE 16)
 - PROPOSED 114" COMPUST FILTER SOCK (TYPE 17)
 - PROPOSED 120" COMPUST FILTER SOCK (TYPE 18)
 - PROPOSED 126" COMPUST FILTER SOCK (TYPE 19)
 - PROPOSED 132" COMPUST FILTER SOCK (TYPE 20)
 - PROPOSED 138" COMPUST FILTER SOCK (TYPE 21)
 - PROPOSED 144" COMPUST FILTER SOCK (TYPE 22)
 - PROPOSED 150" COMPUST FILTER SOCK (TYPE 23)
 - PROPOSED 156" COMPUST FILTER SOCK (TYPE 24)
 - PROPOSED 162" COMPUST FILTER SOCK (TYPE 25)
 - PROPOSED 168" COMPUST FILTER SOCK (TYPE 26)
 - PROPOSED 174" COMPUST FILTER SOCK (TYPE 27)
 - PROPOSED 180" COMPUST FILTER SOCK (TYPE 28)
 - PROPOSED 186" COMPUST FILTER SOCK (TYPE 29)
 - PROPOSED 192" COMPUST FILTER SOCK (TYPE 30)
 - PROPOSED 198" COMPUST FILTER SOCK (TYPE 31)
 - PROPOSED 204" COMPUST FILTER SOCK (TYPE 32)
 - PROPOSED 210" COMPUST FILTER SOCK (TYPE 33)
 - PROPOSED 216" COMPUST FILTER SOCK (TYPE 34)
 - PROPOSED 222" COMPUST FILTER SOCK (TYPE 35)
 - PROPOSED 228" COMPUST FILTER SOCK (TYPE 36)
 - PROPOSED 234" COMPUST FILTER SOCK (TYPE 37)
 - PROPOSED 240" COMPUST FILTER SOCK (TYPE 38)
 - PROPOSED 246" COMPUST FILTER SOCK (TYPE 39)
 - PROPOSED 252" COMPUST FILTER SOCK (TYPE 40)
 - PROPOSED 258" COMPUST FILTER SOCK (TYPE 41)
 - PROPOSED 264" COMPUST FILTER SOCK (TYPE 42)
 - PROPOSED 270" COMPUST FILTER SOCK (TYPE 43)
 - PROPOSED 276" COMPUST FILTER SOCK (TYPE 44)
 - PROPOSED 282" COMPUST FILTER SOCK (TYPE 45)
 - PROPOSED 288" COMPUST FILTER SOCK (TYPE 46)
 - PROPOSED 294" COMPUST FILTER SOCK (TYPE 47)
 - PROPOSED 300" COMPUST FILTER SOCK (TYPE 48)
 - PROPOSED 306" COMPUST FILTER SOCK (TYPE 49)
 - PROPOSED 312" COMPUST FILTER SOCK (TYPE 50)
 - PROPOSED 318" COMPUST FILTER SOCK (TYPE 51)
 - PROPOSED 324" COMPUST FILTER SOCK (TYPE 52)
 - PROPOSED 330" COMPUST FILTER SOCK (TYPE 53)
 - PROPOSED 336" COMPUST FILTER SOCK (TYPE 54)
 - PROPOSED 342" COMPUST FILTER SOCK (TYPE 55)
 - PROPOSED 348" COMPUST FILTER SOCK (TYPE 56)
 - PROPOSED 354" COMPUST FILTER SOCK (TYPE 57)
 - PROPOSED 360" COMPUST FILTER SOCK (TYPE 58)
 - PROPOSED 366" COMPUST FILTER SOCK (TYPE 59)
 - PROPOSED 372" COMPUST FILTER SOCK (TYPE 60)
 - PROPOSED 378" COMPUST FILTER SOCK (TYPE 61)
 - PROPOSED 384" COMPUST FILTER SOCK (TYPE 62)
 - PROPOSED 390" COMPUST FILTER SOCK (TYPE 63)
 - PROPOSED 396" COMPUST FILTER SOCK (TYPE 64)
 - PROPOSED 402" COMPUST FILTER SOCK (TYPE 65)
 - PROPOSED 408" COMPUST FILTER SOCK (TYPE 66)
 - PROPOSED 414" COMPUST FILTER SOCK (TYPE 67)
 - PROPOSED 420" COMPUST FILTER SOCK (TYPE 68)
 - PROPOSED 426" COMPUST FILTER SOCK (TYPE 69)
 - PROPOSED 432" COMPUST FILTER SOCK (TYPE 70)
 - PROPOSED 438" COMPUST FILTER SOCK (TYPE 71)
 - PROPOSED 444" COMPUST FILTER SOCK (TYPE 72)
 - PROPOSED 450" COMPUST FILTER SOCK (TYPE 73)
 - PROPOSED 456" COMPUST FILTER SOCK (TYPE 74)
 - PROPOSED 462" COMPUST FILTER SOCK (TYPE 75)
 - PROPOSED 468" COMPUST FILTER SOCK (TYPE 76)
 - PROPOSED 474" COMPUST FILTER SOCK (TYPE 77)
 - PROPOSED 480" COMPUST FILTER SOCK (TYPE 78)
 - PROPOSED 486" COMPUST FILTER SOCK (TYPE 79)
 - PROPOSED 492" COMPUST FILTER SOCK (TYPE 80)
 - PROPOSED 498" COMPUST FILTER SOCK (TYPE 81)
 - PROPOSED 504" COMPUST FILTER SOCK (TYPE 82)
 - PROPOSED 510" COMPUST FILTER SOCK (TYPE 83)
 - PROPOSED 516" COMPUST FILTER SOCK (TYPE 84)
 - PROPOSED 522" COMPUST FILTER SOCK (TYPE 85)
 - PROPOSED 528" COMPUST FILTER SOCK (TYPE 86)
 - PROPOSED 534" COMPUST FILTER SOCK (TYPE 87)
 - PROPOSED 540" COMPUST FILTER SOCK (TYPE 88)
 - PROPOSED 546" COMPUST FILTER SOCK (TYPE 89)
 - PROPOSED 552" COMPUST FILTER SOCK (TYPE 90)
 - PROPOSED 558" COMPUST FILTER SOCK (TYPE 91)
 - PROPOSED 564" COMPUST FILTER SOCK (TYPE 92)
 - PROPOSED 570" COMPUST FILTER SOCK (TYPE 93)
 - PROPOSED 576" COMPUST FILTER SOCK (TYPE 94)
 - PROPOSED 582" COMPUST FILTER SOCK (TYPE 95)
 - PROPOSED 588" COMPUST FILTER SOCK (TYPE 96)
 - PROPOSED 594" COMPUST FILTER SOCK (TYPE 97)
 - PROPOSED 600" COMPUST FILTER SOCK (TYPE 98)
 - PROPOSED 606" COMPUST FILTER SOCK (TYPE 99)
 - PROPOSED 612" COMPUST FILTER SOCK (TYPE 100)

NOTES

- CELLARS FOR WELLS WITH THROUGH MAIN TO BE INSTALLED AT THE END OF THE PERMITS. THE REMAINING CELLARS TO BE INSTALLED AS THE PERMITS ARE ISSUED.
- THE PERMITS FOR WELLS WITH THROUGH MAIN TO BE INSTALLED AT THE END OF THE PERMITS. THE REMAINING PERMITS TO BE INSTALLED AS THE PERMITS ARE ISSUED.
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- THE PERMITS FOR WELLS WITH THROUGH MAIN TO BE INSTALLED AT THE END OF THE PERMITS. THE REMAINING PERMITS TO BE INSTALLED AS THE PERMITS ARE ISSUED.

COMPACTION SPECIFICATIONS

- PLACE FILL MATERIALS USING COMPACTOR EQUIPMENT WITH DRUMS FROM 10-15 IN. DIAMETER IN COMPACTED AREAS. THE DRUMS SHOULD BE SPACED AT LEAST 10 IN. APART. THE MAXIMUM WET WEIGHT OF FILL MATERIAL SHOULD NOT EXCEED 10,000 LBS. PER CYCLE. THE MAXIMUM WET WEIGHT OF FILL MATERIAL SHOULD NOT EXCEED 10,000 LBS. PER CYCLE. THE MAXIMUM WET WEIGHT OF FILL MATERIAL SHOULD NOT EXCEED 10,000 LBS. PER CYCLE.
- COMPACT ALL FILL AND BACKFILL SUBGRADE AND EACH LIFT OF FILL MATERIAL TO A MINIMUM OF 95% PROPORTION OF ITS MAXIMUM DRY DENSITY WITHIN 48 HOURS OF THE DEPOSIT. THE MAXIMUM DRY DENSITY SHALL BE DETERMINED BY STANDARD TEST METHOD (ASTM D 1557) AND SHALL BE APPROVED BY THE STATE OF WEST VIRGINIA.

STREAM AND WETLAND NOTES

- WETLAND AND PROPERTY INFORMATION PROVIDED BY BLUE MOUNTAIN INC. (DATE: 10/17/2016).
- THE FOLLOWING TWO (2) WETLANDS AND (1) STREAM ARE LOCATED WITHIN THE PROJECT AREA. THE WETLANDS ARE WETLAND 1A AND WETLAND 1B. THE STREAM IS STREAM 1.
- THE STREAMS SHOWN HEREIN ARE WETLANDS AS SUCH, A WETLAND IS NOT BEING REQUESTED FOR PERSONAL USE.
- PROPOSED WELLS TO BE INSTALLED FROM THE EDGE OF THE WETLAND TO THE WETLAND.

REFERENCES

- TOPOGRAPHY AND PROPERTY INFORMATION PROVIDED BY BLUE MOUNTAIN INC. (DATE: 10/17/2016).
- CONSULTANTS, INC. DATED 10/17/2016. CIVIL & ENVIRONMENTAL ENGINEERING.
- UNDEVELOPED UTILITIES LOCATED BY A GEOTECHNICAL SURVEY DATED 10/17/2016 BY THE CONSULTANT, INC. DATED 10/17/2016 TO 10/17/2016.
- MARKED UTILITY RECORDS SUBMITTED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 10/17/2016.

SEE FIGURE 3 FOR UPDATED E&S

MISS UTILITY OF WEST VIRGINIA
1-800-249-4040
Decision by Chapter 24-2 requires that you pay \$9 in the state of West Virginia. IT'S THE LAW

DATE	DESCRIPTION
07/20/2017	REVISION RECORD
06/01/2017	REVISED PER WATER COMMENT
05/01/2017	
04/01/2017	
03/01/2017	
02/01/2017	
01/01/2017	
12/01/2016	
11/01/2016	
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