



 west virginia department of environmental protection

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

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

Friday, March 1, 2019
 WELL WORK PERMIT
 Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC
 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Re: Permit approval for FREELAND M06H
 47-051-02151-00-00

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: FREELAND M06H
 Farm Name: JOSEPH L. FREELAND ET UX
 U.S. WELL NUMBER: 47-051-02151-00-00
 Horizontal 6A New Drill
 Date Issued: 3/1/2019

PERMIT CONDITIONS 4705102151

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

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

API Number:

4705102151 ~~03/08/2019~~

PERMIT CONDITIONS

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



west virginia department of environmental protection

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

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

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

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

DATE: February 24, 2019
ORDER NO.: 2019-W-5

INTRODUCTION

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

FINDINGS OF THE CHIEF

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

1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 *et seq.*, and the rules and regulations promulgated thereunder.
2. Chevron Appalachia, LLC is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as P.O. Box 611, Moon Township, Pennsylvania.
3. On December 17, 2018, Chevron Appalachia, LLC submitted well work permit applications identified as API#s 47-051-02142, 47-051-02143, 47-051-02145, 47-051-02146, 47-051-02148, 47-051-02151, 47-051-02153 and 47-051-02154. The proposed wells are to be located on the Freeland Pad in Clay District of Marshall County, West Virginia.
4. On February 20, 2019, Chevron Appalachia, LLC requested a waiver for Wetlands 1A, 1B, 2 and 4 outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s s 47-051-02142, 47-051-02143, 47-051-02145, 47-051-02146, 47-051-02148, 47-051-02151, 47-051-02153 and 47-051-02154.

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

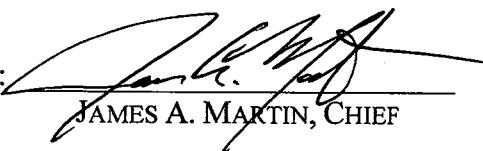
West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetlands 1A 1B, 2 and 4 from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s s 47-051-02142, 47-051-02143, 47-051-02145, 47-051-02146, 47-051-02148, 47-051-02151, 47-051-02153 and 47-051-02154. The Office of Oil and Gas hereby **ORDERS** that Chevron Appalachia, LLC shall meet the following site construction and operational requirements for the Freeland Well Pad:

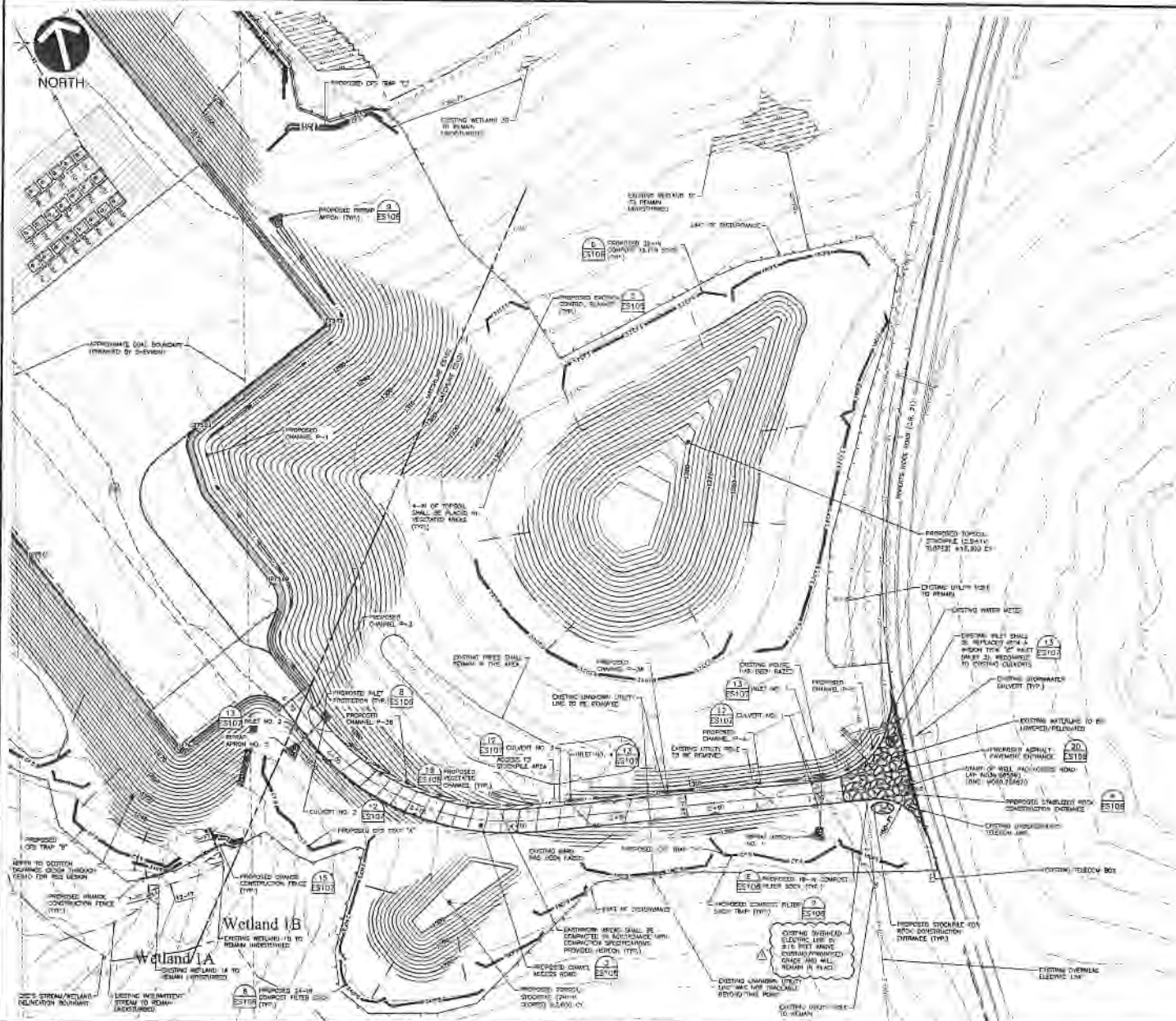
- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least twenty-four inches (24”) in height;
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. Wetland 1A, 1B and 2 shall have both a compost filter sock trap and a layer of thirty two-inch (32”) compost filter sock to prevent any sediment from reaching the wetland from the well pad. This along with rip-rap aprons, temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- d. Wetland 4 shall have a compost filter sock trap and a layer of thirty two-inch (32”) compost filter sock or a layer of eighteen-inch (18”) compost filter sock to prevent any sediment from reaching the wetland from the well pad. This along with temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- e. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- f. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- g. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- h. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- i. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- j. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½”) rain within any twenty-four (24) hour period;
- k. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- l. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 24th day of February, 2019.

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



LEGEND

[Symbol]	EXISTING FOREST LINE
[Symbol]	EXISTING FENCE CONTROL
[Symbol]	EXISTING INTERMEDIATE CONTROL
[Symbol]	EXISTING FENCE BOUNDARY
[Symbol]	EXISTING CHANNEL BOUNDARY
[Symbol]	EXISTING OVERHEAD ELECTRICAL
[Symbol]	EXISTING METAL COUPLER BOUNDARY
[Symbol]	EXISTING METAL
[Symbol]	EXISTING OVERHEAD ELECTRICAL
[Symbol]	EXISTING WIRELINE
[Symbol]	EXISTING TELECOMMUNICATION LINE
[Symbol]	EXISTING STEAM/HEAT CONDUIT
[Symbol]	EXISTING FUEL LINE
[Symbol]	EXISTING WATER MAIN
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING INLET
[Symbol]	PROPOSED LIMIT OF DISTURBANCE
[Symbol]	PROPOSED EDGE OF ACCESS ROADWAY
[Symbol]	PROPOSED DRIVE
[Symbol]	PROPOSED ANNUAL FLOODLINE
[Symbol]	PROPOSED CONTAINMENT EARTH
[Symbol]	PROPOSED WELLSHOE AND CELLAR
[Symbol]	PROPOSED FOUND CONTROL
[Symbol]	PROPOSED INTERMEDIATE CONTROL
[Symbol]	PROPOSED SOAK DRAINAGE
[Symbol]	PROPOSED CLOVE ALL LINE
[Symbol]	PROPOSED COMPOST FILTER SOOK THAT
[Symbol]	PROPOSED 18-IN COMPACT FIELD SOOK
[Symbol]	PROPOSED 24-IN COMPACT FILTER SOOK
[Symbol]	PROPOSED 20-IN COMPACT FILTER SOOK
[Symbol]	PROPOSED CHANNEL CONSTRUCTION FENCE
[Symbol]	PROPOSED ROCK CONSTRUCTION FENCE
[Symbol]	PROPOSED VEGETATION PROTECTION
[Symbol]	PROPOSED CHANNEL
[Symbol]	PROPOSED STEAM/HEAT CONDUIT
[Symbol]	PROPOSED WELLSHOE
[Symbol]	PROPOSED WELLSHOE AND CELLAR
[Symbol]	PROPOSED UNDERGROUND
[Symbol]	PROPOSED ENGINE CONTROL BOUNDARY

- STREAM AND WETLAND NOTES**
1. WETLAND WAIVERS ARE BEING REQUESTED FOR THE FOLLOWING CASE: (A) WETLANDS THAT ARE LOCATED WITHIN 150-FT OF THE LIMIT OF DISTURBANCE (WETLANDS 1A, 1B, & 1A-B);
 2. THE SYSTEMS SHOWN HEREON EXCEED THE LIMIT OF DISTURBANCE AND APPROVAL OR WAIVER IS AS SUCH A WAIVER IS NOT BEING REQUESTED FOR PROTECTIVE STREAMS;
 3. WETLANDS SHOWN HEREON ARE BOUNDARIED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.
- COMPACTION SPECIFICATIONS**
1. PLACE ALL FILL MATERIALS USING COMPACTORS (COMPARE WITH GREATER THAN 18-IN WIDTH IN CONTACT LIPS NOT EXCEEDING 18 INCHES THICK, USE A PRESCRIBED LOCK UP TECHNIQUE OF 4 INCHES (MINIMUM) IN AREAS WHERE STEEL-PLATE LIMITED OR OTHER NON-SATURATED COMPACTORS ARE USED. MINIMUM VEHICLE SOLE SHOULD NOT EXCEED 6 INCHES. IN ADDITION, FILL MUST BE PLACED IN LAYERS WITH A MAXIMUM OF 18 INCHES PER LAYER. ALL AREAS WHERE NON-SATURATED COMPACTORS ARE USED, WASTE COVERED MATERIALS (EXCLUDING THE WASTEWATER STORAGE INDICATED ABOVE) OUTSIDE OF THE PROPOSED FILL AREAS OR IN OTHER AREAS OF THE DISTURBED AREA SHOULD BE PLACED IN EXPOSED AREAS OF FILL EXCEPTING FILL (EXCEPTING FILL) SHOULD BE PLACED IN LIPS NOT EXCEEDING 24 INCHES LIPS SHOULD BE COMPACTED IN SEVERAL PASSES USING HEAVY COMPACTION EQUIPMENT.
 2. COMPACT ALL FILL AND REMOVED MATERIALS AND EACH LIFT OF FILL MATERIAL TO A MINIMUM OF 95 PERCENT OF 15 MAXIMUM DRY WEIGHT WITHIN 48 HOURS OF THE INITIAL MOISTURE CONTROL DETERMINATION DRY DENSITY AND OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698 (STANDARD METHOD).
 3. ADDITIONAL SPECIFICATIONS ARE REQUIRED FOR THE FILL AREAS: REPROPOSED SOIL SHALL BE 20% GRADES REFER TO CANNON'S GRADE THROUGH GRADES FOR MOISTURE RETENTION.
- REFERENCES**
1. STREAMS AND WETLANDS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/14/2017.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICAL LTD. DATED 05/13/2017 TO 07/13/2017.
 3. UTILTY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 06/02/2017 TO 06/12/2017.
 4. TOPOGRAPHY SURVEYED BY UNIMATED AERIAL VEHICLE (UAV) BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 06/14/2016.
 5. PROPERTY BOUNDARIES WERE PROVIDED BY C&E/CIVIL.

REVISION RECORD

REV.	REV. BY	REV. DESCRIPTION	DATE
1	ES		05/14/2017
2	ES		
3	ES		
4	ES		
5	ES		
6	ES		
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9	ES		
10	ES		

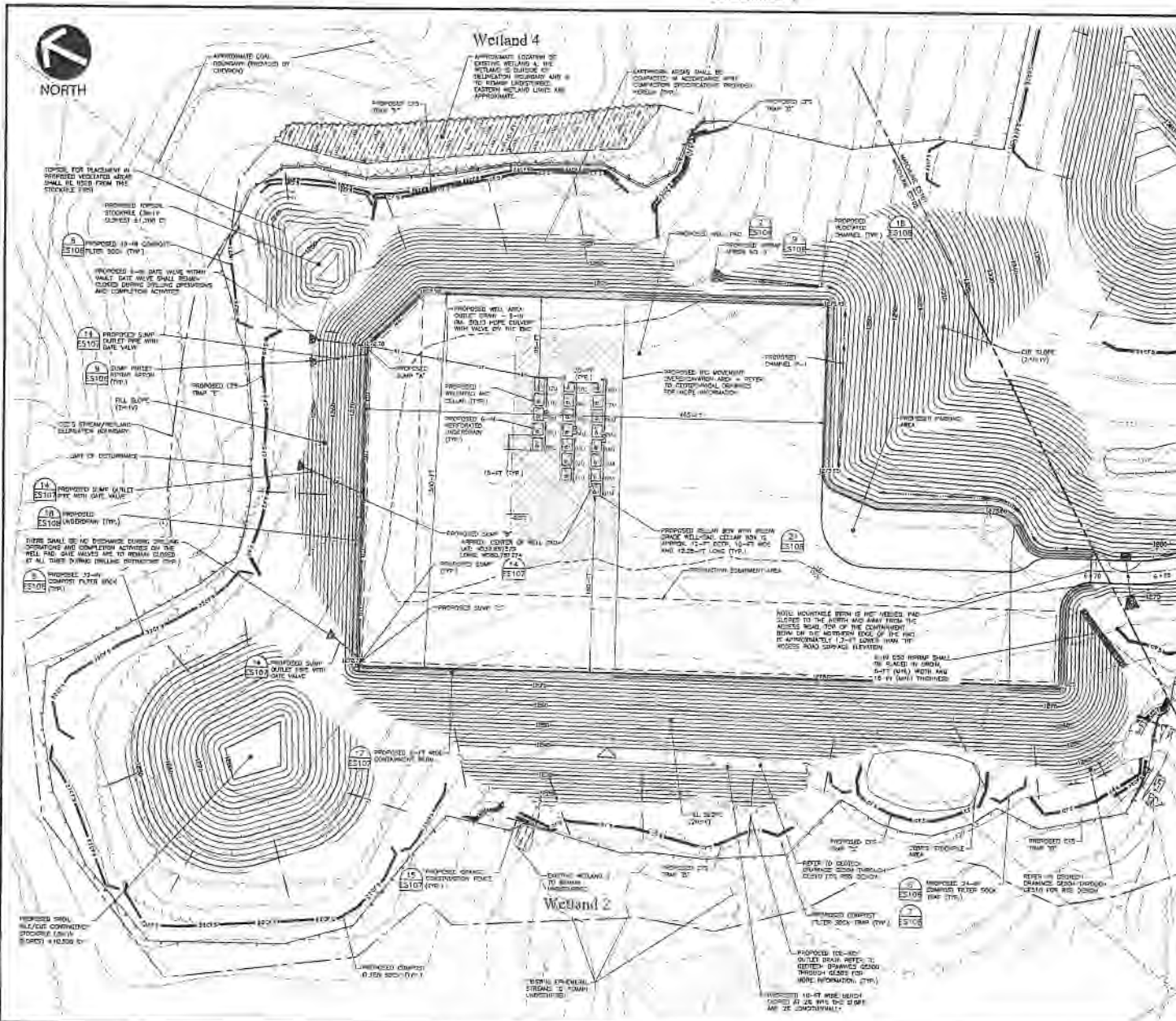
FREELAND WELL PAD
 CLAY DISTRICT
 MARSHALL COUNTY, WEST VIRGINIA
 PREPARED FOR:
CHEVRON APPALACHIA, LLC
 700 CHEROKEE PARKWAY
 CORAOPOLIS, PA 15108

MISS UTILITY OF WEST VIRGINIA
 1-800-245-4848
 1000 High Street Lane
 (South of) Chapin - 24-C Highway Mile 300
 (East) 1st Business Stop 24-200
 3000 E. in the State of West Virginia
IT'S THE LAW



SCALE IN FEET
 0 50 100

EROSION AND SEDIMENT CONTROL PLAN (1 OF 2)
 Prepared by: JES
 Drawing Date: 05/14/2017
 Date Issued: 05/14/2017
 Title Number:
 Owner: CHEVRON
 Checked by: JAW
 Project Manager: JAW



LEGEND

	EXISTING PROPERTY LINE
	EXISTING RIDGE CONTOUR
	EXISTING INTERMEDIATE CONTOUR
	EXISTING 50' BOUNDARY
	EXISTING DRIVEWAY/ROADWAY
	EXISTING STRUCTURE/BUILDING
	EXISTING STREAM
	STREAM AND WETLAND DELINEATION BOUNDARY
	EXISTING WETLAND
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING WATERLINE
	EXISTING GAS/STEAM/UTILITY LINE
	EXISTING STORMWATER CULVERT
	EXISTING FIRE LINE
	EXISTING WATER METER
	EXISTING UTILITY POLE
	EXISTING HOLE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SLOPE OF 4% OR GREATER
	PROPOSED NORMAL PARKING
	PROPOSED CONTAINMENT BERM
	PROPOSED WALKWAY AND CELLAR
	PROPOSED ACCESS DRIVEWAY
	PROPOSED INTERMEDIATE CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED CATCHALL LINE
	PROPOSED COMPACT FILTER SOCK 18"
	PROPOSED COMPACT FILTER SOCK 15"
	PROPOSED COMPACT FILTER SOCK 36"
	PROPOSED DRAINAGE CONSTRUCTION FENCE
	PROPOSED INLET PROTECTION
	PROPOSED DRAINAGE
	PROPOSED STORMWATER CULVERT
	PROPOSED ALLEY
	PROPOSED NORMAL ACCESS
	PROPOSED DRIVEWAY
	PROPOSED EROSION CONTROL BLANKET
	TOTAL NUMBER
	TOTAL LOCATION

STREAMS AND WETLAND NOTES

1. WETLAND BOUNDARIES ARE SHOWN BASED UPON THE FOLLOWING:
 - a. FOUR (4) WETLANDS THAT ARE LOCATED WITHIN 100-YD OF THE LIMIT OF DISTURBANCE (WETLANDS 1A, 1B, 2, AND 4).
 - b. THE STREAMS SHOWN HEREIN OUTSIDE THE LIMIT OF DISTURBANCE ARE CONSIDERED AS INTERMITTENT AS SUCH, UNLESS OTHERWISE NOTED OR INDICATED BY A FURTHER NOTE OR SPECIFICATION FOR FURTHERAL DETERMINATION.
 - c. DIMENSIONS SHOWN HEREIN ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

COMPACTION SPECIFICATIONS

1. PLACE SOIL FILL MATERIALS USING COMPACTION EQUIPMENT WITH OPERATOR THAN 10-TON WEIGHT AS COMPACTOR WHEELS NOT EXCEEDING 18 INCHES DIA. USE A REDUCED LOADS UP PROCESSES OF 4 INCHES (MAXIMUM) IN AREAS WHERE STEEL PLATE TREADS OR OTHER HARD-SURFACED COMPACTORS ARE USED. MAXIMUM PARTICLE SIZE SHOULD NOT EXCEED 6 INCHES IN STRUCTURAL FILL AREAS WHERE HEAVY NON-SUPPORTED COMPACTORS ARE USED. MAXIMUM PARTICLE SIZE OF 3 INCHES SHOULD BE USED IN AREAS WHERE NON-SUPPORTED COMPACTORS ARE USED. WASTE-DISEASED MATERIALS (EXCLUDING THE MAXIMUM PARTICLE SIZE INDICATED ABOVE) OUTSIDE OF THE PROPOSED FILL AREAS OR IN DESIGNATED AREAS OF FILL OVERSPOULLED FILL MATERIALS (I.E. MATERIALS EXCEEDING 6 INCHES) PLACED IN THE DEEPEST LAYER OF FILL SHOULD BE FLAGGED IN SITES NOT EXCEEDING 24 HOURS. LAYS SHOULD BE COMPACTED IN SEVERAL PASSES USING HEAVY CONTACTOR EQUIPMENT.
2. COMPACT ALL FILL AND RECLAIM SUBGRADE AND EACH LIFT OF FILL MATERIAL TO A MINIMUM OF 90% PROPORTION OF ITS MAXIMUM DRY DENSITY WITHIN 5% PROPORTION OF THE ORIGINAL MOISTURE CONTENT, OBTAINING MINIMUM DRY DENSITY AND OPTIMAL MOISTURE CONTENT IN ACCORDANCE WITH ASTM D998 (STANDARD PRACTICE).
3. ADDITIONAL SPECIFICATIONS ARE REQUIRED FOR THE PROPOSED DISTURBED SOIL FILL (FILL) AREAS. REFER TO DISTURBED SOIL FILL THROUGH FILL FOR ADDITIONAL INFORMATION.

- ### REFERENCES
1. STREAMS AND WETLANDS DELINEATED BY ONE & ENVIRONMENTAL CONSULTANTS, INC. 05/24/2015.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOTECHNICAL SURVEY, CONDUCTED BY THE SURVEYORS (C.E. SMITH 08/23/2014) P. 5, 10, 25/2014.
 3. UTILITY FEATURES SURVEYED BY ONE & ENVIRONMENTAL CONSULTANTS, INC. DATED 04/19/2016 BY: (WJ/2016).
 4. TOPOGRAPHY CONDUCTED IN UNIMPAVED ROAD VEHICLE (UAV) BY ONE & ENVIRONMENTAL CONSULTANTS, INC. DATED 04/19/2016.
 5. PROPERTY BOUNDARIES WERE PROVIDED BY ONE & ENVIRONMENTAL CONSULTANTS.

MISS UTILITY OF WEST VIRGINIA
1-800-245-4048

West Virginia State Logo

Customer Service Center: 1500 Riverside Drive, Charleston, WV 25305. Hours: 8:00 AM - 5:00 PM, Monday - Friday.

IT'S THE LAW

SCALE IN FEET

0 20 40

Drill & Environmental Consultants, Inc.

4400 Thompson Lane, Suite 100, Summers, WV 26105

781.457.0800 • 800.499.4510

REVISION RECORD

NO.	DATE	DESCRIPTION
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10		

FREELAND WELL PAD

CLAY DISTRICT
MARSHALL COUNTY, WEST VIRGINIA

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

EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)

Project Name: ES 102
Drawing Scale: 1"=20'-0"
Date Issued: 07/25/2018
Index Number:
Drawn By: EDB
Checked By: JAL
Project Manager: TAE

ES 102

100% Computer Generated Drawing. For more information visit us at www.dcae.com
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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Chevron Appalachia, LLC 49449935 Marshall Clay Powhatan Point, W
Operator ID County District Quadrangle

2) Operator's Well Number: M06H Well Pad Name: Freeland

3) Farm Name/Surface Owner: Freeland Public Road Access: CR 21 Robert Ridge Road

4) Elevation, current ground: 1274' Elevation, proposed post-construction: 1275'

5) Well Type (a) Gas Oil Underground Storage

Other _____

(b) If Gas Shallow Deep

Horizontal _____

6) Existing Pad: Yes or No No *juw 12/5/18*

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6370' below GL, 50' thick; Pore Pressure Gradient 0.64 psi/ft

8) Proposed Total Vertical Depth: 6,395 RECEIVED Office of Oil and Gas

9) Formation at Total Vertical Depth: Marcellus DEC 17 2018

10) Proposed Total Measured Depth: 21,961 WV Department of Environmental Protection

11) Proposed Horizontal Leg Length: 14,481

12) Approximate Fresh Water Strata Depths: 572' below GL

13) Method to Determine Fresh Water Depths: Based on deepest water well within 2 mile radius

14) Approximate Saltwater Depths: 1709', 1789', 2120' below GL

15) Approximate Coal Seam Depths: Pittsburgh Coal top 794' below GL

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

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

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

18) **CASING AND TUBING PROGRAM**

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	20	New	X-52	78.67	60	60	CTS
Fresh Water	13.375	New	J-55	54.5	622	622	CTS
Coal							
Intermediate	9.625	New	L-80	40	2,170	2,170	CTS
Production	5.5	New	P110	20	21,961	21,961	2,670' (500' below 9.625" shoe)
Tubing							
Liners							

ju
12/11/18

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	20	26	0.375				
Fresh Water	13.375	17.5	0.38	2,730	400	Class A	1.2
Coal							
Intermediate	9.625	12.375 & 12.25	0.395	5,750	500	Class A	1.19
Production	5.5	8.75 & 8.5	0.361	14,360	2050	Class A, G, or H	1.25
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

RECEIVED
Office of Oil and Gas

DEC 17 2018

WV Department of
Environmental Protection

je
12/5/18

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

Drill vertical depth to the Marcellus at an estimated total vertical depth of approximately 6,395 feet. Drill horizontal leg.

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

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

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 24.2

22) Area to be disturbed for well pad only, less access road (acres): 5.0

23) Describe centralizer placement for each casing string:

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

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

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

25) Proposed borehole conditioning procedures:

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

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*Note: Attach additional sheets as needed.

03/08/2019

Cement Additives

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

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

The Production cement will have a lead and tail cement.

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

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

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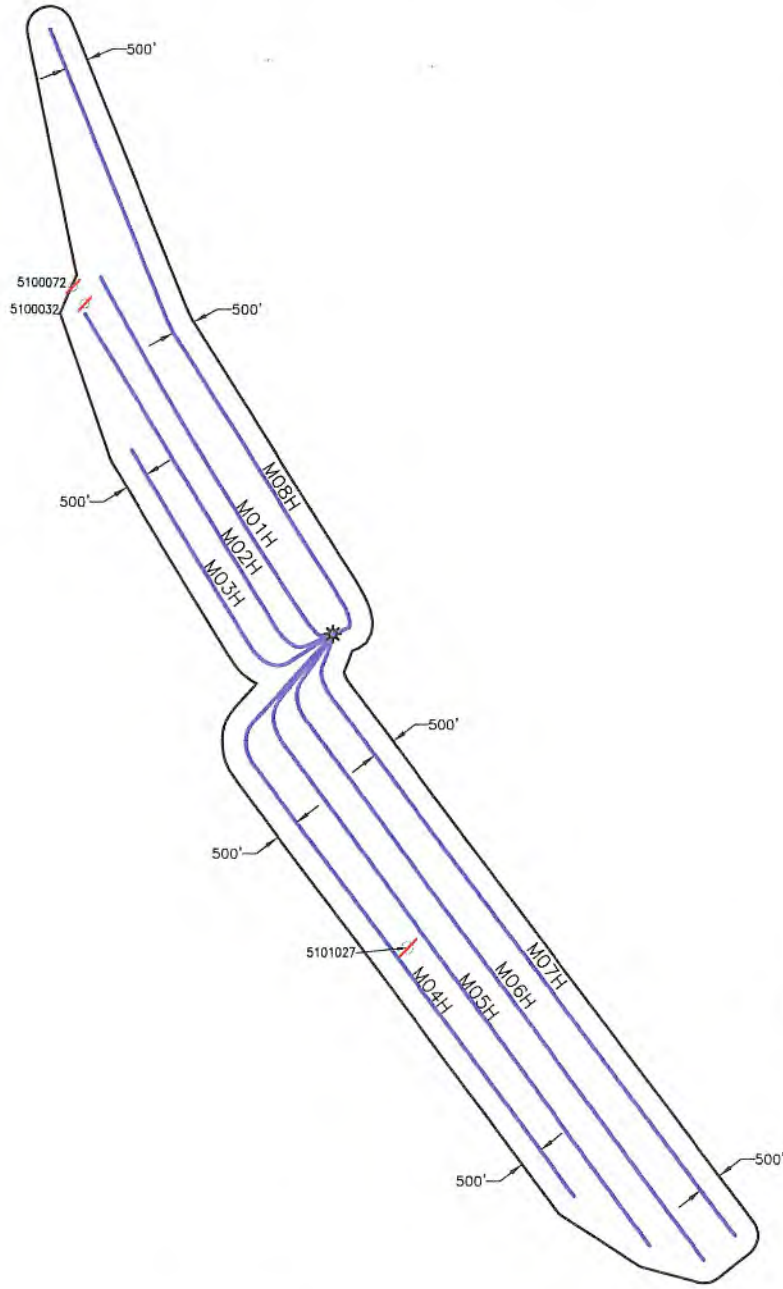


Freeland M06H

Clay Twp, Marshall Co, WV						Ground Level Elev. (ft above SL):		1,274	
DRILLING FLUID / BIT TYPE / TFA	CENTRALIZER PROGRAM	CASING SIZE / FORMATION	DEPTH		WELLHEAD DESIGN		HOLE SIZE (IN)	CASING SPECS	CEMENT PROGRAM
			MD (FT)	TVD (FT)	INC	AZM			
Core Barrel / Auger	2 Bowspring per jt	20" Conductor	65	65			30	Conductor 20" API 5L Minimum 40 ft from GL or at least 10 ft into bedrock	Grout to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per jt over coupling to surface	13-3/8" Casing	622	622			17.5	Surface Casing 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (Jt Strength 1,000 lbs) 853	Surface Blend (Class A) Cement to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per 3 ft over coupling	9-5/8" Casing	2,170	2,170			12.375 - 12.25	Intermediate Casing 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	Intermediate II Blend (Class A) Cement to Surface
	Bow Spring: (1) per every other ft over coupling SpiraGlider or Centek: (1) per ft of csg to KOP Float Equip. Float Equip.	5-1/2" Casing	21,961				8.75 - 8.5	Production Casing 5-1/2" 20# P-110, 0.361" Wall Coupling OD (in) 8.300 ID (in) 4.778 Drift ID (in) 4.653 Burst (psi) 14,360 Collapse (psi) 12,090 Yield (Jt Strength 1,000 lbs) 729	Production Lead Slurry Cement to 500' below 9-5/8" shoe Production Tail Slurry TOC minimum 200' above Marcellus

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12/15/18



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

- LEGEND
- WELL LOCATION
 - PLUGGED WELL
 - ABANDON WELL

FREELAND
AREA OF REVIEW MAP
MARSHALL COUNTY
CLAY DISTRICT
WEST VIRGINIA

TOPO QUAD: POWHATAN POINT, WV
SCALE: 1" = 4000'
DATE: SEPTEMBER 7, 2018

4705102151

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
47-051-00072	Wasmuth-Callahan Gas Co.	Operator Unknown	ABANDONED	39.887867	-80.781834	N/A	N/A	None
47-051-00032	R L McDowell	Operator Unknown	ABANDONED	39.886851	-80.780892	N/A	N/A	None
47-051-01027	CNX Gas Company	CNX Gas Company LLC	ABANDONED	39.849249	-80.75489	N/A	N/A	None

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WW-9
(4/16)

4705 02151
03/08/2019

API Number 47 - _____
Operator's Well No. M06H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 49449935

Watershed (HUC 10) Short Creek - Ohio River Quadrangle Powhatan Point, WV 7.5'

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

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

Proposed Disposal Method For Treated Pit Wastes:

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

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

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

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

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

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

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

-Landfill or offsite name/permit number? Short Creek Landfill/SWF-1034/WW0109517 and Arden Landfill/#100172

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

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

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

Company Official Signature _____ *Jenny Butchko*

Company Official (Typed Name) Jenny Butchko

Company Official Title Permitting Team Lead

Subscribed and sworn before me this 24th day of September, 2018, 20 _____, Commonwealth of Pennsylvania
County of Allegheny

Laura Savage

Notary Public

My commission expires September 17, 2022

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

Chevron Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 18.8 Prevegetation pH 6.5-7.0

Lime 3 tons/acre Tons/acre or to correct to pH

Fertilizer type 10-20-20 or as directed by soil test

Fertilizer amount 300#/acre or as directed by soil test lbs/acre

Mulch 3 tons/acre or 5 tons/acre for winter stabilization Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Annual Ryegrass - 50

See Attached

Winter Wheat - 75

Cereal Ryegrass - 50

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

Jim Nicholas

Comments:

Title:

Oil + Gas Inspector

Date:

12/5/18

Field Reviewed?

(x) Yes

() No

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4705102151

Seed Mixtures

<u>Permanent</u>		3ton/ac	lbs/acre
Seed Type			
Non Agricultural Upland			6000 and
Tall Fescue	57%	3420.00	
Perennial Ryegrass	19%	649.80	
Ladino Clover	10%	64.98	
Birdfoot - Trefoil	10%	6.50	
Red Top	4%	0.26	

<u>Permanent</u>		lbs/acre
Seed Type		
Hayfield, Pastureland, and Cropland		6000
Orchard Grass	40%	2400.00
Timothy	40%	960.00
Birdfoot - Trefoil	10%	96.00
Ladino Clover	10%	9.60

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Chevron

Appalachian LLC
WV Well Site Safety Plan
Pad: Freeland Pad A
Well # M06H

Handwritten signature and date: 12/5/18

3599 Roberts Ridge Rd
Moundsville, WV 26041
Clay District
Marshall County, WV

Access Point – [39.865278°N, 80.758511°W]
Well Site – [39.867578°N, 80.761275°W]
Marshall County, West Virginia

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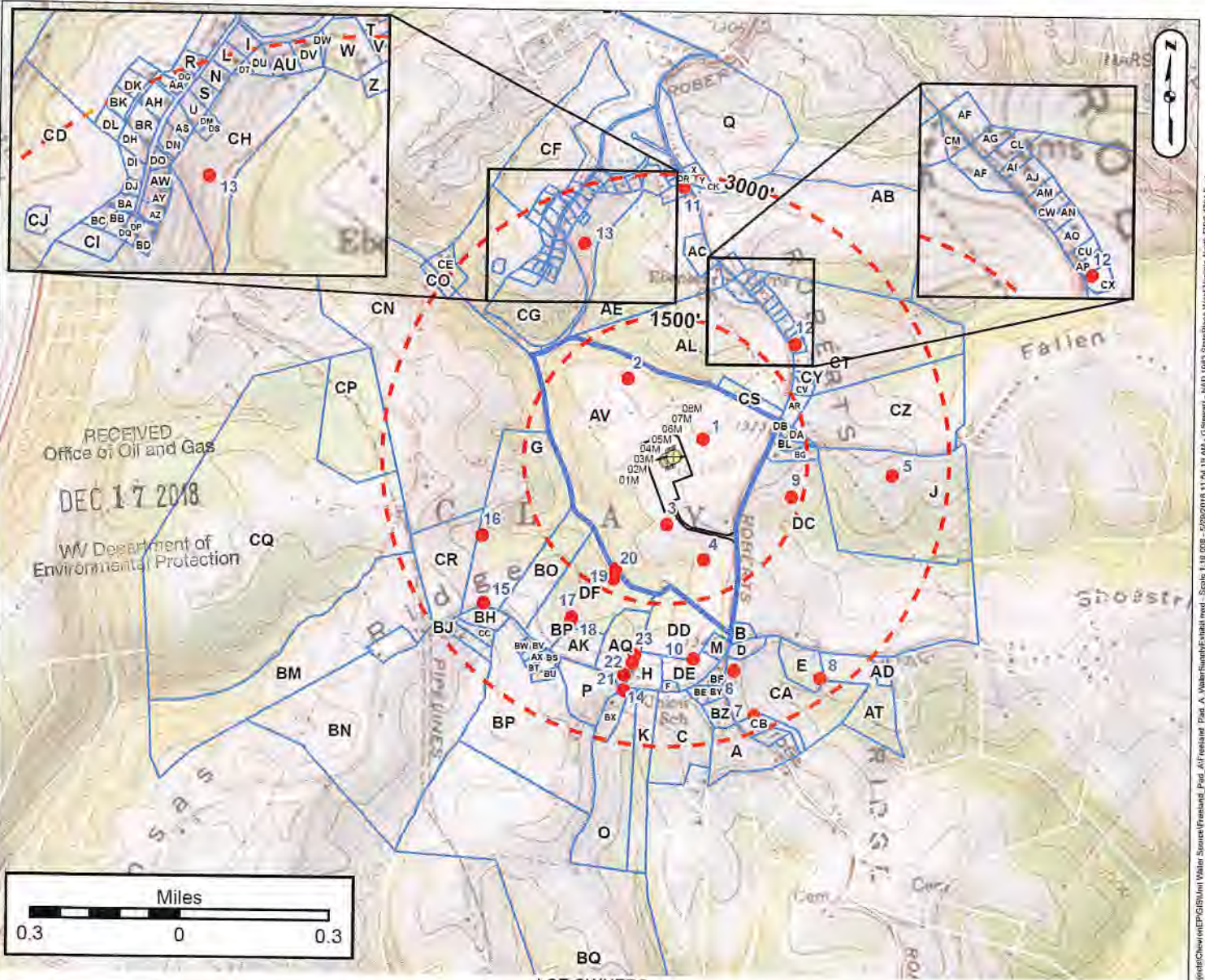
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Environmental Protection



WATER SUPPLY EXHIBIT FREELAND PAD A

470510308/2019
GES



LOT OWNERS

Parcel ID	Owner	Parcel ID	Owner	Parcel ID	Owner	Parcel ID	Owner
25-04 1300120000	BASSETT GREG W WOOD	25-04 7800421000	HART TUNCOONS W & LORI	25-04 7800420000	DAVIS GREGORY T	25-04 7800420000	DAVIS GREGORY T
25-04 7800420000	HUNT WILLIAM ROBERT	25-04 7800420000	HENDERSON ELAINE D	25-04 7800420000	WIGGINS MICHAEL WILLIAM	25-04 7800420000	WIGGINS MICHAEL WILLIAM
25-04 7800420000	CLAYTON PHILIP ET UX	25-04 7800420000	REYNOLDS LARRY L ET UX	25-04 7800420000	SCHWABER JAMES W ET UX	25-04 7800420000	SCHWABER JAMES W ET UX
25-04 7800420000	CLAYTON PHILIP ET UX	25-04 7800420000	REYNOLDS LARRY L ET UX	25-04 7800420000	SCHWABER JAMES W ET UX	25-04 7800420000	SCHWABER JAMES W ET UX
25-04 7800420000	CLAYTON PHILIP ET UX	25-04 7800420000	REYNOLDS LARRY L ET UX	25-04 7800420000	SCHWABER JAMES W ET UX	25-04 7800420000	SCHWABER JAMES W ET UX

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

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

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

BHL is located on topo map 771 feet south of Latitude: 39° 50' 00"
 SHL is located on topo map 2,703 feet south of Latitude: 39° 52' 30"



BHL

SEE PAGE 2 FOR PLAT DUE TO LENGTH OF LATERAL

SEE PAGE 3 FOR LESSORS



SHL

	SURFACE OWNER	DIST-TM/PAR
1	JOSEPH L. FREELAND ET UX	4-7/21
2	NORMAN L. DERROW ET UX	4-7/32
3	CARRIE ANN MASON	4-7/32.3
4	MARK A. & NORMA S. ROBINSON	4-7/31.2
5	PHILLIP JONES ET UX	4-13/7
6	SHAWN T. DANAHEY ET UX	4-13/4.2
7	*CHRISTY L. MCCLELLAND	4-13/7.1
8	GREG ELWOOD BASSETT	4-13/19
9	IMOGENE WHITFIELD - LIFE	4-13/20
10	IMOGENE WHITFIELD - LIFE	4-13/21
11	IMOGENE WHITFIELD - LIFE	4-13/22
12	IMOGENE WHITFIELD - LIFE	4-13/23
13	LINDA LEE WILLIAMS - TOD	4-13/25.1
14	LLOYD BAKER	4-13/25.2
15	JASON K. AMOS	4-13/25.4
16	DEAN E. PETTIT ET UX	5-3/34
17	FRANKLIN J. WILLIAMS II	5-3/35
18	PAUL E. JR. BARLOW ET UX	5-3/33
19	JIMMIE REGIEC ET UX	4-13/25.5
20	ROBERT L. JONES JR.	4-13/29.1
21	LOYE A. BLAKE SR., EST	5-3/32.2
22	KEITH A. & STACY HILL	5-3/32.10
23	JOHN ROBERT HILL ET UX - LIFE	5-3/32.4
24	RALPH A. & ROBIN R. HOLMES	5-3/6.1
25	JEFFREY A. SZAFRAN	5-3/6
26	DOUG & TERRI ALLMAN	5-3/6.3
27	CHARLENE L. BAKER	5-3/10.2
28	CHARLENE LORRAINE BAKER	5-3/10.1
29	RAYMOND L. & DOROTHY L. MIDCAP	5-3/10
30	TRACY MERCER	5-3/13.2
31	DOUGLAS G. & MICHAEL W. & STEPHEN S. DERROW	5-3/13
32	MICHAEL WILLIAM DERROW	5-3/13.4
33	GLEN L. CUNNINGHAM ET UX	5-3/14
34	BRENT C. & SATONA L. CUNNINGHAM	5-3/15

03/08/2019

BHL is located on topo map 6,492 feet west of Longitude: 80° 42' 30"
 SHL is located on topo map 3,263 feet west of Longitude: 80° 45' 00"

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE



SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M) N:4413095.39 E:520436.24
NAD83, WV NORTH N:500627.748 E:1614549.444

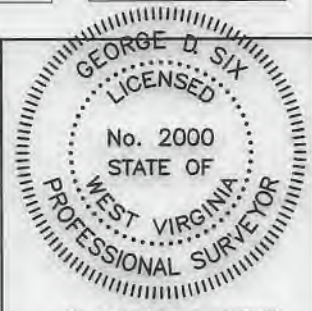
APPROX. LANDING POINT
UTM 17-NAD83(M) N:4412531.29 E:520257.60
NAD83, WV NORTH N:498786.447 E:1613932.298

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M) N:4409058.84 E:522979.79
NAD83, WV NORTH N:487242.313 E:1622674.721

FILE #: FREELAND M06H
 DRAWING #: FREELAND M06H
 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



PLACE SEAL HERE

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



DATE: OCTOBER 12, 2018
 OPERATOR'S WELL #: FREELAND M06H
 API WELL #: 47 51 02151
 STATE COUNTY PERMIT

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

WATERSHED: SHORT CREEK-OHIO RIVER ELEVATION: 1274.00'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: POWHATAN POINT, WV 7.5'

SURFACE OWNER: JOSEPH L. FREELAND ET UX ACREAGE: 104.22±

OIL & GAS ROYALTY OWNER: JOSEPH FREELAND ET UX ACREAGE: 529.943±

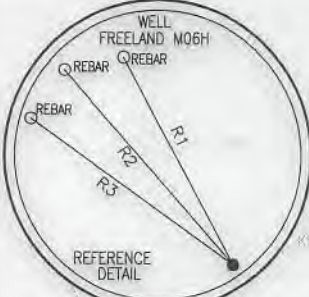
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE

(SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,395± TMD: 21,961.46±

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

FREELAND M06H PAGE 2 OF 4



WELL PAD ORIENTATION DETAIL

03/08/2019

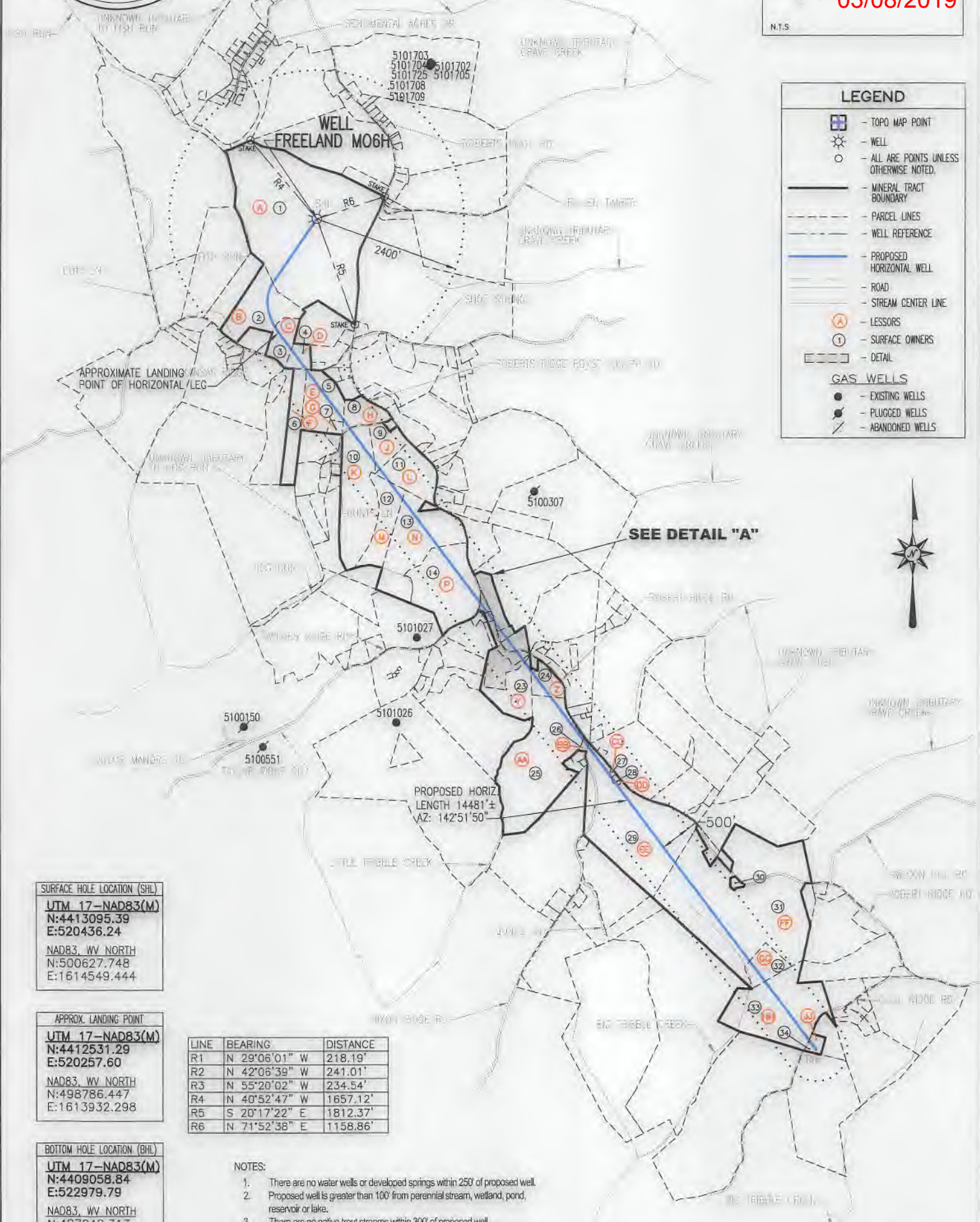
N.T.S.

LEGEND

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

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS
- ABANDONED WELLS



SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M)
 N:4413095.39
 E:520436.24
 NAD83_WV NORTH
 N:500627.748
 E:1614549.444

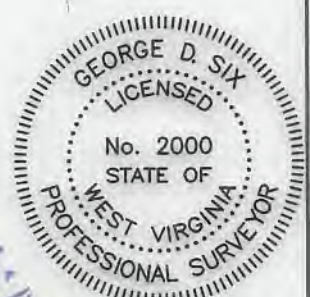
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BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M)
 N:4409058.84
 E:522979.79
 NAD83_WV NORTH
 N:487242.313
 E:1622674.721

LINE	BEARING	DISTANCE
R1	N 29°06'01" W	218.19'
R2	N 42°06'39" W	241.01'
R3	N 55°20'02" W	234.54'
R4	N 40°52'47" W	1657.12'
R5	S 20°17'22" E	1812.37'
R6	N 71°52'38" E	1158.86'

- 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.

OCTOBER 12, 2018



George D. Six

FREELAND

M06H

PAGE 3 OF 4

03/08/2019

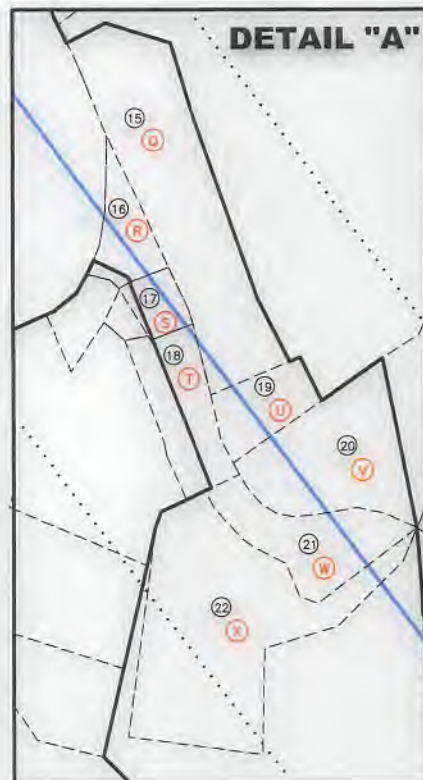
	LESSOR	DIST-TM/PAR
A	JOSEPH FREELAND ET UX	4-7/21
B	NORMAN L. DERROW ET UX	4-7/32
C	CARRIE ANN MASON	4-7/32.3
D	MARK A. ROBINSON	4-7/31.2
E	PHILLIP D. JONES ET UX	4-13/7
F	SHAWN T. DANAHEY ET UX	4-13/4.2
G	*CHAD W. MCCLELLAND ET UX	4-13/7.1
H	GREG E. BASSETT ET UX	4-13/19
J	IMOGENE WHITFIELD	4-13/20
K	IMOGENE WHITFIELD	4-13/21
L	IMOGENE WHITFIELD	4-13/22
M	IMOGENE WHITFIELD	4-13/23
N	CHARLES WILLIAMS ET UX	4-13/25.1
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Q	JASON K. AMOS	4-13/25.4
R	DEAN E. PETTIT ET UX	5-3/34
S	FRANKLIN J. WILLIAMS II	5-3/35
T	PAUL E. BARLOW JR., ET UX	5-3/33
U	JIMMY REGIEC ET UX	4-13/25.5
V	ROBERT L. JONES JR., ET UX	4-13/29.1
W	BRIAN E. BLAKE	5-3/32.2
X	KEITH A. HILL	5-3/32.10
Y	CAROL ELLEN HILL	5-3/32.4
	MARK O. HILL	
	MELISSA J. DAVIS	
	KEITH A. HILL	
Z	CHARLOTTE S. SZAFRAN	5-3/6.1
	JEFFREY A. SZAFRAN	
	JEFFREY D. ROBINSON UX	
	RANDY D. ROBINSON	
	MARK A. ROBINSON	
	BRIAN FURBEE	
	GREGORY D. FURBEE	
	MARSHA A. SINGER	
	EDMOND J. FURBEE	
	CHRISTOPHER G. FURBEE	
	MATTHEW R. FURBEE	
	MAUREEN C. COOPER	
	REXENA A. CUNNINGHAM	
	RICHARD CECIL ET UX	
	SHERRY L. MORRIS	
	WILLIAM R. POLEN	
	DEBBIE MAE MOORE	
	ETHEL E. STARKEY AKA ETHEL ELAINE STARKEY	
	CALLENE M. PETERSON FKA CALLENE M. STARKEY	
	REBECCA JEAN BROWN	
	PAULA J. ROHRER	
	MARLA K. STRUHAR	
	SARAH SISLEY FKA SARAH SALSBERY ET VIR	
	CARALOTTA J. GIBSON FKA CARALOTTA SALSBERY	
	JOHN M. SALSBERY BY JASON L. JACKSON GUARDIAN	
	DELLA J. COVERDALE ET UX	
	TRACY M. SALSBERY AKA TRACY SALSBERY	
	GINGER L. SALSBERY AKA GINGER SALSBERY	
	DALE A. SALSBERY AKA DALE ADORIN SALSBERY	
	JODIE R. MORRIS FKA JODIE SALSBERY	
	BARBARA L. MCGAHA	
	ELAINE M. KEENER	
	SHERRY KAY RISHER	
	SANDRA LEE KNAPSKI	
	BRENT LEE STARKEY	
	FORREST STARKEY ET UX	
	ANITA STANLEY FKA ANITA STARKEY	
	LINDA D. MAYO ET VIR	
	CAROL JEAN MALILKA ALBERT	
	SHARON L. SCHARTIGER	
	JANET SHADDICK	
	DUANE M. STARKEY ET UX	
	REGINA KAY ST GEORGE ET VIR	
	BETTY LOU STARKEY	
	PATTIE S. MADRID FKA PATTIE S. SPEAR	
AA	CHARLOTTE S. SZAFRAN	5-3/6
	JEFFREY A. SZAFRAN	
	JEFFREY D. ROBINSON UX	
	RANDY D. ROBINSON	
	MARK A. ROBINSON	

	LESSOR	DIST-TM/PAR
AA	BRIAN FURBEE	5-3/6
	GREGORY D. FURBEE	
	MARSHA A. SINGER	
	EDMOND J. FURBEE	
	CHRISTOPHER G. FURBEE	
	MATTHEW R. FURBEE	
	MAUREEN C. COOPER	
	REXENA A. CUNNINGHAM	
	RICHARD CECIL ET UX	
	SHERRY L. MORRIS	
	WILLIAM R. POLEN	
	DEBBIE MAE MOORE	
	ETHEL E. STARKEY AKA ETHEL ELAINE STARKEY	
	CALLENE M. PETERSON FKA CALLENE M. STARKEY	
	REBECCA JEAN BROWN	
	PAULA J. ROHRER	
	MARLA K. STRUHAR	
	SARAH SISLEY FKA SARAH SALSBERY ET VIR	
	CARALOTTA J. GIBSON FKA CARALOTTA SALSBERY	
	JOHN M. SALSBERY BY JASON L. JACKSON GUARDIAN	
	DELLA J. COVERDALE ET UX	
	TRACY M. SALSBERY AKA TRACY SALSBERY	
	GINGER L. SALSBERY AKA GINGER SALSBERY	
	DALE A. SALSBERY AKA DALE ADORIN SALSBERY	
	JODIE R. MORRIS FKA JODIE SALSBERY	
	BARBARA L. MCGAHA	
	ELAINE M. KEENER	
	SHERRY KAY RISHER	
	SANDRA LEE KNAPSKI	
	BRENT LEE STARKEY	
	FORREST STARKEY ET UX	
	ANITA STANLEY FKA ANITA STARKEY	
	LINDA D. MAYO ET VIR	
	CAROL JEAN MALILKA ALBERT	
	SHARON L. SCHARTIGER	
	JANET SHADDICK	
	DUANE M. STARKEY ET UX	
	REGINA KAY ST GEORGE ET VIR	
	BETTY LOU STARKEY	
	PATTIE S. MADRID FKA PATTIE S. SPEAR	

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M) N:4413095.39 E:520436.24
NAD83, WV NORTH N:500627.748 E:1614549.444

APPROX. LANDING POINT
UTM 17-NAD83(M) N:4412531.29 E:520257.60
NAD83, WV NORTH N:498786.447 E:1613932.298

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M) N:4409058.84 E:522979.79
NAD83, WV NORTH N:487242.313 E:1622674.721



* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

OCTOBER 12, 2018

FREELAND

M06H

PAGE 4 OF 4

03/08/2019

	LESSOR	DIST-TM/PAR
BB	CHARLOTTE S. SZAFRAN	5-3/6.3
	JEFFREY A. SZAFRAN	
	JEFFREY D. ROBINSON UX	
	RANDY D. ROBINSON	
	MARK A. ROBINSON	
	BRIAN FURBEE	
	GREGORY D. FURBEE	
	MARSHA A. SINGER	
	EDMOND J. FURBEE	
	CHRISTOPHER G. FURBEE	
	MATTHEW R. FURBEE	
	MAUREEN C. COOPER	
	REXENA A. CUNNINGHAM	
	RICHARD CECIL ET UX	
	SHERRY L. MORRIS	
	WILLIAM R. POLEN	
	DEBBIE MAE MOORE	
	ETHEL E. STARKEY AKA ETHEL ELAINE STARKEY	
	CALLENE M. PETERSON FKA CALLENE M. STARKEY	
	REBECCA JEAN BROWN	
	PAULA J. ROHRER	
	MARLA K. STRUHAR	
	SARAH SISLEY FKA SARAH SALSBERY ET VIR	
	CARALOTTA J. GIBSON FKA CARALOTTA SALSBERY	
	JOHN M. SALSBERY BY JASON L. JACKSON GUARDIAN	
	DELLA J. COVERDALE ET UX	
	TRACY M. SALSBERY AKA TRACY SALSBERY	
	GINGER L. SALSBERY AKA GINGER SALSBERY	
	DALE A. SALSBERY AKA DALE ADORIN SALSBERY	
	JODIE R. MORRIS FKA JODIE SALSBERY	
	BARBARA L. MCGAHA	
	ELAINE M. KEENER	
	SHERRY KAY RISHER	
SANDRA LEE KNAPSKI		
BRENT LEE STARKEY		
FORREST STARKEY ET UX		
ANITA STANLEY FKA ANITA STARKEY		
LINDA D. MAYO ET VIR		
CAROL JEAN MALILKA ALBERT		
SHARON L. SCHATIGER		
JANET SHADDICK		
DUANE M. STARKEY ET UX		
REGINA KAY ST GEORGE ET VIR		
BETTY LOU STARKEY		
PATTIE S. MADRID FKA PATTIE S. SPEAR		
CC	DOROTHY L. MIDCAP	5-3/10.2
DD	CHARLENE LORRAINE BAKER	5-3/10.1
EE	DOROTHY L. MIDCAP	5-3/10
FF	MICHAEL WILLIAM DERROW	5-3/13
GG	MICHAEL WILLIAM DERROW	5-3/13.4
HH	GLENN L. CUNNINGHAM ET UX	5-3/14
JJ	BRENT C. CUNNINGHAM ET UX	5-3/15

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M)
N:4413095.39
E:520436.24
NAD83, WV NORTH
N:500627.748
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NAD83, WV NORTH
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BOTTOM HOLE LOCATION (BHL)
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E:522979.79
NAD83, WV NORTH
N:487242.313
E:1622674.721

OCTOBER 12, 2018

WW-6A1
(5/13)

Operator's Well No. M06H

**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
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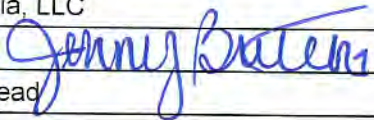
See Attached

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

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

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

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

Well Operator: Chevron Appalachia, LLC
 By: Jenny Butchko 
 Its: Permitting Team Lead

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Freeland Unit #6H - BATCH 1 - MRCL FULL

Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	4-7-21	FREELAND JOSEPH ET UX	Chevron U.S.A. Inc.	0.180	932/374	n/a	n/a	n/a
B	4-7-32	DERROW NORMAN L ET UX	Chevron U.S.A. Inc.	0.180	852/409	n/a	n/a	n/a
C	4-7-32.3	MASON CARRIE ANN	Chevron U.S.A. Inc.	0.180	852/378	n/a	n/a	n/a
D	4-7-31.2	ROBINSON MARK A - SFX	Chevron U.S.A. Inc.	0.180	915/513	n/a	n/a	n/a
E	4-13-7	JONES PHILLIP D ET UX	TriEnergy Holdings, LLC	0.160	705/264	24/180 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a
F	4-13-4.2	DANAHEY SHAWN T ET UX	TH Exploration, LLC	0.180	876/64	36/168 TH Exploration, LLC to Chevron U.S.A. Inc.	n/a	n/a
G	4-13-7.1	McCLELLAND CHAD W. ET UX	Chevron U.S.A. Inc.	0.140	773/506	n/a	n/a	n/a
H	4-13-19	BASSETT GREG E ET UX	TriEnergy Holdings, LLC	0.160	704/613	24/180 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a
J	4-13-20	WHITFIELD IMOGENE	AB Resources, LLC	0.125	689/89	24/466 AB Resources et al to Chief Exploration and Development and Radler 2000 Limited Partnership	25/105 Chief Exploration and Development and Radler 2000 Limited Partnership to Chevron U.S.A. Inc.	756/397 AB Resources, LLC to Chevron U.S.A. Inc.
K	4-13-21	WHITFIELD IMOGENE	AB Resources, LLC	0.125	689/89	24/466 AB Resources et al to Chief Exploration and Development and Radler 2000 Limited Partnership	25/105 Chief Exploration and Development and Radler 2000 Limited Partnership to Chevron U.S.A. Inc.	756/397 AB Resources, LLC to Chevron U.S.A. Inc.
L	4-13-22	WHITFIELD IMOGENE	AB Resources, LLC	0.125	689/89	24/466 AB Resources et al to Chief Exploration and Development and Radler 2000 Limited Partnership	25/105 Chief Exploration and Development and Radler 2000 Limited Partnership to Chevron U.S.A. Inc.	756/397 AB Resources, LLC to Chevron U.S.A. Inc.

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Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
M	4-13-23	WHITFIELD IMOGENE	AB Resources, LLC	0.125	689/89	24/466 AB Resources et al to Chief Exploration and Development and Radler 2000 Limited Partnership	25/105 Chief Exploration and Development and Radler 2000 Limited Partnership to Chevron U.S.A. Inc.	756/397 AB Resources, LLC to Chevron U.S.A. Inc.
N	4-13-25.1	WILLIAMS CHARLES ET UX	Chevron U.S.A. Inc.	0.180	838/545	n/a	n/a	n/a
P	4-13-25.2	BAKER LLOYD G	Chevron U.S.A. Inc.	0.180	861/583	n/a	n/a	n/a
Q	4-13-25.4	AMOS JASON K	Chevron U.S.A. Inc.	0.160	803/549	n/a	n/a	n/a
R	5-3-34	PETTIT DEAN E ET UX	TriEnergy Holdings, LLC	0.160	739/571	25/489 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a
S	5-3-35	WILLIAMS FRANKLIN J II	Chevron U.S.A. Inc.	0.170	899/520	n/a	n/a	n/a
T	5-3-33	BARLOW PAUL E JR ET UX	TriEnergy Holdings, LLC	0.160	740/23	25/489 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a
U	4-13-25.5	REGIEC JIMMY ET UX	Chevron U.S.A. Inc.	0.160	772/438	n/a	n/a	n/a
V	4-13.29.1	JONES ROBERT L JR ET UX	AB Resources, LLC	0.125	689/87	24/490 AB Resources, LLC to Chief Exploration & Development LLC and Radler 2000 Limited Partnership	25/1 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Chevron U.S.A. Inc.	756/397 AB Resources, LLC to Chevron U.S.A. Inc.
W	5-3-32.2	BLAKE BRIAN E	Chevron U.S.A. Inc.	0.160	771/633	n/a	n/a	n/a
X	5-3-32.10	HILL KEITH A	Noble Energy, Inc.	0.170	845/252	39/1 Noble Energy, Inc. to HG Energy II Appalachia	40/577 HG Energy II Appalachia to Chevron U.S.A. Inc.	n/a
V	5-3-32.1	HILL CAROL ELLEN	Noble Energy, Inc.	0.170	845/185	39/1 Noble Energy, Inc. to HG Energy II Appalachia	40/577 HG Energy II Appalachia to Chevron U.S.A. Inc.	n/a
		HILL MARK O	Noble Energy, Inc.	0.170	845/187	39/1 Noble Energy, Inc. to HG Energy II Appalachia	40/577 HG Energy II Appalachia to Chevron U.S.A. Inc.	n/a

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Freeland Unit #6H - BATCH 1 - MRCL FULL

Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
		DAVIS MELISSA J	Noble Energy, Inc.	0.170	845/167	39/1 Noble Energy, Inc. to HG Energy II Appalachia	40/577 HG Energy II Appalachia to Chevron U.S.A. Inc.	n/a
		HILL KEITH A	Noble Energy, Inc.	0.170	845/252	39/1 Noble Energy, Inc. to HG Energy II Appalachia	40/577 HG Energy II Appalachia to Chevron U.S.A. Inc.	n/a
		SZAFRAN CHARLOTTE S - SFX	Chevron U.S.A. Inc.	0.200	939/124	n/a	n/a	n/a
		SZAFRAN JEFFREY A - SFX	Chevron U.S.A. Inc.	0.200	939/223	n/a	n/a	n/a
		ROBINSON JEFFREY D UX - SFX	Chevron U.S.A. Inc.	0.180	887/576	n/a	n/a	n/a
		ROBINSON RANDY D - SFX	Chevron U.S.A. Inc.	0.180	880/539	n/a	n/a	n/a
		ROBINSON MARK A - SFX	Chevron U.S.A. Inc.	0.180	887/573	n/a	n/a	n/a
		FURBEE BRIAN - SFX	Chevron U.S.A. Inc.	0.180	939/136	n/a	n/a	n/a
		FURBEE GREGORY D - SFX	Chevron U.S.A. Inc.	0.180	939/139	n/a	n/a	n/a
		SINGER MARSHA A - SFX	Chevron U.S.A. Inc.	0.180	890/469	n/a	n/a	n/a
		FURBEE EDMOND J - SFX	Chevron U.S.A. Inc.	0.180	926/68	n/a	n/a	n/a
		FURBEE CHRISTOPHER G - SFX	Chevron U.S.A. Inc.	0.180	873/613	n/a	n/a	n/a
		FURBEE MATTHEW R - SFX	Chevron U.S.A. Inc.	0.180	880/440	n/a	n/a	n/a
		COOPER MAUREEN C - SFX	Chesapeake Appalachia, LLC	0.125	691/26	24/338 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
		CUNNINGHAM REXENA A - SFX	Chevron U.S.A. Inc.	0.180	873/610	n/a	n/a	n/a
		CECIL RICHARD ET UX - SFX	Chevron U.S.A. Inc.	0.180	871/132	n/a	n/a	n/a
		MORRIS SHERRY L - SFX	Chevron U.S.A. Inc.	0.160	929/526	n/a	n/a	n/a
		POLEN WILLIAM R - SFX	Chevron U.S.A. Inc.	0.160	880/419	n/a	n/a	n/a
		MOORE DEBBIE MAE - SFX	Chesapeake Appalachia, LLC	0.125	690/564	24/338 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.

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Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
Z	5-3-6.1	STARKEY ETHEL E AKA STARKEY ETHEL ELAINE - SFX	Chevron U.S.A. Inc.	0.180	871/152	n/a	n/a	n/a
		PETERSON CALLENE M FKA STARKEY CALLENE M - SFX	Chevron U.S.A. Inc.	0.180	871/114	n/a	n/a	n/a
		BROWN REBECCA JEAN - SFX	Chevron U.S.A. Inc.	0.180	873/309	n/a	n/a	n/a
		ROHRER PAULA J - SFX	Chevron U.S.A. Inc.	0.180	873/312	n/a	n/a	n/a
		STRUHAR MARLA K - SFX	Chevron U.S.A. Inc.	0.180	873/321	n/a	n/a	n/a
		SISLEY SARAH FKA SALSBERY SARAH ET VIR - SFX	Chevron U.S.A. Inc.	0.180	871/145	n/a	n/a	n/a
		GIBSON CARALOTTA J FKA SALSBERY CARALOTTA - SFX	Chevron U.S.A. Inc.	0.180	871/138	n/a	n/a	n/a
		SALSBERY JOHN M BY JASON L JACKSON GUARDIAN - SFX	Chevron U.S.A. Inc.	0.180	882/203	n/a	n/a	n/a
		COVERDALE DELLA J ET UX - SFX	Chevron U.S.A. Inc.	0.180	871/173	n/a	n/a	n/a
		SALSBERY TRACY M AKA SALSBERY TRACY - SFX	Chevron U.S.A. Inc.	0.180	871/159	n/a	n/a	n/a
		SALSBERY GINGER L AKA SALSBERY GINGER SFX	Chevron U.S.A. Inc.	0.180	871/167	n/a	n/a	n/a
		SALSBERY DALE A AKA SALSBERY DALE ADORIN - SFX	Chevron U.S.A. Inc.	0.180	871/315	n/a	n/a	n/a
		MORRIS JODIE R FKA SALSBERY JODIE - SFX	Chevron U.S.A. Inc.	0.180	871/126	n/a	n/a	n/a
		MCGAHA BARBARA L - SFX	Chevron U.S.A. Inc.	0.180	872/98	n/a	n/a	n/a
		KEENER ELAINE M - SFX	Chevron U.S.A. Inc.	0.180	872/101	n/a	n/a	n/a
		RISHER SHERRY KAY - SFX	Chevron U.S.A. Inc.	0.160	803/562	n/a	n/a	n/a
		KNAPSKI SANDRA LEE - SFX	Chevron U.S.A. Inc.	0.180	873/315	n/a	n/a	n/a
		STARKEY BRENT LEE - SFX	Chevron U.S.A. Inc.	0.180	873/318	n/a	n/a	n/a
		STARKEY FORREST ET UX - SFX	Chevron U.S.A. Inc.	0.180	872/154	n/a	n/a	n/a
		STANLEY ANITA FKA STARKEY ANITA - SFX	Chevron U.S.A. Inc.	0.180	872/151	n/a	n/a	n/a
MAYO LINDA D ET VIR - SFX	Chevron U.S.A. Inc.	0.180	872/157	n/a	n/a	n/a		
ALBERT CAROL JEAN MALILKA - SFX	Chevron U.S.A. Inc.	0.180	893/268	n/a	n/a	n/a		
SCHARTIGER SHARON L - SFX	Chevron U.S.A. Inc.	0.180	893/205	n/a	n/a	n/a		
SHADDICK JANET - SFX	Chevron U.S.A. Inc.	0.180	893/271	n/a	n/a	n/a		
STARKEY DUANE M ET UX - SFX	Chevron U.S.A. Inc.	0.180	893/265	n/a	n/a	n/a		

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Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
		ST GEORGE REGINA KAY ET VIR - SFX	Chevron U.S.A. Inc.	0.180	872/104	n/a	n/a	n/a
		STARKEY BETTY LOU - SFX	Chevron U.S.A. Inc.	0.180	872/107	n/a	n/a	n/a
		MADRID PATTIE S FKA SPEAR PATTIE S - SFX	Chevron U.S.A. Inc.	0.180	871/120	n/a	n/a	n/a
		SZAFRAN CHARLOTTE S - SFX	Chevron U.S.A. Inc.	0.200	939/124	n/a	n/a	n/a
		SZAFRAN JEFFREY A - SFX	Chevron U.S.A. Inc.	0.200	939/223	n/a	n/a	n/a
		ROBINSON JEFFREY D UX - SFX	Chevron U.S.A. Inc.	0.180	887/576	n/a	n/a	n/a
		ROBINSON RANDY D - SFX	Chevron U.S.A. Inc.	0.180	880/539	n/a	n/a	n/a
		ROBINSON MARK A - SFX	Chevron U.S.A. Inc.	0.180	887/573	n/a	n/a	n/a
		FURBEE BRIAN - SFX	Chevron U.S.A. Inc.	0.180	939/136	n/a	n/a	n/a
		FURBEE GREGORY D - SFX	Chevron U.S.A. Inc.	0.180	939/139	n/a	n/a	n/a
		SINGER MARSHA A - SFX	Chevron U.S.A. Inc.	0.180	890/469	n/a	n/a	n/a
		FURBEE EDMOND J - SFX	Chevron U.S.A. Inc.	0.180	926/68	n/a	n/a	n/a
		FURBEE CHRISTOPHER G - SFX	Chevron U.S.A. Inc.	0.180	873/613	n/a	n/a	n/a
		FURBEE MATTHEW R - SFX	Chevron U.S.A. Inc.	0.180	880/440	n/a	n/a	n/a
		COOPER MAUREEN C - SFX	Chesapeake Appalachia, LLC	0.125	691/26	24/338 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
		CUNNINGHAM REXENA A - SFX	Chevron U.S.A. Inc.	0.180	873/610	n/a	n/a	n/a
		CECIL RICHARD ET UX - SFX	Chevron U.S.A. Inc.	0.180	871/132	n/a	n/a	n/a
		MORRIS SHERRY L - SFX	Chevron U.S.A. Inc.	0.160	929/526	n/a	n/a	n/a
		POLEN WILLIAM R - SFX	Chevron U.S.A. Inc.	0.160	880/419	n/a	n/a	n/a
		MOORE DEBBIE MAE - SFX	Chesapeake Appalachia, LLC	0.125	690/564	24/338 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
		STARKEY ETHEL E AKA STARKEY ETHEL ELAINE - SFX	Chevron U.S.A. Inc.	0.180	871/152	n/a	n/a	n/a
		PETERSON CALLENE M FKA STARKEY CALLENE M - SFX	Chevron U.S.A. Inc.	0.180	871/114	n/a	n/a	n/a
		BROWN REBECCA JEAN - SFX	Chevron U.S.A. Inc.	0.180	873/309	n/a	n/a	n/a

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Freeland Unit #6H - BATCH 1 - MRCL FULL

Piat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
AA	5-3-6	ROHRER PAULA J - SFX	Chevron U.S.A. Inc.	0.180	873/312	n/a	n/a	n/a
		STRUHAR MARLA K - SFX	Chevron U.S.A. Inc.	0.180	873/321	n/a	n/a	n/a
		SISLEY SARAH FKA SALSBERY SARAH ET VIR - SFX	Chevron U.S.A. Inc.	0.180	871/145	n/a	n/a	n/a
		GIBSON CARALOTTA J FKA SALSBERY CARALOTTA - SFX	Chevron U.S.A. Inc.	0.180	871/138	n/a	n/a	n/a
		SALSBERY JOHN M BY JASON L JACKSON GUARDIAN - SFX	Chevron U.S.A. Inc.	0.180	882/203	n/a	n/a	n/a
		COVERDALE DELLA J ET UX - SFX	Chevron U.S.A. Inc.	0.180	871/173	n/a	n/a	n/a
		SALSBERY TRACY M AKA SALSBERY TRACY - SFX	Chevron U.S.A. Inc.	0.180	871/159	n/a	n/a	n/a
		SALSBERY GINGER L AKA SALSBERY GINGER SFX	Chevron U.S.A. Inc.	0.180	871/167	n/a	n/a	n/a
		SALSBERY DALE A AKA SALSBERY DALE ADORIN - SFX	Chevron U.S.A. Inc.	0.180	871/315	n/a	n/a	n/a
		MORRIS JODIE R FKA SALSBERY JODIE - SFX	Chevron U.S.A. Inc.	0.180	871/126	n/a	n/a	n/a
		MCGAHA BARBARA L - SFX	Chevron U.S.A. Inc.	0.180	872/98	n/a	n/a	n/a
		KEENER ELAINE M - SFX	Chevron U.S.A. Inc.	0.180	872/101	n/a	n/a	n/a
		RISHER SHERRY KAY - SFX	Chevron U.S.A. Inc.	0.160	803/562	n/a	n/a	n/a
		KNAPSKI SANDRA LEE - SFX	Chevron U.S.A. Inc.	0.180	873/315	n/a	n/a	n/a
		STARKEY BRENT LEE - SFX	Chevron U.S.A. Inc.	0.180	873/318	n/a	n/a	n/a
		STARKEY FORREST ET UX - SFX	Chevron U.S.A. Inc.	0.180	872/154	n/a	n/a	n/a
		STANLEY ANITA FKA STARKEY ANITA - SFX	Chevron U.S.A. Inc.	0.180	872/151	n/a	n/a	n/a
		MAYO LINDA D ET VIR - SFX	Chevron U.S.A. Inc.	0.180	872/157	n/a	n/a	n/a
		ALBERT CAROL JEAN MALILKA - SFX	Chevron U.S.A. Inc.	0.180	893/268	n/a	n/a	n/a
		SCHARTIGER SHARON L - SFX	Chevron U.S.A. Inc.	0.180	893/205	n/a	n/a	n/a
		SHADDICK JANET - SFX	Chevron U.S.A. Inc.	0.180	893/271	n/a	n/a	n/a
		STARKEY DUANE M ET UX - SFX	Chevron U.S.A. Inc.	0.180	893/265	n/a	n/a	n/a
		ST GEORGE REGINA KAY ET VIR - SFX	Chevron U.S.A. Inc.	0.180	872/104	n/a	n/a	n/a
STARKEY BETTY LOU - SFX	Chevron U.S.A. Inc.	0.180	872/107	n/a	n/a	n/a		
MADRID PATTIE S FKA SPEAR PATTIE S - SFX	Chevron U.S.A. Inc.	0.180	871/120	n/a	n/a	n/a		
		SZAFRAN CHARLOTTE S - SFX	Chevron U.S.A. Inc.	0.200	939/124	n/a	n/a	n/a

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Freeland Unit #6H - BATCH 1 - MRCL FULL

Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
BB	5-3-6.3	SZAFRAN JEFFREY A - SFX	Chevron U.S.A. Inc.	0.200	939/223	n/a	n/a	n/a
		ROBINSON JEFFREY D UX - SFX	Chevron U.S.A. Inc.	0.180	887/576	n/a	n/a	n/a
		ROBINSON RANDY D - SFX	Chevron U.S.A. Inc.	0.180	880/539	n/a	n/a	n/a
		ROBINSON MARK A - SFX	Chevron U.S.A. Inc.	0.180	887/573	n/a	n/a	n/a
		FURBEE BRIAN - SFX	Chevron U.S.A. Inc.	0.180	939/136	n/a	n/a	n/a
		FURBEE GREGORY D - SFX	Chevron U.S.A. Inc.	0.180	939/139	n/a	n/a	n/a
		SINGER MARSHA A - SFX	Chevron U.S.A. Inc.	0.180	890/469	n/a	n/a	n/a
		FURBEE EDMOND J - SFX	Chevron U.S.A. Inc.	0.180	926/68	n/a	n/a	n/a
		FURBEE CHRISTOPHER G - SFX	Chevron U.S.A. Inc.	0.180	873/613	n/a	n/a	n/a
		FURBEE MATTHEW R - SFX	Chevron U.S.A. Inc.	0.180	880/440	n/a	n/a	n/a
		COOPER MAUREEN C - SFX	Chesapeake Appalachia, LLC	0.125	691/26	24/338 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
		CUNNINGHAM REXENA A - SFX	Chevron U.S.A. Inc.	0.180	873/610	n/a	n/a	n/a
		CECIL RICHARD ET UX - SFX	Chevron U.S.A. Inc.	0.180	871/132	n/a	n/a	n/a
		MORRIS SHERRY L - SFX	Chevron U.S.A. Inc.	0.160	929/526	n/a	n/a	n/a
		POLEN WILLIAM R - SFX	Chevron U.S.A. Inc.	0.160	880/419	n/a	n/a	n/a
		MOORE DEBBIE MAE - SFX	Chesapeake Appalachia, LLC	0.125	690/564	24/338 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
		STARKEY ETHEL E AKA STARKEY ETHEL ELAINE - SFX	Chevron U.S.A. Inc.	0.180	871/152	n/a	n/a	n/a
		PETERSON CALLENE M FKA STARKEY CALLENE M - SFX	Chevron U.S.A. Inc.	0.180	871/114	n/a	n/a	n/a
		BROWN REBECCA JEAN - SFX	Chevron U.S.A. Inc.	0.180	873/309	n/a	n/a	n/a
		ROHRER PAULA J - SFX	Chevron U.S.A. Inc.	0.180	873/312	n/a	n/a	n/a
STRUHAR MARLA K - SFX	Chevron U.S.A. Inc.	0.180	873/321	n/a	n/a	n/a		
SISLEY SARAH FKA SALSERRY SARAH ET VIR - SFX	Chevron U.S.A. Inc.	0.180	871/145	n/a	n/a	n/a		

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Freeland Unit #6H - BATCH 1 - MRCL FULL

Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
		GIBSON CARALOTTA J FKA SALS BERRY CARALOTTA - SFX	Chevron U.S.A. Inc.	0.180	871/138	n/a	n/a	n/a
		SALS BERRY JOHN M BY JASON L JACKSON GUARDIAN - SFX	Chevron U.S.A. Inc.	0.180	882/203	n/a	n/a	n/a
		COVERDALE DELLA J ET UX - SFX	Chevron U.S.A. Inc.	0.180	871/173	n/a	n/a	n/a
		SALS BERRY TRACY M AKA SALS BERRY TRACY - SFX	Chevron U.S.A. Inc.	0.180	871/159	n/a	n/a	n/a
		SALS BERRY GINGER L AKA SALS BERRY GINGER SFX	Chevron U.S.A. Inc.	0.180	871/167	n/a	n/a	n/a
		SALS BERRY DALE A AKA SALS BERRY DALE ADORIN - SFX	Chevron U.S.A. Inc.	0.180	871/315	n/a	n/a	n/a
		MORRIS JODIE R FKA SALS BERRY JODIE - SFX	Chevron U.S.A. Inc.	0.180	871/126	n/a	n/a	n/a
		MCGAHA BARBARA L - SFX	Chevron U.S.A. Inc.	0.180	872/98	n/a	n/a	n/a
		KEENER ELAINE M - SFX	Chevron U.S.A. Inc.	0.180	872/101	n/a	n/a	n/a
		RISHER SHERRY KAY - SFX	Chevron U.S.A. Inc.	0.160	803/562	n/a	n/a	n/a
		KNAPSKI SANDRA LEE - SFX	Chevron U.S.A. Inc.	0.180	873/315	n/a	n/a	n/a
		STARKEY BRENT LEE - SFX	Chevron U.S.A. Inc.	0.180	873/318	n/a	n/a	n/a
		STARKEY FORREST ET UX - SFX	Chevron U.S.A. Inc.	0.180	872/154	n/a	n/a	n/a
		STANLEY ANITA FKA STARKEY ANITA - SFX	Chevron U.S.A. Inc.	0.180	872/151	n/a	n/a	n/a
		MAYO LINDA D ET VIR - SFX	Chevron U.S.A. Inc.	0.180	872/157	n/a	n/a	n/a
		ALBERT CAROL JEAN MALILKA - SFX	Chevron U.S.A. Inc.	0.180	893/268	n/a	n/a	n/a
		SCHARTIGER SHARON L - SFX	Chevron U.S.A. Inc.	0.180	893/205	n/a	n/a	n/a
		SHADDICK JANET - SFX	Chevron U.S.A. Inc.	0.180	893/271	n/a	n/a	n/a
		STARKEY DUANE M ET UX - SFX	Chevron U.S.A. Inc.	0.180	893/265	n/a	n/a	n/a
		ST GEORGE REGINA KAY ET VIR - SFX	Chevron U.S.A. Inc.	0.180	872/104	n/a	n/a	n/a
		STARKEY BETTY LOU - SFX	Chevron U.S.A. Inc.	0.180	872/107	n/a	n/a	n/a
		MADRID PATTIE S FKA SPEAR PATTIE S - SFX	Chevron U.S.A. Inc.	0.180	871/120	n/a	n/a	n/a
CC	5-3-10.2	MIDCAP DOROTHY L	Chevron U.S.A. Inc.	0.160	899/535	n/a	n/a	n/a
DD	5-3-10.1	BAKER CHARLENE LORRAINE	Chevron U.S.A. Inc.	0.160	899/535	n/a	n/a	n/a
EE	5-3-10	MIDCAP DOROTHY L	Chevron U.S.A. Inc.	0.160	899/535	n/a	n/a	n/a

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Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
FF	5-3-13	DERROW MICHAEL WILLIAM	Chesapeake Appalachia, LLC	0.150	681/341	29/325 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
GG	5-3-13.4	DERROW MICHAEL WILLIAM	Chesapeake Appalachia, LLC	0.150	681/341	29/325 Chesapeake Appalachia, LLC to Statoil USA Onshore Properties, Inc.	30/427 Statoil USA Onshore Properties, Inc to Chevron U.S.A. Inc.	30/461 Chesapeake Appalachia, LLC to Chevron U.S.A. Inc.
HH	5-3-14	CUNNINGHAM GLENN L ET UX	Chevron U.S.A. Inc.	0.150	683/509	n/a	n/a	n/a
JJ	5-3-15	CUNNINGHAM BRENT C ET UX	TriEnergy Holdings, LLC	0.160	737/271	25/489 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a

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Kevin J Cruz
Land Representative, AMBU

September 10, 2018

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

RE: Freeland 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H

To Whom It May Concern,

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Kevin J Cruz".

Kevin J Cruz
Land Representative

Chevron North America Exploration and Production Company
(a Chevron U.S.A. Inc. division)
700 Cherrington Parkway Coraopolis, PA 15108
Tel 412-865-1562
kevincruz@chevron.com

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DEC 17 2018

WV Department of
Environmental Protection

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

Date of Notice Certification: 12/13/18

API No. 47- _____
Operator's Well No. M06H
Well Pad Name: Freeland

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>520436.24</u>
County: <u>Marshall</u>		Northing: <u>4413095.39</u>
District: <u>Clay</u>	Public Road Access: <u>CR 21 Robert Ridge Road</u>	
Quadrangle: <u>Powhatan Point, WV 7.5'</u>	Generally used farm name: <u>Freeland</u>	
Watershed: <u>Short Creek - Ohio River</u>		

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY		OOG OFFICE USE ONLY
<input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED		<input type="checkbox"/> RECEIVED
<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 <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)		<input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION	RECEIVED Office of Oil and Gas	<input checked="" type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 5. PUBLIC NOTICE	DEC 17 2018	<input checked="" type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION	WV Department of Environmental Protection	<input checked="" type="checkbox"/> RECEIVED

Required Attachments:

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

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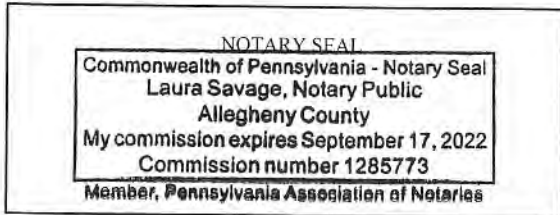
Certification of Notice is hereby given:

THEREFORE, I Jenny Butchko, 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.

Jenny Butchko

Well Operator: Chevron Appalachia, LLC
By: Jenny Butchko
Its: Permitting Team Lead
Telephone: 412-865-1533

Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Facsimile: 412-865-2403
Email: JZYK@chevron.com



Commonwealth of Pennsylvania
County of Allegheny
Subscribed and sworn before me this 24th day of September 2018.
Laura Savage Notary Public
My Commission Expires September 17, 2022

Oil and Gas Privacy Notice:

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

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

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

Date of Notice 11/15/18 Date Permit Application Filed: 12/14/18
Notice of:

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

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

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

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

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

- SURFACE OWNER(s)
Name: Joseph L. Freeland and Debra J. Freeland
Address: 813 Clearview Terrace
New Martinsville, WV 26155
Name: Joseph L. Freeland
Address: 813 Clearview Terrace
New Martinsville, WV 260155
- 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: Murray Energy Corp.
Address: 46226 National Road
St. Clairsville, OH 43950
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: See Attachment
Address: _____
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: _____
Address: _____

*Please attach additional forms if necessary

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DEC 17 2018

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Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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

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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.

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)

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API NO. 47- _____ - **03/08/2019**
OPERATOR WELL NO. MOGH
Well Pad Name: Freeland

Notice is hereby given by:

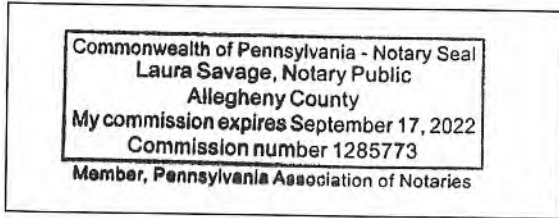
Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-1533
Email: JZYK@chevron.com

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

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.

Jenny Bester



Commonwealth of Pennsylvania
County of Allegheny
Subscribed and sworn before me this 24th day of September 2018.
Laura Savage Notary Public
My Commission Expires September 17, 2022

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Environmental Protection

4705102151 ^{03/08/2019}

Attachment to WW-6A

API No. 47- _____ - _____

OPERATOR WELL NO. M06H

Well Pad Name: Freeland

- SURFACE OWNER**
Name:
Address:

- COAL OWNER OR LESSEE**
Name:
Address:

- COAL OPERATOR**
Name:
Address:

- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name: Joseph L. Freeland ET UX
Address: 813 Clearview Terrace
New Martinsville, WV 26155

- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name: Cathy J. and Carl F Petrucci, Jr.
Address: 863 Petrucci Lane
Moundsville, WV 26041

- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name: Norman L. Darrow, ET UX
Address: 97 Old Homestead Lane
Moundsville, WV 26041

- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name:
Address:

- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**
Name:
Address:

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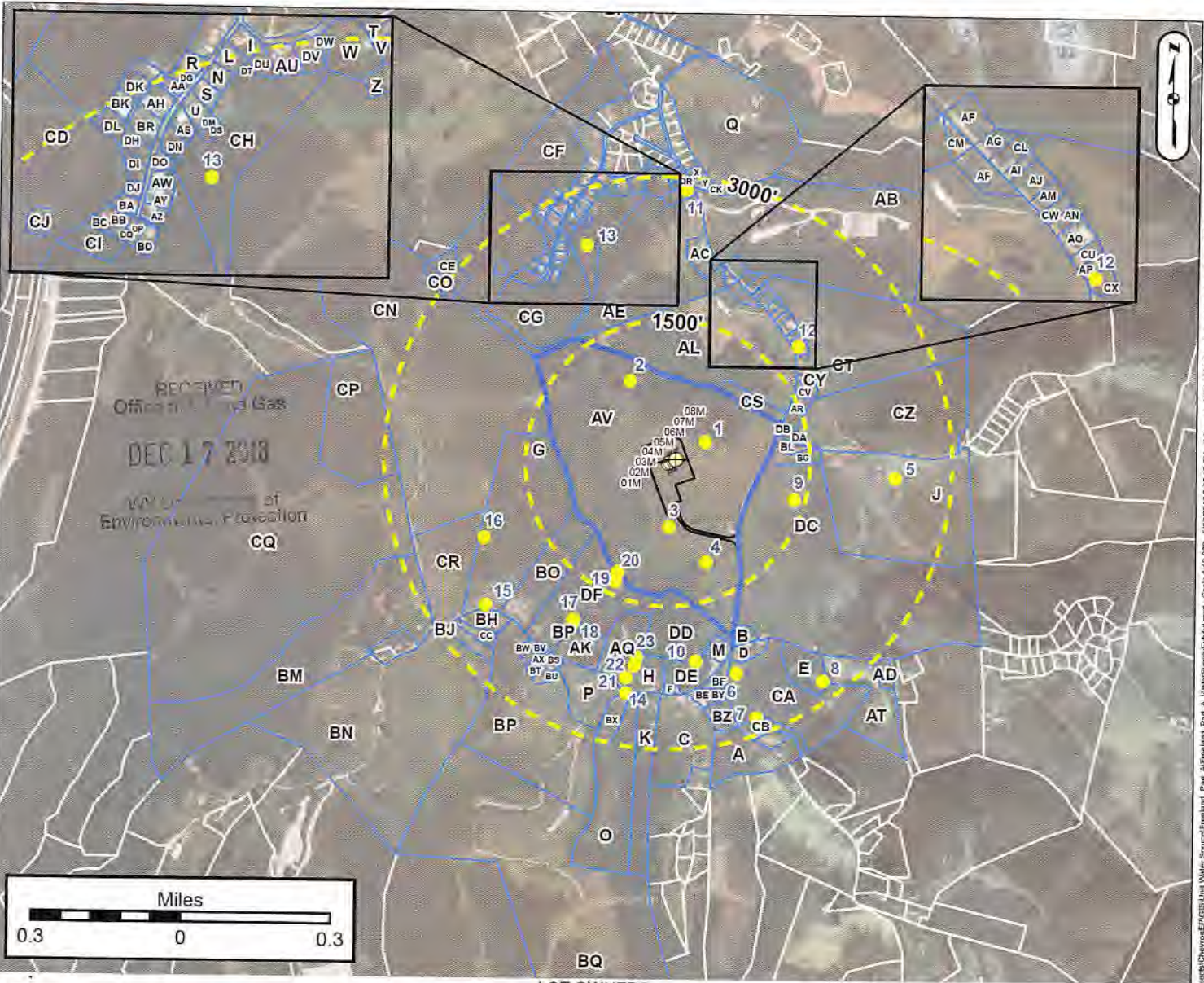
DEC 17 2018

WV Department of
Environmental Protection



WATER SUPPLY EXHIBIT FREELAND PAD A

4705102151 03/08/2019



LOT OWNERS

Parcel ID	Label	Owner	Parcel ID	Label	Owner	Parcel ID	Label	Owner	Parcel ID	Label	Owner
15-04-100010000	A	BASSETT-GING ELWOOD	15-04-780015000	AK	EMERY BRIGGS T	15-04-780010000	AM	ELNORSON MARSHALL W	15-04-780010000	AN	HONIGS MICHAEL WILLIAM
15-04-780010000	B	HEART WILLIAM ROBERT	15-04-780010000	AL	HARTLAND DEWE W & JORI	15-04-780010000	AO	BRK WINGEL B & CAROLYN B	15-04-780010000	AP	WYLAND JACOB ET UX
15-04-180010000	C	SCHUBER PHILIP ET UX	15-04-780010000	AP	NESTOR JACK L ET UX	15-04-780010000	AQ	BERNARD ADRIAN L ET UX	15-04-780010000	AR	MARSHALL COUNTY SPURPAGE DIST
15-04-780010000	D	SILBERT JIMMY ET UX	15-04-780010000	AR	THOMPSON PHILIP B & JOSE	15-04-780010000	AS	STEP PUGNIE C & ELIZABETH A	15-04-780010000	AT	HUBBARD KIMBERLY
15-04-780010000	E	GRAVANO DUSTIN E	15-04-780010000	AS	SOUTH LARA NOLAN & MARIE S	15-04-780010000	AT	LESTER BRIGGS C & ELIZABETH A	15-04-780010000	AV	BRONNER W F CHURCH BY
15-04-780010000	F	MASON SHIRLEY A	15-04-780010000	AT	BIRGER GARY K ET UX ET UX	15-04-780010000	AV	BRICK BRYAN F ET UX	15-04-780010000	AW	BOYCE GAYNOR D W GRAY
15-04-780010000	G	ROSENBERG IRVING & BERENA	15-04-780010000	AV	MASARY JOHN K & MARGY LOU	15-04-780010000	AW	EMMASTERS WILLIAM L	15-04-780010000	AX	PERLUCCI CAROL J & CARL F JR
15-04-780010000	H	ROBINSON MARLA E ET UX	15-04-780010000	AV	WHITTINGTON LORNE ET UX	15-04-780010000	AX	EMMASTERS WILLIAM L	15-04-780010000	AY	CONSOLIDATION COAL COMPANY
15-04-780010000	I	MCGINNIS THOMAS STEVEN J ET UX	15-04-780010000	AV	MASON JOHN G & MARGY LOU	15-04-780010000	AY	EMMASTERS WILLIAM L	15-04-780010000	AZ	MARSHALL COUNTY COAL COMPANY
15-04-780010000	J	DANAHY SHAWN T ET UX	15-04-780010000	AV	BRENNER M L EMBERTH W	15-04-780010000	AZ	EMMASTERS WILLIAM L	15-04-780010000	BA	EMMASTERS WILLIAM L
15-04-780010000	K	BILL LONNIE DAVIS & TAMMY SUZ	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BA	EMMASTERS WILLIAM L	15-04-780010000	BB	EMMASTERS WILLIAM L
15-04-780010000	L	WATFUT JEFFREY C	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BB	EMMASTERS WILLIAM L	15-04-780010000	BC	EMMASTERS WILLIAM L
15-04-780010000	M	SUZENNY MICHAELE & KELLY M	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BC	EMMASTERS WILLIAM L	15-04-780010000	BD	EMMASTERS WILLIAM L
15-04-780010000	N	DANAHY SHAWN T & KELLY M	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BD	EMMASTERS WILLIAM L	15-04-780010000	BE	EMMASTERS WILLIAM L
15-04-780010000	O	ELDER CHARLES W ET UX	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BE	EMMASTERS WILLIAM L	15-04-780010000	BF	EMMASTERS WILLIAM L
15-04-780010000	P	HARLEN CHARLES DELBERT ET UX	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BF	EMMASTERS WILLIAM L	15-04-780010000	BG	EMMASTERS WILLIAM L
15-04-780010000	Q	WITFUT JOSEPH M ET UX	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BG	EMMASTERS WILLIAM L	15-04-780010000	BH	EMMASTERS WILLIAM L
15-04-780010000	R	BOYCE JAMES A & SHIRLEY M - WOODS	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BH	EMMASTERS WILLIAM L	15-04-780010000	BI	EMMASTERS WILLIAM L
15-04-780010000	S	LUCAS JOSEPH ET UX	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BI	EMMASTERS WILLIAM L	15-04-780010000	BJ	EMMASTERS WILLIAM L
15-04-780010000	T	EMMASTERS MICHELLE M	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BJ	EMMASTERS WILLIAM L	15-04-780010000	BK	EMMASTERS WILLIAM L
15-04-780010000	U	MYERS BARBARA A - LIFE	15-04-780010000	AV	EMMASTERS WILLIAM L	15-04-780010000	BK	EMMASTERS WILLIAM L	15-04-780010000	BL	EMMASTERS WILLIAM L

Surface Owner: JOSEPH FREELAND County: MARSHALL
 Oil/Gas Owner: JOSEPH FREELAND
 Well Operator: CHEVRON APPALACHIA, LLC
 Address: 700 CERRINGTON PARKWAY Address: 301 COMMERCE PARK DR
CORAOPOLIS, PA 15108 CRANBERRY TOWNSHIP, PA 16066
 Phone: 254-564-3700 Phone: 800-267-2549

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

L:\Projects\Chevron\Freeland\Pad_A\Freeland_Pad_A_WaterSupplyExhibit.mxd - State 1:19,000 - 5/20/2018 2:05:17 PM - O:Stewart - NAD 1983 StatePlane West Virginia North FIPS 4703 Feet

4705102151 03/08/2019

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

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

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

Date of Notice: 11/15/18 **Date Permit Application Filed:** 12/14/18

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

- HAND DELIVERY
- CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: Joseph L. Freeland and Debra J. Freeland
Address: 813 Clearview Terrace
New Martinsville, WV 26155

Name: Joseph L. Freeland
Address: 813 Clearview Terrace
New Martinsville, WV 26155

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>520436.24</u>
County:	<u>Marshall</u>	Northing:	<u>4413095.39</u>
District:	<u>Clay</u>	Public Road Access:	<u>CR 21 Robert Ridge Road</u>
Quadrangle:	<u>Powhatan Point, WV 7.5'</u>	Generally used farm name:	<u>Freeland</u>
Watershed:	<u>Short Creek - Ohio River</u>		

This Notice Shall Include:

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

Notice is hereby given by:

Well Operator: Chevron Appalachia, LLC
Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Telephone: 412-865-1533
Email: JZYK@chevron.com
Facsimile: 412-865-2403

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

Oil and Gas Privacy Notice:

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

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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: 11/15/18 Date Permit Application Filed: 12/14/18

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

- CERTIFIED MAIL RETURN RECEIPT REQUESTED
- HAND DELIVERY

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

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

Name: Joseph L. Freeland and Debra J. Freeland
Address: 813 Clearview Terrace
New Martinsville, WV 26155

Name: Joseph L. Freeland
Address: 813 Clearview Terrace
New Martinsville, WV 26155

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>520436.24</u>
County:	<u>Marshall</u>		Northing:	<u>4413095.39</u>
District:	<u>Clay</u>	Public Road Access:	<u>CR 21 Robert Ridge Road</u>	
Quadrangle:	<u>Powhatan Point, WV 7.5'</u>	Generally used farm name:	<u>Freeland</u>	
Watershed:	<u>Short Creek - Ohio River</u>			

This Notice Shall Include:

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

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

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

Oil and Gas Privacy Notice:

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

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WV Department of
Environmental Protection

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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, _____, 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>520436.24</u>
County:	<u>Marshall</u>	UTM NAD 83 Northing:	<u>4413095.39</u>
District:	<u>Clay</u>	Public Road Access:	<u>CR 21 Robert Ridge Road</u>
Quadrangle:	<u>Powhatan Point, WV 7.5'</u>	Generally used farm name:	<u>Freeland</u>
Watershed:	<u>Short Creek - Ohio River</u>		

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

*Please check the box that applies

- SURFACE OWNER
- SURFACE OWNER (Road and/or Other Disturbance)
- SURFACE OWNER (Impoundments/Pits)
- COAL OWNER OR LESSEE
- COAL OPERATOR
- WATER PURVEYOR
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD

FOR EXECUTION BY A NATURAL PERSON

Signature: *Joseph M. Freeland*
Print Name: JOSEPH M. FREELAND
Date: 11-20-18

FOR EXECUTION BY A CORPORATION, ETC.

Company: _____
By: _____
Its: RECEIVED
Office of Oil and Gas
Signature: _____
Date: DEC 17 2018

WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

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

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

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

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

State: West Virginia
County: Marshall
District: Clay
Quadrangle: Powhatan Point 7.5'
Watershed: Upper Ohio-Beaver

UTM NAD 83 Easting: 520436.243
Northing: 4413095.390
Public Road Access: Robers Ridge Road
Generally used farm name: Freeland

RECEIVED
Office of Oil and Gas

DEC 17 2018

WV Department of
Environmental Protection

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

*Please check the box that applies

- SURFACE OWNER
- SURFACE OWNER (Road and/or Other Disturbance)
- SURFACE OWNER (Impoundments/Pits)
- COAL OWNER OR LESSEE
- COAL OPERATOR
- WATER PURVEYOR
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD

FOR EXECUTION BY A NATURAL PERSON

Signature: _____
Print Name: _____
Date: _____

FOR EXECUTION BY A CORPORATION, ETC.

Company: Murray American Energy, Inc.
By: Mason Smith
Its: Coal, oil & gas relations manager
Signature: _____
Date: 10-29-18

Oil and Gas Privacy Notice:

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



4705 * 02151 03/08/2019

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

November 2, 2018

Jill M. Newman
Deputy Commissioner

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

Subject: DOH Permit for the Freeland Pad, Marshall County
Freeland M06H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2018-0862 for the subject site to Chevron North America Exploration and Production Company for access to the State Road for the well pad located off of Marshall County Route 21 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: Nikolai Softcheck
Chevron Appalachia, LLC
CH, OM, D-6
File

RECEIVED
Office of Oil and Gas

DEC 17 2018

WV Department of
Environmental Protection

Hydraulic Fracturing Fluid Additives

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

RECEIVED
Office of Oil and Gas

DEC 17 2018

WV Department of
Environmental Protection

FREELAND WELL PAD EROSION AND SEDIMENT CONTROL PLAN

3599 RIDGE ROAD (COUNTY ROUTE 21)
CLAY DISTRICT, MARSHALL COUNTY, WEST VIRGINIA



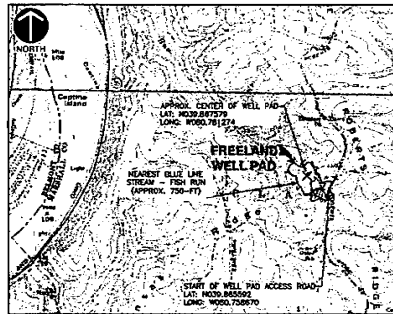
PREPARED FOR:
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

CONSULTANTS
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4200 TRIANGLE LANE, SUITE 200
EXPORT, PA 15832
PHONE: 724-327-5200

CIVIL/SITE ENGINEER CONTACT: JOSH MAGARREE
EMAIL ADDRESS: jmagarree@cecinc.com
GEO TECHNICAL ENGINEER CONTACT: AARON LAVAGE
EMAIL ADDRESS: alavage@cecinc.com

SITE COORDINATES AND WATERSHED
START OF WELL PAD ACCESS ROAD
LATITUDE: 39.865592° N, LONGITUDE: 80.758670° W
APPROXIMATE CENTER OF WELL PAD
LATITUDE: 39.867572° N, LONGITUDE: 80.761274° W
*BASED ON ROAD 83, WEST VIRGINIA NORTH ZONE
WATERSHED NAME: UPPER OHIO SOUTH
RECEIVING STREAM: UNNAMED TRIBUTARIES TO FISH RUN

West Virginia North			
Wellpad No.	Northing	Easting	Longitude (West)
0184	500597.5170	1614480.8966	80.7632808
0204	500603.2623	1614494.5281	80.7632817
0304	500609.6094	1614508.2635	80.7632906
0404	500615.8555	1614521.9920	80.7632995
0504	500622.2027	1614535.7165	80.7633084
0604	500628.5499	1614549.4400	80.7633173
0704	500635.7941	1614557.1715	80.7633262
0804	500642.0403	1614565.8990	80.7633351
0904	500648.2865	1614573.6305	80.7633440
1004	500654.5327	1614581.3620	80.7633529
1104	500660.7789	1614589.0935	80.7633618
1204	500667.0251	1614596.8250	80.7633707
1304	500673.2713	1614604.5565	80.7633796
1404	500679.5175	1614612.2880	80.7633885
1504	500685.7637	1614620.0195	80.7633974
1604	500692.0099	1614627.7510	80.7634063
1704	500698.2561	1614635.4825	80.7634152
1804	500704.5023	1614643.2140	80.7634241
1904	500710.7485	1614650.9455	80.7634330
2004	500717.0000	1614658.6770	80.7634419
2104	500723.2462	1614666.4085	80.7634508
2204	500729.4924	1614674.1400	80.7634597
2304	500735.7386	1614681.8715	80.7634686
2404	500741.9848	1614689.6030	80.7634775
2504	500748.2310	1614697.3345	80.7634864
2604	500754.4772	1614705.0660	80.7634953
2704	500760.7234	1614712.7975	80.7635042
2804	500766.9696	1614720.5290	80.7635131
2904	500773.2158	1614728.2605	80.7635220
3004	500779.4620	1614736.0100	80.7635309
3104	500785.7082	1614743.7415	80.7635398
3204	500791.9544	1614751.4730	80.7635487
3304	500798.2006	1614759.2045	80.7635576
3404	500804.4468	1614766.9360	80.7635665
3504	500810.6930	1614774.6675	80.7635754
3604	500816.9392	1614782.3990	80.7635843
3704	500823.1854	1614790.1305	80.7635932
3804	500829.4316	1614797.8620	80.7636021
3904	500835.6778	1614805.5935	80.7636110
4004	500841.9240	1614813.3250	80.7636199
4104	500848.1702	1614821.0565	80.7636288
4204	500854.4164	1614828.7880	80.7636377
4304	500860.6626	1614836.5195	80.7636466
4404	500866.9088	1614844.2510	80.7636555
4504	500873.1550	1614851.9825	80.7636644
4604	500879.4012	1614859.7140	80.7636733
4704	500885.6474	1614867.4455	80.7636822
4804	500891.8936	1614875.1770	80.7636911
4904	500898.1398	1614882.9085	80.7636999
5004	500904.3860	1614890.6400	80.7637088



SITE LIMITS OF DISTURBANCE/IMPACTS TO NOW/FORMER LANDOWNER - JOSEPH L. FREELAND (AC)	
TOTAL AREA	22.4
WOODED AREA DISTURBED	1.7
WELL PAD	12.7
ACCESS PAD	3.1
STOCKPILE AREA	6.6

DWG NO.	SHEET TITLE	INCLUDED	LAST REVISED
CS 000	COVER SHEET	X	11/14/2018
CS 000	EXISTING TOPOGRAPHIC PLAN	X	11/14/2018
ES 100	OVERALL EROSION AND SEDIMENT CONTROL PLAN	X	11/14/2018
ES 101	EROSION AND SEDIMENT CONTROL PLAN (1 OF 2)	X	11/14/2018
ES 102	EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)	X	11/14/2018
ES 103	EROSION AND SEDIMENT CONTROL DETAILS (1 OF 6)	X	11/14/2018
ES 104	EROSION AND SEDIMENT CONTROL DETAILS (2 OF 6)	X	11/14/2018
ES 105	EROSION AND SEDIMENT CONTROL DETAILS (3 OF 6)	X	11/14/2018
ES 106	EROSION AND SEDIMENT CONTROL DETAILS (4 OF 6)	X	11/14/2018
ES 107	EROSION AND SEDIMENT CONTROL DETAILS (5 OF 6)	X	11/14/2018
ES 108	EROSION AND SEDIMENT CONTROL DETAILS (6 OF 6)	X	11/14/2018
ES 109	WELL PAD PLAN AND CROSS-SECTIONS	X	11/14/2018
ES 110	ACCESS ROAD PLAN AND PROFILE	X	11/14/2018
ES 111	ACCESS ROAD CROSS-SECTIONS	X	11/14/2018
ES 112	STOCKPILE CROSS-SECTIONS	X	11/14/2018
GE 300	GEO TECHNICAL SUBSURFACE SUMMARY	X	11/14/2018
GE 301	GEO TECHNICAL SUBSURFACE CROSS-SECTIONS	X	11/14/2018
GE 302	GEO TECHNICAL NOTES AND TABLES	X	11/14/2018
GE 303	GEO TECHNICAL DETAILS	X	11/14/2018
GE 304	RSS PLAN AND ELEVATION VIEW (1 OF 2)	X	11/14/2018
GE 305	RSS PLAN AND ELEVATION VIEW (2 OF 2)	X	11/14/2018
GE 306	RSS CROSS-SECTION (1 OF 3)	X	11/14/2018
GE 307	RSS CROSS-SECTION (2 OF 3)	X	11/14/2018
GE 308	RSS CROSS-SECTION (3 OF 3)	X	11/14/2018
GE 309	RSS SPECIFICATIONS AND QUANTITIES	X	11/14/2018
GE 310	RSS DETAILS	X	11/14/2018
PC 600	SITE PLAN WITH AERIAL	X	11/14/2018
PC 601	POST-CONSTRUCTION RECLAMATION PLAN	X	11/14/2018
PC 602	POST-CONSTRUCTION RECLAMATION DETAILS	X	11/14/2018

LEGEND		
DISTRICT PROPERTY LINE	PROPOSED LIMIT OF DISTURBANCE	PROPOSED COMPOST FILTER SOCK TRAP
EXISTING INDEX CONTOUR	PROPOSED EDGE OF ACCESS ROAD/PAD	PROPOSED 18-IN COMPOST FILTER SOCK
EXISTING INTERMEDIATE CONTOUR	PROPOSED GRAVEL	PROPOSED 24-IN COMPOST FILTER SOCK
EXISTING PAVED ROADWAY	PROPOSED ASPHALT PAVEMENT	PROPOSED 32-IN COMPOST FILTER SOCK
EXISTING GRAVELED ROADWAY	PROPOSED CONCRETE/STONE BED	PROPOSED BRASSIC CONSTRUCTION FENCE
EXISTING STRUCTURE/BUILDING	PROPOSED WELHEAD AND CELLAR	PROPOSED ROCK CONSTRUCTION ENTRANCE
EXISTING STREAM	PROPOSED INDEX CONTOUR	PROPOSED INLET PROTECTION
STREAM AND WETLAND DELINEATION BOUNDARY	PROPOSED INTERMEDIATE CONTOUR	PROPOSED EROSION CONTROL SLURRY
EXISTING WETLAND	PROPOSED SPOT ELEVATION	
EXISTING OVERHEAD ELECTRIC LINE	PROPOSED CUT/FILL LINE	
EXISTING GRAVELED ROADWAY	PROPOSED CHANNEL	
EXISTING TELECOMMUNICATION LINE	PROPOSED STORMWATER CULVERT	
EXISTING STORMWATER CULVERT	PROPOSED INLET	
EXISTING TREE LINE	PROPOSED STORMWATER POND	
EXISTING WATER METER	PROPOSED UNDERDRY	
EXISTING UTILITY POLE		
EXISTING INLET		

- WETLANDS WITHIN 100 LF OF THE LIMIT OF DISTURBANCE (SUBJECT TO WETLAND WAIVER REQUEST)**
- WETLAND 1A (PEM) - 7 FT FROM LOD
 - WETLAND 1B (PEM) - 5 LF FROM LOD
 - WETLAND 2 (PSS) - 2 LF FROM LOD
 - WETLAND 4 (PEM/PSS) - 10 LF FROM LOD
- REFERENCES**
- STREAMS AND WETLANDS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 05/24/2017.
 - UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICS LTD. DATED 05/23/2017 TO 05/25/2017.
 - UTILITY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 06/09/2017 TO 06/12/2017.
 - TOPOGRAPHY SURVEYED VIA UNMARKED AERIAL VEHICLE (UAV) BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 04/18/2018
 - PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.
 - BACKGROUND AERIAL IMAGE FROM GOOGLE EARTH PRO, DATED 2016.



REVISION RECORD

NO.	DATE	DESCRIPTION

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

COVER SHEET
Project Number: 172400
Drawing Scale: 1"=50'
Date Issued: 11/14/2018
Index Number:
Drawn By: GCB
Checked By: JML
Project Manager: JES
CS 000





APPROXIMATE COAL BOUNDARY (DETERMINED BY CONVENT)

APPROXIMATE LOCATION OF EXISTING WETLANDS & THE WETLANDS AS DETERMINED BY COLLECTING EVIDENCE AND BY FIELDWORK (DETERMINED BY WESTERN HETLANDS 14495 AND ASSOCIATES)

EARTHWORK AREAS SHALL BE COMPACTED TO 95% DENSITY AND COMPACTION SPECIFICATIONS PROVIDED HEREON (TYP.)

TOPSOIL FOR PLACEMENT IN PROPOSED REVEGETATED AREAS SHALL BE USED FROM THE STOCKPILE THERE

PROPOSED TOPSOIL STOCKPILE (2500 CY) (SLOPES: 1:1.25 H:1 V)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 6-IN DATE VALVE WITH 1/2" DIA. DATE VALVE SHALL BE OPENED DURING DRILLING OPERATIONS AND COMPACTION ACTIVITIES

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

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PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

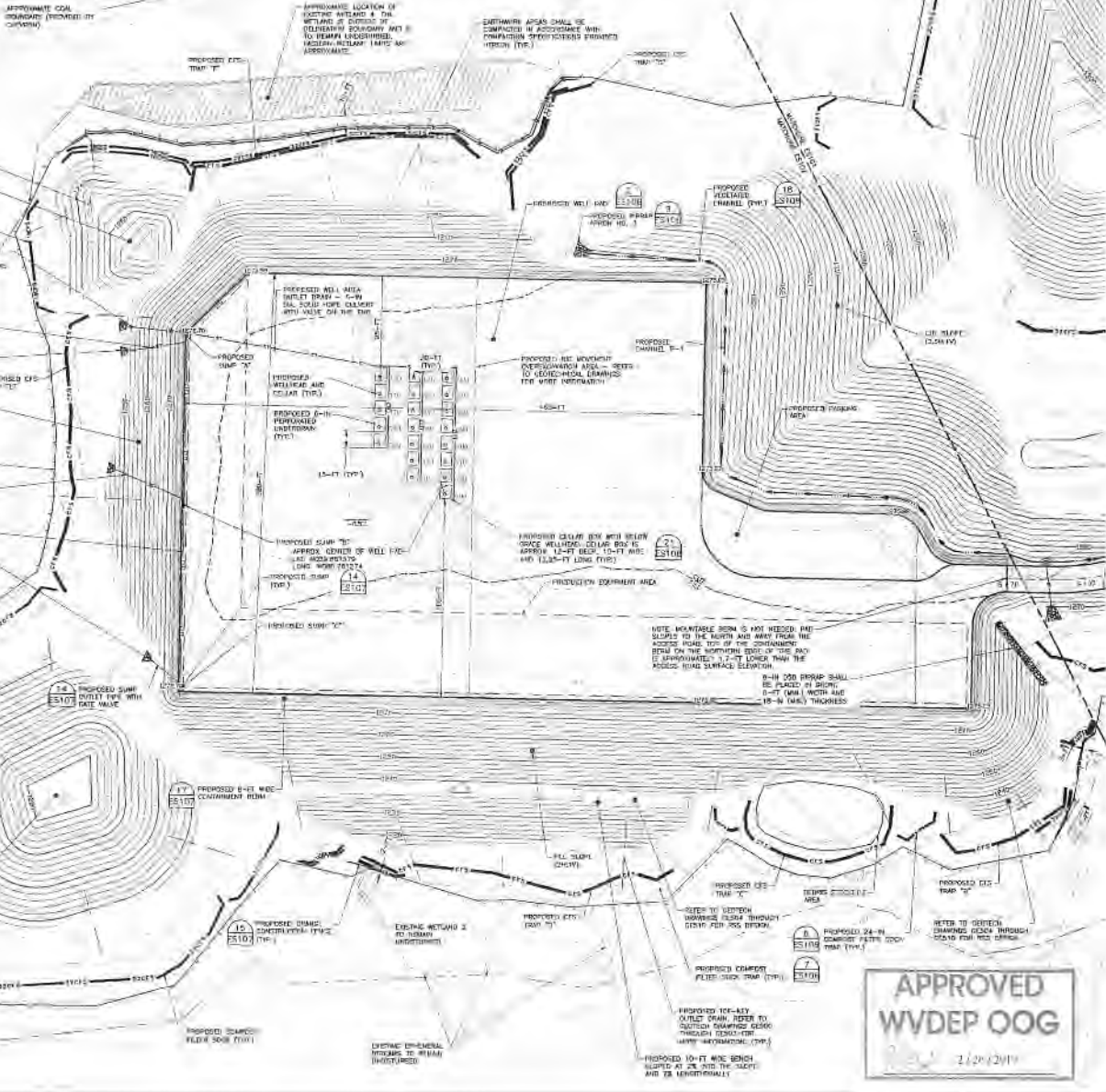
PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)

PROPOSED 18-IN COMPACTED FILLER SOIL (TYP.)



LEGEND

[Symbol]	EXISTING PROPERTY LINE
[Symbol]	EXISTING WETLAND BOUNDARY
[Symbol]	EXISTING INTERMEDIATE CONTOUR
[Symbol]	EXISTING FLOOD PLAIN
[Symbol]	EXISTING DRAINAGE CHANNEL
[Symbol]	EXISTING CONCRETE/ASPHALT
[Symbol]	EXISTING DITCH
[Symbol]	EXISTING AND WETLAND (DETERMINED BY WESTERN HETLANDS)
[Symbol]	EXISTING WETLAND
[Symbol]	EXISTING DRAINAGE CHANNEL LINE
[Symbol]	EXISTING WETLAND
[Symbol]	EXISTING TELECOMMUNICATION LINE
[Symbol]	EXISTING STORMWATER CHANNEL
[Symbol]	EXISTING TRAIL LINE
[Symbol]	EXISTING WATER METER
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING INLET
[Symbol]	PROPOSED LIMIT OF DISTURBANCE
[Symbol]	PROPOSED EDGE OF ACCESS ROAD/PAVEMENT DRIVEWAY
[Symbol]	PROPOSED ASPHALT PAVEMENT
[Symbol]	PROPOSED CONCRETE/ASPHALT
[Symbol]	PROPOSED WETLAND AND CELLAR
[Symbol]	PROPOSED MUDY CONCRETE
[Symbol]	PROPOSED INTERMEDIATE CONTOUR
[Symbol]	PROPOSED DATE VALVE
[Symbol]	PROPOSED 18-IN FILLER SOIL
[Symbol]	PROPOSED 18-IN COMPACTED FILLER SOIL
[Symbol]	PROPOSED 24-IN COMPACTED FILLER SOIL
[Symbol]	PROPOSED 30-IN COMPACTED FILLER SOIL
[Symbol]	PROPOSED DRAINAGE CONSTRUCTION FENCE
[Symbol]	PROPOSED ROCK CONSTRUCTION ENTRANCE
[Symbol]	PROPOSED MUD PROTECTION
[Symbol]	PROPOSED CHANNEL
[Symbol]	PROPOSED STORMWATER CHANNEL
[Symbol]	PROPOSED INLET
[Symbol]	PROPOSED REPAIR UNION
[Symbol]	PROPOSED UNDERPASS
[Symbol]	PROPOSED EROSION CONTROL BLANKET

DETAIL NUMBER: ES104
DETAIL LOCATION: [Symbol]

STREAM AND WETLAND NOTES

- WETLAND MATTERS ARE BEING REQUESTED FOR THE FOLLOWING FOUR (4) WETLANDS THAT ARE LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE: WETLANDS 1A, 1B, 2, AND 4.
- THE STREAMS SHOWN HEREON OUTSIDE THE LIMIT OF DISTURBANCE ARE DETERMINED AS INTERMITTENT AS SUCH A MATTER IS NOT BEING REQUESTED FOR REGULATORY PURPOSES.
- DIMENSIONS SHOWN HEREON ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

COMPACTION SPECIFICATIONS

- PLACE SOIL, FILL MATERIALS USING COMPACTION EQUIPMENT WITH GREATER THAN 10-TON WEIGHT IN COMPACTED LAYS NOT EXCEEDING 12 INCHES THICK. USE A REDUCED SOFT-LIFT THICKNESS OF 4 INCHES (MAXIMUM) IN AREAS WHERE STEEL-PLATE ROLLERS OR OTHER UNDESIRABLE COMPACTIONERS ARE USED. MAXIMUM PARTICLE SIZE SHOULD NOT EXCEED 3/4 INCHES IN STRUCTURAL FILL AREAS WHERE HEAVY, SELF-PROPULSED COMPACTIONERS ARE UTILIZED. A REDUCED MAXIMUM PARTICLE SIZE OF 3/8 INCHES SHOULD BE USED IN AREAS WHERE HAND-OPERATED COMPACTIONERS ARE USED. HEAVY COMPACTION PARTICLES EXCEEDING THE MAXIMUM PARTICLE SIZE SPECIFIED ABOVE SHOULD BE IN THE SHORTEST LAY ABOVE OR IN DEEPER AREAS OF FILL OVERLAPPING ROCK PARTICLES (I.E. MATERIALS SPECIFYING 3 INCHES PLACED IN THE GREATEST LAY OF FILL SHOULD BE PLACED IN LAYS NOT EXCEEDING 24 INCHES. LAYS SHOULD BE COMPACTED IN SEVERAL PASSES USING HEAVY COMPACTION EQUIPMENT.
- COMPACT ALL PAD AND ROADWAY SUBSOURCES AND EACH LIFT OF FILL MATERIAL TO A MINIMUM OF 95% DENSITY OF ITS MAXIMUM DRY DENSITY WITHIN 1% TOLERANCE OF THE OPTIMUM MOISTURE CONTENT. DETERMINE MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT BY ACCORDANCE WITH ASTM D1556 (STANDARD METHOD).
- ADDITIONAL SPECIFICATIONS ARE REQUIRED FOR THE PROPOSED REVEGETATED SOIL (SLOPE BENCH) AREAS. REFER TO DRAWINGS 2500 THROUGH 2510 FOR ADDITIONAL INFORMATION.

REFERENCES

- STREAMS AND WETLANDS Delineated by CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 09/24/2011.
- INTERMEDIATE LIMITS LOCATED BY A GEOSPATIAL SURVEY CONDUCTED BY THE COMMONWEALTH OF WEST VIRGINIA DATED 02/22/2011 TO 02/23/2011.
- UTILITY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 04/18/2011 TO 04/19/2011.
- TOPOGRAPHY SURVEYED BY UNIMATED SURVEY, INC. DATED 04/18/2011 TO 04/19/2011.
- PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.



APPROVED WVDEP OOG
2/28/2011

C&E
Civil & Environmental Consultants, Inc.
1000 Triangle Lane, Suite 200 - Boone, PA 17002
724/772-9271 - fax: 724/772-9272



REVISION RECORD

Date	By	Of	Description
02/28/11	DJH	01	ISSUED FOR PERMIT
02/28/11	DJH	02	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	03	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	04	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	05	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	06	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	07	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	08	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	09	REVISED PER MISS UTILITY COMMENTS
02/28/11	DJH	10	REVISED PER MISS UTILITY COMMENTS

FREELAND WELL PAD
CLAY DISTRICT
MARSHALL COUNTY, WEST VIRGINIA
PREPARED FOR
CHEVRON APPALACHIA, LLC
700 CHEROKEE PARKWAY
CORAOPOLIS, PA 15108

EROSION AND SEDIMENT CONTROL PLAN (7 OF 7)
Project Number: 12-2022
Original Scale: 1"=20'
Last Revision: 2/28/2011
Author: DJH
Checked By: DJH
Contract No.: 12-2022
Revision No.: 08

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