



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

Tuesday, June 18, 2019
WELL WORK PERMIT
Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

Re: Permit approval for OTTE M15H
47-051-02210-00-00

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: OTTE M15H
Farm Name: HUBERT C. & JANET E. OTTE
U.S. WELL NUMBER: 47-051-02210-00-00
Horizontal 6A New Drill
Date Issued: 6/18/2019

PERMIT CONDITIONS

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

CONDITIONS

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

API Number: _____

PERMIT CONDITIONS

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



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: June 14, 2019
ORDER NO.: 2019-W-10

INTRODUCTION

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

FINDINGS OF THE CHIEF

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

1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 *et seq.*, and the rules and regulations promulgated thereunder.
2. Chevron Appalachia, LLC is a “person” as defined by W. Va. Code §22-6-1(n), with a corporate address as P.O. Box 611, Moon Township, Pennsylvania.
3. On April 30, 2019, Chevron Appalachia, LLC submitted a well work permit application identified as API# 47-051-02210. The proposed well is to be located on the Otte Pad in the Washington District of Marshall County, West Virginia.
4. On April 30, 2019, Chevron Appalachia, LLC requested a waiver for Wetland 1B as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-051-02210. Wetland 1A will be impacted and subject to USACE Nationwide Permit 39.

CONCLUSIONS OF LAW

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

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

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

ORDER

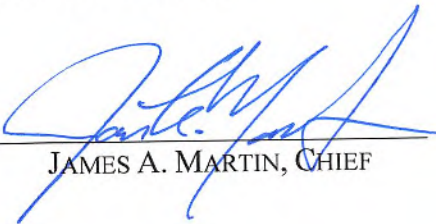
West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland 1B from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-051-02210. The Office of Oil and Gas hereby **ORDERS** that Chevron Appalachia, LLC shall meet the following site construction and operational requirements for the Otte 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 1B shall have two layers of eighteen-inch (18”) compost filter sock and two layers of twenty-four (24”) compost filter sock further down slope to prevent any sediment from reaching the wetland from the well pad. This along with rip-rap aprons, temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- d. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- e. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- f. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- g. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- h. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- i. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½”) rain within any twenty-four (24) hour period;
- j. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- k. All records from inspections shall be maintained on site for the life of the project and be available upon request.

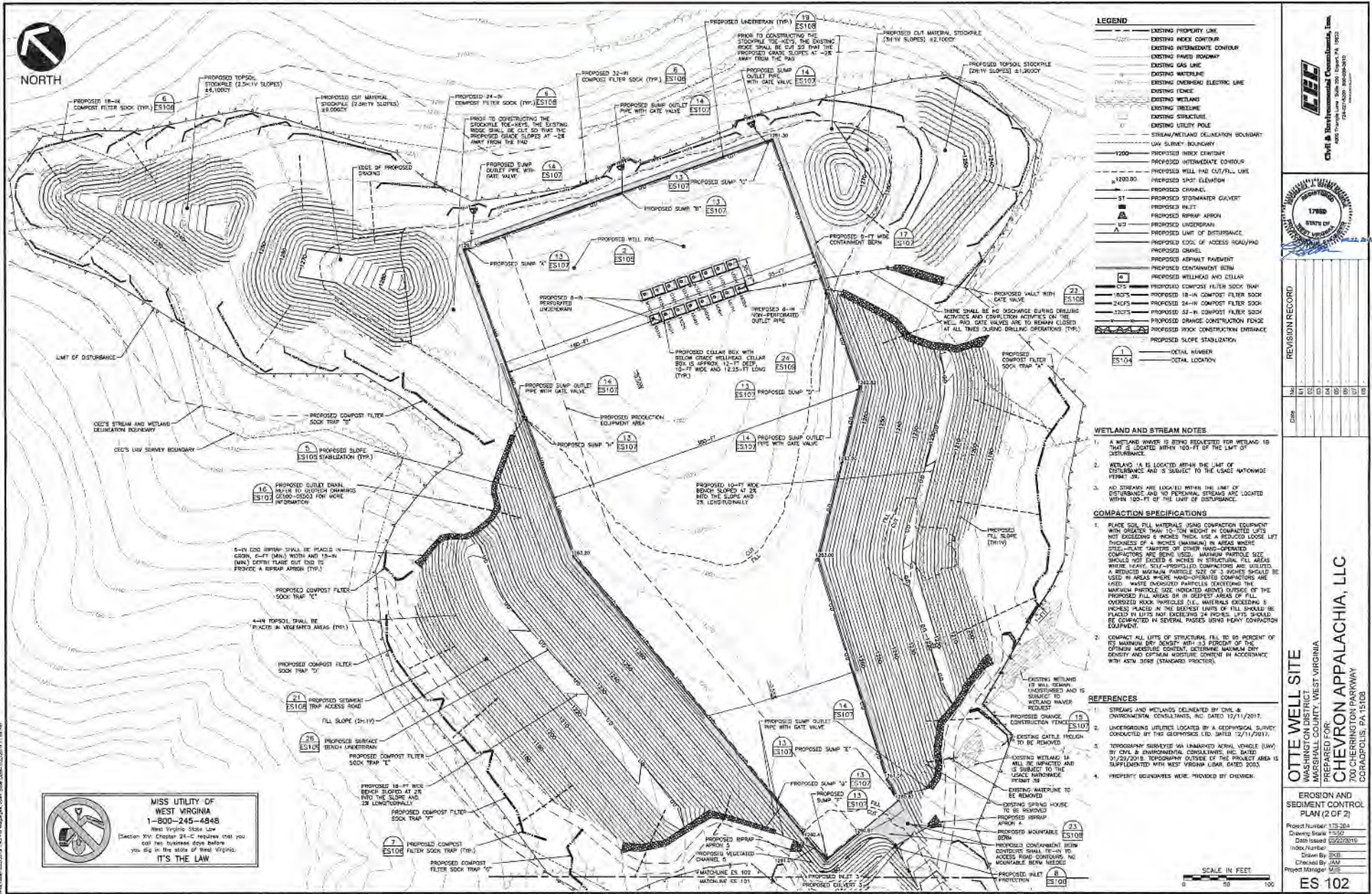
Thus ORDERED, the 14th day of June, 2019.

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

Attachment 1



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

1) Well Operator: Chevron Appalachia, LLC 494499935 Marshall Washington Moundsville, WV
Operator ID County District Quadrangle

2) Operator's Well Number: M15H Well Pad Name: Otte

3) Farm Name/Surface Owner: Otte Public Road Access: CR 12 Grandview Road

4) Elevation, current ground: 1304.87 Elevation, proposed post-construction: 1263

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

(b) If Gas Shallow Deep _____
Horizontal _____

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6,360 ft below GL, 50' thick with an anticipated pore pressure of .0.64 psi/ft

8) Proposed Total Vertical Depth: 6,360

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 16,663 ✓

11) Proposed Horizontal Leg Length: 9,330

12) Approximate Fresh Water Strata Depths: 559 ft below GL ✓

13) Method to Determine Fresh Water Depths: Deepest freshwater well in 2 mile radius

14) Approximate Saltwater Depths: 1326 ft, 1560 ft., 2075 ft.

15) Approximate Coal Seam Depths: Washington 474 ft; Waynesburg A 579 ft; Redstone 829 ft; Sewickley 788 ft; Pittsburgh 854 ft below GL

16) Approximate Depth to Possible Void (coal mine, karst, other): Abandoned coal mine void @ 854 ft below GL

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No _____
X located in the sealed and abandoned Parr's Run room & pillar mine

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

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18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	New	X-52	78.67	40	40	CTS ✓
Fresh Water	20"	New	J-55	94	609	609 ✓	CTS ✓
Coal	13-3/8"	New	J-55	54.5	914	914 ✓	CTS ✓
Intermediate	9.625"	New	L-80	40	2,125	2,125 ✓	CTS ✓
Production	5.50"	New	P110	20	16,663	16,663 ✓	2625 (500' below 9.625" shoe)
Tubing							
Liners							

4/18/19

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"	0.375"				
Fresh Water	20"	26"	0.438"	2,110	-	Class A	1.2
Coal	13-3/8"	17-1/2"	0.38"	2,730	1,200	Class A	1.19
Intermediate	9.625"	12.375" & 12.25"	0.395"	5,750	2,500	Class A	1.19
Production	5.5"	8.75" & 8.5"	0.361"	14,360	9,975	Class A, G, or H	1.25
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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JM 4/22/19

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

Run a cement basket 40' above the top of the mine. Drill vertical depth to the Marcellus. 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): 20.4

22) Area to be disturbed for well pad only, less access road (acres): 13.7

23) Describe centralizer placement for each casing string:

Surface + coal: (1) on shoe track w/ stop collar & (1) per 2 jt to surface; Intermediate: (1) on shoe track w/ stop collar & (1) per 3 jts; Production String: (1) centralizer every jt from TMD to planned TOC & (1) every other joint from planned TOC to surface.

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

For the Water String the blend will contain class A cement, 3% CaCl₂, and flake. The coal will contain class A cement, 3% CaCl₂, Salt, and flake. A cement basket will be placed ~40' above the top of the mine. 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.

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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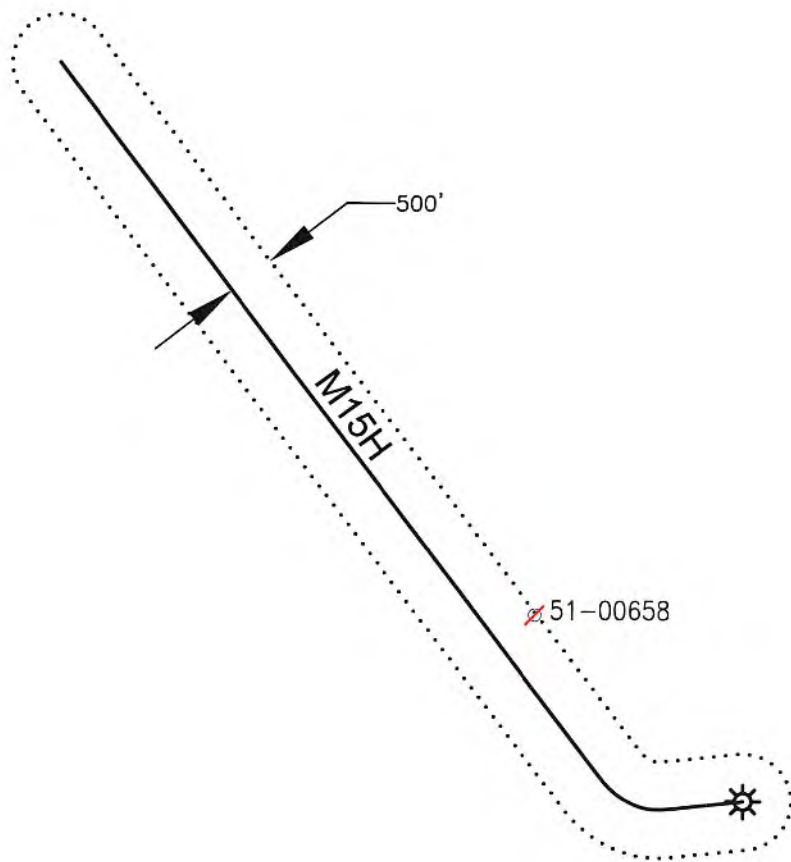
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Otte M15H									
Clay Twp. Marshall Co, WV 1/7/2019 9:27						Ground Level Elev. (ft above SL): 1262 **All depths below reference GL**			
DRILLING FLUID / BIT TYPE / TFA	CENTRALIZER PROGRAM	CASING SIZE / FORMATION	DEPTH		WELLHEAD DESIGN FMC UH-S 13.58"	HOLE SIZE (IN)	HOLE DEPTH (FT)	CASING SPECS	CEMENT PROGRAM
			MD (FT)	TYD (FT)					
Core Barrel / Auger		30" Conductor	40	40	INC AZM	26-36	40	Conductor 30" 118.2# X-42 29.25 Minimum 40 ft from GL or at least 10 ft into bedrock	Grout to Surface
Air ORL with Mist and additives / 26" Hammer	Bow Spring: (1) on shoe track w/ stop collar & (1) per 2 ft over coupling to surface.	20" Casing	609	609		26	639	Surface Casing 20" 34# J-55 BTC 0.438" Wall Coupling OD (in) 21.000 ID (in) 18.124 DnH ID (in) 18.937 Burst (psi) 2110 Collapse (psi) 520 Yield (Jt Strength 1,000 lbs) 1402 Capacity (bbft) 0.3553 Annulus (bbft) 0.2681	Surface Blend (Class A) Cement to surface
Air ORL with Mist and additives	Bow Spring: (1) on shoe track w/ stop collar & (1) per 2 ft over coupling to surface Basket Placement Secured w/ (2) lock rings above and (1) below	Basket Placement Top of Coal Deepest Coal	834 854 859					Coal String 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 DnH ID (in) 12.459 Burst (psi) 2730 Collapse (psi) 1130 Yield (Jt Strength 1,000 lbs) 653	Intermediate I Blend (Class A) Cement grout to surface Shoe Job Vol (25 bbl Excess)
Air ORL with Mist and additives	Bow Spring: (1) on shoe track w/ stop collar & (1) per 3 ft over coupling to surface	13-3/8" Casing	914	914		17.50	958	Intermediate Casing 9-5/8" 40# L-80IC BTC 0.395" Wall Coupling OD (in) 10.625 ID (in) 8.835 DnH ID (in) 8.679 Burst (psi) 5750 Collapse (psi) 3870 Yield (Jt Strength 1,000 lbs) 916	Intermediate II Blend (Class A) Cement to surface 30% Excess
	Surface - TOC (1) per every other jt TOC-Curve KOP (1) per jt of csg Curve KOP-TMD (1) per jt of csg 10 Marker Jt of Csg 100' above KOP	9-5/8" Casing	2,125	2,125		12.25	2,150	Production Casing 5-1/2" 20# P110EC DW/C-IS-Plus .361" Wall Coupling OD (in) 6.300 ID (in) 4.778 DnH ID (in) 4.653 Burst (psi) 14360 Collapse (psi) 12090 Yield (Jt Strength 1,000 lbs) 729	Production Lead Slurry (Class A, G, H) Cement top approximately 500 below 9-5/8" shoe
Planned MW: 11.5ppg SBM - 12.5ppg SBM	Float Equip. (2) Jts of Csg Float Equip.	Est. BHT deg. F 5-1/2" Casing	16,663	146 6,360		8.5 to 8.75		Production Tail Slurry (Class A, G, H)	

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4/18/19



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

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

LEGEND
☀ - WELL LOCATION
X - ABANDONED WELL

OTTE
AREA OF REVIEW MAP
MARSHALL COUNTY
WASHINGTON DISTRICT
WEST VIRGINIA

TOPO QUAD: MOUNDSVILLE, WV
SCALE: 1" = 2000'
DATE: DECEMBER 12, 2018

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
47-051-00658	TOTAL RESOURCES LAND COMPANY INC	TOTAL RESOURCES LAND COMPANY INC	ABANDONED WELL	39.951014	-80.718502	N/A	N/A	

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WW-9
(4/16)

API Number 47 - _____ - _____
Operator's Well No. M15H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 494499935

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

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

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

Proposed Disposal Method For Treated Pit Wastes:

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

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

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

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

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

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

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

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

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

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

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

Company Official Signature [Signature]

Company Official (Typed Name) Kenneth Martz

Company Official Title Permitting Team Lead

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Subscribed and sworn before me this 22nd day of March, 2019

Commonwealth of Pennsylvania
County of Allegheny

Laura Savage

Notary Public
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

My commission expires September 17, 2019

Chevron Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 8.2 Prevegetation pH N/A

Lime 3 ton/ac Tons/acre or to correct to pH _____

Fertilizer type 10/20/20

Fertilizer amount 300 lb/ac lbs/acre

Mulch 8 ton/acre or 5 ton/acre winter Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	50	See Attached	
Winter Wheat	75		
Winter Wheat-adverse	90		

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: _____

As a condition of the permit, I would like Chevron to submit a plan addressing ingress/egress of residents along Grandview Rd, from us-250 to entrance to access road.

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Title: Oil & Gas Inspector Date: 4/18/19

Field Reviewed? Yes No

Seed Mixtures

Permanent

Seed Type	lbs/acre
Non Agricultural Upland	175 and
Tall Fescue	57%
Perennial Ryegrass	19%
Ladino Clover	10%
Birdsfoot - Trefoil	10%
Red Top	4%

Permanent

Seed Type	lbs/acre
Hayfield, Pastureland, and Cropland	200
Orchard Grass	40%
Timothy	40%
Birdsfoot - Trefoil	10%
Ladino Clover	10%

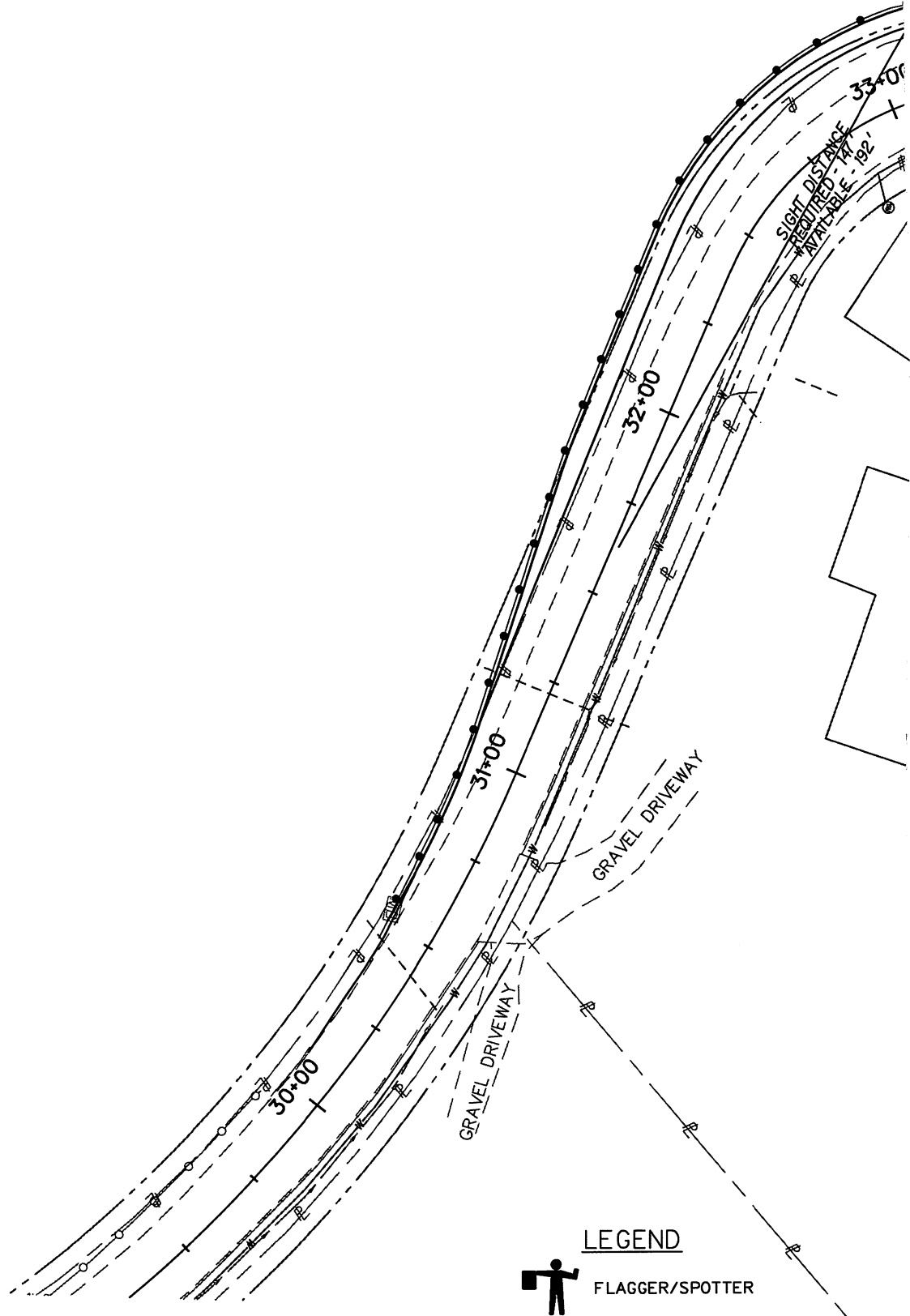
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CR 12 Grandview Road Improvements Narrative

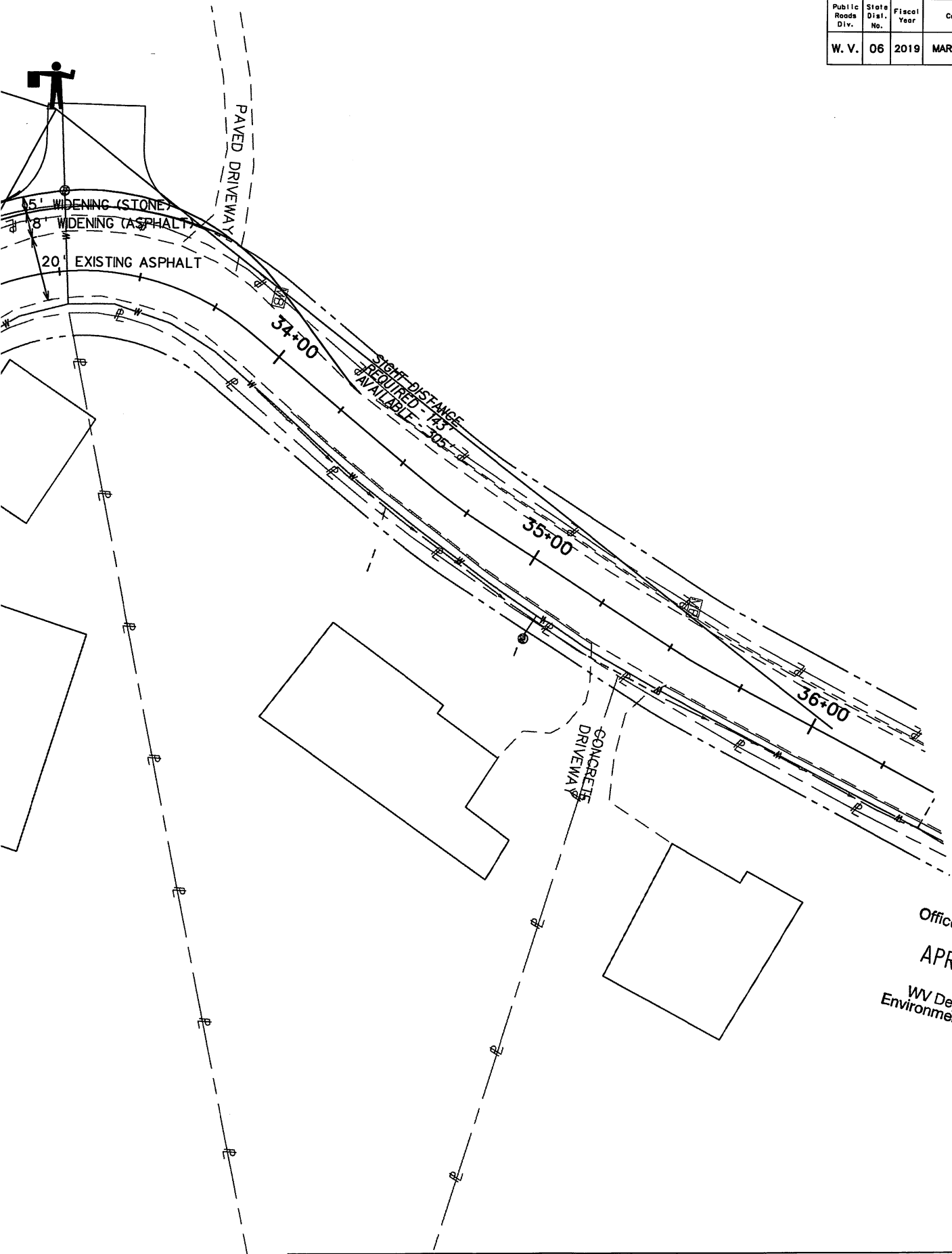
The purpose of the Grandview Road (CR 12) improvements are to help safely facilitate the construction, development and production of a marcellus gas drilling site while minimizing the impact to the traveling public. The WVDOH approved plans will provide roadway improvements from the intersection of US 250 and CR 12 to the access driveway located approximately 0.6 miles north along CR 12. Some of the key roadway improvements include drainage upgrades, installation of guardrail, curve widening and approximately 470 feet of an asphalt overlay. During construction operations a gravel turnaround will be constructed on the outside of the curve to help safely store and maneuver construction equipment. This gravel turnaround will remain once the roadway improvements have been completed and be utilized as a flagger/spotter area. The location of the gravel turnaround allows for vehicles to be seen entering the curve from both directions. The use of the flagger/spotter will allow for oversized loads to safely maneuver the curve to access the access driveway.

RECEIVED
Office of Oil and Gas
APR 30 2019
WV Department of
Environmental Protection

FLAGGER/SPOTTER TO BE USED
DURING WELL DEVELOPMENT



Public Roads Div.	State Dist. No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	06	2019	MARSHALL	1	1



RECEIVED
Office of Oil and Gas
APR 30 2019
WV Department of
Environmental Protection

DESIGNED	DATE
DW	3/1/19
DRAWN	DATE
DW	3/1/19
CHECKED	DATE
JC	3/1/19
CHECKED	DATE
SRP	3/1/19

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

FLAGGER/SPOTTER EXHIBIT

C:\Users\jguyton\AppData\Local\Temp\AutoCAD\2019\190301\190301.dwg



Chevron

**Appalachian LLC
WV Well Site Safety Plan**

Pad: Otte Pad A

Well # M15H

4/18/19

**1790 Grandview Rd
Moundsville, WV 26041
Washington District
Marshall County, WV**

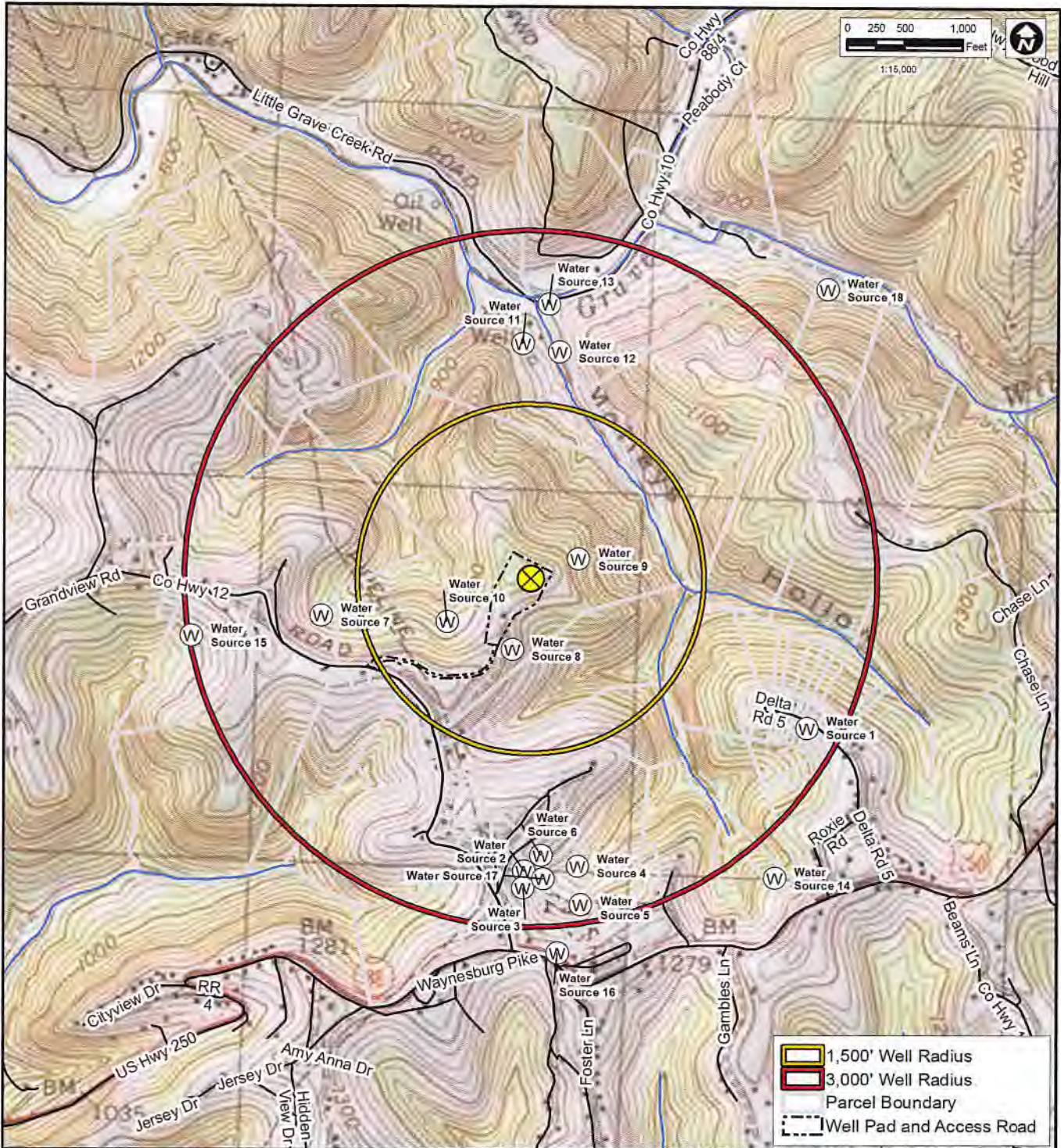
Access Point – [39.943450°N, 80.715335°W]

Well Site – [39.945327°N, 80.711023°W]]

Marshall County, West Virginia

RECEIVED
Office of Oil and Gas
APR 30 2019
WV Department of
Environmental Protection

Water Supply Exhibit Otte Pad A



Surface Owner: Otte
 Oil / Gas Owner: Otte
 Well Operator: Chevron Appalachia, LLC.
 Address: 700 Cherrington Parkway
Coraopolis, PA 15108
 Phone: 724-564-3700

County: Marshall
 Locating Consultant: Hull & Associates
 Address: 300 Merchant Lane, Suite 307
Pittsburgh, PA 15205
 Phone: 412-446-0315

Search Radius:
 At least 3000' from each well.

HULL
 Environment / Energy / Infrastructure

RECEIVED
 Office of Oil and Gas
 January 2019
 Datum NAD83
 Page 4 of 4

APR 30 2019

BHL is located on topo map 12,234 feet south of Latitude: 40° 00' 00"
 SHL is located on topo map 4,587 feet south of Latitude: 39° 57' 30"

NOTES:

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SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS



SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M)
 N:4421774.991
 E:524715.854
 NAD83, WV NORTH
 N:528875.214
 E:1629069.145

APPROX. LANDING POINT
UTM 17-NAD83(M)
 N:4421835.29
 E:524266.28
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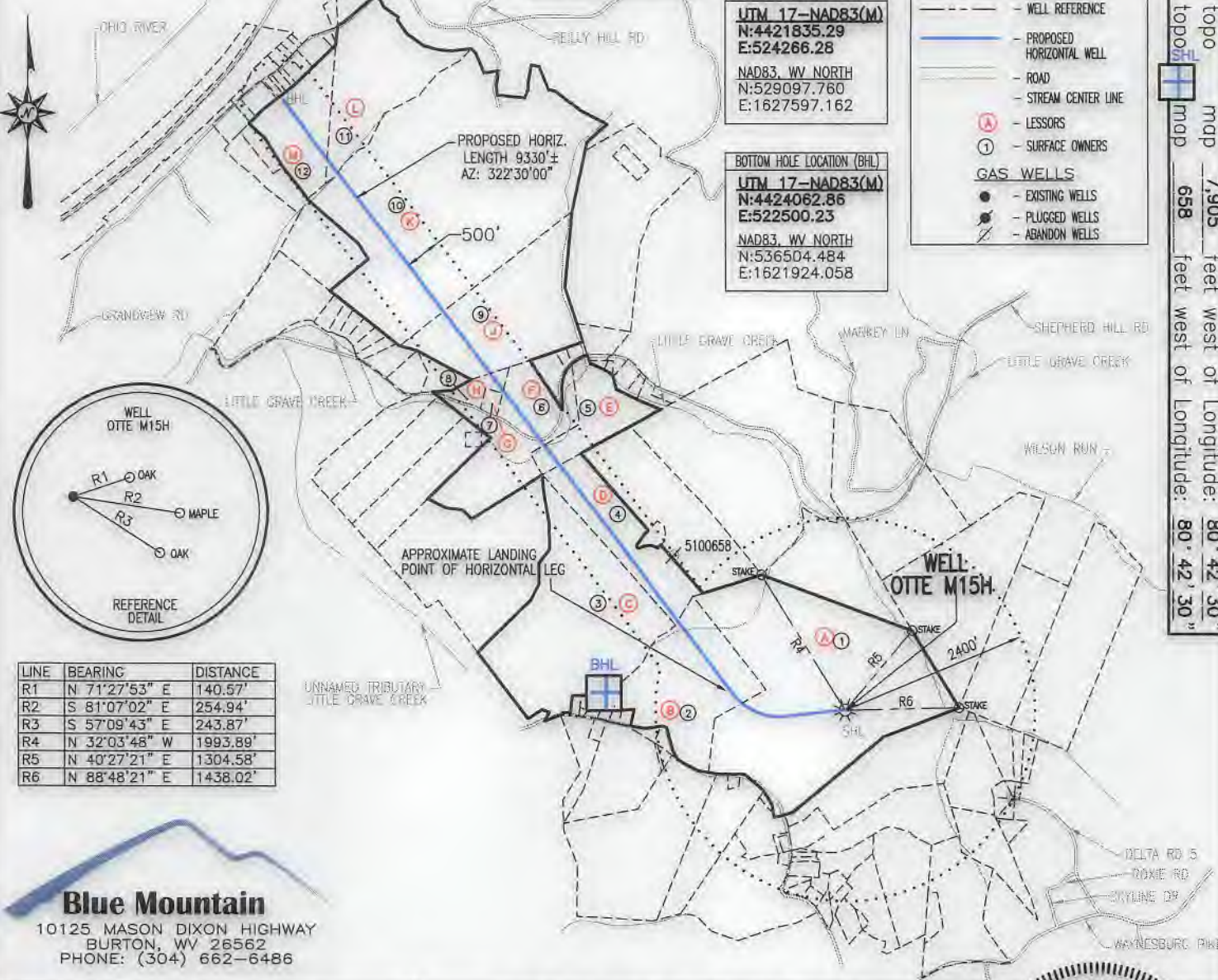
BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M)
 N:4424062.86
 E:522500.23
 NAD83, WV NORTH
 N:536504.484
 E:1621924.058

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

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS
- ABANDON WELLS



LINE	BEARING	DISTANCE
R1	N 71°27'53" E	140.57'
R2	S 81°07'02" E	254.94'
R3	S 57°09'43" E	243.87'
R4	N 32°03'48" W	1993.89'
R5	N 40°27'21" E	1304.58'
R6	N 88°48'21" E	1438.02'

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

BHL is located on topo map 7,905 feet west of Longitude: 80° 42' 30"
 SHL is located on topo map 658 feet west of Longitude: 80° 42' 30"

FILE #: OTTE M15H
 DRAWING #: OTTE M15H
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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

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



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

DATE: DECEMBER 13, 2018
 OPERATOR'S WELL #: OTTE M15H
 API WELL #: 47 51 02210
 STATE COUNTY PERMIT

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

WATERSHED: SHORT CREEK-OHIO RIVER ELEVATION: 1304.87'
 COUNTY/DISTRICT: MARSHALL / WASHINGTON QUADRANGLE: MOUNDSVILLE, WV 7.5'
 SURFACE OWNER: HUBERT C. & JANET E. OTTE ACREAGE: 126.00±
 OIL & GAS ROYALTY OWNER: MICHAEL P. OTTE AND MARK DOUGLAS OTTE ACREAGE: 632.455±

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: 6,360'± TMD: 16,662.43'±
 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

OTTE M15H PAGE 2 OF 2

	SURFACE OWNER	DIST-TM/PAR
1	HUBERT C. & JANET E. OTTE REVOCABLE LIVING TRUST ET AL	14-3/53
2	JOHN E. & MELISSA WOODS	14-3/58
3	*MARSHALL COUNTY PARK & REC	14-2/9
4	MARSHALL COUNTY PARK & REC	14-2/8
5	TEDDY F. KOSKI - LIFE	14-1/17
6	ELI A. YODER ET AL	14-1/16
7	*LAMSON N. NGUYEN ET UX	14-1/16.3
8	LARRY L. & ALICIA S. MCCLINTOCK	14-1/16.4
9	LEVI E. MAST ET AL	13-12/51
10	JOHN WILLIAM REILLY III ET AL	13-12/14
11	JOHN WILLIAM REILLY III ET AL	13-12/1
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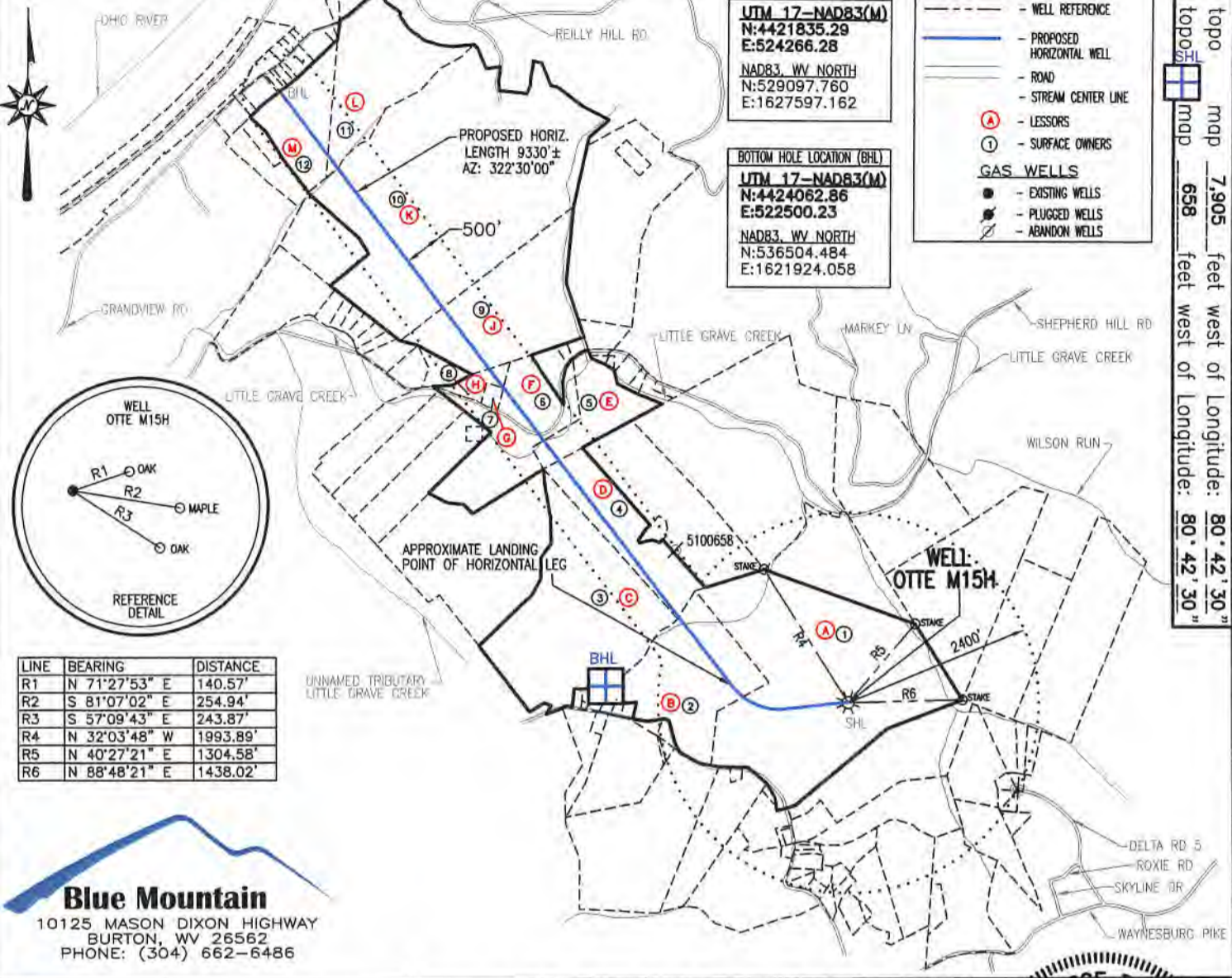
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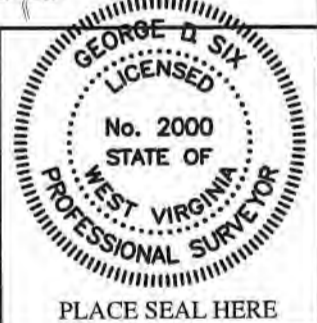


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* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

DECEMBER 13, 2018

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

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

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

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


See Attached

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

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

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

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

Well Operator: Chevron Appalachia, LLC
 By: Kenneth Martz 
 Its: Permitting Team Lead

Otte Unit #15H - MARC - BATCH 1 MIS - FINAL

Plat ID	Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3	Assignment #4
A	14-0003-0053-0000-0000	OTTE HUBERT C ET UX	CHEVRON USA INC	0.1875	939/127	-	-	-	-
A	14-0003-0053-0000-0000	OTTE RICHARD JOSEPH	CHEVRON USA INC	0.1875	939/130	-	-	-	-
A	14-0003-0053-0000-0000	PENTZIEN CAROLINE	CHEVRON USA INC	0.1875	950/196	-	-	-	-
A	14-0003-0053-0000-0000	FOSTER PATRICIA GAIL	CHEVRON USA INC	0.1875	950/218	-	-	-	-
A	14-0003-0053-0000-0000	CUNNINGHAM NANCY JEAN	CHEVRON USA INC	0.1875	950/215	-	-	-	-
A	14-0003-0053-0000-0000	YOHO REBECCA ANN	CHEVRON USA INC	0.1875	950/212	-	-	-	-
A	14-0003-0053-0000-0000	OTTE MICHAEL P	CHEVRON USA INC	0.1875	935/160	-	-	-	-
A	14-0003-0053-0000-0000	OTTE MARK DOUGLAS	CHEVRON USA INC	0.1875	939/180	-	-	-	-
		WOODS JOHN E ET UX	CHESAPEAKE APPALACHIA LLC	0.125	684/326	22/666	30/427	30/461	-
B	14-0003-0058-0000-0000	RSBALL COUNTY PARK AND RECREATION BOA	CHEVRON USA INC	0.18	889/153	-	-	-	-
C	14-0002-0009-0000-0000	SIBURT JUDY DELORIS	CHEVRON USA INC	0.18	976/197	-	-	-	-
C	14-0002-0009-0000-0000	DAVES DIANE ALAYNE	CHEVRON USA INC	0.18	983/455	-	-	-	-
C	14-0002-0009-0000-0000	LEACH CHARLES	CHEVRON USA INC	0.18	979/331	-	-	-	-
C	14-0002-0009-0000-0000	WEED APRIL	CHEVRON USA INC	0.18	979/313	-	-	-	-
C	14-0002-0009-0000-0000	BOWERS DELORES A	CHEVRON USA INC	0.18	979/316	-	-	-	-
C	14-0002-0009-0000-0000	SIBURT BARBARA KAY	CHEVRON USA INC	0.18	976/238	-	-	-	-
C	14-0002-0009-0000-0000	FRANKLIN CAROLYN	CHEVRON USA INC	0.18	976/229	-	-	-	-
C	14-0002-0009-0000-0000	SIBURT JAMES EARL	CHEVRON USA INC	0.18	976/241	-	-	-	-
C	14-0002-0009-0000-0000	LITTELL LINDA E	CHEVRON USA INC	0.18	976/232	-	-	-	-
C	14-0002-0009-0000-0000	SIBURT ROBERT PAUL	CHEVRON USA INC	0.18	1011/360	-	-	-	-
C	14-0002-0009-0000-0000	KESSELRING NANCY CAROL	CHEVRON USA INC	0.18	987/38	-	-	-	-
C	14-0002-0009-0000-0000	SIBURT LEONA MAE	CHEVRON USA INC	0.18	976/194	-	-	-	-
		MARSHALL COUNTY PARK AND RECREATION BOARD	CHEVRON USA INC	0.18	889/153	-	-	-	-
D	14-0002-0008-0000-0000	AMP FUND II LP	CHEVRON USA INC	0.18	865/91	-	-	-	-
E	14-0001-0017-0000-0000	BOUNTY MINERALS LLC	CHEVRON USA INC	0.2	950/193	-	-	-	-
F	14-0001-0016-0000-0000	YODER ELI A	CHEVRON USA INC	0.18	960/646	-	-	-	-
F	14-0001-0016-0000-0000	MAST LEVI E	CHEVRON USA INC	0.18	960/638	-	-	-	-
F	14-0001-0016-0000-0000	MILLER DAVID H	CHEVRON USA INC	0.18	960/642	-	-	-	-
F	14-0001-0016-0003-0000	BOUNTY MINERALS LLC	CHEVRON USA INC	0.2	950/193	-	-	-	-
G	14-0001-0016-0003-0000	YODER ELI A	CHEVRON USA INC	0.18	960/646	-	-	-	-
G	14-0001-0016-0003-0000	MAST LEVI E	CHEVRON USA INC	0.18	960/638	-	-	-	-
G	14-0001-0016-0004-0000	MILLER DAVID H	CHEVRON USA INC	0.18	960/642	-	-	-	-
H	14-0001-0016-0003-0000	MCCLINTOCK LARRY L ET UX	CHEVRON USA INC	0.18	848/461	-	-	-	-
J	13-0012-0051-0000-0000	YODER ELI A	CHEVRON USA INC	0.18	961/1	-	-	-	-
J	13-0012-0051-0000-0000	MAST LEVI E	CHEVRON USA INC	0.18	961/5	-	-	-	-
J	13-0012-0051-0000-0000	MILLER DAVID H	CHEVRON USA INC	0.18	961/9	-	-	-	-
J	13-0012-0051-0000-0000	BOUNTY MINERALS LLC	CHEVRON USA INC	0.2	950/193	-	-	-	-

Otte Unit #15H - MARC - BATCH 1 MLS - FINAL

Plat ID	Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3	Assignment #4
K	13-0012-0014-0000-0000	YOHO MARY ANN	CHEVRON USA INC	0.18	847/278	-	-	-	-
K	13-0012-0014-0000-0000	REILLY MICHAEL J	CHEVRON USA INC	0.18	847/305	-	-	-	-
K	13-0012-0014-0000-0000	REYNOLDS THERESA J	CHEVRON USA INC	0.18	847/257	-	-	-	-
K	13-0012-0014-0000-0000	REILLY TIMOTHY F	CHEVRON USA INC	0.18	847/241	-	-	-	-
K	13-0012-0014-0000-0000	DORAN PATRICIA K	CHEVRON USA INC	0.18	847/287	-	-	-	-
K	13-0012-0014-0000-0000	REILLY JOHN W III	CHEVRON USA INC	0.18	847/296	-	-	-	-
L	13-0012-0001-0000-0000	YOHO MARY ANN	CHEVRON USA INC	0.18	847/278	-	-	-	-
L	13-0012-0001-0000-0000	REILLY MICHAEL J	CHEVRON USA INC	0.18	847/305	-	-	-	-
L	13-0012-0001-0000-0000	REYNOLDS THERESA J	CHEVRON USA INC	0.18	847/257	-	-	-	-
L	13-0012-0001-0000-0000	REILLY TIMOTHY F	CHEVRON USA INC	0.18	847/241	-	-	-	-
L	13-0012-0001-0000-0000	DORAN PATRICIA K	CHEVRON USA INC	0.18	847/287	-	-	-	-
L	13-0012-0001-0000-0000	REILLY JOHN W III	CHEVRON USA INC	0.18	847/296	-	-	-	-
M	14-0001-0004-0000-0000	OTTE MICHAEL P	CHEVRON USA INC	0.1875	935/160	-	-	-	-
M	14-0001-0004-0000-0000	OTTE MARK DOUGLAS	CHEVRON USA INC	0.1875	939/180	-	-	-	-



Mitchell G. Limbert
Land Representative, AMBU

March 7, 2019

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

RE: Otte 15H

To Whom It May Concern,

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

Sincerely,

A handwritten signature in black ink, appearing to read "M G Limbert".

Mitchell G. Limbert
Land Representative

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

Date of Notice Certification: 4/3/19

API No. 47- _____
Operator's Well No. M15H
Well Pad Name: Otte

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>524715.854</u>
County: <u>Marshall</u>	UTM NAD 83 Northing: <u>4421774.991</u>
District: <u>Washington</u>	Public Road Access: <u>CR 12 Grandview Road</u>
Quadrangle: <u>Moundsville, WV 7.5'</u>	Generally used farm name: <u>Otte</u>
Watershed: <u>Short Creek - Ohio River</u>	

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

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

*PLEASE CHECK ALL THAT APPLY

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

OOG OFFICE USE ONLY
<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input type="checkbox"/> RECEIVED
<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input type="checkbox"/> RECEIVED
<input type="checkbox"/> RECEIVED
<input type="checkbox"/> RECEIVED


Required Attachments:

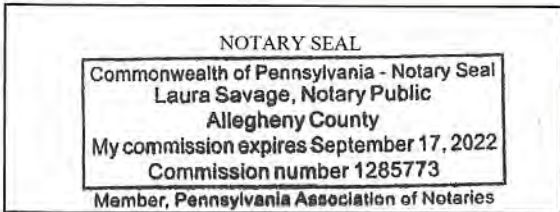
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication 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 Kenneth D. Martz, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	<u>Chevron Appalachia, LLC</u>	Address:	<u>700 Cherrington Parkway</u>
By:	<u>Kenneth Martz</u> 		<u>Coraopolis, PA 15108</u>
Its:	<u>Permitting Team Lead</u>	Facsimile:	<u>412-865-2403</u>
Telephone:	<u>412-865-1433</u>	Email:	<u>KMartz@chevron.com</u>



Commonwealth of Pennsylvania
County of Allegheny
Subscribed and sworn before me this 22nd day of March, 2019.

Laura Savage Notary Public

My Commission Expires September 17, 2022

Oil and Gas Privacy Notice:

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

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**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: 4/3/19 **Date Permit Application Filed:** 4/29/19

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: Hubert C. and Jane E. Otte Revocable Living Trust
 Address: 78 John Deere Drive
Glen Dale, WV 26038
 Name: _____
 Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: _____
 Address: _____
 Name: _____
 Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: _____
 Address: _____

COAL OWNER OR LESSEE

Name: Consol Mining Company, LLC
 Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

COAL OPERATOR

Name: _____
 Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: Hubert C. Otte & Jane E. Revocable Living Trust Etal
 Address: 78 John Deere Drive
Glen Dale, WV 26038

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
 Address: _____

*Please attach additional forms if necessary

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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 noise and Gas

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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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.**

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)

API NO. 47- _____ - _____
OPERATOR WELL NO. M15H
Well Pad Name: Otte

Notice is hereby given by:

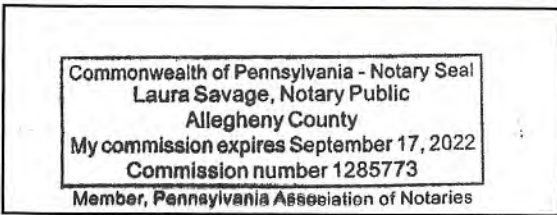
Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-1433
Email: KMartz@chevron.com



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.



*Commonwealth of Pennsylvania
County of Allegheny*

Subscribed and sworn before me this 22nd day of March, 2019.

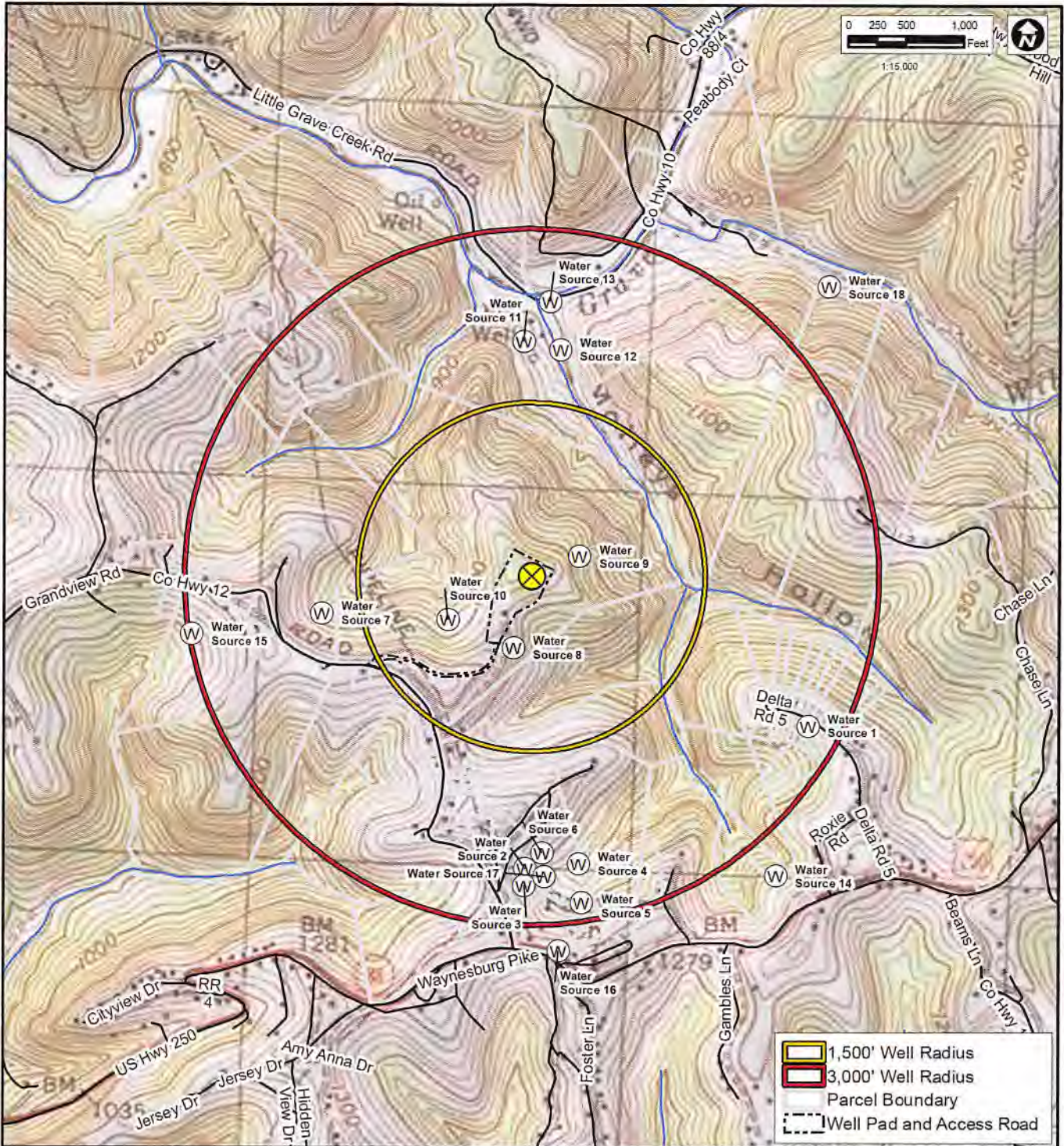
Laura Savage

Notary Public

My Commission Expires September 17, 2022

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Water Supply Exhibit Otte Pad A



Surface Owner: Otte
 Oil / Gas Owner: Otte
 Well Operator: Chevron Appalachia, LLC
 Address: 700 Cherrington Parkway
Coraopolis, PA 15108
 Phone: 724-564-3700

County: Marshall
 Locating Consultant: Hull & Associates
 Address: 300 Merchant Lane, Suite 307
Pittsburgh, PA 15205
 Phone: 412-446-0315

Search Radius:
 At least 3000' from each well



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 January 2019

Water Supply Exhibit

Otte Pad A

#	WATER PURVEYOR	SUPPLY	ELEVATION (feet)	ADDRESS	PHONE
1	GROSSO FLOYD ET UX	WELL	1,268	308 SKYLINE DR MOUNDSVILLE, WV 26041	304-810-4244
2	GUZEK FRANK L ET UX	SPRING	1,237	340 GINGER RD MOUNDSVILLE, WV 26041	304-845-4442
3	GUZEK FRANK L ET UX	SPRING	1,244	340 GINGER RD MOUNDSVILLE, WV 26041	304-845-4442
4	GUZEK JENNA NICOLE	STREAM	1,142	271 GINGER RD MOUNDSVILLE, WV 26041	304-557-7715
5	GUZEK JENNA NICOLE	SPRING	1,189	271 GINGER RD MOUNDSVILLE, WV 26041	304-557-7715
6	GUZEK JENNA NICOLE	SPRING	1,234	271 GINGER RD MOUNDSVILLE, WV 26041	304-557-7715
7	WOODS JOHN E & MELISSA	SPRING	1,189	1550 GRANDVIEW RD MOUNDSVILLE, WV 26041	304-281-9197 (CELL) 304-843-5121 (HOME)
8	OTTE HUBERT C & JANE E REVOCABLE LIVING TRUST ET AL	SPRING	1,234	78 JOHN DEER DR GLEN DALE, WV 26038	304-232-9612 304-312-9337
9	OTTE HUBERT C & JANE E REVOCABLE LIVING TRUST ET AL	SPRING	1,190	78 JOHN DEER DR GLEN DALE, WV 26038	304-232-9612 304-312-9337
10	OTTE HUBERT C & JANE E REVOCABLE LIVING TRUST ET AL	SPRING	1,162	78 JOHN DEER DR GLEN DALE, WV 26038	304-232-9612 304-312-9337
11	OTTE HUBERT C & JANE E REVOCABLE LIVING TRUST ET AL	SPRING	838	78 JOHN DEER DR GLEN DALE, WV 26038	304-232-9612 304-312-9337
12	OTTE HUBERT C & JANE E REVOCABLE LIVING TRUST ET AL	STREAM	798	78 JOHN DEER DR GLEN DALE, WV 26038	304-232-9612 304-312-9337
13	OTTE HUBERT C ET AL	STREAM	783	78 JOHN DEER DR GLEN DALE, WV 26038	304-232-9612 304-312-9337
14	BEEVER JOHN WESLEY	SPRING	1,236	1858 WAYNESBURG PIKE RD MOUNDSVILLE, WV 26041	304-559-1588
15	OELSCHLAGER FAMILY IRREVOCABLE TRUST	SPRING	1,205	1457 GRANDVIEW RD MOUNDSVILLE, WV 26041	304-845-2081
16	STROPE CHARLES B	WELL	1,312	1400 WAYNESBURG PIKE RD MOUNDSVILLE, WV 26041	304-845-2969
17	GUZEK FRANK L ET UX	POND	1,195	340 GINGER RD MOUNDSVILLE, WV 26041	304-845-4442
18	HILL DONALD	WELL	846	209 BURKETT HILL LN GLEN DALE, WV 26038	304-845-2490

HULL
Environment / Energy / Infrastructure

Settlers Cabin Business Center
300 Merchant Lane, Suite 307
Pittsburgh, PA 15205
Phone (412) 446-0315
Fax (412) 446-0324

December 2018
Datum NAD83
Page 2 of 4

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Water Supply Exhibit Otte Pad A

#	COORDINATES (NAD 83)		Distance from Well Pad (feet)			
1	39° 56' 32.475" N	80° 42' 6.723" W	2,716			
2	39° 56' 19.437" N	80° 42' 37.564" W	2,519			
3	39° 56' 17.993" N	80° 42' 37.623" W	2,665			
4	39° 56' 20.051" N	80° 42' 31.657" W	2,506			
5	39° 56' 16.768" N	80° 42' 31.148" W	2,839			
6	39° 56' 20.818" N	80° 42' 35.746" W	2,385			
7	39° 56' 40.608" N	80° 43' 1.112" W	1,838			
8	39° 56' 38.242" N	80° 42' 39.735" W	630			
9	39° 56' 46.220" N	80° 42' 32.776" W	451			
10	39° 56' 40.448" N	80° 42' 47.134" W	812			
11	39° 57' 4.324" N	80° 42' 39.848" W	2,028			
12	39° 57' 3.789" N	80° 42' 35.722" W	1,977			
13	39° 57' 7.777" N	80° 42' 37.121" W	2,374			
14	39° 56' 19.619" N	80° 42' 9.708" W	3,333			
15	39° 56' 38.478" N	80° 43' 15.481" W	2,589			
16	39° 56' 12.565" N	80° 42' 33.607" W	2,978			
17	39° 56' 18.815" N	80° 42' 35.448" W	3,575			
18	39° 57' 9.877" N	80° 42' 6.223" W	3,232			

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Water Supply Exhibit Otte Pad A



	1,500' Well Radius
	3,000' Well Radius
	Parcel Boundary
	Well Pad and Access Road

Surface Owner: Otte
 Oil / Gas Owner: Otte
 Well Operator: Chevron Appalachia, LLC.
 Address: 700 Cherrington Parkway
Coraopolis, PA 15108
 Phone: 724-564-3700

County: Marshall
 Locating Consultant: Hull & Associates
 Address: 300 Merchant Lane, Suite 307
Pittsburgh, PA 15205
 Phone: 412-446-0315

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 Date: 4/29/2019
 Page 1 of 4



Search Radius:
 At least 3000' from each well.

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: 4/3/19 **Date Permit Application Filed:** 4/29/19

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: Hubert C. & Jane E. Otte Revocable Living Trust
Address: 78 John Deere Drive
Glen Dale, WV 26038

Name: _____
Address: _____

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>524715.854</u>
County:	<u>Marshall</u>	Northing:	<u>4421774.991</u>
District:	<u>Washington</u>	Public Road Access:	<u>CR 12 Grandview Road</u>
Quadrangle:	<u>Moundsville, WV 7.5'</u>	Generally used farm name:	<u>Otte</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: 412-865-1433
Email: KMartz@chevron.com
Facsimile: 412-865-2403

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

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APR 30 2019
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
NOTICE OF PLANNED OPERATION

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

Date of Notice: 4/3/19 **Date Permit Application Filed:** 4/29/19

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

- CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Hubert C. & Jane E. Otte Revocable Living Trust
Address: 78 John Deere Drive
Glen Dale, WV 26038

Name: _____
Address: _____

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>524715.854</u>
County:	<u>Marshall</u>		Northing:	<u>4421774.991</u>
District:	<u>Washington</u>	Public Road Access:	<u>CR 12 Grandview Road</u>	
Quadrangle:	<u>Moundsville, WV 7.5'</u>	Generally used farm name:	<u>Otte</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: 412-865-1433
Email: KMartz@chevron.com

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

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Oil and Gas Privacy Notice:

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

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

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

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

State: West Virginia UTM NAD 83 Easting: 524715.854
County: Marshall Northing: 4421774.991
District: Washington Public Road Access: Grandview Road
Quadrangle: Moundsville 7.5' Generally used farm name: Otte
Watershed: Upper Ohio-Beaver

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

<p>*Please check the box that applies</p> <p><input type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input checked="" type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p>	<p>FOR EXECUTION BY A NATURAL PERSON</p> <p>Signature: _____</p> <p>Print Name: _____</p> <p>Date: _____</p>
	<p>FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: <u>Consol Energy Inc.</u></p> <p>By: <u>Casey V. Saunders</u></p> <p>Its: <u>Manager Coal/Gas Coordination</u></p> <p>Signature: <u>Casey V. Saunders</u></p> <p>Date: <u>09/28/2018</u></p>

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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.



47 05 + 022 10

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

March 8, 2019

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 Otte Pad A, Marshall County
Otte Pad A M15H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2019-0098 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 12 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 October 1, 2018.

Very Truly Yours,

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

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

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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

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OTTE WELL SITE EROSION AND SEDIMENT CONTROL PLAN

GRANDVIEW ROAD (C.R. 12)
WASHINGTON DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

**APPROVED
WVDEP OOG**
8/14/2019

PREPARED FOR:

CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAPOLIS, PA 15108

CONSULTANTS

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
4000 TRIANGLE LANE, SUITE 200
EXPORT, PA 15622
PHONE: 724-327-5200

CIVIL/SITE ENGINEER CONTACT: JOSH MAGARCEE
EMAIL ADDRESS: jmagarcee@cecinc.com

GEOTECHNICAL ENGINEER CONTACT: AARON LAVAGE
EMAIL ADDRESS: alavage@cecinc.com

SITE COORDINATES AND WATERSHED

START OF WELL PAD ACCESS ROAD
LATITUDE: 39.945410° N, LONGITUDE: 80.715271° W

APPROXIMATE CENTER OF WELL PAD
LATITUDE: 39.945327° N, LONGITUDE: 80.711027° W

*BASED ON NAD 83, WEST VIRGINIA NORTH ZONE

WATERSHED NAME: UPPER OHIO SOUTH
RECEIVING STREAM: UNNAMED TRIBUTARIES TO FISH RUI

STREAM AND WETLAND PERMANENT IMPACTS
(SUBJECT TO USACE NATIONAL PERMIT 39)

WETLAND 1A (PEM) - 0.02 AC

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

WETLAND 1B (PEM) - 1 LF FROM LOD

REFERENCES

- STREAMS AND WETLANDS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 12/11/2017.
- UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICS LTD. DATED 12/11/2017.
- TOPOGRAPHY SURVEYED VIA UNMANNED AERIAL VEHICLE (UAV) BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 01/25/2018. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH WEST VIRGINIA LOU, DATED 2003.
- PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.
- BACKGROUND AERIAL IMAGE FROM GOOGLE EARTH PRO, DATED 2016.

Wellhead No.	Northing	Eastng	Latitude (North)	Longitude (West)
M02H	528975.0187	182801.3584	39.9456837	80.7107742
M02H	528944.8419	182905.2954	39.9456658	80.7107260
M03H	528841.8710	182108.2285	39.9456480	80.7106777
M04H	528834.0562	182980.4555	39.9456302	80.7106295
M05H	528838.3183	182956.0875	39.9456123	80.7105813
M06H	528831.8425	1829126.5196	39.9455945	80.7105331
M07H	528914.9358	1828132.3916	39.9455767	80.7104848
M08H	528899.2888	1828126.3847	39.9455589	80.7104366
LO0A	528885.1526	1839149.7374	39.9455411	80.7103903
UL0A	528841.8297	1829138.3053	39.9455232	80.7103438
UL1H	528848.5063	1829122.8731	39.9455054	80.7102967
UL1H	528855.1814	1829109.4412	39.9454876	80.7102500
UL1H	528861.6402	1829094.7067	39.9454704	80.7102032
UL4H	528868.5371	1829062.5777	39.9454522	80.7101561
M15H	528875.2138	1829069.1451	39.9454340	80.7101076
M16H	528882.8028	1829055.7231	39.9454158	80.7100779

Note: Northings and Eastings are in 2011 State Plane M/D 83 US Survey Foot, West Virginia North



SITE LOCATION MAP

SCALE IN FEET
0 2000 4000

REFERENCE

U.S.G.S. 7.5' TOPOGRAPHIC MAP, MOUNDVILLE QUADRANGLE, WV DATED 1986. PHOTOGRAPHED 1972 AND 1976.

LEGEND

- - - - - EXISTING PROPERTY LINE
- - - - - EXISTING INDEX CONTOUR
- - - - - EXISTING INTERMEDIATE CONTOUR
- - - - - EXISTING PAVED ROADWAY
- - - - - EXISTING GAS LINE
- - - - - EXISTING WATERLINE
- - - - - EXISTING OVERHEAD ELECTRIC LINE
- - - - - EXISTING FENCE
- - - - - EXISTING WETLAND
- - - - - EXISTING THRESHLINE
- - - - - EXISTING STRUCTURE
- - - - - EXISTING UTILITY POLE
- - - - - STREAM/WETLAND DELINEATION BOUNDARY
- - - - - UAV SURVEY BOUNDARY
- A — PROPOSED LIMIT OF DISTURBANCE
- - - - - PROPOSED EDGE OF ACCESS ROAD/PAD
- - - - - PROPOSED DRIVEWAY
- - - - - PROPOSED ASPHALT PAVEMENT
- - - - - PROPOSED CONTAINMENT BERM
- - - - - PROPOSED WELLHEAD AND COLLAR
- - - - - PROPOSED INDEX CONTOUR
- - - - - PROPOSED INTERMEDIATE CONTOUR
- - - - - PROPOSED WELL PAD CURVE/FILL LINE
- - - - - PROPOSED SPOT ELEVATION
- OFS — PROPOSED COMPOST FILTER SOCK TRAP
- 180FS — PROPOSED 18-IN COMPOST FILTER SOCK
- 240FS — PROPOSED 24-IN COMPOST FILTER SOCK
- 300FS — PROPOSED 30-IN COMPOST FILTER SOCK
- - - - - PROPOSED ORANGE CONSTRUCTION FENCE
- - - - - PROPOSED ROCK CONSTRUCTION ENTRANCE
- - - - - PROPOSED INLET PROTECTION
- - - - - PROPOSED SLOPE STABILIZATION
- CH — PROPOSED CHANNEL
- ST — PROPOSED STORMWATER CULVERT
- HW — PROPOSED HWY APPROX
- UD — PROPOSED UNDERDRAIN
- - - - - PROPOSED TRENCH DRAIN

SITE LIMITS OF DISTURBANCE/IMPACTS TO NOR/FORMER LANDOWNER - HERBERT OTTE (AC)	
WELL PAD	18.5
ACCESS ROAD	4.4
STOCKPILES	3.2
TOTAL AREA	26.1
WOODED AREA DISTURBED	6.8

DWG NO	SHEET TITLE	INCLUDE	LAST REVISED
CL000	COVER SHEET	X	3/22/2019
CS000	EXISTING TOPOGRAPHIC PLAN	X	3/22/2019
ES100	OVERALL EROSION AND SEDIMENT CONTROL PLAN	X	3/22/2019
ES101	EROSION AND SEDIMENT CONTROL PLAN (1 OF 2)	X	3/22/2019
ES102	EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)	X	3/22/2019
ES103	EROSION AND SEDIMENT CONTROL DETAILS (1 OF 7)	X	3/22/2019
ES104	EROSION AND SEDIMENT CONTROL DETAILS (2 OF 7)	X	3/22/2019
ES106	EROSION AND SEDIMENT CONTROL DETAILS (3 OF 7)	X	3/22/2019
ES106	EROSION AND SEDIMENT CONTROL DETAILS (4 OF 7)	X	3/22/2019
ES107	EROSION AND SEDIMENT CONTROL DETAILS (5 OF 7)	X	3/22/2019
ES108	EROSION AND SEDIMENT CONTROL DETAILS (6 OF 7)	X	3/22/2019
ES109	EROSION AND SEDIMENT CONTROL DETAILS (7 OF 7)	X	3/22/2019
ES110	WELL PAD PLAN VIEW	X	3/22/2019
ES111	WELL PAD CROSS-SECTIONS	X	3/22/2019
ES112	ACCESS ROAD PLAN AND PROFILE	X	3/22/2019
ES113	ACCESS ROAD CROSS-SECTIONS (1 OF 2)	X	3/22/2019
ES114	ACCESS ROAD CROSS-SECTIONS (2 OF 2)	X	3/22/2019
ES115	STOCKPILE CROSS-SECTIONS	X	3/22/2019
GE500	GEOTECHNICAL SUBSURFACE SUMMARY	X	3/22/2019
GE501	GEOTECHNICAL SITE PLAN	X	3/22/2019
GE502	GEOTECHNICAL CROSS-SECTIONS	X	3/22/2019
GE503	GEOTECHNICAL TABLES AND NOTES	X	3/22/2019
GE504	GEOTECHNICAL DETAILS	X	3/22/2019
PC600	SITE PLAN WITH AERIAL	X	3/22/2019
PC601	POST-CONSTRUCTION RECLAMATION PLAN	X	3/22/2019
PC602	POST-CONSTRUCTION RECLAMATION DETAILS	X	3/22/2019

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Civil & Environmental Consultants, Inc.
4000 Triangle Lane, Suite 200 - Export, PA 15622
724-327-5200 - 800-895-0510
www.cecinc.com



REVISION RECORD

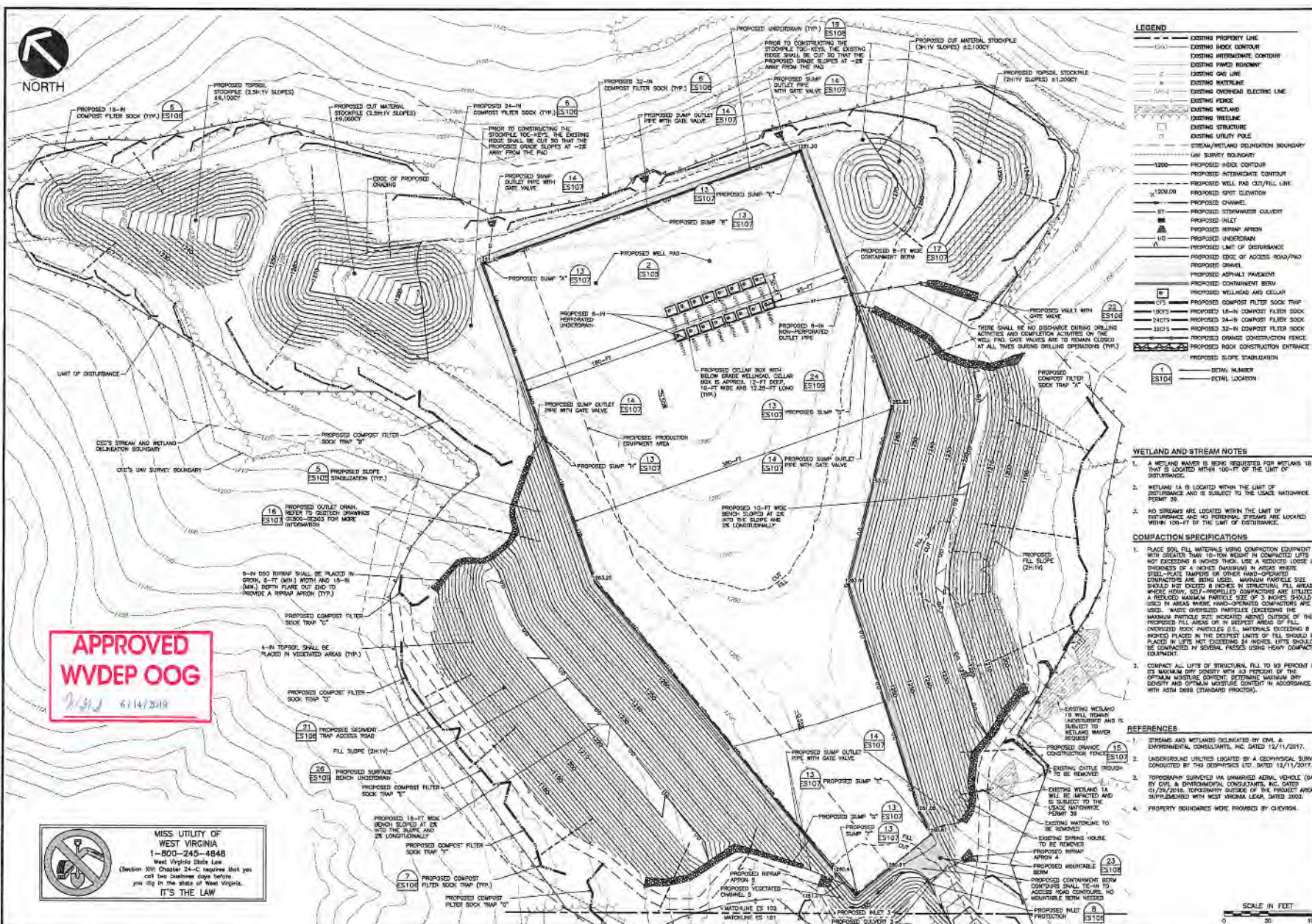
No.	Date	By	For

OTTE WELL SITE
WASHINGTON DISTRICT
MARSHALL COUNTY, WEST VIRGINIA
PREPARED FOR:
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAPOLIS, PA 15108

COVER SHEET

Project Number: 175-204
Drawing Scale: 1"=200'
Date Issued: 08/22/2019
Intent Number:
Drawn By: EMB
Checked By: JLM
Project Manager: MJS

CS 000



- ### LEGEND
- EXISTING PROPERTY LINE
 - EXISTING BOUNDARY
 - EXISTING WETLAND BOUNDARY
 - EXISTING POWER ROWWAY
 - EXISTING GAS LINE
 - EXISTING WATERLINE
 - EXISTING ELECTRICAL LINE
 - EXISTING FENCE
 - EXISTING WETLAND
 - EXISTING WETLAND
 - EXISTING WETLAND
 - EXISTING UTILITY POLE
 - STREAM/WETLAND DELINEATION BOUNDARY
 - LAW SURVEY BOUNDARY
 - PROPOSED INDEX CONTOUR
 - PROPOSED INTERIM CONTOUR
 - PROPOSED WELL PAD CUT/FILL LINE
 - PROPOSED SPOT ELEVATION
 - PROPOSED CHANNEL
 - PROPOSED STORMWATER CULVERT
 - PROPOSED INLET
 - PROPOSED REPAIR APRON
 - PROPOSED UNDERDRAIN
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED EDGE OF ACCESS ROAD/PAV
 - PROPOSED DRIVEWAY
 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED CONTAINMENT BERM
 - PROPOSED WELLSHAFT AND SELLAR
 - PROPOSED COMPOST FILTER SOCK TRAP
 - PROPOSED 18-IN COMPOST FILTER SOCK
 - PROPOSED 24-IN COMPOST FILTER SOCK
 - PROPOSED 30-IN COMPOST FILTER SOCK
 - PROPOSED ORANGE CONSTRUCTION FENCE
 - PROPOSED ROCK CONSTRUCTION ENTRANCE
 - PROPOSED SLOPE STABILIZATION
 - DETAIL NUMBER
 - DETAIL LOCATION

- ### WETLAND AND STREAM NOTES
1. A WETLAND WAIVER IS BEING REQUESTED FOR WETLAND 1B THAT IS LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE.
 2. WETLAND 1A IS LOCATED WITHIN THE LIMIT OF DISTURBANCE AND IS SUBJECT TO THE USAGE WAIVER PERFORM 39.
 3. NO STREAMS ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND NO PERMANENT STREAMS ARE LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE.

- ### COMPACTION SPECIFICATIONS
1. PLACE SOIL FILL MATERIALS USING COMPACTION EQUIPMENT WITH GREATER THAN 10-TON WEIGHT IN COMPACTED LIFTS NOT EXCEEDING 6 INCHES THICK. USE A REDUCED SOLE LIFT THICKNESS OF 4 INCHES MAXIMUM IN AREAS WHERE STEEL-PLATE ROLLERS OR OTHER HAND-OPERATED COMPACTORS ARE BEING USED. MAXIMUM PARTICLE SIZE SHOULD NOT EXCEED 8 INCHES IN STRUCTURAL FILL AREAS WHERE HEAVY, SELF-PROPELLED COMPACTORS ARE UTILIZED. A REDUCED MAXIMUM PARTICLE SIZE OF 3 INCHES SHOULD BE USED IN AREAS WHERE HAND-OPERATED COMPACTORS ARE USED. MOST OVERSIZED PARTICLES EXCEEDING THE MAXIMUM PARTICLE SIZE INDICATED ABOVE SHOULD BE REMOVED FROM THE DEEPEST LAYER OF FILL. PROPOSED ROCK PARTICLES (E.G., MATERIALS EXCEEDING 8 INCHES) PLACED IN THE DEEPEST LAYER OF FILL SHOULD BE PLACED IN LIFTS NOT EXCEEDING 24 INCHES LIFTS SHOULD BE COMPACTED IN SEVERAL PASSES USING HEAVY COMPACTION EQUIPMENT.
 2. CONTACT ALL LIFTS OF STRUCTURAL FILL TO 95 PERCENT OF ITS MAXIMUM DRY DENSITY WITH 93 PERCENT OF THE OPTIMAL MOISTURE CONTENT, DETERMINED MAXIMUM DRY DENSITY AND OPTIMAL MOISTURE CONTENT IN ACCORDANCE WITH ASTM D998 (STANDARD PRACTICE).

- ### REFERENCES
1. STREAMS AND WETLANDS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 12/11/2017.
 2. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY T49 GEOPHYSICS LTD DATED 12/11/2017.
 3. TOPOGRAPHY SURVEYED VIA UNMANNED AIRBORNE VEHICLE (UAV) BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 01/20/2018. TOPOGRAPHY OUTSIDE OF THE PROJECT AREA IS SUPPLEMENTED WITH BEST AVAILABLE LEGAL 2000.
 4. PROPERTY BOUNDARIES WERE PROVIDED BY CHEVRON.

APPROVED
WVDEP OOG

2/21/2018 6/14/2018

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CEC
Civil & Environmental Consultants, Inc.
4001 Spring Lane, Suite 200, Capitol Hill, 25302
75420-0200, MISSOURI



REV	DATE	DESCRIPTION
1	02/21/2018	ISSUED FOR PERMIT
2	06/14/2018	APPROVED BY WVDEP

NO.	DATE	DESCRIPTION
1	02/21/2018	ISSUED FOR PERMIT
2	06/14/2018	APPROVED BY WVDEP

OTTE WELL SITE
MARSHALL COUNTY, WEST VIRGINIA
PREPARED FOR
CHEVRON APPALACHIA, LLC
10000 CHEVRON DRIVE
CORNSPOUS, PA 15108

**EROSION AND
SEDIMENT CONTROL
PLAN (2 OF 2)**

Project Number: 125-224
Drawing Scale: 1/8"=1'-0"
Date Issued: 02/22/2018
Issue Number:
Drawn By: EKS
Checked By: JBB
Project Manager: MSB

ES 102

SCALE IN FEET
0 30 100