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 west virginia department of environmental protection
 

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

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Thursday, October 4, 2018  
 WELL WORK PERMIT  
 Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC  
 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Re: Permit approval for HINES M12H  
 47-051-02084-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

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

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

James A. Martin  
 Chief

Operator's Well Number: HINES M12H  
 Farm Name: DONALD HINES ET UX  
 U.S. WELL NUMBER: 47-051-02084-00-00  
 Horizontal 6A New Drill  
 Date Issued: 10/4/2018

**PERMIT CONDITIONS** 4705102084 <sup>10/05/2018</sup>

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.

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**CONDITIONS**

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

# PERMIT CONDITIONS 4705102084

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](mailto:DEPOOGNotify@wv.gov).

10/05/2018

4705102084



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west virginia department of environmental protection

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

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

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

TO: Chevron Appalachia, LLC  
800 Mountain View Drive  
Smithfield, PA 15478

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

**INTRODUCTION**

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

**FINDINGS OF THE CHIEF**

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

1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 *et seq.*, and the rules and regulations promulgated thereunder.
2. Chevron is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 800 Mountain View Drive, Smithfield, Pennsylvania.
3. On April 24, 2017, Chevron submitted well work permit applications identified as API#s 47-051-01926, 47-051-01927, 47-051-01928, 47-051-01929, 47-051-01930, 47-051-01931, 47-051-01932 and 47-051-01933. The eight proposed wells are to be located on the Hines Pad in Washington District of Marshall County, West Virginia.
4. On April 24, 2017, Civil and Environmental Consultants, Inc. (CEC), on behalf of Chevron, requested a waiver for Wetlands 2A, 2B, 3A, and 3B outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-051-01926, 47-051-01927, 47-051-01928, 47-051-01929, 47-051-01930, 47-051-01931, 47-051-01932 and 47-051-01933. Wetlands 3A and 3B will be excluded from this waiver due to being located outside the area of the pad LOD.

**CONCLUSIONS OF LAW**

1. West Virginia Code §22-1-6(d) requires, in part, that “[i]n addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to... (3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing.”
2. West Virginia Code §22-6A-2(a)(6) requires, in part, that “Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter.”
3. West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the Office of Oil and Gas shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The Office of Oil and Gas may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.”

**ORDER****4705102084**

West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetlands 2A and 2B from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-051-01926, 47-051-01927, 47-051-01928, 47-051-01929, 47-051-01930, 47-051-01931, 47-051-01932 and 47-051-01933. The Office of Oil and Gas hereby **ORDERS** that Chevron shall meet the following site construction and operational requirements for the Hines Well Pad:

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

10/05/2018

4705102084

Thus ORDERED, the 14th day of August, 2017.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

By:

  
\_\_\_\_\_  
JAMES A. MARTIN, CHIEF

**4705102084**

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

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

2) Operator's Well Number: M12H Well Pad Name: Hines

3) Farm Name/Surface Owner: Hines Public Road Access: Route 38/Campbell Hill Road

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

5) Well Type (a) Gas X Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_

Other \_\_\_\_\_

(b) If Gas Shallow X Deep \_\_\_\_\_

Horizontal X

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus; 6,245' below GL; 50' thick; pore pressure gradient 0.64 psi/ft

8) Proposed Total Vertical Depth: 6,289'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14,436'

11) Proposed Horizontal Leg Length: 6,537'

12) Approximate Fresh Water Strata Depths: 360' below GL - Base of Dunkard Group

13) Method to Determine Fresh Water Depths: No water wells within 1.5 miles - used base of Dunkard group as deepest potable water in Marshall County

14) Approximate Saltwater Depths: 1046', 1595', 1837' Below GL

15) Approximate Coal Seam Depths: Waynesburg Seam 365' Below GL; Pittsburgh Seam 640' Below GL

16) Approximate Depth to Possible Void (coal mine, karst, other): No Void expected

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

(a) If Yes, provide Mine Info: Name: Ireland Mine  
Depth: 640' Below GL  
Seam: Pittsburgh Coal  
Owner: Murray Energy Corp owns Ireland Mine; Consol owns Coal Pillar wells will be drilled in.

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**4705102084**

18)

**CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New			60	60	CTS
Fresh Water	13.375	New	J-55	54.5	410	410	CTS
Coal							
Intermediate	9.625	New	L-80	40	1,858	1,858	CTS
Production	5.50	New	P110	20	14,436	14,436	2358 (500' below 9.625" shoe)
Tubing							
Liners							

*Handwritten signature*  
3/29/18

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	30					
Fresh Water	13.375	17.5	0.38	2730	1911	Class A	1.2
Coal							
Intermediate	9.625	12.375 & 12.25	0.395	5750	2768	Class A	1.19
Production	5.5	8.75 & 8.5	0.361	14360	9975	Class A, G, or H	1.25
Tubing							
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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

Drill vertical depth to the Marcellus at an estimated total vertical depth of approximately 6,289 feet. Drill horizontal leg.

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

Frac with 400,000 lb. sand with 9,525 bbl fluid per stage; anticipated maximum pressure is 9,400 and anticipated max rate in BPM is 100

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 8 acres

22) Area to be disturbed for well pad only, less access road (acres): 2 acres

23) Describe centralizer placement for each casing string:

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

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

For the Water String the blend will contain class A cement, 3% CaCl<sub>2</sub>, and flake. The intermediate will contain class A cement, 3% CaCl<sub>2</sub>, 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 T<sub>1</sub> 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.

Office of Oil and Gas  
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\*Note: Attach additional sheets as needed.

10/05/2018

4705102084

### HINES PAD CEMENT ADDITIVES

- For the Water String the blend will contain class A cement, 3% CaCl<sub>2</sub>, and flake.
- The intermediate will contain class A cement, 3% CaCl<sub>2</sub>, 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

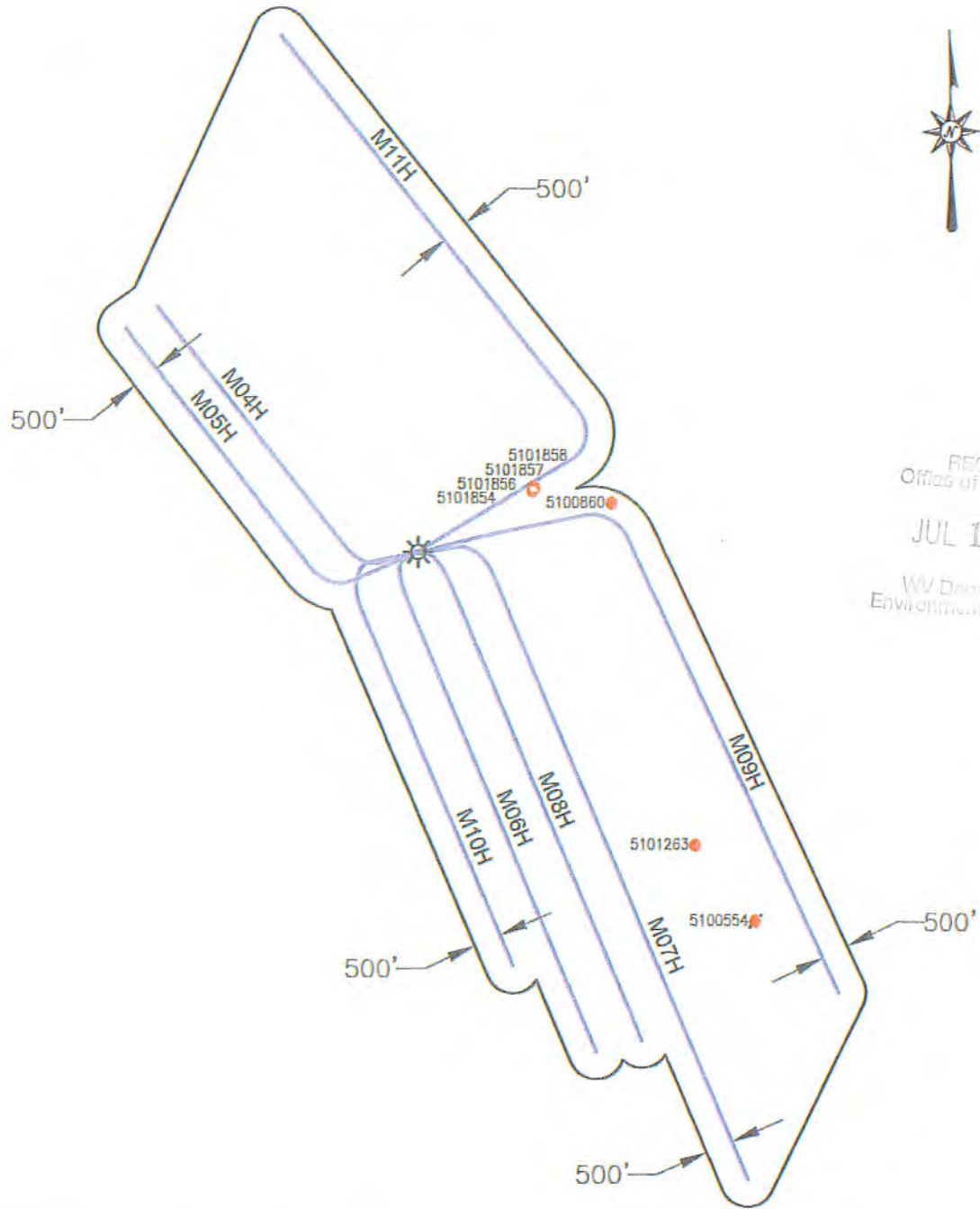
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Chevron		Hines M12H									
Washington Twp, Marshall Co, WV										Ground Level Elev. (ft above SL): 1,120	
DRILLING FLUID / BIT TYPE / TFA	CENTRALIZER PROGRAM	CASING SIZE / FORMATION	DEPTH		WELLHEAD DESIGN		HOLE SIZE (IN)	CASING SPECS	CEMENT PROGRAM		
			MD (FT)	TVD (FT)	INC	AZM					
Core Barrel / Auger	2 Bowspring per Jt	20" Conductor	60	60			26	<b>Conductor</b> 20" API 5L Minimum 40 ft from GL or at least 10 ft into bedrock	Grout to Surface		
	<b>Bow Spring:</b> (1) on shoe track w/ stop collar & (1) per jt over coupling to surface							<b>Surface Casing</b> 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (Jt Strength 1,000 lbs) 853	<b>Surface Blend (Class A)</b> Cement to Surface		
		13-3/8" Casing	410	410			17.5	Minimum 50 ft past deepest known fresh water			
	<b>Bow Spring:</b> (1) on shoe track w/ stop collar & (1) per 3 jts over coupling							<b>Intermediate Casing</b> 9-5/8" 40# L-80 BTC 0.395" Wall Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.679 Burst (psi) 5,750 Collapse (psi) 3,080 Yield (Jt Strength 1,000 lbs) 916	<b>Intermediate II Blend (Class A)</b> Cement to Surface		
		9-5/8" Casing	1,858	1,858			12.375 - 12.25				
	<b>Bow Spring:</b> (1) per every other jt over coupling  <b>SpiraGlider or Centek:</b> (1) per jt of csg to KOP							<b>Production Casing</b> 5-1/2" 20# P-110, 0.361" Wall Coupling OD (in) 6.300 ID (in) 4.778 Drift ID (in) 4.653 Burst (psi) 14,360 Collapse (psi) 12,090 Yield (Jt Strength 1,000 lbs) 729	<b>Production Lead Slurry</b> Cement to 500' below 9-5/8" shoe		
	<b>Float Equip.</b>  <b>Non-Conservation</b>	5-1/2" Casing	14,436				8.75 - 8.6	<b>Production Tail Slurry</b> TOC minimum 200' above Marcellus			

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

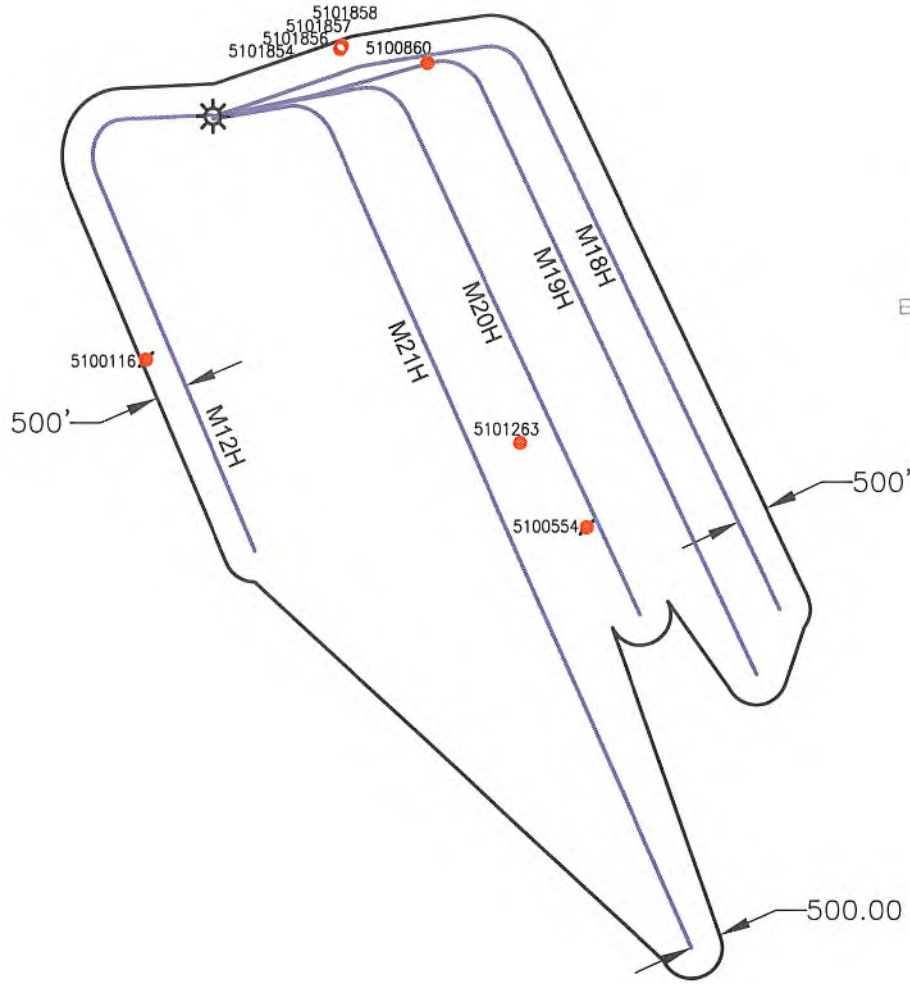
PREPARED FOR:  
 CHEVRON APPALACHIA, LLC  
 800 MOUNTAIN VIEW DRIVE  
 SMITHFIELD, PA 15478

LEGEND

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

**HINES**  
 AREA OF REVIEW MAP  
 MARSHALL COUNTY  
 WASHINGTON DISTRICT  
 WEST VIRGINIA

TOPO QUAD: MOUNDSVILLE, WV  
 SCALE: 1" = 3000'  
 DATE: MARCH 2, 2017



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

**LEGEND**

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

**HINES BATCH 2  
AREA OF REVIEW MAP  
MARSHALL COUNTY  
WASHINGTON DISTRICT  
WEST VIRGINIA**

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TOPO QUAD: MOUNDSVILLE, WV

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SCALE: 1" = 300'

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DATE: FEBRUARY 5, 2018

4705102084

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
47-051-00860	CNX Gas Company LLC	CNX Gas Company LLC	Active	39.908767	-80.686817	840'	Pittsburgh Seam	None
47-051-01263	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Active	39.892007	-80.681121	Unknown	Unknown	None
47-051-00554	Kentucky Central & Co.	Unknown	Plugged	39.888303	-80.677210	1441'	Pottsville	None
47-051-01854	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909336	-80.691893	6317	Marcellus	None
47-051-01856	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909383	-80.691856	6317'	Marcellus	None
47-051-01857	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909430	-80.691819	6317'	Marcellus	None
47-051-01858	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909477	-80.691782	6317'	Marcellus	None
47-051-00116	Unknown	Unknown	Plugged	39.895415	-80.702829	Unknown	Unknown	None

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WW-9  
(4/16)

4705102086 10/05/2018

API Number 47 - \_\_\_\_\_ - \_\_\_\_\_  
Operator's Well No. Hines M12H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 49449935

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

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

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

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

Proposed Disposal Method For Treated Pit Wastes:

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

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

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

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

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

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

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

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

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

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

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

Company Official Signature Jenny Hayes  
Company Official (Typed Name) Jenny Hayes  
Company Official Title Permitting Team Lead

Subscribed and sworn before me this 14th day of March, 2018

Laura Savage

Notary Public

My commission expires September 17, 2018

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



**Chevron Appalachia, LLC**

Proposed Revegetation Treatment: Acres Disturbed 8 acres Prevegetation pH per soils testing report

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

Fertilizer type 10-20-20

Fertilizer amount 300 lbs/acre

Mulch 3, 5 for winter stabilization Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type lbs/acre

Seed Type lbs/acre

See Attached

See Attached

**Attach:**

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, 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 Tricholva*

Comments: \_\_\_\_\_

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WV Department of  
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Title: Oil & Gas Inspector

Date: 3/27/18

Field Reviewed? (  ) Yes (  ) No

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

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 Office of Air and Gas  
 JUL 19 2018  
 Vermont Department of  
 Environmental Protection

4705102084



**Chevron**

**Appalachian LLC  
WV Well Site Safety Plan  
Pad: **Hines Pad A**  
**Well # M12H****

*JW*  
*3/27/18*

**1256 Campbell Hill Road  
Moundsville, WV 26041  
Washington District  
Marshall County, WV**

**Access Point – [39.904947°N, 80.693363°W]  
Well Site – [39.906387°N, 80.699914°W]  
Marshall County, West Virginia**

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JUL 19 2018

WV Department of  
Environmental Protection

BHL is located on topo map 10,801 feet south of Latitude: 39° 55' 00"  
 SHL is located on topo map 3,777 feet south of Latitude: 39° 55' 00"

NOTES:

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

**SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS**

**SURFACE HOLE LOCATION (SHL)**  
 UTM 17-NAD83(M)  
 N:4417400.513  
 E:525708.256  
 NAD83, WV NORTH  
 N:514465.864  
 E:1632085.721

**APPROX. LANDING POINT**  
 UTM 17-NAD83(M)  
 N:4417400.513  
 E:525146.57  
 NAD83, WV NORTH  
 N:513470.214  
 E:1630225.394

**BOTTOM HOLE LOCATION (BHL)**  
 UTM 17-NAD83(M)  
 N:4415261.15  
 E:525960.04  
 NAD83, WV NORTH  
 N:507431.723  
 E:1632794.593

BHL is located on topo map 8,336 feet west of Longitude: 80° 40' 00"  
 SHL is located on topo map 9,136 feet west of Longitude: 80° 40' 00"

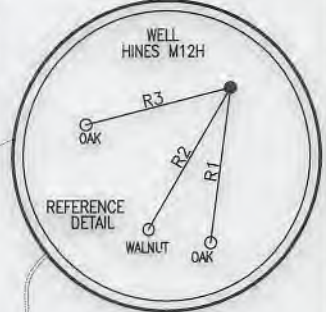
**WELL PAD ORIENTATION DETAIL**

M01HC	M14HC	U15HC	U26HC
M02HC	M15HC	U16HC	U27HC
M03HC	M12HC	U17HC	U28HC
M04HC	M11HC	U18HC	U29HC
M05HC	M10HC	U19HC	U30HC
M06HC	M09HC	U20HC	U31HC
M07HC	M08HC	U21HC	U32HC
M08HC	M07HC	U22HC	U33HC
M09HC	M06HC	U23HC	U34HC
M10HC	M05HC	U24HC	U35HC
M11HC	M04HC	U25HC	U36HC
M12HC	M03HC	U26HC	U37HC
M13HC	M02HC	U27HC	U38HC
M14HC	M01HC	U28HC	U39HC
M15HC	M00HC	U29HC	U40HC

N.T.S.

**LEGEND**

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



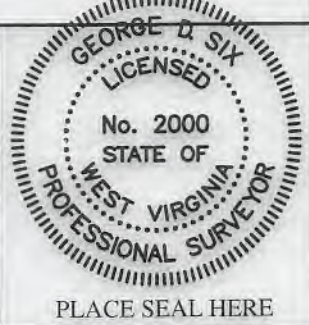
LINE	BEARING	DISTANCE
R1	S 07°25'46" W	197.66'
R2	S 30°23'40" W	207.80'
R3	S 75°55'28" W	191.19'
R4	N 18°40'30" E	626.36'
R5	N 79°50'58" E	2241.88'
R6	S 66°12'20" E	1385.53'

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

FILE #: HINES M12H  
 DRAWING #: HINES M12H  
 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: SEPTEMBER 24, 2018  
 OPERATOR'S WELL #: HINES M12H  
 API WELL #: 47 51 02084  
 STATE COUNTY PERMIT

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

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

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

SURFACE OWNER: DONALD HINES ET UX ACREAGE: 114.934±

OIL & GAS ROYALTY OWNER: DONALD HINES ET UX ACREAGE: 418.613±

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: 6,289'± TMD: 14,436.61'±

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

# HINES

## M12H

### PAGE 2 OF 2

10/05/2018

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
B	WILLIAM F. RULONG	14-12/25
	CHARLES BURTON RULONG	
	HAROLD DEAN FURBEE	
	DALE FRANCIS FURBEE	
	ROBERT L. RULONG	
	DRU ELLA FOX	
	JOHN T. MORRIS	
	LYNN ELLEN COOK	
	ETHEL M. RULONG	
	TERRY LEE RULONG	
	RICHARD J. RULONG	
	TRACEY LYNN RULONG	
	GARY MORRISON	
	ELIZABETH Y. MORRISON	
	ROGER GLEN RULONG	
LIMESTONE PRESBYTERIAN CHURCH TRUSTEES		
CLYDE DOWLER ET UX		
LAURA J. REYES		
C	OSCAR JACKSON GOODNIGHT ET UX	14-12/67
D	ARNIE N. GOODNIGHT ET UX	14-12/66
E	PAUL DAVID YOHO	14-12/65
	SHIRLEY MCWHORTER	
	IRENE GLOVER	
	CARL WAYNE YOHO	
	CAROLYN GAUGHAN	
JILL YOHO-WHITE		
F	*DELBERT MARSHALL VAN SCYOC ET UX	14-12/46
G	SHANNETTE OMEAR	14-12/45
H	SANDRA K. FULLER	14-12/33
J	DOUGLAS L. PARSONS	14-12/34
	DONALD M. BOSTON ET UX	
	DAVID D. PARSONS ET UX	
	JAMES CRAIG PARSONS	
	ROBERT B. FULLER TEST TRUSTEE	
	GRACE I. SCARBOROUGH	
K	KEVIN W. ROGERS JR., ET UX	14-12/37
L	CAROL SUE ONEIL CROFT	14-12/35
	THOMAS PARSONS	
	TEDDY HOWARD PARSONS	
	KENNETH ROBERT PARSONS	
	SANDRA K. FULLER	
	SHANNETTE OMEAR	
	BERNICE MAE MCKIMMIE	
	DONALD HERBERT PARSONS	
	DONNA GASSAWAY IAMS	
	PATRICIA A. PARSONS	
	DOUGLAS L. PARSONS	
	GRACE SCARBOROUGH	
	FRANKI LEE PARSONS	
	DANIEL F. PARSONS	
	DAVID D. PARSONS ET UX	
	DARLENE BOSTON ET VIR	
	DANNY K. WALKER	
MARY MABLE MORGAN AIF PHYLLIS JEAN CONLEY		
RICHARD BAKER ET UX		
HILLVIEW TERRACE CHURCH OF CHRIST		
ROBERT FULLER TEST TRUSTEE		
EVAN ROBERT VERBA		
M	RICHARD C. YOHO ET UX	14-13/42
N	RICHARD L. MARTIN ET UX	14-13/41.1
P	JENNIFER KELCH	14-13/26
Q	THOMAS AND EVELYN JOHNSON	14-13/22

**SURFACE HOLE LOCATION (SHL)**

**UTM 17-NAD83(M)**  
**N:4417400.513**  
**E:525708.256**  
 NAD83, WV NORTH  
 N:514465.864  
 E:1632085.721

**APPROX. LANDING POINT**

**UTM 17-NAD83(M)**  
**N:4417087.71**  
**E:525146.57**  
 NAD83, WV NORTH  
 N:513470.214  
 E:1630225.394

**BOTTOM HOLE LOCATION (BHL)**

**UTM 17-NAD83(M)**  
**N:4415261.15**  
**E:525960.04**  
 NAD83, WV NORTH  
 N:507431.723  
 E:1632794.593

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX	14-12/30
2	TERRY L. DERROW ET UX	14-12/30.3
3	ARNIE N. GOODNIGHT ET UX	14-12/25
4	OSCAR JACKSON & ARLENE J. GOODNIGHT	14-12/67
5	ARNIE N. GOODNIGHT ET UX	14-12/66
6	DELBERT M. & SYLVIA I. VAN SCYOC - LIFE	14-12/65
7	*DELBERT M. & SYLVIA I. VAN SCYOC - LIFE	14-12/46
8	HENRY T. PARSONS EST ET AL	14-12/45
9	HENRY T. PARSONS EST ET AL	14-12/33
10	HENRY T. PARSONS EST ET AL	14-12/34
11	KEVIN W. JR. & REBECCA ROGERS	14-12/37
12	CAROL SUE CROFT-ONEIL ET VIR	14-12/35
13	RICHARD C. & CARLA V. YOHO	14-13/42
14	RICHARD L. & DARLENE K. MARTIN	14-13/41.2
15	RICHARD L. & DARLENE K. MARTIN	14-13/41.1
16	JENNIFER KELCH	14-13/26
17	EVELYN RUTH JOHNSON	14-13/22

\* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

**SEPTEMBER 24, 2018**

WW-6A1  
(5/13)

Operator's Well No. Hines M12H

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

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

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

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

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Office of Oil and Gas

JUL 19 2018

WV Department of  
Environmental Protection

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

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

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

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

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

AUG 11 2018

WV Department of  
Environmental Protection

Hines SW Unit #12H - MARC - MLS - FINAL								
Plad ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	14-12-30	HINES DONALD ET UX	Chevron U.S.A. Inc	16.00%	774/290	n/a	n/a	n/a
B	14-12-25	RULONG WILLIAM F - SFX	Chevron U.S.A. Inc	14.00%	820/241	n/a	n/a	n/a
		RULONG CHARLES BURTON - SFX	Chevron U.S.A. Inc	14.00%	820/269	n/a	n/a	n/a
		FURBEE HAROLD DEAN - SFX	Chevron U.S.A. Inc	14.00%	820/325	n/a	n/a	n/a
		FURBEE DALE FRANCIS - SFX	Chevron U.S.A. Inc	14.00%	820/219	n/a	n/a	n/a
		RULONG ROBERT L - SFX	Chevron U.S.A. Inc	14.00%	820/212	n/a	n/a	n/a
		FOX DRU ELLA - SFX	Chevron U.S.A. Inc	14.00%	820/313	n/a	n/a	n/a
		MORRIS JOHN T - SFX	Chevron U.S.A. Inc	14.00%	820/344	n/a	n/a	n/a
		COOK LYNN ELLEN - SFX	Chevron U.S.A. Inc	14.00%	828/430	n/a	n/a	n/a
		RULONG ETHEL M SFX	Chevron U.S.A. Inc	14.00%	831/396	n/a	n/a	n/a
		RULONG TERRY LEE - SFX	Chevron U.S.A. Inc	14.00%	831/389	n/a	n/a	n/a
		RULONG RICHARD J - SFX	Chevron U.S.A. Inc	14.00%	831/518	n/a	n/a	n/a
		RULONG TRACEY LYNN - SFX	Chevron U.S.A. Inc	14.00%	838/389	n/a	n/a	n/a
		MORRISON GARY - SFX	Chevron U.S.A. Inc	16.00%	847/71	n/a	n/a	n/a
		MORRISON ELIZABETH Y - SFX	Chevron U.S.A. Inc	16.00%	847/68	n/a	n/a	n/a
		RULONG ROGER GLEN - SFX	Chevron U.S.A. Inc	18.00%	848/308	n/a	n/a	n/a
		TRUSTES LIMESTONE PRESBYTERIAN CHURCH - SFX	Chevron U.S.A. Inc	18.00%	854/86	n/a	n/a	n/a
		DOWLER CLYDE ET UX - SFX	Chevron U.S.A. Inc	18.00%	868/72	n/a	n/a	n/a
REYES LAURA J - SFX	Chevron U.S.A. Inc	16.00%	882/392	n/a	n/a	n/a		
C	14-12-67	GOODNIGHT OSCAR JACKSON ET UX	Chevron U.S.A. Inc	18.00%	837/322	n/a	n/a	n/a
D	14-12-66	GOODNIGHT ARNIE N ET UX	Chevron U.S.A. Inc	16.00%	831/445	n/a	n/a	n/a
E	14-12-65	YOHO PAUL DAVID - SFX	Chevron U.S.A. Inc	16.00%	836/312	n/a	n/a	n/a
		MCWHORTER SHIRLEY - SFX	Chevron U.S.A. Inc	16.00%	836/263	n/a	n/a	n/a
		GLOVER IRENE - SFX	Chevron U.S.A. Inc	16.00%	838/425	n/a	n/a	n/a
		YOHO CARL WAYNE - SFX	Chevron U.S.A. Inc	16.00%	835/85	n/a	n/a	n/a
		GAUGHAN CAROLYN - SFX	Chevron U.S.A. Inc	16.00%	838/432	n/a	n/a	n/a
		YOHO-WHITE JILL - SFX	Chevron U.S.A. Inc	16.00%	836/305	n/a	n/a	n/a
F	14-12-46	VAN SCYOC DELBERT MARSHALL ET UX	Chesapeake Appalachia, LLC	14.00%	697/45	30/461 Chesapeake Appalachia, L.L.C. to Chevron U.S.A. Inc.	n/a	n/a
G H I	14-12-45; 14-12-33; 14-12-34	OMEAR SHANNETTE - SFX	Chevron U.S.A. Inc	18.00%	837/297	n/a	n/a	n/a
		FULLER SANDRA K - SFX	Chevron U.S.A. Inc	18.00%	837/182	n/a	n/a	n/a
		PARSONS DOUGLAS L - SFX	Chevron U.S.A. Inc	18.00%	837/279	n/a	n/a	n/a
		BOSTON DONALD M ET UX - SFX	Chevron U.S.A. Inc	18.00%	837/287	n/a	n/a	n/a
		PARSONS DAVID D ET UX - SFX	Chevron U.S.A. Inc	18.00%	837/172	n/a	n/a	n/a

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WV Department of  
Environmental Protection

		Hines SW Unit #12H - MARC -			MLS - FINAL			
Plad ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
		PARSONS JAMES CRAIG	Chevron U.S.A. Inc	18.00%	837/177	n/a	n/a	n/a
		FULLER ROBERT B TEST TRSTE	Chevron U.S.A. Inc	18.00%	837/187	n/a	n/a	n/a
		SCARBOROUGH GRACE I - SFX	Chevron U.S.A. Inc	18.00%	864/20	n/a	n/a	n/a
K	14-12-37	ROGERS KEVIN W JR ET UX	TriEnergy Holdings, LLC	15.00%	772/401	28/348 TriEnergy Holdings to Chevron U.S.A. Inc.	n/a	n/a
L	14-12-35	ONEIL CROFT CAROL SUE	Chevron U.S.A. Inc	18.00%	837/341	n/a	n/a	n/a
		PARSONS THOMAS - SFX	Chevron U.S.A. Inc	18.00%	860/640	n/a	n/a	n/a
		PARSONS TEDDY HOWARD - SFX	Chevron U.S.A. Inc	18.00%	860/628	n/a	n/a	n/a
		PARSONS KENNETH ROBERT - SFX	Chevron U.S.A. Inc	18.00%	860/622	n/a	n/a	n/a
		FULLER SANDRA K - SFX	Chevron U.S.A. Inc	18.00%	860/610	n/a	n/a	n/a
		OMEAR SHANNETTE - SFX	Chevron U.S.A. Inc	18.00%	860/604	n/a	n/a	n/a
		MCKIMMIE BERNICE MAE - SFX	Chevron U.S.A. Inc	18.00%	860/616	n/a	n/a	n/a
		PARSONS DONALD HERBERT	Chevron U.S.A. Inc	18.00%	860/634	n/a	n/a	n/a
		IAMS DONNA GASSAWAY - SFX	Chevron U.S.A. Inc	18.00%	865/68	n/a	n/a	n/a
		PARSONS PATRICIA A - SFX	Chevron U.S.A. Inc	18.00%	872/415	n/a	n/a	n/a
		PARSONS DOUGLAS L - SFX	Chevron U.S.A. Inc	18.00%	865/312	n/a	n/a	n/a
		SCARBOROUGH GRACE - SFX	Chevron U.S.A. Inc	18.00%	864/590	n/a	n/a	n/a
		PARSONS FRANKI LEE - SFX	Chevron U.S.A. Inc	18.00%	868/510	n/a	n/a	n/a
		PARSONS DANIEL F - SFX	Chevron U.S.A. Inc	18.00%	868/622	n/a	n/a	n/a
		PARSONS DAVID D ET UX - SFX	Chevron U.S.A. Inc	18.00%	868/616	n/a	n/a	n/a
		BOSTON DARLENE ET VIR - SFX	Chevron U.S.A. Inc	18.00%	867/564	n/a	n/a	n/a
		WALKER DANNY K - SFX	Chevron U.S.A. Inc	18.00%	871/321	n/a	n/a	n/a
		MORGAN MARY MABLE AIF PHYLLIS JEAN CONLEY - SFX	Chevron U.S.A. Inc	18.00%	872/409	n/a	n/a	n/a
BAKER RICHARD ET UX - SFX	Chevron U.S.A. Inc	18.00%	889/253	n/a	n/a	n/a		
HILLVIEW TERRACE CHURCH OF CHRIST - SFX	Chevron U.S.A. Inc	18.00%	889/256	n/a	n/a	n/a		
Fuller Robert Test Trste	Chevron U.S.A. Inc	18.00%	935/198	n/a	n/a	n/a		
VERBA EVAN ROBERT - SFX	Chevron U.S.A. Inc	18.00%	948/183	n/a	n/a	n/a		
M	14-13-42	YOHO RICHARD C. ET UX	TriEnergy Holdings, LLC	18.00%	706/315	24/180 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a
N	14-13-41.1	MARTIN RICHARD L ET UX	TriEnergy Holdings, LLC	18.00%	707/411	24/180 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a

4705102084



Hines SW Unit #12H - MARC - MLS - FINAL								
Plad ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
P	14-13-26	KELCH JENNIFER	Chesapeake Appalachia, LLC	16.00%	698/393	30/392 Chesapeake Appalachia, L.L.C. to Chevron U.S.A. Inc.	n/a	n/a
Q	14-12-22	JOHNSON THOMAS AND EVELYN	TriEnergy Holdings, LLC	16.00%	694/274	24/180 TriEnergy Holdings, LLC to NPAR, LLC	756/332 NPAR, LLC to Chevron U.S.A. Inc.	n/a

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WV Department of  
Environmental Protection

4705102084



10/05/2018

4705102084

**Brandon Means**  
Land Representative

February 27, 2018

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

RE: Hines 12H, 18H, 19H, 20H, 21

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,

Brandon Means  
Land Representative

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Office of Oil and Gas  
JUL 19 2018  
WV Department of  
Environmental Protection

**Brandon Means**  
**Chevron North America Exploration and Production Company**  
(a division of Chevron U.S.A. Inc.)  
700 Cherrington Parkway, Coraopolis, PA 15108  
Tel 412 865 3449  
bmeans@chevron.com

4705102084

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

Date of Notice Certification: 03/19/2018

API No. 47- \_\_\_\_\_ - \_\_\_\_\_  
Operator's Well No. 12H  
Well Pad Name: Hines

**Notice has been given:**

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

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>525708.256</u>
County: <u>Marshall</u>	Northing: <u>4417400.513</u>
District: <u>Washington</u>	Public Road Access: <u>Route 38 Campbell Hill Road</u>
Quadrangle: <u>Moundsville, WV 7.5'</u>	Generally used farm name: <u>Hines</u>
Watershed: <u>Middle Grave Creek/Grave Creek</u>	

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

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p align="center"><b>OOG OFFICE USE ONLY</b></p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p>
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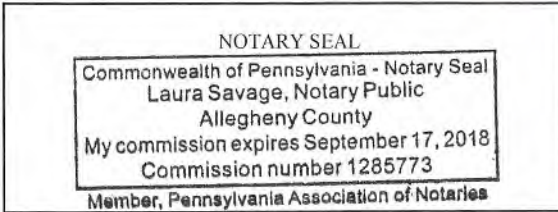
**Required Attachments:**

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

**Certification of Notice is hereby given:**

THEREFORE, I Jenny Hayes, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	<u>Chevron Appalachia, LLC</u>	Address:	<u>700 Cherrington Parkway</u>
By:	<u>Jenny Hayes</u>		<u>Coraopolis, PA 15108</u>
Its:	<u>Permitting Team Lead</u>	Facsimile:	<u>412-865-2403</u>
Telephone:	<u>412-865-1533</u>	Email:	<u>JZYK@chevron.com</u>



*Jenny Hayes* COMMONWEALTH OF PENNSYLVANIA  
 COUNTY OF ALLEGHENY  
 Subscribed and sworn before me this 19th day of June 2018.  
*Laura Savage* Notary Public  
 My Commission Expires September 17, 2018

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto: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: 3/12/18 Date Permit Application Filed: 7/18/18

Notice of:

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

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

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

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

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

SURFACE OWNER(s)

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

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

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

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE

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

COAL OPERATOR

Name: Murray Energy Corporation  
Address: 46229 National Road  
St Clairsville, OH 43950

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

Name: See Attached  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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WV Department of  
Environmental Protection

4705102084

API NO. 47-

OPERATOR WELL NO. M12H

Well Pad Name: Hines

10/05/2018

**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

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

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

**Well Location Restrictions**

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

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

**Water Well Testing:**

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

**Water Testing Laboratories:**

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

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

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

**Written Comment:**

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

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> 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)

4705102084  
API NO. 47- \_\_\_\_\_ - \_\_\_\_\_ 10/05/2018  
OPERATOR WELL NO. M12H  
Well Pad Name: Hines

**Notice is hereby given by:**

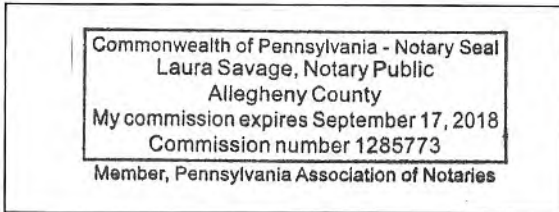
Well Operator: Chevron Appalachia, LLC  
Telephone: 412-865-1533  
Email: jzyk@chevron.com

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

**Oil and Gas Privacy Notice:**

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

*Jenny Hays*



Commonwealth of Pennsylvania  
County of Allegheny  
Subscribed and sworn before me this 13th day of March, 2018.  
Laura Savage Notary Public  
My Commission Expires September 17, 2018

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Attachment to WW-6A

API No. 47- \_\_\_\_\_ - \_\_\_\_\_

OPERATOR WELL NO. M12HWell Pad Name: Hines

- COAL OWNER OR LESSEE**  
Name: Consol Mining Company LLC ✓  
Address: 1000 Consol Energy Drive  
Canonsburg, PA 15317
- COAL OPERATOR**  
Name: Murray Energy Corporation ✓  
Address: 46229 National Road  
St. Clairsville, OH 43950
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**  
Name: Bobby G. Baker ✓  
Address: 742 Toms Run Road  
Moundsville, WV 26041
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR** ✓  
Name: Mark Grandstaff ✓  
Address: 762 Toms Run Road  
Moundsville, WV 26041
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR** ✓  
Name: Edward D. Knuth ✓  
Address: 747 Toms Run Lane  
Moundsville, WV 26041
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**  
Name: Morgan Lacefield ✓  
Address: 1851 Campbell Hill Road  
Moundsville, WV 26041
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR**  
Name: Tobias G & Jessica D Brown ✓  
Address: 873 Toms Run Lane  
Moundsville, WV 26041

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# WATER SUPPLY EXHIBIT HINES PAD

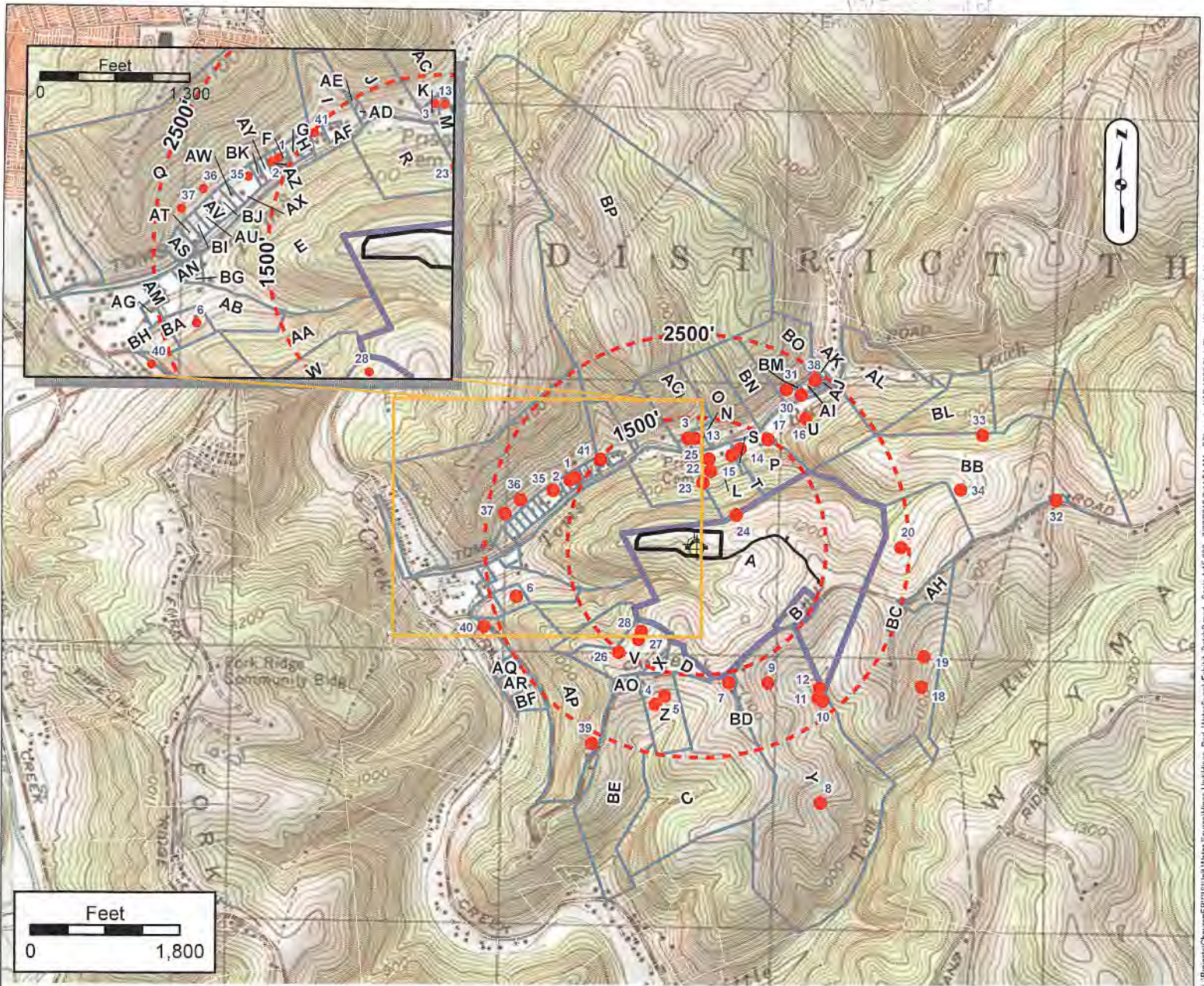
## 4705102084

## HINES PAD

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JUL 19 2018

10/05/2018  
GEM



### LOT OWNERS

Label	OWNER	TM	Label	OWNER	TM	Label	OWNER	TM	Label	OWNER	TM
A	HINES DONALD ET UX	25-14 12003000000000	Q	HALL CHARLES R	75-14 12002400000000	AG	GOODNIGHT ARNIE	75-14 12006700020000	AV	YOHIO LYLE WAYNE	25-14 12000700000000
B	GRISSETT LANCE J ET UX	25-14 12003000000000	R	STATE OF W VA	25-14 12002000000000	AH	ROBERTS EARNEST L ET UX	25-14 12009100010000	AW	PYLES RONNIE E ET UX	25-14 90041000000000
C	PARSONS HENRY T ET ETAL	25-14 12003000000000	S	FITZGERALDS JOHN F & ANGELA L	25-14 12001700010000	AI	PHILS RONNIE ET UX	25-14 80040000000000	AX	WADE RUSTY	25-14 90042000000000
D	WOOD CLIFFINE HINES	25-14 12003000000000	T	KNUTH EDWARD DAVID & KATHY JO	25-14 12001800010000	AJ	THOMAS WILLIAM H ET UX	75-14 80019000000000	AY	SMITH PAUL K & BETTY -LIFE	25-14 12000900000000
E	GOODNIGHT ARNIE N ET UX	25-14 12002500000000	U	BELICE JOHN A ET UX	25-14 12002000000000	AK	THOMAS WILLIAM H ET UX	75-14 80019000000000	BA	GOODNIGHT OSCAR J	25-14 12007000000000
F	BROWN TERRY K ET UX	25-14 12001100000000	V	LACEFIELD MORGAN	25-14 12003000010000	AL	BRADY ROGER A ET UX	25-14 80056000000000	BB	RINE OKEY L JR	25-14 11000100000000
G	TUCKER JESS L & HELEN	25-14 12001200000000	W	LACEFIELD MORGAN T	25-14 12003000000000	AM	HARTLEY PHYLLIS C	25-14 12006700000000	BC	HOSKINS PATRICIA SUE	25-14 12005100000000
H	YOHIO RAYMOND P	25-14 12001300000000	X	WDOODS CLESLIE	25-14 12003000000000	AN	HARTLEY PHYLLIS C	25-14 12006700000000	BD	FULLER ROBERT B ET UX	25-14 12005300010000
I	MCCARTNEY MICHAEL J ET UX	25-14 90046000000000	Y	GOULDSBERRY DOUGLAS EDWARD ET	75-14 12003200000000	AO	PARSONS HENRY T JR & VIOLET	25-14 12004500000000	BE	PARSONS HENRY T ET ETAL	25-14 12004500000000
J	LUCAS LEONARD L ET UX	25-14 90045000000000	Z	BOSTON DONALD M ET UX	25-14 12003000010000	AP	VAN SCYOC DEBBERT M ET UX	25-14 12005500000000	BF	HARVEY TH GEORGE B ET UX	25-14 12006400000000
K	BAKER ROBBY C ET UX	25-14 90044001000000	AA	GOODNIGHT ARNIE N ET UX	25-14 12001800000000	AQ	JENKINS MICHAEL LEE ET UX	25-14 12004400000000	BG	GOODNIGHT ARNIE	25-14 12006500000000
L	KNUTH EDWARD DAVID ET UX	25-14 12002700000000	AB	GOODNIGHT GEORGE T UX ESTS	25-14 12002700000000	AR	SCHWELER JOHN W & TALINE J	25-14 12004400000000	BH	GOODNIGHT ARNIE	25-14 12006500000000
M	KRANSTATT ELVER JR ET UX	25-14 90044000000000	AC	LUCAS LEONARD L ET UX	25-14 90044000000000	AS	THOMAS HENRY T ET UX	25-14 12004400000000	BI	HOTT MARVIN JUNIOR ET UX LIFE	25-14 12002000000000
N	BAKER BRUCE W ET UX	25-14 90044000000000	AD	LUCAS LEONARD L ET UX	25-14 90044000000000	AT	WHITELATCH DEBBIE ANN	25-14 12004400000000	BJ	YOHIO LYLE WAYNE	25-14 12002000000000
O	OLIVER GERALD ET AL	25-14 90044000000000	AE	LUCAS LEONARD L ET UX	25-14 90044000000000	AU	FOSTER NORMA	25-14 12004400000000	BK	CHURCH OF GOD 7TH DAY TRUSTLES	25-14 12002000000000
P	BROWN TORIAS & JESSICA	25-14 12002800000000	AF	MCCARTNEY MICHAEL J ET UX	25-14 90046000000000	AV	FOSTER NORMA	25-14 12004500000000	BL	BRADY ROGER A ET UX	25-14 90056000000000

Surface Owner: DONALD HINES

County: MARSHALL

Oil/Gas Owner: DONALD HINES

Township: MOUNDSVILLE, WV

GROUNDWATER & ENVIRONMENTAL

Surveyor: SERVICES, INC.

Well Operator: CHEVRON APPALACHIA, LLC

Address: 301 COMMERCE PARK DR

Address: 700 CHERRINGTON PARKWAY

CRANBERRY TOWNSHIP, PA 16066

CORAOPOLIS, PA 15108

Phone: 724-564-3700

Phone: 800-267-2549

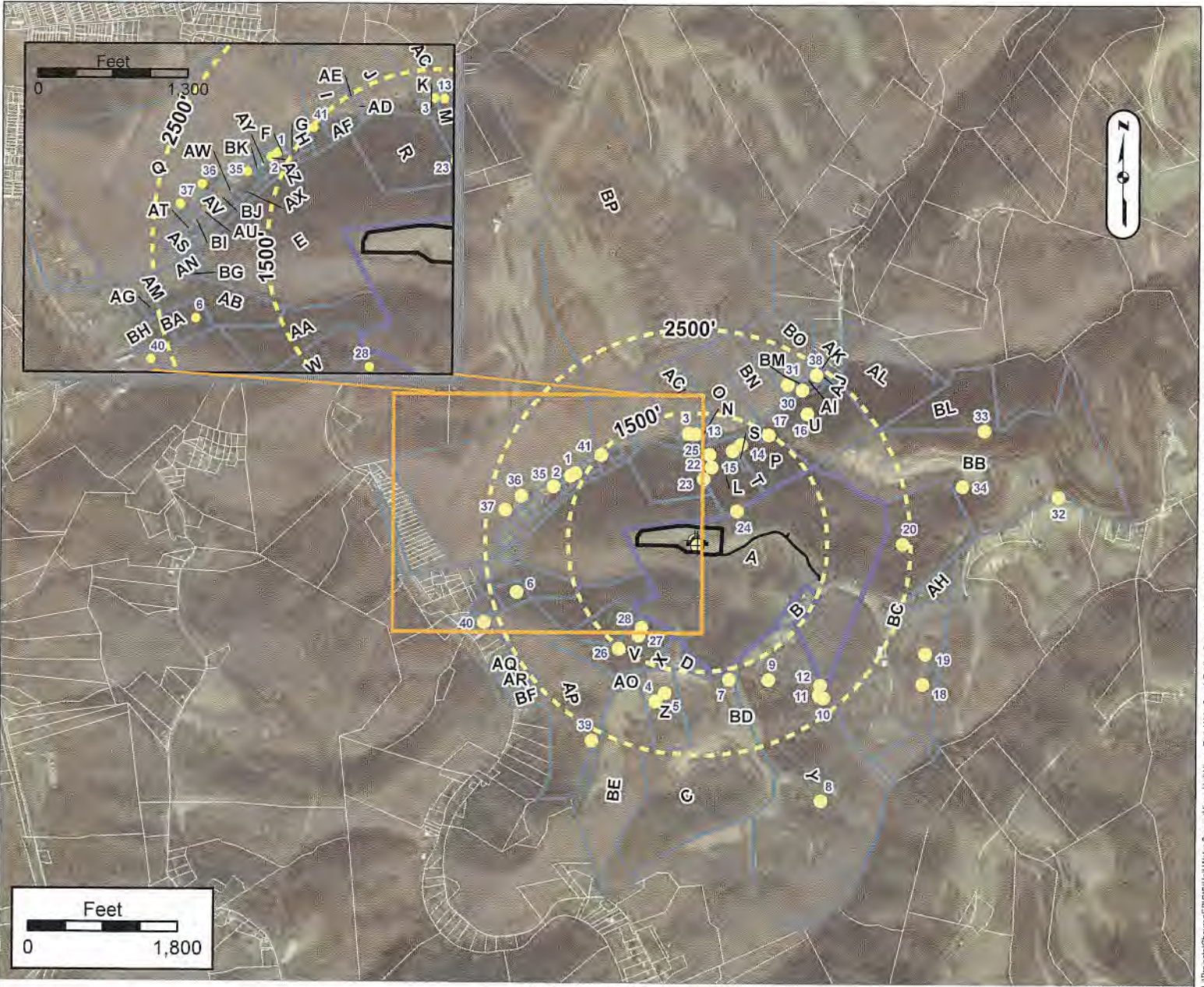
NOTICE: THE INTENT OF THIS EXHIBIT IS TO IDENTIFY EXISTING WATER SUPPLIES IN THE VICINITY OF A PROPOSED GAS WELL, AND IS NOT A COMPLETE BOUNDARY SURVEY. PROPERTY LINES AND OWNER INFORMATION WERE OBTAINED FROM DEEDS, TAX RECORDS, AERIAL PHOTOGRAPHY, GIS, AND FIELD SURVEYED EVIDENCE.



# WATER SUPPLY EXHIBIT HINES PAD

## 4705102084

10/05/2018  
GEM



### LOT OWNERS

Label	OWNER	TM	Label	OWNER	TM	Label	OWNER	TM	Label	OWNER	TM
A	HINES DONALD ET UX	25-14 12003000000000	Q	RAIL CHARLES R	25-14 12002400000000	AG	GOODNIGHT ARNIE	25-14 12006700020000	AW	YOHD LYLE WAYNE	25-14 12000700000000
B	GOSSET LANCE L ET UX	25-14 12003000000000	R	STATE OF W VA	25-14 12002600000000	AH	ROBERT'S EARNEST L ET UX	25-14 12003000100000	AX		25-14 12009900000000
C	PARSONS HENRY T EST ET AL	25-14 12003000000000	S	PITTSBURGH JCHRY E & ANGELA I	25-14 12002700000000	AI	PYLES ROMANIE ET UX	25-14 90040000000000	AV	SMITH PAUL K & BETTY - LIFE	25-14 12000200000000
D	WOOD CLESTERNE HINES	25-14 12003000000000	T	KWILTH EDWARD DAVID & KATHY D	25-14 12002800000000	AJ	THOMAS WILLIAM H ET UX	25-14 90039000000000	AZ	ANDRINGER SANDRA SUE & LORLA	25-14 12000100000000
E	GOODNIGHT ARNIE N ET UX	25-14 12002500000000	U	BEUCE JOHN A ET UX	25-14 12002900000000	AK	THOMAS WILLIAM H ET UX	25-14 90039000000000	BA	GOODNIGHT OSCAR J	25-14 12000600000000
F	BRODWIN TERRY K ET UX	25-14 12001100000000	V	LACEFIELD MORGAN	25-14 12003000000000	AL	BRADY ROGER A ET UX	25-14 90036000000000	BB	HINE DEEY L JR	25-14 12000100000000
G	THICKER JESS L & HELEN	25-14 12001200000000	W	LACEFIELD MORGAN T	25-14 12003000000000	AM	HARTLEY PHYLLIS C	25-14 12006700000000	BC	HOSKINS PATRICIA SUE	25-14 12003100000000
H	YOHD RAYMOND P	25-14 12001300000000	X	WOODS CLESIE	25-14 12003000000000	AN		25-14 12006500000000	BD	FULLER ROBERT B ET UX	25-14 12003000000000
I	MCCARTNEY MICHAEL J ET UX	25-14 90040000000000	Y	GOLDSBERRY DOUGLAS EDWARD ET UX	25-14 12003200000000	AO	PARSONS HENRY T JR & VIOLET	25-14 12004500000000	BE	PARSONS HENRY T EST ET AL	25-14 12004500000000
J	LUCAS LEONARD L ET UX	25-14 90045000000000	Z	BOSTON DONALD W ET UX	25-14 12006500000000	AP	VAN SEVOC DELBERT W ET UX	25-14 12005500000000	BF	HARVETH GEORGE R ET UX	25-14 12006400000000
K	BAKER BOBBY C ET UX	25-14 90044000000000	AA	GOODNIGHT ARNIE V ET UX	25-14 12006700000000	AQ	SCHNEIDER JOHN M & TALINE J	25-14 12006400000000	BG		25-14 12006400000000
L	KWILTH EDWARD DAVID ET UX	25-14 12001700000000	AB	GOODNIGHT ARNIE V ET UX	25-14 12006700000000	AR	SCHNEIDER JOHN M & TALINE J	25-14 12006400000000	BH	GOODNIGHT ARNIE	25-14 12006700000000
M	GRANDSTAFF ELMER JR ET UX	25-14 90044000000000	AC	LUCAS LEONARD L ET UX	25-14 90044000000000	AS	THOMAS HARRY E ET UX	25-14 12000200000000	BI	HOYT MARVIN JUNIOR ET UX-LIFE	25-14 12000200000000
N	BAKER BRUCE W ET UX	25-14 90044000000000	AD	LUCAS LEONARD L ET UX	25-14 90044000000000	AT	WHITEATCH DEBBIE ANN	25-14 12000200000000	BJ	YOHD LYLE WAYNE	25-14 12000200000000
O	OLLIVER GERALD ET AL	25-14 90044000000000	AE	LUCAS LEONARD L ET UX	25-14 90044000000000	AU	FOSTER NDRMA	25-14 12000800000000	BK	CHURCH OF GOD 7TH DAY TRUSTEES	25-14 12000800000000
P	BRODWIN TOBIAS & JESSICA	25-14 12003000000000	AF	MCCARTNEY MICHAEL J ET UX	25-14 90040000000000	AV	FOSTER NDRMA	25-14 12000800000000	BL	BRADY ROGER A ET UX	25-14 90035000000000

Surface Owner: DONALD HINES

County: MARSHALL

Oil/Gas Owner: DONALD HINES

Township: MOUNDSVILLE, WV

GROUNDWATER & ENVIRONMENTAL

Well Operator: CHEVRON APPALACHIA, LLC

Surveyor: SERVICES, INC.

Address: 700 CHERRINGTON PARKWAY  
CORAOPOLIS, PA 15108

Address: 301 COMMERCE PARK DR  
CRANBERRY TOWNSHIP, PA 16066

Phone: 724-564-3700

Phone: 800-267-2549

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



WATER SUPPLY EXHIBIT  
HINES PAD

10/05/2018

4705102084

No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
1	ANDLINGER, SANDRA S. & KORN, LORI A.	Well	724	480 TOMS RUN ROAD	304-280-1108
2*	ANDLINGER, SANDRA S. & D. ANDLINGER	Well	754	480 TOMS RUN ROAD	304-280-1108
3	BAKER, BOBBY G.	Well	621	742 TOMS RUN ROAD	304-845-1836
4*	BOSTON, DONALD M.	Spring	1,029	1770 CAMPBELL HILL ROAD	304-845-2506
5*	BOSTON, DONALD M.	Spring	1,075	1770 CAMPBELL HILL ROAD	304-845-2506
6	GOODNIGHT, OSCAR J.	Dug well	632	77 GOODNIGHT LANE	304-845-3813
7	GOULDSBERRY, DOUGLAS E.	Dug well	1,295	1584 CAMPBELL HILL ROAD	304-830-1265 304-830-1264
8	GOULDSBERRY, DOUGLAS E.	Spring	1,118	1584 CAMPBELL HILL ROAD	304-830-1265 304-830-1264
9	GOULDSBERRY, DOUGLAS E.	Spring	1,174	1584 CAMPBELL HILL ROAD	304-830-1265 304-830-1264
10	GOULDSBERRY, DOUGLAS E.	Spring	1,065	1584 CAMPBELL HILL ROAD	304-830-1265 304-830-1264
11	GOULDSBERRY, DOUGLAS E.	Stream	1,069	1584 CAMPBELL HILL ROAD	304-830-1265 304-830-1264
12	GOULDSBERRY, DOUGLAS E.	Stream	1,075	1584 CAMPBELL HILL ROAD	304-830-1265 304-830-1264
13*	GRANDSTAFF, MARK G.	Well	617	762 TOMS RUN LANE	304-780-8287 cell
14*	BROWN, TOBIAS & JESSICA	Well	769	873 TOMS RUN LANE	304-221-2057 (No longer in service)
15*	BROWN, TOBIAS & JESSICA	Spring	811	873 TOMS RUN LANE	304-221-2057 (No longer in service)

No.	SUPPLY COORDINATES	M12H	M18H	M19H	M20H	M21H			
1	39°54'30.37261266"N 80°42'15.98578642"W	1,651	1,687	1,694	1,701	1,708			
2	39°54'30.03421257"N 80°42'16.68058661"W	1,684	1,720	1,726	1,733	1,739			
3	39°54'35.31901437"N 80°41'58.57978144"W	1,280	1,301	1,315	1,330	1,344			
4	39°54'03.58860809"N 80°42'02.87098044"W	1,983	1,972	1,958	1,944	1,930			
5	39°54'04.60740834"N 80°42'01.47778009"W	1,861	1,848	1,834	1,820	1,805			
6	39°54'16.12164955"N 80°42'24.69670805"W	2,238	2,262	2,258	2,254	2,250			
7	39°54'06.31740910"N 80°41'51.63897720"W	1,716	1,690	1,676	1,662	1,648			
8	39°53'52.12620700"N 80°41'37.10577171"W	3,471	3,441	3,428	3,415	3,402			
9	39°54'06.36780937"N 80°41'45.51177532"W	1,891	1,860	1,847	1,834	1,821			
10	39°54'04.31220934"N 80°41'37.03017257"W	2,440	2,406	2,395	2,384	2,373			
11	39°54'04.60740937"N 80°41'37.76817282"W	2,380	2,347	2,335	2,324	2,313			
12	39°54'05.83860961"N 80°41'37.55937285"W	2,297	2,262	2,252	2,241	2,230			
13	39°54'35.29381441"N 80°41'57.46018110"W	1,274	1,292	1,307	1,322	1,336			
14	39°54'34.13821449"N 80°41'50.51937888"W	1,271	1,275	1,288	1,302	1,315			
15	39°54'33.36061429"N 80°41'51.79017922"W	1,160	1,166	1,179	1,193	1,207			

RECEIVED  
Office of Energy Gas

JUL 10 2018

W.D. Department of  
Environmental Regulation

\*Water source previously located in 2014 or 2015



WATER SUPPLY EXHIBIT  
HINES PAD

10/05/2018

4705102084

No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
16*	HARDING, JODI L. & TERRY A.	Spring	752	899 TOMS RUN LANE	304-845-6315 724-231-9109
17*	HARDING, JODI L. & TERRY A.	Stream	712	899 TOMS RUN LANE	304-845-6315 724-231-9109
18*	HOSKINS, PATRICIA SUE	Spring	1,026	19 CHARLES DRIVE	304-845-9769 304-639-7413
19*	HOSKINS, PATRICIA SUE	Spring	1,094	19 CHARLES DRIVE	304-845-9769 304-639-7413
20*	HOSKINS, PATRICIA SUE	Spring	1,016	19 CHARLES DRIVE	304-845-9769 304-639-7413
21*	HOSKINS, PATRICIA SUE	Pond	1,117	19 CHARLES DRIVE	304-845-9769 304-639-7413
22*	KNUTH, EDWARD D	Spring	747	747 TOMS RUN LANE	304-845-7519
23*	KNUTH, EDWARD D	Spring	826	747 TOMS RUN LANE	304-845-7519
24*	KNUTH, EDWARD D	Spring	996	747 TOMS RUN LANE	304-845-7519
25*	KNUTH, EDWARD D	Well	692	747 TOMS RUN LANE	304-845-7519
26*	LACEFIELD, MORGAN	Spring	1,142	1851 CAMPBELL HILL ROAD	304-639-0727
27*	LACEFIELD, MORGAN	Spring	1,195	1851 CAMPBELL HILL ROAD	304-639-0727
28*	LACEFIELD, MORGAN	Spring	1,145	1851 CAMPBELL HILL ROAD	304-639-0727
29	OLIVER, GERALD	Stream	945	816 TOMS RUN LANE	304-845-7675 home 304-238-3433 cell
30*	PYLES, RONNIE E ET UX	Well	895	1056 TOMS RUN LANE	304-845-2288

No.	SUPPLY COORDINATES	M12H	M18H	M19H	M20H	M21H			
16	39°54'37.90021565"N 80°41'40.37457605"W	2,024	2,018	2,030	2,041	2,052			
17	39°54'35.33341491"N 80°41'46.21377765"W	1,541	1,539	1,552	1,564	1,576			
18	39°54'06.13741035"N 80°41'21.74096802"W	3,237	3,201	3,194	3,186	3,179			
19	39°54'09.71221105"N 80°41'21.45656819"W	3,086	3,050	3,044	3,038	3,032			
20	39°54'22.67221338"N 80°41'25.29417031"W	2,492	2,461	2,462	2,462	2,462			
21	39°54'11.47981147"N 80°41'19.68896778"W	3,142	3,106	3,101	3,096	3,091			
22	39°54'31.42021377"N 80°41'54.98698006"W	899	912	926	941	955			
23	39°54'29.99461345"N 80°41'56.16058031"W	742	758	772	787	801			
24	39°54'26.25421296"N 80°41'50.93337844"W	611	597	607	616	626			
25	39°54'32.88541404"N 80°41'55.30018026"W	1,041	1,055	1,070	1,084	1,099			
26	39°54'09.67620900"N 80°42'08.72818268"W	1,592	1,595	1,583	1,571	1,559			
27	39°54'11.27100944"N 80°42'05.73658188"W	1,332	1,332	1,319	1,307	1,295			
28	39°54'12.22500964"N 80°42'05.28298181"W	1,231	1,231	1,219	1,207	1,194			
29	39°54'35.11381592"N 80°41'21.68697011"W	3,044	3,024	3,030	3,036	3,042			
30	39°54'40.69021615"N 80°41'41.17737650"W	2,210	2,208	2,220	2,232	2,244			

OFFICE OF THE  
JUL 19 2018  
WV DEPARTMENT OF  
NATURAL RESOURCES

\*Water source previously located in 2014 or 2015



WATER SUPPLY EXHIBIT

HINES PAD

4705102084



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
31*	PYLES, RONNIE E ET UX	Spring	705	1056 TOMS RUN LANE	304-845-2288
32*	RINE, OKEY L JR	Well	1,307	6 TRACY LANE	h 304-845-1533 c 304-650-5792
33*	RINE, OKEY L JR	Pond	1,130	6 TRACY LANE	h 304-845-1533 c 304-650-5792
34*	RINE, OKEY L JR	Pond	1,132	6 TRACY LANE	h 304-845-1533 c 304-650-5792
35*	SCAMELHORN, DENISE	Well	705	432 TOMS RUN LANE	304-810-0336
36*	SCAMELHORN, DENISE	Spring	737	432 TOMS RUN LANE	304-810-0336
37*	SCAMELHORN, DENISE	Spring	767	432 TOMS RUN LANE	304-810-0336
38*	THOMAS, WILLIAM H ET UX - Deceased	Well	689	1074 TOMS RUN LANE	304-845-6459
39	KEITH, VAN SCYOC	Spring	1,137	2074 CAMPBELL HILL ROAD	304-280-5104
40	KEITH, VAN SCYOC	Spring	693	2074 CAMPBELL HILL ROAD	304-280-5104
41*	YOHO, RAYMOND P.	Well	726	524 TOMS RUN LANE	304-845-5250

No.	SUPPLY COORDINATES	M12H	M18H	M19H	M20H	M21H			
31	39°54'41.30941617"N 80°41'43.49577725"W	2,167	2,168	2,181	2,193	2,206			
32	39°54'28.57981555"N 80°41'01.36136340"W	4,397	4,369	4,372	4,374	4,376			
33	39°54'36.24781652"N 80°41'12.95696752"W	3,715	3,693	3,699	3,705	3,710			
34	39°54'29.63461511"N 80°41'16.22216804"W	3,275	3,249	3,252	3,255	3,259			
35	39°54'28.74181221"N 80°42'19.27618731"W	1,820	1,855	1,860	1,865	1,870			
36	39°54'27.59341177"N 80°42'24.29098876"W	2,162	2,197	2,200	2,204	2,207			
37	39°54'25.87981134"N 80°42'26.69578938"W	2,315	2,348	2,350	2,352	2,355			
38	39°54'42.48661659"N 80°41'39.10017599"W	2,452	2,449	2,461	2,473	2,485			
39	39°53'58.76820674"N 80°42'12.63058309"W	2,702	2,699	2,686	2,673	2,660			
40	39°54'12.53460865"N 80°42'29.63338930"W	2,724	2,745	2,740	2,735	2,730			
41	39°54'32.58661326"N 80°42'11.99698536"W	1,521	1,557	1,566	1,576	1,586			

Office of Oil and Gas

JUL 10 2018

Environmental Section

\*Water source previously located in 2014 or 2015

4705102004 10/05/2018

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:** 3/12/18 **Date Permit Application Filed:** 7/18/18

RECEIVED  
Office of Oil and Gas  
JUL 18 2018  
WV Department of Environmental Protection

**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: Donald Hines and Wanda L. Hines ✓  
Address: 201 4th Street  
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: West Virginia UTM NAD 83 Easting: 525708.256  
County: Marshall Northing: 4417400.513  
District: Washington Public Road Access: Route 38/Campbell Hill Road  
Quadrangle: Moundsville, WV 7.5' Generally used farm name: Hines  
Watershed: Middle Grave Creek - Grave Creek

**This Notice Shall Include:**

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

**Notice is hereby given by:**

Well Operator: Chevron Appalachia, LLC  
Address: 700 Cherrington Parkway  
Coraopolis, PA 15108  
Telephone: 412-865-2504  
Email: \_\_\_\_\_  
Facsimile: 412-865-2403

Authorized Representative: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Email: \_\_\_\_\_  
Facsimile: \_\_\_\_\_

**Oil and Gas Privacy Notice:**

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



4705102084 1008/2018

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: 3/12/18 Date Permit Application Filed: 7/18/18

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

- CERTIFIED MAIL RETURN RECEIPT REQUESTED
- HAND DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)

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

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

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>525708.256</u>
County:	<u>Marshall</u>		Northing:	<u>4417400.513</u>
District:	<u>Washington</u>	Public Road Access:	<u>Route 38/Campbell Hill Road</u>	
Quadrangle:	<u>Moundsville, WV 7.5'</u>	Generally used farm name:	<u>Hines</u>	
Watershed:	<u>Middle Grave Creek - Grave Creek</u>			

This Notice Shall Include:

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

Well Operator: Chevron Appalachia, LLC  
Telephone: 412-865-2504  
Email: \_\_\_\_\_

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](mailto:depprivacyofficer@wv.gov).

RECEIVED  
Office of Oil and Gas

JUL 19 2018

WV Department of  
Environmental Protection

4705102084

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

**Instructions to Persons Named on Page WW-6A**

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

**Comment and Waiver Provisions**

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

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

**VOLUNTARY STATEMENT OF NO OBJECTION**

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>525708.256</u>
County:	<u>Marshall</u>		Northing:	<u>4417400.513</u>
District:	<u>Washington</u>	Public Road Access:	<u>Route 38/Campbell Hill Road</u>	
Quadrangle:	<u>Moundsville, WV 7.5'</u>	Generally used farm name:	<u>Hines</u>	
Watershed:	<u>Middle Grave Creek - Grave Creek</u>			

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

<p>*Please check the box that applies</p> <p><input checked="" type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p>	<p><b>FOR EXECUTION BY A NATURAL PERSON</b></p> <p>Signature: <u>Donald Hines</u></p> <p>Print Name: <u>Donald Hines</u></p> <p>Date: <u>5-11-18</u></p> <p><b>FOR EXECUTION BY A CORPORATION, ETC.</b></p> <p>Company: _____</p> <p>By: _____</p> <p>Its: _____</p> <p>Signature: _____</p> <p>Date: <u>JUL 10 2018</u></p>
--	--

**Oil and Gas Privacy Notice:**

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

STATE OF WEST VIRGINIA 4705102084  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
**VOLUNTARY STATEMENT OF NO OBJECTION**

**Instructions to Persons Named on Page WW-6A**

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

**Comment and Waiver Provisions**

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

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

**VOLUNTARY STATEMENT OF NO OBJECTION**

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

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>525708.256</u>	RECEIVED Office of Oil and Gas
County: <u>Marshall</u>	UTM NAD 83 Northing: <u>4417400.513</u>	JUL 19 2018
District: <u>Washington</u>	Public Road Access: <u>Campbell Hill Road</u>	
Quadrangle: <u>Moundsville 7.5'</u>	Generally used farm name: <u>Hines</u>	
Watershed: <u>Upper Ohio-Beaver</u>		

WV Department of Environmental Protection

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

\*Please check the box that applies

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

**FOR EXECUTION BY A NATURAL PERSON**

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Date: \_\_\_\_\_

**FOR EXECUTION BY A CORPORATION, ETC.**

Company: Consolidation Coal Company  
By: Mason Smith  
Its: Coal, Oil and Gas Relations Manager

Signature: *Mason Smith*  
Date: 07/18/2018

**Oil and Gas Privacy Notice:**

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



## WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

## Division of Highways

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

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

February 28, 2018

Jill M. Newman  
 Deputy Commissioner

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

Subject: DOH Permit for the Hines Pad A Well Site, Marshall County  
 Hines A Unit M12H

Dear Mr. Martin,

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

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

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

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

RECEIVED  
 Office of Oil and Gas

JUL 19 2018

WV Department of  
 Environmental Protection

10/05/2018

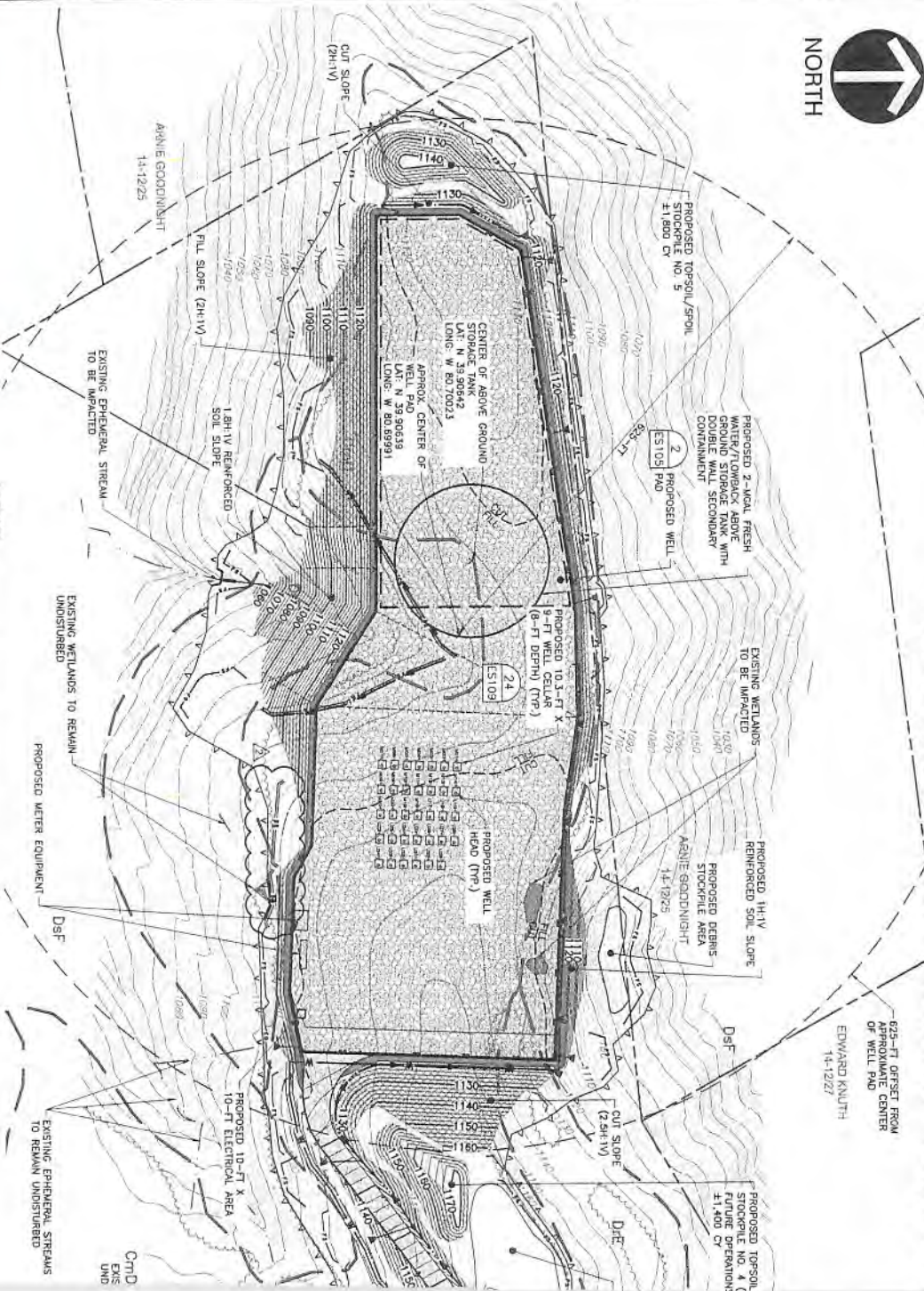
4705102084

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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Office of Oil and Gas  
JUL 19 2018  
WV Department of  
Environmental Protection

# FOR EROSION AND SEDIMENT CONTROL



**APPROVED**  
**WVDEP 00G**  
Modification  
4/5/2018

**NOTES**

1. THE CLOSEST RESIDENCE TO THE APPROXIMATE CENTER OF THE PROPOSED WELL PAD IS APPROXIMATELY 1,150 FT TO THE NORTH.
2. CELLARS FOR WELLS M-4H THROUGH M-4H TO BE INSTALLED DURING THE INITIAL SITE CONSTRUCTION. THE REMAINING CELLARS TO BE INSTALLED AS THE DRILLING PROGRAM PROGRESSES.

**EARTHWORK NOTES**

1. EARTHWORK ANALYSIS IS PRELIMINARY AND FOR INFORMATION PURPOSES ONLY.
2. ACTUAL EARTHWORK WILL VARY BASED ON SITE CONDITIONS AND MATERIALS USED.
3. EARTHWORK ANALYSIS DOES NOT CONSIDER SOIL SHRINK OR SWELL.
4. TRENCH SPOILS ARE NOT INCLUDED.

**REFERENCES**

1. TOPOGRAPHY AND PROPERTY INFORMATION PROVIDED BY BLUE MOUNTAIN INC. AERIAL PHOTOGRAPHY DATED 3/31/2014.
2. LANDSCAPE UTILITIES LOCATED BY A GEOTECHNICAL SURVEY CONDUCTED BY THE GEOTECHNICAL LTD. DATED 10/19/2016 TO 10/20/2016.
3. MARKED UTILITY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 10/26/2016.
4. STREAM AND WETLANDS SHOWN ARE PER CEC FIELD DELINEATION PERFORMED ON 10/15/2016.

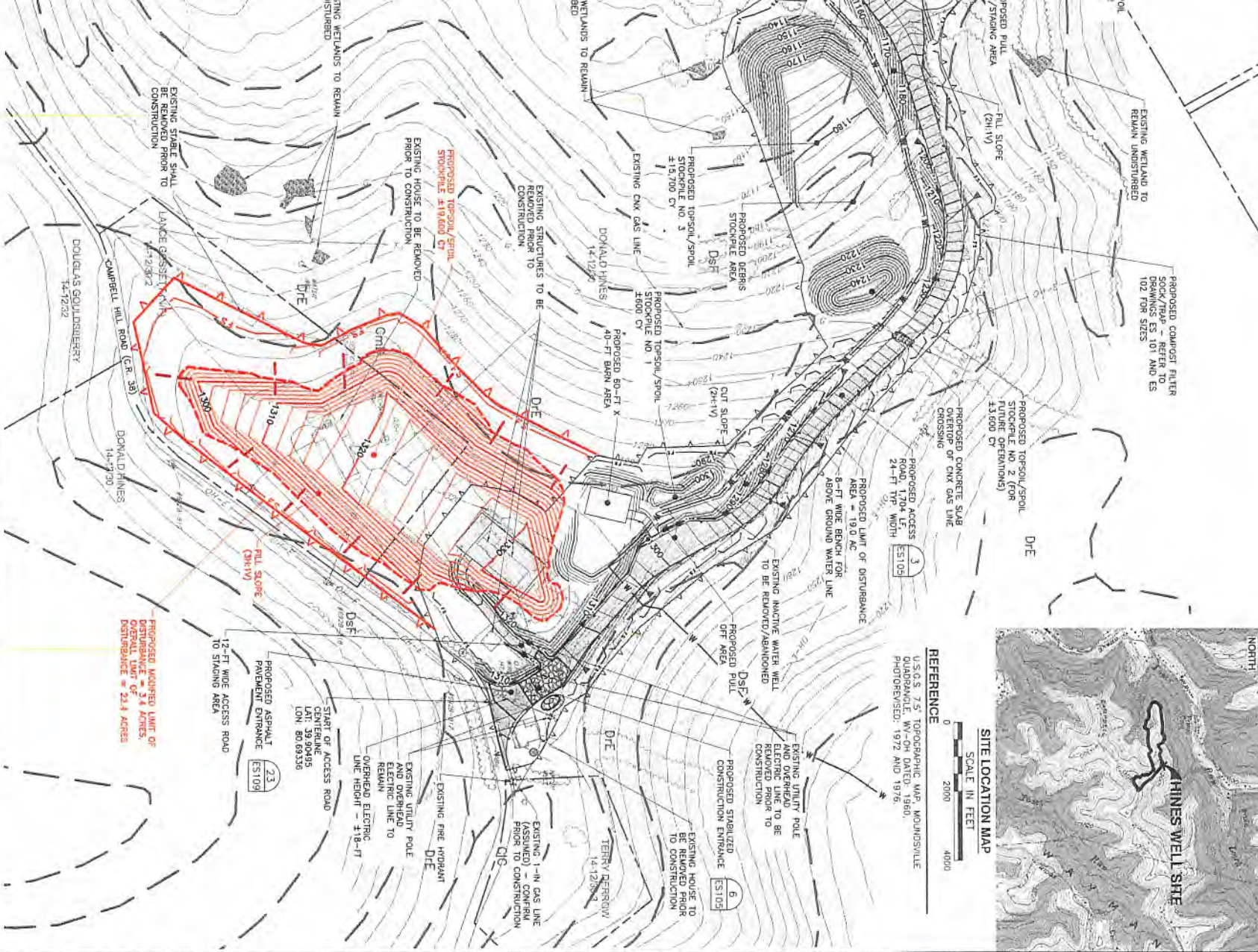
**LEGEND**

- EXISTING PROPERTY LINE
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING PAVED ROADWAY
- EXISTING UNPAVED ROADWAY
- EXISTING GAS LINE
- EXISTING WATERLINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TELECOMMUNICATION LINE
- EXISTING FENCE
- EXISTING STREAM
- EXISTING WETLAND
- EXISTING TREELINE
- EXISTING STRUCTURE
- EXISTING UTILITY POLE
- EXISTING FIRE HYDRANT
- PROPOSED EDGE OF ACCESS ROAD
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED WELL HEAD AND CELLAR
- PROPOSED PERIMETER BERM
- PROPOSED GRAVEL
- PROPOSED BUTTRESS
- PROPOSED ASPHALT PAVEMENT
- PROPOSED WATERLINE
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED CUT/FILL LINE
- PROPOSED CHANNEL
- PROPOSED STORMWATER CULVERT
- PROPOSED INLET
- PROPOSED RIPRAP APRON
- PROPOSED UNDERDRAIN
- PROPOSED COMPOST FILTER SOCK/TRAP
- PROPOSED TEMPORARY RUNOFF DIVERSION
- PROPOSED ORANGE CONSTRUCTION FENCE
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- SOIL BOUNDARY
- D/E
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED MODIFIED LIMIT OF DISTURBANCE
- PROPOSED TOE-KEY
- TOE-KEY OUTLET DRAINS
- DETAIL NUMBER
- DRAWING DESIGNATION

APPROVED  
OFFICE OF DIVISION CHIEF  
JUL 19 2018  
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

Feature	Nothing	Easting	Latitude (North)
Approx. Center of Well Pad	514501.051	1631895.932	39.90699
Beginning of Access Road Centerline	514482.028	1632056.332	39.90495
Well Site Limit of Disturbance	<b>22.4 ACRES</b>		

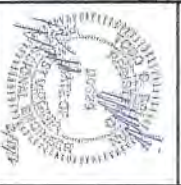
PURPOSES ONLY



REFERENCE  
 U.S.G.S 7.5 TOPOGRAPHIC MAP, MOUNTAINVILLE  
 QUADRANGLE W-10H DATED 1980.  
 PHOTOREVISED: 1972 AND 1976.

SITE LOCATION MAP  
 SCALE IN FEET  
 0 2000 4000

REVISION RECORD	
Date	No
	01
07/26/2017	02
02/15/2018	03
	04
	05
	06
	07
	08



**C.E.C.**  
 Civil & Environmental Consultants, Inc.  
 4000 Triangle Lane, Suite 200 - Export, PA 15632  
 724-327-5200 · 800-899-3610  
 www.cecinc.com

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

OVERALL EROSION  
 AND SEDIMENT  
 CONTROL PLAN

Project Number: 164-452-004D  
 Drawing Scale: 1"=100'  
 Date Issued: 02/15/2018  
 Index Number:  
 Drawn By: JAM  
 Checked By: TCB  
 Project Manager: MJS  
**ES 100**

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



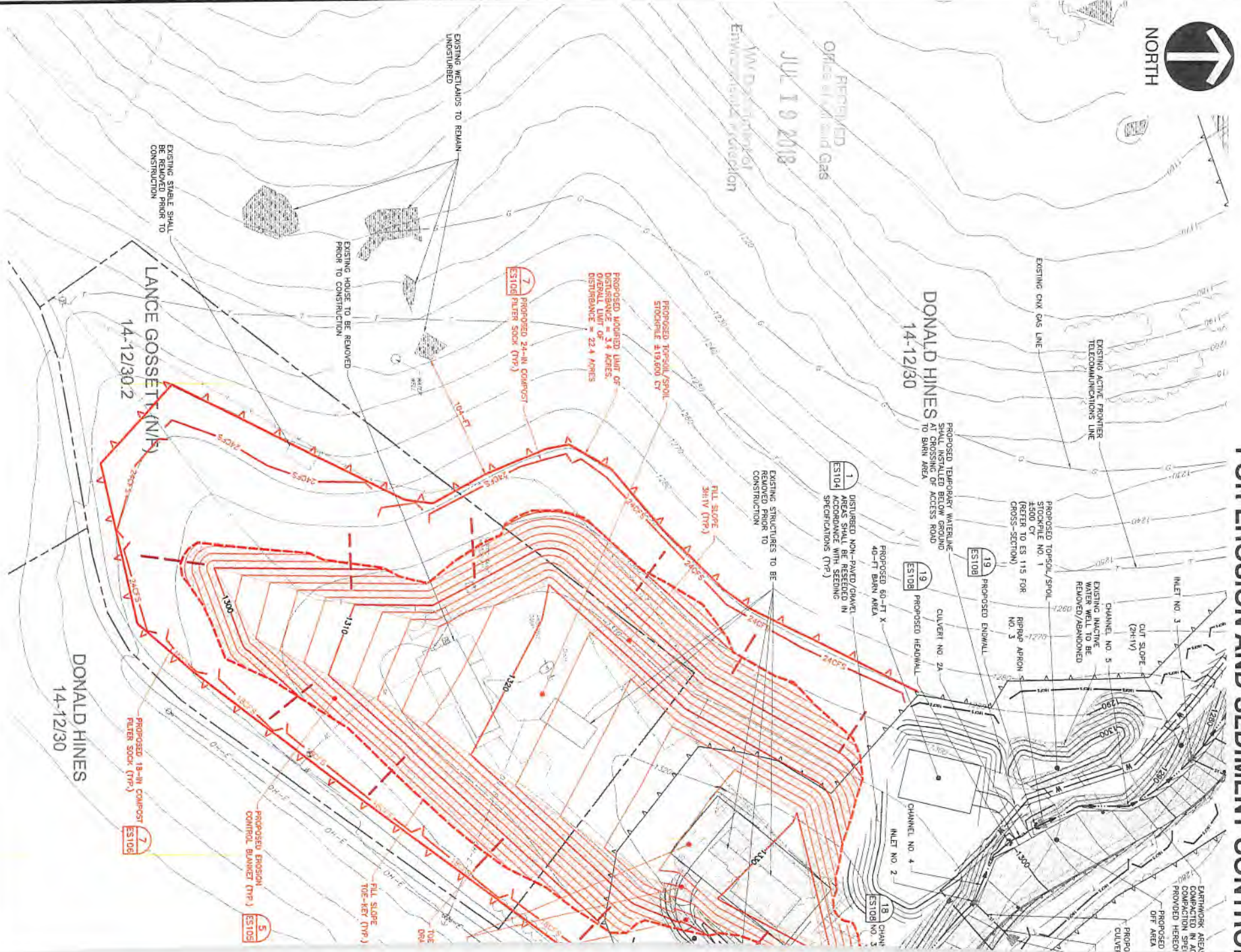
Longitude (West)	80.69991
	80.69336





PROPOSED  
Office of Oil and Gas  
JUL 19 2018

FOR EROSION AND SEDIMENT CONTROL



EXISTING STABLE SHALL  
BE REMOVED PRIOR TO  
CONSTRUCTION

LANCE GOSSETT (N/F)

14-12/30.2

DONALD HINES  
14-12/30

EXISTING WETLANDS TO REMAIN  
UNDISTURBED

EXISTING HOUSE TO BE REMOVED  
PRIOR TO CONSTRUCTION

7 PROPOSED 24-IN COMPPOST  
FLUTER SOCK (TYP.)

PROPOSED MODIFIED LIMIT OF  
DISTURBANCE = 3.4 ACRES.  
DISTURBANCE TO BE  
DISTANCE = 22.4 ACRES

PROPOSED TOPSOIL/SPOIL  
STOCKPILE 419,000 CY

FILL SLOPE  
SHINY (TYP.)

11 DISTURBED NON-DRAINED/COVER  
AREAS SHALL BE RESTORED IN  
ACCORDANCE WITH SEEDING  
SPECIFICATIONS (TYP.)

PROPOSED 80-FT X  
40-FT BARRY AREA

PROPOSED TEMPORARY WATERBULK  
SHALL INSTALLED BELOW GROUND  
AT CROSSING OF ACCESS ROAD  
TO BARRY AREA

19 PROPOSED ENSWALL

19 PROPOSED HEADWALL

CHANNEL NO. 5  
EXISTING INACTIVE  
WATER WELL TO BE  
REMOVED/ABANDONED

CUT SLOPE  
(2H:1V)

CHANNEL NO. 3  
RIPRAP APRON  
NO. 3

EXHUMED AREA  
COMPACTION SITE  
PROVIDED HEREOF  
PROPOSED  
OFF AREA

7 PROPOSED 18-IN COMPPOST  
FLUTER SOCK (TYP.)

5 PROPOSED EROSION  
CONTROL BLANKET (TYP.)

FILL SLOPE  
TOE-RET (TYP.)

TOE  
DRP

18 CHAN  
NO. 3

CHANNEL NO. 4

CHANNEL NO. 2

CHANNEL NO. 3

CHANNEL NO. 4

CHANNEL NO. 5

CHANNEL NO. 6

CHANNEL NO. 7

CHANNEL NO. 8

CHANNEL NO. 9

CHANNEL NO. 10

CHANNEL NO. 11

CHANNEL NO. 12

CHANNEL NO. 13

CHANNEL NO. 14

CHANNEL NO. 15

CHANNEL NO. 16

CHANNEL NO. 17

CHANNEL NO. 18

CHANNEL NO. 19

CHANNEL NO. 20

CHANNEL NO. 21

CHANNEL NO. 22

CHANNEL NO. 23

CHANNEL NO. 24

CHANNEL NO. 25

CHANNEL NO. 26

CHANNEL NO. 27

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CHANNEL NO. 86

CHANNEL NO. 87

CHANNEL NO. 88

CHANNEL NO. 89

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CHANNEL NO. 92

CHANNEL NO. 93

CHANNEL NO. 94

CHANNEL NO. 95

CHANNEL NO. 96

CHANNEL NO. 97

CHANNEL NO. 98

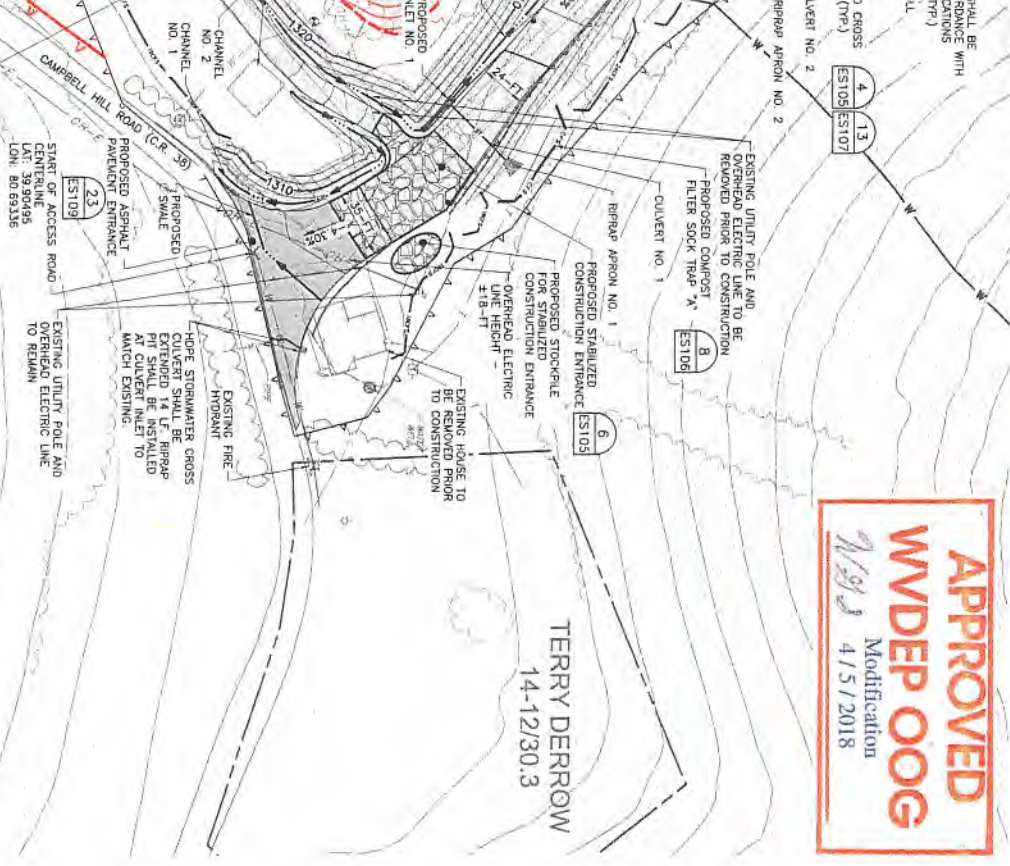
CHANNEL NO. 99

CHANNEL NO. 100



# PURPOSES ONLY

**APPROVED**  
**WVDEP 00G**  
 Modification  
 4/5/2018



### STREAM AND WETLAND NOTES

1. WETLAND WAIVERS ARE BEING REQUESTED FOR THE FOLLOWING FOUR (4) WETLANDS THAT ARE LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE: WETLAND 2A, WETLAND 2B, WETLAND 3A, AND WETLAND 3B.
2. THE FOLLOWING TWO (2) WETLANDS AND (1) EPHEMERAL STREAM ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE USACE NATIONWIDE PERMIT 39 FOR PERMANENT IMPACTS: WETLAND 1A, WETLAND 1B, AND UNIT 1 TO TOWNS CREEK.
3. THE STREAMS SHOWN HEREON ARE EPHEMERAL, AS SUCH, A WAIVER IS NOT BEING REQUESTED FOR PERENNIAL STREAMS.
4. DIMENSIONS SHOWN HEREON ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

### COMPACTION SPECIFICATIONS

1. MATERIALS PLACED IN THE PERMANENT SPILL PILES SHALL BE PLACED IN LIFTS NOT EXCEEDING 12-INCHES THICK; SHALL NOT BE EXCESSIVELY WET (I.E. WITHIN 2-3 PERCENT OF THE OPTIMAL MOISTURE CONTENT), AND SHALL NOT EXCESSIVELY DEFIRM BEYOND THE WEIGHT OF CONSTRUCTION EQUIPMENT DURING PLACEMENT. MOISTURE CONDITIONS OF SPILL MATERIALS MAY BE REQUIRED.
2. CONTRACTOR SHOULD ASSUME FOR PLANNING PURPOSES APPROXIMATELY 50 PERCENT OF STOCKPILE MATERIAL WILL NEED DRED, OR TREATED WITH LIME OR CEMENT TO FACILITATE PLACEMENT. CONTRACTOR SHOULD ASSUME LIME OR CEMENT SHOULD BE APPLIED AT A RATE OF 6 PERCENT BY WEIGHT.

### REFERENCES

1. TOPOGRAPHY AND PROPERTY INFORMATION PROVIDED BY BLUE MOUNTAIN NC AERIAL PHOTOGRAPHY DATED 3/31/2014.
2. STREAMS AND WETLANDS DELINEATED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 10/10/2016.
3. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICS LTD. DATED 10/19/2016 TO 10/20/2016.
4. MARKED UTILITY FEATURES SURVEYED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATED 10/26/2016.

### LEGEND

	EXISTING PROPERTY LINE
	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
	EXISTING PAVED ROADWAY
	EXISTING UNPAVED ROADWAY
	EXISTING GAS LINE
	EXISTING WATERLINE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING TELECOMMUNICATION LINE
	EXISTING FENCE
	EXISTING STREAM
	EXISTING WETLAND
	EXISTING TREE LINE
	EXISTING STRUCTURE
	EXISTING UTILITY POLE
	PROPOSED EDGE OF ACCESS ROAD
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED WELL HEAD AND CELLAR
	PROPOSED PERIMETER BERM
	PROPOSED GRAVEL
	PROPOSED ASPHALT PAVEMENT
	PROPOSED WATERLINE
	PROPOSED NOEC CONTOUR
	PROPOSED INTERMEDIATE CONTOUR
	PROPOSED CUT/FILL LINE
	PROPOSED SPOT ELEVATION
	PROPOSED CHANNEL
	PROPOSED STORMWATER CULVERT
	PROPOSED INLET
	PROPOSED RRPAE APRON
	PROPOSED UNDERDRAIN
	PROPOSED COMPOST FILTER SOCK TRAP
	PROPOSED 18-IN COMPOST FILTER SOCK
	PROPOSED 24-IN COMPOST FILTER SOCK
	PROPOSED 32-IN COMPOST FILTER SOCK
	PROPOSED TEMPORARY RUNOFF DIVERSION
	PROPOSED ORANGE CONSTRUCTION FENCE
	PROPOSED ROCK CONSTRUCTION ENTRANCE
	PROPOSED INLET PROTECTION
	PROPOSED EROSION CONTROL BLANKET
	PROPOSED MODIFIED LIMIT OF DISTURBANCE
	PROPOSED TOE-KEY
	TOE-KEY OUTLET DRAINS
	DETAIL NUMBER
	DRAWING DESIGNATION



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



REVISION RECORD	
Date	No.
02/18/2018	03 MAJOR MODIFICATION - EXPANDED LOD
	04
	05
	06
	07
	08

**Civil & Environmental Consultants, Inc.**  
 4000 Triangle Lane, Suite 200 - Export, PA 15632  
 724-327-5200 • 800-899-3610  
 www.cecinc.com

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

MAJOR MOD. EROSION AND SEDIMENT CONTROL PLAN  
 Project Number: 16A-052-03A-D  
 Drawing Scale: 1"=50'  
 Drawing Date: 02/18/2018  
 Index Number: \_\_\_\_\_  
 Drawn By: RQB  
 Checked By: JAM  
 Project Manager: TCB  
**ES 101A**