

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Thursday, February 23, 2017 WELL WORK PERMIT Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC (A) POST OFFICE BOX 611

MOON TOWNSHIP, PA 15108

Re: Permit approval for M01H 47-051-01897-00-00

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: M01H Farm Name: HICKS, THOMAS E.

U.S. WELL NUMBER: 47-051-01897-00-00

Horizontal 6A / New Drill

Date Issued: 2/23/2017

Promoting a healthy environment.

A	P	I	N	um	ber:			

PERMIT CONDITIONS 4705101897

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

CONDITIONS

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

API Number:	

PERMIT CONDITIONS, 7 0 5 1 0 1 8 9 7

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



west virginia department of environmental protection

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

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

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

TO: Chevron Appalachia, LLC P.O. Box 611 Moon Township, PA 15108 DATE: February 22, 2017 ORDER NO.: 2017-W-4

INTRODUCTION

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

FINDINGS OF THE CHIEF

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

- 1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 et seq., and the rules and regulations promulgated thereunder.
- 2. Chevron Appalachia, LLC is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as P.O. Box 611, Moon Township, Pennsylvania.
- On December 1, 2016, Chevron Appalachia, LLC submitted well work permit applications identified as API#s 47-051-01897, 47-051-01898, 47-051-01899, 47-051-01900, 47-051-01901, 47-051-01902 and 47-051-01913. The proposed wells are to be located on the Hicks Pad in Clay District of Marshall County, West Virginia.
- 4. On December 1, 2016, Chevron Appalachia, LLC requested a waiver for Wetland W-02 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 47-051-01897, 47-051-01898, 47-051-01899, 47-051-01900, 47-051-01901, 47-051-01902 and 47-051-01913.

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 No. 2017-W-4

ORDER

West Virginia Code §22-6A-12(b) requires, in part, that "[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland W-02 from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-051-01897, 47-051-01898, 47-051-01899, 47-051-01900, 47-051-01901, 47-051-01902 and 47-051-01913. The Office of Oil and Gas hereby **ORDERS** that Chevron Appalachia, LLC shall meet the following site construction and operational requirements for the Hicks 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 W-02 shall have two layers of thirty-inch (30") silt fence to prevent any sediment from reaching the wetland or stream from the well pad and adjacent tank pad. Orange construction fence also delineates the LOD boundary near the wetland to minimize the change of disturbance.
- d. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- e. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- f. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- g. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- h. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- i. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- j. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies:
- k. All records from inspections shall be maintained on site for the life of the project and be available upon request.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

JAMES A. MARTIN, CHIEF

11/3/14	API Number:
Wetland and Perennial Stream Waiver Request	Operator's Well Number:
·	•
Well Operator: Chevron Appalacia, LL	.c
Well Number:	Well Pad Name: Hicks Well Site
	Marshall County, Clay District, Moundsville & Glen Easton, WV

ADLAL

44 10 14 4

Answer the questions below to request a waiver from West Virginia Department of Environmental Protection for any wetlands or perennial streams which lie within one hundred feet of proposed project Limit of Disturbance (LOD), which includes any erosion and sediment control devices to be used.

This waiver shall be requested pursuant to Chapter 22 Article 6A Section 12 of West Virginia Code, which states:

§22-6A-12(b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows:

- (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir.
- (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake.
- (3) For a groundwater source, the distance shall be measured from the wellhead or spring.

The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.

§22-6A-12(c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section.

API Number:	
Operator's Well Number:	

Answer in the space provided, or use additional pages as necessary to fully answer the questions below:

1. Describe the proposed project location, including unique identifying names of all wetlands, and the names of perennial streams for which the waiver is sought.

The project site consists of forest and meadow with an existing road. The proposed alterations to the project area include clearing approximately 0.1 acres of forest, construction of a combined well pad and tank pad, the improvement of existing private road and the construction of new access road for natural gas operations. The proposed development will disturb approximately 27.4 acres. The waiver is sought for wetland W-02, for which the buffer between the wetland and the limit of disturbance (LOD) is 14 feet. No perennial streams are located within the project area. Please refer to the Erosion and Sediment Control Drawings for the location of wetland W-02.

- 2. Justify the proposed activity by describing alternatives to this project that were considered.
 - a. Include a No-Action Alternative as to show "the future without the project"
 - b. Location Alternatives must be shown
 - c. Must demonstrate why a one hundred foot buffer cannot be maintained
 - d. Describe how the proposed project is the least environmentally damaging practicable alternative
 - A. The No-Action Alternative for this site would involve the construction of four additional pad sites to access the natural gas resources that will be covered by the Hick's Site. The construction of the four alternate locations would cause a greater disturbance to the surrounding environment and region.
 - B. Chevron investigated several alternate locations in conjunction with the Hick's site. The Hick's Well site was designed to combine all of three separate locations and a portion of a fourth location into one pad site. By combining these alternate sites, the total disturbance to the existing land, forested areas and other critical natural resources has been minimized.
 - C. Due to the surrounding topography and site conditions, maintaining a 100 foot buffer between the limit of disturbance and wetland W-02 is not viable.
 - D. The Hick's Well site was designed to utilize the topography of the site in the most practical and efficient manner. Temporary soil stock piles were placed to minimize the overall disturbance to the site. Alternate locations would increase disturbed area and expand the overall limit of disturbance. The proposed stockpile locations minimize the surface area of the stockpile, thus minimizing the disturbed area. Additional E&S controls will be implemented to protect the wetland from adverse impacts.

API Number:	
Operator's Well Number:	

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

Temporary erosion and sediment control measures including, erosion control blanket, rock filters, riprap aprons, channels, silt fence, a sediment basin, stone construction entrances, mountable berms and temporary seeding and mulching will be used to protect the waters of the state.

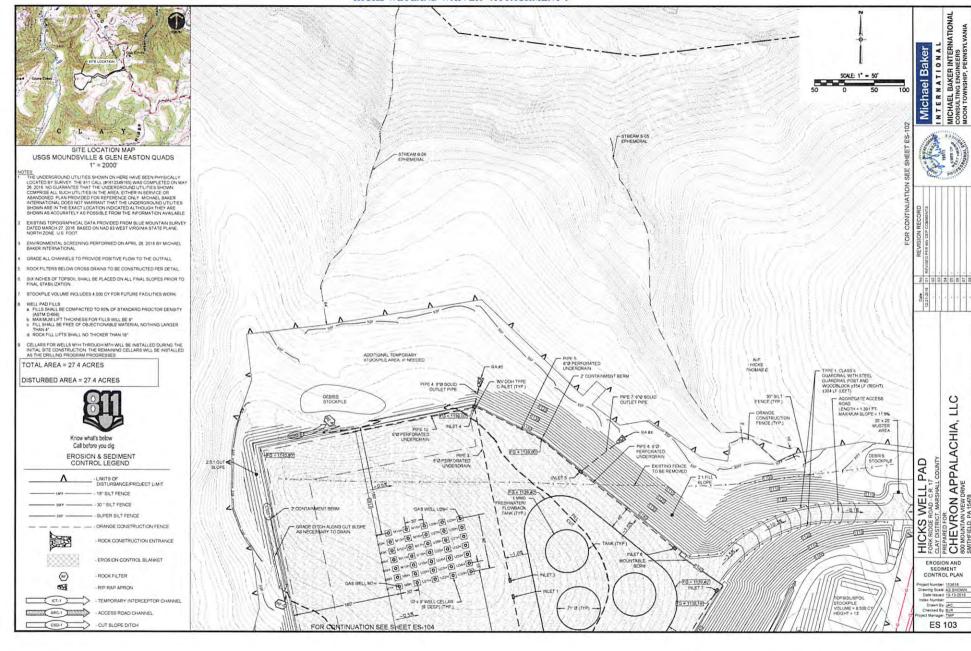
Permanent erosion control measures include permanent seeding and mulching and aggregate surfacing. Any areas that are not permanently stabilized with aggregate will be seeded and mulched according to the seeding specifications. Temporary erosion and sediment control measures will remain in place until the site has reached a uniform 70% perennial vegetative cover on all disturbed areas.

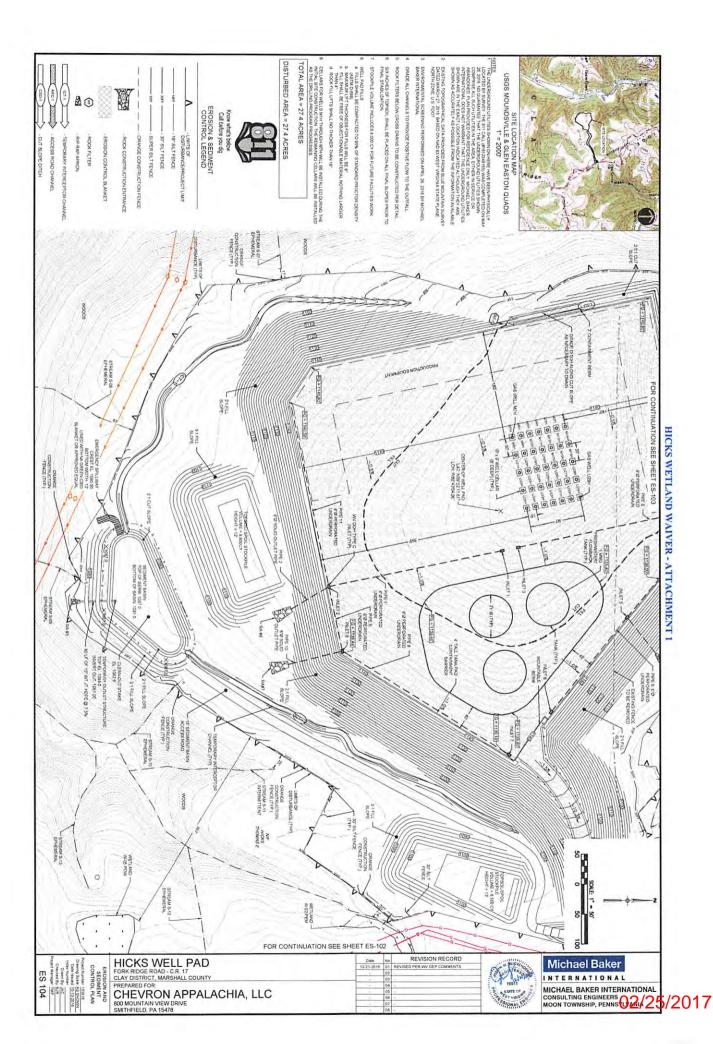
Additional details, including maintenance guidelines, have been included on the attached Erosion and Sediment Control Plan. The contractor(s) will be responsible for inspecting and maintaining all temporary and permanent erosion and sediment control best management practices.

- 4. Provide mapping, plans, specifications and design analysis for the preferred alternative to the project.
 - a. Specify in writing what additional controls, measures, devices, monitoring, etc. will be used to protect these wetlands and/or perennial streams for which the waiver is sought.

All erosion and sediment control features have been designed and shall be installed in accordance with the 2006 West Virginia Erosion and Sediment Control Best Management Practice Manual and the West Virginia Erosion and Sediment Control Field Manual (dated 2012).

A double layer of 30" silt fence will be installed as additional protection between the disturbed area and wetland W-02.





API NO. 47	
OPERATOR WELL NO.	M01H
Well Pad Name: Hicks	

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

1) Well Operator:	Chevron A	ppalachi	ia, LLC	49449935	Marshall	Clay	Glen Easton, WV
				Operator ID	County	District	Quadrangle
2) Operator's Well	Number: M	01H		Well Pad	Name: Hicks		
3) Farm Name/Sur	face Owner:	Thomas	s E Hicks	Public Road	d Access: Fork	Ridge Ro	ad/WV-17
4) Elevation, curre	nt ground:	1177'	Ele	evation, proposed p	ost-constructio	n: 1140'	
5) Well Type (a)	Gas X		Oil	Unde	rground Storag	e	
Ot	her						
(b))If Gas Sh	allow	X	Deep			
6) Existing Pad: Y		orizontal	<u>X</u>			JV 2/13	3/17
7) Proposed Target Marcellus, 6,362	t Formation(s), Depth	(s), Antici	pated Thickness ar	nd Expected Pr	essure(s):	
8) Proposed Total	Vertical Dep	th: 6,36	6				
9) Formation at To	tal Vertical	Depth:	Marcellus				
10) Proposed Tota	l Measured I	Depth: 1	19,620				
11) Proposed Horiz	zontal Leg L	ength: _	12,720				
12) Approximate F	resh Water S	Strata Dej	pths:	430'			
13) Method to Det	ermine Fresh	Water D	epths: 1	' mile radius sear	ch around pac	location	
14) Approximate S	Saltwater Del	oths: 11	47', 1751'	, 2112'			
15) Approximate (Coal Seam D	epths: 39	98', 678'				
16) Approximate I	Depth to Poss	sible Void	d (coal mi	ne, karst, other): _	None		
17) Does Proposed directly overlying				ns Yes	No	<u>X</u>	
(a) If Yes, provid	le Mine Info:	: Name:	:				
• •		Depth	<u> </u>				
		Seam:					
		Owner	:				

API NO. 47	
OPERATOR WELL NO.	M01H
Well Pad Name: Hicks	

18)

CASING AND TUBING PROGRAM

ТҮРЕ	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	480	480	CTS
Coal							
Intermediate	9.625	New	L-80	40	2,037	2,037	CTS
Production	5.50	New	P110	20	19,620	19,620	2,537'
Tubing							
Liners							

JN 2/13/17

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

PACKERS

Kind:		
Sizes:		
Depths Set:		

WW-6B	
(10/14)	

API NO. 47	
OPERATOR WELL NO. MO1H	
Well Pad Name: Hicks	

19)	Describe	proposed	well v	work,	includi	ng the	drilling	g and	plugging	back	of any	pilot hole	: :
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Drill vertical depth to the Marcellus at an estimated total vertical depth of approximately 6,366 feet. Drill horizontal leg.

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

Slickwater completion with 280' stage length, 1750 lbs/ft proppant (max anticipated rate/pressure will be 115bpm/9900 psi, respectively)

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 27.4 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 19.7 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% CaCl2, and flake. The intermediate will contain class A cement, 3% CaCl2, and flake. The Production cement will have a lead and tail cement. The lead will contain class A, G, or H cement, KCl, dispersant, suspension agent, and retarder. The tail will contain class A, G, or H cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

25) Proposed borehole conditioning procedures:

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

^{*}Note: Attach additional sheets as needed.

Cement Additives

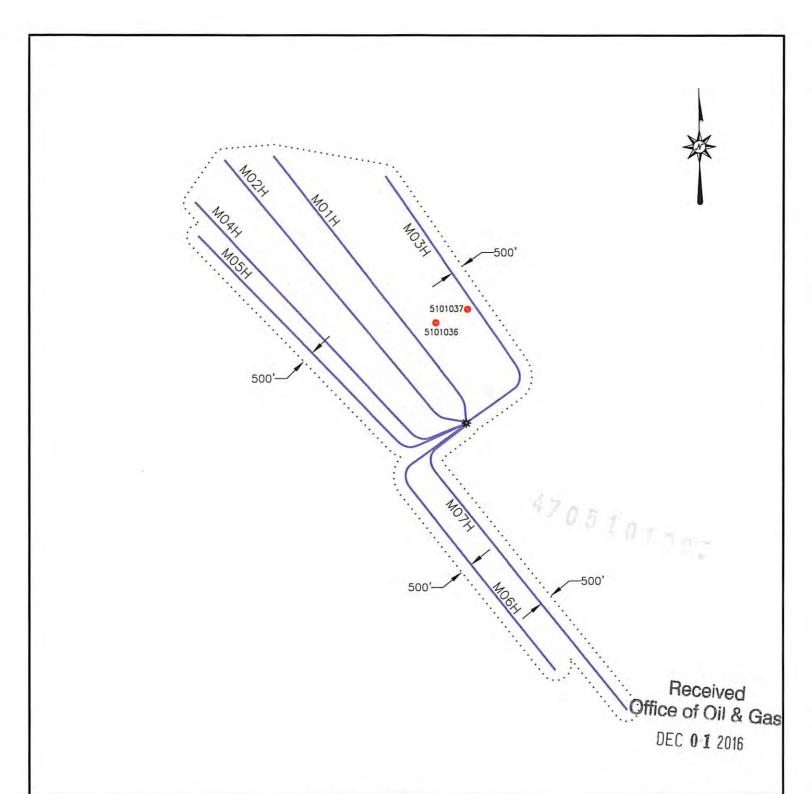
For the Water String the blend will contain class A cement, 3% CaCl2, and flake.

The intermediate will contain class A cement, 3% CaCl2, and flake.

The Production cement will have a lead and tail cement.

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

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





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

PREPARED FOR:

CHEVRON APPALACHIA, LLC 800 MOUNTAIN VIEW DRIVE SMITHFIELD, PA 15478

LEGEND

ACTIVE WELL

HICKS AREA OF REVIEW MAP MARSHALL COUNTY CLAY DISTRICT

WEST VIRGINIA

TOPO QUAD: GLEN EASTON, WV SCALE: 1" = 4000'

DATE: OCTOBER 24, 2016

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
47-051-01036	CNX Gas Company LLC	CNX Gas Company LLC	Active	39.883078	-80.723078	274'	Pittsburgh Seam	None
47-051-01037	CNX Gas Company LLC	CNX Gas Company LLC	Active	39.884675	-80.718315	578'	Pittsburgh Seam	None

Received
Office of Oil & Gas
DEC 0.1 2016

icyron				Hicks N	И01H		
y Twp, Marshall Co,	w					Ground Level Elev. (ft above SL):	1,138
DRILLING FLUID /	CENTRALIZER	CASING SIZE /	DEPTH	WELLHEAD DESIGN	HOLE	CASING	CEMENT
BIT TYPE / TFA	PROGRAM	FORMATION	MD TVD (FT) (FT)		SIZE (IN)	SPECS	PROGRAM
Core Barrel / Auger	2 Bowspring per Jt	20" Conductor	60 60	INC AZM	26	Conductor 20" API 5L Minimum 40 ft from GL or at I	Grout to Surface
	Bow Spring: (1) on shee track w stop collar & (1) per it over coupling to surface					Surface Casing 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.645 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (Jt Strength 1,000 lbs) 853	Surface Blend (Class A) Cement to Surface
		13-3/8" Casing	480 480		17.5	Minimum 50 ft past deepes	known fresh water
	Bow Spring: (1) on shoe track w/ stop collar & (1) per 3 jts over coupling					Intermediate Casing 9-5/8" 40#L-80 BTC 0.385" Wall Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.679 Burst (psi) 5,750 Collapse (psi) 3,080 Yield (JI Strength 1,000 lbs) 916	Intermediate II Blend (Class A) Cement to Surface
	Bow Spring:	9-5/8" Casing	2,037 2,037		12.375 - 12.25	Production Casing	Production Lead Slurry
	(1) per every other it over coupling SpiraGilder or Centek: (1) per it of cag to KOP					5-1(2" 20# P-110, 0.381" 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	Cement to 500' below 9-5/8" shoe
							<u>Production Tail Slurry</u> TOC minimum 200' above Marcell
	Float Equip. (2) Jts of Csg		18,191 -		8.75 -		

API Number 47 -	_
Operator's Well No.	Hicks MO1H

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 Glen Easton, 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 V
If so, please describe anticipated pit waste:
Will a synthetic liner be used in the pit? Yes No If so, what ml.?
Proposed Disposal Method For Treated Wastes:
Land Application
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
Other (Explain
Will closed loop system be used? If so, describe: Yes, we will be utilizing multiple open/closed top tanks
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air to KOP, SBM from KOP to TMD
-If oil based, what type? Synthetic, petroleum, etc. Synthetic
Additives to be used in drilling medium? Barite, fluid loss, emulsifiers, rheological control
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed offsite
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)
-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 White House
Company Official (Typed Name) Jenny Haffes
Company Official Title_Permilting Team Lead
Subscribed and sworn before me this 24th day of October , 2016 NOTARIAL SEAL Kristen Brooks, Notary Public Smithfield Boro, Fayette County My Commission expires Sept 2, 2018 My commission expires Sept 2, 2018
iviy commission expires 3400 2, 2010

unless otherwise noted in soils Vacre	report		
re			
<u>Mixtures</u>			
	Permano	ent	
See Non Agricultural Un	d Type land	lbs/acre Hayfield, Pasturela	nd and Cropla
Tall Fescue	100	Orchard Grass	80
Perenniai Ryegrass	33	Timothy	80
Ladino Clover	18	Birdsfoot - Trefoil	20
Birdsfoot - Trefoil	18	Ladino Clover	20
Red Top	6		
	***************************************		***************************************

, ,			
			-
.,,,			
	See Non Agricultural Up Tall Fescue Perennial Ryegrass Ladino Clover Birdsfoot - Trefoil Red Top tion (unless engineer tensions (L x W x D)	Seed Type Non Agricultural Upland Tall Fescue 100 Perennial Ryegrass 33 Ladino Clover 18 Birdsfoot - Trefoil 18 Red Top 6 tion (unless engineered plans including ensions (L x W x D) of the pit, and designed to the control of the pit, and designe	Seed Type Non Agricultural Upland Tall Fescue Perennial Ryegrass Perennial Ryegrass Birdsfoot - Trefoil Birdsfoot - Trefoil Birdsfoot - Trefoil Birdsfoot - Trefoil Red Top 6 tion (unless engineered plans including this info have because one of the pit, and dimensions (L x W)



Chevron

Appalachian LLC WV Well Site Safety Plan

Pad: Hicks Pad A Well # M01H

Du 116/16

271 Arbor Lane
Moundsville, WV 26041
Clay District
Marshall County, WV

Access Point – [39.872100°N, 80.711825°W] Well Site – [39.871558°N, 80.717794°W] Marshall County, West Virginia

> Received Office of Oil & Gas DEC 0-1 2016

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

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

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

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

see attached

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

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

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

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

Well Operator:	Chevron Appalachia, LLC	orc 0.1 501
By:	July Luces)
Its:	Permitting Team Lead	

Page 1 of 4

Hicks M01H

Plat ID	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
4-8-37	Hicks, Christa Dawn et al	Chevron U.S.A. Inc.	0.18	841/246	n/a	n/a	n/a
4-8-35	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	0.125	875/105	36/226 SWN Production Company, LLC to Chevron U.S.A. Inc. 24/180	756/332] n/a
4-8-34	Schaber, Leslie et al	TriEnergy Holdings, LLC	0.18	704/16	TriEnergy Holdings,	NPAR, LLC to	n/a
	CAIN Con Company II C	Charman II C A Jac	0.3	010/540	LLC to NPAR, LLC	Chevron U.S.A.	- /-
4-4-30	CNX Gas Company LLC	Chevron U.S.A. Inc.	0.2	818/549	n/a /-	n/a	n/a
4-4-29	Richmond, Lester Allen et al	Chevron U.S.A. Inc.	0.18	860/249	n/a /-	n/a /-	n/a
4-4-74	CNX Gas Company LLC	Chevron U.S.A. Inc.	0.2	818/549	n/a /-	n/a - /-	n/a
4-4-72	Richmond, Janet et vir	Chevron U.S.A. Inc.	0.18	860/240	n/a 756/397	n/a	n/a
4-4-2	Marshall County Airport Authority	AB Resources, LLC	0.125	685/281	AB Resources LLC to Chevron U.S.A. Inc.	n/a	n/a
4-4-70	Hyde, Vernon L.	Chevron U.S.A. Inc.	0.16	791/212	n/a	n/a	n/a
4-4-70	Fox, John L.	Chevron U.S.A. Inc.	0.155	796/368	n/a	n/a	n/a
	Fox, Karen M.	Chevron U.S.A. Inc.	0.155	796/349	n/a	n/a	n/a
	Preston, Christi F.	Chevron U.S.A. Inc.	0.155	796/524	n/a	n/a	n/a
	Fox, John L. II	Chevron U.S.A. Inc.	0.155	797/52	n/a	n/a	n/a
	Hamilton, Cynthia S.	Chevron U.S.A. Inc.	0.155	796/505	n/a	n/a	n/a
	Argenta, Dorothy A.	Chevron U.S.A. Inc.	0.155	797/89	n/a	n/a	n/a
	Persinger, Mary E.	Chevron U.S.A. Inc.	0.155	796/378	n/a	n/a	n/a
	Evans, Karen Fox	Chevron U.S.A. Inc.	0.155	796/349	n/a	n/a	n/a
4-5-54.5	Fox, Brad	Chevron U.S.A. Inc.	0.155	796/522	n/a	n/a	n/a
	Smith, Linda	Chevron U.S.A. Inc.	0.155	797/99	n/a	n/a	n/a
	Miller, Ann Machele	Chevron U.S.A. Inc.	0.155	796/634	n/a	n/a	n/a
	Hunnell, Janet C.	Chevron U.S.A. Inc.	0.155	797/252	n/a	n/a	n/a
	Persinger, Michael	Chevron U.S.A. Inc.	0.155	797/242	n/a	n/a	n/a
	Blake, Beth	Chevron U.S.A. Inc.	0.155	797/232	n/a	n/a	n/a
	Argenta, William P.	Chevron U.S.A. Inc.	0.155	797/222	n/a	n/a	n/a
	Argenta, Paul T.	Chevron U.S.A. Inc.	0.155	797/577	n/a	n/a	n/a
	Kress, Joan E.	Chevron U.S.A. Inc.	0.155	797/262	n/a	n/a	n/a
4-4-1.2	Lightner, John D JRACA VOC Office of OII &	Chevron U.S.A. Inc.	0.18	862/1	n/a 26/201	n/a	n/a
4-5-45	Wood, Thomas P. et ux DEC 0-1 2016	NPAR. LLC	0.18	750/322	NPAR, LLC to Chevron U.S.A. Inc.	n/a	n/a

Hicks M01H

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Plat ID	Lessor	Lessee	Royalty	Book/Page		Assignment #2	Assignment #3
4-4-1.5	Bungard, Patricia A.	NPAR, LLC	0.1875	700/467	756/332 NPAR, LLC to Chevron	n/a	n/a
					U.S.A. Inc. 756/332		
4-4-1.6	Bungard, Patricia A.	NPAR, LLC	0.1875	700/467	NPAR, LLC to Chevrစ္က်ာ ·	n/a	n/a
					U.S.A. Inc. 756/332	0526	
4-4-1.4	Hudson, Douglas J. et ux	NPAR, LLC	0.1875	700/462	NPAR, LLC to Chevron	n/a	n/a
					U.S.A. Inc. 756/332		
4-2-49	Chaplin Real Estate Co	NPAR, LLC	0.1875	706/396	NPAR, LLC to Chevron	n/a	n/a
					U.S.A. Inc. 25/489	756/332	
4-2B-87	Carter, Richard P.	TriEnergy Holdings, LLC	0.16	737/501	TriEnergy Holdings,	NPAR, LLC to	n/a
					LLC to NPAR, LLC 25/489	Chevron U.S.A. 756/332	
4-2B-86	Carter, Richard P.	TriEnergy Holdings, LLC	0.16	737/501	TriEnergy Holdings,	NPAR, LLC to	n/a
					LLC to NPAR, LLC 25/489	Chevron U.S.A. 756/332	
4-2B-85	Carter, Richard P.	TriEnergy Holdings, LLC	0.16	737/501	TriEnergy Holdings,	NPAR, LLC to	n/a
					LLC to NPAR, LLC	Chevron U.S.A.	
4-2B-84	Morris, Rosemary	Chevron U.S.A. Inc.	0.16	772/85	n/a 25/489	n/a 756/332	n/a
4-2B-49	Zukoff, Pete S. et ux	TriEnergy Holdings, LLC	0.18	738/107	TriEnergy Holdings,	NPAR, LLC to	n/a
					LLC to NPAR, LLC 28/348	Chevron U.S.A.	
4-2B-52	King, Roger R. et ux	TriEnergy Holdings, LLC	0.18	749/209	TriEnergy Holdings,	n/a	n/a
4-20-32	King, Roger N. et ux	menergy moralings, etc	0.10	743/203	LLC to Chevron U.S.A.	11,7 G	11, 4
					Inc. 28/348		
4-2B-53	King, Roger R. et ux	TriEnergy Holdings, LLC	0.18	749/209	TriEnergy Holdings,	n/a	n/a
4 20 33	King, Noger II. et ax	menergy moralings, ele	0.20	, 13, 203	LLC to Chevron U.S.A.	.,, =	.,, -
				•	Inc.		
4-2B-59	Raper, Sidney L.	Chevron U.S.A. Inc.	0.165	902/510	n/a 756/332	n/a	n/a
4-2B-60	Chaplin Real Estate Co	NPAR, LLC	0.1875	706/396	NPAR, LLC to Chevron	n/a	n/a
	Chaplin Real Estate Confice of Co	Ved			U.S.A. Inc.		
	Olice of C	11 & Gas					
	Office of C	ः जवह					
	250 0.1	4U16					

Hicks M01H

Plat ID	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
					756/332		<u> </u>
4-2B-63	Chaplin Real Estate Co	NPAR, LLC	0.1875	706/396	NPAR, LLC to Chevron	n/a	n/a
					U.S.A. Inc.		
					26/123	26/201	
4-2B-64	Landers, George F. et ux	TriEnergy Holdings, LLC	0.18	739/600	TriEnergy Holdings,	NPAR, LLC to	n/a
					LLC to NPAR, LLC 26/123	Chevron U.S.A. (26/201)) - g' - · · ·
4-2B-65	Landers, George F. et ux	TriEnergy Holdings, LLC	0.18	739/600	TriEnergy Holdings,	NPAR, LLC to	n/a
					LLC to NPAR, LLC 26/123	Chevron U.S.A. 26/201	
4-2B-66	Landers, George F. et ux	TriEnergy Holdings, LLC	0.18	739/600	TriEnergy Holdings,	NPAR, LLC to	n/a
	-				LLC to NPAR, LLC 756/332	Chevron U.S.A.	
4-2B-70	Chaplin Real Estate Co	NPAR, LLC	0.1875	706/396	NPAR, LLC to Chevron	n/a	n/a
					U.S.A. Inc. 756/332		
4-2B-71	Chaplin Real Estate Co	NPAR, LLC	0.1875	706/396	NPAR, LLC to Chevron	n/a	n/a
	·				U.S.A. Inc.		

Received Office of Oil & Gas

DEC 0-1 2016



Branden Weimer Permitting Team Lead Chevron Appalachia, LLC 800 Mountain View Drive Smithfield, PA 15478 Tel 724 564 3745 Fax 724 564 3894 bwkb@chevron.com

January 6, 2015

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

To Whom It May Concern:

Please be advised that Chevron Appalachia, LLC and Chevron U.S.A. Inc. are affiliated entities. Unless and until revoked, and as evidenced by the signatures of authorized representatives of each entity below, Chevron Appalachia, LLC is authorized to operate assets owned by Chevron U.S.A. Inc. which are located in West Virginia, including oil and gas leases. More particularly, Chevron Appalachia, LLC is authorized to obtain well work permits for assets owned by Chevron U.S.A. Inc. I trust that this will alleviate any concerns the Department may have about Chevron Appalachia, LLC applying for well work permit applications on properties either leased or owned by Chevron U.S.A. Inc. If you have any further questions or concerns, please do not hesitate to contact me.

Branden Weimer

Attorney-In-Fact for Chevron Appalachia, LLC

Marc Tate

Attorney-In-Fact for Chevron U.S.A. Inc.

Office of Oil & Gas
DEC 0-1 2016



November 14, 2016

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

RE: Hicks 1H, 2H, 3H, 4H, 5H, 6H, 7H

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,

Madeline Fitzgerald Land Representative

Madeline Fritzgerald

Received
Office of Oil & Gas
DEC 0-1 2016

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

Date of Noti	ce Certification: 11/15/2016	API No. 47	<u> </u>
		Operator's Wel	I No. M01H
		Well Pad Name	: Hicks
	been given:		···
Pursuant to the	he provisions in West Virginia Code §	22-6A, the Operator has provided the required	l parties with the Notice Forms listed
	e tract of land as follows:		
State:	West Virginia	(IIM NAI) X3	990.986
County: District:	Marshall	Northing: <u>4413</u>	3571.769
Quadrangle:	Clay Glen Easton, WV 7.5		Ridge Road/WV-17
Watershed:	Middle Grave Creek - Grave Creek	Generally used farm name: Hick	
watersheu.	Wildlie Grave Creek - Grave Creek	 _	4705101017
of giving the requirements Virginia Cod	surface owner notice of entry to sur of subsection (b), section sixteen of	tion sixteen of this article; (ii) that the require vey pursuant to subsection (a), section ten of this article were waived in writing by the sinder proof of and certify to the secretary that	f this article six-a; or (iii) the notice urface owner; and Pursuant to West
	West Virginia Code § 22-6A, the Ope erator has properly served the required	rator has attached proof to this Notice Certifi parties with the following:	cation
*PLEASE CH	ECK ALL THAT APPLY		OOG OFFICE USE ONLY
☐ 1. NO		NOTICE NOT REQUIRED BECAUSE : SEISMIC ACTIVITY WAS CONDUCTED	NO RECEIVED/
☐ 2. NO	TICE OF ENTRY FOR PLAT SURVI	EY or NO PLAT SURVEY WAS COND	UCTED RECEIVED
■ 3. NO		☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SURFACE C (PLEASE ATTACH)	WNER
■ 4. NO	TICE OF PLANNED OPERATION		☐ RECEIVED
■ 5. PUI	BLIC NOTICE		☐ RECEIVED
■ 6 NO	TICE OF APPLICATION		RECEIVED

Required Attachments:

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

DEC 01 2016

WW-6AC (1/12)

Certification of Notice is hereby given:

above, to the r signature confir in this Notice obtaining the ir	at as required under West Virginia (equired parties through personal sermation. I certify under penalty of lar Certification and all attachments, a	Code § 22-6 rvice, by regard that I have and that bas atton is true,	6A, I have so gistered mail e personally sed on my i accurate and	the notice requirements within West Virginia Code § 22- erved the attached copies of the Notice Forms, identified or by any method of delivery that requires a receipt or examined and am familiar with the information submitted equiry of those individuals immediately responsible for a complete. I am aware that there are significant penalties entering the complete of
Well Operator:	Chevron Appalachia, LLC		Address:	800 Mountain View Dribe
By:	Jenny Houses			Smithfield, PA 15478
Its:	Permitting Team Lead		Facsimile:	724-564-3894
Telephone:	724 564-3700		Email:	
My	ONWEATTAROS PENNSYLVANIA NOTARIAL SEAL Kristen Brooks, Notary Public Smithfield Boro, Fayette County Commission Expires Sept. 2, 2018 PENNSYLVANIA ASSOCIATION OF NOTARIES			rn before me this 15th day of November 2010 Outure Books Notary Public pires Sept 2, 2017

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.

AT NETO TENTA

Received
Office of Oil & Gas
DEC 0 1 2016

WW-6A (9-13)

API NO. 47		
OPERATOR WE	ELL NO.	M01H
Well Pad Name:	Hicks	

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 that	n the filing date of permit application.
Date of Notice: <u>10/26/16</u> Date Permit Application Filed: <u>12</u>	1/16
PERMIT FOR ANY WELL WORK CONSTRUCTION OF A	ROVAL FOR THE AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	(b)
	OD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION
the surface of the tract on which the well is or is proposed to be local boil and gas leasehold being developed by the proposed well work, if described in the erosion and sediment control plan submitted pursual operator or lessee, in the event the tract of land on which the well promore coal seams; (4) The owners of record of the surface tract or trace well work, if the surface tract is to be used for the placement, construction which is a described in section nine of this article; (5) A have a water well, spring or water supply source located within one of provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than three subsection (b) of this section hold interests in the lands, the applicant records of the sheriff required to be maintained pursuant to section exprovision of this article to the contrary, notice to a lien holder is not	ne well plat to each of the following persons: (1) The owners of record of ted; (2) The owners of record of the surface tract or tracts overlying the the surface tract is to be used for roads or other land disturbance as int to subsection (c), section seven of this article; (3) The coal owner, oposed to be drilled is located [sic] is known to be underlain by one or cts overlying the oil and gas leasehold being developed by the proposed action, enlargement, alteration, repair, removal or abandonment of any my surface owner or water purveyor who is known to the applicant to chousand five hundred feet of the center of the well pad which is used to (6) The operator of any natural gas storage field within which the extenants in common or other co-owners of interests described in the may serve the documents required upon the person described in the light, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. ovide the Well Site Safety Plan ("WSSP") to the surface owner and any as provided in section 15 of this rule.
Address: 353 Arbor Lane	Address: 1000 Consol Energy Drive
Moundsville, WV 26041	Canonsburg, PA 15317 COAL OPERATOR
Name:Address:	Name: Murray Energy
☐ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Jeffrey Ryan	Address: 46226 National Road St. Clairsville, OH 43950 SURFACE OWNER OF WATER WELL
Address: 141 Clover Lane	AND/OR WATER PURVEYOR(s)
Moundsville, WV 26041	Name: Kenneth B. Tagg
Name:	Address: 3303 Big Grave Creek Rd Moundsville, WV 26041
Address:	DOPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name:	Address. Office Office
Address:	*Please attach additional forms if necessary
	Moundsville, WV 25041 OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name: Address: *Please attach additional forms if necessary UEC 0:1 2016
	- 2016

WW-6AW	
(1-12)	

API NO.	
OPERATOR WELL NO.	HICKS 1H
Well Pad Name:	Hicks

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

State:		Vest Virginia	East:	1,658,005.170 ft
County:	Tradit Shall	lorth State Plane (AD 27	North:	501,954.002 ft
District:	Clay	Public Road Access:		- (0489/
Quadrangle: Watershed:		Generally used farm nan	ie:	HICKS
ssued on those mate coordinates of Nort	have no objection to the planned work descriptions, provided that Chevron U.S.A. Inc. of th 501,954.002 ft t, East 1,658,005.170 ft in a	drills the well on We accordance with the	st Virgi	nia North State Plane NAD 27
	American Energy and Chevron U.S.A. In	ic. dated 9/12/2016.		
			-	
			UTION	BY A NATURAL PERSON
		FOR EXEC		D
☐ SURFACE OV	VNER	FOR EXEC		D
☐ SURFACE OV		FOR EXEC Signature: Print Name:		D
☐ SURFACE OV	VNER (Road and/or Other Disturbance)	FOR EXEC		Office of Oil A Come
☐ SURFACE OV	VNER	Signature: Print Name: Date:		Office of Oil A Come
☐ SURFACE OV ☐ SURFACE OV ☐SURFACE OW	VNER (Road and/or Other Disturbance) NER (Impoundments/Pits)	Signature: Print Name: Date:	CUTION	PEC 01 2016 BY A CORPORATION, ETC.
☐ SURFACE OV ☐ SURFACE OV ☐SURFACE OW	VNER (Road and/or Other Disturbance) NER (Impoundments/Pits)	Signature: Print Name: Date: FOR EXECTOR COMPANY:	CUTION	Pecelvad Office of Oil 2016 BY A CORPORATION, ETC. Consolidation Coal Company
☐ SURFACE OV ☐ SURFACE OV ☐SURFACE OW ☐COAL OWNER	VNER VNER (Road and/or Other Disturbance) NER (Impoundments/Pits) R OR LESSEE	Signature: Print Name: Date:	CUTION	Pecelvad Office of Consolidation Coal Company Alex O'Nelli
☐ SURFACE OV ☐ SURFACE OV ☐SURFACE OW ☐COAL OWNER	VNER VNER (Road and/or Other Disturbance) NER (Impoundments/Pits) R OR LESSEE	FOR EXECT Signature: Print Name: Date: FOR EXECT Company: By:	CUTION	Pecelvad Office of Oil 2016 BY A CORPORATION, ETC. Consolidation Coal Company
☐ SURFACE OV ☐ SURFACE OW ☐SURFACE OW ☐COAL OWNER ☐COAL OPERA	VNER VNER (Road and/or Other Disturbance) NER (Impoundments/Pits) R OR LESSEE TOR	FOR EXECT Signature: Print Name: Date: FOR EXECT Company: By:	CUTION	BY A CORPORATION, ETC. Consolidation Coal Company Alex O'Nell! Consolidation Manager
	VNER VNER (Road and/or Other Disturbance) NER (Impoundments/Pits) R OR LESSEE TOR	FOR EXECT Signature: Print Name: Date: FOR EXECT Company: By: Its:	CUTION	Pecelvad Office of Consolidation Coal Company Alex O'Nelli

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@wy.gov

API NO. 47	
OPERATOR WELL NO.	M01H
Well Pad Name: Hicks	

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

State:	the well plat, all for proposed well work on the trac West Virginia	Easting:	524090.986
County:	Marshall	Northing:	4413571.769
District:	2336	ublic Road Access:	Fork Ridge Road/WV-17
Quadrangle:		Generally used farm name:	Hicks
Watershed:	Middle Grave Creek - Grave Creek		- 4 0 7 G 11 X
*Please checl	the box that applies	FOR EXECUT	TION BY A NATURAL PERSON
*Please checl	the box that applies	FOR EXECUT	TION BY A NATURAL PERSON
□ SURFA	CE OWNER	Signature:	my Pface
□ SURFA	CE OWNER (Road and/or Other Disturbance)	Print Name: S	
□ SURFA	CE OWNER (Impoundments/Pits)		TION BY A CORPORATION, ETC.
□ COAL C	OWNER OR LESSEE	Company:	
	PERATOR	Its:	
□ COAL C			Pos.
	PURVEYOR	Signature:	Heceived
WATER	R PURVEYOR TOR OF ANY NATURAL GAS STORAGE F	FIELD Signature:	Office of Oil & Gas

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.

API NO. 47 OPERATOR WELL NO.	M01H
Well Pad Name: Hicks	33370

Instructions to Persons Named on Page WW-6A

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VOLUNTARY STATEMENT OF NO OBJECTION

WW-6A and	ted above, and that I have received copies of a lattachments consisting of pages one (I) through the well plat, all for proposed well work on the tree.	Notice of Applica	ation, an Ap , including	plication for a Well Work Permit on Form
State:	West Virginia	UTM NAD 83	Easting:	524090.986
County:	Marshall	Northing:		4413571.769
District:	20.40		ad Access:	Fork Ridge Road/WV-17
Quadrangle:	Glen Easton, WV 7.5'	Generally used t	farm name:	Hicks
Watershed:	Middle Grave Creek - Grave Creek			
*Please check	k the box that applies	1000		TION BY A NATURAL PERSON
□ SURFA	CE OWNER		nature: Mo	
□ SURFAC	CE OWNER (Road and/or Other Disturbance	e) Prin	e: 11 7	ary L. Randolph
□ SURFAC	CE OWNER (Impoundments/Pits)	FO	R EXECUT	TION BY A CORPORATION, ETC.
□ COAL C	OWNER OR LESSEE		npany:	G. 18 3-2 N TOP 1-1 V TOP
1	PERATOR	100		Received
☑ WATER	RPURVEYOR		nature:	Office of Oil & Gas
☐ OPERA	TOR OF ANY NATURAL GAS STORAGE	FIELD Dat	e:	DEC 0.1 2010

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.

API NO. 47	
OPERATOR WELL NO.	M01H
Well Pad Name: Hicks	

Instructions to Persons Named on Page WW-6A

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VOLUNTARY STATEMENT OF NO OBJECTION

____, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated

State:	West Virginia	UTM NAD 83	Easting:	524090.986	_
County:	Marshall		Northing:		_
District:	Clay	Public Road A	ccess:	Fork Ridge Road/WV-17	_
Quadrangle:	Glen Easton, WV 7.5'	Generally used	l farm name:ج	- Hicks	_
Watershed:	Middle Grave Creek - Grave Creek		و نده	7 V -	
*Please check	the box that applies		OR EXECUT	ION BY A NATURAL PERSON	
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□ SURFAC	CE OWNER (Road and/or Other D	, D	OR EXECUT	ION BY A CORPORATION, ETC.	
□ SURFAC	CE OWNER (Road and/or Other D CE OWNER (Impoundments/Pits) OWNER OR LESSEE	, D	OR EXECUT	ION BY A CORPORATION, ETC.	
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API No. 47	
OPERATOR WELL NO. M01H	
Well Pad Name: Hicks	

☒ COAL OWNER OR LESEE

Name: Christa Dawn Hicks Address: 65 Clover Lane

Moundsville, WV 26041

☑ COAL OWNER OR LESSEE

Name: Leslie Mae Hicks Address: 1611 Skye Drive Chapel Hill, NC 27516

☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name: Vickie L. & Sidney P. Pond Address: 119 Labrador Lane Moundsville, WV 26041

☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name: Lillie Lavern Garey

Address: 798 Big Grave Creek Rd.

Moundsville, WV 26041

Received
Office of Oil & Gas
DEC 0-1 2016

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(8-	-13	3)

API NO. 47	-		
OPERATOR WE	ELL NO.	M01H	
Well Pad Name:	Hicks		

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

02/25/2017

WW-6A (8-13)

API NO. 47	
OPERATOR WELL NO.	M01H
Well Pad Name: Hicks	

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

Office of Oil & Gas

DEC 0.1 2016

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.

WW-6A (8-13)

API NO. 47	
OPERATOR WELL	NO. MO1H
Well Pad Name: Hicks	3

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.

Peceived
Office of Oil & Gas
DEC 0-1 2016

WW-6A	API NO. 47-
(8-13)	OPERATOR WELL NO. M01H
O 11	Well Pad Name: Hicks
Genny Hayes	
Notice is hereby given by:	
Well Operator: Chevron Appalachia, LLC	Address: 800 Mountain View Orive
Telephone: 784 564 3755	Address: 800 Mountain View Prive Smithfield Ph 15478
Email: 124K@ CNCVrun.Cum	Facsimile:

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NOTA HE SEAL

Kristen Brooks, Notary Public Smithfield Borc, Fayette County by Commission Fr. Fees Sept. 2, 2018

My Commission Fr. Fes Sept. 2, 2018
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this 19th day of October 2016.

Kusten Brooks

Notary Public

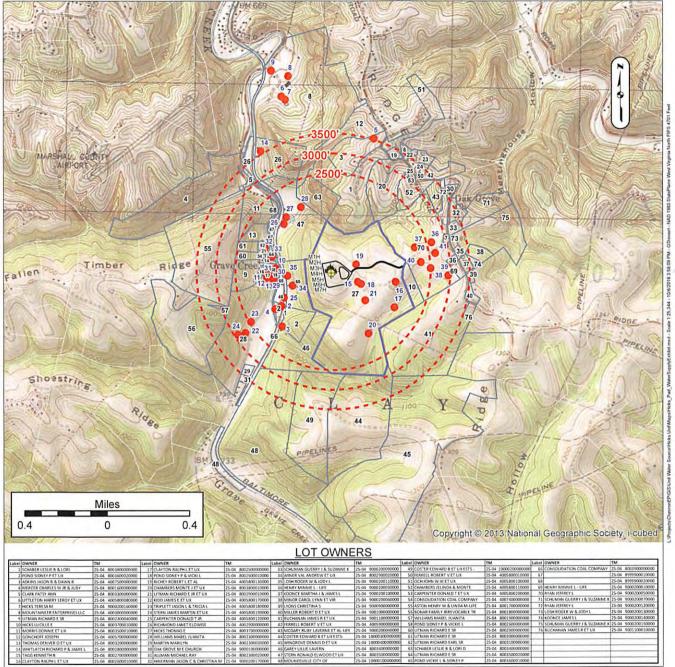
My Commission Expires Sept. 2, 2018

Received Office of Oil & Gas DEC 0-1 2016



WATER SUPPLY EXHIBIT **HICKS PAD**





Surface Owner: THOMAS E. HICKS

Oil/Gas Owner: THOMAS E. HICKS

Well Operator: CHEVRON APPALACHIA, LLC

Address: 800 MOUNTAIN VIEW DRIVE

SMITHFIELD, PA. 15478

Phone: <u>724-564-3700</u>

County: MARSHALL

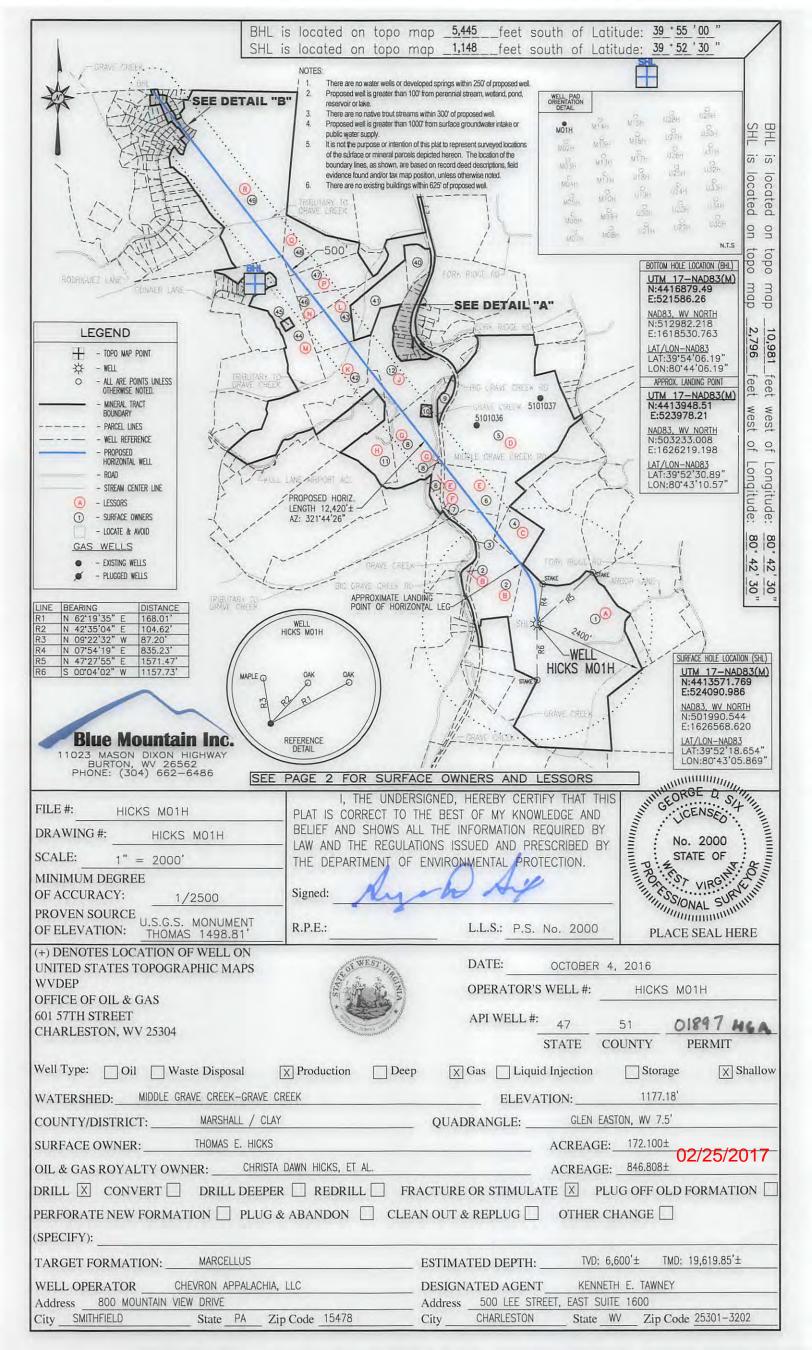
Township: MOUNDSVILLE, WORTHOOMENTADIL & GROUNDWATER & ENVIRONMENTADIL & GROUNDWATER & INC.

Address: 301 COMMERCE PARK DR

CRANBERRY TOWNSHIP, PA 16066

Phone: 800-267-2549

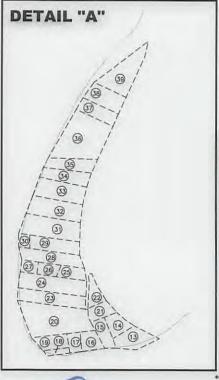
02/25/2017

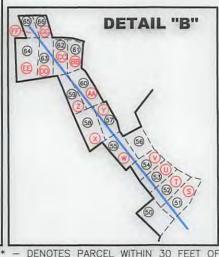


HICKS M01H PAGE 2 OF 2

	LESSOR	DIST-TM/PAR
Α	CHRISTA DAWN HICKS, ET AL.	4-8/37
В	CHESAPEAKE APPALACHIA, LLC.	4-8/35
C	LESLIE SCHABER, ET AL.	4-8/34
D	CNX GAS COMPANY LLC	4-4/30
E	LESTER ALLEN RICHMOND, ET AL.	4-4/29
F	CNX GAS COMPANY LLC	4-4/74
G	JANET RICHMOND, ET VIR.	4-4/72
Н	MARSHALL COUNTY AIRPORT AUTHORITY	4-4/2
J	VERNON L. HYDE	4-4/70
K	JOHN L. FOX	4-5/54.5
	KAREN M. FOX	
	CHRISTI F. PRESTON	
	JOHN L. FOX, II	
	CYNTHIA S. HAMILTON	
	DOROTHY A. ARGENTA	
	MARY E. PERSINGER	
	KAREN FOX EVANS	
	BRAD FOX	
	LINDA SMITH	
	ANN MACHELE MILLER	
	JANET C. HUNNELL	
	MICHAEL PERSINGER	
	BETH BLAKE	
	WILLIAM P. ARGENTA	
	PAUL T. ARGENTA	
	JOAN E. KRESS	
L	JOHN D. LIGHTNER, JR., ET UX.	4-4/1.2
M	THOMAS P. WOOD, ET UX.	4-5/45
N	PATRICIA A. BUNGARD	4-4/1.5
P	PATRICIA A. BUNGARD	4-4/1.6
Q	DOUGLAS J. HUDSON, ET UX.	4-4/1.4
R	CHAPLIN REAL ESTATE CO.	4-2/49
S	RICHARD P. CARTER	4-28/87
T	RICHARD P. CARTER	4-2B/86
U	RICHARD P. CARTER	4-2B/85
V	ROSEMARY MORRIS	4-28/84
W	PETE S. ZUKOFF, ET UX.	4-2B/49
X	ROGER R. KING, ET UX.	4-2B/52
Y	ROGER R. KING, ET UX.	4-2B/53
Z	SIDNEY L. RAPER	4-2B/59
AA	CHAPLIN REAL ESTATE COMPANY	4-2B/60
BB	CHAPLIN REAL ESTATE COMPANY	4-2B/63
CC	GEORGE F. LANDERS, ET UX.	4-2B/64
DD		4-2B/65
EE	GEORGE F. LANDERS, ET UX.	4-2B/66
FF	CHAPLIN REAL ESTATE CO.	4-2B/70
GG	*CHAPLIN REAL ESTATE COMPANY	4-2B/71

	SURFACE OWNER	DIST-TM/PAR
1	THOMAS E. HICKS	4-8/37
2	RONALD ELWOOD STERN ET UX	4-8/35
3	CONSOLIDATION COAL COMPANY/MURRAY ENERGY C/O LAND DEPT	4-8/39
4	CHEVRON USA INC	4-8/34
5	MOUNTAINEER ENTERPRISES LLC	4-4/30
6	LESTER ALLEN & JANET E. RICHMOND	4-4/29
7	CONSOLIDATION COAL COMPANY/MURRAY ENERGY C/O LAND DEPT	
8	JANET ELOWISE RICHMOND - LIFE	4-4/72
9	VERNON L. HYDE	4-4/71
10	WILLARD L. ATWELL ET UX	4-4/73
11	MARSHALL CO AIRPORT AUTHORITY	4-4/2
12	VERNON L. HYDE	4-4/70
13	DANIEL L. & REBECCA L. WILLIAMS	4-4/70.1
14	CARL E., JR. & DARLENE LUCAS	4-4/4.5
15	AMANDA ROBERTS - LIFE	4-4/4.4
_		4-4/4.4
16	THOMAS E., JR. & CRYSTAL M. ROGERSON	4-4/4.10
	THOMAS E. ROGERSON JR.	4-4/4.12
18	ROBERT HAYWOOD MCCARTNEY ET UX	4-4/4.9
19	THOMAS E. ROGERSON JR.	4-4/4.3
20	JOSEPH CHARLES RUDISH	4-4/4
21	DANIEL R. TURKLAY	4-4/4.6
22	JON D. WAYT ET UX	4-4/4.7
23	CHARLES JOSEPH DARMAFALL	4-4/4.2
24	RAYMOND V. CLAYTON	4-4/4.1
25		
	NANCY L. PARKS	4-4/6.1
26	JOHN T. PARKS EST	4-4/6
27	JOHN T. PARKS EST	4-4/5
28	LYLE R. MCMASTERS	4-4/7
29	GLEN MICHAEL SCHMID ET UX	4-4/8
30	GLEN MICHAEL SCHMID ET UX	4-4/9
31	ROBERT LEE HALL	4-4/10
32	JOS W. GOULDSBERRY JR. ET UX	4-4/11
33	JOS W. GOULDSBERRY JR. ET UX	4-4/12
34	SHERRI J. & GEORGE C. ANDERSON	4-4/13
		4-4/13
35	GEORGE C. & SHERRI J. ANDERSON	4-4/14
36	WILLIAM J. & CAROL M. FRITZMAN	4-4/15
37	ROBERT L. & PATSY CLARK	4-4/16
38	ROBERT L. CLARK	4-4/17.1
39	GEORGE R. FINNEGAN	4-4/17
40	PAUL WAYNE LIGHTNER	4-4/1.1
41	JOHN D. & CATHY L. LIGHTNER	4-4/1.7
42	LENEE J. CURITTI ET UX	4-5/54.5
43	JOHN D., JR. & CATHY L. LIGHTNER	4-4/1.2
44		
-	THOMAS P. & TAMARA R. WOOD	4-5/45
45	THOMAS P. & TAMARA R. WOOD	4-5/45.6
46	JOHN D. & CATHY L. LIGHTNER	4-4/1.5
47	PAUL W. & AMANDA LIGHTNER	4-4/1.6
48	PAUL W. & AMANDA LIGHTNER	4-4/1.4
49	CHAPLIN REAL ESTATE CO.	4-2/49
50	CHAPLIN REAL ESTATE CO.	4-2B/106
51	RICHARD P. CARTER	4-2B/87
52	RICHARD P. CARTER	4-2B/86
53	RICHARD P. CARTER	4-2B/85
54	ROSEMARY MORRIS	4-2B/84
55	PETE STEVEN ZUKOFF ET UX	
		4-2B/49
56	WILLIAM I. JEFFRIES ET UX	4-2B/50
57	LINDA J. KING	4-2B/52
58	LINDA J. KING	4-2B/53
59	CODY T. & ANGELA D. ZUK	4-2B/59
60	JOHN & CYNTHIA MCCUTCHEON	4-2B/60
61	*NICHOLAS ADAM & MELISSA JO CHAPLIN	4-2B/63
62	GEORGE & BARBARA LANDERS	4-2B/64
63	GEORGE & BARBARA LANDERS	4-2B/65
64	GEORGE & BARBARA LANDERS	
		4-2B/66
65	KEVIN M. & DEBORAH L. JARRETT	4-2B/70
66	*CHAPLIN REAL ESTATE CO.	4-2B/71





SURFACE HOLE LOCATION (SHL)

UTM 17—NAD83(M)
N:4413571.769
E:524090.986

NAD83, W. NORTH
N:501990.544
E:1626568.620
LAT/LON-NAD83
LAT:39'52'18.654"
LON:80'43'05.869"

APPROX. LANDING POINT

UTM 17-NAD83(M)
N:4413948.51
E:523978.21

NAD83, WV NORTH N:503233.008 E:1626219.198 LAT/LON-NAD83 LAT:39'52'30.89" LON:80'43'10.57" DOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83(M)
N:4416879.49
E:521586.26

NAD83, WV NORTH N:512982.218 E:1618530.763

LAT/LON-NAD83 LAT:39*54'06.19" LON:80*44'06.19"

02/25/2017

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

OCTOBER 4, 2016

WW-6A4 (1/12)

Operator Well No.	M01H
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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: 10/26/2016 Date Permit Application Filed: |2|| | | | | | Delivery method pursuant to West Virginia Code § 22-6A-16(b) ☐ HAND CERTIFIED MAIL **DELIVERY** 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: Thomas E. Hicks Name: Jeffrey L. Ryan Address: 353 Arbor Lane Address: 141 Clover Lane Moundsville, WV 26041 Moundsville, WV 2604 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 Easting: 524090.986 UTM NAD 83 County: Marshall Northing: 4413571.769 District: Clay Public Road Access: Fork Ridge Road/WV-17 Quadrangle: Glen Easton, WV 7.5' Generally used farm name: Hicks 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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Oil and Gas Privacy Notice:

Notice is hereby given by: Well Operator: Chevron Appalachia, LLC

800 Mountain View Drive

724-564-3700

724-564-3894

Address:

Telephone:

Facsimile:

Email:

Smithfield, PA 15478

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.

Address:

Telephone:

Email: Facsimile:

Authorized Representative:

WW-6A5 (1/12)

Operator	Well No.	M01H

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

		Requirement: notice shall be proved: 10/26/2016 Date Pe		o later than the filing pplication Filed:	date of permit	application.
Deliv	ery meth	od pursuant to West Virginia (Code § 2	22-6A-16(c)		
		IED MAIL N RECEIPT REQUESTED		HAND DELIVERY		
return the pl requir drillin damag	receipt r lanned op red to be p ng of a ho ges to the ne notices	equested or hand delivery, give to be peration. The notice required by provided by subsection (b), section izontal well; and (3) A propose surface affected by oil and gas of the subsection is sufficient to be provided by the subsection is sufficient to the subsection is subsection in the subsection is subsection in the subsection is subsection.	he surfa this su ten o ed surfa peration	ace owner whose land ubsection shall include f this article to a surfa ace use and compens as to the extent the da	will be used for de: (1) A copy ace owner whos ation agreemen mages are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter. Sted in the records of the sheriff at the time
(at the Name Addre		por Lane		time of notice): Name: Address	leffrey L. Ryan 141 Clover Lane lle, WV 26041	
Pursu	tion on tl			of drilling a horizonta	l well on the tra	well operator has developed a planned ct of land as follows: 524090.986
Count	-	Marshall		— UTM NAD 8	Northing:	4413571.769
Distri	ct:	Clay		Public Road	Access:	Fork Ridge Road/WV-17
Quad	rangle:	Glen Easton, WV 7.5'		Generally use	ed farm name:	Hicks
Water	rshed:	Middle Grave Creek - Grave Creek				
Pursu to be horize surfact inform headq	ant to We provided ontal well ce affecte nation re	by W. Va. Code § 22-6A-10(b); and (3) A proposed surface used by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE,) to a seand cone externed be obta	surface owner whose impensation agreement the damages are contined from the Secret	e land will be unt containing an ompensable und ary, at the WV	code section; (2) The information required used in conjunction with the drilling of a coffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting

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. Office of Oil & Gas

DEC 0 1 2016



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

November 7, 2016

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

Subject: DOH Permit for the Hicks Pad A Well Site, Marshall County

Hicks A Unit 1H Hicks A Unit 4H Hicks A Unit 7H Hicks A Unit 2H Hicks A Unit 5H

Hicks A Unit 3H Hicks A Unit 6H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2016-0504 for the subject site to Chevron Appalachia, LLC for access to the State Road for the well site located off of Marshall County Route 17 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 & Gas

DEC 0 1 2016

Section VI - Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	
State:	wv
County:	Marshall
API Number:	047-51-XXXXX
Operator Name:	Chevron
Well Pad Name:	Hicks
Longitude:	39.872100
Latitude:	-80.711825
Long/Lat Projection:	NAD 83
Production Type:	
True Vertical Depth (TVD):	
Total Water Volume (gal)*:	116,001,000

Hydraulic Fracturing Fluid Additives:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Comments
Corrosion Inhibitor A264	Schlumberger	Corrosion Inhibitor	Methanol/Aliphatic Acids/Prop-2-yn-1- ol/Aliphatic Alcohols, ethoxylated #1	Mixture	
28% HCl Acid	Schlumberger	Used to open perfs	Hydrochloric Acid	7647-01-0	
Breaker J134	Schlumberger	Gel Breaker	Hemicellulase Enzyme	9012-54-8	
Water Gelling Agent J580	Schlumberger	Water Viscosifier	Carbohydrate Polymer	Proprietary	
Friction Reducer J609	Schlumberger	Friction Reducer	Ammonium Sulfate	7783-20-2	
Iron Stabilizer L58	Schlumberger	Iron Stabilizer	Sodium Erythorbate	6381-77-7	
EC6116A	Nalco	Biocide	Dibromoacetonitrile/2,2-Dibromo-3- nitrilopropionamide/Polyethylene Glycol	Mixture	
EC6486A Scale Inhibitor	Nalco	Scale Inhibitor	Amine Triphosphate/Ethylene Glycol	Mixture	
NALCO EC6673W	Nalco	Iron Control	Ethylene Glycol	107-21-1	
S012-3050	Schlumberger	Proppant	Crystalline Silica	14808-60-7	
5012-4070	Schlumberger	Proppant	Crystalline Silica	14808-60-7	Lagran .
					Ma My
	1//				
* Total Water Volume sources n	may include fresh water, pr	oduced water, and/or recyc	led water	5 1 0 1 3 n	

^{*} Total Water Volume sources may include fresh water, produced water, and/or recycled water

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Aurilland Health Health Aurilland Health Aurilland Health Aurilland Health H Office of Oil & Gas

DEC 0 1 2016

МІСНАЕГ ВАКЕВ ІИТЕПИАТІОИАГ СОИЗПІТІЙО ЕНВІИЕЕВЗ МООИ ТОЖИЗНІР, РЕИИЗУГУБИІА

























OVED	P 000	272772016
APPR	WDE	133

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GE 501	GEOTECHNICAL SUBSURFACE SUMMARY
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GE 503	GEOTECHNICAL TEST BORING INFORMATION
GE 504	GEOTECHNICAL SUBSURFACE DETAILS AND NOTES
009 24	RECLAMATION PLAN WITH AERIAL
80.800	SECIAMATION PLAN

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EVKON APPALACHIA, 800 MOUNTAIN VIEW DRIVE SMITHFIELD, PA 15478	AT NAST AT NAS
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SITE LOCATION MAP
USGS 7.5' TOPOGRAPHIC QUADRANGLE MAP
MOUNDSVILLE 8, 1-2000

	SHEAR	DEANOUT	ENDWALL	FIRE HYDRANT	CAS VALVE	N.ET	LOH	STORY WANTED	SAN MANGE	MARKER	WETER - E. G. W	PERC HOLE	POLE	KON	TESTHOLE	TOL	VENT	BATER VALVE	YARD DRAN
PROPOSED	O DALI XXVETE OLE	CABLE TV	CONTOURS (WINOR!)	DATA LINE	CASDADYT R.	OLE-TL-COV	FDACE LINE	CAS UMC	DASSMEND WHEES	PROPERTY LINE	ROAD CENTERUNE	SANTARY UNE	SANTART LATERAL	STORM SEWER	TREPHONE LINE		SATER UNE LATERAL	a	Ф
		- CIA		DAT		1 213		048	340	1		SAN	194]		1	"	!		
	O seus	O GENERAL	TOWART (THE HYDRANT	N CAS WAY	THE PALET	O IRON PIN	then &	O MANDLE	A WARES	O METER	TOU I	100 tf	* TESHOLE	O PREE	D VENT	M MATER VALVE	M YARD DRAN	
EXISTING	CABLE TV	CONTOUR (WALDR)	DATA LINE	ELECTRIC UNE	DEC-TL-COM	TORCE MAIN	DAS LINE	DAZINEAD WRES	PROPERTY UNE	MONT-OF-WAY	SEMER	TLDHONE LINE	BATCH UNE						
		1111	0	Ĭ	1 22	1		1 6	1			İ							
CNSSSI	TC - TOP OF CURS	0 - 0,7118A	BW - BOTTOM OF WALL	TS -TOP OF SLOPE	ES - BOTTOM OF SLOPE	ST -STORM	ANH - MANHOLE	FL - FLOW LINE	WY - WATER VALVE	DV - GAS VALVE	CO - CLEMIOUT	STD - STANDARD	PM - PANCHG METER	THE WOOD - SQ	50				

CHEVRON APPALACHIA, LLC

CONSULTANTS

PREPARED FOR:



ANCE AREA (AC)		1.7	19.7	27.4	0.1	JEFFREYL	2.2	0.0	2.2	0.0	LUCILLE
HICKS LIMITS OF DISTURBANCE AREA (AC)	TOTAL SITE	ACCESS ROADS	WELL PAD	TOTAL AFFECTED AREA	TOTAL WOODED ACRES DISTURBED	IMPACTS TO RYAN JEFFREY I	ACCESS ROADS	WELL PAD	TOTAL AFFECTED AREA	TOTAL WOODED ACRES DISTURBED	IMPACTS TO HICKS LUCILLE E

E AREA (AC)		1.1	19.7	27.4	0.1	PEYL	2.2	0.0	2.2	00	33110	0.1	0.0	0.1	0.0	MASE	5.2	19.9	25.0	0.1	DRK RIDGE ROAD LONGITUDE 80 707481 W	ARBOR LANE	
HICKS LIMITS OF DISTURBANCE AREA (AC)	TOTAL SITE	ACCESS ROADS	WELL PAD	TOTAL AFFECTED AREA	TOTAL WOODED ACRES DISTURBED	IMPACTS TO RYAN JEFFREY	ACCESS ROADS	WELL PAD	TOTAL AFFECTED AREA	TOTAL WOODED ACRES DISTURBED	IMPACTS TO HICKS LUCILLE	ACCESS ROADS	WELL PAD	TOTAL AFFECTED AREA	TOTAL WOODED ACRES DISTURBED	IMPACTS TO HICKS THOMAS E	ACCESS ROADS	WELL PAD	TOTAL AFFECTED AREA	TOTAL WOODED ACRES DISTURBED	START OF ARBOR LANE AT FORK RIDGE ROAD LATITUDE 38 873781 N LONGTUDE BOT	START OF ACCESS ROAD AT ARBOR LANE	

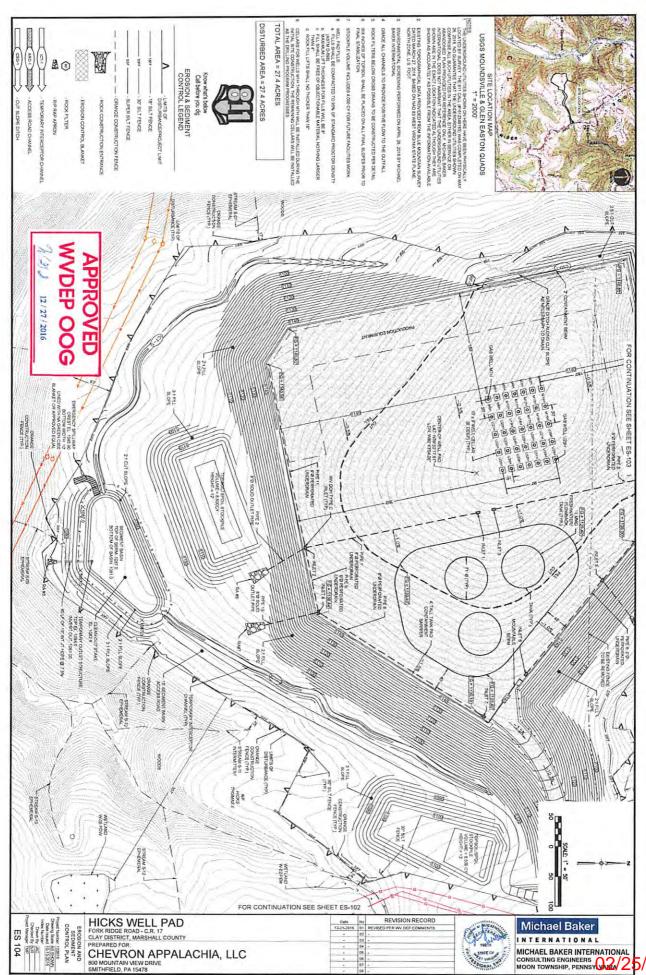
EROSION AND SEDIMENT CONTROL PLANS

HICKS WELL PAD

FORK RIDGE ROAD (C.R. 17) CLAY DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

WATERSHED NAME (NV WATER PLAN) UPPER OHO - WHEEL

WELL PIN 1035H* LATITUDE 39.871678 N US FOOT



HICKS WE

EROSION AND SEDIME

FORK RIDGE ROCLAY DISTRICT, MARSHALL



CHEVRON APP

800 MOUNTAIN SMITHFIELD



SITE LOCAT USGS 7.5' TOPOGRAPHI MOUNDSVILLE & GLEN

LEGEND	EXISTING		
TEGENU TC -TOP OF CURB G -GUTTER TW -TOP OF WALL BW -BOTTOM OF WALL TS -TOP OF SLOPE BS -BOTTOM OF SLOPE SS -BOTTOM OF SLOPE STORM MH -MANHOLE TOP -TOP OF CASTING FL -FLOWLINE WW -WATER VALVE GV -GAS VALVE FH -FIRE HYDRANT CO -CLEAN OUT STD -STANDARD MM -PARRING METER MB -MAILBOX DS -DOOR SILL	 CABLE TV CONTOUR (MALCH) CONTOUR (MACCH) DATA LINE ELECTRIC LIME FENCE USE FORCE MAIN GAS LINE USE PREAD MRES PROPERTY LINE PROPERTY LINE READ CENTERLINE SEALER RELEPHOLE LINE FELET		SHPLE CLEAVOL ENDMALL FRE HIT GAS HAL NULET HOLE WARNER HOLE SON TEETHOLE THE
		G.	VET4T
		84	WATER

Know what's below Call before you dig

CONSULTANTS

BLUE MOUNTAIN AERIAL MAPPING 11023 MASON DIXON HIGHWAY BURTON, WEST VIRGINIA 26562 304-662-2626

HICKS LIMITS OF DISTUR	BANCE AREA (AC)
TOTAL SI	TE
ACCESS ROADS	7.7
WELL PAD	19.7
TOTAL AFFECTED AREA	27.4
TOTAL WOODED ACRES DISTURBED	0.1
IMPACTS TO RYAN	V JEFFREY L
ACCESS ROADS	2.2
WELL PAD	0.0
TOTAL AFFECTED AREA	2.2
OTAL WOODED ACRES DISTURBED	0.0
IMPACTS TO HICK	S LUCILLE E
ACCESS ROADS	0.1
WELL PAD	0.0
TOTAL AFFECTED AREA	0.1
TOTAL WOODED ACRES DISTURBED	0.0
IMPACTS TO HICKS	THOMAS E
ACCESS ROADS	5.2
WELL PAD	19.9
TOTAL AFFECTED AREA	25.0
OTAL WOODED ACRES DISTURBED	0.1

LATITUDE: 39.873761 N LONGITUDE: 80.707481 W
START OF ACCESS ROAD AT ARBOR LANE
LATITUDE: 39.8721 N LONGITUDE: 80.711825 W
WELL PIN "M1H"
LATITUDE: 39.871847 N LONGITUDE: 80.718297 W
WELL PIN "U35H"
LATITUDE: 39.871678 N LONGITUDE: 80.717811 W
BASED ON NAD 83 WEST VIRGINIA, STATE PLANE, NORTH ZONE, U.S. FOOT

START OF ARBOR LANE AT FORK RIDGE ROAD

WATERSHED NAME (WV WATER PLAN): UPPER OHIO - WHEELING

RECEIVING STREAM (USGS BLUE LINE): GRAVE CREEK DISTANCE TO NEAREST USGS BLUE LINE STREAM = 1061 FT NO ANTICIPATED WETLAND IMPACTS

LL PAD

NT CONTROL PLANS

OAD (C.R. 17) COUNTY, WEST VIRGINIA

FOR:

ALACHIA, LLC VIEW DRIVE PA 15478



ON MAP C QUADRANGLE MAP EASTON, WV 1997

	PROPOSED		
	- BUTO SETBACK LINE	0	S-R/8
	- 148LE /V	0	DEFAREST
910	- CONTOURS [MAJOR]	17.	
903	- EUNTOURS (MNOR)	~	ENDWALL
- DAT	- DATA LINE	0	FIRE IN CRANT
		24	DAS VALVE
	- ELECTRIC UNE		
	- BIEC-MI-COV	=	WET
	- TENEE INE	冰	FIGH),
	FORCE MAIN	0	STORM WANHOLE
Q45	- GAS LINE		
0.6	→ CYERHEAD WHES → PROPERTY LINE	0	BAN MANINGLE
	= POST-DE-WAT		MARKER
	- FOAD DENTERUNE		WETER - E. C.
Saly -	EANTARY LINE	0	PERC HOVE
100	SAWYARY LATERAL		
• 910	SPOT ELEVATIONS	ø	POLE
-	STORM SEWER	0	93%
YEL	- TELEPHONE LINE	4	TESTINGLE
······	M TREE LINE	0	***
W	WATER LINE	0	TREE
	WATER INE LATERA	0	VENUT
		H	NATER VALVE
		0	YARD DRAM

	SHEET INDEX	
NO.	TITLE	
CS 000	COVER SHEET	
ES 050	EXISTING TOPOGRAPHIC PLAN	
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