

west virginia department of environmental protection

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

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

Friday, October 5, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Re: Permit approval for HINES M20H 47-051-02087-00-00

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

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

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

James A. Martin Chief Operator's Well Number: HINES M20H Farm Name: DONALD HINES ET UX U.S. WELL NUMBER: 47-051-02087-00-00 Horizontal 6A New Drill Date Issued: 10/5/2018

Promoting a healthy environment.

API Number:

PERMIT CONDITIONS 4705102087

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</u> conditions may result in enforcement action.

CONDITIONS

- 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 4705102087

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, sending an email to DEPOOGNotify@wv.gov.

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west virginia department of environmental protection

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

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

TO: Chevron Appalachia, LLC 800 Mountain View Drive Smithfield, PA 15478 DATE: August 14, 2017 ORDER NO.: 2017-W-9

INTRODUCTION

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

FINDINGS OF THE CHIEF

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

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

10/05/2018 4705102087

CONCLUSIONS OF LAW

- 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."

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<u>ORDER</u>

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

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

hy By 1. JAMES A. MARTIN, CHIEF

API NO. 47-____-

OPERATOR WELL NO1 0905/2018 Well Pad Name: Hines

4705102087

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

1) Well Operator:	Chevron A	ppalachia,	LLC	49449935	Marshall	Washing	Moundsville, WV
				Operator ID	County	District	Quadrangle
2) Operator's Well	Number: M	120H		Well]	Pad Name: Hir	nes	
3) Farm Name/Sur	face Owner:	Hines		Public R	load Access: F	Route 38/Cam	pbell Hill Road
4) Elevation, curre	nt ground:	1125'	Ele	evation, propos	ed post-constru	ction: 1125	
	Gas <u>X</u> her		Oil	U:	nderground Sto	orage	
(b))If Gas Sh	allow X		Deep			
	Ho	orizontal X					
6) Existing Pad: Ye	es or No \underline{Ye}	es					
7) Proposed Target Marcellus; 6,245				-	-	l Pressure(s):	
8) Proposed Total	Vertical Dep	oth: 6,289'	_		,		RECEIVED Office of Oil and Gas
9) Formation at To	· •		rcellus				SEP 27 2018
10) Proposed Total	l Measured I	Depth: 17 ,	354'	_		E	W Department of Invironmental Protection
11) Proposed Horiz	zontal Leg L	ength: 8,9	26'	<u>.</u>			Protection
12) Approximate F	Fresh Water S	Strata Depth	s:	360' below G	- Base of Du	Inkard Group	
13) Method to Dete	ermine Fresh	n Water Dep	ths: N	o water wells within 1.5 n	niles - used base of Dun	kard group as deepest p	otable water in Marshall County
14) Approximate S	Saltwater Dep	oths: 1046	', 1595'	, 1837' Below C	<u>SL</u>		
15) Approximate C	Coal Seam D	epths: Way	nesbu	rg Seam 365'	Below GL; Pit	tsburgh Seam	640' Below GL
16) Approximate I	Depth to Poss	sible Void (d	coal mi	ne, karst, other)	: No Void exp	pected	
17) Does Proposed directly overlying of				ns Yes Y]	No	
(a) If Yes, provid	e Mine Info:	Name:	Irelar	nd Mine			
· / / I		Depth:	640' f	Below GL			
		Seam:	Pittsb	ourgh Coal			
		Owner:	Murray	Energy Corp owns	Ireland Mine; Cor	nsol owns Coal Pil	ar wells will be drilled in.

4705102087 API NO. 47-____

OPERATOR WELL NO. <u>M20H</u>

Well Pad Name: Hines

18)

WW-6B

(04/15)

CASING AND TUBING PROGRAM

ТҮРЕ	<u>Size</u> (in)	<u>New</u> or Used	<u>Grade</u>	<u>Weight per ft.</u> (lb/ft)	<u>FOOTAGE: For</u> <u>Drilling (ft)</u>	INTERVALS: Left in Well (ft)	<u>CEMENT:</u> <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	20	New			60	60	CTS
Fresh Water	13.375	New	J-55	54.5	410	410	CTS
Coal			· · · -	· · ·	· · · · · · · · · · · · · · · · · · ·		
Intermediate	9.625	New	L-80	40	1,858	1,858	CTS
Production	5.50	New	P110	20	17,354	17,354	2358 (500' below 9.625" shoe)
Tubing							
Liners							

0 3/22/10

ТҮРЕ	Size (in)	<u>Wellbore</u> <u>Diameter (in)</u>	<u>Wall</u> <u>Thickness</u> (in)	<u>Burst Pressure</u> (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (cu. ft./k)
Conductor	20	30					······
Fresh Water	13.375	17.5	0.38	2730	1911	Class A	1.2
Coal							<u></u>
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					1		
Liners							

PACKERS

Kind:				······································	 <u> </u>
Sizes:		 ~			
Depths Set:		 	<u> </u>		
	<u> </u>				 ·

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WV Department of Environmental Protection

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

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

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

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

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

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

23) Describe centralizer placement for each casing string:

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

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

For the Water String the blend will contain class A cement, 3% CaCl2, and flake. The intermediate will contain class A CaCl2, and flake. The Production cement will have a lead and tail cement. The lead will contain class A, G, or H dispersant, suspension agent, and retarder. The tail will contain class A, G, or H cement, Calcium Carbonate, KC de-foamer, suspension agent, and friction reducer.	ass A cement, 3% cement, KCl, Cl. dispersant Office of Oil and Gas
	SEP 27 2018
	2018

25) Proposed borehole conditioning procedures:

WV Department of Environmental Protect

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

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HINES PAD CEMENT ADDITIVES

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

suspension agent, and friction reducer

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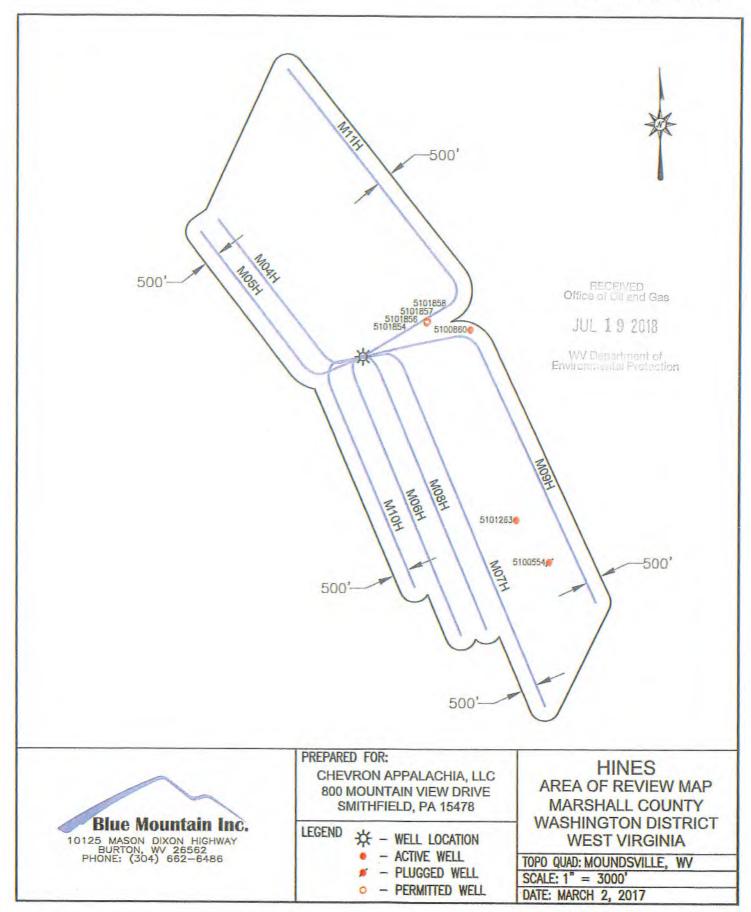
				Hi	nes M	20H		
hington Twp, Marsh	nall Co, WV		-				Ground Level Elev. (ft above SL):	1,120
DRILLING FLUID /	CENTRALIZER	CASING SIZE / FORMATION	DEPTH		LHEAD DESIGN	HOLE	CASING	CEMENT
BIT TYPE / TFA	2 Bowspring per Jt	FORMATION	MD TVD (FT) (FT)		NC AZM	SIZE (IN)	SPECS	PROGRAM Grout to Surface
Gole Ballel / Auger	2 Bowspring per st	20" Conductor	60 60			26	<u>Conductor</u> 20" API 5L Minimum 40 ft from GL or at le	1
	Bow Spring: (1) on shoe track w' stop collat & (1) por i over coupling to surface						Surface Casing 13-3/8* 54.5# J-55 BTC 0.380* Wall Caupling OD (in) 14.375 D (in) 12.615 Drift ID (in) 12.459 Durst (ps1) 2.730 Collapse (ps1) 1.130 Vield [it Strength 1,000 lbs] 853	<u>Surface Blend (Class A)</u> Cement to Surface
	Bow Spring:	13-3/8" Casing	410 410			17.5	Minimum 50 ft past deepest Intermediate Casing 9-5/8" 40# L-80 BTC	known fresh water Intermediate II Blend (Class A) Cement to Surface
	(1) on shoe track witstp collar & (1) per 3 jts over coupling						0.395' Wall Coupling OD (In) 10.625 ID (In) 8.835 Drift ID (In) 8.679 Burst (pat) 5,750 Collapse (pat) 3,080 Yield (Jt Strength 1,000 bs) 916	
uī.	Bow Spring:	9-5/8" Casing	1,858 1,85	8		12.375 - 12.25	Production Casing	Production Lead Slurry
	(1) per every office (i over coupling SpiraGilder or Centek: (1) per (t of csg to KOP						5-1/2" 2017 P-110, D.361" Wall Coupling OD (in) 6 300 ID (in) 4.778 Drit ID (in) 4.653 Burst (pai) 14,360 Collapse (pai) 12,090 Yield (Jt Strength 1,000 lbs) 729	Cement to 500' below 9-5/8" shoe
								Production Tail Slurry TOC minimum 200' above Marcell
	Float Equip.					8.75 -		

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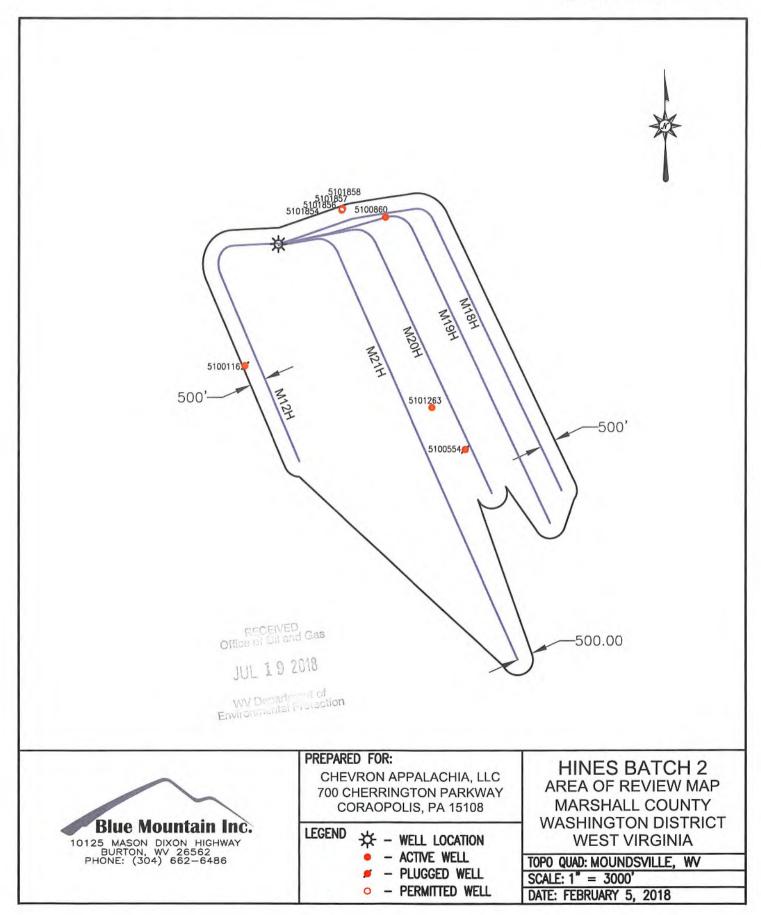
JUL 1 9 2018

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47051012/05/2018



4705110/25/2088



4705102087

Well ID	Prior Operator On Record	Operator - DEP	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones NOT Perforated
47-051-00860	CNX Gas Company LLC	CNX Gas Company LLC	Active	39.908767	-80.686817	840'	Pittsburgh Seam	None
47-051-01263	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Active	39.892007	-80.681121	Unknown	Unknown	None
47-051-00554	Kentucky Central & Co.	Unknown	Plugged	39.888303	-80.677210	1441'	Pottsville	None
47-051-01854	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909336	-80.691893	6317	Marcellus	None
47-051-01856	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	S85606'6E	-80.691856	6317'	Marcellus	None
47-051-01857	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909430	-80.691819	6317'	Marcelius	None
47-051-01858	Chevron Appalachia, LLC	Chevron Appalachia, LLC	Permitted	39.909477	-80.691782	6317'	Marcellus	None
47-051-00116	Unknown	Unknown	Plugged	39.895415	-80.702829	Unknown	Unknown	None



10/05/2018

05102087 WW-9 (4/16)10/05/2018 API Number 47 -Operator's Well No. Hines M20H STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN Operator Name Chevron Appalachia, LLC OP Code 49449935 Watershed (HUC 10) Middle Grave Creek/Grave Creek Quadrangle Moundsville, WV 7.5' Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes V No Will a pit be used? Yes No If so, please describe anticipated pit waste: Will a synthetic liner be used in the pit? Yes No If so, what ml.? Proposed Disposal Method For Treated Pit Wastes: Land Application RECEIVED Office of Cil and 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 Environmental Francotion Will closed loop system be used? If so, describe: Yes, we will be utilizing multiple open/closed top tanks Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air to KOP, SBM KOP to TMD -If oil based, what type? Synthetic, petroleum, etc. Synthetic Additives to be used in drilling medium? Barite, fluid loss, emulsifiers, rheological control Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed offsite -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)

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

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

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

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

Company Official Signature	Jenny	tays	
Company Official (Typed Name) Jer	iny Hayes	0	
Company Official Title Permitting Te	am Lead		
Common wealth of Annsylvania Subscribed and sworn before me this	14th day of March		20_1&
My commission expires	September 17,	2618	Commonwealth of Pennsylvania - Notary Seal Laura Savage, Notary Public Allegheny County My commission expires September 17, 2018
			Commission number 1285773

Chevron Appalachia, LLC

Lime 3 Tons/acre or to correct to pH unless otherwise noted in soll report Fertilizer type 10-20-20 Fertilizer amount 300 Ibs/acre Fertilizer amount 300 Ibs/acre Mulch 3, 5 for winter stabilization Tons/acre Seed Mixtures Temporary Permanent Seed Type Ibs/acre Seed Type Ibs/acre Seed Type Ibs/acre	Proposed Revegetation Treat	tment: Acres Disturbed 8 a	Cres Prev	regetation pH	per soils testing report
Fertilizer amount 300 Ibs/acre Mulch 3, 5 for winter stabilization Tons/acre Seed Mixtures Permanent Seed Type Ibs/acre Ibs/acre	Lime <u>3</u>	Tons/acre or to correct	to pH	n 	
Mulch3, 5 for winter stabilizationTons/acre Seed Mixtures Permanent Seed Type Ibs/acre	Fertilizer type 10-	20-20			
Seed Mixtures Temporary Permanent Seed Type Ibs/acre Seed Type Ibs/acre	Fertilizer amount_3	00	lbs/acre		
Temporary Permanent Seed Type lbs/acre	Mulch3, 5 for w	inter stabilization	Tons/acre		
Seed Type Ibs/acre Seed Type Ibs/acre			Seed Mixtures		
	Te	emporary		Perman	ent
See Attached See Attached	Seed Type	lbs/acre	Seed 7	Гуре	lbs/acre
See Allached See Allached	See Attached		See Attache	əd	
			• • • • • • • • • • • • • • • • • • •		
			······································		

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Jim Milelan	
Comments:	RECEIVED Office of Oil and Gas
	JUL 1 9 2018
	W/V Depertment of Environmental Protection
Title: Oil & Gas Inspector	Date: 4/5/18
Field Reviewed? () Yes () No

			SEED	SEED MIXTURES			
Tem	Temporary		Permanent	int		Permanent	
Seed Type		lbs/acre	Seed Type	lbs/acre		Seed Type	lbs/acre
Annual Ryegrass	or	50	Non Agricultural Upland		and	Hayfield, Pastureland, and Cropland	
Winter Wheat		75	Tall Fescue	100		Orchard Grass	80
			Perennial Ryegrass	33		Timothy	80
			Ladino Clover	18		Birdsfoot - Trefoil	20
			Birdsfoot - Trefoil	18		Ladino Clover	20
			Red Top	9			

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WV Derestment of Environment Protection



Chevron

Appalachian LLC WV Well Site Safety Plan Pad: Hines Pad A

Well # M20H

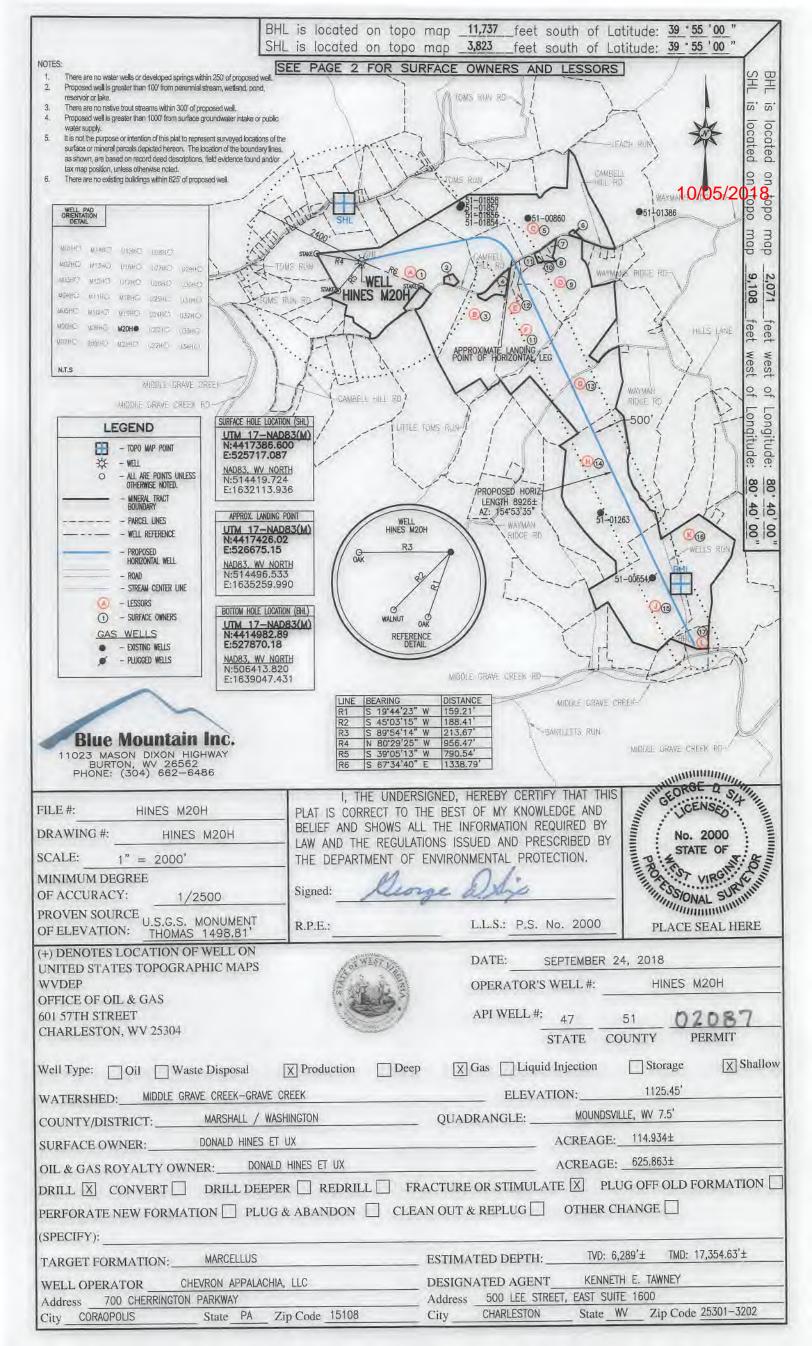
3/27/18

1256 Campbell Hill Road Moundsville, WV 26041 Washington District Marshall County, WV Access Point – [39.904947°N, 80.693363°W] Well Site – [39.906387°N, 80.699914°W] Marshall County, West Virginia

> RECEIVED Office of Oil and Gas

> > JUL 1 9 2018

WAY Department of Environmental Protection



HINES M20H PAGE 2 OF 2

10/05/2018

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
В	PATRICIA S. HOSKINS	14-12/31
С	OKEY L. RINE JR.	14-11/1
D	FRANCIS TURNER ET UX	14-11/2
E	DANIEL I. SHIPLEY ET AL	14-11/16.3
F	DANIEL I. SHIPLEY ET AL	14-11/16
G	PATRICIA C. LINDGREN	14-11/14
Н	JAMES J. CAVENEY	14-13/8
J	FREDA V. PARSONS	14-13/10
	NEVA E. KELLER	
	SHEILA M. HAZEL EXEC OF MARY IRENE TAYLOR	1
	LETHA I. RUCKMAN	1
	ROBERT E. ROGERSON	1
	RONALD E. ROGERSON	1
	PATTY JEAN LANTZ	1
	RALPH VAUGHN TAYLOR	1
	MELISSA ANN BRAUN	1
	ROBIN ROSE	
	RANDALL C. ROGERSON	1
	RUSSELL W. ROGERSON	1
	ELIZABETH BENNETT	1
	JUDITH TAYLOR	
	WILLIAM O. TAYLOR	1
	DAVID R. TAYLOR	1
	MARY E. TAYLOR	1
	HERBERT M. TAYLOR	1
	LORETTA DOUGHERTY	1
	KORENE LANTZ	1
	HOWARD G. TAYLOR	1
	MELVIN FANKHAUSER	1
	EUGENE R. FANKHAUSER	1
	DENVER TAYLOR	1
	STEFANIE CIRILLI	1
	JENNIFER CUICHTA	
K	DENNIS W. CROW ET UX	14-13/11
L	CNX GAS COMPANY LLC	14-13/11.1
	NOBLE ENERGY INC	1

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX	14-12/30
2	TERRY L. DERROW ET UX	14-12/30.3
3	PATRICIA SUE HOSKINS	14-12/31
4	EARNEST L. ROBERTS ET UX	14-12/31.1
5	OKEY L. RINE JR.	14-11/1
6	STEVEN M. LAVENSKI	14-11/1.1
7	D. FRANCIS TURNER ET UX	14-11/2.1
8	CARL A. COCHRAN ET UX	14-11/16.1
9	D. FRANCIS TURNER ET UX	14-11/2
10	JODY L. & ERIC M. WADE	14-11/16.2
11	PAUL E. & BRENT L. SHIPLEY	14-11/16
12	BRENT L. & LORI L. SHIPLEY	14-11/16.3
13	COUNTRY ROADS PROPERTIES LLC	14-11/14
14	JAMES J. CAVENEY ET UX	14-13/8
15	JAMES J. CAVENEY ET UX	14-13/10
16	DENNIS W. CROW ET UX	14-13/11
17	CONSOLIDATION COAL COMPANY, MURRAY ENERGY C/O LAND DEPT.	14-13/11.1

SURFACE HOLE LOCATION (SHL)	APPROX. LANDING POINT	BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M)	UTM 17-NAD83(M)	UTM 17-NAD83(M)
N:4417386.600	N:4417426.02	N:4414982.89
E:525717.087	E:526675.15	E:527870.18
NAD83, WV NORTH	NAD83, WV NORTH	NAD83, W NORTH
N:514419.724	N:514496.533	N:506413.820
E:1632113.936	E:1635259.990	E:1639047.431

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

SEPTEMBER 24, 2018

470510208/2018

WW-6A1 (5/13) Operator's Well No. Hines M20H

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:

Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Lease Name or		Acres and a lot of	ar in	and and

See Attached

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JUL 1 9 2018

WV Department of Environmental Protection

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

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

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

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

Well Operator:	Chevron Appalachia, LLC
By:	Xenny Hans
Its:	Permitting Team Lead

Page 1 of 2

4705102087

Plat ID	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2	Assignment #3
A	14-12-30	HINES DONALD ET UX	Chevron U.S.A. Inc	16.00%	774/290	n/a	n/a	n/a
B	14-12-31	HOSKINS PATRICIA S	Chevron U.S.A. Inc	15.00%	655/564	n/a	n/a	n/a
C	14-11-1	RINE OKEY L JR	Chevron U.S.A. Inc	16.00%	839/394	n/a	n/a	n/a
-				111111111		21/339	21/545	756/397
D	14-11-2	TURNER FRANCIS ET UX	TriEnergy Inc.	12.50%	677/471	TriEnergy Inc. to TriEnergy Holdings	TriEnergy Holdings, LLC to AB Resources, LLC	AB Resources, LLC to Chevron U.S.A. In
		A-1.5.0 M A 215	A COLUMN TO A COLUMN TO A COLUMN	11.0.0.0.0		30/461		
E	14-11-16.3	SHIPLEY DANIEL I ET AL	Chesapeake Appalachia, LLC	12.50%	681/499	Chesapeake Appalachia, L.L.C. to Chevron U.S.A. Inc.	n/a	n/a
0.00	1000000		CONTRACTOR OF THE CONTRACTOR	1 Stateman	and a second second	30/461		- 1-
F	14-11-16	SHIPLEY DANIEL I ET AL	Chesapeake Appalachia, LLC	12.50%	681/498	Chesapeake Appalachia, L.L.C. to Chevron U.S.A. Inc.	n/a	n/a
		and the second	1	1. Same		23/74	756/332	1
G	14-11-14	LINDGREN PATRICIA C	TriEnergy Holdings, LLC	16.00%	691/102	TriEnergy Holdings, LLC to NPAR, LLC	NPAR, LLC to Chevron U.S.A. Inc.	n/a
	1.07.05.2.1	a di sense da sense la	The second s		Constraint 1	20/252	756/379	
Н	14-13-8	CAVENEY JAMES J	TriEnergy Inc.	12.50%	663/497	TriEnergy Inc, to AB Resources, LLC	NPAR, LLC to Chevron U.S.A. Inc.	n/a
				17.00%		26/123	26/201	1
		PARSONS FREDA V - SFX	TriEnergy Holdings, LLC	17.0074	739/617	TriEnergy Holdings, LLC to NPAR, LLC	NPAR, LLC to Chevron U.S.A. Inc.	n/a
	1 1			17.00%	100.00.000	26/123	26/201	
		KELLER NEVA E - SFX	TriEnergy Holdings, LLC	17.0070	740/361	TriEnergy Holdings, LLC to NPAR, LLC	NPAR, LLC to Chevron U.S.A. Inc.	n/a
	1 1	The relevance of the transformed and the relation	and the second second second second	17.00%		28/348		1
		HAZEL SHEILA M EXEC OF TAYLOR MARY IRENE - SFX	TriEnergy Holdings, LLC	17.0074	763/054	TriEnergy Holdings to Chevron U.S.A. Inc.	n/a	n/a
	1 1			17.00%	For Arrison 1	28/348		n/a
		RUCKMAN LETHA I - SFX	TriEnergy Holdings, LLC	17.0070	743/528	TriEnergy Holdings to Chevron U.S.A. Inc.	n/a	
		ROGERSON ROBERT E - SFX	Chevron U.S.A. Inc	18.00%	840/438	n/a	n/a	n/a
		ROGERSON RODELLE STA	Chevron U.S.A. Inc	18.00%	840/435	n/a	n/a	n/a
		LANTZ PATTY JEAN - SFX	Chevron U.S.A. Inc	18.00%	847/559	n/a	n/a	n/a
	1 1	TAYLOR RALPH VAUGHN - SFX	Chevron U.S.A. Inc	18.00%	847/132	n/a	n/a	n/a
	I 1	BRAUN MELISSA ANN - SFX	Chevron U.S.A. Inc	18.00%	847/330	n/a	n/a	n/a
	I F	ROSE ROBIN - SFX	Chevron U.S.A. Inc	18.00%	839/243	n/a	n/a	n/a
	lo se se se la la	ROGERSON RANDALL C - SFX	Chevron U.S.A. Inc	18.00%	847/078	n/a	n/a	n/a
1	14-13-10	ROGERSON RUSSELL W - SFX	Chevron U.S.A. Inc	18.00%	847/524	n/a	n/a	n/a
		BENNETT ELIZABETH - SFX	Chevron U.S.A. Inc	18.00%	840/341	n/a	n/a	n/a
	1 1	TAYLOR JUDITH - SFX	Chevron U.S.A. Inc	18.00%	847/508	n/a	n/a	n/a
	1 1	TAYLOR WILLIAM O - SFX	Chevron U.S.A. Inc	18.00%	859/097	n/a	n/a	n/a
	1 1	TAYLOR DAVID R - SFX	Chevron U.S.A. Inc	18.00%	859/063	n/a	n/a	n/a
	1 1	TAYLOR MARY E - SFX	Chevron U.S.A. Inc	18.00%	859/019	n/a	n/a	n/a
	1 1	TAYLOR HERBERT M	Chevron U.S.A. Inc	18.00%	859/016	n/a	n/a	n/a
	1 1	DOUGHERTY LORETTA - SFX	Chevron U.S.A. Inc	18.00%	848/404	n/a 🤷 🕤	n/a	n/a
	1 1	LANTZ KORENE - SFX	Chevron U.S.A. Inc	18.00%	848/469	n/a 🖑 😂 🗧	n/a	n/a
	1 1	TAYLOR HOWARD G - SFX	Chevron U.S.A. Inc	18.00%	868/095	n/a ot ot	n/a	n/a
	1 1	FANKHAUSER MELVIN - SFX	Chevron U.S.A. Inc	18.00%	878/258	n/a 🛄 🖥	n/a	n/a
	l t	FANKHAUSER EUGENE R - SFX	Chevron U.S.A. Inc	18.00%	878/255	n/a	n/a	n/a
		TAYLOR DENVER - SFX	Chevron U.S.A. Inc	17.00%	887/641	n/a Otto	n/a	n/a
	1 1	CIRILLI STEFANIE - SFX	Chevron U.S.A. Inc	17.00%	887/644	n/a Eo S	n/a	n/a
	E E	CUICHTA JENNIFER - SFX	Chevron U.S.A. Inc	17.00%	887/647	n/a 🗄 📆	n/a	n/a
К	14-13-11	CROW DENNIS W ET UX	Chevron U.S.A. Inc	18.00%	853/249	n/a O	n/a	n/a
	1	CNX GAS COMPANY LLC	Chevron U.S.A. Inc	20.00%	862/486	n/a	n/a	n/a
L	14-13-11.1	NOBLE ENERGY INC	Chevron U.S.A. Inc	20.00%	the second s	n/a	n/a	n/a

4705110/2502018



Brandon Means Land Representative

February 27, 2018

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

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

To whom it may concern:

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

Sincerely,

11

Brandon Means Land Representative

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JUL 1 9 2018

WV Department of Environmental Protection

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

10/05/2018 4705102087

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

Date of Notice Certification: 03/19/2018

API No. 47	
Operator's Well	No. 20H
Well Pad Name:	Hines

Notice has been given:

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

State:	West Virginia	UTM NAD 83	Easting:	525717.087
County:	Marshall	UTMINAD 85	Northing:	4417386.600
District:	Washington	Public Road Ac	cess:	Route 38 Campbell Hill Road
Quadrangle:	Moundsville, WV 7.5'	Generally used t	farm name:	Hines
Watershed:	Middle Grave Creek/Grave Creek			

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

Pursuant to West Virginia Code § 22-6A, the Op that the Operator has properly served the require *PLEASE CHECK ALL THAT APPLY	OOG OFFICE USE ONLY	
□ 1. NOTICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	RECEIVED/ NOT REQUIRED
\Box 2. NOTICE OF ENTRY FOR PLAT SURV	YEY or 🔳 NO PLAT SURVEY WAS CONDUCTED	
3. NOTICE OF INTENT TO DRILL or	NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	RECEIVED/ NOT REQUIRED
	WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
■ 4. NOTICE OF PLANNED OPERATION	FEICE: /ED Office of Cit and Gas	RECEIVED
5. PUBLIC NOTICE	JUL 1 9 2018	RECEIVED
■ 6. NOTICE OF APPLICATION	WV Densitivent) of Environmentation	RECEIVED

Required Attachments:

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

4705100205/29178

Certification of Notice is hereby given:

THEREFORE, I Jenny Hayes

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

Well Operator:	Chevron Appalachia, LLC	Address:	700 Cherrington Parkway
By:	Jenny Hayes		Coraopolis, PA 15108
Its:	Permitting Team Lead	Facsimile:	412-865-2403
Telephone:	412-865-1533	Email:	JZYK@chevron.com
	Commonwealth of Pennsylvania - Notary Seal Laura Savage, Notary Public Allegheny County — My commission expires September 17, 2018	Subscribed and swor	orn before me this 19 Hilay of June 2018. Washing Notary Public xpires September 17, 2018

Oil and Gas Privacy Notice:

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

Office of Oil and Gas

JUL 1 9 2018

WV Distant unit of Environmental indection

W	W-6A	
(9.	-13)	

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

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

	e of Notice: <u>3121</u> ice of:	B Date Permit Application	n Filed: <u>7/18</u> /18
V	PERMIT FOR ANY WELL WORK		TE OF APPROVAL FOR THE CTION OF AN IMPOUNDMENT OR PIT
Deli	very method pursu	ant to West Virginia Code	§ 22-6A-10(b)
	PERSONAL SERVICE	REGISTERED MAIL	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

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

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

SURFACE OWNER(s)	COAL OWNER OR LESSEE	
Name: Donald Hines and Wanda L Hines	Name: Consol Mining Company LLC	RECEIVED
Address: 301 4th Street	Address: 1000 Consol Energy Drive	Office of Oil and Gas
Glen Dale, WV 26038	Canonsburg, PA 15317	
Name:	COAL OPERATOR	JUL 1 9 2018
Address:		
	Address: 46229 National Road	WVEPpertment of Environmental Protection
SURFACE OWNER(s) (Road and/or Other Disturbance)	St. Clairsville, OH 43950	
Name:	SURFACE OWNER OF WATER WELL	·
Address:	AND/OR WATER PURVEYOR(s)	
	Name: See Attached	
Name:	Address:	
Address:		
	OPERATOR OF ANY NATURAL GAS S	TORAGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	Name:	
Name:	Address:	
Address:		
	*Please attach additional forms if necessary	

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WW-6A (8-13)

JUL 1 9 2018 W/ Department of

Environmental Protection

API NO. 477 0 5 1 0 2 0 8 7 OPERATOR WELL NO. M20H0/05/2018 Well Pad Name: Hines

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 <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Well Location Restrictions

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

WW-6A (8-13) API NO. 47**4705102087** OPERATOR WELL NO. M20H

Well Pad Name: Hines

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 RECEIVED Office of Cilland Gas

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WV Depertment of Environmental Protection

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) 4705102087 API NO. 47-OPERATOR WELL NO. <u>M20H</u>0/05/2018

Well Pad Name: Hines

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 <u>http://www.dep.wv.gov/oil-and-gas/Horizontal-</u> <u>Permits/Pages/default.aspx</u> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

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

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

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WM Department of Environmental Arabistion

WW-6A (8-13)

102087 OPERATOR WELL NO. M20H API NO.

Well Pad Name: Hines

Notice is hereby given by:

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

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

Oil and Gas Privacy Notice:

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

commonwealth of Pennsylvania - Notary Seal Laura Savage, Notary Public
Allegheny County
Ay commission expires September 17, 2018
Commission number 1285773
Aember, Pennsylvania Association of Notaries

County of Allegheny Subscribed and sworn before me	nsylvania ethis 13M day of M	with 2018.
Lamasar	age	Notary Public
My Commission Expires	Sptember	(1, 2018

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WV Department of Environmental Protection

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Attachment to WW-6A

API No. 47- ____ - ____

OPERATOR WELL NO. <u>M20H</u>

Well Pad Name: Hines

	COAL OWN	COAL OWNER OR LESSEE							
	Name:	Consol Mining Company LLC							
	Address:	1000 Consol Energy Drive							
		Canonsburg, PA 15317							
\boxtimes	COAL OPER	ATOR							
	Name:	Murray Energy Corporation							
	Address:	46229 National Road							
		St. Clairsville, OH 43950							
\boxtimes	SURFACE O	WNER OF WATER WELL AND/OR WATER PURVEYOR							
	Name:	Bobby G. Baker —							
	Address:	742 Toms Run Road							
		Moundsville, WV 26041							
	SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR								
	Name:	Mark Grandstaff 🧹							
	Address:	762 Toms Run Road							
		Moundsville, WV 26041							
\boxtimes	SURFACE O	WNER OF WATER WELL AND/OR WATER PURVEYOR							
	Name:	Edward D. Knuth 🖌							
	Address:	747 Toms Run Lane							
		Moundsville, WV 26041							
\boxtimes	SURFACE OV	NNER OF WATER WELL AND/OR WATER PURVEYOR							
	Name:	Morgan Lacefield							
	Address:	1851 Campbell Hill Road							
		Moundsville, WV 26041							
\boxtimes	SURFACE OV	VNER OF WATER WELL AND/OR WATER PURVEYOR							
	Name:	Tobias G & Jessica D Brown							
	Address:	873 Toms Run Lane							
		Moundsville, WV 26041							

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JUL 1 9 2018

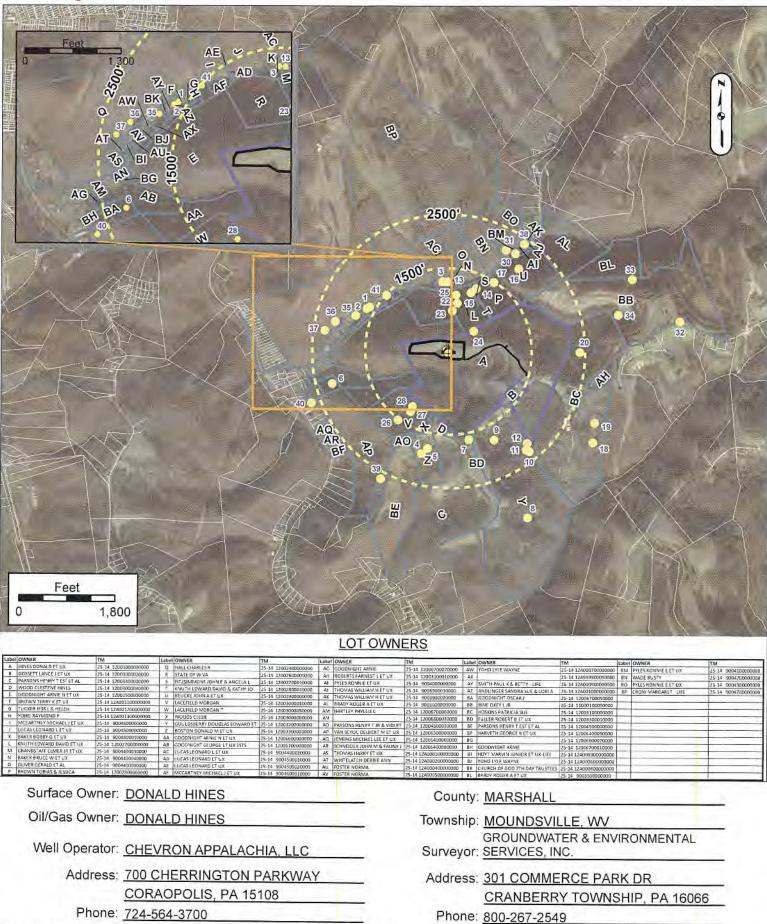
WV Department of Environmental Protection



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



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

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



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

No.	SUPPLY COORDINATES	M12H	M18H	M19H	M20H	M21H		
16	39°54'37.90021565"N 80°41'40.37457605"W	2,024	2,018	2,030	2,041	2,052	1 i	-
17	39°54'35.33341491"N 80°41'46.21377765"W	1,541	1,539	1,552	1,564	1,576		
18	39°54'06.13741035"N 80°41'21.74096802"W	3,237	3,201	3,194	3,186	3,179		
19	39°54'09.71221105"N 80°41'21.45656819"W	3,086	3,050	3,044	3,038	3,032		
20	39°54'22.67221338"N 80°41'25.29417031"W	2,492	2,461	2,462	2,462	2,462		
21	39°54'11.47981147"N 80°41'19.68896778"W	3,142	3,106	3,101	3,096	3,091		
22	39°54'31.42021377"N 80°41'54.98698006"W	899	912	926	941	955	1200	1.0
23	39°54'29.99461345"N 80°41'56.16058031"W	742	758	772	787	801		
24	39°54'26.25421296"N 80°41'50.93337844"W	611	597	607	616	626		
25	39°54'32.88541404"N 80°41'55.30018026"W	1,041	1,055	1,070	1,084	1,099		
26	39°54'09.67620900"N 80°42'08.72818268"W	1,592	1,595	1,583	1,571	1,559		-
27	39°54'11.27100944"N 80°42'05.73658188"W	1,332	1,332	1,319	1,307	1,295		
28	39°54'12.22500964"N 80°42'05.28298181"W	1,231	1,231	1,219	1,207	1,194		
29	39°54'35.11381592"N 80°41'21.68697011"W	3,044	3,024	3,030	3,036	3,042		
30	39°54'40.69021615"N 80°41'41.17737650"W	2,210	2,208	2,220	2,232	2,244		





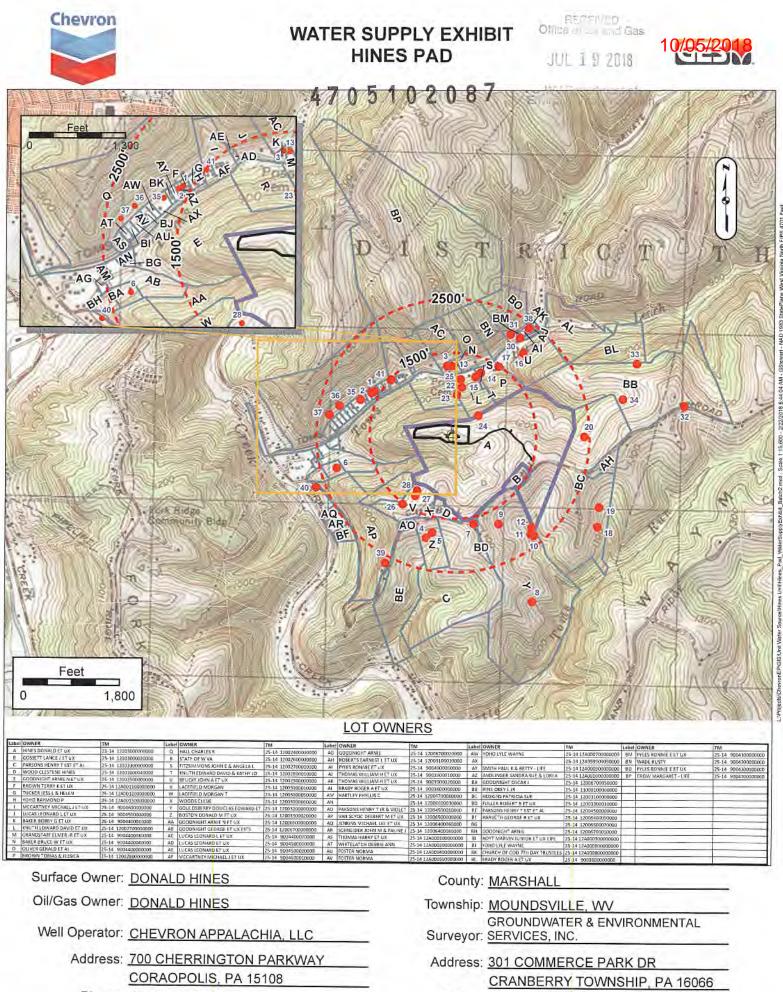
No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
31*	PYLES, RONNIE E ET UX	Spring	705	1056 TOMS RUN LANE	304-845-2288
32*	RINE, OKEY L JR	Well	1,307	6 TRACY LANE	h 304-845-1533 c 304-650-5792
33*	RINE, OKEY L JR	Pond	1,130	6 TRACY LANE	h 304-845-1533 c 304-650-5792
34*	RINE, OKEY L JR	Pond	1,132	6 TRACY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

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

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WV Deventments of Environmental Protection



Phone: 724-564-3700

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

Phone: 800-267-2549

Operator Well No. M20H

470510²⁰0⁵8²⁹¹⁸

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

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 Requi	rement: Notice shall be provided at least TEN (10) days prior to filin Date Permit Application Filed:	ng a permit application.
	ursuant to West Virginia Code § 22-6A-16(b)	RECEIVED Office of Cill and Gas
	CERTIFIED MAIL	JUL 1 9 2018
DELIVERY	RETURN RECEIPT REQUESTED	WV Depertment of Environmental Protection

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

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

Name: Donald Hines and Wanda L. Hines	Name:	
Address: 201 4th Street	Address:	
Glen Dale, WV 26038		_

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:	525717.087	
County:	Marshail	UTM NAD 83	Northing:	4417386.600	
District:	Washington	Public Road Acc	cess:	Route 38/Campbell Hill Road	
Quadrangle:	Moundsville, WV 7.5'	Generally used f	arm name:	Hines	· · ·
Watershed:	Middle Grave Creek - Grave Creek	•			

This Notice Shall Include:

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

Notice is hereby given by:

Well Operator:	Chevron Appalachia, LLC	Authorized Representative:	
Address:	700 Cherrington Parkway	Address:	
Coraopolis, PA 151	08		
Telephone:	412-865-2504	Telephone:	
Email:		Email:	
Facsimile:	412-865-2403	Facsimile:	

Oil and Gas Privacy Notice:

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

WW-6A5		Operator Well No. <u>M20H</u>
(1/12)		1705100007
STAT	TE OF WEST VIRGINIA	470510 <u>208/2078</u>
DEPARTMENT OF ENVIRONM	ENTAL PROTECTION, OF	FICE OF OIL AND GAS
NOTICE	OF PLANNED OPERATION	
Notice Time Requirement: notice shall be provided n	o later than the filing date of permit	application
Date of Notice: 3/13/18 Date Permit A	pplication Filed: 7/19/10	
		Gffice of Oil and This
Delivery method pursuant to West Virginia Code §	22-6A-16(c)	JUL 1 9 2 013
		JUL 19200
CERTIFIED MAIL	HAND	WV Department
RETURN RECEIPT REQUESTED	DELIVERY	Environmental Processon
return receipt requested or hand delivery, give the surfat the planned operation. The notice required by this s required to be provided by subsection (b), section ten or drilling of a horizontal well; and (3) A proposed surf damages to the surface affected by oil and gas operation (d) The notices required by this section shall be given to of notice.	ubsection shall include: (1) A copy f this article to a surface owner whose ace use and compensation agreement ns to the extent the damages are comp	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.
Notice is hereby provided to the SURFACE OWNE	R(s)	
(at the address listed in the records of the sheriff at the		
Name: Donald Hines and Wanda L. Hines	Name:	
Address: 301 4th Street	Address:	
Glen Dale, WV 26038		
Notice is hereby given: Pursuant to West Virginia Code § 22-6A-16(c), notice is operation on the surface owner's land for the purpose of	s hereby given that the undersigned v	vell operator has developed a planned

State:	West Virginia		Easting:	525717.087	
County:	Marshall	UTM NAD 83	Northing:	4417386.600	
District:	Washington	 Public Road Ac	cess:	Route 38/Campbell Hill Road	
Quadrangle:	Moundsville, WV 7.5'	 Generally used t	farm name:	Hines	
Watershed:	Middle Grave Creek - Grave Creek	•		·	· · · ·

This Notice Shall Include:

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

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

Oil and Gas Privacy Notice:

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

API NO. 47-____ OPERATOR WELL NO. M20H Well Pad Name: Hines 10/05/2018

STATE OF WEST VIRGINIA 4705102087 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

I,	, hereby state that I h	nave read the Instructions t	o Persons Na	amed on Page WW-6A and the associated
provisions lis	ted above, and that I have received co	pies of a Notice of Applic:	ation, an App	plication for a Well Work Permit on Form
WW-6A and	attachments consisting of pages one	(1) through		the erosion and sediment control plan, if
	the well plat, all for proposed well wor		lows:	and straighted and a blanching barray of a line, but
State:	West Virginia	LITM NAD 92	Easting:	525717.087
County:	Marshall	UTM NAD 83	Northing:	4417386.600
District:	Washington	Public Road Acc	cess:	Route 38/Campbell Hill Road
Quadrangle:	Moundsville, WV 7.5	Generally used f	farm name:	Hines
Watershed:	Middle Grave Creek - Grave Creek			

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

*Please check the box that applies	FOR EXECUTION BY A NATURAL PERSON
Z SURFACE OWNER	Signature: Donald Hine
□ SURFACE OWNER (Road and/or Other Disturbance)	Print Name: Donglo Hihes Date: 511-18
□ SURFACE OWNER (Impoundments/Pits)	
COAL OWNER OR LESSEE	FOR EXECUTION BY A CORPORATION, ETC. Company:
COAL OPERATOR	By:
□ WATER PURVEYOR	Office 11 235
□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD	Date:JUL 1 9 20 8
Oil and Cas Britany Nation	En. Lition

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STATE OF WEST VIRGINIA 4705102087 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECTION

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VOLUNTARY STATEMENT OF NO OBJECTION

I, Mason Smith	, hereby state that I have read	the Instructions t	o Persons Na	amed on Page WW-6A and the associated
provisions lis	ted above, and that I have received copies of a	Notice of Applic	ation, an Ap	plication for a Well Work Permit on Form
WW-6A and	attachments consisting of pages one (1) through	ugh		the erosion and sediment control plan, if
required, and	the well plat, all for proposed well work on the	tract of land as fol	lows:	
State:	West Virginia		Easting:	525717.087
County:	Marshail	UTM NAD 83	Northing:	4417386.600
District:	Washington	Public Road Acc	•	Campbell Hill Road
Quadrangle:	Moundsville 7.5'	Generally used f		Hines
Watershed	Linner Obio-Beaver	2		

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

*Please check the box that applies	FOR EXECUTION BY A NATURAL PERSON
□ SURFACE OWNER	Signature:
□ SURFACE OWNER (Road and/or Other Disturbance)	Print Name:
SURFACE OWNER (Impoundments/Pits)	
COAL OWNER OR LESSEE	FOR EXECUTION BY A CORPORATION, ETC. Company: Consolidation Coal Company
COAL OPERATOR	By: Mason Smith
U WATER PURVEYOR	Its: Coal. Oll and Gas Relations Manager Signature:
□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD	Date: 07/16/2018

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JUL 1 9 2018

WV Department of Environmental Protection



10/05/2018 4705102087

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

February 28, 2018

Jill M. Newman Deputy Commissioner

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

Subject: DOH Permit for the Hines Pad A Well Site, Marshall County Hines A Unit M20H

Dear Mr. Martin,

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

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

Very Truly Yours,

any K. Clayton

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

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

Office of Oil and Gas JUL 192018 WV Down Prove of Environmental Protection

E.E.O./AFFIRMATIVE ACTION EMPLOYER

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Hydraulic Fracturing Fluid Additives

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

