

## west virginia department of environmental protection

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

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

Tuesday, September 18, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Permit approval for LONGWORTH M16H Re: 47-051-02083-00-00

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: LONGWORTH M16H

Farm Name: GRAHAM H. LONGWORTH JR

U.S. WELL NUMBER: 47-051-02083-00-00

Horizontal 6A New Drill Date Issued: 9/18/2018

API N	Number:	
		09/21/2018
	/ <del>7</del> A =	09/21/2018

# PERMIT CONDITIONS 4705102083

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

# **CONDITIONS**

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed
- 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
- 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:	
	ng/21/2018

# PERMIT CONDITIONS 4705102083

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.

WW-68 (04/15)

PI NO. 47	
<b>OPERATOR WELL</b>	NO. M16H
Well Pad Name:	Longworth

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

1) Well Operator: Chevron Ap	palachia, LLC	49449935	Marshall	Clay	Glen Easton, WV
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: M	16H	Well Pac	Name: Long	worth	
3) Farm Name/Surface Owner:	Graham H Longwo	orth Jr. Public Roa	d Access: Rot	erts Ridge	Road/WV-21
4) Elevation, current ground:	1294.18' El	evation, proposed	post-constructi	on:	
5) Well Type (a) Gas X	Oil	Unde	erground Storag	ge	
Other					
(b)If Gas Sha	llow X	Dеер			
Hor	izontal X	TO SECURITION OF THE SECURITIO			7.10/00/10
6) Existing Pad: Yes or No Yes	3		•		N 8/30/18
<ol> <li>Proposed Target Formation(s Marcellus, 6,531, 61' thick, 0.6</li> </ol>		ipated Thickness a	and Expected Pr	ressure(s):	
8) Proposed Total Vertical Dept	n: 6,511'				
9) Formation at Total Vertical D	epth: Marcellus		······································		
10) Proposed Total Measured De	epth: 11,947'				
11) Proposed Horizontal Leg Le	ngth: 4,934'				
12) Approximate Fresh Water St	rata Depths:	568'			
13) Method to Determine Fresh	Water Depths: 1	mile radius sear	ch around pac	location	
14) Approximate Saltwater Dept	hs: <u>1279', 1883'</u>	, 2134'			
15) Approximate Coal Seam De	oths: 520', 836'			_	
16) Approximate Depth to Possi	ble Void (coal mi	ne, karst, other): _	None		
17) Does Proposed well location directly overlying or adjacent to	contain coal sean an active mine?	ns Yes	No	<u>X</u>	
(a) If Yes, provide Mine Info:	Name:				
	Depth:				
	Seam:				
	Owner:				

API	NO. 47
	OPERATOR WELL NO 6/15/1/2018
	4e7P1 15amp: 1000/21/2010
	- · · · · · · · · · · · · · · · · · · ·

# 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	618	618	CTS
Coal				_		$\overline{a}$	
Intermediate	9.625	New	L-80/ N-80	40	2,206	2,206 V	CTS
Production	5.5	New	P110	20	11,947	11,947	2706 (500' below 9.625" shoe)
Tubing							
Liners							

02/5/18

ТҮРЕ	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> (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	
Coal							
Intermediate	9.625	12.375 & 12.25	0.395	5750	2768	Class A	
Production	5.5	8.75 & 8.5	0.361	14360	9975	Class A, G, or H	
Tubing							
Liners							

# **PACKERS**

Kind:		
Sizes:		
Depths Set:		

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WW-6B	
(10/14)	

	API	NO. 4	7			
		OPER/	ATOR W	ELL NO	<u>റാഷുകൂ</u>	/2018
		Well	Pad Nan	ne: Lo	ngworth	72010
47	0	5	Pad Nan 0 2	0 B	<b>5</b> <sub>м ,</sub>	11.0
7 /	•				01	Z//8
					71	- [·

19	Describe 1	proposed	well work	. including	the drilling	and plugging	g back of any p	oilot hole:
,	~ ~ ~ ~ ~ ~	propose		.,	,	,	,	

Drill vertical depth to the Marcellus at an estimated total vertical depth of approximately 6,511 feet. Drill horizontal leg.

- 20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:
- 9,525 bbl fluid 400,000 lb sand/stage 9,400 anticipated max psi 100 bpm anticipated max rate

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 38.9
- 22) Area to be disturbed for well pad only, less access road (acres): 19.3
- 23) Describe centralizer placement for each casing string:

Surface: bow spring - (1) on shoe track w/ stop collar & (1) per jt over coupling to surface; Intermediate: bow spring - (1) on shoe track w/ stop collar & (1) per 3 jts over coupling; Vertical Production: bow spring - (1) per every other jt over coupling; Curve and Lateral: solid composite (1) per jt of csg to KOP.

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

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

25) Proposed borehole conditioning procedures:

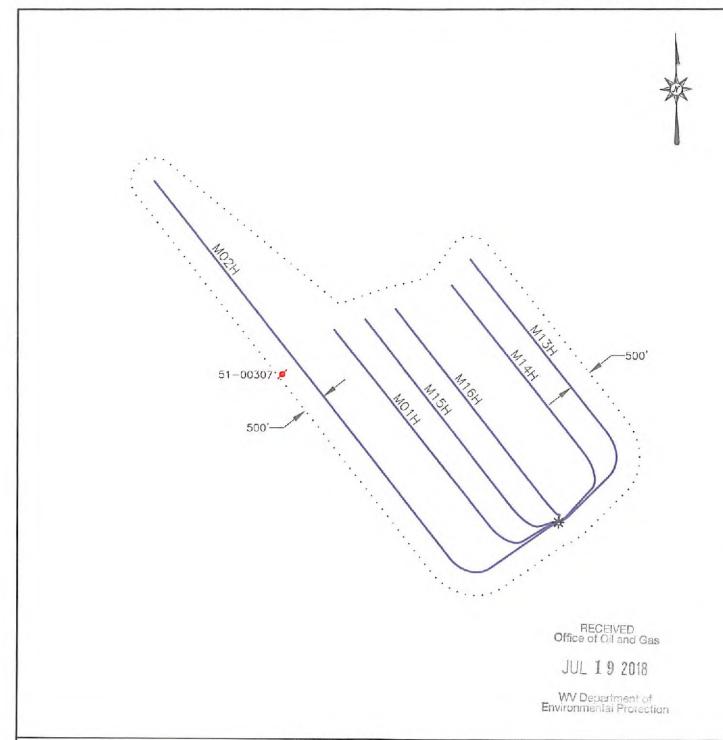
Air sections ensured to be clean via air circulation once TD is reached. Fluid sections will be circulated a minimum of 2 bottoms up once casing point has been reached and until uniform mud properties are achieved.

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\*Note: Attach additional sheets as needed.





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

# PREPARED FOR:

CHEVRON APPALACHIA, LLC 700 CHERRINGTON PARKWAY CORAOPOLIS, PA 15108

### LEGEND

PLUGGED WELL

LONGWORTH BATCH #2 AREA OF REVIEW MAP MARSHALL COUNTY CLAY DISTRICT WEST VIRGINIA

TOPO QUAD: GLEN EASTON, WV

SCALE: 1" = 2000'

DATE: JANUARY 3, 2018

# **Cement Additives**

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

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

The Production cement will have a lead and tail cement.

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

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

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				Lon	gworth N	ITPH		
wp, Marshall Co, W\			-			G	round Level Elev. (ft above St.):	1270
		1	_					
BIT TYPE / TFA	PRDGRAM	CASING SIZE / FORMATION	MD (FT)	TVD (FT)	WELLHEAD DESIGN	HOLF SIZE (IN)	CASING SPECS	PROGRAM
Core Barrel / Auger	2 Bowspring per It	20" Conductor	42	42	INC AZM	30	Conductor 20° 78 67a X-52 Minimum 40 ft from GL or at least	Grout to Surface  10 ft into bedrock
	Eow Spring: (3) on stope track w/ stop collab. (3) per ji over coupling to surface						Surface Casing   13-3/6" 54.59 J-55 BTC   0.15" Wall   Coupling OD (n)   14.375   ID (in)   12.615   Drift ID (in)   12.655   Burst (psi)   2730   Collapse (psi)   1.130   Viel d (it Strength 1,000 lbs)   853	Surface Blend (Class A) Coment to Surface
		13-3/8" Casing	618	618		17.5	Minimum 50 ft past deepest kn	own fresh water
	Bow Spring:  [I] on shoe trace w/ stop collar  6. (1) per 8 its over coupling						Intermediate Casing   9-5/8" 408 J-55 BTC   0.385" Wall   Coupling CD (in)   10.825   ID (in)   8.835   Drift ID (in)   8.879   Burst (pai)   3,950   Collapse (pai)   2,570   Yidid (Jt Strength 1,000 lbs)   630	Intermediate II Blend (Class A Cernent to Surface
	Vertical  Bow Springs (1) per every other place to coupling.  Cures and Lateral  504 Composite (1) per place for 50 per place.	9-5/6" Casing	2,184	2,184		12.375 - 12.25	Production Casing 5-1/2" 20# P-110 EC, 0.365" Wall Coupling OD (in) 6.300 (10 (in) 4.778 Dott ID (in) 4.653 Burst (psi) 14380 Collapse (psi) 12080	<u>Production Lead Sturry.</u> Compat to Surface
		Middlesex  Burkett Shale  Tully Limestone  Hamilton shale  Upper Marcellus		6,293 6,359 6,359 6,423			Yield (Jt Strength 1,000 lbs) 729	Production Tail Slurry TOC minimum 200 above Marcel
	Float Equip.	Lower Marcellus Basal Marcellus		6,522			2/5/18	
	D) As of Csg						21.1	

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API Number 47 - \_ - Operator's Well No. Longworth M16H

4705 102083

# 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 49	449935
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	es No 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:	RECEIVED Office of Oil and Gas
Land Application (if selected provide a completed form WW-9-GPP)	
Underground Injection (UIC Permit Number  Reuse (at API Number at next anticipated well	JUL 1 9 20)8
Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain	WV Department of Environmental Protection
J	
Will closed loop systembe used? If so, describe: Yes, we will be utilizing multiple open top tanks	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.	c. Air & Oil Based
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	
Additives to be used in drilling medium? Barite, fluid loss, emulsifiers, rheological control	V
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 #WW/109517
Permittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and twhere it was properly disposed.	
I certify that I understand and agree to the terms and conditions of the GENERAL WA' on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environment provisions of the permit are enforceable by law. Violations of any term or condition of the general or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar with application form and all attachments thereto and that, based on my inquiry of those individuals im the information, I believe that the information is true, accurate, and complete. I am aware the submitting false information, including the possibility of fine or imprisonment.  Company Official Signature	al Protection. I understand that the all permit and/or other applicable law the information submitted on this mediately responsible for o btaining
Company Official (Typed Name) Jenny Hayes 0	
Company Official Title Permitting Team Lead	
Subscribed and swom before me this 19th day of Junary , 20	18
Liura Savage Notary	Public
My commission expires Seffember 17 2018	Commonwealth of Pennsylvania - Notary S Laura Savage, Notary Public Allegheny County My commission expires September 17, 20
Commonwealth of fennsylvania	Commission number 1285773
The state of the s	the bar bar bar and the bar an

Proposed Revegetation Treatment: Acres Disturbed 14.	Preveg ctation pl1 Per soil testing report
Lime Per soil testing report Tons/acre or to correct	to pl1 Per soil festing report
Fertilizer type See table C attached	
Fertilizer amount 1,000	lbs/acre
Mulch_2	Tons/acre
	Seed Mixtures
Temporary	Permanent
Seed Type lbs/acre	Seed Type lbs/acre
See table A attached	See table B attached
	•
(L, W), and area in acres, of the land application area.  Photocopied section of involved 7.5' topographic sheet.	ride water volume, include dimensions (L, W, D) of the pit, and dimensions
Conditions.	RECEIVED Office of Oil and Gas
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	WV Department of Environmental Protection
Title: Oil + Gas luspector	Date: 2/5/18
Field Reviewed? ( )Yes (	)No

# 4705 102083

WV Department of Environmental Protection JUL 19 2018

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TABLE C - FERTILIZER	RTILIZER	
TYPE	FORMULA	RATE (LBS/ ACRE)
MIXED GRASSES AND LEGUMES	10-10-20	1,000
LEGUME STANDS ONLY	5-20-10 (PREFERRED) OR 10-20-10	1,000
GRASS STANDS ONLY	10-10-20	1,000

\*30 LB OF CEREAL RYE OR WHEAT SHALL BE ADDED TO TYPE D MIXTURE WHEN WOOD CELLULOSE FIBER IS USED AS A MULCH \*\*A COMBINATION OF APPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL HARD FESCUE

ANNUAL RYEGRASS AUG 1 TO MAY 15 OR WEEPING

HARD FESCUE MIXTURE \*\*

CROWNVETCH

RED FESCUE (PENNLAWN) KENTUCKY 31 FESCUE **VARIETY OF SEED** 

LOVEGRASS MAY 15 TO AUGUST 1

63 12

41

22

20

TABLE A - TEMPORARY SEEDING MIXTURES (FROM WV DOT DOH STANDARD SPECIFICATIONS)	KTURES (FROM WV DOT D	OH STANDARD SPECIFICA	TIONS)
	SPRING	SUMMER	FALL AND WINTER
	MAR 1 - MAY 15	MAY 16 - AUG 15	AUG 16 - APR 30
VARIETY OF SEED	LBS/ ACRE	LBS/ ACRE	LBS/ ACRE
ANNUAL RYEGRASS	10		10
BARLEY OF OATS (LOCAL SEEDS)	50		
MILLET (HUNGARIAN, GERMAN OR JAPANESE)		50	
CEREAL RYE OR CEREAL WHEAT			50
TOTAL	09	50	9

(ALL OTHER AREAS) LBS/ ACRE

(CUT AND FILL SLOPES) LBS/ ACRE

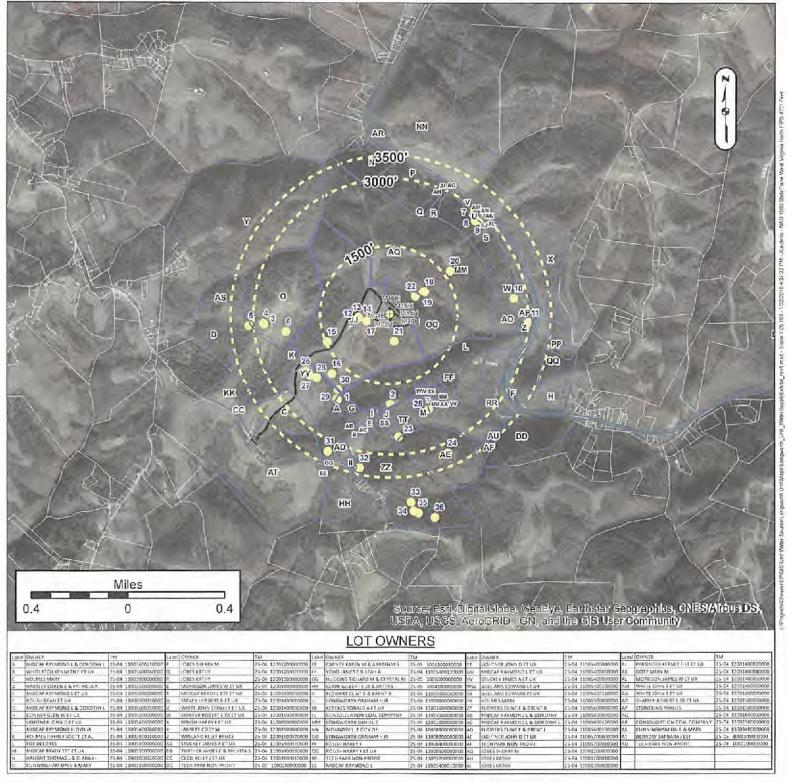
TYPE D\*

TABLE B - SEED MIXTURES (FROM WV DOT DOH STANDARD SPECIFICATIONS)



# WATER SUPPLY EXHIBIT LONGWORTH BATCH #2

# 4705 9020 83



Surface Owner: GRAHAM H LONGWORTH, JR.

Oil/Gas Owner: GRAHAM H LONGWORTH, JR.

Well Operator: CHEVRON APPALACHIA, LLC

Address: 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Phone: 724-564-3700

County: MARSHALL

Township: MOUNDSVILLE, WV

GROUNDWATER & ENVIRONMENTAL

Surveyor: SERVICES, INC.

Address: 301 COMMERCE PARK DR

CRANBERRY TOWNSHIP, PA 16066

Phone: 800-267-2549



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10

11

12

13

14

15

39° 51' 12.27240"N 80° 43' 13.22040"W

39° 51' 10.91160"N 80° 43' 12.61560"W

39° 51' 10.99080"N 80° 43' 11.43120"W

39° 50' 54.25800"N 80° 43' 01.44840"W

39° 50' 49.15320"N 80° 42' 57.36240"W

39° 50' 49.62840"N 80° 43' 44.71680"W

39° 50' 49.76160"N 80° 43' 44.91480"W

39° 50' 49.67160"N 80° 43' 44.91480"W

39° 50' 44.37960"N 80° 43' 53.60520"W

# WATER SUPPLY EXHIBIT LONGWORTH BATCH #2

T



No.	WATER PURVEYOR	SUF	PPLY	ELEV.		ADDRESS		РНО	NE#
1	MIDCAP RAYMOND L & DOROTHY L	Str	eam	1,148	163	3 Roberts Ri	dge	304-84	5-6114
2	ARNETT, SUSAN DUNCAN- ARNETT	Well		1,272	356	Wilson Hill I	_ane	304-63	9-2314
3	CUNNINGHAM DALE & MARY	Well		1,294	446 (	446 Cunningham Lane		304-84	5-0864
4	CUNNINGHAM DALE & MARY	Cistern		1,291	446 (	Cunningham	Lane	304-845-0864	
5	CUNNINGHAM DALE & MARY	Spring		1,241	446 (	Cunningham	Lane	304-845-0864	
6	CUNNINGHAM DALE & MARY	Spring		1,220	446 Cunningham Lane		Lane	304-84	5-0864
7	MORRISON JAMES W ET UX	Well		715	94 Big Grave Crk		304-845-1835		
8	MORRISON JAMES W ET UX	Spring		727	94 Big Grave Crk		304-845-1835		
9	MORRISON JAMES W ET UX	Pond		652	94 Big Grave Crk		304-845-1835		
10	SHAFFER ROBERT L SR ET UX	Drilled Well		670	95 Big Grave Crk		304-845-6083		
11	SHAFFER ROBERT L SR ET UX	Dug Well		679	95 Big Grave Crk		304-845-6083		
12	LONGWORTH GRAHAM H JR	Dug	Well	1,312	2527 Fork Ridge Road		304-281-4840		
13	LONGWORTH GRAHAM H JR	Dug	Well	1,303	2527 Fork Ridge Road		304-281-4840		
14	LONGWORTH GRAHAM H JR	Cis	tern	1,309	2527 Fork Ridge Road		Road	304-281-4840	
15	LONGWORTH GRAHAM H JR	Po	ond	1,251	2527 Fork Ridge Road		Road	304-281-4840	
No.	SUPPLY COORDINATES	1H	2H	13H	14H	15H	16H		
1	39° 50' 31.99920"N 80° 43' 50.45880"W	2,152	2,152	2,180	2,181	2,182	2,182		
2	39° 50′ 31.13880″N 80° 43′ 35.65200″W	1,939	1,931	1,939	1,947	1,955	1,964		
3	39° 50′ 47.99400"N 80° 44′ 11.34600"W	2,736	2,748	2,790	2,779	2,767	2,755		
4	39° 50' 48.12000"N 80° 44' 11.46480"W	2,745	2,756	2,799	2,787	2,775	2,763		
5	39° 50' 47.55840"N 80° 44' 15.60840"W	3,071	3,083	3,125	3,114	3,102	3,090		
6	39° 50' 46.43880"N 80° 44' 05.11440"W	2,274	2,285	2,328	2,317	2,306	2,295		

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2,865

2,791

2,859

2,754

3,046

653

667

668

1,470

2,864

2,789

2,856

2,743

3,033

665

679

680

1,478

2,831

2,755

2,822

2,701

2,992

707

721

722

1,520

2,832

2,757

2,824

2.712

3,005

695

709

710

1,512

2,834

2,759

2.827

2,723

3,017

684

698

699

1,504

2,835

2,761

2,829

2.734

3,030

673

686

687

1,496



# WATER SUPPLY EXHIBIT LONGWORTH BATCH #2



No.	WATER PURVEYOR	SUF	PPLY	ELEV.		ADDRESS		PHONI	Ε#
16	LONGWORTH GRAHAM H JR	Sp	ring	1,190	2527	Fork Ridge	Road	304-281-	4840
17	LONGWORTH GRAHAM H JR	Sp	ring	1,288	2527	Fork Ridge	Road	304-281-	4840
18	LONGWORTH DANIEL C	Sp	ring	1,148	81	2 Spindle La	ane	304-845-	0413
19	LONGWORTH DANIEL C	Spring		1,168	81	2 Spindle La	ane	304-845-	0413
20	LONGWORTH DANIEL C	Dug Well		1,201	81	2 Spindle La	ane	304-845-	0413
21	LONGWORTH GRAHAM H JR	Spring		1,217	2527	Fork Ridge	Road	304-281-	4840
22	LONGWORTH GRAHAM H JR	Pond		1,151	2527	Fork Ridge	Road	304-281-	4840
23	LIGHTNER JOHN D ET UX	Stream		984	264	Wilson Hill I	Lane	304-280-	9370
24	LIGHTNER JOHN D ET UX	Dug	Well	1,082	264 Wilson Hill Lane		Lane	304-280-	9370
25	MIDCAP RAYMOND L ET UX	Stre	eam	1,132	565	5 Roberts R	idge	304-845-6114	
26	HOLMES MARY	Po	ond	1,241	41 197 Spindle Lane		ane	304-845-0703	
27	HOLMES MARY	Pond		1,241	197 Spindle Lane		304-845-0703		
28	HOLMES MARY	Pond		1,189	197 Spindle Lane		304-845-0703		
29	HOLMES MARY	Stream		1,055	197 Spindle Lane		304-845-0703		
30	HOLMES MARY	Stre	eam	1,137	197 Spindle Lane		304-845-0703		
No.	SUPPLY COORDINATES	1H	2H	13H	14H	15H	16H		
16	39° 50' 37.55040"N 80° 43' 52.09320"W	1,779	1,781	1,817	1,814	1,811	1,808		
17	39° 50' 48.94440"N 80° 43' 42.63240"W	506	516	558	548	539	529		
18	39° 50' 55.43520"N 80° 43' 26.41440"W	936	930	891	896	902	908		
19	39° 50' 55.37400"N 80° 43' 26.90760"W	900	895	856	861	867	872		
20	39° 51' 00.00360"N 80° 43' 19.33680"W	1,653	1,648	1,610	1,615	1,620	1,625		
21	39° 50' 44.70720"N 80° 43' 34.83480"W	578	568	570	579	590	600		
22	39° 50' 54.42000"N 80° 43' 29.10720"W	705	700	662	666	671	676		
23	39° 50' 24.18360"N 80° 43' 33.22560"W	2,654	2,644	2,649	2,659	2,668	2,677		
24	39° 50' 20.94000"N 80° 43' 19.41960"W	3,252	3,239	3,230	3,243	3,256	3,268		
25	39° 50' 30.21000"N 80° 43' 24.89880'W	2,221	2,209	2,200	2,212	2,225	2,238		
26	39° 50' 38.04720"N 80° 43' 59.52000"W	2,189	2,195	2,234	2,228	2,222	2,217		
27	39° 50' 37.13640"N 80° 43' 58.28520"W	2,166	2,170	2,209	2,204	2,199	2,194		
28	39° 50' 36.69360"N 80° 43' 56.34840"W	2,078	2,082	2,119	2,115	2,111	2,107		
29	39° 50' 32.17560"N 80° 43' 50.67840"W	2,146	2,145	2,174	2,175	2,175	2,176		
30	39° 50' 34.24200"N 80° 43' 50.41200"W	1,958	1,959	1,989	1,989	1,989	1,989		

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JUL 1 9 2018



# WATER SUPPLY EXHIBIT LONGWORTH BATCH #2



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
31	FLOWERS CLINT E & BRENT B	Spring	1,272	6404 Roberts Ridge Road	304-639-4499
32	FLOWERS CLINT E & BRENT B	Spring	1,273	6404 Roberts Ridge Road	304-639-4499
33	FLOWERS CLINT E & BRENT B	Spring	1,284	6404 Roberts Ridge Road	304-639-4499
34	FLOWERS CLINT E & BRENT B	Spring	1,303	6404 Roberts Ridge Road	304-639-4499
35	FLOWERS CLINT E & BRENT B	Spring	1,297	6404 Roberts Ridge Road	304-639-4499
36	FLOWERS CLINT E & BRENT B	Spring	1,313	6404 Roberts Ridge Road	304-639-4499

No.	SUPPLY COORDINATES	1H	2H	13H	14H	15H	16H	
31	39° 50' 20.94360"N 80° 43' 53.01120"W	3,241	3,238	3,263	3,265	3,268	3,270	
32	39° 50′ 17.44080″N 80° 43′ 44.02560″W	3,377	3,372	3,387	3,393	3,399	3,405	
33	39° 50′ 10.26600″N 80° 43′ 29.49960″W	4,086	4,076	4,079	4,089	4,099	4,109	
34	39° 50′ 08.39400″N 80° 43′ 28.77240″W	4,281	4,271	4,274	4,284	4,294	4,304	
35	39° 50′ 07.99800"N 80° 43′ 27.40080"W	4,337	4,327	4,329	4,339	4,349	4,359	
36	39° 50' 07.10880"N 80° 43' 22.72800"W	4,498	4,487	4,485	4,496	4,507	4,518	

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JUL 1 9 2018



# Chevron

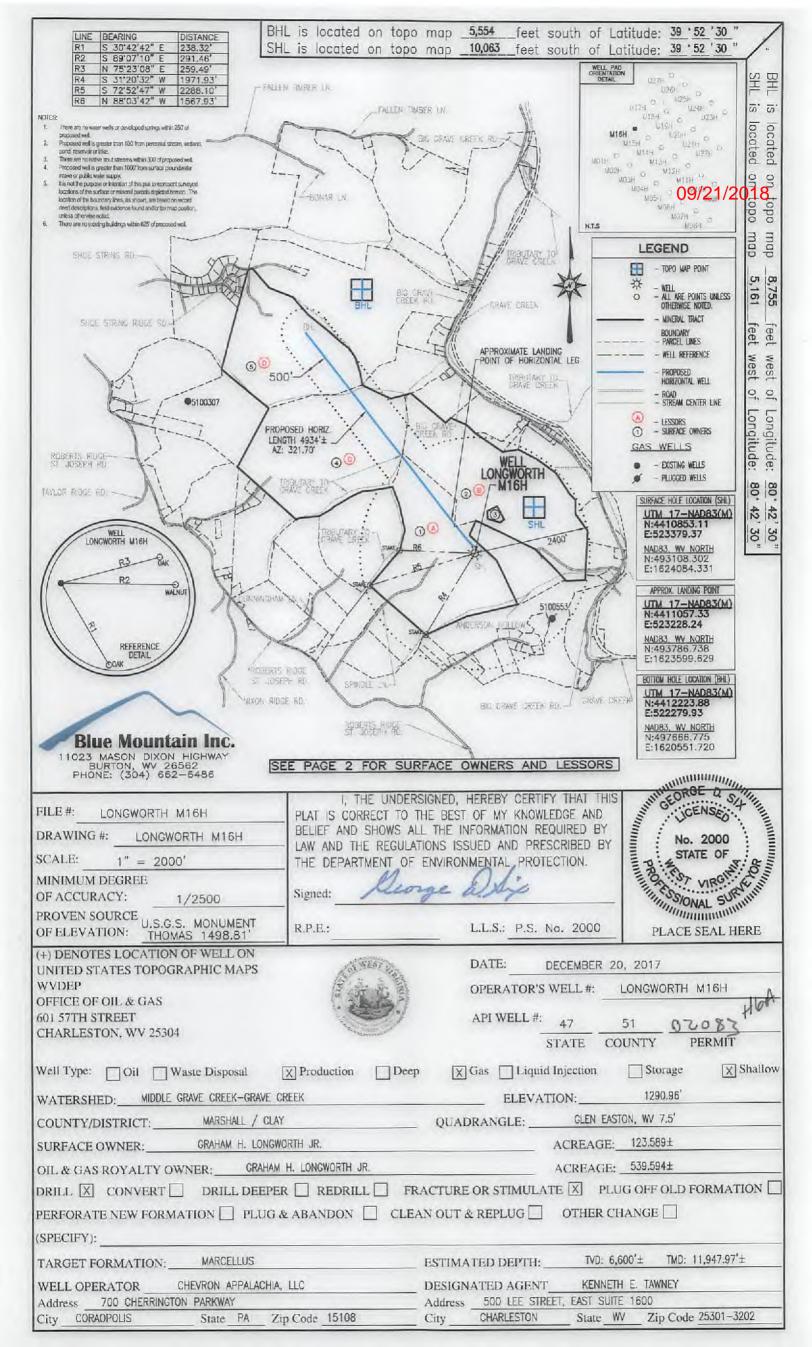
Appalachian LLC WV Well Site Safety Plan

Pad: Longworth Pad A Well # M16H 3/5/18

5962 Roberts Ridge Rd Moundsville, WV 26041 Washington District Marshall County, WV

Access Point – [39.839575°N, 80.737044°W] Well Site – [39.847350°N, 80.726939°W] Marshall County, West Virginia





# LONGWORTH M16H PAGE 2 OF 2

LONGWORTH 47 051 02083

09/21/2018

	LESSOR	DIST-TM/PAR		
A	GRAHAM H. LONGWORTH JR. ET AL	4-11/1		
В	GRAHAM H. LONGWORTH JR. ET AL	4-12/16		
	SHERI L. EVRAETS FAMILY TRUST			
	LISA NICEWARNER			
	JULIA RODGERS			
	KEITH FRIESE			
	MARK FREISE			
	ANTHONY FREISE			
	JAMES FRIESE			
	HENRY FREISE			
	STEVEN FRIESE			
C	BRETT A. ANDREWS ET UX	4-12/19		
D	JMK IREV TRST	4-12/4		
	PURPLEBURGH VENTURES LLC			
	MARCELUS TX MINERAL PRINRS LTD			

	SURFACE OWNER	DIST-TM/PAR
1	GRAHAM H. LONGWORTH JR.	4-11/1
2	DANIEL C. LONGWORTH	4-12/16
3	DANIEL C. SR. AND JEANNETTE L. LONGWORTH	4-12/16.1
4	CODY M. JARRETT	4-12/19
5	MERLE L. CHAPLIN ET UX	4-12/4

SURFACE HOLE LOCATION (SHL)

<u>UTM 17—NAD83(M)</u>
N:4410853.11
E:523379.37

NAD83, W NORTH N:493108.302 E:1624084.331 NPROX. LANDING POINT

UTM 17—NAD83(M)
N:4411057.33
E:523228.24

NAD83, WV NORTH
N:493786.738
E:1623599.629

BOTTOM HOLE LOCATION (BHL)

UTM 17-NADB3(M)
N:4412223.88
E:522279.93

NADB3, W NORTH
N:497666.775
E:1620551.720

**DECEMBER 20, 2017** 



WW-6A1 (5/13)

Operator's Well No. Longworth M16H

# 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

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JUL 19 2018

WV Department of Environmental Protection

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

Well Operator: Chevron Appalachia, LLC

By:

Jenny Hayes

Its:

Permitting Team Lead

Page 1 of

of MAA

# Longworth Unit #16H

Plat ID	Lessor	Lessee	Royalty	Book/Page	Assignment #1	Assignment #2
4-11-1.0	LONGWORTH GRAHAM H JR ET AL	Chevron U.S.A. Inc.	0.14	BK 790 - PG 129	n/a	n/a
4-12-16.0	LONGWORTH GRAHAM H JR ET AL	Chevron U.S.A. Inc.	0.14	BK 790 - PG 129	n/a	n/a
					BK 25 - PG 449	BK 756 - PG 33
	EVRAETS SHERI L FAMILY TRUST	TriEnergy Holdings, LLC	0.16	BK 730 - PG 407	TriEnergy Holdings, LLC to	NPAR, LLC to Che
					NPAR, LLC BK 28 - PG 348	U.S.A. Inc.
	NICEWARNER LISA	TriEnergy Holdings, LLC	0.14	BK 751 - PG 260	TriEnergy Holdings, LLC to	n/a
					Chevron U.S.A. Inc. BK 28 - PG 348	
	RODGERS JULIA	TriEnergy Holdings, LLC	0.14	BK 751 - PG 262	TriEnergy Holdings, LLC to	n/a
					Chevron U.S.A. Inc. BK 28 - PG 348	
	FRIESE KEITH	TriEnergy Holdings, LLC	0.14	BK 751 - PG 264	TriEnergy Holdings, LLC to	n/a
					Chevron U.S.A. Inc. BK 28 - PG 348	
	FREISE MARK	TriEnergy Holdings, LLC	0.14	Bk 751 - PG 250	TriEnergy Holdings, LLC to	n/a
<u>ញ</u>	0				Chevron U.S.A. Inc. BK 28 - PG 348	
	FREISE ANTHONY	TriEnergy Holdings, LLC	0.14	BK 753 - PG 580	TriEnergy Holdings, LLC to	n/a
दुक् 🛏	FREISE ANTHONY  FREISE ANTHONY  RECEIVED  FRIESE JAMES  FRIESE JAMES  Gas				Chevron U.S.A. Inc. BK 28 - PG 348	
9 2	FRIESE JAMES	TriEnergy Holdings, LLC	0.14	BK 751 - PG 254	TriEnergy Holdings, LLC to	n/a
2018 ment of	id ភ្ន				Chevron U.S.A. Inc. BK 28 - PG 348	
on iii	FREISE HENRY	TriEnergy Holdings, LLC	0.14	BK 752 - PG 382	TriEnergy Holdings, LLC to	n/a
					Chevron U.S.A. Inc. BK 28 - PG 348	
	FRIESE STEVEN	TriEnergy Holdings, LLC	0.14	BK 751 - PG 252	TriEnergy Holdings, LLC to Chevron U.S.A. Inc.	n/a
-12-19.0	ANDREWS BRETT A ET UX	Chevron U.S.A. Inc.	0.15	BK 773 - PG 43	n/a	n/a
1-12-4.0	JMK IREV TRST	Chevron U.S.A. Inc.	0.16	BK 797 - PG 336	n/a	n/a
	PURPLEBURGH VENTURES LLC	Chevron U.S.A. Inc.	0.16	BK 799 - PG 325	n/a	n/a
	MARCELLUS TX MINERAL PRTNRS LTD	Chevron U.S.A. Inc.	0.16	BK 794 - PG 561	n/a	n/a



4705902083

February 1, 2018

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

RE: Longworth 1H, 2H, 13H, 14H, 15H, 16H

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,

Luke Slagel

Land Representative

Lucae A flagel

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JUL 19 2018

V/V Department of Environmental Protection

 $\square$  received

☐ RECEIVED

# 4705 102083 STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

	ce Certification: 01/22/2018	API No. 47- Operator's Well No.	 M16H
		Well Pad Name: Lo	
Notice has l	been given:		<del>-</del>
		e § 22-6A, the Operator has provided the required part	ies with the Notice Forms listed
below for the	e tract of land as follows:		
State:	West Virginia	UTM NAD 83 Easting: 523379.37	
County:	Marshall	Northing: <u>4410853.11</u>	
District:	Clay		ge Road/WV-21
Quadrangle:	Glen Easton, WV 7.5'	Generally used farm name: Longworth	
Watershed:	Middle Grave Creek - Grave Creek	<del></del>	
requirements Virginia Cod of this article Pursuant to	of subsection (b), section sixteen to § 22-6A-11(b), the applicant shall have been completed by the applications.	Operator has attached proof to this Notice Certification	e owner; and Pursuant to West stice requirements of section ten
•	erator has property served the requirements.	red parties with the following:	OOG OFFICE USE
I ELASE CIT	DOK ALL HIAT ATTET		ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY 0	r NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/ NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SUR	VEY or  NO PLAT SURVEY WAS CONDUCTED	ED RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SURFACE OWNE (PLEASE ATTACH)	R
■ 4. NO	TICE OF PLANNED OPERATION		RECEIVED
	N. I.O. NOTICE	RECEIVED Office of Oil and Gas	

# **Required Attachments:**

■ 5. PUBLIC NOTICE

■ 6. NOTICE OF APPLICATION

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.

JUL 1 9 2018

WV Department of Environmental Protection

# Certification of Notice is hereby given:

THEREFORE,		have read and un	derstand	the notice requirements within West Virginia Code § 22-
6A. I certify th	at as required under West Virginia	Code 8 22-6A.	I have se	rved the attached copies of the Notice Forms, identified
above, to the re	equired parties through personal se	ervice by registe	red mail	or by any method of delivery that requires a receipt or
signature confir	mation. I certify under penalty of I	aw that I have ne	rsonally	examined and am familiar with the information submitted
in this Notice	Certification and all attachments	and that based	on my ir	equiry of those individuals immediately responsible for
as bed as in a see Ale as in-	f 11 1' 1 C			그 이 그렇게 했다. 그 이 그 그는 그 전에 그 있는 그 전에 있었다. 이번 그 사이를 보고 있는 것이 없는 것이 없는 것이다. 그는 것이 없는 것이 없어요?
for submitting f	alse information, including the nose	ibility of fine on	d imminute	complete. I am aware that there are significant penalties
for submitting i	alse information, including the poss	aonity of time and	a imprisor	ment theres
Well Operator:			ldress:	700 Cherlington Parkway
By:	Jenny Hayes		til Coo.	
				Coraopolis, PA 15108
Its:	Permitting Team Lead	Fa	esimile:	412-865-2403
Telephone:	412-865-1533	En	nail:	JZYK@chevron.com
		Courses	ealth of	f fennsylvania
	The second	County ,	of Alleel	m before me this 1th day of March 2018.
	NOTARY SEAL	Subscribed	and swo	in before me this 1th day of March 2018.
Commonwe	ealth of Pennsylvania - Notary Seal		P	
Lau	ra Savage, Notary Public	(	Mura	Savage Notary Public
Mycomolic	Allegheny County			A .
Com	ssion expires September 17, 2018 mission number 1285773	My Comm	ission Ev	pires September 17 2118
	ennsylvania Association of Notaries	ing comm	ionon ion	The same of the sa
moniber, re	misylvania Association of Notaries			

# 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 <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.

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JUL 1 9 2018

WV Department of Environmental Protection WW-6A (9-13) API NO. 47-OPERATOR WELL NO. MO9/21/2018 Well Pad Name: Longworth

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

		later than the filing date of permit application	
Date of Notice 33/18	Date Permit Application Fil	led:	RECEIVED Office of Oil and Gas
	_		JUL 1 9 2018
PERMIT FOR AN	Y CERTIFICATE	OF APPROVAL FOR THE	
WELL WORK	CONSTRUCTION	ON OF AN IMPOUNDMENT OR PIT	WV Department of Environmental Protection
Delivery method pursu	ant to West Virginia Code § 22	2-6A-10(b)	
PERSONAL	☐ REGISTERED	METHOD OF DELIVERY THAT REQUIRES	S A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATIO	
the surface of the tract on oil and gas leasehold bein described in the erosion a operator or lessee, in the omore coal seams; (4) The well work, if the surface t impoundment or pit as de have a water well, spring provide water for consum proposed well work activisubsection (b) of this sect records of the sheriff requiprovision of this article to Code R. § 35-8-5.7.a req	which the well is or is proposed to ag developed by the proposed well and sediment control plan submitte event the tract of land on which the owners of record of the surface tra- ract is to be used for the placement scribed in section nine of this artic or water supply source located with ption by humans or domestic animity is to take place. (e)(1) If more to ion hold interests in the lands, the wired to be maintained pursuant to the contrary, notice to a lien hold uires, in part, that the operator sha	ele, and the well plat to each of the following person be located; (2) The owners of record of the surface tract is to be used for roads of dipursuant to subsection (c), section seven of this ele well proposed to be drilled is located [sic] is known act or tracts overlying the oil and gas leasehold be at construction, enlargement, alteration, repair, renotle; (5) Any surface owner or water purveyor who thin one thousand five hundred feet of the center of hals; and (6) The operator of any natural gas storage han three tenants in common or other co-owners of applicant may serve the documents required upon section eight, article one, chapter eleven-a of this er is not notice to a landowner, unless the lien hold. It also provide the Well Site Safety Plan ("WSSP" testing as provided in section 15 of this rule.	ce tract or tracts overlying the other land disturbance as article; (3) The coal owner, own to be underlain by one or ing developed by the proposed noval or abandonment of any is known to the applicant to of the well pad which is used to be field within which the of interests described in the person described in the code. (2) Notwithstanding any der is the landowner. W. Va.
☐ Application Notice	☑ WSSP Notice ☑ E&S Plan	Notice ☑ Well Plat Notice is hereby provide	led to:
SURFACE OWNER(s		☑ COAL OWNER OR LESSEE	
Name: Graham H Longworth	lr -	Name: Consolidated Coal Company	
Address: 2527 Fork Ridge Ro	pad	Address: 1000 Consol Energy Drive	
Moundsville, WV 26041		Canonsburg, PA 15317	
Name:		☑ COAL OPERATOR	
A 1.1		Name: Murray Energy Corporation	
		Address: 46226 National Road	
DISTIDEACE OWNER	(Road and/or Other Disturbance		
Name: Mary Holmes	(Koad and/or Other Disturbanc		TEL T
		SURFACE OWNER OF WATER W	VELL
Address: 197 Spindle Lane		AND/OR WATER PURVEYOR(s)	
Moundsville, WV 26041	2	Name: Daniel C. Longworth	
Name: The Estate of Barbara		Address: 812 Spindle Lane	
Address: 6247 Roberts Ridge	Road	Moundsville, WV 26041	
Moundsville, WV 26041	100 and 100 an	☐ OPERATOR OF ANY NATURAL	
	s) (Impoundments or Pits)	Name:	7 - 10 1 - 10 - 10 - 10 - 10 - 10 - 10 -
Name:		Address:	
Address:		*Please attach additional forms if nece	ssary

WW-6A (8-13)

JUL 1 & LUIS

API NO. 47-OPERATOR WELL NO. MAN 21/2018 Well Pad Name: Longworth

# Notice is hereby given:

WV Department of Environmental Protection

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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <a href="https://www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

# **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

API NO. 47-\_\_\_-OPERATOR WELL NO. M69/21/2018

Well Pad Name: Longworth

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

### Water Well Testing:

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

# **Water Testing Laboratories:**

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

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

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

### Written Comment:

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

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

JUL 1 9 2018

Office of Oil and Gas

WV Department 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.

# 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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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.

RECEIVED Office of Oil and Gas

JUI 1 9 2018

WV Department of Environmental Protection WW-6A (8-13)

API NO. 47-\_\_\_OPERATOR WELL NO. MIQ9/21/2018
Well Pad Name: Longworth

Notice is hereby given by:

Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-1533

Email: jzyk@chevron.com

Address: 700 Cherrington Parkway

Coraopolis, PA 15108

Facsimile: 412-865-2403

Oil and Gas Privacy Notice:

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

Commonwealth of Pennsylvania - Notary Seal Läura Savage, Notary Public Allegheny County My commission expires September 17, 2018

Commission number 1285773

Member, Pennsylvania Association of Notaries

Commonwealth of Pennsylvania

Country of Alleghany

Subscribed and sworn before me this 19 day of January 7

Notary Public

My Commission Expires

Splember

7 7018

RECEIVED Office of Oil and Gas

JUL 1 9 2018

W/V Department of Environmental Protection

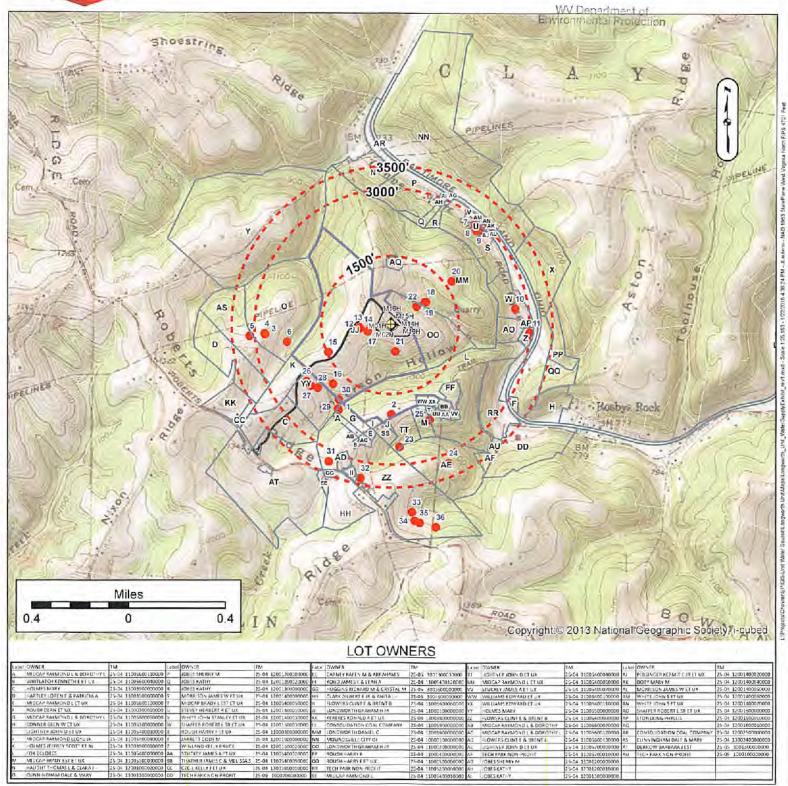


# WATER SUPPLY EXHIBIT LONGWORTH BATCH #2

RECEIVED Office of Oil and Gas

JUL 1 9 2018





Surface Owner: GRAHAM H LONGWORTH, JR.

Oil/Gas Owner: GRAHAM H LONGWORTH, JR.

Well Operator: CHEVRON APPALACHIA, LLC

Address: 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Phone: 724-564-3700

County: MARSHALL

Township: MOUNDSVILLE, WV

**GROUNDWATER & ENVIRONMENTAL** 

Surveyor: SERVICES, INC.

Address: 301 COMMERCE PARK DR

CRANBERRY TOWNSHIP, PA 16066

Phone. 800-267-2549

# 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.

HAND DELIVERY  Pursuant to W. Va. Correceipt requested or hardrilling a horizontal woof this subsection as of subsection may be wair and if available, facsim	nd delivery, give the surface of the Provided, That notice give the date the notice was provided in writing by the surface ite number and electronic materials wided to the SURFACE of	REQUESTED  I days prior to filing a permit application, owner notice of its intent to enter upon the ven pursuant to subsection (a), section to the surface owner: Provided, how owner. The notice, if required, shall included the operator and the operator.	Office of Oil and Gas  JUL 19 2018  WV Department of Environmental Protection  an operator shall, by certified mail return the surface owner's land for the purpose of the of this article satisfies the requirements of this ude the name, address, telephone number, or's authorized representative.
DELIVERY  Pursuant to W. Va. Correceipt requested or had drilling a horizontal woof this subsection as of subsection may be wair and if available, facsim  Notice is hereby pro Name: Graham H Longworth Address: 2527 Fork Ridge F	RETURN RECEIPT In the second delivery, give the surface of the date the notice was provided in writing by the surface it number and electronic materials.	days prior to filing a permit application, owner notice of its intent to enter upon the ven pursuant to subsection (a), section to the surface owner: <i>Provided, howowner</i> . The notice, if required, shall included address of the operator and the operator owner.	WV Department of Environmental Protection an operator shall, by certified mail return the surface owner's land for the purpose of an of this article satisfies the requirements of this ude the name, address, telephone number,
receipt requested or har drilling a horizontal wo of this subsection as of subsection may be wair and if available, facsim  Notice is hereby pro Name: Graham H Longworth Address: 2527 Fork Ridge I	nd delivery, give the surface of the Provided, That notice give the date the notice was provided in writing by the surface ite number and electronic materials wided to the SURFACE of	owner notice of its intent to enter upon the ven pursuant to subsection (a), section to the surface owner: <i>Provided, how owner</i> . The notice, if required, shall included address of the operator and the operator owner.	ne surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this ude the name, address, telephone number,
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Address: 2527 Fork Ridge I		rvaine.	
A CONTRACTOR OF THE PARTY OF TH	CORO	Address:	
		/tddress.	
State: West Virgi County: Marshell District: Clay Quadrangle: Glen Easte		UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:	523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth
Watershed: Middle Gra	ve Creek - Grave Creek		
facsimile number and related to horizontal di	inia Code § 22-6A-16(b), t electronic mail address of t illing may be obtained from	he operator and the operator's authorize the Secretary, at the WV Department of	ress, telephone number, and if available, ed representative. Additional information f Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is hereby giv	en by:		
Well Operator: Chevro		Authorized Representative:	
Address: 700 Ch	errington Parkway	Address:	
Coraopolis, WV 15108			
Telephone: 412-86	5-1533	Telephone:	
Email: JZYK@	chevron.com	Email:	
Facsimile: 412-868	-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 depprivacyofficer@wv.gov.

4705102083

# 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.

Date of Notic	Requirement: Notice shall be provi ce: 1/33//8 Dat	e Permit Application Filed:	AECEIVED Office of Gil and Gas
Delivery met	hod pursuant to West Virginia Co	de § 22-6A-16(b)	JUL 1 9 2018
☐ HAND DELIVE	CERTIFIED MAIL RETURN RECEIPT	REQUESTED	WV Department of Environmental Protection
receipt request drilling a hor of this subsect subsection materials and if availab	sted or hand delivery, give the surfaction izontal well: <i>Provided</i> , That notice stion as of the date the notice was propay be waived in writing by the surfaction.	e owner notice of its intent to enter upon given pursuant to subsection (a), section to vided to the surface owner: <i>Provided, ho</i> is a cowner. The notice, if required, shall included address of the operator and the operator	n, an operator shall, by certified mail return the surface owner's land for the purpose of ten of this article satisfies the requirements owever. That the notice requirements of this clude the name, address, telephone number tor's authorized representative.
Name: Mary Ho		Name:	
Address: 197		Address:	
Moundsville, WV		ridaress.	
Notice is he Pursuant to W the surface ov State:	Vest Virginia Code § 22-6A-16(b), n	g a horizontal well on the tract of land as f	d well operator has an intent to enter upor follows:  523379.37
Pursuant to W the surface ov State: County: District:	Vest Virginia Code § 22-6A-16(b), n wner's land for the purpose of drilling West Virginia Marshall	g a horizontal well on the tract of land as f  UTM NAD 83 Easting: Northing: Public Road Access;	follows:
Pursuant to W the surface ov State: County: District: Quadrangle:	Vest Virginia Code § 22-6A-16(b), n wner's land for the purpose of drilling West Virginia Marshall Clay Glen Easton, WV 7.5'	g a horizontal well on the tract of land as f UTM NAD 83 Easting: Northing:	follows: 523379.37 4410853.11
Pursuant to W the surface ov	Vest Virginia Code § 22-6A-16(b), n wner's land for the purpose of drilling West Virginia Marshall	g a horizontal well on the tract of land as f  UTM NAD 83 Easting: Northing: Public Road Access;	Follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21
Pursuant to W the surface ov State: County: District: Quadrangle: Watershed: This Notice Pursuant to V facsimile nun related to hor	Vest Virginia Code § 22-6A-16(b), novner's land for the purpose of drilling West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave Creek  Shall Include:  West Virginia Code § 22-6A-16(b), nober and electronic mail address of fizontal drilling may be obtained fro	g a horizontal well on the tract of land as f  UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:  this notice shall include the name, add the operator and the operator's authorize the Secretary, at the WV Department.	Follows:  523379.37  4410853.11  Roberts Ridge Road/WV-21  Longworth   Iress, telephone number, and if available zed representative. Additional information of Environmental Protection headquarters
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Pursuant to W the surface ov State: County: District: Quadrangle: Watershed:  This Notice Pursuant to V facsimile nun related to hor located at 601  Notice is he	Vest Virginia Code § 22-6A-16(b), n wher's land for the purpose of drilling West Virginia Marshall Clay Glen Easton, WV 7.5' Middle Grave Creek - Grave Creek  Shall Include: West Virginia Code § 22-6A-16(b), mber and electronic mail address of fizontal drilling may be obtained fro 57th Street, SE, Charleston, WV 25	g a horizontal well on the tract of land as f  UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:  this notice shall include the name, add the operator and the operator's authorize the Secretary, at the WV Department.	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  Iress, telephone number, and if available zed representative. Additional information of Environmental Protection headquarters lep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to W the surface ov State: County: District: Quadrangle: Watershed: This Notice Pursuant to V facsimile nun related to hor located at 601 Notice is he Well Operato	Vest Virginia Code § 22-6A-16(b), n wner's land for the purpose of drilling West Virginia Marshall Clay Glen Easton, WV 7.5' Middle Grave Creek - Grave Creek  Shall Include: West Virginia Code § 22-6A-16(b), mber and electronic mail address of rizontal drilling may be obtained fro 57th Street, SE, Charleston, WV 25 reby given by:	uTM NAD 83  Easting: Northing: Public Road Access: Generally used farm name:  this notice shall include the name, add the operator and the operator's authorize the Secretary, at the WV Department 304 (304-926-0450) or by visiting www.de	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  Iress, telephone number, and if available zed representative. Additional information of Environmental Protection headquarters lep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to W the surface ov State: County: District: Quadrangle: Watershed:  This Notice Pursuant to V facsimile nun related to hor located at 601  Notice is he	Vest Virginia Code § 22-6A-16(b), novner's land for the purpose of drilling West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave Creek  Shall Include:  West Virginia Code § 22-6A-16(b), nober and electronic mail address of fizontal drilling may be obtained fro 57th Street, SE, Charleston, WV 25  reby given by:  Chevron Appalachia, LLC  700 Cherrington Parkway	this notice shall include the name, add the operator and the operator's authorized Authorized Representative	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  Iress, telephone number, and if available zed representative. Additional information of Environmental Protection headquarters lep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to W the surface ov State: County: District: Quadrangle: Watershed:  This Notice Pursuant to W facsimile nun related to hor located at 601  Notice is he Well Operato Address:	Vest Virginia Code § 22-6A-16(b), novner's land for the purpose of drilling West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave Creek  Shall Include:  West Virginia Code § 22-6A-16(b), nober and electronic mail address of fizontal drilling may be obtained fro 57th Street, SE, Charleston, WV 25  reby given by:  Chevron Appalachia, LLC  700 Cherrington Parkway	this notice shall include the name, add the operator and the operator's authorized Authorized Representative	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  Iress, telephone number, and if available zed representative. Additional information of Environmental Protection headquarters lep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to W the surface ov State: County: District: Quadrangle: Watershed:  This Notice Pursuant to W facsimile nun related to hor located at 601  Notice is he Well Operato Address: Coraopolis, WW	Vest Virginia Code § 22-6A-16(b), n wner's land for the purpose of drilling West Virginia Marshall Clay Glen Easton, WV 7.5' Middle Grave Creek - Grave Creek  Shall Include: West Virginia Code § 22-6A-16(b), mber and electronic mail address of fizontal drilling may be obtained fro 57th Street, SE, Charleston, WV 25  reby given by:  T: Chevron Appalachia LLC 700 Cherrington Parkway	this notice shall include the name, add the operator and the Secretary, at the WV Department and (304-926-0450) or by visiting www.d	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  Iress, telephone number, and if available zed representative. Additional information of Environmental Protection headquarters lep.wv.gov/oil-and-gas/pages/default.aspx.

# Oil and Gas Privacy Notice:

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# 4705102083 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 Date of Notic	Requirement: Notice s e: 1/22/18	hall be provided at lea  Date Permit	st TEN (10) days prior to filing Application Filed:	a permit application. Office of Oil and Gas
Delivery met	hod pursuant to West	Virginia Code § 22-6	A-16(b)	JUL 1 9 2018
☐ HAND	■ CERTI	FIED MAIL		WV Department of Environmental Protection
DELIVE		RN RECEIPT REQUE	STED	Environmental Protection
receipt request drilling a hore of this subsect subsection mand if availab	sted or hand delivery, gi izontal well: Provided, tion as of the date the n my be waived in writing le, facsimile number an reby provided to the	ve the surface owner national That notice given pure otice was provided to the by the surface owner, and electronic mail address.	notice of its intent to enter upon suant to subsection (a), section the surface owner: <i>Provided, has</i> The notice, if required, shall incess of the operator and the operator	n, an operator shall, by certified mail return the surface owner's land for the purpose of ten of this article satisfies the requirements ovever. That the notice requirements of this clude the name, address, telephone number, tor's authorized representative.
	ite of Barbara J. Derrow		Name:	
Address: 6247	Roberts Ridge Road		Address:	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Notice is he Pursuant to V the surface ov	reby given: Vest Virginia Code § 22 vner's land for the purp	-6A-16(b), notice is hose of drilling a horizo	ereby given that the undersigned ntal well on the tract of land as t	
Notice is he Pursuant to V the surface ov State: County: District: Quadrangle:	reby given: Vest Virginia Code § 22	ose of drilling a horizo	ereby given that the undersigned	d well operator has an intent to enter upon follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth
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Notice is he Pursuant to V the surface ov State: County: District: Quadrangle: Watershed: This Notice Pursuant to V facsimile nur related to hor located at 600	reby given: Vest Virginia Code § 22 vner's land for the purp West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave  Shall Include: West Virginia Code § nber and electronic maizontal drilling may be 157th Street, SE, Charle reby given by:	Creek  22-6A-16(b), this notice and address of the oper obtained from the Sec.	ereby given that the undersigned natal well on the tract of land as a Easting:  UTM NAD 83  Public Road Access:  Generally used farm name:  ice shall include the name, add ator and the operator's authorise cretary, at the WV Department 1926-0450) or by visiting www.c	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  dress, telephone number, and if available, zed representative. Additional information of Environmental Protection headquarters, lep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is he Pursuant to We the surface of State: County: District: Quadrangle: Watershed: This Notice Pursuant to We facsimile nurrelated to how located at 601 Notice is he Well Operator	reby given: Vest Virginia Code § 22 vner's land for the purp West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave  Shall Include: West Virginia Code § nber and electronic maizontal drilling may be 1.57'h Street, SE, Charle  reby given by: Chevron Appalachia, LLC 700 Cherrington Parkway	Creek  22-6A-16(b), this notice and address of the oper obtained from the Sec.	ereby given that the undersigned natal well on the tract of land as a Easting:  UTM NAD 83  Public Road Access:  Generally used farm name:  ice shall include the name, add ator and the operator's authorizeretary, at the WV Department 1926-0450) or by visiting www.se	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  dress, telephone number, and if available, zed representative. Additional information of Environmental Protection headquarters, lep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is he Pursuant to V the surface of State: County: District: Quadrangle: Watershed:  This Notice Pursuant to V facsimile nurrelated to hor located at 600  Notice is he Well Operato Address:	reby given: Vest Virginia Code § 22 vner's land for the purp West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave  Shall Include: West Virginia Code § nber and electronic maizontal drilling may be 1.57'h Street, SE, Charle  reby given by: Chevron Appalachia, LLC 700 Cherrington Parkway	Creek  22-6A-16(b), this notice and address of the oper obtained from the Sec.	ereby given that the undersigned natal well on the tract of land as a Easting:  UTM NAD 83  Public Road Access:  Generally used farm name:  ice shall include the name, add ator and the operator's authorizeretary, at the WV Department 1926-0450) or by visiting www.se	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  dress, telephone number, and if available, zed representative. Additional information of Environmental Protection headquarters, lep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is he Pursuant to V the surface of State: County: District: Quadrangle: Watershed:  This Notice Pursuant to V facsimile nurrelated to hor located at 60 ll  Notice is he Well Operato Address: Coraopolis, WV	reby given: Vest Virginia Code § 22 vner's land for the purp West Virginia  Marshall  Clay Glen Easton, WV 7.5' Middle Grave Creek - Grave  Shall Include: West Virginia Code § nber and electronic maizontal drilling may be 157th Street, SE, Charle  reby given by: Chevron Appalachia, LLC 700 Cherrington Parkway	Creek  22-6A-16(b), this notice and address of the oper obtained from the Sec.	ereby given that the undersigned ntal well on the tract of land as a UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ice shall include the name, addator and the operator's authorizeretary, at the WV Department 1926-0450) or by visiting www.s.  Authorized Representative Address:	follows: 523379.37 4410853.11 Roberts Ridge Road/WV-21 Longworth  dress, telephone number, and if available, zed representative. Additional information of Environmental Protection headquarters, lep.wv.gov/oil-and-gas/pages/default.aspx.

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Operator Well No. Longworth M16H 09/21/2018

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF 710 AND GAS 0 8 3 NOTICE OF PLANNED OPERATION

Date of Notic	Requirement: notice shall be re: 1/22/18 Date	Permit Application Filed:	Office of Oil and Gas
Delivery met	hod pursuant to West Virgin	ia Code § 22-6A-16(c)	JUL 1 9 2018
■ CERTI	FIED MAIL	☐ HAND	WV Department of
	RN RECEIPT REQUESTED	DELIVERY	Environmental Protection
return receipt the planned of required to be drilling of a damages to tl (d) The notice of notice.	requested or hand delivery, gire peration. The notice required a provided by subsection (b), so horizontal well; and (3) A proper surface affected by oil and g	o later than the date for filing the permit application, we the surface owner whose land will be used for the d d by this subsection shall include: (1) A copy of this ection ten of this article to a surface owner whose land posed surface use and compensation agreement conta as operations to the extent the damages are compensabled be given to the surface owner at the address listed in the CE OWNER(s)	rilling of a horizontal well notice of a code section; (2) The information will be used in conjunction with the aining an offer of compensation for le under article six-b of this chapter.
	s listed in the records of the sh		
Name: Graham	H Langworth Jr	Name:	
Name: Graham Address: 2527 Moundsville, WV  Notice is her Pursuant to V	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16	Name: Address:  (c), notice is hereby given that the undersigned well op	perator has developed a planned
Name: Graham Address: 2527 Moundsville, WV Notice is her Pursuant to V operation on State: County:	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16 the surface owner's land for the West Virginia Marshall	Name:  Address:  Address:  (c), notice is hereby given that the undersigned well op ne purpose of drilling a horizontal well on the tract of la  UTM NAD 83  Easting:  523375  Northing:  441085	nd as follows: 9.37 53.11
Name: Graham Address: 2527 Moundsville, WV Notice is her Pursuant to V operation on State: County: District:	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16 the surface owner's land for the West Virginia Marshall Clay	Name: Address:  Address:  O(c), notice is hereby given that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that t	and as follows: 9.37 53.11 s Ridge Road/WV 21
Name: Graham Address: 2527 Moundsville, WV Notice is her Pursuant to V operation on State: County:	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16 the surface owner's land for the West Virginia Marshall	Name:  Address:  Address:  (c), notice is hereby given that the undersigned well op ne purpose of drilling a horizontal well on the tract of la  UTM NAD 83  Easting:  523375  Northing:  441085	and as follows: 9.37 53.11 s Ridge Road/WV 21
Name: Graham Address: 2527 Moundsville, WW Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice: Pursuant to W to be provide horizontal we surface affect information of headquarters.	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16 the surface owner's land for the West Virginia  Marshall  Clay  Glen Easton 7.5'  Middle Grave Creek - Grave Creek  Shall Include: Vest Virginia Code § 22-6A-16 ed by W. Va. Code § 22-6A-16 ed by W. Va. Code § 22-6A-16 ed by oil and gas operations to related to horizontal drilling mandocated at 601 57th Street, S	Name: Address:  Address:  O(c), notice is hereby given that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well of the purpose of drilling a horizontal well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that the undersigned well on the tract of late that t	ection; (2) The information required a conjunction with the drilling of a of compensation for damages to the cle six-b of this chapter. Additional rtment of Environmental Protection
Name: Graham Address: 2527 Moundsville, WV  Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice: Pursuant to V to be provide horizontal we surface affect information of	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16 the surface owner's land for the West Virginia  Marshall Clay Glen Easton 7.5' Middle Grave Creek - Grave Creek  Shall Include: Vest Virginia Code § 22-6A-16 ed by W. Va. Code § 22-6A-16 ell; and (3) A proposed surface ted by oil and gas operations to related to horizontal drilling mand to located at 601 57th Street, Stault.aspx.	Name: Address:  Address:  O(c), notice is hereby given that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the purpose of drilling a horizontal well on the tract of late to the extent the damages are compensable under articles and be obtained from the Secretary, at the WV Depart	ection; (2) The information required a conjunction with the drilling of a of compensation for damages to the cle six-b of this chapter. Additional rtment of Environmental Protection
Name: Graham Address: 2527 Moundsville, WV  Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice: Pursuant to V to be provide horizontal we surface affect information of headquarters, gas/pages/de	H Longworth Jr Fork Ridge Road 26041  eby given: Vest Virginia Code § 22-6A-16 the surface owner's land for the West Virginia  Marshall Clay Glen Easton 7.5' Middle Grave Creek - Grave Creek  Shall Include: Vest Virginia Code § 22-6A-16 ed by W. Va. Code § 22-6A-16 ell; and (3) A proposed surface ted by oil and gas operations to related to horizontal drilling mand to located at 601 57th Street, Stault.aspx.	Name: Address:  Address:  O(c), notice is hereby given that the undersigned well op the purpose of drilling a horizontal well on the tract of late that the purpose of drilling a horizontal well on the tract of late to the purpose of drilling a horizontal well on the tract of late to the extent the damages are compensable under articles to the extent the damage.	ection; (2) The information required a conjunction with the drilling of a of compensation for damages to the cle six-b of this chapter. Additional rtment of Environmental Protection

# Oil and Gas Privacy Notice:

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

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

	e: 1/23/18 Date Pe	rmit Application Filed:		RECEIVED Office of Oil and Gas
Delivery met	hod pursuant to West Virginia C	Code § 22-6A-16(c)		JUL 1 9 2018
CERTII	FIED MAIL	☐ HAND		110/15
RETUR	N RECEIPT REQUESTED	DELIVERY		W Department of Environmental Protection
return receipt the planned or required to be drilling of a hamages to th (d) The notice of notice.	requested or hand delivery, give to operation. The notice required by provided by subsection (b), section norizontal well; and (3) A propose e surface affected by oil and gas of	he surface owner whose land this subsection shall incluent ten of this article to a surface use and compenserations to the extent the digiven to the surface owner.	d will be used for de: (1) A copy ace owner whose sation agreemer amages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the nt containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
	s listed in the records of the sheriff			
Name: Mary Hol		Name:		
Address: 197 S Moundsville, WV		Addres	s:	
		urpose of drilling a horizont UTM NAD Public Road	al well on the tra Easting: Northing:	well operator has developed a planned act of land as follows:  523379.37  4410855.11  Roberts Ridge Road/WV 21  Longworth
Pursuant to Woperation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to Work to be provide horizontal we surface affect information reheadquarters, gas/pages/def	/est Virginia Code § 22-6A-16(c), the surface owner's land for the province of	urpose of drilling a horizont  UTM NAD  Public Road Generally us  this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are of the obtained from the Secret Charleston, WV 25304	al well on the tra Easting: Northing: Access: ed farm name:  )A copy of this e land will be ent containing at compensable unctary, at the WV (304-926-0450)	act of land as follows:  523379.37  4410853.11  Roberts Ridge Road/WV 21  Longworth  code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional / Department of Environmental Protection ) or by visiting www.dep.wv.gov/oil-and-
Pursuant to Wooperation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to Watershed: to be provide horizontal we surface affect information reheadquarters,	/est Virginia Code § 22-6A-16(c), the surface owner's land for the province of	urpose of drilling a horizont  UTM NAD  Public Road Generally us  this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are compensationed from the Secretary and the secretary of	Easting: Northing: Access: ed farm name:  A copy of this e land will be ent containing an ompensable unctary, at the WV	act of land as follows:  523379.37  4410853.11  Roberts Ridge Road/WV 21  Longworth  code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the der article six-b of this chapter. Additional 7 Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-

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Operator Well No. Longworth M16H

# STATE OF WEST VIRGINIA 4705102083 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

Notice Time Date of Not	e Requirement: notice shall be provi ice:/_22//8 Date Per	ded no later than the mit Application File	filing d:	date of permit	application.
Delivery me	ethod pursuant to West Virginia Co	ode § 22-6A-16(c)			
	TFIED MAIL	☐ HAND			
KEIU	JRN RECEIPT REQUESTED	DELIVERY			
the planned required to be drilling of a damages to t	of requested or hand delivery, give the operation. The notice required by the provided by subsection (b), section horizontal well; and (3) A proposed the surface affected by oil and gas on	e surface owner whos this subsection shall ten of this article to I surface use and con erations to the extent	e land includ a surfa apens the da	will be used for le: (1) A copy ace owner whos ation agreemen mages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
					RECEIVED Office of Oil and Gas
(at the addre	reby provided to the SURFACE Over ss listed in the records of the sheriff a tate of Barbara J. Derrow	it the time of notice):	ame:		JUL 1 9 2018
	7 Roberts Ridge Road		ddress	:	WV Department of Environmental Protection
operation or State:	the surface owner's land for the pur West Virginia	pose of drilling a hori	zontal	well on the tra	well operator has developed a planned ct of land as follows: 523379 37
County:	Marshall			Northing:	4410853.11
District:	Clay	Public I			Roberts Ridge Road/WV 21
Quadrangle: Watershed:		General	ly use	d farm name:	Longworth
This Notice Pursuant to	Middle Grave Creek - Grave Creek  Shall Include: West Virginia Code § 22-6A-16(c), tl	nis notice shall includ	le: (1).	A copy of this	code section; (2) The information required
to be provid horizontal w surface affect information	led by W. Va. Code § 22-6A-10(b) rell; and (3) A proposed surface use a reted by oil and gas operations to the related to horizontal drilling may be a located at 601 57th Street, SE,	to a surface owner or nd compensation agreextent the damages as contained from the S	whose eemen are co Secreta	land will be unt containing an impensable und	nsed in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting

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

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

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

### **Comment and Waiver Provisions**

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

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

# VOLUNTARY STATEMENT OF NO OBJECTION

provisions list WW-6A and required, and to State: County: District: Quadrangle: Watershed:	Mm Decom, hereby state that I'have read ed above, and that I have received copies of a attachments consisting of pages one (1) throw the well plat, all for proposed well work on the West Virginia  Marshall  Clay  Glen Easton, WW 7.5'  Middle Grave Creek - Grave Creek  that I have no objection to the planned work de	Notice of Apough tract of land a UTM NAD Public Road Generally us	plication, an App , including to s follows: 83 Easting: Northing: Access: sed farm name:	blication for a Well Work Permit on Form he erosion and sediment control plan, if  523379.37  4410853.11  Roberts Ridge Road / WV 21  Longworth
*Please check	the box that applies		FOR EXECUT	ION BY A NATURAL PERSON
SURFAC	• •		Signature: Mu	ilent 10 m Derson
□ SURFAC	CE OWNER (Road and/or Other Disturband	ce)		2018
□ SURFAC	CE OWNER (Impoundments/Pits)			ION BY A CORPORATION, ETC.
□ COAL O	WNER OR LESSEE		Company:	
□ COAL O	PERATOR		By: Its:	
□ WATER	PURVEYOR			
□ OPERA	FOR OF ANY NATURAL GAS STORAG	SE FIELD		

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RECTIVED
Office of Grand Gas

JUL 1 9 2018

API NO. 47 0 5 1 0 2 0 8 3 OPERATOR WELL NO. MO9/21/2018

Well Pad Name: Longworth

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

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Mart . Roille

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# VOLUNTARY STATEMENT OF NO OBJECTION

State:	the well plat, all for proposed well work on the trace West Virginia	Easting:	523379.37
County: District: Quadrangle:	Marshall	Northing:	4410853.11 Roberts Ridge Road / WV 21
	·	Generally used farm name:	Longworth
Watershed:	Middle Grave Creek - Grave Creek	reversity about their name.	
			ION BY A NATURAL PERSON
□ SURFA	CE OWNER	Signature: Ma	
	CE OWNER (Road and/or Other Disturbance)	Signature: Ma Print Name: M Date: 2-10	ily Reelley andyn Reilley
⊠ SURFAC			cilya Reelleig arriya Reelley 2018
⊠ SURFAC	CE OWNER (Road and/or Other Disturbance)		ily Reelley and you Reilley
⊠ SURFAC	CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) DWNER OR LESSEE	FOR EXECUT Company: By:	cilya Reelleig arriya Reelley 2018
SURFACE SURFACE COAL COAL COAL COAL COAL COAL COAL COAL	CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) DWNER OR LESSEE	FOR EXECUT Company: By: Its:	ily Rectley and you Rectley 2018  ION BY A CORPORATION, ETC.

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Office and Gas

JUL 1 9 2018

# STATE OF WEST VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

# VOLUNTARY STATEMENT OF NO OBJECTION

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### **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** 

provisions lis WW-6A and	ted above, and that I have received copies of attachments consisting of pages one (1) the the well plat, all for proposed well work on the West Virginia  Marshall  Clay  Glen Easton, WV 7.5'  Middle Grave Creek - Grave Creek	a Notice of Appl rough e tract of land as UTM NAD 8: Public Road A	ication, an App , including follows: Easting: Northing:	amed on Page WW-6A and the associated olication for a Well Work Permit on Form the erosion and sediment control plan, if  523379.37  4410853.11  Roberts Ridge Road / WV 21  Longworth
issued on thos	that I have no objection to the planned work of the materials.			I have no objection to a permit being
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### Oil and Gas Privacy Notice:

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

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JUL 19 2018

API NO. 4-7 0 5 1	0,2,0,8,3,8
OPERATOR WELL NO.	M16H
Well Pad Name: Longworth Pag	d A

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

# Instructions to Persons Named on Page WW-6A

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

### **Comment and Waiver Provisions**

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# **VOLUNTARY STATEMENT OF NO OBJECTION**

provisions listed above, and that I have	received copies of a Notice of A f pages one (1) through sed well work on the tract of land UTM NAI Public Roa Generally	pplication, an App, including (as follows:  83 Easting: Northing: ad Access: used farm name:	
*Please check the box that applies		FOR EXECUTI	ON BY A NATURAL PERSON
☐ SURFACE OWNER		Signature:	
SURFACE OWNER (Road and/o	or Other Disturbance)	Print Name:	
☐ SURFACE OWNER (Impoundm	ents/Pits)	Date:	
☐ COAL OWNER OR LESSEE			ON BY A CORPORATION, ETC.
■ COAL OPERATOR		By: Mason Smith	
□ WATER PURVEYOR		<u> </u>	Relations Manager (Sorth Sucks)
☐ OPERATOR OF ANY NATURA	AL GAS STORAGE FIELD	Signature: / / / / / / / / / / / / / / / / / / /	

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.

유도이까/(FD) Office 에서 Janual Gas



# WEST VIRGINIA DEPARTMENT OF TRANSPORTATION 47 0 5 ' 0 2 0 8 3

# 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

January 10, 2018

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

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

# Longworth M16H

Dear Mr. Martin,

Jim Justice

Governor

The West Virginia Division of Highways has issued Permit #06-2016-0411 for the subject site to Chevron Appalachia, LLC for access to the State Road for the well site located off of Marshall County Route 21 SLS.

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

Very Truly Yours,

Gary K. Clayton, P.E. Regional Maintenance Engineer

Lary K. Clayton

Central Office Oil &Gas Coordinator

Cc: Mandy Fordyce

Chevron Appalachia, LLC

CH, OM, D-6

File

Office of Oil and Gas

JUL 19 2018

Very Separtment of Environmental Protection

# **Hydraulic Fracturing Fluid Additives**

			09/21/2018
Hydraulic Fra	cturing Fluid Additives	47	0 -
Supplier	Name	Purpose	702
Universal	7.5% HCl Acid	Acid - To open perforations	02083
Universal	Unislick ST50	Friction Reducer for Water and Brine (Anionic)	
Universal	Scale Inhibitor A	Scale Inhibitor	
Universal	Iron Control A	Iron Control	
Universal	Unihib G	Corrosion Inhibitor for Acid	
Universal	K-Bac 1020	Biocide/Bactericide	
Universal	CMHPG (Polyfrac Gel)	Gel	
Universal	LEB 10X	Gel Breaker	
Universal	100 Mesh White Sand	Proppant	
Universal	40-70 Mesh White Sand	Proppant	

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WV Department of Environmental Protection

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CLAY DISTRICT, MARSHALL CHEVRON APP PREPAF

800 MOUNTAI SMITHFIELD

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LONGWORTH WELL SITE

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LONGWORTH WELL SITE
CLAY DISTRICT
MARSHALL COUNTY WEST VIRGINIA
PREPARED FOR
CHEVRON APPALACHIA, LLC
BOX MOUNTAIN VIEW DRIVE
SMITHFIELD, PA 19478

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REVISION RECORD

IIIII 4000 Treego Lane, Bete 200 - Espert, PA 15632 774-327-3200 - 400-419-3410

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