

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, October 15, 2019 WELL WORK PERMIT Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC 700 CHERRINGTON PARKWAY CORAOPOLIS, PA 15108

Permit approval for ROTH M06H Re: 47-051-02254-00-00

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: ROTH M06H

Farm Name: FAYE E. ROTH

U.S. WELL NUMBER: 47-051-02254-00-00

Horizontal 6A New Drill Date Issued: 9/11/2019

4	7	0	5	1	0	2	2	5	1

API N	umber:	

PERMIT CONDITIONS

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

CO	ND	T	\mathbf{O}	V.C
	- 1-			44.3

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

API Number:	

PERMIT CONDITIONS

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

WW-6B (04/15)

API	NO. 47-	-					-	U	I
	OPERATOR W	ELL	NO	. 1	1061	1			
	Well Pad Nan	ne:	Roth						

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

1) Well Operator: Chevro	on Appalachi	a, LLC	49449935	Marshall	Union	Moundsville
			Operator ID	County	District	Quadrangle
2) Operator's Well Number	m: M06H		Well P	ad Name: Rot	h	
3) Farm Name/Surface Ow	mer: Faye E.	Roth	Public R	oad Access: Cl	R 88 Rock I	Hill Road
4) Elevation, current groun	nd: 1,300'	E	levation, propose	d post-construc	tion: 1,300	r
5) Well Type (a) Gas Other	X	Oil _	Ur	derground Stor	age	
(b)If Gas	Shallow	Х	Deep			-2
6) Existing Pad: Yes or No	Horizontal No	<u>X</u>			2/13/1	9
7) Proposed Target Format Marcellus, 6,405', 51 fee	tion(s), Depth(*-	시프트 아니는 집에 가장하는 데 얼마나 없		Pressure(s):	
8) Proposed Total Vertical	Depth: 6,40	5' /				
9) Formation at Total Vert	· della compania dell	/larcellu	s			
10) Proposed Total Measur	red Depth: 1	7,800' \	1			
11) Proposed Horizontal L	eg Length: 1	0,435'				
12) Approximate Fresh Wa	ater Strata Dep	oths:	385' below GL			
13) Method to Determine I	Fresh Water D	epths:	Deepest freshw	ater well withir	1 mile of t	he proposed well /
14) Approximate Saltwater	Depths: 131	14 ft, 166	66 ft, and 17 4 3 ft	below ground I	evel 🗸	
15) Approximate Coal Sea	m Depths: Wa	shington 40	0ft, Waynesburg 520ft, S	ewickley 712ft, Redsto	ne 764ft, and Pitts	sburgh 795ft below ground level
16) Approximate Depth to	Possible Void	(coal m	ine, karst, other)	795ft below groun	nd level to seale	d and abandoned coal mine
17) Does Proposed well lo directly overlying or adjace			Yes	N	lo X	
(a) If Yes, provide Mine	Info: Name:					
	Depth:					RECEIVED
	Seam:					Office of Oil and Gas
	Owner					JUL - 9 2019

WW-6B
(04/15)

API NO. 47	1	7.0	5	1	0	2	2	5	9
OPERATO	RW	/ELL	NO	М	06H				
Well Pad	Na	me:	Roth						

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	X-52	78.67	40	40	CTS
Fresh Water	13.375	New	J-55	54.5	435	435 🗸	CTS
Coal							-
Intermediate	9.625	New	L-80	40	2,014	2,014 🗸	CTS
Production	5.5	New	P110	20	17,800	17,800	2514 (500' below 9.625" shoe)
Tubing							
Liners		- 11					

No (12/19

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	30	0.375				1
Fresh Water	13.375	17.5	0.38	2,730	1,911	Class A	1.2
Coal							
Intermediate	9.625	12.375 & 12.25	0.395	5,750	2,768	Class A	1.19
Production	5.5	8.75 & 8.5	0.361	14,360	9,975	Class A,G or H	1.25
Tubing							
Liners		- 11			/		

PACKERS

Kind:	
Sizes:	
Depths Set:	
	RECE VED Office of Oil and Gas

JUL - 9 2019

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(1	0/	1	.4)

API NO. 47	
OPERATOR WELL NO.	M06H
Well Pad Name: Roth	

19) Describe	proposed	well w	ork, inc	luding the	e drilling a	and plugg	ging back	c of any	pilot hole:

Run a cement basket approximately 40 th Drill horizontal leg.	above the top of the mine.	Drill vertical depth to the Marcellus.

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

9525 bbl fluid - 400,000 lbm sand/stage - 9,400 anticipated max psi - 100 bpm anticipated max rate

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 15.5
- 22) Area to be disturbed for well pad only, less access road (acres): 12.5
- 23) Describe centralizer placement for each casing string:

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

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

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

25) Proposed borehole conditioning procedures:

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

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

From: Laird, Susan <<u>SLaird@chevron.com</u>> Sent: Thursday, August 29, 2019 2:32:47 PM

To: Stansberry, Wade A < Wade.A.Stansberry@wv.gov>

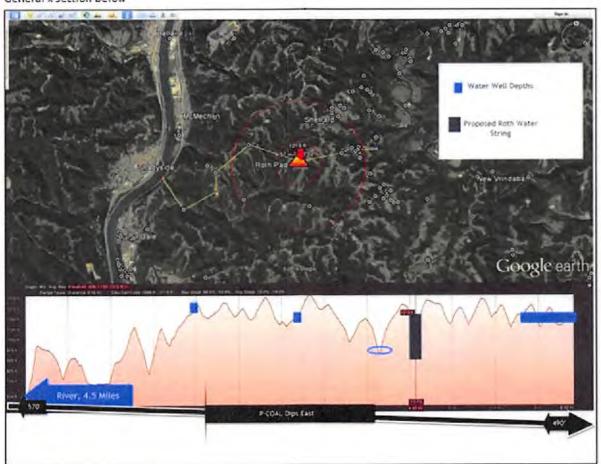
Subject: [External] 47-051-02254 Roth M06H

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and are expecting the content. -- WV Office of Technology

Good Afternoon Wade,

The water well information used in the table below came from WV Publications on water wells which listed 400 water wells in the Marshall County area and data about them. This data was made into a shapefile. For Roth, the deepest freshwater source around is a stream about 0.5 miles from the Roth pad.

General x section below



Ross PAD ELEV	1300	1										TVD SS of coal in Roth	MD of Pcoal in Ros
												506	795
			well				SSSTVD	Needed					
			depth	water	distance		Water	CSG	Depti	h in			
well ID	Direction	elevation	(MD)	depth	(miles)	Note	Depth	Depth	Roth				
47051WW322	W	1360	55	n/a	1.17		1295	124	5	5	Coal SS		
47051WW302	W	840	35	6	1.48	"Hydrogen sulfide gas present,	805	75	5	495 Well in Coal!?	53	0	
47051WW296	5	1270	0	n/a	1.08	adequate for 4 people, drilled	1270	122	0	30			
47051WW322	E	1170	0	n/a	1.45		1170	112	0	130			
47051WW325	E	1240	0	0	1.45	dry since 1981	1240	119	0	60			
47051WW325	E	1280	109	83.5	13		1171	112	1	129			
47051WW324	E	1300	130	84.6	1		1170	112	0	130 Deepest in 1n	ni		
47051WW327	E	1300	140	100.45	1.3		1160	111	0				
47051WW328	E	1300	22	n/a	1.29	dry since 12/81	1278	122	8	22			
47051WW331	E	1310	120	n/a	1.35	Inadequate for domectic use	1190	114	٥	110			
47051WW330	E	1310	19	n/a			1291	124	1	9			
47051WW329	E	1240	130	n/a	1.2	Often dry in summer	1110	106	0	190 Deepest in 1.	Smi		
47051WW344	NE	1190	n/a	n/a	1.4	dry since 1979	1090	104	0	210 "est with no v	well depth	to West	
47051WW345	NE	1230	n/a	n/a	1.45	flows all year	1090	104	0	210 *est with no v	well depth	to West	
47051WW349	NE	1220	n/a	n/a	1.5	flows all year	1090	104	0	210 *est with no v	well depth	to West	
47051WW320	W	1300	157	117	1.86	perf from 10-157	1143	109	13	157			
Stream	W	915		910	0.5	Localized GW/SW in stream	915	86	5	385			
Stream	SW	860		850	1	Localized GW/SW in stream	860	81	D	440			
	West is u	pdip											
						Deepest water with certainty =		in Imile					
						1.5 miles and some uncertainty							
OFFSET PADS to	reference				Deepest wa	ster 0.5 mile including surface =	915						

Let me know if you need additional information.

Thanks Susan

Susan Laird

HES Specialist - Regulatory Permitting slaird@chevron.com

Appalachian Mountain Business Unit Chevron North America Exploration and Production Company a division of Chevron USA Inc 700 Cherrington Parkway Coraopolis, PA 15108 Tel 412-865-2504 Fax 412-865-2403

Cement Additives

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

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

The Production cement will have a lead and tail cement.

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

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

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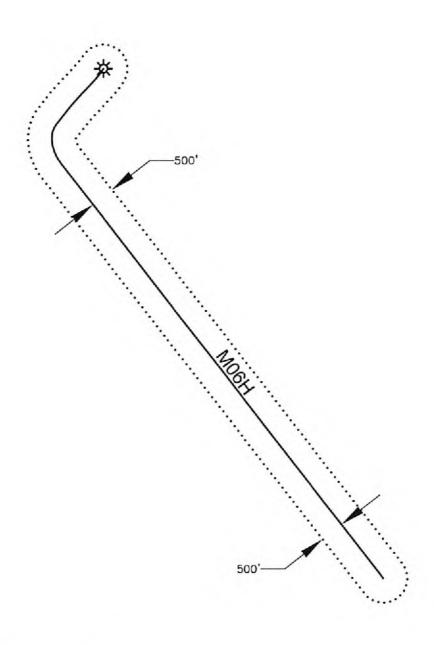
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Chevron					Roth 6	+			
nion Twp, Marshall Co	o, WV					•		Ground Level Elev. (ft above SL): Depth Meas. ff air KB (ft above GL):	1,300 24
			1						Depths reference GL
DRILLING FLUID / BIT TYPE / TFA	PROGRAM	CASING SIZE / FORMATION	MD (FT)	TVD (FT)	WELLHEAD DESIGN FMC UH-S 13-5/8"	HOLE SIZE (IN)	Hole Depth (FT)	CASING SPECS	CEMENT PROGRAM
Core Barrel / Auger	2 Bowspring per Jt	√ 20" Conductor	40	40		26-36	40	<u>Conductor</u> 20° 78.67# X-52 Minimum 40 ft from GL or at les	Grout to Surface
	Bow Spring: (1) on shoe track w/ stop collar & (1) per 2 jt over coupling to surface	Est. Frac Gradient 14.5 ppg Gas Gradient 0.1 psi/ft Est. Pore Pres. Grad. 0.338 psi/ft						Surface Casing 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (it Strength 1,000 lbs) 853 MASP (Psi) 438	Surface Blend (Class A) Cement to Surface
	<u> </u>	Est. BHT deg. F 13-3/8" Casing	435	78 435		17.5	485	Minimum 50 ft past deepest	known fresh water
	Bow Spring: (1) on shee track w/ stop collar & (1) per 3 jts over coupling			-				Intermediate Casing 9-5/8" 40#L-80IC BTC 0.395" Wall Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.679 Burst (psi) 5,750 Collapse (psi) 3,870 Yield (Jt Strength 1.000 lbs) 916	Intermediate II Blend (Class A Cement to Surface
		Est. BHT deg. F	,	96		To starts			
		6-5/8" Casing	2,014	2,014	11 16	12.375 -	2,040		
	Bow Spring: (1) per every other it over coupling SpiraGlider or Centek; (1) per jt of csg to KOP							Production Casing 5-1/2" 20# P-110, 0.961" Wall Coupling OD (in) 6.900 ID (in) 4.753 Drift ID (in) 4.653 Burst (psi) 14,960 Collapse (psi) 12,090 Yield (Jt Strength 1.000 lbs) 729	Production Lead Sturry Cement to 500' below 9-5/8" shoe
	Float Equip.								Production Tall Slurry TOC minimum 200 above Marcell
	(2) Jts of Osg	4				8.75			
Non-Conservation	Float Equip.	5-1/2" Casing	17,800	6,405 √		8.75 -	17,800		

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- NO WELLS WITHIN THE 500FT BUFFER



CHEVRON APPALACHIA, LLC 700 CHERRINGTON PARKWAY CORAOPOLIS, PA 15108

LEGEND

☆ - WELL LOCATION

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Environmental Protection

ROTH

ROTH
AREA OF REVIEW MAP
MARSHALL COUNTY
UNION DISTRICT
WEST VIRGINIA

TOPO QUAD: MOUNDSVILLE, WV

SCALE: 1" = 2000' DATE: MAY 10, 2019

Blue Mountain

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

API Number 47 -	_	
Operator's Well No.	МО6Н	

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_Chevron Appalachia, LLC OP Code 49449935	
Watershed (HUC 10) Short Creek - Ohio River Quadrangle Moundsville	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No No	
Will a pit be used? Yes No V	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes No V If so, what ml.?	
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
Underground Injection (UIC Permit Number)	
Rcuse (at API Number_at the next anticipated well Off Site Disposal (Supply form WW-9 for disposal location)	
Other (Explain_	
Will closed loop system be used? If so, describe: Yes we will be utilizing multiple open/closed top tanks	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air to KOP, SBM KOP to TMD	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	
Additives to be used in drilling medium? Barite, fluid loss, emulsifiers, rheological control	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed off site	
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)	
-Landfill or offsite name/permit number? Arden Landfill #100172, South Hills Landfill #100592, Short Creek Landfill #WV0109517	
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.	
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issue on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicate law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the information submitted on the application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significate penalties for submitting false information, including the possibility of fine or imprisonment. RECEIV Office of Oil at Company Official Signature	the ble his for ant
Company Official (Typed Name) Kenneth D. Martz	2019
Company Official Title Permitting Team Lead WV Departs	ment of
Environmental	Protecti
Subscribed and sworn before use this day of July , 20 19 County of Alleghens Fa	vania Yett
Notary Public Commonwealth of Pennsylvania - Notary Public Commonw	ary Seal
My commission expires Jan 17, 2 My Commission Expires Jan 17, 2 Commission Number 1252052	2022

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Title: Bil & Gas laspector

Date: 6/13/19

WV Department of Environmental Protection

Field Reviewed?

1 Va

) 1

WW-9 Attachment

Roth M06H

Seed Mixtures

<u> </u>		
<u>Permanent</u>]
Seed Type	lbs/acre	
Non Agricutlural Upland	175lb/ac	and
Tall Fescue	57%	
Perennial Ryegrass	19%	
Ladino Clover	10%	
Birdsfoot - Trefoil	10%	
Red Top	4%	
		_

<u>Permanent</u>	
Seed Type	lbs/acre
Hayfield, Pastureland, and Cropland	200lb/ac
Orchard Grass	40%
Timothy	40%
Birdsfoot - Trefoil	10%
Ladino Clover	10%

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Chevron

Appalachian LLC WV Well Site Safety Plan

Pad: Roth Pad A Well # M06H

No 113/19

145 McHenry Lane Wheeling, WV 26033 Union District Marshall County, WV

Access Point – [39.9721°N, 80.6791°W] Well Site – [39.9698935°N, 80.6826057°W] Marshall County, West Virginia

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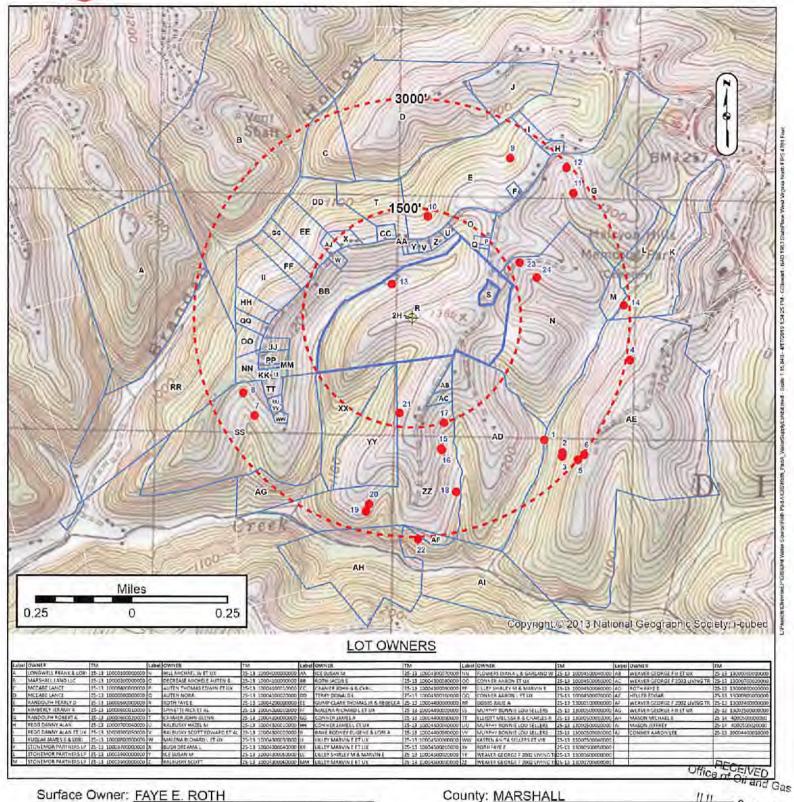
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WV Department of Environmental Protection



WATER SUPPLY EXHIBIT ROTH PAD A





Oil/Gas Owner: FAYE E. ROTH

Well Operator: CHEVRON APPALACHIA, LLC

Address: 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Phone: 412-865-0088

Township: UNION, WV

UNION, WV

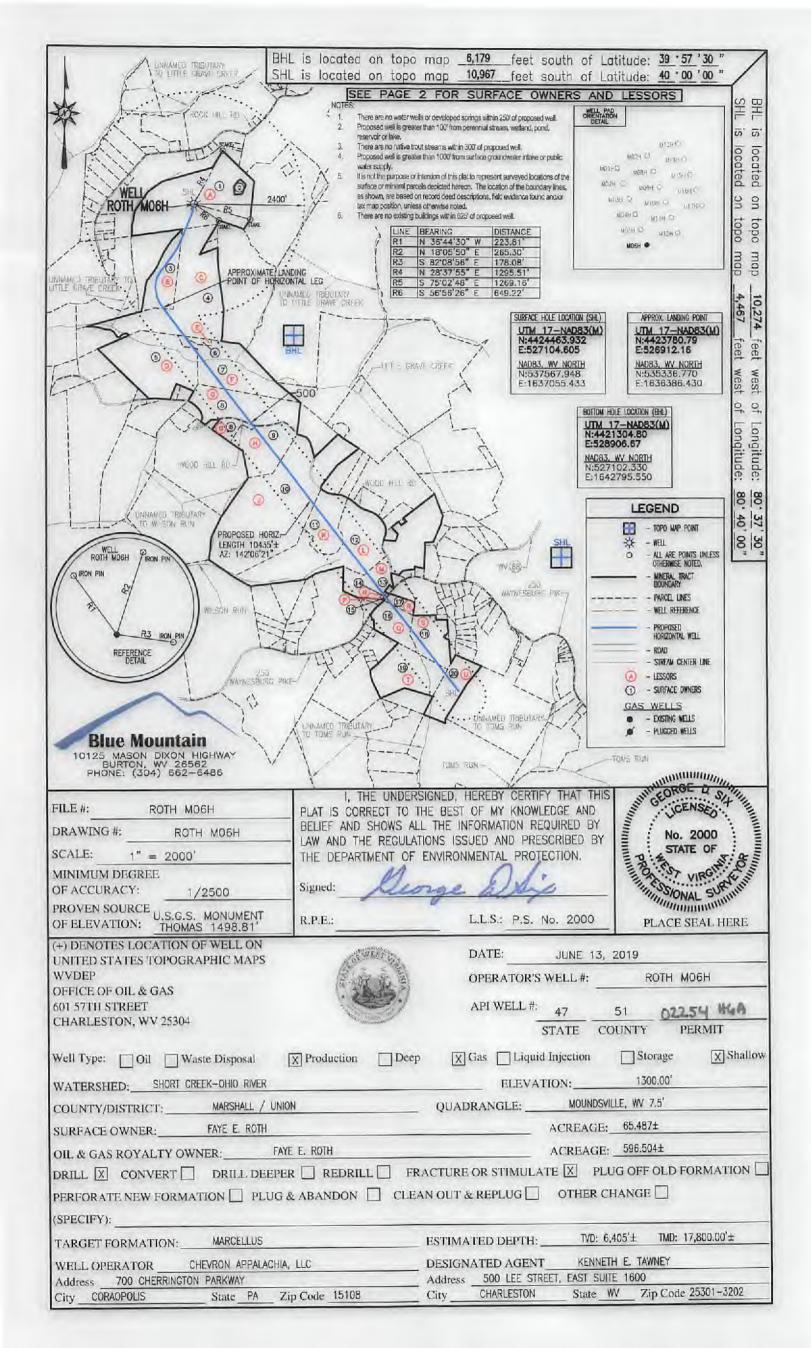
GROUNDWATER & ENVIRONMENT Of Imental Protection

Surveyor: SERVICES, INC.

Address: 301 COMMERCE PARK DR

CRANBERRY TOWNSHIP, PA 16066

Phone: 800-267-2549



ROTH **M06H** PAGE 2 OF 2

	SURFACE OWNER	DIST-TM/PAR
1	FAYE E. ROTH	13-10/42
2	BRIAN K. & MELINDA D. MASTERS	13-10/42.1
3	GEORGE F. WEAVER 2002 LIVING TR	13-13/6
4	GEORGE F. WEAVER 2002 LIVING TR	13-13/7
5	MICHAEL E. MASON	14-4/5
6	GEORGE F. WEAVER 2002 LIVING TR	13-13/24
7	JEFFREY B. & BETTY LOU MASON	14-4/5.2
8	RONALD B. MASON	14-4/6
9	WESLEY J. MYERS ET UX	14-4/6.1
10	BRENT A. & AUDRA R. CONKLE	14-4/9
11	BRENT A. & AUDRA R. CONKLE	14-4/11
12	NATHAN N., JR. & MELISSA BURKETT	14-4/10
13	GEORGE E. BERTRAM ET UX	14-4/16
14	ROBERT CARTER DARWISH ET UX	14-4/16.3
15	ROBERT CARTER DARWISH ET UX	14-4/16.2
16	JEFFREY A. ROBBINS	14-4/35
17	JEFFREY A. ROBBINS	14-4/24
18	HELEN M. KOONTZ	14-4/34
19	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	14-5/43
20	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	14-5/42

	LESSOR	DIST-TM/PAR
Α	FAYE E. ROTH	13-10/42
В	WEAVER FAMILY FARM LP	13-13/6
	GEORGE F. WEAVER 2002 LIVING TRUST	
С	WEAVER FAMILY FARM LP	13-13/7
	GEORGE F. WEAVER 2002 LIVING TRUST	
D	MICHAEL E. MASON	14-4/5
E	WEAVER FAMILY FARM LP	13-13/24
	GEORGE F. WEAVER 2002 LIVING TRUST	
F	RONALD B. MASON	14-4/5.2
G	RONALD B. MASON	14-4/6
Н	WESLEY J. MYERS ET UX	14-4/6.1
J	CHAMBERS FAM TRST DTS 10/4/2016	14-4/9
K	CHAMBERS FAM TRST DTS 10/4/2016	14-4/11
L	NATHAN NEIL BURKETT, JR.	14-4/10
М	GEORGE E. BERTRAM ET UX	14-4/16
N	ROBERT CARTER DARWISH ET UX	14-4/16.3
P	ROBERT CARTER DARWISH ET UX	14-4/16.2
Q	KT HILL FAMILY TRUST	14-4/35
R	KT HILL FAMILY TRUST	14-4/24
S	DOROTHY CROW ET VIR	14-4/34
	FRIZZELL FAMILY TRST	
Т	DONNA S. DOYEL ET VIR	14-5/43
	EARL GREGORY HUMMEL	
U	VERNON L. KNOX ET UX	14-5/42
	HARRY EDWIN GRIMM ET UX	
	JAMES E. HERRICK ET UX	

SURFACE HOLE LOCATION (SHL)

UTM 17—NAD83(M)
N:4424463.932
E:527104.605

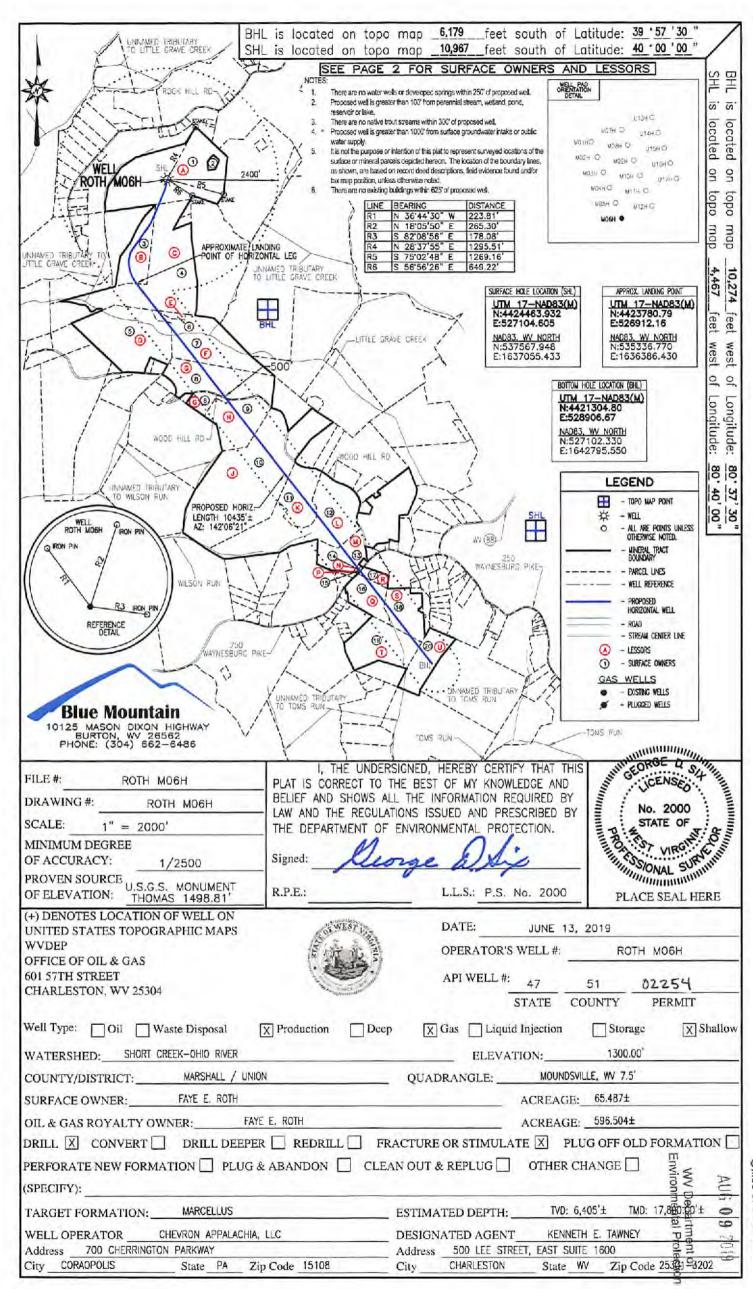
APPROX. LANDING POINT UTM 17-NAD83(M) N:4423780.79 E:526912.16 Nades, W North N:535336.770 E:1636386.430

BOTTOM HOLE LOCATION (BHL) UTM 17-NAD83(M) N:4421304.80 E:528906.67 NAD83, W NORTH N:527102.330 E:1642795.550

JUNE 13, 2019



API WELL #: 47 51 02254 WGA | STATE | COUNTY | PERMIT



ROTH **M06H** PAGE 2 OF 2

	SURFACE OWNER	DIST-TM/PAR
1	FAYE E. ROTH	13-10/42
2	BRIAN K. & MELINDA D. MASTERS	13-10/42.1
3	GEORGE F. WEAVER 2002 LIVING TR	13-13/6
4	GEORGE F. WEAVER 2002 LIVING TR	13-13/7
5	MICHAEL E. MASON	14-4/5
5	GEORGE F. WEAVER 2002 LIVING TR	13-13/24
7	JEFFREY B. & BETTY LOU MASON	14-4/5.2
8	RONALD B. MASON	14-4/6
9	WESLEY J. MYERS ET UX	14-4/6.1
10	BRENT A. & AUDRA R. CONKLE	14-4/9
11	BRENT A. & AUDRA R. CONKLE	14-4/11
12	NATHAN N., JR. & MELISSA BURKETT	14-4/10
13	GEORGE E. BERTRAM ET UX	14-4/16
14	ROBERT CARTER DARWISH ET UX	14-4/16.3
15	ROBERT CARTER DARWISH ET UX	14-4/16.2
16	JEFFREY A. ROBBINS	14-4/35
17	JEFFREY A. ROBBINS	14-4/24
18	HELEN M. KOONTZ	14-4/34
19	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	14-5/43
20	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	14-5/42

	LESSOR	DIST-TM/PAR
A	FAYE E. ROTH	13-10/42
В	WEAVER FAMILY FARM LP	13-13/6
	GEORGE F. WEAVER 2002 LIVING TRUST	
C	WEAVER FAMILY FARM LP	13-13/7
	GEORGE F. WEAVER 2002 LIVING TRUST	
D	MICHAEL E. MASON	14-4/5
E	WEAVER FAMILY FARM LP	13-13/24
	GEORGE F. WEAVER 2002 LIVING TRUST	
F	RONALD B. MASON	14-4/5.2
G	RONALD B. MASON	14-4/6
Н	WESLEY J. MYERS ET UX	14-4/6.1
J	CHAMBERS FAM TRST DTS 10/4/2016	14-4/9
K	CHAMBERS FAM TRST DTS 10/4/2016	14-4/11
L	NATHAN NEIL BURKETT, JR.	14-4/10
М	GEORGE E. BERTRAM ET UX	14-4/16
N	ROBERT CARTER DARWISH ET UX	14-4/16.3
P	ROBERT CARTER DARWISH ET UX	14-4/16.2
Q	KT HILL FAMILY TRUST	14-4/35
R	KT HILL FAMILY TRUST	14-4/24
S	DOROTHY CROW ET VIR	14-4/34
	FRIZZELL FAMILY TRST	
T	DONNA S. DOYEL ET VIR	14-5/43
	EARL GREGORY HUMMEL	
U	VERNON L. KNOX ET UX	14-5/42
	HARRY EDWIN GRIMM ET UX	
	JAMES E. HERRICK ET UX	

SURFACE HOLE LOCATION (SHL) UTM 17-NAD83(M) N:4424463.932 E:527104.605

NAD83, WV NORTH N:537567.948 E:1637055.433

APPROX. LANDING POINT UTM 17-NAD83(M) N:4423780.79 E:526912.16 NAD83, WV NORTH N:535336,770 E:1636386.430

BOTTON HOLE LOCATION (BHL) UTM 17-NAD83(M) N:4421304.80 E:528906.67 NAD83, WV NORTH N:527102.330 E:1642795.550

JUNE 13, 2019

WV Department of Environmental Protection

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

API WELL#: 47

51

02254

STATE COUNTY

PERMIT

WW-6A1 (5/13)

Operator's Well No. MC	06H
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INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

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

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

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

See Attached

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

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

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

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

Well Operator:	Chevron Appalachia, LLC	Office of Oil and Gas
By:	Mora oran	JUL = 9 2019
Its:	Permitting Team Lead	WV Department of Environmental Protection

		Roth	Unit M06H			<u> </u>
Plat ID	Parcel Number	Lessor	Lessee	Royalty	Book/Page	Assignment #1
Α	13-10-42	Roth Faye E	Chevron U.S.A. Inc.	0.18	888/41	N/A
						TH Exploration, LLC to
		Weaver Family Farm LP - SFX	TH Exploration LLC	0.18	879/305	Chevron U.S.A. Inc.
В	13-13-6					40/152
	13-13-0				l	TH Exploration, LLC to
		George F Weaver 2002 Living Trust	TH Exploration LLC	0.18	881/154	Chevron U.S.A. Inc.
						40/152
					_	TH Exploration, LLC to
		Weaver Family Farm LP - SFX	TH Exploration LLC	0.18	879/305	Chevron U.S.A. Inc.
С	13-13-7					40/152
						TH Exploration, LLC to
		George F Weaver 2002 Living Trust	TH Exploration LLC	0.18	881/154	Chevron U.S.A. Inc.
						40/152
D	14-4-5	Mason Michael E	Chevron U.S.A. Inc.	0.18	1008/568	N/A
		Manager of the second				TH Exploration, LLC to
		Weaver Family Farm LP - SFX	TH Exploration LLC	0.18	879/305	Chevron U.S.A. Inc.
E	13-13-24					40/152
		Coord Filton 2003 Hide Tour	70.5	0.40	004/454	TH Exploration, LLC to
		George F Weaver 2002 Living Trust	TH Exploration LLC	0.18	881/154	Chevron U.S.A. Inc.
						40/152 V
F	14-4-5.2	Mason Donald D	THE Franchism H.C.	0.10	005/50	TH Exploration, LLC to
Г	14-4-5.2	Mason Ronald B.	TH Exploration LLC	0.18	885/58	Chevron U.S.A. Inc.
						40/152 V
G	14-4-6	Mason Ronald B.	TH Exploration LLC	0.18	885/58	TH Exploration, LLC to
•	14-4-0	ividsoff Koffalu B.	TH Exploration LLC	0.18	005/50	Chevron U.S.A. Inc. 40/152
Н	14-4-6.1	Myers Wesley J. et ux	Chevron U.S.A. Inc.	0.18	977/119	40/132 N/A
	14 4 0.1	iviyers avesicy J. et ux	Chevion O.S.A. Inc.	0.10	3///119	IV/A
J	14-4-9	Chambers Fam TRST DTS 10/4/2016	Chevron U.S.A. Inc. /	0.17	919/547	N/A
K	14-4-11	Chambers Fam TRST DTS 10/4/2016	Chevron U.S.A. Inc.√	0.17	919/547	N/A
<u> L </u>	14-4-10	Burkett Nathan Neil Jr.	Chevron U.S.A. Inc. ✓	0.18	848/326	N/A
М	14-4-16	Bertram George E et ux	Chevron U.S.A. Inc. /	0.18	968/515	N/A
						TH Exploration, LLC to
N	14-4-16.3	Darwish Robert Carter et ux	TH Exploration LLC	0.19	938/319	Chevron U.S.A. Inc.
				_		40/152
						TH Exploration, LLC to
Р	14-4-16.2	Darwish Robert Carter et ux	TH Exploration LLC	0.19	938/319	Chevron U.S.A. Inc.
_						40/152
Q	14-4-35	KT Hill Family Trust	Chevron U.S.A. Inc. /	0.17	987/41	N/A
R	14-4-24	KT Hill Family Trust	Chevron U.S.A. Inc.	0.17	987/41	N/A
S	14-4-34	Crow Dorothy et vir - SFX	Chevron U.S.A. Inc.	0.18	871/586	N/A
		Frizzell Family TRST - SFX	Chevron U.S.A. Inc.	0.18	889/438	N/A
Т	14-5-43	Doyel Donna S ET VIR - SFX	Chevron U.S.A. Inc.	0.14	814/372	N/A
··· -		Hummel Earl Gregory - SFX	Chevron U.S.A. Inc.	0.14	813/21	N/A
	14543	Knox Vernon L et ux - SFX	Chevron U.S.A. Inc.	0.16	801/637	N/A
U	14-5-42	Grimm Harry Edwin et ux - SFX	Chevron U.S.A. Inc.	0.16	801/618	N/A
		Herrick James E et ux - SFX	Chevron U.S.A. Inc.	0.16	801/604	N/A



May 17, 2019

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

RE: Roth M06H

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,

Brian Derr

Land Representative

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

Date of Notic	e Certification: 06/12/2019			API No. 47	7	
			•	Operator's	Well No. MOS	Н
				Well Pad N	Name: Roth	
Notice has l						
	e provisions in West Virginia Co	de § 22-6A	, the Operator has prov	ided the rec	uired parties	with the Notice Forms listed
	tract of land as follows:					
State:	West Virgina			Easting:	527104.605	. <u></u>
County:	Marshall	_	_	Northing:	4424463.932	
District:	Union		Public Road Acce		CR 88 Rock Hill	Road
Quadrangle:	Moundsville		Generally used far	rm name:	Roth	
Watershed:	Short Creek - Ohio River		-			
prescribed by it has provide information re of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(lefthe secretary, shall be verified an ed the owners of the surface desequired by subsections (b) and (c) surface owner notice of entry to of subsection (b), section sixtee e § 22-6A-11(b), the applicant shall have been completed by the appli	nd shall conscribed in so, section size survey pure of this and tender pure section size survey pure section size survey pure section size section size section size section section size s	tain the following info- subdivisions (1), (2) are xteen of this article; (ii) arsuant to subsection (in rticle were waived in	rmation: (14 nd (4), substitute the real that the real, section writing by	4) A certificat section (b), se quirement was ten of this art the surface or	ion from the operator that (i) ction ten of this article, the deemed satisfied as a result icle six-a; or (iii) the notice wner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the rator has properly served the requect ALL THAT APPLY			is Notice C	ertification	OOG OFFICE USE ONLY
☐ 1. NO1	TICE OF SEISMIC ACTIVITY		OTICE NOT REQUIR MIC ACTIVITY WAS			☐ RECEIVED/ NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SU	RVEY or	■ NO PLAT SURVE	EY WAS CO	ONDUCTED	□ RECEIVED
■ 3. NO	FICE OF INTENT TO DRILL	NOTIO	OTICE NOT REQUIR CE OF ENTRY FOR P CONDUCTED or			☐ RECEIVED/ NOT REQUIRED
·		□v	VRITTEN WAIVER E (PLEASE ATTACH)	BY SURFA	CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATIO	N				☐ RECEIVED
■ 5. PUE	BLIC NOTICE					☐ RECEIVED
■ 6. NO	FICE OF APPLICATION			Offic	RECEIVED GE	□ RECEIVED
Required A	ttachments:				JUL - 9 Le	

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

Certification of Notice is hereby given:

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

Address:

Well Operator: Chevron Appalachia, LLC

By:
Its: Permitting Team Lead

Coraopolis, PA 15108
Facsimile: 412-865-2403

Telephone: 412-865-1433

Email: kmartz@chevron.com

700 Cherrington Parkway

Commonwealth of Pennsylvania – Notary Seal JENNY L HAYES – Notary Public

Fayette County

My Commission Expires Jan 17, 2022

Commission Number 1252052

Commonwealth of Pennsylvania County of Allegheny

Subscribed and sworn before me this 2 day of VIII

Notari Dublio

Commission Expires January 17, 2022

Oil and Gas Privacy Notice:

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

RECEIVED Office of Oil and Gas

JUL - 9 2019

WW-6A (9-13) API NO. 47-4705102254

OPERATOR WELL NO. MG6H

Well Pad Name: Roth

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

Not	ice Time Require	ment: notice shall be prov	ded no later than the	c filing date of permit application.	
	e of Notice: 6/1/219 ice of:	Date Permit Applica	tion Filed: 7/3/	19	
Ø	PERMIT FOR A WELL WORK		CATE OF APPRO RUCTION OF AN	VAL FOR THE IMPOUNDMENT OR PIT	
Del	ivery method pur	suant to West Virginia C	ode § 22-6A-10(b)		
	PERSONAL	REGISTERED	✓ METHOD	OF DELIVERY THAT REQUIRES A	
	SERVICE	MAIL	RECEIPT	OR SIGNATURE CONFIRMATION	
regit sedii the s oil a desc oper mor well imp have prov prop subs reco prov Cod	stered mail or by an ment control plan resurface of the tract of and gas leasehold be tribed in the erosion rator or lessee, in the coal seams; (4) The work, if the surface oundment or pit as a water well, spring yide water for consumptions of the sheriff register of this secrets of the sheriff register of this article is R. § 35-8-5.7.a register.	y method of delivery that re- equired by section seven of a on which the well is or is pro- sing developed by the propo- and sediment control plans e event the tract of land on va- ne owners of record of the sa- e tract is to be used for the pro- described in section nine of g or water supply source loc- imption by humans or dome ivity is to take place. (c)(1) I ection hold interests in the la- quired to be maintained pur- to the contrary, notice to a le- equires, in part, that the open	quires a receipt or si his article, and the va- posed to be located sed well work, if the submitted pursuant to which the well propo- arface tract or tracts lacement, construction this article; (5) Any stated within one thouse the animals; and (6) of more than three teams, the applicant mands, the applicant mands ien holder is not not reator shall also provi-	required by this article shall deliver, by personal gnature confirmation, copies of the application, well plat to each of the following persons: (1) The common of record of the surface tract or surface tract is to be used for roads or other land of subsection (c), section seven of this article; (3) used to be drilled is located [sic] is known to be to overlying the oil and gas leasehold being develoin, enlargement, alteration, repair, removal or all surface owner or water purveyor who is known to usand five hundred feet of the center of the well. The operator of any natural gas storage field with ants in common or other co-owners of interests ay serve the documents required upon the person to a landowner, unless the lien holder is the life to a landowner, unless the lien holder is the life the Well Site Safety Plan ("WSSP") to the surrovided in section 15 of this rule.	the erosion and e owners of record of tracts overlying the d disturbance as The coal owner, underlain by one or ped by the proposed candonment of any to the applicant to pad which is used to thin which the described in n described in the Notwithstanding any andowner, W. Va.
Ø A	Application Notice	e ☑ WSSP Notice ☑ E&	S Plan Notice	Well Plat Notice is hereby provided to:	
	URFACE OWNER	R(s)		COAL OWNER OR LESSEE	
	ne: Faye E. Roth			ame: Consol Milning Company, LLC	->
	ress: 376 McHenry La eling, WV 26003	ne		ddress: 1000 Consol Energy Drive	-
				COAL OPERATOR	-
Add	Irace.			ame:	
Auc	11 C35.		_ A	ldress:	
ПS	URFACE OWNER	R(s) (Road and/or Other Di		THE COS.	_
		(-) (-)		SURFACE OWNER OF WATER WELL	_
Add	lress:		A.	ND/OR WATER PURVEYOR(s)	
			N:	ame: See Attached	
Nan	ne:		A	ddress:	
Add	lress:				n Lan nave en
ELS!	URFACE OWNER	R(s) (Impoundments or Pits		OPERATOR OF ANY NATURAL GAS STO ame:	and and Oil and Gas
		(a) (impoundments of The		iddress:	
Add	iress:	1		Please attach additional forms if necessary	
_				rease attach additional forms if necessary	WV Department of Environmental Protection

WW-6A (8-13) API NO. 47-47-05 10 2 2 5 4

OPERATOR WELL NO. MOGH

Well Pad Name: Roth

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

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

WW-6A	
(8-13)	

API NO. 47-OPERATOR WELL NO. MOGH Well Pad Name: Roth

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

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

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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.

WW-6A (8-13) API NO. 47-4705102254

OPERATOR WELL NO. MO6H

Well Pad Name: Roth

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

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

Permit Denial or Condition

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

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

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

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

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WW-6A (8-13)

API NO. 4 4 7 0 5 1 0 2 2 5 4 OPERATOR WELL NO. MOGH

Well Pad Name: Roth

Notice is hereby given by:

Well Operator: Chevron Appalachía, LLC

Telephone: 412-865-1433 Email: kmartz@chevron.com Address: 700 Cherrington Parkway

Coraopolis, PA 15108

Facsimile: 412-865-2403 Kenneth D. Martz 6/12/19

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

DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Commonwealth of Pennsylvania - Notary Seal Laura Savage, Notary Public **Allegheny County**

My commission expires September 17, 2022 Commission number 1285773

Member, Pennsylvania Association of Notaries

Commonwealth of Pennsylvania

County of Allegheny

Subscribed and sworn before me this 2th day of June

My Commission Expires

Notary Public

V4.

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Attachment to WW-6A

API No. 47-		
OPERATOR WELL N	O. <u>M06H</u>	
Well Pad Name:	Roth	

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name:

Faye E. Roth

Address:

376 McHenry Lane

Wheeling, WV 26003

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name:

George F. Weaver 2002 Living Trust,

Address:

382 McHenry Lane

Wheeling, WV 26003

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR

Name:

Pearly D. Randolph

Address:

411 Rock Hill Lane

Wheeling, WV 26003

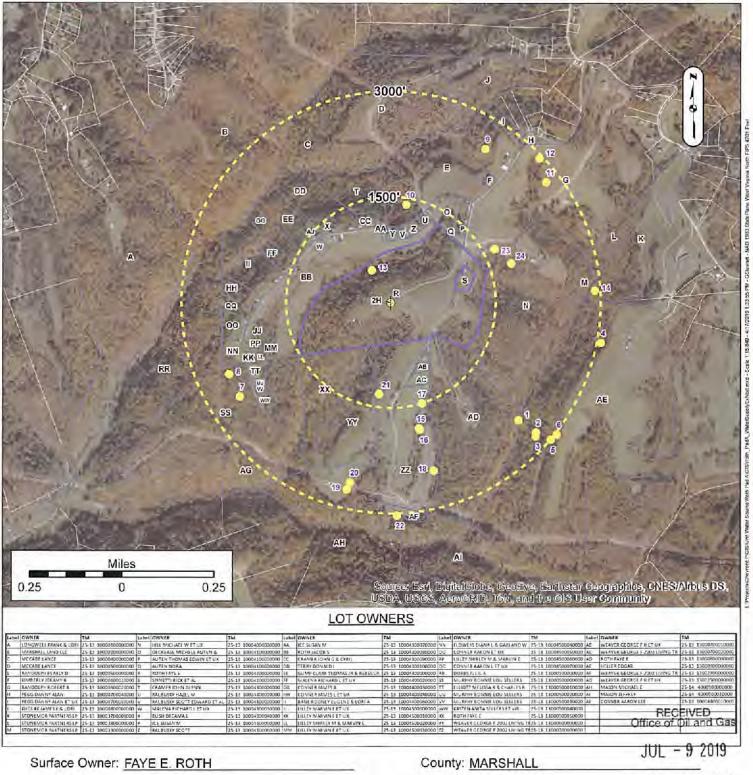
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WATER SUPPLY EXHIBIT ROTH PAD A





Oil/Gas Owner: FAYE E. ROTH

Well Operator: CHEVRON APPALACHIA, LLC

Address: 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Phone: 412-865-0088

Township: UNION, WV Bepartment of Environmental Protection

GROUNDWATER & ENVIRONMENTAL

Surveyor: SERVICES, INC.

Address: 301 COMMERCE PARK DR

CRANBERRY TOWNSHIP, PA 16066

Phone: 800-267-2549



WATER SUPPLY EXHIBIT



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE #
1	HELLER EDGAR	Stream	1,041	301 PENNY LANE	304-233-0648
2	HELLER EDGAR	Spring	1,117	301 PENNY LANE	304-233-0648
3	HELLER EDGAR	Spring	1,122	301 PENNY LANE	304-233-0648
4	HELLER EDGAR	Spring	1,244	301 PENNY LANE	304-233-0648
5	HELLER EDGAR	Spring	1,206	301 PENNY LANE	304-233-0648
6	HELLER EDGAR	Spring	1,234	301 PENNY LANE	304-233-0648
7	MURPHY BONNIE LOU SELLERS	Spring	1,159	1466 ROCK HILL	304-232-3171
8	MURPHY BONNIE LOU SELLERS	Spring	1,193	1466 ROCK HILL	304-232-3171
9	RANDOLPH PEARLY D	Spring	1,228	411 ROCK HILL	304-233-1896
10	RANDOLPH PEARLY D	Spring	1,211	411 ROCK HILL	304-233-1896
11	RANDOLPH ROBERT A	Spring	1,263	140 ROCK HILL LANE	304-780-6766
12	RANDOLPH ROBERT A	Spring	1,272	140 ROCK HILL LANE	304-780-6766
13	ROTH FAYE E	Pond	1,150	376 MCHENRY LANE	304-232-8334
14	STONEMOR PARTNERS LP	Stream	1,115	4987 FAIRMONT PIKE	681-209-0600
15	WEAVER GEORGE F 2002 LIVING TR	Spring	1,217	382 MCHENRY LANE	304-232-7254

No.	SUPPLY COORDINATES	2H	
1	39*57'55.2860"N 80*40'34.4820"W	2,475	
2	39°57'54.5976"N 80°40'31.2636"W	2,776	
3	39°57'54.0792"N 80°40'31.2852"W	2,810	
4	39°58'07.2732"N 80°40'19.5492"W	3,057	
5	39°57′53.6220″N 80°40′28.4808″W	3,005	
6	39°57'54.3528"N 80°40'27.4152"W	3,024	
7	39°57'59.0832"N 80°41'25.7388"W	2,542	
В	39°58'02.1468"N 80°41'27.7584"W	2,532	
9	39°58'34.3380"N 80°40'41.2356"W	2,568	
10	39°58'26.3136"N 80°40'55.6392"W	1,404	
11	39*58'29 7408"N 80*40'29,9640"W	2,802	
12	39°58'33.1248"N 80°40'31.2492"W	2,954	
13	39°58'17.0328"N 80°41'01.8096"W	531	
14	39°56'14.6352"N 80°40'20.7948"W	2,920	
15	39°57'54.9252"N 80°40'52.7448"W	1,836	

Office of Oil and Gas

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WATER SUPPLY EXHIBIT



No.	WATER PURVEYOR	SUPPLY	ELEV.	ADDRESS	PHONE#
16	WEAVER GEORGE F 2002 LIVING TR	Spring	1,215	382 MCHENRY LANE	304-232-7254
17	WEAVER GEORGE F 2002 LIVING TR	Spring	1,240	382 MCHENRY LANE	304-232-7254
18	WEAVER GEORGE F 2002 LIVING TR	Spring	1,110	382 MCHENRY LANE	304-232-7254
19	WEAVER GEORGE F 2002 LIVING TR	Spring	1,116	382 MCHENRY LANE	304-232-7254
20	WEAVER GEORGE F 2002 LIVING TR	Spring	1,123	382 MCHENRY LANE	304-232-7254
21	WEAVER GEORGE F 2002 LIVING TR	Spring	1,259	382 MCHENRY LANE	304-232-7254
22	WEAVER GEORGE F 2002 LIVING TRUST	Spring	1,992	382 MCHENRY LANE	304-232-7254
23	HILL MICHAEL W ET UX	Spring	1,281	146 MCHENRY LANE	304-281-3796
24	HILL MICHAEL W ET UX	Spring	1,226	146 MCHENRY LANE	304-281-3796
No.	SUPPLY COORDINATES	2H			
16	39°57'54.7596"N 80°40'52.5864"W	1,855			
17	39°57'58.4352"N 80°40'52.2228"W	1,505			
18	39°57'49.0500"N 80°40'49.9260"W	2,466			
19	39"57'46.2528"N 80"41'05.8200"W	2,729			
20	39°57'47,2572"N 80°41'05,2584"W	2,620			
21	39°57'59.6484"N 80°41'00 1572"W	1,317			
22	39°57'42.6528'N 80°40'56.5536"W	3,031			
23	39°58'20,2800"N 80°40'39,288"W	1,665			

Office of Oil and Gas

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

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Date of Noti	ce: 06/12/2019		at least TEN (10) days prior to filing a crimit Application Filed: 7 2	5 1 4
Delivery me	thod pursuant to	o West Virginia Code §	22-6A-16(b)	
☐ HAND		CERTIFIED MAIL		
DELIVI		RETURN RECEIPT RE	FOLIESTED	
eceipt reque drilling a hor of this subsection m	sted or hand delivition as of the date as be waived in very large.	very, give the surface ov ovided, That notice give te the notice was provide writing by the surface ov	wher notice of its intent to enter upon to en pursuant to subsection (a), section to ed to the surface owner: <i>Provided, ho</i>	n, an operator shall, by certified mail return the surface owner's land for the purpose of ten of this article satisfies the requirement towever, That the notice requirements of this clude the name, address, telephone number for's authorized representative.
Notice is he	reby provided	to the SURFACE O	WNER(s):	
Name: Faye E.		/	Name:	
Address: 376 Wheeling, WV 26			Address:	
State: County: District: Quadrangle: Vatershed: Chis Notice Oursuant to Vacsimile nur	West Virgina Marshall Union Moundsville Short Creek - Ohio I Shall Include: West Virginia Comber and electro	River ode § 22-6A-16(b), thi nic mail address of the	operator and the operator's authoriz	Tollows: 527104.605 4424463.932 CR 88 Rock Hill Road Roth Aress, telephone number, and if available are representative. Additional information of Environmental Protection headquarters
ocated at 60 Notice is he Well Operato	1 57 th Street, SE, ereby given by: Chevron Appalac	Charleston, WV 25304	(304-926-0450) or by visiting <u>www.d</u> Authorized Representative	lep.wv.gov/oil-and-gas/pages/default.aspx.
Address:	700 Cherrington	Parkway	Address:	
Coraopolis, PA 1	5108		<u> </u>	Office of Oil an
elephone;	412-865-1433		Telephone:	of Oil en
Email:	kmartz@chevron	1.com	Email:	JUL - 9 20
According to the second second	412-865-2403		Facsimile:	9 20
Facsimile:	110000			Environmental Protected telephone number, as part of our regulator

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.

WW-6A5 (1/12) Operator Well No. MO6H

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

Delivery me	thod pursuant to West Virginia (Code §	22-6A-16(c)			
■ CERT	FIED MAIL		HAND			
	RN RECEIPT REQUESTED		DELIVERY			
return receip the planned required to b drilling of a damages to t (d) The notic of notice.	W. Va. Code § 22-6A-16(c), no lat requested or hand delivery, give to operation. The notice required by e provided by subsection (b), section horizontal well; and (3) A propose surface affected by oil and gas ones required by this section shall be subsequently.	he surfa this so on ten o ed surfa peration given t	ace owner whose land absection shall include this article to a surf- ace use and compens as to the extent the da to the surface owner a	I will be used for de: (I) A copy ace owner whost sation agreement images are com	or the drilling of a least this code sections and will be used to containing an of pensable under arti	horizontal well notice of on; (2) The information If in conjunction with the fer of compensation for cle six-b of this chapter.
	reby provided to the SURFACE (ss listed in the records of the sherift					
		/	Name:			
Name: Faye E						
Name: Faye E Address: 376 Wheeling, WV 2 Notice is he Pursuant to V operation or	McHenry Lane 9003 Peby given: West Virginia Code § 22-6A-16(c), the surface owner's land for the po		Address s hereby given that the	s: ne undersigned I well on the tra	act of land as follow	
Name: Feye E Address: 376 Wheeling, WV 2 Notice is her Pursuant to voperation or State: County:	McHenry Lane 3003 Peby given: West Virginia Code § 22-6A-16(c),		Address s hereby given that the	ne undersigned of the transition of the transiti		
Name: Faye E Address: 376 Wheeling, WW 2 Notice is her Pursuant to	McHenry Lane reby given: West Virginia Code § 22-6A-16(c), the surface owner's land for the pu West Virgina Mershall		Address s hereby given that the formula described with the formula describe	ne undersigned of the transition of the transiti	net of land as follow 527104,605 4424463,932	
Name: Feye E Address: 376 Wheeling, WV 2 Notice is her Pursuant to v operation or State: County: District:	McHenry Lane reby given: West Virginia Code § 22-6A-16(c), the surface owner's land for the property of the		Address s hereby given that the formula described with the formula describe	ne undersigned of the transition of the transiti	act of land as follow 527104,605 4424463,932 CR 88 Rock Hill Road	
Name: Feye E Address: 376 Wheeling, WV 2 Notice is her Pursuant to V operation or State: County: District: Quadrangle: Watershed: This Notice Pursuant to V to be provide horizontal w surface affect information	reby given: West Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virgina Mershall Union Moundsville Short Creek - Ohio River Shall Include: West Virginia Code § 22-6A-16(c), ed by W. Va. Code § 22-6A-10(bell; and (3) A proposed surface use sted by oil and gas operations to the related to horizontal drilling may, located at 601 57th Street, SE,	this no) to a : and cone exter	Address s hereby given that the familing a horizonta UTM NAD 8 Public Road Generally use tice shall include: (1) surface owner whose impensation agreement the damages are coined from the Secret	ne undersigned of well on the transitions: Basting: Northing: Access: ed farm name: A copy of this eland will be understand arm name; armoniary, at the WV	act of land as follow 527104.605 4424463.932 CR 88 Rock Hill Road Roth code section; (2) Toused in conjunction offer of compensite article six-b of Department of En	The information required in with the drilling of a ation for damages to the this chapter. Additional invironmental Protection ww.dep.wv.gov/oil-and-
Name: Feye E Address: 376 Wheeling, WV 2 Notice is her Pursuant to voperation or State: County: District: Quadrangle: Watershed: This Notice Pursuant to vote be provided horizontal watershed: This notice Pursuant to vote be provided horizontal watershed: Notice Pursuant to vote be provided horizontal watershed:	reby given: West Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virgina Mershall Union Moundsville Short Creek - Ohio River Shall Include: West Virginia Code § 22-6A-16(c), ed by W. Va. Code § 22-6A-10(bell; and (3) A proposed surface used the steel by oil and gas operations to the related to horizontal drilling may located at 601 57th Street, SE, fault.aspx.	this no) to a : and cone exter	Address s hereby given that the familing a horizonta UTM NAD 8 Public Road Generally use tice shall include: (1) surface owner whose impensation agreement the damages are coined from the Secret	ne undersigned of well on the transitions: Basting: Northing: Access: ed farm name: A copy of this eland will be understand arm name; armoniary, at the WV	act of land as follow 527104.605 4424463.932 CR 88 Rock Hill Road Roth code section; (2) Toused in conjunction offer of compensater article six-b of Department of Entry or by visiting wellow.	The information required in with the drilling of a ation for damages to the this chapter. Additional invironmental Protection www.dcp.wv.gov/oil-and-
Name: Feye E Address: 376 Wheeling, WV 2 Notice is hel Pursuant to V operation or State: County: District: Quadrangle: Watershed: This Notice Pursuant to V to be provid horizontal w surface affect information headquarters gas/pages/de	reby given: West Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virgina Mershall Union Moundsville Short Creek - Ohio River Shall Include: West Virginia Code § 22-6A-16(c), ed by W. Va. Code § 22-6A-10(bell; and (3) A proposed surface used the steel by oil and gas operations to the related to horizontal drilling may located at 601 57th Street, SE, fault.aspx.	this no) to a : and cone exter	s hereby given that the drilling a horizonta UTM NAD 8 Public Road Generally use tice shall include: (1) surface owner whose impensation agreement the damages are coined from the Secret eston, WV 25304	ne undersigned of well on the transitions: Beating: Northing: Access: ad farm name: A copy of this are and will be understaining are	act of land as follow 527104.605 4424463.932 CR 88 Rock Hill Road Roth code section; (2) Toused in conjunction offer of compensiter article six-b of Toepartment of Entry or by visiting workway	The information required in with the drilling of a ation for damages to the this chapter. Additional invironmental Protection

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

API NO.	47	0	5	1	0	2	2	5	4
OPERAT	OR W	EL	LN	Ю.	MC)6H			
Well Pad	Name	: Ro	th P	ad 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

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 crosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

State:	West Virginia T	JTM NAD 83	d as follows: D 83 Easting: 527104.605		
County:	Marshall	Public Road Access:		4424463 932 Rock Hill Road	
District: Quadrangle:					
	Moundsville 7.5' Generall Upper Ohio-Beaver		used farm name: Roth		
Watershed:					
*Please check	the box that applies	FC	OR EXECUT	ION BY A NATURAL PERSON	
*Please check the box that applies		FC	OR EXECUT	ION BY A NATURAL PERSON	
CIDEA.	CE OWATER				
□ SURFA	CE OWNER		gnature:		
	CE OWNER CE OWNER (Road and/or Other Disturbance)	Pr	int Name:		
□ SURFA		Pri Da	int Name: nte:		
□ SURFAC	CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits)	Pri Da	int Name: ate: OR EXECUT	ION BY A CORPORATION, ETC.	
□ SURFAC □ SURFAC ■ COAL C	CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) OWNER OR LESSEE	Pri Da FO	int Name: nte:	NSOL Bregy Sawars	
□ SURFAC □ SURFAC ■ COAL C	CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits)	Pri Da	int Name: ate: OR EXECUT ompany:	Well Energy Samples Con More Condension	
□ SURFAC □ SURFAC ■ COAL C □ COAL C	CE OWNER (Road and/or Other Disturbance) CE OWNER (Impoundments/Pits) OWNER OR LESSEE	Pri Da	or EXECUT	Sandrs Condinators	

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 of \$8500 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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

July 1, 2019

Byrd E. White, III Secretary of Transportation

> Jimmy Wriston, P. E. Deputy Secretary/ Acting Commissioner

> > Environmental protection

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

Subject: DOH Permit for the Roth Pad A, Marshall County Roth M06H Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2019-0304 issued to Chevron Appalachia LLC for access to the State Road for a well site located off Marshall County Route 88/3 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer

Lary K. Clayton

Central Office O&G Coordinator

Cc:

Susan Laird

Chev Appalachia LLC

CH, OM, D-6

File

Hydraulic Fracturing Fluid Additives

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

Office of Oil and Gas

JUL - 9 2019

Environmental Protection

ROTH WELL PAD A EROSION AND SEDIMENT CONTROL PLAN

APPROVED WVDEP OOG 8/20/2019

ROCK HILL ROAD/McHENRY LANE MARSHALL COUNTY, WEST VIRGINIA

PREPARED FOR:

CHEVRON APPALACHIA, LLC

700 CHERRINGTON PARKWAY CORAOPOLIS, PA 15108

CONSULTANTS

CM. A ENTRONUENTAL CONSULTANTS, INC. 4000 TRIANGLE LANE, SUITE 200 ENFORT, PA 15612 PHONE: 724-327-5200

CIVIL/SITE ENCINEER CONTACT: STEVE CARUSO FMAL ADDRESS: scorusc@cacine.com CECTECHNICAL ENGINEER CONTACT: AARON LAVACE EMAIL ADDRESS: GIGYOGE GOODING COM

SITE COORDINATES AND WATERSHE

START OF WELL PAD ACCESS ROAD LATTUDE- 39 972064" N. LONGTHIDE: 80.679152" W

*RASED ON NAT BIS, WEST VIRGINIA NORTH ZONE

WATERSHED NAME: UPPER CHIO SOUTH RECEIVING STREAM UNNAMED TRIBUTARIES TO LITTLE GRAVE CREEK

STREAM AND WETLAND NOTES

THE STREAMS SHOWN HEREIGN GUTSEK THE LIMIT OF DEPLETATION OF THE LIMIT OF SETUPION HERE SQUIMENTS WITH THE LIMIT OF DEPLETANCE, AS SUCH, A WAVER IS NOT

	Seate	West Virginia N		
Wellhead No.	Northing	Letting	Latitude (Horsh)	Longitude (West
antim:	\$71617 644F	5637037,7127	39.9000619	80.6627578
MICH	5.576.71.705.6°	5687013,2125	25,970045 K	WORKSERTS
\$403H	\$3380H 765V	3482038-8124	30.9700017	POARHERS
MONH	\$11295.8265	1957044.8527	23.9679637	80 8825485
SECOND.	557581.8871	1582049-8526	THE MORNAUGE	ROSERVAL
MOLH	5375618477	SERPORE ALZE	SE MENERAL	\$0.6876057
HOTM	53764E 7249	1432255.6112	39.9901151	80.6676598
MODEL	\$13634.785E	2687261-2513	39.9700771	80.8825884
20194	\$1967E846.Z	36,370(6,00) 4	25.000.03	80347480
MICM	527606.8067	3617072-2113	39.9700001	W0.64.25476
W1156	\$33592.5673	2617017.2116	M3.9493630	10.6825271
H12M	332174.027V	1617061-0117	33.9695250	BOARFIONT
949.301	STREET,	2617011-0007	91.970148.7	BC 58.75799
HEBS	STREET, BOLD	1617080.0301	20.0701096	80.6831884
HESU	539671.5767	1637014.5707	\$4.9700256	80.6824690
MERC	517617 6669	3617300 3107	39.4950371	BC 0825888
4970	338604 0475	24 12705 8505	25 96/25/66.8	80 8634767



SITE SENSES OF DISTURBANCE/ IMPACT LANDOWNER - FAYER	
TOTAL AREA	15.5
WOODED AREA DISTURBED	4.4
WELL PAD	12.a.
ACCESS ROAD	24
STOCKPU FAREA	D.B.

DWG NO	SHIET TITLE	ENCTRORD	LAST REVISED
C2 000	COYLASHELT		6/12/2019
15.050	DISTING TOPOGRAPHIC PLAN		6/12/2019
ES 100	OVERALL EROSION AND SEEKMENT CONTROL PLAN		6/12/2019
ES 181	ERCSION AND SEDIMENT CONTROL PLAN (3 OF 2)		6/12/2019
15 102	ERCISION AND SEPIMENT CONTROL PLAN (2 OF 2)		6/12/2019
15:100	EROSION AND SEDIMENT CONTROL DETAILS (1 OF 7)	× .	6/12/2019
FS 104	PROMON AND SEDIMENT CONTROL DETAILS (2 OF 7)	×.	6/12/2019
ES 105	EROSION AND SEDIMENT CONTROL DETAILS (3 OF 7)		6/12/2019
ES 106	EROSION AND SEDIMENT CONTROL DETAILS 14 DF 7]		6/12/2019
ES 107	EROSION AND SEDIMENT CONTROL DETAILS IS OF 71		6/12/2019
FS 108	FROSION AND MIDIMENT CONTROL DETAILS (6:06-7)		6/13/2019
65 109	EROSION AND SEDIMENT CONTROL DETAILS (7 OF 7)		6/12/2019
(5 1)9	WELL PADIPLAN AND CROSS SECTIONS		6/12/2019
65 111	ACCESS ROAD PLAN AND PROPILE		6/12/2019
ES 117	ACCESS ROAD CROSS-SECTIONS		W13/3019
GIII	STOCKPUS CROSS-SECTIONS		6/12/2019
68,500	STOTEOINICAL SUBSURFACE SUMMARY		6/12/2019
GF 501	GEOTECHNICAL DETAILS		6/12/2019
GE NO?	GECTECHNICAL NOTES AND TABLES		6/12/2019
EE 101	GEOTECHNICAL DETAILS	*	6/12/2019
60,504	RSS FLAN AND FLEVATION VIEW (STAID-BOTTO 5+00)		6/12/2019
of ses	RIS PLAN AND REPVATION VIEW (STA 5-1000F 9-78)	×	6/12/2019
GE 506	RSS CROSS SECTION (STA 9+71)		6/12/2019
GE 507	RSE CROSS-SECTION (STA 8+20)		6/13/3019
GE 506	ISS SPECIFICATIONS AND QUANTITIES		6/12/2019
SE YOU	MSS DETAILS	- 1	6/12/2019
PC 600	SUTE PEAN WITH AERIAL		6/12/7019
PC 601	POST CONSTRUCTION RECLAMATION FLAN		5/12/2015
PC 602	POST-CONSTRUCTION RECLAMATION DETAILS		6/12/2015

SUPPLY CONDUCTED BY THE SCOPENSION DATE.

MICH	557673,705.0	3687013,2125	25,970045 K	WI SKIERTS
\$403H	\$3380H 765V	3439038.8124	30 9700017	BO ARZHEST
MONH	\$11295.8265	1957044.8527	23.9673637	80 8825465
MODEL.	5575818871	15.620.09.852.6	THE SECONDARIES	NO SERVICE
MOLH	5375615477	3682005 ALZE	DE PROPERTY.	\$0.6876057
MINE	53264E 2249	5632055.6112	39.9901151	80.6676098
MODES.	512614 285E	2637261-2413	39.9700771	80.8875884
DOTE:	533630.846Z	36,370106,010104	STATE OF	\$054.PAR
MICH	527606.9067	2617072-21131	39.9700011	W0.64.25476
WILL	537592.5673	2617017.2116	35.5455630	10.6825271
H1266	332574.027V	1617061.5117	39.9691250	BOARZYOWT
PE 301	53760978052	26170414900	99.9901487	BO BR HOW
HEAD	STREET, MILE	1617090.0301	IR STC 1095	90.6821804
HESE	\$39673,6767	3637054.5707	\$4,9700259-	B0.6824690
MERC	517617-6669	36173003101	39.4900371	80.08251885
METERS.	338604 0475	34 EZEOS ESEOS	22 96/25/66.8	80 86 14 76 7

DESTING TREELING DESTRUCTION THECH PORT OF COSTING STRUCTURE COST

EUSTING WATER METER



REFERENCE



MISS UTILITY OF WEST VIRGINIA 1-800-245-4848 IT'S THE LAW

ROTH WELL PAD A
ROCK-RLL ROLD
MASSALL COLRITY WA
PREMALE FOR
CHEVRON APPALACHIA, LLC

Drawing Study 11/2/2007 Date Instant: 6/13/2019 1999: Number

CS 000

