

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

November 30, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-9101324, issued to EQT PRODUCTION COMPANY, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin

Chief 🌽

Operator's Well No: 515827

Farm Name: MORRIS, MICHAEL G.

API Well Number: 47-9101324

Permit Type: Horizontal 6A Well

Date Issued: 11/30/2015

Promoting a healthy environment.

12/04/2015

API Number:	

PERMIT CONDITIONS

4709101326

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

CONDITIONS

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



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

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

TO: EQT Production Company 115 Professional Place P.O. Box 230 Bridgeport WV, 26330

DATE: November 23, 2015 ORDER NO.: 2015-W-12

INTRODUCTION

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

FINDINGS OF THE CHIEF

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

- 1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 et seq., and the rules and regulations promulgated thereunder.
- 2. EQT is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 115 Professional Place, P.O. Box 230, Bridgeport, West Virginia.
- 3. On August 26, 2015 and September 18, 2015, EQT submitted well work permit applications identified as API#s 47-091-01323, 47-091-01324, 47-091-01326 and 47-091-01327. The four proposed wells are to be located on the FAW 60 Pad in Booths Creek District of Taylor County, West Virginia.
- On August 26, 2015, EQT requested a waiver for Wetland A, Wetland C and Wetland E as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for well work permit applications identified as API#s 47-091-01323, 47-091-01324, 47-091-01326 and 47-091-01327.

5. On June 9, 2015, Civil & Environmental Consultants, Inc. (CEC), on behalf of EQT, requested a Nationwide Permit (NWP) 14 from the U.S. Army Corps of Engineers (USACE) for permanent impacts to 0.007 acre of Wetland B. Furthermore, on November 19, 2015, CEC requested a waiver for the remaining portion (0.004 acre) of Wetland B as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for well work permit applications identified as API#s 47-091-01323, 47-091-01324, 47-091-01326 and 47-091-01327.

CONCLUSIONS OF LAW

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

Order No. 2015-W-12 12/04/2015

ORDER

West Virginia Code §22-6A-12(b) requires, in part, that "[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland A, Wetland B, Wetland C and Wetland E from well location restriction requirements in W. Va. Code §22-6A-12(b) for well work permit applications identified as API#s 47-091-01323, 47-091-01324, 47-091-01326 and 47-091-01327. The Office of Oil and Gas hereby **ORDERS** that EQT shall meet the following site construction and operational requirements for the FAW 60 well pad:

- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least a twenty four inches (24") in height;
- b. Filter/silt socks shall be installed on all slopes and down gradient locations of the pad and topsoil pile areas as erosion and sediment controlling BMPs;
- c. Wetlands A, B, C, and E shall have super silt fence backed with thirty two inch (32") compost filter sock for all areas immediately adjacent to the wetland
- d. The entire area where the wetlands are located will be delineated with orange construction fence.
- e. All diversion ditches that feed the areas where the wetlands are located shall have ditch checks to aid in the removal of sediment.
- f. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- g. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- h. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- i. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- j. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- k. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- 1. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- m. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 23rd day of November, 2015.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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



November 5, 2015

Mr. Gene Smith West Virginia Department of Environmental Protection Office of Oil and Gas 601 57th Street SE Charleston, WV 25304

Re: revision of 47-091-01323, 01324, 01326, 01327

Dear Mr. Smith,

Enclosed is an updated WW-6B and schematics changing the fresh water casing, signed by the inspector. Please insert these changes into the permit applications on file.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

Vicki Roark

Permitting Supervisor-WV

Enc.

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Office of Oil and Gas

NOV 05 2015

WV Department of Environmental Protection WW - 6B (4/15)

4709101324

API NO.	47	-	091	0
OPERATO	R WE	LL NO		515827
Well Pag	d Nar	FAW60		

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

1) Well Operator:	EQT Producti	on Compan	У	-	306686	091	1		343
				Op	erator ID	County	District	Qua	adrangle
2) Operator's Well I	Number:	-	51582	.7		Well Pad Na	me:	FAW60)
3) Farm Name/Surf	ace Owner : _		Michael (G. Morris		_ Public Road	Access: _	Co. F	Rt. 250
4) Elevation, curren	t ground:	1,322.0		Elevation,	proposed	oost-constructio	n:1,3	16.1	
5) Well Type: (a) Ga	as <u> </u>	_ Oil _		Underg	round Stor	age			
Ot	her								
(b)	If Gas:	Shallow _	(*)		Deep				
	1	Horizontal _							
6) Existing Pad? Ye				_					
o) Existing Faur Te	3 UI NO	no							
7) Proposed Target	Formation(s),	Depth(s), A	nticipated ¹	Thickness	es and Ass	ociated Pressur	e(s):		
Target formation is	Marcellus at a	depth of	7290 with the	e anticipated	thickness to t	e 155 feet and ar	ticipated target p	ressure of	1869 PSI
				Top of Ma	rcellus 718	4			
B) Proposed Total V	The state of the s					7439			
				Onondaga					
10) Proposed Total	The second secon			11702					
Proposed Horizo	ontal Leg Leng	th				3,925			
12) Approximate Fre					121	, 204, 268, 357,	662, 736, 87	В	
13) Method to Deter						By offset	wells		
14) Approximate Sa	Itwater Depths	:				1,406			
15) Approximate Co					02, 316, 39	90, 458, 527, 55	2, 626, 706,	772	
16) Approximate De	pth to Possible	Void (coal	mine, kars					reported	
17)Does proposed v	vell location co	ntain coal s	eams direc	tly overlyi	ng or				
adjacent to an a	ctive mine?			1	Y	98	No x		
(a) If Yes, provide	de Mine Info:	Name:					. 731		
		Depth:							
		Seam:							7.7.7.
		Owner:							

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Office of Oil and Gas

NOV 05 2015

WV Department of Environmental Protection WW - 6B (4/15)

4709101324 CASING AND TUBING PROGRAM

 APINO
 47
 091
 0

 OPERATOR WELL NO
 515827

 Well Pad Name:
 FAW60

18)

TYPE	Size (in)	<u>New</u> or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill- up (Cu.Ft.)
Conductor	20	New	MC-50	81	35	35	34 C.T.S.
Fresh Water	13 3/8	New	J-55	54.5	978	978	850 C.T.S.
Coal	-	-	-	-	_	-	_
Intermediate	9 5/8	New	A-500	40	2,250	2,250	875 C.T.S.
Production	5 1/2	New	P-110	20	11,702	11,702	See Note 1
Tubing	2 3/8		J-55	4.6			May not be run, if run will be set. 100 less than TD
Liners							

				ي .	anned &	hoyram	11-4-15
TYPE	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	24	0.375		18	Construction	1.18
Fresh Water	13 3/8	17 1/2	0.38	2,730	2,184	* See Note 2	1.21
Coal							
Intermediate	9 5/8	12 3/8	0.395	3,950	3,160	* See Note 2	1.21
Production	5 1/2	8 1/2	0.361	12,640	10,112	7.0	1.27/1.86
Tubing							
Liners							

Packers

Kind:	N/A	· ·
Sizes:	N/A	
Depths Set:	N/A	

Note 1: EQT plans to bring the TOC on the production casing cement job 1,000' above kick off point, which is at least 500' above the shallowest production zone, to avoid communication.

Note 2: Reference Variance 2014-17. (Attached)

Page 2 of 3

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NOV 05 2015

WV Department of Environmental Protection

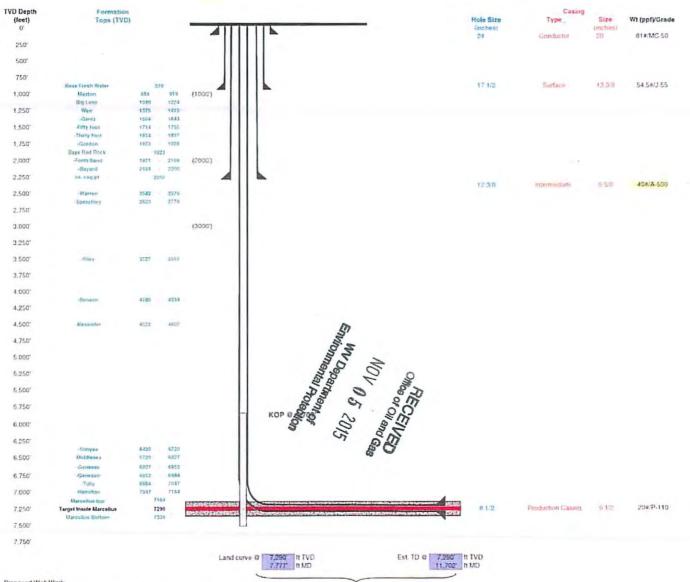
ww	•	6B
(10/1	4)

4709101324

API NO.	47	٠,	091	 (
OPERATO	R WE	LL NC)	515827
Well Pag	d Nar	no:		FAW60

19) Describe proposed well work, including the drilling and plugging back of	any pilot hole:	•				
Drill and complete a new horizontal well in the Marcellus formation. The vertical drill to go down to an approximate depth of 7439'.						
Tag the Onondaga not more than 100', run logs, then plug back with a solid cement plug to	o approximately 5709'.					
Then kick off the horizontal leg into the Marcellus using a slick water frac.						
20) Describe fracturing/stimulating methods in detail, including anticipated m	•					
Hydraulic fracturing is completed in accordance with state regulations using water recycled from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of	n previously fractured wells and obtained from chemicals (including 15% Hydrochloric acid,					
gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industrial interest in the indust						
anticipated internal casing pressure is expected to average approximately 8500 psi, maximum approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200.						
vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage						
21) Total area to be disturbed, including roads, stockpile area, pits, etc, (acre	es): 19.39					
22) Area to be disturbed for well pad only, less access road (acres):	17.89					
 23) Describe centralizer placement for each casing string. Surface: Bow spring centralizers - One at the shoe and one spaced every 	E00'					
 Intermediate: Bow spring centralizers—One cent at the shoe and one space 						
Production: One spaced every 1000' from KOP to Int csg shoe						
24) Describe all cement additives associated with each cement type. Used to speed the setting of cement sturries.	Surface (Type 1 Cement): 0-3% Calcium Chloride					
0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of the cemen	It slurry to a thief zone.					
Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temp	erature formations to speed the setting of cement					
slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of witto a thief zone.	hole drilling fluid or cement slurry (not filtrate)					
to a trici sorie.						
Production						
Production:						
Lead (Type 1 Cement): 0.2-0.7% Lignosulfonate (Retarder). Lengthens thickening time.	Dr.					
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Lead (Type 1 Cement): 0.2-0.7% Lignosulfonate (Retarder). Lengthens thickening time. 0.3% CFR (dispersant). Makes cement easier to mix. Tail (Type H Cement): 0.25-0.40% Lignosulfonate (Retarder). Lengthens thickening time. 0.2-0.3% CFR (dispersant). This is to make the cement easier to mix. 60 % Calcuim Carbonate. Acid solubility. 0.4-0.6% Halad (fluid loss). Reduces amount of water lost to formation.	NOV 05 20 WV Department of Environmental Protect Approximately 30-45 minutes) rotating & reciprocating minish, continue to circulate an additional 5	1.5				
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Fairmont West Taylor West Virgina Azımıdh 161



3,925 ft Lateral

0 -0 S



November 2, 2015

Mr. Gene Smith West Virginia Department of Environmental Protection Office of Oil and Gas 601 57th Street SE Charleston, WV 25304

Re: Casing plan on Wells (FAW60)

Dear Mr. Smith,

EQT is requesting the 13-3/8" surface casing be set at 978' KB, 100' below the deepest fresh water. We will set the 9-5/8" intermediate string at 2250' KB, 50' below the base of the Bayard formation.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

Vicki Roark

Permitting Supervisor

Enc.

NOV 05

W Department of Protection



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary dep.wv.gov

March 18, 2014

Nabors Completion & Production Services Company 1380 Route 286 Hwy E #121 Indiana PA 15701

Re: Cement Variance Request

Dear Sir or Madam,

This agency is approving a variance request for the cement blend listed below to be used on surface and coal protection strings for the drilling of oil and gas wells in the state of West Virginia. The variance cannot be used without requesting its use on a permit application and approval by this agency:

Type 1 (2% Calcium Chloride-Accelerator, 0.25% Super Flake-Lost Circulation, 5.2% Water, 94% Type "1" Cement)

If you have any questions regarding this matter feel free to contact me at 304-926-0499, ext. 1653.

James Peterson

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

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AUG. 2 6 2015



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary dep.wv.gov

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

IN THE MATTER OF A VARIANCE FROM)	ORDER NO.	2014 - 17
REGULATION 35 CSR § 4-11.4/11.5/14.1)		
AND 35 CSR § 8-9.2.h. 4/5/6/8 OF THE)		
THE OPERATIONAL	í		
REGULATIONS OF CEMENTING OIL	í		
AND GAS WELLS	í		

REPORT OF THE OFFICE

Nabors Completion & Production Services Co. requests approval of a different cement blend for use in cementing surface and coal protection casing of oil and gas wells.

FINDINGS OF FACT

- 1.) Nabors Completion & Production Services Co. proposes the following cement blend:
 - 2% Calcium Chloride (Accelerator)
 - 0.25 % Super Flake (Lost Circulation)
 - 94% Type "1" Cement
 - 5.20 % Water
- Laboratory testing results indicate that the blend listed in Fact No.1 will achieve a 500
 psi compressive strength within 6 hours and a 2,435 psi compressive strength within 24
 hours.

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AUG. 2 6 2015

CONCLUSIONS OF LAW

Pursuant to Articles 6 and 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to 35 CSR § 4-11.5 and 35 CSR § 8-9.2.h.8 the Chief of the Office of Oil and Gas may approve different cement blends upon the well operator providing satisfactory proof that different cement types are adequate.

ORDER

It is ordered that Nabors Completion & Production Services Co. may use the cement blend listed in Findings of Fact No.1 for the cementing of surface and coal protection casing of oil and gas wells in the State as may be requested by oil and gas operators. The waiting time on the cement blend shall be 8 hours. The cement blend shall be mixed in strict accordance with the specifications for each blend and weight measurements made on-site to assure the cement slurries meet the minimum weight specifications. A sample shall be collected and, if after 8 hours the cement is not set up, additional time will be required. Nabors Completion & Production Services Co. shall keep a record of cement blend jobs in which the cement blend approved under this order is to be used and made available to the Office of Oil and Gas upon request.

Dated this, the 18th day of March, 2014.

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief Office of Oil and Gas

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Received
Office of Oil & Gas
AUG. 2 6 2015

WW-9 (2/15)

Page	1	of	2
API No. 47 091	-	_	C
Operator's Well No.			515827

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

Fluids/Cuttings Disposal & Reclamation Plan

Operator Name	EQT Production Company	OP Code	306686	
Watershed (HUC10)	Hustead Fork of Booths Creek			-
Do you anticipate using m	nore than 5,000 bbls of water to comp	lete the proposed well w	ork? Yes x No	
Will a pit be used ? Yes:				_
If so please descri	be anticipated pit waste:	flowback water & r	esidual solids	
Will a synthetic lin	er be used in the pit? Yes X	NoIf s	o, what ml.?60	=
Proposed Dispos	Reuse (at API Number	Permit Number 00 Various n WW-9 for disposal loc	014, 8462, 4037 ation)	<u>)</u>)
Will closed loop system be fluid. The drill cuttings are the	e used? Yes, The closed loop systemen prepared for transportation to an off-s	n will remove drill cuttings fite disposal facility.	rom the drilling	-
Drilling medium anticipate	d for this well (vertical and horizontal)	? Air, freshwater, oil bas	ed, etc.	-
Air is used to drill the top-hole sections of t	he wellbore (surface, intermediate, and pilot). Water based r	nud may be necessary depending on h		<u> </u>
and drill the intermediate section. The pilo	I hole, curve, and lateral sections will be drilled with either air	, water based mud, or oil based mud.		_
Additives to be used in dri	ontrol, deflocculates, biodegradable oil lubrican oil, emulsifier, salt, lime, viscosifer, alkalinity co	oricant , detergent, defoaming, water. t , defoaming, walnut shell, sa	etic mud Water based mud – Barite, viscosifer t, x-cide, carbonates. Ilates,	
- If left in pit and pi - Landfill or offsite	thod? Leave in pit, landfill, removed o an to solidify what medium will be used? (Cem name/permit number?	ent, Line, sawdust) See Attached		9101324
Permittee shall provide writter any West Virginia solid waste disclose where it was properly	n notice to the Office of Oil and Gas of any facility. The notice shall be provided with disposed.	/ load of drill cuttings or as: in 24 hours of rejection and	sociated waste rejected at the permittee shall also	
on August 1, 2005, by the Office of provisions of the permit are enforced or regulation can lead to enforced		t of Environmental Protection. on of the general permit and/o	I understand that the rother applicable law	=
I certify under penalty of la- application form and all attachme	w that I have personally examined and am fam nts thereto and that, based on my inquiry of the	illiar with the information subm	itted on this	
the information, I believe that the	information is true, accurate, and complete. I a	m aware that there are signific	sponsible for obtaining ant penalties for	Received Office of Oil & Gas
Company Official Signature Company Official (Typed N Company Official Title	ame)	Victoria J. Roark itting Supervisor		AUG. 2 6 2015
Subscribed and sworn before	ore me this 24th day of _	August	, 20 <u>/5</u> Notary Public	_
My commission expires	4-7-20			OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA

Form WW-9

4709101324

			or's Well No.	51582
Proposed Revegetation Treat	lment: Acres Disturb	ed 19.39	Prevegetatio	n pH6.07
Lime3	Tons/acre	or to correct to pH		
Fertilize type	Granular 10-2	20-20	6.5	
Fertilizer Amount		lbs/acre (500 lbs minimum)		
Mulch		Tons/acre		
T		Seed Mixtures		
Temporar Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass	Permanent	lbs/acre
Alsike Clover	5	Alsike Clover		15
Annual Rye		Maike Clover		5
Photocopied section of involved Plan Approved by:	most f	anolle		
de: OIC+615	INSPECIO	n Date:	-4-15	
eld Reviewed? (✓) Yes) No	

EQT Production Water plan Offsite disposals for Marcellus wells

CWS TRUCKING INC.

P.O. Box 391 Williamstown, WV 26187 740-516-3586 Noble County/Noble Township Permit # 3390

LAD LIQUID ASSETS DISPOSAL INC.

226 Rankin Road Washington, PA 15301 724-350-2760 724-222-6080 724-229-7034 fax Ohio County/Wheeling Permit # USEPA WV 0014

TRI COUNTY WASTE WATER MANAGEMENT, INC.

1487 Toms Run Road Holbrook, PA 15341 724-627-7178 Plant 724-499-5647 Office Greene County/Waynesburg Permit # TC-1009

Waste Management - Meadowfill Landfill

Rt. 2, Box 68 Dawson Drive Bridgeport, WV 26330 304-326-6027 Permit #SWF-1032-98 Approval #100785WV

Waste Management - Northwestern Landfill

512 E. Dry Road Parkersburg, WV 26104 304-428-0602 Permit #SWF-1025 WV-0109400 Approval #100833WV

BROAD STREET ENERGY LLC

37 West Broad Street Suite 1100 Columbus, Ohio 43215 740-516-5381 Washington County/Belpre Twp. Permit # 8462

TRIAD ENERGY

P.O. Box 430 Reno, OH 45773 740-516-6021 Well 740-374-2940 Reno Office Jennifer Nobel County/Jackson Township Permit # 4037

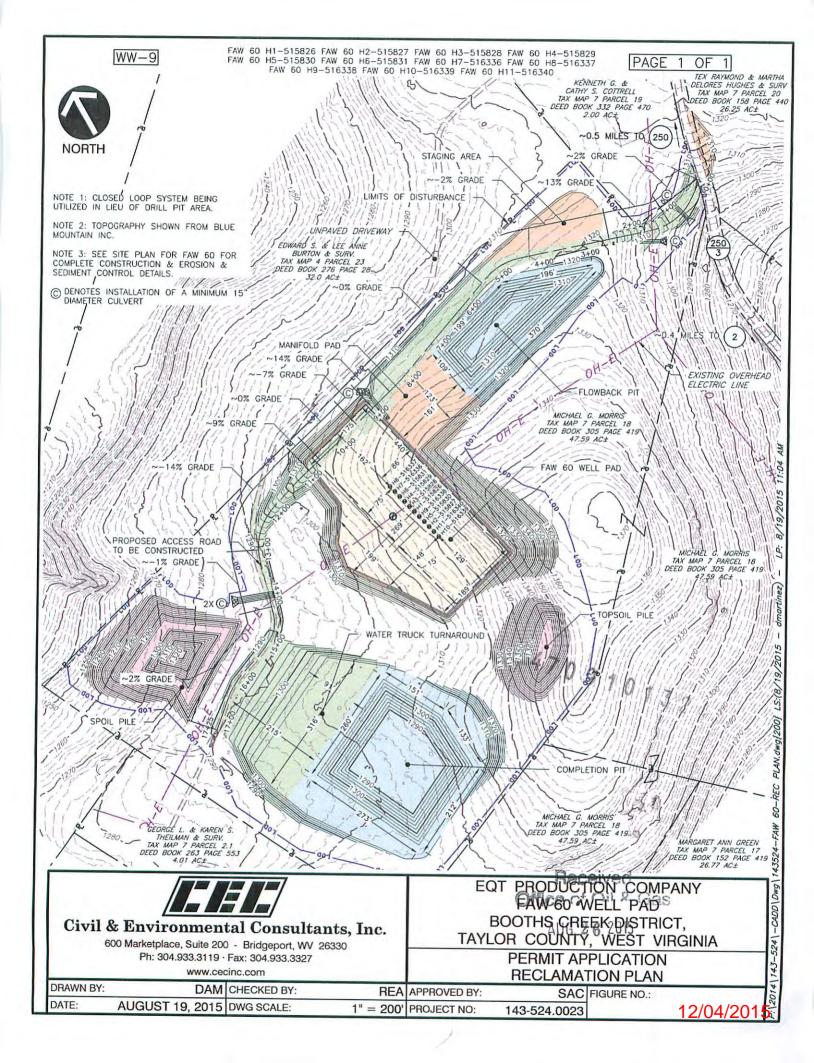
KING EXCAVATING CO.

Advanced Waste Services 101 River Park Drive New Castle, Pa. 16101 Facility Permit# PAR000029132

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Office of Oil 8 Gas

AUG. 26 2015





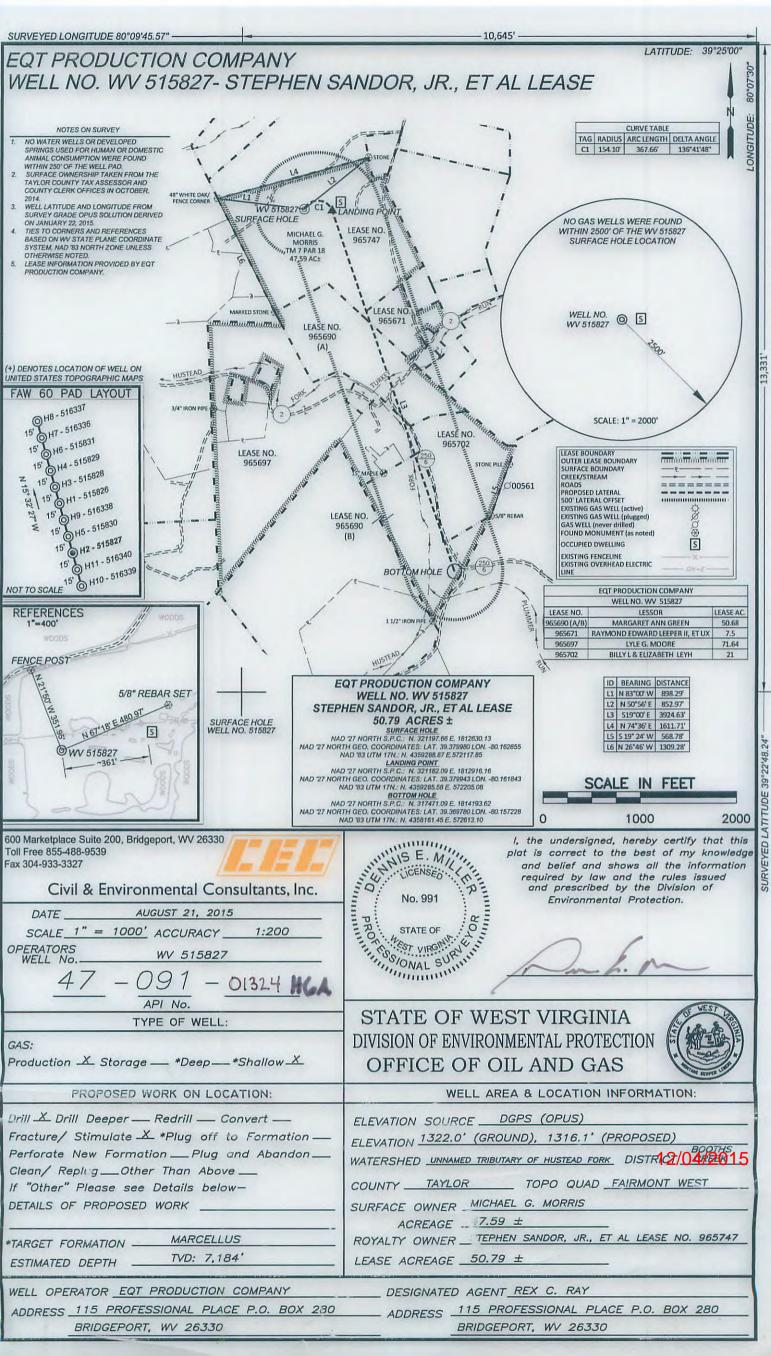
Site Specific Safety Plan

EQT FAW 60 Pad

Fairmont- West Quadrant

Taylor County, WV

515827	For Wells:	
EQT Production Pittle 8-24-15 Date	Date Prepared:	August 18, 2015 WV Oil and Gas Inspector Title ALLOPS INSPECTOR



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 7 0 9 1 0 1 3 2 4 am the person who signed the Notice and Application for the Applicant, and that –

- 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
965747			min pd 1/8th	
	John Sandor	Hunt Marcellus, LLC		LB62/178
	Stephany Mallery	Hunt Marcellus, LLC		LB62/181
	Stephen Sandor	Hunt Marcellus, LLC		LB62/185
	Hunt Marcellus, LLC (50%)	EQT Production Company		AB33/526
	Michael G. Morris (50%)	EQT Production Company		LB66/66
965671			min pd 1/8th	
	Raymond Edward Leeper, II and Cindy Marie Leeper	Hunt Marcellus, LLC		LB60/554
	Hunt Marcellus, LLC	EQT Production Company		AB33/526
965690			min pd 1/8th	
	Margaret Ann Green	Hunt Marcellus, LLC		LB60/713
	Hunt Marcellus, LLC	EQT Production Company		AB33/526
965697			min pd 1/8th	
	Lyle G. Moore	Hunt Marcellus, LLC	0.0.0.0	LB61/85
	Hunt Marcellus, LLC	EQT Production Company		AB33/526
965702			min pd 1/8th	
	Billy L. Leyh and Elizabeth Leyh	Hunt Marcellus, LLC		LB61/161
	Hunt Marcellus, LLC	EQT Production Company		AB33/526

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

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:

EQT Production Company

By:

Its: Permitting Supervisor

Page 1 of 1

Received Office of Oil & Gas

AUG. 2 6 2015

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

Date of No	otice Certification:		API No. 47 09 Operator's Well No. Well Pad Name:	1 0 515827 FAW60
Pursuant to below for th	s been given: the provisions in West Virginia Code § 2: e tract of land as follows:	2-6A, the Operator has provided UTM NAD 83 Easting 9	I the required parties with	
State:	WV	_	101324	572,117.85
County:	Taylor	UTM NAD 83 Northing:		4,359,288.87
District:	Booths Creek	Public Road Access:		Co. Rt. 250
Quadrangle:	Fairmont West	Generally used farm name:		Michael G. Morris
Watershed:	Hustead Fork of Booths Creek			
prescribed by it has provide information of giving the requirement.	West Virginia Code § 22-6A-7(b), every poy the secretary, shall be verified and shalled the owners of the surface described in required by subsections (b) and (c), section surface owner notice of entry to survey pos of subsection (b), section sixteen of this	Il contain the following information subdivisions (1), (2) and (4), so on sixteen of this article; (ii) that bursuant to subsection (a), section article were waived in writing be	on: (14) A certification fro ubsection (b), section ten the requirement was dee on ten of this article six-a; y the surface owner; and	m the operator that (i) of this article, the med satisfied as a result or (iii) the notice Pursuant to West
viiginia Coo	le § 22-6A-11(b), the applicant shall tende	er proot of and certify to the seci	retary that the notice requ	irements of section ten
or this article	have been completed by the applicant.			

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:	OOG OFFICE USE ONLY
*PLEASE CHECK ALL THAT APPLY	ONLI
☐ NOTICE OF SEISMIC ACTIVITY or SEISMIC ACTIVITY WAS CONDUCTED	REQUIRED
NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED	T REÇEIVED
NOTICE NOT REQUIRED BECAUSE NOTICE OF INTENT TO DRILL or NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OR	C RECEIVED/NOT REQUIRED
WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
► NOTICE OF PLANNED OPERATION	☐ RECEIVED
₩ PUBLIC NOTICE	T RECEIVED
NOTICE OF APPLICATION	☐ RECEIVED
	Paceived

Required Attachments:

Office of Oil & Gas

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have beam 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.

WW-6AC (1/12)

Certification o	f Not	ice is	hereby	given;
		/		

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

Well Operator: **EQT Production Company** Address: P.O. Box 280 By: Victoria J. Roark Bridgeport, WV 26330 Permitting Supervisor Its: Facsimile: 304-848-0040 Telephone: 304-848-0076 Email: vroark@eqt.com



Subscribed and sworn before me this

Notary Public

My Commission Expires

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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WW-6A (9-13)

API NO.	47	-	091	 0
OPERATO	R WEL	L NO.		515827
Well Pad	Nam	e.		EAW60

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS $\underline{\text{NOTICE OF APPLICATION}}$

Notice Time Requirement: notice shall be provided no later than the filing of Date of Notice: 8 35-15 Date Permit Application File	
Notice of:	
PERMIT FOR ANY WELL WORK CONSTRUCTION OF AN	
Delivery method pursuant to West Virginia Code § 22-6A-10(b)	
	ETHOD OF DELIVERY THAT REQUIRES A CCEIPT OR SIGNATURE CONFIRMATION
requires a receipt or signature confirmation, copies of the appl plat to each of the following persons: (1) The owners of record the surface tract or tracts overlying the oil and gas leasehold be disturbance as described in the erosion and sediment control pelessee, in the event the tract of land on which the well propose record of the surface tract or tracts overlying the oil and gas le construction, enlargement, alteration, repair, removal or aband water purveyor who is known to the applicant to have a water which is used to provide water for consumption by humans or work activity is to take place. (c)(1) If more than three tenants in the lands, the applicant may serve the documents required u article one, chapter eleven-a of this code. (2) Notwithstanding unless the lien holder is the landowner. W. Va. Code R. § 35-8	g date of the application, the applicant for a permit for any well work or for a his article shall deliver, by personal service or by registered mail or by any lication, the erosion and sediment control plan required by section seven of d of the surface of the tract on which the well is or is proposed to be located; eing developed by the proposed well work, if the surface tract is to be used blan submitted pursuant to subsection (c), section seven of this article; (3) The ed to be drilled is located [sic] is known to be underlain by one or more coal assehold being developed by the proposed well work, if the surface tract is to donment of any impoundment or pit as described in section nine of this well, spring or water supply source located within one thousand five domestic animals; and (6) The operator of any natural gas storage field in common or other co-owners of interests described in subsection (b) of apon the person described in the records of the sheriff required to be any provision of this article to the contrary, notice to a lien holder is not 8-5.7.a requires, in part, that the operator shall also provide the Well Site bject to notice and water testing as provided in section 15 of this rule. Vell Plat Notice is hereby provided to: COAL OWNER OR LESSEE Name: Michael G. Morris Address: 512 Tappan Road Grafton WV 26354
Name: Address:	See attached for additional coal owners. COAL OPERATOR Name: Address:
SURFACE OWNERS(s) (Road and/or Other Disturbance) Name: Michael G, Morris Address: 512 Tappan Road Grafton WV 26354	SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Name: Michael G, Morris
Name: Kenneth G. and Cathy Cottrell V Address: 430 Tappan Road Grafton WV 26354	Address: 512 Tappan Road Grafton WV 26354 See Attached for additional water purveyors.
See attached for additional road/ other disturbance owners. SURFACE OWNER(s) (Impoundments/Pits) Name: Michael G, Morris Address: 512 Tappan Road Grafton WV 26354	OPERATOR OF ANY NATURAL GAS STORAGEFFELD of Oil & Gas Address: Address: AUG. 2 6 2015
	*Please attach additional forms if necessary

WW6-A

Additional Access Road Owners:

Tex Raymond and Martha Delores Hughes 383 Tappan Road Grafton WV 26354

Additional Coal Owners:

Coalquest Development LLC c/o Ark Land Company Attn: Dave Finnerty One City Place Drive St. Louis MO 63141-7056

Additional Water Puryeyors:

William R and Sally L Hostutler 2660 Rock Union Rd. Fairmont WV 26554

Edward S and Lee Anne Burton and Surv Rr 4 Box 509 Fairmont WV 26554

Tex Raymond and Martha Delores Hughes and Surv. 383 Tappan Road Grafton WV 26354

Kenneth G. and Cathy Cottrell and Surv. 430 Tappan Road Grafton WV 26354

George and Karen S Theilman and Surv. 492 Mohawk Rd. Grafton WV 26354

Robin V Leeper 1576 Turkey Run Rd. Grafton WV 26354

John T and Patricia P Marshal 162 Aspen Dr. Fairmont WV 26554

Robert W and Vivian L Sickles and Surv. 388 Mohawk Rd. Grafton WV 26354

Gary and Kimberly Weaver and Surv. 6430 Beverly Pike Fairmont WV 26554 4709101324

Received
Office of Oil & Gas
AUG 2 6 2015

WW-6A
(8-13)

API NO. <u>47</u> - <u>091</u>		C
OPERATOR WELL NO.		515827
Well Pad Name:	FAY	V60

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 artiste 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 void the organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regard the divisions and the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells as they relate to the well location restrictions regard to the drilling of horizontal wells are the drilling of horizontal wells as the drilling of horizontal wells are the drilling of horizontal wells as the drilling of horizontal wells are the drilling of horizontal well are 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 AUG. 26 2015

WW-6A (8-13)

API NO. <u>47</u> -	091	•	0
OPERATOR WELL NO.		_	515827
Well Pad Name			FAW60

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. 9101324

Written Comment:

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

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

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to design 2015 NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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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 & Gas

AUG. 26 2015

Notice is hereby give	en by:		
Well Operator:	EQT Production Company	Address:	115 Professional Place P.O. Box 280
Telephone:	304-848-0082	·	Bridgeport, WV 26330
Email:	Vroark@eqt.com	Facsimile:	304-848-0041

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.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, 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.

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
REBECCA L. HEATER
EQT PRODUCTION COMPANY
PO BOX 280
BRIDGEPORT, WV 26330
My commission expires April 07, 2020

By: Victoria Roark

Its: Permitting Supervisor

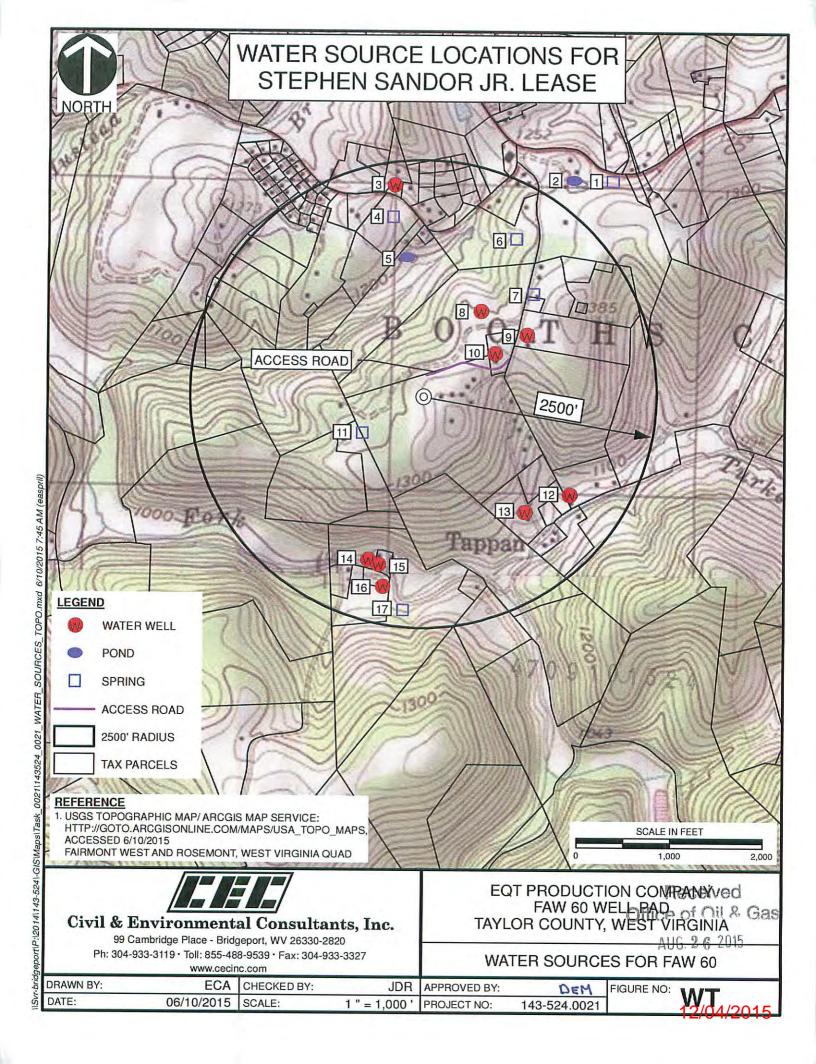
Subscribed and sworn before n. 24 day of

Notary Pub

My Commission Expir

4709101324

Received
Office of Oil & Gas
AUG. 2 6 2015



STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

PERSONAL Pursuant to Westract to conduct	od pursuant to West Virginia Code § 22	2-6A-10(a):	ned Entry: 6/30/2014
PERSONAL Pursuant to Westract to conduct	L SERVICE X CERTIFIED MAIL		
			REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
pursuant to sect records. The not and gas explorat	try to: (1) The surface owner of such tra tion thirty-six, article six, chapter twenty tice shall include a statement that copies	iling a permit application, the operator is article. Such notice shall be provided; (2) to any owner or lessee of coay-two of this code; and (3) any owner of the state Erosion and Sediment (and the Secretary, which statement changes in the Secretary, which statement changes.	r shall provide notice of planned entry on to the surfaced at least seven days but no more than forty-five day I seams beneath such tract that has filed a declarationer of minerals underlying such tract in the county to Control Manual and the statutes and rules related to control Manual and the statutes and rules rules rules are rules and rules rules and rules rules rules rules are rules and rules rul
Notice is hereby	y provided to:		
X SUR	RFACE OWNER(S)	X	MINERAL OWNER(S)
	hael G. Morris		Michael G. Morris
	Tappan Rd. fton, WV 26354-8354	Address:	512 Tappan Rd.
	A STATUTE OF THE STATE OF THE S		Grafton, WV 26354-8354
	AL OWNER(S) OR LESSEE(S) Il Declaration pursuant to §22-6A-10 and		
§22-	-6-36 Not of Record		*Places attack additional (
Notice is hereby	v aiven:		*Please attach additional forms if necessary
		ereby given that the undersigned well	ll operator is planning entry to conduct a plat survey or
the tract of land a	as follows:	eroby given that the undersigned well	roperator is planning entry to conduct a plat survey or
State: V	West Virginia	Approx. Latitude & Longitu	ide: 39.37844/-80.16373
	Taylor	Public Road Acce	
	Booths Creek / Map 7 / Parcel 18	Watersh	
Quadrangle: F	Fairmont West	Generally Used Farm Nar	7
			1954
304-926-0450). (www.dep.wv.gov/	Copies of such documents or additional /oil-and-gas/pages/default.aspx.		ed to oil and gas exploration and production may be located at 601 57th Street, SE, Charleston, WV 25304 illing may be obtained from the Secretary by visiting
Notice is hereby			
	EQT Production Company	Address	s:115 Professional Place, Bridgeport, WV 26330
	304-848-0099	EQT Representative	
_	304-848-0040		11. 1 100
Email: _6	eqtlandentrynotice@eqt.com	Signature	: Butty Kuga
			() - spind
il and Gas Priva			

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	0
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515827

STATE OF WEST VIRGINIA

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

Date of Notice	* <u>8-25-15</u> •	Date Permit App	ilcation rileu.	
Delivery meth	od pursuant to West Virginia Code § 22-6A	-16(c)		
	IFIED MAIL HAN RN RECEIPT REQUESTED DEL	ID IVERY		
return receipt re the planned ope required to be p drilling of a hori damages to the (d) The notices r of notice.	Va. Code § 22-6A-16(c), no later than the date for equested or hand delivery, give the surface owne eration. The notice required by this subsection showing the subsection (b), section ten of this articontal well; and (3) A proposed surface use and contains the surface affected by oil and gas operations to the equired by this section shall be given to the surface.	r whose land will all include: (1) A c cle to a surface or ompensation agr extent the damag	be used for the drilli opy of this code sect wner whose land will eement containing ar es are compensable	ng of a horizontal well notice of ion; (2) The information be used in conjunction with the offer of compensation for under article six-b of this chapter.
	provided to the SURFACE OWNER(s)			
(at the address i	isted in the records of the sheriff at the time of n			Kenneth G and Cathy Cottrell and Surv.
Name:	Michael G I			Refineth G and Cathy Cottrell and Surv.
Name: Address:	Michael G, I			
Address: Notice is hereby Pursuant to Wes	512 Tappar Grafton WV given: t Virginia Code § 22-6A-16(c), notice is hereby giv	n Road Addre 26354 ven that the unde	rsigned well operato	430 Tappan Road Grafton WV 26354 r has developed a planned
Address: Notice is hereby Pursuant to Wes operation on the State:	512 Tappar Grafton WV given: t Virginia Code § 22-6A-16(c), notice is hereby gives surface owner's land for the purpose of drilling a WV	n Road Addre 26354 ven that the unde	rsigned well operato on the tract of land a Easting:	430 Tappan Road Grafton WV 26354 r has developed a planned s follows: 572,117.850000
Address: Notice is hereby Pursuant to Wes operation on the State: County:	512 Tappar Grafton WV given: t Virginia Code § 22-6A-16(c), notice is hereby giv surface owner's land for the purpose of drilling a WV Taylor	n Road Addre 26354 Ven that the unde a horizontal well UTM NAD 83	rsigned well operato on the tract of land a Easting: Northing:	430 Tappan Road Grafton WV 26354 r has developed a planned s follows: 572,117.850000 4,359,288.870000
Notice is hereby Pursuant to Wes operation on the State: County; District:	512 Tappar Grafton WV given: t Virginia Code § 22-6A-16(c), notice is hereby givens surface owner's land for the purpose of drilling a WV Taylor Booths Creek	ven that the under UTM NAD 83 Public Road Ac	rsigned well operato on the tract of land a Easting: Northing:	430 Tappan Road Grafton WV 26354 r has developed a planned s follows: 572,117.850000 4,359,288.870000 Co. Rt. 250
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Notice is hereby Pursuant to Wes operation on the State: County: District: Quadrangle: Watershed: This Notice Shall Pursuant to Wes to be provided be norizontal well; a surface affected	given: t Virginia Code § 22-6A-16(c), notice is hereby given: surface owner's land for the purpose of drilling a WV Taylor Booths Creek Fairmont West Hustead Fork of Booths Creek Include: t Virginia Code § 22-6A-16(c), this notice shall include: t Virginia Code § 22-6A-10(b) to a surface owner will and (3) A proposed surface use and compensation by oil and gas operations to the extent the damaged to horizontal drilling may be obtained from the cated at 601 57th Street, SE, Charleston, WV 2536	ven that the under a horizontal well used UTM NAD 83 Public Road Ac Generally used whose land will be a agreement continges are compensate Secretary, at the	rsigned well operato on the tract of land a Easting: Northing: ess: farm name: f this code section; (2 e used in conjunction aining an offer of cor ble under article six- e WV Department of	430 Tappan Road Grafton WV 26354 r has developed a planned s follows: 572,117.850000 4,359,288.870000 Co. Rt. 250 Michael G. Morris 2) The information required with the drilling of a inpensation for damages to the b of this chapter. Additional f Environmental Protection
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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 Received appropriately secure your personal information. If you have any questions about our use or your personal information please contact it & Gas DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

AUG. 26 2015

WW-6A5	
(1/12)	

Operator Well No.

515827

STATE OF WEST VIRGINIA

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

Notice Time Date of Not	Requirement: notice shall be provided no latice: 8-85-15	er than the filin		8-25-15
Delivery me	thod pursuant to West Virginia Code § 22-6A	1-16(c)		
	TIFIED MAIL URN RECEIPT REQUESTED DEL	ND JVERY		
return receipt the planned of required to be drilling of a ho damages to the	V. Va. Code § 22-6A-16(c), no later than the date for requested or hand delivery, give the surface owner peration. The notice required by this subsection she provided by subsection (b), section ten of this artiplication (b), section ten of this artiplication (b), and (c) and (c) are surface use and continuous tended (c) and gas operations to the surface affected by oil and gas operations to the surface affected by this section shall be given to the surface.	er whose land will hall include: (1) A icle to a surface o compensation agr extent the damag	be used for the drilling copy of this code sect wner whose land will eement containing ar ges are compensable	ng of a horizontal well notice of ion; (2) The information be used in conjunction with the noffer of compensation for under article six-b of this chapter. ecords of the sheriff at the time
	by provided to the SURFACE OWNER(s)			4709101324
Name:	s listed in the records of the sheriff at the time of n	The state of the s		
Address:	Tex Raymonda and Martha Delores I			
	383 Tappa Grafton WV		255:	
operation on t State:	est Virginia Code § 22-6A-16(c), notice is hereby gi he surface owner's land for the purpose of drilling WV	a horizontal well UTM NAD 83	on the tract of land as Easting:	5 follows: 572,117.850000
County:	Taylor	and making a color	Northing:	4,359,288.870000
District:	Booths Creek	Public Road Ac	-	Co. Rt. 250
Quadrangle: Watershed:	Fairmont West Hustead Fork of Booths Creek	Generally used	farm name:	Michael G. Morris
to be provided horizontal wel	all Include: est Virginia Code § 22-6A-16(c), this notice shall inc by W. Va. Code § 22-6A-10(b) to a surface owner ; and (3) A proposed surface use and compensation d by oil and gas operations to the extent the dama	whose land will b n agreement cont	e used in conjunction aining an offer of con	with the drilling of a npensation for damages to the
information re	lated to horizontal drilling may be obtained from tl located at 601 57th Street, SE, Charleston, WV 253	he Secretary, at th	e WV Department of	Environmental Protection
Well Operator:	EQT Production Company	Address:	115 Professional Pl	ace, P.O. Box 280
Telephone:	304-848-0082	Bridgeport,		000, 1.0. DOX 200
Email:	vroark@eqt.com	Facsimile:	304-848-0040	
Oil and Gas Pri	unay Makinay	- I was a series of the		
on and das Pri	vacy 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 Received needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will fice of Oil & Gas 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. AUG. 2 6 2015

EQT PRODUCTION API NO. 47-115 PROFESSIONAL PLACE OPERATOR WELL NO. H2-515827 BRIDGEFORT, WV 26330-4509Well Pad Name: FAW60

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STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WELL LOCATION RESTRICTION WAIVER

	be advised that well work permits a			of West Virgin	na to conduct on or gas well
Pursuant to V any existing located within larger used to dwellings or provided in so article was pr by written co- clerk of the co- variance by the or practices to conditions the	on Restrictions West Virginia Code § 22-6A-12(a), water well or developed spring used in six hundred twenty-five feet of an o house or shelter dairy cattle or pagricultural buildings that existed or ection ten of this article or a notice or rovided, whichever occurs first, and consent of the surface owner transmit county commission for the county in the secretary from these distance restricts be employed during well site consected the surface, bonding and indemnification, a	d for human or domestic occupied dwelling struct oultry husbandry. This in the date a notice to the of intent to drill a horizon to any dwelling under cou tted to the department ar in which such property is rictions upon submission struction, drilling and op afety and protection of af	animal consumure, or a buildir limitation is ap surface owner of tal well as provinstruction prior of recorded in tal located. Further of a plan which erations. The variety of a persons a fected persons a	option. The centre two thousand plicable to those of planned entry ded in subsection to that date. The real property ermore, the well identifies the stariance, if grant	ter of well pads may not be d five hundred square feet or se wells, developed springs, y for surveying or staking as on (b), section sixteen of this his limitation may be waived y records maintained by the I operator may be granted a sufficient measures, facilities ited, shall include terms and
	4	WAIVE	R		4
WW-6A and required, and State: County: District: Quadrangle: Watershed: I further state issued on those WELL SITE *Please check EXISTIT DEVEL DWELL DWELL	ted above, and that I have received c attachments consisting of pages one the well plat, all for proposed well well well plat, all for proposed well well well well well plat. Taylor Booths Creek Fairmont West Hustead Fork of Booths Creek et that I have no objection to the plann se materials and I therefore waive all ERESTRICTIONS BEING WAIV is all that apply NG WATER WELLS COPED SPRINGS LINGS	opies of a Notice of Appl (1) through (1) vork on the tract of land a UTM NAD UTM NAD Public Road Generally u led work described in the	ication, an Apple, including the office of follows: 83 Easting: 83 Northing: 83 Northing: 84 Access: 85 ematerials, and office of the follows: 86 Included West of the follows: 87 FOR EXECUTOR	39.380068 -80.162659 Tappan Road Morris Farm I I have no obje Virginia Code § FION BY A NA COLLEGATION BY A CO	iment control plan, if Instrument No 2015005610 Date Recorded 04/06/2015 Document Type MIS Pages Recorded 1 Book-Page 11-359 Recording Fee \$5.00 etionditationable being00 22-6A-12(a). ATURAL PERSON H Instrument
☐ AGRICU	ULTURAL BUILDINGS		Signature: Date:		
	Tohn W. Damato Afformey in fact	Signati Teleph	ire:	Alexander of the second	POB2 3 2 6
My Comm	OFFICIAL SEAL SIONER FOR WEST VIRGINIA James R. Evans Bridgeport, WV nission Expires March 07, 2023	Subscribed and sword My Commission Expir	res 3	31 St day of	Notary Public
The Office of (Oil and Gas processes your personal info	ormation, such as name, add	lress and telephon	e number, as par	t 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 stationed 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 depprivacy of the Secure of the Secure your personal information.

AUG. 2 6 2015



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

August 24, 2015

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 FAW60 Well Site, Taylor County

4709101324

515826 FAW60 H1 515827 FAW60 H2 515828 FAW60 H3 515829 FAW60 H4 515830 FAW60 H5 515831 FAW60 H6 516336 FAW60 H7 516337 FAW60 H8 516338 FAW60 H9 516339 FAW60 H10 516340 FAW60 H11

Dear Mr. Martin,

Earl Ray Tomblin

Governor

This well site will be accessed from Permit # 04-2015-0781 issued to EQT Production Company for access to the State Road for a well site located off of Taylor County Route 250/3 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

Regional Maintenance Engineer

Day K. Clayton

Central Office Oil & Gas Coordinator

Received Office of Oil & Gas

AUG. 2 6 2015

Cc:

Nick Bumgardner

EQT Production Company

CH, OM, D-4

File

Anticipated Frac Additives Chemical Names and CAS numbers

<u>Material</u>	Ingredient	CAS Number
Water		
Sand	Hydrotreated light petroleum distillate	14808-60-7
Friction Reducer	Tributyl tetradecyl phosphonium chloride	64742-47-8
Biocide	Ammonium chloride	81741-28-8
Scale Inhibitor	Hydrochloric Acid	12125-02-9
15% Hydrochloric Acid	Propargyl Alcohol	7647-01-0
Corrosion Inhibitor	Methanol	107-19-7
Corrosion Inhibitor	Guar Gum	67-56-1
Gelling Agent	Sodium Persulfate	9000-30-0
Oxidizing Breaker	Potassium Carbonate	7775-27-1
Buffering Agent		584-08-7

4709101324

Received
Office of Oil & Gas
AUG. 2 & 2015





West Virginia Department of **Environmental Protection** Office of Oil & Gas 601 57th Street SE Charleston, WV 25304-2345

DEP Office	Use only
Date Received by Oil & Gas:	11-30 - 15
Assigned Impoundment ID #:	991-WPA-00029

Permit Associated Impoundment / Pit Registration

Instruction: This form is to be used to register impoundments or waste pits, greater than 5,000 bbls, that are associated with a WVDEP, Office of Oil and Gas, well drilling permit. An associated impoundment or pit means it has been designed and included in the well drilling permit application, will follow the reclamation time frame of well work permit, and will be approved in conjunction with the well work permit. An impoundment ID number will be assigned by WVDEP, Office of Oil and Gas, to all impoundments and pits. This impoundment ID number will be sent to the applicant following receipt of this form by WVDEP. Please reference this impoundment ID number with all future correspondence and reference to this impoundment. Conditions as described in W.Va. State Rule §35-4-100 9 10 13 2 C 21 will be followed as it relates to impoundments and pits.

Section 1 - Operator Information

Operator Name:	EQT Production Company		
Operator ID:	306686		
Address: Street	115 Professional Place		
City:	Bridgeport	State: WV	Zip: 26330
Contact Name:	Phillip Keaton	Contact Title:	Regional Manager Construction
Contact Phone:	304-348-7605	Contact Email:	

Section 2 - Engineering / Design Contractor Information

Design will be contracted ■ Designed in-house □	
Company Name: Civil & Environmental Consultan	ts, Inc.
Address: Street 600 Marketplace Avenue, Suite 2	200
City: Bridgeport	State: WV Zip: 26330
Contact Name: _Joseph D. Robinson	Contact Title: Project Manager
Contact Phone: <u>304-848-7134</u>	Contact Email: jrobinson@cecinc.com
Certifying Professional Engineer:	
Professional Engineer Registration Number: 19756	

Received Office of Oil & Gas

AUG. 26 2015

Page 1 of 4





Office of Oil and Gas

Section 3 - Impoundment / Pit Information

Type of Structure. Check one of two character Impoundment Note: Any waste in a pit will make it a waste	× W	/aste Pit	
Name of Structure (Company Name :)	FAW 60 Flowback Pit		
County: Taylor	District:	Booths Creek	
	ont West		
Farm Name: Stephen Sandor Jr.			
Pad Name: FAW 60			
Surface Owner Name: Michael G. Morris,			
		t 132 and turn right onto US Rt. 250 and go	
Co. Rt. 250/2 and go 200 feet. Turn left onto Cour			oad.
(Note: Give general location, example: 2 miles so		·	
Watershed (nearest perennial): Unnar			
Distance (Drainage Distance) to neares	t perennial stream: 0.1 m	i Hustead Fork	
UTM Coordinates : 572225.5279 Access Road Coordinates (junction of s	ngitude (Use negative signature) E 435: tate highway access) ongitude (Use negative signature) E 435: 109' ensions of long axis. asure below:	n):80.161399 9380.0852	0 1 3 2 4
Capacity with 2' Freeboad – Provide all	units of measure heleur		
Barrels: 30,396 Gallor		Acre-Feet: 3.918	
Incised volume:			
Barrels: 30,396 Gallor	s: 1,276,721	Acre-Feet: 3.918	
Net impounded volume: (Total volume lo Barrels: 10,159 Gallon	'	Acre-Feet: 1.309	
			Danaharat
Anticipated Construction Start Date (est Note: No construction may begin on Asscalendar days prior to confirmed construction start date. Use	socioated impoundment us ction start date, notify the	Office of Oil & Gas, and the loca	al Oil and Gas



Section 4 - Associated Well Numbers and API Numbers. List associated well numbers and API number. API numbers may not be assigned at time of registering this impoundment, if so list as pending.

Well Number(s):	API Number(s) – If issued:
515826; 515827	
515828; 515829	
515830; 515831	
516336; 516337	
516338; 516339	
516340	

Section 5 - Required Information Checklist To Register Permit Associated Impoundments or Pits. Include the following information and plans with application.

- Engineered Construction Plans, certified by WV Registered P.E.
- Erosion and Sediment Control Plan, certified by WV Registered P.E.
- Reclamation Plan, certified by WV Registered P.E.

Section 6 – Dam Standard Qualifying Evaluation

The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be defined as a dam, under W.Va Rule §47-34. If the design of this structure qualifies it to be defined as a dam, all permits regulating dams will be required prior to registering the structure with the Office of Oil and Gas. The dam standard, from the WVDEP, Div. Of Water and Waste, is available for review at: http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx

Section 7 –Comments – Provide ar	y additional	comments	concerning	this	project
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4709101324

Received
Office of Oil & Gas

AUG 2 6 2015



Section 8 - Application Certification

I hereby certify that the information listed above is true and accurate. I understand that this pit/impoundment is to be constructed only in a location appropriate for the storage of water, including wastewater, and will be constructed in accordance with plans designed and certified by a West Virginia registered professional engineer. I further recognize that all required plans have been submitted to the Office of Oil and Gas. I understand that after construction, and prior to any fluid being placed in the pit/impoundment, it shall be inspected by a West Virginia registered professional engineer to ensure compliance with the certified design and construction plan, and that the professional engineer shall certify that this structure was constructed in accordance with design and construction plans. I understand that such certification shall be in writing to the Chief and that no fluids may be placed in the pit/impoundment until the certification has been filed with the chief. I agree that this pit/impoundment shall be constructed, maintained, operated and closed in accordance with all applicable laws and rules, including the requirements of W. Va. Code R § 35-4-2.

Name:	Victoria T. Koonk
Title:	Dermitting Spenvisor
Signature:	The Ath
Taken, subscribed and	sworn to before me this, 20th Day of August 20 15
Notary Public:	Deliecta y Seater
My commission expires:	4-7-20
Notary Seal:	OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRIGINIA REBECCA L. HEATER EQT PRODUCTION COMPANY PO BOX 280 BRIDGEPORT, WV 26330

Section 9. Submittal Instructions

Submit original paper copy of application to:

West Virginia Department of Environmental Protection
Office of Oil and Gas
Impoundment Registration
601 57th Street, SE
Charleston WW 25304

Email PDF file format of this application and all related engineering Plans to : <u>Depimpoundments@wv.gov</u>

Rece

Office of On & Gas

AUG. 2 6 2015

Page 4 of 4

12/04/2015





West Virginia Department of Environmental Protection Office of Oil & Gas 601 57th Street SE Charleston, WV 25304-2345

DEP Office Use	only
Date Received by Oil & Gas;	1-30-15
Assigned Impoundment ID#:	1-WPA-0030

Permit Associated Impoundment / Pit Registration

Instruction: This form is to be used to register impoundments or waste pits, greater than 5,000 bbls, that are associated with a WVDEP, Office of Oil and Gas, well drilling permit. An associated impoundment or pit means it has been designed and included in the well drilling permit application, will follow the reclamation time frame of well work permit, and will be approved in conjunction with the well work permit. An impoundment ID number will be assigned by WVDEP, Office of Oil and Gas, to all impoundments and pits. This impoundment ID number will be sent to the applicant following receipt of this form by WVDEP. Please reference this impoundment ID number with all future correspondence and reference to this impoundment. Conditions as described in W.Va. State Rule §35-4-21 will be followed as it relates to impoundments and pits.

Section 1 – Operator Information

Operator Name:	EQT Production Company			
Operator ID:	306686			
Address: Street	115 Professional Place			
City:	Bridgeport	State: WV	Zip:	26330
Contact Name:	Phillip Keaton	Contact Title:	Regional Man	ager Construction
Contact Phone:	304-348-7605	Contact Email	preten@eqt.com	n
			7091	0132,
				''

Section 2 – Engineering / Design Contractor Information

Design will be contracte	ed 🗉 Designed in-hou	use □	· · · · · ·				
Company Name: _Civil & Environmental Consultants, Inc.							
Address: Street	600 Marketplace Aver	nue, Suite 20	00		··		
City:	Bridgeport		State:	W	Zip:	26330	
Contact Name:	Joseph D. Robinson		 Contact	Title:	Project Mana	ger	
Contact Phone:			Contact E	mail:	jrobinson@c	ecinc.com	
Certifying Professional I		Robinson					-
Professional Engineer R	Registration Number: _	19756					
							BARAIVEC

Office of fill & Gas

AUG. 2 6 2015





Office of Oil and Gas

Section 3 - Impoundment / Pit Information

Type of Structure. Check one of two choices below:	
☐ Freshwater Impoundment ☑ ₩	Vaste Pit
Note: Any waste in a pit will make it a waste pit.	
·	
Name of Structure (Company Name) FAW 60 Completion Dit	
Name of Structure (Company Name :) FAW 60 Completion Pit County: Taylor District:	
USGS 7.5' Quad Map Name: Fairmont West	Booths Creek
Farm Name: Stephen Sandor Jr.	
Pad Name: FAW 60	
Surface Owner Name: Michael G. Morris, et ux	
	it 132 and turn right onto US Rt. 250 and go 3.2 miles, right onto
Co. Rt. 250/2 and go 200 feet. Turn left onto County Route 250/3 and go 0.4 miles t	
(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22,	
Watershed (nearest perennial): Unnamed Tributary of Hustead Fort	
	ni Hustead Fork
Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxx	(x))
Latitude: 39.378937 Longitude (Use negative sig	• •
	9162.4917 N
Access Road Coordinates (junction of state highway access)	IV
Latitude: 39.381080 Longitude (Use negative signature)	gn): -80.159596
	9403.6738 N
Approximate Dimensions	
Length: 273' Width: 260'	Height: 18' berm; 16' capacity w/ 2' FB
Note: If irregularly shaped, give approximate dimensions of long axis.	
Total Capacity – Provide all units of measure below:	4709101324 Acre-Feet: 18.531
Barrels: 143,758 Gallons: 6,038,260	Acre-Feet: 18.531
Capacity with 2' Freeboad – Provide all units of measure below:	
Barrels: 120,298 Gallons: 5,052,879	Acre-Feet: 15.507
ncised volume:	
Barrels: 35,879 Gallons: 1,507,020	Acre-Feet: 4.625
Net impounded volume: (Total volume less incised volume.)	
Barrels: 107,879 Gallons: 4,531,240	Acre-Feet: 13.906
	Received
i i i i i i i i i i i i i i i i i i i	OVEMBER 2015
Note: No construction may begin on Associoated impoundment u	iriui vvvdep issues the grilling definit. At least / / _
calendar days prior to confirmed construction start date, notify the	Office of Oil & Gas, and the local Oil and G& 2013
nspector of construction start date. Use form IMP-2, "Notification	of impoundment / Pit Construction."



Section 4 - Associated Well Numbers and API Numbers. List associated well numbers and API number. API numbers may not be assigned at time of registering this impoundment, if so list as pending.

Well Number(s):	API Number(s) – If issued:
515826; 515827	
515828; 515829	
515830; 515831	
516336; 516337	
516338; 516339	
516340	

Section 5 - Required Information Checklist To Register Permit Associated Impoundments or Pits. Include the following information and plans with application.

×	Engineered Construction Plans,	certified b	y W	Registered P.	E.
---	--------------------------------	-------------	-----	---------------	----

- × Erosion and Sediment Control Plan, certified by WV Registered P.E.
- × Reclamation Plan, certified by WV Registered P.E.

Section 6 - Dam Standard Qualifying Evaluation

The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be defined as a dam, under W.Va Rule §47-34. If the design of this structure qualifies it to be defined as a dam, all permits regulating dams will be required prior to registering the structure with the Office of Oil and Gas. The dam standard, from the WVDEP, Div. Of Water and Waste, is available for review at: http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx

Section 7 -Comments - Provide any addi	tional comments concerning this project
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4709101324



Section 8 - Application Certification

I hereby certify that the information listed above is true and accurate. I understand that this pit/impoundment is to be constructed only in a location appropriate for the storage of water, including wastewater, and will be constructed in accordance with plans designed and certified by a West Virginia registered professional engineer. I further recognize that all required plans have been submitted to the Office of Oil and Gas. I understand that after construction, and prior to any fluid being placed in the pit/impoundment, it shall be inspected by a West Virginia registered professional engineer to ensure compliance with the certified design and construction plan, and that the professional engineer shall certify that this structure was constructed in accordance with design and construction plans. I understand that such certification shall be in writing to the Chief and that no fluids may be placed in the pit/impoundment until the certification has been filed with the chief. I agree that this pit/impoundment shall be constructed, maintained, operated and closed in accordance with all applicable laws and rules, including the requirements of W. Va. Code R § 35-4-2.

Name:	Victoria J. Roans
Title:	Dermitting Sipervisor
Signature: _	Weel 1/h
Taken, subscrib	ed and sworn to before me this, 20 Day of August 20 15
Notary Public:	Phillips of Weater
My commission	expires: 4-7-20
Notary Seal:	

Section 9. Submittal Instructions

Submit original paper copy of application to:

West Virginia Department of Environmental Protection Office of Oil and Gas Impoundment Registration 601 57th Street, SE Charleston WW 25304

Email PDF file format of this application and all related engineering Plans to : Depimpoundments@wv.gov

Office of Oil 2 Cars AUG. 2 6 2015

Page 4 of 4

4709101324

12/04/2015

YOU DIG!

WEST VIRGIMA #11 DNE CALL WAS PERFORMED IN NOVEMBER, 2014

THE POLLOWING UTILITY COMPANES MAY BE PRESENT IN THE PROJECT AREA

- FERSTENERGY CORP.
 FRONTIER COMMUNICATIONS (FORMERLY VERIZON)
 COMCAST
 MOLATIAN VIEW WATER ASSOCIATION
 FROMTER A CTITICES COMMUNICATIONS COMPANY
 FROMTER A CTITICES COMMUNICATIONS COMPANY

PROJECT OWNER/APPLICANT

FOT PRODUCTION COMPANY BRIDGEPORT, WV 26330 PH (304) 648-0055 CONTACT JUSTIN MEADOWS

CIVIL ENGINEER

百

CVIL & ENVIRONMENTAL CONSULTANTS, INC. SP CAMBRIDGE PLACE BRIDGEPORT, MV 28130 PH (DOS) \$13-3119 CONTINCT, JOSEPHO, ROBINSON, P.E. CONTINCT, JOSEPHO, ROBINSON, P.E.

WYDOH

DISTRICT FOUR PH (DOA) 842-15 CONTACT DIS

SPEL HOTUNE

WEST VIRGIMA DEPARTMENT OF ENVIRGIMENTAL PROTECTION (MVDEP) PH. (801) 642-3274

PENNSYLVANIA

VIRGINIA

APPROVED WVDEP OOG

HH 11/16/2015

Eastern Panhandle

PROJECT !YLAND

AREA

Loc	AL EMERGENCY SERVICES	
	NAME	TELEPHONE NO
AMBULANCE		911
HOSPITAL EMERGENCY ROOM	FARMONT DENERAL HOSPITAL	(304),367-7100
TIRE DEPARTMENT		911
POLICE DEPARTMENT		911
POISON CONTROL CENTER	WEST VIRGINIA POSSON CENTER	IROX 222-1229

Capitol

FAW 60 FINAL SITE DESIGN, CONSTRUCTION PLANS, & EROSION & SEDIMENT CONTROL PLANS EQT PRODUCTION COMPANY

LAT./LONG: N 39° 22' 48.80" W 80° 9' 46.31" APPROXIMATE CENTER OF PROJECT)







V	CINITY M	AP
TAYLO	R COUNTY RO	AD MAP
	SCALE IN FEE	T
a	1 MUS	1 1415



SITE LOCATIONS WV83 (WEST VIRGINIA NORTH ZONE)		
	LATITUDE	LONGITUDE
BEGINNING OF MAIN ACCESS HOAD	39,381080	-80,159598
CENTRUM OF PAD	19.580223	-80.160364
CENTROID OF PLOWINGK PIT	39.380681	-50.161200
CENTROID OF COMPLETION PIT.	39.376937	-80,163733

SITE LOCAT UTMa3-17 (WEST VIRGIN		NE)
	NORTHENG	EASTING
BEGINNING OF MAIN ACCESS ROAD	4359409,6736	572360,5569
CENTROID OF PAD	4059905.9316	572100.0472
CENTROID OF FLOWBACK PIT	435/8380,0852	572225 8279
CENTHOLD OF COMPLETION PIT	4359102.4917	572026.4875

	SHEET INDEX
SHEET 1 OF 22	COVERSHEET
SHEET 2 OF 32	EXISTING CONDITIONS
SHEET 3 OF 22	CONSTRUCTION NOTES
SHEET 4 DF 32	SUMMARY OF QUANTITIES
SHEET S OF 32	OVERVIEW SITE PLAN
SHEETS 6-7 OF 32	FINAL DESKIN SITE PLAN
SHEETS 8-12 OF 112	WELL PAD PROFILE & CROSS SECTIONS
SHEETS 13-14 OF 32	FLOWBACK PIT PROFILE & CACISS SECTIONS
SHEET'S 15-17 OF 32	COMPLETION PIT PROFILE & CROSS SECTIONS
SHEETS 15-19 OF 32	MAIN ACCESS ROAD PROFILES & CROSS SECTIONS
SHEETS 20-21 CF 32	COMPLETION PIT ACCESS POAD PROFILE & CROSS SECTIONS
SHEETS 22-23 OF 32	SPOIL PILE PROFILES & CROSS SECTIONS
SHEETS 24-25 OF 32	TOPSOIL PILE PROFILE & CROSS SECTIONS

SHEETS 31-32 OF 32 RECLAMATION PLAN

AFFECTED TAX PARCELS

HOOTH'S CREEK DISTRICT: TAYLOR COUNTY WV

MCHACL, A MEDIA THE MEDIA COUNTY WE MICHAEL AND PARACEL 18 DEED ROOK SOY JUICE 19 4 159 AC 18 100 EN ROOK 19 10

EDNIETH G. AND CATHY'S, COTTRELL
TAX MAP 7 PARCEL 19
DEED BOOK 332 PAGE 470
3.00 AC 2
(AFFECTED ARCA FROM MAIN ACCESS FOAD + C.O. ACFES)

TEX RAYMOND AND MARTHA DELONES HUDHES AND SURV.
TAX MAP 7 FARCES 20
DEED ROOK 158 PAGE 440
24.55 AC a.
(AFFECTED AREA FHOM STACKING AREA + 0.15 ACRES)

AFFECTED AREA FROM MAIN ACCESS ROAD - 0.05 ACRES!
WIFFECTED AREA FROM STACING AREA + 0.05 ACRES!

SITE DISTLIBRANCE

MAIN ACCESS ROAD		1.50 AC
DHILL PAD	-	4.47 45
FLOWBACK PIT	-	1.65 AC
MANIFOLD PAD		0.63 AC
COMPLETION PIT	-	3.04 AC
COMPLETION PIT ACCESS FICAD		TATAC
WATER TRUCK TURNAROUND		1.90 AC
STACING AREA	-	0.54 AC
SPOLPILE		1.56 AC
FORSOIL PILE		1.34.65
TOTAL		

9.33 60

WELL TRUEND			TENO:	API# 910132		
	in	4	515e26	API# 910132		
	152		515827			
	143	-	515878	API# 910132		
	140		\$15929			
	H5	4	515800	API# 910132		
	110	12	515831	141 41 21017		
	H7		518334			
	RI.	4.1	\$18007			

PLAN REPRODUCTION WARNING THE PLANS HAVE BEEN CREATED ON ANSI DIDER X 24" SHEETS FOR REDUCTIONS, REPER TO GRAPHIC SCALE.

THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THE PLANS THAT IS NOT IN DITTED IN FILL COLOR SHALL NOT BE COMMISSION ADEQUATE FOR DICHSTRUCTION. PHRNOSES.

FLOOD PI	LAIN COND	SITIONS	
DO SITE CONSTRUCTION ACTIVITIE	STAKEPLAS	E IN FLOODPLAN	NO
PERMIT NEEDED FROM COUNTY FL	COPPLAIN	DORDINATOR	YES
HEC-RAS STUDY COMPLETED:		N/A	
FLOODPLAIN SHOWN ON DRAWING	3.		MO
FIRM MAP NUMBER(3) FOR SITE:	540910000	3.5	-
ACREAGE OF CONSTRUCTION IN F	HIAJEDOOJ	N/A	



C000

Civil &

EQT PRODUCTION COMPANY FAW 60 BOOTHS CREEK DISTRICT FAYLOR COUNTY, WEST VIRGINIA