



---

**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: 47-9101323, 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: 515826  
Farm Name: MORRIS, MICHAEL G.  
**API Well Number: 47-9101323**  
**Permit Type: Horizontal 6A Well**  
Date Issued: 11/30/2015

Promoting a healthy environment.

12/04/2015

## PERMIT CONDITIONS

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

### CONDITIONS

---

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



---

west virginia department of environmental protection

---

Office of Oil and Gas  
601 57<sup>th</sup> 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.
4. 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.

12/04/2015

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

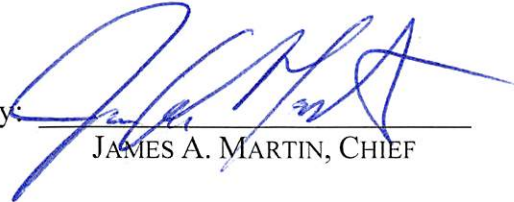
West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland 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;
- l. 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 23<sup>rd</sup> 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

By:   
\_\_\_\_\_  
JAMES A. MARTIN, CHIEF

4709101323

API NO. 47 - 091 - 0  
OPERATOR WELL NO. 515826  
Well Pad Name: FAW60

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

1) Well Operator: EQT Production Company  
Operator ID: 306686 County: 091 District: 1 Quadrangle: 343

2) Operator's Well Number: 515826 Well Pad Name: FAW60

3) Farm Name/Surface Owner: Michael G. Morris Public Road Access: Co. Rt. 250

4) Elevation, current ground: 1,323.1 Elevation, proposed post-construction: 1,316.1

5) Well Type: (a) Gas  Oil  Underground Storage   
Other \_\_\_\_\_

(b) If Gas: Shallow  Deep   
Horizontal

6) Existing Pad? Yes or No: no

7) Proposed Target Formation(s), Depth(s), Anticipated Thicknesses and Associated Pressure(s):  
Target formation is Marcellus at a depth of 7290 with the anticipated thickness to be 155 feet and anticipated target pressure of 1869 PSI  
Top of Marcellus: 7184

8) Proposed Total Vertical Depth: 7290

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 12677

11) Proposed Horizontal Leg Length: 4,805

12) Approximate Fresh Water Strata Depths: 121, 204, 268, 357, 662, 736, 878

13) Method to Determine Fresh Water Depth: By offset wells

14) Approximate Saltwater Depths: 1,406

15) Approximate Coal Seam Depths: 43, 202, 316, 390, 458, 527, 552, 626, 706, 772

16) Approximate Depth to Possible Void (coal mine, karst, other): None reported

17) Does proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes \_\_\_\_\_ No x

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas  
NOV 05 2015  
WV Department of  
Environmental Protection

WW - 6B  
(4/15)

**4709101323**  
**CASING AND TUBING PROGRAM**

API NO 47 - 091 - 0  
OPERATOR WELL NO 515826  
Well Pad Name: FAW60

18)

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu.Ft.)
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	12,677	12,677	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							

*Ernest Reynolds 11-4-15*

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	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	-	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)

**RECEIVED**  
Office of Oil and Gas  
NOV 05 2015  
WV Department of  
Environmental Protection



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 5585'.  
Then kick off the horizontal leg into the Marcellus using a slick water frac.

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

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to average approximately 8500 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water per stage. Sand sizes 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, (acres): 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 500'.
- Intermediate: Bow spring centralizers– One cent at the shoe and one spaced every 500'.
- Production: One spaced every 1000' from KOP to Int csg shoe

24) Describe all cement additives associated with each cement type. Surface (Type 1 Cement): 0-3% Calcium Chloride

Used to speed the setting of cement slurries.

0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of the cement slurry to a thief zone.

Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of whole drilling fluid or cement slurry (not filtrate) to a thief zone.

Production:

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.

RECEIVED  
Office of Oil and Gas

NOV 15

WV Department of  
Environmental Protection  
WV Department of  
Environmental Protection

25) Proposed borehole conditioning procedures. Surface: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating

one full joint until cuttings diminish at surface. When cuttings returning to surface diminish, continue to circulate an additional 5

minutes. To ensure that there is no fill, short trip two stands with no circulation. If there is fill, bring compressors back on

and circulate hole clean. A constant rate of higher than expected cuttings volume likely indicates washouts that will not clean up.

Intermediate: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one full joint until cuttings diminish at

surface. When cuttings returning to surface diminish, continue to circulate an additional 5 minutes. If foam drilling, to enhance

hole cleaning use a soap sweep or increase injection rate & foam concentration.

Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume.

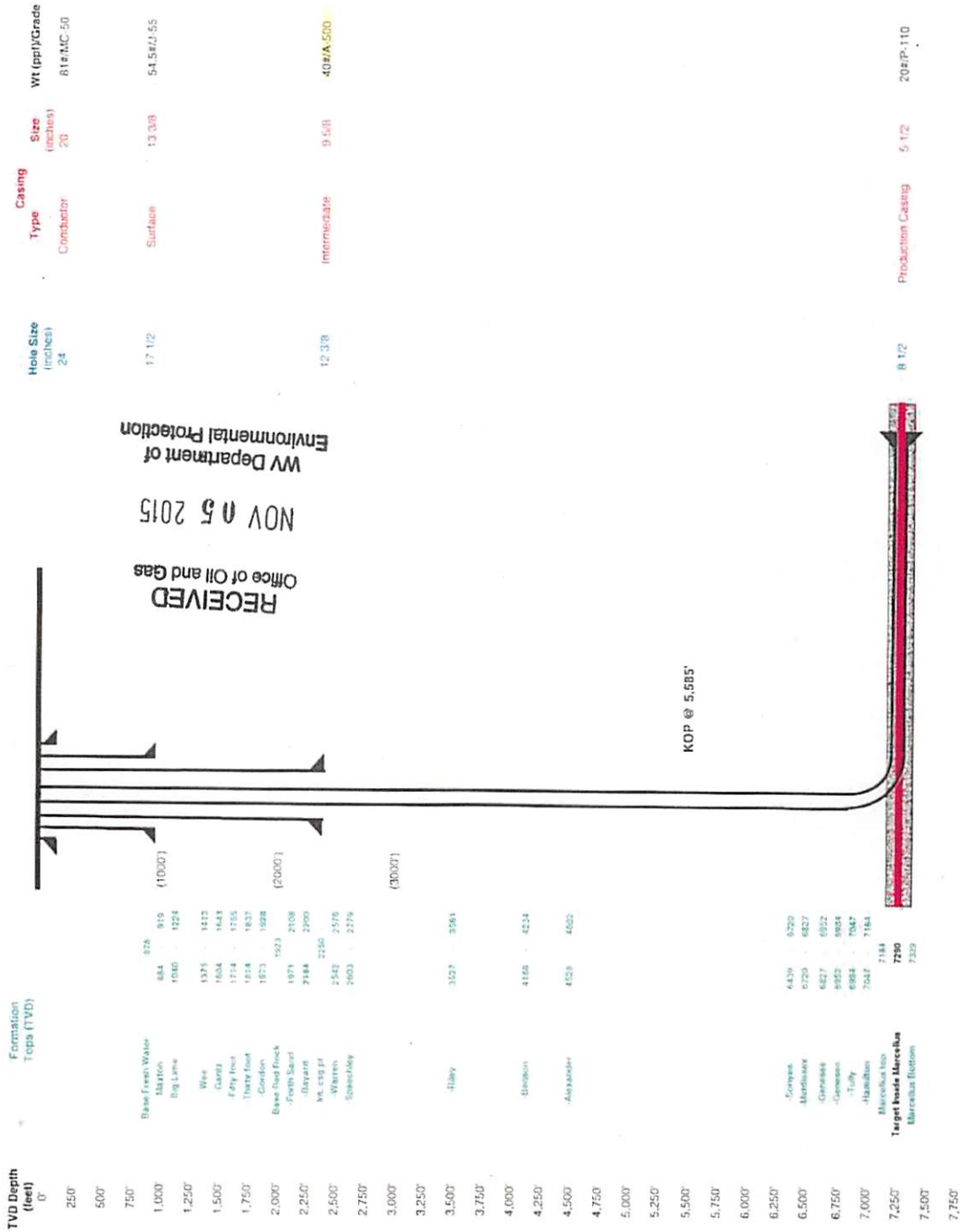
Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

\*Note: Attach additional sheets as needed.

4709101323

Well 515826 (FAW60H1)  
EOT Production  
Fairmont West  
Taylor

West Virginia  
Acreage 101  
Vertical Section 422



RECEIVED  
Office of Oil and Gas  
NOV 05 2015  
WV Department of  
Environmental Protection

Proposed Well Work:  
Drill and complete a new horizontal well in the Marcellus formation.  
The vertical drill to go down to an approximate depth of 5595'.  
Then kick off the horizontal leg into the Marcellus using a slick water frac.

12/04/2015



4709101323

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.

RECEIVED  
Office of Oil and Gas  
NOV 05 2015  
WV Department of  
Environmental Protection

12/04/2015



west virginia department of environmental protection

Office of Oil and Gas  
601 57<sup>th</sup> 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.

Sincerely,

James Peterson  
Environmental Resources Specialist / Permitting

4709101323

Promoting a healthy environment.

Received  
Office of Oil & Gas

AUG. 26 2015

12/04/2015



west virginia department of environmental protection

Office of Oil and Gas  
601 57<sup>th</sup> 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 )**  
**REGULATIONS OF CEMENTING OIL )**  
**AND GAS WELLS )**

**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

2.) 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.

4709101323

Promoting a healthy environment.

Received  
Office of Oil & Gas  
AUG. 26 2015

12/04/2015

**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

4709101323

Received  
Office of Oil & Gas

AUG 26 2015

12/04/2015

WW-9  
(2/15)

Page 1 of 2  
API No. 47 - 091 - 0  
Operator's Well No. 515826

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 Quadrangle Fairmont West

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes x No     

Will a pit be used? Yes: X No:     

If so please describe anticipated pit waste: flowback water & residual solids

Will a synthetic liner be used in the pit? Yes X No      If so, what ml.? 60

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 0014, 8462, 4037 )
- Reuse (at API Number Various )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain      )

Will closed loop system be used? Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.

Air is used to drill the top-hole sections of the wellbore (surface, intermediate, and pilot). Water based mud may be necessary depending on hole conditions to stabilize and drill the intermediate section. The pilot hole, curve, and lateral sections will be drilled with either air, water based mud, or oil based mud.

4709 101323

- If oil based, what type? Synthetic, petroleum, etc Synthetic mud

Additives to be used in drilling medium? Air - biodegradable oil lubricant, detergent, defoaming, water. Water based mud - Barite, viscosifer, alkalinity control, lime, filtration control, deflocculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates.

Oil based mud - synthetic base oil, emulsifier, salt, lime, viscosifer, alkalinity control, filtration control, deflocculates, biodegradable oil lubricant, defoaming, carbonates.

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

- If left in pit and plan to solidify what medium will be used? (Cement, Lime, sawdust) n/a
- Landfill or offsite name/permit number? See Attached List

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

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

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

Company Official Signature *Victoria J. Boark*  
Company Official (Typed Name) Victoria J. Boark  
Company Official Title Permitting Supervisor

Received  
Office of Oil & Gas  
AUG. 26 2015

Subscribed and sworn before me this 24 day of August, 20 15

Rebecca L. Heater Notary Public

My commission expires 4-7-20



4709101323

Operator's Well No. 515826

Proposed Revegetation Treatment: Acres Disturbed 19.39 Prevegetation pH 6.07

Lime 3 Tons/acre or to correct to pH 6.5

Fertilize type Granular 10-20-20

Fertilizer Amount 1/3 lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

Attach:

Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *[Signature]*

Comments: *RESUB AS AP*

Title: *OIL & GAS INSPECTION* Date: *11-4-15*

Field 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

**BROAD STREET ENERGY LLC**

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

**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

**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

**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

**KING EXCAVATING CO.**

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

**Waste Management - Meadowfill Landfill**

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

4709101323

**Waste Management - Northwestern Landfill**

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

Received  
Office of Oil & Gas

AUG 26 2015

12/04/2015



NORTH

NOTE 1: CLOSED LOOP SYSTEM BEING UTILIZED IN LIEU OF DRILL PIT AREA.

NOTE 2: TOPOGRAPHY SHOWN FROM BLUE MOUNTAIN INC.

NOTE 3: SEE SITE PLAN FOR FAW 60 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

© DENOTES INSTALLATION OF A MINIMUM 15" DIAMETER CULVERT

KENNETH G. & CATHY S. COTTRELL  
TAX MAP 7 PARCEL 19  
DEED BOOK 332 PAGE 470  
2.00 AC±

TEX RAYMOND & MARTHA DELORES HUGHES & SURV  
TAX MAP 7 PARCEL 20  
DEED BOOK 158 PAGE 440  
26.25 AC±

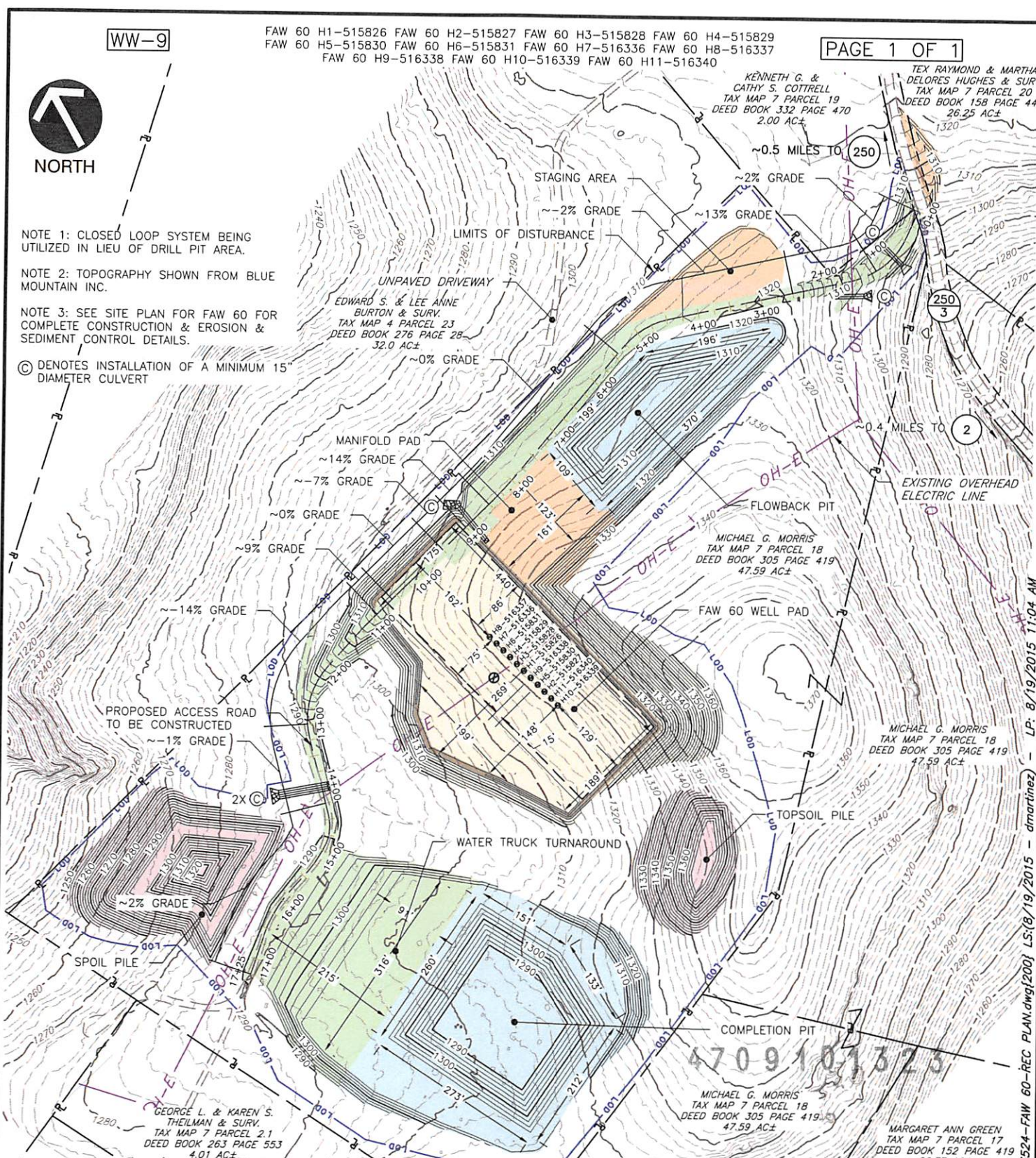
EDWARD S. & LEE ANNE BURTON & SURV.  
TAX MAP 4 PARCEL 23  
DEED BOOK 276 PAGE 28  
32.0 AC±

MICHAEL G. MORRIS  
TAX MAP 7 PARCEL 18  
DEED BOOK 305 PAGE 419  
47.59 AC±

MICHAEL G. MORRIS  
TAX MAP 7 PARCEL 18  
DEED BOOK 305 PAGE 419  
47.59 AC±

MICHAEL G. MORRIS  
TAX MAP 7 PARCEL 18  
DEED BOOK 305 PAGE 419  
47.59 AC±

MARGARET ANN GREEN  
TAX MAP 7 PARCEL 17  
DEED BOOK 152 PAGE 419  
26.77 AC±



LP: 8/19/2015 11:04 AM  
LS: (8/19/2015 - dmartinez) - REC PLAN.dwg [200] - FAW 60-REC PLAN.dwg [200]



Civil & Environmental Consultants, Inc.

600 Marketplace, Suite 200 - Bridgeport, WV 26330

Ph: 304.933.3119 · Fax: 304.933.3327

www.cecinc.com

EQT PRODUCTION COMPANY  
FAW 60 WELL PAD  
BOOTH'S CREEK DISTRICT  
TAYLOR COUNTY, WEST VIRGINIA

PERMIT APPLICATION AUG. 26 2015  
RECLAMATION PLAN

DRAWN BY:	DAM	CHECKED BY:	REA	APPROVED BY:	SAC	FIGURE NO.:
DATE:	AUGUST 19, 2015	DWG SCALE:	1" = 200'	PROJECT NO:	143-524.0023	12/04/2015

4709101323



Where energy meets innovation.™

# Site Specific Safety Plan

EQT FAW 60 Pad

Fairmont- West Quadrant

Taylor County, WV

For Wells:

5158a10 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date Prepared:

August 18, 2015

*[Signature]*

EQT Production

Permitting Supervisor

Title

8-24-15

Date

*[Signature]*

WV Oil and Gas Inspector

OIL & GAS INSPECTOR

Title

11-24-15

Date

# EQT PRODUCTION COMPANY WELL NO. WV 515826- STEPHEN SANDOR, JR., ET AL LEASE

LONGITUDE: 80°07'30"

CURVE TABLE			
TAG	RADIUS	ARC LENGTH	DELTA ANGLE
C1	250'	662.81'	151°54'21"

- NOTES ON SURVEY**
- NO WATER WELLS OR DEVELOPED SPRINGS USED FOR HUMAN OR DOMESTIC ANIMAL CONSUMPTION WERE FOUND WITHIN 250' OF THE WELL PAD.
  - SURFACE OWNERSHIP TAKEN FROM THE TAYLOR COUNTY TAX ASSESSOR AND COUNTY CLERK OFFICES IN OCTOBER, 2014.
  - WELL LATITUDE AND LONGITUDE FROM SURVEY GRADE OPUS SOLUTION DERIVED ON JANUARY 22, 2015.
  - TIES TO CORNERS AND REFERENCES BASED ON WV STATE PLANE COORDINATE SYSTEM, NAD '83 NORTH ZONE UNLESS OTHERWISE NOTED.
  - LEASE INFORMATION PROVIDED BY EQT PRODUCTION COMPANY.

**EQT PRODUCTION COMPANY  
WELL NO. WV 515826  
STEPHEN SANDOR, JR., ET AL LEASE  
50.79 ACRES ±**

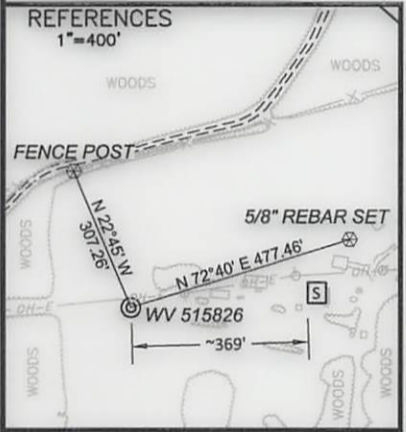
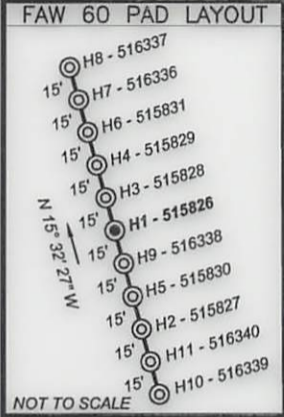
**SURFACE HOLE**  
NAD '27 NORTH S.P.C.: N. 321241.01 E. 1812618.07  
NAD '27 NORTH GEO. COORDINATES: LAT. 39.380099 LON. -80.162899  
NAD '83 UTM 17N.: N. 4359302.02 E. 572113.96

**LANDING POINT**  
NAD '27 NORTH S.P.C.: N. 321073.05 E. 1812107.37  
NAD '27 NORTH GEO. COORDINATES: LAT. 39.379627 LON. -80.164701  
NAD '83 UTM 17N.: N. 4359248.26 E. 571959.21

**BOTTOM HOLE**  
NAD '27 NORTH S.P.C.: N. 316530.06 E. 1813671.56  
NAD '27 NORTH GEO. COORDINATES: LAT. 39.367186 LON. -80.159050  
NAD '83 UTM 17N.: N. 4357872.10 E. 572458.80

EQT PRODUCTION COMPANY WELL NO. WV 515826		
LEASE NO.	LESSOR	LEASE AC.
965690 (A)	MARGARET ANN GREEN	50.68
965697	LYLE G. MOORE	71.64
1009271	THOMAS E. PROUD, ET UX	84

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



600 Marketplace Suite 200, Bridgeport, WV 26330  
Toll Free 855-488-9539  
Fax 304-933-3327



**Civil & Environmental Consultants, Inc.**

DATE AUGUST 21, 2015  
SCALE 1" = 1000' ACCURACY 1:200  
OPERATORS WV 515826  
WELL No. 47 - 091 - 01323 HGA  
API No.

TYPE OF WELL:

GAS:  
Production  Storage  \*Deep  \*Shallow

PROPOSED WORK ON LOCATION:

Drill  Drill Deeper  Redrill  Convert   
Fracture/ Stimulate  \*Plug off to Formation   
Perforate New Formation  Plug and Abandon   
Clean/ Replug  Other Than Above   
If "Other" Please see Details below—  
DETAILS OF PROPOSED WORK \_\_\_\_\_  
\*TARGET FORMATION MARCELLUS  
ESTIMATED DEPTH TVD: 7,184'

WELL OPERATOR EQT PRODUCTION COMPANY  
ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280  
BRIDGEPORT, WV 26330

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Division of Environmental Protection.

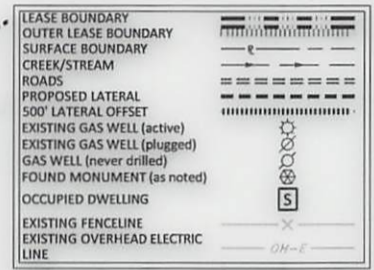
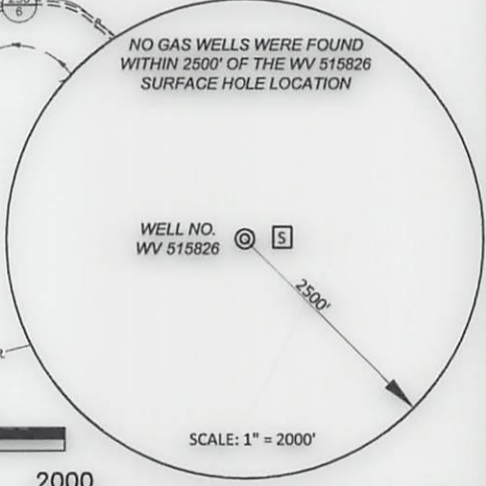
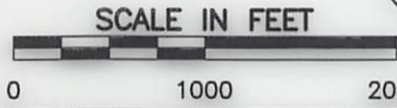
**DENNIS E. MILLER**  
LICENSED  
No. 991  
STATE OF WEST VIRGINIA  
PROFESSIONAL SURVEYOR

**STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS**

WELL AREA & LOCATION INFORMATION:

ELEVATION SOURCE DGPS (OPUS)  
ELEVATION 1323.1' (GROUND), 1316.1' (PROPOSED)  
WATERSHED UNNAMED TRIBUTARY OF HUSTEAD FORK DISTRICT 12/04/2015  
COUNTY TAYLOR TOPO QUAD FAIRMONT WES.  
SURFACE OWNER MICHAEL G. MORRIS  
ACREAGE 47.59 ±  
ROYALTY OWNER STEPHEN SANDOR, JR., ET AL LEASE NO. 965747  
LEASE ACREAGE 50.79 ±

DESIGNATED AGENT REX C. RAY  
ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280  
BRIDGEPORT, WV 26330



ID	BEARING	DISTANCE
L1	N 85°42' W	882.02'
L2	N 53°46' E	836.03'
L3	N 47°08' W	142.32'
L4	S 19°00' E	4804.62'
L5	N 74°36' E	1611.71'
L6	S 19°24' W	568.78'
L7	N 26°46' W	1309.28'

13,287'  
SURVEYED LATITUDE 39°22'48.67"

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>965747</u>			Min 1/8 pd	
	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
<u>965690</u>				
	Margaret Ann Green	Hunt Marcellus, LLC	Min 1/8 pd	LB60/713
	Hunt Marcellus, LLC	EQT Production Company		AB33/526
<u>965697</u>			Min 1/8 pd	
	Lyle G. Moore	Hunt Marcellus, LLC		LB61/85
	Hunt Marcellus, LLC	EQT Production Company		AB33/526
<u>1009271</u>			Min 1/8 pd	
	Thomas E. Proud	EQT Production Company		LB67/170

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.

4709101323

**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: [Signature]  
 Its: Permitting Supervisor

Received  
Office of Oil & Gas

Page 1 of 1 AUG. 26 2015

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

Date of Notice Certification: \_\_\_\_\_

API No. 47 - 091 - 0  
Operator's Well No. 515826  
Well Pad Name: FAW60

**Notice has been given:**

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

State: <u>WV</u>	UTM NAD 83 Easting: <u>572,113.96</u>
County: <u>Taylor</u>	UTM NAD 83 Northing: <u>4,359,302.02</u>
District: <u>Booths Creek</u>	Public Road Access: <u>Co. Rt. 250</u>
Quadrangle: <u>Fairmont West</u>	Generally used farm name: <u>Michael G. Morris</u>
Watershed: <u>Hustead Fork of Booths Creek</u>	

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

\*PLEASE CHECK ALL THAT APPLY

NOTICE OF SEISMIC ACTIVITY or  NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED

NOTICE OF ENTRY FOR PLAT SURVEY or  NO PLAT SURVEY WAS CONDUCTED

NOTICE OF INTENT TO DRILL or  NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OR

WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)

NOTICE OF PLANNED OPERATION

PUBLIC NOTICE

NOTICE OF APPLICATION

**OOG OFFICE USE ONLY**

RECEIVED/NOT REQUIRED

RECEIVED

RECEIVED/NOT REQUIRED

RECEIVED

RECEIVED

RECEIVED

**Required Attachments:**

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

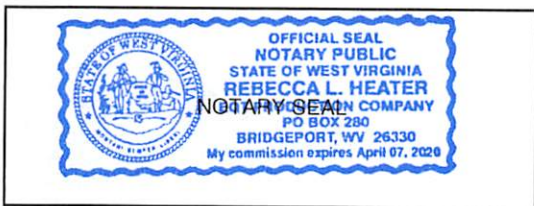
Received  
Office  
AUG 28 2015  
12/04/2015

**Certification of Notice is hereby given:**

THEREFORE, I [Signature] 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  
By: Victoria J. Roark  
Its: Permitting Supervisor  
Telephone: 304-848-0076

Address: P.O. Box 280  
Bridgeport, WV 26330  
Facsimile: 304-848-0040  
Email: [vroark@eqt.com](mailto:vroark@eqt.com)



Subscribed and sworn before me this 24 day of August, 2015

Rebecca L. Heater Notary Public

My Commission Expires 4-7-20

**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](mailto:depprivacyofficer@wv.gov).

4709101323

Received  
Office of Oil & Gas  
AUG 26 2015

12/04/2015

WW-6A  
(9-13)

API NO. 47 - 091 - 0  
OPERATOR WELL NO. 515826  
Well Pad Name: FAW60

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

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

Date of Notice: 8-25-15 Date Permit Application Filed: 8-25-15

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

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

4709101323

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

SURFACE OWNER(S)  
Name: Michael G. Morris  
Address: 512 Tappan Road  
Grafton WV 26354

COAL OWNER OR LESSEE  
Name: Michael G. Morris  
Address: 512 Tappan Road  
Grafton WV 26354

See attached for additional coal owners.

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

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  
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 STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Received  
Office of Oil & Gas

\*Please attach additional forms if necessary

AUG 28 2015  
12/04/2015



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 Purveyors:**

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

4709101323

Received  
Office of Oil & Gas

AUG. 26 2015

12/04/2015

**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](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

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

Received  
Office of Oil & Gas

AUG 26 . 015

12/04/2015

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

**Water Well Testing:**

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

**Water Testing Laboratories:**

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

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

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

**Written Comment:**

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

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

Received  
Office of Oil & Gas

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

12/04/2015

**Time Limits and Methods for Filing Comments.**

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

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

**Comment Requirements**

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

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

**Permit Denial or Condition**

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

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

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

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

4709101323 Received  
Office of Oil & Gas  
AUG. 26 2015

Notice is hereby given by:

Well Operator: EQT Production Company

Address: 115 Professional Place P.O. Box 280

Telephone: 304-848-0082

Bridgeport, WV 26330

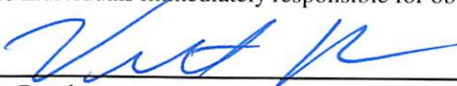
Email: Vroark@eqt.com

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.



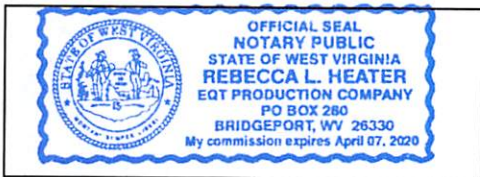
By: Victoria Roark

Its: Permitting Supervisor

Subscribed and sworn before on 24 day of August, 2015

Rebecca L. Heater Notary Public

My Commission Expires 4-7-20



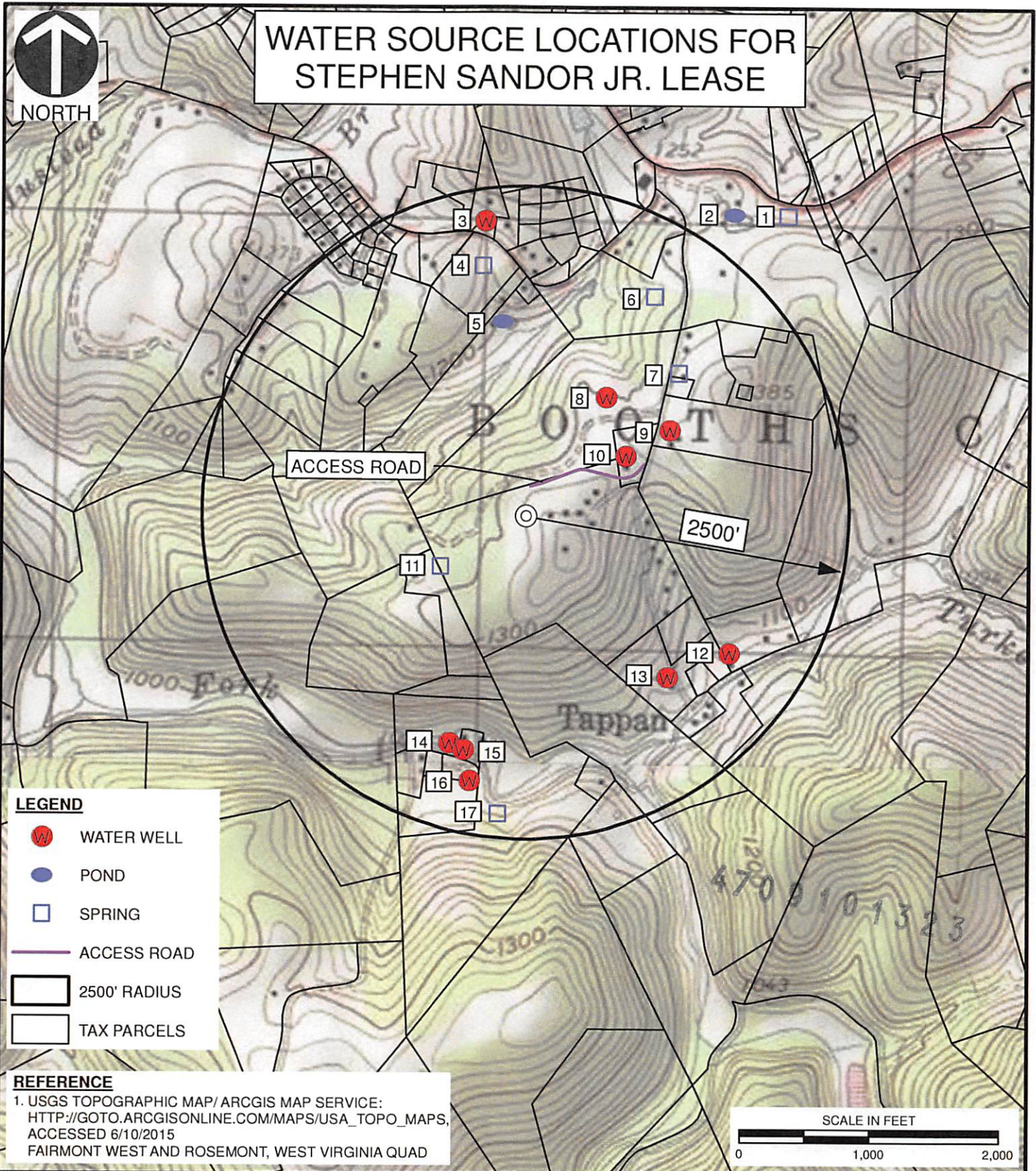
4709101323

Received  
Office of Oil & Gas  
AUG 26 2015

12/04/2015



# WATER SOURCE LOCATIONS FOR STEPHEN SANDOR JR. LEASE



### LEGEND

- WATER WELL
- POND
- SPRING
- ACCESS ROAD
- 2500' RADIUS
- TAX PARCELS

### REFERENCE

1. USGS TOPOGRAPHIC MAP/ ARCGIS MAP SERVICE:  
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/USA\\_TOPO\\_MAPS](http://gto.arcgis.com/maps/usa_topo_maps),  
 ACCESSED 6/10/2015  
 FAIRMONT WEST AND ROSEMONT, WEST VIRGINIA QUAD



\\Svr-bridgeport\IP:120.141.43.524-GIS\Maps\Task\_0021143524\_0021\_WATER\_SOURCES\_TOPO.mxd 6/10/2015 7:45 AM (easpril)



## Civil & Environmental Consultants, Inc.

99 Cambridge Place - Bridgeport, WV 26330-2820  
 Ph: 304-933-3119 · Toll: 855-488-9539 · Fax: 304-933-3327  
[www.cecinc.com](http://www.cecinc.com)

Energy Production Company  
 Office of Oil & Gas  
 FAW 60 WELL PAD  
 TAYLOR COUNTY, WEST VIRGINIA  
 AUG 26 2015

## WATER SOURCES FOR FAW 60

DRAWN BY:	ECA	CHECKED BY:	JDR	APPROVED BY:	DEM	FIGURE NO:	WT
DATE:	06/10/2015	SCALE:	1" = 1,000'	PROJECT NO:	143-524.0021		12/04/2015

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

**Notice Time Requirement:** Notice shall be provided at least **SEVEN (7)** days but no more than **FORTY-FIVE (45)** days prior to entry.

**Date of Notice:** 6/20/2014

**Date of Planned Entry:** 6/30/2014

**Delivery method pursuant to West Virginia Code § 22-6A-10(a):**

PERSONAL SERVICE     CERTIFIED MAIL     METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

**Notice is hereby provided to:**

**SURFACE OWNER(S)**

Name: Michael G. Morris  
Address: 512 Tappan Rd.  
Grafton, WV 26354-8354

**MINERAL OWNER(S)**

Name: Michael G. Morris  
Address: 512 Tappan Rd.  
Grafton, WV 26354-8354

**COAL OWNER(S) OR LESSEE(S)**

Coal Declaration pursuant to §22-6A-10 and §22-6-36 Not of Record

\*Please attach additional forms if necessary

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: West Virginia  
County: Taylor  
Dist/Map/Par: Booths Creek / Map 7 / Parcel 18  
Quadrangle: Fairmont West

Approx. Latitude & Longitude: 39.37844/-80.16373  
Public Road Access: CR 250/3  
Watershed: Tygart Valley  
Generally Used Farm Name: Morris

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: EQT Production Company  
Telephone: 304-848-0099  
Facsimile: 304-848-0040  
Email: eqtlandentrynotice@eqt.com

Address: 115 Professional Place, Bridgeport, WV 26330  
EQT Representative: Kathy Kugel  
Signature: *Kathy Kugel*

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such a name, address and telephone number, as part of 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](mailto:depprivacyofficer@WV.gov).

REC-  
Office of Oil & Gas  
AUG 26 2015

**12/04/2015**

11-362

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
**WELL LOCATION RESTRICTION WAIVER**

The well operator, EQT Production is applying for a permit from the State of West Virginia to conduct oil or gas well work. Please be advised that well work permits are valid for twenty-four (24) months.

**Well Location Restrictions**

Pursuant to West Virginia Code § 22-6A-12(a), Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements.

**WAIVER**

I, Michael G. Morris, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through (1), including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>39.380187</u>
County: <u>Taylor</u>	UTM NAD 83 Northing: <u>-80.162703</u>
District: <u>Booths Creek</u>	Public Road Access: <u>Tappan Road</u>
Quadrangle: <u>Fairmont West</u>	Generally used farm name: <u>Morris Farm</u>
Watershed: <u>Hustead Fork of Booths Creek</u>	

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials and I therefore waive all well site restrictions listed under West Virginia Code § 22-6A-12(a).

**WELL SITE RESTRICTIONS BEING WAIVED**

\*Please check all that apply

- EXISTING WATER WELLS
- DEVELOPED SPRINGS
- DWELLINGS
- AGRICULTURAL BUILDINGS

**FOR EXECUTION BY A NATURAL PERSON**

Signature: Michael G. Morris  
Print Name: Michael G. Morris  
Date: 3/31/2015

**FOR EXECUTION BY A CORPORATION, ETC.**

Company: \_\_\_\_\_  
By: Georgianna Thompson  
Its: TAYLOR County 03:07:35 PM  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Instrument No 2015005414  
Date Recorded 04/06/2015

Well Operator: EQT Production  
By: John W. Damato  
Its: Attorney in fact

Signature: \_\_\_\_\_  
Telephone: 304-248-XXXX  
Document Type MIS  
Pages Recorded 1  
Book-Page 11-362  
Recording Fee \$5.00

**OFFICIAL SEAL**  
**COMMISSIONER FOR WEST VIRGINIA**  
**JAMES REEVES**  
**Bridgeport, WV**  
**My Commission Expires March 07, 2023**

Subscribed and sworn before me this 31<sup>st</sup> day of March, 2015  
[Signature]  
Notary Public  
My Commission Expires 3-7-2023

**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 our regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

Received  
Office of Oil & Gas  
AUG 20 2015

12/04/2015





WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Earl Ray Tomblin  
Governor

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 57<sup>th</sup> Street, SE  
Charleston, WV 25304

4709101323

Subject: DOH Permit for the FAW60 Well Site, Taylor County

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,

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  
Central Office Oil & Gas Coordinator

Cc: Nick Bumgardner  
EQT Production Company  
CH, OM, D-4  
File

Received  
Office of Oil & Gas

AUG 26 2015

12/04/2015

**Anticipated Frac Additives  
Chemical Names and CAS numbers**

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
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

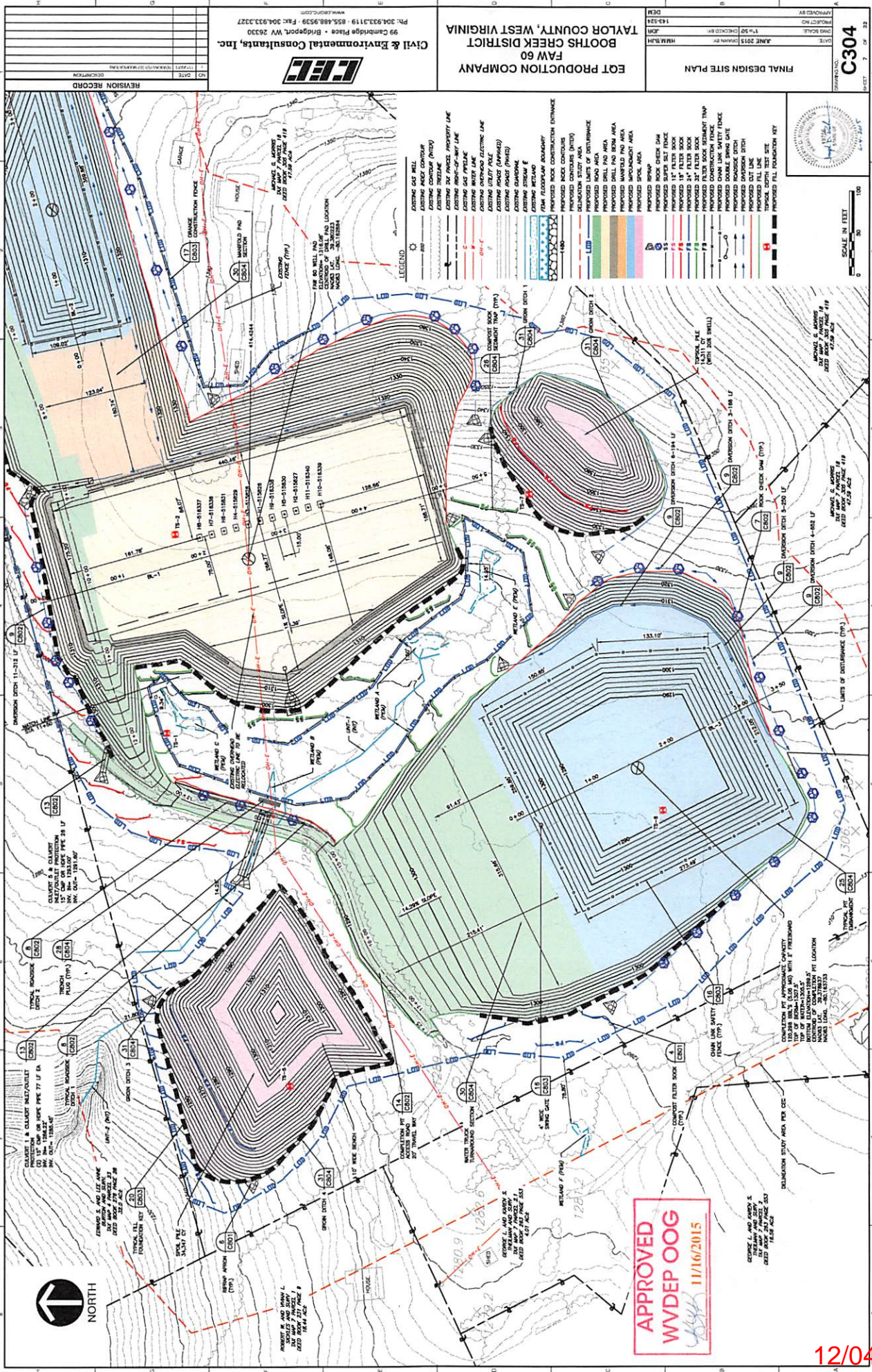
4709101323

Received  
Office of Oil & Gas  
AUG 26 2015

12/04/2015



ATTACHMENT 1 - WETLAND WAIVER



C304  
SHEET 7 OF 22

FINAL DESIGN SITE PLAN  
 DATE: JAN 2015  
 PROJECT NO.: 14154  
 DRAWN BY: HMM/RLH  
 CHECKED BY: JDM  
 DEEM

EOT PRODUCTION COMPANY  
 FAW 60  
 BOOTH CREEK DISTRICT  
 TAYLOR COUNTY, WEST VIRGINIA

Civil & Environmental Consultants, Inc.  
 99 Cambridge Place • Bridgeport, WV 26330  
 PH: 304.933.1119 • 855.488.9539 • FAX: 304.933.3327



NO.	DATE	DESCRIPTION
1	11/16/15	ISSUANCE OF WETLAND WAIVER
2		
3		
4		
5		
6		
7		
8		
9		
10		

APPROVED  
 WVDEP OOG  
 11/16/2015

12/04/2015





Office of Oil and Gas

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 #:	091-WPA-11029

## 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: <u>EQT Production Company</u>			
Operator ID: <u>306686</u>			
Address: Street <u>115 Professional Place</u>			
City: <u>Bridgeport</u>	State: <u>WV</u>	Zip: <u>26330</u>	
Contact Name: <u>Phillip Keaton</u>	Contact Title: <u>Regional Manager Construction</u>		
Contact Phone: <u>304-348-7605</u>	Contact Email: <u>pkeaton@eqt.com</u>		

1109101323

### Section 2 – Engineering / Design Contractor Information

Design will be contracted <input checked="" type="checkbox"/> Designed in-house <input type="checkbox"/>	
Company Name: <u>Civil &amp; Environmental Consultants, Inc.</u>	
Address: Street <u>600 Marketplace Avenue, Suite 200</u>	
City: <u>Bridgeport</u>	State: <u>WV</u> Zip: <u>26330</u>
Contact Name: <u>Joseph D. Robinson</u>	Contact Title: <u>Project Manager</u>
Contact Phone: <u>304-848-7134</u>	Contact Email: <u>jrobinson@cecinc.com</u>
Certifying Professional Engineer: <u>Joseph D. Robinson</u>	
Professional Engineer Registration Number: <u>19756</u>	

Received  
Office of Oil & Gas  
AUG. 26 2015 Page 1 of 4

12/04/2015



Office of Oil and Gas

**Section 3 - Impoundment / Pit Information**

Type of Structure. Check one of two choices below:

Freshwater Impoundment

Waste Pit

Note: Any waste in a pit will make it a waste pit.

Name of Structure (Company Name :) FAW 60 Flowback Pit

County: Taylor District: Booths Creek

USGS 7.5' Quad Map Name: Fairmont West

Farm Name: Stephen Sandor Jr.

Pad Name: FAW 60

Surface Owner Name: Michael G. Morris, et ux

Physical Description of Location: North on I-79 and go 12.6 miles. Take exit 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 to the beginning of the proposed access road.

(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22, left on Buffalo Creek)

Watershed (nearest perennial): Unnamed Tributary of Husted Fork

Distance (Drainage Distance) to nearest perennial stream: 0.1 mi Husted Fork

Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxxx))

Latitude: 39.380881 Longitude (Use negative sign): -80.161399

UTM Coordinates : 572225.5279 E 4359380.0852 N

Access Road Coordinates (junction of state highway access)

Latitude: 39.381080 Longitude (Use negative sign): -80.159596

UTM Coordinates : 572380.5569 E 4359403.6738

*470910 N323*

**Approximate Dimensions**

Length: 370' Width: 109' Height: 15' berm; 13' capacity w/ 2' FB

Note: If irregularly shaped, give approximate dimensions of long axis.

Total Capacity – Provide all units of measure below:

Barrels: 40,555 Gallons: 1,703,410 Acre-Feet: 5.228

Capacity with 2' Freeboard – Provide all units of measure below:

Barrels: 30,396 Gallons: 1,276,721 Acre-Feet: 3.918

Incised volume:

Barrels: 30,396 Gallons: 1,276,721 Acre-Feet: 3.918

Net impounded volume: (Total volume less incised volume.)

Barrels: 10,159 Gallons: 426,689 Acre-Feet: 1.309

Anticipated Construction Start Date (estimation, non-binding): NOVEMBER 2015

Note: No construction may begin on Associated impoundment until WVDEP issues the drilling permit. At least 7 calendar days prior to confirmed construction start date, notify the Office of Oil & Gas, and the local Oil and Gas inspector of construction start date. Use form IMP-2, "Notification of Impoundment / Pit Construction."

Received  
Office of Oil & Gas

AUG 26 2015

Page 2 of 4

12/04/2015



**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 any additional comments concerning this project**

4709101323

Received  
Office of Oil & Gas

AUG. 26 2015

Page 3 of 4

12/04/2015





**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: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
*Victoria J. Romak*  
*Permitting Supervisor*  
*[Signature]*

Taken, subscribed and sworn to before me this, 20<sup>th</sup> Day of August 20 15  
Notary Public: Rebecca Heater  
My commission expires: 4-7-20

Notary Seal:



4709101323

**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 57<sup>th</sup> Street, SE  
Charleston WV 25304

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

Received  
Office of Oil & Gas  
AUG. 26 2015

12/04/2015



Office of Oil and Gas

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#:	091-WPA-0003D

## 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: <u>EQT Production Company</u>			
Operator ID: <u>306686</u>			
Address: Street <u>115 Professional Place</u>			
City: <u>Bridgeport</u>	State: <u>WV</u>	Zip: <u>26330</u>	
Contact Name: <u>Phillip Keaton</u>	Contact Title: <u>Regional Manager Construction</u>		
Contact Phone: <u>304-348-7605</u>	Contact Email: <u>pkeaton@eqt.com</u>		

### Section 2 – Engineering / Design Contractor Information

Design will be contracted <input checked="" type="checkbox"/> Designed in-house <input type="checkbox"/>			
Company Name: <u>Civil &amp; Environmental Consultants, Inc.</u>			
Address: Street <u>600 Marketplace Avenue, Suite 200</u>			
City: <u>Bridgeport</u>	State: <u>WV</u>	Zip: <u>26330</u>	
Contact Name: <u>Joseph D. Robinson</u>	Contact Title: <u>Project Manager</u>		
Contact Phone: <u>304-848-7134</u>	Contact Email: <u>jrobinson@cecinc.com</u>		
Certifying Professional Engineer: <u>Joseph D. Robinson</u>			
Professional Engineer Registration Number: <u>19756</u>			

**Received**  
**Office of Oil & Gas**  
Aug. 26 2015



Office of Oil and Gas

**Section 3 - Impoundment / Pit Information**Type of Structure. Check one of two choices below: Freshwater Impoundment Waste PitNote: Any waste in a pit will make it a waste pit.Name of Structure (Company Name :) FAW 60 Completion PitCounty: Taylor District: Booths CreekUSGS 7.5' Quad Map Name: Fairmont WestFarm Name: Stephen Sandor Jr.Pad Name: FAW 60Surface Owner Name: Michael G. Morris, et uxPhysical Description of Location: North on I-79 and go 12.6 miles. Take exit 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 to the beginning of the proposed access road.

(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22, left on Buffalo Creek)

Watershed (nearest perennial): Unnamed Tributary of Husted ForkDistance (Drainage Distance) to nearest perennial stream: 0.1 mi Husted Fork

Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxxx))

Latitude: 39.378937 Longitude (Use negative sign): -80.163733UTM Coordinates : 572026.4875 E 4359162.4917 N

Access Road Coordinates (junction of state highway access)

Latitude: 39.381080 Longitude (Use negative sign): -80.159596UTM Coordinates : 572380.5569 E 4359403.6738 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:

Barrels: 143,758 Gallons: 6,038,260 Acre-Feet: 18.531

Capacity with 2' Freeboard – Provide all units of measure below:

Barrels: 120,298 Gallons: 5,052,879 Acre-Feet: 15.507

Incised 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: 13.906Anticipated Construction Start Date (estimation, non-binding): NOVEMBER 2015Note: No construction may begin on **Associated** impoundment until WVDEP issues the drilling permit. At least 7 calendar days prior to confirmed construction start date, notify the Office of Oil & Gas, and the local Oil and Gas inspector of construction start date. Use form IMP-2, "Notification of Impoundment / Pit Construction."

Office of Oil &amp; Gas

AUG 20 2015

12/04/2015



**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 any additional comments concerning this project**

4709101323

Received  
Office of Oil & Gas

AUG. 26 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: \_\_\_\_\_  
Title: \_\_\_\_\_  
Signature: \_\_\_\_\_  
*Victoria J. Poyak*  
*Permitting Supervisor*  
*WV JH*

Taken, subscribed and sworn to before me this, 20<sup>th</sup> Day of August 20 15

Notary Public: Rebecca L Heater

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 57<sup>th</sup> Street, SE  
Charleston WV 25304

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

4709101323

Received  
Office of Oil & Gas  
AUG. 26 2015