

#### west virginia department of environmental protection

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

Friday, March 03, 2017 WELL WORK PERMIT Horizontal 6A / Horizontal 6A Well - 1

EQT PRODUCTION COMPANY (A) 120 PROFESSIONAL PLACE BUILDING II BRIDGEPORT, WV 26330

Re: Permit approval for 516212

47-085-10259-00-00

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

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

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

James A. Martin Chief

Operator's Well Number: 516212 Farm Name: SMITH, CHRISTA J.

U.S. WELL NUMBER: 47-085-10259-00-00

Horizontal 6A / Horizontal 6A Well - 1

Date Issued: 3/3/2017

Promoting a healthy environment.

API Number: 85-10259

#### **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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

#### **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. The operator shall install noise barriers during drilling and completion activities.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 9. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 10. 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.
- 11. During the casing and cementing process, in the event cement does not return to the surface, the oil and/gas/2017 inspector shall be notified within 24 hours.

API Number: 85-10259

### **PERMIT CONDITIONS**

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



#### west virginia department of environmental protection

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

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

TO: EQT Production Company 115 Professional Place P.O. Box 280 Bridgeport WV, 26330 DATE: March 2, 2017 ORDER NO.: 2017-W-2

#### **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 280, Bridgeport, West Virginia.
- 3. On October 2, 2015, EQT submitted well work permit applications identified as API#s 47-085-10258, 47-085-10259, 47-085-10260, 47-085-10261, 47-085-10262, 47-085-10263 and 47-085-10264. The proposed wells are to be located on the PUL 97 Pad in Clay District of Ritchie County, West Virginia.
- 4. On October 2, 2015, EQT requested a waiver for Wetland WL-1 and Wetland WL-3 outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API# 47-085-10258, 47-085-10259, 47-085-10260, 47-085-10261,47-085-10262,47-085-10263 and 47-085-10264.

#### **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**

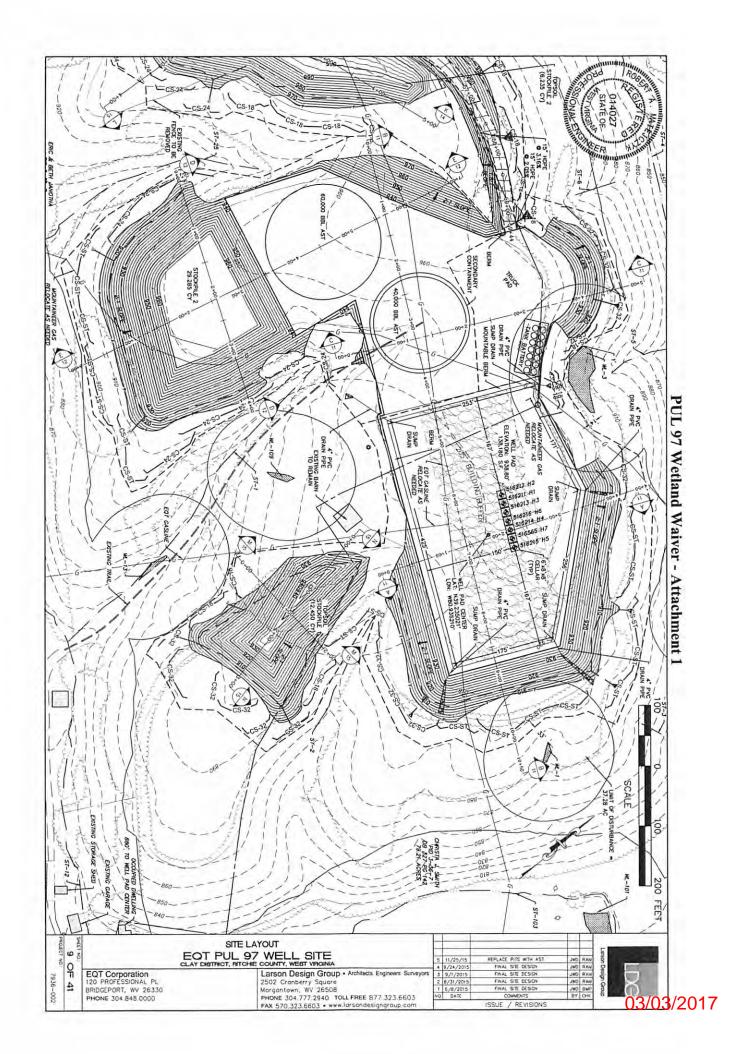
West Virginia Code §22-6A-12(b) requires, in part, that "[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland WL-1 and Wetland WL-3 from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-085-10258, 47-085-10259, 47-085-10260, 47-085-10261, 47-085-10262, 47-085-10263 and 47-085-10264. The Office of Oil and Gas hereby **ORDERS** that EQT shall meet the following site construction and operational requirements for the PUL 97 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. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. Wetland WL-1 shall have a compost sock sediment trap (three socks stacked in pyramidal form) that will prevent any sediment from reaching the wetland or stream from the well pad and adjacent tank pad.
- d. Wetland WL-3 shall have both a layer of 32" compost filter sock and a layer of 18" compost filter sock that will prevent any sediment from reaching the wetland or stream from the well pad and adjacent tank pad.
- e. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- f. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- g. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- h. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- i. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- j. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- k. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies:
- l. All records from inspections shall be maintained on site for the life of the project and be available upon request.

#### IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

MES A. MARTIN, CHIEF



WW-6B (04/15)

## 4708510259

API NO. 47-85 -	10259
OPERATOR WEL	
Well Pad Name	PUL97

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

1) Well Operator: EQT Produ	ction Company	306686	Ritchie	Clay	Pullman
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: 51	6212	Well Pac	d Name: PUL	.97	
3) Farm Name/Surface Owner:	Christa J. Smith	Public Roa	d Access: ST	RT 74	
		evation, proposed			
5) Well Type (a) Gas × Other	Oil	Und	erground Stora	age	
(b)If Gas Sha	llow X	Deep			Doff Doff
6) Existing Pad: Yes or No No					Michael 1.10
7) Proposed Target Formation(s) Marcellus, 6203, 50, 2190, Top	, Depth(s), Antici of Marcellus 6183	pated Thickness a	and Expected I	Pressure(s):	Michael Soft
8) Proposed Total Vertical Deptl	n: 6203				
9) Formation at Total Vertical D	epth: Marcellus	/ a			
10) Proposed Total Measured De	epth: 11669				
11) Proposed Horizontal Leg Le	ngth: 5030				
12) Approximate Fresh Water St	rata Depths:	46, 74, 177, 273	3		
<ul><li>13) Method to Determine Fresh</li><li>14) Approximate Saltwater Dept</li></ul>		y offset wells			
15) Approximate Coal Seam Dep	oths: 248, 550				
16) Approximate Depth to Possi	ble Void (coal min	ne, karst, other):	None reporte	d	
17) Does Proposed well location directly overlying or adjacent to		ns Yes	N	o <u>x</u>	
(a) If Yes, provide Mine Info:	Name:				
	Depth:				
	Seam:				
	Owner:				

WW-6B (04/15)

API NO. 47-85 -	
OPERATOR WELL NO. 516212	
Well Pad Name: PUL97	_

18)

#### CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well	CEMENT: Fill-up	
Conductor	20	New	A-500	78.6	40	(ft) 40	(Cu. Ft.)/CTS	
Fresh Water	13 3/8	New	J-55	54.5	605		60 ft^3/CTS	
Coal	_	~	- 00	34.5	605	605	581 ft^3/CTS	
Intermediate	9 5/8	New	P-110	40	-	-		
Production			100000000000000000000000000000000000000		5052	5052	1997 ft^3/CTS	
	5 1/2	New	P-110	20	11669	11669	500' above top producing zone	
Tubing	2 3/8		J-55	4.6			May not be run, if set 100' from TD.	
Liners							, and see the field fig.	

TYPE Wall Anticipated Cement Wellbore Burst Pressure Size (in) Cement Thickness Max. Internal Diameter (in) Yield (psi) Type (in) Pressure (psi) (cu. ft./k) Conductor 20 26 .375 18 Construction 1.18 Fresh Water 13 3/8 17 1/2 .38 2730 2184 See Variance 1.19 Coal Intermediate 9 5/8. 12 3/8 .395 7900 See Variance 6320 1.19 Production 2016-20 5 1/2 8 1/2 .361 12640 10112 Class H 1.07/1.86 **Tubing** Liners

#### **PACKERS**

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

WŊ-6B	
(10/14)	

### 4708510259

API NO. 47-85 -	10259
<b>OPERATOR WELL</b>	NO. 516212
Well Pad Name:	PUL97

9) Describe proposed well work, including	the drilling and plugging back of any pilot hole:
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Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 5236'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

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 be approximately 10000 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): 37.28
- 22) Area to be disturbed for well pad only, less access road (acres): 14.82
- 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 solid body cent spaced every joint from production casing shoe to KOP

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

Conductor: Class A no additives
Surface (Type 1 Cement): 0-3% Calcium Chloride Used to speed the setting of cement slumies, .25% Flake Loss Circulation Material (LCM) is used to combat the loss of the cement slumy to a thief zone.
Intermediate (Type 1 Cement): 0-3% Catcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slumies 0.25% flake Loss Circulation Material (LCM) is used to combat Production;
Production:

Lead (Type H Cement): 0.2% CD-20 (dispersant makes coment easier to mix) .15% SuperFL-300 (fluid loss/lengthens thickening time) .15% SEC-10 (fluid loss) 50 50 POZ (extender)
Tail (Type H Cement): 0.2% Super CR-1 (Retarder) Lengthens thickening time .3% Super FL-200 (fluid loss) .2% SEC-10 (Fluid loss) .2% SuperFL-350 (fluid loss) Reduces amount of water lost to formation 60 % Calculm Carbonate. Acid solubility.

#### 25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface. Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.

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.

Proposed Wel	6,250	6 000	5 750	5 500*	5,250	5,000	4,750	4,500	4,250	4,000	3.750	3,500	3,250'	3,000'	2,750	2,500	2,250'	2,000"	1,750	1,500	1,250'	1,000	750'	500'	250	0'	TVD Depth	- 1	8	Well 516212(PUL97H2)	
Proposed Well Work:	Target Inside Marcellus Marcellus Bettom	Hamilton	Genesed	Middleses	Sanyen	Int. eng pr	***************************************	Benson	Hitoy				Speechoy	Warran	Bayard	Gordon	First See	Weir	Bill Lune			Egype Fleet Flock		Sago Fresh Water		Control of the Contro	Formation Tops (TVD)	y	West Virgina	оптадна)	
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	Production Casing					Intermediate																		Surface	Conductor	1904	Tuna				
	asing 5 1/2																														
						9 5/8																		13 3/8		(inches)					
	20 F					40																		54.5	78.6						
	P-110					P-110																		J-55	A-500		Grade				
	0.361					0.395																		0.38	0.312		Casing Wall Thickness				
	11669					5052																		605	40	Deput free	Donth (feet)				
	500' above top Producing Zone Displacement					Surface																		Surface	Surface						
	ing Zone																														

03/03/20/271/17



## 4708510259

west virginia department of environmental protection

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

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

March 18, 2014

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

Re: Cement Variance Request

Dear Sir or Madam,

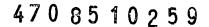
This agency is approving a variance request for the cement blend listed below to be used on surface and coal protection strings for the drilling of oil and gas wells in the state of West Virginia. The variance cannot be used without requesting its use on a permit application and approval by this agency:

Type I (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.

Environmental Resources Specialist / Permitting

Promoting a healthy environment.





west virginia department of environmental protection

Office of Oll and Gas 601 57th Street, SE Charleston, WV 25304 (304) 928-0450 (304) 928-0452 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	Ś		
REGULATIONS OF CEMENTING OIL	j		
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 easing of oil and gas wells.

#### FINDINGS OF FACT

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

Promoting a healthy environment.

#### 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



#### west virginia department of environmental protection

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

Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.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 LEGISLATIVE RULE 35CSR8,	)	ORDER NO.	2016-20
SECTION 9.2.H.2. RELATING TO THE CEMENTING	)		
OF OIL AND GAS WELLS	)		

#### REPORT OF THE OFFICE

In response to industry requests, the West Virginia Department of Environmental Protection, Office of Oil and Gas, has reviewed the proposed use of the Lafarge OneCem cement blend (OneCem) on the coal, intermediate and production casing strings.

#### FINDINGS OF FACT

- 1. On July 24, 2015, EQT Production Company (EQT) submitted a variance request for the use of OneCem, from Legislative Rule 35CSR8, Section 9.2.h.2.
- Laboratory analysis submitted by EQT on July 24, 2015, indicate OneCem meets or exceeds all other specific requirements found in Legislative Rule 35CSR8, Section 9.2.h.
- On May 13, 2016, the Office of Oil and Gas provided public notice of acceptance of
  public comments on the variance request. During the 30-day public comment period, no
  comments were received.

#### CONCLUSIONS OF LAW

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

Pursuant to Legislative Rule 35CSR8, Section 14, the Chief of the Office of Oil and Gas may grant a variance from any requirement of this rule.

#### ORDER

It is ordered that the Lafarge OneCem cement blend, referenced in MSDS Version 1.0 issued on April 21, 2014, is approved for use on the coal, intermediate and production casing strings for well drilling subject to the provisions of Legislative Rule 35CSR8. This approval does not apply to cementing of freshwater casing strings.

Dated this, the 20th day of July, 2016.

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

## 470 85 10 2 5 9

**EQT Production** 

**Hydraulic Fracturing Monitoring Plan** 

Pad ID: PUL97

Ritchie County, WV

1/9/17

## 470 85 10 259

#### **Purpose**

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Ritchie County, WV prior to hydraulic fracturing at the following EQT wells on PUL97 pad: 516211, 516212, 516213, 516214, 516215, 516216, 516565.

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation. A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the hydraulic fracturing, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

#### 1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 1,500 feet of this pad and the lateral sections that are known or could reasonably be expected to be within range of the fracture propagation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

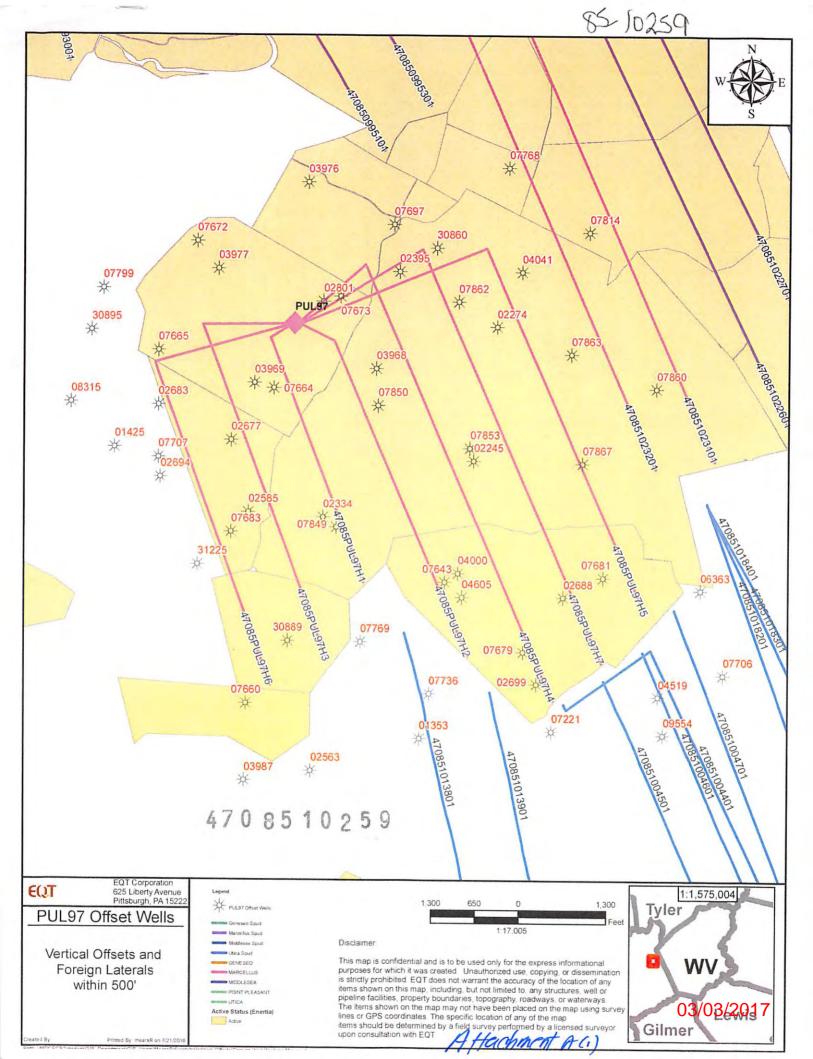
EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

- 1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
- 2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
- 3. Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT
- 4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

#### 2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.



470850245 GAS   9/30/1952   01425   GLIUDIEY   80.9469   39.100   99.000   1.003.000   1.002.0000   4708502274   GAS   1/22/1961   00WER HURON SHALE   02274   F. HOIDGE   80.9214   39.1249   87.000   1.932.0000   2.003.000   4708502384   GAS   5/10/1961   02393   F. HOIDGE   80.9214   39.1249   87.000   1.932.0000   2.003.000   4708502385   GAS-P   8/11/1961   02393   F. HOIDGE   80.9214   39.1249   87.000   1.952.0000   2.003.000   4708502385   DAY   8/31/1962   02593   F. HOIDGE   80.9214   39.1247   98.0000   1.005.0000   1.005.0000   1.964	Distance form Pad to	TD	SS Depth	DatumEleva	TargetFm	Latitude	Longitude	Operator	Permit	FmatTD		WellStatus	WellID	1
4708502245 GAS	00 6368.67	2102.0000	-998.0000	1104.0000		39.2183	-80.9289	GUS MILLER	01353		10/16/1951			
\$\frac{4}{708502245} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	00 3229.28	2022.0000	-1029.0000	993.0000		39.2300	-80.9449	G L DUDLEY	01425					
4708502334 GAS			-896.0000	1149.0000		39.2295	-80.9261	T F HODGE	02245					- N - N
4708502384 GAS   5/10/1961		2404.0000	-1532.0000	872.0000		39.2349	-80.9249	T F HODGE	02274	LOWER HURON SHALE	1/22/1961			
4708502395 GAS-P 8/11/1961 02395 TF HODGE 80.9300 39.2371 998.0000 -1056.0000 150.0000 170.00				838.0000		39.2272	-80.9340	T F HODGE	02334		5/10/1961	GAS	4708502334	2
4708502585 BPV 8/31/1962 02563 REBELHILLOIL& GAS 80,9346 39.2170 1010.0000 -1005.0000 2015.0000			-1056.0000	908.0000		39.2371	-80.9300	T F HODGE	02395		8/11/1961			
4708502585 GAS 10/16/1962 02585 01.STATES SALES 80.9379 39.2274 828.0000 -1048.0000 1868.00000 4708502683 GAS 2/15/1963 02689 PETROLEUM DRILLING 80.9348 39.2317 890.0000 -1048.0000 1869.00000 4708502683 GAS 3/2/1963 02689 PETROLEUM DRILLING 80.9426 39.2317 890.0000 -1015.0000 1905.0000 4708502694 GAS 4/19/1963 02694 PETROLEUM DRILLING 80.9426 39.2317 890.0000 -1015.0000 1905.0000 4708502699 GAS 4/19/1963 02694 PETROLEUM DRILLING 80.9426 39.2288 960.0000 -1027.0000 1027.0000 1905.0000 4708502699 GAS 5/1/1963 02699 01LSTATES SALES 80.9228 39.2205 953.0000 -1027.0000 1027.0000 1207.			-1005.0000	1010.0000		39.2170	-80.9346	REBEL HILL OIL & GAS	02563		8/31/1962			-
4708502677 GAS   1/6/1963   02677 PETROLEMD RILLING   8.0.9428   39.2107   810.0000   1659.00000   4708502688   GAS   2/15/1963   02683 PETROLEMD RILLING   8.0.9426   39.2117   890.0000   -1015.0000   905.00000   4708502689   GAS   47/9/1963   02694				828.0000		39.2274	-80.9379	OIL STATES SALES	02585		10/16/1962			70.
4708502683 GAS			-1048.0000	821.0000		39.2303	-80.9388	PETROLEUM DRILLING	02677		1/6/1963	GAS	4708502677	2
4708502688 GAS 3/Z/1963 02688 OIL STATES SALES 8.0 921A 39.2240 953.0000 -1101.0000 2054.0000 4708502699 GAS 4/19/1963 02694 PTEROLEUM BRILLING 8.0 9345 39.2288 960.0000 1027.0000 1987.0000 4708502801 GAS 10/3/1963 02801 MOUNTAIN STATE 8.0 9340 39.2359 \$20.0000 -1020.0000 1987.0000 4708503968 UNK 3/20/1916 03968 MOUNTAIN STATE 8.0 9340 39.2359 \$20.0000 -1020.0000 100930.0000 4708503969 PRA 10/14/1917 03968 MOUNTAIN STOLD EQU 8.0 9313 39.2332 951.0000 99999.0000 100930.0000 4708503967 PRA 10/14/1917 03976 EUITRANS 8.0 9348 39.2407 775.0000 99999.0000 100930.0000 4708503977 GAS 3/8/1918 03977 FC 8.0 93999.0001 009774.0000 4708503977 GAS 3/8/1918 03977 FC 8.0 93999.0001 009774.0000 99999.0000 100930.0000 4708503977 GAS 3/8/1918 03977 FC 8.0 93999.0001 00930.0000 4708503977 GAS 3/8/1918 03977 FC 8.0 9399 30.2572 905.0000 9999.0000 100930.0000 4708503987 PAA 10/72/1919 0398 FC 90UITRANS 8.0 9381 39.2166 947.0000 99999.0000 100930.0000 4708504041 GAS 10/5/1978 04000 FC 8.0 9.09 30.250 1138.0000 99999.0000 101137.0000 4708504041 GAS 10/5/1978 04000 FC 8.0 9.09 30.250 1138.0000 99999.0000 101137.0000 4708504605 UNK 10/17/1984 0563 BIG A 01L 80.9346 39.2240 1140.0000 99999.0000 101137.0000 4708504630 UNK 10/17/1984 0563 BIG A 01L 80.9346 39.2240 1140.0000 99999.0000 101137.0000 4708505636 OAS 7/4/1987 RHINESTREET SHALE 0/543 ECA 8.0 940 39.2243 89.0000 4351.0000 5906.0000 4708505646 GAS 7/4/1987 RHINESTREET SHALE 0/543 ECA 8.0 940 39.2246 1097.0000 4523.0000 5303.0000 4708505646 GAS 7/4/1987 0/566 ECA 8.0 940 39.2247 91.0000 4523.0000 5203.0000 470850566 GAS 7/4/1987 0/566 ECA 8.0 940 39.2347 92.2000 4291.0000 5203.0000 47085056767 GAS 11/2/1988 0/567 ECA 8.0 940 39.2347 92.2000 4291.0000 5203.0000 47085056767 GAS 11/2/1988 0/567 ECA 8.0 940 39.2348 1015.0000 4187.0000 5200.0000 47085056767 GAS 11/2/1988 0/568 ECA 8.0 940 39.2348 1015.0000 4278.0000 5338.0000 47085056767 GAS 11/2/1988 0/568 ECA 8.0 940 39.2348 1015.0000 4278.0000 5330.0000 4708505767 GAS 11/2/1988 0/568 ECA 8.0 940 39.2349 39.2418 1063.0000 4278.0000 53						39.2317	-80.9426	PETROLEUM DRILLING	02683		2/15/1963			,
4708502694 GAS						39.2240	-80.9214	OIL STATES SALES	02688		3/2/1963	GAS	4708502688	
4708502699 GAS 5/1/1963 0,269 OIL STATES SALES 80.9228 39.2205 953.0000 -1034.0000 1987.0000 4708503968 UNK 3/20/1916 0,3968 MOUNTAIN ST (OLD EQU 80.9312 39.2332 35.0000 -1039.0000 10930.0000 4708503969 UNK 6/9/1916 0,3969 MOUNTAIN ST (OLD EQU 80.9312 39.2332 35.0000 -39999.0000 100930.0000 4708503976 P&A 10/14/1917 0,3976 EQUITRANS 80.9318 39.2366 39.3000 -39999.0000 100930.0000 4708503977 GAS 3/8/1918 0,3977 PC 80.9385 89.2372 905.0000 -993.0000 10930.0000 4708503977 F&A 10/14/1919 0,3987 EQUITRANS 80.9381 39.2166 947.0000 -9999.0000 100747.0000 4708504041 GAS 10/21/1919 0,3987 EQUITRANS 80.9381 39.2166 947.0000 -9999.0000 100946.0000 FPC 80.9369 39.2250 1138.0000 -9999.0000 100747.0000 4708504041 GAS 10/51/1978 0,40000 EPC 80.9369 39.2250 1138.0000 -9999.0000 101737.0000 4708504041 GAS 10/51/1978 0,40000 40401 MURVIN OIL 80.9326 39.2371 950.0000 -1556.0000 2506.0000 4708504041 GAS 10/51/1978 0,40000 40405 PETROLEUM DRILLING 80.9366 39.2371 950.0000 -1556.0000 2506.0000 470850461 GAS 10/17/1984 0,536 BIG A OIL 80.9326 39.2243 890.0000 -1556.0000 -1556.0000 4708507636 GAS 7/24/1987 RHINESTREET SHALE 0638 BIG A OIL 80.9326 39.2246 1190.0000 -4708507636 GAS 7/24/1987 GAS 260.0000 4605 PETROLEUM DRILLING 80.9367 39.2240 1140.0000 -99999.0000 101139.0000 4708507636 GAS 8/51/1985 07221 STALNAKER ENERGY 80.9326 39.2346 1097.0000 -4220.0000 5181.0000 4708507636 GAS 8/17/1987 07660 ECA 80.9330 39.2197 961.0000 -4220.0000 5213.0000 4708507636 GAS 8/17/1987 07660 ECA 80.9330 39.2197 961.0000 -4220.0000 5210.0000 4708507679 GAS 8/17/1987 07661 ECA 80.9346 39.2339 1043.0000 -4220.0000 5210.0000 4708507679 GAS 9/15/1987 07667 ECA 80.9346 39.2339 1043.0000 -4220.0000 5338.0000 4708507679 GAS 9/15/1987 07667 ECA 80.9346 39.2341 1052.0000 -4220.0000 5338.0000 4708507679 GAS 9/15/1988 07672 ECA 80.9346 39.2341 1052.0000 -4220.0000 5338.0000 4708507679 GAS 9/15/1988 07672 ECA 80.9346 39.2341 1052.0000 -4220.0000 5338.0000 -5000000 4708507679 GAS 9/15/1988 07672 ECA 80.9340 39.2209 1083.0000 -4220.0000 50300.0000 -500000000 -500						39.2288	-80.9425	PETROLEUM DRILLING	02694		4/19/1963	GAS	4708502694	
4708502861 GAS 10/3/1963 02801 MOUNTAIN STATE 8.0,9340 39.2359 820.0000 -1020.0000 1840.0000 4708503969 UNK 3/20/1916 03968 MOUNTAIN ST (OLD EQU 8.0,9312 39.2332 951.0000 -9999.0000 100930.0000 4708503976 PAA 10/14/1917 03976 EQUITRANS 8.0,9348 39.2407 775.0000 -99999.0000 100930.0000 4708503976 PAA 10/14/1917 03976 EQUITRANS 8.0,9348 39.2407 775.0000 -99999.0000 100774.0000 4708503987 PAA 10/22/1919 03987 EPC 8.0,9359 39.2372 905.0000 -99999.0000 100774.0000 4708503987 PAA 10/22/1919 03987 EPC 8.0,9369 39.2256 138.0000 -99999.0000 100966.0000 4708504001 SWD-P 6/3/1926 04000 EPC 8.0,9269 39.2256 138.0000 -99999.0000 100966.0000 470850401 GAS 10/5/1978 04041 MURVIN OIL 80.9236 39.2371 950.0000 -1556.0000 5906.0000 470850401 GAS 10/5/1978 04041 MURVIN OIL 80.9236 39.2250 138.0000 -99999.0000 10137.0000 4708506363 08.6 12/7/1984 06363 BIG A OIL 8.0,946 39.2200 10666.0000 -4840.0000 5906.0000 4708506363 08.6 12/7/1984 06363 BIG A OIL 8.0,946 39.2200 10666.0000 -4840.0000 5906.0000 4708507221 GAS 8/5/1985 6722 4724/1987 RHINESTREET SHALE 07643 ECA 8.0,9142 39.2243 880.0000 -4313.0000 5903.0000 4708507643 GAS 5/28/1987 RHINESTREET SHALE 07643 ECA 8.0,9142 39.2243 880.0000 -4313.0000 5903.0000 4708507663 GAS 7/24/1987 07660 ECA 8.0,9380 39.2187 961.0000 -4253.0000 5181.0000 4708507665 GAS 8/2/1987 07666 ECA 8.0,9380 39.2187 961.0000 -4253.0000 5181.0000 4708507665 GAS 8/2/1987 07669 ECA 8.0,9380 39.2383 1015.0000 -4270.0000 5133.0000 4708507665 GAS 8/2/1987 07669 ECA 8.0,9380 39.2383 1015.0000 -4270.0000 5202.0000 4708507679 GAS 9/2/1987 07679 ECA 8.0,9380 39.2390 7870.0000 4270.0000 5202.0000 470850767 GAS 10/31/1988 07681 ECA 8.0,9380 39.2383 1015.0000 -4270.0000 5202.0000 470850767 GAS 10/31/1988 07681 ECA 8.0,9380 39.2383 1015.0000 -4270.0000 5202.0000 470850767 GAS 10/31/1988 07679 ECA 8.0,9380 39.2390 7870.0000 4226.0000 5200.0000 470850767 GAS 10/31/1988 07679 ECA 8.0,9380 39.2390 7870.0000 4226.0000 5200.0000 470850770 GAS 8/19988 07707 ECA 8.0,9380 39.2390 7870.0000 4226.0000 5200.0000 470850770 GAS 8/19988 0						39.2205	-80.9228	OIL STATES SALES	02699		5/1/1963	GAS	4708502699	
4708503968 UNK	The state of the s							MOUNTAIN STATE	02801		10/3/1963	GAS	4708502801	
4708503969 UNK 6/9/1916 03969 MOUNTAIN ST (OLD EQU 48.9376 39.2326 931.0000 9999.0000 100930.0000 4708503977 PRA 10/14/1917 03976 EQUITRANS 8.0.9348 39.2407 775.0000 9999.0000 100974.0000 4708503987 PRA 10/22/1919 03987 EQUITRANS 80.9381 39.2166 9470.000 9999.0000 100946.0000 470850400 SWD-P 6/3/1926 04000 PPC 80.9269 39.2250 1138.000 9999.0000 100946.0000 470850401 GAS 10/5/1978 04001 PROSPAGE 10/14/1980 RINESTREET SHALE 04519 HAUGHT 80.936 39.2371 950.0000 -3999.0000 101137.0000 4708504519 GAS 2/24/1980 RINESTREET SHALE 04519 HAUGHT 80.936 39.2240 1166.0000 4840.0000 9999.0000 101139.0000 4708506363 0&G 12/7/1984 06363 BIG A OL 80.9381 39.246 1140.0000 9999.0000 101139.0000 4708506363 0&G 12/7/1984 06363 BIG A OL 80.9381 39.246 1140.0000 9999.0000 101139.0000 4708506363 0&G 12/7/1984 60563 BIG A OL 80.9380 39.2243 890.0000 4333.0000 5203.0000 4708507643 GAS 5/28/1987 RHINESTREET SHALE 0/643 ECA 80.9380 39.2197 961.0000 4523.0000 5520.0000 4708507643 GAS 5/28/1987 RHINESTREET SHALE 0/643 ECA 80.9380 39.2197 961.0000 4523.0000 5203.0000 4708507666 GAS 8/12/1987 07664 EAE 80.9366 39.2339 1043.0000 4203.0000 5246.0000 4708507665 GAS 8/22/1987 07664 EAE 80.9366 39.2339 1043.0000 4203.0000 5246.0000 470850763 GAS 9/25/1987 07665 ECA 80.9366 39.2339 1043.0000 4203.0000 5246.0000 470850763 GAS 9/25/1987 07665 ECA 80.9366 39.2339 1043.0000 4203.0000 5246.0000 470850763 GAS 9/25/1987 07663 ECA 80.9368 39.2383 1015.0000 4203.0000 5246.0000 4708507663 GAS 9/25/1987 07663 ECA 80.9368 39.2383 1015.0000 4203.0000 5246.0000 4708507663 GAS 9/25/1987 07668 ECA 80.9368 39.2390 780.000 4203.0000 5091.0000 4708507663 GAS 9/25/1987 07668 ECA 80.9368 39.2318 1052.0000 4228.0000 5091.0000 5091.0000 4708507663 GAS 9/25/1987 07668 ECA 80.9368 39.2318 1052.0000 4228.0000 5093.0000 6766.0000											3/20/1916	UNK	4708503968	
4708503976 P&A 10/14/1917 03976 EQUITRANS 80.9381 39.2407 775.0000 99999.0000 100774.0000 4708503977 GAS 3/8/1918 03977 FPC 80.9395 39.2372 905.0000 -993.0000 10988.0000 4708503987 P&A 10/22/1919 03987 EQUITRANS 80.9381 39.2166 947.0000 99999.0000 100946.0000 4708504000 \$WD-P 6/3/1926 04000 FPC 80.9269 39.2250 1138.0000 -99399.000 100946.0000 4708504001 GAS 10/5/1978 04001 MURVIN OIL 80.926 39.2371 950.0000 -1556.0000 2506.0000 4708504051 GAS 2/24/1988 RHINESTREET SHALE 04519 HAUGHIT 80.9164 39.2200 11066.0000 440.0000 5906.0000 4708504653 0&G 12/7/1984 06363 BIG A OIL 80.9267 39.2240 1140.0000 -99999.000 101139.0000 4708507653 0&G 12/7/1984 06363 BIG A OIL 80.9267 39.2240 1140.0000 -99999.000 101139.0000 4708507656 0&G 5/28/1987 RHINESTREET SHALE 07643 ECA 80.9267 39.2246 1097.0000 -4523.0000 5203.0000 4708507666 GAS 7/24/1987 RHINESTREET SHALE 07643 ECA 80.9360 39.2374 992.0000 -4708507666 GAS 8/17/1987 07666 ECA 80.9380 39.2197 961.0000 -4220.0000 5181.0000 4708507665 GAS 8/22/1987 07660 ECA 80.9380 39.2394 992.0000 -4291.0000 5213.0000 4708507667 GAS 8/22/1987 07668 ECA 80.9366 39.2334 992.000 -4291.0000 5213.0000 4708507667 GAS 11/23/1988 076672 ECA 80.9360 39.2383 1015.0000 -4187.0000 5202.0000 4708507668 GAS 9/15/1987 07663 ECA 80.9363 39.2361 894.0000 -4187.0000 5202.0000 4708507668 GAS 9/20/1987 07668 ECA 80.9363 39.2361 894.0000 -4197.0000 5202.0000 4708507678 GAS 9/20/1987 07668 ECA 80.9313 39.2361 894.0000 -4197.0000 5091.0000 4708507668 GAS 9/20/1987 07668 ECA 80.9313 39.2361 894.0000 -4780.0000 5330.0000 4708507679 GAS 9/20/1987 07668 ECA 80.9313 39.2361 894.0000 -4780.0000 5330.0000 4708507679 GAS 8/1988 077679 ECA 80.9313 39.2361 894.0000 -4780.0000 5330.0000 4708507679 GAS 8/1988 07768 ECA 80.9333 39.2390 7870.000 -4286.0000 5330.0000 4708507679 GAS 8/1988 07768 ECA 80.9333 39.2390 7870.000 -4286.0000 5330.0000 4708507679 GAS 8/1988 07768 ECA 80.9333 39.2390 7870.000 -4286.0000 5330.0000 4708507766 GAS 8/1988 07768 ECA 80.9333 39.2390 7870.000 -4286.0000 5330.0000 4708507766 GAS 8/1988 07768 EC											6/9/1916	UNK	4708503969	4
4708503987 FAS 3/8/1918 03977 EPC -80.9395 39.2372 905.0000 993.0000 1898.0000 4708503987 P&A 10/22/1919 03987 EQUITRANS 80.9381 39.2166 947.0000 99999.0000 100946.0000 14708504000 5WD-P 6/3/1926 04000 EPC 80.9269 39.250 1138.0000 99999.0000 10137.0000 14708504014 GAS 10/5/1978 04041 MURVIN OIL 80.9236 39.2371 950.0000 -1556.0000 2506.0000 14708504519 GAS 2/24/1980 RINESTREET SHALE 04519 HAUGHT 80.9164 39.2200 1066.0000 -4840.0000 5906.0000 4708504605 UNK 10/17/1980 04059 PETROLEUM DRILLING 80.9267 39.2240 1140.0000 99999.0000 10139.0000 14708507633 08.G 12/7/1984 06363 BIG A OIL 80.9124 39.2243 890.0000 -4313.0000 5906.0000 4708507643 GAS 5/28/1987 RHINESTREET SHALE 04519 HAUGHT 80.9124 39.2243 890.0000 -4313.0000 5203.0000 4708507643 GAS 5/28/1987 RHINESTREET SHALE 04634 ECA 80.9126 39.2246 1097.0000 -4523.0000 5335.0000 4708507643 GAS 5/28/1987 RHINESTREET SHALE 04634 ECA 80.9266 39.2344 922.000 -4252.0000 5315.0000 4708507665 GAS 8/27/1987 07666 ECA 80.9380 39.2197 961.0000 -4220.0000 5181.0000 4708507665 GAS 8/27/1987 07666 ECA 80.9366 39.2334 922.000 -4291.0000 5245.0000 4708507665 GAS 8/27/1987 07667 ECA 80.9406 39.2383 1015.0000 4203.0000 5246.0000 4708507667 GAS 11/23/1988 07672 ECA 80.9406 39.2383 1015.0000 4278.0000 5338.0000 4708507679 GAS 11/23/1988 07672 ECA 80.9406 39.2383 1015.0000 4278.0000 5338.0000 4708507679 GAS 10/31/1988 07661 ECA 80.9331 39.2161 894.000 47197.0000 5091.0000 4708507697 GAS 10/31/1988 07661 ECA 80.9331 39.2266 954.0000 47278.0000 5338.0000 4708507697 GAS 10/31/1988 07661 ECA 80.9331 39.2266 954.0000 47278.0000 5338.0000 4708507697 GAS 10/31/1988 07661 ECA 80.9331 39.2201 1083.0000 4278.0000 5338.0000 4708507769 GAS 10/31/1988 07661 ECA 80.9331 39.2201 1083.0000 4278.0000 5330.0000 4708507769 GAS 10/31/1988 07661 ECA 80.9331 39.2201 1083.0000 4278.0000 5085.0000 4708507769 GAS 10/31/1988 07706 ECA 80.9331 39.2201 1083.0000 4278.0000 5370.0000 4708507769 GAS 8/19/1988 07706 ECA 80.9331 39.2201 1083.0000 4278.0000 5085.0000 4708507769 GAS 8/19/1988 07706 ECA 80.9351 39.2201 10											10/14/1917	P&A	4708503976	- 4
4708503887 P&A 10/2Z/1919 03987 EQUITANNS 80.9381 39.2166 947.000 9999.000 100946.0000 4708504000 SWD-P 6/3Z/1926 04000 EPC 80.9369 39.2250 1138.0000 9999.0000 101137.0000 4708504519 GAS 10/5Z/1978 04041 MURVIN Oil 80.9336 39.2371 950.0000 -1556.0000 2506.0000 4708504519 GAS 2/24Z/1980 RHINESTREET SHALE 04519 HAUGHT 80.9164 39.2200 1066.0000 4840.0000 5906.0000 4708506363 0&G 12Z/7/1984 06363 BIG AOIL 80.9164 39.2240 1140.0000 99999.0000 101139.0000 4708507634 GAS 5/28Z/1987 RHINESTREET SHALE 07643 ECA 80.9267 39.2246 1097.0000 4357.0000 5335.0000 4708507660 GAS 7/2Z/1987 07666 ECA 80.9363 39.2179 96.1000 4252.0000 4251.0000 5200.0000 4708507665 GAS 8/Z/1987 07666 ECA 80.9363 39.2197 96.1000 4220.0000 51810.0000 4708507665 GAS 8/Z/1988 07672 ECA 80.9466 39.2339 1043.0000 4203.0000 5213.0000 4708507673 GAS 11/23Z/1988 07672 ECA 80.9363 39.234 922.000 4291.0000 5213.0000 4708507673 GAS 9/20Z/1987 07669 ECA 80.9383 39.234 922.000 4291.0000 5213.0000 4708507673 GAS 9/20Z/1987 07669 ECA 80.9363 39.2339 1043.0000 4203.0000 5202.0000 4708507673 GAS 9/20Z/1987 07669 ECA 80.9363 39.2339 1043.0000 4203.0000 5202.0000 4708507673 GAS 9/2D/1987 07679 ECA 80.9363 39.2381 1015.0000 4187.0000 5291.0000 4708507681 GAS 10/3Z/1988 07672 ECA 80.9363 39.2381 1015.0000 4187.0000 5291.0000 4708507679 GAS 9/2D/1987 07681 ECA 80.9383 39.2218 1052.0000 4286.0000 5338.0000 4708507679 GAS 10/3Z/1988 07679 ECA 80.9383 39.2248 1063.0000 4278.0000 5338.0000 4708507679 GAS 10/3Z/1988 07679 ECA 80.9383 39.2361 894.0000 4278.0000 5338.0000 4708507679 GAS 10/3Z/1988 07679 ECA 80.9383 39.2266 954.0000 4278.0000 5338.0000 4708507769 GAS 10/3Z/1988 07676 ECA 80.9383 39.2266 954.0000 4278.0000 5308.0000 4708507769 GAS 8/2Z/1988 07769 ECA 80.9383 39.2266 954.0000 4280.0000 5085.0000 4708507769 GAS 8/2Z/1988 07769 ECA 80.9383 39.2266 954.0000 4280.0000 5085.0000 5085.0000 4708507769 GAS 8/2Z/1988 07769 ECA 80.9383 39.2266 954.0000 4280.0000 5085.0000 4708507769 GAS 8/2Z/1988 07769 ECA 80.9383 39.2266 954.0000 4280.0000 5085.0000 5085.00000 4708507769								EPC	03977		3/8/1918	GAS	4708503977	4
4708504000 SWD-P 4708504001 GAS 10/5/1978 04041 MURVIN OIL 8.0.9216 39.2250 1138.0000 99999.0000 101137.0000 4708504605 UNK 10/17/1980 04051 PETROLEUM DRILLING 4708504605 UNK 10/17/1980 04051 PETROLEUM DRILLING 4708504605 UNK 10/17/1984 06363 BIG A OIL 4708504605 UNK 470850463 O&G 12/7/1984 06363 BIG A OIL 470850463 O&G 12/7/1985 07221 STALINAKER ENERGY 80.9226 39.2186 978.0000 4313.0000 5203.0000 4708507643 GAS 4708507666 GAS 4708407666 GAS 4708507665 GAS 8/17/1987 07660 ECA 80.9326 39.2344 922.0000 4220.0000 4220.0000 5213.0000 4708507665 GAS 8/17/1987 07666 ECA 80.9326 39.2349 922.0000 4220.0000 5213.0000 4708507665 GAS 8/12/1987 07665 ECA 80.9426 39.2339 1043.0000 4220.0000 5246.0000 4708507665 GAS 9/15/1987 07665 ECA 80.9426 39.2339 1043.0000 4203.0000 5246.0000 4708507679 GAS 9/15/1987 07669 ECA 80.9338 39.2248 1053.0000 4187.0000 5202.0000 4708507679 GAS 9/20/1987 07669 ECA 80.9338 39.2248 1053.0000 4197.0000 5213.0000 5202.0000 4708507679 GAS 9/20/1987 07669 ECA 80.9338 39.2248 1053.0000 4286.0000 5338.0000 4708507679 GAS 9/20/1987 07669 ECA 80.9338 39.2248 1063.0000 4278.0000 5338.0000 4708507679 GAS 9/20/1987 07669 ECA 80.9338 39.2248 1063.0000 4278.0000 5338.0000 4708507679 GAS 9/20/1987 07669 ECA 80.9338 39.2248 1063.0000 4278.0000 5338.0000 4708507679 GAS 9/20/1987 07683 ECA 80.9338 39.2248 1063.0000 4278.0000 5338.0000 4278.0000 5307.0000 5707.0000 5								EQUITRANS	03987		10/22/1919	P&A	4708503987	49
4708504615 GAS 10/5/1978 04041 MURVIN OIL 80.9236 39.2371 950.000 -1556.0000 2506.0000 4708504519 GAS 2/24/1980 RHINESTREET SHALE 04519 HAUGHT -80.9164 39.2200 1066.0000 -4840.0000 5996.0000 4708506363 0&G 12/7/1984 06363 BIG A OIL 80.9142 39.2243 880.0000 -4313.0000 5203.0000 4708507631 GAS 8/5/1985 07221 5TALNAKER ENERGY 80.9220 39.2186 978.0000 -4333.0000 5303.0000 4708507636 GAS 7/24/1987 07664 EA 8 80.9366 39.2371 961.0000 -4223.0000 5220.0000 47085076573 GAS 8/22/1987 07665 ECA 80.9366 39.2344 922.0000 -4291.0000 5181.0000 4708507673 GAS 9/15/1987 07673 ECA 80.9361 39.2361 880.93000 -4216.0000 -4278.0000 5338.0000 4708507697 GAS 9/20/1987 07669 ECA 80.9363 39.2218 1052.0000 -4278.0000 5313.0000 670.0000 4708507667 GAS 9/20/1987 07673 ECA 80.9363 39.2218 1052.0000 -4278.0000 5313.0000 670.0000 4708507667 GAS 9/20/1987 07679 ECA 80.9363 39.2218 1052.0000 -4278.0000 5313.0000 670.0000 4708507667 GAS 9/20/1987 07669 ECA 80.9363 39.2218 1052.0000 -4278.0000 5313.0000 670.0000 4708507667 GAS 9/20/1987 07679 ECA 80.9363 39.2218 1052.0000 4278.0000 5313.0000 670.00000 670.0000 670.0000 670.0000 670.0000 670.0000 670.0000 670.00000 670.00000 670.0000 670.0000 670.0000 670.0000 670.00000 670.00								EPC	04000		6/3/1926	SWD-P	4708504000	- 4
4708504619 GAS								MURVIN OIL	04041		10/5/1978	GAS	4708504041	4
4708507665 UNK 10/17/1980 04605 PETROLEUM DRILLING -80.9267 39.2240 1140.0000 -99999.0000 101139.0000 4708507663 08.6 12/7/1984 06563 BIG A OIL -80.9142 39.2243 890.0000 -4313.0000 5203.0000 4708507643 GAS 5/28/1985 07221 STALNAKER ENERGY -80.9220 39.2186 978.0000 4357.0000 5335.0000 4708507660 GAS 7/24/1987 07660 ECA -80.9380 39.2197 961.0000 -4220.0000 5181.0000 4708507665 GAS 8/17/1987 07664 E A E -80.9366 39.2324 922.0000 4291.0000 5213.0000 4708507665 GAS 8/22/1987 07665 ECA -80.9426 39.2339 1043.0000 4220.0000 5213.0000 4708507673 GAS 9/20/1987 07673 ECA -80.9310 39.2361 894.0000 -4197.0000 5991.0000 4270.0000 5338.0000 4708507681 GAS 9/20/1987 07679 ECA -80.9326 39.2218 1052.0000 4278.0000 5338.0000 4708507697 GAS 9/20/1987 07698 ECA -80.9330 39.2218 1052.0000 4278.0000 5338.0000 4708507697 GAS 9/29/1987 07698 ECA -80.9330 39.2248 1063.0000 4278.0000 5338.0000 4708507697 GAS 10/31/1988 07681 ECA -80.9330 39.2248 1063.0000 4278.0000 5338.0000 4708507697 GAS 10/31/1988 07681 ECA -80.9330 39.2248 1063.0000 4278.0000 5338.0000 4708507697 GAS 10/30/1988 07681 ECA -80.9330 39.2248 1063.0000 4278.0000 5336.0000 4708507697 GAS 10/30/1988 07681 ECA -80.9330 39.2209 1083.0000 4278.0000 5307.0000 4708507697 GAS 10/30/1988 07681 ECA -80.9330 39.2209 1083.0000 4278.0000 5085.0000 4708507707 GAS 8/19/1988 07707 ECA -80.9320 39.2209 1083.0000 4224.0000 5085.0000 4708507707 GAS 8/19/1988 07706 ECA -80.9320 39.2209 1083.0000 4226.0000 5085.0000 4708507708 GAS 11/5/1988 07708 ECA -80.9320 39.2201 918.0000 4226.0000 5085.0000 4708507709 GAS 8/19/1988 07708 ECA -80.9320 39.2201 918.0000 4226.0000 5375.0000 4708507709 GAS 8/19/1988 07708 ECA -80.9320 39.2201 918.0000 4226.0000 5375.0000 4708507709 GAS 8/19/1988 07708 ECA -80.9320 39.2201 918.0000 4226.0000 5375.0000 4708507709 GAS 8/19/1988 07708 ECA -80.9320 39.2201 918.0000 4226.0000 5375.0000 4708507709 GAS 8/19/1988 07708 ECA -80.9320 39.2201 918.0000 4226.0000 5375.0000 4708507709 GAS 8/19/1988 07708 ECA -80.9320 39.2201 918.0000 4216.0000 5375.0000 4708507709 GAS 8/19/								HAUGHT	04519	RHINESTREET SHALE	2/24/1980	GAS	4708504519	4
47085076363 O&G 12/7/1984 06363 BIG A OIL -80.9142 39.2243 890.0000 -4313.0000 5203.0000 4708507221 GAS 8/5/1985 07221 STALNAKER ENERGY 80.9220 39.2186 978.0000 -4357.0000 5335.0000 4708507660 GAS 7/24/1987 07660 ECA -80.9276 39.2246 1097.0000 -4523.0000 5620.0000 4708507660 GAS 7/24/1987 07660 ECA -80.9380 39.2197 961.0000 -4220.0000 5181.0000 4708507660 GAS 8/17/1987 07664 EAE -80.9366 39.2334 922.0000 -4291.0000 5213.0000 4708507665 GAS 8/22/1987 07665 ECA -80.9466 39.2339 1043.0000 -4290.0000 5213.0000 4708507679 GAS 11/23/1988 07672 ECA -80.9406 39.2383 1015.0000 -4187.0000 5202.0000 4708507679 GAS 9/20/1987 07673 ECA -80.9313 39.2361 894.0000 -4197.0000 5910.0000 4708507683 GAS 9/29/1987 07683 ECA -80.9313 39.2218 1052.0000 -4278.0000 5338.0000 4708507683 GAS 9/29/1987 07683 ECA -80.9388 39.2218 1063.0000 4278.0000 5338.0000 4708507697 GAS 10/11/1987 07697 EAE -80.9303 39.2218 1063.0000 -4278.0000 5314.0000 4708507697 GAS 10/11/1987 07697 EAE -80.9303 39.2218 1063.0000 -4278.0000 5307.0000 4708507697 GAS 10/11/1987 07697 EAE -80.9303 39.2209 1083.0000 -4228.0000 5085.0000 4708507707 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4228.0000 5085.0000 4708507707 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4228.0000 5350.0000 4708507706 GAS 11/5/1988 07706 ECA -80.9426 39.2296 1045.0000 -4228.0000 5085.0000 4708507706 GAS 11/5/1988 07706 ECA -80.9426 39.2296 1045.0000 -4228.0000 5085.0000 4708507706 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4258.0000 5350.0000 4708507706 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4258.0000 5375.0000 4708507709 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4258.0000 5375.0000 4708507709 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4258.0000 5375.0000 4708507709 GAS 8/19/1988 07706 ECA -80.9426 39.2296 1045.0000 -4258.0000 5375.0000 4708507709 GAS 8/19/1988 07706 ECA -80.9433 39.2201 191.0000 -4258.0000 5375.0000 4708507709 GAS 8/19/1988 07706 ECA -80.9320 39.2222 1121.0000 -4258.0000 5375.0000 4708507709 GAS 8/19/1989 07849 EAE -80.								PETROLEUM DRILLING	04605		10/17/1980	UNK	4708504605	1
4708507221 GAS 8/5/1985 07221 STALNAKER ENERGY 80.9220 39.2186 978.0000 4357.0000 5335.0000 4708507663 GAS 5/28/1987 RHINESTREET SHALE 07643 ECA 80.9276 39.2246 1097.0000 4523.0000 5620.0000 4708507666 GAS 7/24/1987 07660 ECA 80.9380 39.2197 961.0000 4220.0000 5181.0000 4708507665 GAS 8/17/1987 07664 EAE 80.9366 39.2324 922.0000 4291.0000 5213.0000 4708507667 GAS 11/23/1988 07672 ECA 80.9426 39.2339 1043.0000 4203.0000 5246.0000 4708507673 GAS 9/15/1987 07665 ECA 80.9406 39.2383 1015.0000 4187.0000 5091.0000 4708507679 GAS 9/20/1987 07679 ECA 80.9331 39.2361 894.0000 4197.0000 5091.0000 4708507681 GAS 10/31/1988 07681 ECA 80.9383 39.2268 1063.0000 4278.0000 5338.0000 470850769 GAS 9/29/1987 07681 ECA 80.9333 39.2248 1063.0000 4278.0000 5338.0000 470850769 GAS 10/11/1987 07697 EAE 80.9303 39.2390 787.0000 4298.0000 5085.0000 470850769 GAS 10/11/1987 07697 EAE 80.9303 39.2390 787.0000 4228.0000 5085.0000 470850769 GAS 10/30/1988 07706 EAR 80.9303 39.2390 787.0000 4228.0000 5085.0000 470850769 GAS 10/30/1988 07706 EAR 80.9303 39.2390 787.0000 4228.0000 5085.0000 470850769 GAS 10/30/1988 07706 EAR 80.9303 39.2390 1083.0000 4224.0000 5307.0000 470850769 GAS 10/30/1988 07706 ECA 80.9303 39.2390 1083.0000 4224.0000 5307.0000 470850769 GAS 8/19/1988 07706 ECA 80.9304 39.2296 1045.0000 4205.0000 5085.0000 4708507768 GAS 6/12/1988 07706 ECA 80.9243 39.2211 102.0000 3562.0000 4205.000											12/7/1984	O&G	4708506363	1
4708507643 GAS											8/5/1985	GAS	4708507221	- 4
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4708507664 GAS								ECA	07660		7/24/1987	GAS	1708507660	1
4708507665 GAS 8/22/1987 07665 ECA -80.9426 39.2339 1043.0000 -4203.0000 5246.0000 4708507672 GAS 11/23/1988 07672 ECA -80.9406 39.2383 1015.0000 -4187.0000 5202.0000 4708507673 GAS 9/15/1987 07673 ECA -80.9331 39.2361 894.0000 -4197.0000 5091.0000 4708507691 GAS 9/20/1987 07679 ECA -80.9331 39.2218 1052.0000 -4286.0000 5338.0000 4708507683 GAS 9/29/1987 07683 ECA -80.9338 39.2248 1063.0000 -4278.0000 5341.0000 4708507697 GAS 10/11/1987 07697 EAE -80.9303 39.2390 787.0000 -4298.0000 5085.0000 4708507706 GAS 10/30/1987 07706 BET RO -80.9303 39.2390 787.0000 -4298.0000 5085.0000 4708507706 GAS 8/19/1988 07707 ECA -80.9426 39.2296 1045.0000 -4205.0000 5307.0000 4708507706 GAS 11/5/1988 07736 ECA -80.9426 39.2296 1045.0000 -4205.0000 5200.0000 4708507706 GAS 6/12/1988 07768 ECA -80.9426 39.2296 1045.0000 -4254.0000 5307.0000 4708507706 GAS 8/27/1988 07768 ECA -80.9426 39.2291 1083.0000 -4280.0000 5200.0000 4708507706 GAS 8/27/1988 07768 ECA -80.9426 39.2291 1083.0000 -4280.0000 5200.0000 4708507706 GAS 8/27/1988 07768 ECA -80.9426 39.2291 1045.0000 -3562.0000 4604.0000 4708507706 GAS 8/27/1988 07769 ECA -80.9426 39.2291 1121.0000 -3562.0000 5000.0000 4708507706 GAS 8/27/1988 07769 ECA -80.9426 39.2292 1121.0000 -3614.0000 5375.0000 4708507706 GAS 8/27/1988 07769 ECA -80.9426 39.2292 1121.0000 -3614.0000 5375.0000 4708507706 GAS 8/27/1988 07769 ECA -80.9426 39.2292 1121.0000 -3614.0000 5375.0000 4708507706 GAS 8/16/1988 07769 ECA -80.9320 39.2222 1121.0000 -3614.0000 5375.0000 4708507706 GAS 8/16/1988 07769 ECA -80.9333 39.2268 923.0000 -4217.0000 53140.0000 4708507850 GAS 7/30/1989 07849 EAE -80.9333 39.2268 923.0000 -4217.0000 53140.0000 4708507850 GAS 7/30/1989 07849 EAE -80.9333 39.2268 923.0000 -4217.0000 53140.0000 4708507850 GAS 7/12/1989 07849 EAE -80.9331 39.2317 984.0000 -4216.0000 5200.0000											8/17/1987	GAS	1708507664	1
4708507672 GAS 11/23/1988 07672 ECA 80.9406 39.2383 1015.0000 4187.0000 5202.0000 4708507673 GAS 9/15/1987 07673 ECA 80.9331 39.2361 894.0000 4197.0000 5091.0000 4708507681 GAS 10/31/1988 07681 ECA 80.9331 39.2248 1052.0000 4286.0000 5338.0000 4708507683 GAS 9/29/1987 07683 ECA 80.9388 39.2248 1063.0000 4278.0000 5341.0000 4708507697 GAS 10/11/1987 07697 E.A.E 80.9303 39.2390 787.0000 4298.0000 5085.0000 4708507707 GAS 8/19/1988 07707 ECA 80.9130 39.2209 1083.0000 4224.0000 5307.0000 4708507706 GAS 11/5/1988 07707 ECA 80.9243 39.2216 1045.0000 4224.0000 5250.0000 4708507768 GAS 11/5/1988 07768 ECA 80.9284 39.2201 918.0000 4282.0000 5250.0000 4708507769 GAS 8/27/1988 07768 ECA 80.9243 39.2413 1042.0000 3562.0000 4708507769 GAS 8/27/1988 07768 ECA 80.9243 39.2413 1042.0000 3562.0000 4708507769 GAS 8/27/1988 07768 ECA 80.9243 39.2212 1121.0000 4254.0000 5750.0000 4708507769 GAS 8/27/1988 07768 ECA 80.9243 39.2212 1121.0000 4254.0000 5750.0000 4708507769 GAS 8/16/1988 07769 ECA 80.9243 39.2212 1121.0000 4254.0000 5750.0000 4708507769 GAS 8/16/1988 07769 ECA 80.9243 39.2212 1121.0000 4254.0000 5750.0000 4708507769 GAS 8/16/1988 07769 ECA 80.9243 39.2212 1121.0000 4254.0000 5750.0000 4708507769 GAS 8/16/1988 07769 ECA 80.9320 39.2222 1121.0000 4254.0000 5750.0000 4708507789 GAS 8/16/1988 07769 ECA 80.9323 39.2268 923.0000 4217.0000 5140.0000 470850789 GAS 7/30/1989 07849 E.A.E 80.9333 39.2268 923.0000 4217.0000 5140.0000 470850789 GAS 7/30/1989 07849 E.A.E 80.9333 39.2268 923.0000 4217.0000 5140.0000 470850789 GAS 7/12/1989 07849 E.A.E 80.9333 39.2268 923.0000 4216.0000 5200.0000											8/22/1987	GAS	708507665	- 1
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4709507952 CAS 7/02/1000 5200,0000 5200,0000														
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4708507862 GAS 8/77/1989 02363 FCA -80.9263 39.2300 1082.0000 -4239.0000 5321.0000														
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4708507860 GAS	4708507814 GAS	4/08531225 GAS	4708530895 GAS	4708530889 GAS	4708530860 GAS	4708509554 GAS	4/08508315 GAS	4/0850/86/ GAS	4708507863 GAS
9/15/1989 DEVONIAN	~	_	10/7/1924	8/5/1920	2/8/1917	8/25/2008	4/29/1994	10/14/1989	9/8/1989
_	07814 ECA	31225 EPC	•	30889 PGH & WV GAS	_	09554 KEY OIL			
	-80.9201 39.2		-80.9461 39.2					-80.9204 39.2294	-80.9210 39.2338
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		_	1.0000	_	_	_	_	_	922.0000
		-1027.0000	-2000.0000	-1984.0000	-1026.0000	-4310.0000	-4178.0000	-4317.0000	-3612.0000
4452.0000	4452.0000	2015.0000	2001.0000	1985.0000	1816.0000	5460.0000	5200.0000	5196.0000	4534.0000

4129.87 4740.54 3514.58 8149.81 2381.88 4662.01 3006.33 3825.41 4571.26 5456.40

Affact next

API Number 47 - 8	35	10259	8
Operator's	Well No	516212	0

# 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 (HUC 10) North Fork Hughes River Quadrangle Pennsboro
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes V
Will a pit be used? Yes ✓ No
If so, please describe anticipated pit waste: Flowback water and residual solids
Will a synthetic liner be used in the pit? Yes No If so, what ml.? 60  Proposed Disposal Method For Treated Pit Wastes:
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
Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then Will closed loop system be used? If so, describe:     Prepared for transportation to an off-site disposal facility.
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud
Additives to be used in drilling medium? See Attached
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  Company Official Signature
Company Official (Typed Name)_Victoria J. Roark
Company Official Title Permitting Supervisor
Subscribed and sworn before me this / day of fan 20 18 OFFICIAL SEAL OFFICIAL SEAL OF WEST VIRGINIA
My commission expires 8-24-22  My commission expires 8-24-22  My commission expires 8-24-22  My Commission Expires Aug. 24, 2022

API Number 47 - 85	_	10259	B	
Operator's Well No.	5	16212	C	

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

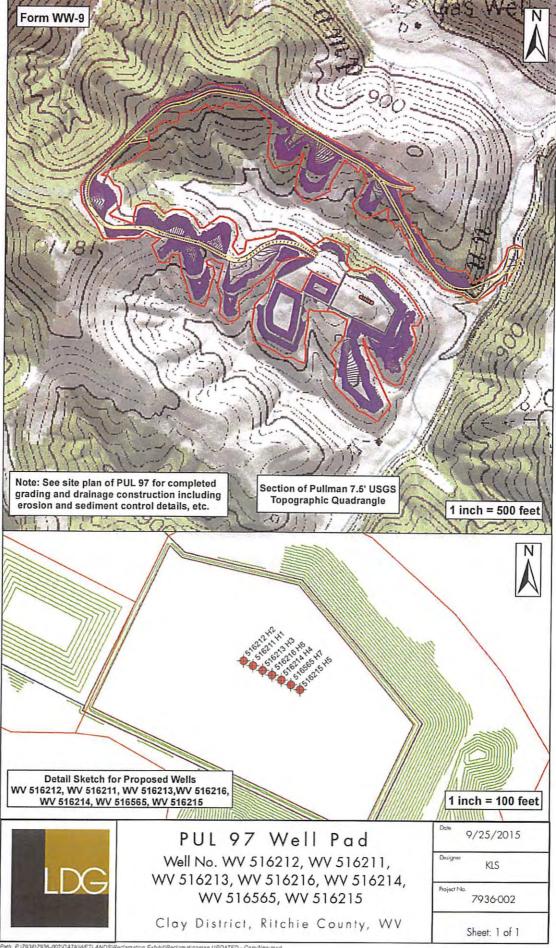
#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Watershed (HUC 10) North Fork Hughes River  Quadrangle Pennaboro  Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No   If so, please describe anticipated pit waste: Flowback water and residual solids  Will a synthetic liner be used in the pit? Yes No If so, what ml.? 60  Proposed Disposal Method For Treated Pit Wastes:  Land Application  Reuse (at API Number Various)  Other (Explain  Vea. The desend loop system will amone thit entire the disposal facility. The drift cuttings are then   Yes. The desend loop system will amone thit entire from the drifting fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire flow from the drifting fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire flow fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire flow fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings fluid. The drift cuttings are then   Yes. The desend loop system will amone thit entire fluid. The drift cuttings fluid.	Operator Name EQT Production Company OP Code 306686
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No Will a pit be used? Yes No No No If so, please describe anticipated pit waste:  Flowback water and residual solids  Will a synthetic liner be used in the pit? Yes 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 Vanious Off Site Disposal (Supply form WW-9 for disposal location)  Other (Explain Office Office of Offi	Way I Lawre to North Early Hughes Diver
Will a synthetic liner be used in the pit? Yes 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 Vorious Office Site Disposal (Supply form WW-9 for disposal location) Other (Explain Other (Explain Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then Will closed loop system be used? If so, describe: Pitipamed for transportation to an off-site disposal facility.  Will closed loop system be used? If so, describe: Pitipamed for transportation to an off-site disposal facility.  Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached  If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud  Additives to be used in drilling medium? See Attached  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 from and all attachments thereto and that, based on my inquiry o	Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No
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Additives to be used in drilling medium? See Attached  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.  Lertify 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 Title Permitting Supervisor  Subscribed and sworn before me this Again the Again of the Again to the Again that the Again the Again that the	Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then Will closed loop system be used? If so, describe:  Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then will closed loop system be used? If so, describe:
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Subscribed and sworn before me this day of Subscribed and sworn befo	
Subscribed and sworn before me this / 9 day of	
OFFICIAL SEAL OTAT Blic STATE OF WEST VIRGINIA NOTARY PUBLIC Pamela Sykes EQT Production PO Page 200	
My commission expires 8-24-32 Panela Sykes EQT Production PO Para 200	West while STATE OF WEST VIRGINIA
	My commission expires  8-24-22  Pamela Sykes FOT Production

4708510259

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Fo: m	WW-

	atment. Acres Dist	urbed	45.38	Prevegetation	pH6.2	2
Lime3	Tons/a	acre or to cor	rect to pH	6.5		
Fertilize type	Granular	10-20-20				
Fertilizer Amount	1/3	Ibs/acre	(500 lbs minimum)			
Mulch	2		Tons/acre			
		See	d Mixtures			
Tempo Seed Type KY-31	lbs/acre 40		Seed Type Orchard Grass	Permanent	lbs/acre	
Alsike Clover	5		Alsike Clover		5	
Annual Rye	15					
			аррисацоп.			
			epphoanori.	Mich	rael I	sof
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Comments:	Descent	e Couple	lall c			soffen.
Photocopied section of invo	Descent	eouple	lall c	tructed	acoun	Soffen d



Path. P.1793617936-002/DATA/WETLANDS/Reclamation Exhibit/Reclamationmap UPDATED - CopyNaw.mxd

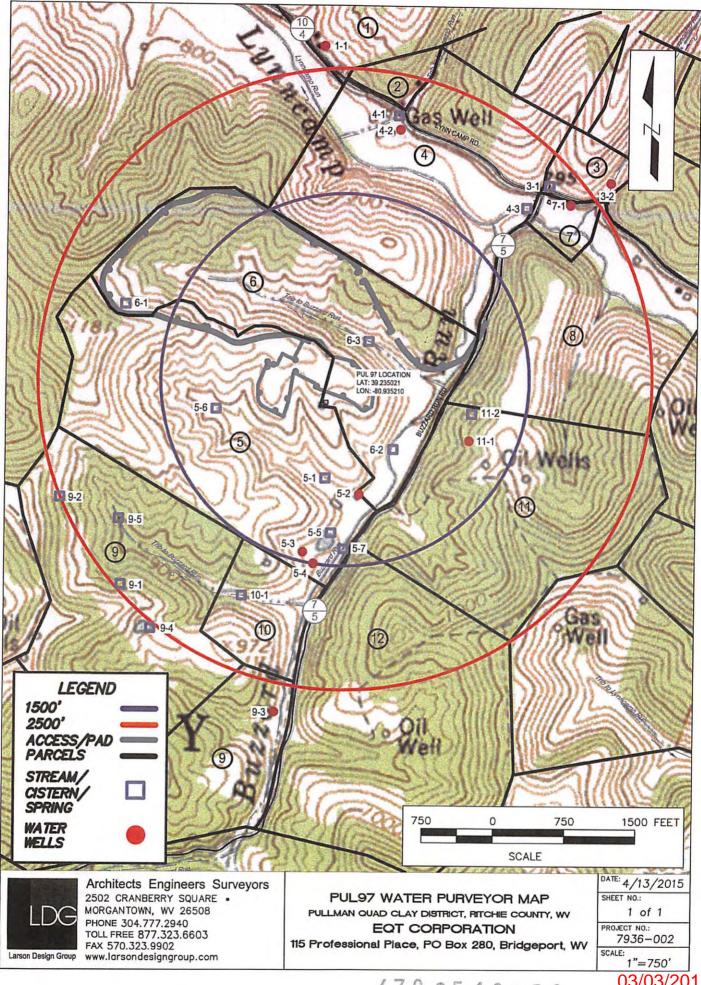


## Site Specific Safety Plan

# <u>EQT</u> PUL97 Unit Pad

# Pullman Ritchie County, WV

_516211	516212	516213	For Wells: 516214	_516215	_516216	_516565
EQT Production  Frm. ttm	1 Lipen		Date Prepared:	Micho	2017 Gas Inspector	4
Date	7/			Date	14/17	



### **EQT PRODUCTION COMPANY** WELL NO. 516212 - Ashley E. Ness, Jr. et al PAGE 1 OF 2

UTM NAD83	TOPHOLE	N-4342877.51	E-505580.39
ZONE 17N	LANDING PT	N-4342790.76	E-505760.46
(METERS)	BOT HOLE	N-4341384.68	E-506369.98
NAD27 SPC	TOPHOLE	N-270987.23	E-1593393.36
FEET NORTH	LANDING PT	N-270692.68	E-1593979.50
ZONE	BOT HOLE	N-266045.06	E-1595902.63
NAD27 GEO	TOPHOLE	N039.235101	W080.935510
LAT(N)	LANDING PT	N039.234318	W080.933425
LONG(W)	BOT HOLE	N039.221643	W080.926376

MINERAL OWNERS	AREA (Ac±)	LEASE #
Orma M. Johnson, et al	627	105675
Richard Barnard, et al	170	118340

	PROPERTY TIES		
L1	S30°25'W	1523.8'	
L2	N72°31'E	1201.0'	

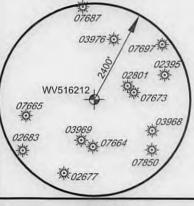
TIOTAL	ONTAL BORE GE	CIVILLIA
TH-LP	AZ 116.6807°	656.0
LP-BH	AZ 157.5208°	5029.8

TOTAL HORIZONTAL LENGTH - 5,892'



	PROPERTI	ES CROSSED BY BO	RE		
TAB	OWNER	DISTRICT	TAX MAP #	PARCEL#	ACREAGE
1	CHRISTA J. SMITH	CLAY	3-36	P/O #7	69.88 Ac±
2	JOHN R. & ROSE MARIE SUDOL	CLAY	3-36	17	59.56 Ac±
3	FRANK J. OSTROWSKY	CLAY	3-36	18	89.25 Ac±
4	PEGGY WINCE	CLAY	3-36	19	69.5 Ac±
5	PEGGY WINCE	CLAY	3-36	33	95.788 Ac±
6	PEGGY WINCE	CLAY	3-36	32	72.63 Ac

	PROPERTIES ADJOINING THOS				
TAB	OWNER	DISTRICT	TAX MAP #	PARCEL#	ACREAGE
A	ELF, LLC	CLAY	3-36	6	184.724 Ac±
В	MICHAEL L. DAVIS	CLAY	3-36	P/O #7	79.21 Ac±
C	MICHAEL L. DAVIS	CLAY	3-36	16	18.18 Ac
D	BRIAN M. & MICHAEL W. TAYLOR	CLAY	3-36	29.1	20.693 Ac±
E	BRIAN M. & MICHAEL W. TAYLOR	CLAY	3-36	29	65.407 Ac±
F	TERRY LEE RICHARDS	CLAY	3-36	30	121.5 Ac±
G	ROBERT F. & IRENE D. PUGH	CLAY	3-36	31	51.9 Ac±
Н	ROBERT F. & IRENE D. PUGH	CLAY	3-40	10.1	2.89 Ac±
1	JUNE C. BERKLEY FAMILY TRUST	CLAY	3-40	25	81.37 Ac±
J	CLIFTON A. & SHIRLEY M. SAMPLES, ET AL	CLAY	3-36	37	32 Ac±
K	CHARLES E. COTTRILL, JR	CLAY	3-36	33.1	1.212 Ac±
L	CAROL MAY MCATEE	CLAY	3-36	34	11.69 Ac±
M	PEGGY L. VANMETER ET AL	CLAY	3-36	20	48.88 Ac:
N	EVERETT MCATEE	CLAY	3-36	20.1	16.53 Ac±
0	BERNARD & CAROL LEE MCATEE	CLAY	3-36	20.2	0.45 Ac±
P	PAUL W. HILVERS	CLAY	3-36	9	90.70 Ac±
0	FAITH E. COTTRILL	CLAY	3-36	8.2	51.88 Ac±
R	FOUSS FARMS, LLC	CLAY	3+36	3.4	70.65 Ac±



(NTS)

FILE NO	I, THE UNDERSIGNED, HEREBY CERTIFY THAT IS CORRECT TO THE BEST OF MY KNOWLEDGE
DRAWN BYDMS	BELIEF AND SHOWS ALL THE INFORMATION REG LAW AND THE REGULATIONS ISSUED AND PRES
SCALE 1 INCH = 2000 FEET	THE DIVISION OF ENVIRONMENTAL PROTECTION
MIN DEGREE OF ACCURACY 1 IN 2500	David M. Sunnon
PROVEN SOURCE OF ELEVATION SURVEY GRADE GPS	P.S. #2034

AND
QUIRED BY OF CENSES OF
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STATE OF
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NO. 2034
STATE OF
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NO. 2034

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

2:1793617936-002 PUL97/DATAISURVEYISURVEYSIEQT PUL 97 FINAL PLAT (NEW), DWG

ADDRESS



115 PROFESSIONAL PLACE, PO BOX 280

BRIDGEPORT, WV 26330

W.V.D.E.P. OFFICE OF OIL AND GAS

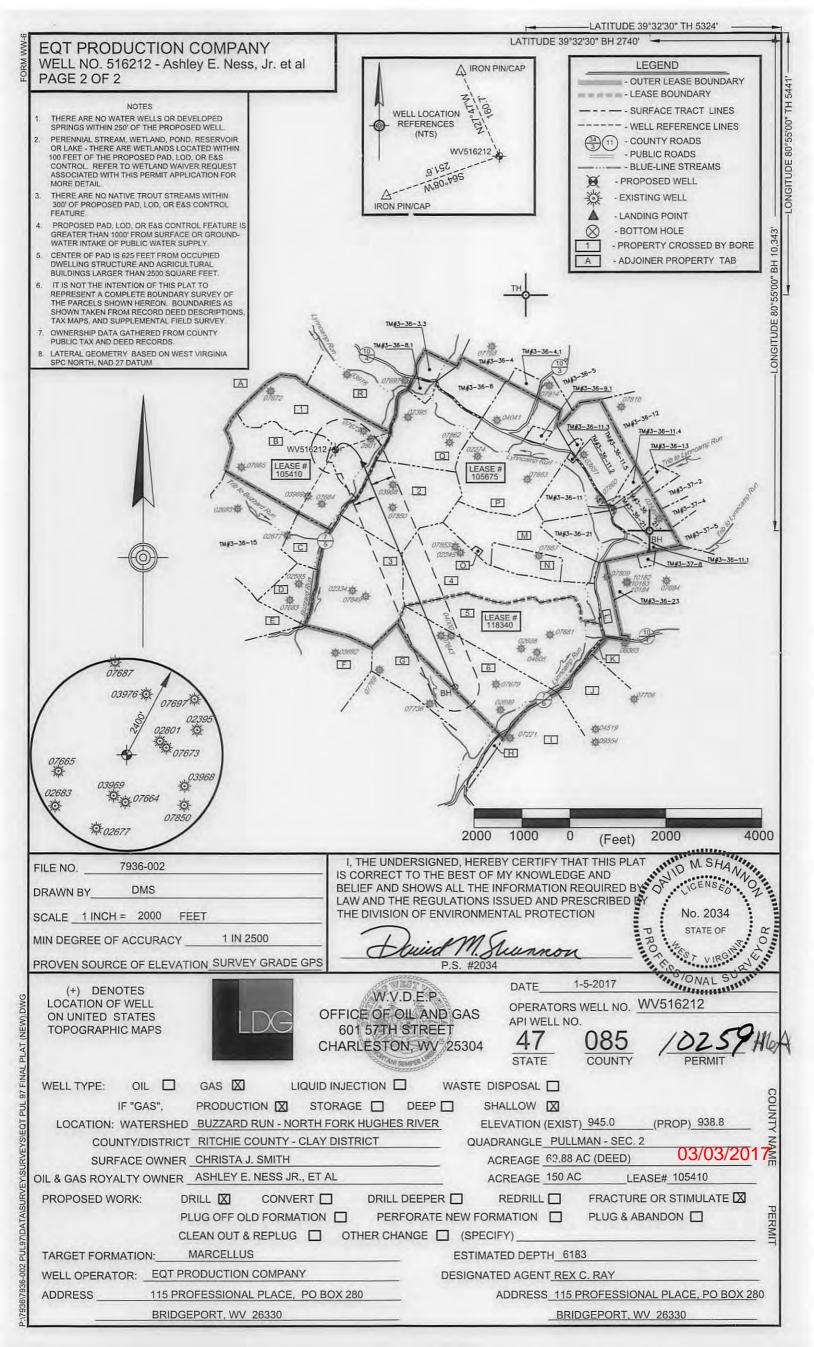
TANO ONAL SULLIN 1-5-2017 DATE OPERATORS WELL NO. WV516212

ADDRESS 115 PROFESSIONAL PLACE, PO BOX 280

BRIDGEPORT, WV 26330

API WELL NO.

TOPOGRAFI	IIC IVIAFO			1 10 11 10	ARLESTON	The state of the s	5304	47		085 COUNTY	/02 PERM	57	
WELL TYPE:	OIL	☐ GAS	s 🖾	LIQUID IN	JECTION	l WA	ASTE D	ISPOSAL					C
	IF "GAS"	, PRC	DUCTION [	X STORA	AGE 🗆	DEEP	SI	HALLOW	$\square$				COUNT
LOCATION	: WATERS	SHED_BUZ	ZARD RUN	NORTH FOR	RK HUGHES	RIVER	EL	EVATION	(EXIST)_	945.0	(PROP) 938	3.8	Ŧ
		440		TY - CLAY DIS	STRICT			Cy and the second		AN - SEC. 2	03/0	3/2017	MAN
		CONTRACTOR OF THE PARTY OF THE	ISTA J. SMI					-	- 4.750	C (DEED)		3/2017	Ē
OIL & GAS ROY	ALTY OW	NER ASH	LEY E. NES	S JR., ET AL			A	CREAGE	150 AC	LEA	SE#_105410		
PROPOSED V	VORK:	DRILL	X co	NVERT 🗆	DRILL D	DEEPER [	]	REDRILL		FRACTURE	OR STIMULA		_
		PLUG C	FF OLD FO	RMATION [	] PERF	ORATE NE	EW FOF	RMATION		PLUG & ABA	ANDON		PERMIT
		CLEAN	OUT & REPL	UG 🗆	OTHER CHA	NGE 🗆	(SPEC	IFY)					2
TARGET FOR	MATION:_	MARC	ELLUS			E	STIMA	TED DEP	TH_ 6183				Ì
WELL OPERA	TOR: _E	QT PRODU	CTION COM	PANY		DE	SIGNAT	TED AGEN	IT REX C	. RAY			



WW-6A1 (5/13)

Operator's	Well	No.	516212	

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

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

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

Number	Grantor, Lessor, etc.	Constant		1.2.14.2.2.2.2
radifice	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Pag

See Attached

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

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

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

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

Well Operator: EQT Production Company

By:

Its: Permitting Supervisor

Page 1 of 2

Operator's Well No.

516212

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
105410	Ashley E. Ness Jr., et al (current royalty owner)		**	
	Sarah Wilson, et al (original lessor)	W.A. Flanagan		LB30/176
	W.A. Flanagan	J. L. Newman		LB58/362
	J. L. Newman	The Philadelphia Company of West Virginia		LB58/363
	The Philadelphia Company of West Virginia	Pittsburgh and West Virginia Gas Company		DB55/362
	Pittsburgh and West Virginia Gas Company	Equitable Gas Company		DB 126/473
	Equitable Gas Company	Equitrans, Inc.		LB 201/253
	Equitrans,Inc.	Equitrans,LP.		AB269/182
	Equitrans,LP	Equitable Production/Eastern States, Inc.		DB234/830
	Equitable Production/Eastern States, Inc.	Equitable Production Company		CB6/443
	Equitable Production Company	EQT Production Company		CB6/443
<u>105675</u>	Orma M. Johnson, et al (current royalty owner)		**	
	E. J. Taylor & Laura Taylor, his wife (original lessor)	J. L. Newman		LB30/149
	J. L. Newman	The Philadelphia Company of West Virginia		LB91/265
	The Philadelphia Company of West Virginia	Pittsburgh and West Virginia Gas Company		DB55/362
	Pittsburgh and West Virginia Gas Company	Equitable Gas Company		DB 126/473
	Equitable Gas Company	Equitrans, Inc.		LB 201/253
	Equitrans,Inc.	Equitrans,LP.		AB269/182
	Equitrans,LP	Equitable Production/Eastern States, Inc.		DB234/830
	Equitable Production/Eastern States, Inc.	Equitable Production Company		CB6/443
	Equitable Production Company	EQT Production Company		CB6/443
<u>118340</u>	Richard Barnard, et al (current royalty owner)		**	
	S. L. Hall & E. P. Hall, his wife (original lessor)	Pittsburgh and West Virginia Gas Company		LB45/421
	Pittsburgh and West Virginia Gas Company	Equitable Gas Company		DB 126/473
	Equitable Gas Company	Equitrans, Inc.		LB 201/253
	Equitrans,Inc.	Equitrans,LP.		AB269/182
	Equitrans,LP	Equitable Production/Eastern States, Inc.		DB234/830
	Equitable Production/Eastern States, Inc.	Equitable Production Company		CB6/443
	Equitable Production Company	EQT Production Company		CB6/443

<sup>\*\*</sup> We will pay a minimum one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced, or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced, or marketed from the well.



4708510259

February 11, 2016

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

Re: PUL97 well pad Well numbers 516211, 516212, 516213, 516214, 516215, 516216, 516565 Clay District, Ritchie County

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. 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.

Sincerely,

Vicki Roark

Permitting Supervisor-WV



## Table 1 – Water Source Identification

EQT Well Pad Name: PUL 97	. Submittal Date:	
EQT Well Number:	-	
Survey / Engineering Company: Lar	son Design Group*	
Site Number: 1 Distance from Surface Owner / Occupant: Dale W Moore II Address: 1977 Lynn Camp Rd Pennsboro, WV 26415	II	☐ Landowner Requested Sampling ☐ Landowner Decline Sampling
Field Located Date: 3-11-15 Owner  Coordinates: 1-1 39.242436, -80.936131		Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Contact Attempts (Date): 1st: 3-11-15 2nd: Comments: His water well is out side of 25	Date Door Hanger Left:	
Owner Signature: Per Phone Conversation  Site Number: 2, 4 Distance from	<u>4-2</u> 2,240' <u>4-3</u> 2,173	31
Surface Owner / Occupant: Fouss Farms LLC  Address: 4200 Grand Central Ave  Vienna, WV 26105		■ Landowner Requested Sampling □ Landowner Decline Sampling □ Unable to Contact
4.0.20.040640 .00.020004	r home during survey (yes/no): No	(Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Contact Attempts (Date): 1st: 3-11-15 2nd:		as given
Owner's Signature: Per Phone Conversat	4-1 39.240947, -80.99 tion 4-3 39.238992, -80.99	





	<u>3-1</u> 2,417'	
Site Number:3 Distance fr	om Gas Well (feet): 3-2 2,794' +	
Surface Owner / Occupant: Randall Lamr	n	Landowner Requested
Address: 2597 Lynn Camp Rd	Phone #: <u>304-659-3075</u>	Sampling   Landowner Decline
Pennsboro, WV 26415		Sampling
Field Located Date: 3-9-15 Owne		☐ Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Contact Attempts (Date): 1st: 3-9-15 2		
Comments: Located stream on property, 2500'.	not in use for drinking water. Water we	ell is outside of
	6-1 2,098' 6-3 390' om Gas Well (feet): 6-2 1,021'	
Surface Owner / Occupant: Christa & Jan	nes Smith	M Landowner Requested
Address: Buzzard Run	Phone #:	Sampling  Landowner Decline
Pennsboro, WV 26415		Sampling  Unable to Contact
Field Located Date:Owner	home during survey (yes/no):	(Further contact attempts to be made by EQT's third party
Coordinates: <b>6-1</b> 39.23665, -80.941642	(decimal degrees NAD 92)	pre-drill sampling lab)
Contact Attempts (Date): 1st: 3-11-15 2nd		
Comments: Eric Janotha's sister. All sou	rces located by direction of Eric. She do	oes not live on
property. Contact Eric.		
A	<b>6-2</b> 39.233572, -80.9	
Owner's Signature:	<b>6-3</b> 39.231267, -80.9	936358

## 470 85 10 259





Surface Owner / Occupant: Mi	chael L. Davis		✓ Landowner Requested
Address: 19 Davis Ridge Road	i	Phone #: 304-481-5899	Sampling   Landowner Decline
Pennsboro, WV 2641:	5		Sampling  Unable to Contact
Field Located Date: 3-11-15	Owner hom	e during survey (yes/no): Yes	(Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Coordinates: <u>5-1</u> 39.232564, -8	0.934794	(decimal degrees – NAD 83)	
Contact Attempts (Date): 1st: 3-1	1-15 2 <sup>nd</sup> :	Date Door Hanger Left: No	Need
Comments: All water sources w	ere previously	located by our environmental grou	p. All sources
on this property are used by ca	ttle. Mr. Janot	ha had requested that we sample ev	verything.
o o o			
Owner Signature: Per Conv	ersation		
Owner Signature: Per Conv	versation		
Owner Signature: Per Conv 5-2 39.231011, -80.936047	versation		
<b>5-2</b> 39.231011, -80.936047	1498'		
<b>5-2</b> 39.231011, -80.936047 <b>5-3</b> 39.232908, -80.935769	1498' 803'		
<b>5-2</b> 39.231011, -80.936047 <b>5-3</b> 39.232908, -80.935769 <b>5-4</b> 39.235936, -80.9346	1498' 803' 364'		





Surface Owner / Occupant: Joseph & Virginia M		Landowner Requested Sampling
Address: 2518 Lynn Camp Rd Pennsboro, WV 26415	Phone #: <u>304-659-2783</u>	Sampling
Field Located Date:Owner home		☐ Unable to Contact (Further contact attempts to b made by EQT's third party pre-drill sampling lab)
Coordinates: 7-1 39.239078, -80.928953  Contact Attempts (Date): 1st: 3-9-15 2nd: 3-1	1-15 _Date Door Hanger Left: <u>Y</u>	
Comments: Contacted us at a later date by phone	e. Has one water well beside ba	rn.
Owner Signature:		
Site Number: 8 Distance from Gas		☐ Landowner Requested
Owner Signature:  Site Number: 8 Distance from Gas Surface Owner / Occupant: Faith Cottrill  Address: 2782 Lynn Camp Rd		□ Landowner Requested Sampling □ Landowner Decline
Site Number: 8 Distance from Gas	Phone #: <u>304-480-1570</u>	Sampling  Landowner Decline Sampling
Site Number:8 Distance from Gas Surface Owner / Occupant: _Faith Cottrill  Address: _2782 Lynn Camp Rd Pennsboro, WV 26415  Field Located Date:Owner home decimals.	Phone #: <u>304-480-1570</u> uring survey (yes/no):	Sampling  Landowner Decline
Site Number: 8 Distance from Gas Surface Owner / Occupant: Faith Cottrill  Address: 2782 Lynn Camp Rd	Phone #: <u>304-480-1570</u> uring survey (yes/no):	Sampling  Landowner Decline Sampling  Unable to Contact (Further contact attempts to be made by EQT's third party
Site Number:8 Distance from Gas Note:8 Distance from Gas Note:8 Distance from Gas Note:8 Distance from Gas Note:88 Distance from Gas Note:9	Phone #: <u>304-480-1570</u> uring survey (yes/no): (decimal degrees – NAD 83)	Sampling  Landowner Decline Sampling  Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Site Number:8 Distance from Gas Surface Owner / Occupant: _Faith Cottrill  Address: _2782 Lynn Camp Rd Pennsboro, WV 26415  Field Located Date:Owner home decimals.	Phone #: <u>304-480-1570</u> uring survey (yes/no): (decimal degrees – NAD 83) -15Date Door Hanger Left: _Y	Sampling  Landowner Decline Sampling  Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)





Surface Owner / Occupant: Brian & Michael Taylor  Address: 268 Buzzard Run Rd  Pennsboro, WV 26415  Pennsboro, WV 26415  Phone #: 304-266-5835  □ Landowner Requested Sampling □ Landowner Decline Sampling □ Unable to Contact	Site Number: 9 Distance from	9-1 2449' 9-2 2518' Gas Well (feet):9-3 2824' 9-4 2532'	9-5 2313'
Pennsboro, WV 26415  Field Located Date: 3-9-15	Surface Owner / Occupant: Brian & Michael	Taylor	Landowner Requested Sampling
Coordinates: 9-1 39.230461, -80.941572 (decimal degrees – NAD 83)  Contact Attempts (Date): 1st: 3-9-15 2nd:	Pennsboro, WV 26415		Sampling Unable to Contact (Further contact attempts to be
though his well his outside of radius, he prefers it to be tested.    Solution	Coordinates: <u>9-1</u> 39.230461, -80.941572	(decimal degrees – NAD 83)	pre-drill sampling lab)
Combine with Eric Janotha  Site Number:10 Distance from Gas Well (feet):1897' +  Surface Owner / Occupant: _Suzanne Janotha (Not Living) left to Eric Sampling  Address:1873 Buzzard Run Rd Phone #: Landowner Requested Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)  Coordinates: 10-1 39.230275, -80.938072	though his well his outside of radius, he pro	efers it to be tested.  9-2 39.232364, -80.943386 9-4	39.229511, -80.940694
Address:1873 Buzzard Run Rd	Site Number:10 Distance from	Gas Well (feet): 1897' +_	
Coordinates: 10-1 39.230275, -80.938072 (decimal degrees – NAD 83)  Contact Attempts (Date): 1st: 2nd: Date Door Hanger Left:	Address: 1873 Buzzard Run Rd	Phone #:	Sampling  Landowner Decline Sampling  Unable to Contact (Further contact attempts to be
	Coordinates: 10-1 39.230275, -80.938072	(decimal degrees – NAD 83)	
Comments: Now owned by Eric Janotha. See him for Sampling.	Contact Attempts (Date): 1st:2nd: _	Date Door Hanger Left:	_
	Comments: Now owned by Eric Janotha. See	e him for Sampling.	
	Owner's Signature:		





Landowner Requested Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Sampling  Landowner Decline Sampling  Unable to Contact (Further contact attempts to be made by EQT's third party
Sampling Unable to Contact (Further contact attempts to be made by EQT's third party
(Further contact attempts to be made by EQT's third party
pre-drill sampling lab)
udol,
1 - 4
Landowner Requested Sampling
Sampling Landowner Decline Sampling
Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to be made by EQT's third party
Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to be
Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to be made by EQT's third party
Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)
1

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

Date of No	otice Certification:	L 2015	API No. 47 0 85 5	10259
			Operator's Well No.	516212
			Well Pad Name:	PUL97
Notice has	been given:			
	the provisions in West Virginia Code §	22-6A, the Operator has provided	the required parties with the N	lotice Forms listed
below for th	e tract of land as follows:	A SAN SAN SAN SAN SAN SAN SAN SAN SAN SA		ones i simo notou
State:	WV	UTM NAD 83 Easting:		4,342,877.51
County:	Ritchie	UTM NAD 83 Northing:		505,580.39
District:	Clay	Public Road Access:	1,37	ST RT 74
Quadrangle:	Pullman	Generally used farm name:	+	Christa J. Smith
Watershed:	North Fork of Hughes River			Official of Strict

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 that the Operator has properly served the re	Operator has attached proof to this Notice Certification quired parties with the following:	OOG OFFICE USE
*PLEASE CHECK ALL THAT APPLY		ONLY
NOTICE OF SEISMIC ACTIVITY or	RECEIVED/NOT REQUIRED	
NOTICE OF ENTRY FOR PLAT SU	IRVEY or NO PLAT SURVEY WAS CONDUCTED	RECEIVED
NOTICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED BECAUSE  NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OR	E RECEIVED/NOT REQUIRED
	WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
NOTICE OF PLANNED OPERATION	N	TIREÇEİVED
PUBLIC NOTICE		□'RECEIVED
NOTICE OF APPLICATION		r 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.

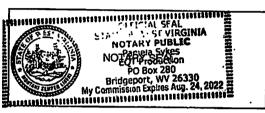
03/03/2017

4708510259

Certification of Notice is hereby given:

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

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



Subscribed and swarn before me this

24 day o

My Commission Expires

Notary Public

#### 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.

WW-6A (9-13)

API NO. 47-085 - 10259	9
OPERATOR WELL NO.	516212
Well Pad Name: PUL97	

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

HOU	ice Time Kequirem	ient: notice shall be provi	ided no later tha	n the filing date of permit application.
	e of Notice: 10/1/15 ice of:	_ Date Permit Applica	tion Filed: 10/1/	15
<b>V</b>	PERMIT FOR AN			ROVAL FOR THE AN IMPOUNDMENT OR PIT
Deli	very method pursu	ıant to West Virginia Co	ode § 22-6A-10	(b)
	PERSONAL SERVICE	☐ REGISTERED MAIL		OD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION
regis sedir the si oil ardesci opera more well impo have provi propo subso recor provi Code water	tered mail or by any nent control plan requirface of the tract on a gas leasehold being ribed in the erosion a stor or lessee, in the erosion and to or lessee, in the erosion and to or lessee, in the erosion and to or lessee, in the erosion and the second seams; (4) The work, if the surface of a water well, spring and water for consumptions water for consumptions water for consumptions (b) of this section (b) of this section of the sheriff requision of this article to the erosion of the sample of the sample of the erosion and erosion eros	method of delivery that rec quired by section seven of the which the well is or is pro- ing developed by the propose and sediment control plan is event the tract of land on we owners of record of the su- tract is to be used for the plant scribed in section nine of the or water supply source local aption by humans or domes ity is to take place. (c)(1) It is to the large of the plant uired to be maintained purson the contrary, notice to a life to where supplets to notice and cowner subject to notice and	quires a receipt of his article, and the posed to be localled well work, if submitted pursual which the well proface tract or tradiacement, construities article; (5) A ated within one of the trace and the applicant of more than three duant to section even holder is not and water testing a section of the construities are section of the applicant to section even holder is not and water testing a section of the construities are section of the construities.	as required by this article shall deliver, by personal service or by a signature confirmation, copies of the application, the erosion and ne well plat to each of the following persons: (1) The owners of record of ted; (2) The owners of record of the surface tract or tracts overlying the the surface tract is to be used for roads or other land disturbance as not to subsection (c), section seven of this article; (3) The coal owner, coposed to be drilled is located [sic] is known to be underlain by one or cots overlying the oil and gas leasehold being developed by the proposed auction, enlargement, alteration, repair, removal or abandonment of any any surface owner or water purveyor who is known to the applicant to chousand five hundred feet of the center of the well pad which is used to (6) The operator of any natural gas storage field within which the extenants in common or other co-owners of interests described in the ight, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. ovide the Well Site Safety Plan ("WSSP") to the surface owner and any as provided in section 15 of this rule.
			S Plan Notice	☑ Well Plat Notice is hereby provided to:
	JRFACE OWNER(: e: see attached			☑ COAL OWNER OR LESSEE Name: see attached
			- -	Name: see attached Address:
	e:	· · · · · · · · · · · · · · · · · · ·	_	COAL OPERATOR
Addr	ess.		-	
			-	Name: Address:
⊿ SU	IRFACE OWNER(	s) (Road and/or Other Dis	- sturbance)	Address:
Nam	e: see attached		,	SURFACE OWNER OF WATER WELL
Addr	ess:		_	AND/OR WATER PURVEYOR(s)
			_	Name: see attached
Nam	e:		_	Address:
Addr	ess:		_	
			_	□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
		s) (Impoundments or Pits)	)	Name:
	e: see attached		-	Address:
Addr	ress:		_	
			_	*Please attach additional forms if necessary

#### WW-6A

# 4708510259

## Surface Owner

Christa J. Smith 204 E. Myles Ave. Pennsboro, WV 26415

Eric H & Beth S. Janotha (Previous owner notice 10/1/2015) 1873 Buzzard Run Rd. Pennsboro, WV 26415

# 4708510259

## **Additional Coal Owners:**

Ashley E. Ness Jr. 2479 Oxford Rd. Pullman, WC 26421

Nellie Pitzer Heirs 5157 Lochwood Ct. Naples FL 34112

Jessie J Simms Heirs 33 Harris Ferry Rd Washington WV 26181

### **Additional Owners of Water Wells**

Christa J. Smith & James Smith 204 E. Myles Ave. Pennsboro, WV 26415

Eric H & Beth S. Janotha (Previous owner notice 10/1/2015) 1873 Buzzard Run Rd. Pennsboro, WV 26415

Michael L. Davis (Current Owner) 19 Davis Ridge Rpad Pennsboro, WV 26415

John & Rose Marie Sudol 2064 Buzzard Run Rd Pennsboro WV 26415

API NO. 47-085 - 10259	
OPERATOR WELL NO. 516212	_
Well Pad Name: PUL97	

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

#### **Well Location Restrictions**

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

WW-6A (8-13)

API NO. 47- 085 - 10259

OPERATOR WELL NO. 516212

Well Pad Name: PUL97

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

#### Water Well Testing:

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

#### Water Testing Laboratories:

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

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

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

#### Written Comment:

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

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

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

WW-6A (8-13)

API NO. 47-085 - 10259

OPERATOR WELL NO. 516212
Well Pad Name: PUL97

### Time Limits and Methods for Filing Comments.

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

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

#### **Comment Requirements**

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

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

#### Permit Denial or Condition

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

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

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

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

WW-6A (8-13)

API NO. 47- 085 - 10259 OPERATOR WELL NO. 516212

Well Pad Name: PUL97

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 304-848-0076

Email: vroark@eqt.com

Address: 115 Professional Place

Bridgeport, WV 26385

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.

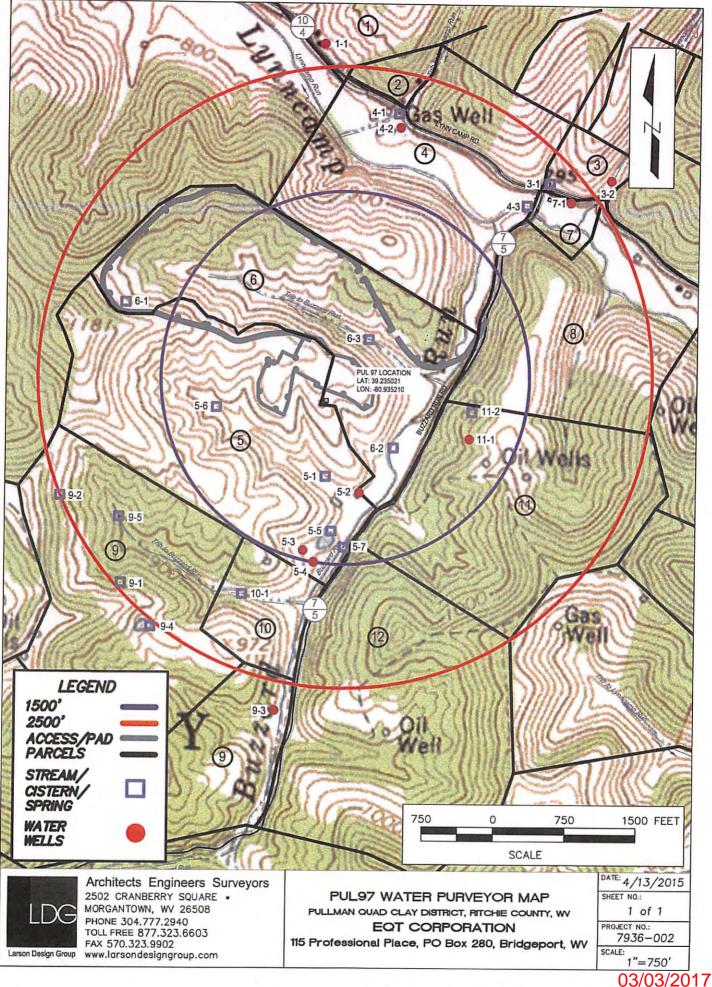
OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WV 26330
My Commission Expires Aug. 24, 2022

Subscribed and sworn before me this

day of

Notary Public

My Commission Expires



WW-6A3 (1/12)

Operator Well No. <u>Lease #105410</u>

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

MOUGE THE	e wedanement: Nonce apan de bloaided at least :	SEVEN (/) days but no more than	FORTY-FIVE (45) days prior to entry.
Date of Not	ice: September 25, 2014	Date of Planner	Entry: October 3, 2014
Delivery me	ethod pursuant to West Virginia Code § 22-6A-		
PERSO	ONAL SERVICE X CERTIFIED MAIL	METHOD OF DELIVERY THAT RE	QUIRES A RECEIPT OR SIGNATURE CONFIRMATION
prior to such pursuant to records. The and gas exp	n entry to: (1) The surface owner of such tract; (2) section thirty-six, article six, chapter twenty-two a notice shall include a statement that copies of the	permit application, the operator sicle. Such notice shall be provided to any owner or lessee of coal stoff this code; and (3) any owner e state Erosion and Sediment Col Secretary, which statement shall it	nall provide notice of planned entry on to the surface at least seven days but no more than forty-five days eams beneath such tract that has filed a declaration of minerals underlying such tract in the county tax attroit Manual and the statutes and rules related to oil statute contact information, including the address to the statute contact information, including the address to the statute contact information, including the address to the statutes are statuted.
	ereby provided to:	·	•
X	SURFACE OWNER(S)	X c	DAL OWNER OR LESSEE
			pal Declaration pursuant to §22-6A-10 and
Name: _	Eric H. & Beth S. Janotha		2-6-36 Not of Record
Address:	1873 Buzzard Run Rd. Pennsboro, WV 26415	Address:	
			NERAL OWNER(S)
Name:	Christa J. Smith	• • • • • • • • • • • • • • • • • • • •	• •
	204 East Myles Avenue	Naillo	
	Pennsboro, WV 26415	Address:	
Name: _		Name:	
Address: _		Address:	:
Notice is he		'Pleas	attach additional forms if necessary
Pursuant to 1	V	given that the undersigned well o	perator is planning entry to conduct a plat survey on
State:	West Virginia	Approx. Latitude & Longitude:	39.23527 / -80.93623 & 39.23248 / -80.93876
County:	Ritchie	Public Road Access:	
District:	Clay / Map 36 / Parcel 7	Watershed:	The state of the s
Quadrangle:	Pullman	Generally Used Farm Name:	Janotha
obtained from (304-926-04)	<b>n</b> the Secretary, at the WV Department of Environr	nental Protection headquarters, ior	to oil and gas exploration and production may be cated at 601 57th Street, SE, Charleston, WV 25304 ag may be obtained from the Secretary by visiting
Notice is he	reby given by:		
Well Operato	er: EQT Production Company	Address:	115 Professional Place, Bridgeport, WV 26330
Telephon	e: 304-848-0099	EQT Representative:	
Facsimil	e: <u>304-848-0040</u>	·	1./
Ema	il: EQTLandEntryNotice@eqt.com	Signature:	Kathy Kug

Oli 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.

WW-6A5 (1/12)

# 470 85 10 2 5 9

Operator Well No. 516212

### STATE OF WEST VIRGINIA

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

Date of Not	ice: 10/01/2015 Date Permit Applica	than the filing ation Filed: 10/	date of permit	application.
Delivery me	ethod pursuant to West Virginia Code § 22-6A	-16(c)		
	IFIED MAIL HAN JRN RECEIPT REQUESTED DEL	ND LIVERY		
the planned required to be drilling of a damages to t	W. Va. Code § 22-6A-16(c), no later than the control requested or hand delivery, give the surface own operation. The notice required by this subsection be provided by subsection (b), section ten of this horizontal well; and (3) A proposed surface us the surface affected by oil and gas operations to the section shall be given to the surface affected by this section shall be given to the surface affected by this section shall be given to the section shal	vner whose lan tion shall inclu article to a surf se and compen he extent the d	d will be used for ide: (1) A copy face owner whose sation agreement amages are com-	or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chanter
(at the addre Name: See atta	reby provided to the SURFACE OWNER(s) ss listed in the records of the sheriff at the time o	Name:		
Notice is her Pursuant to V operation or State: County:	reby given: West Virginia Code § 22-6A-16(c), notice is here the surface owner's land for the purpose of drill  W  Ritchie	by given that thing a horizonta	nl well on the tra Easting:	ct of land as follows: 505580.39
District:	Clay	Public Road	Northing:	4342877.51 St Rt. 74
Quadrangle:	Pullman		ed farm name:	Christa J. Smith
Pursuant to V to be provid horizontal we surface affect information	North Fork of Hughes River  Shall Include: West Virginia Code § 22-6A-16(c), this notice shed by W. Va. Code § 22-6A-10(b) to a surface ell; and (3) A proposed surface use and compensited by oil and gas operations to the extent the crelated to horizontal drilling may be obtained find the content of the co	e owner whose sation agreeme damages are co from the Secret	e land will be unt containing an ompensable und the WV	offer of compensation for damages to the er article six-b of this chapter. Additional
Well Operato	DT: EQT Production Company	Address:	115 Professional Pla	ice, P.O. Box 280
Telephone:	304-848-0082		Bridgeport, WV 263	
Email:	vroark@eqt.com	Facsimile:	304-848-0040	
	<del></del>			

### Oil and Gas Privacy Notice:

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

### **Surface Owner**

Christa J. Smith 204 E. Myles Ave. Pennsboro, WV 26415

Eric H & Beth S. Janotha (Previous owner notice 10/1/2015) 1873 Buzzard Run Rd. Pennsboro, WV 26415

## Surface Owner (Road and/or Other Distrubance)

470 85 10 25 9

Christa J. Smith 204 E. Myles Ave. Pennsboro, WV 26415

Eric H & Beth S. Janotha (Previous owner notice 10/1/2015) 1873 Buzzard Run Rd. Pennsboro, WV 26415

## **Surface Owner (Impoundments or Pits)**

Eric H & Beth S. Janotha (Previous owner notice 10/1/2015) 1873 Buzzard Run Rd. Pennsboro, WV 26415



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways** 

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

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

Reissued January 9, 2017

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

Subject: DOH Permit for the PUL 97 Pad Site, Ritchie County

516211 PUL97H1 516214 PUL97H4 516212 PUL97H2 516215 PUL97H5 516213 PUL97H3 516216 PUL97H6

516565 PUL97H7

Dear Mr. Martin,

This well site will be accessed from Permit #03-2015-0400 issued to EQT Production Company for access to the State Road. The well site is located off of Ritchie County Route 7/5 SLS. Approved permit must be received before the start of construction.

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

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

**EQT Production Company** 

CH, OM, D-3, File

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

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



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:		3	
Assigned Impoundment ID #:			

# Permit Associated Impoundment / Pit Registration

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

#### Section 1 - Operator Information

Operator Name:	EQT Production Company			
Operator ID:	306686			
Address: Street	P.O. Box 280			<del></del>
City:	Bridgeport	State: W	Zip: 263	330
Contact Name:	Columbus Michael Jervis	Contact Title:		
Contact Phone:	304-848-0013	Contact Email:	CJervis@eqt.com	

## Section 2 – Engineering / Design Contractor Information

• •	Larson Design Group			
Address: Street	2502 Cranberry Square			
City:	Morgantown	State: w	/ Zip:	26508
Contact Name:	Timothy Kinder	Contact Title	e: Director of Op	erations - Energy Group
Contact Phone:	877-323-6603 Ext. 453	Contact Ema	il: TKinder@lars	ondesigngroup.com
Certifying Professional E	ingineer: Robert A. Matejczyk, F	PΕ		
rofessional Engineer R		<u>'</u>		





## Office of Oil and Gas

# Section 3 - Impoundment / Pit Information

Type of Structure. Check one of two choices below:	
	Vaste Pit
Note: Any waste in a pit will make it a waste pit.	
•	
Name of Charles (O	
Name of Structure (Company Name :) Flowback Pit	
County: Ritchie District:	Clay
USGS 7.5' Quad Map Name: Pullman Farm Name: Janotha	
Pad Name: PUL 97	
Surface Owner Name: Eric & Beth Janotha	
Physical Description of Location: West side of CR 7/5 (Buzzard Ru	n Bood) approximately 0.40 mills at all 10.40
intersection of CR 7/5 and CR 74 (Pullman Drive)	n Road) approximately 2.19 miles North of the
(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22,	left on Buffalo Crooks
Watershed (nearest perennial): Buzzard Run	iei on Buildio Creek)
	50 ft.
to hear out personnial stream.	
Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxx	(X))
Latitude: 39.235325 Longitude (Use negative sig	
•	71078.11 N
Access Road Coordinates (junction of state highway access)	
Latitude: 39.236281 Longitude (Use negative si	gn): -80.931290
100000	1306.47 N
Approximate Dimensions	
Length: 189 ft. Width: 134 ft.	Height: 14 ft.
Note: If irregularly shaped, give approximate dimensions of long axis.	
Total Capacity – Provide all units of measure below:	
Вагтеls: <u>35,960</u> Gallons: <u>1,510,332</u>	_ Acre-Feet: _4.64
Capacity with 2' Freeboad Provide all units of measure below:	
Barrels: 27,622 Gallons: 1,160,116	Acre-Feet: 3.56
Incised volume:	
Barrels: 34,988 Gallons: 1,469,325	_ Acre-Feet: 4.50
No.	
Net impounded volume: (Total volume less incised volume.)	
Barrels: 972 Gallons: 41,007	Acre-Feet: 0.14
Anthonored Countries (Co. 15) (1) (1)	
Anticipated Construction Start Date (estimation, non-binding): F	all 2015
Anticipated Construction Start Date (estimation, non-binding): F Note: No construction may begin on Associoated impoundment u calendar days prior to confirmed construction start date, notify the inspector of construction start date. Use form IMP-2, "Notification	all 2015  ntil WVDEP issues the drilling permit. At least 7  Office of Oil & Gas, and the local Oil and Gas



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

Well Number(s):	API Number(s) – If issued:
516212 H2	Pending
516211 H1	Pending
516213 H3	Pending
516216 H6	Pending
516214 H4	Pending
516565 H7	Pending
516215 H5	Pending

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	Ξ.
---	------------	---------------------	--------------	-------------------	----

- 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

(iii)	The design of this stand of the standard of th
×	The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be
	defined as a dem under MV o Date \$47.04 Isther the determine it does not quality 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.
	an 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:
	the dameter, north the vvolet, biv. Of vvaler and vvaste, is available for review at:
	http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx
	The state of the s

Section 7 -Con	Section 7 -Comments - Provide any additional comments concerning this project				
5					



### **Section 8 - Application Certification**

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

Name:	Victoria J. Koank
Title:	Dermitting Superisor
Signature:	That It
Taken, subscribed and sworn to	before me this, 30 Day of Sept 20 15
Notary Public:	anda Jyin
My commission expires:	8-24-20
Notary Seal:	OFFICIAL SEAL  STATE OF WEST VIRGINIA  HOTARY PUBLIC  Pamela Syles  EQT Production  PO Box 280  Bridgeport, WV 26330  My Commission Expires Avg. 24, 2022
Taken, subscribed and sworn to Notary Public:  My commission expires:	STATE OF WEST VIRGINIA  NOTARY PUBLIC  Parties Sylves  EQT Production

### 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 WW 25304

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



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:	٠.	 \	
Assigned Impoundment ID #:	 		 - :

# Permit Associated Impoundment / Pit Registration

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

**Section 1 – Operator Information** 

Operator Name:	EQT Production Company			
Operator ID:	306686			
Address: Street	P.O. Box 280			
City:	Bridgeport	State: WV	Zip:	26330
Contact Name:	Columbus Michael Jervis	Contact Title:	•	
Contact Phone:	304-848-0013	Contact Email:	CJervis@eqt.com	
		· · · · · · · · · · · · · · · · · · ·		

Section 2 - Engineering / Design Contractor Information

Company Name:	Larson Des	ign Group				
Address: Street						
City:	Morgantown		State:	w	Zip:	26508
Contact Name:	Timothy Kinder		Contact	Title:	Director of Ope	erations - Energy Group
Contact Phone:	Contact Phone: 877-323-6603 Ext. 453		Contact E	Email:	TKinder@larso	ondesigngroup.com
Certifying Professional E	ngineer: F	Robert A. Matejczyk,	PE			··-
Professional Engineer R	egistration N	umber: 014027				



## 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 :) Completion Pit
County: Ritchie District: Clay
USGS 7.5' Quad Map Name: Pullman
Farm Name: Janotha
Pad Name: PUL 97 Surface Owner Name: Eric & Beth Janotha
Physical Description of Location: West side of CR 7/5 (Buzzard Run Road) approximately 2.19 miles North of the intersection of CR 7/5 and CR 74 (Pullman Drive)
(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22, left on Buffato Creek)
Watershed (nearest perennial): Buzzard Run
Distance (Drainage Distance) to nearest perennial stream: 1,390 ft.
The state of the s
Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxxx))
Latitude: 39.234863 Longitude (Use negative sign): -80.937277
UTM Coordinates : 1561402.00 E 270913.97 N
Access Road Coordinates (junction of state highway access)
Latitude: 39.236281 Longitude (Use negative sign): -80.931290
UTM Coordinates : 1563088.16 E 271306.47 N
Approximate Dimensions
Length: 238 ft. Width: 198 ft. Height: 14 ft.
Note: If irregularly shaped, give approximate dimensions of long axis.
Total Capacity – Provide all units of measure below:
Barrels: 142,485 Gallons: 5,984,371 Acre-Feet: 18.37
Consolity with 2! Espekand Deputies all writes of management at
Capacity with 2' Freeboad – Provide all units of measure below:  Barrels: 117,700 Gallons: 4,943,417 Acre-Feet: 15,17
Barrels: 117,760 Gallons: 4,943,417 Acre-Feet: 15.17
Incised volume:
Barrels: 39,984 Gallons: 1,678,296 Acre-Feet: 5.14
Acte-reet.
Net impounded volume: (Total volume less incised volume.)
Barrels: 102,521 Gallons: 4,306,075 Acre-Feet; 13.23
Anticipated Construction Start Date (estimation, non-binding): Fall 2015
Note: No construction may begin on Associoated 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."
insposes of construction start date. Ose form here-2, Notification of impoundment / Pit Construction."



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

Well Number(s):	API Number(s) – If issued:
516212 H2	Pending
516211 H1	Pending
516213 H3	Pending
516216 H6	Pending
516214 H4	Pending
516565 H7	Pending
516215 H5	Pending

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	Registere	d P.E.
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- 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 dealer of this standard to the standard to
×	The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be
	defined as a description of quality 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,
	" and a structure dualities 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 permits regarding dame with se required prior to registering the structure with the Office of Off and Gas.
	The dam standard, from the WVDEP, Div. Of Water and Waste, is available for review at:
	The dam standard, from the YYDE!, Div. Of Yyater and Yyaste, is available for review at:
	http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx
	Timp://www.dep.wa.gov/aaaa/ce/ds/fages/dejagil.aspx

Section 7 –Comments – Provide any additional comments concerning this project	

Office of Oil and Gas

470 05 10 25 9

## **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:	Lietoria J. Konke
Title:	Dern-thing Superasor
Signature:	The It
Taken, subscribed and sw Notary Public:	worn to before me this, 30 Day of Sept 20 15
My commission expires:	8-24-22
Notary Seal:	OFFICIAL SEAL STATE OF WEST VIRGINIA MOTARY PUBLIC Pamela Syrkes EOT Production PO Box 280  Bridgeport, WV 26330 My Commission Expires Aug. 24, 2022

#### 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 WW 25304

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

#### PROJECT INFORMATION

PROJECT NAME: FOT PUL 97

CLAY DISTRICT, RITCHIE COUNTY, WV DISTRICT 3 MAP 36 PARCELS 4, 7

SURFACE OWNERS

TAX PARCEL:

CHRISTA J. SMITH PID 3-36-7 TOTAL PROPERTY AREA: 69.88 ACRES TOTAL DISTURBED AREA: 26.55 ACRES IMPACTED FORESTED AREA: 13.20 ACRES

ERIC & BETH JANOTHA PID 3-36-7 TOTAL PROPERTY AREA: 79.21 ACRES TOTAL DISTURBED AREA: 18.83 ACRES IMPACTED FORESTED AREA: 1.93 ACRES





# FOT PRODUCTION COMPANY

EQT PUL 97 SITE PLAN

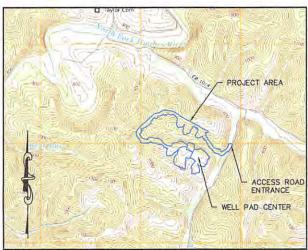
EQT PRODUCTION COMPANY OPERATOR ID: 306686 P.O. BOX 280 BRIDGEPORT, WV 26330

PHONE: (304) 348-3870

#### ENGINEER

**OPERATOR** 

LARSON DESIGN GROUP 2502 CRANBERRY SQUARE MORGANTOWN, WV 26508 PHONE: (304) 777-2940



SCALE: 1" = 2000'

PULLMAN QUADRANGLE WEST VIRGINIA

PROPOSED WELL NAME	WV NORTH NAD 83	NAD 83 LAT & LONG
H2-516212	N 271021.37 E 1561952.35	LAT 39.235182 LON -80.935341
H1-516211	N 271014.76 E 1561965.81	LAT 39.235165 LON -80.935293
H3-516213	N 271008.15 E 1561979.28	LAT 39.235147 LON -80.935245
H6-516216	N 271001.54 E 1561992.74	LAT 39.235129 LON -80.935197
H4-516214	N 270994.93 E 1562006.21	LAT 39.235112 LON -80.935149
H7-516565	N 270988.31 E 1562019.67	LAT 39.235094 LON -80.935101
H5-516215	N 270981.69 E 1562033.14	LAT 39.235077 LON -80.935053
WELL PAD ELEVATION	938.80	

#### GENERAL DESCRIPTION

THE ACCESS ROAD(S), WELL PAD, FLOW BACK PIT, AND COMPLETIONS PIT ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL SHALE GAS WELLS.

#### MISS UTILITY STATEMENT

EQT WILL NOTIFY MISS UTILITY OF WEST VIRGINIA FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN: TICKET #143509524, #1435093538, AND #1435093569.

IN ADDITION, MISS UTILITY WILL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT

#### MISS Utility of West Virginia 1-800-245-4848 West Virginia State Law (Section XIV: Chapter 24-C) Requires that you call two

business days before you dig in the state of West Virginia. IT'S THE LAW!!

#### RESTRICTIONS NOTES:

1. THERE ARE TWO WETLANDS WITHIN 100 FEET OF THE WELL PAD LOD.

2 THERE ARE NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE WELL PAD LOD.

3. THERE ARE NO NATURALLY PRODUCING TROUT STREAMS WITHIN 300 FEET OF THE WELL PAD AND LOD.

4 THERE ARE NO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY FACILITIES WITHIN 1000 FEET OF THE WELL PAD AND LOD.

5. THERE ARE NO APPARENT EXISTING WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF THE WELL(S) BEING DRILLED

6. THERE ARE NO OCCUPIED DWELLING STRUCTURES WITHIN 625 FEET OF THE CENTER OF THE WELL PAD.

7. THERE ARE NO AGRICULTURAL BUILDINGS LARGER THAN 2,500 SQUARE FEET WITHIN 625 FEET OF THE CENTER OF THE WELL PAD.

#### LOCATION COORDINATES

ACCESS ROAD ENTRANCE

LATITUDE: 39.236018 LONGITUDE: -80.931364 (NAD 83) N 271307.66 E 1563083.29 (WV NORTH NAD 83)

LATITUDE: 39.235021 LONGITUDE: -80.935210 (NAD 83) N 270962.12 E 1561988.38 (WV NORTH NAD 83)

CENTER OF 60,000 BBL TANK

LATITUDE: 39.235277 LONGITUDE: -80.937146 (NAD 83) N 271064.14 E 1561441.45 (WV NORTH NAD 83)

CENTER OF 40,000 BBL TANK

LATITUDE 39.234863 LONGITUDE: -80.937277 (NAD 83) N 270913.97 E 1561402.00 (WV NORTH NAD 83)

#### ENTRANCE PERMIT

EQT WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MM-109) FROM THE WEST VIRIGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

WETLAND DELINEATIONS WERE PERFORMED BETWEEN DECEMBER 11, 2014 THROUGH JANUARY 29, 2015 BY LARSON DESIGN GROUP TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE APRIL 24, 2015 EQT PUL 97 JURISDICTIONAL STREAMS & WELLANDS MAPS WERE PREPARED BY LARSON DESIGN GROUP AND SUMMARIZE THE RESULTS OF THE FIELD DELINEATION. THE MAPS DO NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WYDEP. IT IS STRONGLY RECOMMENDED THAT THE AFOREMENTONED AGENCIES BE CONSULTED IN AN EFFORT TO GAIN WRITTEN CONFIRMATION OF THE DELINEATION SHOWN ON THIS EXHIBIT PRIOR TO ENGAGING CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN. THE DEVELOPER SHALL OBTAIN THE APPROPRIATE PERMITS FROM THE FEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WETLAND FILLS AND STREAM CROSSINGS.

#### GEOTECHNICAL NOTE

A GEOTECHNICAL INVESTIGATION HAS NOT COMPLETED FOR THIS SITE. CONSEQUENTLY, THE DESIGN OF THE SITE IMPROVEMENTS DEPICTED ON THESE DRAWINGS WAS PREPARED BY LDG WITHOUT DETAILED GEOTECHNICAL INFORMATION AND LDG DOES NOT GUARANTEE THE EFFICACY OF THIS DESIGN.

LDG RECOMMENDS COMPLETION OF A DETAILED GEOTECHNICAL INVESTIGATION AND EVALUATION/REDESIGN OF THE SITE IMPROVEMENTS PRIOR TO CONSTRUCTION. THE OWNER ASSUMES ALL RISK IN THE USE OF THESE DRAWINGS TO CONSTRUCTION IMPROVEMENTS ON THIS SITE.

#### SHEET INDEX

COVER SHEET

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ACCESS ROAD CROSS SECTIONS

RECLAMATION PLANS 25-29

30-40 EROSION CONTROL DETAILS

CONSTRUCTION QUANTITIES



REPLACE PITS WITH AST	OWF	RAM
FINAL SITE DESIGN	CMC	RAM
FINAL SITE DESIGN	OW	RAM
FINAL SITE DESIGN	GWC	RAM
FINAL SITE DESIGN	Owc	BMP
COMMENTS	BY	ž

# · Architects Group Square SITE

SHEET 16元 COVER 1 FOT

EQT Corporation 120 PROFESSIONAL P BRIDGEPORT, WV 263 PHONE 304.848.0000

1 OF 41 7936-002

