

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary <u>www.dep.wv.gov</u>

Thursday, June 21, 2018
WELL WORK PLUGGING PERMIT
Vertical Plugging

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for 6230 47-017-01881-00-00

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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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: 6230

Farm Name: LODGE, F. L.

U.S. WELL NUMBER: 47-017-01881-00-00

Vertical Plugging
Date Issued: 6/21/2018

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

- 1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.

WW-4B Rev. 2/01

1) Date May 21 ,	20 18
2)Operator's	
Well No. 606230 F. L. Lodge #	6230
3) API Well No. 47-017	- 01681

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

	APPLICATION FOR A PERI	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liquid	d injection / Waste disposal /
		derground storage) Deep/ ShallowX
5}	Location: Elevation 893	Watershed Middle Fork
	District Cove	County Doddridge Quadrangle Oxford
6)	Well Operator EQT Production Company	7) Designated Agent Jason Ranson
٠,	Address 2400 Ansys Drive- Suite 200	Address 120 Professional Place
	Canonsburg PA 15317	Bridgeport WV 26330
8)	Oil and Gas Inspector to be notified	9)Plugging Contractor
	Name Daniel Flack	Name HydroCarbon Well Service
	Address 587 Rive Road	Address PO Box 995
	Buckhannon WV 26201	Buckhannon WV 26201
	Work Order: The work order for the mani	
		dures.
		dures.
		dures. RECEIVED Office of Oil and Gas
loti	See Attachment for details and proced	RECEIVED Office of Oil and Ga JUN 2 1 2018

PLUGGING PROGNOS

606230 F.L.Lodge API# 47-017-01881 District, Cove Doddridge County, WV

BY: R Green DATE: 01/03/18

CURRENT STATUS: TD @ 1893' Elevation @ 907'

10" casing @ 30' 8 5/8" casing @ 223' (CTS) 5 ½" casing @ 1873' (Cemented with 75 sks)

Fresh Water @ None Reported Saltwater@ None Reported Oil Show @ 1809' Gas shows @ 1742' Coal @ None Reported

- 1. Notify inspector Daniel Flack @ 304-545-0109, 24 hrs. prior to commencing operations.
- 2. TIH and check TD @ or below 1850'
- 3. TIH to 1850' and spot 25 bbl. of 6% gelled water, followed by a 300' C1A cement plug. 1850' to 1550'. WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
- 4. Free point 5 1/2" casing, cut casing @ free point. TOOH 5 1/2" casing.
- Set a 100' C1A cement plug 50' in/out of casing cut. Perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
- 6. TOOH to 1000' set a 200' C1A cement plug ,1000' to 800'. (Elevation).
- 7. TOOH to 300', set a 300' C1A cement plug 300' to surface.
- 8. Erect monument with API#, date plugged, & company name.
- 9. Reclaim location and road to WV-DEP specifications.

Make every effort to spall all cosing

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Office of Oil and Gas

JUN 2 1 2018

WV Department of Environmental Protection

Eqt. 6230



STATE OF WEST VIRGINIA DEPARTMENT OF MINES



Oil and Gas Division

OIL & GAS DIVISION DEFT. OF MINES

Disposal_

WELL RECORD

| Rotary X | Oil X | Cable | Gas | Comb. | Water Flood | Storage |

Quadrangle Holbrook NE 4³⁻⁴ Permit No. Dodd-1881

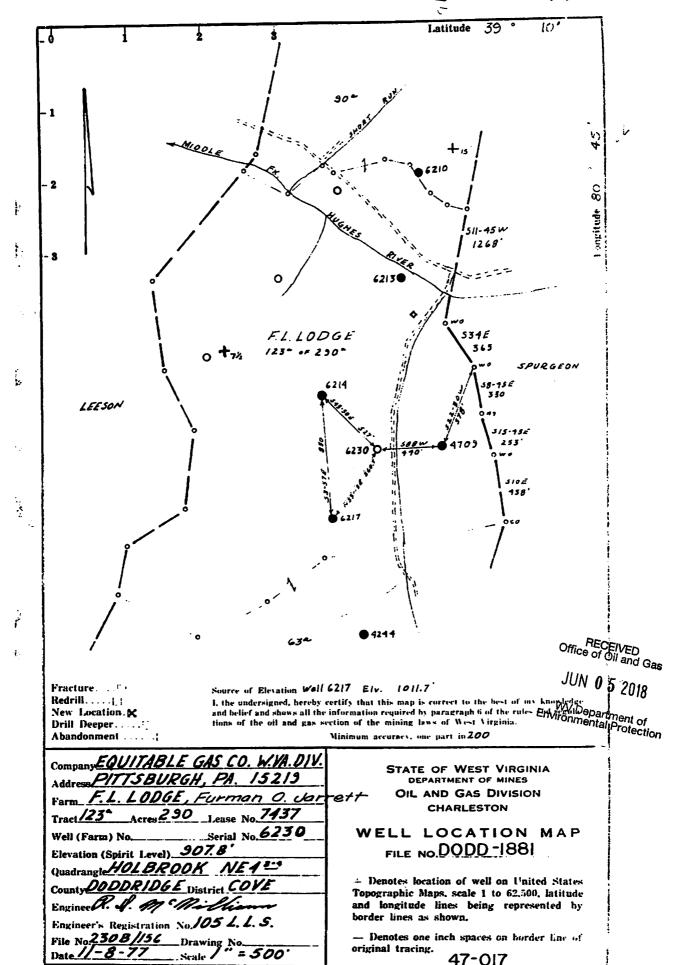
(Kind) Equitable Gas Company Company_ Address 420 Blvd. of the Allies, Pgh., PA 15219 Casing and Used in Left Cement fill up in Well **Tubing** Drilling Cu. ft. (Sks.) F.L. Lodge Acres 123ac of Location (waters) Hughes River
Well No. P. O. 6230 290ac Size 907.81 20-16 District_Cove County Doddridge Cond. The surface of tract is owned in fee by_ 13-10" 30 Nettie Leeson, Att. in Fact 9 5/8 Address Auburn, West Virginia 8 5/8 223 223 To surface Mineral rights are owned by Furman O. Jarrett 5 1/2 1873 Address Morgantown, W. VA 26505 755x. to 1488' 3-27-78 Drilling Commenced_ 4 1/2 5-27-78 Drilling Completed_ Initial open flow _ .cu. ft. _ bbis. Liners Used Final production_ .cu. ft. per day ___ bbls. Well open _ hrs. before test_ Well treatment details: Attach copy of cementing record.

Fractured 5-2-78 Treating Pressure Details: Max 1900#. final 1900#. Aug 1500# I.S.I.P. 1600#. 15 min S.I.P. 1100# Total Fluid - 875 BBLS. Total Prop - 10.000# 80/100 sand. 35.000# 20/40 sand Coal was encountered at_ No Coal _Feet_ Inches Fresh water_ .Fcet . Salt Water_ Feet . Producing Sand_ Big Injun Depth _ 1734 - 1829

Pormation Color Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water • Res	marks
Gas Sand Salt Sand Little Lime Little Lime Little Lime Big Lime Big Injun T.D. Note: From Gamma Log	798 1000 1089 1186 1313 1424 1500 1616 1642 1674 1734	807 1038 1100 1215 1365 1452 1547 1626 1663 1734 1829	Gas 1742 - 1769 011 1809 - 1823	Office of Oil and Gi JUN 0.5 2018 WV Department of Environmental Protection

(over)

^{*} Indicates Electric Log tops in the remarks section.



Commence of

. . . .

WW-4A Revised 6-07

1) Date:

May 21, 2018

2) Operator's Well Number

606230 F. L. Lodge #6230

3) API Well No.: 47 -

01881

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to	be served:	5) (a) Coal Operator		
(a) Name See Att	ached	Name		
Address		Address		
(b) Name		(b) Coal Owr	ner(s) with Declaration	
Address		Nama	See Attached	
		Address		
(c) Name		Name		
Address		Address		
6) Inspector Daniel F	Flack	(c) Coal Less	see with Declaration	
Address 58 Rive	Road	Name	oc will becautation	
The second of the second secon	innon WV 26201	Address		
Telephone 304-545	5-0109			
However, you are not Take notice that unde accompanying docum Protection, with respethe Application, and	required to take any action at all. r Chapter 22-6 of the West Virginia ents for a permit to plug and abandet to the well at the location describ	a Code, the undersigned well of on a well with the Chief of the bed on the attached Application stered or certified mail or deliv	perator proposes to file or has filed to Office of Oil and Gas, West Virginian and depicted on the attached Form wered by hand to the person(s) name	this Notice and Application and a Department of Environmental WW-6. Copies of this Notice,
	Wall On one	ton FOT Braduation Compa		
~~~~~	wen Opera By:	EQT Production Compa Erin Spine	IIIy	
OFFICIAL SEAL NOTARY PUBLIC		Regional Land Supervis	sor	
STATE OF WEST VIRGI	Address	2400 Ansys Drive, Suite		
EQT PRODUCTION COMPO BOX 280	PANY	Canonsburg PA 15317		
BRIDGEPORT, WV 263	Telephone	(304) 848-0035		
				Office OF CEIVED
Subscribed and sworn b	a Ubins	day of June	2 2018 Notary Public	Office of Oil and Gas  JUN 0 5 2018  WW Department of Environmental Protection
Oil and Gas Privacy Notice				mental Protection

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

#### 47-017-01881

606230 (F.L. Lodge #6230)

### Owner(s) (Surface and Access)

Mansfield Leeson 76 Bear Fork Road New Milton, WV 26411

### Coal Owner(s):

Mansfield Leeson 76 Bear Fork Road New Milton, WV 26411

### Potential Water Owner(s):

Mansfield Leeson / 76 Bear Fork Road New Milton, WV 26411

Office of Oil and Gas

JUN 0 5 2018

WV Department of Environmental Protection

WW-9 (5/16)

API Number	47 -	017	_ 0	1881	P
Operator's We			30 F. I	. Lod	ge #6230

### 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	
Watershed (HUC 10) Middle Fork Quadrangle Oxford	
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 Vo No	
If so, please describe anticipated pit waste: Formation Fluids	
Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20 ml	
Proposed Disposal Method For Treated Pit Wastes:	
Land Application (if selected provide a completed form WW-9-GPP)	
Underground Injection ( UIC Permit Number)	
Reuse (at API Number)  Off Site Disposal (Supply form WW-9 for disposal location)	
Other (Explain_	
Will closed loop systembe used? If so, describe:	
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.	
-If oil based, what type? Synthetic, petroleum, etc	
Additives to be used in drilling medium?	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc	
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)	
-Landfill or offsite name/permit number?	
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 April 1, 2016, by the Office of Oil and Cas 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/orother 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 of the papilication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsibly for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalty for submitting false information, including the possibility of fine or imprisonment.  Company Official Signature  Company Official Title Regional Land Supervisor  Subscribed and swom before me this	`as
My commission expires 4-7-2020  My commission expires 4-7-3020	EET

### **EQT Production Water plan Offsite disposals**

### **Waste Management - Meadowfill Landfill**

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

### **Waste Management - Northwestern Landfill**

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

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		Operator's W	/ell No. 606230 F. L. Lodge #62
Proposed Revegetation Trea	atment: Acres Disturbed 13	t Preveg etation p	н
Lime 3	Tons/acre or to correc	ct to pH 6.5	
Fertilizer type (10	0-20-20) or equivalent	***********	
Fertilizer amount_	1/3 ton	lbs/acre	
Mulch 2		Tons/acre	
		Seed Mixtures	
Т	emporar y	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Aslike Clover	5	Aslike Clover	5
Annual Rye	15		
provided). If water from the (L, W), and area in acres, or	e pit will be land applied, pro f the land application area.	d application (unless engineered plans incluovide water volume, include dimensions (L	ding this info have been , W, D) of the pit, and dimension
provided). If water from the (L, W), and area in acres, of Photocopied section of invo	e pit will be land applied, profithe land application area.  olved 7.5' topographic sheet.	ovide water volume, include dimensions (L	, W, D) of the pit, and dimension
provided). If water from the (L, W), and area in acres, of Photocopied section of invo	e pit will be land applied, profithe land application area.  olved 7.5' topographic sheet.	ovide water volume, include dimensions (L	, W, D) of the pit, and dimension

JUN 2 1 2018

WV Department of Environmental Protection

Oxford 7.5' 1" = 200' Topo Quad: Scale: Doddridge May 10, 2018 County: Date: Cove 67-30-00-08 Project No: District: Topo 47-017-01881 WV 606230 (F. L. Lodge #6230) Pit Location Map 47-017-01881 WV 606230 **Existing Well** Access Road Office of Oil and NAD 27, North Zone JUN 0 5 20 8N:236418.53 Environmental Protection **WGS 84 LEGEND** LAT:39.142025 LONG:-80.785996 Proposed Pit Location ELEV:892.63 SURVEYING AND MAPPING SERVICES PERFORMED BY: PREPARED FOR: ALLEGHENY SURVEYS, INC. **EQT Production Company** 



1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608

1" = 500' Topo Quad: Oxford 7.5' Scale: County: Doddridge Date: May 10, 2018 Cove 67-30-00-08 District: Project No: Highway 47-017-01881 WV 606230 (F. L. Lodge #6230) Pit Location Map 19) 19 Fork 47-017-01881 WV 606230 **Existing Well Access Road** Office of Oil and Gas JUN 0 5 2018 WV Department of Environmental Protection NAD 27, North Zone N:236418.53 E:1635204.87 WGS 84 **LEGEND** LAT:39.142025 LONG:-80.785996 Proposed Pit Location ELEV:892.63 PREPARED FOR: SURVEYING AND MAPPING SERVICES PERFORMED BY: ALLEGHENY SURVEYS, INC. **EQT Production Company** 



1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608

Oxford 7.5' Topo Quad: County:

Scale:

1" = 2000'

Doddridge

Date:

May 10, 2018

District:

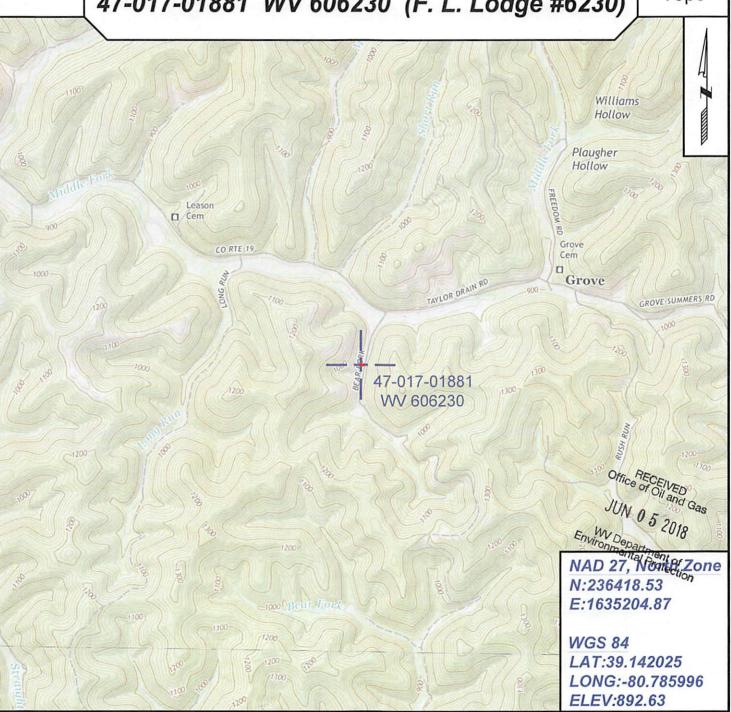
Cove

Project No:

67-30-00-08

47-017-01881 WV 606230 (F. L. Lodge #6230)

Topo





SURVEYING AND MAPPING SERVICES PERFORMED BY:

### ALLEGHENY SURVEYS, INC.

1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608

PREPARED FOR:

### **EQT Production Company**



## West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

API: 47-017-01881 WELL NO.: WV 606230 (F. L. Lodge #6230)
FARM NAME: F. L. Lodge
RESPONSIBLE PARTY NAME: EQT Production Company
COUNTY: Doddridge DISTRICT: Cove
QUADRANGLE: Oxford 7.5'
SURFACE OWNER: Mansfield Leeson
ROYALTY OWNER: Mansfield Leeson
UTM GPS NORTHING: 4332559
UTM GPS EASTING:518494 GPS ELEVATION:272 m (893 ft)
The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:  1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.  2. Accuracy to Datum – 3.05 meters  3. Data Collection Method: Survey grade GPS : Post Processed Differential Real-Time Differential Real-Time Differential Altitude:  A Letter size copy of the topography map showing the well location.  If the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.  Signature Title Date



# Miss Utility of West Virginia (WV811) (Exhibit A) Directions to Gas Well No. WV 606230 API No. 47-017-01881

- Beginning at the intersection of US Interstate 79 Exit 79 (Burnsville/Glenville) and WV State Route 5 in Braxton County, WV.
- Proceed Northwest on WV State Route 5, for approximately 9.6 miles, to WV County Route 13, on the right.
- Turn right onto WV County Route 13 and proceed Northeast, for approximately 3.1 miles, to WV County Route 26, on the left.
- Turn left onto WV County Route 26 and proceed Northwest, for approximately 4.5 miles, to the junction of US Routes 33 & 119.
- Turn right onto US Routes 33 & 119 and proceed Northeast, for approximately 1.8 miles, to WV County Route 47, on the left.
- Turn left onto WV County Route 47 and proceed Northwest, for approximately 3.6 miles, to the intersection with WV State Route 18.
- Bear right onto WV State Route 18 and proceed Northeast, for approximately 9.4 miles, to
   WV County Route 19, on the left. (Point No. 1)

  Office of Oil and Gas

  Office of Oil and Gas

  Office of Oil and Gas
- Turn left onto WV County Route 19 and proceed Northwest, for approximately 3.1 miles, to WV County Route 62, on the left. (Point No. 2)

  WV County Route 62, on the left. (Point No. 2)

BIRCH RIVER OFFICE 237 Birch River Road Birch River, WV 26610 phone: 304-649-8606 fax: 304-649-8608 BRIDGEPORT OFFICE

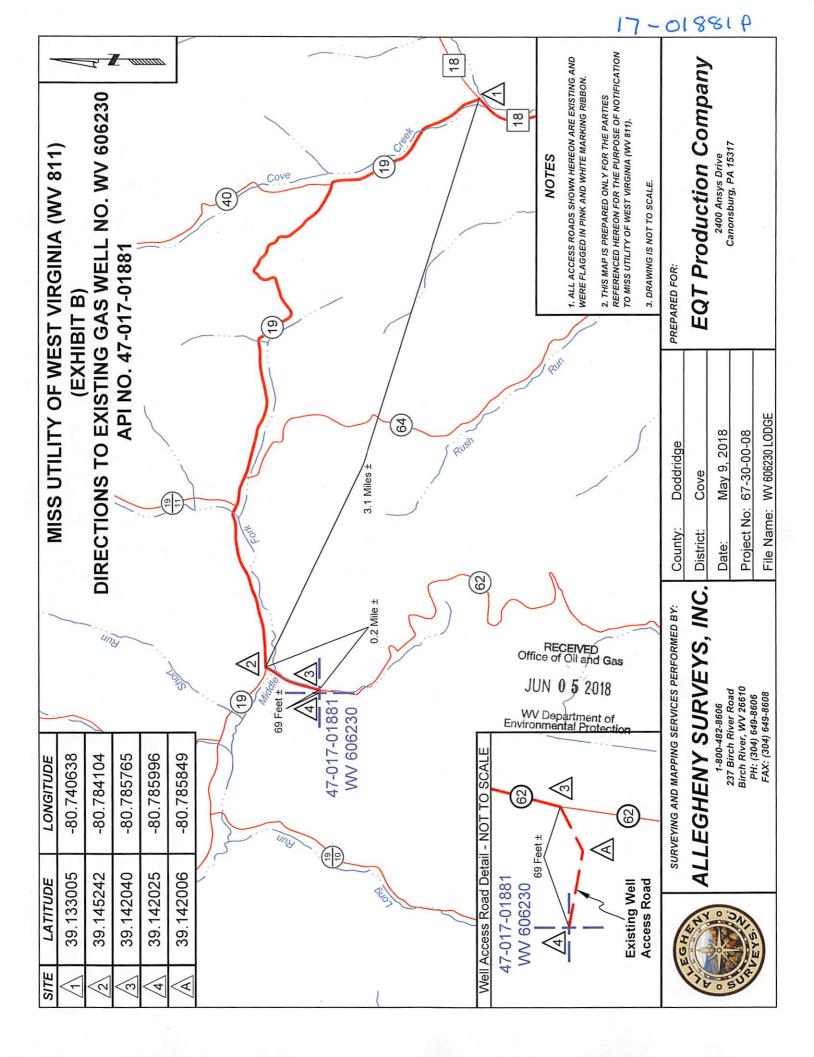
172 Thompson Drive Bridgeport, WV 26330 phone: 304-848-5035 fax: 304-848-5037 ALUM CREEK OFFICE
P.O. Box 108 • 1413 Childress Road
Alum Creek, WV 25003

phone: 304-756-2949 fax: 304-756-2948

- Turn left onto WV County Route 62 and proceed Southwest, for approximately 0.2 mile, to the Well Access Road, on the right. (*Point No. 3*)
- Turn right onto the Well Access Road and proceed West, for approximately 69 feet, arriving at Gas Well WV 606230. (*Point No. 4*)

Office of Oil and Gas
JUN 0 5 2018

WV Department of Environmental Protection





### POTENTIAL WATER SAMPLE DATA SHEET

CLIENT:	EQT PRODUCTION COMPANY	
LEASE NAM	IE AND WELL No. F.L. Lodge #6230 - WV 606230 - API No. 47-017-01881	

### POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing:882 +/- Owner:Mansfield Leeson		
Address: 76 Bear Fork Road, New Milton, WV 26411 .	Phone No	
Comments:		
Site: 2 Spacing:		
Address: 76 Bear Fork Road, New Milton, WV 26411 .	Phone No	
Comments:		

Environmental Protection

BIRCH RIVER OFFICE 237 Birch River Road Birch River, WV 26610 phone: 304-649-8606 fax: 304-649-8608 BRIDGEPORT OFFICE

172 Thompson Drive Bridgeport, WV 26330 phone: 304-848-5035 fax: 304-848-5037

ALUM CREEK OFFICE P.O. Box 108 • 1413 Childress Road Alum Creek, WV 25003 phone: 304-756-2949 fax: 304-756-2948

1" = 2000' Topo Quad: Oxford 7.5' Scale: County: Doddridge Date: May 10, 2018 67-30-00-08 Cove Project No: District: Water 47-017-01881 WV 606230 (F. L. Lodge #6230) 2 Potential Water Sources within 1000 Williams Hollow Plaugher Hollow Leason Cem Grove CO RTE 19 Cem Grove TAYLOR DRAIN RD GROVE SUMMERS RD Site 2 47-017-01881 WV 606230 E:1635204.87 **WGS 84** LAT:39.142025 LONG:-80.785996 ELEV:892.63



SURVEYING AND MAPPING SERVICES PERFORMED BY:

### ALLEGHENY SURVEYS, INC.

1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608

PREPARED FOR:

### **EQT Production Company**