

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Monday, May 7, 2018 WELL WORK PLUGGING PERMIT Vertical Plugging

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for 185 47-095-00501-00-00

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: 185 Farm Name: HAUGHT, J. B. U.S. WELL NUMBER: 47-095-00501-00-00 Vertical Plugging Date Issued: 5/7/2018

Promoting a healthy environment.

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

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.
- 4. This well is under a consent order and must be plugged under the terms of that agreement.

Form WW-4 (B) Permit Copy (Rev 2/01)

4)

Date:		Apr	il 1	0, 2018	
Operator's We	11				
Well No.	6504	51 Hau	gh	t #185	
API Well No .:	#	095	-	00501	

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

	Well Type: Oi If Gas, Production			quid Injection	Waste Dispo	sa	
	n Gas, Flouucil		_ Or Undergro	ound storage	Deep	Shallow	Х
5)		evation: 908		Daniels Run			
	Location: District:	Ellsworth	_ County:	Tyler	Quadrangle:	Porter Falls	
6)	Well Operator Address:	EQT Production C 120 Professional F Bridgeport, WV 26	lace	7) Designat Address:			
		n Blevins 19th Street a WV 26105		Name:	Contractor: HydroCarbon Well 9 PO BOX 995 Buckhannon, WV 2	Service	

10) Work Order: The work order for the manner of plugging this well is as follows: See Attachment for details and procedures.

OFFICE USE ONLY

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

Date 4-26-18

PLUGGING PROGNOS

650451 J.B. Haught # 185 API# 47-095-00501 District, Ellsworth Tyler County, WV

BY: R Green DATE: 01/30/17

CURRENT STATUS:

TD @ 2651' Elevation @ 907'

10" casing @???
8 1/4" casing @???
6 5/8" casing @ Casing in well ... but no record of how much.
5 3/16" casing @ Casing in well... but no records of how much.
2" tubing" @ 2652" (Set on 2" X 5 3/16" packer @ 2404')

Fresh Water @ None Reported Saltwater@ None Reported Oil Show @ None Reported Gas shows @ None Reported Coal @ None Reported

)m17 7-26-18 ACB .1/26/

Craqin Blevins 304-382-5933

- 1. Notify inspector, Derek Haught, @ 304-206-7613, 24 hrs. prior to commencing operations.
- 2. Release packer and TOOH with 2 3/8" tubing and packer.
- TIH to 2600', spot 30 bbl. of 6% gelled water, followed by a 250' C1A cement plug, 2600' to 2350'. WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
- * Note, if unable to release packer and TOOH tubing, TIH, and cut 2" tubing at top of packer, TOOH tubing.
- TIH to top of packer, spot 30 bbl. of 6% gelled water, followed by a 200' C1A cement plug, 2400 to 2200', WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
- 6. TIH collar locator and find bottom of 5 3/16" casing.
- TIH to bottom of 5 3/16" casing, set a 100' C1A cement plug from 50'below to 50' inside of 5 3/16" casing.
- 8. Free point 5 3/16" casing cut casing @ free point. TOOH 5 3/16" casing.
- 9. TIH 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.
- 10. TIH collar locator and find bottom of 6 5/8" casing.
- 11. TIH to bottom of 6 5/8" casing, set a 100' C1A cement plug from 50'below to 50' inside of 6 5/8" casing.
- 12. Free point 6 5/8" casing cut casing @ free point. TOOH 6 5/8" casing.
- TIH 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.
- 14. TIH collar locator and find bottom of 8 1/4" casing.(If present)

- 15. TIH to bottom of 8 1/4" casing, set a 100' C1A cement plug from 50'below to 50' inside of 8 1/4" casing.
- 16. Free point 8 1/4" casing cut casing @ free point. TOOH 8 1/4" casing.
- 17. TIH 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.
- 18. TIH to 950' set a 100' C1A cement plug 950' to 850'. (Elevation).
- 19. TIH collar locator and find bottom of 10" casing.(If present)
- 20. TIH to bottom of 10" casing, set a 100' C1A cement plug from 50'below to 50' inside of 10" casing.
- 21. Free point 10" casing cut casing @ free point. TOOH 10" casing.
- 22. TIH set a C1A cement plug 50' in casing cut to surface. Perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
- 23. * Note, if unable to cut and pull 10" casing, TIH and perforate 10" with 4 holes each @ 150', 100'& 75'. TIH to 150', and set a 150' C1A cement plug 150' to surface.
- 24. Erect monument with API#, date plugged, & company name.
- 25. Reclaim location and road to WV-DEP specifications.

UMUL UND COMI AN I Well No. 185 Map Sheet No2/10 METHINSPILLE P RECORD OF WELL B. Naught Drilled on 40 Farm of Acres, situate in Ellsword County 21Val Lease No. 32611 Township District Shipping Point Foreman 47.095005018 RIG Located Commenced Drilling Notified Gen'l Office Notified Gen'l Office Commenced Completed Drilling uly 11, 1100. Completed Notified Gen'l Office Contractor Contractor Address Address ROCK FORMATION TOP BOTTOM REMARKS PRESSURE AND VOLUME tube aug Conductor カス the 35 Minute Lbs. 4 Or Mapleton Coal :. 1 10 Pittsburgh Coal 2 Little Dunkard by to Pgh. 10/18/35 Big Dunkard 20 Gas Sand az 5 1st Salt Sand 10 2nd Salt Sand 32 15 Maxton Sand 40 30 Little Lime 4-8 1 Hour u Pencil Cave Rock 50 Tubing Inch **Big Lime** Size of Casing Big Injun Vol. by Water Gantz Sand Mercury 50 Foot Sand " Pressure 30 Foot Sand Gordon Stray CONNECTED TO MAIN LINE Gordon Sand 4th Sand Length of Line 5th Sand Feet Bayard Sand Size of Line Inch DISCONNECTED FROM LINE Elizabeth Speechley Notified Les RECEIVED Bradford A Office of Oil and Gas Withgef 3 2018 ___ Tuking Total Depth 2651 Feet at \$ per Foot Gas Furnished at Cents per have Doment

SIZE	CHARGE TO WEL		PUT IN V	VELL	PULLE	D	LEFT IN WEL	.L	TRANSFER	RED	LEFT AT WE	r LL	Livironment	Protectic
	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	PACIN	ER A Back
2	2652		2652				2652	1						allehar
10	ļ						0						Size 240	4
12	4					0	In ecc	a	hat	ro	reca	rd	Set at	Feet
													WELL S	HOT
													Ву	
													With Qts.	at Feet

650451 HA49MT =18

,

Company Employee

WW-4-A Revised 6/07

6

1 \	Data	
1)	Date:	
• /	Dato.	

April 10, 2018709500501

	650451	Haught #185
)	Operato	or's vvell number

3) API Well No.: # 095 - 00501

State

County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

Surface Owner	er(s) to be served:	5) (a) Coal	Operator:
(a) Name	Robert D and Sherry Ball	Name	None
Address	552 Pittinger Rd.	Address	
	New Cumberland WV 26047		
(b) Name		(b) Coal Ov	vner(s) with Declaration
Address		Name	Robert D and Sherry Ball
			552 Pittinger Rd.
		Address	New Cumberland WV 26047
(c) Name		Name	
Address		Address	
		_	
Inspector	Cragin Blevins	(c) Coal Les	ssee with Declaration
Address	1407 19th Street	Name	None
	Vienna WV 26105	Address	
Telephone	304-382-5933		

TO THE PERSONS NAMED ABOVE:

You should have received this Form and the following documents:

(1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and

(2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to **file Char** VED filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Confi and Gas of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the pp **9 9 2** 018 above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

	vvv Department of
Well Operator:	EQT Production Company S Environmental Protection
NOTARY PUBLIC BY:	Erin Spine
	Regional Land Supervisor
REBECCA L. WANSTITEE IS. EAT PRODUCTION COMPANY Address:	2200 Energy Drive
PO BOX 280	Canonsburg PA 15317
My commission expires April 07, 202 Telephone:	(304) 848-0035
Subscribed and sworn before me this	day of April , 2018
My Commission Expires:	Notary Public
	0

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

WW-9		Page	of	
Revised 5/16			erator's Well Number	
			1 Haught #185	
			Well No.: # 095 - 00501	_
	STATE OF WE			
	DEPARTMENT OF ENVIRO	NMENTAL PROTECTIO	N	
	FLUIDS / CUTTINGS DISPOS		AN	
Operator Name:	EQT PRODUCTION COMPANY	C	DP CODE:	
				-
Watershed (HUC 10):		Quadrangle		_
Will a pit be used? Yes	ore than 5,000 bbls of water to complet X No	te the proposed well work?	Yes No_X	
If so, please describe antic		Formation	Fluids	
Will a synthetic liner be us	ed in the pit? Yes X No	Is so, what ml.?	20 ml	-
Proposed Disposal Method	d for Treated Pit Wastes:			DmH
	Land Application (if selected prov	vide a completed form WW-	-9-GPP)	4-26-18
V	Underground Injection (UIC Perm	nit Number		_)
X	Reuse (at API Number Various			-) CKB,
X	Off Site Disposal Permit (Supply Other: (Explain			4/26/2019
				_ / /
Will closed loop system be	used ? If so, describe:			-
Drilling medium anticipated	d for this well? (vertical and horizontal)	? Air, freshwater, oil based	. etc	-
If oil based, what	at type? Synthetic, petroleum, etc.		,	-
Additives to be used in drill	ling mealum?			
Drill cuttings disposal meth	nod? Leave in pit, landfill, remove offsi	te, etc.		
If left in pit and pla	an to solidify what medium will be used? (c name/permit number?	ement, Lime, sawdust)		-
Landin or offsite r	ame/permit number?			-
Permittee shall provide written	n notice to the Office of the Oil and Gas of a	ny load of drill cuttings or asso	ciated waste rejected at :	-
West Virginia solid waste facil	ity. The notice shall be provided within 24 I	nours of rejection and the perm	nittee shall also disclose	
where it was properly disposed				
I certify that I understan	d and agree to the terms and condition	s of the GENERAL WATER		=
on April 1, 2016, by the Off	rice of Oil and Gas of the West Virginia	Division of Environmental	Protection Lunderstand that the	
provisions of the permit are	e enforceable by law. Violations of any or can lead to enforcement action.	term or condition of the ge	neral permit and/or other	
application form and all atta	achments thereto and that, based on m	w inquiry of those individue	lo immodiately reconcided for	
obtaining the information, I	believe that the information is true, acc	curate and complete. I am	aware that there are significant	
penalties for submitting fals	se information, including the possibility	of fine or imprisonment.	5	
Company Official Sigr	nature	~		
Company Official (Typ	ped Name) Erin Spine			
Company Official Title				•
Subscribed and sworn b		day of April	. 2018	
Dalassas	VIII III			
My Commission Expires	J Wanstreet		orpricial NOTARY F	1101 10
my commission Expiles		20	REBECCAL M	ANSTREET
			Bridgeport, My contrainsion agen	280
			A STATE OF A	Navana and

95-00501P

			OPERATOR'S WELL NO. 650451 Haught #11
	L	EGEND	
Property Boundary		- Diversion	
Road		Spring	Wet Spot
==========		$\bigcirc \longrightarrow$	-2-
Planned Fence	Drain Pip	e with size in inches	Water Way
///			€→С→
Existing Fence	Str	ream	Cross Drain
Open Ditch	Artific	ial Filter Strip	Rock
-· Þ ··- Þ ·-·· Þ ···		XXX	-26000
North	Building	Water well	Drill site
N	and the second second	W	\oplus
Pit with Cut Walls	\$	mpacted Walls Area o	f Land Application of Pit Wast
oposed Revegetation Treatment: A	Acres Disturbed:	1± Prevegetat	ion pH
Lime T	ons/acre or to correct to	рН6.5	
Fertilizer (10-20-20) or equivale		1/3 ton	_ lbs/acre (500 lbs minimun
Mulch 2 T	ons/acre or hydroseed.		
	SEED MIXT	URES	
Area I			Area II
Seed Type	lbs/acre	Seed Type	lbs/acr
Red Fescue	40	Red Fescue	15
	5	Alsike Clover	5
	45		
	15		
	15		
Annual Rye	15		
Annual Rye ATTACH: Drawing(s) of road, location, pit an	nd proposed area for land a	pplication.	
Annual Rye ATTACH: Drawing(s) of road, location, pit an Photocopies section of involved 7.	nd proposed area for land a	pplication.	
Annual Rye ATTACH: Drawing(s) of road, location, pit an Photocopies section of involved 7. Plan approved by:	nd proposed area for land a	pplication.	
Alsike Clover Annual Rye ATTACH: Drawing(s) of road, location, pit an Photocopies section of involved 7. Plan approved by: Comments: Title:	nd proposed area for land a 5' topographic sheet.	pplication.	

EQT Production Water plan Offsite disposals

4709500501P

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

RECEIVED Office of Oil and Gas

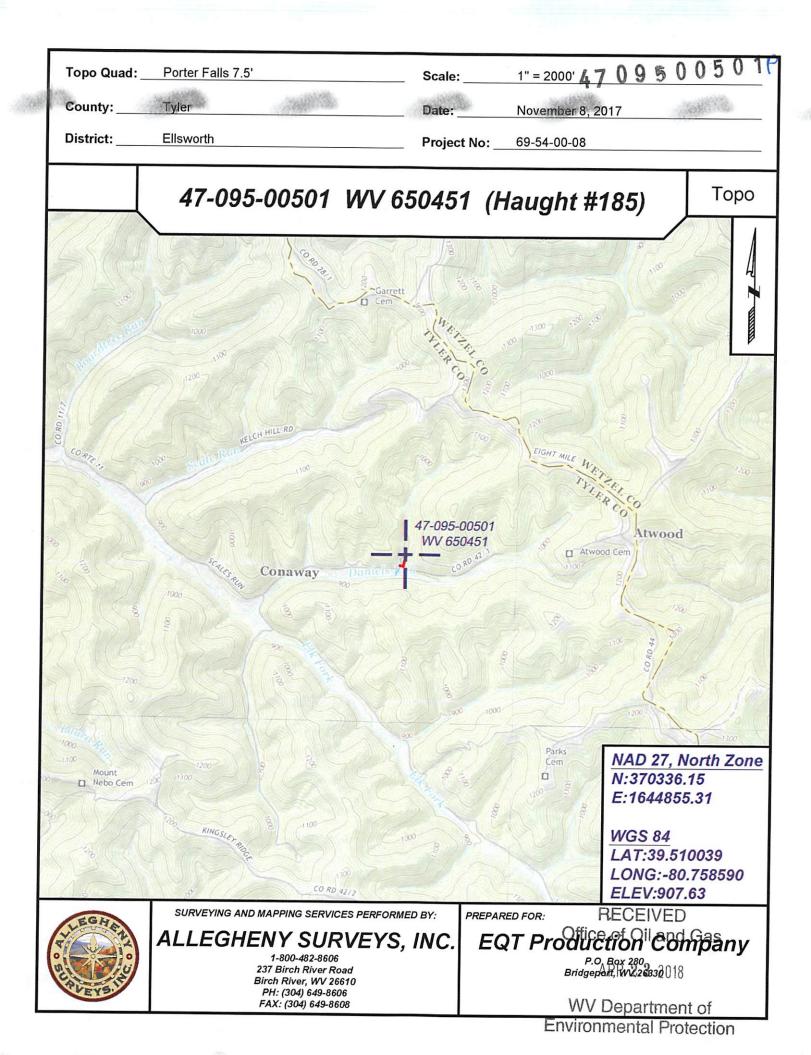
APR 2 3 2018

WV Department of Environmental Protection

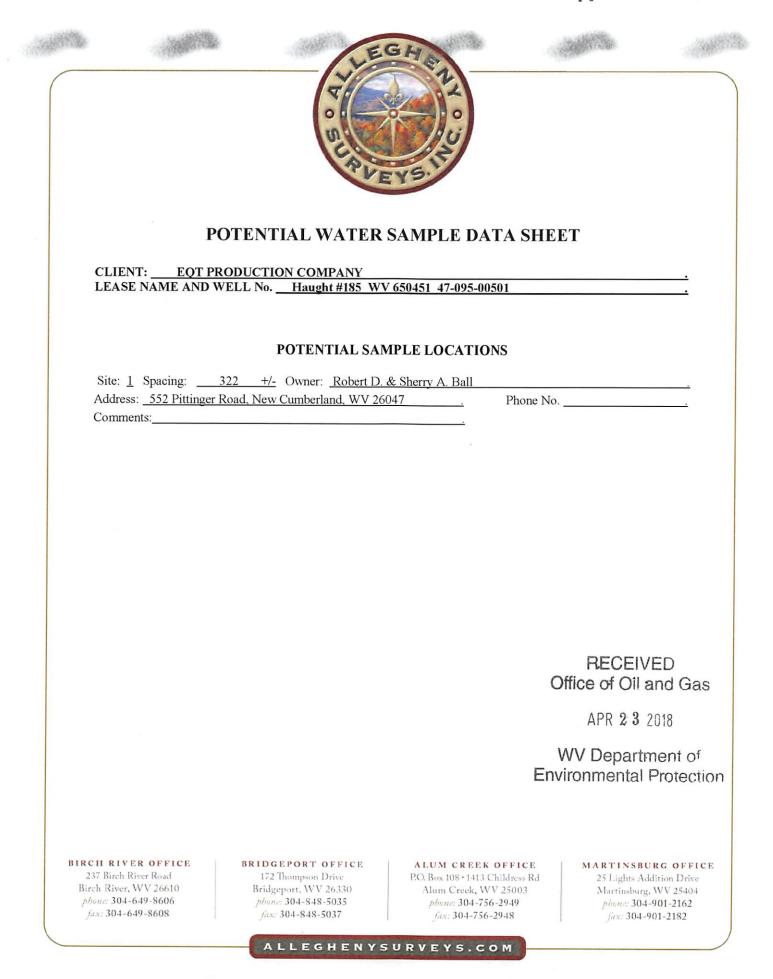
95-00501P

A124	Topo Quad:	Porter Falls 7.5'	Scale:	1" = 200'	
	County:	Tyler	The will be a factor of the	November 8, 2017	li cilji
	District:	Ellsworth		69-54-00-08	
			110ject 110	03-34-00-08	
		47-095-00501 WV	650451 (Haught #185)	Торо
		Pit Lo	cation Topo	47-095-00501	
	A I	ani	els	WV 650451	
2	20-		Druy Youl	N:370336.	
E	Proposed Pit Lo	scation	9ek 4/26	E:1644855 WGS 84 LAT:39.51	0039
	T		and the second se	LONG:-80. ELEV:907.	
100		SURVEYING AND MAPPING SERVICES PERFOR ALLEGHENY SURVEY 1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608			

Topo Quuu	Porter Falls 7.5'	Scale:	1" = 500' 47	0950050
County:	Tyler		November 8, 2017	and the second second
District:	Ellsworth	Project No: _	69-54-00-08	
Highway	47-095-00501	WV 650451 (I	Haught #18	5)
		Pit Location Map		47-095-00501 WV 650451
		Daniels		Run
42 Elk				
			N	AD 27, North Zon 370336.15 1644855.31
				370336.15
Elk 42 2 LEGENI		es performed by: PVEYS, INC. ad b10 6		370336.15 1644855.31 GS 84 AT:39.510039 DNG:-80.758590 LEV:907.63 D D COMPANY 280 M&6330



4709500501P



	15. W		47	09500501
Topo Quad: _	Porter Falls 7.5'	_ Scale:	1" = 2000'	
County:	Tyler	Date:	November 8, 20	017
District:	Ellsworth	_ Project No: _	69-54-00-08	
Water	47-095-00501 WV 6	50451 (H	laught #1	185)
	1 Potential Water	1 8 8 8	n 1000'	Bushap
CO.RD 1112	1200 1200 HELCH HILL RD	CALLER CO ONIN	100 1000	100 100
CO RTF 11	100 Scale Runn	530	EIGHT MILE W.E.	Millico 100
	Scales nun Conaway	47-095-00 WV 6504		Atwood Cem
	1000 Site 1			100 m Qu
1200		900 1000		1200
100 1100 Mount Nebo Cem	1200 1200	900 	Parks Cem	NAD 27, North Zone N:370336.15 E:1644855.31
	100 KINGSLEL BULL	1000 88	and the second sec	<u>WGS 84</u> LAT:39.510039 LONG:-80.758590 ELEV:907.63
BLANDEYS!	SURVEYING AND MAPPING SERVICES PERFOR ALLEGHENY SURVEYS 1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608		QT Produc P.O Bridgep	RECEIVED Stron¹Company Box 280 MPWV 26 \$ 02018 / Department of
			Enviro	nmental Protection

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

API: <u>47-095-00501</u> WELL NO.: WV 650451 (Haught #185)
FARM NAME: J. B. Haught
RESPONSIBLE PARTY NAME: EQT Production Company
COUNTY: Tyler DISTRICT: Ellsworth
QUADRANGLE: Porter Falls 7.5'
SURFACE OWNER: Robert and Sherry Ball
ROYALTY OWNER: John W. Kerns Heirs Trust, et al.
UTM GPS NORTHING: 4373406
UTM GPS EASTING: 520753 GPS ELEVATION: 276 m (908 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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: 1 height above mean sea level (MSL) - meters.
- 2. Accuracy to Datum - 3.05 meters
- 3. Data Collection Method:

4.

3-30-06

Survey grade GPS : Post Processed Differential RECEIVED Real-Time Differential Mapping Grade GPS X : Post Processed Differential Office of Oil and Gas

Real-Time Differential Letter size copy of the topography map showing the well location.3 2018 I 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 becaution of **Environmental Protection** prescribed by the Office of Oil and Gas.

Signature 3#2180 Title

4709500501