

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Wednesday, June 30, 2021 PERMIT MODIFICATION APPROVAL Horizontal 6A / New Drill

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700 PITTSBURGH, PA 15222

Permit Modification Approval for ELLIOTT 17H Re:

47-049-02506-00-00

Extend Lateral from previous length

EQT PRODUCTION COMPANY

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before 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: ELLIOTT 17H

Farm Name: CONSOLIDATION COAL COMPANY

U.S. WELL NUMBER: 47-049-02506-00-00

Horizontal 6A New Drill Date Modification Issued: 06/30/2021

Promoting a healthy environment.

WW-6B (04/15)

Check# 588570 6/3/2021 \$ 05,000.00

API NO. 47- 049	02506
OPERATOR WEI	LL NO. 17H
Well Pad Name	: Elliott

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

1) Well Operator: EQT Produc	ction Company	306686	Marion	Mannington	
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: 171	Н	Well Pac	Name: Elliott		
3) Farm Name/Surface Owner:	Consolidation Coal Co	Public Roa	d Access: CR	5	
4) Elevation, current ground:	1,343' (pad built) EI	evation, proposed	post-constructi	on: 1,343'	
5) Well Type (a) Gas X Other	Oil	Unde	erground Stora	ge	
X /	llow X izontal X	Deep			
6) Existing Pad: Yes or No Yes	·				
7) Proposed Target Formation(s Marcellus, 7,770', 101', 2,593	35 PE	ipated Thickness a	and Expected P	ressure(s):	
8) Proposed Total Vertical Dept	h: 7,770'				
9) Formation at Total Vertical D	epth: Marcellus				
10) Proposed Total Measured D	epth: 24,063'	/			
11) Proposed Horizontal Leg Le	ngth: 14,727' v	/			1
12) Approximate Fresh Water S	trata Depths:	202', 287'			
13) Method to Determine Fresh	Water Depths:	Offset Wells - 47-0)49-02251, 47-	049-00878	
14) Approximate Saltwater Dep	ths: 1,797', 1,89	5', 2,412'			
15) Approximate Coal Seam De	pths: 435'-437',	870'-875', 967'-97	5'		
16) Approximate Depth to Possi	ble Void (coal m	ine, karst, other):	N/A		
17) Does Proposed well location directly overlying or adjacent to		ms Yes X	No)	
(a) If Yes, provide Mine Info:	Name: Mario	on County Mine			
	Depth: 967'-	975'		RECEI	
	Seam: Pittsl	ourgh		Office of Oil	
	Owner: Cons	solidation Coal Co	mpany	JUN 2 3	2021

WW-6B	
(04/15)	

API NO. 47-049	02506
OPERATOR WELL	NO. 17H
Well Pad Name:	Elliott

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	26	New	A-500	85.6	40	40 🗸	60 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	1015	1015 /	900 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	J-55	36	2492	2492 🗸	1000 ft^3 / CTS
Production	5 1/2	New	P-110	20	24063	24063 /	500' above intermediate casing
Tubing			1				
Liners							

Bryan Harris 614121

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	26	30	0.312	1050	18	Class A	1.18
Fresh Water	13 3/8	17 1/2	0.380	2730	2184	Class A	1.13
Coal							
Intermediate	9 5/8	12 3/8	0.352	3520	2816	Class A	1.18
Production	5 1/2	8 1/2	0.361	14360	11488	Class A/H	1.04 - 2.098
Tubing							
Liners							

PACKERS

Kind:	
Sizes:	RECEIVED
Depths Set:	JUN 2 3 2021

WW-6B	
(10/14)	

API NO. 47- 049 - 0250	06
OPERATOR WELL NO	O. 17H
Well Pad Name: €	iott

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Continue drilling and complete a new horizontal well in the Marcellus Formation. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

This well has been drilled vertically and the conductor, fresh water casing and intermediate casing have been set. The depths shown for these casing strings indicate actual depths.

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 0.1%) of chemicals (including 15% Hydrochloric acid, 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 10,000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000-600,000 pounds of proppant per stage.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 27.35 acres (pad built)
- 22) Area to be disturbed for well pad only, less access road (acres): 10.47 Acres
- 23) Describe centralizer placement for each casing string:
- Surface: Bow spring centralizers One centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

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

RECEIVED

JUN 2 3 2021

Conductor: Class A no additives

Surface: Calcium Chloride. Used to speed the setting of cement slurries

Intermediate: Calcium Chloride. Used to speed the setting of cement slurries.

Production: Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, WV Department o

Anti-Settling/Suspension Agent

Environmental Frotection

25) Proposed borehole conditioning procedures:

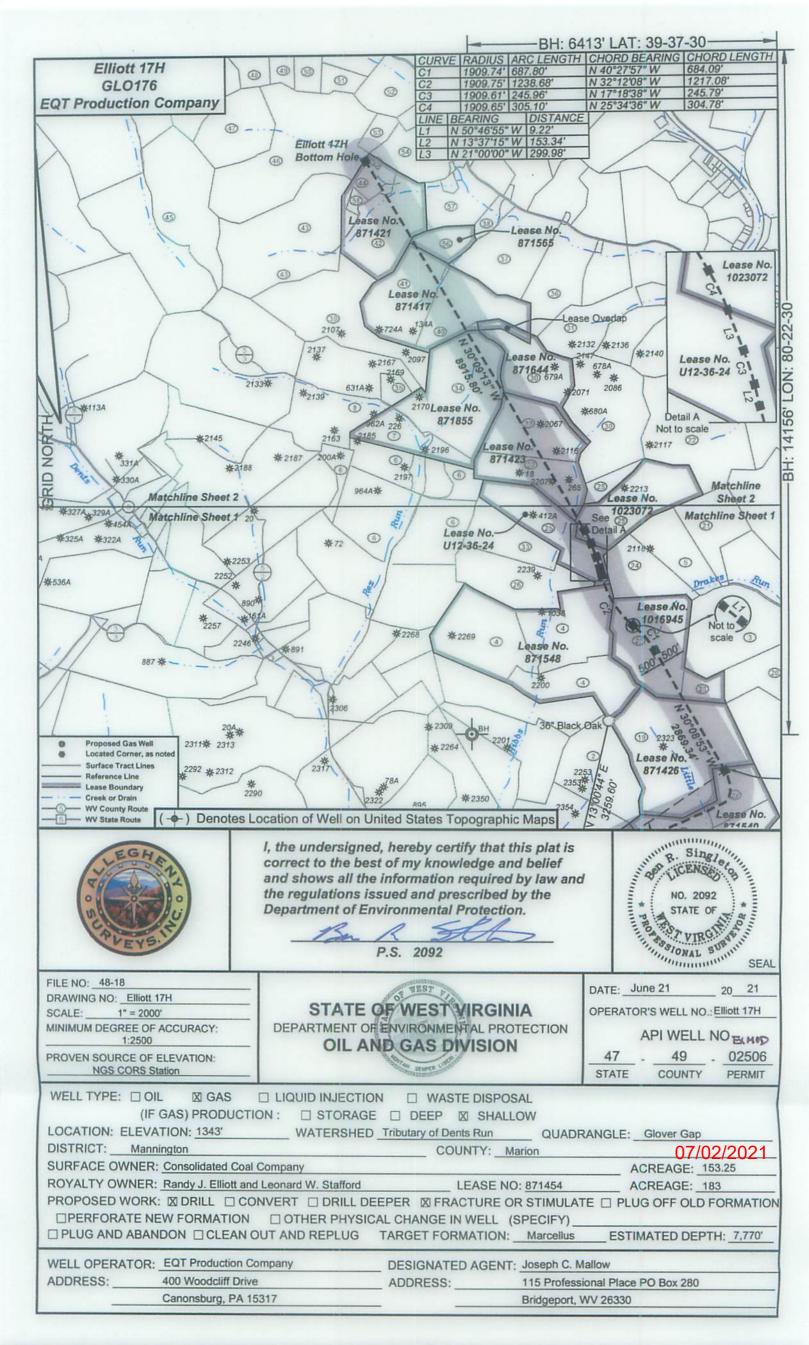
Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.

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

Production: Perform a cleanup cycle by pumping 3-8 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

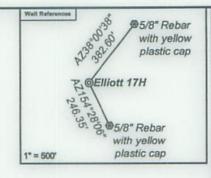
*Note: Attach additional sheets as needed.

Wellbore Diagram **EQT Production** County: Elliot 17H Marion Well: State: West Virginia Pad: **Elliot** Elevation: 1342' GL 1355' KB Conductor @ 40' 26", 85.6#, A-500, cement to surface w/ Class A Surface 1,015' @ 13-3/8", 54.5#, J-55, cement to surface w/ Class A Intermediate 2,492' @ 9-5/8", 36#, J-55, cement to surface w/ Class A RECEIVED Office of On anning a JUN 2 3 2621 WV department or Environmental Protection **Production** 24,063' MD / 7,770' TVD @ 5-1/2", 20#, P-110, cement to 500' inside 9-5/8" w/ Class A/H Formation: Marcellus NOT7/029645E

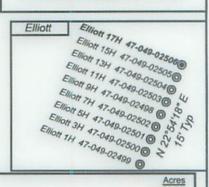


Elliott 17H GL0176 **EQT Production Company**

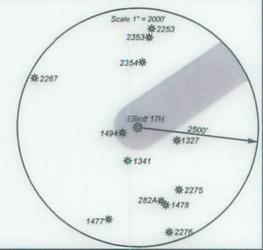
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
2012		100000000000000000000000000000000000000		Mannington	Consolidation Coal Company	153.25
1	34	40	Marion	-		-
2	34	37	Marion	Mannington Mannington	Consolidation Coal Company Anna M. Mike, et al.	133.37
3	32	10	Marion	-		73.51
4	36	21	Marion	Mannington Mannington	Consolidation Coal Company	169,40
5	32	13.1	Marion	Toronto Inches and the	Willis E. Anderson	33.40
6	36	.0	Marion	Mannington	Fredrick E. & Deborsh S. Lilley	138.22
7	36	10	Marion	Mannington	CNX Land LLC	34,88
8	28	20	Marion	Mannington	Sportsman Square Circle Club Inc	102.85
0	34	49	Marion	Mannington	Dennis M. & Lisa A. Hayes	24.78
10	34	47	Marion	Mannington	Edward F. Price	23.00
11	34	48	Marion	Mannington	Edward F. Price	3.00
12	34	40.1	Marion	Mannington	Raymond F. & Betty J. Fluharty	29.75
13	34	45	Marion	Mannington	City of Mannington	42.50
14	34	41	Marion	Mannington	Consolidation Coal Company	47.00
15	34	39	Marion	Mannington	Consolidation Coal Company	42.75
16	34	33	Marion	Mannington	Consolidation Coal Company	134.00
17	34	38	Marion	Mannington	Consolidation Coal Company	17.00
18	33	28	Marion	Mannington	Mildred H. Prichard Heirs	379.56
19	32	11	Marion	Mannington	Consolidation Coal Company	118.00
20	32	9	Marion	Mannington	Michael L. & Bette J. Higgs	155.18
21	32	13.2	Marion	Mannington	Susanne A. & Charles W. Given	33.40
22	31	34.1	Marion	Mannington	Consolidation Coal Company	88.05
23	32	12	Marion	Mannington	James K. & Rose K. Haugh	78.21
24	32	13	Marion	Mannington	Susanne A. & Charles W. Given	33.40
		_	-	-		-
25	36	24	Marion	Mannington	CNX Land LLC	47.68
26	38	22	Marion	Mannington	Consolidation Coal Company	50.87
27	33	- 1	Marion	Mannington	Thomas D. & Almee J. Haught	106.82
28	31	39	Marion	Mannington	CNX Land LLC	57,25
29	28	23	Marion	Marnington	CNX Land LLC	48.50
30	31	38	Marion	Mannington	CNX Land LLC	132.05
31	28	3	Marion	Mannington	Shirtey M. Dunigan	107,39
32	28	22	Marion	Mannington	CNX Land LLC	38.60
33	38	23	Marion	Mannington	CNX Land LLC	30.06
34	28	21	Marion	Mannington	Sportsman Square Circle Club Inc	81.00
35	28	25	Marion	Mannington	CNX Land LLC	7.25
36	28	3	Marion	Mannington	Ray E. Cooker	41.30
37	28	4	Marion	Mannington	Jeffrey H. Michael	38.75
38	28	5	Marion	Mannington	Betty A Earl	9.00
39	28	17	Marion	Mannington	CNX Land LLC	77.95
40	28	8.1	Marion	Mannington	Wilson Investments LLC	52.85
41	28	8	Marion	Mannington	Joshua A. & Courtney N. Wilforg	52.85
42	28	8.5	Marion	Mannington	Elijah & Erica Dean	55.00
43	28	16	Marion	Mannington	Consolidation Coal Company	107.63
44	28	8.1	_	Mannington		_
_		_	Marion		CNX Land LLC	15.06
45	26	2.1	Marion	Mannington	Larry Golf	160.04
46	28	0	Marion	Mannington	Waco Oil & Gas Company Inc	124.50
47	28	10	Marion	Mannington	Waco Oil & Gas Company Inc	41.50
48	28	13.1	Marion	Mannington	CNX Land LLC	21.58
49	27	11	Marion	Mannington	Jason G. & Cathy L. Straight	
50	27	12.1	Marion	Mannington	Jason G. & Cathy L. Straight	
51	28	13	Marion	Mannington	CNX Land LLC 13	
52	27	17	Marion	Mannington	Raymond L. & Karen L. Mercer 104.0	
53	28	9.1	Marion	Mannington	Douglas A. & Lisa A. Hayes 10.0	
54	28	11	Marion	Mannington	CNX Land LLC	39.00
55	28	8.4	Marion	Mannington	CNX Land LLC	1.03
.56	28	7	Marion	Mannington	Betty A. Earl	15.00
57	28	8.2	Marion	Mannington	Rhonda S. Dean	42.84



Notes: Elliott 17H coordinates are NAD 27 N: 382,018.08 E: 1,751,218.93 NAD 27 Lat: 39.545509 Long: -80.382209 NAD 83 UTM N: 4,377,506.80 E: 553,099.10 Elliott 17H Landing Point coordinates are NAD 27 N: 384,172.75 E: 1,754,350.87 NAD 27 N: 384,172,75 E: 1,754,350.87
NAD 27 Lat: 39,551509 Long: -80.371177
NAD 83 UTM N: 4,378,179,17 E: 554,042.37
Elliott 17H Bottom Hole coordinates are
NAD 27 N: 396,858.07 E: 1,746,983.17
NAD 27 Lat: 39,586136 Long: -80.397754
NAD 83 UTM N: 4,382,006.51 E: 551,733.33
West Virginia Coordinate system of 1927 (North Zone)
based upon Differential GPS Measurements.
Plat orientation, corner and well ties are based upon
the grid north meridian.
Well location references are based upon the grid north
meridian.
UTM coordinates are NAD83, Zone 17, Meters.



Lease No.	Owner	Acres
871540	Country Roads Minerals, LLC, et al.	89.75
871426	John D. Haskins, III	117
1016945	Ferrari VI OG, LLC, Bradley W. Thomas, Robert F. Horner & Jacob G. Ford, et al.	78.21
871548	West Virginia University Foundation, Inc., et al.	169.49
U12-36-24	CNX Gas Company LLC	47.68
1023072	WV Minerals Inc., et al.	56.25
871423	Country Roads Minerals, LLC, et al.	83.1
871855	Nita M. Cordray, et al.	115.86
871644	J & N Management Enterprises, LLC	48.75
871417	Sheila Lightfoot and Tina Fischer, et al.	105.75
871565	Lora L. Rinehart, et al.	15
871421	Claud Kendall Trust, et al.	125





57 28 8.2 Marion Mannington 58 28 8.3 Marion Mannington

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

P.S. 2092



FILE NO: 48-18 DRAWING NO: Elliott 17H 1" = 2000' SCALE: MINIMUM DEGREE OF ACCURACY: PROVEN SOURCE OF ELEVATION:

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

DATE: June 21 20 OPERATOR'S WELL NO .: Elliott 17H

API WELL NO EXHOD

02506 47 49

NGS CORS Station	"CHOLINGS"	STATE	COUNTY	PERMIT
	LIQUID INJECTION WASTE DISPOSAL			
	ON: ☐ STORAGE ☐ DEEP ☒ SHALLOW		100	
LOCATION: ELEVATION: 1343'	WATERSHED Tributary of Dents Run	QUADRANGLE: _	Glover Gap	
DISTRICT: Mannington	COUNTY: Marion		07/0	2/2021
SURFACE OWNER: Consolidated Coal C	Company	A	CREAGE: 15	3.25
ROYALTY OWNER: Randy J. Elliott and	Leonard W. Stafford LEASE NO: 8714	454 A	CREAGE: 18	3
PROPOSED WORK: ☑ DRILL ☐ CON	NVERT DRILL DEEPER FRACTURE OR STIM	MULATE PLU	G OFF OLD F	ORMATION
□PERFORATE NEW FORMATION	OTHER PHYSICAL CHANGE IN WELL (SPECI	IFY)		
☐ PLUG AND ABANDON ☐ CLEAN O	UT AND REPLUG TARGET FORMATION: Marc	cellus ESTI	MATED DEPT	H: _7,770'
WELL OPERATOR: EQT Production Co	mpany DESIGNATED AGENT: Joseph	ph C. Mallow		
ADDRESS: 400 Woodcliff Drive	ADDRESS: 115 F	Professional Place	PO Box 280	
Canonsburg, PA 15	Bridg	eport, WV 26330		

WEST VIRGINIA GEOLOGICAL PROGNOSIS

Horizontal Well ELLIOT (GLO187)

Drilling Objectives:

MARCELLUS

County: Quad:

Marion Glover Gap

Elevation: Recommended Azimuth 1355 KB Degrees 1342 GL

TVD: 7770

ESTIMATED FORMATION TOPS	fre	om wells 4704902251, 4704900878		
Formation	Top (TVD)	Base (TVD) Lithology	Comments	Top RR Base RR
Fresh Water Zone	- 1	287	FW @ 202.287,,	No redrock listed in offse
Coal	435	437 Coal		
Sewickley	870	875 Coal		
Pittsburgh	967	975 Coal		
Big Lime	2182	2308 Limestone	SW (a) 1797,1895,2412.	
Big Injun	2308	2435 Sandstone		
Int csg pt	2485			
Berea	2583	3007 Sandstone	Gas shows @ 2412,2932,3026,3085,3164,3360,4755, .	
Gantz	3007	3026 Silty Sand	Outside of Storage	
50ft	3114	3128 Silty Sand		
Bayard	3254	3624 Silty Sand		
Alexander	5742	6135 Silty Sand		
Elks	6135	7166 Gray Shales and Silts		
Sonyea	7166	7373 Gray shale		
Middlesex	7373	7437 Shale		1
Genesee	7437	7545 Gray shale interbedded		
Geneseo	7545	7582 Black Shale		
Tully	7582	7613 Limestone		
Hamilton	7613	7719 Gray shale with some		
Marcellus	7719	7820 Black Shale		
Purcell	7785	7787 Limestone		
-Lateral Zone	7770			
Cherry Valley	7801	7803 Limestone		
Onondaga	7820	Limestone		

Target Thickness	101 feet	
Max Anticipated Rock Pressure	2593 PSI	

Comments:

Note that this is a TVD prog for a horizontal well (azimuth of degrees; target formation = MARCELLUS). All measurements taken from estimated KB elevation. Water and coal information estimated from surrounding well data,

Intermediate casing point is recommended beneath the Big Injun to shut off any water production from the Upper Devonian sands. Intermediate casing should be cemented into the surface string, per WV regulations.

LATERAL DRILLING TOLERANCES

Mapview - Lateral: Mapview - TD: Deviate as little as possible to the left or right of the planned wellbore. DO NOT EXTEND beyond recommended wellbore to avoid leaseline

RECOMMENDED CASING POINTS

Fresh Water/Coal	CSG OD	13 3/8	CSG DEPTH		1025	50' below Pittsburgh
Intermediate 1:	CSG OD	9 5/8	CSG DEPTH		2485	Beneath theBig Injun formation
Production:	CSG OD	5 1/2	CSG DEPTH:	@ TD		

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JUN 2 3 2021

WV Department of Environmental Protection

07/02/2021

v 217 4

WW-6A1 (5/13)

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:

ease Name or			1995	523 323323
Number	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: Erin Spine

Supervisor - Subsurface Permitting

Office of Oil and Gas

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JUN 2 3 2021 Page 1 of 4

JUN 2 3 70, 1

Lease No.	Grantor, Lessor, etc.		Grantee, Lessee, etc.	Royalty	Book/Page
				1-414 <i>4/</i> 00	
871454	Randy J. Elliott and Leonard W. Stafford	183 ac		"at least 1/8th per WV Code 22-6-8"	
011404	Randy J. Elliott, a married man dealing in his sole/sep. property	100 00	EQT Production Company		DR 1213/441 -
			. ,		<u>≥</u>
				*at least 1/8th per	RECEIVA Office of Ov
<u>871540</u>	Country Roads Minerals, LLC, et al.	89.75 ac		WV Code 22-6-8"	H. Hite
			American Shale Development, Inc., (50%) and		•
	Byron W. Davis, a married man dealing with his sole and sep. property		Republic Energy Ventures, LLC, (50%)		DR 1148/27
	American Shale Development, Inc.		Republic Partners VIII, LLC		AB 47/469 AB 51/525
	Republic Energy Ventures, LLC, Republic Partners VIII, LLC, et al		EQT Production Company		DR 1228/1
	Trans Energy, Inc. and American Shale Development, Inc.		EQT Production Company		UR 1220/1
				*at least 1/8th per	
<u>871426</u>	John D. Haskins, III	117 ac		WV Code 22-6-8"	
	John D. Haskins, III, married, dealing in his sole and separate property		EQT Production Company		DR 1254/532
4040045	Ferrari VI OG, LLC, Bradley W. Thomas, Robert F. Horner & Jacob G. Ford, et al.	78.21 ac		"at least 1/8th per WV Code 22-6-8"	
<u>1016945</u>	Ferrari VI OG, LLC, Bradley W. Thomas, a married man dealing in his sole	70.21 ac		*** Oddc 22 0 0	
	and separate property, Robert F. Homer, a married man dealing in his sole				
	and separate, and Jacob G. Ford, a married man dealing in his sole and				
	separate property		EQT Production Company		DR 1203/339
				*at least 1/8th per	
871548	West Virginia University Foundation, Inc., et al.	169.49 ac		WV Code 22-6-8"	
<u>0,1040</u>	West Virginia University Foundation, Inc., for the benefit of West Virginia		American Shale Development, Inc., (50%) and		DD 44501045
	University		Republic Energy Ventures, LLC, (50%)		DR 1159/217
	American Shale Development, Inc.		Republic Partners VIII, LLC		AB 47/469
	Republic Energy Ventures, LLC, Republic Partners VIII, LLC, et al		EQT Production Company		AB 51/525
	Trans Energy, Inc. and American Shale Development, Inc.		EQT Production Company		DR 1228/1
				*at least 1/8th per	
U12-36-24	CNX Gas Company LLC	47.68 ac		WV Code 22-6-8"	

	Consolidation Coal Company, et al.		CNX Gas Company LLC See attachment		DR 1005/246	
<u>1023072</u>	WV Minerals Inc., et al. WV Minerals, Inc.	56.25 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1119/98	3 2021
<u>871423</u>	Country Roads Minerals, LLC, et al. Robert L. Jones and Faye H. Jones, husband and wife Trans Energy, Inc., 50%, and Republic Energy Ventures, LLC, 50% Trans Energy, Inc. American Shale Development, Inc. Republic Energy Ventures, LLC, Republic Partners VIII, LLC, et al Trans Energy, Inc. and American Shale Development, Inc.	83.1 ac	Trans Energy, Inc., 50%, and Republic Energy Ventures, LLC, 50% Tenmile Land,LLC American Shale Development, Inc. Republic Partners VIII, LLC EQT Production Company EQT Production Company	*at least 1/8th per WV Code 22-6-8*	DR 1119/98 See Price of Oll 119/98 See Price of Old 11	S NUL
<u>871855</u>	Nita M. Cordray, et al. Nita M. Cordray, widow	115.86 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1258/1002	
<u>871644</u> Buffer	J & N Management Enterprises, LLC Nancy Fout and John Fout, wife and husband Republic Energy Ventures, LLC, et al	48.75 ac	Republic Energy Ventures EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1188/289 AB 51/525	
<u>871417</u>	Sheila Lightfoot and Tina Fischer, et al. Sheila Lightfoot, Individually, and Tina Fischer by Sheila Lightfoot, Attorney-in-Fact Republic Energy Ventures, LLC	105.75 ac	Republic Energy Ventures, LLC EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1199/971 AB 52/189	
<u>871565</u>	Lora L. Rinehart, et al. Lora L. Rinehart and Jack Rinehart, her husband American Shale Development, Inc. Republic Energy Ventures, LLC, Republic Partners VIII, LLC, et al Trans Energy, Inc. and American Shale Development, Inc.	15 ac	American Shale Development, Inc., (50%) and Republic Energy Ventures, LLC, (50%) Republic Partners VIII, LLC EQT Production Company EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1153/447 AB 47/469 AB 51/525 DR 1228/1	

871421 Claud Kendall Trust, et al.	125 ac	"at least 1/8th per WV Code 22-6-8"
Claud Kendali	Tenmile Land, LLC Trans Energy, Inc., 50%, and Republic Energy	DR 1100/327 & DR1092/802
Tenmile Land, LLC Trans Energy, Inc. American Shale Development, Inc. Republic Energy Ventures, LLC, Republic Partners VIII, LLC, Trans Energy, Inc. and American Shale Development, Inc.	Ventures, LLC, 50% American Shale Development, Inc. Republic Partners VIII, LLC	DR 1102/58 AB 43/420 AB 47/469 AB 51/525 DR 1228825 DR 122882

SECOND AMENDMENT TO ACREAGE TRADE AGREEMENT

THIS SECOND AMENDMENT TO ACREAGE TRADE AGREEMENT (this "Amendment") is entered into this 14th day of June, 2021, by and among EQT Production Company, a Pennsylvania corporation, and Rice Drilling B LLC, a Delaware limited liability company, whose addresses are 625 Liberty Avenue, Suite 1700, Pittsburgh, PA 15222 (collectively, "EQT"), and CNX Gas Company LLC, a Virginia limited liability company, whose address is 1000 CONSOL Energy Drive, Canonsburg, PA 15317 ("CNX").

WHEREAS, EQT and CNX are parties to that certain Acreage Trade Agreement entered into as of February 12, 2021, as amended by that certain First Amendment to Acreage Trade Agreement dated March 5, 2021 (the "Trade Agreement"); and

WHEREAS, EQT and CNX desire to amend the Trade Agreement to extend the Closing established in the Trade Agreement as set forth herein;

NOW, THEREFORE, in consideration of the mutual promises and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and with the intent to be legally bound, EQT and CNX hereby agree to amend the Trade Agreement as follows:

- 1. <u>Definitions</u>. Capitalized terms used and not otherwise defined herein shall have the meanings given to such terms in the Trade Agreement.
- 2. Extension of Closing. Unless otherwise agreed to by the Parties, the Closing under the Trade Agreement and any Drilling Letters executed pursuant to the Trade Agreement shall occur on or before July 9, 2021 (the "Closing Date"). Except as otherwise provided herein, the term "Closing Date" when used in the Trade Agreement and any dates for assignment set forth in any Drilling Letters executed pursuant to the Trade Agreement shall mean the Closing Date as amended hereby.
- 3. Entire Agreement. The Trade Agreement, as amended hereby, all closing documentation referenced in the Trade Agreement and all other documents contemplated by the Trade Agreement constitute the entire agreement between the Parties in respect to the subject matter thereof, and there are no other agreements, understandings, warranties or representations except as set forth herein and therein. In the event of a conflict between the terms of this Amendment and the terms of the Trade Agreement, the terms of the Trade Agreement will control.
- 4. <u>Ratification.</u> EQT and CNX hereby adopt, ratify, and confirm the Trade Agreement, as amended hereby, and declare the Trade Agreement, as amended hereby, to be in full force and effect. All references to the Trade Agreement shall be considered to be references to the Trade Agreement as modified by this Amendment, and except as modified hereby, the Trade Agreement shall remain in full force and effect.
- 5. <u>Counterparts: Execution and Delivery.</u> This Amendment may be executed in multiple counterparts, each of which will be an original instrument, but all of which will constitute one agreement. The execution and delivery of this Amendment by any Party may be evidenced by

facsimile or other electronic transmission (including scanned documents delivered by email), which shall be binding upon all Parties.

[signature page follows]

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ACCEPTED AND AGREED TO this _____ day of June, 2021.

EQT PRODUCTION COMPANY

By Corry Puk

yad Mb

Name: Corey C. Peck
Its: Authorized Agent

RICE DRILLING B LLC

DocuSigned by:

SALD ME

Name: Corey C. Peck
Its: Authorized Agent

CNX GAS COMPANY LLC

Name: Peter J. Binotto

Its: Assistant Vice President

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Certificate Of Completion

Envelope Id: D901B35AD9574C1C85CFC038F6C15275 Status: Completed

Subject: Please DocuSign: CNX-EQT Exchange Agreement - Determine Trade - Second Amendment.pdf

Source Envelope:

Document Pages: 3 Signatures: 2 **Envelope Originator:** Initials: 4 Jarred Detweiler Certificate Pages: 2

AutoNav: Enabled

Envelopeld Stamping: Enabled

Time Zone: (UTC-05:00) Eastern Time (US & Canada)

625 Liberty Ave Ste 1700 Pittsburgh, PA 15222 jdetweiler@eqt.com IP Address: 100.6.120.87

Record Tracking

Status: Original Holder: Jarred Detweiler Location: DocuSion

6/14/2021 8:07:37 AM jdetweiler@eqt.com

Signer Events Signature **Timestamp**

Docusigned by: Corey Peck cpeck@eqt.com

Managing Director - Land Ops

EQT Corporation

Security Level: Email, Account Authentication

(None)

Signature Adoption: Pre-selected Style Using IP Address: 174.241.232.136

Signed using mobile

MD

Sent: 6/14/2021 8:09:17 AM Corry Peck Viewed: 6/14/2021 8:10:06 AM Signed: 6/15/2021 1:20:36 PM

Electronic Record and Signature Disclosure:

Not Offered via DocuSign

Jarred Detweiler idetweiler@eqt.com Landman IV

EQT Corporation

Security Level: Email, Account Authentication

Sent: 6/14/2021 8:09:16 AM Viewed: 6/14/2021 8:09:38 AM Signed: 6/14/2021 8:09:46 AM

Signature Adoption: Pre-selected Style Using IP Address: 165.225.8.238

Signature Adoption: Drawn on Device

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Electronic Record and Signature Disclosure: Not Offered via DocuSign

Matt Eller meller@eqt.com **Land BD Director EQT Corporation**

Security Level: Email, Account Authentication

(None)

Sent: 6/14/2021 8:09:17 AM Viewed: 6/14/2021 8:09:37 AM Signed: 6/14/2021 8:26:04 AM

Electronic Record and Signature Disclosure:

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In Person Signer Events **Signature Timestamp**

Editor Delivery Events Status Timestamp

Agent Delivery Events Status **Timestamp**

Intermediary Delivery Events Status Timestamp

Certified Delivery Events Status Timestamp

Carbon Copy Events Status Timestamp

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Payment Events	Status	Timestamps
Completed	Security Checked	6/15/2021 1:20:36 PM
Signing Complete	Security Checked	6/14/2021 8:26:04 AM
Certified Delivered	Security Checked	6/14/2021 8:09:37 AM
Envelope Sent	Hashed/Encrypted	6/14/2021 8:09:17 AM
Envelope Summary Events	Status	Timestamps
Notary Events	Signature	Timestamp
Witness Events	Signature	Timestamp

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DRILLING LETTER AGREEMENT

March 4, 2021

CNX Gas Company LLC Attn: Peter Binotto 1000 CONSOL Energy Drive Canonsburg, PA 15317 Phone: (724) 485-3206

e-mail: PeterBinotto@cnx.com

RE: Drilling Letter Issued Pursuant to Acreage Trade Agreement

Dear Mr. Binotto:

- 1. Reference is made to that certain Acreage Trade Agreement dated February 12, 2021 (the "Trade Agreement") between EQT Production Company, a Pennsylvania corporation, and Rice Drilling B LLC, a Delaware limited liability company (collectively "EQT"), and CNX Gas Company LLC, a Virginia limited liability company ("CNX"). governing an exchange of certain oil and gas leases in Armstrong, Greene, and Washington Counties, Pennsylvania and Doddridge, Marion, Marshall, Monongalia, Tyler, and Wetzel Counties, West Virginia (the "Exchange"). All capitalized terms used but not otherwise defined herein shall have the meanings (if any) ascribed to them in the Trade Agreement.
- 2. Pursuant to Section V.C of the Trade Agreement, EQT ("Drilling Party") issued a Drilling Letter Request to CNX ("Assignor") identifying its need to drill, complete and produce wells upon those certain Oil and Gas Leases of Assignor set forth on Exhibit A hereto (the "Drilling Leases") prior to the Closing. This letter is the Drilling Letter resulting from the aforementioned Drilling Letter Request. Assignor will assign the Drilling Leases as to the Target Formation to Drilling Party on or before June 17. 2021, subject to the terms of the Trade Agreement.
- Subject to Section V.C of the Trade Agreement, Assignor hereby grants Drilling Party and/or its designated affiliates the rights to make regulatory permit applications and, upon receipt of all necessary permits and government approvals, to horizontally drill, complete and produce one (1) or more wellbore laterals ("Wells") through and in the Target Formation of the lands covered by the Drilling Leases and to extract, produce and market the hydrocarbons therefrom; provided, however, that Assignor hereby expressly withholds to itself and its successors and assigns, and does not grant Drilling Party and/or its designated affiliates, the right to access the surface of or to conduct surface operations on the lands covered by the Drilling Leases. Drilling Party hereby agrees to indemnify, defend and hold harmless Assignor for, from and against any and all Claims (as defined below) sustained by Assignor or its affiliates or related companies resulting from or in connection with Drilling Party's activities with respect to the Drilling Leases, including, without limitation, the drilling of the Wells and Drilling Party's development and operation of the Drilling Leases, that arise on or after the date of this Drilling Letter. "Claims" shall mean any and all losses, suits, proceedings, actions, causes of action, in law or at equity, demands, penalties, fines, fees, charges, assessments, liabilities (including environmental liabilities), damages (including environmental and natural resources damages), claims, judgments, executions, costs and expenses of any kind (including, without limitation, attorney's fees, expert's fees, court costs and other out-of-pocket fees and disbursements), taxes, and interest, whether existing or incurred or asserted in the future, in connection with (a) any such claim or the defense thereof, (b) amounts paid in settlement, orders, liens, or decrees, or (c) any injury or damage of any kind and nature to persons (including sickness, illness and/or death), mines,

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wells, or property claims or to the Drilling Leases, or natural resources, and with respect to any of the foregoing, whether sustained or brought by or against Assignor or any third party. Notwithstanding any of the foregoing, in the event that any Claims arise from the joint or concurrent negligence of Assignor, the loss shall be borne by Drilling Party and Assignor proportionately to their degree of negligence, and Drilling Party shall have no obligation to indemnify Assignor against Assignor's negligence or willful misconduct.

- 4. This Drilling Letter is specifically made subject to the terms and conditions of the Trade Agreement. In the event of any conflict between the terms of this Drilling Letter and the terms of the Trade Agreement, the terms of the Trade Agreement shall control.
- This Drilling Letter shall be governed by, construed, interpreted and applied in accordance
 with the laws of the State or Commonwealth in which the Drilling Leases are located, excluding any choice
 of law rules which would refer the matter to the laws of another jurisdiction.
- 6. This Drilling I etter may be executed in any number of counterparts, each of which shall be considered an original for all purposes, and all of which, when taken together, shall constitute one and the same instrument, provided that this Drilling Letter but shall not be binding upon either of Drilling Party or Assignor until fully executed by both of them

If the above meets your approval, please execute in the space provided below and return one signed copy to my attention. Should you have any questions, please contact John Zavatchan at (112) 584-3132 or jzavatchan@eqt.com.

Sincerely

EQT Production Company

By Corey Petk 761) 48 - Name Corey C. Peck Lufe: Authorized Agent

Rice Drilling B LLC

By Cong Ped y. w.

Acknowledged, Accepted and Agreed to this 57H day of March, 2021.

CNX Gas Company LLC

By: POTEK J DINGTO Title: ASSULTAT VILL MESIDEN

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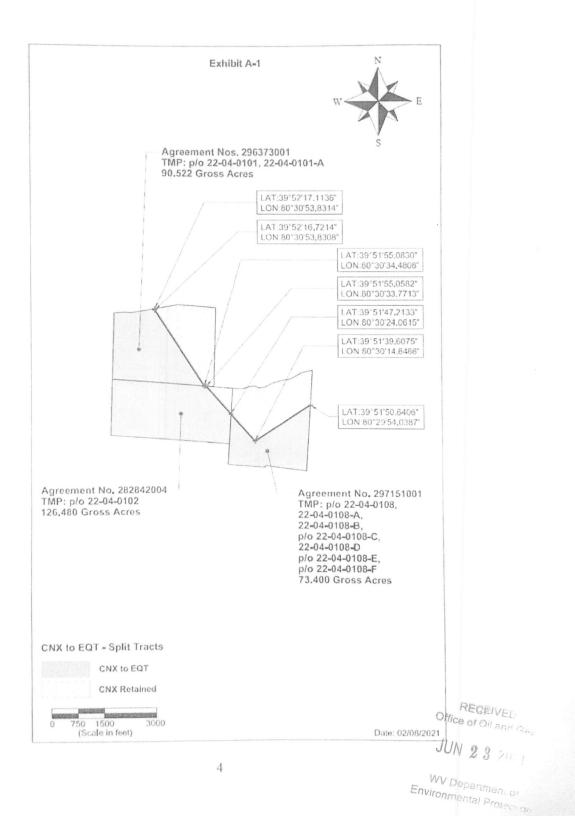
EXHIBIT A TO DRILLING LETTER

DRILLING LEASES

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EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: Elliott

County: Marion

June 21, 2021

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WV Department or Environmental Protection

Page 1 of 2

3

Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Marion County, WV prior to hydraulic fracturing at the following EQT wells on the Elliott pad: 1H, 3H, 5H, 7H, 9H, 11H, 13H, 15H & 17H

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 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:

- Inspect their surface equipment prior to fracturing to establish integrity and establish prefrac well conditions
- 2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
- Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT

2. Reporting

JUN 2 3 ;

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 abnormalities.





June 22, 2021

* Plat / 128/21

Via FedEx Overnight

West Virginia Department of Environmental Protection Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304

RE: Well Work Permit Modification Application Elliott 17H Well Permit Number 47-049-02506 Mannington District Marion County, WV

EXPEDITED REVIEW REQUESTED

WVDEP Recipient,

Attached please find following information to modify the existing Well Work Permit for this well:

- Check in the amount of \$5,000.00, payable to "West Virginia Department of Environmental Protection," for the expedited review fee
- Check in the amount of \$2,500.00, payable to "West Virginia Department of Environmental Protection," for the well work permit modification fee
- Completed Form WW-6B and supporting documents, approved by the Oil and Gas Inspector
- Revised Well Bore Diagram
- Well Location Plat
- Completed Form WW-6A1 and supporting documentation
- Updated Hydraulic Fracturing Monitoring Plan

EQT is proposing to extend the lateral from the previously permitted length.

The Marion County Mine has been added to the WW-6B form. This mine was not listed on the original permit applications. The mine operator, however, had been notified prior to submittal of the original application.

This well has been drilled vertically. The conductor, fresh water casing and intermediate casing have been set to the depths shown on the WW-6B form and wellbore diagram.

EQT Production trusts that if any portion of the submitted documentation is found to be inadequate for processing the permit, notification will be made to our Permitting department at your earliest convenience. It is EQT Production's intent to cooperate fully to provide any additional requested documentation and clarification in a timely manner such that permitting proceeds in a predictable and logical manner.

Best Regards,

John Zavatchan

Project Specialist - Permitting

jzavatchan@eqt.com

724-746-9073

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