



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

Tuesday, May 4, 2021
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit Modification Approval for ELLIOTT 15H
47-049-02505-00-00

Lateral Extension +10,062'

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.

A blue ink signature of James A. Martin, written in a cursive style.

James A. Martin
Chief

Operator's Well Number: ELLIOTT 15H
Farm Name: CONSOLIDATION COAL COMPANY
U.S. WELL NUMBER: 47-049-02505-00-00
Horizontal 6A New Drill
Date Modification Issued: May 4, 2021

Promoting a healthy environment.

05/07/2021



EQT PRODUCTION COMPANY
 400 Woodcliff Drive | Canonsburg, PA 15317
 P: 724-746-9073 | www.eqt.com

April 27, 2021

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 15H Well
 Permit Number 47-049-02505
 Center District
 Wetzel 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
- 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

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.

The 13 3/8" casing string for this well has been set approximately 10' shallower than what had been proposed on the original well work permit application. This action was field approved, and confirmation of that approval has been included with this modification application.

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

RECEIVED
 Office of Oil and Gas

APR 29 2021

WV Department of
 Environmental Protection

05/07/2021

Check # 581889
4/9/2021
\$5,000.00

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

1) Well Operator: EQT Production Company 306686 Marion Mannington Glover Gap
Operator ID County District Quadrangle

2) Operator's Well Number: 15H Well Pad Name: Elliott

3) Farm Name/Surface Owner: Consolidation Coal Company Public Road Access: CR 5

4) Elevation, current ground: 1,343' (Pad Built) Elevation, proposed post-construction: 1,343'

5) Well Type (a) Gas Oil Underground Storage

Other

(b) If Gas Shallow Deep

Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 7,770', 101', 2,593 psi

RECEIVED
Office of Oil and Gas

8) Proposed Total Vertical Depth: 7,770'

9) Formation at Total Vertical Depth: Marcellus

APR 29 2021

10) Proposed Total Measured Depth: 23,866'

WV Department of
Environmental Protection

11) Proposed Horizontal Leg Length: 14,918'

12) Approximate Fresh Water Strata Depths: 202', 287'

13) Method to Determine Fresh Water Depths: Offset Wells - 47-049-02251, 47-049-00878

14) Approximate Saltwater Depths: 1,797', 1,895', 2,412'

15) Approximate Coal Seam Depths: 435'-437', 870'-875', 967'-975'

16) Approximate Depth to Possible Void (coal mine, karst, other): N/A

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No

(a) If Yes, provide Mine Info: Name: Marion County Mine

Depth: 967'-975'

Seam: Pittsburgh

Owner: Consolidation Coal Company

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 (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	A-500	40	2488	2488	1000 ft ³ / CTS
Production	5 1/2	New	P-110	20	23866	23866	500' above intermediate casing
Tubing							
Liners							

Bryan Harris 4/26/21

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	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	0.395	3950	3160	Class A	1.18
Production	5 1/2	8 1/2	0.361	14360	11488	Class A/H	1.04 - 2.098
Tubing							
Liners							

RECEIVED
Office of Oil and Gas

APR 29 2021

PACKERS

WV Department of
Environmental Protection

Kind:				
Sizes:				
Depths Set:				

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

RECEIVED
Office of Oil and Gas

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

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, Anti-Settling/Suspension Agent

APR 29 2021

WV Department of
Energy, Mineral and Natural Resources
Field Agent, Retarder

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.

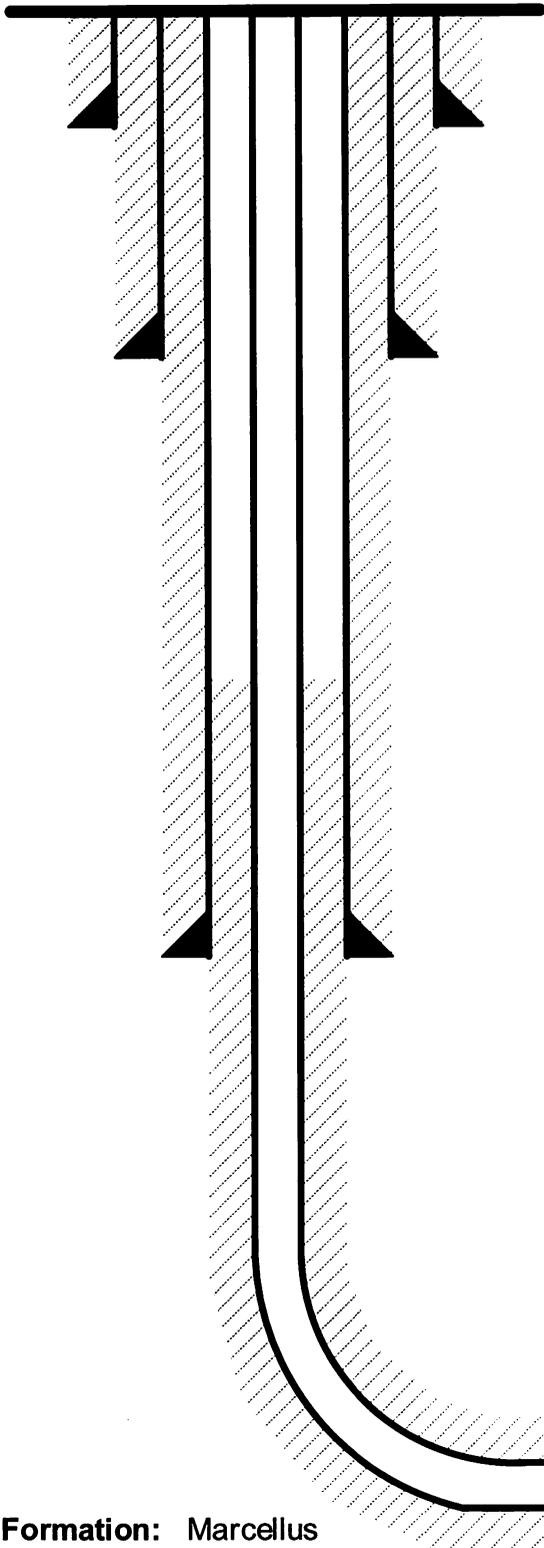
*Note: Attach additional sheets as needed.

EQT Production

Wellbore Diagram

Well: Elliot 15H
Pad: Elliot
Elevation: 1342' GL 1355' KB

County: Marion
State: West Virginia



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 @ 2,488'

9-5/8", 40#, A-500, cement to surface w/ Class A

Production @ 23,866' MD / 7,770' TVD

5-1/2", 20#, P-110, cement to 500' inside 9-5/8" w/ Class A/H

Formation: Marcellus

RECEIVED
Office of Oil and Gas

APR 29 2021

WV Department of
Environmental Protection

Zavatchan, John

From: Harris, Bryan O <Bryan.O.Harris@wv.gov>
Sent: Thursday, April 15, 2021 8:13 AM
To: Stahl, Evan R.
Cc: Ridgway, Derek
Subject: RE: [External] Elliott 17H, 15H, & 13H 13-3/8" Set Depths

We spoke verbally of setting the 13 3/8" casing 10' short of permitted casing depth and I gave approval of this action. The only requirements are to make sure the actual casing depth set is reflected on the WR-35's when it is submitted to Charleston. No modification is required.

Thanks

Bryan Harris
Oil and Gas Inspector
304-553-6087

From: Stahl, Evan R. <EStahl@eqt.com>
Sent: Wednesday, April 14, 2021 3:13 PM
To: Harris, Bryan O <Bryan.O.Harris@wv.gov>
Cc: Ridgway, Derek <Derek.Ridgway@eqt.com>
Subject: [External] Elliott 17H, 15H, & 13H 13-3/8" Set Depths

CAUTION: External email. Do not click links or open attachments unless you verify sender.

Bryan,

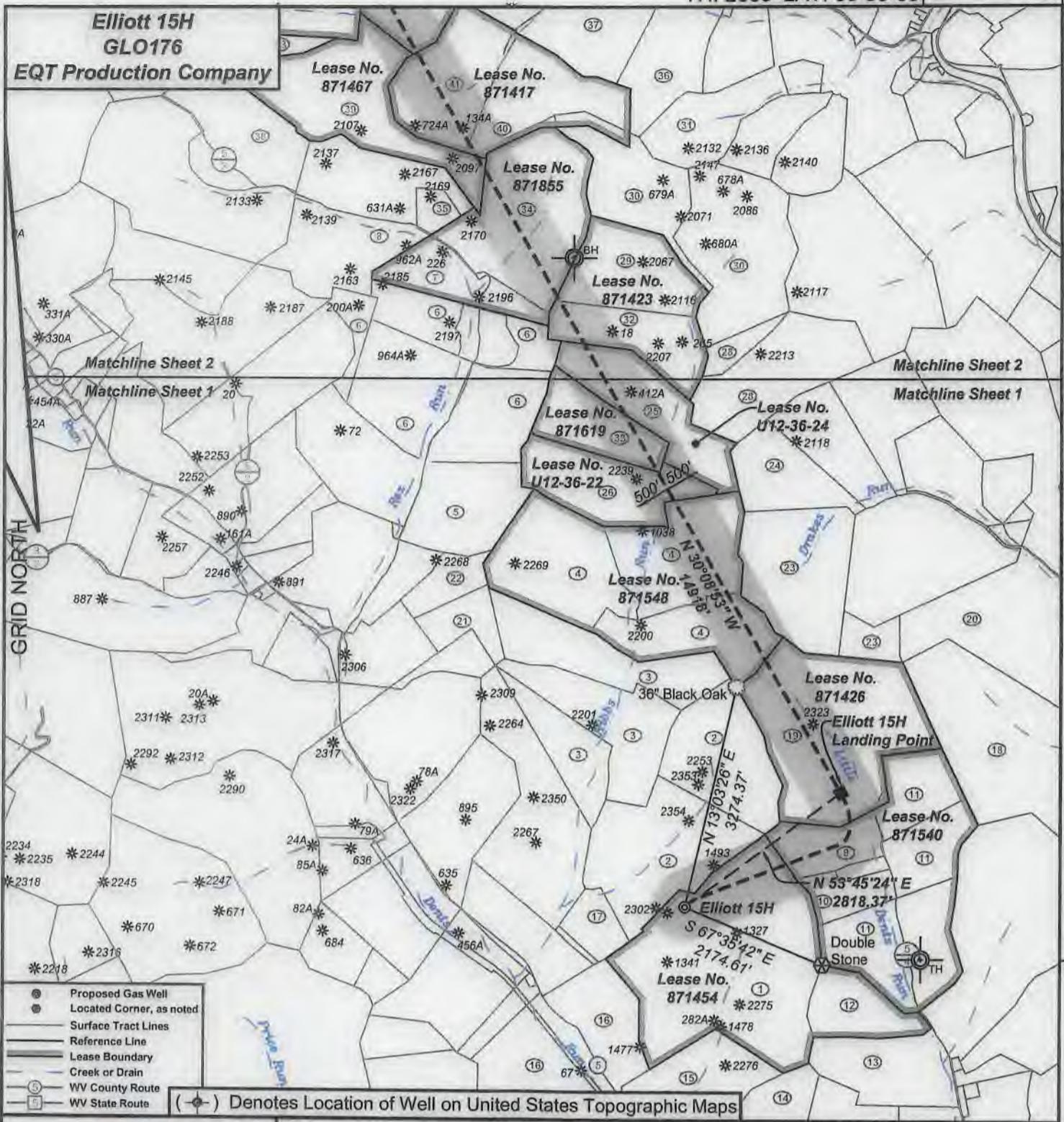
I'm sending this email in an effort to follow up with documentation to our previous conversation regarding the Elliott 13-3/8" strings on the 17H, 15H, and 13H wells. As we discussed, these strings are set shallower than the depth listed on the currently issued permit (Each set at 1,015' vs the permitted 1,025'), however, they still fulfill the requirements for minimum depth past fresh water, competently seated past coal, and shallower than ground elevation requirements as laid out in the regulations. At the end of our discussion we had come to agreement of your approval for these items and planned to set at permitted depth or 30-40' deeper beginning with the 11H to avoid inconsistency with the permit. Could you please reply with confirmation of the conversation above and your approval?

Thanks,

Evan Stahl
Drilling Engineer
EQT Production
M: 412-215-8360

To learn about EQT's environmental, social and governance efforts visit: <https://esq.eqt.com>

RECEIVED
Office of Oil and Gas
APR 29 2021
WV Department of
Environmental Protection



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.

Ben R. Singleton
P.S. 2092



SEAL

FILE NO: 48-18
DRAWING NO: Elliott 15H
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: April 7 20 20
OPERATOR'S WELL NO.: Elliott 15H
API WELL NO. MOD
47 - 49 - 02505
STATE COUNTY PERMIT

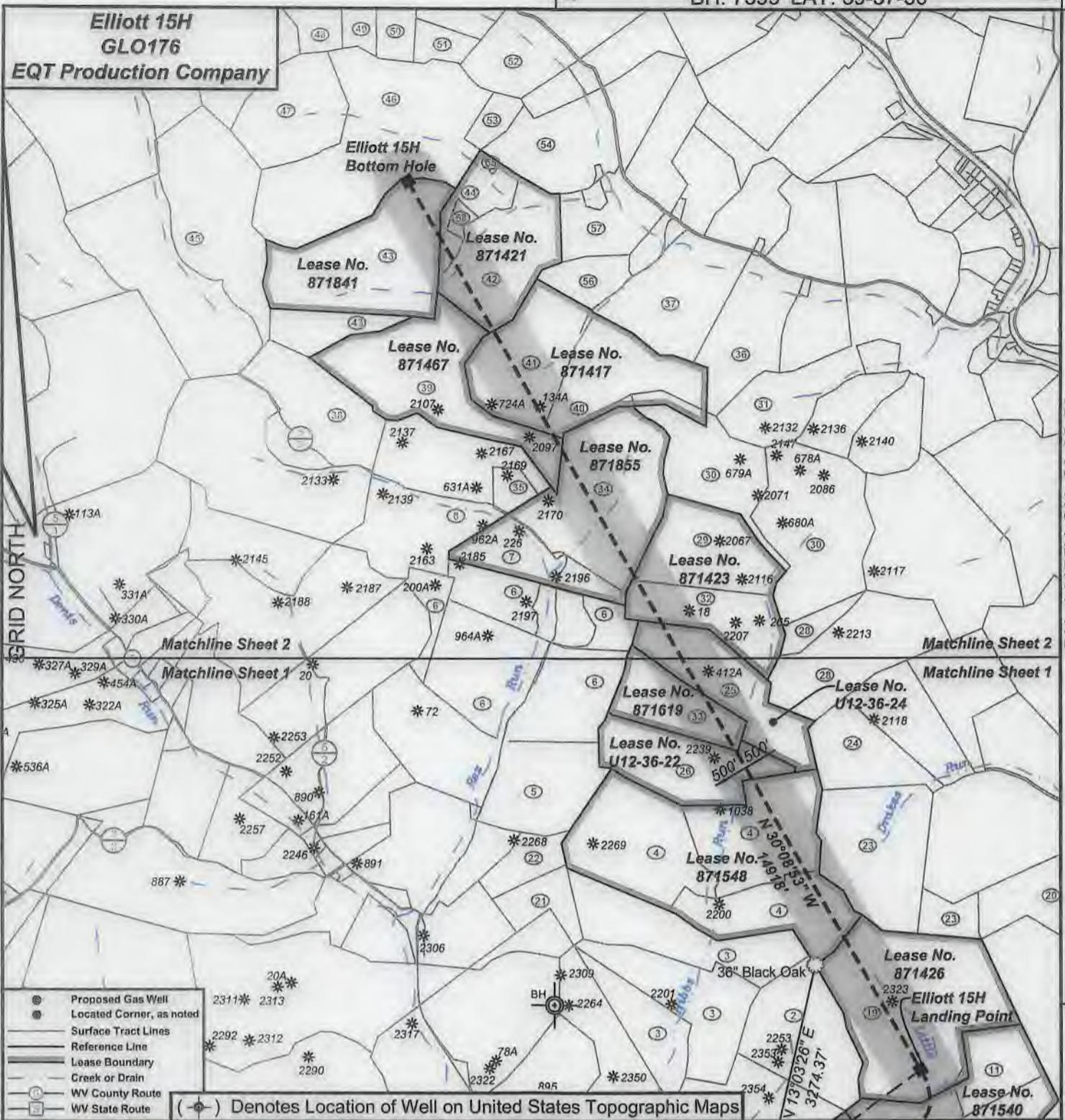
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1343' WATERSHED Tributary of Dents Run QUADRANGLE: Glover Gap
DISTRICT: Mannington COUNTY: Marion
SURFACE OWNER: Consolidated Coal Company ACREAGE: 153.25
ROYALTY OWNER: Randy J. Elliott and Leonard W. Stafford LEASE NO: 871454 ACREAGE: 183
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7,770'

05/07/2021

WELL OPERATOR: EQT Production Company ADDRESS: 400 Woodcliff Drive Canonsburg, PA 15317
DESIGNATED AGENT: Joseph C. Mallow ADDRESS: 115 Professional Place PO Box 280 Bridgeport, WV 26330

BH: 7399' LAT: 39-37-30

**Elliott 15H
GLO176
EQT Production Company**



- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- WV County Route
- WV State Route

(-*) Denotes Location of Well on United States Topographic Maps



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.

Ben R. State
P.S. 2092



SEAL

FILE NO: 48-18
 DRAWING NO: Elliott 15H
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: April 7 20 20
 OPERATOR'S WELL NO.: Elliott 15H
 API WELL NO **MWD**
 47 - 49 - 02505
 STATE COUNTY PERMIT

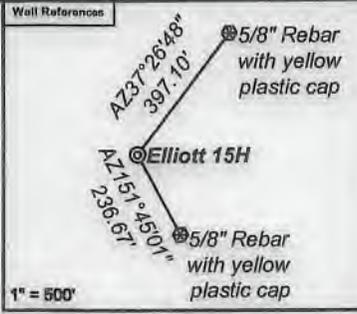
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: 1343' WATERSHED Tributary of Dents Run QUADRANGLE: Glover Gap
 DISTRICT: Mannington COUNTY: Marion
 SURFACE OWNER: Consolidated Coal Company ACREAGE: 153.25
 ROYALTY OWNER: Randy J. Elliott and Leonard W. Stafford LEASE NO: 871454 ACREAGE: 183
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7,770'

05/07/2021

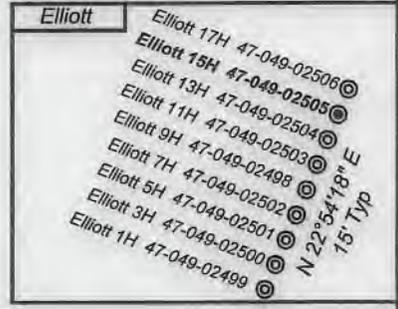
WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow
 ADDRESS: 400 Woodcliff Drive ADDRESS: 115 Professional Place PO Box 280
 Canonsburg, PA 15317 Bridgeport, WV 26330

**Elliott 15H
GLO176
EQT Production Company**

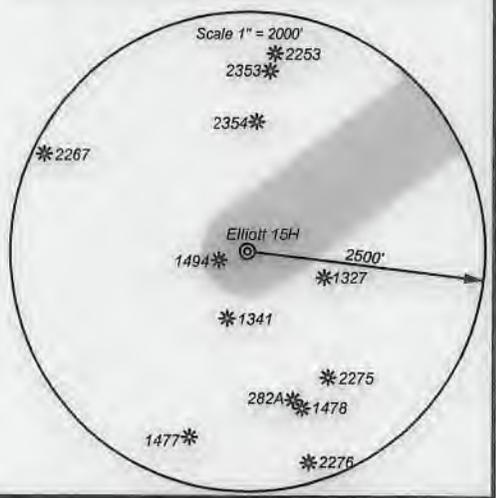
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	34	40	Marion	Mannington	Consolidation Coal Company	153.25
2	34	37	Marion	Mannington	Consolidation Coal Company	133.57
3	36	20	Marion	Mannington	Consolidation Coal Company	131.10
4	36	21	Marion	Mannington	Consolidation Coal Company	188.48
5	36	11	Marion	Mannington	Fredrick E. & Deborah S. Lilley	48.25
6	36	9	Marion	Mannington	Fredrick E. & Deborah S. Lilley	158.22
7	36	10	Marion	Mannington	CNX Land LLC	34.88
8	26	20	Marion	Mannington	Sportsman Square Circle Club Inc	102.85
9	34	49	Marion	Mannington	Donnie M. & Lisa A. Hayes	24.78
10	34	47	Marion	Mannington	Edward F. Price	23.00
11	33	1	Marion	Mannington	Thomas D. & Anne J. Haught	108.82
12	34	40.1	Marion	Mannington	Raymond F. & Betty J. Fluharty	28.75
13	34	45	Marion	Mannington	City of Mannington	42.50
14	34	41	Marion	Mannington	Consolidation Coal Company	47.00
15	34	38	Marion	Mannington	Consolidation Coal Company	42.75
16	34	33	Marion	Mannington	Consolidation Coal Company	134.00
17	34	36	Marion	Mannington	Consolidation Coal Company	17.00
18	33	28	Marion	Mannington	Mildred H. Prichard Heins	379.58
19	32	11	Marion	Mannington	Consolidation Coal Company	118.00
20	32	9	Marion	Mannington	Michael L. & Betty J. Higgs	155.18
21	36	13	Marion	Mannington	Mark A. & Carrie A. Handershot	16.20
22	36	12	Marion	Mannington	Mark A. & Carrie A. Handershot	15.20
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	36	22	Marion	Mannington	Consolidation Coal Company	50.67
28	31	30	Marion	Mannington	CNX Land LLC	57.28
29	28	23	Marion	Mannington	CNX Land LLC	46.50
30	31	38	Marion	Mannington	CNX Land LLC	132.08
31	28	1	Marion	Mannington	Shirley M. Dungan	107.39
32	28	22	Marion	Mannington	CNX Land LLC	36.60
33	36	23	Marion	Mannington	CNX Land LLC	30.68
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	18	Marion	Mannington	Donna McDonald	55.75
39	28	17	Marion	Mannington	CNX Land LLC	77.98
40	28	8.1	Marion	Mannington	Willson Investments LLC	52.85
41	28	6	Marion	Mannington	Jacobs A. & Courtney N. Wilfong	52.85
42	28	8.5	Marion	Mannington	Elijah & Erica Doan	55.00
43	28	16	Marion	Mannington	Consolidation Coal Company	107.83
44	28	8.1	Marion	Mannington	CNX Land LLC	15.96
45	26	2.1	Marion	Mannington	Larry Goff	160.04
46	28	9	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	13.52
50	27	12.1	Marion	Mannington	Jason G. & Cathy L. Straight	20.00
51	28	13	Marion	Mannington	CNX Land LLC	13.16
52	27	17	Marion	Mannington	Raymond L. & Karen L. Messer	104.00
53	28	9.1	Marion	Mannington	Douglas A. & Lisa A. Hayes	10.00
54	28	11	Marion	Mannington	CNX Land LLC	36.00
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
58	28	8.3	Marion	Mannington	CNX Land LLC	3.01



Notes:
Elliott 15H coordinates are
NAD 27 N: 382,004.27 E: 1,751,213.09
NAD 27 Lat: 39.545471 Long: -80.382229
NAD 83 UTM N: 4,377,502.56 E: 553,097.39
Elliott 15H Landing Point coordinates are
NAD 27 N: 383,670.53 E: 1,753,486.14
NAD 27 Lat: 39.550107 Long: -80.374227
NAD 83 UTM N: 4,378,021.77 E: 553,781.46
Elliott 15H Bottom Hole coordinates are
NAD 27 N: 396,566.99 E: 1,745,994.67
NAD 27 Lat: 39.585315 Long: -80.401251
NAD 83 UTM N: 4,381,913.41 E: 551,433.64
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
871548	West Virginia University Foundation, Inc., et al.	169.49
U12-36-22	CNX Gas Company LLC	50.87
871619	Meg L. Burkardt, et al.	30.96
U12-36-24	CNX Gas Company LLC	47.68
871423	Country Roads Minerals, LLC, et al.	83.1
871855	Nita M. Cordray, et al.	115.86
871467	Lee and Hall Royalties, a partnership, et al.	77.95
871417	Sheila Lightfoot and Tina Fischer, et al.	105.75
871421	Claud Kendall Trust, et al.	125
871841	John Baker III, et al.	106.63



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.

Ben R. Singleton
P.S. 2092



SEAL

FILE NO: 48-18
DRAWING NO: Elliott 15H
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: April 7 20 20
OPERATOR'S WELL NO.: Elliott 15H
API WELL NO. MOD
47 - 49 - 02505
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1343' WATERSHED Tributary of Dents Run QUADRANGLE: Glover Gap
DISTRICT: Mannington COUNTY: Marion
SURFACE OWNER: Consolidated Coal Company ACREAGE: 153.25
ROYALTY OWNER: Randy J. Elliott and Leonard W. Stafford LEASE NO: 871454 ACREAGE: 183
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7,770'

WELL OPERATOR: EQT Production Company ADDRESS: 400 Woodcliff Drive Canonsburg, PA 15317
DESIGNATED AGENT: Joseph C. Mallow ADDRESS: 115 Professional Place PO Box 280 Bridgeport, WV 26330

05/07/2021

WW-6A1
(5/13)

Operator's Well No. Elliott 15H

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
-------------------------	-----------------------	-----------------------	---------	-----------

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

Office of Oil and Gas

APR 29 2021

WV Department of
Environmental Protection

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: John Zavatchan *John F. Zavatchan Jr.*

Its: Project Specialist - Permitting

WW-6A1 attachment

Operator's Well No.

Elliott 15H

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
871454	<u>Randy J. Elliott and Leonard W. Stafford</u> Randy J. Elliott, a married man dealing in his sole/sep. property	183 ac EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1213/441
871540	<u>Country Roads Minerals, LLC, et al.</u> Byron W. Davis, a married man dealing with his sole and sep. property American Shale Development, Inc. Republic Energy Ventures, LLC, Republic Partners VIII, LLC, et al Trans Energy, Inc. and American Shale Development, Inc.	89.75 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 1148/27 AB 47/469 AB 51/525 DR 1228/1
871426	<u>John D. Haskins, III</u> John D. Haskins, III, married, dealing in his sole and separate property	117 ac EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DR 1254/532
871548	<u>West Virginia University Foundation, Inc., et al.</u> West Virginia University Foundation, Inc., for the benefit of West Virginia University American Shale Development, Inc. Republic Energy Ventures, LLC, Republic Partners VIII, LLC, et al Trans Energy, Inc. and American Shale Development, Inc.	169.49 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 1159/217 AB 47/469 AB 51/525 DR 1228/1
U12-36-22	<u>CNX Gas Company LLC</u> Consolidation Coal Company, et al.	50.87 ac CNX Gas Company LLC See Attached Letter	"at least 1/8th per WV Code 22-6-8"	DR 1005/246

RECEIVED
 Office of Oil and Gas
 APR 29 2021
 WV Department of
 Environmental Protection

871619	<u>Meg L. Burkardt, et al.</u>	30.96 ac	"at least 1/8th per WV Code 22-6-8"	Republic Energy Ventures EQT Production Company EQT Production Company	DR 1167/663 AB 51/525 DR 1228/1
U12-36-24	<u>CNX Gas Company LLC</u>	47.68 ac	"at least 1/8th per WV Code 22-6-8"	CNX Gas Company LLC See Attached Letter	DR 1005/246
871423	<u>Country Roads Minerals, LLC, et al.</u>	83.1 ac	"at least 1/8th per WV Code 22-6-8"	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	DR 1097/226 AB 42/601 AB 43/420 AB 47/469 AB 51/525 DR 1228/1
871855	<u>Nita M. Cordray, et al.</u>	115.86 ac	"at least 1/8th per WV Code 22-6-8"	EQT Production Company	DR 1258/1002
871467	<u>Lee and Hall Royalties, a partnership, et al.</u>	77.95 ac	"at least 1/8th per WV Code 22-6-8"	American Shale Development, Inc., (50%) and Republic Energy Ventures, LLC, (50%) Republic Partners VIII, LLC EQT Production Company EQT Production Company	DR 1118/277 AB 47/469 AB 51/525 DR 1228/1
871417	<u>Sheila Lightfoot and Tina Fischer, et al.</u>	105.75 ac	"at least 1/8th per WV Code 22-6-8"	Republic Energy Ventures, LLC EQT Production Company	DR 1199/971 AB 52/189

RECEIVED
 Office of Oil and Gas
 APR 29 2021
 WV Department of Environmental Protection

871421 **Claud Kendall Trust, et al.**

125 ac

"at least 1/8th per
WV Code 22-6-8"

Claud Kendall

Tenmile Land, LLC

DR 1100/327 & DR1092/802

Tenmile Land, LLC

Trans Energy, Inc., 50%, and Republic Energy
Ventures, LLC, 50%

DR 1102/58

Trans Energy, Inc.

American Shale Development, Inc.

AB 43/420

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

871841 **John Baker III, et al.**

106.63 ac

"at least 1/8th per
WV Code 22-6-8"

John Baker III, (married dealing in his sole and serarate property)

EQT Production Company

DR 1276/283

RECEIVED
Office of Oil and Gas
APR 29 2021
WV Department of
Environmental Protection

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.

3. 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,

RECEIVED
Office of Oil and Gas
APR 29 2021
WV Department of
Environmental Protection

05/07/2021

well, 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.

5. 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.

8. 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 Letter 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 (317) 584-3132 or zavatchan@eqp.com.

Sincerely,

FQT Production Company

By: [Signature]
Name: Corey C. Peck
Title: Authorized Agent

Rice Drilling B.L.C.

By: [Signature]
Name: Corey C. Peck
Title: Authorized Agent

Acknowledged, Accepted and Agreed to this 5th day of March, 2021.

CNX Gas Company LLC

By: [Signature]
Name: KATELYN J. JENNINGS
Title: ASSISTANT V.P. OPERATIONS

RECEIVED
Office of Oil and Gas
APR 29 2021
WV Department of
Environmental Protection

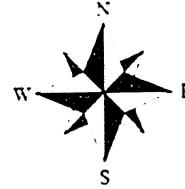
**EXHIBIT A
TO DRILLING LETTER
DRILLING LEASES**

Property Type	Applicant #	Original Lessee/Operator	Design Lessee/Operator	Effective Date	Gross Acres	Net Acres to be Covered	Net Acres	Recording Book Page	Instrument Number	State	County	Township	Full Parcel Assessed	Full Tract
LEASE	28177801	ELMS BROTHERS	RUE DRILLING R L L C	10/9/2014	90.5229	31.3422	9.1384	475/1364	20180000004	PENNSYLVANIA	Greene	Bellevue	100722 04 0125 A PO 22 04 0125 100722 04 0125 A 22 04 1008 B 22 04 0125 11 PO 22 04 0125 01 22 04	Yes, conveying the portion of the lease identified on Exhibit A 1
LEASE	24755203	TAKE 10 (DEW) ROYALTY L L L C	CNK GAS COMPANY L L C	12/19/2019	73.6000	36.2000	32.0500	14/788	20190000054	PENNSYLVANIA	Greene	Bellevue	100722 04 0125 A PO 22 04 0125 100722 04 0125 A 22 04 1008 B 22 04 0125 11 PO 22 04 0125 01 22 04	Yes, conveying the portion of the lease identified on Exhibit A 1
LEASE	28284204	THREE RIVERS	RANDA RESOURCES	12/17/2019	126.6800	14.0535	11.5370	533/120	20190000412	PENNSYLVANIA	Greene	Bellevue	100722 04 0125 A PO 22 04 0125 100722 04 0125 A 22 04 1008 B 22 04 0125 11 PO 22 04 0125 01 22 04	Yes, conveying the portion of the lease identified on Exhibit A 1
LEASE	23242600	RONALD	CNK GAS COMPANY	6/22/2015	88.0000	48.0000	32.0409	482/1154	20120000340	PENNSYLVANIA	Greene	Altoona	01 02 0104	No
Lease	27526700	ROBERT M EDWARDS	PENNSYLVANIA CONFIN CO	9/2/2005	101.4300	8.6190	7.0676	331/214	20050000757	PENNSYLVANIA	Greene	Altoona, Bellevue	01 02 0111 22 04 0121 A	No
Lease	28107601	SULLY	PENNSYLVANIA CONFIN CO	6/9/2015	1.0000	0.8440	0.2781	230/2738	201100002781	PENNSYLVANIA	Greene	Altoona	01 01 0114	No
Lease	22181500	FRITTE & PENN	NATIONAL BANK CONSOLIDATION	2/5/1980	67.2500	32.3250	31.5425	825/2345		WEST VIRGINIA	Marion	Marion	12 14 11	No
Lease	28322500	LANDLUBER	NATIONAL BANK THE CHARLESTON	1/3/1977	114.6300	11.8000	41.1880	583/101		WEST VIRGINIA	Marion	Marion	12 14 11	No
Lease	N/A	DAISY AND PAUL T GREEN	NATIONAL BANK AS THE CHARLESTON	8/30/1957	3	1.5	1.2800	583/152		WEST VIRGINIA	Marion	Marion	12 14 10	No
Lease	N/A	AND MARY WALTER D STRAIGHT JR AND CONVA	NATIONAL BANK AS THE CHARLESTON	1/31/1957	48.85	12.2110	10.0143	584/2834/2600		WEST VIRGINIA	Marion	Marion	12 14 14	No
Lease		EDWARDS	NATIONAL BANK AS TRUSTEE	8/30/1960	50.87	10.85	11.7133	612/186		WEST VIRGINIA	Marion	Marion	12 14 22	No
Lease	26480000	JAMES W AND JENNIFER L WENDERSHOFT	NATIONAL BANK CONSOLIDATION	10/13/1971	47.04	17.65	19.0936	807/212		WEST VIRGINIA	Marion	Marion	12 14 24	No
Lease	28812000	ANDREW F WENDERSHOFT	NATIONAL BANK CONSOLIDATION	9/10/1919	18.69	0.6122343	0.5019	812/574		WEST VIRGINIA	Marion	Marion	12 17 12 2	No

RECEIVED
Office of Oil and Gas
APR 29 2021
WV Department of
Environmental Protection

05/07/2021

Exhibit A-1



Agreement Nos. 296373001
TMP: p/o 22-04-0101, 22-04-0101-A
90.522 Gross Acres

LAT: 39° 52' 17.1136"
LON: 80° 30' 53.8314"

LAT: 39° 52' 16.7214"
LON: 80° 30' 53.8308"

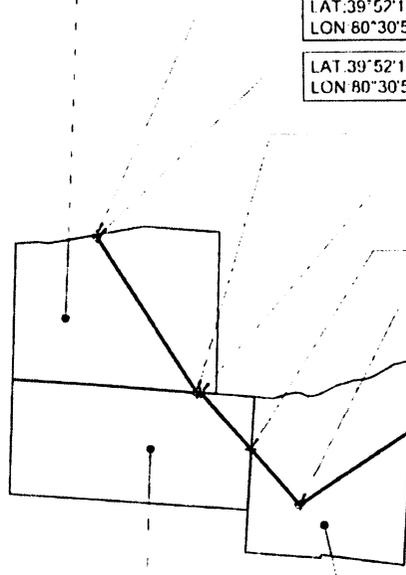
LAT: 39° 51' 55.0830"
LON: 80° 30' 34.4808"

LAT: 39° 51' 55.0582"
LON: 80° 30' 33.7713"

LAT: 39° 51' 47.2133"
LON: 80° 30' 24.0615"

LAT: 39° 51' 39.6075"
LON: 80° 30' 14.6486"

LAT: 39° 51' 50.6406"
LON: 80° 29' 54.0387"



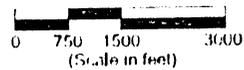
Agreement No. 282842004
TMP: p/o 22-04-0102
126,480 Gross Acres

Agreement No. 297151001
TMP: p/o 22-04-0108,
22-04-0108-A,
22-04-0108-B,
p/o 22-04-0108-C,
22-04-0108-D
p/o 22-04-0108-E,
p/o 22-04-0108-F
73,400 Gross Acres

CNX to EQT - Split Tracts

CNX to EQT

CNX Retained



Date: 02/08/2021

RECEIVED
Office of Oil and Gas

APR 29 2021

WV Department of
Environmental Protection