



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, December 14, 2021
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit Modification Approval for 10H
47-103-03414-00-00

Lateral Extension

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: 10H
Farm Name: MICHAEL KUHN
U.S. WELL NUMBER: 47-103-03414-00-00
Horizontal 6A New Drill
Date Modification Issued: 12/14/2021

Promoting a healthy environment.

12/17/2021

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

1) Well Operator: EQT Production Company 306686 Wetzel Center Big Run
Operator ID County District Quadrangle

2) Operator's Well Number: 10H Well Pad Name: Michael Kuhn

3) Farm Name/Surface Owner: Rachel Elizabeth Wyatt & Sheldon R Norris Public Road Access: CR 19/3

4) Elevation, current ground: 1509' (built) Elevation, proposed post-construction: 1509' (built)

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, 7,736', 51', 2,620 PSI

8) Proposed Total Vertical Depth: 7736'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 25,616'

11) Proposed Horizontal Leg Length: 17,418'

12) Approximate Fresh Water Strata Depths: 75', 361'

13) Method to Determine Fresh Water Depths: Offset Wells - 47-103-01884 & 43-103-01813

14) Approximate Saltwater Depths: 2027', 2100', 2295', 2369'

15) Approximate Coal Seam Depths: 1163'-1166', 1260'-1266'

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: _____
Depth: _____
Seam: _____
Owner: _____

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Office of Oil and Gas
DEC 09 2021
WV Department of
Environmental Protection

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	50 ft ³ / CTS
Fresh Water	13 3/8	New	J-55	54.5	1316	1316	1210 ft ³ / CTS
Coal							
Intermediate	9 5/8	New	J-55	36	2823	2823	1100 ft ³ / CTS
Production	5 1/2	New	P-110	20	25616	25616	500' above intermediate casing
Tubing							
Liners							

Bryan Harris 12/8/21

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 / Type 1	1.13 - 1.19
Coal							
Intermediate	9 5/8	12 3/8	0.352	3520	2816	Class A / Type 1	1.13 - 1.19
Production	5 1/2	8 1/2	0.361	14360	11488	Class A/H	1.04 - 2.10
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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

Drill and complete the horizontal portion of this well in the Marcellus Formation. Drill the vertical, kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.1%) 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): 12.25 acres (2.87 acres previously disturbed)

22) Area to be disturbed for well pad only, less access road (acres): 5.17 acres (2.72 acres existing)

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:

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

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.

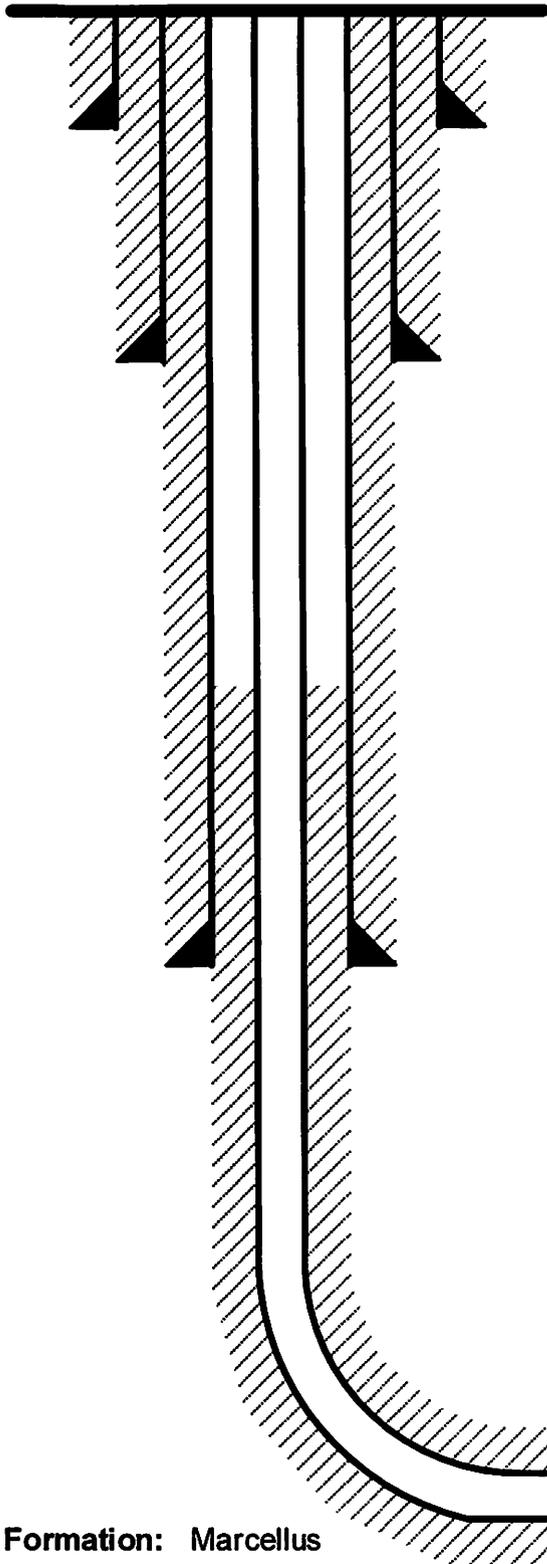
*Note: Attach additional sheets as needed.

EQT Production

Wellbore Diagram

Well: Michael Kuhn 10H
Pad: Michael Kuhn
Elevation: 1523' GL 1536' KB

County: Wetzel
State: West Virginia



Conductor @ 40'

26", 85.6#, A-500, cement to surface w/ Class A

Surface @ 1,316'

13-3/8", 54.5#, J-55, cement to surface w/ Class A/Type I

Intermediate @ 2,823'

9-5/8", 36#, J-55, cement to surface w/ Class A/Type I

Production @ 25,616' MD / 7,736' TVD

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

Formation: Marcellus

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Office of Oil and Gas

DEC 09 2021

WV Department of
Environmental Protection

**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
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See Attachment

**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

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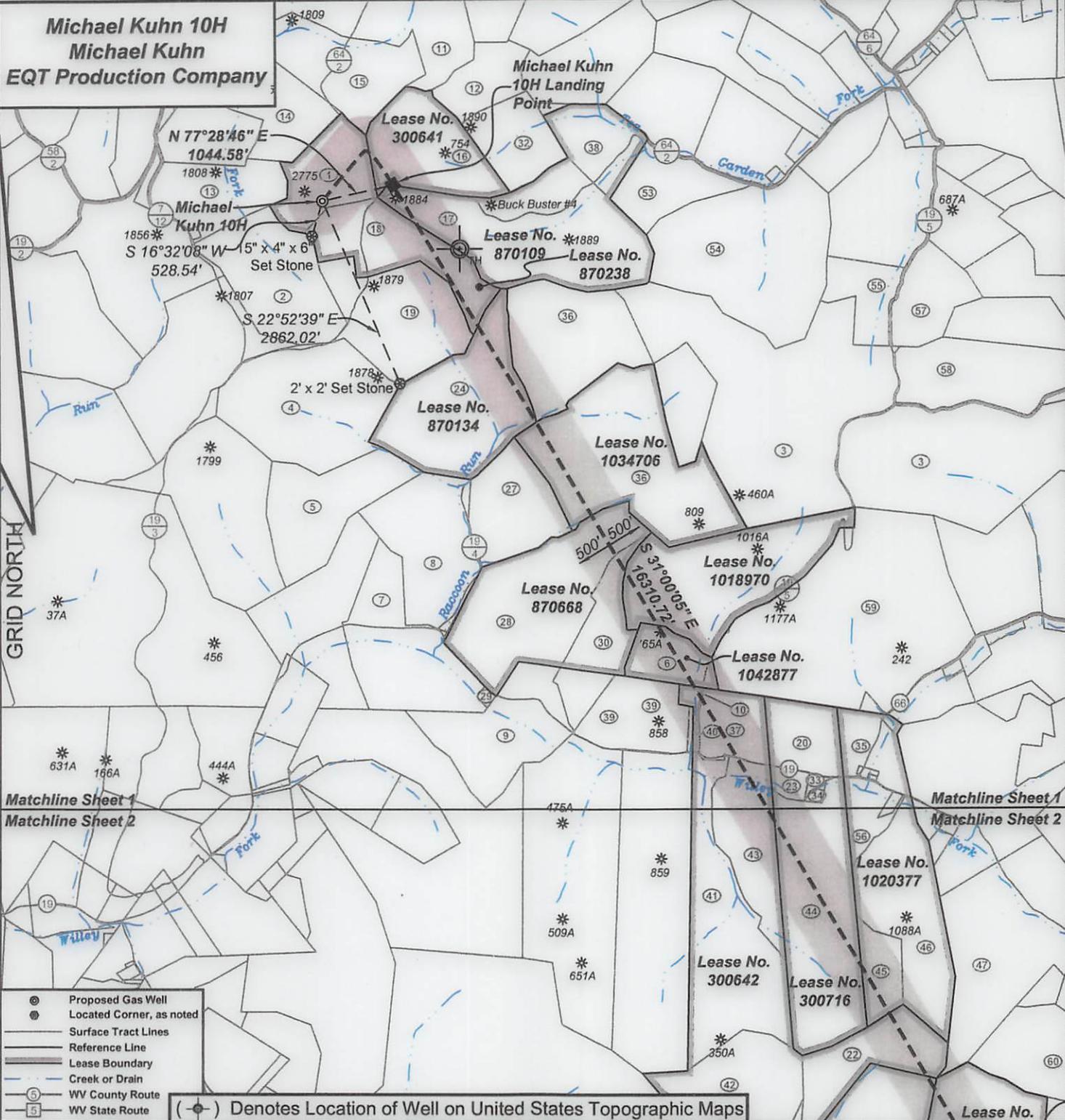
The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity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

Well Operator: EQT Production Company
 By: John Zavatchan *John F Zavatchan Jr.*
 Its: Project Specialist Permitting

TH: 8793' LAT: 39-37-30

TH: 3583' LON: 80-30-00

Michael Kuhn 10H
Michael Kuhn
EQT Production Company



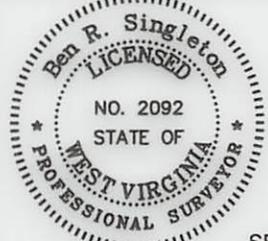
- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- ⑤ WV County Route
- ⑤ WV State Route

(●) 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. Singleton
P.S. 2092



SEAL

FILE NO: 49-20
DRAWING NO: Michael Kuhn 10H
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: December 06 20 21
OPERATOR'S WELL NO.: Michael Kuhn 10H
API WELL NO MoD
47 - 103 - 03414
STATE COUNTY PERMIT

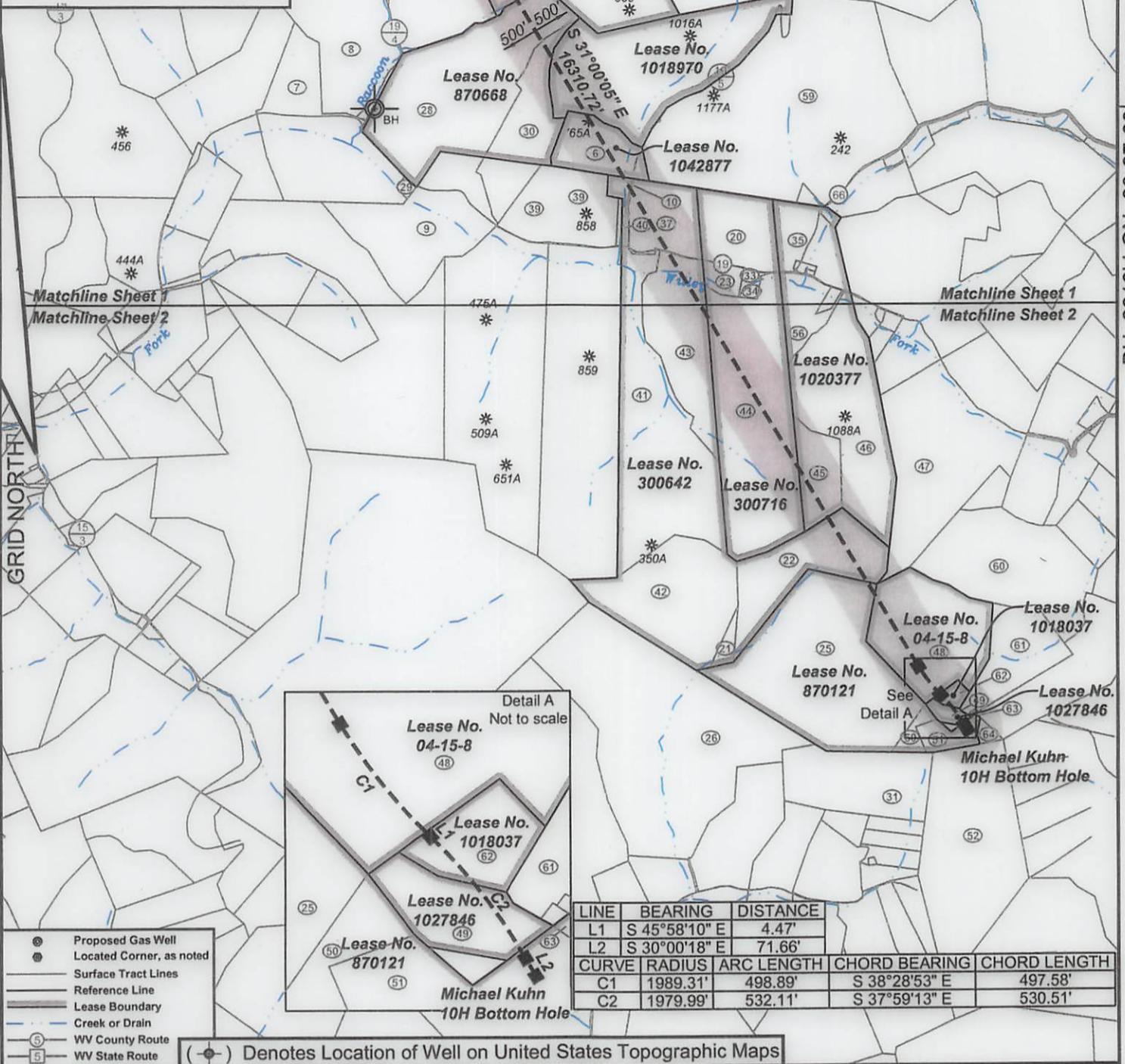
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1509' WATERSHED Knob Fork of West Virginia Fork Fishing Creek QUADRANGLE: Big Run
DISTRICT: Center COUNTY: Wetzel 12/17/2021
SURFACE OWNER: Rachel Elizabeth Wyatt & Sheldon R. Norris ACREAGE: 36.40
ROYALTY OWNER: Michael G. Kuhn LEASE NO: 870238 ACREAGE: 202
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: 7736'

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

BH: 10280' LAT: 39-35-00

BH: 2919' LON: 80-27-30

Michael Kuhn 10H
Michael Kuhn
EQT Production Company



LINE	BEARING	DISTANCE	CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
L1	S 45°58'10" E	4.47'					
L2	S 30°00'18" E	71.66'					
C1			1989.31'	498.89'	S 38°28'53" E	497.58'	
C2			1979.99'	532.11'	S 37°59'13" E	530.51'	

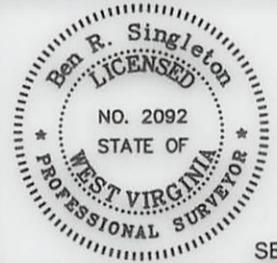
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Ben R. Singleton
P.S. 2092



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 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OIL AND GAS DIVISION

DATE: December 06 20 21
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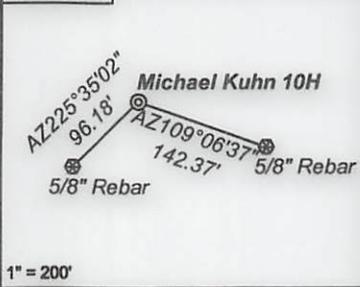
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 Canonsburg, PA 15317 Bridgeport, WV 26330

Michael Kuhn 10H
Michael Kuhn
EQT Production Company

Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	20	32	Wetzel	Center	Rachel Elizabeth Wyatt & Sheldon R. Norris	36.40
2	20	35	Wetzel	Center	Rachel Elizabeth Wyatt & Sheldon R. Norris	54.00
3	5	1	Wetzel	Grant	Raccoon Run Properties LLC	370.01
4	4	10	Wetzel	Grant	William B. & Pamela S. Franck	78.78
5	9	3	Wetzel	Grant	William B. & Pamela S. Franck	50.00
6	10	9	Wetzel	Grant	Gregory A. Burdine	22.50
7	9	21	Wetzel	Grant	Gregory & Michael Dulaney	59.90
8	9	4	Wetzel	Grant	Gregory & Michael Dulaney	50.00
9	9	27	Wetzel	Grant	Burl Barr	47.17
10	10	19	Wetzel	Grant	Robert Chipps	2.41
11	20	5	Wetzel	Center	Robert F. & Linda Rix	107.00
12	13	8	Wetzel	Church	William B. & Pamela S. Franck	26.50
13	20	31	Wetzel	Center	Rachel Elizabeth Wyatt & Sheldon R. Norris	40.00
14	20	27	Wetzel	Center	Robert E. & Linda E. Rix	48.75
15	20	18	Wetzel	Center	Robert E. & Linda E. Rix	60.10
16	13	8	Wetzel	Church	William B. Franck Jr.	48.44
17	17	1	Wetzel	Church	Buck Buster Hunt Club of WV Inc.	100.00
18	20	36	Wetzel	Center	Rachel Elizabeth Wyatt & Sheldon R. Norris	45.00
19	20	37	Wetzel	Center	William B. & Pamela S. Franck	67.50
20	10	21	Wetzel	Grant	John Gump Jr. & Mary Jo. Gump	25.00
21	15	6	Wetzel	Grant	Donald J. D'Lusky, et al.	2.75
22	15	1	Wetzel	Grant	Timothy E. Thus	43.20
23	10	36.1	Wetzel	Grant	Brooks Hineman	5.00
24	4	11	Wetzel	Grant	Liberty Holding Company	89.05
25	15	7	Wetzel	Grant	Timothy E. Thus	115.00
26	15	12	Wetzel	Grant	Donald J. D'Lusky, et al.	147.50
27	9	5	Wetzel	Grant	John E. Selwell	36.50
28	9	12	Wetzel	Grant	Burl Barr	89.28
29	9	21.2	Wetzel	Grant	David W. & Barbara L. Anderson	1.00
30	9	84	Wetzel	Grant	Calvin N. Barr, et al.	32.92
31	15	13	Wetzel	Grant	Donald W. & Dianna White	40.00
32	13	9	Wetzel	Church	William B. Franck Jr.	28.00
33	10	49	Wetzel	Grant	Brooks & Donna J. Hineman	1.28
34	10	30	Wetzel	Grant	Tammy D. Chambers	1.05
35	10	31	Wetzel	Grant	John Gump Jr. & Mary Jo. Gump	16.33
36	4	12	Wetzel	Grant	Robert L. McCann Jr. & Andrew S. McCann	190.78
37	10	20	Wetzel	Grant	Billy J. & Frances J. Higgins Irrevocable Trust	21.06
38	13	10	Wetzel	Church	Buck Buster Hunt Club of WV Inc	27.50
39	10	18	Wetzel	Grant	Michael J. & Patricia L. Barber	35.00
40	10	29.1	Wetzel	Grant	Robert Rice	2.21
41	10	29	Wetzel	Grant	Billy J. & Frances J. Huggins Irrevocable Trust	59.31
42	15	5	Wetzel	Grant	Donald J. D'Lusky, et al.	43.20
43	10	29.2	Wetzel	Grant	Randy R. Rex	40.00
44	10	38	Wetzel	Grant	Tammy D. Chambers	89.67
45	10	39	Wetzel	Grant	Tammy D. Chambers	18.36
46	10	32	Wetzel	Grant	Richard E. & Jay A. Griffith	60.00
47	10	40	Wetzel	Grant	Ronald K. Gump & Deloris P. Gump	94.50
48	15	8	Wetzel	Grant	Coastal Forest Resources Company	49.00
49	15	14	Wetzel	Grant	Rich Rager	2.70
50	15	7.2	Wetzel	Grant	Minnie E. O'Bannon	6.00
51	15	7.1	Wetzel	Grant	Donald W. & Dianna White	7.80
52	15	26	Wetzel	Grant	William Jack & Beverly L. Barr	78.22
53	18	1	Wetzel	Church	Andrew Pinus	31.80
54	18	2	Wetzel	Church	David Brickenstein, et al.	98.50
55	18	10	Wetzel	Church	Steven W. & Carolyn L. Blair	19.00
56	10	33	Wetzel	Grant	Brady Grefe	5.56
57	18	11	Wetzel	Church	Thomas E. Kahl	29.00
58	18	17	Wetzel	Church	Cecil Summers	57.30
59	10	2.1	Wetzel	Grant	Richard L. Ebright	139.18
60	15	2	Wetzel	Grant	Coastal Forest Resources Company	61.00
61	15	10	Wetzel	Grant	Coastal Forest Resources Company	26.84
62	15	9	Wetzel	Grant	Coastal Forest Resources Company	2.50
63	15	15	Wetzel	Grant	Charleston Welding Co LLC	0.21
64	15	37	Wetzel	Grant	Coastal Forest Resources Company	1.45

Well References



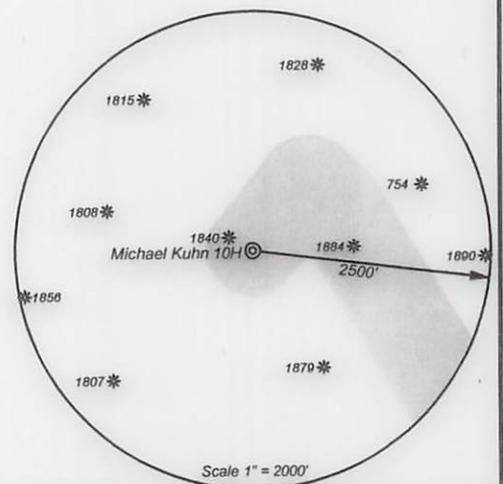
Notes:

Michael Kuhn 10H coordinates are
 NAD 27 N: 407,834.57 E: 1,709,493.23
 NAD 27 Lat: 39.615165 Long: -80.531212
 NAD 83 UTM N: 4,385,160.00 E: 540,255.80
 Michael Kuhn 10H Landing Point coordinates are
 NAD 27 N: 408,061.03 E: 1,710,512.98
 NAD 27 Lat: 39.615819 Long: -80.527602
 NAD 83 UTM N: 4,385,234.19 E: 540,565.33
 Michael Kuhn 10H Bottom Hole coordinates are
 NAD 27 N: 393,207.43 E: 1,719,589.16
 NAD 27 Lat: 39.575321 Long: -80.494803
 NAD 83 UTM N: 4,380,755.05 E: 543,405.90
 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.

Michael Kuhn

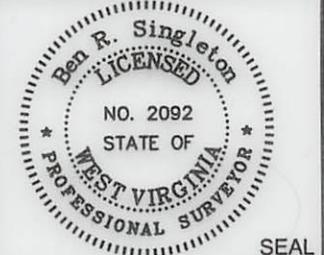


Lease No.	Owner	Acres
300641	Beulah Deloris Ballard	48.43874
870109	Buckbusters Hunting Club of WVA, LLC	127.5
870238	Michael G. Kuhn, et al.	202
870134	Liberty Holding Company, Inc.	89
1034706	Andrew S. McCann, et al.	107.75
870668	Valerie D. Preat, et al.	103
1018970	Three Rivers Royalty, LLC, et al.	75
1042877	Liberty Holding Company	22.775
300642	Waco Oil & Gas Co. Inc., et al.	122
300716	Bounty Minerals LLC, et al.	110
1020377	Patrick Harold Hasenbuhler, et al.	256
300642	Oxy USA Inc., et al.	256
870121	Beverly Kay Campbell, et al.	117
04-15-8	Stone Hill Minerals Holdings, LLC	4.9
1018037	Coastal Forest Resources Company d/b/a Coastal Timberlands Company, et al.	2.5
1027846	Rich Rager	2.75



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 P.S. 2092



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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

Lease No.	Grantor, Lessor, etc.	Acres	Grantee, Lessee, etc.	Royalty	Book/Page
<u>870238</u>	<u>Michael G. Kuhn</u> Michael G. Kuhn, a single man Drilling Appalachian Corporation Grenadier Energy Partners, LLC Drilling Appalachian Corporation Statoil USA Onshore Properties Inc.	202 ac	Drilling Appalachian Corporation Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc. Statoil USA Onshore Properties Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 77A/56 OG 118A/108 & 136A/538 OG 138A/1 OG 138A/54 OG 175A/707
<u>300641</u>	<u>Beulah Deloris Ballard</u> David Ballard and Malinda Ballard, husband and wife The Carter Oil Company Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc., Blazer Energy Corp., et al.	48.43874 ac	The Carter Oil Company The Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	DB 58/165 DB 91/1 DB 233/387 OG 66A/69 Corp. Book 13/151 OG 76A/232 Corp. Book 12/253 Corp. Book 12/259 Corp. Book 13/14
<u>870109</u>	<u>Buckbusters Hunting Club of WVA, LLC</u> Buck Buster Hunting Club of West Virginia, Inc. Drilling Appalachian Corporation Grenadier Energy Partners, LLC Drilling Appalachian Corporation Statoil USA Onshore Properties Inc.	127.5 ac	Drilling Appalachian Corporation Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc. Statoil USA Onshore Properties Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 80A/244 OG 118A/108 & 136A/538 OG 138A/1 OG 138A/54 OG 175A/707
<u>870238</u>	<u>Michael G. Kuhn, et al.</u> Michael G. Kuhn, a single man Drilling Appalachian Corporation Grenadier Energy Partners, LLC Drilling Appalachian Corporation Statoil USA Onshore Properties Inc.	202 ac	Drilling Appalachian Corporation Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc. Statoil USA Onshore Properties Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 77A/56 OG 118A/108 & 136A/538 OG 138A/1 OG 138A/54 OG 175A/707

<u>870134</u>	<u>Liberty Holding Company, Inc.</u> Liberty Holding Company, Inc. Drilling Appalachian Corporation Grenadier Energy Partners, LLC Drilling Appalachian Corporation Statoil USA Onshore Properties Inc.	89 ac	Drilling Appalachian Corporation Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc. Statoil USA Onshore Properties Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 79A/316 OG 118A/108 & 136A/538 OG 138A/1 OG 138A/54 OG 175A/707
<u>1034706</u>	<u>Andrew S. McCann, et al.</u> Andrew S. McCann	107.75 ac	EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 216A/189
<u>870668</u>	<u>Valerie D. Preat, et al.</u> Freda Watts Drilling Appalachian Corporation Grenadier Energy Partners, LLC Drilling Appalachian Corporation Statoil USA Onshore Properties Inc.	103 ac	Drilling Appalachian Corporation Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc. Statoil USA Onshore Properties Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 82A/123 OG 118A/108 & 136A/538 OG 138A/1 OG 138A/54 OG 175A/707
<u>1018970</u>	<u>Three Rivers Royalty, LLC, et al.</u> Three Rivers Royalty, LLC	75 ac	EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 179A/57
<u>1042877</u>	<u>Liberty Holding Company</u> Liberty Holding Company, a West Virginia Corporation Antero Resources Corporation	22.775 ac	Antero Resources Corporation EQT Production Company	*at least 1/8th per WV Code 22-6-8"	OG 182A/373 OG 231A/59
<u>300642</u>	<u>Waco Oil & Gas Co., Inc., et al.</u> F.F. Morgan & M.V. Morgan, his wife The Carter Oil Company Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc., Blazer Energy Corp., et al.	256 ac	The Carter Oil Co. The Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8"	DB 79/101 OG 1A/198 DB 233/387 OG 66A/69 Corp. Book 13/151 OG 76A/232 Corp. Book 12/253 Corp. Book 12/259 Corp. Book 13/14

<u>300716</u>	<u>Bounty Minerals LLC, et al.</u> Ara Long Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc., Blazer Energy Corp., et al.	122 ac	Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8*	OG 2A/42 DB 233/387 OG 66A/69 Corp. Book 13/151 OG 76A/232 Corp. Book 12/253 Corp. Book 12/259 Corp. Book 13/14
<u>1020377</u>	<u>Patrick Harold Hasenbuhler, et al.</u> Lester L. Ice and Gertrude C. Ice, husband and wife Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Invitation Energy, Inc. Joe O'Ferrell Standard Oil Company, Inc.	110 ac	Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Invitation Energy, Inc. Joe O'Ferrell Standard Oil Company, Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8*	OG 48A/229 DB 233/387 OG 66A/69 Corp. Book 13/151 OG 74A/538 OG 125A/982 & 136A/861 OG 125A/984 & 136A/863 OG 186A/286 & 188A/31
<u>300642</u>	<u>Oxy USA Inc., et al.</u> F.F. Morgan & M.V. Morgan, his wife The Carter Oil Company Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc., Blazer Energy Corp., et al.	256 ac	The Carter Oil Co. The Hope Natural Gas Company Consolidation Gas Supply Corporation Consolidated Gas Transmission Corporation CNG Transmission Corporation Eastern States Oil & Gas, Inc. Blazer Energy Corp. Eastern States Oil & Gas, Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8*	DB 79/101 OG 1A/198 DB 233/387 OG 66A/69 Corp. Book 13/151 OG 76A/232 Corp. Book 12/253 Corp. Book 12/259 Corp. Book 13/14
<u>870121</u>	<u>Beverly Kay Campbell, et al.</u> Mary Eloise Kimble, widow Drilling Appalachian Corporation Grenadier Energy Partners, LLC Drilling Appalachian Corporation Statoil USA Onshore Properties Inc.	117 ac	Drilling Appalachian Corporation Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc. Statoil USA Onshore Properties Inc. EQT Production Company	*at least 1/8th per WV Code 22-6-8*	OG 84A/535 OG 118A/108 & 136A/538 OG 138A/1 OG 138A/54 OG 175A/707

<u>04-15-8</u>	<u>Stone Hill Minerals Holdings, LLC</u> Stone Hill Minerals Holdings, LLC	49 ac	TH Exploration, LLC	"at least 1/8th per WV Code 22-6-8"	OG 272A/148
<u>1018037</u>	<u>Coastal Forest Resources Company d/b/a Coastal Timberlands Company, et al.</u> Coastal Forest Resources Company d/b/a Coastal Timberlands Company	2.5 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	OG 180A/862
<u>1027846</u>	<u>Rich Rager</u> Rich Rager, a widower, appearing herein by and through Regina S. Rager, Agent and Attorney-In-Fact by Power of Attorney dated June 27, 2000	2.75 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	OG 239A/589

<u>Lease No.</u>	<u>Grantor, Lessor, etc.</u>	<u>Acres</u>	<u>Grantee, Lessee, etc.</u>	<u>Royalty</u>	<u>Book/Page</u>
<u>870241</u>	<u>Shiben Estates, Inc</u>			"at least 1/8th per WV Code 22-6-8"	
	Shiben Estates, Inc	67.5 ac	Grenadier Energy Partners, LLC		OG 123A/780
	Grenadier Energy Partners, LLC		Drilling Appalachian Corporation		OG 125A/319
	Grenadier Energy Partners, LLC		Statoil USA Onshore Properties Inc.		OG 138A/1
	Drilling Appalachian Corporation		Statoil USA Onshore Properties Inc.		OG 138A/54
	Statoil USA Onshore Properties Inc.		EQT Production Company		OG 175A/707
<u>870834</u>	<u>Shiben Estates, Inc., et al.</u>			"at least 1/8th per WV Code 22-6-8"	
	Shiben Estates, Inc.	60.75 ac	Grenadier Energy Partners, LLC		OG 123A/790
	Grenadier Energy Partners, LLC		Drilling Appalachian Corporation		OG 125A/319
	Grenadier Energy Partners, LLC		Statoil USA Onshore Properties Inc.		OG 138A/1
	Drilling Appalachian Corporation		Statoil USA Onshore Properties Inc.		OG 138A/54
	Statoil USA Onshore Properties Inc.		EQT Production Company		OG 175A/707
<u>993341</u>	<u>Three Rivers Royalty II, LLC, et al.</u>			"at least 1/8th per WV Code 22-6-8"	
	Three Rivers Royalty II, LLC	137 ac	EQT Production Company		OG 235A/151

EXHIBIT "A"**TH Leases – to be assigned from TH to EOT:**

Lessor	Lessee	Lease Date	County	State	Recording Bk/Pg	Instrument No.	Parcel ID	Gross Ac.
ARVIL F HAWKINS AND MARGIE E HAWKINS	TH EXPLORATION, LLC	3/3/2017	WETZEL	WV	184A/415	221853	4-25-43.3	30
ARVIL F HAWKINS AND MARGIE E HAWKINS	TH EXPLORATION, LLC	3/16/2017	WETZEL	WV	188A/783	229300	4-25-43.2	38
JANET ROSE HILLBERY	TH EXPLORATION, LLC	3/16/2017	WETZEL	WV	184A/948	222844	4-25-30.2	38
CLARENCE SILAS HILLBERY, JR	TH EXPLORATION, LLC	3/16/2017	WETZEL	WV			4-25-30.2	38
WILLIAM B FRANCIK AND PAMELA S FRANCIK	TH EXPLORATION, LLC	3/25/2018	WETZEL	WV			4-30-60	43
THOMAS J IACOBONI	TH EXPLORATION, LLC	3/26/2018	WETZEL	WV			4-30-60	43
BETTY LOU LOMBARDO	TH EXPLORATION, LLC	10/11/2018	WETZEL	WV	218A/404	260216	1-7-11.1, 1-7-14	54.9
PATTY ANN NOVOTNY	TH EXPLORATION, LLC	10/13/2018	WETZEL	WV	218A/400	260214	1-7-11.1, 1-7-14	54.9
PEGGY JO DUSKY AND RAYMOND G DUSKY	TH EXPLORATION, LLC	10/22/2018	WETZEL	WV	222A/484	265929	1-7-11.1, 1-7-14	54.9
DENNIS R WYLIE AND AVRIL M WYLIE	TH EXPLORATION, LLC	10/13/2018	WETZEL	WV	221A/122	263286	1-7-11.1, 1-7-14	54.9
BOUNTY MINERALS LLC	TH EXPLORATION, LLC	4/26/2018	WETZEL	WV	215A/233	258057	1-16-55	15.3
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2016	WETZEL	WV			2-6-12, 2-6-13, 2-6-23, 2-6-24, 2-10-5	194
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	WETZEL	WV	Pending	Pending	1-11-1, 1-11-2, 1-11-3, 1-11-4, 1-11-15, 1-11-16, 1-11-5, 1-11-	142.1

12/17/2021

							17, 1-11-18, 1-11-19	
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	1-15-55, 1-19-3, 1-19-3.3, 1-19-2	42.75
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	1-14-42	30.19
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	3-4-30, 3-4-31	20.42
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	8/1/2020	Wetzel	WV	252A-104	294225	1-8-7, 4-9-5, 4-14-33, 1-8-17	385.5
Lemasters Keystone Trust	TH Exploration, LLC	10/2/2018	Wetzel	WV	226A-389	272225	1-10-22, 1-10-23, 1-10-21	130
Red Stone Resources, LLC	TH Exploration, LLC	8/31/2018	Wetzel	WV	219A-455	261079	5-4-22	63.5
Bradley Baker	TH Exploration, LLC	12/1/2017	Wetzel	WV	201A-143	244556	4-28-59	46.95
Stone Hill Mineral Holdings, LLC	TH Exploration, LLC	8/1/2020	Wetzel	WV	252A-107	294226	4-13-37, 4-13-37.1, 4-12-15.1, 4-13-36, 4-18-5, 4-12-5.1, 4-19-36, 4-19-34, 4-19-35, 4-12-14, 4-12-29, 4-18-2	227.58
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	3-2-10, 3-2-11	13.025
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	1-14-31	13.031
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	3-2-5	15.75
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	3-2-39	10.75

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STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	3-4-1, 3-4-55, 3-2-56, 3-4-56, 3-4-3,	23.25
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	3-3-9, 3-3-10, 3-3-10.1	9.85
STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	10/1/2021	Wetzel	WV	Pending	Pending	4-15-8	49
BOUNTY MINERALS LLC	TH EXPLORATION, LLC	2/6/2018	WETZEL	WV	208A-455	251442	4-24-22	60.125

12/17/2021

Permitting Letter

November 16, 2021

WV Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Re: Permitting Letter - Assignment of Oil and Gas Leases between TH Exploration, LLC and EQT Production Company

Dear Director:

By this letter, we are advising you that, EQT Production Company ("EQT") and TH Exploration, LLC ("TH") have entered into an Acreage Trade Agreement dated November 3, 2021 ("Trade Agreement") for the assignment of certain oil and gas leases situate in Wetzel County, West Virginia. Such oil and gas leases are identified in Exhibit "A" hereto (the "Oil and Gas Leases").

Subject to the Trade Agreement, the parties agreed to allow certain pre-closing operations to be conducted on each party's respective Oil and Gas Leases as set forth below in relevant part:

5.2 *Permit Applications and Development.* Each of TH and EQT agree to allow the other Party, without objection, to make regulatory permit applications, by EQT, in the case of the TH Leases, and by TH, in the case of the EQT Leases, to be acquired by such Party pursuant to the Transaction and, upon receipt of all necessary permits and governmental approvals, to proceed to develop such Oil and Gas Leases and extract, produce and market the Hydrocarbons therefrom, in each case prior to Closing (with respect to each Party, "*Pre-Closing Operations*"). The Parties agree to execute a letter on the Execution Date noticing the WV DEP of the Pre-Closing Operations pursuant to the form attached hereto as Exhibit H (the "*Permitting Letter*"). [...]

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This letter is the Permitting Letter referenced above. The Oil and Gas Leases will be transferred by and between TH and EQT on or before December 20, 2021. Please accept this letter as notice of the pending assignment and agreement by the parties to allow for such pre-closing operations.

If you have any questions concerning this matter, please contact the undersigned or Todd Klaner, Director Permitting at tklaner@eqt.com or by phone at (412) 303-2213.

12/17/2021

Sincerely,

EQT Production Company

Corey Peck

By: Corey C. Peck

Its: Authorized Agent

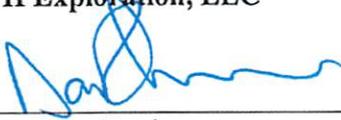
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[SIGNATURE PAGE FOLLOWS]

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TH Exploration, LLC



By: Dave Buchanan
Its: VP – Land

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EQT Production
Hydraulic Fracturing Monitoring Plan
Pad ID: Michael Kuhn (BIG467)
County: Wetzel

May 14, 2021

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Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on the Michael Kuhn (BIG467) pad: 4H, 6H, 8H, 10H, 12H, 14H and 16H.

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**.

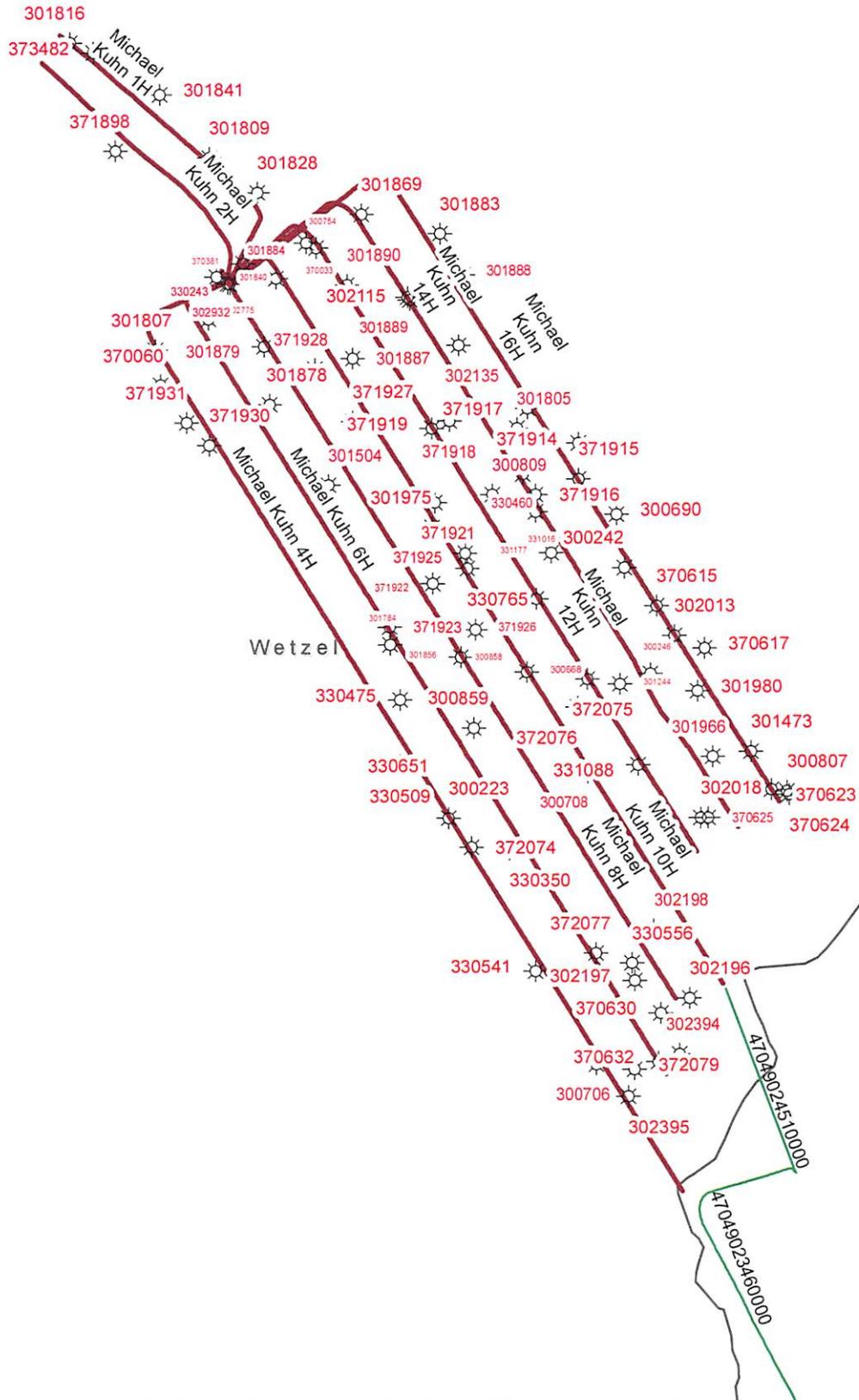
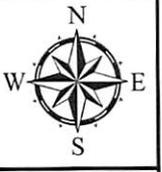
EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

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

2. Reporting

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



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Marion

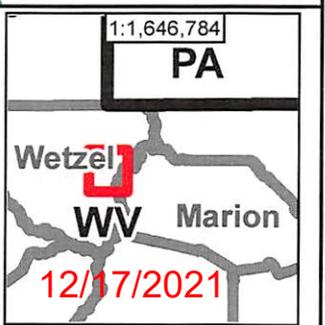
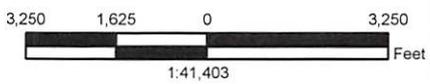
EQT
EQT Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

Michael Kuhn

Vertical Offsets and
Foreign Laterals
within 500'

Legend
☀ Foreign Offset Wells
— Foreign Horizontals
Well Lateral_FM
Formation
— Geneseo
— Marcellus
— Utica

Disclaimer:
This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.



UWI	ACT_STATUS	CURR_OPER	FNL_CLASS	FNL_STAT	INIT_CLASS	LATITUDE	LONGITUDE	OPER_NAME	DATUM	ELEVATION	TOT_DEPTH	TVD
302775	Completed Wells	EQT PRODUCTION CO	DEVELOPMENT WELL-GAS	GAS-WO	DEVELOPMENT REDRILL	39.61517270	-80.53132350	GRENADEIR ENERGY PARTNERS LLC	NAD27	1533.00	13730.00	7740.00
302932	Completed Wells	EQT PRODUCTION CO	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61513990	-80.53116000	STATOIL USA ONSHORE PROP INC	NAD27	1532.00	13450.00	7680.00
301244	Completed Wells/WHCS	STANDARD OIL CO INC	DEEPER POOL WILDCAT-DISCOVERY	GAS	DEEPER POOL WILDCAT	39.59206100	-80.50243960	HADDAD & BROOKS INC	NAD27	983.00	8010.00	0.00
301244	Completed Wells	STANDARD OIL CO INC	DEVELOPMENT WELL-GAS	GAS-WO	DEVELOPMENT RECOMPLETION	39.59206100	-80.50243960	APPLIED MECHANICS	NAD27	983.00	8010.00	0.00
301244	Completed Wells	STANDARD OIL CO INC	SHALLOWER POOL WILDCAT-DISCOVERY	GAS-WO	SHALLOWER POOL WILDCAT RECOMPLETION	39.59206100	-80.50243960	CNG TRANSMISSION CORP	NAD27	983.00	8010.00	0.00
302775	Completed Wells	EQT PRODUCTION CO	PILLOT HOLE	PILOT HOLE	PILLOT HOLE	39.61517270	-80.53132350	GRENADEIR ENERGY PARTNERS LLC	NAD27	1533.00	7911.00	0.00
301504	Completed Wells/WHCS	PILLAR ENERGY LLC	DEVELOPMENT WELL-OIL	OIL	DEEPER POOL WILDCAT	39.60326550	-80.52398230	SHELDON & ASSOC	NAD27	960.00	4000.00	0.00
301884	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61542870	-80.52772870	DAC CORP	NAD27	1576.00	3841.00	0.00
801879	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61510600	-80.52866650	DAC CORP	NAD27	1545.00	3778.00	0.00
301840	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61552780	-80.53213150	DAC CORP	NAD27	1519.00	3759.00	0.00
302135	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61150940	-80.51427410	DAC CORP	NAD27	1574.00	3750.00	0.00
302198	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	NEW FIELD WILDCAT	39.57798480	-80.50004190	DAC CORP	NAD27	1525.00	3706.00	0.00
301805	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.60761300	-80.50992900	DAC CORP	NAD27	1450.00	3702.00	0.00
301828	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.62036380	-80.52904090	DAC CORP	NAD27	1288.00	3684.00	0.00
301890	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61503400	-80.52247900	DAC CORP	NAD27	1402.00	3673.00	0.00
301807	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61136470	-80.53672210	DAC CORP	NAD27	1209.00	3673.00	0.00
301841	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.62063690	-80.53618990	DRILLING APPALACHIAN	NAD27	1400.00	3670.00	0.00
301878	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.60817160	-80.52829230	DAC CORP	NAD27	1409.00	3665.00	0.00
301887	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61078450	-80.52210970	DAC CORP	NAD27	1175.00	3658.00	0.00
301888	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61557340	-80.51386540	DAC CORP	NAD27	1381.00	3628.00	0.00
301883	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61789550	-80.51555250	DAC CORP	NAD27	1175.00	3625.00	0.00
301856	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.59364990	-80.51423810	DAC CORP	NAD27	1372.00	3612.00	0.00
302197	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	NEW FIELD WILDCAT	39.57505380	-80.50148170	DAC CORP	NAD27	1567.00	3603.00	0.00
301975	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.60105930	-80.51630150	DAC CORP	NAD27	1384.00	3593.00	0.00
301869	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61905760	-80.52335930	DAC CORP	NAD27	1258.00	3553.00	0.00
302196	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.57404180	-80.49744480	D A C OIL CORP	NAD27	1015.00	3520.00	0.00
302013	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.59481790	-80.49842690	DAC CORP	NAD27	1285.00	3506.00	0.00
330556	Completed Wells	DUNN-MAR OIL & GAS CO	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.57607000	-80.50168610	DUNN-MAR OIL & GAS CO	NAD27	1365.00	3473.00	0.00
330460	Completed Wells	MANUFACTURERS LIGHT & HEAT	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.60411200	-80.50957100	MANUFACTURERS LIGHT & HEAT	NAD27	1462.00	3457.00	0.00
331088	Completed Wells	UNKNOWN	UNCLASSIFIED	ADD-GW	DEVELOPMENT WELL	39.58742100	-80.50112600	UNKNOWN	NAD27	1328.00	3423.00	0.00
302115	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61412150	-80.51780010	DAC CORP	NAD27	1242.00	3401.00	0.00
301809	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.62239580	-80.53259990	DAC CORP	NAD27	1182.00	3351.00	0.00
301784	Completed Wells/WHCS	ALLIANCE PETROLEUM CO LLC	DEVELOPMENT WELL-DRY (INCLUDING TEMPORARILY ABANDONED WELL)	D&A	DEVELOPMENT DEEPENING	39.59438320	-80.51948600	DAC CORP	NAD27	937.00	3307.00	0.00
330651	Completed Wells	PITTSBURGH & W VA GAS	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.58566700	-80.51779700	PITTSBURGH & W VA GAS	NAD27	1401.00	3297.00	0.00
301966	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.58752050	-80.49561760	DAC CORP	NAD27	1029.00	3289.00	0.00
302394	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.57083180	-80.49817650	D A C OIL CORP	NAD27	1109.00	3282.00	0.00
301980	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.59162600	-80.49674080	DAC CORP	NAD27	1027.00	3264.00	0.00
302395	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.56842400	-80.50196500	D A C OIL CORP	NAD27	1064.00	3262.00	0.00
300223	Completed Wells	EQT PRODUCTION CO	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.58442100	-80.51521500	PITTSBURGH & W VA GAS	NAD27	1148.00	3230.00	0.00
300708	Completed Wells	DIVERSIFIED PRODUCTION LLC	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.58697400	-80.50487100	CONSOLIDATED GAS SUPPLY CORP	NAD27	0.00	3143.00	0.00
302018	Completed Wells/WHCS	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.58436890	-80.49655240	DAC CORP	NAD27	1299.00	3135.00	0.00
330509	Completed Wells	DUNN-MAR OIL & GAS CO	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.58742100	-80.51876800	DUNN-MAR OIL & GAS CO	NAD27	1182.00	3102.00	0.00
300706	Completed Wells	ROSS & WHARTON GAS CO	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.57027100	-80.50430910	HOPE NATURAL GAS	NAD27	979.00	3086.00	0.00
330475	Completed Wells	PITTSBURGH & W VA GAS	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.59119400	-80.51876800	PITTSBURGH & W VA GAS	NAD27	1120.00	3072.00	0.00
301473	Completed Wells	HOPE NATURAL GAS	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.58813500	-80.49280300	HOPE NATURAL GAS	NAD27	1205.00	3044.00	0.00
302343	Completed Wells	PITTSBURGH & W VA GAS	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.61309900	-80.53278410	PITTSBURGH & W VA GAS	NAD27	1224.00	3013.00	0.00
300668	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.59277900	-80.50936700	CARTER OIL CO	NAD27	0.00	2871.00	0.00
303350	Completed Wells	HOPE NATURAL GAS	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.58260800	-80.51067800	HOPE NATURAL GAS	NAD27	1427.00	2573.00	0.00
300754	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.61716300	-80.52472900	CARNEGIE NATURAL GAS CORP	NAD27	0.00	2448.00	0.00
301784	Completed Wells/WHCS	ALLIANCE PETROLEUM CO LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.59438320	-80.51948600	DAC CORP	NAD27	937.00	2364.00	0.00
300807	Completed Wells	EQT PRODUCTION CO	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.58586100	-80.49017260	CARNEGIE NATURAL GAS CORP	NAD27	1043.00	1916.00	0.00
301889	Completed Wells/WHCS	DRILLING APPALACHIAN	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.61426740	-80.51798710	DAC CORP	NAD27	1175.00	1886.00	0.00
300690	Completed Wells	DIVERSIFIED PRODUCTION LLC	DEVELOPMENT WELL-GAS	GAS	DEVELOPMENT WELL	39.60177800	-80.50262300	HOPE NATURAL GAS	NAD27	0.00	1820.00	0.00
331016	Completed Wells	MANUFACTURERS LIGHT & HEAT	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.60193500	-80.50863300	MANUFACTURERS LIGHT & HEAT	NAD27	1223.00	1680.00	0.00
330765	Completed Wells	MANUFACTURERS LIGHT & HEAT	DEVELOPMENT WELL-GAS	ADD-GW	DEVELOPMENT WELL	39.59874200	-80.51370000	MANUFACTURERS LIGHT & HEAT	NAD27	1165.00	1611.00	0.00
300242	Completed Wells	HOPE NATURAL GAS	DEVELOPMENT WELL-GAS	ADD-CB	DEVELOPMENT WELL	39.59871700	-80.50206700	HOPE NATURAL GAS	NAD27	1244.00	908.00	0.00
300246	Completed Wells	UNKNOWN	DEVELOPMENT WELL-DRY (INCLUDING TEMPORARILY ABANDONED WELL)	D&A-G	DEVELOPMENT WELL	39.59264600	-80.50018800	UNKNOWN	NAD27	1177.00	845.00	0.00
300359	Completed Wells	PHILADELPHIA OIL	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.58958600	-80.51391000	PHILADELPHIA OIL	NAD27	0.00	0.00	0.00
372074	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.58275290	-80.51348800	UNKNOWN	NAD27	0.00	0.00	0.00
372077	Completed Wells	HOPE NATURAL GAS	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.57665700	-80.50430910	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00
372079	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.56998100	-80.50149900	UNKNOWN	NAD27	0.00	0.00	0.00
370623	Completed Wells	HOPE NATURAL GAS	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.58595800	-80.49130500	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00
370625	Completed Wells	HOPE NATURAL GAS	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.58436100	-80.49598800	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00
370630	Completed Wells	HOPE NATURAL GAS	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.57317400	-80.49954800	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00
370624	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.58566700	-80.48999300	UNKNOWN	NAD27	0.00	0.00	0.00
330541	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.57564100	-80.50880500	UNKNOWN	NAD27	0.00	0.00	0.00
370632	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.57041600	-80.49973500	UNKNOWN	NAD27	0.00	0.00	0.00
300809	Completed Wells	CARNEGIE NATURAL GAS CORP	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.60293900	-80.51180200	CARNEGIE NATURAL GAS CORP	NAD27	0.00	0.00	0.00
300856	Completed Wells	EQUITABLE GAS CO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.59524700	-80.51311400	EQUITABLE GAS CO	NAD27	0.00	0.00	0.00
300680	Completed Wells	PITTSBURGH & W VA GAS	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.60932500	-80.53834400	PITTSBURGH & W VA GAS	NAD27	0.00	0.00	0.00
370033	Completed Wells	HOPE NATURAL GAS	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.61745300	-80.52547810	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00
331177	Completed Wells	HOPE NATURAL GAS	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.59961300	-80.50750700	HOPE NATURAL GAS	NAD27	1349.00	0.00	0.00
370381	Completed Wells	CARNEGIE NATURAL GAS CORP	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	PSEUDO	PSEUDO-ORIGINAL WELL - UNKNOWN CLASS	39.61629200	-80.53016110	CARNEGIE NATURAL GAS CORP	NAD27	0.00	0.00	0.00
301816	Completed Wells	DIVERSIFIED PRODUCTION LLC	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.62907600	-80.54279300	DAC CORP	NAD27	0.00	0.00	0.00
371898	Completed Wells	HOPE NATURAL GAS	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.62282390	-80.53952800	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00
373482	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.62849500	-80.54110100	UNKNOWN	NAD27	0.00	0.00	0.00
371927	Completed Wells	MANUFACTURERS LIGHT & HEAT	UNCLASSIFIED	UNKNWN	UNCLASSIFIED	39.60714800	-80.52210600	MANUFACTURERS LIGHT & HEAT	NAD27	0.00	0.00	0.00

371915	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60381000	-80.50543300	UNKNOWN	NAD27	0.00	0.00	0.00
371916	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60293900	-80.50861800	UNKNOWN	NAD27	0.00	0.00	0.00
371914	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60584200	-80.50543300	UNKNOWN	NAD27	0.00	0.00	0.00
371917	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60787400	-80.50918000	UNKNOWN	NAD27	0.00	0.00	0.00
371918	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60714800	-80.51498700	UNKNOWN	NAD27	0.00	0.00	0.00
371921	Completed Wells	CARNEGIE NATURAL GAS CORP	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60250300	-80.51611100	CARNEGIE NATURAL GAS CORP	NAD27	0.00	0.00	0.00
371922	Completed Wells	CARNEGIE NATURAL GAS CORP	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.59785900	-80.51629810	CARNEGIE NATURAL GAS CORP	NAD27	0.00	0.00	0.00
371923	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.59539190	-80.51948300	UNKNOWN	NAD27	0.00	0.00	0.00
371925	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.59960100	-80.51386300	UNKNOWN	NAD27	0.00	0.00	0.00
371926	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.59698300	-80.50861800	UNKNOWN	NAD27	0.00	0.00	0.00
371919	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.60671300	-80.51629810	UNKNOWN	NAD27	0.00	0.00	0.00
370615	Completed Wells	UNKNOWN	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.59655300	-80.49973500	UNKNOWN	NAD27	0.00	0.00	0.00
370617	Completed Wells	HOPE NATURAL GAS	UNCLASSIFIED	UNKWN	UNCLASSIFIED	39.59408500	-80.49617600	HOPE NATURAL GAS	NAD27	0.00	0.00	0.00

Horizontals												
UWI	ACT_STATUS	CURR_OPER	FNL_CLASS	INIT_CLASS	LATITUDE	LONGITUDE	OPER_NAME	ELEV_RF_CD	ELEVATION	TOT_DEPTH	TVD	WELL_NAME
4704902346000	Completed Wells	EQT PRODUCTION CO	DEVELOPMENT WELL-GAS	DEVELOPMENT WELL		39.56398000	-80.48958100	EQT PRODUCTION CO	KB	1447.00	13610.00	7770.00 WV 514744 BROWER ET AL
4704902451000	Completed Wells	EQT PRODUCTION CO	DEVELOPMENT WELL-GAS	DEVELOPMENT WELL		39.56399560	-80.48968610	EQT PRODUCTION CO	KB	1440.00	12027.00	7835.00 HS GLO76



December 8, 2021

Via FedEx Overnight

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

RECEIVED
Office of Oil and Gas

DEC 09 2021

WV Department of
Environmental Protection

RE: Well Work Permit Modification
Michael Kuhn 10H Well
Permit Number 47-103-03414
Center District, Wetzel County, WV

WVDEP Recipient,

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

- Check in the amount of \$5,000 for the expedited permit 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
- Hydraulic Fracturing Monitoring Plan

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

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

Check # 590359
Amt \$5000
Date 10/21/21

12/17/2021



Stansberry, Wade A <wade.a.stansberry@wv.gov>

Expedited Modification Horizontal H6A Well Work Permit (API: 47-103-03414)

1 message

Stansberry, Wade A <wade.a.stansberry@wv.gov>

Wed, Dec 15, 2021 at 11:08 AM

To: John <JZavatchan@eqt.com>, Todd <tklaner@eqt.com>, Erin Spine <espine@eqt.com>, "Shrum, Becky" <bshrum@eqt.com>, Olivia Pishioneri <opishioneri@eqt.com>, "Harris, Bryan O" <bryan.o.harris@wv.gov>, Scott Lemley <slemley@wvassessor.com>

I have attached a copy of the newly issued well [permit](#) number "**P7S2U**". This will serve as your copy.

If you have any questions, then [please](#) contact us here at the Office of Oil and Gas.

Thank you,

Wade A. Stansberry

Environmental Resource Specialist 3

West Virginia Department of Environmental Protection

Office of Oil & Gas

601 57th St. SE

Charleston, WV 25304

(304) 926-0499 ext. 41115

(304) 926-0452 fax

Wade.A.Stansberry@wv.gov

 **47-103-03414 - mod.pdf**
3531K

12/17/2021