



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

Monday, December 4, 2023
WELL WORK PERMIT
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY
400 WOODLIFF DR.

CANONSBURG, PA 15317

Re: Permit approval for Carnegie 19H
47-049-02529-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.


James A. Martin
Chief

Operator's Well Number: Carnegie 19H
Farm Name: Jeanne A Musgrave Akers & Jo
U.S. WELL NUMBER: 47-049-02529-00-00
Horizontal 6A New Drill
Date Issued: 12/4/2023

Promoting a healthy environment.

12/08/2023

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Also, 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

12/08/2023

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Office of Oil and Gas

NOV 03 2023

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WV Department of Environmental Protection
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: 19H Well Pad Name: Carnegie

3) Farm Name/Surface Owner: Jeanne Ann Musgrave Akers & Joseph Forte Public Road Access: CR 7/3

4) Elevation, current ground: 1,318' (built) Elevation, proposed post-construction: 1,318' (built)

5) Well Type (a) Gas X Oil _____ Underground Storage _____
Other _____

(b) If Gas Shallow X Deep _____
Horizontal X

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 7,712', 79', 2,593 psi

8) Proposed Total Vertical Depth: 6,422'

9) Formation at Total Vertical Depth: Elks

10) Proposed Total Measured Depth: 7,305'

11) Proposed Horizontal Leg Length: 0'

12) Approximate Fresh Water Strata Depths: 309', 335', 341', 371', 709'

13) Method to Determine Fresh Water Depths: Offset Wells - 049-30050, 049-00200, 049-30239

14) Approximate Saltwater Depths: 1,852'

15) Approximate Coal Seam Depths: 515'-517', 669'-671', 937'-941', 1,034'-1,041'

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 X No _____

(a) If Yes, provide Mine Info: Name: Harrison County Mine
Depth: 1,034'-1,041'
Seam: Pittsburgh
Owner: Harrison County Coal Resources

WW-6B
(04/15)

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4704902520
API NO. 47-
OPERATOR WELL NO. 19H
Well Pad Name: Carnegie

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	A252 GR 3 Bare	85.6	40	40 ✓	45 ft ³ / CTS ✓
Fresh Water	13 3/8	New	J-55	54.5	1091	1091 ✓	1040 ft ³ / CTS
Coal							
Intermediate	9 5/8	New	J-55	36	2673	2673 ✓	1050 ft ³ / CTS
Production	6	New	P-110	24	7305	7305 ✓	500' above intermediate casing
Tubing							
Liners							

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	1000	18	Class A/L	1.04 - 1.20 ✓
Fresh Water	13 3/8	17 1/2	0.380	2730	2184	Class A/L	1.04 - 1.20
Coal							
Intermediate	9 5/8	12 3/8	0.352	3520	2816	Class A/L	1.04 - 1.20
Production	6	8 1/2	0.400	14580 ✓	11664	Class A/H/L	1.04 - 2.10
Tubing							
Liners							

PACKERS

Ky Willett 10/31/23

Kind:				
Sizes:				
Depths Set:				

NOV 03 2023

WV Department of
Environmental Protection

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

Drill and complete a new horizontal 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): 60.28 acres (built)

22) Area to be disturbed for well pad only, less access road (acres): 8.96 acres (built)

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 other joint from production casing shoe to landing point. One solid body centralizer spaced every joint from landing point to planned top of cement.

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.

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

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Environmental Protection

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 306686

Watershed (HUC 10) Laurel Run of Owen Davy Fork Quadrangle Glover Gap

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes No If so, what ml.? N/A

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 0014, 8462, 4037)
- Reuse (at API Number Various)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud

Additives to be used in drilling medium? See Attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? See Attached List

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]

Company Official (Typed Name) John Zavatchan

Company Official Title Project Specialist - Permitting

Subscribed and sworn before me this 2nd day of November, 20 23

[Signature] Notary Public

My commission expires October 25, 2027

Commonwealth of Pennsylvania - Notary Seal
Olivia Wilson, Notary Public
Allegheny County
My commission expires October 25, 2027
Commission number 1359968
Member, Pennsylvania Association of Notaries

12/08/2023

EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 500 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

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WV Department of
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Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____

Comments: Pre-seed/mulch all disturbed areas as soon as reasonably possible, per regulation. Upgrade E&S as necessary per WV DEP E&S Manual.

Title: Ky Willett Date: 10/31/23

Field Reviewed? () Yes () No



SITE SAFETY AND ENVIRONMENTAL PLAN

Carnegie Well Pad (GLO168)

Mannington
Marion County, WV

Wells: 1H, 3H, 5H, 7H, 9H, 11H, 13H, 15H, 17H, 19H

Prepared By: Donny Prater, CSP, Health and Safety Sciences, LLC

Approved By: Scott M. Held, Senior Safety Coordinator

Created Date: 23-Feb-21


John Zavatchan
Project Specialist - Permitting
EQT Production Company


Oil and Gas Inspector
WVDEP Office of Oil and Gas

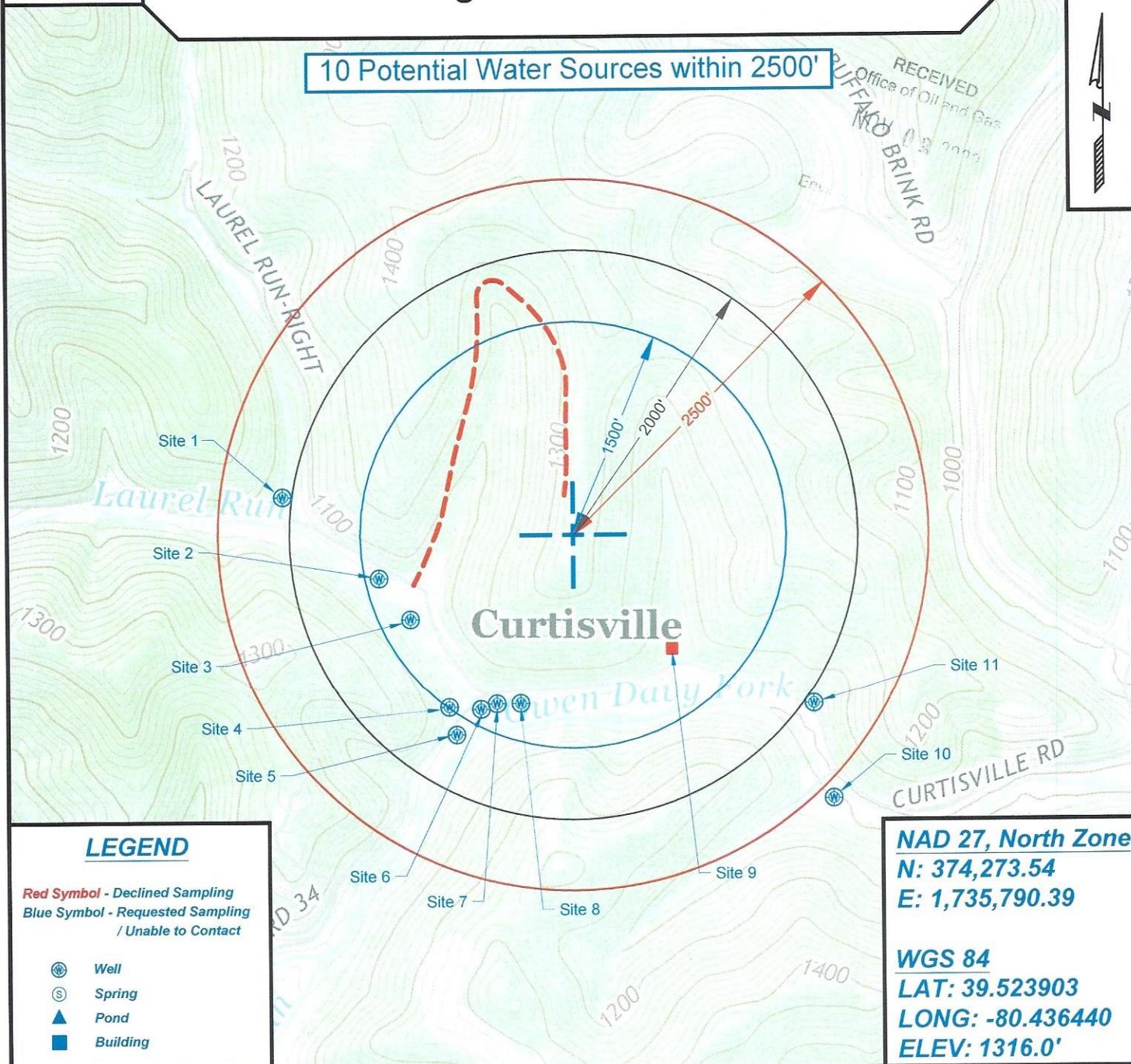
12/08/2023

Topo Quad: Glover Gap Scale: 1" = 1000'
 County: Marion Date: July 13, 2021
 District: Mannington Project No: 92-18-M-21

Water

Carnegie North Well Pad

10 Potential Water Sources within 2500'



LEGEND

Red Symbol - Declined Sampling
 Blue Symbol - Requested Sampling / Unable to Contact

- Well
- Spring
- Pond
- Building

NAD 27, North Zone
N: 374,273.54
E: 1,735,790.39

WGS 84
LAT: 39.523903
LONG: -80.436440
ELEV: 1316.0'



SURVEYING AND MAPPING SERVICES PERFORMED BY:

ALLEGHENY SURVEYS, INC.

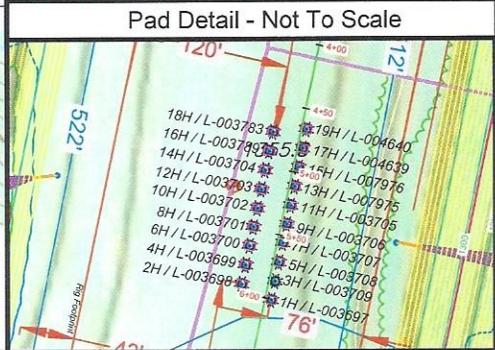
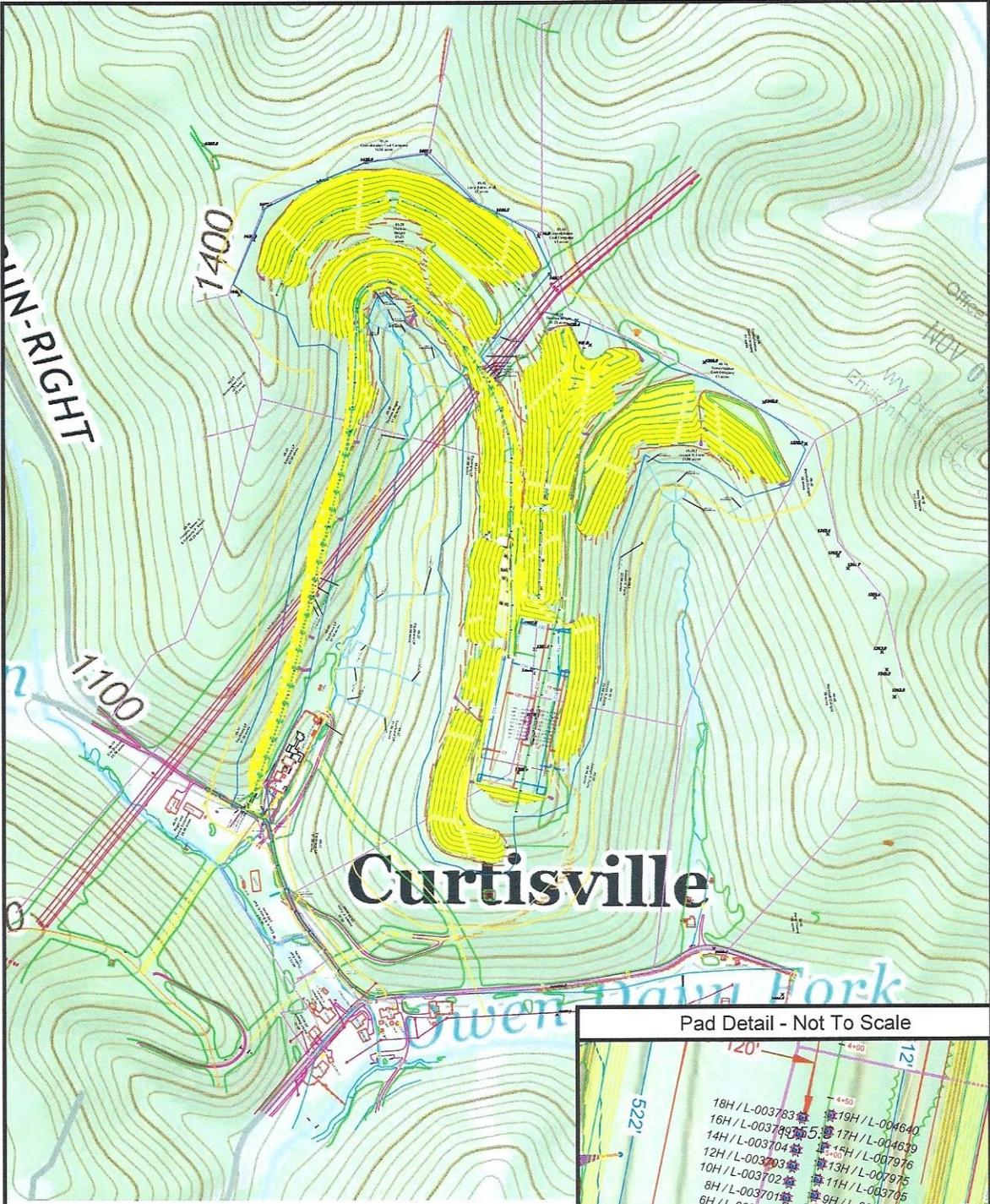
1-800-482-8606
 237 Birch River Road
 Birch River, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

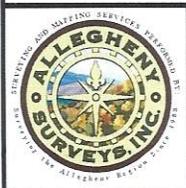
400 Woodcliff Drive
 Canonsburg, PA 15317

12/08/2023



Pine Grove 7.5' USGS QUADRANGLE		Proposed Disturbance Area	
Projected culvert inventory. (for bid purposes only)	Well Site Location	Proposed Access Road	See Site Plan
15" minimum diameter culverts	See Site Plan	Approximate Total Disturbance	See Site Plan
24" minimum diameter culverts	See Site Plan		
DRAWN BY: Scott Brown	DATE: August 5, 2021	FILE NO. 92-21	DRAWING FILE NO. Carnegie Rec Plan

Note: SEE SITE PLAN OF CARNEGIE FOR COMPLETE GRADING & DRAINAGE CONSTRUCTION INCLUDING EROSION & SEDIMENT CONTROL DETAILS, ETC.



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 Birch River Office Phone: (304) 649-8606 Fax: (304) 649-8608
 237 Birch River Road P.O. Box 438 Birch River, WV 26610

12/08/2023

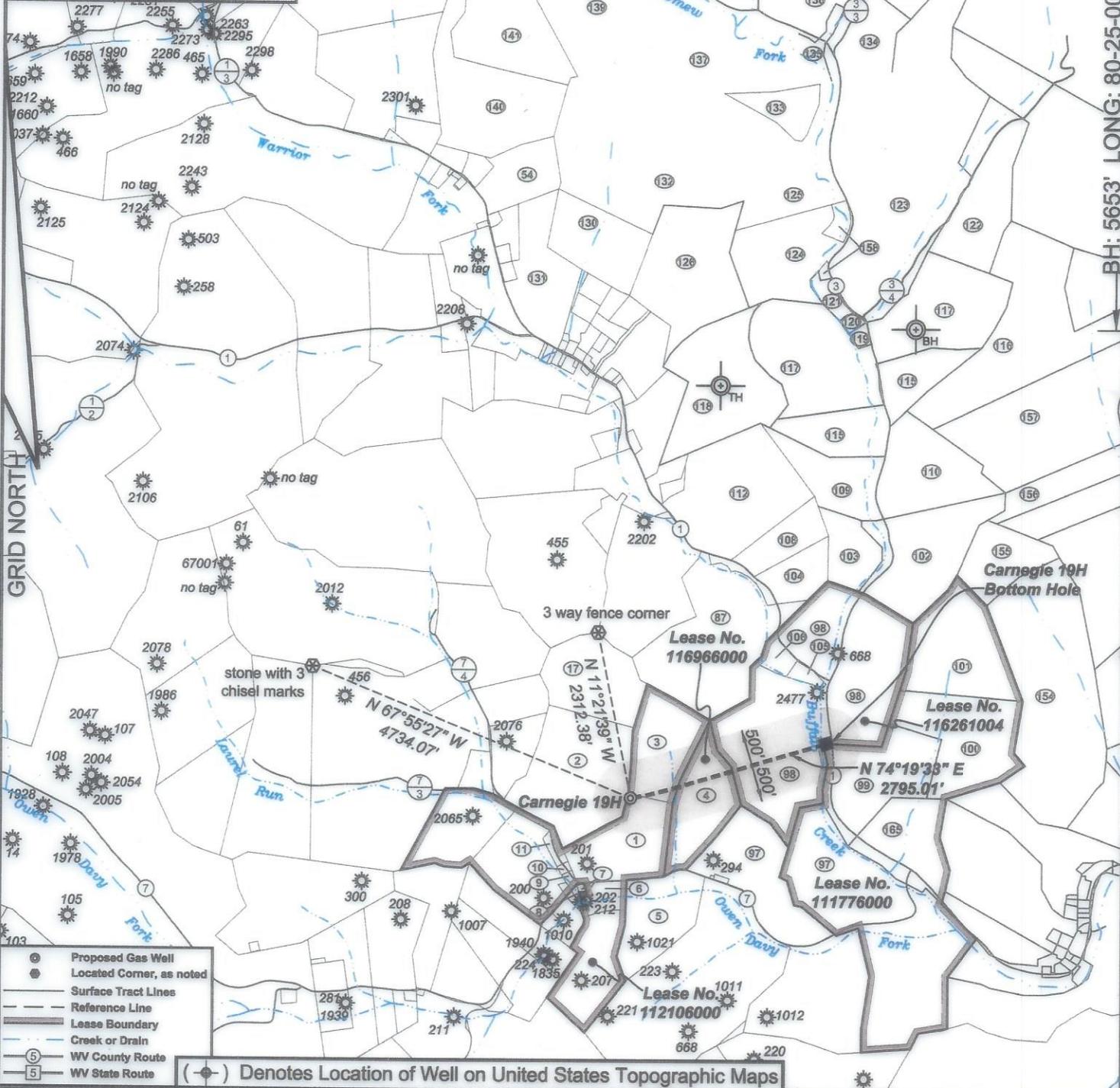
TH: 5570' LAT: 39-32-30

BH: 2886' LAT: 39-32-30

BH: 5653' LONG: 80-25-00

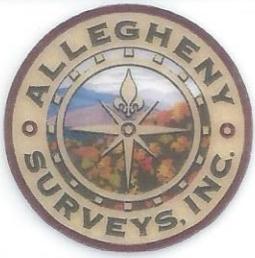
TH: 6437' LONG: 80-25-00

Carnegie 19H
Carnegie
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: 92-21
 DRAWING NO: Carnegie 19H
 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: October 31 20 23
 OPERATOR'S WELL NO.: Carnegie 19H
 API WELL NO
 47 - 049 - 02529
 STATE COUNTY PERMIT

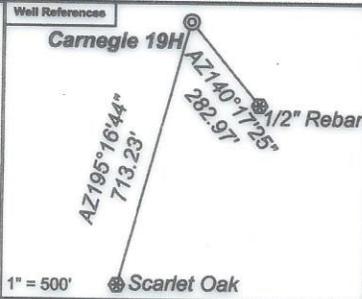
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built: 1318' WATERSHED Laurel Run of Owen Davy Fork QUADRANGLE: Glover Gap
 DISTRICT: Mannington COUNTY: Marion
 SURFACE OWNER: Jeanne A. Musgrave Akers & Joseph Forte ACREAGE: 135
 ROYALTY OWNER: Bounty Minerals, LLC, et al. LEASE NO: 112106000 ACREAGE: 135
 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: 6422'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow
 ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive
 Canonsburg, PA 15317 Clarksburg, WV 25301

12/08/2023

Carnegie 19H
Carnegie
EQT Production Company

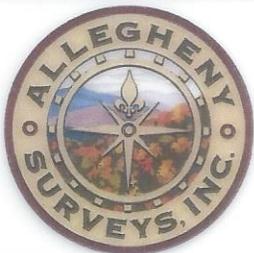
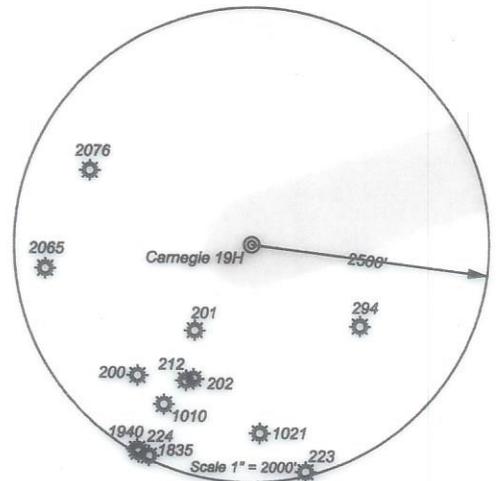
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	49	39	Marion	Mannington	Jeanne A. Musgrave Akers & Joseph Forte	28.06
2	49	37	Marion	Mannington	Equitrans LP	51.5
3	49	39.1	Marion	Mannington	Jeanne A. Musgrave Akers & Joseph Forte	23.9
4	49	40	Marion	Mannington	Marshall & Dick Cartright	36
5	50	14	Marion	Mannington	Melvin L. Gooch Sr.	28
6	50	15	Marion	Mannington	Perry R. & Janice M. Thorne	5.61
7	50	16	Marion	Mannington	Richard H. & Lucy M. Lambert	0.46
8	50	17	Marion	Mannington	Jason H. & Brandy L. Batson	0.32
9	48	13	Marion	Mannington	Harlen O. & Diana S. Batson	1.1
10	48	13.2	Marion	Mannington	Dustin Earl	0.73
11	48	13.1	Marion	Mannington	Gary A. & Sheila D. Earl	2.02
17	49	38	Marion	Mannington	Thomas B. Wright	30
34	44	26	Marion	Mannington	Charles P. & Kathy H. Glover	41.06
87	49	14	Marion	Mannington	Marion County Coal Resources Inc	61
97	50	17	Marion	Mannington	Perry R. & Janice M. Thorne	180.09
98	49	12	Marion	Mannington	Robert S. Thome, Sr., et al.	118.825
99	49	41	Marion	Mannington	Joseph R. & Whitney N. Elliott	30
100	49	42	Marion	Mannington	Joseph R. & Whitney N. Elliott	40.2
101	49	11	Marion	Mannington	Joseph R. & Whitney N. Elliott	38.7
102	49	8	Marion	Mannington	Donald I. & Larayne M. Lafferty	41.71
103	37	14	Marion	Mannington	Kevin M. & Glenda S. Brewer	19.79
104	37	13	Marion	Mannington	Joseph & Larry Baker	17.23
105	49	13	Marion	Mannington	CNX Land LLC	2.06
106	49	17.1	Marion	Mannington	CNX Land LLC	4.175
108	37	13.7	Marion	Mannington	John H. & Carole J. Tennant	13.74
109	37	15	Marion	Mannington	George Flaw, Jr.	19.1
110	37	26	Marion	Mannington	Delbert R. Triplett	40.15
112	37	13.1	Marion	Mannington	Larry C. & Patricia Baker	52.28
115	37	16	Marion	Mannington	Marion County Coal Resources Inc	35
116	37	28	Marion	Mannington	Harrison County Coal Resources Inc	91
117	37	17	Marion	Mannington	Jeffrey H. Michael	86.04
118	37	10	Marion	Mannington	Kevin D. & Heather Glasscock	51
119	37	17.1	Marion	Mannington	Ronald C. & Betty L. Michael	1.46
120	37	22.2	Marion	Mannington	Ronald C. & Betty L. Michael	1.5
121	37	22.1	Marion	Mannington	Ronald C. & Betty L. Michael	5.17
122	37	75	Marion	Mannington	Jeffrey H. Michael	33.75
123	37	22	Marion	Mannington	Jeffrey H. Michael	166.83
124	37	18	Marion	Mannington	Tommy L. & Terri A. Snodgrass	31.65
125	37	20	Marion	Mannington	No Parcel Information	NA
126	37	3	Marion	Mannington	Kevin D. & Heather Glasscock	49.25
130	37	2.3	Marion	Mannington	Rosemary A. & Samuel M. Snodgrass	2.83
131	41	27	Marion	Mannington	Daniel Berisko	29.226
132	37	21	Marion	Mannington	Cynthia M. & Kim S. Titley	1.36
133	37	21.1	Marion	Mannington	Julie A. Titley & Justin R. Cain	11.171
134	38	13.1	Marion	Mannington	Christine L. Fragale, et al.	16.56
135	38	13.2	Marion	Mannington	Christine L. Fragale, et al.	7
136	38	13.3	Marion	Mannington	Christine L. Fragale, et al.	15.87
137	41	1	Marion	Mannington	Edna M. Cain	107.5
138	44	3	Marion	Mannington	Thomas E. & Andrea G. Ryan	1
139	41	4	Marion	Mannington	Richard L. Cain	54.33
140	41	21.1	Marion	Mannington	Bd of Trs Most Worshipful Grd Ldg of AF&AM WV	43.56
141	41	24	Marion	Mannington	Strasland LTD	36.17
142	44	6	Marion	Mannington	John D. & Raji K. Carson	55
143	44	5	Marion	Mannington	Thomas E. & Andrea G. Ryan	24.51
144	38	9	Marion	Mannington	Thomas E. & Andrea G. Ryan	62
145	38	10	Marion	Mannington	Thomas E. & Andrea G. Ryan	176.15
146	38	10.1	Marion	Mannington	Michael E. & Laura A. Gorbey	1.15
147	38	11	Marion	Mannington	Yulia Nikolaeva	115
148	38	8	Marion	Mannington	John D. & Raji K. Carson	64.56
149	38	8.1	Marion	Mannington	John D. & Raji K. Carson	2.60
150	44	8	Marion	Mannington	Charles D. & June Shaver	16.5
152	44	9	Marion	Mannington	Charles D. & June Shaver	19
153	44	10	Marion	Mannington	Charles D. & June Shaver	128.75
154	49	10	Marion	Mannington	Harrison County Coal Resources Inc	102.6
155	49	9	Marion	Mannington	Derek Nuzum	33.75
156	49	7	Marion	Mannington	Willis F. & Patty H. Anderson	30
157	37	27	Marion	Mannington	Harrison County Coal Resources Inc	85.5
158	37	19	Marion	Mannington	Gary F. Snodgrass	3.61
159	38	6	Marion	Mannington	Thomas R. & Margaret M. Williams	11.19
163	44	5.1	Marion	Mannington	Thomas E. & Andrea G. Ryan	0.49
164	44	4.1	Marion	Mannington	Matthew I. Cain	0.67
165	50	11	Marion	Mannington	Joseph R. & Whitney N. Elliott	77.087



Notes:
Carnegie 19H coordinates are
NAD 27 N: 374,337.69 E: 1,735,852.98
NAD 27 Lat: 39.523997 Long: -80.436411
NAD 83 UTM N: 4,375,088.77 E: 548,456.59
Carnegie 19H Bottom Hole coordinates are
NAD 27 N: 375,092.81 E: 1,738,544.05
NAD 27 Lat: 39.526147 Long: -80.428899
NAD 83 UTM N: 4,375,332.50 E: 549,272.63
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.

Carnegie	
Carnegie 18H	Carnegie 19H
Carnegie 16H	Carnegie 17H
Carnegie 14H	Carnegie 15H
Carnegie 12H	Carnegie 13H
Carnegie 10H	Carnegie 11H
Carnegie 8H	Carnegie 9H
Carnegie 6H	Carnegie 7H
Carnegie 4H	Carnegie 5H
Carnegie 2H	Carnegie 3H
	Carnegie 1H

Lease No.	Owner	Acres
112106000	Bounty Minerals, LLC, et al.	135
116966000	Judith Ann Myers, et al.	36
116261004	Sarabeth Lamm, et al.	123
111776000	Joseph R. Elliott and Whitney N. Elliott, et al.	250



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: 92-21
DRAWING NO: Carnegie 19H
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: October 31 20 23
OPERATOR'S WELL NO.: Carnegie 19H
API WELL NO
47 - 049 - 02529
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: As-Built: 1318' WATERSHED: Laurel Run of Owen Davy Fork QUADRANGLE: Glover Gap
DISTRICT: Mannington COUNTY: Marion
SURFACE OWNER: Jeanne A. Musgrave Akers & Joseph Forte ACREAGE: 25.95
ROYALTY OWNER: Bounty Minerals, LLC, et al. LEASE NO: 112106000 ACREAGE: 135
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: 6422'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow
ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive
Canonsburg, PA 15317 Clarksburg, WV 25301

12/08/2023

**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				

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WV Department of Environmental Protection

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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

Well Operator: EQT Production Company
 By: John Zavatchan
 Its: Project Specialist - Permitting

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>112106000</u>	<u>Bounty Minerals, LLC, et al.</u> Guy F. Musgrave, single, et al. Pittsburgh and West Virginia Gas Company Pittsburgh and West Virginia Gas Company Equitable Gas Company Equitrans, Inc. Equitable Gas Company, LLC Equitrans, L.P.	135 ac Pittsburgh and West Virginia Gas Company Equitable Gas Company Equitable Gas Company Equitrans, Inc. Equitable Gas Company, LLC Equitrans, LP EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 465/312 DB 510/487 DB 511/539 AB 12/279 DB 1148/296 AB 46/660 DB 1114/130
<u>116966000</u>	<u>Judith Ann Myers, et al.</u> Marshall Cutright and Betty Cutright, husband and wife, and Dick Cartright, single Equitable Gas Company Equitrans, Inc. Equitable Gas Company, LLC Equitrans, L.P.	36 ac Equitable Gas Company Equitrans, Inc. Equitable Gas Company, LLC Equitrans, LP EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 724/970 AB 12/279 DB 1148/296 AB 46/660 DB 1114/130
<u>116261004</u>	<u>Sarabeth Lamm, et al.</u> Sarabeth Lamm, single Republic Energy Ventures, LLC	123 ac Republic Energy Ventures, LLC EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 1203/1160 AB 52/744

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

111776000
Joseph R. Elliott and Whitney N. Elliott, et al.

George W & Mariah Beay

J.M. Sullivan

William H. Furbee

Wm. H. Furbee

Logansport-Mannington Oil Company

Home Gas Company

M.K. McMillin, et ux.

J.P. Stone

John B. Miller, et ux; Robert B. Miller, et ux; David Bear, et ux;

Edward Wittish, et ux; Andrew D. Miller, et ux; and James P. Stone

Fairmont & Grafton Gas Company

Pittsburgh and West Virginia Gas Company

Anchor Oil Company

Southern Oil Company

Pittsburg Oil and Gas Company

Ohio-West Virginia Oil and Gas Co.

J. M. Read, f/d/b/a Read Supply Company

J. M. Read, f/d/b/a Read Supply Company

Pittsburgh and West Virginia Gas Company

Pittsburgh and West Virginia Gas Company

Equitable Gas Company

Equitrans, Inc.

Equitable Gas Company, LLC

Equitrans, L.P.

250 ac

J.M. Sullivan

William H. Furbee

Home Gas Company

Logansport-Mannington Oil Company

J.B. Miller, David Bear, J.P. Stone, R.B. Miller, and A.D. Miller

M.K. McMillin

The Fairmont & Grafton Gas Company

Ed Wittish

Anchor Oil Company

Pittsburgh and West Virginia Gas Company

Anchor Oil Company

Southern Oil Company

Pittsburg Oil and Gas Company

Ohio-West Virginia Oil & Gas Co.

J. M. Read, f/d/b/a Read Supply Company

Pittsburgh and West Virginia Gas Company

Pittsburgh and West Virginia Gas Company

Equitable Gas Company

Equitable Gas Company

Equitrans, Inc.

Equitable Gas Company, LLC

Equitrans, LP

EQT Production Company

DB 130/340

DB 130/342

DB 180/2

DB 130/366

DB 140/396

DB 150/389

DB 353/403

DB 156/68

DB 186/301

Corp Book 1/258

DB 492/409

DB 286/230

DB 319/145

DB 487/421

DB 493/230

DB 493/227

DB 502/577

DB 510/487

DB 511/539

AB 12/279

DB 1148/296

AB 46/660

DB 1114/130

12/08/2023

4704902529



EQT PRODUCTION COMPANY
400 Woodcliff Drive | Canonsburg, PA 15317

October 24, 2023

Mr. Taylor Brewer
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

RECEIVED
Office of Oil and Gas
NOV 03 2023
WV Department of Environmental Protection

Re: Carnegie 19H Gas Well
Mannington District, Marion County, WV

Dear Mr. Brewer,

EQT Production Company is applying for a new well work permit for the well referenced above. Upon information and belief, the Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Zavatchan'.

John Zavatchan
Project Specialist - Permitting

12/08/2023

**Horizontal Natural Gas Well Work Permit
Application Notice By Publication**

Notice is hereby given:

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

Paper: Times West Virginian

Public Notice Date: July 28th and August 4th, 2023

The following applicant intends to apply for a horizontal natural well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads or utilizes more than two hundred ten thousand gallons of water in any thirty day period.

Applicant: EQT Production Company **Well Number:** Carnegie 19H

Address: 400 Woodcliff Drive
Canonsburg, PA 15317

Business Conducted: Natural gas production.

Location –

State:	<u>WV</u>	County:	<u>Marion</u>
District:	<u>Mannington</u>	Quadrangle:	<u>Glover Gap</u>
UTM Coordinate NAD83 Northing:	<u>4375088.770</u>		
UTM coordinate NAD83 Easting:	<u>548456.586</u>		
Watershed:	<u>Laurel Run of Owen Davy Fork</u>		

Coordinate Conversion:
To convert the coordinates above into longitude and latitude, visit: http://tagis.dep.wv.gov/convert/llutm_conus.php

Electronic notification:
To receive an email when applications have been received or issued by the Office of Oil and Gas, visit <http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx> to sign up.

Reviewing Applications:
Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to DEP.comments@wv.gov.

Submitting Comments:
Comments may be submitted online at <https://apps.dep.wv.gov/oog/comments/comments.cfm>, or by letter to Permit Review, Office of Oil and Gas, 601 57th Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: www.dep.wv.gov/oil-and-gas/pages/default.aspx

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE CERTIFICATION

Date of Notice Certification: 11/2/23

NOV 03 2023

API No. 47- _____

Operator's Well No. ^{19H} _____

Well Pad Name: Carnegie

WV Department of
Environmental Protection

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>548456.586</u>
County:	<u>Marion</u>		Northing:	<u>4375088.770</u>
District:	<u>Mannington</u>	Public Road Access:		<u>CR 7/3</u>
Quadrangle:	<u>Glover Gap</u>	Generally used farm name:		<u>Jeanne A. Musgrave Akers & Joseph Forte</u>
Watershed:	<u>Laurel Run of Owen Davy Fork</u>			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY <input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED <input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED <input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION <input checked="" type="checkbox"/> 5. PUBLIC NOTICE <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		OOG OFFICE USE ONLY <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED
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Required Attachments:

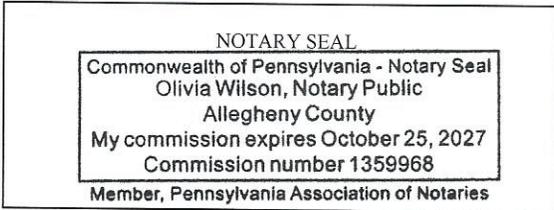
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

12/08/2023

Certification of Notice is hereby given:

THEREFORE, I John Zavatchan, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	<u>EQT Production Company</u>	Address:	<u>400 Woodcliff Drive</u>
By:	<u>John Zavatchan</u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Project Specialist / Permitting</u>	Facsimile:	<u>412-395-2974</u>
Telephone:	<u>724-746-9073</u>	Email:	<u>jzavatchan@eqt.com</u>



Subscribed and sworn before me this 2nd day of Nov. 2023.
Olivia Wilson Notary Public
 My Commission Expires October 25, 2027

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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 NOV 03 2023
 WV Department of
 Environmental Protection

12/08/2023

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 11/17/23 Date Permit Application Filed: 11/21/23

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)

Name: See Attached List
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: See Attached List
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: N/A
Address: _____

COAL OWNER OR LESSEE

Name: See Attached List
Address: _____

COAL OPERATOR

Name: See Attached List
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: See Attached List
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: See Attached List
Address: _____

*Please attach additional forms if necessary

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WV Department of
Environmental Protection

12/08/2023

NOV 03 2023

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

12/08/2023

WW-6A
(8-13)

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NOV 08 2023

API NO. 47-4704902529
OPERATOR WELL NO. 19H
Well Pad Name: Carnegie

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

12/08/2023

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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Office of Oil and Gas
NOV 03 2023
WV Department of
Environmental and Public Affairs

12/08/2023

WW-6A
(8-13)

4704902529
API NO. 47-
OPERATOR WELL NO. 19H
Well Pad Name: Carnegie

Notice is hereby given by:

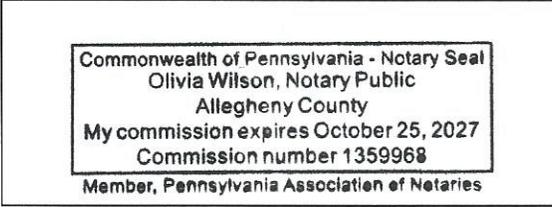
Well Operator: EQT Production Company
Telephone: 724-746-9073
Email: jzavatchan@eqt.com



Address: 400 Woodcliff Drive
Canonsburg, PA 15317
Facsimile: 412-395-2974

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



Subscribed and sworn before me this 2nd day of Nov, 2023.
Olivia Wilson Notary Public
My Commission Expires October 25, 2027

RECEIVED
Office of Oil and Gas
NOV 08 2023
WV Department of Environmental Protection

12/08/2023

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 08/30/2021 **Date Permit Application Filed:** 11/2/23

RECEIVED
Office of Oil and Gas
NOV 03 2023

WV Department of
Environmental Protection

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

- HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: See Attached List
Address: _____

Name: See Attached List
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>548,456.586</u>
County:	<u>Marion</u>	UTM NAD 83 Northing:	<u>4,375,088.770</u>
District:	<u>Mannington</u>	Public Road Access:	<u>CR 7/3</u>
Quadrangle:	<u>Glover Gap</u>	Generally used farm name:	<u>Jeanne A. Musgrave Akers and Joseph Forte</u>
Watershed:	<u>Laurel Run of Owen Davy Fork</u>		

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: EQT Production Company
Address: 400 Woodcliff Drive
Canonsburg, PA 15317
Telephone: 724-746-9073
Email: jzavatchan@eqt.com
Facsimile: 412-395-2974

Authorized Representative: John Zavatchan
Address: 400 Woodcliff Drive
Canonsburg, PA 15317
Telephone: 724-746-9073
Email: jzavatchan@eqt.com
Facsimile: 412-395-2974

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

12/08/2023

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 11/1/23 **Date Permit Application Filed:** 11/2/23

RECEIVED
Office of Oil and Gas
NOV 02 2023
WV Dept
Environmental Protection

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL RETURN RECEIPT REQUESTED
 HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: See Attached List Name: _____
Address: _____ Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 548456.586
County: Marion Northing: 4375088.770
District: Mannington Public Road Access: CR 7/3
Quadrangle: Glover Gap Generally used farm name: Jeanne A. Musgrave Akers & Joseph Forte
Watershed: Laurel Run of Owen Davy Fork

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: EQT Production Company Address: 400 Woodcliff Drive
Telephone: 724-746-9073 Canonsburg, PA 15317
Email: jzavatchan@eqt.com Facsimile: 412-395-2974

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

12/08/2023



4704902529

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Alanna J. Keller, P.E.
Deputy Secretary of Transportation/
Deputy Commissioner of Highways

Jimmy Wriston, P. E.
Secretary of Transportation
Commissioner of Highways

August 29, 2023

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

RECEIVED
Office of Oil and Gas
NOV 03 2023
WV Department of
Environmental Protection

Subject: DOH Permit for the Carnegie Pad, Marion County
Carnegie 19H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2016-0799 which has been issued to EQT Production Company for access to the State Road for a well site located off Marion County Route 7/3 SLS MP 0.197.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Operations Engineer
Central Office O&G Coordinator

Cc: John Zavatchan
EQT Production Company
OM, D-4
File

E.E.O./AFFIRMATIVE ACTION EMPLOYER

12/08/2023

Anticipated Frac Additives
Chemical Names and CAS Numbers

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
Sand (Proppant)	Silica Substrate	14808-60-7
Water	Water	7732-18-5
Hydrochloric Acid (HCl)	Hydrogen Chloride	7647-01-0
Friction Reducer	Copolymer of 2-propenamide	Proprietary
	Petroleum Distillate	64742-47-8
	Oleic Acid Diethanolamide	93-83-4
	Alcohols, C12-16, ethoxylated	68551-12-2
	Ammonium chloride ((NH ₄)Cl)	12125-02-9
Biocide	Glutaraldehyde	111-30-8
	Alkyl dimethyl benzyl ammonium chloride	68391-01-5
	Didecyl dimethyl ammonium chloride	7173-51-5
	Non-hazardous substances	Proprietary
Scale Control	Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid))(BHMT)	34690-00-1
Acid Chelating Agent	Non-hazardous substances	Proprietary
	Ferriplex 66	
Corrosion Inhibitor	Citric Acid	77-92-9
	Acetic Acid	64-19-7
	PLEXHIB 166	
	Methanol	67-56-1
	Alcohols, C14-15, ethoxylated	68951-67-7

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Office of Oil and Gas
NOV 08 2023
Department of
the State of Oklahoma

12/08/2023

OPERATOR: EQT Production Company WELL NO: 19H

PAD NAME: Carnegie

REVIEWED BY: John Zavatchan

SIGNATURE: 

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

RECEIVED
Office of Oil and Gas
NOV 03 2023
NY Department of
Environmental Conservation

Well Restrictions

- At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR
 - DEP Waiver and Permit Conditions
- At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR
 - DEP Waiver and Permit Conditions
- At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR
 - DEP Waiver and Permit Conditions
- At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR
 - Surface Owner Waiver and Recorded with County Clerk, OR
 - DEP Variance and Permit Conditions
- At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR
 - Surface Owner Waiver and Recorded with County Clerk, OR
 - DEP Variance and Permit Conditions
- At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR
 - Surface Owner Waiver and Recorded with County Clerk, OR
 - DEP Variance and Permit Conditions

12/08/2023