



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, February 12, 2024
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY
400 WOODCLIFF DR.

CANONSBURG, PA 15317

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

Added lease to permit

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: Carnegie 19H
Farm Name: Jeanne A Musgrave Akers & Joseph Forte
U.S. WELL NUMBER: 47-049-02529-00-00
Horizontal 6A New Drill
Date Modification Issued: 2/12/2024

Promoting a healthy environment.

02/16/2024

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

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

2) Operator's Well Number: 19H Well Pad Name: Carnegie

3) Farm Name/Surface Owner: Jeanne Ann Muegrave 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 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, 7,712', 79', 2,593 psi

8) Proposed Total Vertical Depth: 7,712'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 10,511'

11) Proposed Horizontal Leg Length: 251'

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 No _____

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(a) If Yes, provide Mine Info: Name: Harrison County Mine JAN 26 2024
Depth: 1,034'-1,041'
Seam: Pittsburgh WV Department of Environmental Protection
Owner: Harrison County Coal Resources

Kj Willett
1/17/24

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 OR 3 Bars	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	10511	10511	507 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

Kind:				
Sizes:				
Depths Set:				

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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.

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*Note: Attach additional sheets as needed.

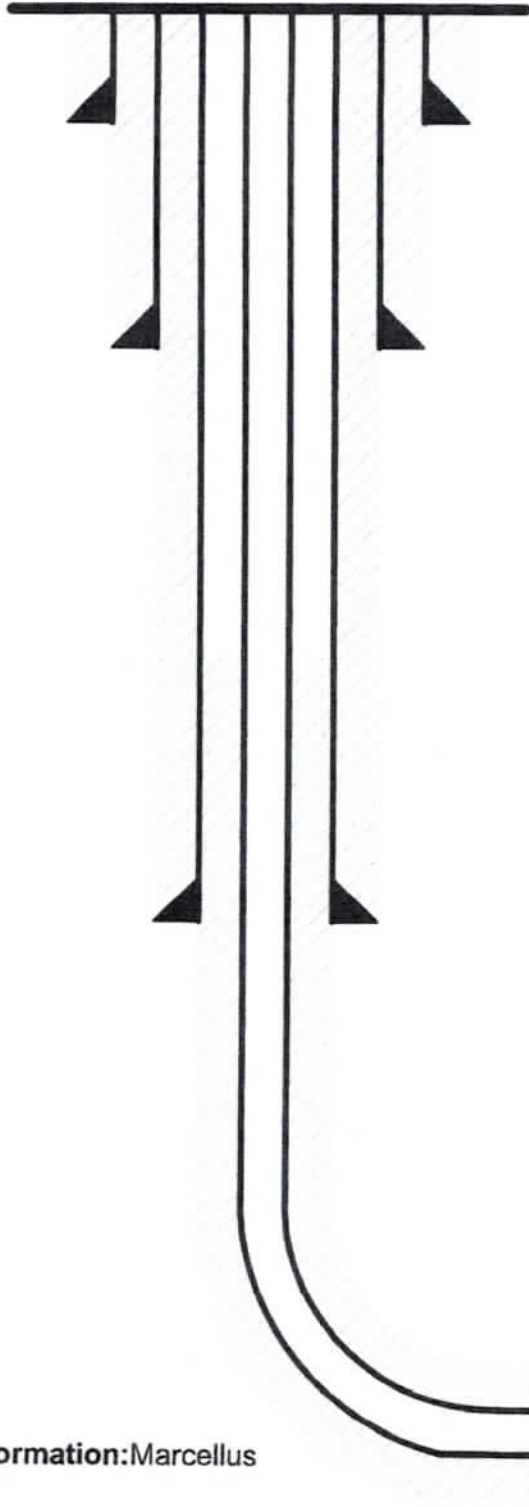
JAN 26 2024

EQT Production

Wellbore Diagram

Well: Carnegie 19H
Pad: Carnegie
Elevation: 1318' GL 1331' KB

County: Marion
State: West Virginia



Conductor @ 40'

26", 85.6#, A252 GR3 Bare, cement to surface w/ Class A/L

Surface @ 1,091'

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

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Intermediate @ 2,673'

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

Production @ 10,511' MD / 7,712' TVD

6", 24#, P-110, cement to 500' inside 9-5/8" w/ Class A/H/L

Formation: Marcellus

Ky Willett 1/17/24

NOT TO SCALE

02/16/2024

WEST VIRGINIA GEOLOGICAL PROGNOSIS

Horizontal Well
Carnegie
 S-000512

Drilling Objectives:

Marcellus
 Marion
 Glover Gap

County:

Quad:

Elevation:

1331 KB

1318 GL

Recommended Azimuth

TBD Degrees

Recommended LP to TD: TBD

Proposed Logging Suite:

@ Pilothole TD - Run OH logs for evaluation of uphole zones.
 Quad Combo Pilot Hole log planned

ESTIMATED FORMATION TOPS

Formation	Top (TVD)	Base (TVD)	Lithology	Comments	Top RR	Base RR
Fresh Water Zone	1	709		FW @ 371,335,309,341,709.		No red rock noted in offsets
Washington	515	517	Coal	No voids should be encountered, but located in a large barrier block in the active Harrison County Mine (PGH seam)		
Waynesburg	669	671	Coal			
Sewickley	937	941	Coal			
Pittsburgh	1034	1041	Coal			
Keener Storage Zone	2331	2358		Inside Protective Boundary of Logansport Storage Field		
Big Injun	2515	2623	Silty Sand			
Int. csg pt	2673			SW @ 1852, ... Base of Offset Well Perforations at 3259' TVD (plugged)		
Gantz	3110	3198	Silty Sand			
SOF	3051	3267	Silty Sand			
Fifth Sand	3267	3333	Silty Sand			
Bayard	3333	5799	Silty Sand			
Alexander	5799	6209	Silty Sand			
Elks	6209	7163	Silty Sand			
Elks	7163	7163	Gray Shales and Silts			
Sonyea	7163	7347	Gray shale			
Middlesex	7347	7406	Shale			
Genesee	7406	7506	Gray shale interbedded			
Genesee	7506	7540	Black Shale			
Tully	7540	7569	Limestone			
Hamilton	7569	7672	Gray shale with some			
Marcellus	7672	7751	Black Shale			
Purcell	7715	7717	Limestone			
-Lateral Zone	7712			Start Lateral at 7711.5'		
Cherry Valley	7730	7732	Limestone			
Onondaga	7751		Limestone			
Pilot Hole TD						

Target Thickness	79 feet
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Comments:

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

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

LATERAL DRILLING TOLERANCES

Mapview - Lateral:

Deviate as little as possible to the left or right of the planned wellbore.

Mapview - TD:

DO NOT EXTEND beyond recommended wellbore to avoid lease line.

RECOMMENDED CASING POINTS

Conductor	CSG OD	26"	CSG DEPTH:	40'	or competent rock
Fresh Water/Coal	CSG OD	13 3/8	CSG DEPTH:	1091	50' below Pittsburgh, cover freshwater
Intermediate 1:	CSG OD	9 5/8	CSG DEPTH:	2673	Beneath the Big Injun formation
Production:	CSG OD	5 1/2	CSG DEPTH:	@ TD	

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02/16/2024

6704902529

EQT Production
Hydraulic Fracturing Monitoring Plan
Pad ID: Carnegie
County: Marion

January 22, 2024

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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 Marion County, WV prior to hydraulic fracturing at the following EQT wells on the Carnegie pad: 1H, 3H, 5H, 7H, 9H, 11H, 13H, 15H, 17H and 19H.

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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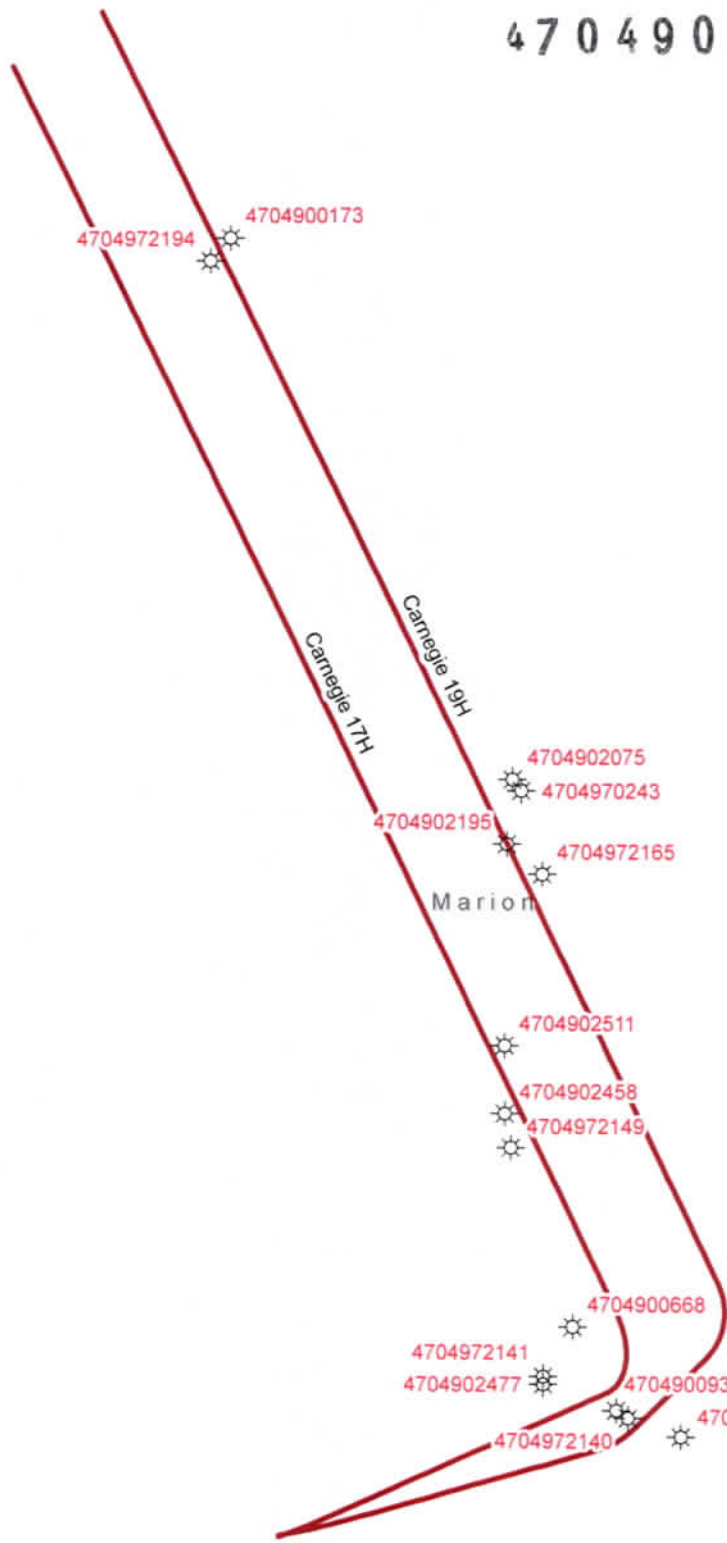
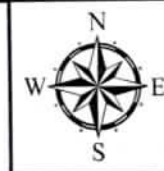
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EQT
EQT Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

Carnegie 17H & 19H

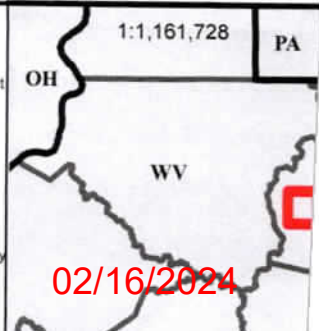
Vertical Offsets and
Foreign Laterals
within 500 Feet

Legend

- Well Lateral_FM
- Formation
- Genesee
- Marcellus
- Utica
- Carnegie_Offset_Wells

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.

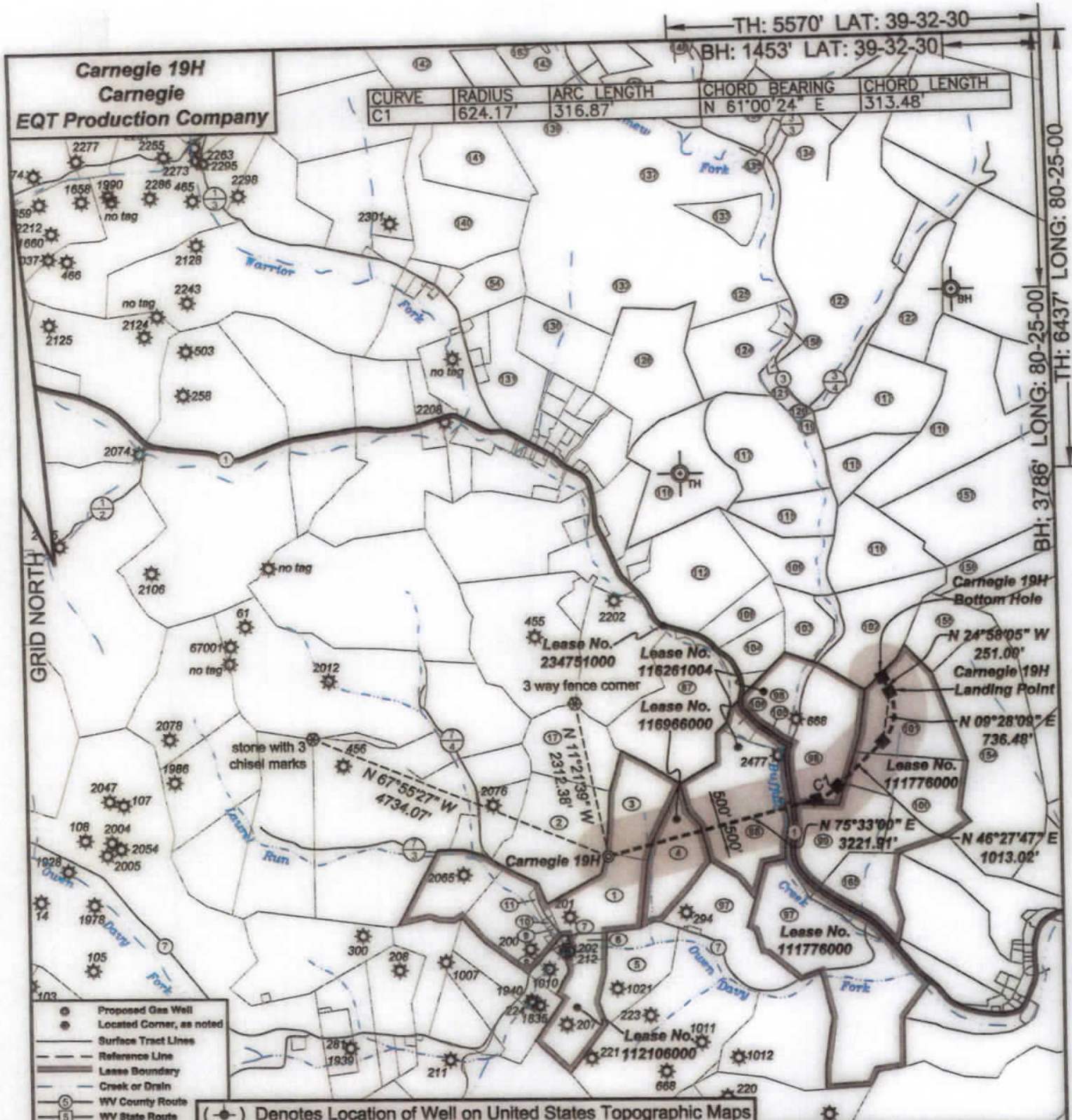


02/16/2024

Contract ID	Contract Name	Company	Contract Type	Contract Category	Contract Value	Contract Status	Contract Date	Contract Description	Contract Location
4704072136	47-040-72136-00	(NA)	UNREPORTED	(NA)	30529956	-80422472	1224	0	0
4704072140	47-040-72140-00	(NA)	UNREPORTED	(NA)	30284340	-80428218	1216	0	0
4704000048	47-040-00048-00	CONSOLIDATION COAL COMPANY	P & A	GAS	36129003	-80428823	948	1007	2826
4704007111	47-040-00711-00	(NA)	UNREPORTED	(NA)	36539998	-80428880	1272	1282	0
4704072141	47-040-72141-00	BP	UNREPORTED	BP	305385371	-80427517	898	0	0
4704072142	47-040-07214-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	30538156	-80428825	1341	1350	0
4704072145	47-040-72145-00	(NA)	UNREPORTED	(NA)	3654146	-80427154	1095	0	0
4704000173	47-040-00173-00	CONSOLIDATION COAL COMPANY	P & A	WATER	3654635	-80427073	1095	1104	3317
4704000037	47-040-00037-00	(NA)	UNREPORTED	(NA)	36521778	-80428856	1217	1227	0
4704072184	47-040-72184-00	(NA)	UNREPORTED	(NA)	36567727	-80428384	1030	0	0
4704000075	47-040-00075-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	36546037	-80428819	1041	1050	0
4704002477	47-040-02477-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	36528182	-80427361	1001	1010	0
4704002185	47-040-02185-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	3642221	-80428381	1159	1168	0
4704072140	47-040-72140-00	(NA)	UNREPORTED	(NA)	39527238	-80424345	1287	0	0
4704072243	47-040-70243-00	FREHOLD OIL & GAS	UNREPORTED	UNREPORTED	36543684	-804270	1019	0	0

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JAN 26 2024
WV Department of Environmental Protection



TH: 5570' LONG: 80-25-00
BH: 3786' LONG: 80-25-00
TH: 6437' LONG: 80-25-00



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



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: January 16 20 24
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

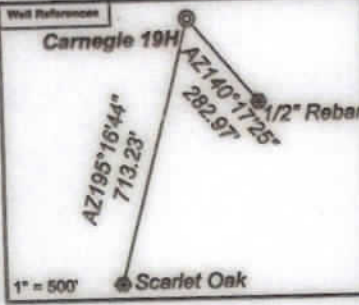
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6422'

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

02/16/2024

**Carnegie 19H
Carnegie
EQT Production Company**

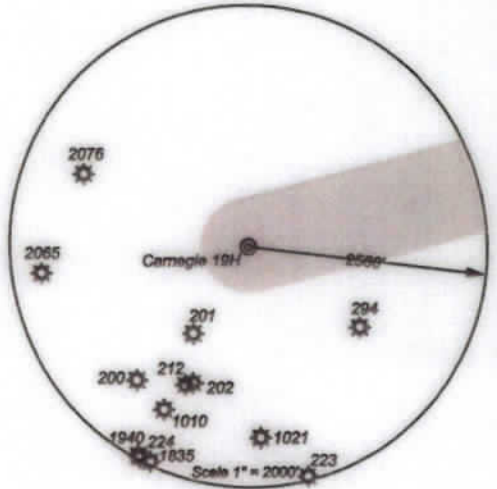
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	49	20	Marion	Mannington	Jeanne A. Musgrave Akers & Joseph Forte	28.06
2	49	37	Marion	Mannington	Equitrans LP	51.5
3	49	39.1	Marion	Mannington	Jeanne A. Musgrave Akers & Joseph Forte	23.9
4	49	40	Marion	Mannington	Marshall & Dick Cartright	36
5	50	54	Marion	Mannington	Melvin L. Goach Sr.	28
6	50	15	Marion	Mannington	Perry R. & Janice M. Thorne	5.61
7	50	26	Marion	Mannington	Richard H. & Lucy M. Lambert	0.06
8	50	17	Marion	Mannington	Jason H. & Brandy L. Batson	0.82
9	48	13	Marion	Mannington	Harion 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
14	49	38	Marion	Mannington	Thomas K. Wright	39
24	44	26	Marion	Mannington	Charles F. & Kathy H. Glover	43.05
47	49	14	Marion	Mannington	Marion County Coal Resources Inc	61
97	49	17	Marion	Mannington	Perry R. & Janice M. Thorne	100.09
28	49	12	Marion	Mannington	Robert S. Ihoma, Sr., et al.	116.929
29	49	41	Marion	Mannington	Joseph H. & Whitney N. Elliott	39
29	49	42	Marion	Mannington	Joseph H. & Whitney N. Elliott	40.2
109	49	40	Marion	Mannington	Joseph H. & Whitney N. Elliott	38.7
109	49	11	Marion	Mannington	Donald I. & Larayne M. Lafferty	40.71
107	49	14	Marion	Mannington	Kevin M. & Glenda S. Brewer	19.79
104	49	13	Marion	Mannington	Joseph H. Larry Baker	17.23
104	49	13	Marion	Mannington	CNK I and II C	2.05
106	49	13	Marion	Mannington	CNK I and II C	4.16
108	49	13.2	Marion	Mannington	John H. & Conde L. Tennant	13.74
109	49	15	Marion	Mannington	George Ffow, Jr.	19.1
110	49	26	Marion	Mannington	Dufford B. Triplett	41.15
112	49	13.1	Marion	Mannington	Larry C. & Patricia Baker	52.28
115	49	16	Marion	Mannington	Marion County Coal Resources Inc	35
116	49	28	Marion	Mannington	Harrison County Coal Resources Inc	91
117	49	17	Marion	Mannington	Jeffrey H. Michael	85.04
118	49	10	Marion	Mannington	Kevin D. & Heather Glasscock	51
119	49	17.1	Marion	Mannington	Ronald C. & Betty L. Michael	1.46
120	49	22.2	Marion	Mannington	Ronald C. & Betty L. Michael	1.5
121	49	22.1	Marion	Mannington	Ronald C. & Betty L. Michael	5.17
122	49	25	Marion	Mannington	Jeffrey H. Michael	73.75
123	49	22	Marion	Mannington	Jeffrey H. Michael	105.83
124	49	18	Marion	Mannington	Tommy L. & Terri A. Snodgrass	31.65
125	49	20	Marion	Mannington	No Parcel Information	NA
126	49	3	Marion	Mannington	Kevin D. & Heather Glasscock	49.25
130	49	2.3	Marion	Mannington	Rosemary A. & Samuel M. Snodgrass	2.83
131	49	23	Marion	Mannington	Daniel Berisko	25.226
132	49	21	Marion	Mannington	Cynthia M. & Kim S. Tittley	1.35
133	49	21.1	Marion	Mannington	Julie A. Tittley & Justin R. Cain	11.171
134	49	13.1	Marion	Mannington	Christine L. Frapale, et al.	10.56
135	49	13.2	Marion	Mannington	Christine L. Frapale, et al.	7
136	49	13.3	Marion	Mannington	Christine L. Frapale, et al.	15.87
137	49	1	Marion	Mannington	Edna M. Cain	107.5
138	49	3	Marion	Mannington	Thomas E. & Andrea G. Ryan	1
139	49	4	Marion	Mannington	Richard L. Cain	51.33
140	49	24.1	Marion	Mannington	Bd of Trs Most Worshipful Grd Ldg of AFBAMW	43.56
141	49	24	Marion	Mannington	Strasland LTD	36.17
142	49	6	Marion	Mannington	John D. & Raji K. Carson	55
143	49	5	Marion	Mannington	Thomas E. & Andrea G. Ryan	24.53
144	49	9	Marion	Mannington	Thomas E. & Andrea G. Ryan	61
145	49	10	Marion	Mannington	Thomas E. & Andrea G. Ryan	176.13
146	49	10.1	Marion	Mannington	Michael E. & Laura A. Gorbey	1.15
147	49	11	Marion	Mannington	Yulia Nikolaeva	115
148	49	8	Marion	Mannington	John D. & Raji K. Carson	64.56
149	49	8.1	Marion	Mannington	John D. & Raji K. Carson	2.60
150	49	8	Marion	Mannington	Charles D. & June Shover	16.3
151	49	9	Marion	Mannington	Charles D. & June Shover	19
152	49	30	Marion	Mannington	Charles D. & June Shover	128.75
154	49	30	Marion	Mannington	Harrison County Coal Resources Inc	302.6
156	49	9	Marion	Mannington	Derek Nuzum	33.75
156	49	7	Marion	Mannington	Willis F. & Patty H. Anderson	30
157	49	77	Marion	Mannington	Harrison County Coal Resources Inc	86.5
158	49	19	Marion	Mannington	Gary T. Smoligons	3.81
159	49	6	Marion	Mannington	Thomas R. & Margaret M. Williams	11.19
161	44	5.1	Marion	Mannington	Thomas E. & Andrea G. Ryan	0.49
164	44	4.1	Marion	Mannington	Matthew I. Cain	0.67
165	49	11	Marion	Mannington	Joseph B. & Wilmore N. Elliott	77.037



Notes:
 Carnegie 19H coordinates are
 NAD 27 N: 374,337.89 E: 1,735,852.96
 NAD 27 Lat: 39.523997 Long: -80.436411
 NAD 83 UTM N: 4,375,088.77 E: 548,456.59
 Carnegie 19H Landing Point coordinates are
 NAD 27 N: 376,717.85 E: 1,740,102.68
 NAD 27 Lat: 39.530652 Long: -80.421433
 NAD 83 UTM N: 4,375,835.52 E: 549,739.25
 Carnegie 19H Bottom Hole coordinates are
 NAD 27 N: 376,946.39 E: 1,739,996.73
 NAD 27 Lat: 39.531274 Long: -80.421817
 NAD 83 UTM N: 4,375,904.30 E: 549,705.82
 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
116968000	Judith Ann Myers, et al.	36
116261004	Sarahbeth Lamm, et al.	123
234751000	West Virginia Department of Transportation, Division of Highways	46.86
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



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: January 16 20 24
 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: 1316' WATERSHED: Laurel Run of Owen Davy Fork QUADRANGLE: Glover Gap
 DISTRICT: Mannington COUNTY: Marion
 SURFACE OWNER: Jeanne A. Musgrave Akers & Joseph Forte ACREAGE: 28.06
 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: 8422'

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

02/16/2024

WW-6A1
(5/13)

Operator's Well No. Carnegie 19H

**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 Attached

RECEIVED
Office of Oil and Gas

JAN 26 2024

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 *John F. Zavatchan Jr*
 Its: Project Specialist/Permitting

Lease No.	Grantor, Lessor, etc.		Grantee, Lessee, etc.	Royalty	Book/Page
	<u>Bounty Minerals, LLC, et al.</u>			"at least 1/8th per WV Code 22-6-8"	
112106000	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 EGT Production Company		DB 465/312 DB 510/487 DB 511/539 AB 12/279 DB 1148/296 AB 46/660 DB 1114/130 (Sublease)
	<u>Judith Ann Myers, et al.</u>			"at least 1/8th per WV Code 22-6-8"	
116966000	Marshall Cutright and Betty Cutright, husband and wife, and Dick Cutright, 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 EGT Production Company		DB 724/970 AB 12/279 DB 1148/296 AB 46/660 DB 1114/130 (Sublease)
	<u>Sarabeth Lamm, et al.</u>			"at least 1/8th per WV Code 22-6-8"	
116261004	Sarabeth Lamm, single Republic Energy Ventures, LLC	123 ac	Republic Energy Ventures, LLC EGT Production Company		DB 1203/1160 AB 52/744
	<u>West Virginia Department of Transportation, Division of Highways</u>			"at least 1/8th per WV Code 22-6-8"	
234751000	West Virginia Department of Transportation, Division of Highways	46.86 ac	EGT Production Company		DB 1336/524
	<u>Joseph R. Elliott and Whitney N. Elliott, et al.</u>			"at least 1/8th per WV Code 22-6-8"	
111776000	George W & Mariah Beaty 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 & Gratton 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.	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 & Gratton 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, t/d/b/a Read Supply 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

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 WV Department of
 Environmental Protection

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

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 493/227
DB 502/577
DB 510/487
DB 511/539
AB 12/279
DB 1148/296
AB 46/660
DB 1114/130

(Sublease)

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