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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://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 Radcliff 10H  
47-049-02512-00-00

**Lateral Extension**

EQT PRODUCTION COMPANY

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

If there are any questions, please feel free to contact me at (304) 926- 0450.

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

James A. Martin  
Chief

Operator's Well Number: Radcliff 10H  
Farm Name: Jackie D & Sheila L Radcliff  
U.S. WELL NUMBER: 47-049-02512-00-00  
Horizontal 6A New Drill  
Date Modification Issued: 02/12/2024

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: 10H Well Pad Name: Radcliff

3) Farm Name/Surface Owner: Jackie D. & Sheila L. Radcliff Public Road Access: CR 4/4

4) Elevation, current ground: 1,493' (built) Elevation, proposed post-construction: 1,493' (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, 7,916', 78', 2,593 psi

8) Proposed Total Vertical Depth: 8,049'

9) Formation at Total Vertical Depth: Onondaga

10) Proposed Total Measured Depth: 23,138'

11) Proposed Horizontal Leg Length: 14,814'

12) Approximate Fresh Water Strata Depths: 460', 490', 621', 751'

13) Method to Determine Fresh Water Depths: Offset Wells - 049-02184, 049-00699, 049-30238

14) Approximate Saltwater Depths: 1,856', 2,127', 2,247'

15) Approximate Coal Seam Depths: 1,200'-1,206', 1,297'-1,304'

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 X

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

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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 Bar	85.6	40	40 ✓	50 ft <sup>3</sup> / CTS
Fresh Water	13 3/8	New	J-55	54.5	1354	1354 ✓	1230 ft <sup>3</sup> / CTS ✓
Coal							
Intermediate	9 5/8	New	J-55	36	2721	2721 ✓	1050 ft <sup>3</sup> / CTS
Production	6	New	P-110	24	23138	23138 ✓	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							

*Rg Willits*  
2/2/24

**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 vertical, kick off, and drill curve/tangent to approximately 7300'. Drop back to vertical and drill the pilot hole to an approximate depth of 8099' MD/8,049' TVD', no more than 100' below the top of the Onondaga formation. Then trip out of the hole, run logs, and plug back to approximately 7300'. Then drill the curve and lateral in the Marcellus formation. 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): 17.33 (built)

22) Area to be disturbed for well pad only, less access road (acres): 5.19 (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

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25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Production: Perform a cleanup cycle by pumping 3-8 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

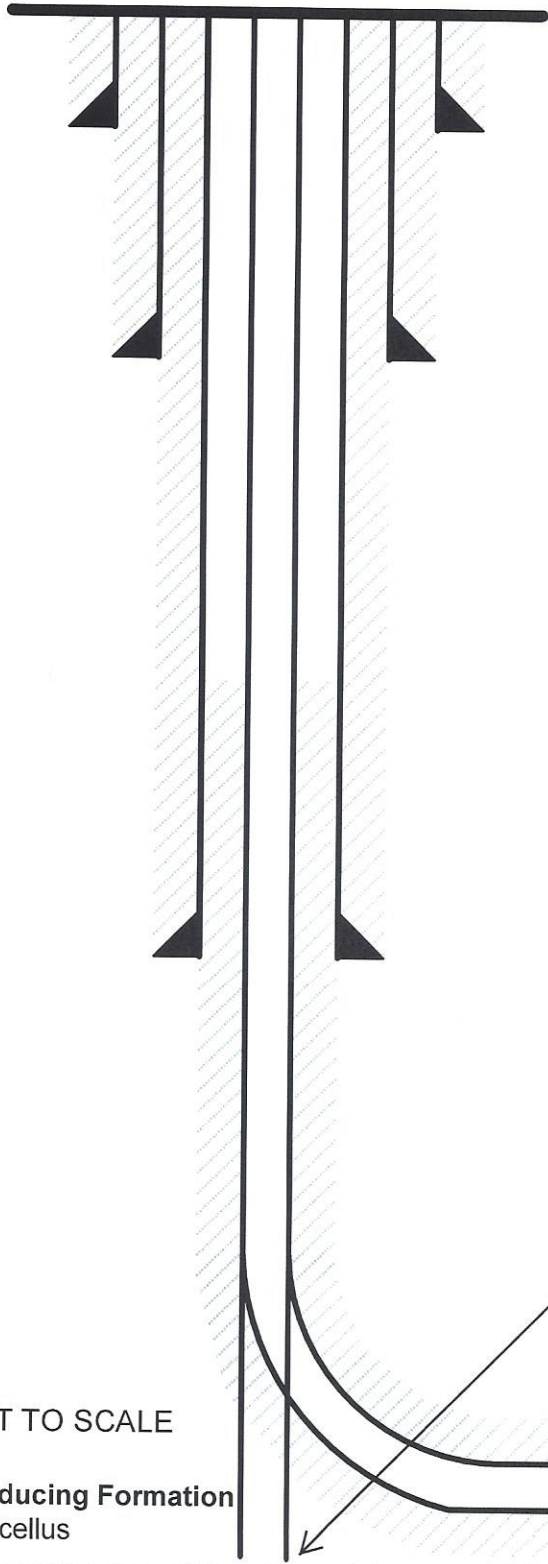
\*Note: Attach additional sheets as needed.

**EQT Production**

**Wellbore Diagram**

Well: Radcliff 10H  
Pad: Radcliff  
Elevation: 1493' GL 1506' KB

County: Marion  
State: West Virginia



**Conductor @ 40'**

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

**Surface @ 1,354'**

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

**Intermediate @ 2,721'**

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

**Pilot Hole @ 8,099' MD / 8,049' TVD**

**Production @ 23,138' MD / 7,916' TVD**

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

NOT TO SCALE

**Producing Formation  
Marcellus**

**Proposed work:** Drill and complete a new horizontal well in the Marcellus Formation. Drill vertical, kick off, and drill curve/tangent to approximately 7300'. Drop back to vertical and drill the pilot hole to an approximate depth of 8099', no more than 100' below the top of the Onondaga formation. Then trip out of the hole, run logs, and plug back to approximately 7300'. Then drill the curve and lateral in the Marcellus formation. Cement casing. **02/16/2024**

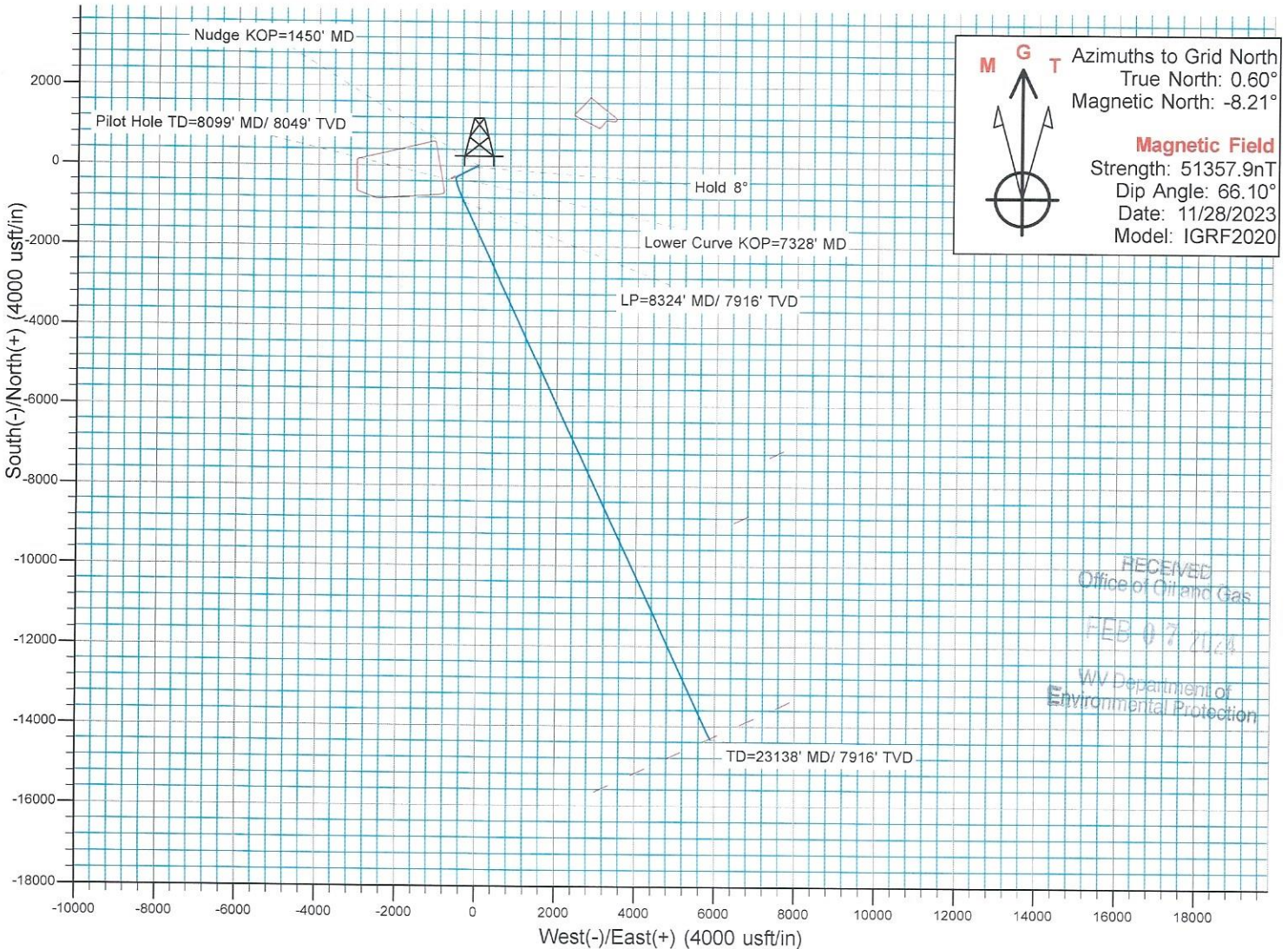
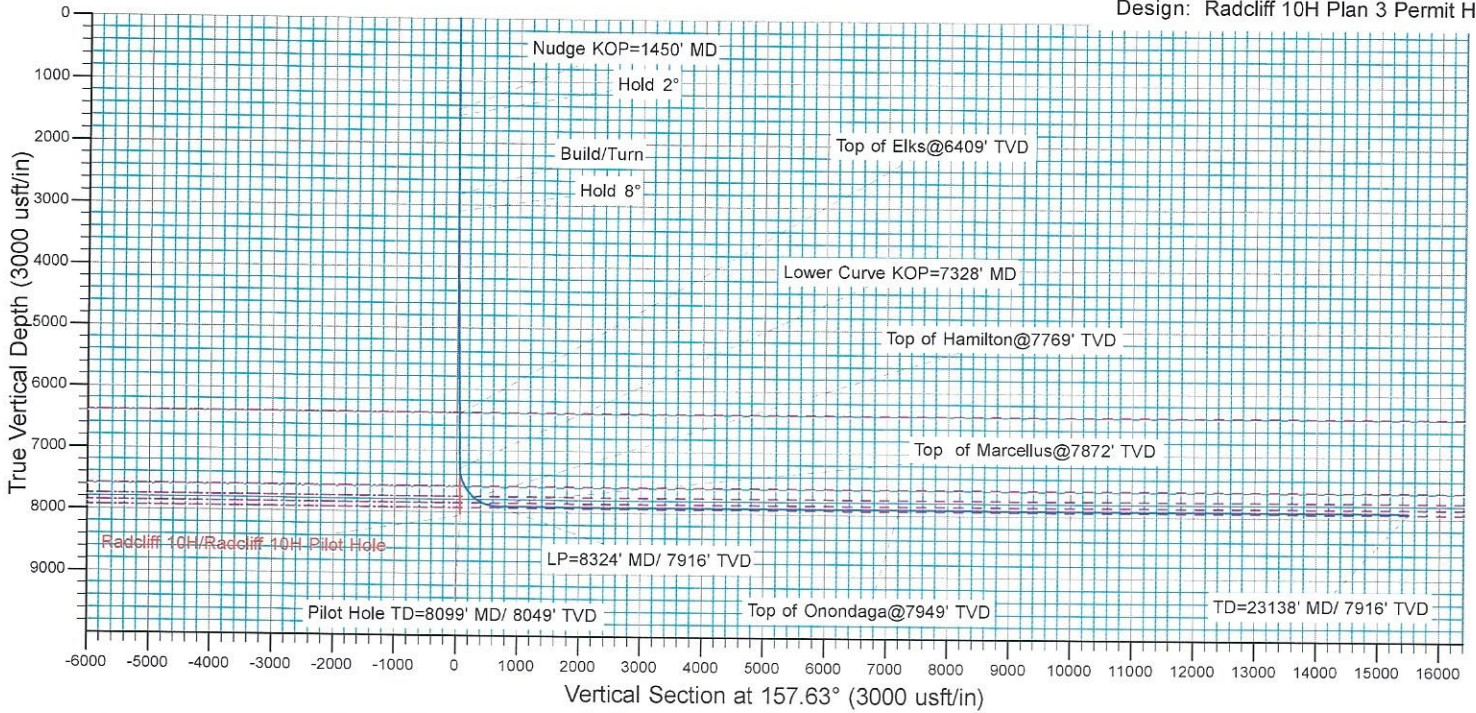
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# EQT PRODUCTION

Project: Marion County, WV  
 Site: Radcliff  
 Well: Radcliff 10H  
 Wellbore: Main  
 Design: Radcliff 10H Plan 3 Permit HZ



02/16/2024



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

February 2, 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 Radcliff pad: 4H, 6H, 8H, 10H, 12H, 14H, 16H and 18H.

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:

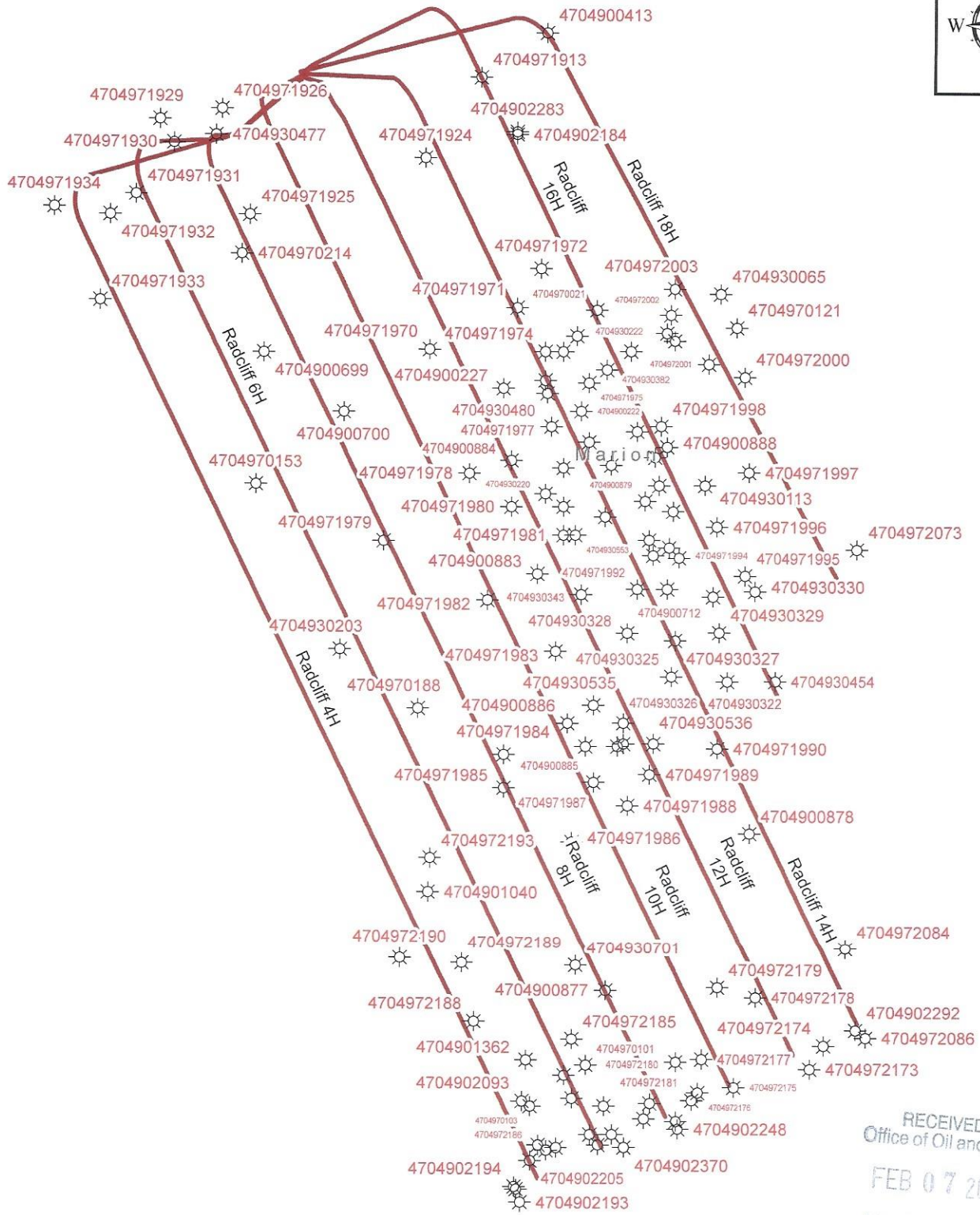
1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
3. Inspect or install master valves or other necessary equipment for wellhead 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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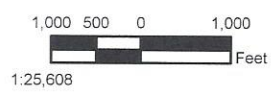
**EQT**  
EQT Corporation  
625 Liberty Avenue  
Pittsburgh, PA 15222

**Radcliff South**

**Vertical Offsets and  
Foreign Laterals  
within 500 Feet**

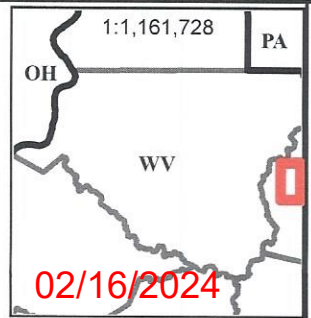
**Legend**

- Well Lateral\_FM
- Formation
  - Geneseo
  - Marcellus
  - Utica
- Radcliff\_Offset\_Wells
- Radcliff\_Permits



**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.



APL_UWI_Un	APL_UWI_12	ENWOperato	ENWWellSta	ENWWellTyp	InitialOpe	Latitude	Longitude	ElevationG	ElevationK	MD_FT	TVD_FT	WellName	WellSymbol
4704900888	47-049-00888-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39.573547	-80.41966	1153	1163	3041	3041	KENDALL, ALFRED - HEIRS 3	OTHER-P & A
4704971929	47-049-71929-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.586186	-80.44514	1336	0	0	0	L D FETTY	UNREPORTED-UNREPORTED
4704972001	47-049-72001-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.576741	-80.4176	1289	0	0	0	ALF KENDALL	UNREPORTED-UNREPORTED
4704971987	47-049-71987-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.580485	-80.42341	1381	0	0	0	J L HAYS	UNREPORTED-UNREPORTED
4704901362	47-049-01362-00	CONSOLIDATION COAL COMPANY	P & A	OIL	CONSOLIDATION COAL COMPANY	39.549745	-80.42678	1098	1108	2823	2823	SNODGRASS, TOMMY L. 5262	OIL-P & A
4704900879	47-049-00879-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39.572821	-80.42247	1336	1346	3048	3048	HAYES, J. L. - HEIRS 24	OTHER-P & A
4704971994	47-049-71994-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.589193	-80.4191	1097	0	0	0	Z E BATSON	UNREPORTED-UNREPORTED
4704900227	47-049-00227-00	DIVERSIFIED ENERGY	P & A	WATER	DIVERSIFIED PRODUCTION	39.575767	-80.42792	1224	1233	3077	3077	HAYES, SARAH E. 4	WATER-P & A
4704900712	47-049-00712-00	DIVERSIFIED ENERGY	P & A	OIL	DIVERSIFIED PRODUCTION	39.567741	-80.41741	1090	1099	2858	2858	BATSON, Z. E. & A. M. 7	OIL-P & A
4704900877	47-049-00877-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39.552357	-80.42284	1274	1284	2998	2998	HAYES, J. L. & A. J. 19	OTHER-P & A
4704972002	47-049-72002-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.578627	-80.41947	1469	0	0	0	J W BATSON	UNREPORTED-UNREPORTED
4704971998	47-049-71998-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.574273	-80.42003	1144	0	0	0	ALF KENDALL	UNREPORTED-UNREPORTED
4704972181	47-049-72181-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.548003	-80.4206	1074	0	0	0	JACK HAYS	UNREPORTED-UNREPORTED
4704900876	47-049-00876-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39.548246	-80.4245	1274	1283	2985	2985	MICHAEL, JEFFREY 5259	OTHER-P & A
4704900222	47-049-00222-00	DIVERSIFIED ENERGY	P & A	GAS	DIVERSIFIED PRODUCTION	39.574854	-80.42397	1416	1425	3146	3146	HAYES, J. L. - HEIRS 42	GAS-P & A
4704900869	47-049-00869-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39.57137	-80.42078	1257	1267	3006	3006	BATSON, Z. E. & A. M. 1	OTHER-P & A
4704930220	47-049-30220-00	DELMAR OIL CO	INACTIVE COMPLETED	OIL & GAS	DELMAR	39.571671	-80.42584	1105	0	0	3168	27	OIL & GAS-INACTIVE COMPLETED
4704930277	47-049-30277-00	MONROE, R. S.	UNREPORTED	UNREPORTED	MONROE, R. S.	39.54905	-80.4249	1281	0	0	0	A W KENDALL	UNREPORTED-UNREPORTED
4704972189	47-049-72189-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.553519	-80.42996	1043	0	0	0	J N MICHAEL	UNREPORTED-UNREPORTED
4704930701	47-049-30701-00	HANLEY, BEATY & BEATY	INACTIVE COMPLETED	GAS	HANLEY, BEATY & BEATY	39.5534	-80.42434	1255	0	0	3124	NEWTON CUNNINGHAM 1	GAS-INACTIVE COMPLETED
4704971974	47-049-71974-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.577176	-80.42584	1433	0	0	0	SARAH HAYS	UNREPORTED-UNREPORTED
4704930536	47-049-30536-00	TRI-STATE PIPE COMPANY, THE	COMPLETED	OIL	TRI-STATE PIPE COMPANY, THE	39.561955	-80.42041	1326	0	0	3079	AMELIA CROUSER 2	OIL-COMPLETED
4704930553	47-049-30553-00	HANLEY, BEATY, MCISAAC	UNREPORTED	WATER	HANLEY, BEATY, MCISAAC	39.570076	-80.42434	1270	0	2925	0	S C THORN HEIRS	WATER-UNREPORTED
4704930328	47-049-30328-00	(GAS)	INACTIVE COMPLETED	OIL	SOUTH PENN OIL (S PENN NAT GAS)	39.566306	-80.42172	1311	0	0	3095	M M KENDALL 7	OIL-INACTIVE COMPLETED
4704970121	47-049-70121-00	(N/A)	COMPLETED	OIL	(N/A)	39.578051	-80.41622	1495	0	0	3210	2	OIL-COMPLETED
4704972176	47-049-72176-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.549439	-80.41816	1229	0	0	0	JACK HAYS	UNREPORTED-UNREPORTED
4704901114	47-049-30114-00	CLIFTON OIL & GAS	COMPLETED	OIL	CLIFTON OIL & GAS	39.574136	-80.42116	1223	0	0	3113	5	OIL-COMPLETED
4704902292	47-049-02292-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39.550788	-80.41032	1323	1332	0	0	STRAIGHT, W.S. & JAS W. 5124	OTHER-P & A
4704900065	47-049-30065-00	HARRY SIBERT CONTRACT	COMPLETED	OIL	HARRY SIBERT CONTRACT	39.579356	-80.41704	1294	0	0	3097	ALFRED KENDALL 7	OIL-COMPLETED
4704903022	47-049-30322-00	(GAS)	INACTIVE COMPLETED	OIL	SOUTH PENN OIL (S PENN NAT GAS)	39.56442	-80.41666	1210	0	0	2327	M M KENDALL 2	OIL-INACTIVE COMPLETED
4704971931	47-049-71931-00	BP	UNREPORTED	UNREPORTED	BP	39.583272	-80.44626	1204	0	0	0	JACOB MURRAY	UNREPORTED-UNREPORTED
4704972193	47-049-72193-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.557583	-80.43165	1083	0	0	0	REBECCA WATSON	UNREPORTED-UNREPORTED
4704972186	47-049-72186-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.546407	-80.42822	1022	0	0	0	JOHN BOARD	UNREPORTED-UNREPORTED
4704901915	47-049-01915-00	DIVERSIFIED ENERGY	PRODUCING	OIL & GAS	DIVERSIFIED PRODUCTION	39.571045	-80.41942	1112	1121	4110	4110	D HAYES 50	OIL & GAS-PRODUCING
4704903221	47-049-30221-00	(GAS)	INACTIVE COMPLETED	OIL & GAS	SOUTH PENN OIL (S PENN NAT GAS)	39.577616	-80.41928	1450	0	0	2468	HOARD-BATSON 1	OIL & GAS-INACTIVE COMPLETED
4704972180	47-049-72180-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.5496	-80.41929	1087	0	0	0	JACK HAYS	UNREPORTED-UNREPORTED
4704930454	47-049-30454-00	INTERSTATE PIPE & SUPPLY	UNREPORTED	WATER	INTERSTATE PIPE & SUPPLY	39.564419	-80.41426	1093	0	3008	0	M M KENDALL	WATER-UNREPORTED
4704971972	47-049-71972-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.580369	-80.42603	1488	0	0	0	D METZ	UNREPORTED-UNREPORTED
4704971986	47-049-71986-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.558163	-80.42453	1288	0	0	0	NANCY E HAYS	UNREPORTED-UNREPORTED
4704900885	47-049-00885-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39.561936	-80.42378	1236	1246	3026	3026	HAYES, J. L. - HEIRS 34	OTHER-P & A
4704900886	47-049-00886-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39.562807	-80.42472	1269	1279	3040	3040	HAYES, J. L. - HEIRS 36	OTHER-P & A
4704902370	47-049-02370-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39.546269	-80.42192	1050	1059	0	0	HAYS, J.L. & A.J. 7701	OTHER-P & A
4704971971	47-049-71971-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.578917	-80.42715	1448	0	0	0	SARAH HAYS	UNREPORTED-UNREPORTED
4704971926	47-049-71926-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39.586522	-80.44195	1116	0	0	0	L D FETTY	UNREPORTED-UNREPORTED

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4704971980	47-049-71980-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,571,225	-80,427,533	1210	0	0	0	0	J L HAYS	UNREPORTED-UNREPORTED
4704900871	47-049-00871-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39,568,032	-80,419,666	1209	1219	3184	3184	3184	BATSON, Z. E. & A. M. 4	OTHER-P & A
4704930113	47-049-30113-00	HOPE CONSTRUCTION & REFINING	UNREPORTED	WATER	HOPE CONSTRUCTION & REFINING	39,571,961	-80,417,779	1236	0	3015	3009	3009	WZ HAYS HEIRS	WATER-UNREPORTED
4704972066	47-049-72066-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,550,47	-80,409,884	1338	0	0	0	0	J W STRAIGHT	UNREPORTED-UNREPORTED
4704900880	47-049-00880-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39,572,683	-80,423,559	1370	1380	3167	3167	3167	HAYES, J. L. - HEIRS 26	OTHER-P & A
4704972000	47-049-72000-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,576,16	-80,415,83	1267	0	0	0	0	ALF KENDALL	UNREPORTED-UNREPORTED
4704971978	47-049-71978-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,572,532	-80,428,959	1277	0	0	0	0	J L HAYS	UNREPORTED-UNREPORTED
4704902383	47-049-02383-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39,546,162	-80,425,76	1044	1053	0	0	0	MICHAEL, JEFFREY H. 5265	OTHER-P & A
4704900881	47-049-00881-00	DIVERSIFIED ENERGY ROSS AND WHARTON GAS	P & A	OTHER	DIVERSIFIED PRODUCTION	39,571,226	-80,424,249	1178	1188	3130	3130	3130	HAYES, J. L. - HEIRS 28	OTHER-P & A
4704901430	47-049-01430-00	COMPANY, INC.	P & A	OTHER	ROSS&WHARTON GAS CO	39,568,031	-80,421,16	1339	1349	0	0	0	Z.E. BATSON 6	OTHER-P & A
4704972175	47-049-72175-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,548,584	-80,4164	1220	0	0	0	0	J J HOLDEN	UNREPORTED-UNREPORTED
4704972084	47-049-72084-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,553,954	-80,41078	1225	0	0	0	0	J W STRAIGHT	UNREPORTED-UNREPORTED
4704902232	47-049-02232-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39,547,931	-80,42288	1278	1287	0	0	0	MICHAEL, JEFFREY 5258	OTHER-P & A
4704971933	47-049-71933-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,579,208	-80,44813	1489	0	0	0	0	NIMROD COLE	UNREPORTED-UNREPORTED
4704971988	47-049-71988-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,559,614	-80,42172	1428	0	0	0	0	BURCHINAL HRS	UNREPORTED-UNREPORTED
4704971997	47-049-71997-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,572,531	-80,41965	1409	0	0	0	0	W Z HAYS	UNREPORTED-UNREPORTED
4704971990	47-049-71990-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,561,791	-80,41722	1140	0	0	0	0	J F CROUSER ET AL	UNREPORTED-UNREPORTED
4704971924	47-049-71924-00	BP	UNREPORTED	UNREPORTED	BP	39,564,735	-80,43184	1102	0	0	0	0	JACOB MURRAY	UNREPORTED-UNREPORTED
4704972185	47-049-72185-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,550,471	-80,42453	1284	0	0	0	0	BENJAMIN GRUBB	UNREPORTED-UNREPORTED
4704930203	47-049-30203-00	L.A. DILLINGER SOUTH PENN OIL (S. PENN NAT.	UNREPORTED	UNREPORTED	L.A. DILLINGER	39,565,726	-80,43815	1407	0	0	0	0	SARAH E HAYS	UNREPORTED-UNREPORTED
4704930323	47-049-30323-00	(GAS)	INACTIVE COMPLETED	OIL	SOUTH PENN OIL (S PENN NAT GAS)	39,561,872	-80,42221	1329	0	0	3083	3083	BURCHINAL HEIRS 2	UNREPORTED-UNREPORTED
4704930343	47-049-30343-00	JENNINGS BROTHERS, E. H., COMPANY	INACTIVE COMPLETED	GAS	JENNINGS BROTHERS, E. H., COMPANY	39,667,756	-80,42397	1296	0	0	3315	3315	29	OIL-INACTIVE COMPLETED
4704902093	47-049-02093-00	CONSOLIDATION COAL COMPANY	P & A	DRY HOLE	CONSOLIDATION COAL COMPANY	39,548,109	-80,42699	1075	1085	2828	2828	2828	MICHAEL JEFFREY H. 5257	GAS-INACTIVE COMPLETED
4704930330	47-049-30330-00	(GAS)	INACTIVE COMPLETED	OIL	SOUTH PENN OIL (S PENN NAT GAS)	39,567,901	-80,41528	1152	0	0	2913	2913	M M KENDALL 9	UNREPORTED-UNREPORTED
4704900878	47-049-00878-00	DIVERSIFIED ENERGY	PRODUCING	GAS	DIVERSIFIED ENERGY	39,558,453	-80,41585	1410	1420	3342	3342	3342	HAYES, J. L. & A. J. 20	OIL-INACTIVE COMPLETED
4704971913	47-049-71913-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,587,783	-80,42903	1287	0	0	0	0	S C BATSON	UNREPORTED-UNREPORTED
4704971932	47-049-71932-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,582,546	-80,44757	1376	0	0	0	0	NIMROD COLE	UNREPORTED-UNREPORTED
4704932194	47-049-02194-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39,544,802	-80,42739	1014	1023	0	0	0	SNODGRASS, DIANE 5320	OTHER-P & A
4704932271	47-049-02271-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39,548,072	-80,41846	1233	1242	0	0	0	HAYS, J.L. & A.J., #2 5141	OTHER-P & A
4704972173	47-049-72173-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,549,309	-80,41265	1381	0	0	0	0	J J HOLDEN	UNREPORTED-UNREPORTED
4704972073	47-049-72073-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,569,484	-80,41021	1296	0	0	0	0	HENRY STRAIGHT 3	UNREPORTED-UNREPORTED
4704922248	47-049-02248-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39,546,967	-80,41918	1225	1234	0	0	0	MICHAEL, JEFFREY 5139	UNREPORTED-UNREPORTED
4704930555	47-049-30555-00	TRI-STATE PIPE COMPANY, THE	COMPLETED	OIL	TRI-STATE PIPE COMPANY, THE	39,563,472	-80,42344	1360	0	0	3122	3122	KENDALL-BURCHINAL 1	OIL-COMPLETED
4704972174	47-049-72174-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,550,181	-80,41119	1349	0	0	0	0	NOAH BAKER	UNREPORTED-UNREPORTED
4704971992	47-049-71992-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,568,033	-80,42116	1286	0	0	0	0	Z E BATSON 6	UNREPORTED-UNREPORTED
4704900870	47-049-00870-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39,570,79	-80,42284	1120	1130	2906	2906	2906	BATSON, Z. E. & A. M. 5	OTHER-P & A
4704971934	47-049-71934-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,582,837	-80,45038	1401	0	0	0	0	NIMROD COLE	UNREPORTED-UNREPORTED
4704900218	47-049-00218-00	DIVERSIFIED ENERGY SOUTH PENN OIL (S. PENN NAT.	INACTIVE COMPLETED	GAS	DIVERSIFIED PRODUCTION	39,572,03	-80,42013	1170	1179	3022	3022	3022	KENDALL, ALFRED 12	GAS P & A
4704930376	47-049-30376-00	(GAS)	INACTIVE COMPLETED	OIL & GAS	SOUTH PENN OIL (S PENN NAT GAS)	39,577,181	-80,42491	1435	0	0	3232	3232	J W BATSON 5	OIL & GAS-INACTIVE COMPLETED
4704972177	47-049-72177-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,549,745	-80,41797	1128	0	0	0	0	J J HOLDEN	UNREPORTED-UNREPORTED
4704930325	47-049-30325-00	(GAS)	INACTIVE COMPLETED	OIL	SOUTH PENN OIL (S PENN NAT GAS)	39,564,566	-80,41947	1250	0	0	2378	2378	M M KENDALL 3	OIL-INACTIVE COMPLETED
4704900884	47-049-00884-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39,572,967	-80,42753	1184	1194	3041	3041	3041	HAYES, J.L./G. HAYES 33	OTHER-P & A
4704971996	47-049-71996-00	(N/A)	UNREPORTED	UNREPORTED	(N/A)	39,570,555	-80,41722	1181	0	0	0	0	WZ HAYS	UNREPORTED-UNREPORTED
4704900882	47-049-00882-00	DIVERSIFIED ENERGY	P & A	OTHER	DIVERSIFIED PRODUCTION	39,572,677	-80,4249	1194	1204	3003	3003	3003	HAYES, J. L./G. HAYES 30	OTHER-P & A
4704970214	47-049-70214-00	BP	UNREPORTED	UNREPORTED	BP	39,580,952	-80,44102	1076	0	0	0	0	NANCY L MURRAY	UNREPORTED-UNREPORTED

FEB 07 2024  
 WV Department of Environmental Protection

202162224



APL_UWIL_Un	ENVOperato	ENVWellSta	Latitude	Longitude	PermitNumb	PermitStat	PermitType	WellName	WellType			
4704972183	47-049-72183-00 (N/A)	SOUTH PENN OIL (S. PENN NAT.	UNREPORTED	UNREPORTED	(N/A)	39.546642	-80.42247	1155	0	0	JACK HAYS	UNREPORTED-UNREPORTED
4704930382	47-049-30382-00 (GAS)	SOUTH PENN OIL (S. PENN NAT. GAS)	INACTIVE COMPLETED	OIL	SOUTH PENN OIL (S. PENN NAT. GAS)	39.576456	-80.42286	1215	0	3006	HOARD-BATSON 2	OIL-INACTIVE COMPLETED
4704971989	47-049-71989-00 (N/A)		UNREPORTED	UNREPORTED	(N/A)	39.560776	-80.4206	1394	0	0	J L CROUSER ET AL	UNREPORTED-UNREPORTED
4704902360	47-049-02360-00	CONSOLIDATION COAL COMPANY	P & A	OTHER	CONSOLIDATION COAL COMPANY	39.546374	-80.42322	1198	1207	0	HAYS, J.L. & A.J. 5252	OTHER-P & A
4704900229	47-049-00229-00	COBHAM GAS INDUSTRIES, INC.	P & A	GAS	TRANS ENERGY	39.573135	-80.42034	1142	1151	3400	KENDALL 13	GAS-P & A
4704900215	47-049-00215-00	DIVERSIFIED ENERGY	P & A	WATER	DIVERSIFIED PRODUCTION	39.569919	-80.4206	1109	1118	2936	BATSON, ZEBEDEE 8	WATER-P & A
4704970101	47-049-70101-00	DELMAR OIL CO	UNREPORTED	OIL	DELMAR	39.549465	-80.42378	1326	0	3037	A J HAYES	OIL-UNREPORTED
4704971977	47-049-71977-00 (N/A)		UNREPORTED	UNREPORTED	(N/A)	39.574273	-80.42547	1346	0	0	SARAH HAYS	UNREPORTED-UNREPORTED

Permits

APL_UWIL_Un	ENVOperato	ENVWellSta	Latitude	Longitude	PermitNumb	PermitStat	PermitType	WellName	WellType
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4704902184	WEST VIRGINIA LAND RESOURCES, INC.	P & A	39.585619	-80.427226	4704902184 2023-10-30	ACTIVE	PLUG BACK	JONES 2H	GAS
4704902283	WEST VIRGINIA LAND RESOURCES, INC.	P & A	39.58575	-80.42716	4704902283 2023-10-30	ACTIVE	PLUG BACK	JONES 3H	GAS

RECEIVED  
Office of Oil and Gas  
FEB 07 2024  
WV Department of  
Environmental Protection

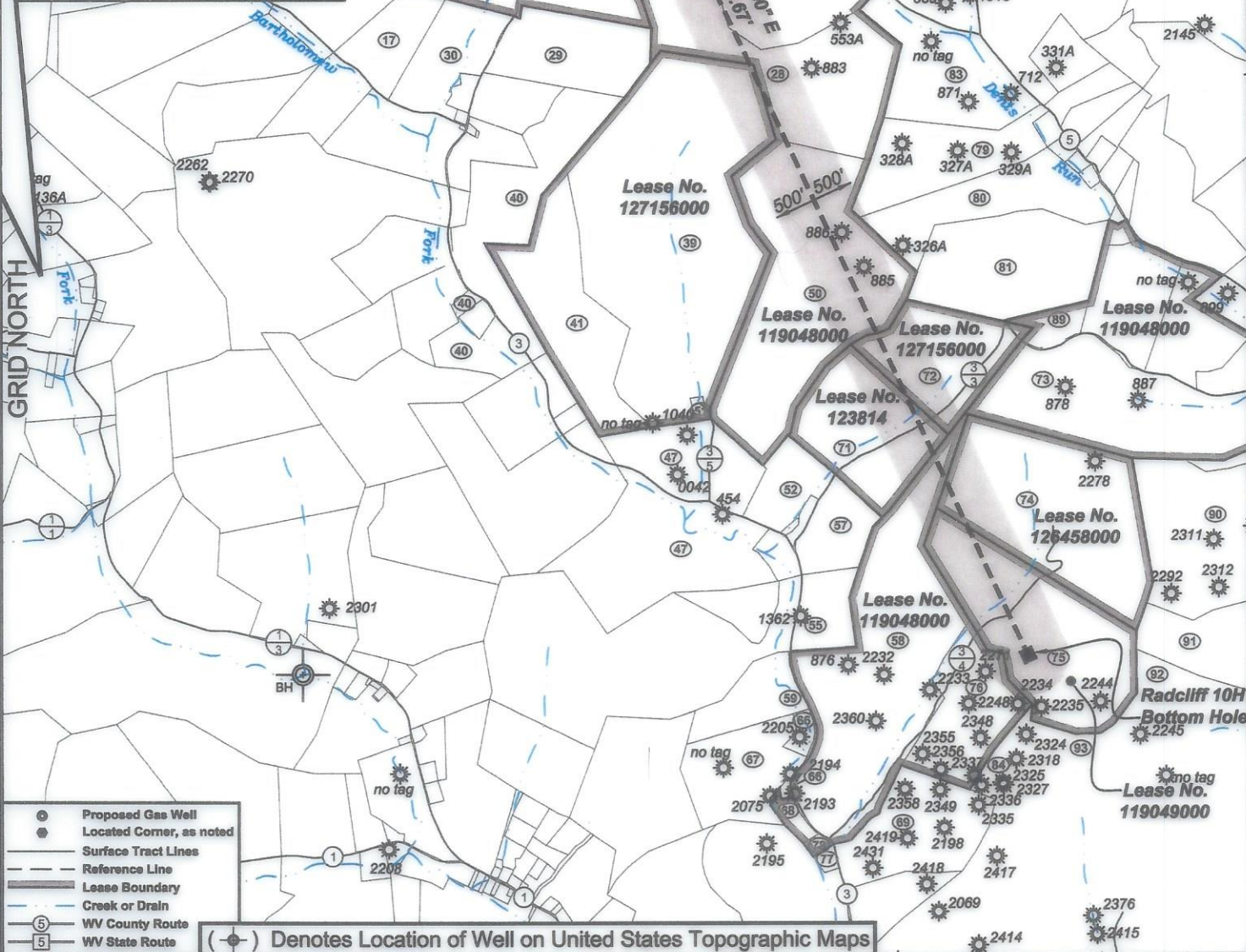
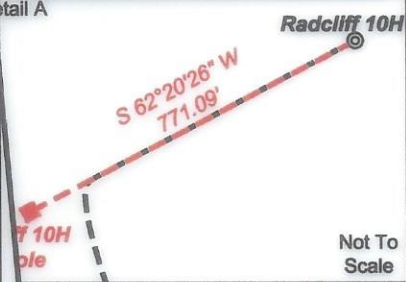
02/16/2024



BH: 11728' LAT: 39-35-00

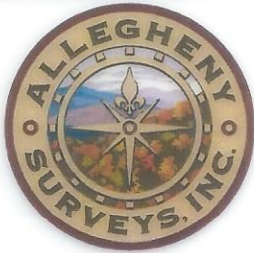
TH: 12635' LONG: 80-22-30

Radcliff 10H  
Radcliff  
EQT Production Company



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

(⊙) Denotes Location of Well on United States Topographic Maps



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

*Ben R. Singleton*  
P.S. 2092



SEAL

FILE NO: 113-21  
 DRAWING NO: Radcliff 10H  
 SCALE: 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: NGS CORS Station

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



DATE: January 30 20 24  
 OPERATOR'S WELL NO.: Radcliff 10H  
 API WELL NO  
 47 - 049 - 02512  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: 1493' WATERSHED Bartholomew Fork QUADRANGLE: Glover Gap  
 DISTRICT: Mannington COUNTY: Marion  
 SURFACE OWNER: Jackie D. & Sheila L. Radcliff ACREAGE: 1090  
 ROYALTY OWNER: Rebecca R. Shuttlesworth, et al. LEASE NO: 109790001 ACREAGE: 1090  
 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: 7916'

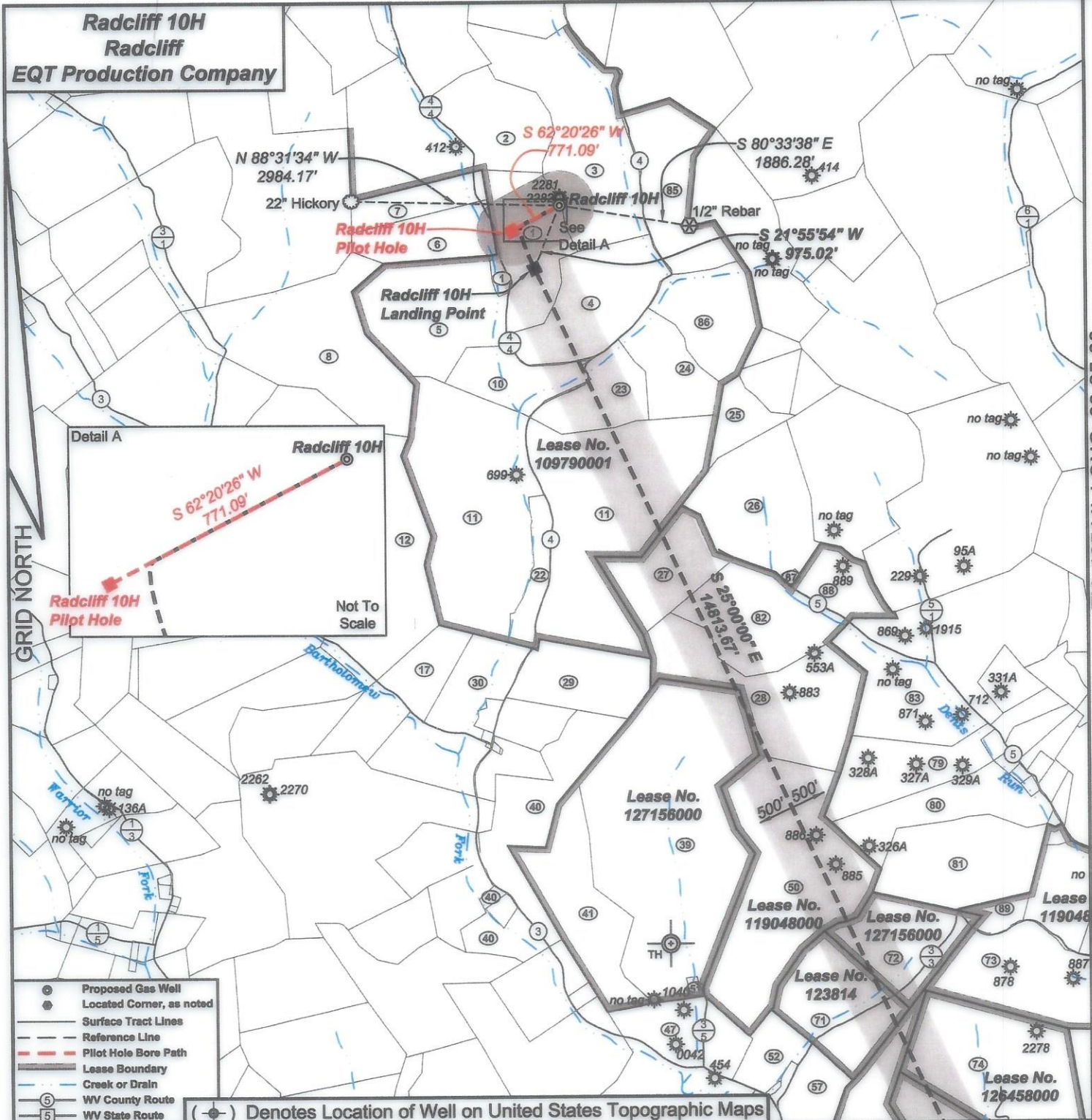
02/16/2024

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow  
 ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive  
 Canonsburg, PA 15317 Clarksburg, WV 26301



TH: 6021' LAT: 39-37-30

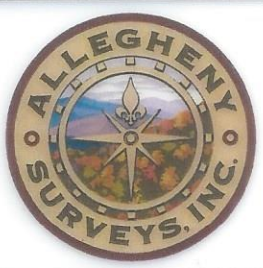
Radcliff 10H  
Radcliff  
EQT Production Company



TH: 13544' LONG: 80-25-00

- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- - - Reference Line
- - - Pilot Hole Bore Path
- 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: 113-21  
DRAWING NO: Radcliff 10H  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: January 30 20 24  
OPERATOR'S WELL NO.: Radcliff 10H  
API WELL NO  
47 - 049 - 02512  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: 1493' WATERSHED Bartholomew Fork QUADRANGLE: Glover Gap  
DISTRICT: Mannington COUNTY: Marion  
SURFACE OWNER: Jackie D. & Sheila L. Radcliff ACREAGE: 1090  
ROYALTY OWNER: Rebecca R. Shuttlesworth, et al. LEASE NO: 109790001 ACREAGE: 1090  
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: 7916'

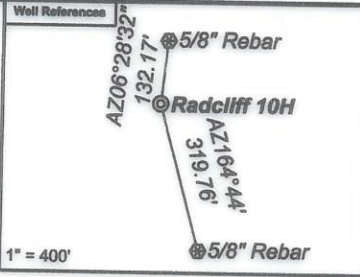
02/16/2024

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow  
ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive  
Canonsburg, PA 15317 Clarksburg, WV 26301



**Radcliff 10H**  
**Radcliff**  
**EQT Production Company**

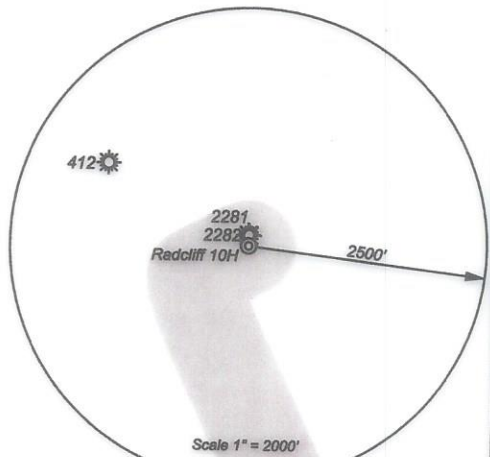
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	40	10.1	Marion	Mannington	Jackie D. & Sheila L. Radcliff	48.08
2	40	10	Marion	Mannington	Shelly L. Nelson	43.03
3	40	3	Marion	Mannington	Jason G. & Heather R. Stout	99.75
4	40	2	Marion	Mannington	Lula B. Knight	56.32
5	40	11	Marion	Mannington	Clarence W. Sweeney	63
6	40	12	Marion	Mannington	Jackie D. & Sheila L. Radcliff	27.35
7	40	13	Marion	Mannington	Shelly L. Nelson	19.75
8	40	18	Marion	Mannington	Nimrod Cole	92.12
10	40	23	Marion	Mannington	Sara M. Pascoe, et al.	26.41
11	39	4	Marion	Mannington	Coastal Forest Resources Company	245.722
12	40	22	Marion	Mannington	James & Natalie Kams	113.25
17	44	14	Marion	Mannington	Charles D. & June Shaver	22.7
22	39	4.1	Marion	Mannington	Thomas R. & Joann McSorley	14.9
23	40	2.2	Marion	Mannington	James W. Boore	29.52
24	40	2.1	Marion	Mannington	Jason G. & Heather R. Stout	29.58
25	39	3	Marion	Mannington	Thomas G. & Theresa A. Jones	10.25
26	39	5	Marion	Mannington	Thomas G. & Theresa A. Jones	61.85
27	38	21.3	Marion	Mannington	David Mafield	37.292
28	38	21	Marion	Mannington	Dennis G. & Louise M. Hayes	74.885
29	38	1	Marion	Mannington	Casey B. & Jennifer J. Allender	37.25
30	44	11	Marion	Mannington	Charles D. & June Shaver	57.75
39	38	10	Marion	Mannington	Thomas E. & Andrea G. Ryan	176.15
40	38	8	Marion	Mannington	John D. & Raji K. Carson	64.56
41	38	9	Marion	Mannington	Thomas E. & Andrea G. Ryan	62
47	44	1	Marion	Mannington	Edna Marie Cain	107.5
50	38	11	Marion	Mannington	Yulia Nikolaeva	115
51	38	10.1	Marion	Mannington	Michael E. & Laura A. Gorbey	1.15
52	38	13.3	Marion	Mannington	Christine L. Fragale, et al.	15.87
55	37	21	Marion	Mannington	Justin R. Cain	129.85
57	38	13.1	Marion	Mannington	Christine L. Fragale, et al.	16.56
58	37	22	Marion	Mannington	Jeffrey H. Michael	166.83
59	37	20	Marion	Mannington	Justin R. Cain	18
66	37	19	Marion	Mannington	Gary E. Snodgrass	3.61
67	37	18	Marion	Mannington	Tommy L. & Terri A. Snodgrass	31.65
68	37	22.1	Marion	Mannington	Ronald C. & Betty L. Michael, et al.	5.17
69	37	17	Marion	Mannington	Jeffrey H. Michael	86.04
71	38	14	Marion	Mannington	Nancy M. Riggs	52
72	38	14.1	Marion	Mannington	John A. Mayhew, Jr.	48
73	37	34	Marion	Mannington	James D. Alkinson	112.5
74	37	23	Marion	Mannington	Christine L. Fragale, et al.	95
75	37	24	Marion	Mannington	Jeffrey H. Michael	79
76	37	25	Marion	Mannington	Jeffrey H. Michael	33.75
77	37	17.1	Marion	Mannington	Ronald C. & Betty L. Michael	1.46
78	37	22.2	Marion	Mannington	Ronald C. & Betty L. Michael	1.5
79	38	19	Marion	Mannington	Dorothy D. Hendershot	38.246
80	38	19.4	Marion	Mannington	William E. Hendershot	39.702
81	38	15	Marion	Mannington	Michael & Julia A. Billie	58.67
82	38	21.2	Marion	Mannington	Douglas E. & Debora J. Mafield	54.669
83	38	20	Marion	Mannington	Dennis G. & Louise M. Hayes	59.24
84	37	28	Marion	Mannington	Harrison County Coal Resources Inc	91
85	26	16	Marion	Mannington	Jason G. & Heather R. Stout	48.12
86	39	2	Marion	Mannington	Lula B. Knight	43.39
87	39	6	Marion	Mannington	Thomas G. & Theresa A. Jones	0.65
88	38	21.1	Marion	Mannington	Ronald & Jean Hayes	21.55
89	38	16	Marion	Mannington	Michael & Julia A. Billie	7.65
90	37	31	Marion	Mannington	Marion County Coal Resources Inc.	109.2
91	37	30	Marion	Mannington	Marion County Coal Resources Inc.	107
92	37	29	Marion	Mannington	Marion County Coal Resources Inc.	89.25
93	37	28.1	Marion	Mannington	Marshall & Dick Cartright	10



**Notes:**  
Radcliff 10H coordinates are  
NAD 83 N: 397,594.74 E: 1,704,145.51  
NAD 83 Lat: 39.587819 Long: -80.438031  
NAD 83 UTM N: 4,382,161.56 E: 548,256.82  
Radcliff 10H Landing Point coordinates are  
NAD 83 N: 396,690.28 E: 1,703,781.33  
NAD 83 Lat: 39.585325 Long: -80.439290  
NAD 83 UTM N: 4,381,884.16 E: 548,150.47  
Radcliff 10H Bottom Hole coordinates are  
NAD 83 N: 383,264.53 E: 1,710,041.86  
NAD 83 Lat: 39.548845 Long: -80.416591  
NAD 83 UTM N: 4,377,825.66 E: 550,126.09  
West Virginia Coordinate system of 1983 (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.

- Radcliff**
- Radcliff 18H ☉
  - Radcliff 16H ☉
  - Radcliff 14H ☉
  - Radcliff 12H ☉
  - Radcliff 10H ☉
  - Radcliff 8H ☉
  - Radcliff 6H ☉
  - Radcliff 4H ☉

Lease No.	Owner	Acres
109790001	Rebecca R. Shuttlesworth, et al.	1090
119048000	Lee and Hall Royalties, et al.	809
127156000	EQT Production Company, et al.	240
127156000	EQT Production Company, et al.	48.43125
123814	XTO Energy, Inc.	52
128458000	Melania Higginbotham Arevalo de Brol, et al.	95
119049000	EQT Production Company	79



*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: 113-21  
DRAWING NO: Radcliff 10H  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: January 30 20 24  
OPERATOR'S WELL NO.: Radcliff 10H  
API WELL NO  
47 - 049 - 02512  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: 1493' WATERSHED Bartholomew Fork QUADRANGLE: Glover Gap  
DISTRICT: Mannington COUNTY: Marion  
SURFACE OWNER: Jackie D. & Sheila L. Radcliff  
ROYALTY OWNER: Rebecca R. Shuttlesworth, et al. LEASE NO: 109790001 ACREAGE: 1090  
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: 7916'  
WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow  
ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive  
Canonsburg, PA 15317 Clarksburg, WV 26301

02/16/2024



**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 Attachment				

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

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

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

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

Well Operator: EQT Production Company

By: John Zavatchan

Its: Project Specialist - Permitting

Lease No.	Grantor, Lessor, etc.	Acres	Grantee, Lessee, etc.	Royalty	Book/Page
<u>109790001</u>	<u>Rebecca R. Shuttlesworth, et al.</u> Rebecca R. Shuttlesworth, Power of Attorney for Robert Lee Gwinn, Sr., Widower American Shale Development, Inc. Republic Partners VIII, LLC Republic Energy Ventures, LLC American Shale Development, Inc.	1090 ac	American Shale Development, Inc. Republic Energy Ventures, LLC Republic Partners VIII, LLC EQT Production Company EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 1117/329 AB 47/469 AB 51/525 DB 1228/1
<u>119048000</u>	<u>Lee and Hall Royalties, et al.</u> J.L. Hays and A.J. Hays Delmar Oil Company E. H. Jennings Bros. Company Quaker State Oil Refining Corporation	809 ac	Delmar Oil Company E. H. Jennings Bros. Company Quaker State Oil Refining Corporation B-C Oil and Gas Company, Inc. Clarence W. Mutschelknaus, Sr. Clarence W. Mutschelknaus, Jr. Jacklyn A. Rominger William R. Johnson Cobham Gas Industries, Inc. Prima Oil Company Trans Energy, Inc. Republic Energy Ventures, LLC Republic Energy Ventures, LLC Trans Energy, Inc. American Shale Development, Inc. Republic Partners VIII, LLC EQT Production Company EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 88/427 DB 354/341 DB 467/61 DB 754/403 AB 6/132 AB 12/293 AB 15/339 AB 27/258 AB 30/165 AB 39/953 AB 41/325 DB 1113/756 AB 43/420 AB 47/469 AB 51/525 DB 1228/1

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<u>127156000</u>	<u>EQT Production Company, et al.</u> Republic Energy Ventures, LLC Republic Partners VIII, LLC	240 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 1200/1
<u>127156000</u>	<u>EQT Production Company, et al.</u> Republic Energy Ventures, LLC Republic Partners VIII, LLC	48.43125 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	BK 1200/1
<u>123814</u>	<u>XTO Energy, Inc.</u> XTO Energy, Inc.	52 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 1341/1004
<u>126458000</u>	<u>Melania Higginbotham Arevalo de Brol, et al.</u> Melania Higginbotham Arevalo de Brol and Cesar Atilio Brol Valencia, wife and husband	95 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 1248/348
<u>119049000</u>	<u>EQT Production Company</u> Dwight F. Garner	79 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 1238/478

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February 2, 2024

Via FedEx Overnight Delivery

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

RE: Well Work Permit Application Modification – EXPEDITED REVIEW REQUESTED  
Radcliff 10H  
Permit Number 47-049-02512  
Mannington District, Marion County, WV

WVDEP Recipient,

Attached please find the Well Work Permit Application for the well referenced above. You will find the following included with this submittal:

- Check in the amount \$2,500.00 for the permit fee and an additional \$5,000.00 for the expedited permit modification fee
- Completed WW-6B and supporting documents, approved by the O&G Inspector
- Well Location Plat
- Completed Form WW-6A1 and supporting documentation
- Hydraulic Fracturing Monitoring Plan
- Offset Well Map and Table
- Water Management Plan Modification Application

EQT is proposing to extend the lateral from the previously permitted length and add a shallow pilot hole (not more than 100' below the top of the Onondaga).

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

Best Regards,

John Zavatchan  
Project Specialist – Permitting  
[jzavatchan@eqt.com](mailto:jzavatchan@eqt.com)  
724-746-9073

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CK# 602145  
\$5000<sup>00</sup>  
CK# 601413  
\$2500<sup>00</sup>

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