

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

APPROVED K7 3/24/25

FEB 24 2025
WV Department of
Environmental Protection

API 47 - 049 - 02518 County Marion District Mannington
Quad Glover Gap Pad Name RADCLIFF Field/Pool Name N/A
Farm name Jackie D. and Sheila L. Radcliff Well Number Radcliff 8H (L004664)
Operator (as registered with the OOG) EQT Production Company
Address 400 Woodcliff Drive City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,382,157.11 Easting 548,257.83
Landing Point of Curve Northing 4,381,647.13 Easting 547,929.24
Bottom Hole Northing 4,377,691.77 Easting 549,850.23

Elevation (ft) 1493' GL Type of Well ☒ New ☐ Existing Type of Report ☐ Interim ☒ Final
Permit Type ☐ Deviated ☐ Horizontal ☒ Horizontal 6A ☐ Vertical Depth Type ☐ Deep ☒ Shallow
Type of Operation ☐ Convert ☐ Deepen ☒ Drill ☐ Plug Back ☐ Redrilling ☐ Rework ☒ Stimulate
Well Type ☐ Brine Disposal ☐ CBM ☒ Gas ☐ Oil ☐ Secondary Recovery ☐ Solution Mining ☐ Storage ☐ Other _____
Type of Completion ☒ Single ☐ Multiple Fluids Produced ☐ Brine ☒ Gas ☐ NGL ☐ Oil ☐ Other _____
Drilled with ☐ Cable ☒ Rotary

Drilling Media Surface hole ☒ Air ☐ Mud ☐ Fresh Water Intermediate hole ☒ Air ☐ Mud ☐ Fresh Water ☐ Brine
Production hole ☒ Air ☒ Mud ☐ Fresh Water ☐ Brine

Mud Type(s) and Additive(s)

Synthetic Oil Based Mud 13.68 ppg barium sulfate, sodium chloride, xanthan gum, polyanionic cellulose, modified starch, sodium hydroxide, phosphonates and alkyl phosphates, glutaraldehyde solution, calcium hydroxide,
partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 09/27/2023 Date drilling commenced 11/04/2023 Date drilling ceased 03/19/2024
Date completion activities began 09/12/2024 Date completion activities ceased 11/24/2024
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 448', 478', 609', 739', 893' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2114' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1190', 1285' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

04/11/2025

API 47- 049 - 02518 Farm name Jackie D. and Sheila L. Radcliff Well number Radcliff 8H (L004664)

CASING STRINGS	Hole Size	Casing Size	Depth (GL)	New or Used	Grade wt/ft	Basket Depth(s) (GL)	Did cement circulate (Y/ N) * Provide details below*
Conductor	30"	26"	40'	NEW	A-500 85.6#	N/A	Y
Surface	17-1/2"	13-3/8"	1359'	NEW	J-55 54.5#	1262'	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2723'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	6"	23,168'	NEW	P-110 24#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production cmt has calculated TOC of 1230'GL, which is greater than 500'TVD above the producing formation. No issues.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (GL)	WOC (hrs)
Conductor	CLASS A	83	15.6	1.18	98	0	8+
Surface	CLASS L	1265	16.0	1.09	1379	0	8
Coal							
Intermediate 1	CLASS L	1005	15.6	1.14	1146	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3795	15.0	1.18	4478	1230'	8+
Tubing							

Drillers TD (ft) 23,184' Loggers TD (ft) N/A
Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
Plug back procedure _____

Kick off depth (ft) 2991'
Check all wireline logs run ☐ caliper ☐ density ☒ deviated/directional ☐ induction
☐ neutron ☐ resistivity ☒ gamma ray ☐ temperature ☐ sonic

Well cored ☐ Yes ☒ No ☐ Conventional ☐ Sidewall Were cuttings collected ☐ Yes ☒ No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
CONDUCTOR- NONE
SURFACE- ON SHOE TRACK AND EVERY 500' TO SURFACE
INTERMEDIATE: ON SHOE TRACK AND EVERY 500' FEET TO SURFACE
PRODUCTION: ON SHOE TRACK, EVERY OTHER JOINT TO 8954', EVERY JOINT TO 7433' AND EVERY OTHER JOINT TO 1996'

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS _____

WERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED _____

04/11/2025

API 47- 049 - 02518

Farm name Jackie D. and Sheila L. Radcliff Well number Radcliff 8H (L004664)

PERFORATION RECORD

[illegible]

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

04/11/2025

Well number Radcliff 8H (L004664)

DEPTHS

MD

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	
	NAME TVD	TVD	MD	MD	

[illegible]

Attach copy of FRACFOCUS Registry

04/11/2025

API 47- 049 - 02518 Farm name Jackie D. and Sheila L. Radcliff Well number Radcliff 8H (L004664)

Drilling Contractor Falcon (Rig 25)
Address 1120 US-119 City Indiana State PA Zip 15701

Logging Company Scientific Drilling International
Address 3475 Washington Ave City Finleyville State PA Zip 15332

Logging Company GyroData
Address 73 Noblestown Road City Carnegie State PA Zip 15106

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

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Office of Oil and Gas

FEB 24 2025

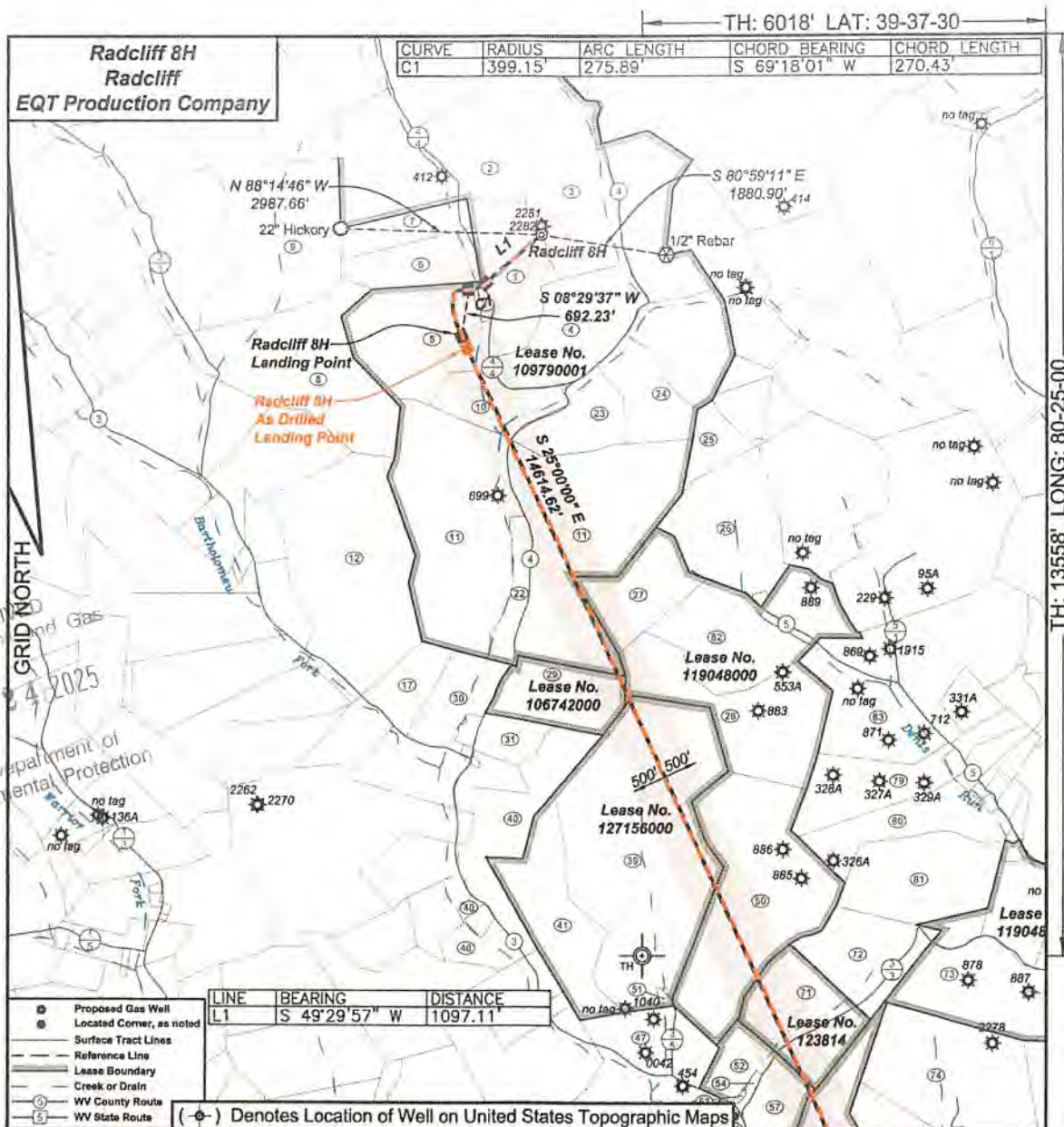
WV Department of
Environmental Protection

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Well # RADCLIFF 8H Final Formations API# 47-049-02518				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	1,190	1,190
Sewickley Coal	1,190	1,190	1,194	1,194
Sand/Shale	1,194	1,194	1,285	1,285
Pittsburgh Coal	1,285	1,285	1,292	1,292
Sand/Shale	1,292	1,292	2,455	2,454
Big Lime	2,455	2,454	2,528	2,527
Big Injun	2,528	2,527	2,656	2,655
Sand/Shale	2,656	2,655	2,771	2,770
Berea	2,771	2,770	3,346	3,342
Gordon	3,346	3,342	3,508	3,500
Bayard	3,508	3,500	5,949	5,791
Alexander	5,949	5,791	6,394	6,205
Elks	6,394	6,205	7,419	7,153
Sonyea	7,419	7,153	7,594	7,314
Middlesex	7,594	7,314	7,660	7,375
Genesee	7,660	7,375	7,786	7,489
Geneseo	7,786	7,489	7,827	7,525
Tully	7,827	7,525	7,876	7,567
Hamilton	7,876	7,567	8,089	7,725
Marcellus	8,089	7,725	23,184	7,936

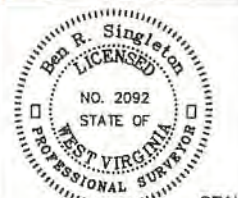
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I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

P.S. 2092



FILE NO: 113-21
DRAWING NO: Radcliff 8H
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

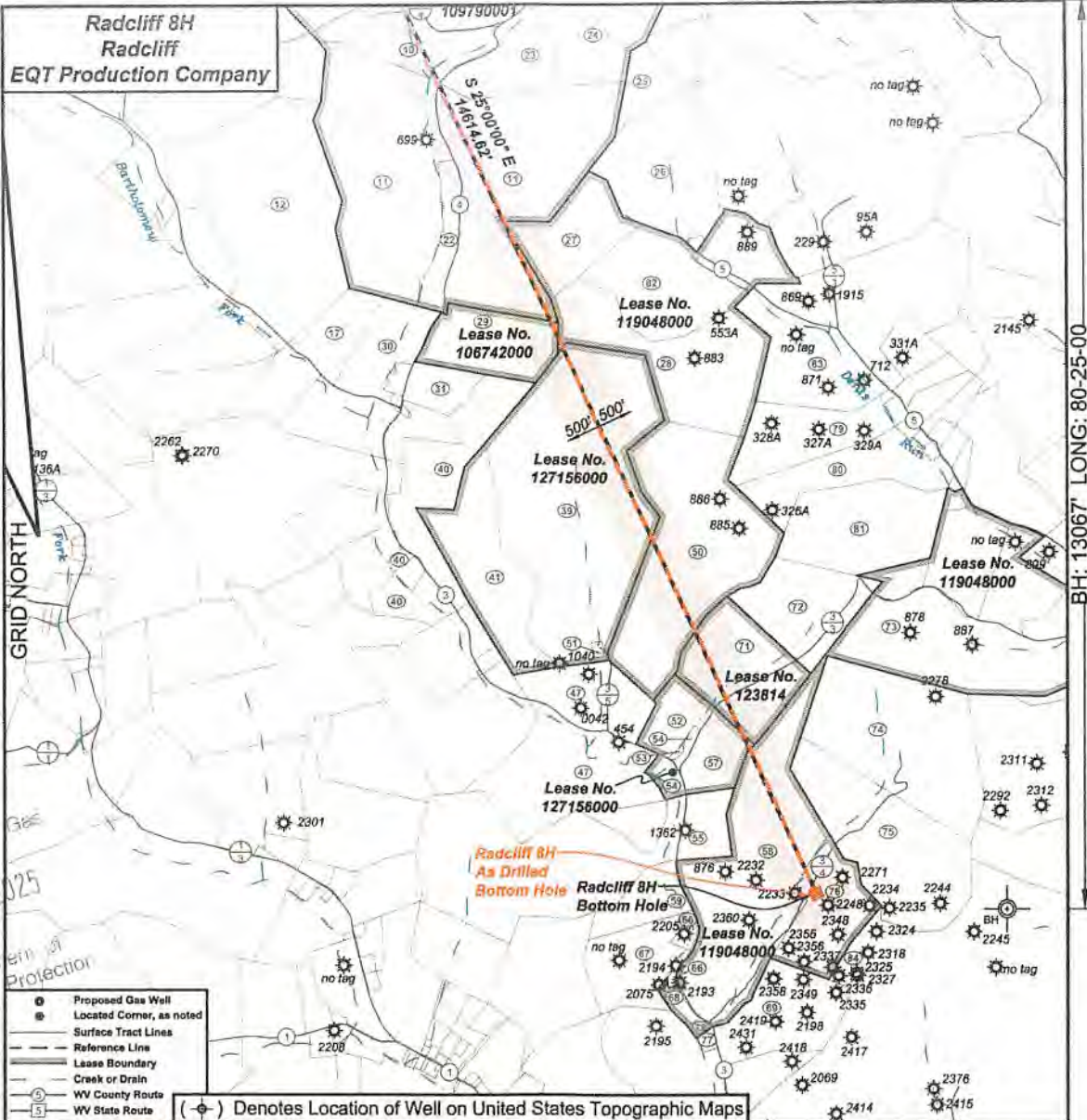
DATE: March 21 20 24
OPERATOR'S WELL NO.: Radcliff 8H
API WELL NO
47 - 049 - 02518
STATE COUNTY PERMIT

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: 48.08
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

04/11/2025

BH: 881' LAT: 39-35-00

Radcliff 8H
Radcliff
EQT Production CompanyRECEIVED
Office of Oil and Gas

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WV Department of
Environmental Protection

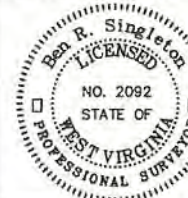
- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- WV County Route
- WV State Route

() Denotes Location of Well on United States Topographic Maps



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SEAL

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

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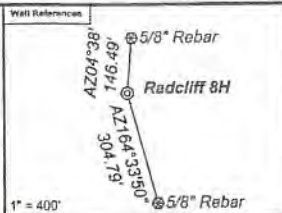
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☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7915'

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

04/11/2025

Radcliff 8H
Radcliff
EQT Production Company

Tract ID	Tract Map No.	Parcel No.	County	Owner	Surface Tract Owner	Acres
1	40	10	Marion	Marion	Marion	48.08
2	40	10	Marion	Marion	Marion	48.08
3	40	10	Marion	Marion	Marion	48.08
4	40	10	Marion	Marion	Marion	48.08
5	40	10	Marion	Marion	Marion	48.08
6	40	10	Marion	Marion	Marion	48.08
7	40	10	Marion	Marion	Marion	48.08
8	40	10	Marion	Marion	Marion	48.08
9	40	10	Marion	Marion	Marion	48.08
10	40	10	Marion	Marion	Marion	48.08
11	40	10	Marion	Marion	Marion	48.08
12	40	10	Marion	Marion	Marion	48.08
13	40	10	Marion	Marion	Marion	48.08
14	40	10	Marion	Marion	Marion	48.08
15	40	10	Marion	Marion	Marion	48.08
16	40	10	Marion	Marion	Marion	48.08
17	40	10	Marion	Marion	Marion	48.08
18	40	10	Marion	Marion	Marion	48.08
19	40	10	Marion	Marion	Marion	48.08
20	40	10	Marion	Marion	Marion	48.08
21	40	10	Marion	Marion	Marion	48.08
22	40	10	Marion	Marion	Marion	48.08
23	40	10	Marion	Marion	Marion	48.08
24	40	10	Marion	Marion	Marion	48.08
25	40	10	Marion	Marion	Marion	48.08
26	40	10	Marion	Marion	Marion	48.08
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28	40	10	Marion	Marion	Marion	48.08
29	40	10	Marion	Marion	Marion	48.08
30	40	10	Marion	Marion	Marion	48.08
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40	40	10	Marion	Marion	Marion	48.08
41	40	10	Marion	Marion	Marion	48.08
42	40	10	Marion	Marion	Marion	48.08
43	40	10	Marion	Marion	Marion	48.08
44	40	10	Marion	Marion	Marion	48.08
45	40	10	Marion	Marion	Marion	48.08
46	40	10	Marion	Marion	Marion	48.08
47	40	10	Marion	Marion	Marion	48.08
48	40	10	Marion	Marion	Marion	48.08
49	40	10	Marion	Marion	Marion	48.08
50	40	10	Marion	Marion	Marion	48.08
51	40	10	Marion	Marion	Marion	48.08
52	40	10	Marion	Marion	Marion	48.08
53	40	10	Marion	Marion	Marion	48.08
54	40	10	Marion	Marion	Marion	48.08
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65	40	10	Marion	Marion	Marion	48.08
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67	40	10	Marion	Marion	Marion	48.08
68	40	10	Marion	Marion	Marion	48.08
69	40	10	Marion	Marion	Marion	48.08
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71	40	10	Marion	Marion	Marion	48.08
72	40	10	Marion	Marion	Marion	48.08
73	40	10	Marion	Marion	Marion	48.08
74	40	10	Marion	Marion	Marion	48.08
75	40	10	Marion	Marion	Marion	48.08
76	40	10	Marion	Marion	Marion	48.08
77	40	10	Marion	Marion	Marion	48.08
78	40	10	Marion	Marion	Marion	48.08
79	40	10	Marion	Marion	Marion	48.08
80	40	10	Marion	Marion	Marion	48.08
81	40	10	Marion	Marion	Marion	48.08
82	40	10	Marion	Marion	Marion	48.08
83	40	10	Marion	Marion	Marion	48.08
84	40	10	Marion	Marion	Marion	48.08

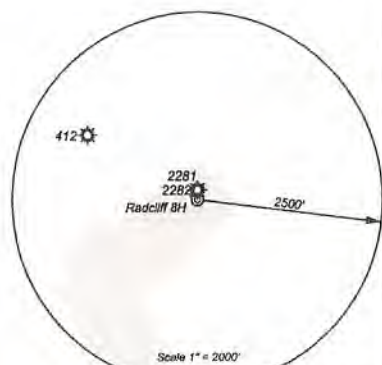


As Drilled Well Information:
Radcliff 8H coordinates are:
NAD 83 N: 397,580.09 E: 1,704,148.58
NAD 83 UTM N: 4,382,157.11 E: 548,257.83
Radcliff 8H Landing Point coordinates are:
NAD 83 N: 395,524.82 E: 1,703,042.41
NAD 83 UTM N: 4,381,647.13 E: 547,929.24
Radcliff 8H Bottom Hole coordinates are:
NAD 83 N: 382,840.30 E: 1,709,129.32
NAD 83 UTM N: 4,377,691.77 E: 549,850.23
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

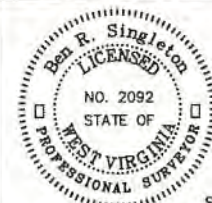
Lease No.	Owner	Acres
109790001	Rebecca R. Shuttlesworth, et al.	1090
119048000	Lee and Hall Royalties, et al.	809
106742000	The Sheila Lightfoot Revocable Trust, et al.	37.25
127156000	EQT Production Company, et al.	240
123814	XTO Energy, Inc.	52
127156000	EQT Production Company, et al.	41

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Ben R. Singleton
P.S. 2092



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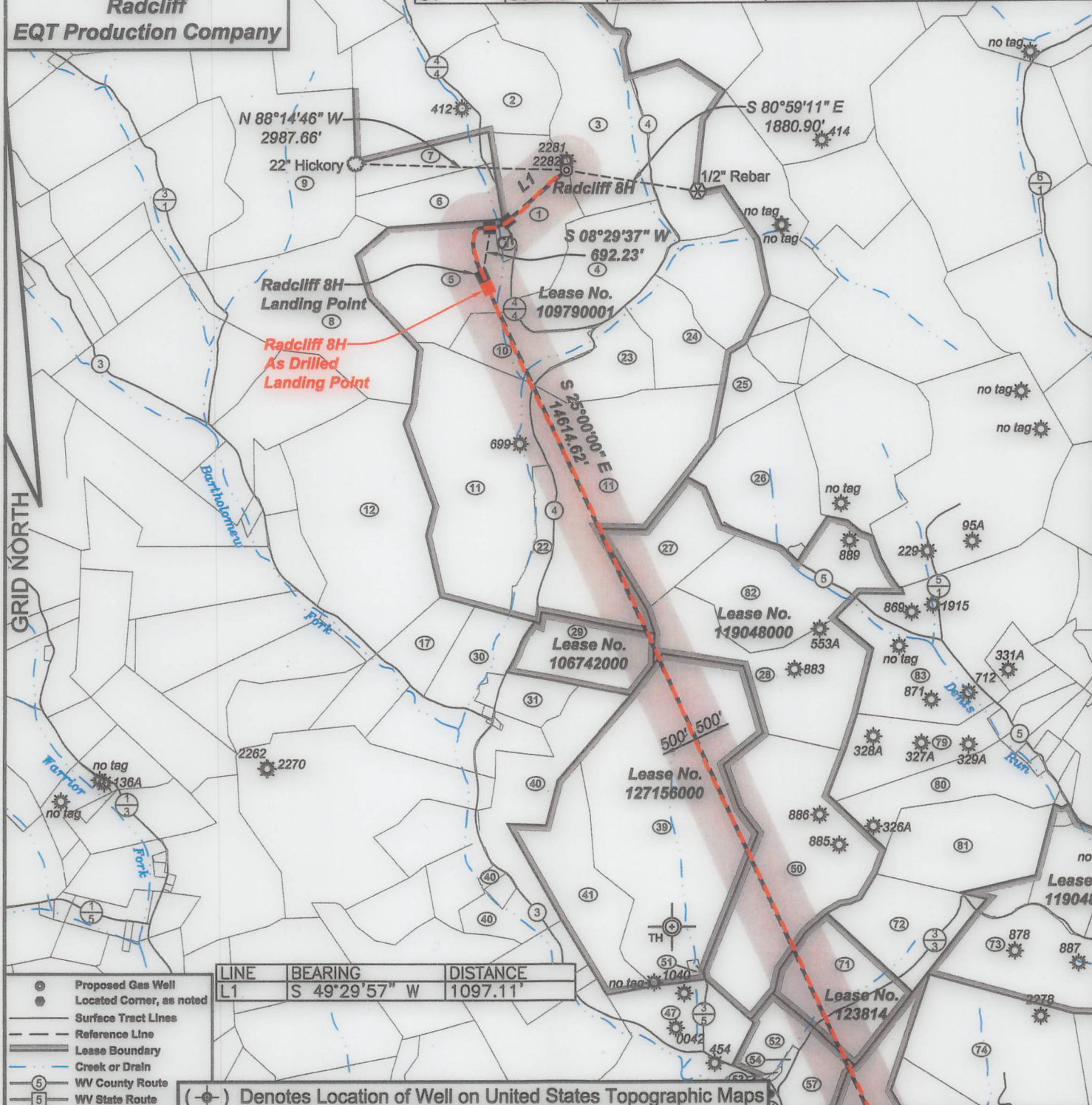
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ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive
Canonsburg, PA 15317 Clarksburg, WV 26301

04/11/2025

TH: 6018' LAT: 39-37-30

**Radcliff 8H
Radcliff
EQT Production Company**

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	399.15'	275.89'	S 69°18'01" W	270.43'

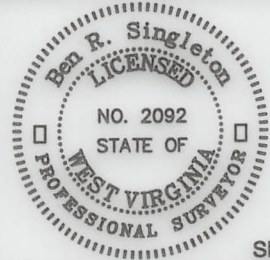


TH: 13558' LONG: 80-25-00.



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B. R. S. S.
P.S. 2092



SEAL

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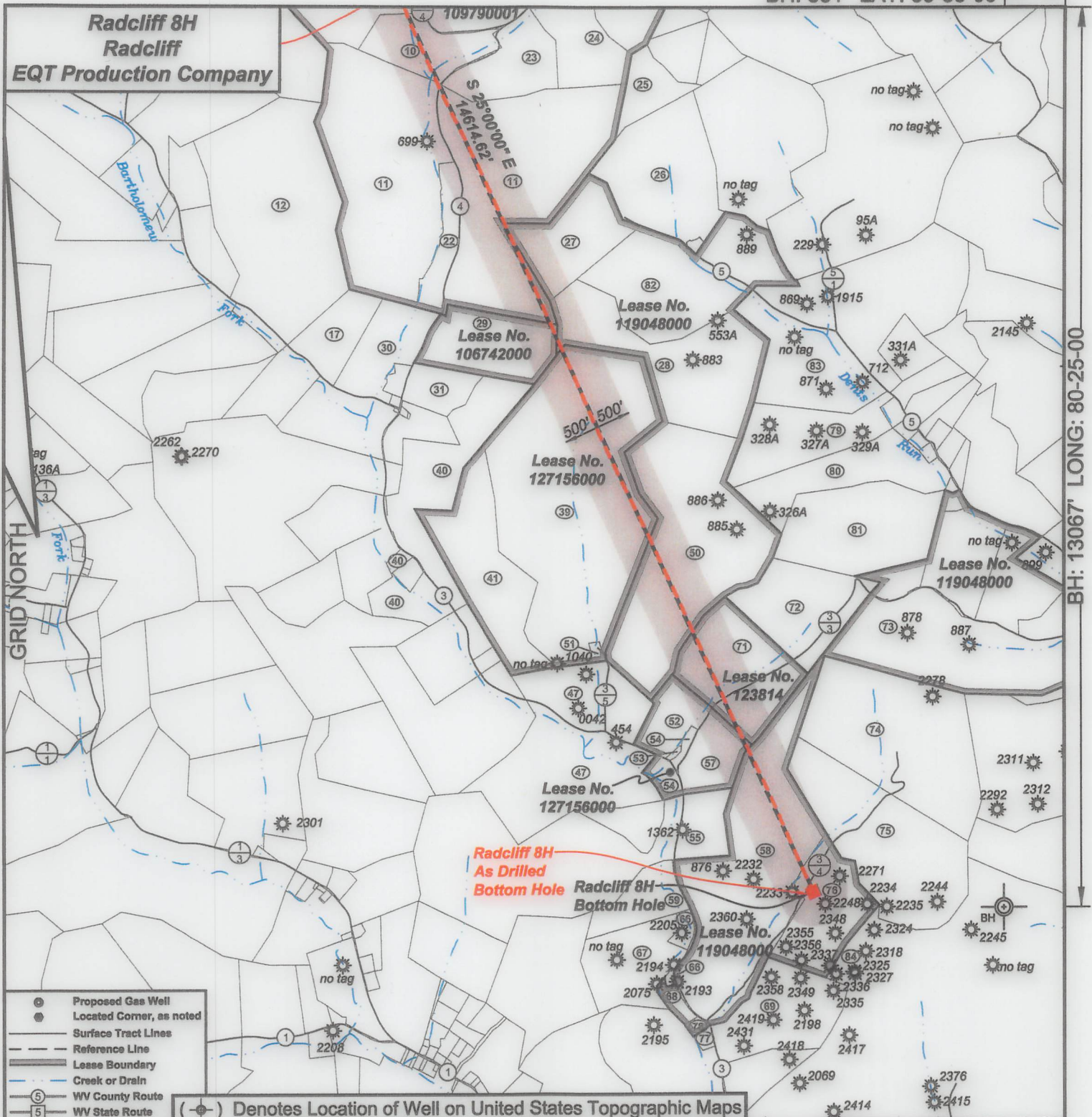
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BH: 881' LAT: 39-35-00

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Radcliff
EQT Production Company



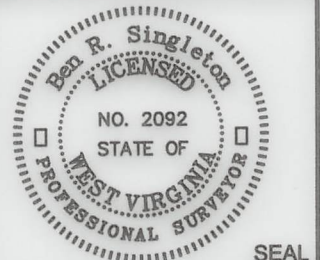
BH: 13067' LONG: 80-25-00



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



SEAL

FILE NO: 113-21

DRAWING NO: Radcliff 8H

SCALE: 1" = 2000'

MINIMUM DEGREE OF ACCURACY:
1:2500PROVEN SOURCE OF ELEVATION:
NGS CORS Station

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



DATE: March 21 20 24

OPERATOR'S WELL NO.: Radcliff 8H

API WELL NO

47	049	02518
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: 48.08

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

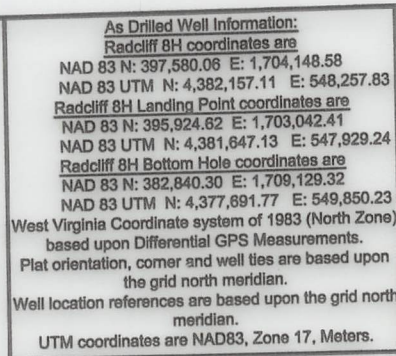
ADDRESS: 427 Midstate Drive

Canonsburg, PA 15317

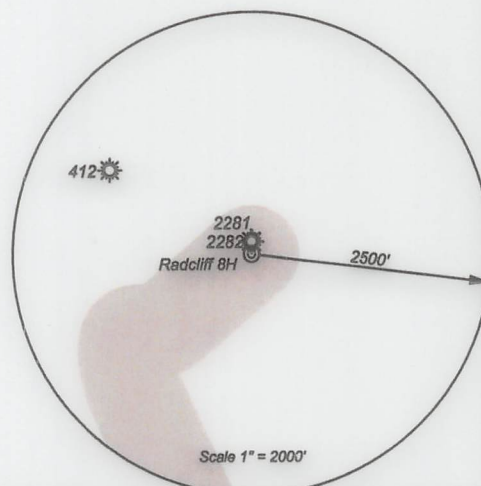
Clarksburg, WV 26301

04/11/2025

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	37.08
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 O. & Sheila L. Radcliff	27.35
7	40	13	Marion	Mannington	Shelly L. Nelson	19.75
8	40	18	Marion	Mannington	Nimrod Cole	92.12
9	40	17	Marion	Mannington	Steven B. Newbraugh	108.7
10	40	23	Marion	Mannington	Sara M. Pascoe, et al.	76.41
11	39	4	Marion	Mannington	Coastal Forest Resources Company	245.722
12	40	22	Marion	Mannington	James & Nattalin Kerns	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	47.08
28	38	21	Marion	Mannington	Dennis G. & Louise M. Hayes	74.885
29	38	1	Marion	Mannington	Casey B. & Jennifer I. Allender	37.25
30	44	11	Marion	Mannington	Charles D. & June Shaver	57.75
31	38	2	Marion	Mannington	Justin & Kendra Davis	13.05
39	38	10	Marion	Mannington	Thomas E. & Andrea G. Ryan	176.15
40	38	8	Marion	Mannington	John D. & Rajl K. Carson	64.36
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 Nilolaeva	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
53	38	13	Marion	Mannington	Cindy Slater, et al.	0.54
54	38	13.2	Marion	Mannington	Christine L. Fragale, et al.	7
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. Atkinson	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

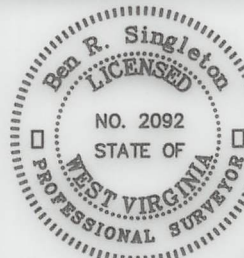


<u>Lease No.</u>	<u>Owner</u>	<u>Acres</u>
109790001	Rebecca R. Shuttlesworth, et al.	1090
119048000	Lee and Hall Royalties, et al.	809
106742000	The Sheila Lightfoot Revocable Trust, et al.	37.25
127156000	EQT Production Company, et al.	240
123814	XTO Energy, Inc.	52
127156000	EQT Production Company, et al.	41



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.

Bruce H. Stark
P.S. 2092



SEAL

FILE NO: 113-21
DRAWING NO: Radcliff 8H
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: March 21 20 24
 OPERATOR'S WELL NO.: Radcliff 8H
 API WELL NO
47 - 049 - 02518
 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 04/11/2025

SURFACE OWNER: Jackie D. & Sheila L. Radcliff		ACREAGE: 48.08
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

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Perforation Data

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Stage No.	Perforation Date	Stage Perforated From TMD Ft.	Stage Perforated To TMD Ft.	# of Perforations/Stage	Formation(s)
2	09/13/2024	23082	22900	40	Marcellus
3	09/13/2024	22881	22700	40	Marcellus
4	09/14/2024	22681	22499	40	Marcellus
5	09/14/2024	22480	22299	40	Marcellus
6	09/15/2024	22280	22098	40	Marcellus
7	09/15/2024	22079	21898	40	Marcellus
8	09/15/2024	21879	21697	40	Marcellus
9	09/16/2024	21678	21497	40	Marcellus
10	09/16/2024	21478	21296	40	Marcellus
11	09/16/2024	21277	21096	40	Marcellus
12	09/17/2024	21077	20895	40	Marcellus
13	09/17/2024	20876	20695	40	Marcellus
14	09/18/2024	20676	20494	40	Marcellus
15	09/18/2024	20475	20294	40	Marcellus
16	09/19/2024	20275	20093	40	Marcellus
17	09/19/2024	20074	19893	40	Marcellus
18	09/19/2024	19874	19692	40	Marcellus
19	09/20/2024	19673	19492	40	Marcellus
20	09/20/2024	19473	19291	40	Marcellus
21	09/20/2024	19272	19091	40	Marcellus
22	09/21/2024	19072	18890	40	Marcellus
23	09/21/2024	18871	18690	40	Marcellus
24	09/22/2024	18671	18489	40	Marcellus
25	09/22/2024	18470	18289	40	Marcellus
26	09/23/2024	18270	18088	40	Marcellus
27	09/23/2024	18069	17888	40	Marcellus
28	09/24/2024	17869	17687	40	Marcellus
29	09/24/2024	17668	17487	40	Marcellus
30	09/25/2024	17468	17286	40	Marcellus
31	09/25/2024	17267	17086	40	Marcellus
32	09/25/2024	17067	16885	40	Marcellus
33	09/26/2024	16866	16685	40	Marcellus
34	09/27/2024	16666	16484	40	Marcellus
35	09/27/2024	16465	16284	40	Marcellus
36	09/27/2024	16265	16083	40	Marcellus
37	09/27/2024	16064	15883	40	Marcellus
38	09/28/2024	15864	15682	40	Marcellus
39	09/28/2024	15663	15482	40	Marcellus
40	09/29/2024	15463	15281	40	Marcellus
41	09/29/2024	15262	15081	40	Marcellus
42	09/29/2024	15062	14880	40	Marcellus

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43	09/30/2024	14861	14680	40	Marcellus
44	09/30/2024	14661	14479	40	Marcellus
45	09/30/2024	14460	14279	40	Marcellus
46	10/01/2024	14260	14078	40	Marcellus
47	10/01/2024	14059	13878	40	Marcellus
48	10/02/2024	13859	13677	40	Marcellus
49	10/02/2024	13658	13477	40	Marcellus
50	10/02/2024	13458	13276	40	Marcellus
51	10/03/2024	13257	13076	40	Marcellus
52	10/03/2024	13057	12875	40	Marcellus
53	10/04/2024	12856	12675	40	Marcellus
54	10/04/2024	12656	12474	40	Marcellus
55	10/04/2024	12455	12274	40	Marcellus
56	10/05/2024	12255	12073	40	Marcellus
57	10/05/2024	12054	11873	40	Marcellus
58	10/05/2024	11854	11672	40	Marcellus
59	10/06/2024	11653	11472	40	Marcellus
60	10/06/2024	11453	11271	40	Marcellus
61	10/06/2024	11252	11071	40	Marcellus
62	10/07/2024	11052	10870	40	Marcellus
63	10/07/2024	10851	10670	40	Marcellus
64	10/08/2024	10651	10469	40	Marcellus
65	10/08/2024	10450	10269	40	Marcellus
66	10/08/2024	10250	10068	40	Marcellus
67	10/09/2024	10049	9868	40	Marcellus
68	10/10/2024	9849	9667	40	Marcellus
69	10/10/2024	9648	9467	40	Marcellus
70	10/10/2024	9448	9266	40	Marcellus
71	10/11/2024	9247	9066	40	Marcellus
72	10/11/2024	9047	8865	40	Marcellus
73	10/11/2024	8846	8665	40	Marcellus
74	10/12/2024	8646	8464	40	Marcellus

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Stimulation Data

04/11/2025

Stage #	Stimulation Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	09/13/2024	64	8695	7826	4252	176150	4133	
2	09/13/2024	100	8966	7150	4915	440364	10473	
3	09/14/2024	95	8867	6554	5149	440138	10205	
4	09/14/2024	100	9158	6922	5453	440322	10336	
5	09/15/2024	99	8877	6312	5623	440217	10334	
6	09/15/2024	100	9110	6740	5531	440540	10292	
7	09/15/2024	95	8966	6679	5294	435300	10485	
8	09/16/2024	100	9123	8090	5325	440072	10312	
9	09/16/2024	100	8996	6520	5454	440237	10269	
10	09/17/2024	97	9035	6268	5272	440112	10245	
11	09/17/2024	99	9168	6798	5494	440010	10265	
12	09/17/2024	99	9111	6406	5495	440337	10406	
13	09/18/2024	98	9316	5949	5074	440515	10356	
14	09/18/2024	100	9083	6420	5406	440153	10268	
15	09/18/2024	100	9039	6212	5115	440454	10270	
16	09/19/2024	100	9032	6818	5449	439889	10217	
17	09/19/2024	100	9161	6534	5121	440735	10248	
18	09/20/2024	100	9013	6032	5157	440411	10334	
19	09/20/2024	100	8990	6569	5133	440069	10234	
20	09/21/2024	100	8845	5751	5684	440307	10374	
21	09/21/2024	100	8937	6201	5206	440452	10240	
22	09/21/2024	100	8690	5539	5784	440146	10249	
23	09/22/2024	100	8668	6008	5260	439994	10294	
24	09/22/2024	100	8767	6238	5216	440150	10161	
25	09/23/2024	101	8724	6755	5211	440217	10013	
26	09/23/2024	100	8753	5899	5512	440211	10168	
27	09/24/2024	100	8941	6625	5306	441667	10247	
28	09/25/2024	100	8833	6263	6046	440090	10156	
29	09/25/2024	100	8932	6572	5010	440020	10115	
30	09/25/2024	101	8690	6641	5459	440151	10102	
31	09/26/2024	100	9011	7085	6217	439974	10145	
32	09/26/2024	100	8720	6317	5515	441015	9621	
33	09/27/2024	100	8751	6577	6156	440176	10093	
34	09/27/2024	101	8872	8396	5406	440521	10077	
35	09/27/2024	100	8994	6482	5084	442314	10113	
36	09/28/2024	100	8919	6770	6010	440230	10037	
37	09/28/2024	100	8896	6531	5603	438180	10047	
38	09/28/2024	100	8952	6574	5380	440160	10070	
39	09/29/2024	99	9001	6721	6008	440301	10036	
40	09/29/2024	99	8957	9168	5753	440511	10009	
41	09/30/2024	98	8838	7183	6295	439978	10013	

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42	09/30/2024	99	8852	6669	5739	442730	10434
43	09/30/2024	97	8769	7086	5001	440246	9973
44	10/01/2024	99	9045	6925	6238	440369	9972
45	10/01/2024	99	8988	9111	6048	440947	9997
46	10/01/2024	98	8696	7215	6418	440971	9995
47	10/02/2024	100	8828	6762	6433	440291	9963
48	10/02/2024	95	8459	6939	5980	441834	9936
49	10/02/2024	98	8492	6805	5176	440636	9993
50	10/03/2024	95	8075	6712	6067	440341	9963
51	10/04/2024	100	8290	8687	6077	440037	9967
52	10/04/2024	101	8443	7848	5570	440491	9939
53	10/04/2024	100	8357	8212	5498	440881	9899
54	10/05/2024	101	8390	6082	5847	440071	9858
55	10/05/2024	100	8357	8885	5791	440112	9903
56	10/05/2024	100	8252	9128	6083	441702	9856
57	10/06/2024	101	8051	6050	5126	440093	9868
58	10/06/2024	100	7997	8690	5756	440740	9867
59	10/06/2024	100	7880	6963	5905	440069	9826
60	10/07/2024	101	8162	6017	5920	440004	9851
61	10/07/2024	100	8181	6523	6436	439961	9676
62	10/07/2024	100	8285	6605	5996	440354	9854
63	10/08/2024	100	8067	6124	6084	440490	9844
64	10/08/2024	100	7943	8960	5074	440079	9837
65	10/09/2024	101	7983	6347	5476	440173	9806
66	10/09/2024	100	8075	5334	5692	440006	9804
67	10/10/2024	100	7947	7751	6048	440369	9781
68	10/10/2024	101	7947	5750	5723	443042	9815
69	10/11/2024	100	7701	6436	6071	440447	10360
70	10/11/2024	100	7643	5184	5938	440442	9752
71	10/11/2024	101	7894	6087	5924	440805	9754
72	10/12/2024	100	7888	6031	5787	441100	9803
73	10/12/2024	100	8122	9264	5223	441267	9742
74	10/12/2024	100	7877	6681	4879	440087	9733

04/11/2025

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	09/12/2024
Job End Date:	10/12/2024
State:	West Virginia
County:	Marion
API Number:	47-049-02518-00-00
Operator Name:	EQT Production
Well Name and Number:	Radcliff 8H
Latitude:	39.587778
Longitude:	-80.43802
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7965
Total Base Water Volume (gal)*:	31024686
Total Base Non Water Volume:	0



Water Source	Percent
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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	EQT	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	88.75264	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	11.08083	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.01777	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.01777	None
Clearal 268	ChemStream	Biocide					
			Water	7732-18-5	80.00000	0.00900	None

04/11/2025

StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Water	7732-18-5	15.00000	0.00250	None
Enviro-Syn HCR-7000- WL	Fluid USA, Inc.	Synthenic Acid					
			FLUID-Acid-00001	Proprietary	20.00000	0.00128	None
Clearal 268	ChemStream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00056	None
Enviro-Syn HCR-7000- WL	Fluid USA, Inc.	Synthenic Acid					
			FLUID-Amine-00001	Proprietary	10.00000	0.00032	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00028	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00002	None
Clearal 268	ChemStream	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Ethanol	64-17-5	1.50000	0.00000	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			AA/Maleic Anhydride Co- polymer	9003-04-7	1.00000	0.00000	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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