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Office of Oil and Gas

FEB 24 2025

West Virginia
Department of
Environmental Protection

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

APPROVED

KJ W. White
3/24/25

API 47 - 049 - 02514 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 16H (L008456)
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 4,382,174.94 Easting 548,253.79
Landing Point of Curve Northing 4,382,224.25 Easting 549,008.09
Bottom Hole Northing 4,379,502.19 Easting 550,324.13

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 13.76 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 09/11/2023 Date drilling commenced 11/03/2023 Date drilling ceased 04/18/2024
Date completion activities began 10/14/2024 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 2086' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1190', 1282' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

04/11/2025

API 47- 049 - 02514 Farm name Jackie D. and Sheila L. Radcliff Well number Radcliff 16H (L008456)

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"	1360'	NEW	J-55 54.5#	1262'	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2730'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	6"	19,024'	NEW	P-110 24#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production cmt has calculated TOC of 1384'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	1280	16.0	1.09	1395	0	8
Coal							
Intermediate 1	CLASS L	1005	15.6	1.14	1146	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3060	15.0	1.19	3641	1384'	8+
Tubing							

Drillers TD (ft) 19,044' Loggers TD (ft) N/A
Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
Plug back procedure _____

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Kick off depth (ft) 2551'

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 8870', EVERY JOINT TO 7774' AND EVERY OTHER JOINT TO 2109'

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 _____

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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.

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[illegible]

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API 47- 049 - 02514 Farm name Jackie D. and Sheila L. Radcliff Well number Radcliff 16H (L008456)

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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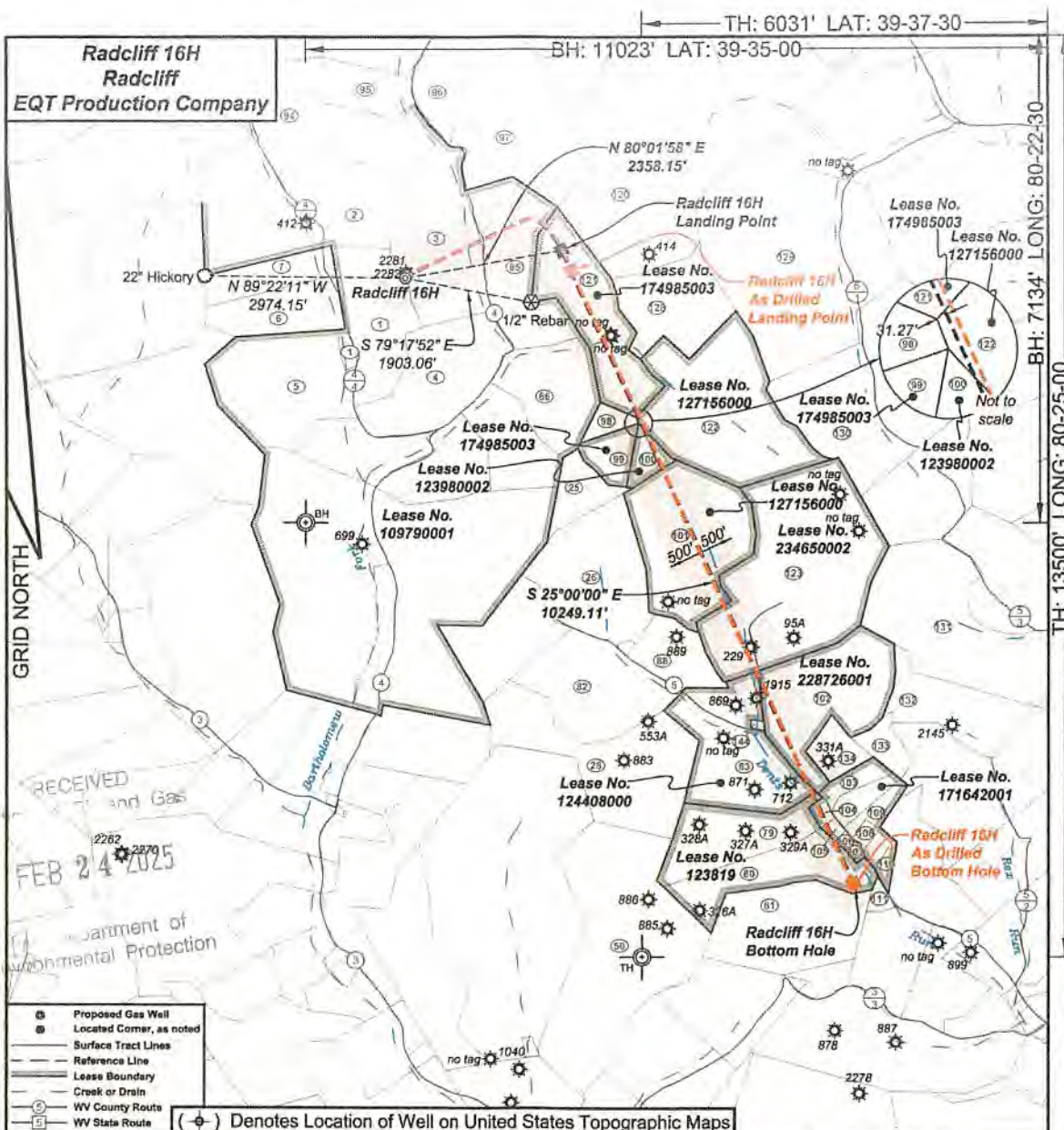
Well # RADCLIFF 16H Final Formations API# 47-049-02514				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	1,190	1,190
Sewickley Coal	1,190	1,190	1,194	1,194
Sand/Shale	1,194	1,194	1,282	1,282
Pittsburgh Coal	1,282	1,282	1,292	1,292
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	3,340
Gordon	3,346	3,340	3,508	3,498
Bayard	3,508	3,498	5,949	5,713
Alexander	5,949	5,713	6,394	6,105
Elks	6,394	6,105	7,844	7,394
Sonyea	7,844	7,394	8,037	7,561
Middlesex	8,037	7,561	8,111	7,620
Genesee	8,111	7,620	8,254	7,726
Geneseo	8,254	7,726	8,300	7,757
Tully	8,300	7,757	8,358	7,792
Hamilton	8,358	7,792	8,628	7,902
Marcellus	8,628	7,902	19,044	7,956

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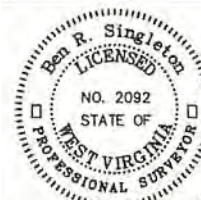
WV Department of
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I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

P.S. 2092



SEAL

FILE NO: 113-21
DRAWING NO: Radcliff 16H
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: April 23 20 24
OPERATOR'S WELL NO.: Radcliff 16H
API WELL NO
47 049 02514
STATE COUNTY PERMIT

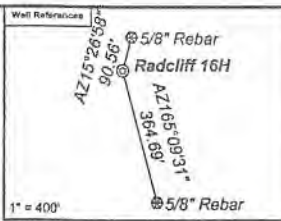
WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL
(IF GAS) PRODUCTION: ☐ STORAGE ☐ DEEP ☒ SHALLOW
LOCATION: ELEVATION: 1493' WATERSHED Bartholomew Fork QUADRANGLE: Glover Gap
DISTRICT: Mannington COUNTY: Marion
SURFACE OWNER: Jackie D. & Sheila L. Radcliff ACREAGE: 48.08
ROYALTY OWNER: Rebecca 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

Radcliff 16H
Radcliff
EQT Production Company

Tract ID	TAX MAP NO.	Parcel No.	County	Owner	Acres
1	40	10.1	Marion	Jackie D. & Sheila L. Radcliff	45.04
2	40	10	Marion	Shelly L. Nelson	45.03
3	40	7	Marion	Jason G. & Michelle R. Stout	99.75
4	40	2	Marion	John R. Wright	18.84
5	40	11	Marion	Clarence W. Swearing	4.4
6	40	12	Marion	Jackie D. & Sheila L. Radcliff	27.35
7	40	11	Marion	Shelly L. Nelson	19.75
25	39	3	Marion	Thomas G. & Theresa A. Jones	10.25
26	39	5	Marion	Thomas G. & Theresa A. Jones	10.25
28	38	21	Marion	Dennis C. & Louise M. Hayes	74.883
30	38	11	Marion	Yula N. Nieves	115
29	38	29	Marion	Dorothy B. Henderson	38.244
80	38	19.8	Marion	William D. Cousen	75.703
81	38	11	Marion	Michael & Julia A. Elbe	58.87
82	38	21.2	Marion	Douglas F. & Debra J. Matfield	54.669
83	38	20	Marion	Dennis C. & Louise M. Hayes	59.24
85	38	16	Marion	Jason D. & Heather H. Moad	48.12
71	38	7	Marion	John R. Wright	49.79
88	38	21.1	Marion	Richard & Jean Hayes	21.55
94	40	9	Marion	Karla A. Gould	25.32
95	40	4	Marion	EBI EM LLC	20.8
96	NA	NA	Marion	Tax Info Not Available	NA
97	25	15	Marion	Jason G. & Michelle R. Stout	91.9
98	25	15	Marion	Jason G. & Michelle R. Stout	7.5
99	25	17	Marion	Jason G. & Michelle R. Stout	57
100	39	16	Marion	Jason G. & Michelle R. Stout	7.851
101	39	7	Marion	Dennis Markel & John Phasanti	84
102	39	9	Marion	Dennis Markel & John Phasanti	62.5
103	39	12.2	Marion	Michael F. & Kim Berthie	7.01
104	38	19.2	Marion	Dorothy B. Henderson	7.245
105	38	19.5	Marion	Dorothy B. Henderson	1.456
106	38	19.3	Marion	Robert R. Smith & James W. Henderson	1.01
107	38	19.1	Marion	David A. Wright	1.27
108	39	11.1	Marion	Kerry Deloff & Michael Berthie	1.03
109	39	11.8	Marion	Scott F. & Michael R. Berthie	9.11
110	39	11.4	Marion	Jason F. Young	2.71
111	38	18	Marion	William D. Cousen	0.25
120	26	12	Marion	EBI EM LLC	157.29
121	26	13	Marion	Jason G. & Michelle R. Stout	57
122	26	1	Marion	Albert C. Woods Hess	90.6
123	25	8	Marion	Dennis Markel & John Phasanti	128.635
128	26	1	Marion	EBI EM LLC	41
129	26	9	Marion	Thomas C. Carpenter, et al	150.95
130	26	2.1	Marion	Larry Goff	160.04
131	28	19	Marion	Rickey C. Bennett	94.12
132	28	14	Marion	Lee H. & Sheri L. Taylor	85.09
133	39	13.1	Marion	Michael F. & Kim Berthie	9.26
134	39	10	Marion	Dennis Markel & John Phasanti	12.17
135	39	11	Marion	Michael F. & Kim Berthie	7
144	38	20.1	Marion	Dennis Markel	0.3



As-Drilled Well Information:
Radcliff 16H coordinates are:
NAD 83 N: 397,638.78 E: 1,704,136.29
NAD 83 UTM N: 4,382,174.94 E: 548,253.79
Radcliff 16H Landing Point coordinates are:
NAD 83 N: 397,759.28 E: 1,706,614.16
NAD 83 UTM N: 4,382,224.25 E: 549,008.03
Radcliff 16H Bottom Hole coordinates are:
NAD 83 N: 388,755.04 E: 1,710,763.53
NAD 83 Lat: 39.563747 Long: -80.414135
NAD 83 UTM N: 4,379,502.19 E: 550,324.13
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

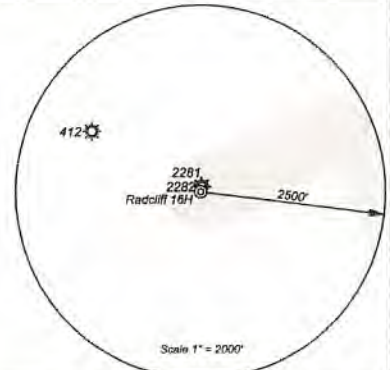
Radcliff 8H

Radcliff 6H

Radcliff 4H

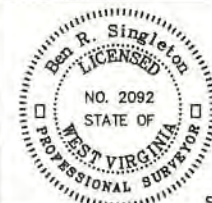
Lease No.	Owner	Acres
109790001	Rebecca R. Shuttlesworth, et al.	1090
174985003	Country Roads Minerals, LLC, et al.	59
127156000	EQT Production Company, et al.	97.25
123980002	Country Roads Minerals, LLC, et al.	9
127156000	EQT Production Company, et al.	84
234650002	Paul Edward Dennison, et al.	128.635
228726001	Bounty Minerals, LLC	62.5
124408000	EQT Production Company, et al.	59.75
123819	XTO Energy, Inc.	77.948
171642001	XTO Energy, Inc.	512.948872

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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.

Ben R. Singleton
P.S. 2092



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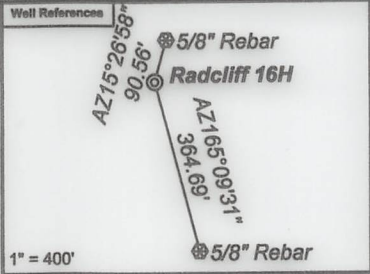
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Radcliff 16H
Radcliff
EQT Production Company

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
25	39	3	Marion	Mannington	Thomas G. & Theresa A. Jones	10.25
26	39	5	Marion	Mannington	Thomas G. & Theresa A. Jones	61.85
28	38	21	Marion	Mannington	Dennis G. & Louise M. Hayes	74.885
50	38	11	Marion	Mannington	Yulia Nikolaeva	115
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
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86	39	2	Marion	Mannington	Lula B. Knight	43.39
88	38	21.1	Marion	Mannington	Ronald & Jean Hayes	21.55
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108	39	11.1	Marion	Mannington	Kerry Orloff & Michael Berthy	1.92
109	39	11.3	Marion	Mannington	Kerri F. & Michael F. Berthy	9.11
110	39	11.4	Marion	Mannington	Lynn E. Sturm	2.73
111	38	18	Marion	Mannington	William D. Crouser	0.25
120	26	12	Marion	Mannington	EBX-EM LLC	152.25
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Radcliff 14H ☉

Radcliff 12H ☉

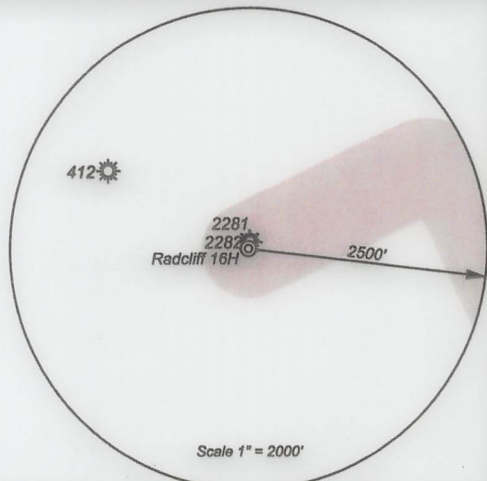
Radcliff 10H ☉

Radcliff 8H ☉

Radcliff 6H ☉

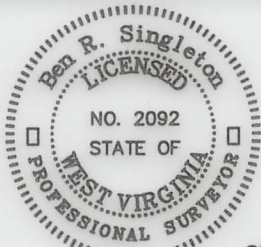
Radcliff 4H ☉

Lease No.	Owner	Acres
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47 - 049 - 02514
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

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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	10/14/2024	18936	18757	40	Marcellus
3	10/14/2024	18738	18559	40	Marcellus
4	10/14/2024	18540	18361	40	Marcellus
5	10/15/2024	18342	18163	40	Marcellus
6	10/15/2024	18144	17965	40	Marcellus
7	10/15/2024	17946	17767	40	Marcellus
8	10/16/2024	17748	17569	40	Marcellus
9	10/16/2024	17550	17371	40	Marcellus
10	10/16/2024	17352	17173	40	Marcellus
11	10/16/2024	17154	16975	40	Marcellus
12	10/17/2024	16956	16777	40	Marcellus
13	10/17/2024	16758	16579	40	Marcellus
14	10/17/2024	16560	16381	40	Marcellus
15	10/17/2024	16362	16183	40	Marcellus
16	10/18/2024	16164	15985	40	Marcellus
17	10/18/2024	15966	15787	40	Marcellus
18	10/19/2024	15768	15589	40	Marcellus
19	10/19/2024	15570	15391	40	Marcellus
20	10/20/2024	15372	15193	40	Marcellus
21	10/20/2024	15174	14995	40	Marcellus
22	10/21/2024	14976	14797	40	Marcellus
23	10/22/2024	14778	14599	40	Marcellus
24	10/22/2024	14580	14401	40	Marcellus
25	10/23/2024	14382	14203	40	Marcellus
26	10/24/2024	14184	14005	40	Marcellus
27	10/25/2024	13986	13807	40	Marcellus
28	10/25/2024	13788	13609	40	Marcellus
29	10/26/2024	13590	13411	40	Marcellus
30	10/26/2024	13392	13213	40	Marcellus
31	10/27/2024	13194	13015	40	Marcellus
32	10/28/2024	12996	12817	40	Marcellus
33	10/28/2024	12798	12619	40	Marcellus
34	10/28/2024	12600	12421	40	Marcellus
35	10/29/2024	12402	12223	40	Marcellus
36	10/29/2024	12204	12025	40	Marcellus
37	10/30/2024	12006	11827	40	Marcellus
38	10/30/2024	11808	11629	40	Marcellus
39	10/30/2024	11610	11431	40	Marcellus
40	10/31/2024	11412	11233	40	Marcellus
41	10/31/2024	11214	11035	40	Marcellus
42	10/31/2024	11016	10837	40	Marcellus

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43	11/01/2024	10818	10639	40	Marcellus
44	11/01/2024	10620	10441	40	Marcellus
45	11/01/2024	10422	10243	40	Marcellus
46	11/02/2024	10224	10045	40	Marcellus
47	11/02/2024	10026	9847	40	Marcellus
48	11/03/2024	9828	9649	40	Marcellus
49	11/03/2024	9630	9451	40	Marcellus
50	11/03/2024	9432	9253	40	Marcellus
51	11/04/2024	9234	9055	40	Marcellus
52	11/04/2024	9036	8857	40	Marcellus
53	11/05/2024	8838	8659	40	Marcellus

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Stimulation Data

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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	10/14/2024	100	8364	8112	4899	176296	4013	
2	10/14/2024	98	8507	7130	8446	440395	9984	
3	10/14/2024	100	8331	6156	6022	440440	9973	
4	10/15/2024	100	8649	6574	5689	440463	9948	
5	10/15/2024	99	8405	6670	7091	440269	9949	
6	10/15/2024	100	8514	6613	5351	440180	9925	
7	10/16/2024	100	8270	5689	5816	440397	9893	
8	10/16/2024	100	8608	6184	5277	440102	9882	
9	10/16/2024	100	8573	6190	5563	440055	9917	
10	10/17/2024	100	8637	5918	6016	440430	9900	
11	10/17/2024	100	8689	5978	5486	440470	9888	
12	10/17/2024	100	8471	8129	5851	440138	9894	
13	10/17/2024	100	8516	6059	5864	439987	9886	
14	10/18/2024	100	8565	6463	5779	443281	9931	
15	10/18/2024	100	8604	7495	5846	441850	9897	
16	10/18/2024	100	8599	6203	5970	440244	9864	
17	10/19/2024	100	8589	6398	5729	440021	9888	
18	10/19/2024	100	8419	5753	5174	440102	9913	
19	10/20/2024	100	8682	6824	6050	440356	9893	
20	10/20/2024	100	8669	6485	5486	440143	9854	
21	10/21/2024	100	8417	6664	5186	440077	9896	
22	10/22/2024	100	8276	6254	5454	440005	9861	
23	10/23/2024	100	8435	6351	5544	440924	9894	
24	10/23/2024	100	8285	6285	5415	440064	9807	
25	10/25/2024	99	8560	5858	5485	439300	9926	
26	10/25/2024	100	8729	6503	5443	440025	9794	
27	10/26/2024	100	8465	6217	5284	440015	9866	
28	10/26/2024	98	8722	6493	5106	441024	9850	
29	10/27/2024	100	8465	6275	5255	440560	9891	
30	10/27/2024	100	8377	6319	5550	441086	9782	
31	10/28/2024	100	7879	6061	5662	439938	9784	
32	10/28/2024	100	8223	6600	5468	440910	9742	
33	10/29/2024	100	8465	6565	4869	440550	9799	
34	10/29/2024	101	8269	6632	6301	440128	9766	
35	10/29/2024	100	8435	6236	5685	440609	9740	
36	10/30/2024	101	8244	6568	5571	442107	9744	
37	10/30/2024	101	8447	6210	5350	439020	9699	
38	10/30/2024	100	7989	5719	5924	440387	9745	
39	10/31/2024	100	8298	8839	5979	441022	9749	
40	10/31/2024	100	4394	2197	5981	440062	9796	
41	10/31/2024	100	8391	6083	5730	439932	9834	

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42	11/01/2024	100	8292	6707	5542	440093	9740
43	11/01/2024	96	8260	6030	4672	440150	9698
44	11/02/2024	100	8222	6332	5492	442026	9749
45	11/02/2024	100	7882	3988	5808	440797	9689
46	11/02/2024	100	8296	6748	5786	441272	9673
47	11/03/2024	100	8185	6828	5678	441516	9673
48	11/03/2024	100	7704	5040	5834	440168	9610
49	11/03/2024	100	8088	6154	6013	440758	9650
50	11/04/2024	100	8020	6556	5388	442205	9648
51	11/04/2024	100	8020	6180	5525	440076	9575
52	11/05/2024	100	7891	7287	4845	440976	9604
53	11/05/2024	100	7872	7534	4792	440064	9607

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/14/2024
Job End Date:	11/05/2024
State:	West Virginia
County:	Marion
API Number:	47-049-02514-00-00
Operator Name:	EQT Production
Well Name and Number:	Radcliff 16H
Latitude:	39.587939
Longitude:	-80.438065
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7985
Total Base Water Volume (gal)*:	21595266
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	88.50693	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	11.33687	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.01644	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.01644	None
Clearal 268	ChemStream	Biocide					
			Water	7732-18-5	80.00000	0.00896	None

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StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Water	7732-18-5	15.00000	0.00231	None
Enviro-Syn HCR-7000- WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Acid-00001	Proprietary	20.00000	0.00120	None
Clearal 268	ChemStream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00056	None
Enviro-Syn HCR-7000- WL	Fluid USA, Inc.	Synthetic Acid					
			FLUID-Amine-00001	Proprietary	10.00000	0.00030	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00026	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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