

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: BIG245 112H (L0004462)

API: 47 - 103 - 03445

Submission:  Initial  Amended

Notes: Amendment for Flowback/Production Data

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Environmental Protection

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

API 47-103-03445 County Wetzel District Grant  
Quad Big Run Pad Name BIG245 Field/Pool Name N/A  
Farm name ET Blue Grass LLC Well Number BIG245 112H (L004462)  
Operator (as registered with the OOG) EQT Production Company  
Address 2400 Ansys Drive, Suite 200 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 4,382,952.55 Easting 537,031.80  
Landing Point of Curve Northing 4,383,113.12 Easting 536,577.58  
Bottom Hole Northing 4,378,408.25 Easting 540,513.69

Elevation (ft) 1430' 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 13.8 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 06/13/2022 Date drilling commenced 11/15/2021 Date drilling ceased 07/10/2022  
Date completion activities began 07/14/2023 Date completion activities ceased 10/21/2023  
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 230,508,663,753,1012 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 933,1015,1117 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

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Reviewed by: [Signature]  
03/01/2024

API 47- 103-03445 Farm name ET Blue Grass LLC Well number BIG245 112H (L004462)

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"	1203'	NEW	J-55 54.5#	1091'	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2641'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	6"	26,474'	NEW	P-110 24#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 977' GL, which is greater than 500' TVD above the producing formation. No issues during cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (GL)	WOC (hrs)
Conductor	CLASS A	83	15.6	1.18	98	0	8+
Surface	CLASS A	1020	16.0	1.13	1152	0	8
Coal							
Intermediate 1	CLASS A	1055	16.5	1.07	1128	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4780	15.2	1.09	5210	977'	8+
Tubing							

Drillers TD (ft) 26,481' Loggers TD (ft) N/A  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 1,237'

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 AND EVERY JOINT TO 2035' \_\_\_\_\_

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

Logging Company Scientific Drilling International  
Address 124 Vista Drive City Charleroi State PA Zip 15022

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

Stimulation Contractor Evolution Well Services Operating  
Address 1780 Hughes Landing Blvd Ste 125 City The Woodlands State TX Zip 77380

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Well # BIG245 112H (L004462) Final Formations API# 47-103-03445				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	933	933
Waynesburg Coal	933	933	936	936
Sand/Shale	936	936	1,015	1,015
Mapletown Coal	1,015	1,015	1,018	1,018
Sand/Shale	1,018	1,018	1,117	1,117
Pittsburgh Coal	1,117	1,117	1,126	1,126
Sand/Shale	1,126	1,126	2,257	2,248
Maxton	2,257	2,248	2,298	2,289
Sand/Shale	2,298	2,289	2,311	2,301
Big Lime	2,311	2,301	2,381	2,371
Big Injun	2,381	2,371	2,548	2,536
Sand/Shale	2,548	2,536	2,717	2,702
Weir	2,717	2,702	2,757	2,742
Sand/Shale	2,757	2,742	3,115	3,093
Gordon	3,115	3,093	3,154	3,130
Sand/Shale	3,154	3,130	3,173	3,149
Forth Sand	3,173	3,149	3,217	3,191
Sand/Shale	3,217	3,191	3,221	3,195
Bayard	3,221	3,195	3,451	3,417
Sand/Shale	3,451	3,417	3,843	3,787
Speechley	3,843	3,787	4,065	3,995
Sand/Shale	4,065	3,995	4,636	4,533
Riley	4,636	4,533	4,868	4,754
Sand/Shale	4,868	4,754	5,332	5,189
Benson	5,332	5,189	5,480	5,328
Sand/Shale	5,480	5,328	5,794	5,625
Alexander	5,794	5,625	6,110	5,923
Elks	6,110	5,923	7,316	7,055
Sonyea	7,316	7,055	7,502	7,221
Middlesex	7,502	7,221	7,571	7,276
Genesee	7,571	7,276	7,698	7,365
Geneseo	7,698	7,365	7,736	7,389
Tully	7,736	7,389	7,776	7,412
Hamilton	7,776	7,412	8,045	7,515
Marcellus	8,045	7,515	26,481	7,619

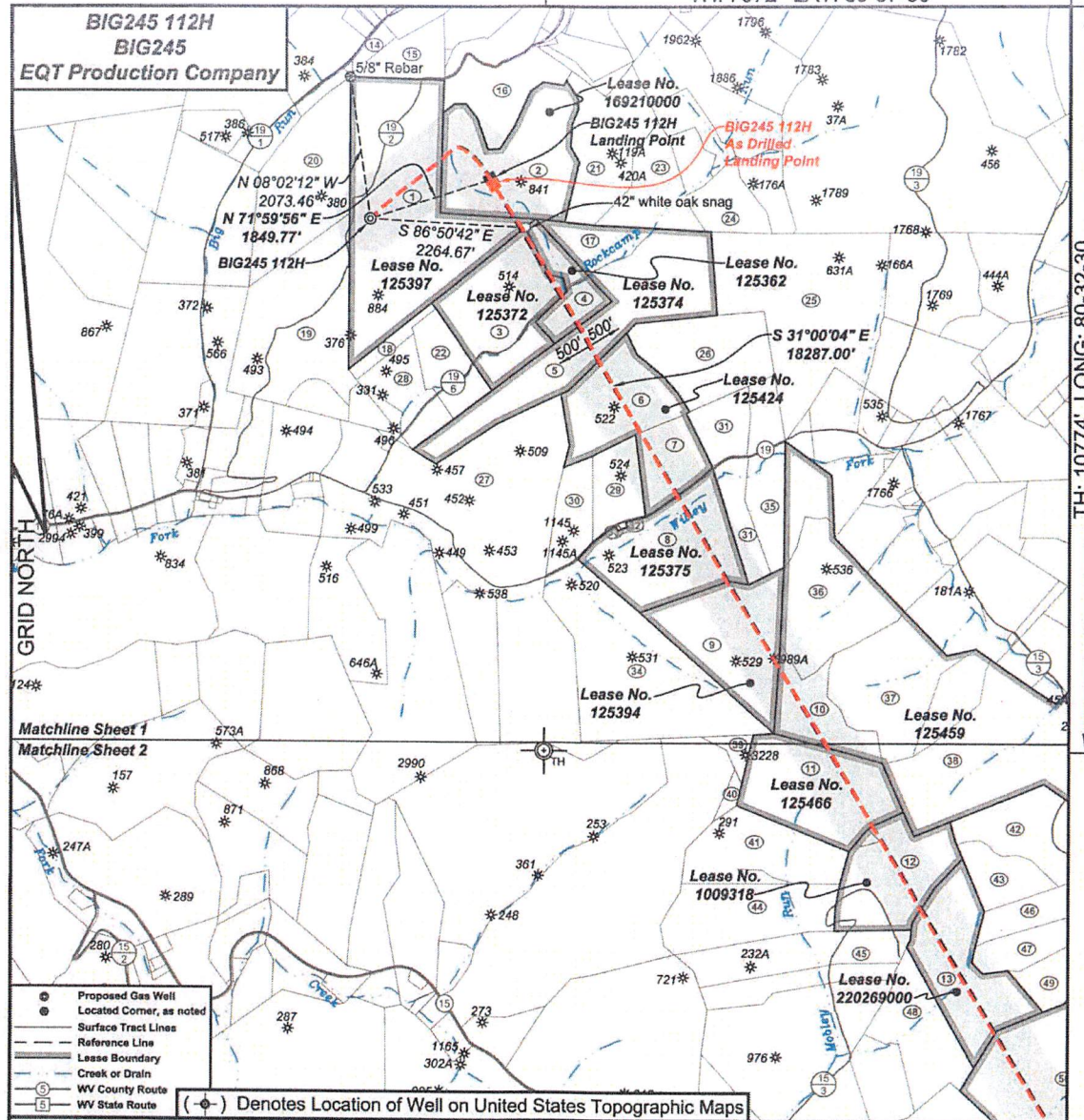
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TH: 7672' LAT: 39-37-30



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

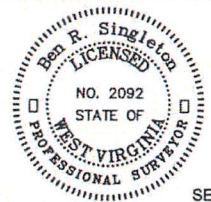
(-o-) Denotes Location of Well on United States Topographic Maps

TH: 10774' LONG: 80-32-30



*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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FILE NO: 246-18  
DRAWING NO: BIG245 112H  
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

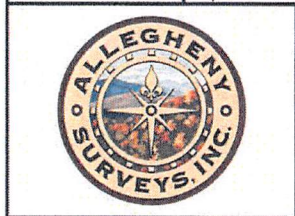
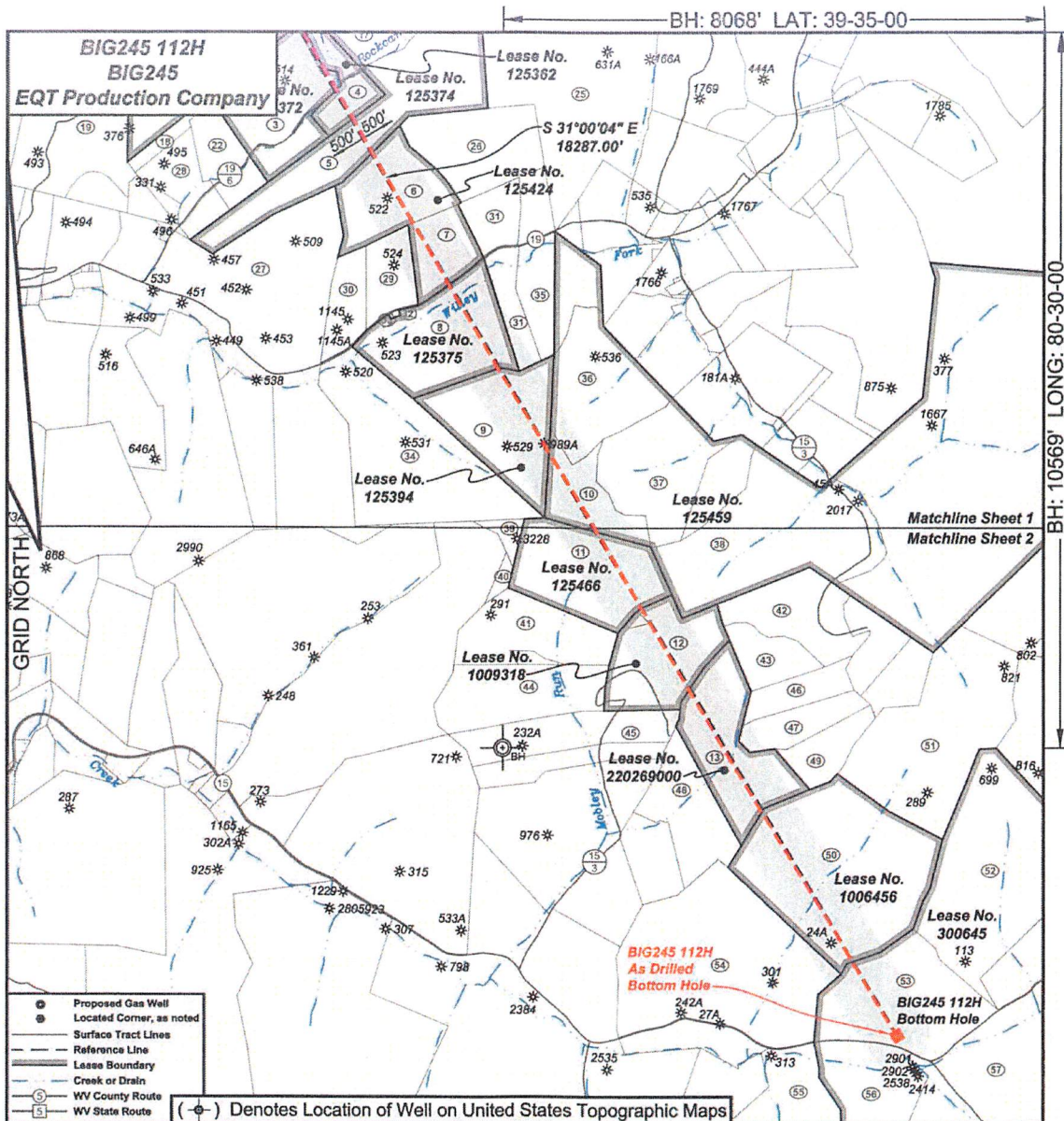
DATE: August 05 20 22  
OPERATOR'S WELL NO.: BIG245 112H  
API WELL NO  
47 - 103 - 03445  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: 1430' WATERSHED Rockcamp Run of Willey Fork QUADRANGLE: Big Run  
DISTRICT: Grant COUNTY: Wetzell  
SURFACE OWNER: ET Blue Grass LLC ACREAGE: 138.93  
ROYALTY OWNER: Shiben Estates, Inc., et al. LEASE NO: 125397 ACREAGE: 140  
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: 7.549'

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

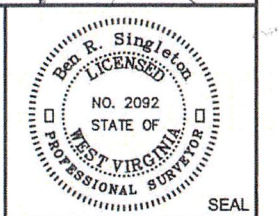
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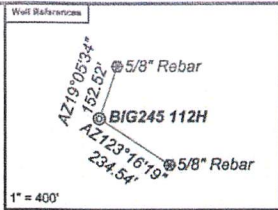
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**BIG245 112H**  
**BIG245**  
**EQT Production Company**



As Drilled Well Information:  
BIG245 112H coordinates are  
NAD 27 N: 400,767.94 E: 1,668,793.49  
NAD 83 UTM N: 4,382,952.55 E: 537,031.80  
BIG245 112H Klek Out Point coordinates are  
NAD 27 N: 400,770.60 E: 1,668,790.51  
NAD 83 UTM N: 4,382,953.34 E: 537,030.88  
BIG245 112H Landing Point coordinates are  
NAD 27 N: 401,264.90 E: 1,700,593.16  
NAD 83 UTM N: 4,383,113.12 E: 537,577.58  
BIG245 112H Bottom Hole coordinates are  
NAD 27 N: 385,865.28 E: 1,709,970.55  
NAD 83 UTM N: 4,378,408.25 E: 540,513.69  
West Virginia Coordinate system of 1927 (North Zone)  
based upon Differential GPS Measurements.  
Plat orientation, corner and well ties are based upon  
the grid north meridian.  
Well location references are based upon the grid north  
meridian.  
UTM coordinates are NAD83, Zone 17, Meters.

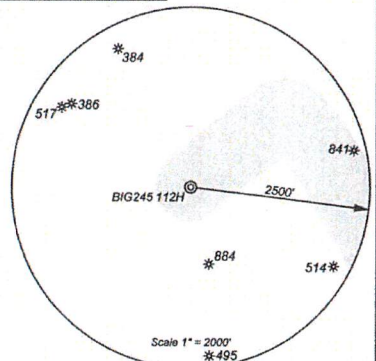
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	8	22	Wetzel	Grant	ET Blue Grass LLC	138.83
2	8	15	Wetzel	Grant	John Michael Byrd	71.80
3	8	28	Wetzel	Grant	James A. Yoho	61.00
4	8	29	Wetzel	Grant	Mary Jane Byrd	15.00
5	8	32	Wetzel	Grant	Joe Pigg	82.40
6	8	26	Wetzel	Grant	Sherilyn Snider	69.52
7	8	40	Wetzel	Grant	Sherilyn Snider	24.00
8	8	52	Wetzel	Grant	Norman Derby	61.61
9	14	8	Wetzel	Grant	Esther R. Coen	58.52
10	14	10	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	29.20
11	14	16	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	66.70
12	14	23	Wetzel	Grant	Equifera LP	51.20
13	14	38	Wetzel	Grant	Dale C. Eastham, et al.	37.20
14	8	13.1	Wetzel	Grant	Duane M. Goodrich	3.58
15	8	7	Wetzel	Grant	James E. & Martin A. Stonking	16.12
16	8	8	Wetzel	Grant	Wanda L. Byrd	58.18
17	8	22	Wetzel	Grant	James A. Yoho	17.60
18	8	25	Wetzel	Grant	James A. Yoho	6.25
19	8	23	Wetzel	Grant	Dale K. Dumas, et al.	73.81
20	8	11	Wetzel	Grant	Bonnie M. Herthome	63.50
21	8	63	Wetzel	Grant	Mary E. Wright, et al.	48.00
22	8	27	Wetzel	Grant	James A. Yoho	21.75
23	8	13	Wetzel	Grant	James A. Yoho	27.00
24	8	17	Wetzel	Grant	Loiselle Watson	20.08
25	8	23	Wetzel	Grant	Shoehn B. & Carolyn M. Gantz	119.20
26	8	29	Wetzel	Grant	William & Margaret Schleichner	47.90
27	8	53	Wetzel	Grant	H. Don Higginbotham	198.21
28	8	28	Wetzel	Grant	James A. Yoho	23.25
29	8	40	Wetzel	Grant	Sherilyn Snider	24.00
30	8	54	Wetzel	Grant	Sherilyn Snider	20.00
31	8	53	Wetzel	Grant	Norman R. & Vivian L. Derby	32.80
32	9	52.1	Wetzel	Grant	Norman R. & Vivian L. Derby	1.00
33	9	65	Wetzel	Grant	Terr L. & Jason D. Basty	0.81
34	14	7	Wetzel	Grant	Norman Derby	83.00
35	9	54	Wetzel	Grant	Jack L. & Laenna C. Barnette	17.40
36	14	9	Wetzel	Grant	Leonard Rice	56.00
37	14	11	Wetzel	Grant	Thomas J. Parks, et al.	54.44
38	14	18	Wetzel	Grant	Coastal Forest Resources Company	138.68
39	14	17	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	8.20
40	14	18	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	1.60
41	14	22	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	48.00
42	14	25	Wetzel	Grant	Clara Snodgrass	35.88
43	14	24	Wetzel	Grant	EQT Production Company	19.20
44	14	28	Wetzel	Grant	EQT Production Company	50.80
45	14	37	Wetzel	Grant	EQT Production Company	36.50
46	14	29	Wetzel	Grant	ET Blue Grass, LLC	17.00
47	14	30	Wetzel	Grant	Equifera LP	20.50
48	14	38.3	Wetzel	Grant	Dale C. Eastham, et al.	38.05
49	14	31	Wetzel	Grant	Donald O'Leary Jr.	19.00
50	14	40	Wetzel	Grant	Donald O'Leary Jr.	131.00
51	14	33	Wetzel	Grant	Albee H. & Hilda B. Conaway	106.00
52	14	42	Wetzel	Grant	Donald J. O'Leary	111.00
53	19	8	Wetzel	Grant	Donald O'Leary Jr.	71.50
54	19	7	Wetzel	Grant	Florence E. Kiloyne	157.09
55	19	27	Wetzel	Grant	Florence E. Kiloyne	201.00
56	19	8.1	Wetzel	Grant	EQT Production Company	53.00
57	19	19.1	Wetzel	Grant	Sean L. Snedden	30.08

Lease No.	Owner	Acres
169210000	Liberty Holding Company, Inc.	71.5
125372	Ryan C. Radtka, et al.	61
125362	Mary Jane Wright, et al.	15
125374	Jordan Zachary Pigg, et al.	100
125424	Sherilyn Snider	80
125375	Jacob Francis Shreve III aka Jacob F. Shreve, et al.	62
125394	Esther R. Coen, et al.	60
125456	Randell J. Hartman, et al.	693
125486	Bounty Minerals LLC	67
1009318	Thomas L. Lewis, et al.	51
220269000	Travis J. Eastham, et al.	57
1006456	Valerie D. Preat, et al.	131
300645	Carman Lee Allen, et al.	858

**BIG245**

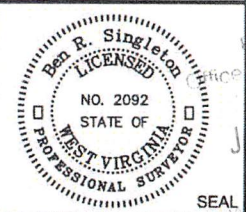
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- ⊙ BIG245 112H
- ⊙ BIG245 110H
- ⊙ BIG245 108H
- ⊙ BIG245 106H
- ⊙ BIG245 104H
- ⊙ BIG245 102H
- ⊙ 47-103-03235
- ⊙ 47-103-03236

47-103-03234 ⊙



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03/01/2024

# 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	08/07/2023	26375	26214	36	Marcellus
3	08/08/2023	26194	26033	36	Marcellus
4	08/08/2023	26014	25852	36	Marcellus
5	08/08/2023	25833	25650	40	Marcellus
6	08/09/2023	25631	25448	40	Marcellus
7	08/09/2023	25429	25246	40	Marcellus
8	08/10/2023	25227	25044	40	Marcellus
9	08/10/2023	25025	24842	40	Marcellus
10	08/10/2023	24823	24640	40	Marcellus
11	08/11/2023	24621	24438	40	Marcellus
12	08/11/2023	24419	24236	40	Marcellus
13	08/12/2023	24217	24034	40	Marcellus
14	08/12/2023	24015	23832	40	Marcellus
15	08/12/2023	23813	23630	40	Marcellus
16	08/12/2023	23611	23428	40	Marcellus
17	08/13/2023	23409	23226	40	Marcellus
18	08/13/2023	23207	23024	40	Marcellus
19	08/13/2023	23005	22822	40	Marcellus
20	08/14/2023	22803	22620	40	Marcellus
21	08/14/2023	22601	22418	40	Marcellus
22	08/14/2023	22399	22216	40	Marcellus
23	08/17/2023	22197	22014	40	Marcellus
24	08/17/2023	21995	21812	40	Marcellus
25	08/17/2023	21793	21610	40	Marcellus
26	08/18/2023	21591	21408	40	Marcellus
27	08/18/2023	21389	21206	40	Marcellus
28	08/18/2023	21187	21004	40	Marcellus
29	08/18/2023	20985	20802	40	Marcellus
30	08/19/2023	20783	20600	40	Marcellus
31	08/19/2023	20581	20398	40	Marcellus
32	08/19/2023	20379	20196	40	Marcellus
33	08/20/2023	20177	19994	40	Marcellus
34	08/20/2023	19975	19792	40	Marcellus
35	08/20/2023	19773	19590	40	Marcellus
36	08/20/2023	19571	19388	40	Marcellus
37	08/20/2023	19369	19186	40	Marcellus
38	08/21/2023	19167	18984	40	Marcellus
39	08/21/2023	18965	18782	40	Marcellus
40	08/21/2023	18763	18580	40	Marcellus
41	08/21/2023	18561	18378	40	Marcellus
42	08/21/2023	18359	18176	40	Marcellus
43	08/22/2023	18157	17974	40	Marcellus
44	08/22/2023	17955	17772	40	Marcellus

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03/01/2024

45	08/22/2023	17753	17570	40	Marcellus
46	08/22/2023	17551	17368	40	Marcellus
47	08/23/2023	17349	17166	40	Marcellus
48	08/23/2023	17147	16964	40	Marcellus
49	08/23/2023	16945	16762	40	Marcellus
50	08/24/2023	16743	16560	40	Marcellus
51	08/24/2023	16541	16358	40	Marcellus
52	08/25/2023	16339	16156	40	Marcellus
53	08/25/2023	16137	15954	40	Marcellus
54	08/25/2023	15935	15752	40	Marcellus
55	08/26/2023	15733	15550	40	Marcellus
56	08/26/2023	15531	15348	40	Marcellus
57	08/26/2023	15329	15146	40	Marcellus
58	08/27/2023	15127	14944	40	Marcellus
59	08/27/2023	14925	14742	40	Marcellus
60	08/27/2023	14723	14540	40	Marcellus
61	08/28/2023	14521	14338	40	Marcellus
62	08/28/2023	14319	14136	40	Marcellus
63	08/28/2023	14117	13934	40	Marcellus
64	08/29/2023	13915	13732	40	Marcellus
65	08/29/2023	13713	13530	40	Marcellus
66	08/29/2023	13511	13328	40	Marcellus
67	08/30/2023	13309	13126	40	Marcellus
68	08/30/2023	13107	12924	40	Marcellus
69	08/31/2023	12905	12722	40	Marcellus
70	08/31/2023	12703	12520	40	Marcellus
71	08/31/2023	12501	12318	40	Marcellus
72	09/01/2023	12299	12116	40	Marcellus
73	09/01/2023	12097	11914	40	Marcellus
74	09/02/2023	11895	11712	40	Marcellus
75	09/02/2023	11693	11510	40	Marcellus
76	09/02/2023	11491	11308	40	Marcellus
77	09/03/2023	11289	11106	40	Marcellus
78	09/03/2023	11087	10904	40	Marcellus
79	09/03/2023	10885	10702	40	Marcellus
80	09/03/2023	10683	10500	40	Marcellus
81	09/03/2023	10481	10298	40	Marcellus
82	09/04/2023	10279	10096	40	Marcellus
83	09/04/2023	10077	9894	40	Marcellus
84	09/05/2023	9875	9692	40	Marcellus
85	09/05/2023	9673	9490	40	Marcellus
86	09/06/2023	9471	9288	40	Marcellus
87	09/07/2023	9269	9086	40	Marcellus
88	09/07/2023	9067	8884	40	Marcellus
89	09/07/2023	8865	8682	40	Marcellus
90	09/07/2023	8663	8480	40	Marcellus
91	09/07/2023	8461	8278	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)	RIP (I CF)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	08/07/2023	73	8754	7764	4479	176073	4442	
2	08/08/2023	92	9212	6439	4708	396340	9563	
3	08/08/2023	94	9263	6106	5274	396371	9402	
4	08/09/2023	99	9158	6761	5807	396191	9442	
5	08/09/2023	99	9008	6387	5717	440391	10575	
6	08/10/2023	98	9151	6123	5788	440112	10430	
7	08/10/2023	96	9030	6306	5305	440360	10483	
8	08/10/2023	99	9174	6423	5425	440498	10362	
9	08/11/2023	99	9180	6357	5539	439994	10354	
10	08/11/2023	99	9232	6348	5555	440466	10430	
11	08/12/2023	100	9172	6331	5073	440074	10442	
12	08/12/2023	100	9140	6056	5047	440484	10424	
13	08/12/2023	100	9022	6428	5236	440509	10446	
14	08/12/2023	99	9140	6407	5056	440498	10460	
15	08/13/2023	99	9086	6494	5329	445101	10499	
16	08/13/2023	100	8891	6220	5363	440098	10348	
17	08/13/2023	85	9013	6619	4539	440390	12727	
18	08/14/2023	101	8888	6563	4941	440122	10289	
19	08/14/2023	100	8949	6523	5490	440262	10328	
20	08/14/2023	100	8783	5945	5123	440452	10344	
21	08/15/2023	101	9039	5497	4614	440145	10343	
22	08/17/2023	100	9026	6012	5151	440171	10285	
23	08/17/2023	99	9098	5944	5038	440420	10228	
24	08/17/2023	100	9134	5963	4202	440165	10333	
25	08/18/2023	100	8902	6362	4757	440206	11071	
26	08/18/2023	100	9051	6201	4635	440243	10248	
27	08/18/2023	99	8914	5347	4761	440190	10240	
28	08/19/2023	99	8888	6171	4766	440153	10248	
29	08/19/2023	100	8928	6143	4752	440227	10207	
30	08/19/2023	100	8932	5876	4773	440338	10233	
31	08/19/2023	100	9092	5892	4733	440013	10238	
32	08/20/2023	100	8866	6055	4623	440152	10192	
33	08/20/2023	99	8885	6494	4542	440087	10195	
34	08/20/2023	100	8257	5066	4834	440186	10179	
35	08/20/2023	100	8418	5757	4545	440157	10184	
36	08/20/2023	100	8832	6541	4187	440160	10205	
37	08/21/2023	100	8751	6128	4339	440207	10170	
38	08/21/2023	100	8846	5949	4541	440123	10170	
39	08/21/2023	100	8484	6363	4633	440107	10125	
40	08/21/2023	100	8761	5738	5609	440237	10176	
41	08/22/2023	100	8976	5733	5290	440140	10174	
42	08/22/2023	100	8952	5670	4750	440090	10132	
43	08/22/2023	101	8582	6203	4764	440137	10101	

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 Environmental Protection

03/01/2024



44	08/22/2023	101	8540	5974	4648	440066	10132
45	08/23/2023	100	8784	5822	4321	440177	10137
46	08/23/2023	100	8049	5754	4347	440225	10068
47	08/23/2023	100	8414	5668	5435	440073	10137
48	08/24/2023	100	8598	5730	4446	440192	10105
49	08/24/2023	100	8619	5672	4587	440116	10059
50	08/24/2023	100	8339	6304	4821	440041	10048
51	08/25/2023	100	8674	6109	4928	440147	10069
52	08/25/2023	99	8904	6304	4553	440155	10065
53	08/25/2023	100	8264	5703	5418	440018	10049
54	08/26/2023	100	8289	5961	4557	440093	10059
55	08/26/2023	100	8072	6079	4906	440087	10031
56	08/27/2023	99	8267	5970	4486	440492	10018
57	08/27/2023	99	8273	6271	5009	440029	10131
58	08/27/2023	100	8147	5521	5062	440097	10012
59	08/27/2023	100	8123	5581	4327	440121	10022
60	08/28/2023	100	8182	6026	4330	440013	10025
61	08/28/2023	100	8047	5877	4467	440034	9998
62	08/29/2023	99	8158	5987	4303	440221	10005
63	08/29/2023	100	7980	6142	4193	440018	9989
64	08/29/2023	100	7977	5718	4440	440070	9975
65	08/29/2023	100	7791	5777	5348	440094	9969
66	08/30/2023	100	7894	5402	5169	440209	9967
67	08/30/2023	99	7803	5945	5426	440079	9911
68	08/31/2023	100	7819	5657	4701	440174	9981
69	08/31/2023	100	7707	6187	5296	440431	9962
70	09/01/2023	99	8181	5917	4626	440093	9950
71	09/01/2023	100	7627	5763	4445	440410	9860
72	09/01/2023	100	7568	6131	4547	440180	9919
73	09/02/2023	99	7333	5866	5318	440187	9917
74	09/02/2023	100	7675	5583	4311	440416	9957
75	09/02/2023	100	7610	6183	4670	440240	9901
76	09/03/2023	99	7685	5973	4616	440220	9884
77	09/03/2023	99	7720	5928	5175	440408	9905
78	09/03/2023	100	7544	5738	5140	440373	9895
79	09/03/2023	100	7601	5670	5435	440429	9880
80	09/04/2023	100	7620	5800	4922	440140	9890
81	09/04/2023	92	7844	6015	5049	440284	12050
82	09/05/2023	101	7446	5577	4924	440112	9944
83	09/05/2023	100	7220	5592	4486	440366	9847
84	09/05/2023	100	7512	5897	5020	440373	9870
85	09/06/2023	99	7762	6072	5325	440021	9820
86	09/07/2023	100	7561	5774	5200	440131	9819
87	09/07/2023	100	7574	5710	5194	440369	9822
88	09/07/2023	100	7726	5563	5032	440408	9826
89	09/07/2023	100	7543	5579	5077	440374	9809
90	09/08/2023	100	7726	5513	5286	440222	9808

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03/01/2024

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91	09/08/2023	100	7516	5709	5290	440044	9780	
92	09/08/2023	100	7544	5738	4268	440580	9841	

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/14/2023
Job End Date:	9/8/2023
State:	West Virginia
County:	Wetzel
API Number:	47-103-03445-00-00
Operator Name:	EQT Production
Well Name and Number:	BIG245 112H
Latitude:	39.59550420
Longitude:	-80.56870250
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,648
Total Base Water Volume (gal):	38,958,570
Total Base Non Water Volume:	0



## 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	88.88968	None
Sand (Proppant)	EQT	Proppant	Silica Substrate	14808-60-7	100.00000	10.96631	None
Clearal 268	ChemStream	Biocide	Non-hazardous substances	Proprietary	80.00000	0.00903	None
StimSTREAM FR 9800	ChemStream	Friction Reducer	Copolymer of 2-propenamide	Proprietary	30.00000	0.00777	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor	Non-hazardous substances	Proprietary	90.00000	0.00765	None
StimSTREAM FR 9800	ChemStream	Friction Reducer	Petroleum Distillate	64742-47-8	20.00000	0.00345	None
Enviro-Syn HCR-7000-WL	Evolution Well Services	Acid	Proprietary	Proprietary	20.00000	0.00137	None
Clearal 268	ChemStream	Biocide	Glutaraldehyde	111-30-8	20.00000	0.00056	None
Enviro-Syn HCR-7000-WL	Evolution Well Services	Acid					

			Proprietary	Proprietary	10.00000	0.00034	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid)(BHMT)	34690-00-1	10.00000	0.00009	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000	0.00004	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Oleic Acid Diethanolamide	93-83-4	2.00000	0.00004	None
Clearal 263	ChemStream	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00001	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Ammonium chloride ((NH4)Cl)	12125-02-9	1.00000	0.00001	None
Clearal 268	ChemStream	Biocide					
			Ethanol	64-17-5	1.50000	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 fresh water, produced water, and/or 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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