

Well Operator's Report of Well Work



Well Number: BIG245 114H (L004464)

API: 47 - 103 - 03446

Submission: Initial Amended

Notes: Amendment for Flowback/Production Data

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Office of Oil and Gas

JAN 22 2024

Wv Department of
Environmental Protection

02/16/2024

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

API 47 - 103 - 03446 County Wetzel District Grant
Quad Big Run Pad Name BIG245 Field/Pool Name N/A
Farm name ET Blue Grass LLC Well Number BIG245 114H (L004464)
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 4,382,957.05 Easting 537,032.56
Landing Point of Curve Northing 4,383,275.87 Easting 537,839.73
Bottom Hole Northing 4,379,103.17 Easting 540,436.68

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 13.65 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 02/28/2022 Date drilling commenced 11/15/2021 Date drilling ceased 06/29/2022
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]
02/16/2024 31-24
WV Department of Environmental Protection

API 47- 103 03446 Farm name ET Blue Grass LLC Well number BIG245 114H (L004464)

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"	1211'	NEW	J-55 54.5#	1085'	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2653'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	6"	24,860'	NEW	HP-110 24#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 940' 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 ³ /sks)	Volume (ft ³)	Cement Top (GL)	WOC (hrs)
Conductor	CLASS A	83	15.6	1.18	98	0	8+
Surface	CLASS A	1016	16.0	1.13	1148	0	8
Coal							
Intermediate 1	CLASS A	1029	16.5	1.07	1101	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4486	15.2	1.09	4889	940'	8+
Tubing							

Drillers TD (ft) 24,886' Loggers TD (ft) N/A
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 2,714

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 1974' _____

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 _____

02/16/2024

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Well number BIG245 114H (L004464)

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

PERFORATION DATA ATTACHED

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations 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)

STIMULATION DATA ATTACHED

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
	TVD	MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1752.00 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 961.35 mcfpd Oil 0.0 bpd NGL _____ bpd Water 6.11 bpd GAS MEASURED BY Estimated Orifice Pilot

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 NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		

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Please insert additional pages as applicable.

Drilling Contractor Patterson UTI (Rig 292)
Address 207 Carlton Dr City Eighty Four State PA Zip 15330

Logging Company Baker Hughes
Address 400 Technology Dr Suite 100 City Canonsburg State PA Zip 15317

Cementing Company Halliburton
Address 121 Champion Way Suite 110 City Canonsburg State PA Zip 15317

Cementing Company Universal Pressure Pumping, Inc.
Address 13549 S. Moisertown Road City Meadville State PA Zip 16335

Please insert additional pages as applicable.

Completed by Adam Hughey Telephone 724-579-5475
Signature _____ Title Director of Completions Date 2023-10-29

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

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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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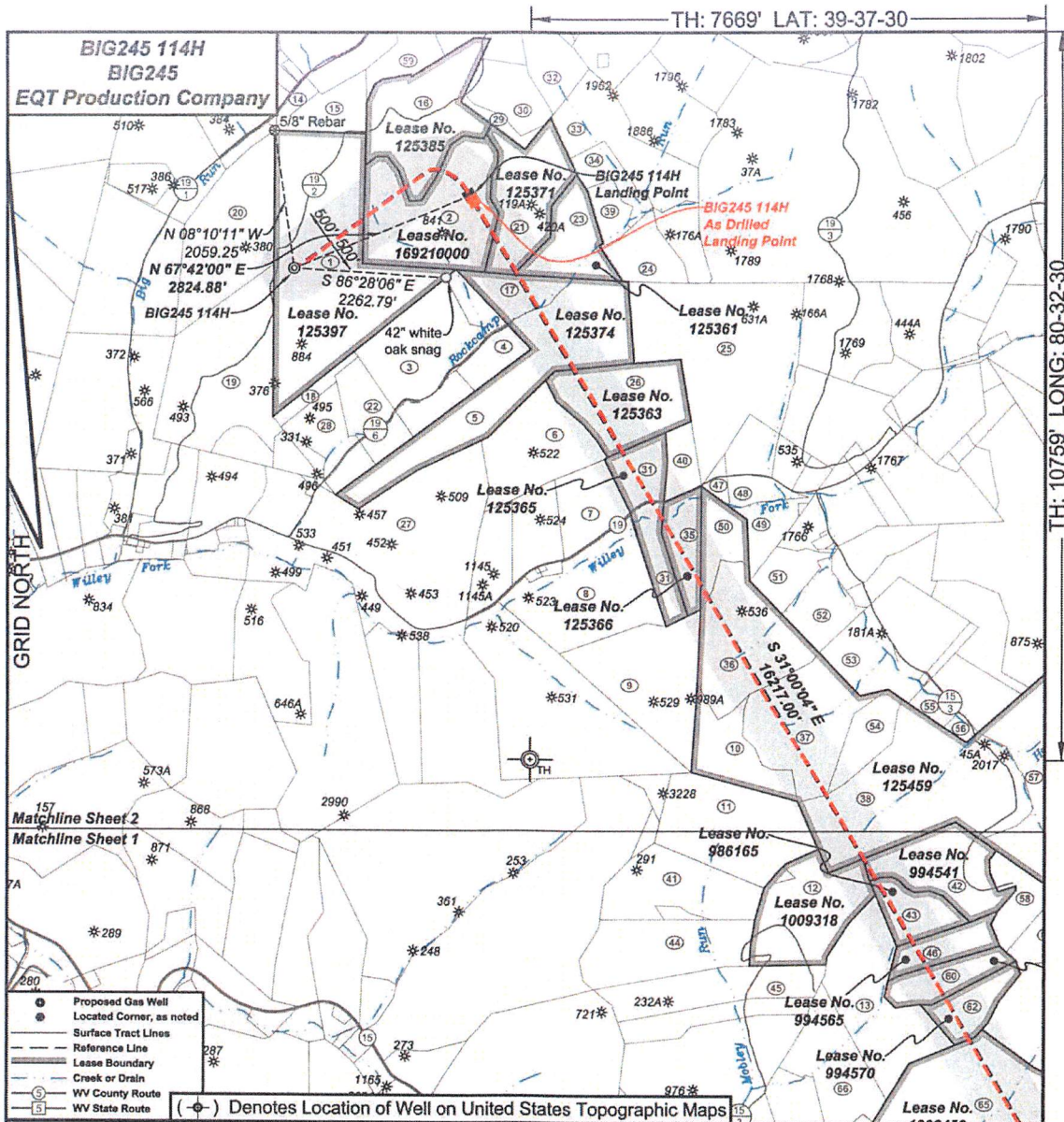
Well # BIG245 114H (L004464) Final Formations API# 47-103-03446				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	933	933
Waynesburg Coal	933	933	936	936
Sand/Shale	936	936	1,015	1,015
Mapletown Coal	1,015	1,015	1,018	1,018
Sand/Shale	1,018	1,018	1,117	1,117
Pittsburgh Coal	1,117	1,117	1,125	1,125
Sand/Shale	1,125	1,125	2,257	2,255
Maxton	2,257	2,255	2,298	2,296
Sand/Shale	2,298	2,296	2,311	2,309
Big Lime	2,311	2,309	2,381	2,378
Big Injun	2,381	2,378	2,548	2,544
Sand/Shale	2,548	2,544	2,717	2,712
Weir	2,717	2,712	2,757	2,751
Sand/Shale	2,757	2,751	3,115	3,100
Gordon	3,115	3,100	3,154	3,138
Sand/Shale	3,154	3,138	3,173	3,156
Forth Sand	3,173	3,156	3,217	3,198
Sand/Shale	3,217	3,198	3,221	3,202
Bayard	3,221	3,202	3,451	3,419
Sand/Shale	3,451	3,419	3,843	3,776
Speechley	3,843	3,776	4,065	3,965
Sand/Shale	4,065	3,965	4,636	4,447
Riley	4,636	4,447	4,868	4,643
Sand/Shale	4,868	4,643	5,332	5,038
Benson	5,332	5,038	5,480	5,163
Sand/Shale	5,480	5,163	5,794	5,428
Alexander	5,794	5,428	6,110	5,695
Elks	6,110	5,695	7,740	7,077
Sonyea	7,740	7,077	7,937	7,236
Middlesex	7,937	7,236	8,009	7,288
Genesee	8,009	7,288	8,147	7,377
Geneseo	8,147	7,377	8,188	7,401
Tully	8,188	7,401	8,232	7,425
Hamilton	8,232	7,425	8,533	7,533
Marcellus	8,533	7,533	24,886	7,625

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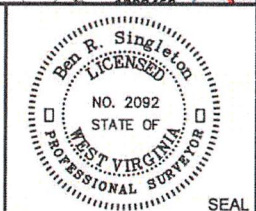
WV Department of
Environmental Protection

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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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FILE NO: 246-18
DRAWING NO: BIG245 114H
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station

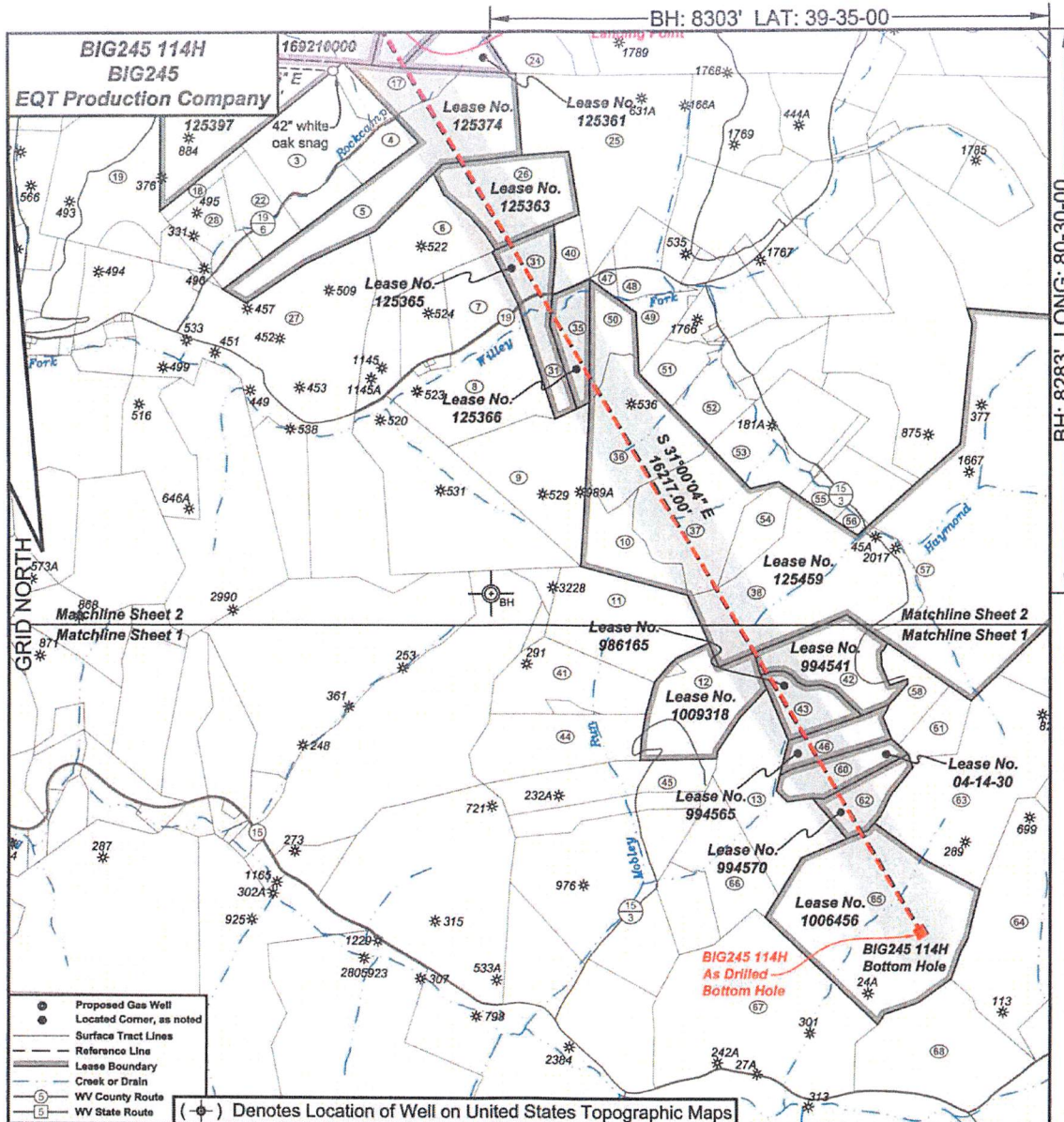
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: July 27 20 22
OPERATOR'S WELL NO.: BIG245 114H
API WELL NO
47 - 103 - 03446
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: Wetzel
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'

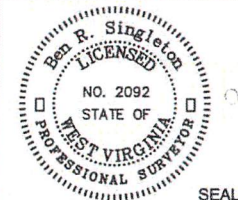
WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow
ADDRESS: 400 Woodcliff Drive ADDRESS: 427 Midstate Drive
Canonsburg, PA 15317 Clarksburg, WV 26301

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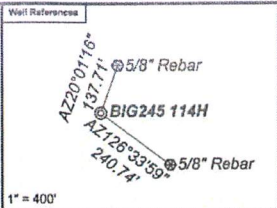
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BIG245 114H
BIG245
EQT Production Company

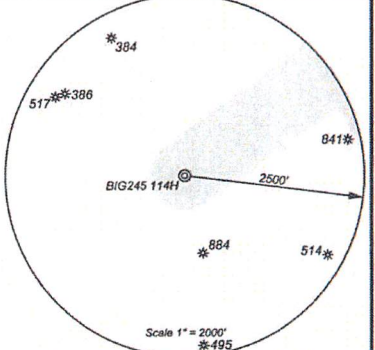
Tract ID	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	8	22	Wetzel	Grant	ET Blue Grass LLC	138.93
2	8	15	Wetzel	Grant	John Michael Byard	71.90
3	8	28	Wetzel	Grant	James A. Yoho	61.00
4	8	29	Wetzel	Grant	Mary Jane Byard	15.00
5	8	32	Wetzel	Grant	Joe Pigg	32.40
6	9	26	Wetzel	Grant	Shirlyn Snider	56.52
7	9	40	Wetzel	Grant	Shirlyn Snider	34.90
8	9	52	Wetzel	Grant	Norman Derby	61.51
9	14	8	Wetzel	Grant	Edgar R. Coan	52.50
10	14	10	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	29.00
11	14	18	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	66.70
12	14	23	Wetzel	Grant	Equiterra LP	51.00
13	14	30	Wetzel	Grant	Dale C. Eastham, et al.	57.00
14	8	13.1	Wetzel	Grant	Duane M. Goodrich	3.36
15	8	7	Wetzel	Grant	James E. & Martin A. Stovoking	16.12
16	8	8	Wetzel	Grant	Wanda L. Byard	56.16
17	9	22	Wetzel	Grant	James A. Yoho	17.80
18	8	25	Wetzel	Grant	James A. Yoho	6.25
19	8	23	Wetzel	Grant	Dale K. Dufaney, et al.	70.81
20	8	11	Wetzel	Grant	Bonnie M. Hawthorne	63.50
21	9	63	Wetzel	Grant	Mary E. Wright, et al.	46.00
22	8	27	Wetzel	Grant	James A. Yoho	21.75
23	9	13	Wetzel	Grant	James A. Yoho	27.00
24	9	17	Wetzel	Grant	Loisie Watson	30.08
25	9	23	Wetzel	Grant	Stephen B. & Carolyn M. Gantz	119.00
26	9	29	Wetzel	Grant	William & Margaret Scheicher	47.90
27	8	53	Wetzel	Grant	H. Don Higginbotham	194.21
28	8	26	Wetzel	Grant	James A. Yoho	23.25
29	8	63	Wetzel	Grant	Mary E. Wright, et al.	4.25
30	8	8	Wetzel	Grant	Mary E. Wright, et al.	24.00
31	9	53	Wetzel	Grant	Norman R. & Vivian L. Derby	32.90
32	4	13	Wetzel	Grant	Olive Marie Utz	15.17
33	8	6	Wetzel	Grant	James A. Yoho	45.06
34	8	8	Wetzel	Grant	Wanda Willey, et al.	11.30
35	9	54	Wetzel	Grant	Jack L. & Leanna C. Barnette	17.42
36	14	9	Wetzel	Grant	Leonard Rice	55.00
37	14	11	Wetzel	Grant	Thomas J. Parks, et al.	54.44
38	14	15	Wetzel	Grant	Coastal Forest Resources Company	138.93
39	9	15	Wetzel	Grant	Dgal Starnesling Estate	8.52
40	9	41	Wetzel	Grant	William Scheicher	11.56
41	14	22	Wetzel	Grant	John W. Wycoff & Carolyn S. McGill	48.00
42	14	25	Wetzel	Grant	Claire Snodgrass	35.58
43	14	24	Wetzel	Grant	EQT Production Company	19.20
44	14	28	Wetzel	Grant	EQT Production Company	50.50
45	14	37	Wetzel	Grant	EQT Production Company	36.50
46	14	29	Wetzel	Grant	ET Blue Grass, LLC	17.00
47	9	42	Wetzel	Grant	Jack L. & Leanna C. Barnette	2.89
48	9	43	Wetzel	Grant	Norman R. & Vivian L. Derby	14.40
49	9	45	Wetzel	Grant	Dewayne & Patricia L. Morhe	19.65
50	9	55	Wetzel	Grant	Jack L. & Leanna C. Barnette	16.40
51	9	56	Wetzel	Grant	Leonard E. & Edwin C. Rice	16.50
52	14	1	Wetzel	Grant	Leonard E. & Edwin C. Rice	21.65
53	14	12	Wetzel	Grant	Thomas J. Parks, et al.	16.00
54	14	19.1	Wetzel	Grant	Thomas J. Parks, et al.	16.82
55	14	14	Wetzel	Grant	Mary Yost, et al.	21.40
56	14	13	Wetzel	Grant	Coastal Forest Resources Company	2.80
57	14	15	Wetzel	Grant	Coastal Forest Resources Company	26.60
58	14	26	Wetzel	Grant	Mary J. Byard	14.30
59	3	31	Wetzel	Grant	Ralph D. Theaker, et al.	27.26
60	14	30	Wetzel	Grant	Equiterra LP	20.50
61	14	32	Wetzel	Grant	Mary Jane Byard	13.30
62	14	31	Wetzel	Grant	Donald J. D'Laskey, Jr.	19.00
63	14	33	Wetzel	Grant	Albee H. & Hilda B. Conway	106.00
64	14	42	Wetzel	Grant	Donald J. D'Laskey, Jr.	111.00
65	14	40	Wetzel	Grant	Donald J. D'Laskey, Jr.	131.00
66	14	39.3	Wetzel	Grant	Dale Eastham, et al.	38.05
67	10	7	Wetzel	Grant	Florence E. Klotz	157.08
68	19	8	Wetzel	Grant	Donald J. D'Laskey, Jr.	71.90



Well Information:
BIG245 114H coordinates are
NAD 27 N: 400,782.89 E: 1,858,788.24
NAD 83 UTM N: 4,382,957.05 E: 537,032.56
BIG245 114H Kick Out Point coordinates are
NAD 27 N: 400,826.27 E: 1,868,865.48
NAD 83 UTM N: 4,382,970.68 E: 537,053.44
BIG245 114H Landing Point coordinates are
NAD 27 N: 401,784.55 E: 1,701,462.28
NAD 83 UTM N: 4,383,275.87 E: 537,839.73
BIG245 114H Bottom Hole coordinates are
NAD 27 N: 387,949.78 E: 1,709,755.84
NAD 83 UTM N: 4,379,103.17 E: 540,436.88
West Virginia Coordinate system of 1927 (North Zone)
based upon Differential GPS Measurements
Piat 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.

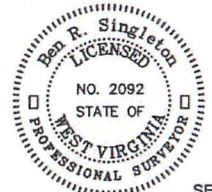
- BIG245**
- ⊙ BIG245 114H
 - ⊙ BIG245 112H
 - ⊙ BIG245 110H
 - ⊙ BIG245 108H
 - ⊙ BIG245 106H
 - ⊙ BIG245 104H
 - ⊙ BIG245 102H
 - ⊙ 47-103-03235
 - ⊙ 47-103-03236
- 47-103-03234 ⊙

Lease No.	Owner	Acres
186210000	Liberty Holding Company, Inc.	71.5
125365	Jeffery Todd Longwell, et al.	61
125371	Joseph F. Kiger, et al.	46
125361	Three Rivers Royalty II, LLC, et al.	27
125374	Jordan Zachary Pigg, et al.	100
125363	Stone Hill Minerals Holdings, LLC	48
125365	Norman R. Derby and Vivian L. Derby	33
125366	OCV USA Inc., et al.	18
1009318	Thomas L. Lewis, et al.	51
125459	Randall J. Hartman, et al.	893
994541	Dan Coleman, et al.	35.88 of 131
896185	Thomas Lee Lewis, Sr., et al.	19.20
994555	Daris Schroeder, et al.	17
04-14-30	Scott Carter, acting as Executor of the Estate of Shirley Gay Carter a/k/a Shirley G. Carter, deceased	19.04
994570	John William Klotz, Jr., et al.	19
1006456	Valerie D. Prest, et al.	131



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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	08/11/2023	24762	24583	40	Marcellus
3	08/12/2023	24564	24385	40	Marcellus
4	08/12/2023	24366	24187	40	Marcellus
5	08/12/2023	24168	23989	40	Marcellus
6	08/12/2023	23970	23791	40	Marcellus
7	08/13/2023	23772	23593	40	Marcellus
8	08/13/2023	23574	23395	40	Marcellus
9	08/13/2023	23376	23197	40	Marcellus
10	08/13/2023	23178	22999	40	Marcellus
11	08/14/2023	22980	22801	40	Marcellus
12	08/14/2023	22782	22603	40	Marcellus
13	08/15/2023	22584	22405	40	Marcellus
14	08/15/2023	22386	22207	40	Marcellus
15	08/16/2023	22188	22009	40	Marcellus
16	08/16/2023	21990	21811	40	Marcellus
17	08/16/2023	21792	21613	40	Marcellus
18	08/17/2023	21594	21415	40	Marcellus
19	08/17/2023	21396	21217	40	Marcellus
20	08/17/2023	21198	21019	40	Marcellus
21	08/18/2023	21000	20821	40	Marcellus
22	08/18/2023	20802	20623	40	Marcellus
23	08/18/2023	20604	20425	40	Marcellus
24	08/19/2023	20406	20227	40	Marcellus
25	08/19/2023	20208	20029	40	Marcellus
26	08/19/2023	20010	19831	40	Marcellus
27	08/19/2023	19812	19633	40	Marcellus
28	08/19/2023	19614	19435	40	Marcellus
29	08/20/2023	19416	19237	40	Marcellus
30	08/20/2023	19218	19039	40	Marcellus
31	08/20/2023	19020	18841	40	Marcellus
32	08/21/2023	18822	18643	40	Marcellus
33	08/21/2023	18624	18445	40	Marcellus
34	08/22/2023	18426	18247	40	Marcellus
35	08/22/2023	18228	18049	40	Marcellus
36	08/22/2023	18030	17851	40	Marcellus
37	08/23/2023	17832	17653	40	Marcellus
38	08/23/2023	17634	17455	40	Marcellus
39	08/23/2023	17436	17257	40	Marcellus
40	08/24/2023	17238	17059	40	Marcellus
41	08/24/2023	17040	16861	40	Marcellus
42	08/24/2023	16842	16663	40	Marcellus
43	08/25/2023	16644	16465	40	Marcellus
44	08/25/2023	16446	16267	40	Marcellus

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45	08/25/2023	16248	16069	40	Marcellus
46	08/26/2023	16050	15871	40	Marcellus
47	08/26/2023	15852	15673	40	Marcellus
48	08/27/2023	15654	15475	40	Marcellus
49	08/27/2023	15456	15277	40	Marcellus
50	08/27/2023	15258	15079	40	Marcellus
51	08/28/2023	15060	14881	40	Marcellus
52	08/28/2023	14862	14683	40	Marcellus
53	08/28/2023	14664	14485	40	Marcellus
54	08/29/2023	14466	14287	40	Marcellus
55	08/29/2023	14268	14089	40	Marcellus
56	08/29/2023	14070	13891	40	Marcellus
57	08/29/2023	13872	13693	40	Marcellus
58	08/30/2023	13674	13495	40	Marcellus
59	08/30/2023	13476	13297	40	Marcellus
60	08/30/2023	13278	13099	40	Marcellus
61	08/31/2023	13080	12901	40	Marcellus
62	08/31/2023	12882	12703	40	Marcellus
63	08/31/2023	12684	12505	40	Marcellus
64	08/31/2023	12486	12307	40	Marcellus
65	08/31/2023	12288	12109	40	Marcellus
66	09/01/2023	12090	11911	40	Marcellus
67	09/01/2023	11892	11713	40	Marcellus
68	09/01/2023	11694	11515	40	Marcellus
69	09/01/2023	11496	11317	40	Marcellus
70	09/01/2023	11298	11119	40	Marcellus
71	09/02/2023	11100	10921	40	Marcellus
72	09/02/2023	10902	10723	40	Marcellus
73	09/02/2023	10704	10525	40	Marcellus
74	09/03/2023	10506	10327	40	Marcellus
75	09/03/2023	10308	10129	40	Marcellus
76	09/04/2023	10110	9931	40	Marcellus
77	09/04/2023	9912	9733	40	Marcellus
78	09/04/2023	9714	9535	40	Marcellus
79	09/05/2023	9516	9337	40	Marcellus
80	09/05/2023	9318	9139	40	Marcellus
81	09/05/2023	9120	8941	40	Marcellus
82	09/05/2023	8922	8743	40	Marcellus
83	09/05/2023	8724	8564	36	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	08/11/2023	90	9115	7361	4654	176440	5125	
2	08/12/2023	100	9127	6219	5446	440004	10306	
3	08/12/2023	100	8969	5906	5636	440460	10232	
4	08/12/2023	99	9144	6261	5423	440379	10280	
5	08/12/2023	100	8994	5988	5363	440028	10234	
6	08/13/2023	100	8956	5984	4646	442652	10298	
7	08/13/2023	99	9010	6329	5140	440332	10183	
8	08/13/2023	100	8895	6051	5635	440441	10231	
9	08/14/2023	100	8845	6526	4914	440140	10181	
10	08/14/2023	100	8918	6217	4898	440205	10163	
11	08/15/2023	100	9108	6339	4776	440198	10162	
12	08/15/2023	100	8936	6216	4863	440361	10186	
13	08/15/2023	100	8987	6395	4849	440101	10182	
14	08/16/2023	100	9013	6181	4919	440440	10202	
15	08/16/2023	99	8954	6212	5070	440381	10122	
16	08/16/2023	100	9169	5959	4795	440151	10156	
17	08/17/2023	100	9006	6578	4997	440093	10124	
18	08/17/2023	100	9040	6890	4914	440087	10118	
19	08/18/2023	100	8992	6191	5193	440570	10152	
20	08/18/2023	100	9077	6187	5099	440087	10010	
21	08/18/2023	100	9080	5939	5417	440205	10080	
22	08/18/2023	99	8994	6035	4961	440106	10071	
23	08/19/2023	100	8924	6010	5088	440105	10062	
24	08/19/2023	100	8940	6059	4706	440196	10036	
25	08/19/2023	99	8831	5620	4684	440216	10008	
26	08/19/2023	100	8949	6091	4679	440121	10070	
27	08/19/2023	100	9012	5764	4553	440355	10022	
28	08/20/2023	100	8841	5992	4597	440137	10007	
29	08/20/2023	100	8753	5876	4301	440194	9963	
30	08/20/2023	100	8521	5633	4749	440139	9971	
31	08/21/2023	100	8810	5958	4352	440087	9978	
32	08/21/2023	100	8517	6199	4730	440182	9940	
33	08/22/2023	93	8898	6108	4049	431047	10253	
34	08/22/2023	100	8347	6243	4930	440045	9945	
35	08/22/2023	101	8656	6041	4256	442035	9973	
36	08/23/2023	100	8720	6313	4309	440201	9938	
37	08/23/2023	99	8877	6289	4543	440094	9900	
38	08/23/2023	100	8450	6121	4949	440121	9925	
39	08/24/2023	100	8637	5708	4543	440077	9966	
40	08/24/2023	100	8550	5809	4821	440064	9901	
41	08/24/2023	100	8235	5905	4677	440107	9905	
42	08/24/2023	99	8572	5953	4617	440086	9888	
43	08/25/2023	100	8234	5953	5030	440043	9891	

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44	08/25/2023	100	8248	5652	4775	440165	9908
45	08/26/2023	100	8253	5984	4408	440058	9730
46	08/26/2023	99	8419	6051	4194	440167	9867
47	08/27/2023	99	8298	5872	4570	440040	9830
48	08/27/2023	100	8058	5576	4581	440058	9842
49	08/27/2023	99	8167	6260	4592	440055	9849
50	08/28/2023	100	8279	6249	5074	440130	9998
51	08/28/2023	100	8473	6107	4896	440018	9859
52	08/28/2023	98	7966	6062	4606	440034	9801
53	08/29/2023	99	8165	5877	4968	440285	9806
54	08/29/2023	95	8814	5886	5142	440117	9867
55	08/29/2023	100	8069	6034	4913	440443	9820
56	08/30/2023	98	8345	6037	4394	440009	9813
57	08/30/2023	97	8434	5866	4351	440066	9782
58	08/30/2023	99	8216	6171	5048	440019	9761
59	08/30/2023	99	8206	5787	4875	440164	9833
60	08/31/2023	99	8032	5901	4759	439967	9815
61	08/31/2023	100	7673	5815	4620	440006	9813
62	08/31/2023	100	7809	5861	4542	440418	9818
63	08/31/2023	100	7882	5673	4628	440372	9791
64	08/31/2023	100	7880	5686	5153	440186	9774
65	09/01/2023	99	7927	5918	4987	440083	9591
66	09/01/2023	100	7769	5710	4854	440434	9599
67	09/01/2023	99	7752	6118	5426	440387	9742
68	09/01/2023	100	7980	6439	5396	440511	9727
69	09/02/2023	97	8331	6385	4844	440022	9730
70	09/02/2023	76	8862	5993	5016	440299	9705
71	09/02/2023	100	7491	5561	4871	440442	9731
72	09/02/2023	100	7572	5793	4569	440467	9737
73	09/03/2023	100	7687	6486	5356	440150	9686
74	09/04/2023	100	7392	6052	4839	441129	9701
75	09/04/2023	100	7488	5933	4938	440126	9691
76	09/04/2023	100	7456	5631	4581	440380	9731
77	09/04/2023	100	7575	7196	4302	440024	9674
78	09/05/2023	100	7491	5758	4127	440231	9668
79	09/05/2023	100	7484	5918	4438	440464	9649
80	09/05/2023	100	7230	5804	4074	440384	9656
81	09/05/2023	100	7292	5740	4495	440426	9649
82	09/05/2023	100	7555	6334	4670	440055	9610
83	09/06/2023	100	8196	6186	4394	396158	8837

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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:	47-103-03446-00-00
Operator Name:	EQT Production
Well Name and Number:	BIG245 114H
Latitude:	39.59554480
Longitude:	-80.56869340
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,653
Total Base Water Volume (gal):	34,348,902
Total Base Non Water Volume:	0

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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	88.56657	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	11.19264	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Copolymer of 2-propenamide	Proprietary	30.00000	0.00634	None
Enviro-Syn HCR-7000-WL	Evolution Well Services	Acid					
			Proprietary	Proprietary	20.00000	0.00628	None
Clearal 268	ChemStream	Biocide					
			Non-hazardous substances	Proprietary	80.00000	0.00518	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			Non-hazardous substances	Proprietary	90.00000	0.00429	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Petroleum Distillate	64742-47-8	20.00000	0.00282	None
Enviro-Syn HCR-7000-WL	Evolution Well Services	Acid					
			Proprietary	Proprietary	10.00000	0.00157	None
Clearal 268	ChemStream	Biocide					

			Glutaraldehyde	111-30-8	20.00000	0.00032	None
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
			Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid)(BHMT)	34690-00-1	10.00000	0.00005	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000	0.00003	None
StimSTREAM FR 9800	ChemStream	Friction Reducer					
			Oleic Acid Diethanolamide	93-83-4	2.00000	0.00003	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					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	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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