

Well Operator's Report of Well Work



Well Number: Vanderbilt 4H (L003774)

API: 47 - 049 - 02535

Submission: ☒ Initial ☐ Amended

Notes:

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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 - 049 - 02535 County Marion District Mannington
Quad Glover Gap Pad Name VANDERBILT Field/Pool Name N/A
Farm name EQT Production Company Well Number Vanderbilt 4H (L003774)
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 4,377,616.58 Easting 545,118.41
Landing Point of Curve Northing 4,377,744.49 Easting 544,404.28
Bottom Hole Northing 4,374,092.49 Easting 546,183.52

Elevation (ft) 1358' 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 13.52 ppb barium sulfate, sodium chloride, xanthan gum, polyamino 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 04/08/2024 Date drilling commenced 06/25/2024 Date drilling ceased 01/25/2025
Date completion activities began 02/17/2025 Date completion activities ceased 05/20/2025
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 243', 494' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2272' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1180' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Y

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APPROVED

Reviewed by:

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API 47- 049 - 02535 Farm name EQT Production Company Well number Vanderbilt 4H (L003774)

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"	1231'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2669'	NEW	J-55 36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4", 8-1/2"	6"	22,308'	NEW	P-110 24#	N/A	N
Tubing							
Packer type and depth set							

Comment Details _____

Production cmt has calculated TOC of 1054'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 A	1145	16	1.09	1248	0	8
Coal							
Intermediate 1	CLASS L	1003	15.6	1.13	1133	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3670	15.0	1.19	4367	1054'	8+
Tubing							

Drillers TD (ft) 22,328' 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) 2770'

Check all wireline logs run ☐ caliper ☐ density ☒ deviated/directional ☐ induction
☐ neutron ☐ resistivity ☒ gamma ray ☐ temperature ☐ sonic

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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 8937', EVERY JOINT TO 7538', EVERY OTHER JOINT TO 1962'

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 _____

9/8 8-25-2025

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PERFORATION RECORD

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

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Please insert additional pages as applicable.

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DEPTHS

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Drilling Contractor Falcon (Rig 11)

Address 1120 US-119 City Indiana State PA Zip 15701

Logging Company GyroData

Address 73 Nobletown Road City Carnegie State PA Zip 15106

Logging Company Scientific Drilling International, Inc

Address 3475 Washington Ave City Finleyville State PA Zip 15332

Cementing Company _____

Address _____ City _____ State _____ Zip _____

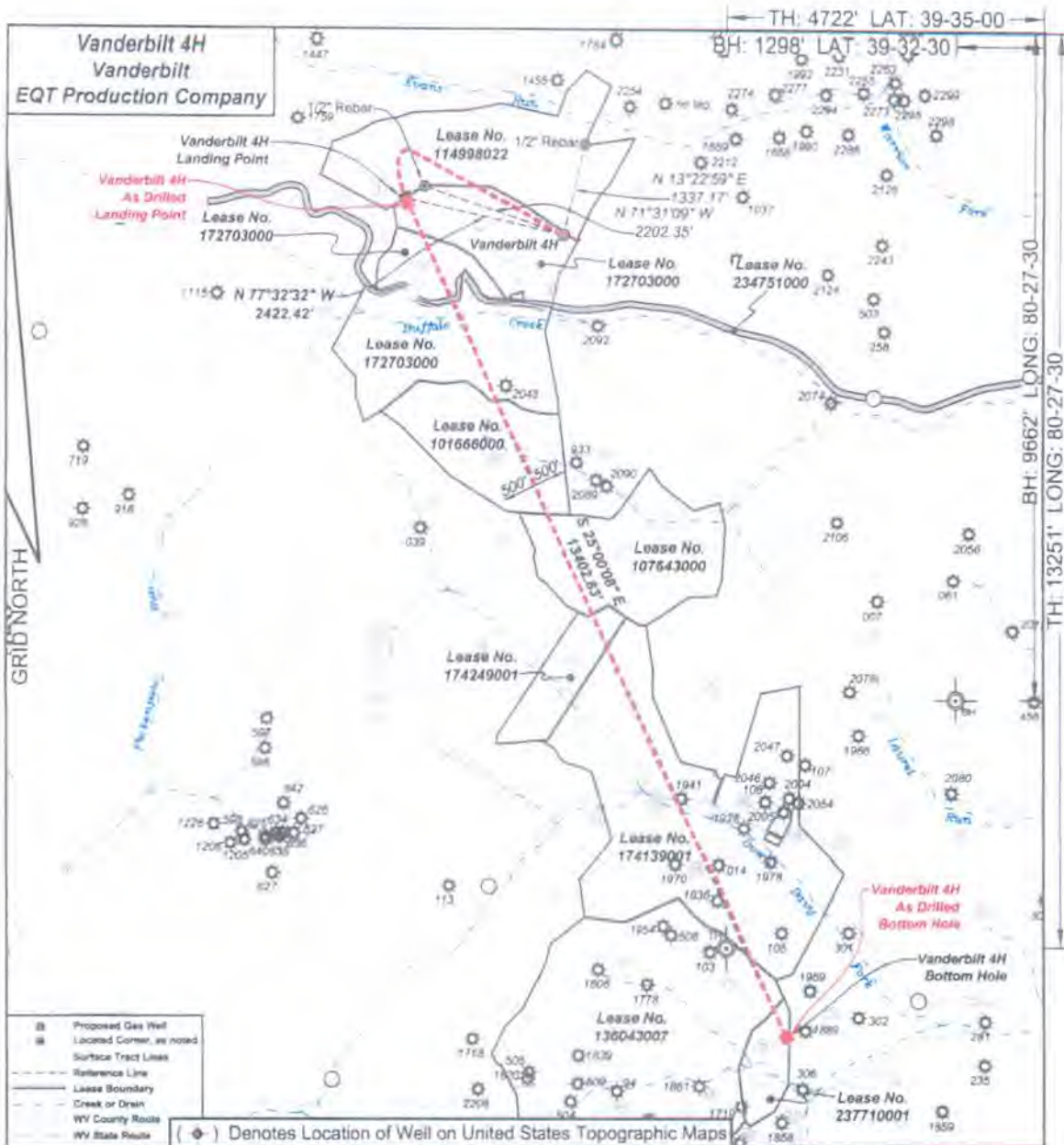
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Well # VANDERBILT 4H Final Formations API# 47-049-02535				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	1,180	1,180
Pittsburgh Coal	1,180	1,180	1,189	1,189
Sand/Shale	1,189	1,189	2,386	2,386
Big Lime	2,386	2,386	2,458	2,458
Big Injun	2,458	2,458	2,562	2,562
Sand/Shale	2,562	2,562	3,050	3,049
Gantz	3,050	3,049	3,157	3,153
50F	3,157	3,153	3,315	3,305
Sand/Shale	3,315	3,305	3,357	3,344
Fifth Sand	3,357	3,344	3,391	3,376
Sand/Shale	3,391	3,376	3,435	3,417
Bayard	3,435	3,417	4,674	4,441
Sand/Shale	4,674	4,441	5,856	5,404
Alexander	5,856	5,404	6,095	5,601
Sand/Shale	6,095	5,601	6,255	5,731
Elks	6,255	5,731	7,196	6,497
Sonyea	7,196	6,497	7,356	6,628
Middlesex	7,356	6,628	7,413	6,675
Genesee	7,413	6,675	7,507	6,750
Geneseo	7,507	6,750	7,537	6,773
Tully	7,537	6,773	7,568	6,797
Hamilton	7,568	6,797	7,668	6,875
Marcellus	7,668	6,875	22,328	7,791

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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. 93-21
DRAWING NO. Vanderbilt 4H
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 February 21, 20, 25
OPERATOR'S WELL NO. Vanderbilt 4H
API WELL NO. 47 - 049 - 02535
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL
(IF GAS) PRODUCTION ☐ STORAGE ☐ DEEP ☒ SHALLOW
LOCATION: ELEVATION: As-Built: 1358' WATERSHED: Evans Run & Buffalo Creek QUADRANGLE: Glover Gap
DISTRICT: Mannington COUNTY: Marion
SURFACE OWNER: Larry Higgins & Eva Higgins ACREAGE: 60
ROYALTY OWNER: EQT Production Company, et al. LEASE NO: 172703000 ACREAGE: 60
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: 7,735'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow
ADDRESS: 400 Woodcliff Drive ADDRESS: 115 Professional Place PO Box 280
Canonsburg, PA 15317 Bridgeport, WV 26330

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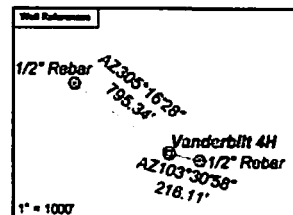
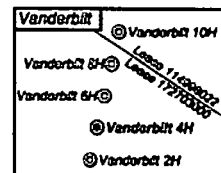
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**Vanderbilt 4H
Vanderbilt
EQT Production Company**

Tract ID	Top Map No	Parcel No	County	District	Surface Tract Owner	Acres
1	45	11	Manon	Mannington	Larry D. & Thana B. Higgins	50
2	45	17	Manon	Mannington	EQT Production Company	125.73
3	45	5	Manon	Mannington	Harry R. & Suzanne M. Morris	52
4	45	12.1	Manon	Mannington	April M. Powell	2.49
5	45	4	Manon	Mannington	Ronald L. Powell, Jr.	59.82
6	45	12	Manon	Mannington	April M. Powell	37.5
7	45	13	Manon	Mannington	Thelma L. Olson	11
8	45	14.2	Manon	Mannington	Thelma L. Olson	1.5
9	45	14.1	Manon	Mannington	Patricia F. Powell	8.59
10	45	14.4	Manon	Mannington	Thomas A. & Karen J. Hearnbaugh	3
11	45	16	Manon	Mannington	Neth A. Powell	27.29
12	45	20	Manon	Mannington	John M. Proffitt, Sr.	14.6
13	45	25.1	Manon	Mannington	Richard K. & Dawn K. Jones	5.71
14	45	24	Manon	Mannington	Barbara E. Henderson, et al	38.6
15	45	23	Manon	Mannington	Thomas L. Shadigosa	105.5
16	45	20	Manon	Mannington	EQT Production Company	78.5
25	45	2	Manon	Mannington	Alan L. & Donna J. McBarry	102.59
26	46	10.1	Manon	Mannington	Johnny R. Myers	28.43
29	46	5.2	Manon	Mannington	Manon County Coal Resources Inc.	74
30	46	6.1	Manon	Mannington	Patricia A. Oathman	40
31	46	8	Manon	Mannington	Patricia A. Oathman	100
32	46	11	Manon	Mannington	Brett Martin	59.55
33	46	10	Manon	Mannington	John Myers	44.07
34	46	12	Manon	Mannington	Brett Martin	10
35	46	2	Manon	Mannington	Manon County Commission	544.34
36	46	13	Manon	Mannington	Brett Martin	8.5
37	46	14	Manon	Mannington	Brett Martin	9.5
38	46	16	Manon	Mannington	Brett Martin	10.5
39	46	17	Manon	Mannington	Brett Martin	7.5
40	46	9	Manon	Mannington	Wayne D. Wile II	13.25
41	46	1	Manon	Mannington	Wayne D. Wile II	85.67
44	46	1.2	Manon	Mannington	Carol L. Wile	1.2
45	47	11	Manon	Mannington	David L. & Dorinda D. Barnett	23.53
46	47	6	Manon	Mannington	The West Virginia Land Trust Inc.	62
47	47	7	Manon	Mannington	The West Virginia Land Trust Inc.	48
48	47	2	Manon	Mannington	Debra A. Monroze	30
49	47	1	Manon	Mannington	Manon County Coal Resources Inc.	96
50	46	4	Manon	Mannington	Moe Ross Inc.	57.47
51	46	5	Manon	Mannington	Ruby L. Herndon	152.04
52	48	1	Manon	Mannington	David L. & Maria A. Jones	58.5
53	48	2	Manon	Mannington	EQT Production Company	40
54	48	3	Manon	Mannington	Mark A. Barron	27.5
55	48	4	Manon	Mannington	Mark A. Barron	57
56	48	5	Manon	Mannington	Manon County Coal Resources Inc.	48.63
57	48	2.3	Manon	Mannington	Wagon M. Pose	0.75
58	48	2.2	Manon	Mannington	Manon County Commission	1.19
59	46	2.4	Manon	Mannington	Manon County Commission	0.51
64	47	3	Manon	Mannington	Debra A. Monroze	91

As-Drilled Well Information
Vanderbilt 4H coordinates are
 NAD 27 N: 352,818.14' E: 1,725,037.15
 NAD 83 UTM N: 4,377,818.58 E: 545,918.41
Vanderbilt 4H Landing Point coordinates are
 NAD 27 N: 363,273.95 E: 1,722,700.50
 NAD 83 UTM N: 4,377,744.43 E: 544,404.28
Vanderbilt 4H Bottom Hole coordinates are
 NAD 27 N: 371,192.93 E: 1,728,339.73
 NAD 83 UTM N: 4,374,092.49 E: 546,183.52
 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.

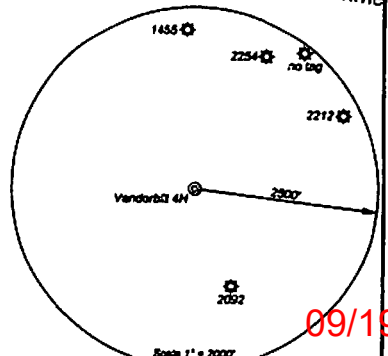


Lot/Tract No.	Owner	Acres
172703000	EQT Production Company, et al.	60
114563022	Bounty Minerals, LLC, et al.	125.73
172703000	EQT Production Company, et al.	40
234751000	West Virginia Department of Transportation, Division of Highways	48.83
172703000	EQT Production Company, et al.	125
101655000	XTO Energy Inc.	74
107643000	Dennis L. Chappell, et al.	100
174249001	Country Roads Minerals, LLC, et al.	34
174133001	Country Roads Minerals, LLC, et al.	203
135043007	Lee and Hazel Royalties, et al.	274
237710001	J&N Management Enterprises, LLC, et al.	23.75 of 297.75

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Perforation Data

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Stage No.	Perforation Date	Stage Perforated From TMD FL	Stage Perforated To TMD FL	# of Perforations/Stage	Formation(s)
2	04/05/2025	22222	22040	40	Marcellus
3	04/06/2025	22021	21838	40	Marcellus
4	04/08/2025	21820	21638	40	Marcellus
5	04/09/2025	21619	21437	40	Marcellus
6	04/09/2025	21418	21236	40	Marcellus
7	04/09/2025	21217	21035	40	Marcellus
8	04/09/2025	21016	20834	40	Marcellus
9	04/10/2025	20815	20633	40	Marcellus
10	04/10/2025	20614	20432	40	Marcellus
11	04/10/2025	20413	20231	40	Marcellus
12	04/10/2025	20212	20030	40	Marcellus
13	04/11/2025	20011	19829	40	Marcellus
14	04/11/2025	19810	19628	40	Marcellus
15	04/11/2025	19609	19427	40	Marcellus
16	04/11/2025	19408	19226	40	Marcellus
17	04/12/2025	19207	19025	40	Marcellus
18	04/12/2025	19006	18824	40	Marcellus
19	04/12/2025	18805	18623	40	Marcellus
20	04/13/2025	18604	18422	40	Marcellus
21	04/13/2025	18403	18221	40	Marcellus
22	04/14/2025	18202	18020	40	Marcellus
23	04/14/2025	18001	17819	40	Marcellus
24	04/15/2025	17800	17618	40	Marcellus
25	04/15/2025	17599	17417	40	Marcellus
26	04/15/2025	17398	17216	40	Marcellus
27	04/16/2025	17197	17015	40	Marcellus
28	04/16/2025	16996	16814	40	Marcellus
29	04/17/2025	16795	16613	40	Marcellus
30	04/17/2025	16594	16412	40	Marcellus
31	04/17/2025	16393	16211	40	Marcellus
32	04/18/2025	16192	16010	40	Marcellus
33	04/18/2025	15991	15809	40	Marcellus
34	04/19/2025	15790	15608	40	Marcellus
35	04/20/2025	15589	15407	40	Marcellus
36	04/20/2025	15388	15206	40	Marcellus
37	04/20/2025	15187	15005	40	Marcellus
38	04/21/2025	14986	14804	40	Marcellus
39	04/21/2025	14785	14603	40	Marcellus
40	04/22/2025	14584	14402	40	Marcellus
41	04/22/2025	14383	14201	40	Marcellus
42	04/23/2025	14182	14000	40	Marcellus
43	04/23/2025	13981	13799	40	Marcellus

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44	04/23/2025	13780	13598	40	Marcellus
45	04/24/2025	13579	13397	40	Marcellus
46	04/24/2025	13378	13196	40	Marcellus
47	04/25/2025	13177	12995	40	Marcellus
48	04/25/2025	12976	12794	40	Marcellus
49	04/25/2025	12775	12593	40	Marcellus
50	04/25/2025	12574	12392	40	Marcellus
51	04/26/2025	12373	12191	40	Marcellus
52	04/26/2025	12172	11990	40	Marcellus
53	04/27/2025	11971	11789	40	Marcellus
54	04/27/2025	11770	11588	40	Marcellus
55	04/27/2025	11569	11387	40	Marcellus
56	04/28/2025	11368	11186	40	Marcellus
57	04/28/2025	11167	10985	40	Marcellus
58	04/29/2025	10966	10784	40	Marcellus
59	04/29/2025	10785	10583	40	Marcellus
60	04/30/2025	10564	10382	40	Marcellus
61	04/30/2025	10363	10181	40	Marcellus
62	05/01/2025	10162	9980	40	Marcellus
63	05/02/2025	9961	9779	40	Marcellus
64	05/02/2025	9760	9578	40	Marcellus
65	05/03/2025	9559	9377	40	Marcellus
66	05/04/2025	9358	9176	40	Marcellus
67	05/04/2025	9157	8975	40	Marcellus
68	05/05/2025	8956	8774	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	04/05/2025	93	8774	8542	4528	177813	4179.000	
2	04/05/2025	97	8956	7083	4760	439991	10413.000	
3	04/08/2025	99	9084	4675	4801	439898	10334.000	
4	04/09/2025	99	9181	6974	4655	439903	10326.000	
5	04/09/2025	99	9086	8988	5096	440132	10299.000	
6	04/09/2025	98	9101	8560	5167	439853	10237.000	
7	04/09/2025	99	9245	8627	4786	440038	10280.000	
8	04/10/2025	99	9221	7029	5319	439906	10327.000	
9	04/10/2025	98	9287	6475	5114	440168	10323.000	
10	04/10/2025	99	9259	6535	5198	440082	10223.000	
11	04/10/2025	99	9180	6529	5679	439758	10192.000	
12	04/11/2025	99	9014	8519	4933	439843	10304.000	
13	04/11/2025	99	9289	6581	5531	440269	10261.000	
14	04/11/2025	99	9219	6786	5165	440145	10219.000	
15	04/11/2025	99	9116	8892	5149	440216	10237.000	
16	04/12/2025	97	9147	6617	5735	439868	10352.000	
17	04/12/2025	98	9271	6895	5603	440088	10279.000	
18	04/12/2025	99	9025	6448	6233	439853	10270.001	
19	04/13/2025	98	9182	6510	4973	435067	10184.000	
20	04/13/2025	93	8679	6380	5391	439986	10196.000	
21	04/14/2025	100	8981	5974	5748	440031	10100.000	
22	04/14/2025	100	9011	6387	5623	440043	10265.000	
23	04/15/2025	99	9071	6756	5082	440006	10201.000	
24	04/15/2025	100	8965	6472	6637	440063	10133.000	
25	04/15/2025	100	8846	6704	5477	439997	10159.000	
26	04/16/2025	98	8910	6729	5088	439954	10160.000	
27	04/16/2025	100	8926	6566	5225	440040	10032.000	
28	04/17/2025	100	9059	6782	6004	440070	10128.000	
29	04/17/2025	100	9049	6590	5317	440268	10120.000	
30	04/18/2025	100	8984	6700	5089	440187	10123.000	
31	04/18/2025	100	9076	6637	7117	444010	10122.000	
32	04/19/2025	100	8873	6650	5808	440011	10113.001	
33	04/19/2025	100	9048	7201	5390	440270	9910.000	
34	04/20/2025	93	8833	6505	4691	440080	10081.000	
35	04/20/2025	100	9076	6680	7844	439936	9879.000	
36	04/20/2025	100	9016	6834	5900	440240	10062.000	
37	04/21/2025	100	8901	6757	4941	439917	10037.000	
38	04/21/2025	100	9046	7206	5735	440343	10064.000	
39	04/22/2025	100	8965	6974	6105	440169	10004.000	
40	04/22/2025	100	8769	6725	5475	440169	10028.000	
41	04/23/2025	100	8798	6692	5452	439957	10003.000	
42	04/23/2025	100	8924	6848	6070	440020	9932.000	

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43	04/24/2025	95	8815	6748	6254	440049	10028.999
44	04/24/2025	100	8832	6806	6041	440087	9831.000
45	04/24/2025	100	8968	7462	5201	439992	9823.000
46	04/25/2025	100	8835	6867	5417	439917	9942.000
47	04/25/2025	100	8990	6570	5290	440025	9948.000
48	04/25/2025	100	8841	6648	5970	440139	9953.000
49	04/25/2025	100	8918	7171	5308	440501	9949.000
50	04/26/2025	100	8812	6445	5592	440034	9932.000
51	04/26/2025	100	8862	6676	6855	440168	9955.000
52	04/27/2025	100	8783	7034	6393	440111	9816.000
53	04/27/2025	100	8511	6373	5511	440069	9926.000
54	04/28/2025	100	8601	6905	4916	440133	9889.000
55	04/28/2025	100	8537	6466	5469	440108	9888.000
56	04/28/2025	100	8630	6983	6054	440068	9893.999
57	04/29/2025	100	8482	6642	5849	440265	9878.000
58	04/29/2025	100	8483	6504	5263	440072	9859.000
59	04/30/2025	100	8330	7061	5880	439864	9844.000
60	04/30/2025	100	8598	7238	4740	440071	9875.000
61	05/01/2025	100	8611	7161	4505	439914	9871.000
62	05/02/2025	100	8607	6945	5440	439963	9837.000
63	05/03/2025	100	8719	6851	5502	440200	9820.000
64	05/03/2025	100	8674	7116	5420	439976	9846.999
65	05/04/2025	100	8609	7201	4529	441449	9820.000
66	05/05/2025	101	8612	7617	5474	440171	9800.000
67	05/05/2025	98	8580	7273	5374	440011	9805.000
68	05/06/2025	98	8330	7313	4413	446168	9821.000

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	02/17/2025
Job End Date:	05/06/2025
State:	West Virginia
County:	Marion
API Number:	47-049-02535-00-00
Operator Name:	EQT Production
Well Name and Number:	Vanderbilt 4H
Latitude:	39.547039
Longitude:	-80.474887
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7819
Total Base Water Volume (gal)*:	28473605.9774468
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	88.56224	None
Sand (Proppant)	EQT	Proppant					
			Silica Substrate	14808-60-7	100.00000	11.05785	None
StimSTREAM FR 9800	ChemStream, Inc.	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.19270	None
StimSTREAM FR 9800	ChemStream, Inc.	Friction Reducer					
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.19270	None
Clearal 268	ChemStream, Inc.	Biocide					

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			Water	7732-18-5	80.00000	0.03582	None
StimSTREAM FR 9800	ChemStream, Inc.	Friction Reducer					
			Water	7732-18-5	15.00000	0.02710	None
StimSTREAM FR 9800	ChemStream, Inc.	Friction Reducer					
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00301	None
Clearal 268	ChemStream, Inc.	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00224	None
Enviro-Syn HCR-7000- WL	STAAR Logistics, LLC	Synthetic Acid					
			FLUID-Acid-00001	Proprietary	20.00000	0.00128	None
Enviro-Syn HCR-7000- WL	STAAR Logistics, LLC	Synthetic Acid					
			FLUID-Amine-00001	Proprietary	10.00000	0.00032	None
StimSTREAM SC-398	ChemStream, Inc.	Scale Inhibitor					
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00009	None
Clearal 268	ChemStream, Inc.	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00005	None
Clearal 268	ChemStream, Inc.	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00005	None
StimSTREAM FR 2800	ChemStream, Inc.	Friction Reducer					
			Distillates (petroleum), hydrated light	64742-47-8	25.00000	0.00000	None
Clearal 268	ChemStream, Inc.	Biocide					
			Ethanol	64-17-5	1.50000	0.00000	None
StimSTREAM SC-398	ChemStream, Inc.	Scale Inhibitor					
			AA/Maleic Anhydride Co- polymer	9003-04-7	1.00000	0.00000	None
StimSTREAM FR 2800	ChemStream, Inc.	Friction Reducer					
			Alcohols, C11-14-iso, C13- rich, ethoxylated	78330-21-9	5.00000	0.00000	None

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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

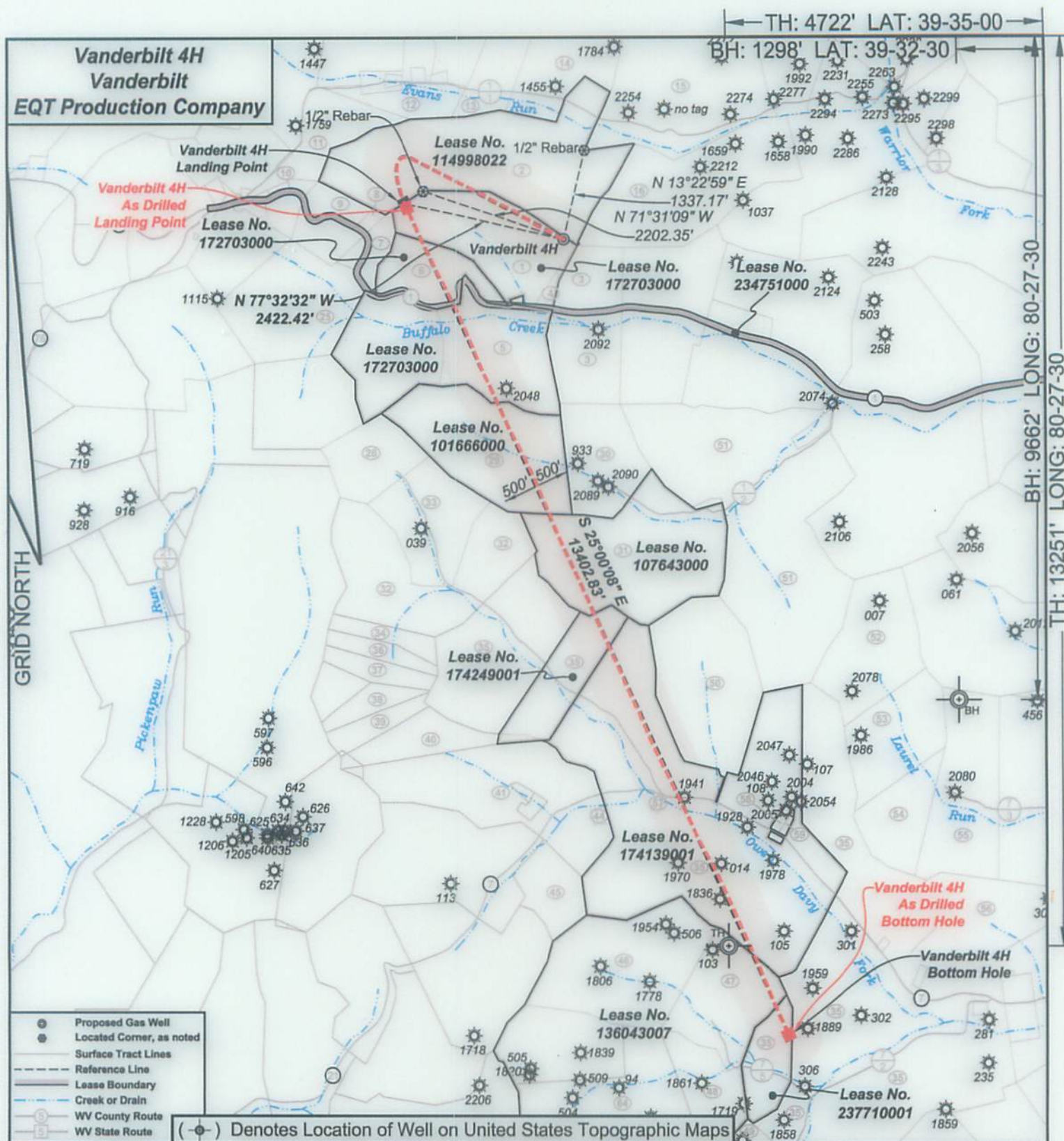
** Information is based on the maximum potential for concentration and thus the total may be over 100%

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)

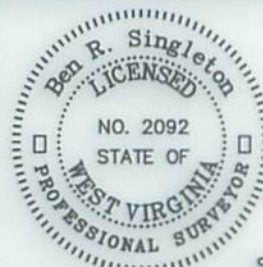
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I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

P.S. 2092



SEAL

FILE NO: 93-21

DRAWING NO: Vanderbilt 4H

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: February 21 20 25

OPERATOR'S WELL NO.: Vanderbilt 4H

API WELL NO

47 - 049 - 02535
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL

(IF GAS) PRODUCTION: ☐ STORAGE ☐ DEEP ☒ SHALLOW

LOCATION: ELEVATION: As-Built: 1358' WATERSHED: Evans Run & Buffalo Creek QUADRANGLE: Glover Gap

DISTRICT: Mannington COUNTY: Marion

SURFACE OWNER: Larry Higgins & Eva Higgins

ACREAGE: 60

ROYALTY OWNER: EQT Production Company, et al.

LEASE NO: 172703000

ACREAGE: 60

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: 7,735'

WELL OPERATOR: EQT Production Company

DESIGNATED AGENT: Joseph C. Mallow

ADDRESS: 400 Woodcliff Drive
Canonsburg, PA 15317

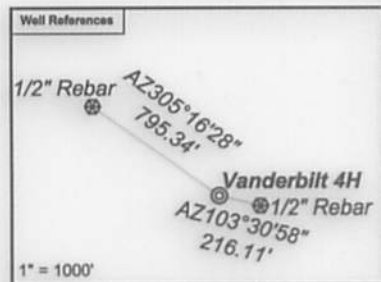
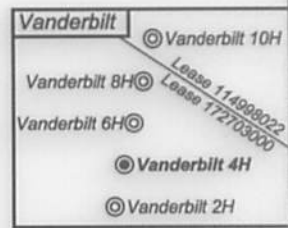
ADDRESS: 115 Professional Place PO Box 280
Bridgeport, WV 26330

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Vanderbilt 4H
Vanderbilt
EQT Production Company

Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	45	11	Marion	Mannington	Larry D. & Trisha B. Higgins	60
2	45	17	Marion	Mannington	EQT Production Company	125.73
3	45	5	Marion	Mannington	Harry R. & Susanne M. Morris	52
4	45	12.1	Marion	Mannington	April M. Powell	2.49
5	45	4	Marion	Mannington	Ronald L. Powell, Jr.	59.82
6	45	12	Marion	Mannington	April M. Powell	37.5
7	45	13	Marion	Mannington	Thelma L. Coen	11
8	45	14.2	Marion	Mannington	Thelma L. Coen	1.6
9	45	14.1	Marion	Mannington	Patricia F. Powell	8.59
10	45	14.4	Marion	Mannington	Thomas A. & Karen J. Hibenbaugh	3
11	45	16	Marion	Mannington	Keith A. Powell	27.29
12	45	26	Marion	Mannington	John M. Proffitt, Sr.	14.6
13	45	25.1	Marion	Mannington	Richard K. & Dawn K. Jones	5.71
14	45	24	Marion	Mannington	Barbara E. Henderson, et al.	38.5
15	45	23	Marion	Mannington	Thomas L. Shodgrass	105.5
16	45	20	Marion	Mannington	EQT Production Company	78.5
25	45	2	Marion	Mannington	Allen L. & Donna J. Hillberry	102.59
28	46	10.1	Marion	Mannington	Johnny P. Myers	28.43
29	46	5.2	Marion	Mannington	Marion County Coal Resources Inc.	74
30	46	6.1	Marion	Mannington	Patricia A. Cotherman	40
31	46	6	Marion	Mannington	Patricia A. Cotherman	100
32	46	11	Marion	Mannington	Brett Martin	59.55
33	46	10	Marion	Mannington	John Myers	44.07
34	46	12	Marion	Mannington	Brett Martin	10
35	46	2	Marion	Mannington	Marion County Commission	644.34
36	46	13	Marion	Mannington	Brett Martin	8.5
37	46	14	Marion	Mannington	Brett Martin	8.5
38	46	16	Marion	Mannington	Brett Martin	10.5
39	46	17	Marion	Mannington	Brett Martin	7.5
40	46	9	Marion	Mannington	Wayne D. Willie II	13.25
41	46	1	Marion	Mannington	Wayne D. Willie II	85.87
44	46	1.2	Marion	Mannington	Caren L. Willie	1.2
45	47	11	Marion	Mannington	David L. & Doretta D. Bonnell	23.53
46	47	6	Marion	Mannington	The West Virginia Land Trust Inc.	62
47	47	7	Marion	Mannington	The West Virginia Land Trust Inc.	48
48	47	2	Marion	Mannington	Debra A. Marozzi	30
49	47	1	Marion	Mannington	Marion County Coal Resources Inc.	98
50	48	4	Marion	Mannington	Mike Ross Inc.	67.47
51	46	5	Marion	Mannington	Ruby L. Herndon	182.04
52	48	1	Marion	Mannington	David L. & Karla A. James	56.5
53	48	2	Marion	Mannington	EQT Production Company	40
54	48	3	Marion	Mannington	Mark A. Barron	27.5
55	48	4	Marion	Mannington	Mark A. Barron	57
56	48	5	Marion	Mannington	Marion County Coal Resources Inc.	46.83
57	46	2.3	Marion	Mannington	Megan M. Peak	0.75
58	46	2.2	Marion	Mannington	Marion County Commission	1.19
59	46	2.4	Marion	Mannington	Marion County Commission	0.81
64	47	3	Marion	Mannington	Debra A. Marozzi	91

As-Drilled Well Information:
Vanderbilt 4H coordinates are
NAD 27 N: 382,815.14 E: 1,725,037.15
NAD 83 UTM N: 4,377,616.58 E: 545,118.41
Vanderbilt 4H Landing Point coordinates are
NAD 27 N: 383,273.95 E: 1,722,700.80
NAD 83 UTM N: 4,377,744.49 E: 544,404.28
Vanderbilt 4H Bottom Hole coordinates are
NAD 27 N: 371,192.93 E: 1,728,339.75
NAD 83 UTM N: 4,374,092.49 E: 546,183.52
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.



Lease No.	Owner	Acres
172703000	EQT Production Company, et al.	60
11498022	Bounty Minerals, LLC, et al.	125.73
172703000	EQT Production Company, et al.	40
234751000	West Virginia Department of Transportation, Division of Highways	46.86
172703000	EQT Production Company, et al.	126
101686000	XTO Energy Inc.	74
107643000	Denise L. Chappell, et al.	100
174249001	Country Roads Minerals, LLC, et al.	34
174139001	Country Roads Minerals, LLC, et al.	203
136043007	Lee and Hall Royalties, et al.	274
237710001	J&N Management Enterprises, LLC, et al.	23.75 of 297.75

