



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Wednesday, March 19, 2025
WELL WORK PERMIT
Horizontal 6A / Re-Work

EQT PRODUCTION COMPANY
400 WOODCLIFF DR.

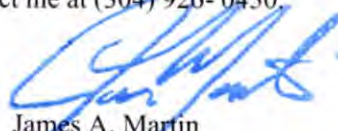
CANONSBURG, PA 15317

Re: Permit approval for HANSEN 5H
47-051-01649-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.



James A. Martin
Chief

Operator's Well Number: HANSEN 5H
Farm Name: BAYER MATERIAL SCINECE
U.S. WELL NUMBER: 47-051-01649-00-00
Horizontal 6A Re-Work
Date Issued: 3/19/2025

PERMIT CONDITIONS

47 05 10 16 49

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Also, 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

03/21/2025

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: <u>EQT Production Company</u>	306686	Marshall	Franklin	New Martinsville
	Operator ID	County	District	Quadrangle

2) Operator's Well Number: 5H Well Pad Name: Hansen

3) Farm Name/Surface Owner: Covestro, Inc. Public Road Access: County Route 2/2

4) Elevation, current ground: 1,247' (built) Elevation, proposed post-construction: 1,247' (built)

5) Well Type (a) Gas ☒ Oil ☐ Underground Storage ☐
Other ☐
(b) If Gas Shallow ☒ Deep ☐
Horizontal ☒

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6,532', 50', 2,000 psi

8) Proposed Total Vertical Depth: 6,532' (drilled - see WR-35)

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 12,203' (drilled - see WR-35)

11) Proposed Horizontal Leg Length: 5,645

12) Approximate Fresh Water Strata Depths: 55'

13) Method to Determine Fresh Water Depths: Submitted WR-35

14) Approximate Saltwater Depths: 1,590'

15) Approximate Coal Seam Depths: 820'-830'; 1,130'-1,160'

16) Approximate Depth to Possible Void (coal mine, karst, other): N/A

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes ☐ No ☒

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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Strader Gower
2/06/2025

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	PE/54.5	54.5	110'	110'	to surface
Fresh Water							
Coal	13.375	New	H-40	48	1,213'	1,213'	to surface
Intermediate	9.625	New	J-55	36	2,644'	2,644'	to surface
Production	5.5	New	P-110	20	12,171'	12,171'	to surface
Tubing	2.375	New	N80	4.7	7,060'	7,060'	
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26	.25	880		Class A	1.19
Fresh Water							
Coal	13.375	17.5	.33	1730		Class A	1.21
Intermediate	9.625	12.25	.352	3,520		Class A	1.27
Production	5.5	8.875	.361	12,640		50:50 Class A	1.21
Tubing	2.375		.19	11,200			
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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2/06/2025

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Set temporary retrievable packer above upper most perforation stage at 7055' +/- 15'
Set temporary bridge plug between stages 19 and 20 at 7900' +/- 15'
Set downhole pressure gauge
Replace production tubing with corrosion resistant tubing
After injection and production, remove temporary bridge plug and packer
Reinstall tubing and bring well back to production

7055' for the retrievable packer and ~7898' for the retrievable bridge plug

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Inject carbon dioxide below fracture pressure over 3 stages for well stimulation
Max rate is 200 tons per day
Max bottom hole pressure not to exceed 90% of frac pressure (BHP gauge will be monitored during test)

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): N/A - site built, no disturbance proposed

22) Area to be disturbed for well pad only, less access road (acres): N/A - site built, no disturbance proposed

23) Describe centralizer placement for each casing string:

N/A - casing is set and cemented - WR-35

24) Describe all cement additives associated with each cement type:

N/A - casing is set and cemented - See WR-35

25) Proposed borehole conditioning procedures:

Prior to workover a well clean out and casing inspection was performed. Workover will focus on stimulation of well with carbon dioxide.

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*Note: Attach additional sheets as needed.

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EQT Production**Wellbore Diagram**

Well: Hansen 5H
Pad: Hansen
Elevation: 1278 GL

County: Marshall
State: West Virginia

47 05 10 1649

Production Tubing @ ~ 7,102' – 13 Chrome Tubing

Surface @ 110'

20", 54.5#, PE, cement to surface w/ Class A

Coal @ 1,213'

13-3/8", 48#, H-40, cement to surface w/ Class A

Gas Lift Valves @ engineered depths to lift liquid

Downhole gauge @ ~ 7,001'

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Intermediate @ 2,644'

9-5/8", 36#, J-55, cement to surface w/ Class A

Packer @ ~ 7,050'

Retrievable Bridge Plug @ ~ 7,898'

Production @ 12,171' MD / 6,532' TVD

5-1/2", 20#, P-110, cement surface w/ 50:50 Class A

Formation: Marcellus

Strader Gower
02/06/2025

NOT TO SCALE

03/21/2025

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

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API 47 - 51 - 01649 County Marshall District Franklin
Quad New Martinsville 7.5' Pad Name Hansen Field/Pool Name _____
Farm name Bayer Material Sciences, LLC Well Number 5H
Operator (as registered with the OOG) Gastar Exploration Inc.
Address 229 West Main Street Suite 301 City Clarksburg State WV Zip 26301

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4397448.1 Easting 515917.3
Landing Point of Curve Northing 4396993.6 Easting 516452.5
Bottom Hole Northing 4395614.7 Easting 517008.6

Elevation (ft) 1278' 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 Base Mud

Date permit issued July 24, 2013 Date drilling commenced 3/21/2014 Date drilling ceased 9/30/2014
Date completion activities began 11/1/2014 Date completion activities ceased 4/15/2015
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 55' Open mine(s) (Y/N) depths None
Salt water depth(s) ft 1590' Void(s) encountered (Y/N) depths None
Coal depth(s) ft 820'-830' & 1130'-1160' Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) No

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Reviewed by:

JK

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WR-35
Rev. 8/23/13

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Page ___ of ___

API 47-51 - 01649 Farm name Bayer Material Sciences, LLC Well number 5H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor							
Surface	26"	20"	110'	New	PE / 54.5 #/ft		Yes
Coal	17.5"	13.375"	1213'	New	H-40 / 48 #/ft	83'	Yes
Intermediate 1	12.25"	9.625"	2644'	New	J-55 / 36 #/ft	80'	Yes
Intermediate 2							
Intermediate 3							
Production	8.875"	5.5"	12,171'	New	P-110 / 20 #/ft		Yes
Tubing		2.375"	7060'	New	N80/4.7#		
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Class A	297	15.6	1.19	353	Surface	12
Coal	Class A	893	15.6	1.21	1080	Surface	8
Intermediate 1	Class A	861	15.2	1.27	1093	Surface	8
Intermediate 2							
Intermediate 3							
Production	50:50 Class A	2768	14.5	1.21	3349	Surface	
Tubing							

Drillers TD (ft) 12,178' Loggers TD (ft) N/A
Deepest formation penetrated Marcellus Plug back to (ft) N/A
Plug back procedure N/A

Kick off depth (ft) 8420'

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 _____
Surface/Coal Casing - 3 Centralizers at 300' spacing
Intermediate Casing - 7 Centralizers at 300' Spacing
Production Casing - 201 Centralizers total - 1 centralizer every joint in the lateral and curve and 1 centralizer every third joint in the vertical section

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

Please insert additional pages as applicable.

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Farm name Bayer Material Sciences, LLC Well number 5H

DEPTHS

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OIL TEST ☒ Flow ☐ Pump

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
3066 mcfpd 445 bpd bpd 684 bpd ☐ Estimated ☒ Orifice ☐ Pilot

[illegible][illegible]

Drilling Contractor _____
Address 171 Locust Ave. City Mt. Morris State PA Zip 15349

Address 370 Westec Drive City Mt. Pleasant State PA Zip 15666

Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Address 837 Philippi Pike City Clarksburg State WV Zip 26301

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Telephone 304-622-4796

Date 7-31-15

Attach copy of FRACFOCUS Registry

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51-01649

Hansen #5H Perforation Information

<u>Stage</u>	<u>Date</u>	<u>Perforated interval</u>		<u>Number of Perfs</u>	<u>Formation</u>
		<u>From</u> ft	<u>To</u> ft		
1	11/2/2014	12117	12019	60	Marcellus
2	11/26/2014	11975.5	11842	48	Marcellus
3	12/1/2014	11796	11669	48	Marcellus
4	12/4/2014	11632	11460	48	Marcellus
5	12/5/2014	11422	11244	60	Marcellus
6	12/5/2014	11185	10961	60	Marcellus
7	12/6/2014	10914	10706	60	Marcellus
8	12/6/2014	10640	10425	60	Marcellus
9	12/7/2014	10376	10178	60	Marcellus
10	12/7/2014	10128	9972	48	Marcellus
11	12/7/2014	9933	9744	48	Marcellus
12	12/8/2014	9561	9559	48	Marcellus
13	12/8/2014	9520	9365	48	Marcellus
14	12/8/2014	9328	9180	48	Marcellus
15	12/9/2014	9122	8974	48	Marcellus
16	12/9/2014	8911	8683	60	Marcellus
17	12/10/2014	8621	8436	48	Marcellus
18	12/10/2014	8379	8175	60	Marcellus
19	12/10/2014	8128	7922	60	Marcellus
20	12/10/2014	7874	7675	60	Marcellus
21	12/10/2014	7608	7455	48	Marcellus
22	12/11/2014	7349	7127	48	Marcellus

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Fluid & Sand Volume Summary - Hansen 5H

<u>Stage</u>	<u>Stimulation Date</u>	<u>Avg Pump Rate (BPM)</u>	<u>Avg Pressure (PSI)</u>	<u>Max Break Pres. (PSI)</u>	<u>ISIP (PSI)</u>	<u>Sand Total (lbs)</u>	<u>Total Water (bbls)</u>
1	11/26/2014	80	6902	6472	4621	181685	4755
2	11/26/2014	80	7072	5533	4822	353096	8377
3	12/4/2014	60	6063	6537	4712	87450	3662
4	12/5/2014	80	6711	6497	4560	359010	8407
5	12/5/2014	80	7040	6051	4509	361107	8163
6	12/5/2014	78	6675	5792	4570	358593	8335
7	12/6/2014	80	6570	5330	4581	355337	8131
8	12/6/2014	80	6635	6250	4492	359052	8331
9	12/7/2014	80	6908	5765	4454	331980	7735
10	12/7/2014	82	7199	6724	4649	359889	8145
11	12/8/2014	80	6840	6683	4663	357471	7867
12	12/8/2014	81	6899	6731	4136	358369	7852
13	12/9/2014	80	6664	6867	4406	359262	7691
14	12/9/2014	80	6966	6793	4054	356510	7860
15	12/9/2014	79	6813	5946	4207	358695	8040
16	12/10/2014	75	6453	6871	3977	357823	7739
17	12/10/2014	80	6514	6762	4014	358024	7755
18	12/10/2014	80	6102	6935	4014	360498	7728
19	12/10/2014	80	6467	6479	4017	357362	7738
20	12/11/2014	80	6100	6061	4733	362943	8001
21	12/11/2014	80	6071	6263	4651	362752	7897
22	12/11/2014	80	6161	7316	4686	369085	7927

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Formations	Hansen TOP TVD	Hansen BASE TVD	Top MD	Base MD
SHALE AND SANDSTONE	0	820	0	820
SEWICKLEY COAL	820	830	820	830
SHALE	830	1130	830	1130
PITTSBURGE COAL	1130	1160	1130	1160
SHALE AND SANDSTONE	1160	1590	1160	1590
3RD SALT SAND	1590	1650	1590	1650
SHALE	1650	1780	1650	1780
MAXTON	1780	1840	1780	1840
SHALE	1840	1860	1840	1860
BIG LIME	1860	1992	1860	1992
BIG INJUN	1992	2240	1992	2240
WEIR SILTSTONE	2240	2490	2240	2490
BEREA SILTSTONE	2490	2550	2490	2550
SAND AND SHALE	2550	2870	2550	2870
GORDON	2870	2960	2870	2960
SILTSTONE AND SANDSTONE	2960	3440	2960	3465
BRAILLER	3440	5051	3465	5244
PIPE CREEK SHALE	5051	5454	5244	5686
SHALE	5454	5879	5686	6129
RHINESTREET	5879	6168	6129	6482
CASHAQUA	6168	6282	6482	6618
MIDDLESEX	6282	6308	6618	6649
WEST RIVER	6308	6361	6649	6722
GENESEO	6361	6388	6722	6762
TULLY LIMESTONE	6388	6423	6762	6824
HAMILTON	6423	6447	6824	6875
MARCELLUS	6447	na	6875	na
ONONDAGA	na	na	na	na

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Welcome Tracy H., Operator - OpId: G1416907 | [Log Out](#)**Hydraulic Fracturing**
DISCLOSURESubmission to FracFocus using
Excel Spreadsheets has been
turned off.[FIND A WELL](#)
BY STATE[ABOUT PROJECT](#)
PARTNERS

(Note: Clicking the FracFocus, FIND A WELL links will open a new window.)

Prepare Disclosure for FracFocus Submission[Disclosure Lists](#) | [Dashboard](#)

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[Preview Disclosure PDF](#)[Validate Disclosure](#)[Submit To FracFocus](#)**RECEIVED**
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WV Department of
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Job Start Date 11/26/2014 Job End Date 12/11/2014 API Number 47-051-01649-00-00 State & County West Virginia --- Marshall

Well Name
HANSEN 5H

Longitude -80.80181 Latitude 39.71017 Datum NAD27 Federal/Tribal Well?

True Vertical Depth (ft) 6517 Total Water Vol (gal) 20178312 Total Non Water Vol 0 Total Mass (lbs) 176105226.4558

**MSDS Chemical Ingredients**[New Additive](#)[Select Additive](#)[Add Additive](#)

	Trade Name	Supplier	Purpose	Ingredients	CAS #	% High Additive	% HF Job	Comments	Ingredient Mass
Edit	Water	Operator	Carrier	Water	7732-18-5	100%	95.4948478%		168242729.7936
Edit	Sand, White, 40/70	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A	0%	2.94573%		5187600
Edit	Sand, White, 30/50	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A	0%	1.14511%		2016600
Edit	HCl, 10.1 - 15%	Baker Hughes	Acidizing	MSDS and Non-MSDS Ingredients Listed Below	N/A	0%	.174438%	SmartCare Product	307195
Edit	Sand, White, 100 mesh	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A	0%	.108912%		191800
Edit	FRW-18	Baker Hughes	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below	N/A	0%	.0339634%	SmartCare Product	5981144

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Edit GW-3LDF Baker Hughes Gelling Agent

51-01649

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .0335564% SmartCare Product 59094.75

Edit Alpha 1427 Baker Hughes Biocide

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .008233% SmartCare Product 14498.75

Edit Enzyme G-IE Baker Hughes Breaker

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .0055726% SmartCare Product 9813.5906

Edit Calcium Chloride Baker Hughes Salts

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .0051674% 9100

Edit ScaleSorb 4, (50# bag) Baker Hughes Scale Inhibitor

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .0022146% SmartCare Product 3900

Edit Ferrotrol 300L Baker Hughes Iron Control

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .0011991% SmartCare Product 2111.63163

Edit CI-14 Baker Hughes Corrosion Inhibitor

MSDS and Non-MSDS Ingredients Listed Below N/A 0% .0005517% SmartCare Product 971.5

Non-MSDS Chemical Ingredients

New Ingredients

Trade Name	Supplier	Purpose	Ingredients	CAS #	% High Additive	% HF Job	Comments	Ingredient Mass
Ingredients in Additive(s) (MSDS and non-MSDS)	Baker Hughes	See Trade Name(s) List						
			Crystalline Silica (Quartz)	14808-60-7	100%	4.1980038%		7396039
			Water	7732-18-5	95%	.1726236%		304128.017885
			Hydrochloric Acid	7647-01-0	15%	.0261602%		46088.965
			Mineral Oil	8042-47-5	70%	.0234796%		41366.325
			Guar Gum	9000-30-0	60%	.0201254%		35456.85
			Poly (acrylamide-co-acrylic acid) partial sodium salt	62649-23-4	30%	.0101847%		17943.432
			Hydrotreated Light Distillate	64742-47-8	30%	.0101847%		17943.432
			Petroleum Distillates	64742-47-8	30%	.0100627%		17728.425
			Paraffinic Petroleum Distillate	64742-55-8	30%	.0100627%		17728.425
			Calcium Chloride	10043-52-4	100%	.0051652%		2100
			Glutaraldehyde	111-30-8	30%	.0024689%		1349.625
			Diatomaceous Earth, Calcined	91053-39-3	100%	.0022136%		3900
			Sodium Chloride	7647-14-5	5%	.0019557%		244.82
			1-butoxy-2-propanol	5131-66-8	5%	.0016771%		2954.7375
			Isotridecanol, ethoxylated	9043-30-5	5%	.0016771%		2954.7375

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Crystalline Silica: Quartz	14808-60-7	5%	.0016771%	2954.7375
Ammonium Chloride	12125-02-9	3%	.0010185%	1794.3432
Didecyl Dimethyl Ammonium Chloride	7173-51-5	10%	.000823%	1449.875
Citric Acid	77-92-9	60%	.0007191%	1266.978978
Oleamide DEA	93-83-4	2%	.000679%	1196.2288
Alcohols, C12-16, ethoxylated	68551-12-2	2%	.000679%	1196.2288
Methanol	67-56-1	100%	.0005514%	971.5
Ethanol	64-17-5	5%	.0004115%	724.9375
Quaternary Ammonium Compound	68424-85-1	5%	.0004115%	724.9375
Sodium Carboxymethyl inulin	430439-54-6	15%	.000332%	585
Sodium chloride	7647-14-5	15%	.000332%	585
Hemicellulase Enzyme Concentrate	9025-56-3	5%	.0002785%	490.67953
Potassium Chloride	7447-40-7	5%	.0002583%	455
Sorbitan Monooleate	1338-43-8	.5%	.0001697%	299.0572
Polyoxyethylene Sorbitan Monooleate	9005-65-6	.5%	.0001697%	299.0572
Polyoxyalkylenes	68951-67-7	30%	.0001654%	291.45
Sodium glycolate	2836-32-0	5%	.0001107%	195
Sodium diglycolate	35249-69-5	5%	.0001107%	195
Fatty Acids	61790-12-3	10%	.0000551%	97.15
Modified Thiourea Polymer	68527-49-1	7%	.0000386%	68.005
2-butoxy-1-propanol	15821-83-7	.1%	.0000335%	59.09475
Olefin	64743-02-8	5%	.0000276%	48.575
Propargyl Alcohol	107-19-7	5%	.0000276%	48.575
Crystalline Silica (Cristobalite)	14464-46-1	1%	.0000221%	39
Formaldehyde	50-00-0	1%	.0000055%	9.715

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Hansen 5H Cement and additives

Surface: Class A + 3% CaCl + .25 #/sk Flake

Intermediate: Class A + 1% EC-1 + ¼ per sack cello flake +.5% SMS + .55% BA-10A

Production: 50:50 Class A + 3 lbs/sk BA-90 + .25% R-3 + .3% MPA-170

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6.420'

LATITUDE 39° 45' 00"
HANSEN LEASE
WELL NO. 5H
487.56± ACRES

NOTES
 OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2013.
 COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

REFERENCES
 HANSEN NO. 5H
 S 78° 18' E 272.4'
 S 61° 54' E 252.0'
 8" SUMAC
 4" LOCUST

SCALE 1"=200'

LEGEND
 - - - LEASED TRACTS
 - - - INTERIOR MINERAL TRACTS
 - - - SURFACE TRACTS
 - - - HARD LEASE LINE

SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,397,448.1
 E) 515,917.3

LANDING POINT 1
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,396,993.6
 E) 516,452.5

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,395,614.7
 E) 517,008.6

LONGITUDE 80° 47' 30"

NOTE: BORE PATH BASED ON GRID NORTH.

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS (1-62)

FILE NUMBER W0120318 (WB1-62)

DRAWING NUMBER HANSEN_WP_5H-WR35

SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS

WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

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. 2122 *Jonathan N. White*

SEAL

DATE: JULY 28, 2015

OPERATORS WELL NO. HANSEN NO. 5H AS-DRILLED
API WELL NO. 47-051-01649
STATE COUNTY PERMIT

WELL TYPE: OIL ☐ GAS ☒ LIQUID INJECTION ☐ WASTE DISPOSAL ☐
 (IF "GAS") PRODUCTION ☒ STORAGE ☐ DEEP ☐ SHALLOW ☒

LOCATION ELEVATION 1245' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER (0503020110)

DISTRICT FRANKLIN COUNTY MARSHALL
QUADRANGLE NEW MARTINSVILLE 7.5' LEASE NUMBER WV16-0099-000, WV62-0003-001, WV16-0076-001, WV16-0127-001

SURFACE OWNER BAYER MATERIAL SCIENCES, LLC ACREAGE 172.79
OIL & GAS ROYALTY OWNER PPG INDUSTRIES, INC., et al LEASE ACREAGE 487.56

PROPOSED WORK: DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION ☐
 PERFORATE NEW FORMATION ☐ OTHER PHYSICAL CHANGE (SPECIFY) _____

TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 6532' TMD: 12,203'

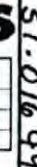
WELL OPERATOR GASTAR EXPLORATION INC. DESIGNATED AGENT MICHAEL McCOWN
ADDRESS 229 W MAIN STREET, SUITE 301 CLARKSBURG WV, 26301

 WV Department of
Environmental Protection

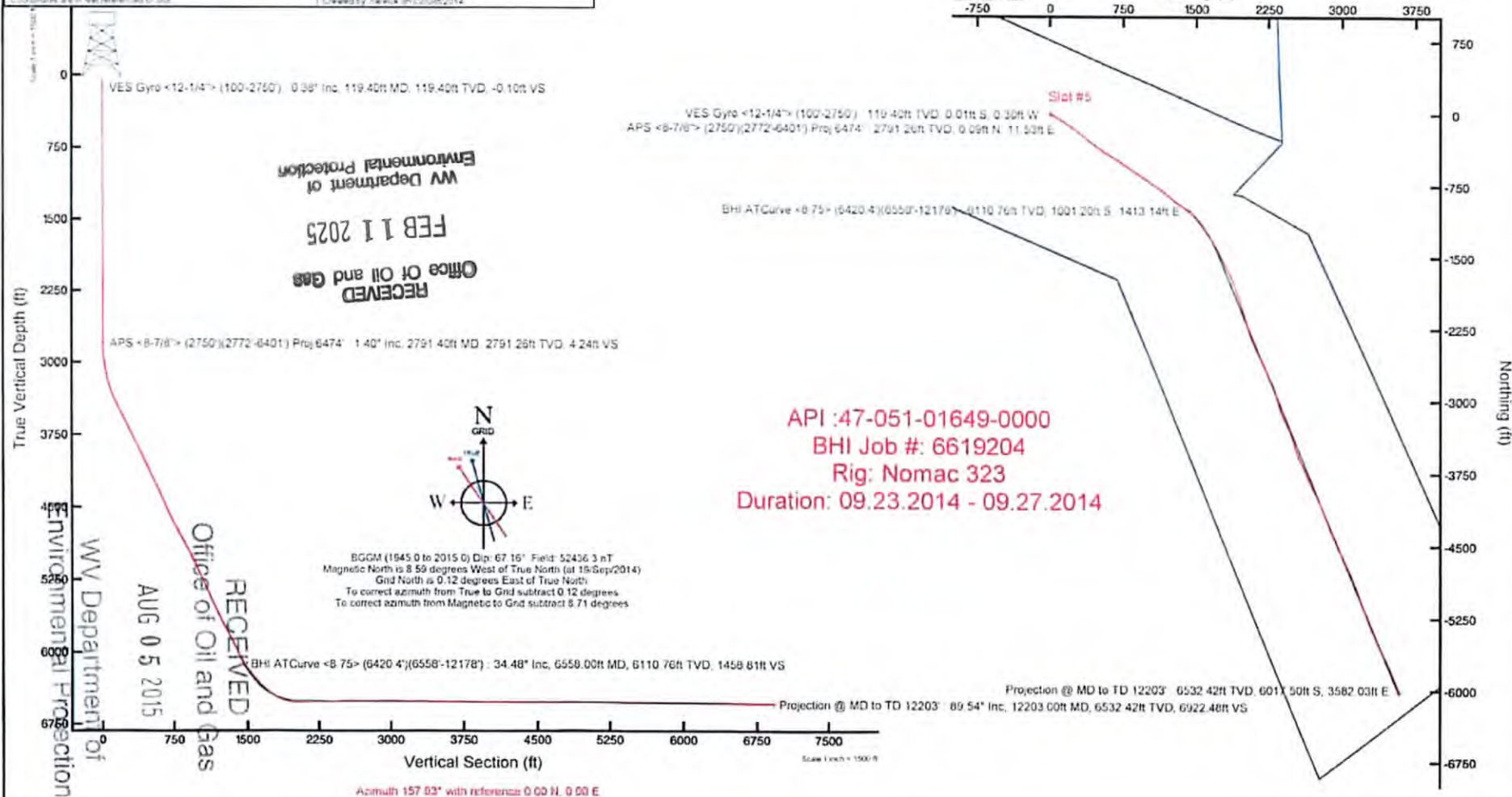
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Slot	Well	Wellbore	Wellpath
Slot #5	Hansen Unit 5H	Hansen Unit 5H (PWB)	Hansen Unit 5H Rev-B 0
Slot #5	Hansen Unit 5H	Hansen Unit 5H AWB	Hansen Unit 5H AWP Prod 12203



REFERENCE WELLPATH IDENTIFICATION

Operator	GASTAR EXPLORATION INC.	Slot	Slot #5
Area	Marshall County, WV	Well	Hansen 5H
Field	Marshall	Wellbore	Hansen 5H (AWB)
Facility	Hansen Unit	Wellpath	Hansen 5H (AWP) Proj: 12,203'
		Sidetrack	(none)

WELLPATH DATA † = interpolated/extrapolated station

MD [ft]	Inclinat ion [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [M]	Grid North [M]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
0.00	0.00	267.12	0.00	0.00	0.00	0.00	515917.3	4397448.1	39°43'36.356"N	80°48'51.356"W	0.00	0.00	0.00
29.40	0.00	267.12	29.40	0.00	0.00	0.00	515917.3	4397448.1	39°43'36.356"N	80°48'51.356"W	0.00	0.00	0.00
119.40	0.38	267.12	119.40	-0.10	-0.01	-0.30	515917.3	4397448.1	39°43'36.356"N	80°48'51.360"W	0.30	267.12	0.42
219.40	0.43	250.60	219.40	-0.22	-0.16	-0.98	515916.9	4397448.0	39°43'36.355"N	80°48'51.369"W	1.00	260.97	0.13
319.40	0.49	252.48	319.39	-0.28	-0.41	-1.74	515916.7	4397448.0	39°43'36.352"N	80°48'51.379"W	1.79	256.79	0.06
419.40	0.27	253.59	419.39	-0.33	-0.60	-2.38	515916.5	4397447.9	39°43'36.350"N	80°48'51.387"W	2.45	255.73	0.22
519.40	0.33	221.90	519.39	-0.23	-0.89	-2.80	515916.4	4397447.8	39°43'36.348"N	80°48'51.392"W	2.93	252.43	0.17
619.40	0.39	193.33	619.39	0.17	-1.43	-3.07	515916.3	4397447.6	39°43'36.342"N	80°48'51.396"W	3.39	244.99	0.19
719.40	0.47	193.50	719.39	0.78	-2.16	-3.24	515916.3	4397447.4	39°43'36.335"N	80°48'51.398"W	3.90	236.31	0.08
819.40	0.43	201.53	819.38	1.39	-2.91	-3.48	515916.2	4397447.2	39°43'36.328"N	80°48'51.401"W	4.53	230.07	0.07
919.40	0.46	202.23	919.38	1.95	-3.63	-3.77	515916.1	4397447.0	39°43'36.320"N	80°48'51.405"W	5.23	226.05	0.03
1019.40	0.22	201.91	1019.38	2.37	-4.18	-3.99	515916.0	4397446.8	39°43'36.315"N	80°48'51.407"W	5.78	223.66	0.24
1119.40	0.06	202.87	1119.38	2.55	-4.41	-4.08	515916.0	4397446.7	39°43'36.313"N	80°48'51.409"W	6.01	222.80	0.16
1219.40	0.13	213.25	1219.38	2.65	-4.55	-4.16	515916.0	4397446.7	39°43'36.311"N	80°48'51.410"W	6.17	222.46	0.07
1319.40	0.17	112.46	1319.38	2.82	-4.70	-4.09	515916.0	4397446.7	39°43'36.310"N	80°48'51.409"W	6.23	221.01	0.23
1419.40	0.33	108.34	1419.38	3.11	-4.85	-3.68	515916.1	4397446.6	39°43'36.308"N	80°48'51.404"W	6.09	217.19	0.16
1519.40	0.26	110.25	1519.37	3.45	-5.02	-3.19	515916.3	4397446.6	39°43'36.307"N	80°48'51.397"W	5.95	212.46	0.07
1619.40	0.30	90.08	1619.37	3.70	-5.10	-2.72	515916.4	4397446.5	39°43'36.306"N	80°48'51.391"W	5.77	208.06	0.11
1719.40	0.51	90.05	1719.37	3.97	-5.10	-2.01	515916.6	4397446.5	39°43'36.306"N	80°48'51.382"W	5.48	201.52	0.21
1819.40	0.91	92.21	1819.36	4.46	-5.13	-0.77	515917.0	4397446.5	39°43'36.306"N	80°48'51.366"W	5.19	188.56	0.40
1919.40	1.05	98.32	1919.35	5.25	-5.29	0.93	515917.5	4397446.5	39°43'36.304"N	80°48'51.345"W	5.37	170.05	0.17
2019.40	0.87	89.80	2019.33	6.00	-5.42	2.59	515918.0	4397446.4	39°43'36.303"N	80°48'51.323"W	6.01	154.42	0.23
2119.40	0.77	72.80	2119.32	6.34	-5.22	4.00	515918.5	4397446.5	39°43'36.305"N	80°48'51.305"W	6.57	142.57	0.26
2219.40	0.76	70.53	2219.32	6.43	-4.80	5.26	515918.8	4397446.6	39°43'36.309"N	80°48'51.289"W	7.12	132.37	0.03
2319.40	0.86	61.59	2319.31	6.37	-4.22	6.55	515919.2	4397446.8	39°43'36.314"N	80°48'51.273"W	7.79	122.81	0.16

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WELLPATH DATA † = interpolated/extrapolated station

MD [ft]	Inclinat ion [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [M]	Grid North [M]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
2419.40	0.92	50.65	2419.29	6.05	-3.36	7.83	515919.6	4397447.1	39°43'36.323"N	80°48'51.256"W	8.52	113.20	0.18
2519.40	0.78	44.57	2519.28	5.54	-2.36	8.93	515920.0	4397447.4	39°43'36.333"N	80°48'51.242"W	9.23	104.82	0.17
2619.40	0.74	45.47	2619.27	5.03	-1.42	9.87	515920.2	4397447.6	39°43'36.342"N	80°48'51.230"W	9.97	98.21	0.04
2719.40	0.74	42.41	2719.27	4.50	-0.49	10.76	515920.5	4397447.9	39°43'36.351"N	80°48'51.219"W	10.77	92.63	0.04
2769.40	0.70	39.29	2769.26	4.22	-0.02	11.17	515920.6	4397448.1	39°43'36.356"N	80°48'51.213"W	11.17	90.10	0.11
2791.40	1.40	88.19	2791.26	4.24	0.09	11.53	515920.8	4397448.1	39°43'36.357"N	80°48'51.209"W	11.53	89.54	4.90
2823.40	2.47	114.99	2823.24	4.88	-0.19	12.54	515921.1	4397448.0	39°43'36.354"N	80°48'51.196"W	12.54	90.85	4.29
2855.40	3.80	123.04	2855.19	6.26	-1.06	14.06	515921.5	4397447.8	39°43'36.346"N	80°48'51.176"W	14.10	94.29	4.37
2887.40	5.08	123.58	2887.09	8.30	-2.42	16.13	515922.2	4397447.3	39°43'36.332"N	80°48'51.150"W	16.31	98.53	4.00
2918.40	6.70	126.53	2917.93	10.98	-4.25	18.72	515922.9	4397446.8	39°43'36.314"N	80°48'51.117"W	19.20	102.80	5.31
2950.40	8.21	127.13	2949.66	14.53	-6.74	22.04	515924.0	4397446.0	39°43'36.289"N	80°48'51.074"W	23.05	107.01	4.72
2981.40	9.48	127.93	2980.29	18.64	-9.65	25.82	515925.1	4397445.1	39°43'36.260"N	80°48'51.026"W	27.57	110.49	4.12
3013.40	10.77	123.64	3011.79	23.40	-12.93	30.39	515926.5	4397444.1	39°43'36.228"N	80°48'50.968"W	33.02	113.04	4.67
3043.40	11.90	120.62	3041.21	28.17	-16.05	35.39	515928.0	4397443.2	39°43'36.197"N	80°48'50.904"W	38.86	114.40	4.25
3075.40	12.48	118.66	3072.48	33.47	-19.39	41.26	515929.8	4397442.2	39°43'36.164"N	80°48'50.829"W	45.59	115.17	2.23
3107.40	13.77	117.50	3103.65	39.05	-22.81	47.67	515931.8	4397441.1	39°43'36.130"N	80°48'50.747"W	52.85	115.57	4.11
3139.40	15.19	118.12	3134.63	45.17	-26.54	54.75	515933.9	4397440.0	39°43'36.093"N	80°48'50.656"W	60.84	115.87	4.46
3170.40	16.45	119.42	3164.46	51.72	-30.61	62.15	515936.2	4397438.8	39°43'36.052"N	80°48'50.562"W	69.28	116.22	4.22
3202.40	17.76	119.01	3195.04	59.07	-35.21	70.37	515938.7	4397437.4	39°43'36.007"N	80°48'50.457"W	78.68	116.58	4.11
3233.40	19.48	119.83	3224.42	66.81	-40.07	78.99	515941.3	4397435.9	39°43'35.959"N	80°48'50.346"W	88.57	116.90	5.61
3265.40	21.00	121.91	3254.44	75.65	-45.76	88.48	515944.2	4397434.1	39°43'35.902"N	80°48'50.225"W	99.61	117.34	5.25
3296.40	22.34	124.12	3283.25	85.04	-52.00	98.08	515947.1	4397432.2	39°43'35.840"N	80°48'50.102"W	111.01	117.93	5.06
3328.40	24.39	125.40	3312.62	95.66	-59.24	108.50	515950.3	4397430.0	39°43'35.769"N	80°48'49.969"W	123.62	118.63	6.60
3359.40	26.29	125.30	3340.64	106.84	-66.91	119.32	515953.6	4397427.7	39°43'35.693"N	80°48'49.831"W	136.80	119.28	6.13
3391.40	27.76	125.69	3369.14	119.12	-75.36	131.16	515957.2	4397425.1	39°43'35.609"N	80°48'49.680"W	151.26	119.88	4.63
3422.40	29.74	124.56	3396.32	131.64	-83.93	143.35	515960.9	4397422.5	39°43'35.524"N	80°48'49.524"W	166.12	120.35	6.62
3454.40	31.36	124.76	3423.88	145.24	-93.18	156.73	515965.0	4397419.7	39°43'35.432"N	80°48'49.353"W	182.34	120.73	5.07
3486.40	32.11	123.87	3451.09	159.26	-102.67	170.63	515969.2	4397416.8	39°43'35.338"N	80°48'49.175"W	199.14	121.04	2.76
3517.40	31.70	124.08	3477.41	172.85	-111.82	184.22	515973.4	4397414.0	39°43'35.247"N	80°48'49.002"W	215.50	121.26	1.37
3549.40	31.47	124.26	3504.67	186.78	-121.24	198.09	515977.6	4397411.1	39°43'35.154"N	80°48'48.824"W	232.25	121.47	0.78
3611.40	30.36	126.75	3557.86	213.66	-139.72	224.02	515985.5	4397405.5	39°43'34.971"N	80°48'48.493"W	264.02	121.95	2.73

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WELLPATH DATA † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [M]	Grid North [M]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
3674.40	29.76	129.09	3612.39	240.98	-159.11	248.91	515993.1	4397399.6	39°43'34.779"N	80°48'48.175"W	295.42	122.59	2.09
3737.40	29.81	128.23	3667.07	268.28	-178.66	273.35	516000.5	4397393.6	39°43'34.585"N	80°48'47.863"W	326.56	123.17	0.68
3800.40	30.28	128.32	3721.60	295.69	-198.20	298.11	516008.1	4397387.7	39°43'34.391"N	80°48'47.546"W	357.99	123.62	0.75
3863.40	29.99	128.48	3776.09	323.21	-217.84	322.90	516015.6	4397381.7	39°43'34.197"N	80°48'47.229"W	389.51	124.01	0.48
3927.40	29.12	129.10	3831.76	350.78	-237.62	347.51	516023.1	4397375.7	39°43'34.001"N	80°48'46.915"W	420.98	124.36	1.44
3990.40	29.92	128.27	3886.58	377.86	-257.02	371.74	516030.5	4397369.8	39°43'33.809"N	80°48'46.605"W	451.94	124.66	1.43
4053.40	29.90	126.75	3941.19	404.95	-276.14	396.66	516038.1	4397363.9	39°43'33.619"N	80°48'46.287"W	483.31	124.85	1.20
4116.40	29.26	125.92	3995.98	431.44	-294.57	421.71	516045.7	4397358.3	39°43'33.436"N	80°48'45.967"W	514.40	124.94	1.21
4179.40	29.09	126.82	4050.99	457.61	-312.78	446.44	516053.3	4397352.8	39°43'33.256"N	80°48'45.651"W	545.10	125.02	0.75
4242.40	29.86	127.33	4105.83	484.22	-331.47	471.17	516060.8	4397347.1	39°43'33.071"N	80°48'45.335"W	576.08	125.13	1.29
4306.40	30.10	125.92	4161.27	511.54	-350.55	496.83	516068.6	4397341.3	39°43'32.882"N	80°48'45.007"W	608.05	125.21	1.16
4368.40	29.41	125.13	4215.10	537.52	-368.43	521.87	516076.2	4397335.8	39°43'32.704"N	80°48'44.687"W	638.82	125.22	1.28
4431.40	30.03	124.93	4269.81	563.74	-386.36	547.45	516084.0	4397330.4	39°43'32.527"N	80°48'44.360"W	670.05	125.21	1.00
4494.40	30.57	124.75	4324.20	590.37	-404.51	573.54	516092.0	4397324.8	39°43'32.347"N	80°48'44.027"W	701.84	125.20	0.87
4558.40	29.82	123.13	4379.52	617.06	-422.49	600.24	516100.1	4397319.4	39°43'32.169"N	80°48'43.685"W	734.02	125.14	1.73
4620.40	28.94	121.79	4433.55	641.84	-438.82	625.90	516107.9	4397314.4	39°43'32.007"N	80°48'43.357"W	764.40	125.03	1.77
4684.40	28.36	120.25	4489.71	666.37	-454.63	652.19	516116.0	4397309.6	39°43'31.850"N	80°48'43.021"W	795.01	124.88	1.47
4747.40	29.21	122.85	4544.93	690.80	-470.51	678.03	516123.8	4397304.7	39°43'31.692"N	80°48'42.691"W	825.29	124.76	2.40
4811.40	29.58	124.28	4600.69	716.73	-487.88	704.20	516131.8	4397299.4	39°43'31.520"N	80°48'42.357"W	856.69	124.72	1.24
4874.40	32.96	126.35	4654.53	744.28	-506.80	730.86	516139.9	4397293.7	39°43'31.333"N	80°48'42.016"W	889.39	124.74	5.63
4937.40	33.26	124.07	4707.30	773.22	-526.64	758.98	516148.5	4397287.6	39°43'31.136"N	80°48'41.657"W	923.79	124.76	2.03
5000.40	32.71	124.61	4760.15	801.80	-545.98	787.30	516157.1	4397281.7	39°43'30.944"N	80°48'41.295"W	958.09	124.74	0.99
5062.40	32.66	123.78	4812.33	829.64	-564.80	814.99	516165.6	4397276.0	39°43'30.758"N	80°48'40.941"W	991.57	124.72	0.73
5124.40	32.35	124.89	4864.62	857.39	-583.59	842.50	516173.9	4397270.3	39°43'30.571"N	80°48'40.589"W	1024.88	124.71	1.08
5188.40	30.81	125.91	4919.14	885.64	-603.00	869.82	516182.3	4397264.4	39°43'30.379"N	80°48'40.240"W	1058.40	124.73	2.55
5251.40	30.24	123.86	4973.41	912.46	-621.30	896.07	516190.3	4397258.8	39°43'30.198"N	80°48'39.905"W	1090.39	124.74	1.88
5315.40	29.70	123.60	5028.85	938.91	-639.05	922.65	516198.4	4397253.4	39°43'30.022"N	80°48'39.565"W	1122.36	124.71	0.87
5378.40	29.32	126.00	5083.68	964.89	-656.76	948.13	516206.1	4397248.0	39°43'29.846"N	80°48'39.239"W	1153.38	124.71	1.97
5441.40	29.45	124.42	5138.58	990.89	-674.58	973.39	516213.8	4397242.6	39°43'29.669"N	80°48'38.916"W	1184.29	124.72	1.25
5504.40	29.06	123.44	5193.54	1016.42	-691.77	998.93	516221.6	4397237.3	39°43'29.499"N	80°48'38.590"W	1215.07	124.70	0.98
5567.40	27.78	127.19	5248.95	1041.65	-709.07	1023.40	516229.1	4397232.0	39°43'29.328"N	80°48'38.277"W	1245.04	124.72	3.49

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WELLPATH DATA † = interpolated/extrapolated station													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [M]	Grid North [M]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
5630.40	27.56	127.39	5304.75	1066.82	-726.80	1046.67	516236.1	4397226.6	39°43'29.152"N	80°48'37.980"W	1274.27	124.78	0.38
5693.40	27.84	125.43	5360.53	1091.78	-744.18	1070.24	516243.3	4397221.3	39°43'28.980"N	80°48'37.679"W	1303.54	124.81	1.51
5757.40	28.02	124.10	5417.07	1116.87	-761.27	1094.87	516250.8	4397216.1	39°43'28.810"N	80°48'37.364"W	1333.51	124.81	1.01
5820.40	28.84	123.19	5472.48	1141.65	-777.88	1119.84	516258.4	4397211.1	39°43'28.645"N	80°48'37.045"W	1363.50	124.79	1.47
5883.40	28.08	126.94	5527.87	1166.85	-795.11	1144.41	516265.9	4397205.8	39°43'28.475"N	80°48'36.731"W	1393.51	124.79	3.08
5946.40	28.72	129.62	5583.29	1192.89	-813.68	1167.92	516273.1	4397200.2	39°43'28.291"N	80°48'36.431"W	1423.41	124.87	2.26
6010.40	28.71	130.73	5639.42	1220.10	-833.51	1191.41	516280.2	4397194.1	39°43'28.094"N	80°48'36.130"W	1454.03	124.98	0.83
6073.40	29.07	131.94	5694.58	1247.31	-853.62	1214.26	516287.2	4397188.0	39°43'27.895"N	80°48'35.838"W	1484.28	125.11	1.09
6136.40	29.32	131.14	5749.57	1274.84	-873.99	1237.26	516294.2	4397181.8	39°43'27.693"N	80°48'35.545"W	1514.82	125.24	0.74
6199.40	30.46	129.74	5804.19	1302.69	-894.35	1261.16	516301.5	4397175.6	39°43'27.491"N	80°48'35.239"W	1546.09	125.34	2.12
6262.40	31.27	127.09	5858.27	1330.80	-914.42	1286.48	516309.2	4397169.5	39°43'27.293"N	80°48'34.916"W	1578.36	125.41	2.51
6325.40	31.00	123.77	5912.20	1358.27	-933.30	1313.02	516317.3	4397163.7	39°43'27.105"N	80°48'34.577"W	1610.92	125.41	2.76
6388.40	30.33	122.16	5966.39	1384.60	-950.79	1339.97	516325.5	4397158.4	39°43'26.932"N	80°48'34.232"W	1643.02	125.36	1.68
6420.40	29.57	122.59	5994.12	1397.59	-959.34	1353.46	516329.6	4397155.8	39°43'26.847"N	80°48'34.060"W	1658.97	125.33	2.47
6558.00	34.48	127.19	6110.76	1458.81	-1001.20	1413.14	516347.8	4397143.0	39°43'26.432"N	80°48'33.297"W	1731.87	125.32	3.98
6653.00	42.60	136.43	6185.07	1511.97	-1040.85	1456.83	516361.1	4397131.0	39°43'26.040"N	80°48'32.739"W	1790.46	125.54	10.46
6748.00	41.19	140.51	6255.79	1571.75	-1088.30	1498.90	516373.9	4397116.5	39°43'25.570"N	80°48'32.202"W	1852.32	125.98	3.23
6843.00	44.23	143.75	6325.60	1633.74	-1139.18	1538.40	516386.0	4397101.0	39°43'25.066"N	80°48'31.698"W	1914.26	126.52	3.95
6938.00	49.24	143.93	6390.69	1700.82	-1195.02	1579.20	516398.4	4397084.0	39°43'24.513"N	80°48'31.177"W	1980.39	127.12	5.28
7032.00	58.21	146.49	6446.25	1774.68	-1257.24	1622.31	516411.5	4397065.0	39°43'23.898"N	80°48'30.627"W	2052.44	127.78	9.79
7128.00	68.61	149.89	6489.18	1859.17	-1330.13	1667.39	516425.3	4397042.8	39°43'23.176"N	80°48'30.052"W	2132.94	128.58	11.28
7222.00	82.44	150.78	6512.61	1949.17	-1409.04	1712.30	516438.9	4397018.8	39°43'22.395"N	80°48'29.480"W	2217.51	129.45	14.74
7316.00	92.09	152.56	6517.10	2042.39	-1491.59	1756.80	516452.5	4396993.6	39°43'21.579"N	80°48'28.912"W	2304.60	130.33	10.44
7411.00	91.05	152.60	6514.49	2136.94	-1575.88	1800.53	516465.8	4396967.9	39°43'20.745"N	80°48'28.355"W	2392.76	131.19	1.10
7506.00	89.85	155.29	6513.75	2231.70	-1661.22	1842.25	516478.5	4396941.9	39°43'19.900"N	80°48'27.823"W	2480.63	132.04	3.10
7601.00	91.35	159.56	6512.75	2326.66	-1748.91	1878.71	516489.6	4396915.2	39°43'19.033"N	80°48'27.359"W	2566.76	132.95	4.76
7696.00	92.16	159.37	6509.84	2421.58	-1837.83	1912.02	516499.8	4396888.1	39°43'18.154"N	80°48'26.935"W	2652.06	133.87	0.88
7791.00	91.14	161.42	6507.11	2516.45	-1927.28	1943.88	516509.5	4396860.9	39°43'17.269"N	80°48'26.530"W	2737.35	134.75	2.41
7886.00	89.97	161.89	6506.19	2611.24	-2017.45	1973.78	516518.6	4396833.4	39°43'16.377"N	80°48'26.150"W	2822.39	135.63	1.33
7981.00	89.85	163.91	6506.33	2705.88	-2108.24	2001.71	516527.1	4396805.7	39°43'15.479"N	80°48'25.795"W	2907.15	136.49	2.13
8076.00	89.38	163.52	6506.97	2800.39	-2199.43	2028.35	516535.2	4396778.0	39°43'14.578"N	80°48'25.457"W	2991.94	137.32	0.64

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WELLPATH DATA † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Wy Department of Environmental Protection Grid East [M]	Grid North [M]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
8172.00	89.66	163.27	6507.78	2895.95	-2291.42	2055.78	516543.6	4396749.9	39°43'13.668"N	80°48'25.108"W	3078.45	138.10	0.39
8265.00	89.60	158.32	6508.38	2988.81	-2379.22	2086.36	516552.9	4396723.2	39°43'12.799"N	80°48'24.719"W	3164.42	138.75	5.32
8359.00	89.51	156.04	6509.11	3082.79	-2465.85	2122.82	516564.0	4396696.8	39°43'11.943"N	80°48'24.255"W	3253.73	139.28	2.43
8452.00	89.51	152.72	6509.90	3175.60	-2549.69	2163.02	516576.3	4396671.2	39°43'11.113"N	80°48'23.743"W	3343.59	139.69	3.57
8547.00	89.48	156.71	6510.74	3270.42	-2635.57	2203.59	516588.6	4396645.1	39°43'10.263"N	80°48'23.226"W	3435.41	140.10	4.20
8642.00	89.38	155.22	6511.69	3365.36	-2722.33	2242.28	516600.4	4396618.6	39°43'09.405"N	80°48'22.733"W	3526.88	140.52	1.57
8737.00	89.66	156.82	6512.48	3460.30	-2809.12	2280.89	516612.2	4396592.2	39°43'08.547"N	80°48'22.242"W	3618.51	140.93	1.71
8833.00	89.82	162.82	6512.92	3556.20	-2899.18	2313.99	516622.3	4396564.8	39°43'07.656"N	80°48'21.820"W	3709.42	141.41	6.25
8927.00	89.94	164.84	6513.12	3649.70	-2989.46	2340.17	516630.2	4396537.3	39°43'06.763"N	80°48'21.488"W	3796.48	141.95	2.15
9021.00	89.60	162.13	6513.49	3743.25	-3079.57	2366.88	516638.4	4396509.8	39°43'05.872"N	80°48'21.149"W	3884.06	142.46	2.91
9116.00	89.69	155.52	6514.08	3838.18	-3168.11	2401.18	516648.8	4396482.8	39°43'04.996"N	80°48'20.712"W	3975.25	142.84	6.96
9210.00	89.48	153.73	6514.76	3932.02	-3253.03	2441.46	516661.1	4396457.0	39°43'04.156"N	80°48'20.199"W	4067.30	143.11	1.92
9303.00	89.57	159.11	6515.53	4024.95	-3338.23	2478.65	516672.4	4396431.0	39°43'03.313"N	80°48'19.725"W	4157.82	143.41	5.79
9398.00	90.12	164.48	6515.79	4119.70	-3428.45	2508.32	516681.5	4396403.5	39°43'02.421"N	80°48'19.348"W	4248.04	143.81	5.68
9493.00	89.94	161.75	6515.74	4214.30	-3519.34	2535.91	516689.9	4396375.8	39°43'01.522"N	80°48'18.998"W	4337.81	144.23	2.88
9588.00	89.94	153.63	6515.84	4309.22	-3607.16	2571.94	516700.9	4396349.1	39°43'00.654"N	80°48'18.539"W	4430.17	144.51	8.55
9683.00	89.94	157.04	6515.94	4404.11	-3693.48	2611.58	516712.9	4396322.8	39°42'59.800"N	80°48'18.034"W	4523.51	144.74	3.59
9778.00	90.06	154.91	6515.94	4499.05	-3780.24	2650.25	516724.7	4396296.3	39°42'58.941"N	80°48'17.542"W	4616.72	144.97	2.25
9873.00	89.97	156.49	6515.92	4593.97	-3866.82	2689.35	516736.6	4396269.9	39°42'58.085"N	80°48'17.044"W	4710.08	145.18	1.67
9967.00	90.06	153.18	6515.89	4687.82	-3951.89	2729.31	516748.8	4396244.0	39°42'57.243"N	80°48'16.535"W	4802.77	145.37	3.52
10062.00	90.06	156.32	6515.79	4782.67	-4037.80	2769.83	516761.2	4396217.8	39°42'56.393"N	80°48'16.019"W	4896.51	145.55	3.31
10157.00	90.06	157.59	6515.69	4877.65	-4125.22	2807.02	516772.5	4396191.2	39°42'55.529"N	80°48'15.545"W	4989.67	145.77	1.34
10252.00	89.94	159.85	6515.69	4972.64	-4213.73	2841.49	516783.0	4396164.2	39°42'54.653"N	80°48'15.107"W	5082.29	146.01	2.38
10347.00	89.91	159.28	6515.82	5067.60	-4302.76	2874.66	516793.1	4396137.1	39°42'53.773"N	80°48'14.685"W	5174.69	146.25	0.60
10442.00	89.82	157.91	6516.04	5162.59	-4391.20	2909.33	516803.7	4396110.2	39°42'52.898"N	80°48'14.243"W	5267.53	146.47	1.45
10537.00	89.85	155.39	6516.31	5257.56	-4478.41	2946.98	516815.1	4396083.6	39°42'52.035"N	80°48'13.764"W	5361.05	146.65	2.65
10632.00	89.88	155.27	6516.54	5352.46	-4564.74	2986.63	516827.2	4396057.3	39°42'51.181"N	80°48'13.259"W	5454.98	146.80	0.13
10728.00	89.88	155.75	6516.74	5448.37	-4652.10	3026.43	516839.3	4396030.7	39°42'50.317"N	80°48'12.752"W	5549.90	146.95	0.50
10823.00	89.72	156.23	6517.07	5543.31	-4738.82	3065.24	516851.2	4396004.3	39°42'49.459"N	80°48'12.258"W	5643.76	147.10	0.34
10918.00	89.66	156.31	6517.59	5638.26	-4825.72	3103.62	516862.9	4395977.8	39°42'48.599"N	80°48'11.769"W	5737.59	147.25	0.30
11013.00	89.29	160.07	6518.46	5733.24	-4913.90	3138.91	516873.6	4395950.9	39°42'47.727"N	80°48'11.320"W	5830.87	147.43	3.98

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [M]	Grid North [M]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
11107.00	89.26	162.12	6519.65	5827.09	-5002.81	3169.36	516882.9	4395923.8	39°42'46.848"N	80°48'10.933"W	5922.24	147.65	2.18
11202.00	89.26	159.06	6520.87	5921.96	-5092.40	3200.92	516892.5	4395896.5	39°42'45.962"N	80°48'10.532"W	6014.85	147.85	3.22
11297.00	89.35	159.66	6522.03	6016.93	-5181.29	3234.41	516902.7	4395869.5	39°42'45.082"N	80°48'10.106"W	6107.96	148.03	0.64
11390.00	89.45	159.73	6523.00	6109.88	-5268.51	3266.68	516912.5	4395842.9	39°42'44.220"N	80°48'09.695"W	6199.06	148.20	0.13
11484.00	89.48	156.83	6523.88	6203.86	-5355.82	3301.46	516923.1	4395816.3	39°42'43.356"N	80°48'09.253"W	6291.62	148.35	3.09
11579.00	89.26	157.39	6524.92	6298.85	-5443.33	3338.41	516934.4	4395789.6	39°42'42.491"N	80°48'08.782"W	6385.52	148.48	0.63
11674.00	89.35	156.19	6526.07	6393.82	-5530.64	3375.84	516945.8	4395763.0	39°42'41.627"N	80°48'08.306"W	6479.53	148.60	1.27
11769.00	89.42	154.38	6527.09	6488.71	-5616.93	3415.56	516957.9	4395736.7	39°42'40.773"N	80°48'07.800"W	6573.88	148.70	1.91
11864.00	89.23	155.92	6528.21	6583.59	-5703.12	3455.48	516970.1	4395710.5	39°42'39.921"N	80°48'07.292"W	6668.28	148.79	1.63
11959.00	89.20	157.09	6529.51	6678.55	-5790.24	3493.35	516981.6	4395683.9	39°42'39.059"N	80°48'06.810"W	6762.42	148.90	1.23
12053.00	89.26	158.42	6530.78	6772.54	-5877.23	3528.93	516992.4	4395657.4	39°42'38.198"N	80°48'06.357"W	6855.30	149.02	1.42
12148.00	89.35	159.81	6531.93	6867.51	-5965.98	3562.79	517002.8	4395630.4	39°42'37.320"N	80°48'05.926"W	6948.84	149.16	1.47
12178.00	89.54	159.42	6532.22	6897.49	-5994.10	3573.24	517005.9	4395621.8	39°42'37.042"N	80°48'05.793"W	6978.34	149.20	1.45
12203.00	89.54	159.42	6532.42	6922.48	-6017.50	3582.03	517008.6	4395614.7	39°42'36.811"N	80°48'05.681"W	7002.95	149.24	0.00

51-01644

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4705101649

EQT Production Company
Well Simulation Monitoring Plan
Pad ID: Hansen
County: Marshall

February 6, 2025

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Page 1 of 2

03/21/2025

Purpose

The purpose of this pad-specific Well Stimulation Monitoring Plan is to identify and notify conventional well operators near EQT's planned well stimulation operations in Marshall and Wetzel County, WV prior to well stimulation operations at the EQT Hansen pad's 5H well.

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fluid migration.

A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the well stimulation operations, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during well stimulation.

1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 500 feet of this pad and the lateral section that are known or could reasonably be expected to be within range of the well stimulation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

EQT will notify these operators of the well stimulation operations schedule for this well, and coordinate with them throughout the well stimulation process.

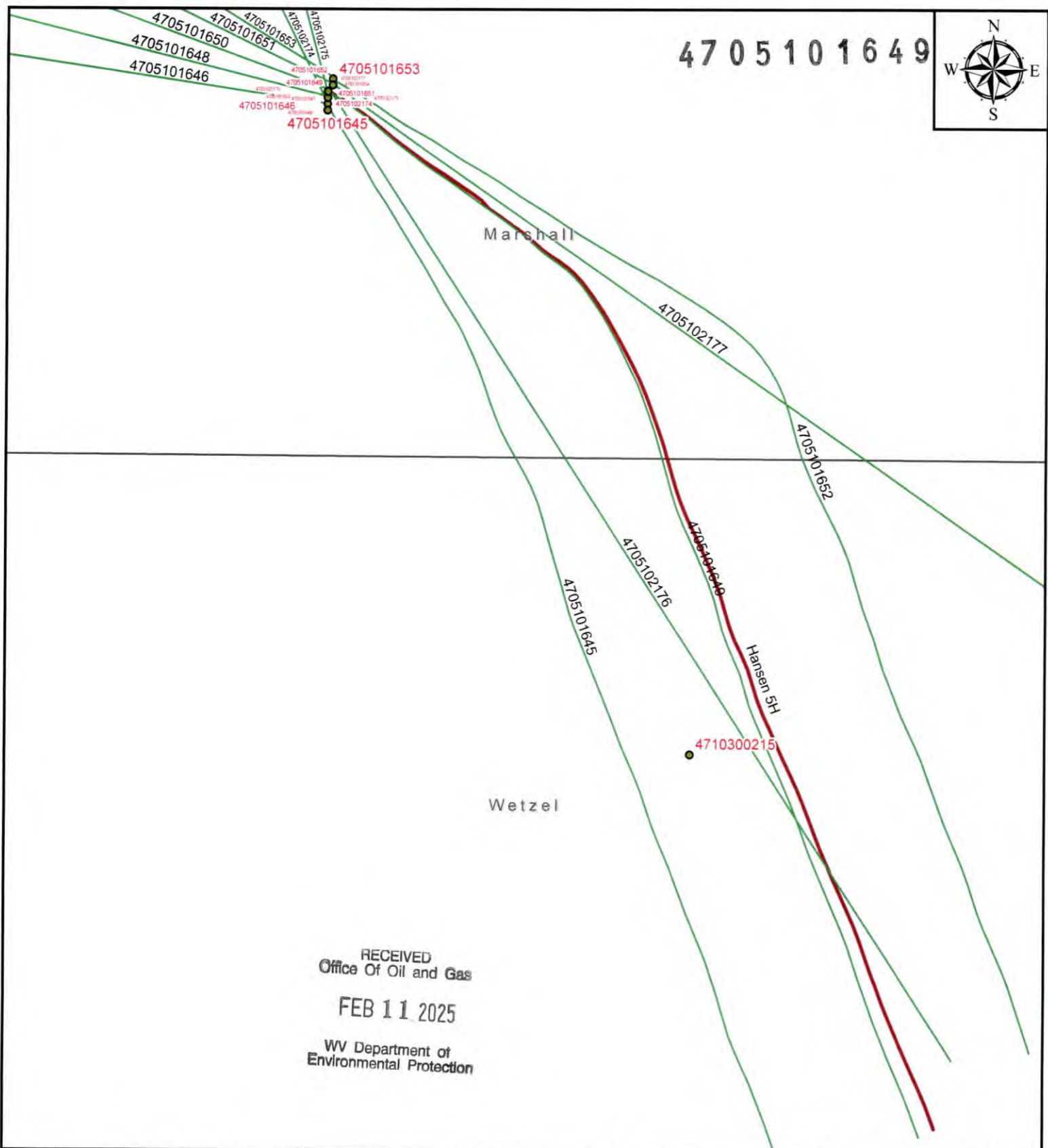
EQT will recommend to these operators at a minimum to:

1. Inspect their surface equipment prior to well stimulation to establish integrity and establish pre-well stimulation well conditions
2. Observe wells closely during and after well stimulation and monitor for abnormal increases in water, gas or pressure
3. Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

2. Reporting

EQT will provide information relating to the well stimulation schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.

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<p>EQT</p> <p>EQT Corporation 625 Liberty Avenue Pittsburgh, PA 15222</p> <hr/> <p>Hansen 5H</p> <hr/> <p>Vertical Offsets and Foreign Laterals within 500 Feet</p>	<p>Legend</p> <p>Well Lateral by Formation</p> <ul style="list-style-type: none"> Genesee Marcellus Utica <p>States</p> <p>Counties</p> <ul style="list-style-type: none"> Hansen_Offset_Wells_update Hansen_Offset_Laterals_update 	<p>380 190 0 380</p> <p>Feet</p> <p>1:9,126</p> <p>Disclaimer:</p> <p>This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed survey or upon consultation with EQT.</p>	<p>1:1,161,728</p> <p>OH WV PA</p> <p>03/21/2025</p>
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APL_UWI_12	ElevationG	ElevationK	ENVOperato	ENVWellSta	ENVWellTyp	InitialOpe	Latitude	Longitude	MD_FT	TVD_FT	WellName
47-051-01653-00	1260	1281	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.727038	-80.814216	11333	0	HANSEN NO. 10H
47-051-02174-00	1255	1278	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.726602	-80.814295	0	0	HANSEN N-2HU
47-051-01651-00	1260	1283	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.726929	-80.814237	11260	0	HANSEN NO. 8H
47-051-01646-00	1256	1279	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.726603	-80.814295	10747	0	HANSEN NO. 2H
47-051-01654-00	1245	1255	EQT	INACTIVE	GAS	TUG HILL OPERATING	39.726875	-80.814246	6411	5760.82	HANSEN NO. 7H
47-051-01648-00	1257	1280	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.726712	-80.814276	10876	0	HANSEN NO. 4H
47-051-01652-00	1260	1274	EQT	PRODUCING	OIL & GAS	EQT PROD	39.726983	-80.814226	0	12178	HANSEN NO. 9H
47-103-00215-00	1276	1285	WASMUTH, GEORGE P & A	DRY HOLE	OTHER	OPERATOR UNKNOWN	39.716311	-80.806517	1286	1286	LOWRY, INA 1
47-051-01645-00	1256	1274	EQT	PRODUCING	OIL & GAS	EQT PROD	39.726548	-80.814305	0	12308	HANSEN 1H
47-051-02177-00	1260	1283	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.726929	-80.814236	0	0	HANSEN S-8HU
47-051-01647-00	1245	1256	EQT	INACTIVE	GAS	TUG HILL OPERATING	39.726657	-80.814285	6338	6004.51	HANSEN NO. 3H
47-051-02175-00	1257	1280	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.726711	-80.814276	0	0	HANSEN N-4HU
47-051-01650-00	1258	1281	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.72682	-80.814256	11022	0	HANSEN NO. 6H
47-051-02176-00	1258	1281	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.72682	-80.814256	0	0	HANSEN S-6HU

APL_UWI_12	ElevationG	ElevationK	ENVOperato	ENVWellSta	ENVWellTyp	InitialOpe	Latitude	Longitude	MD_FT	TVD_FT	WellName
47-051-01653-00	1260	1281	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.727038	-80.814216	11333	0	HANSEN NO. 10H
47-051-01646-00	1256	1279	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.726603	-80.814295	10747	0	HANSEN NO. 2H
47-051-01645-00	1256	1274	EQT	PRODUCING	OIL & GAS	EQT PROD	39.726548	-80.814305	0	12308	HANSEN 1H
47-051-01651-00	1260	1283	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.726929	-80.814237	11260	0	HANSEN NO. 8H
47-051-02174-00	1255	1278	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.726602	-80.814295	0	0	HANSEN N-2HU
47-051-02176-00	1258	1281	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.72682	-80.814256	0	0	HANSEN S-6HU
47-051-02175-00	1257	1280	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.726711	-80.814276	0	0	HANSEN N-4HU
47-051-01648-00	1257	1280	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.726712	-80.814276	10876	0	HANSEN NO. 4H
47-051-01652-00	1260	1274	EQT	PRODUCING	OIL & GAS	EQT PROD	39.726983	-80.814226	0	12178	HANSEN NO. 9H
47-051-01650-00	1258	1281	CHISHOLM O&G	NEVER DRILLED	GAS	GASTAR EXPLORATIO	39.72682	-80.814256	11022	0	HANSEN NO. 6H
47-051-02177-00	1260	1283	EQT	NEVER DRILLED	OTHER	TUG HILL OPERATING	39.726929	-80.814236	0	0	HANSEN S-8HU

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WW-9
(4/16)

API Number 47 - 051 - 01649

Operator's Well No. Hansen 5H

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

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FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company

OP Code 306686

Watershed (HUC 10) French Creek - Ohio River (0503020110)

Quadrangle New Martinsville

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☒ No ☐

Will a pit be used? Yes ☐ No ☒

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes ☐ No ☒ If so, what ml.? N/A

Proposed Disposal Method For Treated Pit Wastes:

- ☐ Land Application
- ☒ Underground Injection (UIC Permit Number 0014, 8462, 4037)
- ☒ Reuse (at API Number Various)
- ☒ Off Site Disposal (Supply form WW-9 for disposal location)
- ☐ Other (Explain _____)

Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached

-If oil based, what type? Synthetic, petroleum, etc. See attachment

Additives to be used in drilling medium? See Attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? See Attached List

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature

Company Official (Typed Name) John Zavatchan

Company Official Title Regional Manager - Permitting

Subscribed and sworn before me this 7th day of February, 2025

Notary Public

My commission expires March 9, 2028

Commonwealth of Pennsylvania - Notary Seal
Rebecca Shrum, Notary Public
Beaver County
My commission expires March 9, 2028
Commission number 1267706
Member, Pennsylvania Association of Notaries

03/21/2025

WW-9 Attachment

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.

- Air is used to drill the top-hole sections of the wellbore (surface, intermediate, and pilot). Water based mud or synthetic based mud may be necessary depending on hole conditions to stabilize and drill the intermediate section. The pilot hole, curve, and lateral sections will be drilled with either air, water-based mud, or synthetic mud.

Additives to be used in drilling medium?

- Air - biodegradable oil lubricant, detergent, defoaming, water.
- Water based mud – Barite, viscosifier, alkalinity control, lime, filtration control, deflocculants, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates.
- Synthetic mud – synthetic base oil, emulsifier, salt, lime, viscosifier, alkalinity control, filtration control, deflocculants, biodegradable oil lubricant, defoaming, carbonates.

No additional drilling is necessary for this rework operation.

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EQT Production Water Plan									
Offsite Disposals for Unconventional Wells									
Facility Name	Address	Address 2	City	State	Zip	Phone	County	State	Permit Number
CWS Trucking Inc.	P.O. Box 391		Williamstown	WV	26187	740-516-3586	Noble	OH	3390
Broad Street Energy LLC	37 West Broad Street	Suite 1100	Columbus	OH	43215	740-516-5381	Washingotn	OH	8462
LAD Liquid Assets Disposal Inc.	226 Rankin Road		Washington	PA	15301	724-350-2760	Ohio	WV	USEPA WV 0014
Triad Energy	PO Box 430		Reno	OH	45773	740-516-6021	Noble	OH	4037
						740-374-2940			
Tri County Waste Water Management, Inc.	1487 Toms Run Road		Holbrook	PA	15341	724-627-7178	Greene	PA	TC-1009
						724-499-5647			
King Excavating Co. Advance Waste Services	101 River Park Drive		New Castle	PA	16101		Lawrence	PA	PAR000029132
Waste Management - Meadowfill Landfill	Rt. 2, Box 68 Dawson Drive		Bridgeport	WV	16330	304-326-6027	Harrison	WV	SWF-1032-98
									Approval #100785WV
Waste Management - Northwestern Landfill	512 E. Dry Road		Parkersburg	WV	26104	304-428-0602	Wood	WV	SWF-1025 WV-0109400
APEX Landfill	11 County Road 78	PO Box 57	Amsterdam	OH	43903	740-543-4389	Jefferson	OH	06-08438
Advanced Disposal - Chestnut Valley Landfill	1184 McClellandtown Road		McClellandtown	PA	15458	724-437-7336	Fayette	PA	100419
Westmoreland Sanitary Landfill	901 Tyrol Boulevard		Belle Vernon	PA	15012	724-929-7694	Westmoreland	PA	100277
Austin Master Services	801 North 1st Street		Martins Ferry	OH	43935	740-609-3800	Belmont	OH	2014-541
Belmont Solids Control	77505 Cadiz-New Athers Road		Cadiz	OH	43907	740-942-1739	Harrison	OH	2015-511
Diversified Resources	3111 Braun Rd.		Belpre	OH	45714	740-401-0413	Washington	OH	
Buckeye Brine	23986 Airport Road		Coshocton	OH	43812	740-610-1512 724-591-4393	Coshocton	OH	34-031-27177 34-031-27178 34-031-27241
Central Environmental Services	28333 West Belpre Pike		Coolville	OH	45723	304-488-0701	Athens	OH	
Nuverra - Nichols	10555 Veto Road		Belpre	OH	45714	330-232-5041	Washington	OH	34-119-2-8776
Nuverra - Goff	9350 East Pike Road		Norwich	OH	43767	330-232-5041	Muskingum	OH	34-167-2-3862
Nuverra - Wolf	5480 State Route 5		Newton Falls	OH	44444	330-232-5041	Trumbull	OH	34-155-2-1893
Nuverra - Pander	5310 State Route 5		Newton Falls	OH	44444	330-232-5041	Trumbull	OH	34-155-2-3795
Nuverra - AnnaRock D-1	3549 Warner Road		Fowler	OH	44418	330-232-5041	Trumbull	OH	34-155-2-2403

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FQ Helen	199 Bowersock Road		Reno	OH	45773	740-374-2940 412-443-4397 740-236-2135	Washington	OH	34-167-2-9577
FQ Dexter	38505 Marietta Rd.		Dexter City	OH	45727	740-374-2940 412-443-4397 740-236-2135	Noble	OH	34-121-24037 34-121-24086
FQ Ritchie	122 Lonesome Pine Rd		Ellenboro	WV	26346	740-374-2940 412-443-4397 740-236-2135	Ritchie	WV	47-085-09721
FQ Mills	53610 TS Rd 706		Portland	OH	45770	740-374-2940 412-443-4397 740-236-2135	Meigs	OH	34-105-2-3619 34-105-2-3652 34-105-2-3637 34-105-2-3651
Petta Enterprises - OH	745 North 3rd Street		Cambridge	OH	43725	614-477-1368	Guernsey	OH	Ohio Chiefs Order 25-019
Petta Enterprises - WV	38 Technology Dr.		Tridelfia	WV	26059	740-255-5727	Ohio	WV	
Deep Rock Disposal	2341 OH-821		Marietta	OH	45750	304-629-0176	Washington	OH	34-167-2-9766
Waste Management - Arden Landfill	100 Rangos Road		Washington	PA	15301	866-909-4458	Washington	PA	100172
Wetzel County Sanitary Landfill	1521 Wetzel County Landfill Road		New Martinsville	WV	26155	3044553800	Wetzel	WV	SWF-1021

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WW-9

HANSEN 5H

SUPPLEMENT PG 1

SHEET 1

REFERENCE IS HEREBY MADE TO THE WV DEP OFFICE OF OIL & GAS "EROSION AND SEDIMENT CONTROL FIELD MANUAL" FOR REQUIREMENTS AND BMPs FOR AVERAGE FIELD CONDITIONS CONCERNING THE MAINTENANCE OF EXISTING ROADS AND THE CONSTRUCTION OF PROPOSED ROADS. FIELD CONDITIONS MAY REQUIRE VARIANCE FROM THESE GUIDELINES AND THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION TO THE INSPECTOR AND THE OPERATOR SHOULD THESE CONDITIONS OCCUR.

INSTALL CULVERTS AS SHOWN ON RECLAMATION PLANS OR AS FIELD CONDITIONS REQUIRE.

ENTRANCES ONTO PUBLIC ROADS SHALL BE CONSTRUCTED OR MAINTAINED IN ACCORDANCE WITH WV DOT REGULATIONS. ADDITIONAL PERMITS MAY BE REQUIRED. TEMPORARY SEED AND MUCH ALL SLOPES UPON CONSTRUCTION OF LOCATION.

ALL CUT AND FILL SLOPES ARE 2H:1V SLOPE

ALL TREES 6-INCHES AND ABOVE ARE TO BE CUT AND STACKED BRUSH SLASHINGS ARE TO BE UTILIZED DOWN SLOPE OF SITE AND STRUCTURES TO ACT AS A CONTROL BARRIER IF AVAILABLE

COVESTRO, LLC
05-27-20
93.03 AC

COVESTRO, LLC
05-28-9
93.40 AC

COVESTRO, LLC
05-28-8
56.32 AC

CARL L. COFFIELD
SR & LANA R.
COFFIELD
05-28-7
64 AC

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COVESTRO, LLC
05-27-22
172.79 AC

CEMETERY

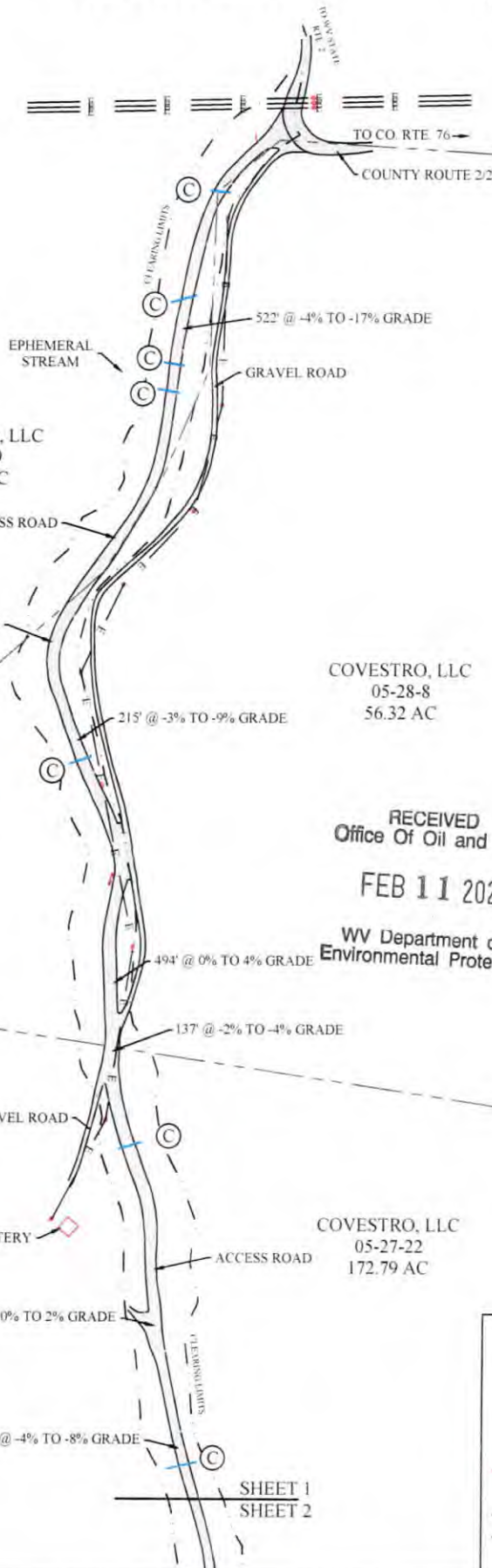
572' @ 0% TO 2% GRADE
239' @ -4% TO -8% GRADE

SHEET 1
SHEET 2

DATE: 01/20/2025

PROJECT NO: HANSEN 5H

03/21/2025

Strader Gower
2/06/2025

TH EXPLORATION
III LLC
05-28-4
48.44 AC

DRAWING NOT
TO SCALE

LEGEND

- ⊙ — Denotes existing culvert with appropriate sediment outlet control (Rip Rap splash pad)
- SF — Silt Fence and or Sediment and Erosion Control Measure
- — — Surface Boundary
- E — Overhead Utility

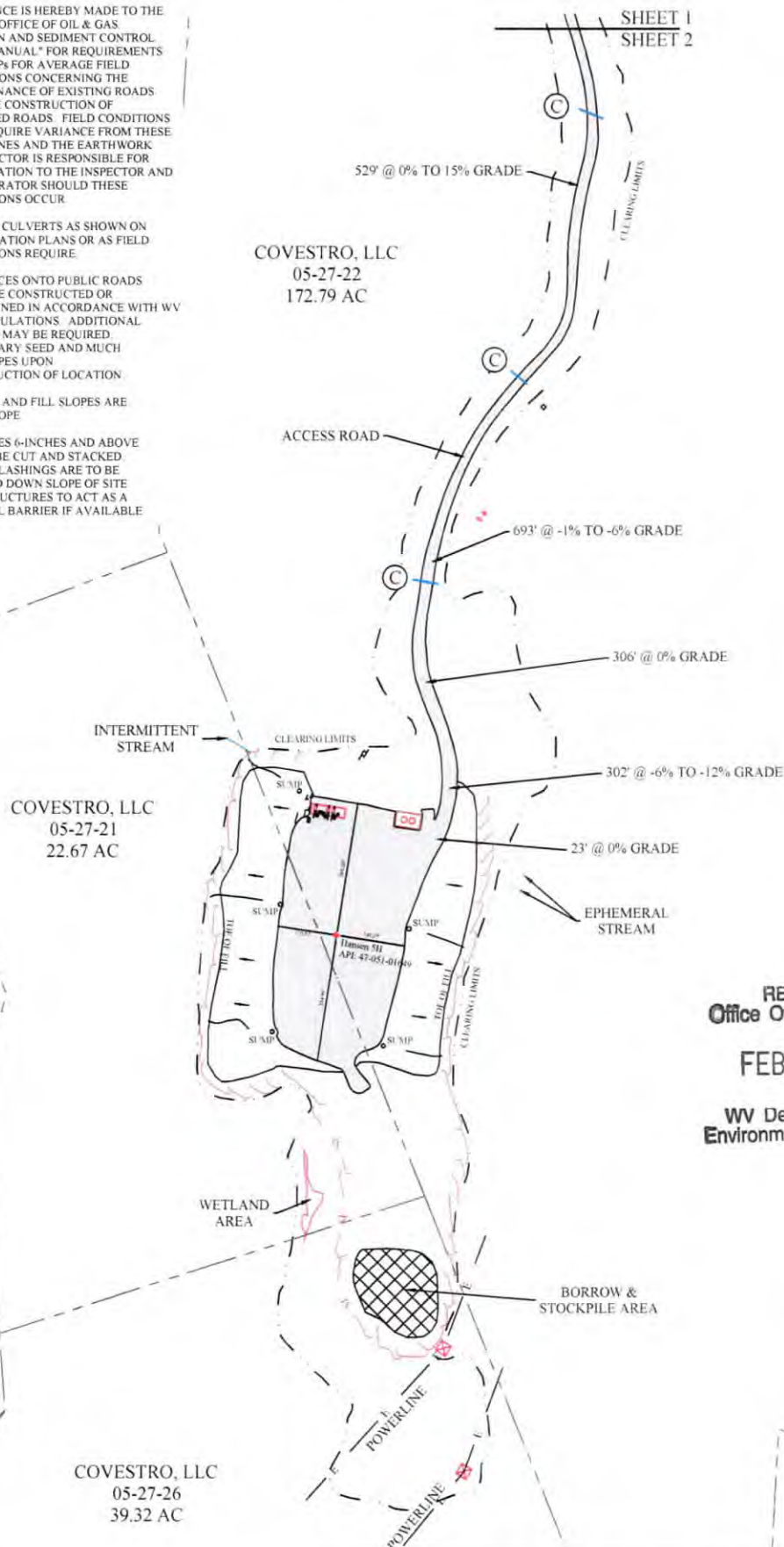
REFERENCE IS HEREBY MADE TO THE WV DEP OFFICE OF OIL & GAS "EROSION AND SEDIMENT CONTROL FIELD MANUAL" FOR REQUIREMENTS AND BMPs FOR AVERAGE FIELD CONDITIONS CONCERNING THE MAINTENANCE OF EXISTING ROADS AND THE CONSTRUCTION OF PROPOSED ROADS. FIELD CONDITIONS MAY REQUIRE VARIANCE FROM THESE GUIDELINES AND THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION TO THE INSPECTOR AND THE OPERATOR SHOULD THESE CONDITIONS OCCUR.

INSTALL CULVERTS AS SHOWN ON
RECLAMATION PLANS OR AS FIELD
CONDITIONS REQUIRE.

ENTRANCES ONTO PUBLIC ROADS
SHALL BE CONSTRUCTED OR
MAINTAINED IN ACCORDANCE WITH WV
DOT REGULATIONS. ADDITIONAL
PERMITS MAY BE REQUIRED.
TEMPORARY SEED AND MUCH
ALL SLOPES UPON
CONSTRUCTION OF LOCATION

ALL CUT AND FILL SLOPES ARE
2H:1V SLOPE

ALL TREES 6-INCHES AND ABOVE
ARE TO BE CUT AND STACKED.
BRUSH SLASHINGS ARE TO BE
UTILIZED DOWN SLOPE OF SITE
AND STRUCTURES TO ACT AS A
CONTROL BARRIER IF AVAILABLE



DRAWING NOT
TO SCALE




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LEGEND

©—Denotes existing culvert with appropriate sediment outlet control (Rip Rap splash pad)

 Silt Fence and or Sediment
 Surface Boundary
 Overhead Utility

DATE: 01/20/2025

PROJECT NO: HANSEN 5H

DRAWN BY: ZCS
03/21/2025

Strader Gower
02/06/2025

WW-9

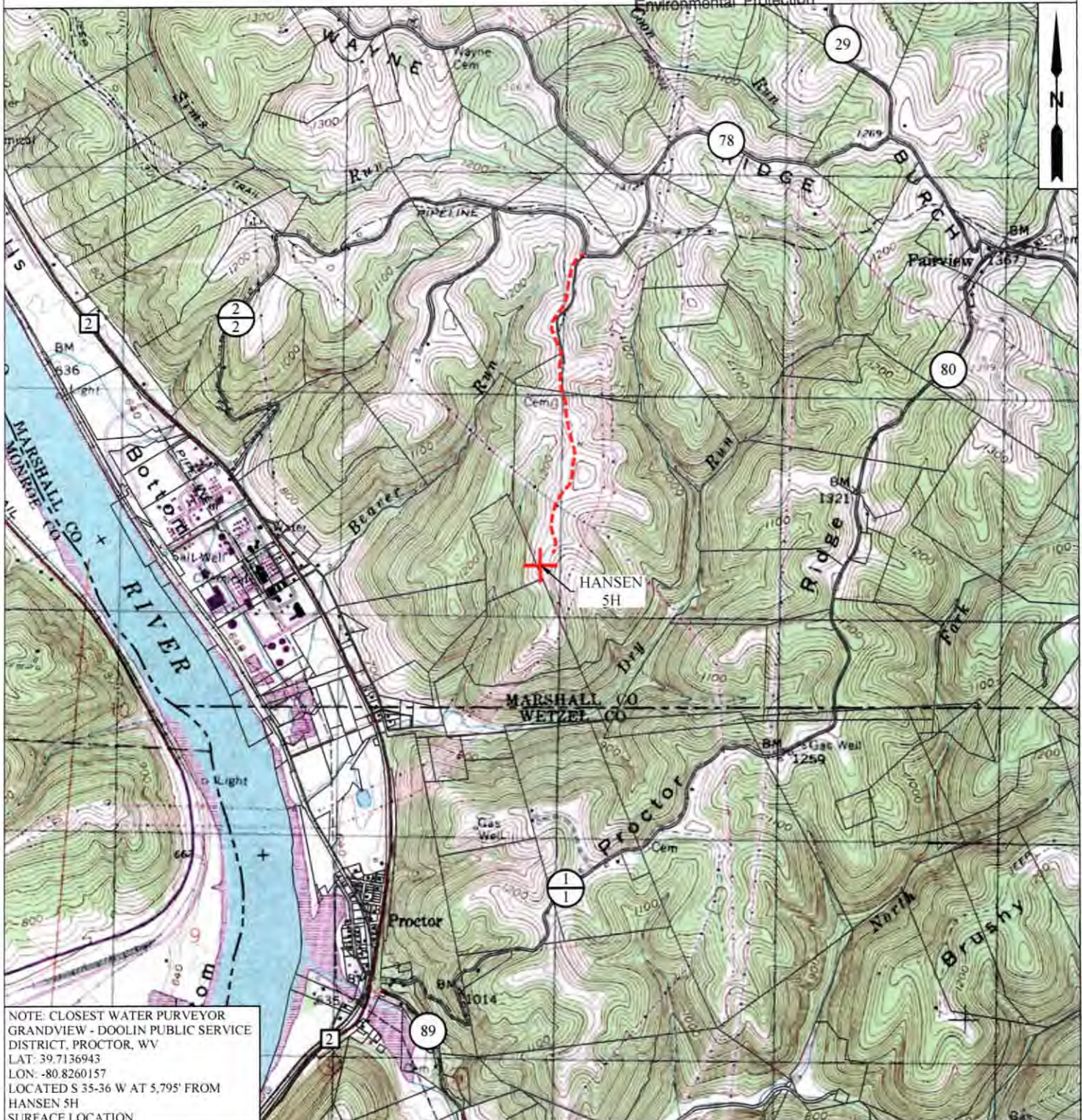
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SUPPLEMENT PG 2

FEB 11 2025

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NOTE: CLOSEST WATER PURVEYOR
GRANDVIEW - DOOLIN PUBLIC SERVICE
DISTRICT, PROCTOR, WV
LAT: 39.7136943
LON: -80.8260157
LOCATED S 35-36 W AT 5,795' FROM
HANSEN 5H
SURFACE LOCATION



OPERATOR	306686	TOPO SECTION	LEASE NAME
EQT PRODUCTION COMPANY 400 WOODCLIFF DR CANONSBURG, PA 15317		NEW MARTINSVILLE 7.5'	HANSEN
		SCALE	DATE
		1" = 2000'	DATE: 01/20/2025 03/31/2025

DATE: 01/20/2025
03/21/2025
Strader Gower
02/06/2025

6,420'

LATITUDE 39° 45' 00"

HANSEN LEASE
WELL NO. 5H
487.56± ACRES

NOTES
OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2013.
COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

REFERENCES
HANSEN NO. 5H
S 78° 18' E 272.4'
S 61° 54' E 252.0'
8° SUMAC
4° LOCUST
SCALE 1" = 200'

LEGEND
--- LEASED TRACTS
--- INTERIOR MINERAL TRACTS
--- SURFACE TRACTS
--- HARD LEASE LINE

SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,397,448.1
E) 515,917.3

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,396,993.6
E) 516,452.5

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,395,614.7
E) 517,008.6

LONGITUDE 80° 47' 30"

8,485'

GRID NORTH

NOTE: BORE PATH BASED ON GRID NORTH.

HORIZONTAL

HANSEN NO. 5H

01653 01651
01654 01650
01652 01648
01647 01646
01645

0109-P
0096-P

(*) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS #84 ACRES

FILE NUMBER **W0120318 (WB1-62)**

DRAWING NUMBER **HANSEN_WP_5H-WR35**

SCALE **1" = 1000'**

MINIMUM DEGREE OF ACCURACY **1/200**

PROVEN SOURCE OF ELEVATION **SUBMETER MAPPING**
GRADE GPS

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. *Jonathan N. White*

STATE OF WEST VIRGINIA
JONATHAN N. WHITE
PROFESSIONAL SURVEYOR

SEAL

WVDEP
OFFICE OF OIL & GAS
801 57TH STREET
CHARLESTON, WV 25304

DATE: **JULY 28, 2015**

OPERATORS WELL NO. **HANSEN NO. 5H AS-DRILLED**

API WELL NO. **47-051-01649**

STATE **COUNTY** **PERMIT**

LOCATION ELEVATION **1245'** WATERSHED (HUC 10) **FRENCH CREEK - OHIO RIVER (0503020110)**

DISTRICT **FRANKLIN** COUNTY **MARSHALL**

QUADRANGLE **NEW MARTINSVILLE 7.5'** LEASE NUMBER **WV16-0099-000, WV62-0003-001**
WV16-0076-001, WV18-0127-001

SURFACE OWNER **BAYER MATERIAL SCIENCES, LLC** ACREAGE **172.79**

OIL & GAS ROYALTY OWNER **PPG INDUSTRIES, INC., et al** LEASE ACREAGE **487.56**

PROPOSED WORK: DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION ☐
PERFORATE NEW FORMATION ☐ OTHER PHYSICAL CHANGE (SPECIFY) _____

PLUG & ABANDON ☐ CLEAN OUT & REPLUG ☐

TARGET FORMATION **MARCELLUS** ESTIMATED DEPTH **TVD: 6532' TMD: 12,203'**

WELL OPERATOR **GASTAR EXPLORATION INC.** DESIGNATED AGENT **MICHAEL McCOWN**

ADDRESS **229 W MAIN STREET, SUITE 301** ADDRESS **229 W MAIN STREET, SUITE 301**
CLARKSBURG WV, 26301 **CLARKSBURG WV, 26301**

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**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
-------------------------	-----------------------	-----------------------	---------	-----------

See Attached



**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: EQT Production Company
By: John Zavatchan
Its: Regional Manager - Permitting

Lease No	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
WV16-0076-001	5-27-22	PPG Industries, Inc.	Gastar Exploration USA Inc.	"at least 1/8th per WV Code 22-6-8"	725	123	N/A	Gastar Exploration USA Inc. to Alitum Marcellus I LLC. AB 24/332	Gastar Exploration USA Inc. to Gastar Exploration Inc. Misc 21/41	Gastar Exploration Inc. to TH Exploration II LLC. AB 36/9	Alitum Marcellus I LLC to TH Exploration II LLC. AB 48/67	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change 2/472
WV16-0127-001	5-27-23	Patricia Haddix	Chesapeake Appalachia LLC	"at least 1/8th per WV Code 22-6-8"	700	113	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc. AB 23/512	Chesapeake Appalachia and Statoil USA Exploration USA Inc. and Alitum Marcellus I LLC. AB 27/321	Gastar Exploration USA Inc. to Gastar Exploration Inc. Misc 21/41	Gastar Exploration Inc. to TH Exploration II LLC. AB 36/9	Alitum Marcellus I LLC to TH Exploration II LLC. AB 48/67	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change 2/472
	5-27-23	Suzanne Hill	Chesapeake Appalachia LLC	"at least 1/8th per WV Code 22-6-8"	699	45	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc. AB 23/512	Chesapeake Appalachia and Statoil USA Exploration USA Inc. and Alitum Marcellus I LLC. AB 27/321	Gastar Exploration USA Inc. to Gastar Exploration Inc. Misc 21/41	Gastar Exploration Inc. to TH Exploration II LLC. AB 36/9	Alitum Marcellus I LLC to TH Exploration II LLC. AB 48/67	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change 2/472
	5-27-23	Lillian Priscilla Grimm	Chesapeake Appalachia LLC	"at least 1/8th per WV Code 22-6-8"	699	41	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc. AB 23/512	Chesapeake Appalachia and Statoil USA Exploration USA Inc. and Alitum Marcellus I LLC. AB 27/321	Gastar Exploration USA Inc. to Gastar Exploration Inc. Misc 21/41	Gastar Exploration Inc. to TH Exploration II LLC. AB 36/9	Alitum Marcellus I LLC to TH Exploration II LLC. AB 48/67	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change 2/472
	5-27-24	George A. Stokler	Gastar Exploration Inc.	"at least 1/8th per WV Code 22-6-8"	756	83	N/A	Gastar Exploration USA Inc. to Alitum Marcellus I LLC. AB 26/539	Gastar Exploration USA Inc. to Gastar Exploration Inc. Misc 21/41	Gastar Exploration Inc. to TH Exploration II LLC. AB 36/9	Alitum Marcellus I LLC to TH Exploration II LLC. AB 48/67	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change 2/472
WV62-0003-001	12-1-8.1	Robert J. Henry	Gastar Exploration Inc.	"at least 1/8th per WV Code 22-6-8"	110A	335	N/A	N/A	N/A	Gastar Exploration USA Inc. to Gastar Exploration Inc. Merger	Gastar Exploration Inc. to TH Exploration II LLC. OG 173A/431	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change Misc 154/899
	12-1-8.1	Robert F. Rothberger	Stone Energy Corporation	"at least 1/8th per WV Code 22-6-8"	113A	761	N/A	Stone Energy Corporation to Gastar Exploration USA Inc. and Alitum Marcellus I LLC. OG 137A/877	Gastar Exploration USA Inc. to Gastar Exploration Inc. Merger	Gastar Exploration Inc. to TH Exploration II LLC. OG 173A/431	Alitum Marcellus I LLC to TH Exploration II LLC. OG 253A/97	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change Misc 154/899
WV62-0003-001	12-1-8	Robert J. Henry	Gastar Exploration Inc.	"at least 1/8th per WV Code 22-6-8"	110A	335	N/A	N/A	N/A	Gastar Exploration USA Inc. to Gastar Exploration Inc. Merger	Gastar Exploration Inc. to TH Exploration II LLC. OG 173A/431	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change Misc 154/899
	12-1-8	Benjamin J. Kocher	Stone Energy Corporation	"at least 1/8th per WV Code 22-6-8"	118A	463	N/A	Stone Energy Corporation to Gastar Exploration USA Inc. and Alitum Marcellus I LLC. OG 137A/877	Gastar Exploration USA Inc. to Gastar Exploration Inc. Merger	Gastar Exploration Inc. to TH Exploration II LLC. OG 173A/431	Alitum Marcellus I LLC to TH Exploration II LLC. OG 253A/97	TH Exploration II LLC to EQT TGH. Exploration II LLC. Name Change Misc 154/899

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Execution Version

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ASSIGNMENT AGREEMENT

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This Assignment Agreement (this "**Assignment**") is made and entered into on August 22, 2023 (the "**Closing Date**"), by and between THQ Appalachia I, LLC, a Delaware limited liability company ("**Upstream Assignor**"), and THQ-XcL Holdings I, LLC, a Delaware limited liability company ("**Midstream Assignor**," and together with Upstream Assignor, "**Assignors**"), on the one hand, and EQT Production Company, a Pennsylvania corporation ("**EPC**"), EQT Acquisition HoldCo LLC, a Delaware limited liability company ("**Upstream Assignee**") and EQT Midstream HoldCo LLC, a Delaware limited liability company ("**Midstream Assignee**", and together with Upstream Assignee, "**Assignees**"), on the other hand. EPC, the Assignors and Assignees are each referred to in this Assignment individually as a "**Party**" and together as the "**Parties**." Capitalized terms used but not otherwise defined herein shall have the meanings set forth in that certain Amended and Restated Purchase Agreement, dated as of December 23, 2022 (as the same may be amended and/or amended and restated from time to time, the "**Purchase Agreement**"), by and among Assignors, the Companies, EQT Corporation, EPC and the other parties party thereto.

RECITALS

WHEREAS, Upstream Assignor owns 100% of the issued and outstanding membership interests (such 100% of the issued and outstanding membership interests, the "**Upstream Company Interests**") of THQ Appalachia I Midco, LLC, a Delaware limited liability company (the "**Upstream Company**");

WHEREAS, Midstream Assignor owns 100% of the issued and outstanding membership interests (such 100% of the issued and outstanding membership interests, the "**Midstream Company Interests**," and together with the Upstream Company Interests, the "**Company Interests**") of THQ-XcL Holdings I Midco, LLC, a Delaware limited liability company (the "**Midstream Company**," and together with Upstream Company, the "**Companies**");

WHEREAS, on December 23, 2022, Assignors, the Companies, EQT Corporation, EPC and the other parties party thereto, entered into the Purchase Agreement;

WHEREAS, pursuant to the Purchase Agreement, Assignors have agreed to sell, convey, transfer, assign and deliver to EPC, and EPC has agreed to purchase from Assignors and pay for, the Company Interests, in each case, subject to the terms and conditions of the Purchase Agreement;

WHEREAS, Upstream Assignee and Midstream Assignee are each wholly-owned subsidiaries of EPC;

WHEREAS, EPC desires to assign its right to acquire (i) the Upstream Company Interests to Upstream Assignee, and (ii) the Midstream Company Interests to Midstream Assignee; and

WHEREAS, the Assignees have agreed to accept the assignment of the respective Company Interests as further provided herein.

NOW, THEREFORE, in accordance with the Purchase Agreement, in consideration of the mutual covenants and agreements in this Assignment and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

AGREEMENTS

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Section 1. *Assignment.*

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(a) Effective as of the Closing, and subject to the terms and conditions of this Assignment and the Purchase Agreement, Upstream Assignor hereby sells, conveys, transfers, assigns and delivers to Upstream Assignee the Upstream Company Interests, and Upstream Assignee hereby purchases and accepts the Upstream Company Interests. Upstream Assignor hereby withdraws as the sole member of the Upstream Company (and shall cease to have or exercise any right, title or interest in or to the Upstream Company Interests) and Upstream Assignee is hereby admitted as the sole member of the Upstream Company pursuant to the terms of its limited liability company agreement.

(b) Effective as of the Closing, and subject to the terms and conditions of this Assignment and the Purchase Agreement, Midstream Assignor hereby sells, conveys, transfers, assigns and delivers to Midstream Assignee the Midstream Company Interests, and Midstream Assignee hereby purchases and accepts the Midstream Company Interests. Midstream Assignor hereby withdraws as the sole member of the Midstream Company (and shall cease to have or exercise any right, title or interest in or to the Midstream Company Interests) and Midstream Assignee is hereby admitted as the sole member of the Midstream Company pursuant to the terms of its limited liability company agreement.

Section 2. *Purchase Agreement.* This Assignment is subject, in all respects, to the terms and conditions of the Purchase Agreement, and nothing contained in this Assignment is meant to enlarge, diminish or otherwise alter the terms and conditions of the Purchase Agreement or the Parties', the Companies' and the other parties' respective rights, duties, liabilities and obligations contained therein, which shall survive the execution and delivery of this Assignment pursuant to its terms. To the extent there is a conflict between this Assignment and the Purchase Agreement, the terms of the Purchase Agreement shall control.

Section 3. *Further Cooperation.* Subject to the terms and conditions of this Assignment and the Purchase Agreement, at any time or from time to time after the Closing Date, at any Party's reasonable request, each other Party shall take such other reasonable actions as such requesting Party may reasonably request, at such requesting Party's expense, in order to effectuate the transactions contemplated by this Assignment.

Section 4. *Amendment.* This Assignment may be amended, restated, supplemented or otherwise modified only by an instrument in writing executed by all Parties and expressly identified as an amendment, restatement, supplement or modification.

Section 5. *Assignment.* This Assignment may not be assigned by any Party without the prior written consent of the other Parties. Any assignment made without the consents required hereby shall be void. Subject to the foregoing provisions of this Section 5, the terms and

provisions of this Assignment shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.

Section 6. **No Third Party Beneficiary.** The terms and conditions of this Assignment are intended solely for the benefit of the Parties and their respective successors and permitted assigns, and it is not the Parties' intention to confer third party beneficiary rights upon any other Person.

Section 7. **Severability.** If any term or other provision of this Assignment is invalid, illegal or incapable of being enforced by any Law or public policy, all other conditions and provisions of this Assignment shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any adverse manner to any Party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the Parties shall negotiate in good faith to modify this Assignment so as to effect the original intent of the Parties as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

Section 8. **Counterparts.** This Assignment may be executed in one or more counterparts, each of which, when executed, shall be deemed to be an original and all of which together shall constitute one and the same document. Each Party's delivery of any executed counterpart signature page by facsimile (or electronic .pdf format transmission) is as effective as executing and delivering this Assignment in the presence of the other Parties, and such signature shall be deemed binding for all purposes hereof, without delivery of an original signature being thereafter required.

Section 9. **Governing Law.** This Assignment and any claim, controversy or dispute arising under or related to this Assignment or the transactions contemplated hereby or the rights, duties and relationship of the Parties hereto, shall be governed by and construed and interpreted in accordance with the Laws of the State of Delaware, without giving effect to any conflicts of law principles (whether of the State of Delaware or any other jurisdiction) that would cause the application of the Laws of any jurisdiction other than the State of Delaware.

Section 10. **Deed; Bill of Sale; Assignment.** To the extent required and permitted by applicable Law, this Assignment shall also constitute a "deed," a "bill of sale" or an "assignment" of the Company Interests.

[Signature pages follow.]

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IN WITNESS WHEREOF, this Assignment has been duly executed by the Parties as of the Closing Date.

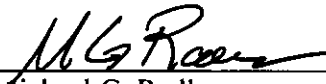
UPSTREAM ASSIGNOR:

THQ Appalachia I, LLC

By: 
Name: Michael G. Radler
Title: Chief Executive Officer

MIDSTREAM ASSIGNOR:

THQ-XcL Holdings I, LLC

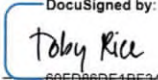
By: 
Name: Michael G. Radler
Title: Chief Executive Officer

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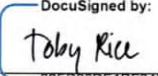
EPC:

EQT Production Company

By: 
Name: Toby Z. Rice
Title: President

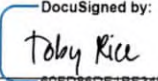
UPSTREAM ASSIGNEE:

EQT Acquisition HoldCo LLC

By: 
Name: Toby Z. Rice
Title: President

MIDSTREAM ASSIGNEE:

EQT Midstream HoldCo LLC

By: 
Name: Toby Z. Rice
Title: President

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EQT Production Company
400 Woodcliff Drive | Canonsburg, PA 15317
412-584-3132 | www.eqt.com

January 17, 2025

Mr. Taylor Brewer
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Hansen 5H Gas Well
Franklin District, Marshall County, WV

Dear Mr. Brewer,

EQT Production Company is applying for a rework permit for the well referenced above. Upon information and belief, the Operator's lease and/ or other real property rights permit it to conduct rework operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Zavatchan'.

John Zavatchan
Regional Manager - Permitting

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE CERTIFICATION

Date of Notice Certification: 2/17/2025

API No. 47- 051 - 01649

Operator's Well No. 5H

Well Pad Name: Hansen

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: West Virginia
County: Marshall
District: Franklin
Quadrangle: New Martinsville
Watershed: French Creek - Ohio River

UTM NAD 83 Easting: 515,917.3
Northing: 4,397,448.1
Public Road Access: County Route 2/2
Generally used farm name: Hansen

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

*PLEASE CHECK ALL THAT APPLY

- ☐ 1. NOTICE OF SEISMIC ACTIVITY or ☒ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- ☐ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ☒ NO PLAT SURVEY WAS CONDUCTED
- ☒ 3. NOTICE OF INTENT TO DRILL or ☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or
- ☐ WRITTEN WAIVER BY SURFACE OWNER
(PLEASE ATTACH)
- ☒ 4. NOTICE OF PLANNED OPERATION
- ☒ 5. PUBLIC NOTICE
- ☒ 6. NOTICE OF APPLICATION

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**OOG OFFICE USE
ONLY**

- ☐ RECEIVED/
NOT REQUIRED
- ☐ RECEIVED
- ☒ RECEIVED/
NOT REQUIRED
- ☒ RECEIVED
- ☒ RECEIVED
- ☒ RECEIVED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

03/21/2025

4705101649

Certification of Notice is hereby given:

THEREFORE, I John Zavatchan, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator: EQT Production Company
By: John Zavatchan
Its: Regional Manager - Permitting
Telephone: 412-584-3132

Address: 400 Woodcliff Drive
Canonsburg, PA 15317
Facsimile: 412-395-2974
Email: jzavatchan@eqt.com

Commonwealth of Pennsylvania - Notary Seal
Rebecca Shrum, Notary Public
Beaver County
My commission expires March 9, 2028
Commission number 1267706
Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 7th day of February 2025.
Rebecca Shrum Notary Public
My Commission Expires March 9, 2028

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION**

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 2/6/2025 **Date Permit Application Filed:** 2/10/2025

Notice of:

- ☒ PERMIT FOR ANY WELL WORK ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- ☐ PERSONAL SERVICE ☐ REGISTERED MAIL ☒ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

☒ Application Notice ☒ WSSP Notice ☒ E&S Plan Notice ☒ Well Plat Notice is hereby provided to:

☒ **SURFACE OWNER(s)**

Name: Covestro, Inc. Attn: Tax Dept.

Address: 1 Covestro Circle
Pittsburgh, PA 15205

Name: _____

Address: _____

☐ **SURFACE OWNER(s) (Road and/or Other Disturbance)**

Name: Covestro, Inc. Attn: Tax Dept.

Address: 1 Covestro Circle
Pittsburgh, PA 15205

Name: _____

Address: _____

☐ **SURFACE OWNER(s) (Impoundments or Pits)**

Name: _____

Address: _____

☒ **COAL OWNER OR LESSEE**

Name: CONSOL Energy, Inc. Attn: Casey Saunders

Address: 275 Technology Drive
Canonsburg, PA 15317

☐ **COAL OPERATOR**

Name: _____

Address: _____

☐ **SURFACE OWNER OF WATER WELL
AND/OR WATER PURVEYOR(s)**

Name: None

Address: _____

☐ **OPERATOR OF ANY NATURAL GAS STORAGE FIELD**

Name: _____

Address: _____

*Please attach additional forms if necessary

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WV Department of
Environmental Protection

03/21/2025

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Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

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Environmental Protection

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

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Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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WW-6A
(8-13)

API NO. 47- 051 - 01649
OPERATOR WELL NO. 5H
Well Pad Name: Hansen

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 412-584-3132

Email: jzavatchan@eqt.com



Address: 400 Woodcliff Drive

Canonsburg, PA 15317

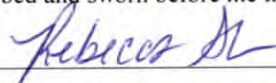
Facsimile: 412-395-2974

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Commonwealth of Pennsylvania - Notary Seal
Rebecca Shrum, Notary Public
Beaver County
My commission expires March 9, 2028
Commission number 1267706
Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 7th day of February, 2025.



Notary Public

My Commission Expires March 9, 2028

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4705101649

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 12/20/2024

Date Permit Application Filed: _____

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Delivery method pursuant to West Virginia Code § 22-6A-16(b)

FEB 11 2025

☐ **HAND**
DELIVERY

☒ **CERTIFIED MAIL**
RETURN RECEIPT REQUESTED

**WV Department of
Environmental Protection**

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Covestro, Inc. Attn: Tax Department

Address: 1 Covestro Circle

Pittsburgh, PA 15205

Name: _____

Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia
County: Marshall
District: Franklin
Quadrangle: New Martinsville
Watershed: French Creek - Ohio River

UTM NAD 83
Easting: 515,917.3
Northing: 4,397,448.1
Public Road Access: County Route 2/2
Generally used farm name: Hansen

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: EQT Production Company

Address: 400 Woodcliff Drive

Canonsburg, PA 15317

Telephone: 412-584-3132

Email: jzavatchan@eqt.com

Facsimile: 412-395-2974

Authorized Representative: John Zavatchan

Address: 400 Woodcliff Drive

Canonsburg, PA 15317

Telephone: 412-584-3132

Email: jzavatchan@eqt.com

Facsimile: 412-395-2974

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 2/6/25 **Date Permit Application Filed:** 2/7/25

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

☒ CERTIFIED MAIL
RETURN RECEIPT REQUESTED

☐ HAND
DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Covestro, Inc. Attn: Tax Department
Address: 1 Covestro Circle
Pittsburgh, PA 15205

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia
County: Marshall
District: Franklin
Quadrangle: New Martinsville
Watershed: French Creek - Ohio River

UTM NAD 83 Easting: 515,917.3
Northing: 4,397,448.1
Public Road Access: County Route 2/2
Generally used farm name: Hansen

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: EQT Production Company
Telephone: 412-584-3132
Email: jzavatchan@eqt.com

Address: 400 Woodcliff Drive
Canonsburg, PA 15317
Facsimile: 412-395-2974

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Office of the District Engineer/Manager
District Four

Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

Alanna J. Keller, P.E.
Deputy Secretary of Transportation
Deputy Commissioner of Highways

Jimmy Wriston, P. E.
Secretary of Transportation
Commissioner of Highways

January 3, 2025

**James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304**

Subject: DOH Permit for the Hansen Well Pad, Marshall County

Dear Mr. Martin,

This well site will be accessed from a DOH permit 06-2017-0178 which has been issued to EQT Production Company for access to the State Road for a well site located off Marshall County Route 2/2 SLS MP 2.23.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

**Lacy D. Pratt
Central Office O&G Coordinator**

**Cc: John Zavatchan
EQT Production Company
OM, D-6
File**

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WV Department of
Environmental Protection

OPERATOR: EQT Production Company WELL NO: 5H

PAD NAME: Hansen

REVIEWED BY: John Zavatchan

SIGNATURE: 

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

Well Restrictions

- ☒ At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR
☐ DEP Waiver and Permit Conditions
- ☒ At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR
☐ DEP Waiver and Permit Conditions
- ☒ At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR
☐ DEP Waiver and Permit Conditions
- ☒ At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR
☐ Surface Owner Waiver and Recorded with County Clerk, OR
☐ DEP Variance and Permit Conditions
- ☒ At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR
☐ Surface Owner Waiver and Recorded with County Clerk, OR
☐ DEP Variance and Permit Conditions
- ☒ At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR
☐ Surface Owner Waiver and Recorded with County Clerk, OR
☐ DEP Variance and Permit Conditions

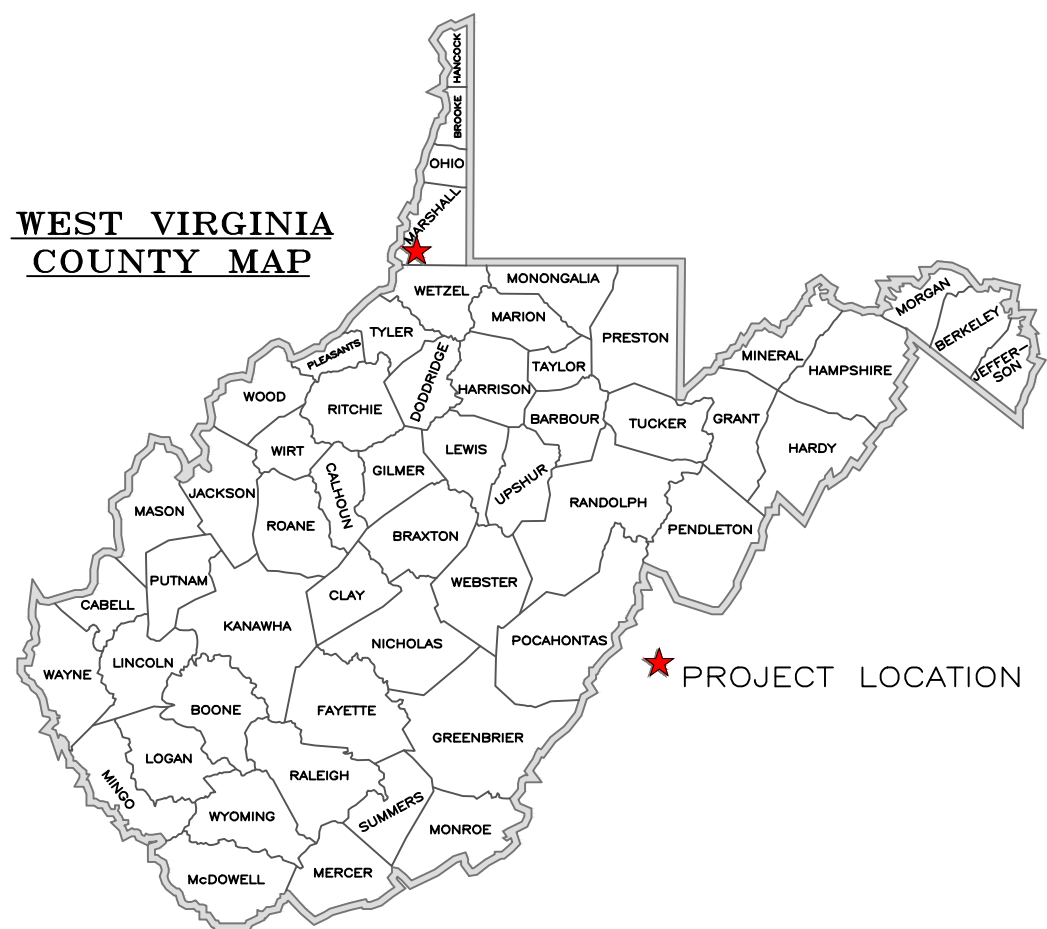
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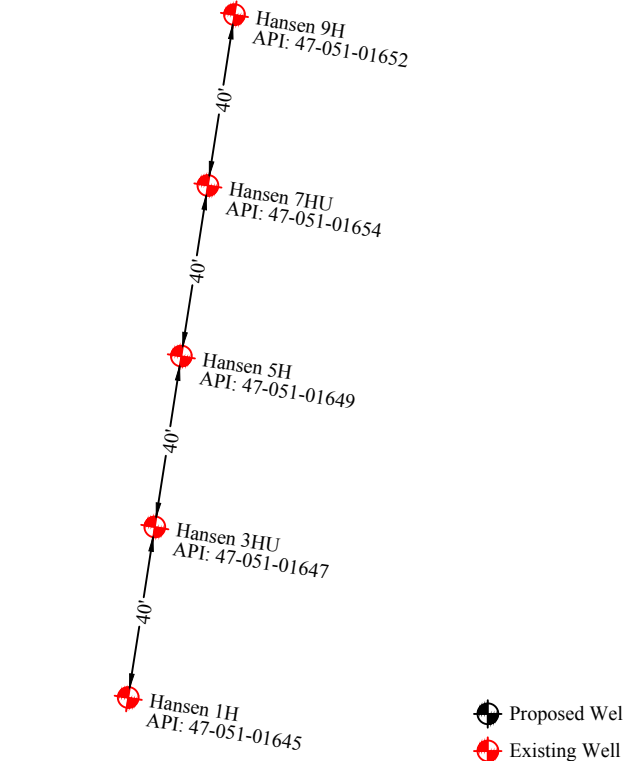
WV Department of
Environmental Protection

03/21/2025

WEST VIRGINIA
COUNTY MAP



Site Entrance	Center of Well Pad
WV-N NAD 83 N: 454134.91 WV-N NAD 83 E: 1599517.96 WV-N NAD 27 N: 454098.98 WV-N NAD 27 E: 1630955.93 Lat. NAD 83: 39.73943577 Lon. NAD 83: -80.81217469 Lat. NAD 27: 39.73935892 Lon. NAD 27: -80.81235959 UTM 17 NAD 83 N: 4398854.65 UTM 17 NAD 83 E: 516093.49	WV-N NAD 83 N: 449538.81 WV-N NAD 83 E: 1598864.04 WV-N NAD 27 N: 449502.93 WV-N NAD 27 E: 1630302.19 Lat. NAD 83: 39.72679283 Lon. NAD 83: -80.81426073 Lat. NAD 27: 39.72671589 Lon. NAD 27: -80.81444491 UTM 17 NAD 83 N: 4397451.10 UTM 17 NAD 83 E: 515917.66 Pad Elev.: 1247.00'



Well Table			
Hansen 1H		Hansen 3HU	Hansen 5H
WV-N NAD 83 N: 449449.99	WV-N NAD 83 N: 449489.50	WV-N NAD 83 N: 449529.26	WV-N NAD 83 N: 449539.26
WV-N NAD 83 E: 1598849.80	WV-N NAD 83 E: 1598856.23	WV-N NAD 83 E: 1598862.00	WV-N NAD 83 E: 1598862.99
WV-N NAD 27 N: 449414.10	WV-N NAD 27 N: 449453.62	WV-N NAD 27 N: 449493.38	WV-N NAD 27 N: 449493.38
WV-N NAD 27 E: 1630287.95	WV-N NAD 27 E: 1630294.38	WV-N NAD 27 E: 1630294.38	WV-N NAD 27 E: 1630300.15
Lat. NAD 83: 39.72654843	Lat. NAD 83: 39.72665717	Lat. NAD 83: 39.72676654	Lat. NAD 83: 39.72676654
Lon. NAD 83: -80.81430676	Lon. NAD 83: -80.81428593	Lon. NAD 83: -80.81426750	Lon. NAD 83: -80.81426750
Lat. NAD 27: 39.72647149	Lat. NAD 27: 39.72658023	Lat. NAD 27: 39.72668960	Lat. NAD 27: 39.72668960
Lon. NAD 27: -80.81449092	Lon. NAD 27: -80.81447010	Lon. NAD 27: -80.81445167	Lon. NAD 27: -80.81445167
UTM 17 NAD 83 (m) N: 4397423.97	UTM 17 NAD 83 (m) N: 4397436.04	UTM 17 NAD 83 (m) N: 4397448.18	UTM 17 NAD 83 (m) N: 4397448.18
UTM 17 NAD 83 (m) E: 515913.77	UTM 17 NAD 83 (m) E: 515915.53	UTM 17 NAD 83 (m) E: 515917.08	UTM 17 NAD 83 (m) E: 515917.08
Hansen 7H			
WV-N NAD 83 N: 449568.65	WV-N NAD 83 N: 449608.06		
WV-N NAD 83 E: 1598868.34	WV-N NAD 83 E: 1598874.39		
WV-N NAD 27 N: 449532.77	WV-N NAD 27 N: 449572.14		
WV-N NAD 27 E: 1630306.23	WV-N NAD 27 E: 1630312.53		
Lat. NAD 83: 39.72687493	Lat. NAD 83: 39.72693474		
Lon. NAD 83: -80.81424702	Lon. NAD 83: -80.81422755		
Lat. NAD 27: 39.72679799	Lat. NAD 27: 39.72690644		
Lon. NAD 27: -80.81443120	Lat. NAD 27: -80.81441474		
UTM 17 NAD 83 (m) N: 4397460.22	UTM 17 NAD 83 (m) N: 4397422.55		
UTM 17 NAD 83 (m) E: 515918.81	UTM 17 NAD 83 (m) E: 515920.46		

Project Contacts

EQT Production Company	Survey and Engineer
Brett Cool - Project Specialist 304-838-8203	Kenneth Kelly 304-338-6985 Off.
John Sandy - Regional Manager I Construction 304-841-5898	John P. See 304-442-0220 Off.
Bill Balog, Jr. - Director of Civil Construction 412-290-1746	Zackary Summerfield 304-338-6987 Off.

Environmental:

Wetland Delineations as provided by Allstar Ecology dated February 3, 2017

Topographic Information:

The topographic information shown herein is based on aerial photography by Blue Mountain Aerial Mapping, Burton, WV

MISS UTILITY OF WEST VIRGINIA
1-800-245-4848
West Virginia State Law
Section XIV, Chapter 24-C requires
that you call two business days
before
you dig in the state of West Virginia.
IT'S THE LAW

**Know what's below.
Call before you dig.**

The WV Mines Website was consulted. Previous (Current) mining activities are not within the AOl.

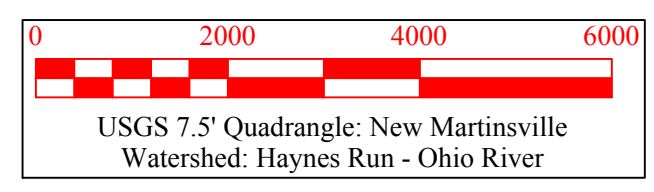
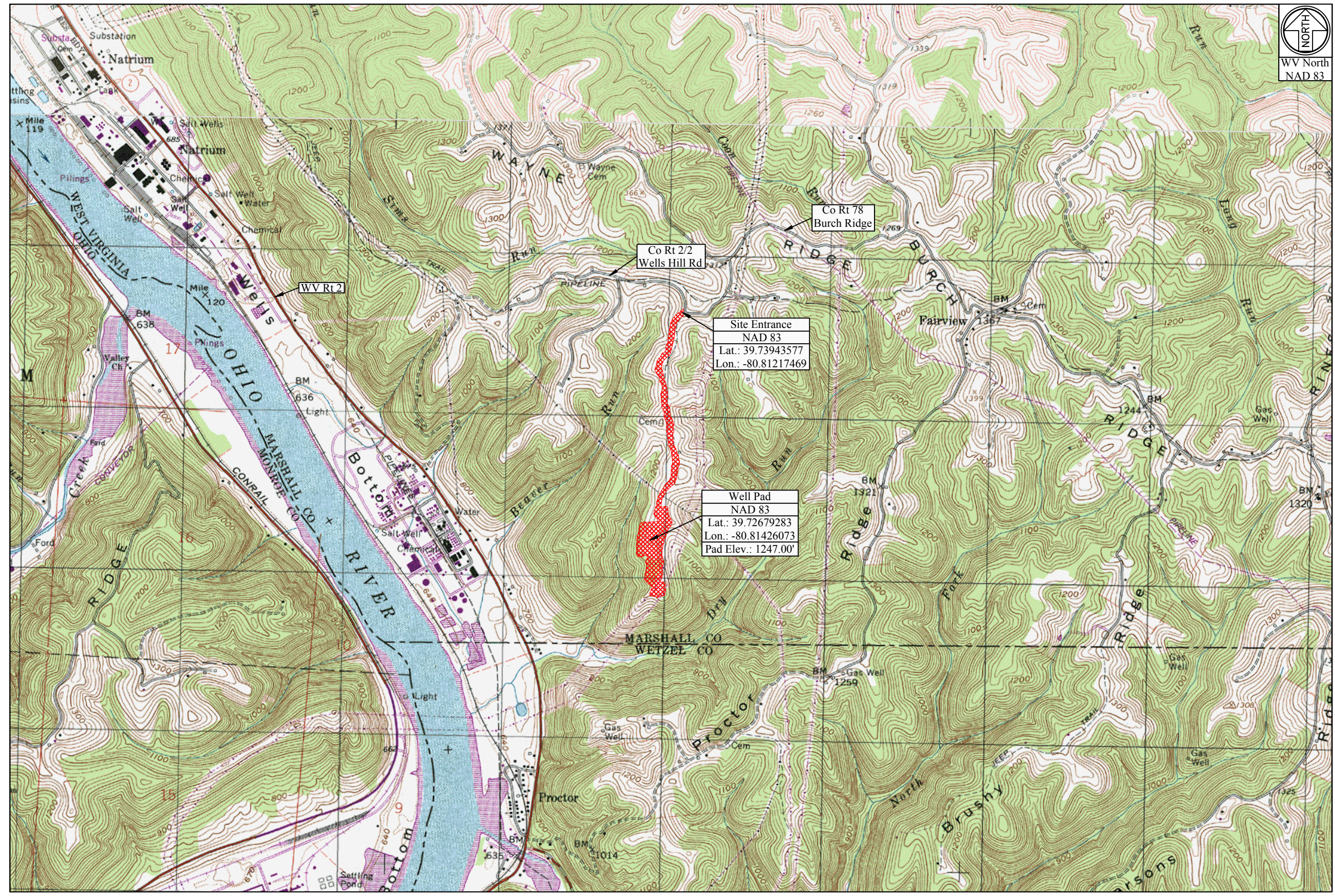
WVDEP Website files show that there are active and/or abandoned gas wells within the AOl

Floodplain Conditions	
Do site construction activities take place in a floodplain:	NO
Permit needed from county floodplain coordinator:	NO
Flood Hazard Zone	X
HEC-RAS Study completed:	N/A
Floodplain shown on drawings:	N/A
FIRM Map Number(s) for site:	S4051C 0203E
Acres of construction in floodplain:	N/A

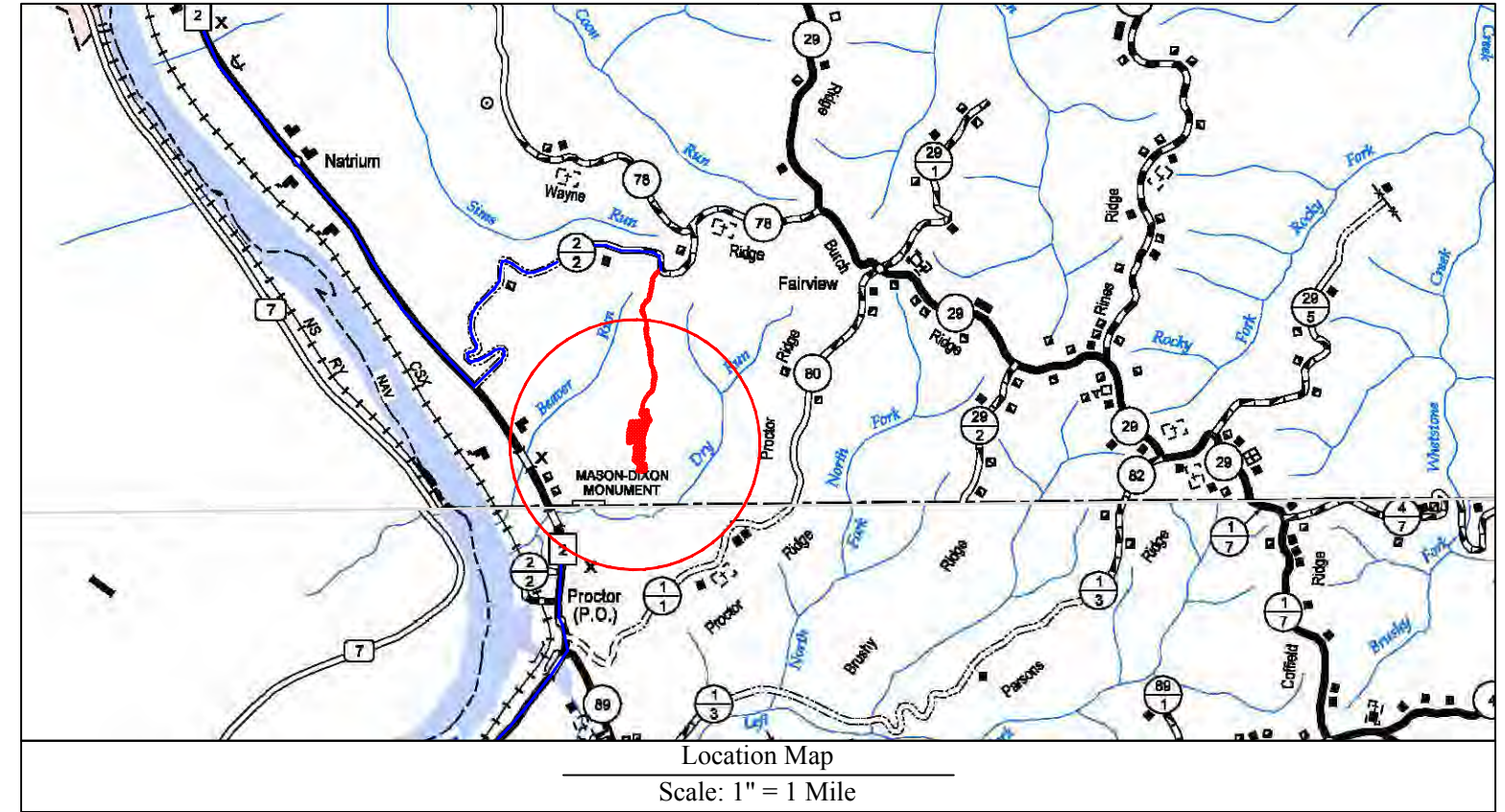
Hansen Well Site

Site Design, Construction Plan, &
Erosion and Sediment Control Plans
EQT Production Company
Marshall County
Franklin District
Latitude 39.72679283°
Longitude -80.81426073°
Haynes Run - Ohio River Watershed

Exhibit A: As-Built



Site Locations (NAD 27)	Site Locations (NAD 83)
Structure Site Entrance Center of Well Pad Center of Production Pad	Latitude (DD) Longitude (DD) Latitude (DD) Longitude (DD)
39.73935892 -80.81235959 39.72671589 -80.81444491 39.72538526 -80.81406053	39.73943577 -80.81217469 39.72679283 -80.81426073 39.72546222 -80.81387640



Well Location Restrictions

All Pad construction complies with the following restrictions.

- *250' from an existing well or developed spring used for human or domestic animals.
- *625' from an occupied dwelling or barn greater than 2,500 SF used for poultry or dairy measured from the center of the pad.
- *100' from the edge of disturbance to wetlands, perennial streams, natural or artificial lake, pond or reservoir.
- *300' from the edge of disturbance to a naturally reproducing trout stream.
- *1,000' of a surface or ground water intake to a public water supply.

(Well Location Restrictions of WV Code 22-6A-12)

As-Built Certification

This as-built certification certifies that this as-built survey accurately depicts the current site conditions. It is recommended that this gas well drilling pad is included in the existing comprehensive maintenance and inspection program for gas well drilling pads or that a comprehensive maintenance and inspection program be developed to monitor the pads condition to insure the continued safe operation.

Zackary C. Summerfield
RPE 22214
Kelly Surveying PLLC
COA: C04232-00

Date: 01-13-2025

Pertinent Site Information

Hansen Well Site
Emergency Number: 304-845-1920
Franklin District, Marshall County, WV
Watershed: Haynes Run - Ohio River Watershed
EQT Emergency Contact Number: 1-833-990-1534

Property Owner Information - Hansen Well Site							
Franklin District - Marshall County							
Owner	TM - Parcel	Well Pad	Prod. Pad	Access Road	Topsoil/Excess	Add. Clearing	Total Disturbed
Covestro, LLC	28-9	0.00	0.00	1.09	0.00	1.50	2.59
Covestro, LLC	28-8	0.00	0.00	1.18	0.00	1.56	2.74
Covestro, LLC	27-22	4.04	0.12	3.14	0.80	6.10	14.20
Covestro, LLC	27-21	2.18	0.54	0.07	0.00	1.85	4.64
Covestro, LLC	27-26	0.00	0.25	0.00	1.33	2.53	4.11
Site Totals (Ac)		6.22	0.91	5.48	2.13	13.54	28.28

Access Road	TM - Parcel	Road Length	Type
Surface Owner	28-9	1,065.55'	Access Road
Covestro, LLC	28-8	966.56'	Access Road
Covestro, LLC	27-22	2,684.37'	Access Road
Covestro, LLC	27-21	180.38'	Access Road

Disturbed Area	
Well Pad Construction	6.22 Ac
Production Pad Construction	0.91 Ac
Access Road Construction	5.48 Ac
Topsoil / Excess Material	2.13 Ac
Additional Clearing	13.54 Ac
Total Disturbed Area	28.28 Ac
Additional Information	
Total Wooded Acres Disturbed	0.00 Ac
Total Linear Feet of Access Road	4,896.56'

Hansen Well Site Quantities	Cut (CY)	Fill (CY)	Spoil (CY)	Borrow (CY)	Max. Slope	Length of Slope
Well Pad	1,423.28	3,649.30	2,226.02	N/A	N/A	N/A
Production Pad	3,044.39	282.05	2,762.34	N/A	N/A	N/A
Production Pad Access Road	0.03	400.55	400.52	11.54%	76.71'	N/A
Topsoil/Excess Material Stockpile	0.00	500.00	500.00	N/A	N/A	N/A
Totals	4,467.70	4,831.90	2,762.34	3,126.54	(Excess Spoil Capacity)	
Total Spoil (CY) =		-364.20				

WVDEP OOG
ACCEPTED AS-BUILT

3/19/2025

Sheet	Description
1	Cover Sheet
N1-N4	Site Notes
2	Overall Plan View - Existing Site Conditions
3	Site Soil Map
4-8	Plan View
9	Cross Sections - Well Pad
10-11	Cross Sections - Access Road
G1-G2	Geotechnical Exhibit
L1	Landowner Disturbed Area Exhibit
S1	Site Reclamation
M1-M2	Production Exhibit
D1-D2	Erosion and Sediment Control Details
R1	Access Road Details
P1	Pad Details

THIS DOCUMENT
PREPARED FOR
EQT PRODUCTION
COMPANY

254
Beltway, WV 26029
(304)338-6985

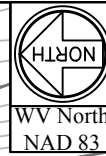
Cover Sheet

Hansen Well Site

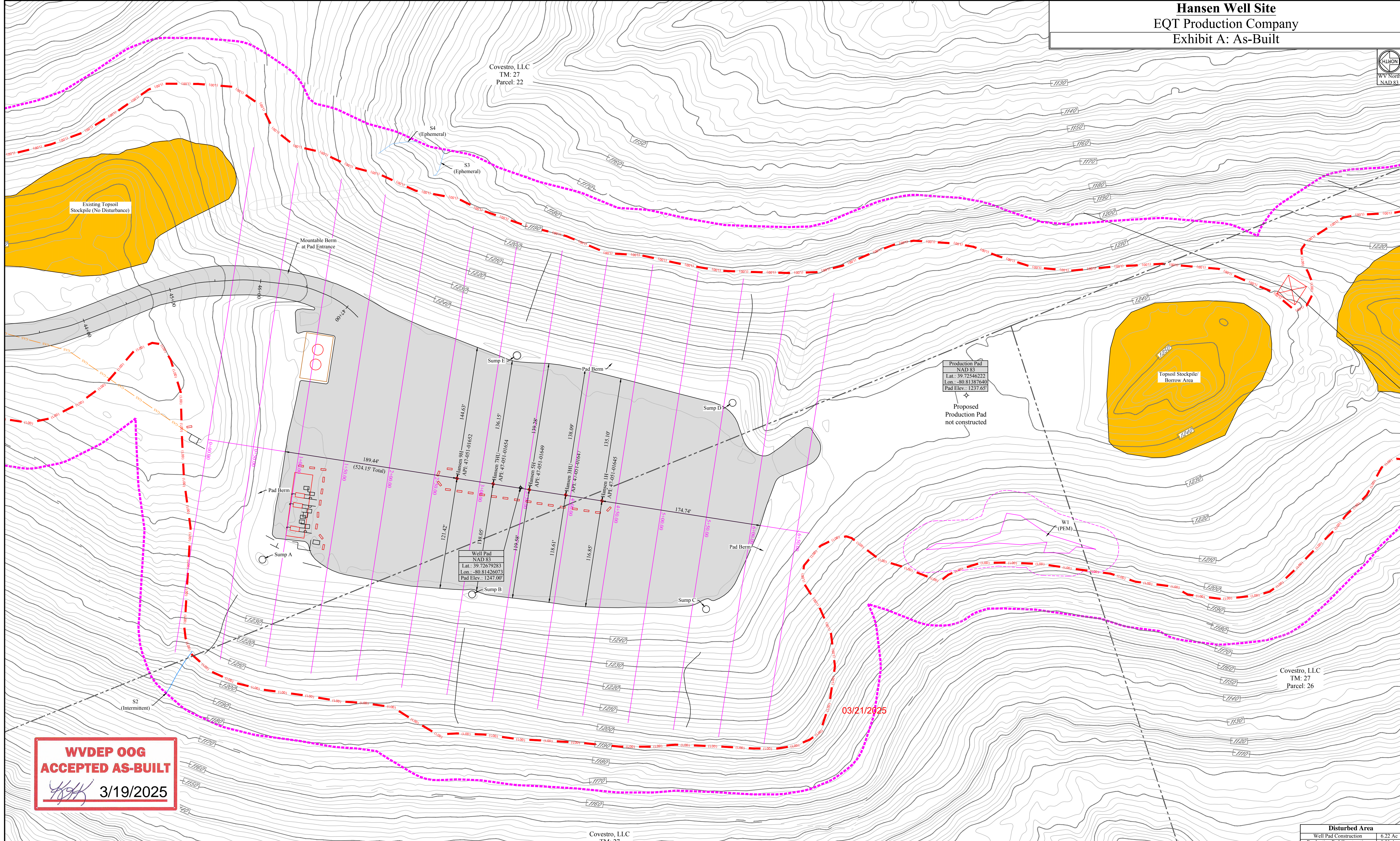
Franklin District
Marshall County, WV

Date: 01/20/2019
Scale: As Shown
Designed By: ZS
File No.
Sheet 1 of 11

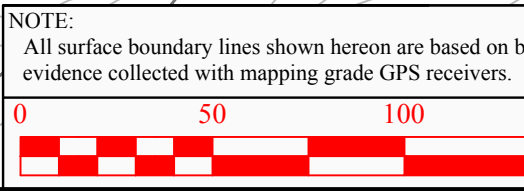
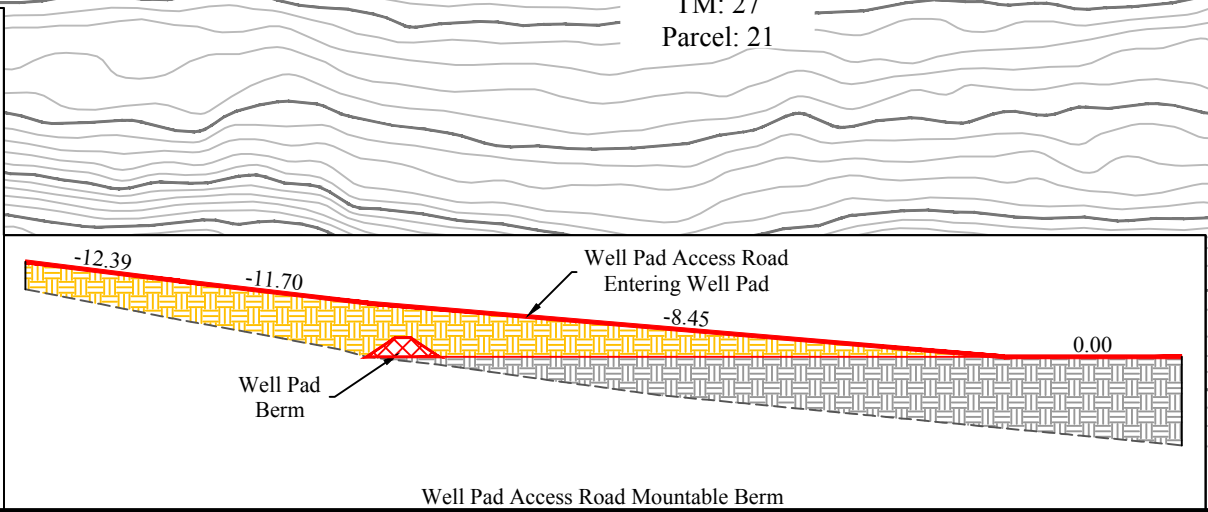
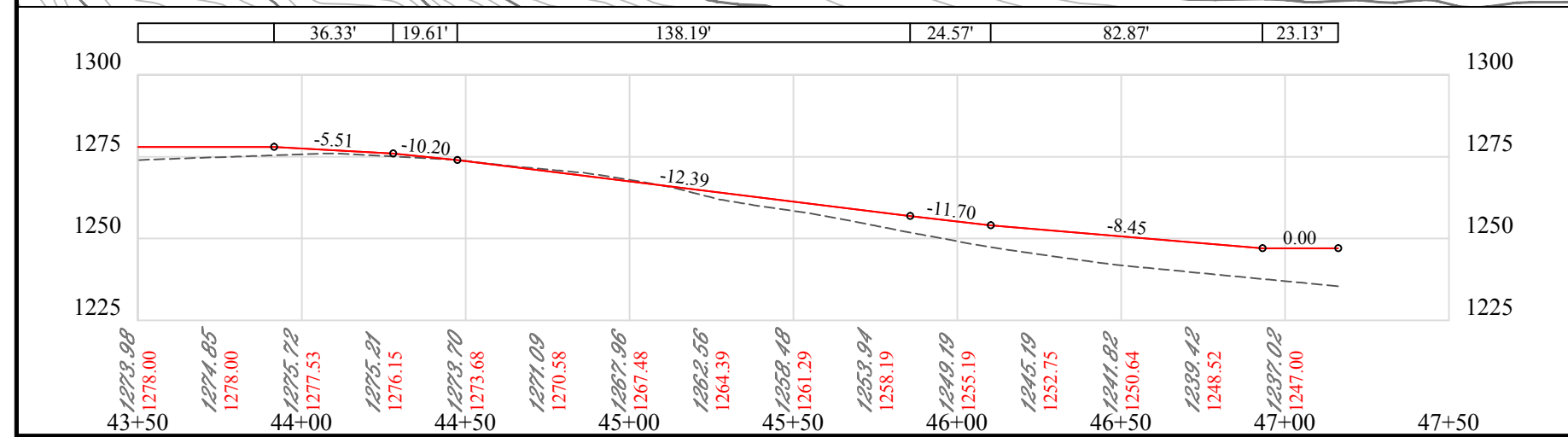
Hansen Well Site
EQT Production Company
Exhibit A: As-Built



Revision	Date
Design	01-20-2019
As-Built	01-13-2025



**WVDEP OOG
ACCEPTED AS-BUILT**
[Signature] 3/19/2025



NOTE:
All surface boundary lines shown hereon are based on boundary evidence collected with mapping grade GPS receivers.

Access Road			
Surface Owner	TM - Parcel	Road Length	Type
Covestro, LLC	28-9	1,065.55'	Access Road
Covestro, LLC	28-8	966.36'	Access Road
Covestro, LLC	27-22	2,684.27'	Access Road
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Total Disturbed Area	28.28 Ac

Additional Information	
Total Wooded Acres Disturbed	0.00 Ac
Total Linear Feet of Access Road	4,896.56'

Legend			
Original Ground 2' Contour	2'	Silt Fence	PEM Wetland
Original Ground 10' Contour	(24)	24" Compost Filter Sock	POW Wetland
Design 2' Contour	SS	Super Silt Fence	PSS Wetland
Design 10' Contour	(L00)	Limits of Disturbance	Perennial Stream
Area of Interest	(L00)	Intermittent Stream	Ephemeral Stream
Existing Gas Line	(L00)	Toe Key	
Existing Utility Pole/Line	(L00)	Erosion Control Blanket Slope Area	
Property Line	(L00)		

EQT
THIS DOCUMENT
PREPARED FOR
EQT PRODUCTION
COMPANY

Kelly Surveying
P.O. Box 254
Delmar, WV 26039
304-338-0965