



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

Friday, June 12, 2026
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

NORTHEAST NATURAL ENERGY LLC
707 VIRGINIA STREET EAST
STE 1200
CHARLESTON, WV 25301

Re: Permit Modification Approval for SULLIVAN 4H
47-061-02017-00-00

Lateral Extension with Forced Pooling

NORTHEAST NATURAL ENERGY LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

A handwritten signature in black ink, appearing to read "H. Jason Harmon".

H. Jason Harmon
Chief

Operator's Well Number: SULLIVAN 4H
Farm Name: ALAN SULLIVAN
U.S. WELL NUMBER: 47-061-02017-00-00
Horizontal 6A New Drill
Date Modification Issued: 06/12/2026

Promoting a healthy environment.

06/12/2026

WW-6B
(04/15)

4706102017
API NO. 47-
OPERATOR WELL NO. 4H
Well Pad Name: Sullivan

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

1) Well Operator: Northeast Natural Energy 494498281 Monongalia Clay Grant Town
Operator ID County District Quadrangle

2) Operator's Well Number: 4H Well Pad Name: Sullivan

3) Farm Name/Surface Owner: Alan Sullivan Public Road Access: Route 27/1

4) Elevation, current ground: N/A Elevation, proposed post-construction: 1,476'

5) Well Type (a) Gas X Oil Underground Storage

Other

(b) If Gas Shallow X Deep

Horizontal X

CK# 45,000.00
CK# 21476

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 7,998' - 8,104', 106', 5,025 psi

8) Proposed Total Vertical Depth: 8,082'

9) Formation at Total Vertical Depth: Marcellus

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10) Proposed Total Measured Depth: 28,059'

11) Proposed Horizontal Leg Length: 19,537'

JUN 02 2026

12) Approximate Fresh Water Strata Depths: 905'

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Environmental Protection

13) Method to Determine Fresh Water Depths: Offset Wells

14) Approximate Saltwater Depths: 2,439'

15) Approximate Coal Seam Depths: 715' - 718' Washington Coal, 895' - 905' Pittsburgh Coal

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

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

(a) If Yes, provide Mine Info: Name: N/A

Depth:

Seam:

Owner:

Robert J. Hitt
4-14-26

WW-6B
(04/15)

API NO. 47- _____
OPERATOR WELL NO. 4H _____
Well Pad Name: Sullivan _____

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	24	New	N/A	N/A	100	100	CTS
Fresh Water	13-3/8	New	J-55	54.5	1,230	1,200*	CTS
Coal	-	-	-	-	-	-	-
Intermediate	9-5/8	New	J-55	36	2,530	2,500	CTS
Production	5-1/2	New	HP P-110	20	28,059	28,009	6,096
Tubing	2-7/8	New	P-110	6.5	N/A	N/A	N/A
Liners	-	-	-	-	-	-	-

*Depth to cover Red Rock Formation ✓

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	24	32	N/A	N/A	N/A	Class A or L	1.19
Fresh Water	13-3/8	17-1/2	0.380	2,740	1,600	Class A or L	1.14
Coal	-	-	-	-	-	-	-
Intermediate	9-5/8	12-1/4	0.352	3,520	2,800	Class A or L	1.19
Production	5-1/2	8-3/4	0.361	15,590	11,500	50:50 Poz	1.16
Tubing	2-7/8	N/A	0.217	13,871	N/A	N/A	N/A
Liners	-	-	-	-	-	-	-

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PACKERS

Kind:				
Sizes:				
Depths Set:				

Robert J. Hitt ✓
4-14-26

WW-6B
(10/14)

4706 1020 17
API NO. 47-
OPERATOR WELL NO. 4H
Well Pad Name: Sullivan

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

Utilize auger rig to set cellar & conductor. The conductor will be set with cement to surface. Mobilize drilling rig and drill surface section on air. Run surface (freshwater & coal string) casing to desired depth. The surface casing will not penetrate sea level. Surface casing will be cemented to surface. Drill intermediate section on air. Run intermediate casing to desired depth. Intermediate casing will be cemented to surface. Drill on air the production section to the start of the curve (KOP). The well will be loaded with synthetic oil base drilling mud (SOBM). Finish drilling the production section utilizing MWD surveys and geosteering practices to maintain the wellbore in the Marcellus shale and prevent anti-collision. Production casing will be ran to TD and cement top will be inside the intermediate casing.

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

A cement bond log will determine the top of production casing cement. The production casing will be pressure tested. The hydraulic fracturing equipment will then open the toe sleeves and begin pumping the first stage. The plug-and-perf method will be used for the remaining stages. The max anticipated pressure during frac is 11,200psi and a max rate of 100bpm. Once frac has finished, a drill out rig will drill all the plugs out of the well. Flowback will then be rigged up and flowback of the well will begin until it is ready to be turned in line via casing flow. At a later time during the life of the well, production tubing will be installed based on the wells performance.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 28.65 ac.

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22) Area to be disturbed for well pad only, less access road (acres): 15.32 ac.

JUN 22 2026

23) Describe centralizer placement for each casing string:

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Surface: shoe track & every 3rd joint to surface
Intermediate: shoe track & every 3rd joint to surface
Production: Rigid bow centralizers at shoe track & every joint in the lateral to KOP. Bow springs from KOP to surface every third joint.

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

Surface: Class A or L Cement + Max 3% bwoc Calcium Chloride Fresh Water blend.
Intermediate: Class A or L Cement + Max 3% bwoc Calcium Chloride + Fresh Water.
Production: 50:50 Poz (Fly Ash & Class A or L) plus additives such as defoamer, retarder, & fluid loss to meet well specific requirements

25) Proposed borehole conditioning procedures:

Surface & intermediate on air will utilize high volumetric flow rates of air to ensure the wellbore is clean prior to TOH.
Production section will utilize synthetic oil based drilling mud to properly clean the wellbore. At TD, pump rate and rotation will be used to clean hole prior to tripping out of the hole.
Production casing will be circulated prior to cementing to ensure a prepared wellbore for cement.

*Note: Attach additional sheets as needed.

Robert J. Hitt
4-14-26

Page 3 of 3
06/12/2026

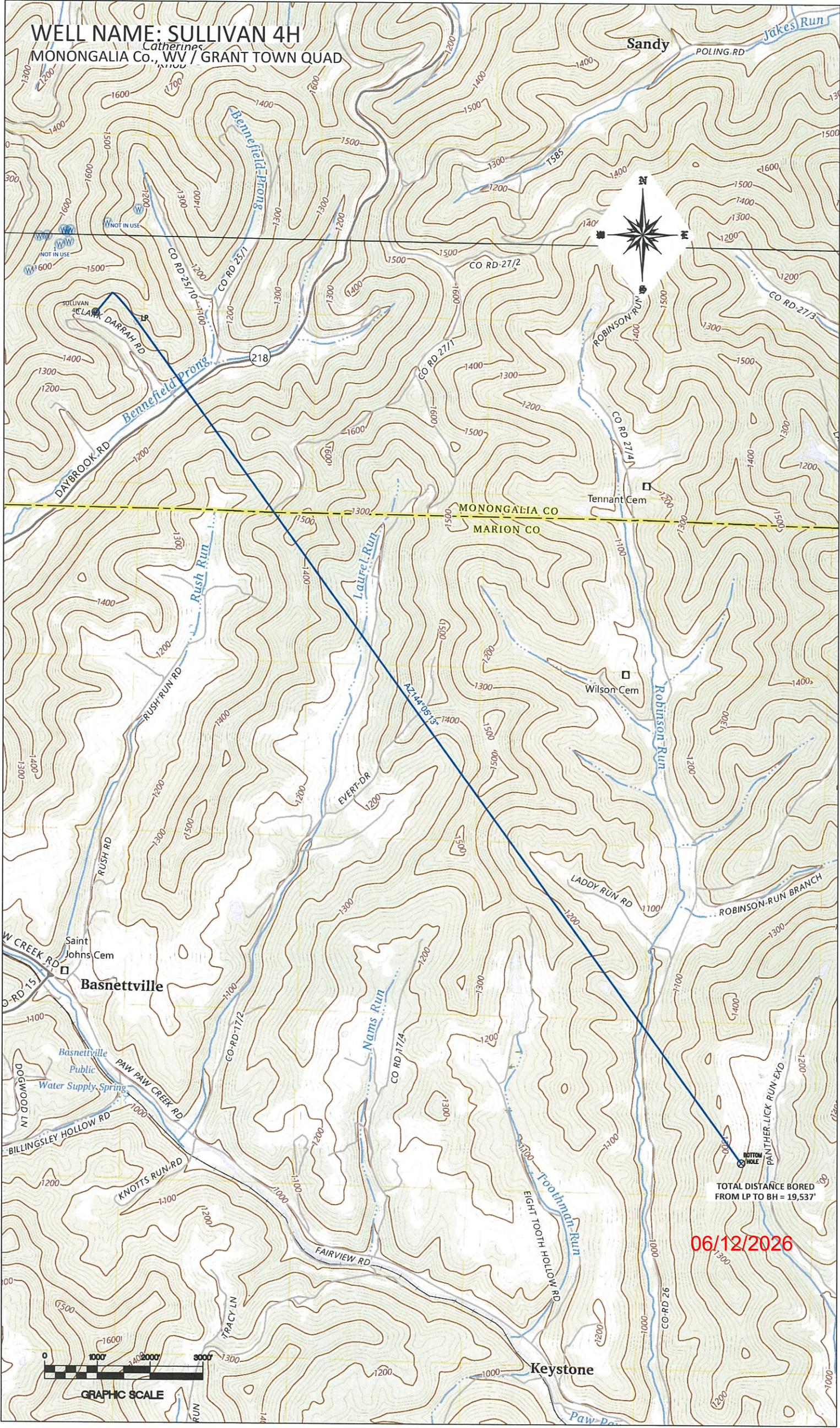


Sullivan 4H AREA OF REVIEW

API Number	Well Name	Well Number	Operator	Latitude (NAD 83)	Longitude (NAD 83)	TMP	TVD	Producing Formation
	N/A							

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WELL NAME: SULLIVAN 4H
Catherine's
MONONGALIA Co., WV / GRANT TOWN QUAD

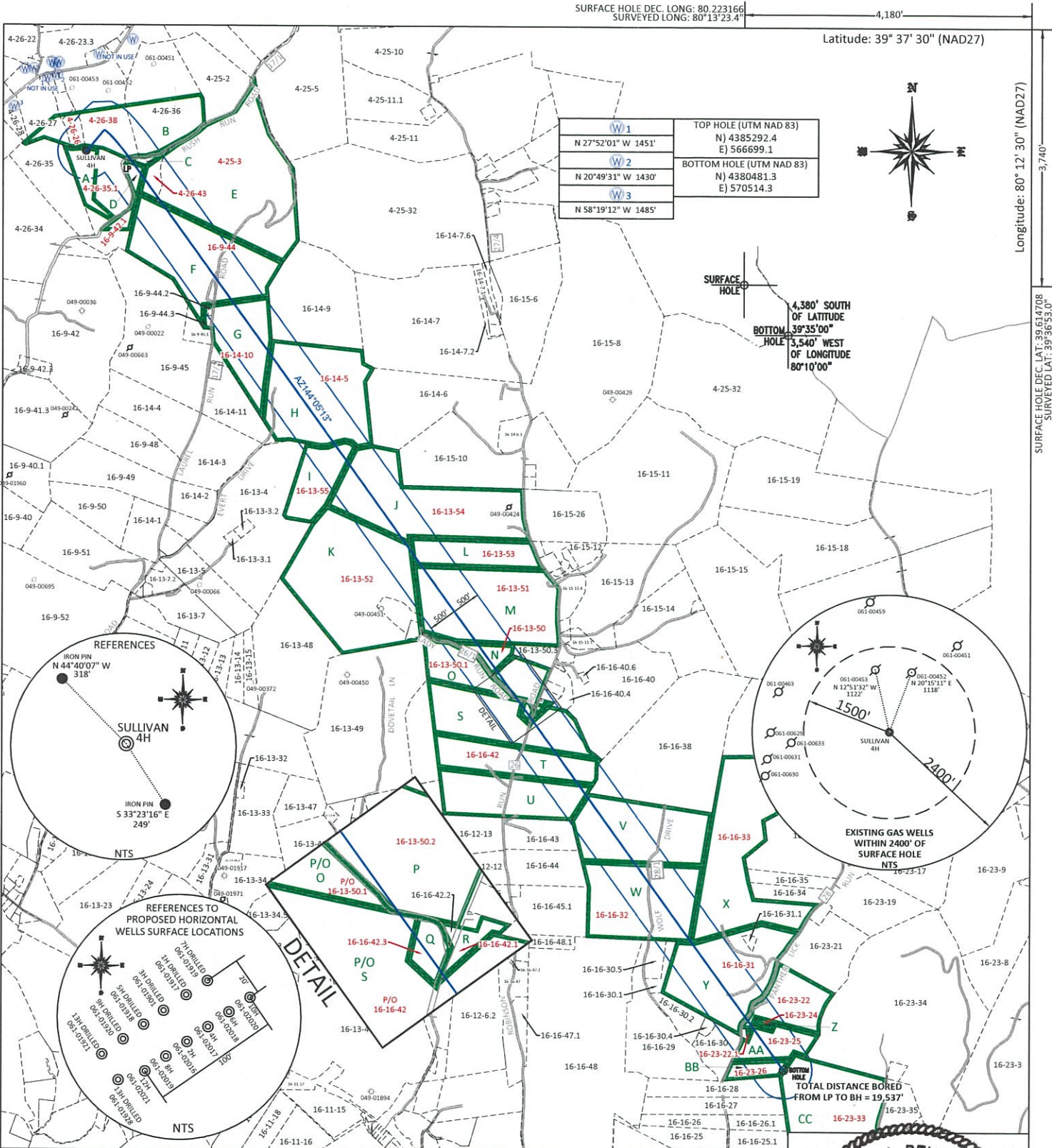


06/12/2026

TOTAL DISTANCE BORED
FROM LP TO BH = 19,537'



GRAPHIC SCALE

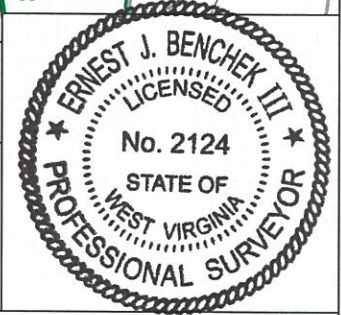


FILE #: NNE25
DRAWING #: 4140
SCALE: PLAT: 1" = 2400'
TICK MARK: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING
GRADE GPS

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.

Signed: 

L.L.S. #2124 : Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

Well Type: ☐ Oil ☐ Waste Diposal ☐ Production ☐ Deep
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: UPPER MONONGAHELA RIVER

COUNTY/DISTRICT: MONONGALIA / CLAY

SURFACE OWNER: ALAN SULLIVAN

OIL & GAS ROYALTY OWNER: James T. McClimans, et al

LEASE NUMBERS:

DATE: JUNE 10, 2026

OPERATOR'S WELL #: SULLIVAN 4H

API WELL #: 47 61 02017
STATE COUNTY PERMIT

AS-BUILT ELEVATION: 1,476.7'

QUADRANGLE: GRANT TOWN

ACREAGE: 1195.550 +/-
ACREAGE: 25.870 +/-

06/12/2026

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☒
PLUG OFF FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: MARCELLUS

WELL OPERATOR: NORTHEAST NATURAL ENERGY LLC

ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200

CITY: CHARLESTON STATE: WV ZIP CODE: 25301

ESTIMATED DEPTH: TVD: 8,082' TMD: 28,059'

DESIGNATED AGENT: John Adams

ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200

CITY: CHARLESTON STATE: WV ZIP CODE: 25301

	PROPERTY OWNER INDEX
4-26-35.1	ALAN SULLIVAN
4-26-26	NNE MIDSTREAM LLC
4-26-38	ADAM CLAY DARRAH
16-9-42.1	JAMES P & URSULA A MCDONALD
4-26-43	CLIFTON E TENNANT JR
4-25-3	DAVID M & DAWN M LINDNER
16-9-44	ROBERT R FOLEY
16-14-10	JON & MARY T WHETZEL
16-14-5	JOHN W & KAREN D CARPENTER
16-13-55	J L TENNANT
16-13-54	NICHOLAS CARLYLE
16-13-52	JAMES & JOYCE GANDY
16-13-53	KERRY L DARRAH (1/2 INT) & KERRY L & TROY (1/2 INT)
16-13-51	KERRY L DARRAH (1/2 INT) & KERRY L & TROY (1/2 INT)
16-13-50	LEO T MCINTOSH JR & CARRIE AMCINTOSH
16-13-50.2	GUY POOLE JR & LOIS J POOLE
16-13-50.1	TERI & ROBERT E ANDERSON
16-16-42	THOMAS A OR COLLEEN J WEAKS
16-16-42.3	WILLIAM B & ANGELA R WRIGHT
16-16-42.1	MARY J CARMAN
16-16-32	PJH RANCH LLC
16-16-33	DENNIS H & FRANCIS A FURBEE
16-16-31	ANDREW D FURBEE
16-23-22	RAY A MARTIN JR & JESSICA M MARTIN
16-23-24	LESA GORMAN
16-23-22.1	RAY A MARTIN JR & JESSICA M MARTIN
16-23-25	KEVIN B SLEETH
16-23-26	MARK B & LUCINDA F KING
16-23-33	ARLEEN D RODRIGUEZ (LIFE 1221-23)

	LEASE INDEX	
A	WV-061-006979-002	P WV-049-106812-002
B	WV-061-006256-001	Q WV-049-107169-001
C	WV-061-006256-001	R WV-049-106130-001
D	WV-049-106826-023	S WV-049-106130-001
E	WV-061-003690-001	T WV-049-107115-001
F	WV-049-104886-000	U WV-049-106130-001
G	WV-049-106066-004	V WV-049-704336-001
H	WV-049-104934-000	W WV-049-107007-001
I	WV-049-107024-001	X WV-061-00219-001
J	WV-049-106950-001	Y WV-049-106726-001
K	WV-049-107186-001	Z WV-049-107059-001
L	WV-049-107209-010	AA WV-049-800345-001
M	WV-049-106790-001	BB WV-049-007662-001
N	WV-049-106812-002	CC WV-049-007661-001
O	WV-049-106812-002	

06/12/2026

FILE #: <u> NNE20 </u>	DATE: <u> JUNE 10, 2026 </u>
DRAWING #: <u> 4140 </u>	OPERATOR'S WELL #: <u> SULLIVAN 4H </u>
SCALE: <u> N/A </u>	API WELL #: <u> 47 </u> <u> 61 </u> <u> 02017 </u> STATE COUNTY PERMIT

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
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See Attached

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Office of Oil and Gas
JUN 02 2026
WV Department of
Environmental Protection

**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: Northeast Natural Energy LLC

By: Hollie Medley

Its: Regulatory Manager

SULLIVAN 4H WW6A1 ATTACHMENT

Plat Letter	NNE Lease #	Lessor Name	Lessee Name	Royalty	Memo DB	Memo PG
A	WV-061-006979-002	James T. McClimans, a/k/a James Todd McClimans	Northeast Natural Energy LLC	12.5% or higher	1876	193
	WV-061-006979-003	Basnett Oil & Gas, LLC	Northeast Natural Energy LLC	12.5% or higher	1876	196
	WV-061-006979-001	David M. McClimans, a/k/a David Mark McClimans	Northeast Natural Energy LLC	12.5% or higher	1876	191
	WV-061-006979-004	Pamela Whisler Cox	Northeast Natural Energy LLC	12.5% or higher	1886	67
B	WV-061-006256-001	Milton A. Ammons and Armenia Ammons; Charles Powell, Special Commissioner	C.J. Ford/South Penn Oil Co	12.5% or higher	27	1
*See Ammons Chain						
C*	WV-061-006256-001	Milton A. Ammons and Armenia Ammons; Charles Powell, Special Commissioner	C.J. Ford/South Penn Oil Co	12.5% or higher	27	1
*See Ammons Chain						
D*	WV-049-106826-023	Judith Ann Yost	Northeast Natural Energy LLC	12.5% or higher	1405	581
	WV-049-106826-001	Lisa Carroll	Northeast Natural Energy LLC	12.5% or higher	1377	273
	WV-049-106826-002	Becki Deskin	Northeast Natural Energy LLC	12.5% or higher	1377	276
	WV-049-106826-003	Donald R. Shepard	Northeast Natural Energy LLC	12.5% or higher	1377	278
	WV-049-106826-005	Kenneth Reeder	Northeast Natural Energy LLC	12.5% or higher	1377	280
	WV-049-106826-006	Keith A. Myers	Northeast Natural Energy LLC	12.5% or higher	1380	434
	WV-049-106826-007	Patrick K. Myers	Northeast Natural Energy LLC	12.5% or higher	1380	436
	WV-049-106826-008	Paula L. Picon	Northeast Natural Energy LLC	12.5% or higher	1380	438
	WV-049-106826-009	Linda Austin	Northeast Natural Energy LLC	12.5% or higher	1380	440
	WV-049-106826-010	Deborah Robinson	Northeast Natural Energy LLC	12.5% or higher	1382	200
	WV-049-106826-011	James Paul McDonald and Ursula Alice McDonald	Northeast Natural Energy LLC	12.5% or higher	1382	202
	WV-049-106826-012	Julie Stanart	Northeast Natural Energy LLC	12.5% or higher	1382	722
	WV-049-106826-013	Patricia L. Shaw and Jeffery W. Shaw	Northeast Natural Energy LLC	12.5% or higher	1391	253
	WV-049-106826-004	Ronald J. Shepard	Northeast Natural Energy LLC	12.5% or higher	1394	333
	WV-049-106826-014	Frances C. Richie	Northeast Natural Energy LLC	12.5% or higher	1398	496
	WV-049-106826-015	Michael P. Barr	Northeast Natural Energy LLC	12.5% or higher	1399	603
	WV-049-106826-017	Douglas E. Browning and Denise Browning	Northeast Natural Energy LLC	12.5% or higher	1399	830
	WV-049-106826-018	Kimberly Reeder a/k/a Kimberly Jo Ward	Northeast Natural Energy LLC	12.5% or higher	1399	832
	WV-049-106826-016	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1401	213
	WV-049-106826-019	Jeremy B. Watson	Northeast Natural Energy LLC	12.5% or higher	1401	202
G	WV-049-106826-022	Michael Morgan Triplett	Northeast Natural Energy LLC	12.5% or higher	1403	562
	WV-049-106826-020	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1405	1080
	WV-049-106826-021	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1405	1082
E*	WV-061-003690-001	West Virginia University Foundation, Inc.	Northeast Natural Energy LLC	12.5% or higher	1531	247
F	WV-049-104886-000	Three Rivers Royalty II, LLC	Northeast Natural Energy LLC	12.5% or higher	1227	824
H	WV-049-106066-004	Mike J. Konoski	Northeast Natural Energy LLC	12.5% or higher	1407	33
	WV-049-106066-002	WV Minerals Inc.	Northeast Natural Energy LLC	12.5% or higher	1320	457
	WV-049-106843-002	Susan L. Bushko and Michael L. Bushko	Northeast Natural Energy LLC	12.5% or higher	1380	442
	WV-049-106843-003	Karen J. Noechel and Jeffrey Noechel	Northeast Natural Energy LLC	12.5% or higher	1380	444
	WV-049-106922-001	Elizabeth A. Jones	Northeast Natural Energy LLC	12.5% or higher	1380	456
	WV-049-106843-004	Mary E. Schipono	Northeast Natural Energy LLC	12.5% or higher	1382	204
	WV-049-106843-005	Deborah Garcia	Northeast Natural Energy LLC	12.5% or higher	1382	263
	WV-049-106922-002	Deborah Kay Price	Northeast Natural Energy LLC	12.5% or higher	1382	724
	WV-049-106922-003	Sally A. Mercer	Northeast Natural Energy LLC	12.5% or higher	1382	726
	WV-049-106922-004	Karen Sue Price	Northeast Natural Energy LLC	12.5% or higher	1382	728
	WV-049-106922-005	Barbara Marguglio, a/k/a Barbara Mercer Marguglio	Northeast Natural Energy LLC	12.5% or higher	1382	265
	WV-049-106922-007	Janet Pfeiffer, f/k/a Janet E. Haines, a/k/a Janet Haines	Northeast Natural Energy LLC	12.5% or higher	1382	217
	WV-049-106922-009	Monica J. White	Northeast Natural Energy LLC	12.5% or higher	1385	820
	WV-049-106922-010	Rhonda J. Layman, a/k/a Rhonda J. Raber Layman	Northeast Natural Energy LLC	12.5% or higher	1386	567
	WV-049-106922-011	Jessy A. Haught, a/k/a Jessy Aric Haught	Northeast Natural Energy LLC	12.5% or higher	1386	569
	WV-049-106922-012	James Mercer, a/k/a James W. Mercer	Northeast Natural Energy LLC	12.5% or higher	1386	571
	WV-049-106922-013	Timothy L. Haught, a/k/a Timothy Lee Haught, a/k/a Lee Haught and Timothy D. Haught	Northeast Natural Energy LLC	12.5% or higher	1389	834
	WV-049-107179-001	DUC Hunter, LLC	Northeast Natural Energy LLC	12.5% or higher	1393	158
	WV-049-106843-006	Lee Ann Dennison	Northeast Natural Energy LLC	12.5% or higher	1399	834
	WV-049-106066-003	Robert M. Haught, a/k/a Robert Martin Haught	Northeast Natural Energy LLC	12.5% or higher	1405	579
I*	WV-049-106922-014	Ruby L. Addison	Northeast Natural Energy LLC	12.5% or higher	1405	583
	WV-049-106066-005	Diana L. Miller	Northeast Natural Energy LLC	12.5% or higher	1407	49
	WV-049-106066-006	Amy N. Hill	Northeast Natural Energy LLC	12.5% or higher	1407	37
	WV-049-106066-007	Melanie Hill, f/k/a Melanie Ellis	Northeast Natural Energy LLC	12.5% or higher	1407	41
	WV-049-106066-008	Joseph T. Mercer, Jr.	Northeast Natural Energy LLC	12.5% or higher	1407	45
H	WV-049-104934-000	John W. Carpenter and Karen D. Carpenter	Northeast Natural Energy LLC	12.5% or higher	1228	1076
J	WV-049-107024-001	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1389	34
	WV-049-107024-002	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1389	32
	WV-049-107024-003	Rene Robinson	Northeast Natural Energy LLC	12.5% or higher	1406	805
	WV-049-107024-004	Nathaniel Robinson	Northeast Natural Energy LLC	12.5% or higher	1406	807
K	WV-049-106950-001	Elk Range Royalties II, LP	Northeast Natural Energy LLC	12.5% or higher	1382	761
	WV-049-106950-002	Elk Range II Co-Invest, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	764
L*	WV-049-107186-001	Robert Davis	Pittsburgh & West Virginia Gas Company	12.5% or higher	217	237
	*See Davis Chain attached					
L*	WV-049-107209-010	AMP V, LP	Northeast Natural Energy LLC	12.5% or higher	1405	642
	WV-049-107209-001	Edith Mae Ramsey Riggs	Northeast Natural Energy LLC	12.5% or higher	1394	351
	WV-049-107209-002	Bruce Alan Riggs	Northeast Natural Energy LLC	12.5% or higher	1394	909
	WV-049-107209-003	Ades Riggs Knisely	Northeast Natural Energy LLC	12.5% or higher	1398	19
	WV-049-107209-004	Paul S. Riggs	Northeast Natural Energy LLC	12.5% or higher	1398	21
	WV-049-107209-005	Gordon Lee Riggs, Jr.	Northeast Natural Energy LLC	12.5% or higher	1398	23
	WV-049-107209-006	Homer William Riggs	Northeast Natural Energy LLC	12.5% or higher	1398	500
	WV-049-107209-007	Tammy Teresa Ellis	Northeast Natural Energy LLC	12.5% or higher	1399	609
	WV-049-107209-008	Eadrie M. Riggs a/k/a Eadrie Mae Winchell	Northeast Natural Energy LLC	12.5% or higher	1399	607
	WV-049-107209-009	Jenny Lou Cavin a/k/a Jenny Lou Riggs	Northeast Natural Energy LLC	12.5% or higher	1399	605
	WV-049-107209-011	Pauline D. McMaster	Northeast Natural Energy LLC	12.5% or higher	1403	564
	WV-049-107209-012	Sheila Fay White	Northeast Natural Energy LLC	12.5% or higher	1403	566
	WV-049-107209-013	Len Erick Winston	Northeast Natural Energy LLC	12.5% or higher	1407	256
	WV-049-107209-014	Ronald Joseph Plodzick	Northeast Natural Energy LLC	12.5% or higher	1407	254

	WV-049-107209-015	Dana A. Winston	Northeast Natural Energy LLC	12.5% or higher	1407	252
M	WV-049-106790-001	Kerry L. Darrah	Northeast Natural Energy LLC	12.5% or higher	1374	610
	WV-049-106790-002	Ridgetop Appalachia LLC	Northeast Natural Energy LLC	12.5% or higher	1374	610
	WV-049-106812-002	MNE Properties, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	190
N*	WV-049-106812-008	Donald Craig McCoy	Northeast Natural Energy LLC	12.5% or higher	1389	832
	WV-049-106812-001	Michael L. Eddy and D. Diana Eddy	Northeast Natural Energy LLC	12.5% or higher	1376	670
	WV-049-106812-003	MNE Properties, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	192
	WV-049-106812-004	Ronald E. Eddy, a/k/a Ronald Eugene Eddy and Martha J. Eddy	Northeast Natural Energy LLC	12.5% or higher	1382	198
	WV-049-106812-005	Fay Edward McCoy	Northeast Natural Energy LLC	12.5% or higher	1382	718
	WV-049-106812-006	Doris Lorraine Yost	Northeast Natural Energy LLC	12.5% or higher	1382	720
	WV-049-106938-001	DUC Hunter, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	732
	WV-049-106958-001	Joni L. Wilson	Northeast Natural Energy LLC	12.5% or higher	1382	243
	WV-049-106958-002	Connie Wilson	Northeast Natural Energy LLC	12.5% or higher	1382	267
	WV-049-106958-003	Mary Beth Barnett and Christopher Barnett	Northeast Natural Energy LLC	12.5% or higher	1382	245
	WV-049-106958-004	Donald A. Travinski	Northeast Natural Energy LLC	12.5% or higher	1382	734
	WV-049-106958-005	Billie Tennant	Northeast Natural Energy LLC	12.5% or higher	1385	824
	WV-049-106958-006	Beverly Lloyd	Northeast Natural Energy LLC	12.5% or higher	1385	826
	WV-049-106812-007	Carol E. Austin, a/k/a Carol Elizabeth Austin	Northeast Natural Energy LLC	12.5% or higher	1388	62
	WV-049-106958-007	Ronald J. Wilcox	Northeast Natural Energy LLC	12.5% or higher	1388	64
	WV-049-106958-008	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1392	872
O*	WV-049-106812-002	MNE Properties, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	190
	WV-049-106812-008	Donald Craig McCoy	Northeast Natural Energy LLC	12.5% or higher	1389	832
	WV-049-106812-001	Michael L. Eddy and D. Diana Eddy	Northeast Natural Energy LLC	12.5% or higher	1376	670
	WV-049-106812-003	MNE Properties, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	192
	WV-049-106812-004	Ronald E. Eddy, a/k/a Ronald Eugene Eddy and Martha J. Eddy	Northeast Natural Energy LLC	12.5% or higher	1382	198
	WV-049-106812-005	Fay Edward McCoy	Northeast Natural Energy LLC	12.5% or higher	1382	718
	WV-049-106812-006	Doris Lorraine Yost	Northeast Natural Energy LLC	12.5% or higher	1382	720
	WV-049-106938-001	DUC Hunter, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	732
	WV-049-106958-001	Joni L. Wilson	Northeast Natural Energy LLC	12.5% or higher	1382	243
	WV-049-106958-002	Connie Wilson	Northeast Natural Energy LLC	12.5% or higher	1382	267
	WV-049-106958-003	Mary Beth Barnett and Christopher Barnett	Northeast Natural Energy LLC	12.5% or higher	1382	245
	WV-049-106958-004	Donald A. Travinski	Northeast Natural Energy LLC	12.5% or higher	1382	734
	WV-049-106958-005	Billie Tennant	Northeast Natural Energy LLC	12.5% or higher	1385	824
	WV-049-106958-006	Beverly Lloyd	Northeast Natural Energy LLC	12.5% or higher	1385	826
	WV-049-106812-007	Carol E. Austin, a/k/a Carol Elizabeth Austin	Northeast Natural Energy LLC	12.5% or higher	1388	62
	WV-049-106958-007	Ronald J. Wilcox	Northeast Natural Energy LLC	12.5% or higher	1388	64
	WV-049-106958-008	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1392	872
P*	WV-049-106812-002	MNE Properties, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	190
	WV-049-106812-008	Donald Craig McCoy	Northeast Natural Energy LLC	12.5% or higher	1389	832
	WV-049-106812-001	Michael L. Eddy and D. Diana Eddy	Northeast Natural Energy LLC	12.5% or higher	1376	670
	WV-049-106812-003	MNE Properties, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	192
	WV-049-106812-004	Ronald E. Eddy, a/k/a Ronald Eugene Eddy and Martha J. Eddy	Northeast Natural Energy LLC	12.5% or higher	1382	198
	WV-049-106812-005	Fay Edward McCoy	Northeast Natural Energy LLC	12.5% or higher	1382	718
	WV-049-106812-006	Doris Lorraine Yost	Northeast Natural Energy LLC	12.5% or higher	1382	720
	WV-049-106938-001	DUC Hunter, LLC	Northeast Natural Energy LLC	12.5% or higher	1382	732
	WV-049-106958-001	Joni L. Wilson	Northeast Natural Energy LLC	12.5% or higher	1382	243
	WV-049-106958-002	Connie Wilson	Northeast Natural Energy LLC	12.5% or higher	1382	267
	WV-049-106958-003	Mary Beth Barnett and Christopher Barnett	Northeast Natural Energy LLC	12.5% or higher	1382	245
	WV-049-106958-004	Donald A. Travinski	Northeast Natural Energy LLC	12.5% or higher	1382	734
	WV-049-106958-005	Billie Tennant	Northeast Natural Energy LLC	12.5% or higher	1385	824
	WV-049-106958-006	Beverly Lloyd	Northeast Natural Energy LLC	12.5% or higher	1385	826
	WV-049-106812-007	Carol E. Austin, a/k/a Carol Elizabeth Austin	Northeast Natural Energy LLC	12.5% or higher	1388	62
	WV-049-106958-007	Ronald J. Wilcox	Northeast Natural Energy LLC	12.5% or higher	1388	64
	WV-049-106958-008	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1392	872
Q*	WV-049-107169-001	Master Mineral Holdings III, L.P., by and through its General Partner PBEX Resources, LLC, a Texas Limited Liability Corporation	Northeast Natural Energy LLC	12.5% or higher	1391	1017
	WV-049-106130-001	Thomas Andrew Weak and Colleen Jennifer Weak	Northeast Natural Energy LLC	12.5% or higher	1314	836
R*	WV-049-107169-001	Master Mineral Holdings III, L.P., by and through its General Partner PBEX Resources, LLC, a Texas Limited Liability Corporation	Northeast Natural Energy LLC	12.5% or higher	1391	1017
	WV-049-106130-001	Thomas Andrew Weak and Colleen Jennifer Weak	Northeast Natural Energy LLC	12.5% or higher	1314	836
S	WV-049-107169-001	Master Mineral Holdings III, L.P., by and through its General Partner PBEX Resources, LLC, a Texas Limited Liability Corporation	Northeast Natural Energy LLC	12.5% or higher	1391	1017
	WV-049-107115-001	Helen Artist, a/k/a Helen Margaret Artist-Rogers	Northeast Natural Energy LLC	12.5% or higher	1389	53
T*	WV-049-107115-002	George H. Rogers, Jr.	Northeast Natural Energy LLC	12.5% or higher	1389	836
	WV-049-107115-003	Billie Tennant	Northeast Natural Energy LLC	12.5% or higher	1389	838
	WV-049-107115-004	Valinda Joy Born and Robert Born	Northeast Natural Energy LLC	12.5% or higher	1391	1001
	WV-049-107115-005	Holly Lorene Stevenson	Northeast Natural Energy LLC	12.5% or higher	1391	1003
	WV-049-107115-006	Nancy Warton, a/k/a Nancy Louise Warton	Northeast Natural Energy LLC	12.5% or higher	1391	1005
	WV-049-107115-007	Ronald J. Wilcox	Northeast Natural Energy LLC	12.5% or higher	1391	1007
	WV-049-107115-009	Pamela Sue Barnard	Northeast Natural Energy LLC	12.5% or higher	1391	1009
	WV-049-107115-010	Joni L. Wilson	Northeast Natural Energy LLC	12.5% or higher	1391	1011
	WV-049-107115-012	Donald A. Travinski	Northeast Natural Energy LLC	12.5% or higher	1391	1013
	WV-049-107115-013	Donna Betonte, f/k/a Donna M. Riggs, f/k/a Donna Marie Wilson	Northeast Natural Energy LLC	12.5% or higher	1392	880
	WV-049-107115-014	Connie Wilson	Northeast Natural Energy LLC	12.5% or higher	1392	882
	WV-049-107115-015	John Robert Jones	Northeast Natural Energy LLC	12.5% or higher	1392	884
	WV-049-107115-008	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1394	353
	WV-049-107115-011	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1394	340
	WV-049-107115-016	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1394	377
	WV-049-107115-017	Beverly Lloyd	Northeast Natural Energy LLC	12.5% or higher	1394	348
	WV-049-107115-018	Elon Jones, f/k/a Elon Ann Jones Hanner Huddleston	Northeast Natural Energy LLC	12.5% or higher	1394	466
U	WV-049-107115-019	Julia Moody, f/k/a Julia Ano Peterson	Northeast Natural Energy LLC	12.5% or higher	1398	17
	WV-049-107115-020	Mary Beth Barnett and Christopher Barnett	Northeast Natural Energy LLC	12.5% or higher	1402	1037
V	WV-049-106130-001	Thomas Andrew Weak and Colleen Jennifer Weak	Northeast Natural Energy LLC	12.5% or higher	1314	836
	WV-049-107169-001	Master Mineral Holdings III, L.P., by and through its General Partner PBEX Resources, LLC, a Texas Limited Liability Corporation	Northeast Natural Energy LLC	12.5% or higher	1391	1017
	WV-049-704336-001	L. Zane Shuck, acting as Trustee for L. Zane Shuck Trust dated July 1, 2008	Northeast Natural Energy LLC	12.5% or higher	1203	600

W	WV-049-107007-001	Aldean Haught a/k/a Aldina Haught	Northeast Natural Energy LLC	12.5% or higher	1385	830
	WV-049-107007-001	Aldean Haught a/k/a Aldina Haught	Northeast Natural Energy LLC	12.5% or higher	1385	830
	WV-049-107007-002	MNE Properties LLC	Northeast Natural Energy LLC	12.5% or higher	1388	36
	WV-049-107007-003	Janice E. Griffith, a/k/a Joyce Elaine Griffith	Northeast Natural Energy LLC	12.5% or higher	1388	38
	WV-049-107007-005	Debbie Byers a/k/a Deborah Ann Byers	Northeast Natural Energy LLC	12.5% or higher	1389	47
	WV-049-107007-006	Ida G. Kirkbride	Northeast Natural Energy LLC	12.5% or higher	1389	49
	WV-049-107007-007	Harold D. Bates	Northeast Natural Energy LLC	12.5% or higher	1389	51
	WV-049-107007-004	Beverly Ann Hibbs Graham	Northeast Natural Energy LLC	12.5% or higher	1391	257
	WV-049-107007-008	Dana A Sbrinovich	Northeast Natural Energy LLC	12.5% or higher	1391	983
	WV-049-107007-009	Aaron M. Byers	Northeast Natural Energy LLC	12.5% or higher	1391	985
	WV-049-107007-010	Christopher Sbrinovich	Northeast Natural Energy LLC	12.5% or higher	1391	988
	WV-049-107007-011	Charles Stuart Baker	Northeast Natural Energy LLC	12.5% or higher	1398	15
	WV-049-107007-012	Cathy S. Szepletowski t/k/a Cathy Baker	Northeast Natural Energy LLC	12.5% or higher	1400	233
	WV-049-107007-013	Sylvia Gayle Cregar t/k/a Sylvia Baker	Northeast Natural Energy LLC	12.5% or higher	1400	235
	WV-049-107007-014	Robert A. Byers	Northeast Natural Energy LLC	12.5% or higher	1400	237
	WV-049-107007-016	Christina Belth a/k/a Christina L. Fisher	Northeast Natural Energy LLC	12.5% or higher	1405	589
	WV-049-107007-017	James D. Byers	Northeast Natural Energy LLC	12.5% or higher	1407	260
X	WV-061-00219-001	EQT Production Company	Northeast Natural Energy LLC	12.5% or higher	1415	892
Y	WV-049-106726-001	J&N Management Enterprises LLC	Northeast Natural Energy LLC	12.5% or higher	1367	250
Z	WV-049-107059-001	Lesa Gorman	Northeast Natural Energy LLC	12.5% or higher	1391	259
AA	WV-049-800345-001	Kevin Blaine Steeth	NNE Properties II LLC	12.5% or higher	1406	600
BB	WV-049-007662-001	Robert L. Jolliffe	LG Minerals, LLC	12.5% or higher	1375	1093
*See Jolliffe Chain attached						
CC	WV-049-007661-001	Mark B. King and Lucinda Furbie-King	LG Minerals, LLC	12.5% or higher	1374	517
*See King Chain attached						
*Subject to the OGCC HUO Hearing on 6/11/2026						
Note: All agreements to Marion Natural Energy LLC are subject to a Consent to Development Agreement with Northeast Natural Energy LLC filed at 1330/525 in Marion County.						

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
B; C	WV-061-005256-001	Milton A. Ammons and Armina Ammons	C.J. Ford	12.5% or higher	27	1
		Charles J. Ford	South Penn Oil Company	Assignment	27	287
		South Penn Oil Company	South Penn Natural Gas Company	Assignment	304	457
		South Penn Natural Gas Company	South Penn Oil Company	Deed	580	311
		South Penn Oil Company	Pennzoil Company	Name Change	50	573
		Pennzoil Company	Pennzoil Products Company	Assignment	23	280
		Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	53	69
		Pennzoil Exploration and Production Company	Pennzenergy Exploration and Production, LLC	Merger	N/A	N/A
		Pennzenergy Exploration and Production, LLC	Devon Energy Production Company, LLC	Merger	N/A	N/A
		Devon Energy Production Company, LLC	East Resources, Inc.	Deed	1207	146
		East Resources, Inc.	HG Energy LLC	Assignment	110	500
		East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	123	43
		East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	158	434
		American Energy - Marcellus, LLC	Ascent Resources Marcellus, LLC	Name Change	122	85
		Ascent Resources Marcellus, LLC	EQT Production Company	Assignment	132	166
		EQT Production Company	Northeast Natural Energy LLC	Trade Agreement	1415	892

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
K	WV-049-107187-001	Robert Davis	Pittsburgh & West Virginia Gas Company	12.5% or higher	217	237
		Pittsburgh & West Virginia Gas Company	Equitable Gas Company	Deed/Assignment	510; 511	487; 539
		Equitable Gas Company	Equitrans, Inc.	Assignment	12	279
		Equitrans, Inc.	Tri-County Oil & Gas, Inc.	Assignment	18	753
		Tri-County Oil & Gas, Inc.	Ammons Energy, Inc.	Assignment	1133	757
		Ammons Energy, Inc.	Hundred Resources, Inc.	Assignment	45	517
		Hundred Resources, Inc.	Piney Holdings, Inc.	Assignment	1159	405
		Piney Holdings, Inc.	Marion Natural Energy LLC	Assignment	67	795

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
CC	WV-049-007661-001	Mark B. King and Lucinda Furbie-King	LG Minerals, LLC	12.5% or more	1374	517
		LG Minerals, LLC	Foss Resources LLC	Assignment	66	977
		Foss Resources LLC	Northeast Natural Energy LLC	JOA	1421	555

Tract	Lease Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book	Page
BB	WV-049-007662-001	Robert L. Jolliffe	LG Minerals, LLC	12.5% or more	1375	1093
		LG Minerals, LLC	Foss Resources LLC	Assignment	66	977
		Foss Resources LLC	Northeast Natural Energy LLC	JOA	1421	555

RECEIVED
Office of Oil and Gas
JUN 02 2026
WV Department of
Environmental Protection



March 27, 2026

WV Department of Environmental Protection
Office of Oil and Gas Management
601 57th Street, SE
Charleston, WV 25304

RE: Sullivan 4H

Dear Permit Reviewer:

Please be advised that Northeast Natural Energy LLC has the right to drill, extract and produce the minerals beneath the following as identified on the included plat:

- Laurel Run Rd (17/2)
- Panther Lick (28)
- Robinson Run Rd (26)
- Wolf Drive (28/1)
- Lady Run Rd (26/1)
- Rush Run Rd (17/1)

RECEIVED
Office of Oil and Gas
JUN 02 2026
WV Department of
Environmental Protection

Sincerely,

A handwritten signature in blue ink, reading 'Tyler C. Murray', is written over a horizontal line.

Tyler Murray
Landman II



June 1, 2026

WV Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Sullivan 2H, 4H, 6H, 8H, 10H, & 12H Expedited Modification- Lateral Extensions

Dear Permit Reviewer,

Northeast Natural Energy LLC ("NNE") is requesting modifications to extend the lateral lengths of the proposed Sullivan 2H, 4H, 6H, 8H, 10H, & 12H wells. The proposed wells will be in the Clay District of Monongalia County, WV.

Enclosed please find the following documents for each well: WW6B, Well Bore Schematic, WW6A1 and attachments, Mylar Plat, Area of Review, and a check for \$45,000 for the expedited review fees.

The Site Safety Plan, Safety Data Sheets, an electronic copy of the Sullivan Well Site Plan, and the As-Built Well Site Plan can be found at the link below.

<https://northeastnaturalenergy.box.com/v/NNESullivanMOD2026>

Should you have any questions please contact me at hmedley@nne-llc.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Hollie Medley', with a long horizontal flourish extending to the right.

Hollie Medley
Regulatory Manager