



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, May 26, 2023
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

TUG HILL OPERATING, LLC
380 SOUTHPOINTE BOULEVARD, PLAZA II
SUITE 200
CANONSBURG, PA 15317

Re: Permit Modification Approval for JEFFERSONS N-7HU
47-103-03509-00-00

Added Lateral Length

TUG HILL OPERATING, 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.

James A. Martin
Chief

Operator's Well Number: JEFFERSONS N-7HU
Farm Name: EDWARD H & JOAN E ESTEP
U.S. WELL NUMBER: 47-103-03509-00-00
Horizontal 6A New Drill
Date Modification Issued: 5/26/2023

Promoting a healthy environment.

05/26/2023



west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street SE, Charleston, WV 25304
304-414-1239

Randall M. Albert, Chairman
dep.wv.gov

May 8, 2023

Department of Environmental Protection
Office of Oil and Gas
Charleston, WV 25304

RE: Application for Deep Well Permit – API #47-103-03509

COMPANY: Tug Hill Operating, LLC

FARM: Edward H. Estep and Joan E. Estep Jeffersons N-7HU

COUNTY: Wetzell DISTRICT: Proctor QUAD: New Martinsville

The deep well review of the application for the above company is **Approved to drill to Trenton for Point Pleasant completion.**

The applicant has complied with the provision of Chapter 22C-9, of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

1. Comments to Notice of Deviation filed? No.
2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? Yes
3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: **yes
4. Provided a plat showing that the productive interval of the well meets the requirements of the Rules of the Commission W. Va. C.S.R. § 39-1-4.2.

Sincerely,

Susan Rose
Administrator

05/26/2023

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

1) Well Operator: Tug Hill Operating, LLC 494510851 Wetzel Proctor New Martinsville
Operator ID County District Quadrangle

2) Operator's Well Number: Jeffersons N-7HU Well Pad Name: Jeffersons

3) Farm Name/Surface Owner: Edward H. Estep & Joan E. Estep Public Road Access: Co. Rt. 1/6 Palmer Ridge

4) Elevation, current ground: 1,240.08' Elevation, proposed post-construction: 1,217.50'

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):**
Point Pleasant is the target formation at a depth of 11,407' - 11,526', thickness of 119' and anticipated pressure of approx. 7,500 psi.

8) **Proposed Total Vertical Depth:** 11,676'

9) **Formation at Total Vertical Depth:** Trenton

10) **Proposed Total Measured Depth:** 24,482'

11) **Proposed Horizontal Leg Length:** 11,733.54'

12) Approximate Fresh Water Strata Depths: 70; 935'

13) Method to Determine Fresh Water Depths: Based on the depth of Pittsburgh Coal seam, per WVGES mapping contours

14) Approximate Saltwater Depths: 1,637'

15) Approximate Coal Seam Depths: Sewickley Coal - 837' and Pittsburgh Coal - 929'

16) Approximate Depth to Possible Void (coal mine, karst, other): None anticipated

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: _____

RECEIVED
Office of Oil and Gas
JAN 26 2023
WV Department of
Environmental Protection

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	30"	NEW	BW	BW	120'	120'	259ft^3(CTS)
Fresh Water/Coal	20"	NEW	J55	106.5#	1,050'	1,050'	1,689ft^3(CTS)
Intermediate 1	13 3/8"	NEW	J55	54.5#	2,775'	2,775'	1,957ft^3(CTS)
Intermediate 2	9 5/8"	NEW	HPP110	47#	11,079'	11,079'	3,068ft^3(CTS)
Production	5 1/2"	NEW	P110	23#	24,482'	24,482'	5,797ft^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		11,364'	
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	30"	36"	1.0	2,333	1,866	CLASS A	1.2
Fresh Water	20"	26"	.5	2,410	1,928	SEE #24	1.2
Coal	13 3/8"	17 1/2"	.38	2,740	2,192	SEE #24	1.2
Intermediate	9 5/8"	12 1/4"	.472	10,730	6,968	SEE #24	1.33
Production	5 1/2"	8 1/2"	.415	16,510	13,208	SEE #24	1.17/1.19
Tubing	2 7/8"			14,530	11,624		
Liners							

PACKERS

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

RECEIVED
 Office of Oil and Gas
 JAN 26 2023
 VA Department of
 Environmental Protection

05/26/2023
 J. M. May
 1/10/23

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

Drill through the Point Pleasant and TD Pilot Hole 150' into the Trenton. Log vertical section and run a solid cement plug back to proposed KOP (10,864'). Drill curve and lateral per proposed well plan, run and cement production casing. Perform CBL from 60 deg to surface, make cleanout run, and stimulate.

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

Well to be completed with approximately 29,400,000 lb. proppant and 530,000 bbl of water. Max rate = 80bpm; max psi = 9,000#.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 18.49 acres

22) Area to be disturbed for well pad only, less access road (acres): 6.86 acres

23) Describe centralizer placement for each casing string:

Will run 3 centralizers on surface casing at equal distance. Intermediate strings will have 1 centralizer every other joint. Production casing will have one centralizer every other joint in lateral, one centralizer every joint through curve, one centralizer every other joint to surface.

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

Sfc - Premium NE-1 + 2% CaCl; Int1 - Premium NE-1 + 1.5% CaCL + Flake; Int2 - Lead: Premium NE-1 + 5% BA-90 + .85% R-3 + 3% KCl + .75 gals/100sk FP-13L + 1% MPA-170 Tail: Premium NE-1 + .1% R-3 + 5% KCl + 1% CD-32 + .4% FL-52 + .2% ASA-301 + .6% Sodium Metasilicate; Kick Plug - Class H Cement + 1% CD-32 + .7% Sodium Metasilicate + .1% R-3 + .75 gal/100sk FP-13L; Prod - Lead: 50:50 (Poz:Class H) + .3% R-3 + .3% MPA-250 + .75 gal/100sk FP-13L Tail: 25:75 (Poz:Class H) + .3% R-3 + .3% MPA-250 + .375 gal/100sk FP-13L

25) Proposed borehole conditioning procedures:

Will circulate a minimum of 3 hours at TD, short trip to curve, circulate bottoms up, check for flow, POOH

RECEIVED
Office of Oil and Gas
JAN 26 2023

*Note: Attach additional sheets as needed.

PA Department of
Environmental Protection

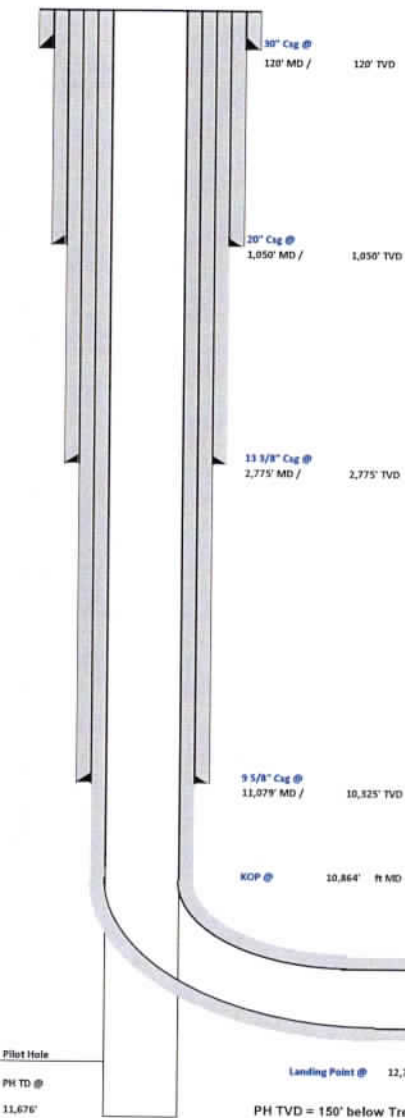


WELL NAME: Jeffersons N-7HU
STATE: WV **COUNTY:** Wetzel
DISTRICT: Proctor
DF Elev: 1,217' **GL Elev:** 1,217'
TD: 24,482'
TH Latitude: 39.68677541
TH Longitude: -80.77016878
BH Latitude: 39.708694
BH Longitude: -80.793621

FORMATION TOPS	
Formation	Depth TVD
Deepest Fresh Water	935'
Sewickley Coal	837'
Pittsburgh Coal	929'
Big Lime	1,980'
Berea	2,622'
Tully	6,534'
Marcellus	6,615'
Onondaga	6,665'
Salina	7,303'
Lockport	8,423'
Utica	11,181'
Point Pleasant	11,407'
Landing Depth	11,457'
Trenton	11,526'
Pilot Hole TD	11,676'

CASING SUMMARY							
Type	Hole Size (in)	Csg Size (in)	Depth (MD)	Depth (TVD)	Weight (lb/ft)	Grade	Top of Cement
Conductor	36	30	120'	120'	BW	BW	Surface
Surface	26	20	1,050'	1,050'	106.5	J55	Surface
Intermediate 1	17 1/2	13 3/8	2,775'	2,775'	54.5	J55	Surface
Intermediate 2	12 1/4	9 5/8	11,879'	10,825'	47	HPP110	Surface
Production	8 1/2	5 1/2	24,482'	11,252'	23	HCP110	Surface

CEMENT SUMMARY				DRILLING DETAILS	
Type	Sacks	Class	Density (ppg)	Fluid Type	Centralizer Notes
Conductor	518	A	15.6	Air	None
Surface	1,821	A	15.6	Air	3 Centralizers at equal distance
Intermediate 1	2,121	A	15.6	Air	1 Centralizer every other joint
Intermediate 2	3,297	A	14.5	Air	1 Centralizer every other joint
Production	5,930	A	16.5	Air / SOBMs	1 every other joint in lateral; 1 per joint in curve; 1 every other joint to surface



Landing Point @ 12,750' MD / 11,457' TVD
 PH TVD = 150' below Trenton Top

Lateral TD @ 24,482' R MD
 11,252' R TVD

RECEIVED
 Office of Oil and Gas
 JAN 26 2023
 WV Department of Environmental Protection

SR



Tug Hill Operating, LLC Casing and Cement Program

Jeffersons N-7HU

Casing

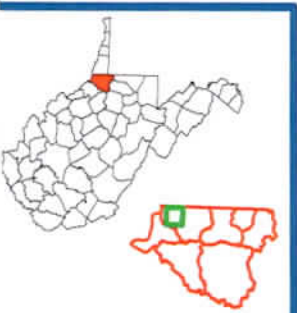
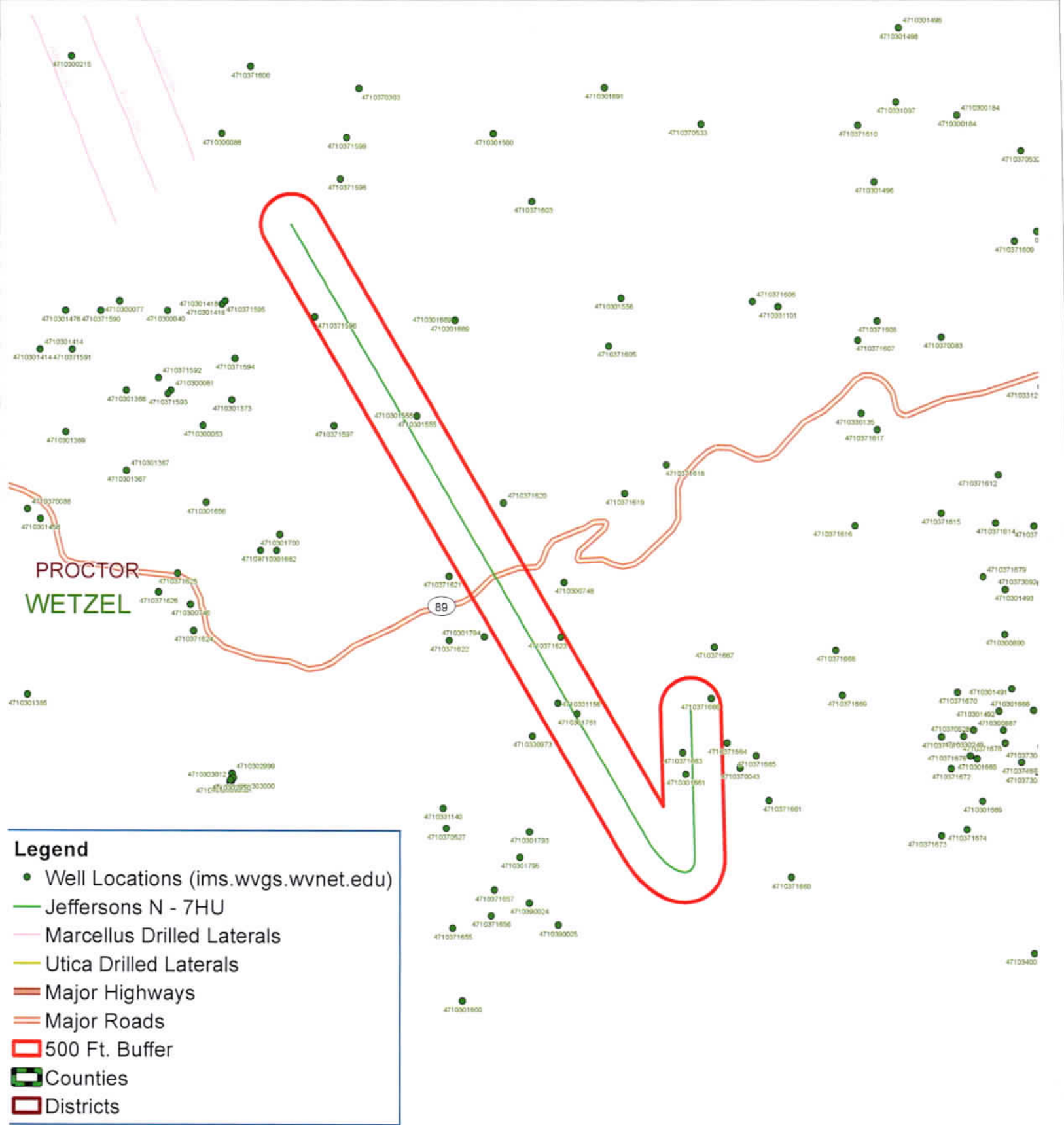
	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	20"	J55	26"	1,050'	CTS
Intermediate 1	13 3/8"	J55	17 1/2"	2,775'	CTS
Intermediate 2	9 5/8"	HPP110	12 1/4"	11,079'	CTS
Production	5 1/2"	HCP110	8 1/2"	24,482'	CTS

Cement

- Conductor: Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Conductor Cement mixed at 15.6 ppg, Y=1.2
- Surface: Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Surface Cement mixed at 15.6 ppg, Y=1.2
- Intermediate 1: Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 15.6 ppg, Y=1.2
- Intermediate 2: Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 14.5 ppg, Y=1.35
- Kick Off Plug: Class H Cement + 1% CD-32 + .7% Sodium Metasilicate + .1% R-3 + .75 gal/100sk FP-13L - KOP Plug
- Production: 50:50 Poz: Premium NE-1 + .1% bwoc ASA-301 + 60lb/sk ASCA-1 + .35% bwoc BA-10A + .25% bwoc MPA-170, 44 lb sack + .5% bwoc R-3 + .75 gals/100sk FP-13L – Production Cement mixed at 16.5 ppg, Y = 1.03

RECEIVED
Office of Oil and Gas
JAN 26 2023
WV Department of
Environmental Protection

05/26/2023



Jeffersons N - 7HU Proctor District Wetzel County, WV



Map Prepared by:



05/26/2023



Notes:

All locations are approximate, and are for visualization purposes only.

Map Created: October 19, 2021

Area of Review

Sources of information to Support 35CSR8 - 5.11: 9.3 et seq.

Description of process to identify potential pathways for well communication during hydraulic fracturing activities.

Data Sources Reviewed:

1. Enverus and RS Energy Group Well Data service: Public nationwide data service that pulls directly from State agency Oil and Gas databases
2. Farm Maps
3. Topo Maps: Recent and older (contact WVGES)
4. Check with DPS

Contacted Adam Picard 724-485-9331, apicard@dpslandservices.com, DPS GIS (10/19/2021) to have him make maps of the wellbores with his information. DPS utilizes WVGES maps for their mapping seems it is the best publicly available. See attached map he provided.

Request maps for:

1. Wellbore with Enverus All Wells Layer
2. Map with Farm lines overlain and any well spots identified on Farm Maps
3. More recent (1970s vintage) topos and older topos

Discussion with Phil Dinterman WVGES GIS Department (7/15/2016)

- WVGES has plotted every well spot they have access to and are aware of with that contains a coordinate. 30000, 70000, and 90000 series wells are available via the WVGES online map. Some locations aren't great due to vintage and manipulation of maps through time
- 30000 series – any well drilled prior to 1929 – APIs were not assigned to original wells
- 70000 series – Well spots pulled from old Farm line maps that the WVGES has access to
- 90000 series – Any sources that the WVGES has access that shows a well spot but has no additional supporting information. DEP does not have 90000 series on their maps.
- There can be duplication between wells in the 3 series
- Phil indicated that other Operators are providing a screenshot of the WVGES map with their planned well and using that for permits

Wells within 500' Buffer

Note: Well spots depicted on Area of Review map are derived from State held coordinates. The spots may differ from those depicted on the Well Plat because the Plat locations represent actual field surveyed locations. Please refer to the Plat for surveyed well spots.

API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4710301661	Perkins Oil and Gas, Inc.	2900' TVD	Gordon	unknown	No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Well is plugged.	Well was plugged 10/9/2014.
4710371663	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710371666	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710301761	Diversified Production, LLC	2404' TVD	Price Fm. & equivs Keener	unknown	No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation.	

API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4710331156	Manufacturers Light & Heat Co.	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well. Well is plugged.	Well was plugged 6/3/1963.
4710371623	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710301555	CNX Gas Co. LLC (North)	2866' TVD	Gordon	unknown	No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Well is plugged.	Well was plugged 5/5/2016.
4710371596	Manufacturers Light & Heat Co.	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.

WV Geological & Economic Survey:

Well: County = 103 Permit = 01661

Report Time: Wednesday, October 20, 2021 11:25:34 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710301661	Wetzel	1661	Proctor	New Martinsville	New Martinsville	39.683764	-80.771528	519592	4392684

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROF
4710301661	10/9/2014	Plugging	Completed	Mark Cecil et al	10	1	A J Briggs		E Briggs Heirs and/or Assigns et al	Perkins Oil and Gas, Inc.	2900	Gordc
4710301661	-/-	Original Loc	Completed	A J Briggs	1	1	A J Briggs			Perkins Oil and Gas, Inc.		

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_B
4710301661	10/9/2014	9/19/2014	1188	Ground Level													
4710301661	-/-	-/-	1240	Topo Estimation				unclassified	unclassified	not available	unknown	unknown					

There is no Pay data for this well

There is no Production Gas data for this well

There is no Production Oil data for this well ** some operators may have reported NGL under Oil

There is no Production NGL data for this well ** some operators may have reported NGL under Oil

There is no Production Water data for this well

There is no Stratigraphy data for this well

There is no Wireline (E-Log) data for this well

Plugging Information:

API	PLG_DT	DEPTH_PBT
4710301661	10/9/2014	0

WV Geological & Economic Survey:

Well: County = 103 Permit = 71663

Report Time: Wednesday, October 20, 2021 11:26:00 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710371663	Wetzel	71663	Proctor	New Martinsville	New Martinsville	39.684753	-80.770648	519667.1	4392794

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST.
4710371663	---		unknown	Prpty Map T V Smith	1					----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_A
4710371663	---	---						unclassified	unclassified	not available	unknown	unknown						

WV Geological & Economic Survey:

Well: County = 103 Permit = 71666

Report Time: Wednesday, October 20, 2021 11:26:15 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710371666	Wetzel	71666	Proctor	New Martinsville	New Martinsville	39.687222	-80.768958	519811.3	4393068.3

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST.
4710371666	---		unknown	Prpty Map T V Smith	1					----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_A
4710371666	---	---						unclassified	unclassified	not available	unknown	unknown						

WV Geological & Economic Survey:

Well: County = 103 Permit = 01761

Report Time: Wednesday, October 20, 2021 11:26:27 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710301761	Wetzel	1761	Proctor	New Martinsville	New Martinsville	39.686515	-80.776842	519135.6	4392988.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM
4710301761	6/15/1998	Original Loc	Completed	Olan Hall	1		Hall		Olan Hall	Ohio L & M Co., Inc.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KC
4710301761	6/15/1998	6/8/1998	1312	Ground Level	Cameron-Garner	Price Fm & equivs	Keener	Development Well	Development Well	Gas	Rotary	Fractured	2404			2404

Pay/Show/Water Information:

API	CMP_DT	ACTIVITY	PRODUCT	SECTION	DEPTH_TOP	FM_TOP	DEPTH_BOT	FM_BOT	G_BEF	G_AFT	O_BEF	O_AFT	WATER_QNTY
4710301761	6/15/1998	Water	Fresh Water	Vertical			105						0
4710301761	6/15/1998	Water	Salt Water	Vertical			1758						0
4710301761	6/15/1998	Pay	Gas	Vertical			2160	Keener	0	870			

Production Gas Information: (Volumes in Mcf)

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710301761	Ohio L & M Co., Inc.	1998	5,598	0	0	0	0	0	0	0	0	0	0	1,521	4,077
4710301761	Ohio L & M Co., Inc.	1999	14,906	4,577	3,064	1,937	982	1,038	695	440	369	555	490	384	375
4710301761	Ohio L & M Co., Inc.	2000	2,757	330	0	554	0	464	207	0	419	26	177	385	195
4710301761	Ohio L & M Co., Inc.	2001	520	122	46	68	46	22	48	47	43	29	22	27	0
4710301761	Ohio L & M Co., Inc.	2002	1,358	33	40	227	0	398	0	219	140	110	68	64	59
4710301761	Ohio L & M Co., Inc.	2003	890	72	58	91	75	81	107	89	75	65	45	72	60
4710301761	Ohio L & M Co., Inc.	2004	519	51	82	57	43	32	60	40	30	37	37	23	27
4710301761	Ohio L & M Co., Inc.	2005	118	19	9	21	2	1	10	13	14	8	14	3	4
4710301761	Ohio L & M Co., Inc.	2006	33	4	1	1	3	1	4	3	4	0	3	7	2
4710301761	Ohio L & M Co., Inc.	2007	15	5	2	4	0	1	0	0	2	1	0	0	0
4710301761	Ohio L & M Co., Inc.	2008	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Ohio L & M Co., Inc.	2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Ohio L & M Co., Inc.	2010	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Ohio L & M Co., Inc.	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Ohio L & M Co., Inc.	2012	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Ohio L & M Co., Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Alliance Petroleum Co., LLC	2014	4	0	0	0	0	0	4	0	0	0	0	0	0
4710301761	Alliance Petroleum Co., LLC	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Alliance Petroleum Co., LLC	2016	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Alliance Petroleum Co., LLC	2017	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Alliance Petroleum Co., LLC	2018	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Alliance Petroleum Co., LLC	2019	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301761	Diversified Production, LLC	2020	0	0	0	0	0	0	0	0	0	0	0	0	0

WV Geological & Economic Survey:

Well: County = 103 Permit = 31156

Report Time: Wednesday, October 20, 2021 11:26:56 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710331156	Wetzel	31156	Proctor	New Martinsville	New Martinsville	39.686999	-80.777968	519038.9	4393041.7

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_E
4710331156	-/-		Original Loc Completed	M Lemons	1	1266		3040		Manufacturers Light & Heat Co.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G
4710331156	-/-	-/-	1283	Spirit Level				unclassified	unclassified	not available	unknown	unknown						

There is no Pay data for this well

There is no Production Gas data for this well

There is no Production Oil data for this well ** some operators may have reported NGL under Oil

There is no Production NGL data for this well ** some operators may have reported NGL under Oil

There is no Production Water data for this well

There is no Stratigraphy data for this well

There is no Wireline (E-Log) data for this well

Plugging Information:

API	PLG_DT	DEPTH_PBT
4710331156	6/3/1963	0

WV Geological & Economic Survey

Well: County = 103 Permit = 71623

Report Time: Wednesday, October 20, 2021 11:27:20 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710371623	Wetzel	71623	Proctor	New Martinsville	New Martinsville	39.689979	-80.77778	519054.1	4393372.4

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST
4710371623	-/-		unknown	Prpty Map John & Jane Trader		2				unknown			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_A
4710371623	-/-	-/-						unclassified	unclassified	not available	unknown	unknown						

WV Geological & Economic Survey

Well: County = 103 Permit = 01555

Report Time Wednesday, October 20, 2021 11:27:31 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX DISTRICT	QUAD_75	QUAD_15	LAT_DD	LONG_DD	UTME	UTMN
4710301555	Wetzel	1555	Proctor	New Martinsville	New Martinsville	39.700079	-80.786048	518342.5	4394491.6

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VO	PROP_TRGT_FM
4710301555	6/17/1903	Original Loc	Completed	Henry Garner			450			Hope Natural Gas Company		
4710301555	5/5/2016	Plugging	Completed	J W & S E Heddolson	1		Garner			CNX Gas Co. LLC (North)	2866	Gordon
4710301555	---	Drilled Deeper	unknown							unknown		

Completion Information:

API	CMP_DT	SPUD_DT	ELEV DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD
4710301555	6/17/1903	6/9/1903	960 Topo Estimation	Cameron-Garner	Gordon	Gordon	unclassified	unclassified	Gas	unknown	unknown	2866		2866	
4710301555	5/5/2016	4/27/2016	1258 Ground Level												
4710301555	---	---	960 Ground Level	Unnamed			unclassified	unclassified	Dry	unknown	unknown				0

Pay/Show/Water Information:

API	CMP_DT	ACTIVITY	PRODUCT	SECTION	DEPTH_TOP	FM_TOP	DEPTH_BOT	FM_BOT	G_BEF	G_AFT	O_BEF	O_AFT	WATER_QNTY
4710301555	6/17/1903	Pay	Gas	Vertical		Gordon		0	Gordon	3041	0		

Production Gas Information: (Volumes in Mcf)

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710301555	Greenridge Oil Co.	1993	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2005	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2006	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2007	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2008	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0

Production Oil Information: (Volumes in Bbl) ** some operators may have reported NGL under Oil

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_OIL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710301555	Greenridge Oil Co.	1993	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2005	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2006	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2007	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2008	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301555	Leatherwood, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0

Production NGL Information: (Volumes in Bbl) ** some operators may have reported NGL under Oil

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_NGL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710301555	Leatherwood, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0

There is no Production Water data for this well

There is no Stratigraphy data for this well

There is no Wireline (E-Log) data for this well

Plugging Information:

API	PLG_DT	DEPTH_PBT
4710301555	5/5/2016	0

WV Geological & Economic Survey

Well: County = 103 Permit = 71596

Report Time: Wednesday, October 20, 2021 11:28:04 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710371596	Wetzel	71596	Proctor	New Martinsville	New Martinsville	39.704492	-80.792234	517811.1	4394980.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST.
4710371596	--		unknown	Prpty Map Olive Goudy		1				Manufacturers Light & Heat Co.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_A
4710371596	--	--						unclassified	unclassified	not available	unknown	unknown						



TUG HILL
OPERATING

Well Site Safety Plan
Part A – Site Specific Data and Figures

Well Name: Jeffersons N-7HU

Pad Name: Jeffersons

County: Wetzel

UTM (meters), NAD83, Zone 17

Northing: 4,393,018.54

Easting: 519707.68

**KEY CONTACT FOR WELL SITE SAFETY PLAN
DEVELOPMENT AND MAINTENANCE**

Jerry V. DeRosa, Director EH&S Affairs

(724) 338-2029 (office)

(412) 736-5767 (cellular)

24-HOUR EMERGENCY PHONE NUMBER

(800) 921-9745

[Signature]
05/26/2023
1/10/23

DAVID G DELALLO LAW MANAGER
TUG HILL OPERATING
390 SOUTHPOINTE BLVD.
STE 200
CANONSBURG PA 15317-0541

CERTIFICATE OF CONSENT AND EASEMENT

We, the undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being all the owners of the surface of that certain lot, tract or parcel of land located in Proctor District, Wetzel County, State of West Virginia, shown on the attached plat or survey, hereby consents and grants an easement, pursuant to West Virginia Code, Section 22C-9-7(b)(4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Conservation Commission, to TH Exploration, LLC, its successors or assigns, for the drilling and operation of a deep well for the production of oil or gas at the location shown on the attached plat or survey.

Executed this 25 day of May, 2022.


Edward H. Estep


Joan E. Estep

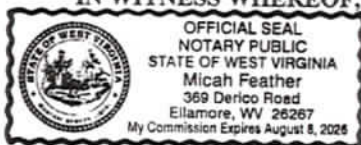
STATE OF WEST VIRGINIA


SS:

COUNTY OF WETZEL

On this, the 25 day of May, 2022, before me, a notary public, the undersigned officer, personally appeared Edward H. Estep, known to me (or satisfactorily proven) to be the person whos name is subscribed to the within instrument, and acknowledged that he/she executed the same for purposed therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.



My Commission Expires: August 8, 2026
Signature/Notary Public: 
Name/Notary Public (print): Micah Feather

STATE OF WEST VIRGINIA


SS:

COUNTY OF WETZEL

On this, the 25 day of May, 2022, before me, a notary public, the undersigned officer, personally appeared Joan E. Estep, known to me (or satisfactorily proven) to be the person whos name is subscribed to the within instrument, and acknowledged that he/she executed the same for purposed therein contained.

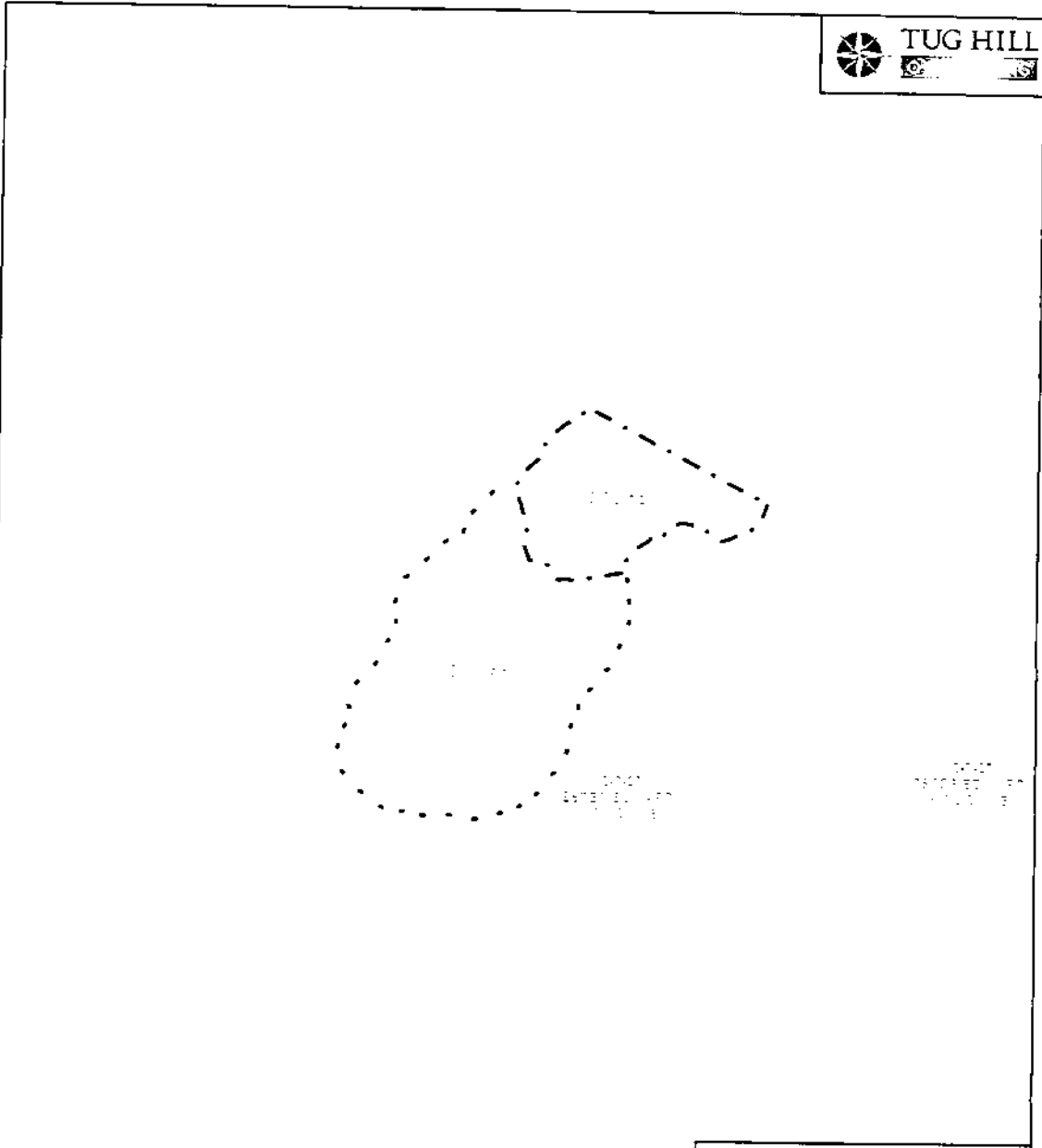
IN WITNESS WHEREOF, I hereunto set my hand and official seal.



My Commission Expires: August 8, 2026
Signature/Notary Public: 
Name/Notary Public (print): Micah Feather

This instrument prepared by:
WV Oil and Gas Conservation Commission
601 57th Street
Charleston, WV 25304

PLAT
EDWARD ESTEP
MARSHALL, WV
DATE: 05/26/2023
SCALE: 1" = 333'



1 inch: 333 feet

- Limit of Disturbance - Access Road
- Limit of Disturbance - Pad

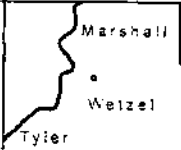
0 95 190 280
Feet

N

NOTE: THIS SURVEY WAS CONDUCTED USING THE
LATEST GPS TECHNOLOGY AVAILABLE AT THE
TIME OF THE SURVEY. THE SURVEYOR HAS
CONDUCTED A VISUAL INSPECTION OF THE
PROPERTY AND HAS FOUND NO OBVIOUS
ENCUMBRANCES OR EASEMENTS. THE
SURVEYOR HAS ALSO CONDUCTED A VISUAL
INSPECTION OF THE SURROUNDING AREA
AND HAS FOUND NO OBVIOUS ENCUMBRANCES
OR EASEMENTS. THE SURVEYOR HAS ALSO
CONDUCTED A VISUAL INSPECTION OF THE
PROPERTY AND HAS FOUND NO OBVIOUS
ENCUMBRANCES OR EASEMENTS.

"PLAT"
Edward Estep
Marshall, WV

Date: _____
Name: _____
Name: _____



Date: 5/11/2018
PCS: NAD 1983 UTM Zone 17N Feet US

05/26/2023



January 24, 2023

WV Department of Environmental Protection
Office of Oil & Gas
601 57th Street, SE
Charleston, WV 25304
Attention: Susan Rose

RE: Jeffersons N-7HU

Subject: Proposed Voluntary Pooling and Unitization

Dear Susan:

Tug Hill Operating, LLC is authorized through, either lease or other agreement, to unitize and pool all lands falling within the boundaries of the proposed voluntary unit included with this submission, except the following:

12-1-20	12-7-42.5	12-7-44
12-1-34	12-7-3	12-7-44.1
12-2-1	12-7-3.1	12-7-53
12-2-8	12-7-3.2	12-7-54
12-7-1	12-7-3.3	12-7-55
12-7-14	12-7-3.4	12-7-56
12-7-14.1	12-7-3.5	12-7-57
12-7-2	12-7-40	12-7-58
12-7-26	12-7-42	12-7-42.4

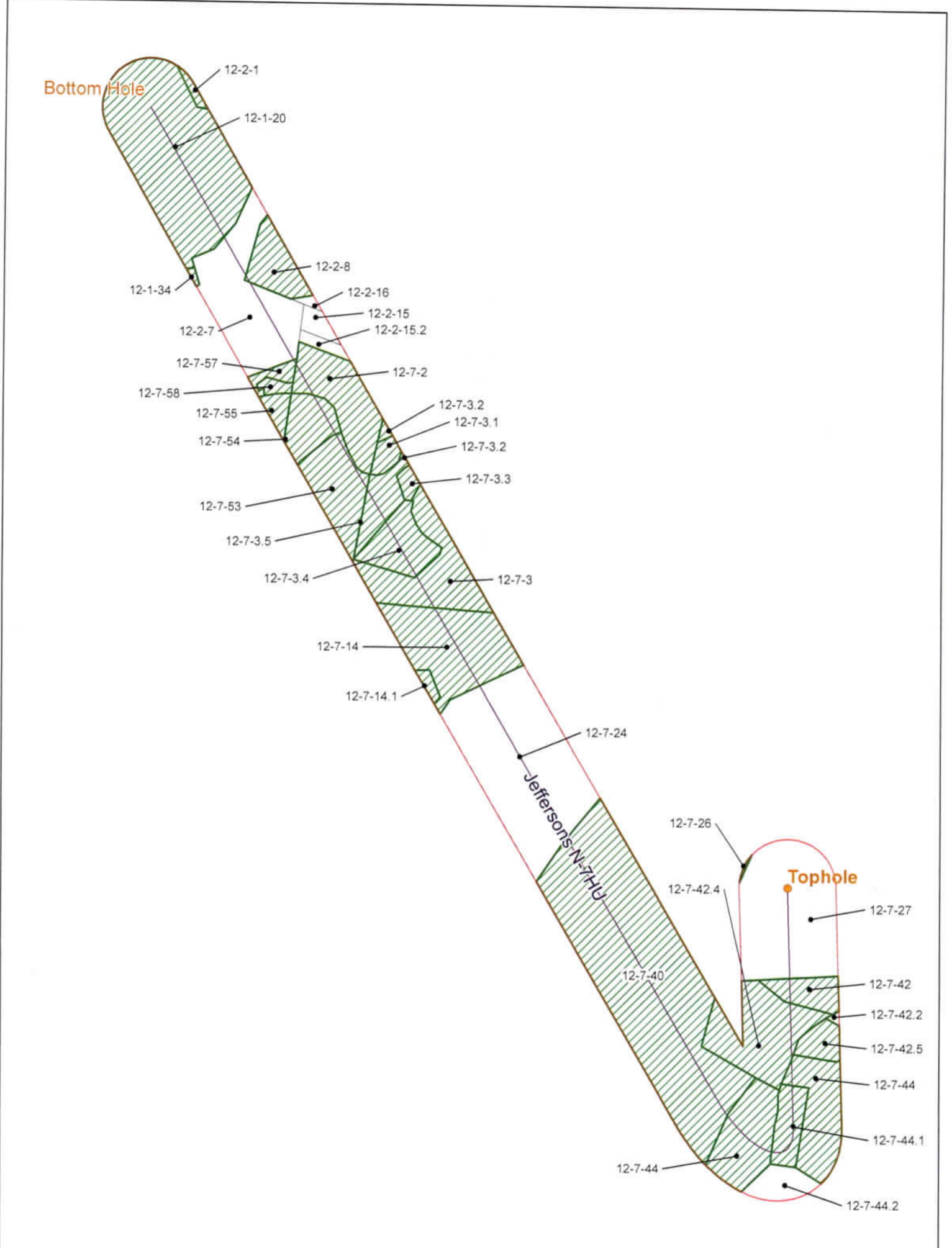
If your office has any questions or concerns regarding the contents of this letter, please do not hesitate to contact me directly at 724-749-8388, or by email at amorris@tug-hilop.com.

Sincerely,

Amy L. Morris
Permitting Specialist – Appalachia Region
Tug Hill Operating

RECEIVED
Office of Oil and Gas
JAN 26 2023
WV Department of
Environmental Protection

Jeffersons N-7HU



Coordinate System: NAD 83 / UTM Zone 17N
 Datum: North American 1983
 False Easting: 1,000,000
 False Northing: 0
 Scale Factor: 0.9996
 Units: Feet US

CONFIDENTIAL

0 15,000 31,000 62,000 Feet

TUG HILL OPERATING

— Utica Well
 □ 500' Buffer
 ▨ Force Pool

Jeffersons N-7HU
 Operators within 500 Feet of Well Borehole



**Operators within 500' of Well Boreholes
Jeffersons N - 7HU**

COUNTY	DISTRICT	TMP	MINERAL OWNER OR LESSEE	ADDRESS
Wetzel	Proctor	12-1-20	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-1-20	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-1-20	UNKNOWN HEIRS OF ALENE MCKIMIE	Missing
Wetzel	Proctor	12-1-34	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-2-1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-2-1	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-2-7	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-2-8	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-2-8	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-2-8	BILLIE MASON SULLIVAN	Missing
Wetzel	Proctor	12-2-8	DENZIL FLOYD MASON	Missing
Wetzel	Proctor	12-2-8	ROBERT D NOLAN AND VICTORIA DEE NOLAN	Missing
Wetzel	Proctor	12-2-8	PAM ISOM	71 Venable Road Annville, KY 40447
Wetzel	Proctor	12-2-8	REBECCA J HARRELL AKA REBECCA J ANTIBUS	533 N. Kalamazoo Avenue Marshall, MI 49068
Wetzel	Proctor	12-2-8	SHANNON HEMINGWAY	Missing
Wetzel	Proctor	12-2-8	KENNETH JAMES PARSONS	Missing
Wetzel	Proctor	12-2-8	JEFFREY J MCGLONE	2072 Farmview Drive Newtown, PA 18940
Wetzel	Proctor	12-2-8	KELLY M MCCLONE	2072 Farmview Drive Newtown, PA 18940
Wetzel	Proctor	12-2-8	STEVEN M MCGLONE	16015 S. 1st Street Phoenix, AZ 85048
Wetzel	Proctor	12-2-8	JOHN R WARSINSKY	1436 S. Marshall Street Benwood, WV 26031
Wetzel	Proctor	12-2-15	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-2-15.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-2-16	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-2	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222

05/26/2023

**Operators within 500' of Well Boreholes
Jeffersons N - 7HU**

Wetzel	Proctor	12-7-2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-2	PERKINS OIL & GAS INC	2966 Northwest Turnpike Pennsboro, WV 26415
Wetzel	Proctor	12-7-2	JOHN RICHARD NUZUM	2728 Cypress Street Columbia, SC 29205
Wetzel	Proctor	12-7-2	THREE RIVERS ROYALTY II LLC	9055 E. Mineral Circle Ste 110 Centennial, CO 80112
Wetzel	Proctor	12-7-2	LISA P BEERS AND GARY J BEERS	2832 Woodley Road Montgomery, AL 36111
Wetzel	Proctor	12-7-2	ANITA LOUISE CROGHAN	46 Fox Lane Winnetka, IL 60093
Wetzel	Proctor	12-7-3	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-3	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-3.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-3.1	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-3.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-3.2	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-3.3	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-3.3	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-3.4	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-3.5	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-3.5	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-14	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-14	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-14	CHERYL ANN COCHRAN	231 Gamble Lane Moundsville, WV 26041
Wetzel	Proctor	12-7-14.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107

05/26/2023

**Operators within 500' of Well Boreholes
Jeffersons N - 7HU**

Wetzel	Proctor	12-7-14.1	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-14.1	CHERYL ANN COCHRAN	231 Gamble Lane Moundsville, WV 26041
Wetzel	Proctor	12-7-24	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-26	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-26	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-26	JOHN RICHARD NUZUM	2728 Cypress Street Columbia, SC 29205
Wetzel	Proctor	12-7-27	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-40	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-40	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-40	BOUNTY MINERALS LLC	777 Main Street, Ste 3400 Fort Worth, TX 76102
Wetzel	Proctor	12-7-40	JOHN RICHARD NUZUM	2728 Cypress Street Columbia, SC 29205
Wetzel	Proctor	12-7-40	UNKNOWN HEIRS OF ALMA SIBERT	Missing
Wetzel	Proctor	12-7-42	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-42	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-42.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-42.2	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-42.4	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-42.4	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-42.5	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-42.5	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-44	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107

05/26/2023

**Operators within 500' of Well Boreholes
Jeffersons N - 7HU**

Wetzel	Proctor	12-7-44	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-44	DORIS MATTHEWS	733 Pavilion Drive, #A301 Matthews, NC 28105
Wetzel	Proctor	12-7-44.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-44.1	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-44.1	DORIS MATTHEWS	733 Pavilion Drive, #A301 Matthews, NC 28105
Wetzel	Proctor	12-7-44.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-44.2	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-53	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-53	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-53	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-53	PERKINS OIL & GAS INC	2966 Northwest Turnpike Pensboro, WV 26415
Wetzel	Proctor	12-7-53	JOHN RICHARD NUZUM	2728 Cypress Street Columbia, SC 29205
Wetzel	Proctor	12-7-53	THREE RIVERS ROYALTY II LLC	9055 E. Mineral Circle Ste 110 Centennial, CO 80112
Wetzel	Proctor	12-7-53	LISA MARIAN BEERS	2832 Woodley Road Montgomery, AL 36111
Wetzel	Proctor	12-7-53	ANITA LOUISE CROGHAN	46 Fox Lane Winnetka, IL 60093
Wetzel	Proctor	12-7-54	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-54	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-54	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
Wetzel	Proctor	12-7-54	PERKINS OIL & GAS INC	2966 Northwest Turnpike Pensboro, WV 26415
Wetzel	Proctor	12-7-54	JOHN RICHARD NUZUM	2728 Cypress Street Columbia, SC 29205
Wetzel	Proctor	12-7-54	THREE RIVERS ROYALTY II LLC	9055 E. Mineral Circle Ste 110 Centennial, CO 80112
Wetzel	Proctor	12-7-54	LISA MARIAN BEERS	2832 Woodley Road Montgomery, AL 36111
Wetzel	Proctor	12-7-54	ANITA LOUISE CROGHAN	46 Fox Lane Winnetka, IL 60093

05/26/2023

**Operators within 500' of Well Boreholes
Jeffersons N - 7HU**

Wetzel	Proctor	12-7-55	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-57	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
Wetzel	Proctor	12-7-58	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222

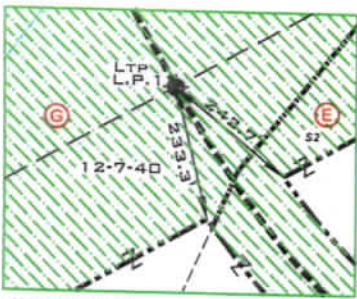
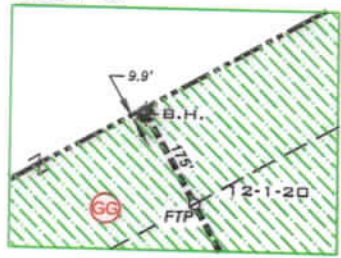
"For those parties identified as Missing or Address Unknown, the following actions were performed in pursuit of locating these individuals : A reasonable review of the records of the clerk of the county commission, the sheriff, the assessor, and the clerk of the circuit court in the county in which the interest is located, and includes unknown heirs, successors and assigns known to be alive; A reasonable inquiry in the vicinity of the owner's last known place of residence; A diligent inquiry into known interest owners in the same tract; and A reasonable review of available Internet resources commonly utilized by the industry."

05/26/2023

JEFFERSONS N-7HU
UTICA UNIT - 355.5645± ACRES
TUG HILL OPERATING

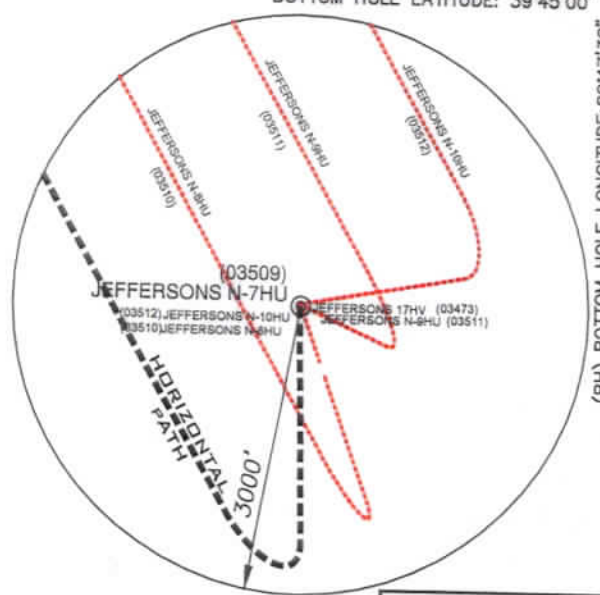
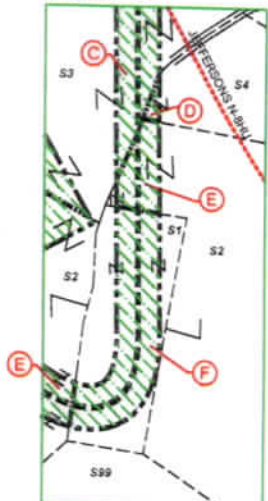
TOP HOLE LATITUDE: 39°42'30"
 BOTTOM HOLE LATITUDE: 39°45'00"

INSET "B"



INSET "A"

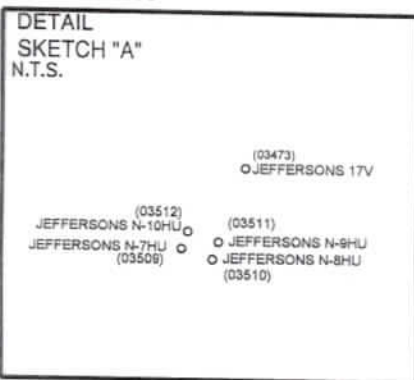
INSET "C"



LEGEND

- LEASED TRACTS
- SURFACE TRACTS
- WELL LATERAL
- POINT PLEASANT LEGS
- UNIT BOUNDARY
- LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- (FTP) PROPOSED FIRST TAKE POINT
- (LTP) PROPOSED LAST TAKE POINT
- FORCED POOL TRACT

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

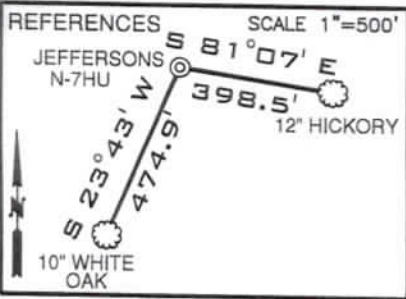


- NOTES**
- BORE PATH BASED ON GRID NORTH.
 - NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 - OWNERSHIP TAKEN FROM PUBLIC RECORDS OF WETZEL COUNTY, WV IN NOVEMBER, 2021. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 - WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
 - ALL DEEP WELLS WITHIN 1,000' ARE SHOWN ON THIS PLAT.
 - BOUNDARIES ALONG ROADWAYS ARE BASED UPON MEMORANDUM BY DICKIE, MCCAMEY & CHILCOTE, P.C. FILE 0058304.0401147
 - L.P.1 & LTP ARE THE SAME POINT.

SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,393,018.54
 E) 519,707.68

LANDING POINT 1
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,392,356.64
 E) 519,490.01

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,395,446.27
 E) 517,691.09



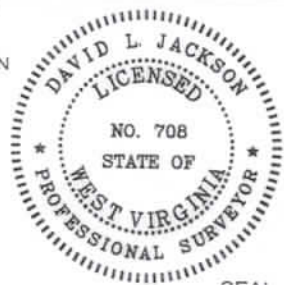
LINE	BEARING	DISTANCE
L1	N 64°05' E	876.39'
L2	S 33°25' E	1081.63'
L3	S 00°40' E	2458.69'

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 06°55' W	130.02'	446.78'	130.48'
C2	S 31°02' W	103.57'	190.79'	104.89'
C3	S 69°03' W	83.84'	139.14'	95.72'
C4	N 78°20' W	118.38'	206.98'	119.35'
C5	N 69°39' W	157.93'	633.00'	158.35'
C6	N 49°35' W	289.06'	1088.05'	289.92'
C7	N 33°53' W	293.72'	1750.07'	294.07'

FILE NUMBER _____
 DRAWING NUMBER: JEFFERSONS_N-7HU_REVO
 SCALE 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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

David L Jackson



JACKSON SURVEYING INC.
 P.O. Box 1460
 Clarksburg, WV 26302
 304-623-5851

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

DATE: January 31, 2023
 OPERATORS WELL NO. JEFFERSONS N-7HU
 API WELL NO. 47-103-03509
 STATE COUNTY PERMIT
 LOCATION ELEVATION 1217.5' WATERSHED (HUC 10) PROCTOR CREEK OF FRENCH CREEK - OHIO RIVER (HUC-10)
 DISTRICT PROCTOR COUNTY WETZEL
 QUADRANGLE NEW MARTINSVILLE 7.5' LEASE NUMBER SEE WW-6A1 FORM
 SURFACE OWNER EDWARD H. & JOAN E. ESTEP ACREAGE 92.302
 OIL & GAS ROYALTY OWNER EDWARD H. & JOAN E. ESTEP - SEE WW-6A1 LEASE ACREAGE 92.302
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____
 TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,676' TMD: 24,482'
 WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN, CT CORP
 ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5098 WASHINGTON STREET WEST, SUITE 407 CHARLESTON, WV 25313-1561

05/26/2023

COUNTY NAME PERMIT

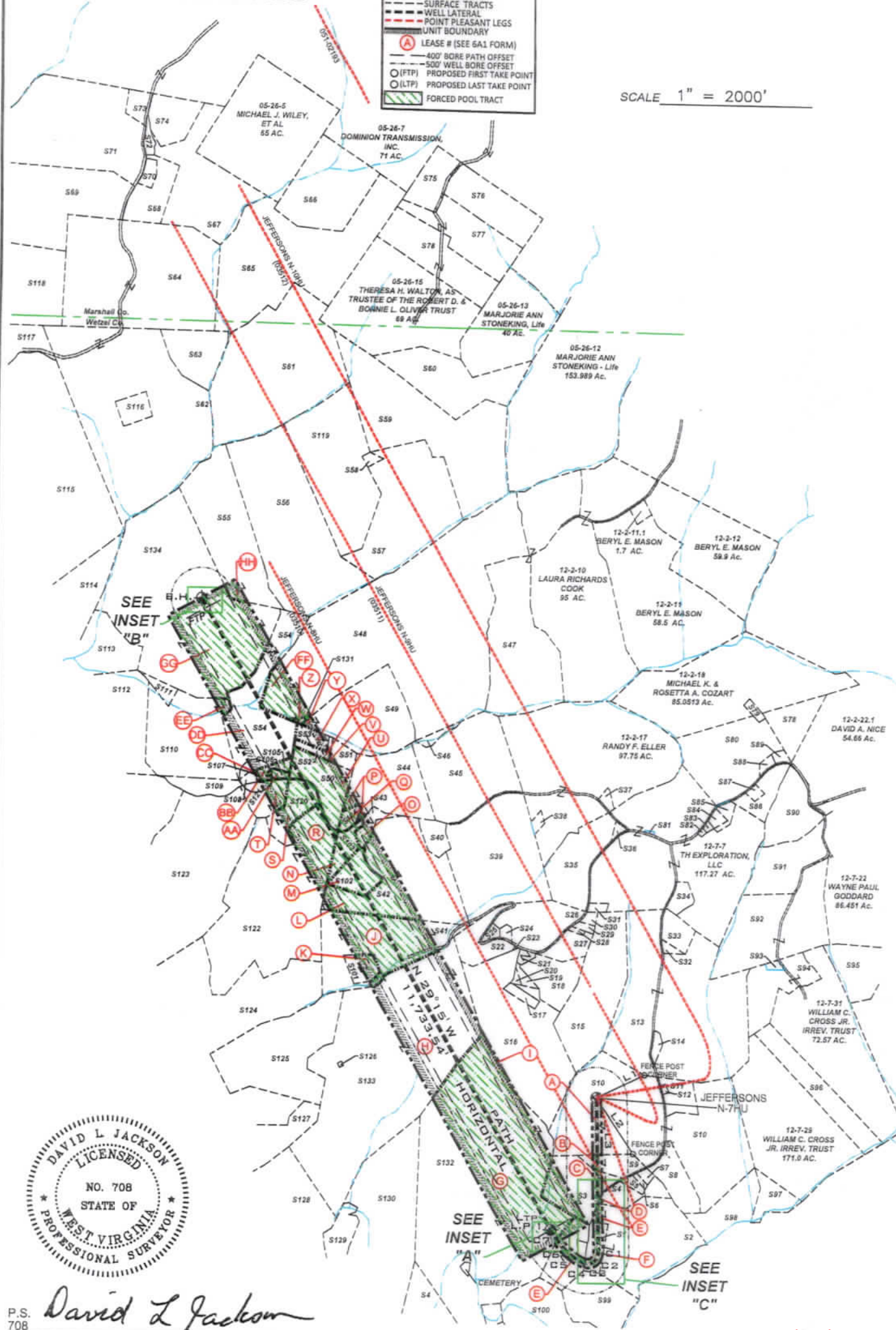
form: wwg

JEFFERSONS N-7HU UTICA UNIT - 355.5645± ACRES TUG HILL OPERATING

LEGEND


- LEASE TRACTS
- - - SURFACE TRACTS
- - - WELL LATERAL
- - - POINT PLEASANT LEGS
- - - UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- (FTP) PROPOSED FIRST TAKE POINT
- (LTP) PROPOSED LAST TAKE POINT
- ▨ FORCED POOL TRACT

SCALE 1" = 2000'



P.S. 708
David L Jackson

05/26/2023

	OPERATOR'S	WELL PLAT
	WELL #: JEFFERSONS N-7HU	PAGE 2 OF 4
	DISTRICT: Proctor	DATE: 01/31/2023
	COUNTY: Wetzel	
	STATE: WV	
API #: 47-103-03509		

JEFFERSONS N-7HU
UTICA UNIT - 355.5645± ACRES
TUG HILL OPERATING

Parcels within Unit Boundary				
Tags	Number	Tax Map -Parcel	Surface Owner	Acres
A	S10	12-7-27	Edward H. & Joan E. Estep	92.302
B	S9	12-7-42	James D. Furbee, II	6.5
C	S3	12-7-42.4	Peggy Lou & Albert Cecil - L/E Steven Mark Cecil, Et Al	17.333
D	S4	12-7-42.5	James D. Furbee, II	6.43
E	S2	12-7-44	Yonsell Jay Eller III & Jennifer Lynn Eller	15.06
F	S1	12-7-44.1	James Foster	5.054
G	S132	12-7-40	T.H. Exploration, LLC.	175.55
H	S133	12-7-24	Lane C. & Minerva R Evans	164.2
I	S16	12-7-26	T.H. Exploration, LLC.	59.89
J	S41	12-7-14	Matthew Rohr & Wayne Raber	32.74
K	S101	12-7-14.1	W VA Dept of Highways	3.49
L	S42	12-7-3	Matthew Rohr & Wayne Raber	55.828
M	S102	12-7-3.4	Dru W. Bills	8.253
N	S103	12-7-3.5	Robert Joseph Coleman	5.422
O	S43	12-7-3.3	Robert Joseph Coleman	3.53
P	S44	12-7-3.2	Lisa M. Naegle	28.47
Q	S104	12-7-3.1	Jeremy W. & Shannon E. Hedderson	2.99
R	S122	12-07-53	EQT Production Company	91
S	S120	12-07-54	Jerry J. Richard	10.6
T	S121	12-07-55	Staria K. Richmond	8.03
U	S50	12-7-2	Jeremy W. & Shannon E. Hedderson	19.8
V	S51	12-2-15.1	Vivian A. Parsons, Et Al	5
W	S52	12-2-15.2	Charles Philip Parsons	2
X	S53	12-2-15	Charles Philip Parsons	3
Y	S49	12-2-16	Laura Lee Cook	33
Z	S131		Midcap School	
AA	S106	12-7-58	John D. & Deborah L. Annah	1.03
BB	S105	12-7-57	John D. & Deborah L. Annah	2.33
CC	S107	12-7-56	Staria K. Richmond	0.3
DD	S54	12-2-7	John D. Annah	44.5
EE	S110	12-1-34	John D. & Deborah L. Annah	38
FF	S48	12-2-8	Laura Richards Cook	185.125
GG	S134	12-1-20	Charles E. Frohnapef, Trustee of the Charles E. Frohnapef Living Trust Dated October 3, 2017	126
HH	S55	12-2-1	Roy Yoho	49

Number	Tax Map -Parcel	Adjoining Parcels Ownership Table	Acres
S5	12-7-42.2	Aarli Fuluharty	1.072
S6	12-7-42.3	James D. Furbee, II	0.528
S7	12-7-42.1	James D. Furbee, II	1.21
S8	12-7-27.2	Douglas I. & Patricia A. Pitts	10.73
S11	12-7-27.1	Edward H. & Joan E. Estep	6.718
S12	12-7-43	Furbee Cemetery	1.11
S13	12-7-20	Jeffrey A. & Paula J. Gorby	104.72
S14	12-7-28	Palmer Cemetery	0.98
S15	12-7-19	Jeffery S. Underwood & Velvet K. Parks	41.4
S17	12-7-26.1	Colby Dean Sidenstricker	2.01
S18	12-7-17	Jeffery S. Underwood & Velvet K. Parks	13.43
S19	12-7-17.2	T.H. Exploration, LLC.	1.29
S20	12-7-17.1	T.H. Exploration, LLC.	0.521
S21	12-7-16	Grant & Jennifer Throckmorton	1.1
S22	12-7-15	Rost Energy Company, Inc.	22.63
S23	12-7-15.7	T.H. Exploration III, LLC.	0.68
S24	12-7-15.2	Billy Sweeney	1.8
S25	12-7-15.3	Billy Sweeney	1.26

* FORCED POOLED TRACTS ARE HIGHLIGHTED



P.S. 708 *David L Jackson*

Number	Tax Map -Parcel	Adjoining Parcels Ownership Table	Acres
S26	12-7-15.1	Billy Sweeney	10.72
S27	12-7-15.6	Jeffery S. Underwood & Velvet K. Parks	5.923
S28	12-7-15.5	Jimmy L. & Sharon Sue Calvin	0.46
S29	12-7-15.4	Jimmy L. & Sharon Sue Calvin	0.97
S30	12-7-18	Anthony M. & Elizabeth G. Parks	1
S31	12-7-7.6	William E. & Glenda E. Kaufman	1.55
S32	12-7-20.2	Peter R. Tamborello & Annis E. Ponikvar	0.9
S33	12-7-20.1	Peter R. Tamborello & Annis E. Ponikvar	5.18
S34	12-7-7.4	Charles Lee & Betsy J. Higgins	4
S35	12-7-5	Matthew D. Arrick	20.37
S36	12-7-6	Stacy E. Briner	0.25
S37	12-7-51	Jean J. Eller	1.25
S38	12-7-52	Brent J. & Sara L. Eller	10.25
S39	12-7-4.1	Robert Joseph Coleman	55.81
S40	12-7-59	Tanner Kelley	5
S45	12-7-4	Rodney G. Eller	46.7
S46	12-2-8.1	Friend W. Parsons	0.3
S47	12-2-9	Laura Richards Cook	77
S56	12-2-2	Ruby Wood, Et Al	82
S57	12-2-4	Edith Salem & Lisa G. Larson	56.25
S58	12-2-4.1	Tyrone Sultzbach & Richard Wolf	1
S59	12-2-5	Clifford W. & Alberta B. Johnson	75.96
S60	12-2-6	Clifford W. & Alberta B. Johnson	36
S61	05-26-16	Heartwood Forestland Fund VII LP	82.5
S62	05-26-14	Mark W. Booth, Maggie Ann Rockwell & George E. Booth, Jr.	117
S63	12-2-24	Maggie Ann Rockwell, Mark W. Booth & George E. Booth, Jr.	13.1
S64	05-26-18	Eric Jay Booth	94
S65	05-26-17	Heartwood Forestland Fund VII LP	82.56
S66	05-26-6	Heartwood Forestland Fund VII LP	36.17
S67	05-26-4.4	Otis F. & Glenda M. Rush	39.436
S68	05-26-4.1	Otis S. Rush, Rt Uk	12.188
S69	05-26-19	Lois E. Booth & Eric Jay Booth	50
S70	05-26-4.3	Crystal & Randolph F. Matask	2.253
S71	05-26-4.5	Eric Jay Booth	74.388
S72	05-26-4.2	Otis S. Rush, etux	1.58
S73	05-26-4	James R. & Melody A. Anderson	3.887
S74	05-26-4.6	Otis F. Rush Jr.	12.268
S75	05-26-23	Richard Joseph Otte	11.34
S76	05-26-9	Theresa H. Walton, as Trustee of The Robert D. & Bonnie L. Oliver Trust	21.75
S77	05-26-10	Theresa H. Walton, as Trustee of The Robert D. & Bonnie L. Oliver Trust	24.94
S78	05-26-14	Theresa H. Walton, as Trustee of The Robert D. & Bonnie L. Oliver Trust	27.56
S79	12-2-25	Michael K. & Rosetta A. Cozart	1.265
S80	12-2-20	Michael K. & Rosetta A. Cozart	34.0637
S81	12-7-7.7	Gregory D. & Bobbie Jo Hughes	0.17
S82	12-7-7.3	Robert N. & Deborah Sue Edwards	0.24
S83	12-7-7.2	Robert N. & Deborah Sue Edwards	0.412
S84	12-7-7.1	Mark E. Eller	1.41
S85	12-7-7.5	Mark E. Eller	1.94
S86	12-7-8.1	Brian & Christine L. Nice	7.628
S87	12-7-8	Mark E. Eller	1.012
S88	12-2-20.1	Shirley L. & Kenneth L. Haight	1
S89	12-2-20.2	Michael K. Cozart	1.025
S90	12-7-9.1	James T. Eddy	17.47
S91	12-7-9	Michael J. & Alena R. Fayad	22.526
S92	12-7-21	Alena R. & Michael J. Fayad, III	58
S93	12-7-31.1	Nancy Jayne & Mark J. Davis	0.808
S94	12-7-31.2	Nancy Jayne & Mark J. Davis	17.37
S95	12-7-32.1	Charles & Judith Rose - L/E, Charles D. Rose, Jr. Et Al	18
S96	12-7-30	William C. Cross Jr. Irrev. Trust	19.75
S97	12-7-46	William C. Cross Jr. Irrev. Trust	9.53
S98	12-7-45	William C. Cross Jr. Irrev. Trust	17.24
S99	12-7-44.2	Danny E. & Jill L. McKinney	19.46
S100	12-12-9	Rickey A. Farley	17.175
S108	12-7-1	Tammara & William J. Wetzel	1
S109	12-6-52	John D. & Deborah L. Annah	6.46
S111	12-1-34.1	Herbert Parsons & Virginia Yoho Roy	2
S112	12-1-32	Baxter Farm, LLC	78.74
S113	12-1-31	Steven Jack & Susan Louise Hafer	20
S114	12-1-19	Steven J. & Susan L. Hafer	36.5
S115	12-1-8	Benjamin J. Kocher	168.67
S116	12-1-41	Mark W. Booth, Maggie Ann Rockwell & George E. Booth, Jr.	5
S117	12-1-8.1	Robert F. Rothlisberger	50.33
S118	05-27-24	Robert F. Rothlisberger	60.1
S119	12-02-03	Nelson M. & Mary D. Miller	51.72
S123	12-06-7.2	Brian Lyle & Beth Ann Hayes	82.36
S124	12-06-30	Ethyl Anderson, Est., Mark Anderson & David Michael Anderson	109.18
S125	12-07-23	Clegg Family Irrevocable Trust	47.61
S126	12-07-24.1	Grandview Doolin Public Service	0.13
S127	12-07-36	Clegg Family Irrevocable Trust	10.25
S128	12-07-37	Rost Energy Company, Inc.	79.75
S129	12-07-38	Rost Energy Company, Inc.	8.1
S130	12-07-39	Rost Energy Company, Inc.	55

05/26/2023



OPERATOR'S
 WELL #: JEFFERSONS N-7HU
 DISTRICT: Proctor
 COUNTY: Wetzel
 STATE: WV
 API #: 47-103-03509

WELL PLAT
 PAGE 3 OF 4
 DATE: 01/31/2023

form ww6

**JEFFERSONS N-7HU
UTICA UNIT - 355.5658± ACRES
TUG HILL OPERATING**

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	DEED BOOK/PAGE	
10*22042	12-7-27	A	EDWARD H ESTEP AND JOAN E ESTEP	210A	205
FORCE POOL	12-7-42	B	BEVERLY J MATTHEWS, ET AL	197A	595
FORCE POOL	12-7-42.4	C	BEVERLY J MATTHEWS, ET AL	197A	595
FORCE POOL	12-7-42.5	D	BEVERLY J MATTHEWS, ET AL	197A	595
FORCE POOL	12-7-44	E	BRC APPALACHIAN MINERALS I LLC, ET AL	102A	505
FORCE POOL	12-7-44.1	F	BRC APPALACHIAN MINERALS I LLC, ET AL	102A	505
FORCE POOL	12-7-40	G	BETTY WATSON HALL, ET AL	234A	362
10*39048	12-7-24	H	DAVID S PALMER, ET AL	258A	213
FORCE POOL	12-7-26	I	BETTY WATSON HALL, ET AL	234A	362
FORCE POOL	12-7-14	J	CHRISTINA JO DAVIES FKN CHRISTINA JO YOHO, ET AL	174A	564
FORCE POOL	12-7-14.1	K	CHRISTINA JO DAVIES FKN CHRISTINA JO YOHO, ET AL	174A	564
FORCE POOL	12-7-3	L	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001, ET AL	151A	540
FORCE POOL	12-7-3.4	M	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001, ET AL	151A	540
FORCE POOL	12-7-3.5	N	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001, ET AL	151A	540
FORCE POOL	12-7-3.3	O	ELIZABETH A BEACHELL, TRUSTEE OF THE MCCALL 2016 DELAWARE TRUST DTD 5/14/2016, ET AL	277A	615
FORCE POOL	12-7-3.2	P	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001, ET AL	151A	540
FORCE POOL	12-7-3.1	Q	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001, ET AL	151A	540
FORCE POOL	12-7-53	R	MAPW, LLC, ET AL	219A	484
FORCE POOL	12-7-54	S	RIDGETOP ROYALTIES, LLC, ET AL	170A	565
FORCE POOL	12-7-55	T	MAPW, LLC	219A	494
FORCE POOL	12-7-2	U	CAROL ANN EALY BRECKENRIDGE, ET AL	167A	749
10*18856	12-2-15.1	V	ROY FRIEND YOHO, ET AL	190A	118
10*18856	12-2-15.2	W	ROY FRIEND YOHO, ET AL	190A	118
10*22364	12-2-15	X	CHARLES PHILIP PARSONS, ET AL	221A	648
10*31168	12-2-16	Y	HERBERT L MILLER AND BRENDA S MILLER	173A	673
FORCE POOL	MIDCAP SCHOOL	Z	AARON DAVIS, ET AL	143A	517
FORCE POOL	12-7-58	AA	MAPW, LLC	219A	494
FORCE POOL	12-7-57	BB	MAPW, LLC	219A	494
FORCE POOL	12-7-56	CC	MAPW, LLC	219A	494
10*24617	12-2-7	DD	BETTY LOU GOUDY	220A	884
FORCE POOL	12-1-34	EE	ROY YOHO	168A	939
FORCE POOL	12-2-8	FF	AARON DAVIS, ET AL	143A	517
FORCE POOL	12-1-20	GG	SHIBEN ESTATES INC, ET AL	155A	629
FORCE POOL	12-2-1	HH	PATHFINDER RESOURCES LLC DBA RECON PATHFINDER LLC ET AL	275A	203



P.S. 708 *David L Jackson*

05/26/2023



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: JEFFERSONS N-7HU
DISTRICT: Proctor
COUNTY: Wetzel
STATE: WV
API #: 47-103-03509

WELL PLAT
PAGE 4 OF 4
DATE: 01/31/2023

**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 pages

**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: Tug Hill Operating, LLC

By: Amy L. Morris *Amy L. Morris*

Its: Permitting Specialist - Appalachia Region

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	DEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	
10*22042	12-7-27	A	EDWARD H ESTEP AND JDAN E ESTEP	TH EXPLORATION LLC	1/8+	210A 205	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FORCE POOL	12-7-42	B	BEVERLY J MATTHEWS	ANTERO RESOURCES CORPORATION	1/8+	197A 595	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	BRC APPALACHIAN MINERALS I, LLC	BRC WORKING INTEREST COMPANY LLC	1/8+	102A 505	BRC Working Interest Company LLC to Chesapeake Appalachia LLC: 103A/470	Chesapeake Appalachia LLC to Statoil Onshore Properties Inc: 120A/109	Chesapeake Appalachia LLC to SWN Production Company LLC: 157A/540	Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC: 158A/801	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 13/296	SWN Production Company LLC to Antero Exchange Properties: 177A/533	Statoil Onshore Properties Inc to Antero Exchange Properties LLC: 177A/738	Merger - Antero Exchange Properties LLC merged with and into Antero Resources Corporation: CB 13/311	Antero Resources Corporation to EQT Production Company: 231A/22	**FORCE POOL**
FORCE POOL	12-7-42	B	CARLA BRIGGS GRABITS	ANTERO RESOURCES CORPORATION	1/8+	194A 807	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	CAROLYN L GRAHAM AND JAMES B GRAHAM	ANTERO RESOURCES CORPORATION	1/8+	194A 810	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	CONNIE VONYON	ANTERO RESOURCES CORPORATION	1/8+	195A 276	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	DORIS B MATTHEWS	ANTERO RESOURCES CORPORATION	1/8+	194A 552	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	JAMES D AND REBECCA S ELLER	ANTERO RESOURCES CORPORATION	1/8+	194A 801	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	JAMES R BEALS	ANTERO RESOURCES CORPORATION	1/8+	194A 543	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	JIMMY L BRIGGS AND LORNA A BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 546	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	JOANNE ELIZABETH RHODES AND GREGORY K RHODES	ANTERO RESOURCES CORPORATION	1/8+	195A 273	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	JOHN ARNOLD BRIGGS AND THERESA BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 795	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	KATHLEEN D RUSSELL	ANTERO RESOURCES CORPORATION	1/8+	194A 555	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	KATHY RUSSELL WELLMAN AND KENNETH WELLMAN	ANTERO RESOURCES CORPORATION	1/8+	194A 561	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	LINDA L LYKINS	ANTERO RESOURCES CORPORATION	1/8+	194A 819	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	LORI LYNN BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 76	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	MARY MAGDALENE ELLER	ANTERO RESOURCES CORPORATION	1/8+	195A 258	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	MERRILYN E SAMPSON AND JOHNNIE D SAMPSON	ANTERO RESOURCES CORPORATION	1/8+	194A 829	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	
FORCE POOL	12-7-42	B	NANCY DELLATORRE MCCANN	ANTERO RESOURCES CORPORATION	1/8+	196A 369	Antero Resources Corporation to EQT Production Company: 231A/22								**FORCE POOL**	

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALT	DEED BOOK/PAG	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	
FORCE POOL	12-7-42	B	PHYLIS JEAN CROASMUM	ANTERO RESOURCES CORPORATION	1/8+	194A 549	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42	B	RANDALL HOWARD RUSSELL	ANTERO RESOURCES CORPORATION	1/8+	194A 558	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42	B	RAYMOND ALLEN BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 798	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42	B	STAR BANAY BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 79	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42	B	THOMAS DELLATORRE AND SANDRA DELLATORRE	ANTERO RESOURCES CORPORATION	1/8+	196A 360	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
10*23804	12-7-42	B	SUSAN GAIL KISNER AND STEVE A KISNER	TH EXPLORATION LLC	1/8+	209A 252	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*24319	12-7-42	B	SAMUEL E HALL JR AND LISA L HALL	TH EXPLORATION LLC	1/8+	215A 900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*24486	12-7-42	B	PEGGY HUGGINS AND MICHAEL HUGGINS	TH EXPLORATION LLC	1/8+	218A 926	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*24487	12-7-42	B	TAMMY J WEAKEY AND DALE K WEAKEY	TH EXPLORATION LLC	1/8+	218A 923	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*24738	12-7-42	B	DEBRA D THROCKMORTON AND JOHN G THROCKMORTON	TH EXPLORATION LLC	1/8+	220A 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*25313	12-7-42	B	TIMOTHY L BRIGGS AND ROBIN GALE BRIGGS	TH EXPLORATION LLC	1/8+	222A 148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*28247	12-7-42	B	PENELOPE A BARDET AND PATRICK J BARDET	TH EXPLORATION LLC	1/8+	235A 565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*29204	12-7-42	B	REGAN JOHNSON	TH EXPLORATION LLC	1/8+	245A 368	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*39686	12-7-42	B	BETTY JANE OLIVE	TH EXPLORATION LLC	1/8+	272A 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FORCE POOL	12-7-42.4	C	BEVERLY J MATTHEWS	ANTERO RESOURCES CORPORATION	1/8+	197A 595	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	BRC APPALACHIAN MINERALS I, LLC	BRC WORKING INTEREST COMPANY LLC	1/8+	102A 505	BRC Working Interest LLC to Chesapeake Appalachia LLC: 103A/470	Chesapeake Appalachia LLC to Statoil Onshore Properties Inc: 120A/109	Chesapeake Appalachia LLC to SWN Production Company LLC: 157A/540	Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC: 158A/801	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 13/296	SWN Production Company LLC to Antero Exchange Properties: 177A/533	Statoil Onshore Properties Inc to Antero Exchange Properties LLC: 177A/738	Merger - Antero Exchange Properties LLC merged with and into Antero Resources Corporation: CB 13/311	Antero Resources Corporation to EQT Production Company: 231A/22	**FORCE POOL**
FORCE POOL	12-7-42.4	C	CARLA BRIGGS GRABITS	ANTERO RESOURCES CORPORATION	1/8+	194A 807	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	CAROLYN L GRAHAM AND JAMES B GRAHAM	ANTERO RESOURCES CORPORATION	1/8+	194A 810	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	CONNIE YONYON	ANTERO RESOURCES CORPORATION	1/8+	195A 276	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	DOORIS B MATTHEWS	ANTERO RESOURCES CORPORATION	1/8+	194A 552	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	JAMES D AND REBECCA S ELLER	ANTERO RESOURCES CORPORATION	1/8+	194A 801	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	JAMES R BEALS	ANTERO RESOURCES CORPORATION	1/8+	194A 543	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	JIMMY L BRIGGS AND LORNA A BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 546	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	JOANNE ELIZABETH RHODES AND GREGORY K RHODES	ANTERO RESOURCES CORPORATION	1/8+	195A 273	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		
FORCE POOL	12-7-42.4	C	JOHN ARNOLD BRIGGS AND THERESA BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 795	Antero Resources Corporation to EQT Production Company: 231A/22							**FORCE POOL**		

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	FEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT
FORCE POOL	12-7-42.4	C	KATHLEEN D RUSSELL	ANTERO RESOURCES CORPORATION	1/8+	194A 555	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	KATHY RUSSELL WELLMAN AND KENNETH WELLMAN	ANTERO RESOURCES CORPORATION	1/8+	194A 561	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	LINDA L LVKINS	ANTERO RESOURCES CORPORATION	1/8+	194A 819	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	LORI LYNN BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 76	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	MARY MAGDALENE ELLER	ANTERO RESOURCES CORPORATION	1/8+	195A 258	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	MERRILYN E SAMPSON AND JOHNNY D SAMPSON	ANTERO RESOURCES CORPORATION	1/8+	194A 829	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	NANCY DELLATORRE MCCANN	ANTERO RESOURCES CORPORATION	1/8+	196A 369	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	PHYLLIS JEAN CROASMUM	ANTERO RESOURCES CORPORATION	1/8+	194A 549	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	RANDALL HOWARD RUSSELL	ANTERO RESOURCES CORPORATION	1/8+	194A 558	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	RAYMOND ALLEN BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 798	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	STAR BANAY BRIGGS	ANTERO RESOURCES CORPORATION	1/8+	194A 79	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
FORCE POOL	12-7-42.4	C	THOMAS DELLATORRE AND SANDRA DELLATORRE	ANTERO RESOURCES CORPORATION	1/8+	196A 360	Antero Resources Corporation to EQT Production Company: 231A/22									**FORCE POOL**
10*23804	12-7-42.4	C	SUSAN GAIL KISNER AND STEVE A KISNER	TH EXPLORATION LLC	1/8+	209A 252	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24319	12-7-42.4	C	SAMUEL E HALL JR AND LISA L HALL	TH EXPLORATION LLC	1/8+	215A 900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24486	12-7-42.4	C	PEGGY HUGGINS AND MICHAEL HUGGINS	TH EXPLORATION LLC	1/8+	218A 926	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24487	12-7-42.4	C	TAMMY J WEAKEY AND DALE K WEAKEY	TH EXPLORATION LLC	1/8+	218A 923	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24738	12-7-42.4	C	DEBRA D THROCKMORTON AND JOHN G THROCKMORTON	TH EXPLORATION LLC	1/8+	220A 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25313	12-7-42.4	C	TIMOTHY L BRIGGS AND ROBIN GALE BRIGGS	TH EXPLORATION LLC	1/8+	222A 148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28247	12-7-42.4	C	PENELOPE A BARDET AND PATRICK J BARDET	TH EXPLORATION LLC	1/8+	235A 565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28204	12-7-42.4	C	REGAN JOHNSON	TH EXPLORATION LLC	1/8+	245A 368	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39686	12-7-42.4	C	BETTY JANE OLIVE	TH EXPLORATION LLC	1/8+	272A 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-44	F	BRC APPALACHIAN MINERALS I LLC	BRC WORKING INTEREST COMPANY LLC	1/8+	102A 505	BRC Working Interest Company LLC to Chesapeake Appalachia LLC: 103A/470	Chesapeake Appalachia LLC to Statoil Onshore Properties Inc: 120A/109	Chesapeake Appalachia LLC to SWN Production Exchange Titleholder LLC: 157A/540	Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC: 158A/801	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 13/295	SWN Production Company LLC to Antero Exchange Properties: 177A/323	Statoil Onshore Properties Inc to Antero Exchange Properties LLC: 177A/738	Merger - Antero Exchange Properties LLC merged with and into Antero Resources Corporation: CB 13/311	Antero Resources Corporation to EQT Production Company: 231A/22	**FORCE POOL**
FORCE POOL	12-7-44	E	DORIS B MATTHEWS	UNRELEASED	NA	NA										**FORCE POOL**
10*21912	12-7-44	E	JOANNE ELIZABETH RHODES	TH EXPLORATION LLC	1/8+	200A 447	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21919	12-7-44	E	JAMES D ELLER	TH EXPLORATION LLC	1/8+	200A 433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22070	12-7-44	E	YONSELL JAY ELLER AND JENNIFER LYNN	TH EXPLORATION LLC	1/8+	201A 423	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23288	12-7-44	E	LORI LYNN BRIGGS	TH EXPLORATION LLC	1/8+	213A 178	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23289	12-7-44	E	PHYLLIS JEAN HAUGHT CROASMUM	TH EXPLORATION LLC	1/8+	212A 12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23290	12-7-44	E	JIMMY LEE BRIGGS AND LORNA A BRIGGS	TH EXPLORATION LLC	1/8+	212A 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23291	12-7-44	E	STAR BANAY BRIGGS	TH EXPLORATION LLC	1/8+	212A 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23292	12-7-44	E	NANCY DELLATORRE MCCANN	TH EXPLORATION LLC	1/8+	212A 388	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23744	12-7-44	E	THOMAS DELLATORRE AND SANDRA DELLATORRE	TH EXPLORATION LLC	1/8+	213A 692	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23804	12-7-44	E	SUSAN GAIL KISNER AND STEVE A KISNER	TH EXPLORATION LLC	1/8+	209A 252	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24319	12-7-44	E	SAMUEL E HALL JR AND LISA L HALL	TH EXPLORATION LLC	1/8+	215A 900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25313	12-7-44	E	TIMOTHY L BRIGGS AND ROBIN GALE BRIGGS	TH EXPLORATION LLC	1/8+	222A 148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28247	12-7-44	E	PENELOPE A BARDET AND PATRICK J BARDET	TH EXPLORATION LLC	1/8+	235A 565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	FEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT
10*28440	12-7-44	E	JOHN ARNOLD BRIGGS AND TERESA BRIGGS	TH EXPLORATION LLC	1/8+	237A 364	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39686	12-7-44	E	BETTY JANE OLIVE	TH EXPLORATION LLC	1/8+	272A 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39750	12-7-44	E	RAYMOND ALLEN BRIGGS AND DEBORAH BRIGGS	TH EXPLORATION LLC	1/8+	270A 469	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39664	12-7-44	E	DOUGLAS ANTHONY MATTHEWS SMT TODD WALLEVAND TRUST	TH EXPLORATION LLC	1/8+	277A 688	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40011	12-7-44	E	BRETT J MARTINEZ AND ERIN B MARTINEZ	TH EXPLORATION LLC	1/8+	277A 692	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40085	12-7-44	E	DAVID W GOLDMAN AND SANDRA L MATTHEWS	TH EXPLORATION LLC	1/8+	278A 835	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40128	12-7-44	E	NEMANJA SVIRCEV AND PAIGE N ZALESKI	TH EXPLORATION LLC	1/8+	278A 839	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-44.1	F	BRC APPALACHIAN MINERALS I LLC	BRC WORKING INTEREST COMPANY LLC	1/8+	102A 505	BRC Working Interest Company LLC to Chesapeake Appalachia LLC: 103A/470	Chesapeake Appalachia LLC to Statoil Onshore Properties Inc: 120A/109	Chesapeake Appalachia LLC to SWN Production Company LLC: 157A/540	Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC: 158A/801	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 13/295	SWN Production Company LLC to Antero Exchange Properties: 177A/533	Statoil Onshore Properties Inc to Antero Exchange Properties LLC: 177A/738	Merger - Antero Exchange Properties LC merged with and into Antero Resources Corporation: CB 13/311	Antero Resources Corporation to EQT Production Company: 231A/22	**FORCE POOL**
FORCE POOL	12-7-44.1	F	DORIS B MATTHEWS	UNLEASED	NA	NA NA										
10*21912	12-7-44.1	F	JOANNE ELIZABETH RHODES	TH EXPLORATION LLC	1/8+	200A 447	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21919	12-7-44.1	F	JAMES D ELLER	TH EXPLORATION LLC	1/8+	200A 433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23288	12-7-44.1	F	LORI LYNN BRIGGS	TH EXPLORATION LLC	1/8+	213A 178	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23289	12-7-44.1	F	PHYLLIS JEAN HAUGHT CROASMIN	TH EXPLORATION LLC	1/8+	212A 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23290	12-7-44.1	F	JIMMY LEE BRIGGS AND LORNA A BRIGGS	TH EXPLORATION LLC	1/8+	212A 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23291	12-7-44.1	F	STAR BANAY BRIGGS	TH EXPLORATION LLC	1/8+	212A 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23292	12-7-44.1	F	NANCY DELLATORRE MCCANN	TH EXPLORATION LLC	1/8+	212A 398	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23744	12-7-44.1	F	THOMAS DELLATORRE AND SANDRA DELLATORRE	TH EXPLORATION LLC	1/8+	213A 692	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23804	12-7-44.1	F	SUSAN GAIL KISNER AND STEVE A KISNER	TH EXPLORATION LLC	1/8+	209A 252	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24319	12-7-44.1	F	SAMUEL E HALL JR AND LISA L HALL	TH EXPLORATION LLC	1/8+	215A 900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25313	12-7-44.1	F	TIMOTHY L BRIGGS AND ROBIN GALE BRIGGS	TH EXPLORATION LLC	1/8+	222A 148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28247	12-7-44.1	F	PENELOPE A BARDET AND PATRICK J BARDET	TH EXPLORATION LLC	1/8+	235A 565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28440	12-7-44.1	F	JOHN ARNOLD BRIGGS AND TERESA BRIGGS	TH EXPLORATION LLC	1/8+	237A 364	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39402	12-7-44.1	F	JAMES H FOSTER JR AND STEPHANIE FOSTER	TH EXPLORATION LLC	1/8+	264A 728	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39686	12-7-44.1	F	BETTY JANE OLIVE	TH EXPLORATION LLC	1/8+	272A 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39750	12-7-44.1	F	RAYMOND ALLEN BRIGGS AND DEBORAH BRIGGS	TH EXPLORATION LLC	1/8+	270A 469	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39664	12-7-44.1	F	DOUGLAS ANTHONY MATTHEWS SMT TODD WALLEVAND TRUST	TH EXPLORATION LLC	1/8+	277A 688	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40011	12-7-44.1	F	BRETT J MARTINEZ AND ERIN B MARTINEZ	TH EXPLORATION LLC	1/8+	277A 692	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40085	12-7-44.1	F	DAVID W GOLDMAN AND SANDRA L MATTHEWS	TH EXPLORATION LLC	1/8+	278A 835	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40128	12-7-44.1	F	NEMANJA SVIRCEV AND PAIGE N ZALESKI	TH EXPLORATION LLC	1/8+	278A 839	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-40	G	BETTY WATSON HALL	EQT PRODUCTION COMPANY	1/8+	734A 362	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	CAROL ANN EALY BRECKENRIDGE	STONE ENERGY CORPORATION	1/8+	167A 747	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	DAVID RDY EALY AND KAREN A EALY	STONE ENERGY CORPORATION	1/8+	167A 737	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	ELLEN KAY EALY SHOOK	STONE ENERGY CORPORATION	1/8+	167A 739	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	JAMES W ARMAN	STONE ENERGY CORPORATION	1/8+	166A 831	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	MICHELLE C SHERWOOD	STONE ENERGY CORPORATION	1/8+	166A 440	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	RICHARD H ARMAN	STONE ENERGY CORPORATION	1/8+	166A 833	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	THOMAS D ARMAN	STONE ENERGY CORPORATION	1/8+	166A 835	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	VICKI S VOORHIS AND NORMAN K VOORHIS	STONE ENERGY CORPORATION	1/8+	166A 853	Stone Energy Corp to EQT Production Company: 183A/305									
FORCE POOL	12-7-40	G	JOHN RICHARD NUZUM	UNLEASED	NA	NA NA										
FORCE POOL	12-7-40	G	THE UNKNOWN HEIRS OF ALMA SIBERT	UNLEASED	NA	NA NA										
10*2269	12-7-40	G	BOUNTY MINERALS LLC	TH EXPLORATION LLC	1/8+	199A 568	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22568	12-7-40	G	THELMA NELL PALMER	TH EXPLORATION LLC	1/8+	208A 428	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22696	12-7-40	G	MARY M STERLING AND WAYNE S STERLING	TH EXPLORATION LLC	1/8+	209A 179	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22697	12-7-40	G	LINDA LEE NUZUM	TH EXPLORATION LLC	1/8+	209A 175	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23039	12-7-40	G	SHARON L BURTON AND ROBERT W BURTON	TH EXPLORATION LLC	1/8+	204A 120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23728	12-7-40	G	VENABLE ROYALTY LTD AND VZ LP	TH EXPLORATION LLC	1/8+	214A 692	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24519	12-7-40	G	THOMAS J CROGHAN AND ANITA P CROGHAN	TH EXPLORATION LLC	1/8+	218A 900	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24520	12-7-40	G	CHRISTOPHER F PALMER AND BEVERLY PALMER	TH EXPLORATION LLC	1/8+	218A 892	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24521	12-7-40	G	DARIA F PALMER	TH EXPLORATION LLC	1/8+	218A 896	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24612	12-7-40	G	LISA P BEERS AND GARY J BEERS	TH EXPLORATION LLC	1/8+	223A 378	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*29074	12-7-40	G	SANDRA A DIETRICH AND PAUL E DIETRICH	TH EXPLORATION LLC	1/8+	240A 463	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*29075	12-7-40	G	NANCY K RUFENER	TH EXPLORATION LLC	1/8+	240A 466	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*29998	12-7-40	G	CHARLES W KOLISH SR AND KAREN KOLISH	TH EXPLORATION LLC	1/8+	255A 305	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*29999	12-7-40	G	CHARLES W KOLISH JR AND JILL KOLISH	TH EXPLORATION LLC	1/8+	255A 301	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*30000	12-7-40	G	SUSAN G ROSIER	TH EXPLORATION LLC	1/8+	255A 309	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39048	12-7-24	H	DAVID S PALMER	TH EXPLORATION LLC	1/8+	258A 213	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	FEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	
10*39070	12-7-24	H	PAMELA A PALMER EMCH	TH EXPLORATION LLC	1/8+	258A 197	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*39166	12-7-24	H	HAMMETT LAND & MINERALS LLC	TH EXPLORATION LLC	1/8+	263A 280	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*39536	12-7-24	H	APPALACHIAN BASIN MINERALS LP	TH EXPLORATION LLC	1/8+	269A 622	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FORCE POOL	12-7-14	J	CHRISTINA JO DAVIES FKN CHRISTINA JO YOHO	ANTERO RESOURCES CORPORATION	1/8+	174A 564	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-14	J	JMA LEE YOHO	ANTERO RESOURCES CORPORATION	1/8+	169A 666	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-14	J	JANE ELLEN MARCUM	STONE ENERGY CORPORATION	1/8+	166A 871	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-14	J	LAWRENCE ELDON YOHO	ANTERO RESOURCES CORPORATION	1/8+	173A 357	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-14	J	NOEL S YOHO	ANTERO RESOURCES CORPORATION	1/8+	173A 207	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-14	J	THOMAS S YOHO	ANTERO RESOURCES CORPORATION	1/8+	172A 898	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-14	J	CHERYL ANN COCHRAN	UNLEASED	NA	NA NA											**FORCE POOL**
10*22363	12-7-14	J	LINDA M YOHO	TH EXPLORATION LLC	1/8+	204A 115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22365	12-7-14	J	GARY LEVERNE YOHO	TH EXPLORATION LLC	1/8+	204A 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22369	12-7-14	J	SHARON E POTTS	TH EXPLORATION LLC	1/8+	208A 433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22691	12-7-14	J	BETTY JEAN SMITH	TH EXPLORATION LLC	1/8+	209A 291	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23019	12-7-14	J	JODI LYNN PAULEY	TH EXPLORATION LLC	1/8+	209A 223	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23456	12-7-14	J	RICHARD L YOHO AND DIANA LYNN YOHO	TH EXPLORATION LLC	1/8+	209A 254	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23745	12-7-14	J	JENNIFER ANN YOHO	TH EXPLORATION LLC	1/8+	213A 699	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24666	12-7-14	J	CHERYL A INSHAM	TH EXPLORATION LLC	1/8+	218A 393	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24667	12-7-14	J	CARL W WHITE	TH EXPLORATION LLC	1/8+	219A 391	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25019	12-7-14	J	ELAINE F BROWNING	TH EXPLORATION LLC	1/8+	221A 214	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25023	12-7-14	J	CHARLES MICHAEL SMITH AND CHERIE L SMITH	TH EXPLORATION LLC	1/8+	221A 206	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25273	12-7-14	J	JAMES R WHITE AND FRANKIE L WHITE	TH EXPLORATION LLC	1/8+	221A 874	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*26900	12-7-14	J	NINA K ALTHOFF AND RONALD D ALTHOFF	TH EXPLORATION LLC	1/8+	225A 778	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*29375	12-7-14	J	STARIA K RICHMOND	TH EXPLORATION LLC	1/8+	250A 456	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*30216	12-7-14	J	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	254A 335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39276	12-7-14	J	THE PYETT TRUST VICK M FERRIS TRUSTEE	TH EXPLORATION LLC	1/8+	261A 880	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39972	12-7-14	J	WAYNE BABER	TH EXPLORATION LLC	1/8+	278A 816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39973	12-7-14	J	MATTHEW J ROHR	TH EXPLORATION LLC	1/8+	278A 814	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-3	L	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001	STONE ENERGY CORPORATION	1/8+	151A 540	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
10*40056	12-7-3	L	MATTHEW J ROHR AND WAYNE BABER	TH EXPLORATION LLC	1/8+	278A 810	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-3	M	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001	STONE ENERGY CORPORATION	1/8+	151A 540	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-3	M	DRU W BILLS AND ANDREA BILLS	ANTERO RESOURCES CORPORATION	1/8+	167A 796	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-3	M	ELIZABETH A BEACHELL, TRUSTEE OF THE MCCALL 2016	EQT PRODUCTION COMPANY	1/8+	277A 615											**FORCE POOL**
10*22207	12-7-3	N	DELAWARE TRUST DTD 5/14/2016	TH EXPLORATION LLC	1/8+	202A 782	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-3	N	ROBERT JOSEPH COLEMAN	TH EXPLORATION LLC	1/8+	202A 782	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-3	N	JOHN J MENSORE, TULANE B MENSORE, ESTA MARIE MCCALL AND JOHN J MENSORE, TRUSTEE UNDER JOHN J MENSORE REV TR DTD 7/12/2001	STONE ENERGY CORPORATION	1/8+	151A 540	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-3	N	ELIZABETH A BEACHELL, TRUSTEE OF THE MCCALL 2016	EQT PRODUCTION COMPANY	1/8+	277A 615											**FORCE POOL**
FORCE POOL	12-7-3	R	MAPW, LLC	EQT PRODUCTION COMPANY	1/8+	219A 884											**FORCE POOL**
FORCE POOL	12-7-3	R	CAROL ANN EALY BRECKENRIDGE	STONE ENERGY CORPORATION	1/8+	167A 749	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-3	R	DAVID ROY EALY	STONE ENERGY CORPORATION	1/8+	167A 735	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-3	R	ELLEN KAY EALY SHOOK	STONE ENERGY CORPORATION	1/8+	167A 741	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-3	R	JAMES W ARMAN	STONE ENERGY CORPORATION	1/8+	170A 571	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	FEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT		
FORCE POOL	12-7-53	R	LARRY D GARNER	EQT PRODUCTION COMPANY	1/8+	255A 841	Stone Energy Corp to EQT Production Company: 183A/305									**FORCE POOL**	
FORCE POOL	12-7-53	R	RICHARD H ARMAN	STONE ENERGY CORPORATION	1/8+	170A 569	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-53	R	ROGER E WOODINGTON	STONE ENERGY CORPORATION	1/8+	170A 567	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-53	R	TAMALA P WOOD AND JAMES G WOOD	STONE ENERGY CORPORATION	1/8+	166A 845	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-53	R	THOMAS D ARMAN	STONE ENERGY CORPORATION	1/8+	170A 561	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-53	R	THOMAS D GARNER	EQT PRODUCTION COMPANY	1/8+	255A 779											**FORCE POOL**
FORCE POOL	12-7-53	R	VICKI S VOORHIS AND NORMAN K VOORHIS	STONE ENERGY CORPORATION	1/8+	170A 563	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-53	R	BARBARA A EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 495	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-53	R	DEBRA K EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 491	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-53	R	DAVID M EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 493	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-53	R	MARY MARGARET STERLING	EQT PRODUCTION COMPANY	1/8+	233A 359											**FORCE POOL**
PENDING	12-7-53	R	LINDA L NUZUM	ANTERO RESOURCES CORPORATION	1/8+	300A 545		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Antero Resources Corporation to TH Exploration LLC
FORCE POOL	12-7-53	R	SHARON L BURTON AND ROBERT W BURTON	EQT PRODUCTION COMPANY	1/8+	227A 233											**FORCE POOL**
FORCE POOL	12-7-53	R	DARIA F PALMER	EQT PRODUCTION COMPANY	1/8+	233A 102											**FORCE POOL**
FORCE POOL	12-7-53	R	CHRISTOPHER F PALMER AND BEVERLY PALMER	EQT PRODUCTION COMPANY	1/8+	233A 104											**FORCE POOL**
FORCE POOL	12-7-53	R	CHARLES W KOLISH SR AND KAREN KOLISH	EQT PRODUCTION COMPANY	1/8+	235A 195											**FORCE POOL**
FORCE POOL	12-7-53	R	CHARLES W KOLISH JR AND JILL KOLISH	EQT PRODUCTION COMPANY	1/8+	235A 180											**FORCE POOL**
FORCE POOL	12-7-53	R	SUSAN G ROSIER	EQT PRODUCTION COMPANY	1/8+	235A 207											**FORCE POOL**
10*40341	12-7-53	R	R SHANE GODDARD AND KATHRYN R GODDARD	TH EXPLORATION LLC	1/8+	PENDING		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40959	12-7-53	R	THELMA NELL PALMER	TH EXPLORATION LLC	1/8+	301A 62		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-53	R	PERKINS OIL & GAS INC	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-53	R	JOHN RICHARD NUZUM	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-53	R	THREE RIVERS ROYALTY II LLC	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-53	R	LISA MARIAN BEERS	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-53	R	ANITA LOUISE CROGHAN	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-54	S	RIDGETOP ROYALTIES, LLC	STONE ENERGY CORPORATION	1/8+	170A 565	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	MAPW LLC	EQT PRODUCTION COMPANY	1/8+	219A 484											**FORCE POOL**
FORCE POOL	12-7-54	S	CAROL ANN EALY BRECKENRIDGE	STONE ENERGY CORPORATION	1/8+	167A 749	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	DAVID ROY EALY	STONE ENERGY CORPORATION	1/8+	167A 735	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	ELLEN KAY EALY SHOOK	STONE ENERGY CORPORATION	1/8+	167A 741	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	JAMES W ARMAN	STONE ENERGY CORPORATION	1/8+	170A 571	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	LARRY D GARNER	EQT PRODUCTION COMPANY	1/8+	255A 841											**FORCE POOL**
FORCE POOL	12-7-54	S	RICHARD H ARMAN	STONE ENERGY CORPORATION	1/8+	170A 569	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	THOMAS D ARMAN	STONE ENERGY CORPORATION	1/8+	170A 567	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	TAMALA P WOOD AND JAMES G WOOD	STONE ENERGY CORPORATION	1/8+	166A 845	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	RICHARD H ARMAN	STONE ENERGY CORPORATION	1/8+	170A 561	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	THOMAS D ARMAN	EQT PRODUCTION COMPANY	1/8+	255A 779											**FORCE POOL**

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	FEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT		
FORCE POOL	12-7-54	S	VICKI S VOORHIS AND NORMAN K VOORHIS	STONE ENERGY CORPORATION	1/8+	170A 563	Stone Energy Corp to EQT Production Company: 183A/305									**FORCE POOL**	
FORCE POOL	12-7-54	S	BARBARA A EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 495	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-54	S	DEBRA K EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 491	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-54	S	DAVID M EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 493	Antero Resources Corporation to EQT Production Company: 231A/22										**FORCE POOL**
FORCE POOL	12-7-54	S	RIDGETOP ROYALTIES, LLC	STONE ENERGY CORPORATION	1/8+	170A 565	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-54	S	MARY MARGARET STERLING	EQT PRODUCTION COMPANY	1/8+	233A 359											**FORCE POOL**
PENDING	12-7-54	S	LINDA L NUZUM	ANTERO RESOURCES CORPORATION	1/8+	360A 545	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Antero Resources Corporation to TH Exploration LLC
FORCE POOL	12-7-54	S	SHARON L BURTON AND ROBERT W BURTON	EQT PRODUCTION COMPANY	1/8+	227A 233											**FORCE POOL**
FORCE POOL	12-7-54	S	DARIA F PALMER	EQT PRODUCTION COMPANY	1/8+	233A 102											**FORCE POOL**
FORCE POOL	12-7-54	S	CHRISTOPHER F PALMER AND BEVERLY PALMER	EQT PRODUCTION COMPANY	1/8+	233A 104											**FORCE POOL**
FORCE POOL	12-7-54	S	CHARLES W KOLISH SR AND KAREN KOLISH	EQT PRODUCTION COMPANY	1/8+	235A 195											**FORCE POOL**
FORCE POOL	12-7-54	S	CHARLES W KOLISH JR AND JILL KOLISH	EQT PRODUCTION COMPANY	1/8+	235A 180											**FORCE POOL**
FORCE POOL	12-7-54	S	SUSAN G ROSIER	EQT PRODUCTION COMPANY	1/8+	235A 207											**FORCE POOL**
10*40341	12-7-54	S	R SHANE GODDARD AND KATHRYN R GODDARD	TH EXPLORATION LLC	1/8+	PENDING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40959	12-7-54	S	THELMA NELL PALMER	TH EXPLORATION LLC	1/8+	301A 62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-54	S	PERKINS OIL & GAS INC	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-54	S	JOHN RICHARD NUZUM	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-54	S	THREE RIVERS ROYALTY II LLC	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-54	S	LISA MARIAN BEERS	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-54	S	ANITA LOUISE CROGHAN	UNLEASED	NA	NA NA											**FORCE POOL**
FORCE POOL	12-7-2	U	CAROL ANN EALY BRECKENRIDGE	STONE ENERGY CORPORATION	1/8+	167A 749	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	DAVID ROY EALY AND KAREN A EALY	STONE ENERGY CORPORATION	1/8+	167A 735	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	ELLEN KAY EALY SHOOK	STONE ENERGY CORPORATION	1/8+	167A 741	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	LARRY D GARNER	EQT PRODUCTION COMPANY	1/8+	255A 841											**FORCE POOL**
FORCE POOL	12-7-2	U	ROGER E WOODINGTON	STONE ENERGY CORPORATION	1/8+	170A 567	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	TAMALA P WOOD AND JAMES G WOOD	STONE ENERGY CORPORATION	1/8+	166A 845	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	THOMAS E GARNER	EQT PRODUCTION COMPANY	1/8+	255A 779											**FORCE POOL**
FORCE POOL	12-7-2	U	VICKI S VOORHIS AND NORMAN K VOORHIS	STONE ENERGY CORPORATION	1/8+	170A 563	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	THOMAS D ARMAN	STONE ENERGY CORPORATION	1/8+	170A 561	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	RIDGETOP ROYALTIES, LLC	STONE ENERGY CORPORATION	1/8+	170A 565	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	RICHARD H ARMAN	STONE ENERGY CORPORATION	1/8+	170A 569	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	JAMES W ARMAN	STONE ENERGY CORPORATION	1/8+	170A 571	Stone Energy Corp to EQT Production Company: 183A/305										**FORCE POOL**
FORCE POOL	12-7-2	U	DEBRA K EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 491	Antero Resources Corporation to EQT Production Company: 231A/59										**FORCE POOL**
FORCE POOL	12-7-2	U	DAVID M EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 493	Antero Resources Corporation to EQT Production Company: 231A/59										**FORCE POOL**

LEASE ID	TMP	TAG	GRANTOR, LESSOR, ETC.	GRANTEE, LESSEE, ETC.	ROYALTY	DEED BOOK/PAGE	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	ASSIGNMENT	
FORCE POOL	12-7-2	U	BARBARA A EDDY	ANTERO RESOURCES CORPORATION	1/8+	173A 495	Antero Resources Corporation to EQT Production Company: 231A/59	**FORCE POOL**								
FORCE POOL	12-7-2	U	MARY MARGARET STERLING	EQT PRODUCTION COMPANY	1/8+	293A 359		**FORCE POOL**								
PENDING	12-7-2	U	LINDA L NUZUM	ANTERO RESOURCES CORPORATION	1/8+	300A 545	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Antero Resources Corporation to TH Exploration LLC
FORCE POOL	12-7-2	U	SHARON L BURTON AND ROBERT W BURTON	EQT PRODUCTION COMPANY	1/8+	227A 233	**FORCE POOL**									
FORCE POOL	12-7-2	U	DARIA F. PALMER	EQT PRODUCTION COMPANY	1/8+	233A 102	**FORCE POOL**									
FORCE POOL	12-7-2	U	CHRISTOPHER F. PALMER AND BEVERLY PALMER	EQT PRODUCTION COMPANY	1/8+	233A 104	**FORCE POOL**									
10*40341	12-7-2	U	R SHANE AND KATHRYN GODDARD	TH EXPLORATION LLC	1/8+	PENDING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*40837	12-7-2	U	THELMA NELL PALMER	TH EXPLORATION LLC	1/8+	298A 690	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-7-2	U	LISA P BEERS AND GARY J BEERS	UNLEASED	NA	NA NA	**FORCE POOL**									
FORCE POOL	12-7-2	U	ANITA LOUISE CROGHAN	UNLEASED	NA	NA NA	**FORCE POOL**									
FORCE POOL	12-7-2	U	PERKINS OIL & GAS INC	UNLEASED	NA	NA NA	**FORCE POOL**									
FORCE POOL	12-7-2	U	JOHN RICHARD NUZUM	UNLEASED	NA	NA NA	**FORCE POOL**									
FORCE POOL	12-7-2	U	THREE RIVERS ROYALTY II LLC	UNLEASED	NA	NA NA	**FORCE POOL**									
FORCE POOL	12-7-57	BB	MAPW, LLC	EQT PRODUCTION COMPANY	1/8+	219A 494	**FORCE POOL**									
10*24617	12-7-7	DD	BETTY LOU GOUDY	TH EXPLORATION LLC	1/8+	220A 864	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	12-1-20	GG	SHIBEN ESTATES INC	STONE ENERGY CORPORATION	1/8+	155A 629	Stone Energy Corp to EQT Production Company: 183A/186	**FORCE POOL**								
FORCE POOL	12-1-20	GG	UNKNOWN HEIRS OF ALENE MCKIMIE	UNLEASED	NA	NA NA	**FORCE POOL**									
10*21118	12-1-20	GG	VENABLE ROYALTY LTD AND V2 LP	TH EXPLORATION LLC	1/8+	199A 572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39159	12-1-20	GG	LEE AND HALL ROYALTIES	TH EXPLORATION LLC	1/8+	260A 466	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A