



---

west virginia department of environmental protection

---

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

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, August 17, 2020  
WELL WORK PERMIT  
Horizontal 6A / New Drill

TUG HILL OPERATING, LLC  
380 SOUTHPOINTE BLVD

CANONSBURG, PA 15317

Re: Permit approval for MCMASTERS N-12HU  
47-051-02316-00-00

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

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

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

James A. Martin  
Chief

Operator's Well Number: MCMASTERS N-12HU  
Farm Name: ROBERT L. SHIELDS, ET AL  
U.S. WELL NUMBER: 47-051-02316-00-00  
Horizontal 6A New Drill  
Date Issued: 8/17/2020

# PERMIT CONDITIONS

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

## CONDITIONS

---

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

## PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov).



---

west virginia department of environmental protection

---

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

Randall M. Albert, Chairman  
dep.wv.gov

August 4, 2020

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

RE: Application for Deep Well Permit – API #47-051-02316

COMPANY: Tug Hill Operating, LLC

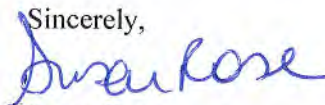
FARM: Robert L. Shields, et al McMasters N-12HU

COUNTY: Marshall DISTRICT: Franklin QUAD: Powhatan Point

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

**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 Marshall Franklin Powhatan Point Z  
Operator ID County District Quadrangle

2) Operator's Well Number: McMasters N-12HU Well Pad Name: Shields

3) Farm Name/Surface Owner: Robert L. Shields, et al Public Road Access: Burch Ridge Road - CR 29

4) Elevation, current ground: 1206' Elevation, proposed post-construction: 1206'

5) Well Type (a) Gas  Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_

Other \_\_\_\_\_

(b) If Gas Shallow \_\_\_\_\_ Deep

Horizontal

6) Existing Pad: Yes or No Yes

*Handwritten signature and date: 3/4/2020*

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Point Pleasant is the target formation at a depth of 11,122' - 11,268' - thickness of 146' and anticipated pressure of approx. 9500 psi.

8) Proposed Total Vertical Depth: 11,418'

9) Formation at Total Vertical Depth: Trenton, plug back to Reedsville

10) Proposed Total Measured Depth: 22,465'

11) Proposed Horizontal Leg Length: 10,721.08'

12) Approximate Fresh Water Strata Depths: 70' ; 802'

13) Method to Determine Fresh Water Depths: Offset well reports or noticeable flow at the flowline or when need to start soaping

14) Approximate Saltwater Depths: 2,167'

15) Approximate Coal Seam Depths: Sewickley Coal - 701' ; Pittsburgh Coal - 796'

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

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: \_\_\_\_\_

18)

**CASING AND TUBING PROGRAM**

<b>TYPE</b>	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	30"	NEW	BW	BW	120'	120'	259FT^3(CTS)
Fresh Water	20"	NEW	J55	106.5#	900'	900'	1,463FT^3(CTS)
Coal	13 3/8"	NEW	J55	54.5#	2600'	2600'	1,842FT^3(CTS)
Intermediate	9 5/8"	NEW	HPP110	47#	10,100'	10,100'	3,292FT^3(CTS)
Production	5 1/2"	NEW	P110	23#	22,465'	22,465'	5,318'FT^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		10,803'	
Liners							

*Jan 1/23/2020*

<b>TYPE</b>	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
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	1.99
Production	5 1/2"	8 1/2"	.415	16,510	10,864	SEE #24	1.18
Tubing	2 7/8"			11,385	11,624		
Liners							

**PACKERS**

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

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

WW-6B  
(10/14)

API NO. 47-051 - \_\_\_\_\_  
OPERATOR WELL NO. McMasters N-12HU  
Well Pad Name: Shields

*Jm*  
*2/4/2020*

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 (10,303'). 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 26,797,500 lb proppant and 414,309 bbl of water. Max rate = 80 bpm; max psi = 12,000#.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 17.76 acres

22) Area to be disturbed for well pad only, less access road (acres): 5.84 acres

23) Describe centralizer placement for each casing string:

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

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

\*See Attachment

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

FEB 13 2020

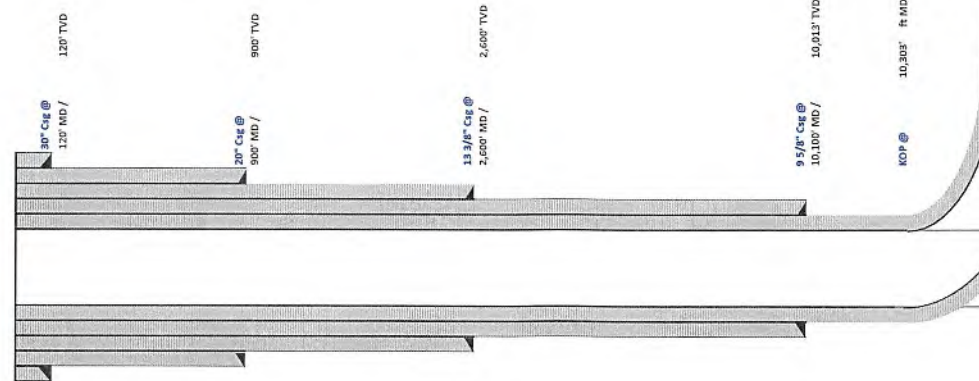
WV Department of  
Environmental Protection

\*Note: Attach additional sheets as needed.

4705 02316



WELL NAME: McMasters N-12HU  
 STATE: WV COUNTY: Marshall  
 DISTRICT: Franklin  
 DF Elev: 1,206' GL Elev: 1,206'  
 TD: 22,465'  
 TH Latitude: 39.760066  
 TH Longitude: -80.787561  
 BH Latitude: 39.78548199  
 BH Longitude: -80.809716



Formation	Depth TVD
Deepest Fresh Water	802'
Sewickley Coal	701'
Pittsburgh Coal	796'
Big Lime	1,946'
Berea	2,484'
Tully	6,341'
Marcellus	6,434'
Onondaga	6,484'
Salina	7,175'
Lockport	8,202'
Utica	10,867'
Point Pleasant	11,122'
Landing Depth	11,172'
Trenton	11,268'
Pilot Hole TD	11,418'

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	900'	900'	106.5	J55	Surface
Intermediate 1	17 1/2	13 3/8	2,600'	2,600'	54.5	J55	Surface
Intermediate 2	12 1/4	9 5/8	10,100'	10,013'	47	HP110	Surface
Production	8 1/2	5 1/2	22,465'	10,985'	23	P110	Surface

CEMENT SUMMARY				DRILLING DETAILS	
Sacks	Class	Density	Fluid Type	Centralizer Notes	
338	A	15.6	Air	None	
1,578	A	15.6	Air	3 Centralizers at equal distance	
1,995	A	15	Air	1 Centralizer every other ft	
2,800	A	14.5	Air	1 Centralizer every other ft	
4,711	A	15	Air / SOBM	1 every other joint in lateral, 1 per joint in curve, 1 every other ft to 5'	

*JW*  
 1/23/2020

RECEIVED  
 Office of Oil and Gas  
 FEB 1 2020  
 PH TVD = 1500'  
 WV Department of Environmental Protection

Pilot Hole  
 PH TD @ 11,418'  
 Lateral TD @ 22,465'  
 10,985' ft TVD  
 11,746' MD / 11,172' TVD  
 10,303' ft MD  
 9 5/8" Csg @ 10,100' MD / 10,013' TVD  
 13 3/8" Csg @ 2,600' MD / 2,600' TVD  
 20" Csg @ 900' MD / 900' TVD  
 30" Csg @ 120' MD / 120' TVD





## Tug Hill Operating, LLC Casing and Cement Program

### McMasters N-12HU

#### Casing

	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	20"	J55	26"	900'	CTS
Intermediate 1	13 3/8"	J55	17 1/2"	2,600'	CTS
Intermediate 2	9 5/8"	HP110	12 1/4"	10,100'	CTS
Production	5 1/2"	P110	8 1/2"	22,465'	CTS

#### Cement

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 15.6 ppg, Y=1.99

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 15.2ppg, Y = 1.18

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

WW-9  
(4/16)

API Number 47 - 051 -

Operator's Well No. McMasters N-12HU

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Tug Hill Operating, LLC OP Code 494510851

Watershed (HUC 10) Fish Creek Quadrangle Powhatan Point 7.5'

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

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: AST Tanks with proper containment will be used for staging fresh water for frac and flow back water

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? AST Tanks will be used with proper contain

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number UIC 2459, UIC 965, UIC 359, UIC 2D0732540, UIC 2D0732523 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Yes - For Vertical and Horizontal Drilling

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

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base

Additives to be used in drilling medium? Barite for weight

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. All drill cuttings to be disposed of in a Landfill

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

-Landfill or offsite name/permit number? Wetzel County Sanitary Landfill (SWF-1021 / WV0109185) and Westmoreland Sanitary Landfill, LLC (SAN1405 / PA DEP EC#1386426)

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

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

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

Company Official Signature James A. Pancake

Company Official (Typed Name) Jim Pancake

Company Official Title VP Geosciences

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

Subscribed and sworn before me this 14 day of JANUARY, 2020

Maureen A Stead

Notary Public

My commission expires 1/28/23

Commonwealth of Pennsylvania - Notary Seal  
MAUREEN A STEAD - Notary Public  
Washington County  
My Commission Expires Jan 28, 2023  
Commission Number 1259926

Tug Hill Operating, LLC

Proposed Revegetation Treatment: Acres Disturbed 17.76 Prevegetation pH 6.0

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch 2.5 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Orchard Grass	12
Spring Oats	96	Ladino	3
		White Clover	2

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Jim Anderson*

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

RECEIVED  
Office of Oil and Gas

FEB 13 2020

Title: WVDEP Oil and Gas Inspector

Date: 1/14/2020 WV Department of Environmental Protection

Field Reviewed?  Yes  No

WW-9

# PROPOSED McMASTERS N-12HU

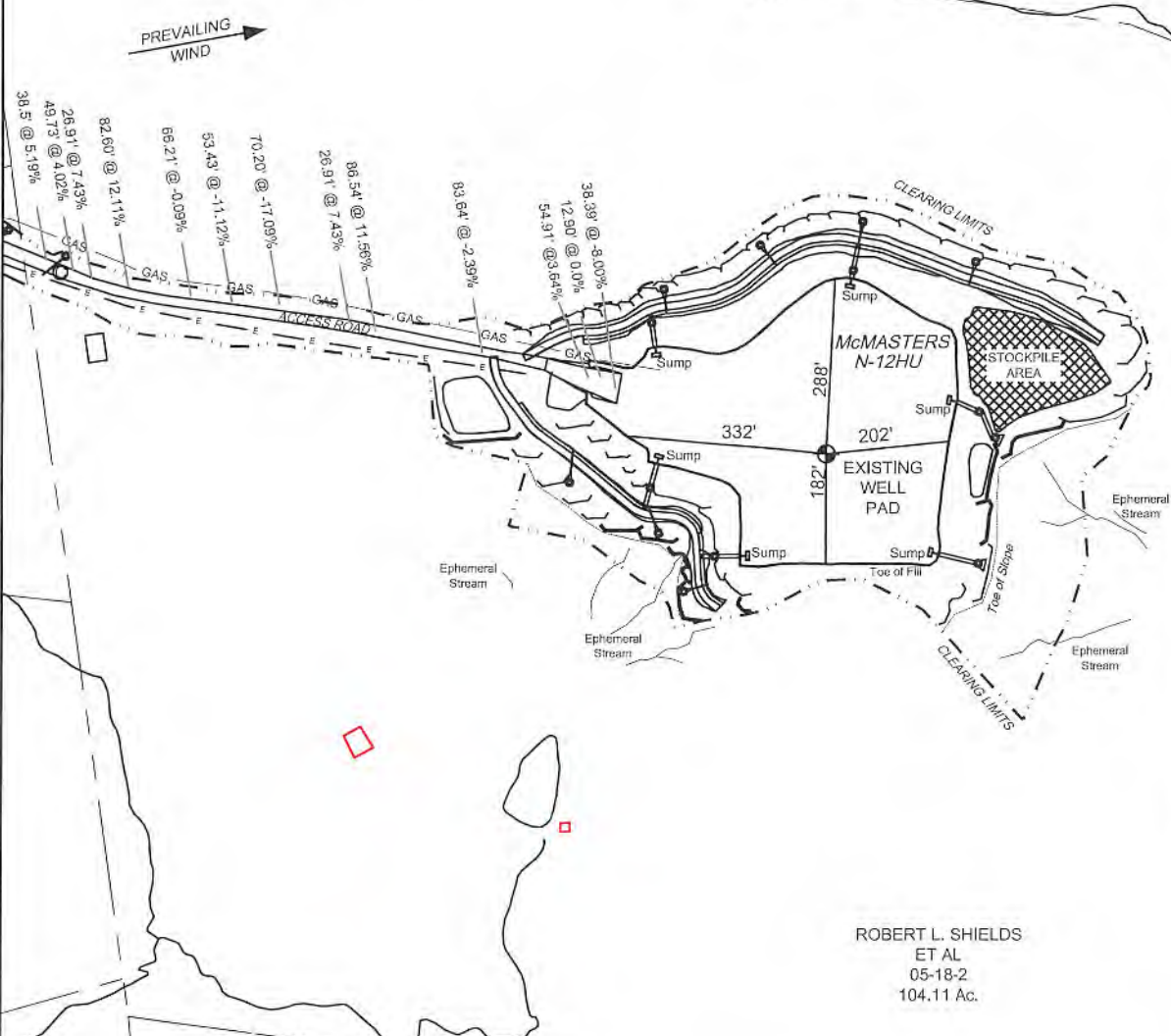
SUPPLEMENT PG 1

DIANA HENRY  
HAYNES &  
CAROL C.  
HENRY  
05-18-1  
62.908 Ac.

OLAN V. &  
PATRICIA E.  
RUTAN  
05-18-3  
43.677 Ac.

DRAWING NOT  
TO SCALE

PREVAILING  
WIND



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

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

ENTRANCES ONTO PUBLIC ROADS SHALL BE CONSTRUCTED OR MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATIONS. ADDITIONAL PERMITS MAY BE REQUIRED.

TEMPORARILY SEED AND MULCH ALL SLOPES UPON CONSTRUCTION OF LOCATION.

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

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

ROBERT L. SHIELDS  
ET AL  
05-18-2  
104.11 Ac.

DUANE BRUNN  
05-18-24  
102 Ac.

**LEGEND**

- Note:
- ⊙ — Denotes existing culvert with appropriate sediment outlet control (Rip Rap splash pad).
  - Silt Fence and or Sediment and Erosion Control Measure.
  - - - Surface Boundary

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

**Jackson Surveying Inc.**  
2413 E. Pike St. #12  
Clarksburg, WV 26301  
Phone: 504-623-5551

TOPO SECTION:		OPERATOR:	
POWHATAN POINT 7.5'		PREPARED FOR:	
COUNTY	DISTRICT	TUG HILL OPERATING, LLC	
MARSHALL	FRANKLIN	380 SOUTHPOINTE BLVD	
DRAWN BY	JOB NO.	SUITE 200	
J.D.C.	494510851	CANONSBURG, PA 15317	
		DATE	SCALE
		1-7-2020	NONE

**TUG HILL  
OPERATING**

WW-9

# PROPOSED McMASTERS N-12HU

SUPPLEMENT PG 1

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

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

ENTRANCES ONTO PUBLIC ROADS SHALL BE CONSTRUCTED OR MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATIONS. ADDITIONAL PERMITS MAY BE REQUIRED.

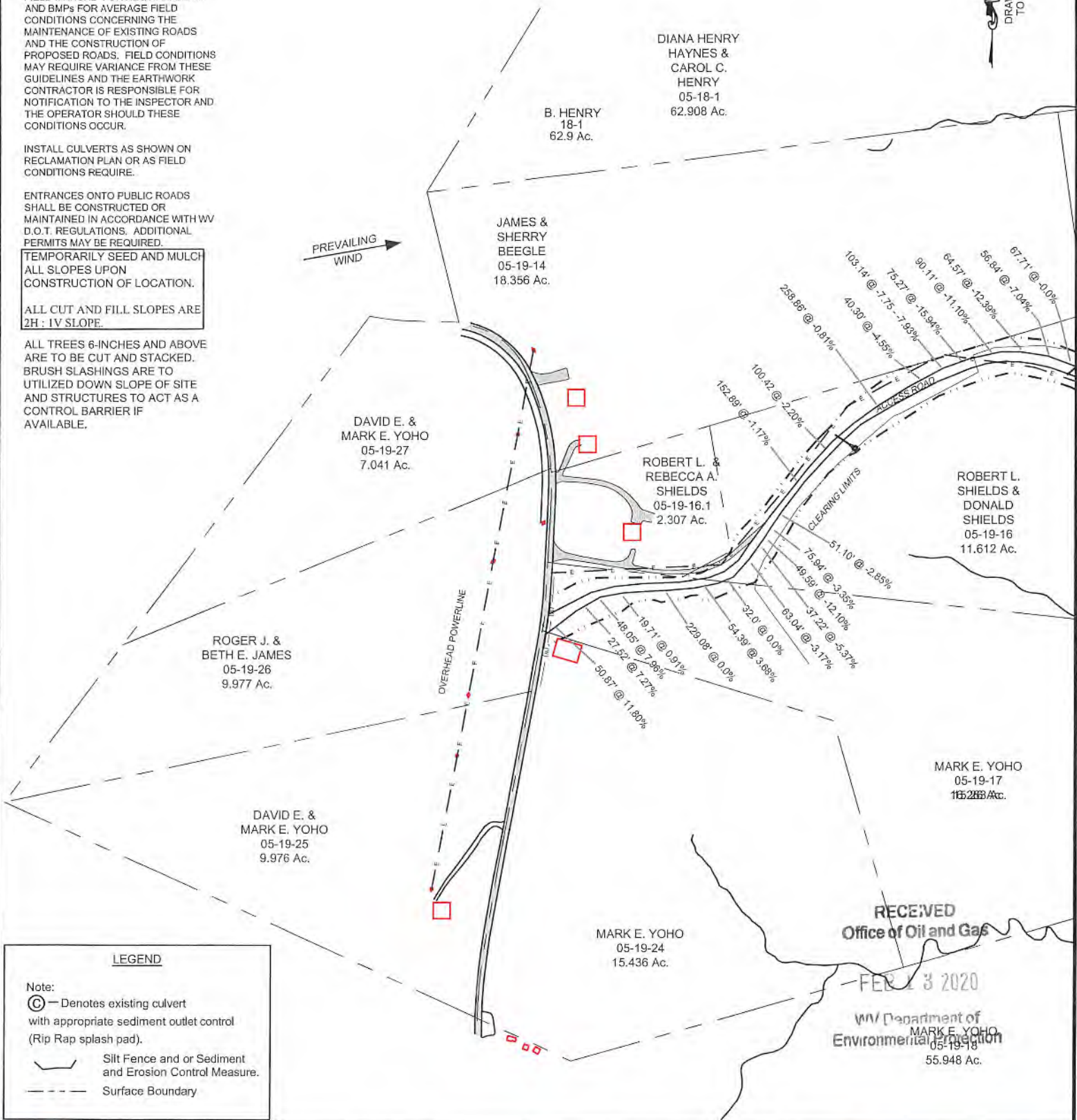
TEMPORARILY SEED AND MULCH ALL SLOPES UPON CONSTRUCTION OF LOCATION.

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

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

DRAWING NOT TO SCALE

PREVAILING WIND



**LEGEND**

- Note:
- ⊙ — Denotes existing culvert with appropriate sediment outlet control (Rip Rap splash pad).
  - Silt Fence and or Sediment and Erosion Control Measure.
  - - - Surface Boundary



**Jackson Surveying Inc.**  
2413 E. Pike St. #112  
Clarksburg, WV 26301  
Phone: 304-628-6861

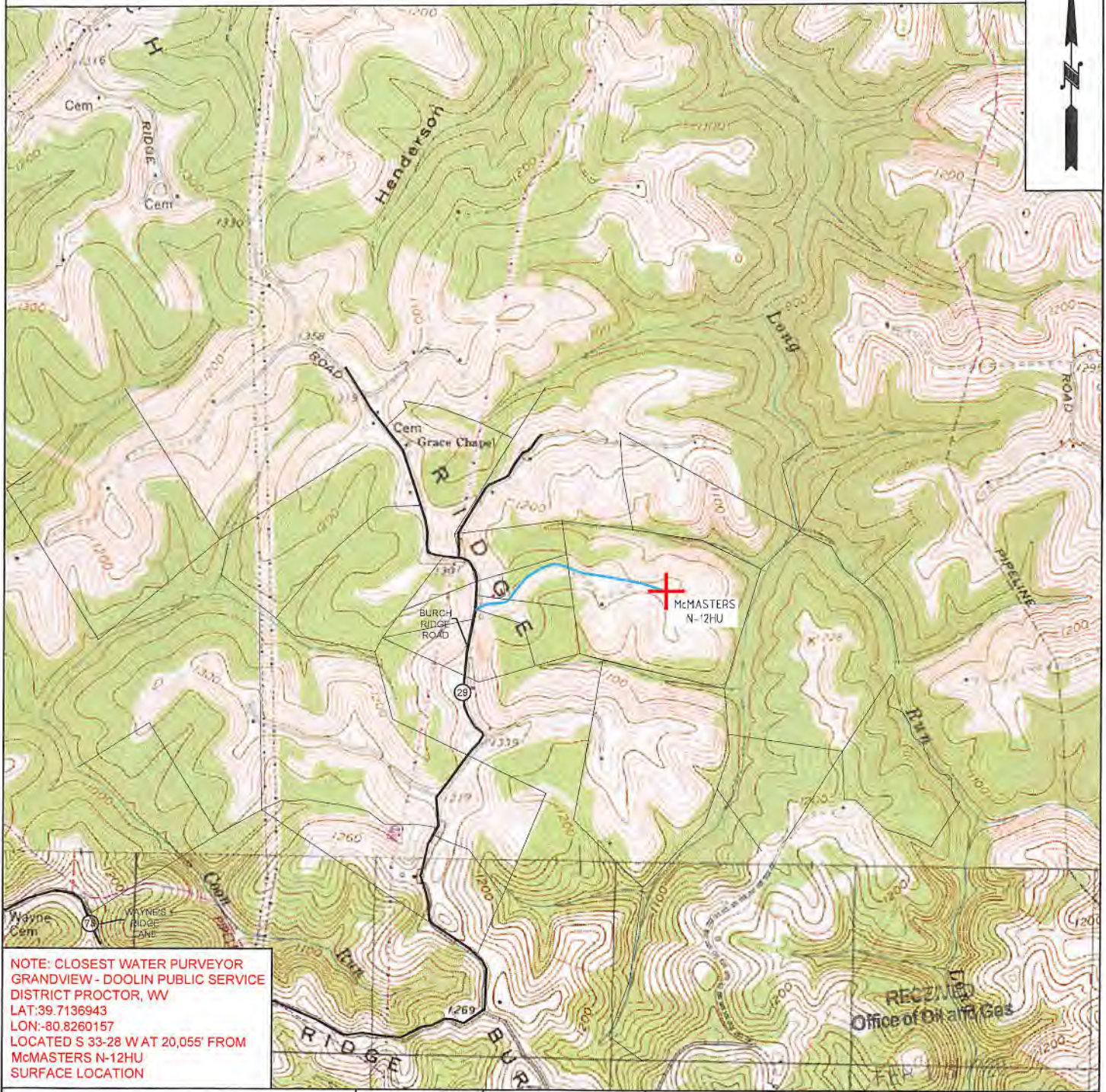
TOPO SECTION:		OPERATOR:	
POWATAN POINT 7.5"		PREPARED FOR:	
COUNTY	DISTRICT	TUG HILL OPERATING, LLC	
MARSHALL	FRANKLIN	380 SOUTHPOINTE BLVD	
DRAWN BY	JOB NO.	SUITE 200	
J.D.C	494510851	CANONSBURG, PA 15317	
		DATE	SCALE
		1-7-2020	NONE



WW-9

# PROPOSED McMASTERS N-12HU

SUPPLEMENT PG 2



NOTE: CLOSEST WATER PURVEYOR  
GRANDVIEW - DOOLIN PUBLIC SERVICE  
DISTRICT PROCTOR, WV  
LAT: 39.7136943  
LON: -80.8260157  
LOCATED S 33-28 W AT 20,055' FROM  
McMASTERS N-12HU  
SURFACE LOCATION



**OPERATOR** 494510851  
TUG HILL OPERATING, LLC  
380 SOUTHPOINTE BLVD  
SUITE 200  
CANONSBURG, PA 15317

**TOPO SECTION**  
POWHATAN POINT 7.5'  
**SCALE:**  
1" = 2000'

**LEASE NAME**  
McMASTERS  
**DATE:**  
DATE: 1-7-2020



# Well Site Safety Plan

## Tug Hill Operating, LLC

*JW*  
*1/23/2020*

Well Name: McMasters N-12HU

Pad Location: Shields Pad  
Marshall County, West Virginia

UTM (meters), NAD83, Zone 17:

Northing: 4,401,149.03

Easting: 518,197.06

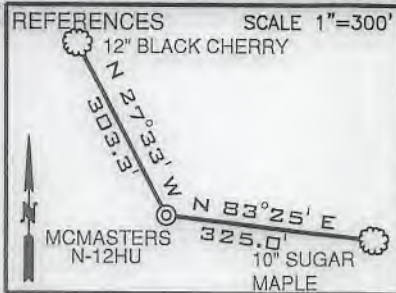
January 2020

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

**MCMASTERS LEASE**  
**WELL N-12HU**  
**327.5983 ACRES**



TOP HOLE LATITUDE: 39°47'30"  
BOTTOM HOLE LATITUDE: 39°47'30"

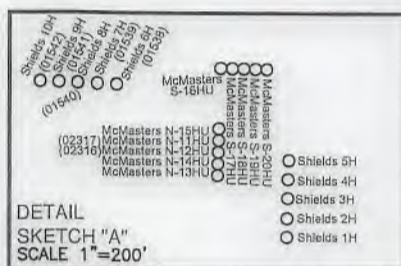
(BH) BOTTOM HOLE LONGITUDE: 80°47'30"  
(TH) TOP HOLE LONGITUDE: 80°45'00"

LINE	BEARING	DISTANCE
L1	S 70°33' E	1428.85'
L2	S 41°23' W	1275.95'
L3	S 44°01' E	141.46'
L4	S 38°10' W	667.78'

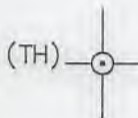


**LEGEND**

- LEASED TRACTS
- SURFACE TRACTS
- WELL LATERAL
- POINT PLEASANT LEGS
- UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET



(+) 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 MARSHALL COUNTY, WV IN MARCH, 2019. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
- WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
- ALL DEEP WELLS SHOWN ON THIS PLAT.
- BOUNDARIES ALONG ROADWAYS ARE BASED UPON MEMORANDUM BY DICKIE, MCGAMEY & CHILCOTE, P.C. FILE 0058304.0401147

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 59°49' W	50.77'	66.15'	52.10'
C2	N 80°31' W	64.54'	125.58'	65.27'
C3	N 57°52' W	120.79'	399.75'	121.26'
C4	N 45°11' W	206.80'	1200.77'	207.05'
C5	N 34°03' W	461.80'	2321.54'	462.56'

**SURFACE HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,401,149.03  
E) 518,197.06

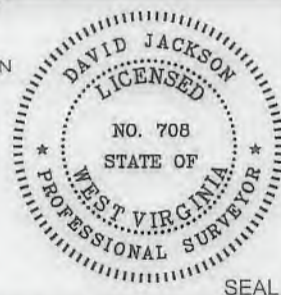
**LANDING POINT 1**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,401,129.35  
E) 517,914.14

**BOTTOM HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,403,965.57  
E) 516,293.30

FILE NUMBER \_\_\_\_\_  
DRAWING NUMBER: MCMASTERS\_N-12HU\_REV1  
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

P.S. 708  
*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



WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
DATE: FEBRUARY 12, 2020  
REVISED: JULY 29, 2020  
OPERATORS WELL NO. MCMASTERS N-12HU  
API WELL NO. 47-051-02316.H6A  
STATE COUNTY PERMIT

LOCATION ELEVATION 1207.50' WATERSHED (HUC 10) FISH CREEK (HUC-10)  
DISTRICT FRANKLIN COUNTY MARSHALL  
QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER SEE WW-6A1 FORM

SURFACE OWNER ROBERT L. SHIELDS, ET AL ACREAGE 104.11  
OIL & GAS ROYALTY OWNER ROBERT L. SHIELDS, ET AL LEASE ACREAGE 104.11  
PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_  
PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE (SPECIFY) \_\_\_\_\_

TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,418' TMD: 22,465'  
WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER  
CT CORPORATION SYSTEM  
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD  
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME  
PERMIT





form wwf

**MCMASTERS LEASE  
WELL N-12HU  
327.5983 ± ACRES**

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES	Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S1	05-23-11.1	John H. & Sonya D. Holliday	46.482	S61	05-18-29	Carl G. Berg	5.319
S2	05-23-11.4	Evelyn L. Hudson	10.879	S62	05-18-31	Kenneth E. Rastall	6.94
S3	05-23-13	Linda D. Greathouse	14.24	S63	05-18-32.1	Lori D. Carpenter	5.545
S4	05-23-9.2	Linda D. Greathouse	25.58	S64	05-18-32	Kenneth E. Rastall	5.335
S5	05-23-14	Dominion Transmission Inc.	59.5	S65	05-18-13.8	Lori D. Carpenter	5.545
S6	05-23-9.3	Linda D. Greathouse	17.5	S66	05-18-33	Sandra & Glenn Whisler	5.343
S7	05-23-08	Carl David & Suzanne L. Guseman	29.5	S67	05-17-12	James & Jill C. Corley	3.33
S8	05-23-05	Daniel D. Rhyand	118.5	S68	05-17-12.1	Williams Ohio Valley Midstream LLC	1.67
S9	05-23-04	Abe J. Hochstetler	100.7	S69	05-17-10.5	Williams Ohio Valley Midstream LLC	4.24
S10	05-23-06	James A. Channing Et Al	48.0	S70	05-17-10	James A. Corley Et Al	92.61
S11	05-23-03	Abe J. Hochstetler	50.0	S71	05-17-10.1	James A. & Jill C. Corley	4.51
S12	05-23-2.1	William L. & Janice M. Wayne	2.364	S72	05-17-9.1	Jeri J. White	1.0
S13	05-18-21	Curtis E. & Michelle J. Hall	43.119	S73	05-17-9.2	Jeri J. White	7.136
S14	05-18-21.1	Rodney & Rhonda Jackson	5.47	S74	05-17-11	Kenneth N. Corley Et Ux	120.0
S15	05-23-02	Daniel J. & Danielle D. Lilley	77.636	S75	05-17-9.4	Vicki L. Bowen	60.3
S16	05-18-22	Rodney & Rhonda Jackson	30.345	S76	05-17-9.3	James A. & Corley Et Ux	12.478
S17 B	05-18-24	Duane Brunn	102.0	S77	05-17-11.1	Randy W. Francis Et Ux	67.0
S18	05-18-23	XCL Midstream Operating LLC	110.0	S78	05-18-20	Wayne E. Channing Et Al	75.6
S19	05-19-18	Mark E. Yoho Et Ux	55.948	S79	05-18-21.2	David P. Lissan	1.0
S20 A	05-18-02	Robert L. Shields Et Al	104.11	S80	05-18-21.3	Stone Hill Minerals Holdings, LLC	0.811
S21 C	05-19-17	Mark A. Yoho	15.263	S81	05-23-8.1	William & Virginia Roupe	34.0
S22 D	05-19-16	Robert L. Shields & Donald Shields	11.612	S82	05-24-5.4	Thomas V. Tuttle Et Ux	38.244
S23 E	05-19-14	James & Sherry Beegle	18.356	S83	05-24-5.5	Sonny & Linda Lou Tagg	17.194
S24 F	05-18-1	Diana Henry Haynes & Carol C. Henry	62.908	S84	05-23.7.2	Florella Lou Weigand	6.354
S25 G	05-19-30	Ernie & Tammy Anderson	19.037	S85	05-23-7.1	Florella Lou Weigand	0.549
S26 H	05-19-13	Rona Lee Rice & Charles Franklin McCordle	94.925	S86	P/O 05-23-7	Terry E. Simms Et Ux	123.097
S27 I	05-19-13.1	Donald Shields	0.800	S87	05-24-5.1	James D. Watkins Et Ux	4.6
S28	05-18-3.1	Nikki L. & Jonathan Stevens	2.223	S88	05-24-5.2	James D. Watkins Et Ux	3.151
S29 J	05-19-8	CNX Gas Company LLC	40.0	S89	05-24-5	Robert C. Francis Et Ux (Life)	145.78
S30 M	05-19-7	Olan V. Rutan Et Ux	32.4801	S90	05-24-3.1	T.H. Exploration II LLC	5.50
S31 K	05-14-15	Robert L. Shields Et Al	53.0	S91	05-24-6	Terry E. Simms Et Ux	42.84
S32 L	05-14-14	Robert L. Shields Et Al	29.05	S92	05-23-10	Terry E. Simms Et Ux	38.95
S33 N	05-14-12	Dale R. Galleher Et Al	135.100	S93	05-23-11.7	Bryan L. Huggins	1.835
S34 O	05-14-12.1	Henry Wilson Plunkert Jr.	5.0	S94	05-23-11.2	Evelyn Hudson	1.154
S35 P	05-14-10	Wanda P. Rine, Life	126.03	S95	05-23-11	Roy F. Yoho	9.475
S36 Q	05-14-13	Ralph D. & Sally Jane Hoyt	222.18	S96	05-23-11.6	T.H. Exploration II, LLC	0.094
S37 R	05-14-9.2	Maria T. Flores	25.0	S97	05-25-20.2	James M. Zambotti	1.347
S38 S	05-12-21	Edward L. Gibson-Life	73.436	S98	05-25-20.3	James A. & Jo C. Estep	4.49
S39 T	05-12-14	Linda Hamilton Et Al	117.495	S99	05-23-11.5	Roy F. Yoho	2.25
S40	05-12-12.1	Linda L. Persinger Et Ux	148.09	S100	05-23-11.3	Colin R. Yoho	11.29
S41	05-12-11	Wesley R. Bryan & Wesley R. Bryan II	52.478	S101	05-23-13.1	James R. & Pamela J. Ferrell	0.75
S42	05-11-15	Lionel L. Persinger Ex Ux	93.0	S102	05-23-12	Mark A. Yoho	3.05
S43	05-15-01	Marcus Sharp & Angela R. Schlabach	121.0	S103	05-26-11	Mark A. Yoho	89.25
S44	05-15-15	Robert L. Shields Et Al	49.02	S104	05-23-9.4	Jackson R. Davis Sr. & Deanna L. Davis	2.087
S45	05-15-12	John David Petrock & Thomas Andrew Petrock	150.23	S105	05-23-9.1	John W. Van Orden Et Ux	23.376
S46	05-15-11	Diana Henry Haynes & Carol Henry	65.59	S106	05-26-7	Dominion Transmission, Inc.	71.0
S47	05-18-1.1	Charles F. & Diana L. Haynes	0.392	S107	05-26-5	Michael J. Wiley Et Al	65.0
S48	05-15-10	Mark Stanley Ruckman	153.75	S108	05-23-26	Michael J. Wiley Et Al	101.57
S49	05-18-04	Olan & Patricia Rutan	65.89	S109	05-23-27	Michael J. Wiley Et Al	33.14
S50	05-18-03	Olan V. & Patricia E. Rutan	43.677	S110	05-23-15	Henry Virginia Ethel Estate	15.5
S51	05-18-05	Terry Melott	8.14	S111	05-23.16.1	Donald B. Henry	1.97
S52	05-18-15.3	Charles Yeater	26.44	S112	05-23-16	Roy Friend Yoho Sr.	18.03
S53	05-18-15.4	Edward Lee Burge, Jr.	22.34	S113	05-23-17.3	William & Katherine Flewelling	5.018
S54	05-18-06	Charles Yeater	26.0	S114	05-23-17	Tammy & Thomas E. Brown	4.62
S55	05-18-07	Charles Yeater	24.22	S115	05-23-17.4	Tammy D. Meadows	2.605
S56	05-18-16	Charles Yeater	17.768	S116	05-23-17.2	Dick Rowan Jr. & Carol J. Rowan	14.920
S57	05-18-13	Southern Country Farms Inc.	11.054	S117	05-23-18	Abe J. Hochstetler	35.38
S58	05-18-59	Southern Country Farms Inc.	15.79	S118	05-23-4.1	XCL Midstream Operating LLC	2.16
S59	05-18-30	Jon Schmidt Et Al	5.46	S119	05-23-4.2	XCL Midstream Operating LLC	1.17
S60	05-18-13.10	Carl Berg	10.88	S120	05-23-18.1	Mark A. Yoho	7.8
				S121	05-23-19	Doty Cemetery	1.0

Lease No.	Tags	Parcel	Lessor	Book	Page
10*14116	A	5-18-2	DONALD SHIELDS	669	367
10*14295	B	5-18-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	C	5-19-17	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14116	D	5-19-16	DONALD SHIELDS	669	367
10*14127	E	5-19-14	JAMES & SHERRY BEEGLE ET AL	699	218
10*14142	F	5-18-1	BENJAMIN FRANKLIN HENRY	718	498
10*14579	G	5-19-30	ERNIE LANDERSON & TAMMEY LANDERSON	681	507
10*14110	H	5-19-13	RONA LEE MCCARDLE	670	472
10*14112	I	5-19-13.1	DONALD SHIELDS	669	374
10*14571	J	5-19-8	MATTHEW S & BRENDA S ANDERSON	840	165
10*14116	K	5-14-15	DONALD SHIELDS	669	367
10*14116	L	5-14-14	DONALD SHIELDS	669	367
10*14423	M	5-19-7	OLAN V & PATRICIA E RUTAN	727	1
10*14928	N	5-14-12	JOSEPH D. PARRIOTT & NELLIE B. PARRIOTT, HUSBAND AND WIFE	660	517
10*14522	O	5-14-12.1	HENRY WILSON PLUNKERT JR	749	532
10*14420	P	5-14-10	ELLIS V & WANDA P RINE	725	141
10*14067	Q	5-14-13	REVA FRANZE	666	51
10*14619	R	5-14-9.2	SHIRLEY R MILLER	715	414
10*24492	S	5-12-21	EDWARD L GIBSON AND VIOLET L GIBSON ETAL	920	112
10*21769	T	5-12-14	BETTY HAMILTON	957	419



P.S. 708

*David L Jackson*



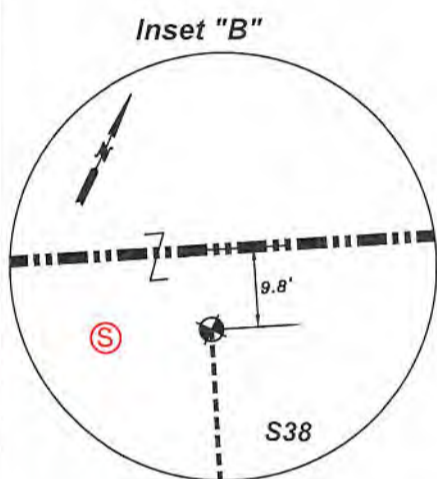
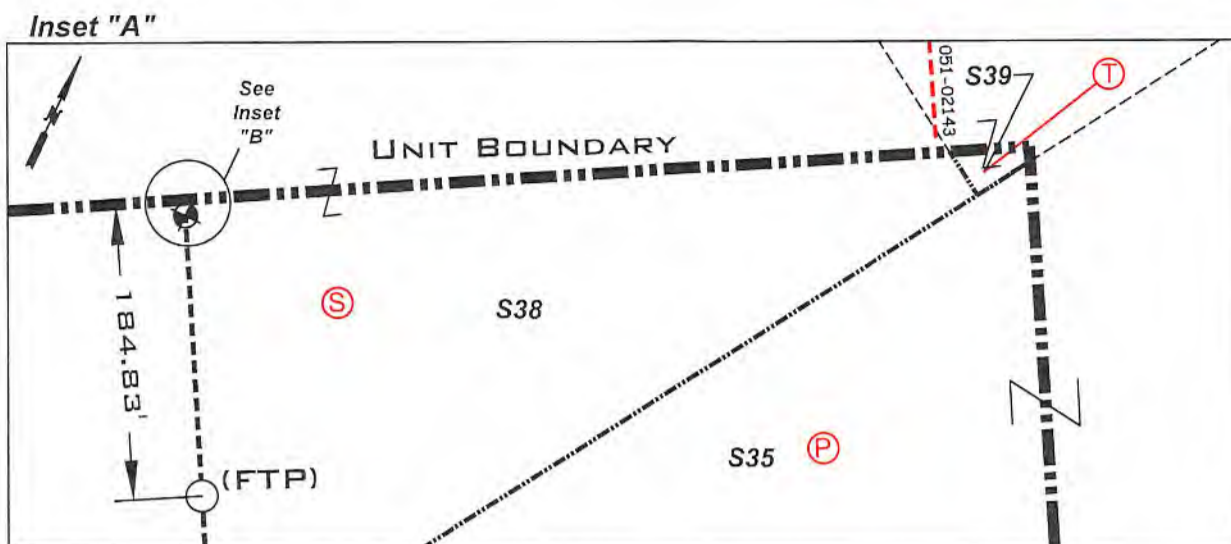
**TUG HILL  
OPERATING**

OPERATOR'S  
WELL #: MCMASTERS N-12HU  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV  
API #: 47-051-02316

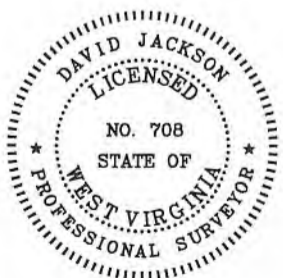
WELL PLAT  
PAGE 3 OF 4  
DATE: 02/12/2020  
REVISED: 07/29/2020

**MCMASTERS LEASE  
WELL N-12HU  
327.5983 ACRES**

**4705102316**



Number	TAX MAP - PARCEL	ADJOINER OWNER	ACRES
S122	05-23-20	Christian Church	0.19
S123	05-23-21	Mark A. & Mark E. Yoho	0.588
S124	05-23-17.1	Curtis E. Hall Et Ux	10.051
S125	05-23-29	James Wiley	0.25
S126	05-23-28.2	Mark W. & Carolyn L. Tennant	10.8
S127	05-23-22	Daniel D. Rhyand & Laurel R. Greene	6.25
S128	05-23-23	Michael J. Wiley Et Al	1.0
S129	05-23-24	Michael J. Wiley Et Al	0.25
S130	05-23-25	Arthur A. Wiley	0.43
S131	05-23-28	Gregg D. Minor	39.43
S132	05-23-2.2	Jessica N. & Andrew L. Fox	7.636
S133	05-23-28.1	Troy W. & Erin M. Thomas	1.0
S134	05-23-01	Patricia Accetolo Et Al	146.66
S135	05-22-7.1	T.H. Exploration II LLC & Atinum Marcellus I LLC	20.68
S136	05-22-08	T.H. Exploration III LLC	48.44
S137	05-22-06	CNX Gas Company LLC	64.70
S138	05-22-10	T.H. Exploration III LLC	58.40
S139	05-22-17	CNX Gas Company LLC	37.5
S140	05-22-04	CNX Gas Company LLC	159.05
S141	05-22-05	CNX Gas Company LLC	134.425
S142	05-22-5.1	Williams Ohio Valley Midstream LLC	12.875
S143	05-19-18.1	Mark E. Yoho Et Ux	2.57
S144	05-19-18.2	Paul V. & Carol Neely	32.672
S145	05-19-25	David E. Yoho & Mark E. Yoho	9.976
S146	05-19-24	Mark E. Yoho	15.436
S147	05-19-26	Roger J. & Beth E. James	9.977
S148	05-19-16.1	Robert L. & Rebecca A. Shields	2.307
S149	05-19-27	David E. Yoho & Mark E. Yoho	7.041
S150	05-19-31	Charles F. & Diana L. Haynes	8.779
S151	05-19-30.1	Eric R.W. & Ashley A. Huggins	2.911
S152	05-19-32	Jasper N. Burch Et Al-Trustees	0.397
S153	05-19-28	David E. Yoho & Mark E. Yoho	56.899
S154	05-19-19	Russell Blake Et Ux	66.4
S155	05-19-21	Sammy E. Whitlatch Et Al	116.45
S156	05-19-20	Wilbert H. Bungard Et Ux	114.989
S157	05-19-15	Carly Herran	0.72
S158	05-19-29	Ernie L. & Tammy L. Anderson	10.961
S159	05-19-09	Penny Elaine Ashcraft	10.44
S160	05-19-12	Ernie L. Anderson Et Ux	5.33
S161	05-19-10	Ernie L. Anderson Et Ux	0.8125
S162	05-19-11	Ernie L. Anderson Et Ux	0.08
S163	05-19-20.3	Sidney Harmon	3.715
S164	05-19-20.1	John J. Ebert-Life	3.848
S165	05-19-7.5	Adam T. & Jesse L. Robinson	2.64
S166	05-19-7.1	Robert L. Shields Et Ux	3.399
S168	05-19-20.2	Casandra L. Harmon	7.448
S169	05-19-05	Margirene Keefe	126.03
S170	05-19-7.2	Olan Rutan	2.783
S171	05-19-7.4	Olan V. Rutan, Et Ux	1.787
S172	05-19-7.3	Olan V. Rutan Et Ux	0.341
S173	05-19-06	Belinda Kay Meadows, Rebecca Ann Shields & Olan V. Rutan	5.1099
S174	05-14-11	Dale R. Gallaher Et Al	12.0
S175	05-14-10.4	Adam R. & Jesse L. Robinson	3.343
S176	05-14-10.2	Ida Belle Rutan-Life, Ralph R. Hoyt	0.495
S177	05-14-10.1	Ida Belle Rutan-Life, Ralph R. Hoyt	0.5
S178	05-14-9.5	Maria T. Flores	6.024
S179	05-14-9.1	Maria T. Flores	2.882
S180	05-12-17	Joni Lyn Leon	0.752



P.S. 708 *David L Jackson*



**TUG HILL  
OPERATING**

OPERATOR'S  
WELL #: MCMASTERS N-12HU  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV  
API #: 47-051-02316

WELL PLAT  
PAGE 4 OF 4  
DATE: 02/12/2020  
REVISED: 07/29/2020

WW-6A1  
(5/13)

Operator's Well No. McMasters N-12HU

**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

**\*Co-tenancy utilization – At least 7 mineral owners in tract. At least 75% of the royalty owners have executed a lease on the tract. The interests of the remaining co-tenants were acquired pursuant to the Co-tenancy Modernization and Majority Protection Act.**

**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.

RECEIVED  
Office of Oil and Gas  
FEB 13 2020

Well Operator: Tug Hill Operating, LLC

By: Amy L. Miller *Amy Miller*

Its: Permitting Specialist - Appalachia Region

WV Department of  
Environmental Protection

Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	
10*14116	A	5-18-2	DONALD SHIELDS	GASTAR EXPLORATION USA INC	1/8+	669	367	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC	
10*14117	A	5-18-2	ROBERT L SHIELDS AND REBECCA A SHIELDS	GASTAR EXPLORATION USA INC	1/8+	669	360	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC	
10*14295	B	5-18-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	TRIENERGY, INC.	1/8+	655	546	NA	19/623 TriEnergy Inc to AB Resources LLC	666/40 AB Resources LLC to Chief Exploration & Development LLC	21/48 TriEnergy Inc and AB Resources LLC to TriEnergy Holdings LLC	21/520 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Enerplus Resources USA	720/214 TriEnergy Holdings LLC to AB Resources LLC	24/32 AB Resources LLC to Gaster Exploration USA Inc and Atrium Marcellus I LLC	24/39 AB Resources LLC, Chief Exploration & Development LLC, Radler 2000 Limited Partnership and Enerplus Resources USA to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC			
10*14296	B	5-18-24	DUANE BRUNN	TRIENERGY HOLDINGS, LLC	1/8+	705	484	NA	NA	NA	NA	NA	24/29 TriEnergy Holdings LLC to AB Resources LLC	24/32 AB Resources LLC to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC				
10*14116	D	5-19-16	DONALD SHIELDS	GASTAR EXPLORATION USA INC	1/8+	669	367	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC	
10*14117	D	5-19-16	ROBERT L SHIELDS AND REBECCA A SHIELDS	GASTAR EXPLORATION USA INC	1/8+	669	360	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC	
10*14127	E	5-19-14	JAMES & SHERRY BEGLE ET AL	GASTAR EXPLORATION USA INC	1/8+	699	218	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC	
10*14142	F	5-18-1	BENJAMIN FRANKLIN HENRY	GASTAR EXPLORATION USA INC	1/8+	718	498	NA	NA	NA	NA	NA	NA	NA	NA	NA	735/263 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC	

Operator's Well No. McMasters N-12HU  
 Department of Environmental Protection  
 11/13/2020

10*14143	F	5-18-1	LOIS BARRETT	GASTAR EXPLORATION USA INC	1/8+	758	435	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14144	F	5-18-1	RHONDA BARRETT	GASTAR EXPLORATION USA INC	1/8+	760	366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14145	F	5-18-1	JAMES DONALD BARRETT	GASTAR EXPLORATION USA INC	1/8+	760	372	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14146	F	5-18-1	JO ANNE BARRETT	GASTAR EXPLORATION USA INC	1/8+	760	375	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14147	F	5-18-1	INEZ DORNON	GASTAR EXPLORATION USA INC	1/8+	760	378	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14148	F	5-18-1	HAZEL L RITCHIE	GASTAR EXPLORATION USA INC	1/8+	760	381	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14149	F	5-18-1	MINNIE PFALZGRAF	GASTAR EXPLORATION USA INC	1/8+	760	369	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14150	F	5-18-1	ARLENE MCCORT	GASTAR EXPLORATION USA INC	1/8+	762	448	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14151	F	5-18-1	RICHARD D LEASURE	GASTAR EXPLORATION USA INC	1/8+	762	451	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14152	F	5-18-1	REBECCA LINN	GASTAR EXPLORATION USA INC	1/8+	762	98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14153	F	5-18-1	RICHARD LINN	GASTAR EXPLORATION USA INC	1/8+	762	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14154	F	5-18-1	JANICE BROWN	GASTAR EXPLORATION USA INC	1/8+	762	92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

4705023

Office of Oil and Gas  
Environmental Protection

10*14155	F	5-18-1	GUY MCCORT	GASTAR EXPLORATION USA INC	1/8+	765	74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14156	F	5-18-1	JODIE JOHNSON	GASTAR EXPLORATION USA INC	1/8+	765	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14157	F	5-18-1	HARLAN BARRETT	GASTAR EXPLORATION USA INC	1/8+	765	77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14158	F	5-18-1	JAMES HOLLAND	GASTAR EXPLORATION USA INC	1/8+	765	421	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14159	F	5-18-1	ROSS BARRETT	GASTAR EXPLORATION USA INC	1/8+	765	424	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14160	F	5-18-1	KATHY BECHTLE	GASTAR EXPLORATION USA INC	1/8+	765	436	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14161	F	5-18-1	JANICE DODD	GASTAR EXPLORATION USA INC	1/8+	765	427	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14162	F	5-18-1	ALLEN L YEATER	GASTAR EXPLORATION USA INC	1/8+	768	555	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14163	F	5-18-1	MARGARET WILSON FITZSIMMONS	GASTAR EXPLORATION USA INC	1/8+	768	567	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14164	F	5-18-1	BARBARA YEATER PERSINGER	GASTAR EXPLORATION USA INC	1/8+	768	557	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14165	F	5-18-1	RACHEL A YEATER	GASTAR EXPLORATION USA INC	1/8+	768	559	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14166	F	5-18-1	TERRI LEE YEATER PARRISH	GASTAR EXPLORATION USA INC	1/8+	768	563	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
Office of Oil and Gas  
WV Department of Environmental Protection  
FEB 23 2020

10*14167	F	5-18-1	KAREN YEATER JONES	GASTAR EXPLORATION USA INC	1/8+	768	565	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14168	F	5-18-1	JUDITH HANNAHS	GASTAR EXPLORATION USA INC	1/8+	770	468	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14169	F	5-18-1	LENA G BLOHM	GASTAR EXPLORATION USA INC	1/8+	770	471	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14170	F	5-18-1	JAMES C KLINE	GASTAR EXPLORATION USA INC	1/8+	772	405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/639 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14171	F	5-18-1	MICHAEL GALE AIF JOSEPHINE GALE	GASTAR EXPLORATION USA INC	1/8+	775	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14172	F	5-18-1	JOHN R & LINDA WILSON	GASTAR EXPLORATION USA INC	1/8+	775	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14173	F	5-18-1	BARBARA L YEATER	GASTAR EXPLORATION USA INC	1/8+	775	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14174	F	5-18-1	CHARLES E YEATER JR	GASTAR EXPLORATION USA INC	1/8+	775	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14175	F	5-18-1	JANE LYNN SWINGLE	GASTAR EXPLORATION USA INC	1/8+	775	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14176	F	5-18-1	CONRAD S YEATER	GASTAR EXPLORATION USA INC	1/8+	775	368	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14177	F	5-18-1	CAROLYN LOWE WELER	GASTAR EXPLORATION USA INC	1/8+	775	366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14178	F	5-18-1	LEANETTE LONG	GASTAR EXPLORATION USA INC	1/8+	775	363	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
Office of Oil and Gas  
2023  
Environmental Protection  
Department of Energy and Mineral Resources  
WV Department of Energy and Mineral Resources



10*14179	F	5-18-1	VERA SHIRLENE & ARTHUR WORKMAN	GASTAR EXPLORATION USA INC	1/8+	775	361	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14180	F	5-18-1	DIANA S GRAFTON	GASTAR EXPLORATION USA INC	1/8+	776	303	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14181	F	5-18-1	DONALD BROOKS WESLEY	GASTAR EXPLORATION USA INC	1/8+	776	305	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14182	F	5-18-1	RICK WEEKLY	GASTAR EXPLORATION USA INC	1/8+	776	307	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14183	F	5-18-1	NANCY J FOTTI	GASTAR EXPLORATION USA INC	1/8+	776	299	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14184	F	5-18-1	HESTER LORETTA DUGAN	GASTAR EXPLORATION USA INC	1/8+	776	301	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14185	F	5-18-1	NICOLE WEEKLY	GASTAR EXPLORATION USA INC	1/8+	776	309	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14186	F	5-18-1	WILLIAM GLENN YEATER	GASTAR EXPLORATION USA INC	1/8+	776	311	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14187	F	5-18-1	GERALD E YEATER	GASTAR EXPLORATION USA INC	1/8+	776	323	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14188	F	5-18-1	WILMA M MILLER	GASTAR EXPLORATION USA INC	1/8+	776	321	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14189	F	5-18-1	BILLIE JO BETHEL	GASTAR EXPLORATION USA INC	1/8+	776	319	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14190	F	5-18-1	ELIZABETH LOUISE YEATER MORAN	GASTAR EXPLORATION USA INC	1/8+	776	317	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
 Office of Oil and Gas  
 Department of Environmental Protection  
 2023

10*14191	F	5-18-1	LARRY W. YEATER	GASTAR EXPLORATION USA INC	1/8+	776	315	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14192	F	5-18-1	MYRA HEWITT	GASTAR EXPLORATION USA INC	1/8+	777	581	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14193	F	5-18-1	SONDRA R KING	GASTAR EXPLORATION USA INC	1/8+	777	579	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14194	F	5-18-1	SANDRA REID CUMBSTON	GASTAR EXPLORATION USA INC	1/8+	777	574	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14195	F	5-18-1	FREDERICK MAXWELL YEATER	GASTAR EXPLORATION USA INC	1/8+	777	583	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14196	F	5-18-1	ROSEMARY AGNES YEATER LUNEMANN	GASTAR EXPLORATION USA INC	1/8+	777	587	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14197	F	5-18-1	PHYLLIS YEATER GREGOSKY	GASTAR EXPLORATION USA INC	1/8+	777	585	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14198	F	5-18-1	MARY J YEATER EARNSHAW	GASTAR EXPLORATION USA INC	1/8+	777	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14199	F	5-18-1	MARY MARGARET WELLMAN BURLEY	GASTAR EXPLORATION USA INC	1/8+	779	488	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14200	F	5-18-1	RANDALL D MORRIS	GASTAR EXPLORATION USA INC	1/8+	779	490	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14201	F	5-18-1	WILLIAM J VEST TRUST AGENT LARRY W YEATER TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	786	490	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14202	F	5-18-1	MAY H RUCKMAN	GASTAR EXPLORATION USA INC	1/8+	779	486	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
 Office of Oil and Gas  
 Environmental Protection

10*14203	F	5-18-1	LINDA KAY MORRIS WILSON	GASTAR EXPLORATION USA INC	1/8+	781	541	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14204	F	5-18-1	JEANETTE SOUTH	GASTAR EXPLORATION USA INC	1/8+	781	537	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14205	F	5-18-1	ANN LOUISE YEATER MARTIN	GASTAR EXPLORATION USA INC	1/8+	781	533	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14206	F	5-18-1	COLLEEN MCCLAIN MOORE	GASTAR EXPLORATION USA INC	1/8+	781	535	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14207	F	5-18-1	FREDRIC & BETTY RICHTER	GASTAR EXPLORATION USA INC	1/8+	781	612	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14208	F	5-18-1	NANCY D TRUEX	GASTAR EXPLORATION USA INC	1/8+	782	202	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14209	F	5-18-1	MARY JANE BUNGARD	GASTAR EXPLORATION USA INC	1/8+	782	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14210	F	5-18-1	JANET E PERSONS	GASTAR EXPLORATION USA INC	1/8+	782	204	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14211	F	5-18-1	STEPHEN L YEATER	GASTAR EXPLORATION USA INC	1/8+	782	206	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28/499 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14212	F	5-18-1	MARTHA ANN GAMBLE & DAN MIGLIORINI	GASTAR EXPLORATION USA INC	1/8+	782	609	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14213	F	5-18-1	SHIRLEY E GBUR	GASTAR EXPLORATION USA INC	1/8+	782	611	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14214	F	5-18-1	SIDNEY F YOHO JR	GASTAR EXPLORATION USA INC	1/8+	782	605	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
 Dept of Conservation  
 Division of Oil and Gas  
 3/20/20

10*14215	F	5-18-1	SCOTT K & KATHIE J RICHTER	GASTAR EXPLORATION USA INC	1/8+	782	607	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14216	F	5-18-1	DOUGLAS I GAMBLE	GASTAR EXPLORATION USA INC	1/8+	783	493	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14217	F	5-18-1	DOMINA S AND DONALD S KIRCH	GASTAR EXPLORATION USA INC	1/8+	783	497	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14218	F	5-18-1	MICKEY L PORTER	GASTAR EXPLORATION USA INC	1/8+	783	506	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14219	F	5-18-1	SUSAN J BROWN	GASTAR EXPLORATION USA INC	1/8+	783	504	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14220	F	5-18-1	JANIS L & ROY T MILLER	GASTAR EXPLORATION USA INC	1/8+	783	502	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14221	F	5-18-1	DEANNA R LAMBERT	GASTAR EXPLORATION USA INC	1/8+	783	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14222	F	5-18-1	ORVILLE V & MADONNA R BLANTON	GASTAR EXPLORATION USA INC	1/8+	783	512	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14223	F	5-18-1	SARAH E HOLT	GASTAR EXPLORATION USA INC	1/8+	783	510	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14224	F	5-18-1	SAMUEL E ZUGARO	GASTAR EXPLORATION USA INC	1/8+	784	193	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14225	F	5-18-1	THOMAS FRANCIS YOHO	GASTAR EXPLORATION USA INC	1/8+	784	195	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14226	F	5-18-1	MONICA ANN BENN	GASTAR EXPLORATION USA INC	1/8+	784	197	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

Office of Oil and Gas  
 RECEIVED  
 2018  
 Environmental Protection

10*14227	F	5-18-1	HUBERT D MORRIS	GASTAR EXPLORATION USA INC	1/8+	784	199	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14228	F	5-18-1	KALFUST DOUGHMAN	GASTAR EXPLORATION USA INC	1/8+	786	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14229	F	5-18-1	JEFFREY H WILSON & PRISCILLA S WILSON	GASTAR EXPLORATION USA INC	1/8+	786	375	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14230	F	5-18-1	JOSEPH P & BARBARA A WILSON	GASTAR EXPLORATION USA INC	1/8+	786	377	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14231	F	5-18-1	YVONNE MARIE SMITH	GASTAR EXPLORATION USA INC	1/8+	786	379	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14232	F	5-18-1	SANDRA L KELLY	GASTAR EXPLORATION USA INC	1/8+	786	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14233	F	5-18-1	THOMAS E PORTER	GASTAR EXPLORATION USA INC	1/8+	786	381	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14234	F	5-18-1	WILLIAM D ADAMS	GASTAR EXPLORATION USA INC	1/8+	786	373	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14235	F	5-18-1	JOHN C WILSON	GASTAR EXPLORATION USA INC	1/8+	786	386	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14236	F	5-18-1	RODNEY C LOWE	GASTAR EXPLORATION USA INC	1/8+	786	367	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14237	F	5-18-1	KELLY KERN	GASTAR EXPLORATION USA INC	1/8+	787	566	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14238	F	5-18-1	LYNN C LAMBERTSEN	GASTAR EXPLORATION USA INC	1/8+	789	283	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

REC-11  
Office of Oil and Gas  
Department of Environmental Protection

10*14239	F	5-18-1	JAMES S WILSON & ANN D WILSON	GASTAR EXPLORATION USA INC	1/8+	789	281	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gastar Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14240	F	5-18-1	SHARON L YEATER	GASTAR EXPLORATION USA INC	1/8+	789	287	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14241	F	5-18-1	CAROL JUDY LANCH	GASTAR EXPLORATION USA INC	1/8+	789	305	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14242	F	5-18-1	PATTI J WILSON	GASTAR EXPLORATION USA INC	1/8+	789	581	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14243	F	5-18-1	JANET HILPERT	GASTAR EXPLORATION USA INC	1/8+	789	579	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14244	F	5-18-1	ANN M MARTINO SIMONE	GASTAR EXPLORATION USA INC	1/8+	790	580	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14245	F	5-18-1	ODETTE YEATER	GASTAR EXPLORATION USA INC	1/8+	790	503	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14246	F	5-18-1	SANDRA M WINSLOW	GASTAR EXPLORATION USA INC	1/8+	790	517	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14247	F	5-18-1	RICKEY ALLEN YEATER	GASTAR EXPLORATION USA INC	1/8+	790	513	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14248	F	5-18-1	TERRY W YEATER	GASTAR EXPLORATION USA INC	1/8+	790	515	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14249	F	5-18-1	CAROL VAN SCYOC	GASTAR EXPLORATION USA INC	1/8+	790	546	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14250	F	5-18-1	DONALD REX QUIGLEY	GASTAR EXPLORATION USA INC	1/8+	790	533	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
Office of Oil and Gas  
2020  
Department of  
Environmental Protection

10*14251	F	5-18-1	ELLEN IONA GORBY HEALTH	GASTAR EXPLORATION USA INC	1/8+	792	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14252	F	5-18-1	THELMA VIRGINIA WHIPKEY YEATER	GASTAR EXPLORATION USA INC	1/8+	794	519	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14253	F	5-18-1	PAGE D HUNT	GASTAR EXPLORATION USA INC	1/8+	795	152	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14254	F	5-18-1	PATRICIA A GULLITZ	GASTAR EXPLORATION USA INC	1/8+	796	72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14255	F	5-18-1	RUSSELL BARRETT	GASTAR EXPLORATION USA INC	1/8+	797	193	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14256	F	5-18-1	MICHAEL JOHNSON	GASTAR EXPLORATION USA INC	1/8+	799	55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14257	F	5-18-1	KATHRYN L MILLER	GASTAR EXPLORATION USA INC	1/8+	799	534	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14258	F	5-18-1	MARGUERITE HARRISON	GASTAR EXPLORATION USA INC	1/8+	799	532	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	806/1 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14259	F	5-18-1	GEORGE MARTINO JR	GASTAR EXPLORATION USA INC	1/8+	803	146	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14260	F	5-18-1	JOHN K OTTO	GASTAR EXPLORATION USA INC	1/8+	803	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14261	F	5-18-1	JEAN MARIE SHEPARD	GASTAR EXPLORATION USA INC	1/8+	804	249	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14262	F	5-18-1	MICHAEL B SHEPARD	GASTAR EXPLORATION USA INC	1/8+	804	251	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC

Operator's Well No. McMasters N-12HU  
 Date of Completion: 11/1/2011  
 Environmental Protection  
 36/9 Gaster Exploration Inc to TH Exploration II LLC

10*14263	F	5-18-1	LAURIE ANN SHEPARD	GASTAR EXPLORATION USA INC	1/8+	804	243	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14264	F	5-18-1	WILLIAM LEWIS OTTO	GASTAR EXPLORATION USA INC	1/8+	809	533	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14265	F	5-18-1	EDWARD F & KAREN SIMS	GASTAR EXPLORATION USA INC	1/8+	816	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14266	F	5-18-1	GREGORY STEINHART	GASTAR EXPLORATION USA INC	1/8+	818	564	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14267	F	5-18-1	NAUCY WILKOFF SHEBISH	GASTAR EXPLORATION INC	1/8+	833	523	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14268	F	5-18-1	JACQUELINE M CASILLAS-DUKE	GASTAR EXPLORATION INC	1/8+	839	530	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14269	F	5-18-1	SHARON D SMITH	GASTAR EXPLORATION INC	1/8+	840	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14270	F	5-18-1	ANNA M. BARRETT	GASTAR EXPLORATION USA INC	1/8+	734	457	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14271	F	5-18-1	RICHARD THOMAS BARRETT	GASTAR EXPLORATION USA INC	1/8+	745	582	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14272	F	5-18-1	ROBERT CLARK ASPLEY	GASTAR EXPLORATION INC	1/8+	844	85	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14273	F	5-18-1	MARY ANNE YEATER MACHAMER	GASTAR EXPLORATION INC	1/8+	852	258	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14274	F	5-18-1	LAURA L YEATER HILL	GASTAR EXPLORATION INC	1/8+	852	245	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14275	F	5-18-1	CAROL RAE YEATER	GASTAR EXPLORATION INC	1/8+	852	247	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14276	F	5-18-1	REBECCA MCPEEK NORRIS	GASTAR EXPLORATION INC	1/8+	854	595	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14277	F	5-18-1	KATHLEEN L YEATER	GASTAR EXPLORATION INC	1/8+	854	593	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Athnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC



10*14278	F	5-18-1	DAVID GALE	GASTAR EXPLORATION INC	1/8+	854	591	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14279	F	5-18-1	WILLIAM BERNARD YEATER	GASTAR EXPLORATION INC	1/8+	854	589	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14280	F	5-18-1	PAUL EDWARD YEATER	GASTAR EXPLORATION INC	1/8+	854	587	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14281	F	5-18-1	DAWN MCPREEK WREZINSKI	GASTAR EXPLORATION INC	1/8+	860	426	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14282	F	5-18-1	CHERYL VAN PELT	GASTAR EXPLORATION INC	1/8+	860	428	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14283	F	5-18-1	MARY JO BARRETT	GASTAR EXPLORATION INC	1/8+	862	438	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14284	F	5-18-1	JULIE BRIGGS	GASTAR EXPLORATION INC	1/8+	862	435	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14285	F	5-18-1	EARL BARRETT JR	GASTAR EXPLORATION INC	1/8+	862	432	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14286	F	5-18-1	EMIMA LEE NEWHOUSE	GASTAR EXPLORATION INC	1/8+	864	315	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14287	F	5-18-1	LAWRENCE AUGUSTIN MCPREEK	GASTAR EXPLORATION INC	1/8+	864	317	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14288	F	5-18-1	REBECCA LYNN LASH	GASTAR EXPLORATION INC	1/8+	864	319	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14289	F	5-18-1	MARYANN RACHEL VANCE	GASTAR EXPLORATION INC	1/8+	864	321	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14290	F	5-18-1	MELISSA ELAINE SCHROTH	GASTAR EXPLORATION INC	1/8+	872	213	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14291	F	5-18-1	MARK DAVID HUNT	GASTAR EXPLORATION INC	1/8+	872	215	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14292	F	5-18-1	JOHN BARRETT	GASTAR EXPLORATION INC	1/8+	875	603	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35/119 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC

RECEIVED  
Office of Oil and Gas  
Environmental Protection  
November 13, 2020







10*14118	K	5-14-15	RITA A RUSH	GASTAR EXPLORATION USA INC	1/8+	813	450	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14119	K	5-14-15	CHARLES W & JUDITH A SWYDER	GASTAR EXPLORATION USA INC	1/8+	813	452	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14120	K	5-14-15	CAROL D & ABRAM HABERLE	GASTAR EXPLORATION USA INC	1/8+	813	448	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14121	K	5-14-15	JACK D & GRETA A SWYDER	GASTAR EXPLORATION USA INC	1/8+	813	446	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gaster Exploration Inc to Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14122	K	5-14-15	ERIC L STOLTZEUS	GASTAR EXPLORATION INC	1/8+	833	525	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32/428 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14123	K	5-14-15	TEESHA L HOLMES	GASTAR EXPLORATION INC	1/8+	836	96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32/428 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14124	K	5-14-15	BETSY G STOLTZEUS	GASTAR EXPLORATION INC	1/8+	836	94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32/428 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14116	L	5-14-14	DONALD SHIELDS	GASTAR EXPLORATION USA INC	1/8+	669	367	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14117	L	5-14-14	ROBERT L SHIELDS AND REBECCA A SHIELDS	GASTAR EXPLORATION USA INC	1/8+	669	360	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Athnum Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14423	M	5-19-7	OLAN V & PATRICIA E RUTAN	GASTAR EXPLORATION USA INC	1/8+	727	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC			
10*14928	N	5-14-12	JOSEPH D. PARRIOTT & NELLIE B. PARRIOTT, HUSBAND AND WIFE	TRIENERGY, INC.	1/8+	660	517	19/623 TriEnergy Inc to AB Resources LLC	666/40 AB Resources LLC to Chief Exploration & Development LLC	21/148 TriEnergy Inc to TriEnergy Holdings LLC	25/1 Chief Exploration & Development, Radler 2000 Limited Partnership and Enerplus Resources USA Corp to Chevron USA Inc	25/105 Chief Exploration & Development, Radler 2000 Limited Partnership and Enerplus Resources USA Corp to Chevron USA Inc	24/319 AB Resources LLC to Chief Exploration & Development and Radler 2000 Limited Partnership	756/397 AB Resources LLC to Chevron USA Inc	32/355 Chevron USA Inc to Gaster Exploration Inc and Athnum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II LLC						

Office of Oil and Gas  
 Office of Environmental Protection

10*14522	O	5-14-12.1	HENRY WILSON PLUNKERT JR	GASTAR EXPLORATION USA INC	1/8+	749	532	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26/639 Gaster Exploration USA Inc and Gaster Exploration Inc merger	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14420	P	5-14-10	ELLIS V & WANDA P RINE	GASTAR EXPLORATION USA INC	1/8+	725	141	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	735/263 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14067	Q	5-14-13	REVA FRANZE	GASTAR EXPLORATION USA INC	1/8+	666	51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/353 Gaster Exploration USA Inc to Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14619	R	5-14-9.2	SHIRLEY R MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	715	414	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14620	R	5-14-9.2	ANITA RAE MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	715	416	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14621	R	5-14-9.2	WILLIAM DALE MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	715	415	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14622	R	5-14-9.2	KELLY D MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	713	606	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14623	R	5-14-9.2	DUANE D MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	717	149	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14624	R	5-14-9.2	DOUGLAS E MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	725	559	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Atrium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC

Office of Oil and Gas  
 Department of Environmental and Natural Resources

10*14625	R	5-14-9-2	JACQUELYN J JOHNSON AND SAMMY R JOHNSON	CHESAPEAKE APPALACHIA LLC	1/8+	715	616	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14626	R	5-14-9-2	STEVEN POND	CHESAPEAKE APPALACHIA LLC	1/8+	715	622	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14627	R	5-14-9-2	BRIAN & LENA POND	CHESAPEAKE APPALACHIA LLC	1/8+	717	51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14628	R	5-14-9-2	TEXVN L MILLER AND GEORGIA A MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	715	514	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14629	R	5-14-9-2	GERALD R MILLER AND LEE ANNE MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	717	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14630	R	5-14-9-2	BARBARA BURLEY AND DAVID BURLEY	CHESAPEAKE APPALACHIA LLC	1/8+	716	637	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14631	R	5-14-9-2	USA ANN MILLER	CHESAPEAKE APPALACHIA LLC	1/8+	715	520	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27/321 Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc to Gaster Exploration USA Inc and Athium Marcellus I LLC	21/41 Gaster Exploration USA Inc and Gaster Exploration Inc merger	36/9 Gaster Exploration Inc to TH Exploration II LLC
10*14902	R	5-14-9-2	BENNY MILLER	GASTAR EXPLORATION INC	1/8+	836	98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14903	R	5-14-9-2	SUE PRUITT	GASTAR EXPLORATION INC	1/8+	836	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II LLC		
10*14904	R	5-14-9-2	LEROY MILLER	GASTAR EXPLORATION INC	1/8+	846	398	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II LLC		

02  
05  
47

OFFICE OF OIL AND GAS  
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION  
3/3/2020





0083768116	R	5-14-9-2	SUSANNE S QUARTERMAN	NOBLE ENERGY, INC.	1/8+	890	606	NA	NA	NA	NA	NA	NA	36/409 Noble Energy Inc to CNX Gas Company	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551007	R	5-14-9-2	RODNEY F PETERSON	NOBLE ENERGY, INC.	1/8+	870	380	NA	NA	NA	NA	NA	NA	35/313 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551012	R	5-14-9-2	NORA K POWDERLY	NOBLE ENERGY, INC.	1/8+	873	83	NA	NA	NA	NA	NA	NA	35/313 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551021	R	5-14-9-2	NORA K POWDERLY	NOBLE ENERGY, INC.	1/8+	881	32	NA	NA	NA	NA	NA	NA	36/395 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551003	R	5-14-9-2	MURIEL ANNE MILLER AND ALAN POWELL	NOBLE ENERGY, INC.	1/8+	860	541	NA	NA	NA	NA	NA	NA	35/172 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0083768114	R	5-14-9-2	MARY S SCHOLL	NOBLE ENERGY, INC.	1/8+	890	572	NA	NA	NA	NA	NA	NA	36/409 Noble Energy Inc to CNX Gas Company	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551014	R	5-14-9-2	MARY F WEILAND	NOBLE ENERGY, INC.	1/8+	873	126	NA	NA	NA	NA	NA	NA	35/313 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0083768113	R	5-14-9-2	KEVIN M POWDERLY	NOBLE ENERGY, INC.	1/8+	890	515	NA	NA	NA	NA	NA	NA	36/409 Noble Energy Inc to CNX Gas Company	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC

4700002

1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC

0076551004	R	5-14-9-2	KATHLEEN A SULLIVAN AND THOMAS SULLIVAN	NOBLE ENERGY, INC.	1/8+	870	364	NA	NA	NA	35/313 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551015	R	5-14-9-2	JANIE H BARNSTEINER AND JOANNE M DISCH	NOBLE ENERGY, INC.	1/8+	873	132	NA	NA	NA	36/395 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551017	R	5-14-9-2	JAMES T SCHOLL	NOBLE ENERGY, INC.	1/8+	878	365	NA	NA	NA	36/395 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551010	R	5-14-9-2	JAMES E HERMAN	NOBLE ENERGY, INC.	1/8+	873	130	NA	NA	NA	36/395 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0083768091	R	5-14-9-2	HARRIET C VENTURA AND ROCCO VENTURA	NOBLE ENERGY, INC.	1/8+	894	541	NA	NA	NA	36/409 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551009	R	5-14-9-2	HARRIET C HERMAN AND JOSEPH H WILKINSON	NOBLE ENERGY, INC.	1/8+	873	122	NA	NA	NA	35/313 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551005	R	5-14-9-2	FRANCIS FISCHER AND JACQUELINE FISCHER	NOBLE ENERGY, INC.	1/8+	870	366	NA	NA	NA	35/313 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
007551013	R	5-14-9-2	EUGENIA A KERR	NOBLE ENERGY, INC.	1/8+	873	120	NA	NA	NA	35/313 Noble Energy Inc Company LLC to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC

0076551008	R	5-14-9-2	EILEEN T POWDERLY	NOBLE ENERGY, INC.	1/8+	873	81	NA	NA	NA	36/395 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551011	R	5-14-9-2	EDWARD P POWDERLY AND MARILYN POWDERLY	NOBLE ENERGY, INC.	1/8+	873	85	NA	NA	NA	35/313 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551007	R	5-14-9-2	DENNIS FISCHER AND SHARRON A FISCHER	NOBLE ENERGY, INC.	1/8+	870	358	NA	NA	NA	35/313 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551002	R	5-14-9-2	DAVID LEE EVANS JR AND NOVELLA EVANS	NOBLE ENERGY, INC.	1/8+	864	180	NA	NA	NA	35/172 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551020	R	5-14-9-2	BRIDGET A POWDERLY	NOBLE ENERGY, INC.	1/8+	881	26	NA	NA	NA	36/395 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0083768115	R	5-14-9-2	BRIAN P POWDERLY AND ANITA POWDERLY	NOBLE ENERGY, INC.	1/8+	890	566	NA	NA	NA	36/409 Noble Energy Inc to CNX Gas Company	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0083768080	R	5-14-9-2	ANTHONY T POWDERLY AND BARBARA M POWDERLY	NOBLE ENERGY, INC.	1/8+	878	363	NA	NA	NA	36/395 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
0076551017	R	5-14-9-2	ANNE GALBALLY AND JAMES F GALBALLY	NOBLE ENERGY, INC.	1/8+	878	373	NA	NA	NA	36/395 Noble Energy Inc to CNX Gas Company LLC	37/169 CNX Gas Company LLC to Noble Energy Inc	39/1 Noble Energy Inc to HG Energy II Appalachia LLC	988/351 Memorandum of Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC	First Amendment to Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC - not recorded	1073/211 Second Amendment Operating Agreement between TH Exploration LLC and HG Energy II Appalachia LLC
10*24492	S	5-12-21	EDWARD L GIBSON AND VIOLET L GIBSON ETAL	AMERICAN PETROLEUM PARTNERS LLC	1/8+	920	112	NA	NA	NA	NA	NA	NA	NA	NA	42/549 American Petroleum Partners Operating LLC and TH Exploration LLC
10*21769	T	5-12-14	BETTY HAMILTON	TH EXPLORATION, LLC	1/8+	957	419	NA	NA	NA	NA	NA	NA	NA	NA	NA

REC'D BY THE OFFICE OF OIL AND GAS  
 ENVIRONMENTAL PROTECTION AGENCY  
 APR 15 2014

10*21170	T	5-12-14	SUSAN WINLAND AND PAUL MICHAEL WINLAND	TH EXPLORATION, LLC	1/8+	957	421	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21176	T	5-12-14	LINDA HAMILTON	TH EXPLORATION, LLC	1/8+	957	417	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

\* Co-tenancy utilization - At least 7 mineral owners in tract. At least 75% of the royalty owners have executed a lease on the tract. The interests of the remaining co-tenants were acquired pursuant to the Co-Tenancy Modernization and Majority Protection Act.

47 05 02 16

RECEIVED  
Office of Oil and Gas  
FEB 13 2020  
WV Department of  
Environmental Protection



4705 02376

**COPY**

**SECOND AMENDMENT TO OPERATING AGREEMENT**

THIS SECOND AMENDMENT TO OPERATING AGREEMENT (this "Amendment") is entered into this 31<sup>st</sup> day of January, 2020 (the "Effective Date"), by and among:

**OPERATOR:**

TH EXPLORATION, LLC  
1320 S. University Drive, Suite 500  
Fort Worth, Texas 76107

Marshall County  
Jan Pest, Clerk  
Instrument 1464085  
02/06/2020 @ 12:06:52 PM  
OIL & GAS LEASE  
Book 1073 @ Page 211  
Pages Recorded 6  
Recording Cost \$ 12.00

**NON-OPERATORS:**

HG ENERGY II APPALACHIA, LLC  
5260 Dupont Road  
Parkersburg, WV 26101

TH EXPLORATION II, LLC  
1320 S. University Drive, Suite 500  
Fort Worth, Texas 76107

**WITNESSETH:**

WHEREAS, Operator and Non-Operators entered into that certain Operating Agreement regarding the Utica formation in Moundsville dated July 1, 2018 (the "JOA") with respect to the Contract Area (as that term is defined in the JOA), located in Marshall County, West Virginia; and

WHEREAS, a Memorandum of Operating Agreement and Financing Statement was recorded in the records of Marshall County, West Virginia on July 19, 2018, at Book 988, Page 351; and

WHEREAS, Operator and Non-Operators entered into that certain unrecorded First Amendment to Operating Agreement dated February 19, 2019 and for all purposes made effective as of July 1, 2018; and

WHEREAS, it has become necessary to further define the boundaries of the Contract Area and Operator and Non-Operators desire to amend the JOA to reflect and incorporate these changes all upon the terms, and subject to the conditions, set forth in this Amendment.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound hereby, agree as follows:

**Section 1. Incorporation of Recitals.** The foregoing recitals are true and correct and are expressly incorporated herein by this reference.

**Section 2. JOA Amendment.** Effective for all purposes as of the Effective Date, the JOA is hereby amended by deleting Exhibit "A-1" in its entirety, and replacing said Exhibit "A-1" attached hereto and made a part hereof.

**Section 3. Adoption and Ratification of JOA.** The parties hereby adopt, ratify, affirm and agree that the JOA, as amended by this Amendment, is and has been a valid and subsisting agreement and agree that it has been and shall remain in full force and effect according to the term and tenor thereof and hereof, for all purposes under the JOA.

**Section 4. JOA to Remain Effective.** Except as modified by this Amendment, the terms and conditions set forth in the JOA shall remain unchanged and in full force and effect.

**Section 5. Counterpart Signatures.** This Amendment may be executed in one or more counterparts, each of which shall be deemed to be an original and all of which, when taken together, shall constitute one and the same instrument.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

[SIGNATURE AND ACKNOWLEDGMENT PAGES FOLLOW]

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

STATE OF WEST VIRGINIA §  
§  
COUNTY OF MARSHALL §

**ASSIGNMENT AND CONVEYANCE**

THIS ASSIGNMENT AND CONVEYANCE (the "Assignment") is made and entered into this 15<sup>th</sup> day of November, 2018 (the "Effective Date"), by and between AMERICAN PETROLEUM PARTNERS OPERATING, LLC, (hereinafter "Assignor") and TH EXPLORATION, LLC (hereinafter "Assignee") pursuant to the terms of that certain Acreage Trade Agreement between the Assignor and the Assignee dated November 15, 2018 (the "Acreage Trade Agreement"). Capitalized terms used but not defined herein and defined in the Acreage Trade Agreement shall have the meanings given to such terms in the Acreage Trade Agreement.

**WITNESSETH:**

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to those certain Oil and Gas Leases situated in Marshall County, West Virginia, as described in Exhibit "A-1", attached hereto and made a part hereof (hereinafter the "Leases"); and

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to the Leases as described below.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and subject to the limited warranties, restrictions and conditions hereinafter mentioned, the parties hereto, intending to be legally bound, do covenant and agree as follows:

1. Assignment. Assignor does hereby grant, bargain, sell, convey, deliver, assign, set over and transfer, as of the Effective Date, to Assignee, its respective successors and assigns, forever, all of Assignor's right, title and interest in and to the Leases, and the lands covered thereby, together with all rights incident thereto and appurtenances thereon.

TO HAVE AND TO HOLD such right, title and interest in and to the Leases unto Assignee or its designee, and their respective successors and assigns, forever, in accordance with the provisions of this Assignment.

2. Special Warranty. Assignor represents and warrants that Assignor has not conveyed or otherwise encumbered (other than Permitted Encumbrances) its interest in the Leases since the time that Assignor obtained its interests in the Leases. Assignor does covenant, promise and agree, to and with the Assignee, its respective successors and assigns, to forever specially warrant and defend the title to the Leases or portions thereof included under this Assignment, unto the Assignee and its respective successors and assigns, against the lawful claims of Assignor, and all persons claiming, or to claim, the same or any part thereof, by, through or under Assignor.

Assignor represents and warrants that Assignor has paid any and all bonuses, rentals, royalties, overriding royalties, and other payments required by the Leases which were due for the period in which Assignor held its interests in the Leases, and that Assignor has fully performed all conditions necessary to maintain the Leases in full force and effect during such period, free and clear of all Encumbrances, except for and subject only to Permitted Encumbrances.

3. Successors and Assigns. The terms of this Assignment shall be binding upon and inure to the benefit of the parties hereto and each of their respective successors

RECEIVED  
Office of Oil and Gas  
FEB 13 2020  
WV Department of  
Environmental Protection



February 5, 2020

WV Department of Environmental Protection  
Office of Oil & Gas  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Attention: Laura Adkins

RE: McMasters N-12HU

Subject: Road Crossing Letter

Dear Laura:

Tug Hill Operating, LLC will not be drilling, extracting or producing any minerals under any WV County or State Routes in the area reflected on the McMasters N-12HU well plat.

If your office has any questions or concerns regarding the contents of this letter, please do not hesitate to contact me directly at 304-376-0111, or by email at [amiller@tug-hillop.com](mailto:amiller@tug-hillop.com).

Sincerely,

A handwritten signature in blue ink that reads "Amy L. Miller".

Amy L. Miller  
Permitting Specialist – Appalachia Region

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection



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

Date of Notice Certification: 02/16/2020

API No. 47- 051

Operator's Well No. McMasters N-12HU

Well Pad Name: Shields

**Notice has been given:**

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>518,197.06</u>
County: <u>Marshall</u>		Northing: <u>4,401,149.03</u>
District: <u>Franklin</u>	Public Road Access: <u>Burch Ridge Road (CR 29)</u>	
Quadrangle: <u>Powhatan Point 7.5'</u>	Generally used farm name: <u>Robert L. Shields, et al</u>	
Watershed: <u>Lower Fish Creek</u>		

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

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 40px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p><b>OOG OFFICE USE ONLY</b></p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
---	---

**Required Attachments:**

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

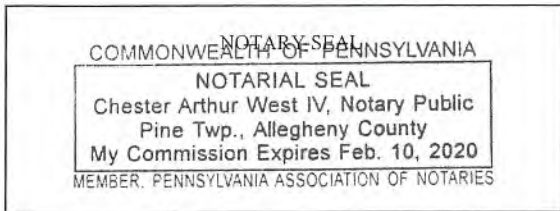
Office of Oil and Gas  
Office of Environmental Protection  
FEB 18 2020  
West Virginia Department of  
Environmental Protection

WW-6AC  
(1/12)

**Certification of Notice is hereby given:**

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

Well Operator:	<u>Tug Hill Operating, LLC</u>	Address:	<u>380 Southpointe Boulevard, Plaza II, Suite 200</u>
By:	<u>Amy L. Miller <i>Amy Miller</i></u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Permitting Specialist - Appalachia Region</u>	Facsimile:	<u>724-338-2030</u>
Telephone:	<u>724-749-8388</u>	Email:	<u>amiller@tug-hillop.com</u>



Subscribed and sworn before me this 6th day of February 2020.  
*[Signature]* Notary Public  
 My Commission Expires 2-10-2020

**Oil and Gas Privacy Notice:**

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

WW-6A  
(9-13)

4705 0250  
API NO. 47- 051 -  
OPERATOR WELL NO. McMasters N-12HU  
Well Pad Name: Shields

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

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

**Date of Notice:** 2/4/2020 **Date Permit Application Filed:** 2/6/2020

**Notice of:**

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

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

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

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

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

SURFACE OWNER(s)  
Name: Donald Shields (Pad and Access Road)  
Address: 231 Lonesome Ln.  
Proctor, WV 26055

Name: Robert and Rebecca Shields (Pad and Access Road)  
Address: 2756 Burch Ridge Road  
Proctor, WV 26055

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: Mark A. Yoho  
Address: 6701 Burch Ridge Road  
Proctor, WV 26055

Name: Mark E. Yoho  
Address: 3998 Burch Ridge Road  
Proctor, WV 26055

SURFACE OWNER(s) (Impoundments or Pits)  
Name: n/a  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: CNX Land Resources Attn: Casey Saunders  
Address: 1000 Consol Drive  
Canonsburg, PA 15317

COAL OPERATOR  
Name: CNX Land Resources Attn: Casey Saunders  
Address: 1000 Consol Drive  
Canonsburg, PA 15317

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: Nikki L. & Jonathan Stevens  
Address: 757 Weeping Willow Lane  
Proctor, WV 26055

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: n/a  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

4705102316

**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

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

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

**Well Location Restrictions**

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

**4705102316**

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

**Water Well Testing:**

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

**Water Testing Laboratories:**

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

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

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

**Written Comment:**

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

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

RECEIVED  
Office of Oil and Gas  
FEB 13 2020  
WV Department of  
Environmental Protection

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

### **Time Limits and Methods for Filing Comments.**

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

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

### **Comment Requirements**

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

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

### **Permit Denial or Condition**

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

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

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

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

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

WW-6A  
(8-13)

4705 02316  
API NO. 47-051 -  
OPERATOR WELL NO. McMasters N-12HU  
Well Pad Name: Shields

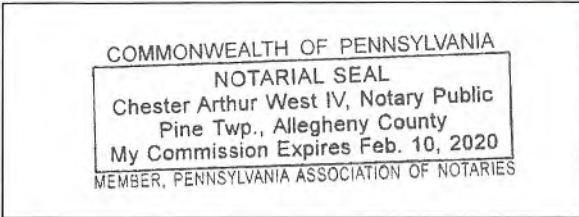
**Notice is hereby given by:**

Well Operator: Tug Hill Operating, LLC  
Telephone: 724-749-8388  
Email: amiller@tug-hillop.com *amy shields*

Address: 380 Southpointe Boulevard, Plaza II, Suite 200  
Canonsburg, PA 15317  
Facsimile: 724-338-2030

**Oil and Gas Privacy Notice:**

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



Subscribed and sworn before me this 15 day of JAN, 2020.

*CAW*  
\_\_\_\_\_  
Notary Public

My Commission Expires 2-10-2020

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

WW-6A

Supplement Pg. 1A

Tug Hill Operating, LLC  
380 Southpointe BLVD, Suite 200  
Canonsburg, PA 15317

## WATER WELL REPORT

Well: MCMASTERS N-12HU  
District: Franklin  
County: Marshall  
State: WV

There appears to be One ( 1 ) possible water source within 2,000 feet of the above referenced well location.

Topo Spot # 1 (House/Cabin) TM 5-18-3.1 Nikki L. & Jonathan Stevens 757 Weeping Willow Ln. Proctor, WV 26055 304-771-0630 © 740-255-3620 © 336-239-2605 ©		

RECEIVED  
Office of Oil and Gas

FEB 13 2020  
WV Department of  
Environmental Protection



WW-6A

SUPPLEMENT PG 1

# PROPOSED McMASTERS N-12HU

*There appears to be one (1) possible water source within 2,000'.*



#1

CENTER OF PAD  
NAD 1983  
LAT:39.760172  
LON:-80.787590

McMASTERS  
N-12HU

2,000' radius

RECEIVED  
Office of Oil and Gas

FEB 13 2020



**TUG HILL**  
OPERATING

OPERATOR	494510851
TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD SUITE 200 CANONSBURG, PA 15317	

TOPO SECTION	POWHATAN POINT 7.5'
SCALE:	1" = 1000'

LEASE NAME	McMASTERS
DATE:	DATE: 1-7-2020

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF ENTRY FOR PLAT SURVEY**

**Notice Time Requirement:** Notice shall be provided at least **SEVEN (7)** days but no more than **FORTY-FIVE (45)** days prior to entry

**Date of Notice:** 11/27/2019      **Date of Planned Entry:** 12/4/2019

**Delivery method pursuant to West Virginia Code § 22-6A-10a**

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

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

**Notice is hereby provided to:**

SURFACE OWNER(s)

Name: Mark A. Yoho  
Address: 6701 Burch Ridge Rd.  
Proctor, WV 26055

Name: Mark E. Yoho  
Address: 3998 Burch Ridge Rd.  
Proctor, WV 26055

Name: Donald Shields  
Address: 231 Lonesome Ln.  
Proctor, WV 26055

COAL OWNER OR LESSEE

Name: CNX Land Resources  
Address: 1000 Consol Dr.  
Canonsburg, PA 15317

MINERAL OWNER(s)

Name: Robert & Rebecca Shields  
Address: 2756 Burch Ridge Rd.  
Proctor, WV 26055

\*please attach additional forms if necessary

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>39.760262; -80.788083</u>
County: <u>Marshall</u>	Public Road Access: <u>Burch Ridge Road (County Route 29)</u>
District: <u>Franklin</u>	Watershed: <u>Lower Fish Creek</u>
Quadrangle: <u>Powhatan Point 7.5'</u>	Generally used farm name: <u>Donald L. Shields, et al</u>

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: Tug Hill Operating, LLC  
Telephone: 724-749-8388  
Email: amiller@tug-hilltop.com

Address: 380 Southpointe Boulevard, Plaza II, Suite 200  
Canonsburg, PA 15317  
Facsimile: 724-338-2030

RECEIVED  
Office of Oil and Gas  
FEB 13 2020  
WV Department of  
Environmental Protection

**Oil and Gas Privacy Notice:**

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

**ADDITIONAL PARTIES TO NOTICE**

**McMasters Pad**

**WW-6A3**

Additional Surface Owner:

Robert and Rebecca Shields

2756 Burch Ridge Road

Proctor, WV 26055

Additional Mineral Owner:

Donald Shields

231 Lonesome Ln.

Proctor, WV 26055

**RECEIVED**  
**Office of Oil and Gas**

**FEB 13 2020**

**WV Department of  
Environmental Protection**

4705 023 0

WW-6A5  
(1/12)

Operator Well No. McMasters N-13HU

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

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

**Date of Notice:** 02/04/2020      **Date Permit Application Filed:** 02/06/2020

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

CERTIFIED MAIL                                       HAND  
RETURN RECEIPT REQUESTED                                      DELIVERY

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

**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: Donald Shields  
Address: 231 Lonesome Ln.  
Proctor, WV 26055

Name: Robert and Rebecca Shields  
Address: 2756 Burch Ridge Road  
Proctor, WV 26055

**Notice is hereby given:**

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>518,203.46</u>
County:	<u>Marshall</u>		Northing:	<u>4,401,148.98</u>
District:	<u>Franklin</u>	Public Road Access:	<u>Burch Ridge Road (CR 29)</u>	
Quadrangle:	<u>Powhatan Point 7.5'</u>	Generally used farm name:	<u>Robert L. Shields, et al</u>	
Watershed:	<u>Fish Creek (HUC 10)</u>			

**This Notice Shall Include:**

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

Well Operator: Tug Hill Operating, LLC  
Telephone: 724-749-8388  
Email: amiller@tug-hillop.com

Address: 380 Southpointe Boulevard, Plaza II, Suite 200  
Canonsburg, PA 15317  
Facsimile: 724-338-2030

**Oil and Gas Privacy Notice:**

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

RECEIVED  
Office of Oil and Gas

FEB 13 2020

WV Department of  
Environmental Protection

4705 02316

**ADDITIONAL PARTIES TO NOTICE**

**McMasters Pad**

**WW-6A5**

4705-102316

Additional Surface Owner:

Mark A. Yoho  
6701 Burch Ridge Road  
Proctor, WV 26055 \

Mark E. Yoho  
3998 Burch Ridge Road  
Proctor, WV 26055

**RECEIVED**  
**Office of Oil and Gas**

FEB 13 2020

**WV Department of**  
**Environmental Protection**

4705 02316

4705102316



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
**Division of Highways**

1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505

Byrd E. White, III  
Secretary of Transportation/  
Commissioner of Highways

January 28, 2020

Jimmy Wriston, P. E.  
Deputy Secretary/  
Deputy Commissioner

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

Subject: DOH Permit for the Shields Pad, Marshall County

McMasters N-11HU	McMasters N-12HU ✓	McMasters N-13HU
McMasters N-14HU	McMasters N-15HU	McMasters S-16HU
McMasters S-17HU	McMasters S-18HU	McMasters S-19HU
McMasters S-20HU		

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2012-0250 which has been transferred to Tug Hill Operating for access to the State Road for a well site located off Marshall County Route 29 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a DISTRICT WIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.  
Regional Maintenance Engineer  
Central Office O&G Coordinator

RECEIVED  
Office of Oil and Gas

Cc: Amy Miller  
Tug Hill Operating  
CH, OM, D-6  
File

FEB 13 2020  
WV Department of  
Environmental Protection



**PLANNED ADDITIVES TO BE USED IN FRACTURING OR STIMULATION**

Well No. McMasters N-12HU

<b>PRODUCT NAME:</b>	<b>CHEMICAL DESCRIPTION:</b>	<b>PRODUCT USE:</b>	<b>HAZARDOUS COMPONENT:</b>
GBW-20C	Hemicellulase Breaker	Breaker - Water	None
ALPHA 1427		Biocide	Glutaraldehyde – CAS#000111-30-8 Quaternary ammonium chloride CAS# 007173-51-5 Alky dimethyl benzyl ammonium Chloride (C12-16) – CAS#068424-85-1 Ethanol – CAS# 000064-17-5 Water – CAS# 007732-18-5
FRAC SAND	Silica Sand (various Mesh sizes)	Proppant	Crystalline silica (quartz) CAS# 14808-60-7
S-8C, Sand	Silica Sand (100 mesh)	Sand	Silica – CAS# 14808-60-7
GW-3LDF		Gellant - Water	Petroleum Distillate Blend – Proprietary, (Not Associated with Diesel Fuel) Guar gum – CAS# 009000-30-0
FRW-18		Friction Reducer	Hydrotreated light distillate CAS# 064742-47-8
Scaletrol		Scale Inhibitor	Ethylene glycol – CAS# 000107-21-1 Diethylene glycol – CAS# 000111-46-6

**RECEIVED**  
Office of Oil and Gas

FEB 13 2020  
PA Department of  
Environmental Protection