



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Thursday, February 27, 2020
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

TUG HILL OPERATING, LLC
380 SOUTHPOINTE BLVD

CANONSBURG, PA 15317

Re: Permit Modification Approval for BURCH RIDGE 6UH
47-051-02193-00-00

Modified for Lateral Extension for a TMD of 24,864'.

TUG HILL OPERATING, LLC

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

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

A handwritten signature in blue ink, appearing to read 'James A. Martin', is positioned above the printed name and title.

James A. Martin
Chief

Operator's Well Number: BURCH RIDGE 6UH
Farm Name: CONSOL RCPC LLC
U.S. WELL NUMBER: 47-051-02193-00-00
Horizontal 6A New Drill
Date Modification Issued: February 27, 2020

Promoting a healthy environment.



west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street SE, Charleston, WV 25304
304-926-0499 Ext 1274

Barry K. Lay, Chairman
dep.wv.gov

October 8, 2019

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

RE: Application for Deep Well Permit – API #47-051-02193

COMPANY: Tug Hill Operating, LLC

FARM: Consol RCPC, LLC Burch Ridge S-6HU

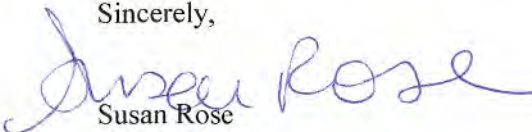
COUNTY: Marshall DISTRICT: Franklin QUAD: Powhatan Point

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; Docket 288-271 Exception Location Hearing
4. Provided a plat showing that the proposed location is a distance of 400± feet from the nearest lease line or unit boundary with the exception of the toe which is 10 feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,


Susan Rose
Administrator

** Blake U-7H 47-051-01766, Blake N-9HU 47-051-02203, Blake N-10HU 47-051-02204, Blake N-11HU 47-051-02205, Armstrong 1N-13HU 47-051-02259, Armstrong 1N-14HU 47-051-02260, Armstrong 1S-10HU 47-051-02256, Armstrong 1S-11HU 47-051-02257, Armstrong 1S-12HU 47-051-02258, Hansen N-4HU 47-051-02175, Hansen 1S-8HU 47-051-02177, Simms U-5H 47-051-01731, and Burch Ridge S-7HU 47-051-02194

4705102193

WW-6B
(04/15)

API NO. 47-051 -
OPERATOR WELL NO. Burch Ridge 6HU
Well Pad Name: Burch Ridge

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: Burch Ridge 6HU Well Pad Name: Burch Ridge

3) Farm Name/Surface Owner: CONSOL RCPC, LLC Public Road Access: Burch Ridge Road

4) Elevation, current ground: 1310.39' Elevation, proposed post-construction: 1310.39'

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

(b) If Gas Shallow Deep
Horizontal

Handwritten signature and date: 2/4/2020

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Point Pleasant is the target formation at a depth of 11,253' - 11,133' - thickness of 120' and anticipated pressure of approx. 9500 psi.

8) Proposed Total Vertical Depth: 11,403'

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

10) Proposed Total Measured Depth: 24,864'

11) Proposed Horizontal Leg Length: 12,531.33'

12) Approximate Fresh Water Strata Depths: 70' ; 901'

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 - 807' ; Pittsburgh Coal - 900'

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: _____

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WW-6B
(04/15)

API NO. 47- 051 - 02193

OPERATOR WELL NO. Burch Ridge 6HU

Well Pad Name: Burch Ridge

JW
5/20/19

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	NEW	BW	BW	120'	120'	259FT^3(CTS)
Fresh Water	20"	NEW	J55	106.5#	1000'	1000'	1,613FT^3(CTS)
Coal	13 3/8"	NEW	J55	54.5#	2751'	2751'	1,975FT^3(CTS)
Intermediate	9 5/8"	NEW	HPP110	47#	10,743'	10,743'	3,501FT^3(CTS)
Production	5 1/2"	NEW	P110	23#	24,864'	24,864'	5,879FT^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		11,069'	
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"	1.0	2,333	1,866	CLASS A	1.2
Fresh Water	20"	26"	.5	2,410	1,928	SEE # 24	1.2
Coal	13 3/8"	17 1/2"	.38	2,740	2,192	SEE #24	1.2
Intermediate	9 5/8"	12 1/4"	.472	10,730	6,968	SEE #24	1.99
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			

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WW-6B
(10/14)

4705102193

API NO. 47-051

OPERATOR WELL NO. Burch Ridge 6HU

Well Pad Name: Burch Ridge

J. [Signature]
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 (10,569'). 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 31,322,500 lb proppant and 484,269 bbl of water. Max rate = 80 bpm; max psi = 12,000#.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 17.06 acres

22) Area to be disturbed for well pad only, less access road (acres): 3.35 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

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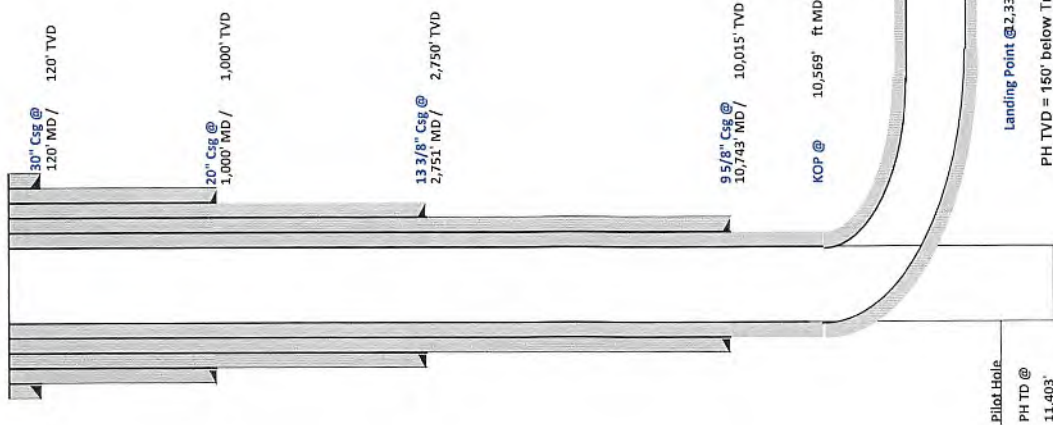
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*Note: Attach additional sheets as needed.



WELL NAME: Burch Ridge S-6HU
 STATE: WV COUNTY: Marshall
 DISTRICT: Franklin
 DE Elev: 1,310' GI Elev: 1,310'
 TD: 24,864'
 TH Latitude: 39.75435517
 TH Longitude: -80.80249684
 BH Latitude: 39.730664
 BH Longitude: -80.784246



FORMATION TOPS	
Formation	Depth, TVD
Deepest Fresh Water	901'
Sewickley Coal	807'
Pittsburgh Coal	900'
Big Lime	2,034'
Berea	2,576'
Tully	6,376'
Marcellus	6,435'
Onondaga	6,487'
Salina	7,180'
Lockport	8,208'
Utica	10,878'
Point Pleasant	11,133'
Landing Depth	11,183'
Trenton	11,253'
Pilot Hole TD	11,403'

CASING SUMMARY						
Type	Hole Size (in)	Csg Size (in)	Depth (MD)	Depth (TVD)	Weight (lb/ft)	Top of Cement
Conductor	36	30	120'	120'	BW	Surface
Surface	26	20	1,000'	1,000'	106.5	Surface
Intermediate 1	17 1/2	13 3/8	2,751'	2,750'	54.5	Surface
Intermediate 2	12 1/4	9 5/8	10,743'	10,015'	47	Surface
Production	8 1/2	5 1/2	24,864'	11,400'	23	Surface

CEMENT SUMMARY				DRILLING DETAILS	
Sacks	Class	Density	Fluid Type	Centralizer Notes	
338	A	15.6	Air	None	
1,740	A	15.6	Air	3 Centralizers at equal distance	
2,103	A	15	Air	1 Centralizer every other jt	
2,927	A	14.5	Air	1 Centralizer every other jt	
5,216	A	15	Air / SOBIM	1 every other joint in lateral; 1 per joint in curve; 1 every other jt to sfc	

Handwritten signature/initials

Pilot Hole
 PH TD @ 11,403'
 Landing Point @ 2,335' MD / 11,183' TVD
 PH TVD = 150' below Trenton Top
 Lateral TD @ 24,864' ft MD
 11,400' ft TVD

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Tug Hill Operating, LLC Casing and Cement Program

Burch Ridge S-6HU

Casing

	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	20"	J55	26"	1,000'	CTS
Intermediate 1	13 3/8"	J55	17 1/2"	2,751'	CTS
Intermediate 2	9 5/8"	HPP110	12 1/4"	10,743'	CTS
Production	5 1/2"	HCP110	8 1/2"	24,864'	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

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Well Site Safety Plan

Tug Hill Operating, LLC

ju
5/20/19

Well Name: Burch Ridge 6HU

Pad Location: Burch Ridge

Marshall County, West Virginia

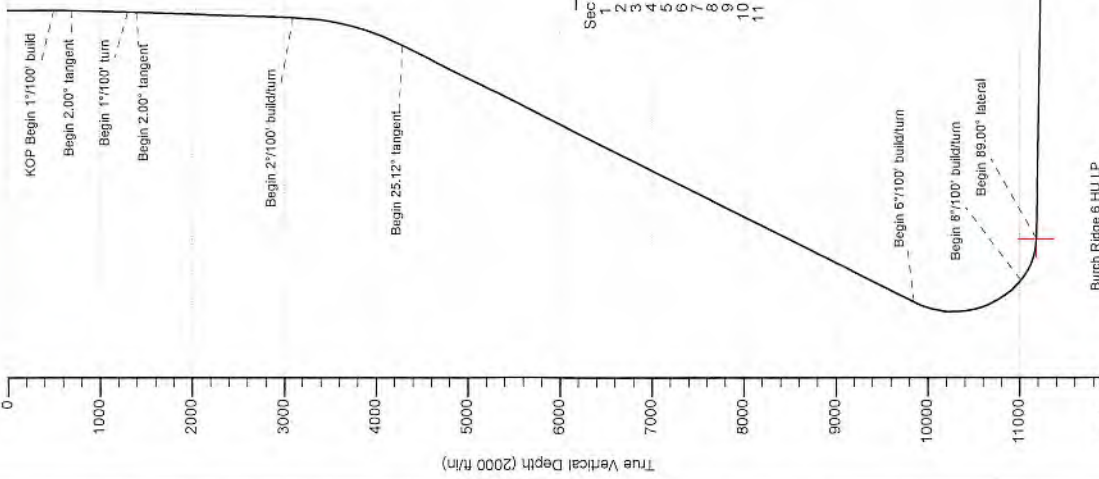
UTM (meters), NAD83, Zone 17:

NORTHING -4,400,512.27

EASTING -516,919.07

Updated May 2019

Well: Burch Ridge 6 HU (slot F)
 Site: Burch Ridge
 Project: Marshall County, West Virginia
 Design: rev1
 Rig:



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SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 1'100' build
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Begin 2.00° tangent
3	700.00	2.00	0.00	699.96	3.49	0.00	1.00	0.00	0.00	Begin 1'100' turn
4	1300.41	2.00	0.00	1300.00	24.44	0.00	0.00	0.00	-21.00	Begin 2.00° tangent
5	1397.66	2.00	331.85	1397.20	27.64	-0.90	1.00	-104.067	-24.16	Begin 2'100' buildturn
6	3101.50	2.00	331.85	3100.00	80.07	-28.95	0.00	0.00	-83.55	Begin 25.12° tangent
7	4338.09	26.73	331.74	4288.64	348.23	-172.98	2.00	-0.124	-387.71	Begin 5'100' buildturn
8	10559.28	26.73	331.74	9853.96	2816.91	-1500.28	0.00	0.00	-3187.82	Begin 8'100' buildturn
9	11847.83	50.00	149.27	11014.53	2818.89	-1365.44	6.00	178.050	-2948.62	Begin 89.00° lateral
10	12335.44	89.00	149.98	11182.00	2232.03	-1139.25	8.00	1.131	-2500.89	Begin 89.00° lateral
11	24864.44	89.00	149.98	11400.00	-8614.78	5127.73	0.00	0.000	10025.37	PBH/1400.00 TVD

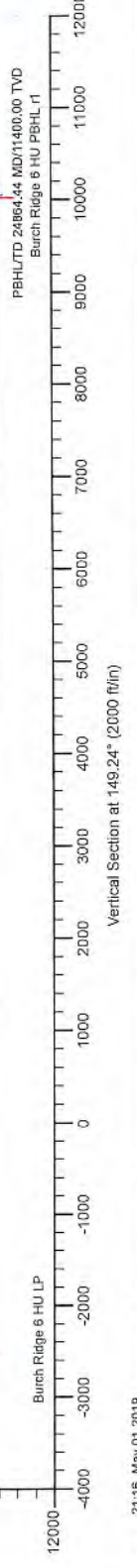
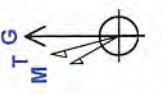
Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD83 West Virginia - HARN
 Ellipsoid: GRS 1980
 Zone: Zone 17N (84 W to 78 W)

System Datum: Mean Sea Level
 Depth Reference: GL @ 1313.00ft
 Northing: 14437347.35
 Easting: 1695925.32

Latitude: 39.75435517
 Longitude: -80.80249684

Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.791°

Azimuths to Grid North
 True North: -0.13°
 Magnetic North: -8.79°
 Strength: 51869.78nt
 Dip Angle: 69.018
 Date: 10/2018
 Model: IGRF2015





Planning Report - Geographic

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Burch Ridge 6 HU (slot F)
Company:	Tug Hill Operating LLC	TVD Reference:	GL @ 1313.00ft
Project:	Marshall County, West Virginia	MD Reference:	GL @ 1313.00ft
Site:	Burch Ridge	North Reference:	Grid
Well:	Burch Ridge 6 HU (slot F)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Project	Marshall County, West Virginia		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD83 West Virginia - HARN		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Burch Ridge				
Site Position:		Northing:	14,437,347.35 usft	Latitude:	39.75435517
From:	Lat/Long	Easting:	1,695,925.32 usft	Longitude:	-80.80249684
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.126 °

Well	Burch Ridge 6 HU (slot F)					
Well Position	+N/-S	0.00 ft	Northing:	14,437,347.35 usft	Latitude:	39.75435517
	+E/-W	0.00 ft	Easting:	1,695,925.32 usft	Longitude:	-80.80249684
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	1,313.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/31/2018	-8.665	66.815	51,989.71302335

Design	rev1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	149.24

Plan Survey Tool Program	Date	5/1/2019		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	24,864.44 rev1 (Original Hole)	MWD MWD - Standard	

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Planning Report - Geographic

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Burch Ridge 6 HU (slot F)
Company:	Tug Hill Operating LLC	TVD Reference:	GL @ 1313.00ft
Project:	Marshall County, West Virginia	MD Reference:	GL @ 1313.00ft
Site:	Burch Ridge	North Reference:	Grid
Well:	Burch Ridge 6 HU (slot F)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.000	
700.00	2.00	0.00	699.96	3.49	0.00	1.00	1.00	0.00	0.000	
1,300.41	2.00	0.00	1,300.00	24.44	0.00	0.00	0.00	0.00	0.000	
1,397.66	2.00	331.85	1,397.20	27.64	-0.80	1.00	0.00	-28.94	-104.067	
3,101.50	2.00	331.85	3,100.00	80.07	-28.85	0.00	0.00	0.00	0.000	
4,338.09	26.73	331.74	4,288.64	348.23	-172.98	2.00	2.00	-0.01	-0.124	
10,569.28	26.73	331.74	9,853.86	2,816.91	-1,500.28	0.00	0.00	0.00	0.000	
11,847.83	50.00	149.27	11,014.53	2,618.69	-1,365.44	6.00	1.82	13.89	178.060	
12,335.44	89.00	149.98	11,182.01	2,232.03	-1,139.25	8.00	8.00	0.15	1.131	
24,864.44	89.00	149.98	11,400.00	-8,614.78	5,127.73	0.00	0.00	0.00	0.000	Burch Ridge 6 HU PB

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Planning Report - Geographic

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Database: DB_Jul2216dt_v14
 Company: Tug Hill Operating LLC
 Project: Marshall County, West Virginia
 Site: Burch Ridge
 Well: Burch Ridge 6 HU (slot F)
 Wellbore: Original Hole
 Design: rev1

Local Co-ordinate Reference: Well Burch Ridge 6 HU (slot F)
 TVD Reference: GL @ 1313.00ft
 MD Reference: GL @ 1313.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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WV Department of Environmental Protection

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,437,347.35	1,695,925.32	39.75435517	-80.80249684
100.00	0.00	0.00	100.00	0.00	0.00	14,437,347.35	1,695,925.32	39.75435517	-80.80249684
200.00	0.00	0.00	200.00	0.00	0.00	14,437,347.35	1,695,925.32	39.75435517	-80.80249684
300.00	0.00	0.00	300.00	0.00	0.00	14,437,347.35	1,695,925.32	39.75435517	-80.80249684
400.00	0.00	0.00	400.00	0.00	0.00	14,437,347.35	1,695,925.32	39.75435517	-80.80249684
500.00	0.00	0.00	500.00	0.00	0.00	14,437,347.35	1,695,925.32	39.75435517	-80.80249684
KOP Begin 1°/100' build									
600.00	1.00	0.00	599.99	0.87	0.00	14,437,348.22	1,695,925.32	39.75435757	-80.80249683
700.00	2.00	0.00	699.96	3.49	0.00	14,437,350.84	1,695,925.32	39.75436476	-80.80249681
Begin 2.00° tangent									
800.00	2.00	0.00	799.90	6.98	0.00	14,437,354.33	1,695,925.32	39.75437434	-80.80249679
900.00	2.00	0.00	899.84	10.47	0.00	14,437,357.82	1,695,925.32	39.75438393	-80.80249676
1,000.00	2.00	0.00	999.78	13.96	0.00	14,437,361.31	1,695,925.32	39.75439351	-80.80249673
1,100.00	2.00	0.00	1,099.72	17.45	0.00	14,437,364.80	1,695,925.32	39.75440309	-80.80249670
1,200.00	2.00	0.00	1,199.65	20.94	0.00	14,437,368.29	1,695,925.32	39.75441268	-80.80249668
1,300.00	2.00	0.00	1,299.59	24.43	0.00	14,437,371.78	1,695,925.32	39.75442226	-80.80249665
1,300.41	2.00	0.00	1,300.00	24.44	0.00	14,437,371.79	1,695,925.32	39.75442230	-80.80249665
Begin 1°/100' turn									
1,397.66	2.00	331.85	1,397.20	27.64	-0.80	14,437,374.99	1,695,924.52	39.75443108	-80.80249947
Begin 2.00° tangent									
1,400.00	2.00	331.85	1,399.54	27.71	-0.84	14,437,375.06	1,695,924.48	39.75443128	-80.80249961
1,500.00	2.00	331.85	1,499.47	30.79	-2.49	14,437,378.14	1,695,922.83	39.75443974	-80.80250544
1,600.00	2.00	331.85	1,599.41	33.86	-4.13	14,437,381.21	1,695,921.18	39.75444820	-80.80251128
1,700.00	2.00	331.85	1,699.35	36.94	-5.78	14,437,384.29	1,695,919.54	39.75445666	-80.80251711
1,800.00	2.00	331.85	1,799.29	40.02	-7.43	14,437,387.37	1,695,917.89	39.75446512	-80.80252295
1,900.00	2.00	331.85	1,899.23	43.10	-9.07	14,437,390.45	1,695,916.25	39.75447358	-80.80252878
2,000.00	2.00	331.85	1,999.17	46.17	-10.72	14,437,393.52	1,695,914.60	39.75448204	-80.80253461
2,100.00	2.00	331.85	2,099.11	49.25	-12.36	14,437,396.60	1,695,912.95	39.75449050	-80.80254045
2,200.00	2.00	331.85	2,199.05	52.33	-14.01	14,437,399.68	1,695,911.31	39.75449896	-80.80254628
2,300.00	2.00	331.85	2,298.99	55.40	-15.66	14,437,402.75	1,695,909.66	39.75450742	-80.80255212
2,400.00	2.00	331.85	2,398.93	58.48	-17.30	14,437,405.83	1,695,908.01	39.75451588	-80.80255795
2,500.00	2.00	331.85	2,498.87	61.56	-18.95	14,437,408.91	1,695,906.37	39.75452434	-80.80256379
2,600.00	2.00	331.85	2,598.80	64.64	-20.60	14,437,411.99	1,695,904.72	39.75453280	-80.80256962
2,700.00	2.00	331.85	2,698.74	67.71	-22.24	14,437,415.06	1,695,903.07	39.75454126	-80.80257545
2,800.00	2.00	331.85	2,798.68	70.79	-23.89	14,437,418.14	1,695,901.43	39.75454972	-80.80258129
2,900.00	2.00	331.85	2,898.62	73.87	-25.54	14,437,421.22	1,695,899.78	39.75455819	-80.80258712
3,000.00	2.00	331.85	2,998.56	76.94	-27.18	14,437,424.29	1,695,898.13	39.75456665	-80.80259296
3,100.00	2.00	331.85	3,098.50	80.02	-28.83	14,437,427.37	1,695,896.49	39.75457511	-80.80259879
3,101.50	2.00	331.85	3,100.00	80.07	-28.85	14,437,427.42	1,695,896.46	39.75457523	-80.80259888
Begin 2°/100' build/turn									
3,200.00	3.97	331.79	3,198.36	84.59	-31.28	14,437,431.94	1,695,894.04	39.75458766	-80.80260746
3,300.00	5.97	331.77	3,297.98	92.22	-35.37	14,437,439.57	1,695,889.94	39.75460865	-80.80262198
3,400.00	7.97	331.76	3,397.24	102.91	-41.12	14,437,450.26	1,695,884.20	39.75463804	-80.80264232
3,500.00	9.97	331.75	3,496.01	116.65	-48.49	14,437,464.00	1,695,876.82	39.75467581	-80.80266847
3,600.00	11.97	331.75	3,594.18	133.41	-57.50	14,437,480.76	1,695,867.82	39.75472189	-80.80270039
3,700.00	13.97	331.74	3,691.62	153.18	-68.13	14,437,500.53	1,695,857.19	39.75477625	-80.80273803
3,800.00	15.97	331.74	3,788.22	175.93	-80.35	14,437,523.28	1,695,844.96	39.75483881	-80.80278136
3,900.00	17.97	331.74	3,883.86	201.63	-94.17	14,437,548.99	1,695,831.14	39.75490949	-80.80283033
4,000.00	19.97	331.74	3,978.43	230.27	-109.56	14,437,577.62	1,695,815.75	39.75498821	-80.80288487
4,100.00	21.97	331.74	4,071.80	261.79	-126.51	14,437,609.14	1,695,798.81	39.75507488	-80.80294491
4,200.00	23.97	331.74	4,163.86	296.16	-144.99	14,437,643.51	1,695,780.33	39.75516938	-80.80301039
4,300.00	25.97	331.74	4,254.51	333.34	-164.98	14,437,680.69	1,695,760.34	39.75527160	-80.80308122
4,338.09	26.73	331.74	4,288.64	348.23	-172.98	14,437,695.58	1,695,752.34	39.75531255	-80.80310959
Begin 25.12° tangent									



Planning Report - Geographic

Database:	DB_Jul2216dt_V14	Local Co-ordinate Reference:	Well Burch Ridge 6 HU (slot F)	RECEIVED Office of Oil and Gas JUN 14 2019 WV Department of Environmental Protection
Company:	Tug Hill Operating LLC	TVD Reference:	GL @ 1313.00ft	
Project:	Marshall County, West Virginia	MD Reference:	GL @ 1313.00ft	
Site:	Burch Ridge	North Reference:	Grid	
Well:	Burch Ridge 6 HU (slot F)	Survey Calculation Method:	Minimum Curvature	
Wellbore:	Original Hole			
Design:	rev1			

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,400.00	26.73	331.74	4,343.94	372.75	-186.17	14,437,720.10	1,695,739.15	39.75537999	-80.80315632	
4,500.00	26.73	331.74	4,433.25	412.37	-207.47	14,437,759.72	1,695,717.85	39.75548892	-80.80323180	
4,600.00	26.73	331.74	4,522.56	451.99	-228.77	14,437,799.34	1,695,696.55	39.75559785	-80.80330728	
4,700.00	26.73	331.74	4,611.87	491.61	-250.07	14,437,838.96	1,695,675.25	39.75570678	-80.80338277	
4,800.00	26.73	331.74	4,701.19	531.23	-271.37	14,437,878.58	1,695,653.94	39.75581571	-80.80345825	
4,900.00	26.73	331.74	4,790.50	570.84	-292.67	14,437,918.19	1,695,632.64	39.75592464	-80.80353373	
5,000.00	26.73	331.74	4,879.81	610.46	-313.97	14,437,957.81	1,695,611.34	39.75603357	-80.80360921	
5,100.00	26.73	331.74	4,969.12	650.08	-335.28	14,437,997.43	1,695,590.04	39.75614250	-80.80368469	
5,200.00	26.73	331.74	5,058.44	689.70	-356.58	14,438,037.05	1,695,568.74	39.75625144	-80.80376018	
5,300.00	26.73	331.74	5,147.75	729.32	-377.88	14,438,076.67	1,695,547.44	39.75636037	-80.80383566	
5,400.00	26.73	331.74	5,237.06	768.94	-399.18	14,438,116.28	1,695,526.14	39.75646930	-80.80391114	
5,500.00	26.73	331.74	5,326.37	808.55	-420.48	14,438,155.90	1,695,504.84	39.75657823	-80.80398662	
5,600.00	26.73	331.74	5,415.68	848.17	-441.78	14,438,195.52	1,695,483.54	39.75668716	-80.80406211	
5,700.00	26.73	331.74	5,505.00	887.79	-463.08	14,438,235.14	1,695,462.24	39.75679609	-80.80413759	
5,800.00	26.73	331.74	5,594.31	927.41	-484.38	14,438,274.76	1,695,440.94	39.75690502	-80.80421308	
5,900.00	26.73	331.74	5,683.62	967.03	-505.68	14,438,314.37	1,695,419.64	39.75701395	-80.80428856	
6,000.00	26.73	331.74	5,772.93	1,006.64	-526.98	14,438,353.99	1,695,398.33	39.75712288	-80.80436404	
6,100.00	26.73	331.74	5,862.25	1,046.26	-548.28	14,438,393.61	1,695,377.03	39.75723181	-80.80443953	
6,200.00	26.73	331.74	5,951.56	1,085.88	-569.59	14,438,433.23	1,695,355.73	39.75734074	-80.80451501	
6,300.00	26.73	331.74	6,040.87	1,125.50	-590.89	14,438,472.85	1,695,334.43	39.75744967	-80.80459050	
6,400.00	26.73	331.74	6,130.18	1,165.12	-612.19	14,438,512.46	1,695,313.13	39.75755860	-80.80466598	
6,500.00	26.73	331.74	6,219.49	1,204.73	-633.49	14,438,552.08	1,695,291.83	39.75766753	-80.80474147	
6,600.00	26.73	331.74	6,308.81	1,244.35	-654.79	14,438,591.70	1,695,270.53	39.75777646	-80.80481696	
6,700.00	26.73	331.74	6,398.12	1,283.97	-676.09	14,438,631.32	1,695,249.23	39.75788539	-80.80489244	
6,800.00	26.73	331.74	6,487.43	1,323.59	-697.39	14,438,670.94	1,695,227.93	39.75799432	-80.80496793	
6,900.00	26.73	331.74	6,576.74	1,363.21	-718.69	14,438,710.55	1,695,206.63	39.75810325	-80.80504341	
7,000.00	26.73	331.74	6,666.06	1,402.82	-739.99	14,438,750.17	1,695,185.33	39.75821218	-80.80511890	
7,100.00	26.73	331.74	6,755.37	1,442.44	-761.29	14,438,789.79	1,695,164.03	39.75832111	-80.80519439	
7,200.00	26.73	331.74	6,844.68	1,482.06	-782.59	14,438,829.41	1,695,142.72	39.75843004	-80.80526988	
7,300.00	26.73	331.74	6,933.99	1,521.68	-803.89	14,438,869.03	1,695,121.42	39.75853897	-80.80534536	
7,400.00	26.73	331.74	7,023.30	1,561.30	-825.20	14,438,908.64	1,695,100.12	39.75864790	-80.80542085	
7,500.00	26.73	331.74	7,112.62	1,600.92	-846.50	14,438,948.26	1,695,078.82	39.75875683	-80.80549634	
7,600.00	26.73	331.74	7,201.93	1,640.53	-867.80	14,438,987.88	1,695,057.52	39.75886576	-80.80557183	
7,700.00	26.73	331.74	7,291.24	1,680.15	-889.10	14,439,027.50	1,695,036.22	39.75897469	-80.80564731	
7,800.00	26.73	331.74	7,380.55	1,719.77	-910.40	14,439,067.12	1,695,014.92	39.75908362	-80.80572280	
7,900.00	26.73	331.74	7,469.87	1,759.39	-931.70	14,439,106.73	1,694,993.62	39.75919255	-80.80579829	
8,000.00	26.73	331.74	7,559.18	1,799.01	-953.00	14,439,146.35	1,694,972.32	39.75930148	-80.80587378	
8,100.00	26.73	331.74	7,648.49	1,838.62	-974.30	14,439,185.97	1,694,951.02	39.75941041	-80.80594927	
8,200.00	26.73	331.74	7,737.80	1,878.24	-995.60	14,439,225.59	1,694,929.72	39.75951934	-80.80602476	
8,300.00	26.73	331.74	7,827.11	1,917.86	-1,016.90	14,439,265.21	1,694,908.42	39.75962827	-80.80610025	
8,400.00	26.73	331.74	7,916.43	1,957.48	-1,038.20	14,439,304.82	1,694,887.11	39.75973720	-80.80617574	
8,500.00	26.73	331.74	8,005.74	1,997.10	-1,059.51	14,439,344.44	1,694,865.81	39.75984612	-80.80625123	
8,600.00	26.73	331.74	8,095.05	2,036.71	-1,080.81	14,439,384.06	1,694,844.51	39.75995505	-80.80632672	
8,700.00	26.73	331.74	8,184.36	2,076.33	-1,102.11	14,439,423.68	1,694,823.21	39.76006398	-80.80640221	
8,800.00	26.73	331.74	8,273.68	2,115.95	-1,123.41	14,439,463.30	1,694,801.91	39.76017291	-80.80647770	
8,900.00	26.73	331.74	8,362.99	2,155.57	-1,144.71	14,439,502.91	1,694,780.61	39.76028184	-80.80655319	
9,000.00	26.73	331.74	8,452.30	2,195.19	-1,166.01	14,439,542.53	1,694,759.31	39.76039077	-80.80662869	
9,100.00	26.73	331.74	8,541.61	2,234.80	-1,187.31	14,439,582.15	1,694,738.01	39.76049970	-80.80670418	
9,200.00	26.73	331.74	8,630.93	2,274.42	-1,208.61	14,439,621.77	1,694,716.71	39.76060863	-80.80677967	
9,300.00	26.73	331.74	8,720.24	2,314.04	-1,229.91	14,439,661.39	1,694,695.41	39.76071756	-80.80685516	
9,400.00	26.73	331.74	8,809.55	2,353.66	-1,251.21	14,439,701.01	1,694,674.11	39.76082649	-80.80693065	
9,500.00	26.73	331.74	8,898.86	2,393.28	-1,272.51	14,439,740.62	1,694,652.81	39.76093541	-80.80700615	
9,600.00	26.73	331.74	8,988.17	2,432.90	-1,293.82	14,439,780.24	1,694,631.50	39.76104434	-80.80708164	
9,700.00	26.73	331.74	9,077.49	2,472.51	-1,315.12	14,439,819.86	1,694,610.20	39.76115327	-80.80715713	
9,800.00	26.73	331.74	9,166.80	2,512.13	-1,336.42	14,439,859.48	1,694,588.90	39.76126220	-80.80723263	



Planning Report - Geographic

Database: DB_Jul2216dt_v14
 Company: Tug Hill Operating LLC
 Project: Marshall County, West Virginia
 Site: Burch Ridge
 Well: Burch Ridge 6 HU (slot F)
 Wellbore: Original Hole
 Design: rev1

Local Co-ordinate Reference: Well Burch Ridge 6 HU (slot F)
 TVD Reference: GL @ 1313.00ft
 MD Reference: GL @ 1313.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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WV Department of
 Environmental Protection

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,900.00	26.73	331.74	9,256.11	2,551.75	-1,357.72	14,439,899.10	1,694,567.60	39.76137113	-80.80730812
10,000.00	26.73	331.74	9,345.42	2,591.37	-1,379.02	14,439,938.71	1,694,546.30	39.76148006	-80.80738361
10,100.00	26.73	331.74	9,434.74	2,630.99	-1,400.32	14,439,978.33	1,694,525.00	39.76158898	-80.80745911
10,200.00	26.73	331.74	9,524.05	2,670.60	-1,421.62	14,440,017.95	1,694,503.70	39.76169791	-80.80753460
10,300.00	26.73	331.74	9,613.36	2,710.22	-1,442.92	14,440,057.57	1,694,482.40	39.76180684	-80.80761010
10,400.00	26.73	331.74	9,702.67	2,749.84	-1,464.22	14,440,097.19	1,694,461.10	39.76191577	-80.80768559
10,500.00	26.73	331.74	9,791.98	2,789.46	-1,485.52	14,440,136.80	1,694,439.80	39.76202470	-80.80776109
10,569.28	26.73	331.74	9,853.86	2,816.91	-1,500.28	14,440,164.25	1,694,425.04	39.76210016	-80.80781339
Begin 6°/100' build/turn									
10,600.00	24.89	331.88	9,881.51	2,828.69	-1,506.60	14,440,176.04	1,694,418.72	39.76213257	-80.80783578
10,700.00	18.89	332.55	9,974.26	2,861.65	-1,524.00	14,440,209.00	1,694,401.32	39.76222319	-80.80789744
10,800.00	12.90	333.81	10,070.39	2,886.06	-1,536.40	14,440,233.41	1,694,388.92	39.76229031	-80.80794138
10,900.00	6.93	337.20	10,168.85	2,901.66	-1,543.67	14,440,249.01	1,694,381.65	39.76233318	-80.80796714
11,000.00	1.24	14.90	10,268.57	2,908.27	-1,545.73	14,440,255.62	1,694,379.59	39.76235135	-80.80797443
11,100.00	5.20	140.37	10,368.44	2,905.82	-1,542.56	14,440,253.17	1,694,382.76	39.76234460	-80.80796317
11,200.00	11.16	145.57	10,467.38	2,894.34	-1,534.20	14,440,241.69	1,694,391.12	39.76231302	-80.80793348
11,300.00	17.15	147.17	10,564.30	2,873.96	-1,520.72	14,440,221.30	1,694,404.60	39.76225696	-80.80788569
11,400.00	23.14	147.96	10,658.14	2,844.89	-1,502.29	14,440,192.23	1,694,423.03	39.76217702	-80.80782033
11,500.00	29.14	148.44	10,747.88	2,807.45	-1,479.10	14,440,154.80	1,694,446.22	39.76207408	-80.80773810
11,600.00	35.13	148.76	10,832.52	2,762.07	-1,451.41	14,440,109.41	1,694,473.91	39.76194927	-80.80763991
11,700.00	41.13	149.00	10,911.14	2,709.22	-1,419.52	14,440,056.57	1,694,505.80	39.76180395	-80.80752684
11,800.00	47.13	149.19	10,982.88	2,649.50	-1,383.78	14,439,996.84	1,694,541.54	39.76163973	-80.80740012
11,847.83	50.00	149.27	11,014.53	2,618.69	-1,365.44	14,439,966.04	1,694,559.88	39.76155501	-80.80733509
Begin 8°/100' build/turn									
11,900.00	54.17	149.37	11,046.58	2,583.30	-1,344.45	14,439,930.65	1,694,580.87	39.76145770	-80.80726065
12,000.00	62.17	149.54	11,099.27	2,510.18	-1,301.31	14,439,857.53	1,694,624.01	39.76125664	-80.80710770
12,100.00	70.17	149.68	11,139.64	2,431.34	-1,255.07	14,439,778.68	1,694,670.25	39.76103983	-80.80694380
12,200.00	78.17	149.82	11,166.90	2,348.30	-1,206.65	14,439,695.64	1,694,718.67	39.76081149	-80.80677212
12,300.00	86.17	149.94	11,180.51	2,262.68	-1,156.97	14,439,610.02	1,694,768.35	39.76057606	-80.80659601
12,335.44	89.00	149.98	11,182.01	2,232.03	-1,139.25	14,439,579.37	1,694,786.07	39.76049179	-80.80653318
Begin 89.00° lateral									
12,400.00	89.00	149.98	11,183.13	2,176.13	-1,106.96	14,439,523.48	1,694,818.36	39.76033810	-80.80641870
12,500.00	89.00	149.98	11,184.87	2,089.56	-1,056.94	14,439,436.91	1,694,868.38	39.76010005	-80.80624138
12,600.00	89.00	149.98	11,186.61	2,002.99	-1,006.92	14,439,350.33	1,694,918.40	39.75986199	-80.80606406
12,700.00	89.00	149.98	11,188.35	1,916.41	-956.90	14,439,263.76	1,694,968.42	39.75962394	-80.80588674
12,800.00	89.00	149.98	11,190.09	1,829.84	-906.88	14,439,177.19	1,695,018.44	39.75938588	-80.80570942
12,900.00	89.00	149.98	11,191.83	1,743.27	-856.86	14,439,090.61	1,695,068.46	39.75914783	-80.80553210
13,000.00	89.00	149.98	11,193.57	1,656.69	-806.84	14,439,004.04	1,695,118.48	39.75890978	-80.80535479
13,100.00	89.00	149.98	11,195.31	1,570.12	-756.82	14,438,917.47	1,695,168.50	39.75867172	-80.80517748
13,200.00	89.00	149.98	11,197.05	1,483.55	-706.80	14,438,830.89	1,695,218.52	39.75843367	-80.80500016
13,300.00	89.00	149.98	11,198.79	1,396.97	-656.78	14,438,744.32	1,695,268.54	39.75819561	-80.80482285
13,400.00	89.00	149.98	11,200.53	1,310.40	-606.76	14,438,657.75	1,695,318.56	39.75795756	-80.80464554
13,500.00	89.00	149.98	11,202.27	1,223.82	-556.74	14,438,571.17	1,695,368.58	39.75771950	-80.80446823
13,600.00	89.00	149.98	11,204.01	1,137.25	-506.72	14,438,484.60	1,695,418.60	39.75748144	-80.80429092
13,700.00	89.00	149.98	11,205.75	1,050.68	-456.70	14,438,398.03	1,695,468.62	39.75724339	-80.80411362
13,800.00	89.00	149.98	11,207.49	964.10	-406.68	14,438,311.45	1,695,518.64	39.75700533	-80.80393631
13,900.00	89.00	149.98	11,209.23	877.53	-356.66	14,438,224.88	1,695,568.66	39.75676727	-80.80375901
14,000.00	89.00	149.98	11,210.97	790.96	-306.64	14,438,138.31	1,695,618.68	39.75652922	-80.80358171
14,100.00	89.00	149.98	11,212.71	704.38	-256.62	14,438,051.73	1,695,668.70	39.75629116	-80.80340440
14,200.00	89.00	149.98	11,214.45	617.81	-206.60	14,437,965.16	1,695,718.72	39.75605310	-80.80322710
14,300.00	89.00	149.98	11,216.19	531.24	-156.58	14,437,878.59	1,695,768.74	39.75581504	-80.80304980
14,400.00	89.00	149.98	11,217.93	444.66	-106.56	14,437,792.01	1,695,818.76	39.75557699	-80.80287251
14,500.00	89.00	149.98	11,219.67	358.09	-56.54	14,437,705.44	1,695,868.78	39.75533893	-80.80269521
14,600.00	89.00	149.98	11,221.41	271.51	-6.52	14,437,618.87	1,695,918.80	39.75510087	-80.80251791



Planning Report - Geographic

Database: DB_Jul2216dt_v14
 Company: Tug Hill Operating LLC
 Project: Marshall County, West Virginia
 Site: Burch Ridge
 Well: Burch Ridge 6 HU (slot F)
 Wellbore: Original Hole
 Design: rev1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well Burch Ridge 6 HU (slot F)
 GL @ 1313.00ft
 GL @ 1313.00ft
 Grid
 Minimum Curvature

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WV Department of
 Environmental Protection

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,700.00	89.00	149.98	11,223.15	184.94	43.50	14,437,532.29	1,695,968.82	39.75486281	-80.80234062
14,800.00	89.00	149.98	11,224.89	98.37	93.52	14,437,445.72	1,696,018.84	39.75462475	-80.80216333
14,900.00	89.00	149.98	11,226.63	11.79	143.54	14,437,359.14	1,696,068.85	39.75438669	-80.80198603
15,000.00	89.00	149.98	11,228.37	-74.78	193.56	14,437,272.57	1,696,118.87	39.75414863	-80.80180874
15,100.00	89.00	149.98	11,230.11	-161.35	243.58	14,437,186.00	1,696,168.89	39.75391057	-80.80163145
15,200.00	89.00	149.98	11,231.85	-247.93	293.60	14,437,099.42	1,696,218.91	39.75367251	-80.80145417
15,300.00	89.00	149.98	11,233.59	-334.50	343.62	14,437,012.85	1,696,268.93	39.75343445	-80.80127688
15,400.00	89.00	149.98	11,235.33	-421.07	393.64	14,436,926.28	1,696,318.95	39.75319639	-80.80109959
15,500.00	89.00	149.98	11,237.07	-507.65	443.66	14,436,839.70	1,696,368.97	39.75295833	-80.80092231
15,600.00	89.00	149.98	11,238.81	-594.22	493.68	14,436,753.13	1,696,418.99	39.75272027	-80.80074502
15,700.00	89.00	149.98	11,240.55	-680.80	543.70	14,436,666.56	1,696,469.01	39.75248220	-80.80056774
15,800.00	89.00	149.98	11,242.29	-767.37	593.72	14,436,579.98	1,696,519.03	39.75224414	-80.80039046
15,900.00	89.00	149.98	11,244.03	-853.94	643.74	14,436,493.41	1,696,569.05	39.75200608	-80.80021318
16,000.00	89.00	149.98	11,245.77	-940.52	693.76	14,436,406.84	1,696,619.07	39.75176802	-80.80003590
16,100.00	89.00	149.98	11,247.51	-1,027.09	743.78	14,436,320.26	1,696,669.09	39.75152995	-80.79985863
16,200.00	89.00	149.98	11,249.25	-1,113.66	793.80	14,436,233.69	1,696,719.11	39.75129189	-80.79968135
16,300.00	89.00	149.98	11,250.99	-1,200.24	843.82	14,436,147.12	1,696,769.13	39.75105383	-80.79950408
16,400.00	89.00	149.98	11,252.73	-1,286.81	893.83	14,436,060.54	1,696,819.15	39.75081576	-80.79932680
16,500.00	89.00	149.98	11,254.47	-1,373.38	943.85	14,435,973.97	1,696,869.17	39.75057770	-80.79914953
16,600.00	89.00	149.98	11,256.21	-1,459.96	993.87	14,435,887.40	1,696,919.19	39.75033963	-80.79897226
16,700.00	89.00	149.98	11,257.95	-1,546.53	1,043.89	14,435,800.82	1,696,969.21	39.75010157	-80.79879499
16,800.00	89.00	149.98	11,259.69	-1,633.11	1,093.91	14,435,714.25	1,697,019.23	39.74986351	-80.79861772
16,900.00	89.00	149.98	11,261.43	-1,719.68	1,143.93	14,435,627.68	1,697,069.25	39.74962544	-80.79844045
17,000.00	89.00	149.98	11,263.17	-1,806.25	1,193.95	14,435,541.10	1,697,119.27	39.74938737	-80.79826319
17,100.00	89.00	149.98	11,264.90	-1,892.83	1,243.97	14,435,454.53	1,697,169.29	39.74914931	-80.79808592
17,200.00	89.00	149.98	11,266.64	-1,979.40	1,293.99	14,435,367.95	1,697,219.31	39.74891124	-80.79790866
17,300.00	89.00	149.98	11,268.38	-2,065.97	1,344.01	14,435,281.38	1,697,269.33	39.74867318	-80.79773139
17,400.00	89.00	149.98	11,270.12	-2,152.55	1,394.03	14,435,194.81	1,697,319.35	39.74843511	-80.79755413
17,500.00	89.00	149.98	11,271.86	-2,239.12	1,444.05	14,435,108.23	1,697,369.37	39.74819704	-80.79737687
17,600.00	89.00	149.98	11,273.60	-2,325.69	1,494.07	14,435,021.66	1,697,419.39	39.74795898	-80.79719961
17,700.00	89.00	149.98	11,275.34	-2,412.27	1,544.09	14,434,935.09	1,697,469.41	39.74772091	-80.79702236
17,800.00	89.00	149.98	11,277.08	-2,498.84	1,594.11	14,434,848.51	1,697,519.43	39.74748284	-80.79684510
17,900.00	89.00	149.98	11,278.82	-2,585.42	1,644.13	14,434,761.94	1,697,569.44	39.74724477	-80.79666784
18,000.00	89.00	149.98	11,280.56	-2,671.99	1,694.15	14,434,675.37	1,697,619.46	39.74700670	-80.79649059
18,100.00	89.00	149.98	11,282.30	-2,758.56	1,744.17	14,434,588.79	1,697,669.48	39.74676864	-80.79631334
18,200.00	89.00	149.98	11,284.04	-2,845.14	1,794.19	14,434,502.22	1,697,719.50	39.74653057	-80.79613608
18,300.00	89.00	149.98	11,285.78	-2,931.71	1,844.21	14,434,415.65	1,697,769.52	39.74629250	-80.79595883
18,400.00	89.00	149.98	11,287.52	-3,018.28	1,894.23	14,434,329.07	1,697,819.54	39.74605443	-80.79578158
18,500.00	89.00	149.98	11,289.26	-3,104.86	1,944.25	14,434,242.50	1,697,869.56	39.74581636	-80.79560434
18,600.00	89.00	149.98	11,291.00	-3,191.43	1,994.27	14,434,155.93	1,697,919.58	39.74557829	-80.79542709
18,700.00	89.00	149.98	11,292.74	-3,278.00	2,044.29	14,434,069.35	1,697,969.60	39.74534022	-80.79524984
18,800.00	89.00	149.98	11,294.48	-3,364.58	2,094.31	14,433,982.78	1,698,019.62	39.74510215	-80.79507260
18,900.00	89.00	149.98	11,296.22	-3,451.15	2,144.33	14,433,896.21	1,698,069.64	39.74486408	-80.79489536
19,000.00	89.00	149.98	11,297.96	-3,537.73	2,194.35	14,433,809.63	1,698,119.66	39.74462601	-80.79471811
19,100.00	89.00	149.98	11,299.70	-3,624.30	2,244.37	14,433,723.06	1,698,169.68	39.74438794	-80.79454087
19,200.00	89.00	149.98	11,301.44	-3,710.87	2,294.39	14,433,636.49	1,698,219.70	39.74414986	-80.79436363
19,300.00	89.00	149.98	11,303.18	-3,797.45	2,344.41	14,433,549.91	1,698,269.72	39.74391179	-80.79418640
19,400.00	89.00	149.98	11,304.92	-3,884.02	2,394.43	14,433,463.34	1,698,319.74	39.74367372	-80.79400916
19,500.00	89.00	149.98	11,306.66	-3,970.59	2,444.45	14,433,376.76	1,698,369.76	39.74343565	-80.79383192
19,600.00	89.00	149.98	11,308.40	-4,057.17	2,494.47	14,433,290.19	1,698,419.78	39.74319758	-80.79365469
19,700.00	89.00	149.98	11,310.14	-4,143.74	2,544.49	14,433,203.62	1,698,469.80	39.74295950	-80.79347745
19,800.00	89.00	149.98	11,311.88	-4,230.31	2,594.51	14,433,117.04	1,698,519.82	39.74272143	-80.79330022
19,900.00	89.00	149.98	11,313.62	-4,316.89	2,644.53	14,433,030.47	1,698,569.84	39.74248336	-80.79312299
20,000.00	89.00	149.98	11,315.36	-4,403.46	2,694.55	14,432,943.90	1,698,619.86	39.74224528	-80.79294576
20,100.00	89.00	149.98	11,317.10	-4,490.04	2,744.57	14,432,857.32	1,698,669.88	39.74200721	-80.79276853



Planning Report - Geographic

Database: DB_Jul2216dt_V14
 Company: Tug Hill Operating LLC
 Project: Marshall County, West Virginia
 Site: Burch Ridge
 Well: Burch Ridge 6 HU (slot F)
 Wellbore: Original Hole
 Design: rev1

Local Co-ordinate Reference: Well Burch Ridge 6 HU (slot F)
 TVD Reference: GL @ 1313.00ft
 MD Reference: GL @ 1313.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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 AUG 14 2019
 WV Department of
 Environmental Protection

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
20,200.00	89.00	149.98	11,318.84	-4,576.61	2,794.59	14,432,770.75	1,698,719.90	39.74176913	-80.79259131
20,300.00	89.00	149.98	11,320.58	-4,663.18	2,844.61	14,432,684.18	1,698,769.92	39.74153106	-80.79241408
20,400.00	89.00	149.98	11,322.32	-4,749.76	2,894.63	14,432,597.60	1,698,819.94	39.74129298	-80.79223685
20,500.00	89.00	149.98	11,324.06	-4,836.33	2,944.65	14,432,511.03	1,698,869.96	39.74105491	-80.79205963
20,600.00	89.00	149.98	11,325.80	-4,922.90	2,994.67	14,432,424.46	1,698,919.98	39.74081683	-80.79188241
20,700.00	89.00	149.98	11,327.54	-5,009.48	3,044.68	14,432,337.88	1,698,970.00	39.74057876	-80.79170519
20,800.00	89.00	149.98	11,329.28	-5,096.05	3,094.70	14,432,251.31	1,699,020.02	39.74034068	-80.79152797
20,900.00	89.00	149.98	11,331.02	-5,182.62	3,144.72	14,432,164.74	1,699,070.03	39.74010261	-80.79135075
21,000.00	89.00	149.98	11,332.76	-5,269.20	3,194.74	14,432,078.16	1,699,120.05	39.73986453	-80.79117353
21,100.00	89.00	149.98	11,334.50	-5,355.77	3,244.76	14,431,991.59	1,699,170.07	39.73962645	-80.79099631
21,200.00	89.00	149.98	11,336.24	-5,442.35	3,294.78	14,431,905.02	1,699,220.09	39.73938837	-80.79081910
21,300.00	89.00	149.98	11,337.98	-5,528.92	3,344.80	14,431,818.44	1,699,270.11	39.73915030	-80.79064188
21,400.00	89.00	149.98	11,339.72	-5,615.49	3,394.82	14,431,731.87	1,699,320.13	39.73891222	-80.79046467
21,500.00	89.00	149.98	11,341.46	-5,702.07	3,444.84	14,431,645.30	1,699,370.15	39.73867414	-80.79028746
21,600.00	89.00	149.98	11,343.20	-5,788.64	3,494.86	14,431,558.72	1,699,420.17	39.73843606	-80.79011025
21,700.00	89.00	149.98	11,344.94	-5,875.21	3,544.88	14,431,472.15	1,699,470.19	39.73819799	-80.78993304
21,800.00	89.00	149.98	11,346.68	-5,961.79	3,594.90	14,431,385.58	1,699,520.21	39.73795991	-80.78975583
21,900.00	89.00	149.98	11,348.42	-6,048.36	3,644.92	14,431,299.00	1,699,570.23	39.73772183	-80.78957863
22,000.00	89.00	149.98	11,350.16	-6,134.93	3,694.94	14,431,212.43	1,699,620.25	39.73748375	-80.78940142
22,100.00	89.00	149.98	11,351.90	-6,221.51	3,744.96	14,431,125.85	1,699,670.27	39.73724567	-80.78922422
22,200.00	89.00	149.98	11,353.64	-6,308.08	3,794.98	14,431,039.28	1,699,720.29	39.73700759	-80.78904701
22,300.00	89.00	149.98	11,355.38	-6,394.66	3,845.00	14,430,952.71	1,699,770.31	39.73676951	-80.78886981
22,400.00	89.00	149.98	11,357.12	-6,481.23	3,895.02	14,430,866.13	1,699,820.33	39.73653143	-80.78869261
22,500.00	89.00	149.98	11,358.86	-6,567.80	3,945.04	14,430,779.56	1,699,870.35	39.73629335	-80.78851541
22,600.00	89.00	149.98	11,360.60	-6,654.38	3,995.06	14,430,692.99	1,699,920.37	39.73605527	-80.78833821
22,700.00	89.00	149.98	11,362.34	-6,740.95	4,045.08	14,430,606.41	1,699,970.39	39.73581719	-80.78816102
22,800.00	89.00	149.98	11,364.08	-6,827.52	4,095.10	14,430,519.84	1,700,020.41	39.73557910	-80.78798382
22,900.00	89.00	149.98	11,365.82	-6,914.10	4,145.12	14,430,433.27	1,700,070.43	39.73534102	-80.78780663
23,000.00	89.00	149.98	11,367.56	-7,000.67	4,195.14	14,430,346.69	1,700,120.45	39.73510294	-80.78762943
23,100.00	89.00	149.98	11,369.30	-7,087.24	4,245.16	14,430,260.12	1,700,170.47	39.73486486	-80.78745224
23,200.00	89.00	149.98	11,371.04	-7,173.82	4,295.18	14,430,173.55	1,700,220.49	39.73462677	-80.78727505
23,300.00	89.00	149.98	11,372.78	-7,260.39	4,345.20	14,430,086.97	1,700,270.51	39.73438869	-80.78709786
23,400.00	89.00	149.98	11,374.52	-7,346.97	4,395.22	14,430,000.40	1,700,320.53	39.73415061	-80.78692067
23,500.00	89.00	149.98	11,376.26	-7,433.54	4,445.24	14,429,913.83	1,700,370.55	39.73391252	-80.78674348
23,600.00	89.00	149.98	11,378.00	-7,520.11	4,495.26	14,429,827.25	1,700,420.57	39.73367444	-80.78656630
23,700.00	89.00	149.98	11,379.74	-7,606.69	4,545.28	14,429,740.68	1,700,470.59	39.73343636	-80.78638911
23,800.00	89.00	149.98	11,381.48	-7,693.26	4,595.30	14,429,654.11	1,700,520.61	39.73319827	-80.78621193
23,900.00	89.00	149.98	11,383.22	-7,779.83	4,645.32	14,429,567.53	1,700,570.63	39.73296019	-80.78603475
24,000.00	89.00	149.98	11,384.96	-7,866.41	4,695.34	14,429,480.96	1,700,620.64	39.73272210	-80.78585757
24,100.00	89.00	149.98	11,386.70	-7,952.98	4,745.36	14,429,394.39	1,700,670.66	39.73248402	-80.78568039
24,200.00	89.00	149.98	11,388.44	-8,039.56	4,795.38	14,429,307.81	1,700,720.68	39.73224593	-80.78550321
24,300.00	89.00	149.98	11,390.18	-8,126.13	4,845.40	14,429,221.24	1,700,770.70	39.73200785	-80.78532603
24,400.00	89.00	149.98	11,391.92	-8,212.70	4,895.42	14,429,134.66	1,700,820.72	39.73176976	-80.78514885
24,500.00	89.00	149.98	11,393.66	-8,299.28	4,945.44	14,429,048.09	1,700,870.74	39.73153167	-80.78497168
24,600.00	89.00	149.98	11,395.40	-8,385.85	4,995.46	14,428,961.52	1,700,920.76	39.73129359	-80.78479451
24,700.00	89.00	149.98	11,397.14	-8,472.42	5,045.48	14,428,874.94	1,700,970.78	39.73105550	-80.78461733
24,800.00	89.00	149.98	11,398.88	-8,559.00	5,095.50	14,428,788.37	1,701,020.80	39.73081741	-80.78444016
24,864.44	89.00	149.98	11,400.00	-8,614.78	5,127.73	14,428,732.59	1,701,053.03	39.73066400	-80.78432600

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Planning Report - Geographic

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AUG 14 2019

WV Department of
Environmental Protection

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Burch Ridge 6 HU (slot F)
Company:	Tug Hill Operating LLC	TVD Reference:	GL @ 1313.00ft
Project:	Marshall County, West Virginia	MD Reference:	GL @ 1313.00ft
Site:	Burch Ridge	North Reference:	Grid
Well:	Burch Ridge 6 HU (slot F)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Burch Ridge 6 HU LP	0.00	0.00	11,182.00	2,232.07	-1,139.26	14,439,579.42	1,694,786.06	39.76049190	-80.80653323
- plan misses target center by 0.01ft at 12335.40ft MD (11182.00 TVD, 2232.07 N, -1139.27 E)									
- Point									
Burch Ridge 6 HU PBHL	0.00	0.00	11,400.00	-8,614.78	5,127.73	14,428,732.59	1,701,053.03	39.73066400	-80.78432600
- plan hits target center									
- Point									

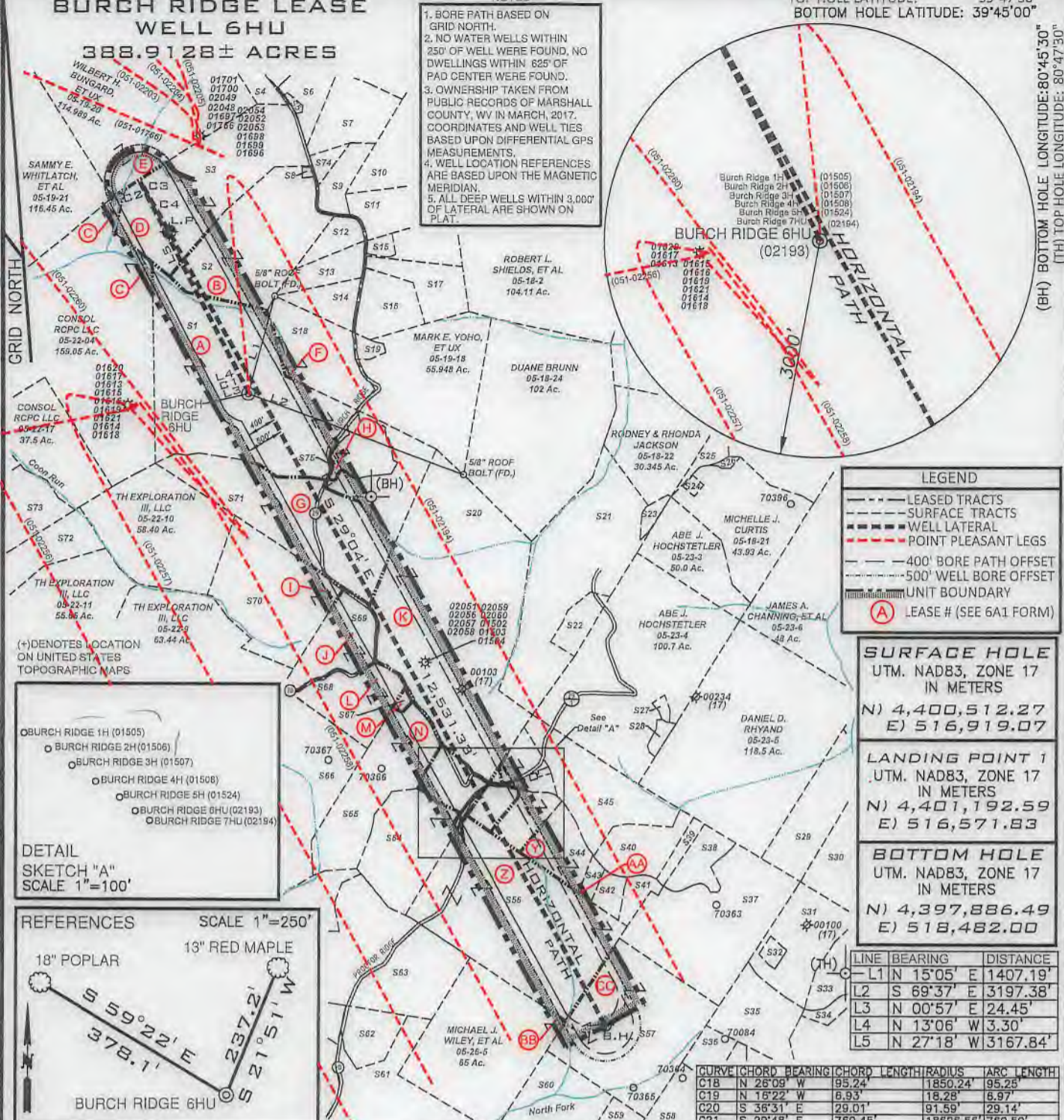
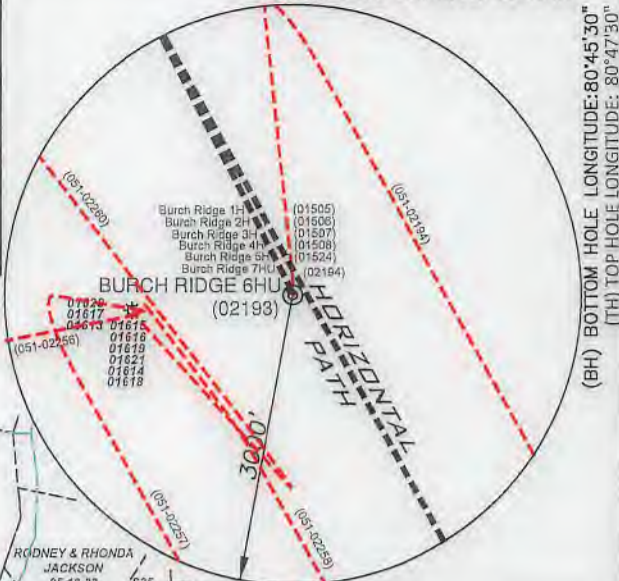
Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
500.00	500.00	0.00	0.00	KOP Begin 1°/100' build
700.00	699.96	3.49	0.00	Begin 2.00° tangent
1,300.41	1,300.00	24.44	0.00	Begin 1°/100' turn
1,397.66	1,397.20	27.64	-0.80	Begin 2.00° tangent
3,101.50	3,100.00	80.07	-28.85	Begin 2°/100' build/turn
4,338.09	4,288.64	348.23	-172.98	Begin 25.12° tangent
10,569.28	9,853.86	2,816.91	-1,500.28	Begin 6°/100' build/turn
11,847.83	11,014.53	2,618.69	-1,365.44	Begin 8°/100' build/turn
12,335.44	11,182.01	2,232.03	-1,139.25	Begin 89.00° lateral
24,864.44	11,400.00	-8,614.78	5,127.73	PBHL/TD 24864.44 MD/11400.00 TVD

BURCH RIDGE LEASE WELL 6HU 388.9128± ACRES

NOTES

1. BORE PATH BASED ON GRID NORTH.
2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
5. ALL DEEP WELLS WITHIN 3,000' OF LATERAL ARE SHOWN ON PLAT.

TOP HOLE LATITUDE: 39°47'30"
BOTTOM HOLE LATITUDE: 39°45'00"



LEGEND

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

SURFACE HOLE

UTM. NAD83, ZONE 17
IN METERS
N) 4,400,512.27
E) 516,919.07

LANDING POINT 1

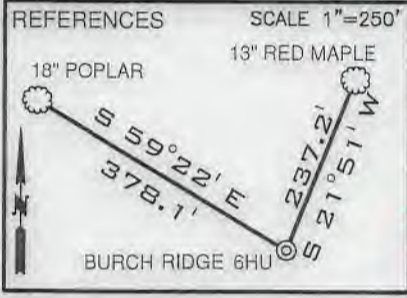
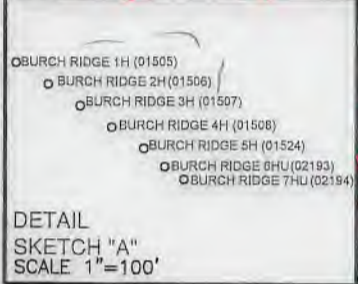
UTM. NAD83, ZONE 17
IN METERS
N) 4,401,192.59
E) 516,571.83

BOTTOM HOLE

UTM. NAD83, ZONE 17
IN METERS
N) 4,397,886.49
E) 518,482.00

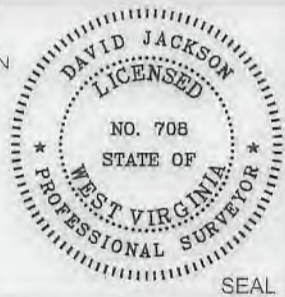
LINE	BEARING	DISTANCE
L1	N 15°05' E	1407.19'
L2	S 69°37' E	3197.38'
L3	N 00°57' E	24.45'
L4	N 13°06' W	3.30'
L5	N 27°18' W	3167.84'

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C18	N 26°09' W	95.24'	1850.24'	95.25'
C19	N 15°22' W	6.93'	18.28'	6.97'
C20	S 36°31' E	29.01'	91.59'	29.14'
C21	S 29°48' E	760.45'	18626.56'	760.50'



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

David L Jackson



FILE NUMBER _____
DRAWING NUMBER: BURCH RIDGE 6HU_Rev 1
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING
GRADE GPS



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

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

DATE: MAY 29, 2019
REVISED DATE: AUGUST 13, 2019
OPERATORS WELL NO. BURCH RIDGE 6HU
API WELL NO. 47-051-02193H6A
STATE COUNTY PERMIT

LOCATION ELEVATION 1310.39' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER
DISTRICT FRANKLIN COUNTY MARSHALL
QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER SEE WW-6A1 FORM

SURFACE OWNER CONSOL RPC LLC ACREAGE 134.425
OIL & GAS ROYALTY OWNER CNX GAS COMPANY LLC LEASE ACREAGE 134.425
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____
PLUG & ABANDON CLEAN OUT & REPLUG

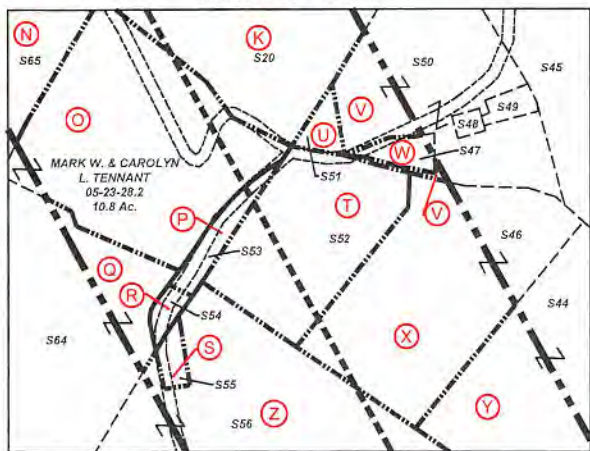
TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,403' TMD: 24,864'
WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME
PERMIT

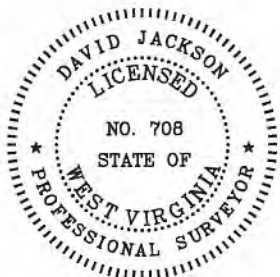
form: ww6

**BURCH RIDGE LEASE
WELL 6HU
388.9128± ACRES**

Detail "A"



Number	TAX MAP -PARCEL	SURFACE OWNER	ACRES
S1	A 05-22-05	Consol RCPC LLC.	134.425
S2	B 05-19-28	David E. Yoho & Mark E. Yoho	56.899
S3	D 05-19-19	Russell Blake, et ux	66.4
S4	05-19-09	Penny Elaine Mezendez	10.44
S5	05-19-15	B. J. Herran Revocable Trust	0.72
S6	05-19-29	Ernie L. & Tammy L. Anderson	10.961
S7	05-19-30	Ernie & Tammy Anderson	19.037
S8	05-19-32	Jasper N. Burch, et al - Trustees	0.397
S9	05-19-31	Charles F. & Diana L. Haynes	8.779
S10	05-18-01	Diana Henry Haynes & Carol C. Henry	62.908
S11	05-19-14	James & Sherry Beegle	18.356
S12	05-19-27	David E. Yoho & Mark E. Yoho	7.041
S13	05-19-26	Roger J. & Beth E. James	9.977
S14	05-19-25	David E. Yoho & Mark E. Yoho	9.976
S15	05-19-16.1	Robert L. & Rebecca A. Shields	2.307
S16	05-19-24	Mark E. Yoho	15.436
S17	05-19-17	Mark E. Yoho	15.263
S18	F 05-19-18.2	Paul V. & Carol Neely	32.672
S19	05-19-18.1	Mark E. Yoho, et ux	2.57
S20	K 05-23-01	Patricia Accetolo, et al	146.66
S21	05-23-02	Daniel J. & Danielle D. Lilley	70.0
S22	05-23-2.2	Jessica N. & Andrew L. Jones	77.636
S23	05-23-2.1	William L. & Janice M. Wayne	2.364
S24	05-18-21	David P. Lissan, Life and David P. Lissan II & Julius L. Lissan	1.0
S25	05-18-21.1	Rodney & Rhonda Jackson	5.47
S26	05-18-21.3	T.H. Exploration III, LLC	0.811
S27	05-23-4.2	XCL Midstream Operating, LLC	1.17
S28	05-23-4.1	XCL Midstream Operating, LLC	2.16
S29	05-23-08	Carl David & Suzanne L. Guseman	29.5
S30	05-23-9.3	Linda D. Greathouse	17.5
S31	05-23-9.2	Linda D. Greathouse	25.58
S32	05-23-9.4	Jackson R. Sr. & Deanna L. Davis	2.087
S33	05-23-13	Linda D. Greathouse	14.24
S34	05-23-12	Mark A. Yoho	3.05
S35	05-23-9.1	John W. Van Orden, et ux	23.376
S36	05-26-22	Richard Joseph Otte, et ux	8.3
S37	05-23-14	Dominion Transmission, Inc.	59.5
S38	05-23-15	Henry Virginia Ethel, Est	15.5
S39	05-23-16.1	Donald B. Henry	1.97
S40	05-23-16	Roy Friend Yoho, Sr.	18.03
S41	05-23-17.3	William & Katherine Flewelling	5.018
S42	05-23-17	Tammy & Thomas E. Brown	4.62
S43	AA 05-23-17.4	Tammy D. Meadows	2.605
S44	Y 05-23-17.2	Dick Jr. & Carol J. Rowan	14.920
S45	05-23-18	Abe J. Hochstetler	35.38
S46	X 05-23-17.1	Curtis E. Hall, et ux	10.051
S47	W 05-23-21	Mark A. Yoho & Mark E. Yoho	0.588
S48	05-23-20	Christan Church	0.19
S49	05-23-19	DOTY Cemetery	1.0
S50	V 05-23-18.1	Mark A. Yoho	7.8
S51	U 05-23-29	James Wiley	0.25
S52	T 05-23-22	Daniel D. Rhyand & Laurel R. Greene	6.25
S53	P 05-23-23	Michael J. Wiley, et al	1.0
S54	R 05-23-24	Michael J. Wiley, et al	0.25
S55	S 05-23-25	Arthur A. Wiley	0.43
S56	Z 05-23-26	Michael J. Wiley, et al	101.57
S57	CC 05-26-07	Dominion Transmission, Inc.	71.0
S58	05-26-23	Richard Joseph Otte, et ux	11.34
S59	05-26-17	Heartland Forestland Fund VII, LP	82.56
S60	05-26-06	Heartland Forestland Fund VII, LP	36.17
S61	05-26-4.4	Otis F. & Glenda M. Rush	39.436
S62	05-26-4.6	Otis F. Rush, Jr.	12.268
S63	05-26-02	Edwin Booth Anderson & Mark W. Booth	67.5
S64	Q 05-23-27	Michael J. Wiley, et al	33.140
S65	N 05-23-28	Gregg D. Minor	39.43
S66	05-28-05	T.H. Exploration III, LLC.	105.9
S67	M 05-23-28.1	Troy W. & Erin M. Thomas	1.0
S68	L 05-22-07	Patricia Accetolo, et al	25.02
S69	J 05-22-7.1	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	20.68
S70	I 05-22-08	T.H. Exploration III, LLC.	48.44
S71	G 05-22-06	Consol RCPC LLC.	64.70
S72	05-22-12	T.H. Exploration III, LLC.	61.49
S73	05-22-16	Edward R. Toho, Jr.	57.0
S74	05-19-30.1	Eric R. W. & Ashley A. Huggins	2.911
S75	H 05-22-5.1	Williams Ohio Valley Midstream, LLC	12.875



P.S.
708

David L Jackson

47-051-02193 H6A



**TUG HILL
OPERATING**

OPERATOR'S	WELL #:	<i>Burch Ridge 6HU</i>	WELL PLAT
	DISTRICT:	<i>Franklin</i>	PAGE 2 OF 3
	COUNTY:	<i>Marshall</i>	DATE: 05/29/2019
	STATE:	<i>WV</i>	REVISED DATE:
	API #:	<i>47-051-02193</i>	8/13/2019

form wv6

**BURCH RIDGE LEASE
WELL 6HU
388.9128± ACRES**

Lease ID	Tags	Parcel	Grantor, Lessor, etc.	Deed Book	Page
10*19529	A	5-22-5	CNX GAS COMPANY LLC	945	175
10*14297	B	5-19-28	MARK E. YOHO AND DAVID E. YOHO	655	547
10*14033	C	5-22-4	LAMOYNE BAKER, et al	665	554
10*14634	D	5-19-19	RUSSELL BLAKE & MARY BLAKE	773	568
10*14141	E	5-19-20	DAVID TAKACH AND WIFE DEBORAH	720	233
10*14421	F	5-19-18.2	PAUL V NEELY AND CAROL J NEELY	728	277
10*16471	G	5-22-6	CNX GAS COMPANY LLC	905	155
10*19529	H	5-22-5.1	CNX GAS COMPANY LLC	945	175
10*14418	I	5-22-8	PPG INDUSTRIES, INC.	878	610
10*14128	J	5-22-7.1	LOUIS J ACCETTOLO AND PATRICIA	703	280
10*14129	K	5-23-1	JESSE P. MCHENRY, ET UX	703	283
10*14128	L	5-22-7	JESSE P. MCHENRY, ET UX	703	280
10*19720	M	5-23-28.1	TROY W THOMAS & ERIN M AMOS-THOMAS	912	94
10*21218	N	5-23-28	GREGG D MINOR , et al	952	647
10*17190	O	5-23-28.2	MARK W. TENNANT CAROLYN L TENNANT	715	570
10*17716	P	5-23-23	MICHAEL J AND BARBARA L WILEY, et al	919	638
10*14710	Q	5-23-27	ROBERT L FRIEDLY, et al	800	408
10*23817	R	5-23-24	HELENA F. NEWMAN, ET AL	1015	149
10*14742	S	5-23-25	SUSAN GORE, et al	790	505
10*14944	T	5-23-22	HERBERT D MINOR	722	511
10*14849	U	5-23-29	DAVID GUSTELY, et al	806	265
10*14849	V	5-23-18.1	DAVID GUSTELY, et al	806	265
10*14849	W	5-23-21	DAVID GUSTELY, et al	806	265
10*14847	X	5-23-17.1	LETHA RUCKMAN, et al	806	270
10*14847	Y	5-23-17.2	LETHA RUCKMAN, et al	806	270
10*14742	Z	5-23-26	SUSAN GORE, et al	790	505
10*14847	AA	5-23-17.4	LETHA RUCKMAN, et al	806	270
10*14742	BB	5-26-5	SUSAN GORE, et al	790	505
10*18343	CC	5-26-7	DOMINION ENERGY TRANSMISSION INC	936	79



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AUG 14 2019
WV Department of
Environmental Protection

P.S. 708 *David L Jackson*

47-02193 H6A



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: Burch Ridge 6HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API #: 47-051-02193

WELL PLAT
PAGE 3 OF 3
DATE: 05/29/2019
REVISED DATE:
8/13/2019

WW-6A1
(5/13)

Operator's Well No. Burch Ridge S-6HU

**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

RECEIVED
Office of Oil and Gas

APR 14 2019

WV Department of
Environmental Protection

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

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

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

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

Well Operator: Tug Hill Operating, LLC

By:

Amy L. Miller

Its:

Permitting Specialist - Appalachia Region

51-02193

Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	
10*14297	B	5-19-28	MARK E. YOHO AND DAVID E. YOHO	TRIENERGY, INC.	1/8+	655	547	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	21/520 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Enerplus Resources (USA) Corp	24/39 AB Resources LLC, Chief Exploration & Development LLC, Radler 2000 Limited Partnership and Enerplus Resources (USA) Corp to Gastar Exploration USA Inc and Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC			
10*14033	C	5-22-4	LAMOYNE BAKER	GASTAR EXPLORATION USA, INC	1/8+	665	554	NA	NA	NA	NA	NA	23/353 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC			
10*14034	C	5-22-4	LAWRENCE C MCWHORTER AND LORRAINE J	GASTAR EXPLORATION USA, INC	1/8+	665	391	NA	NA	NA	NA	23/353 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC				
10*14035	C	5-22-4	PEGGY MAE WHITE	GASTAR EXPLORATION USA, INC	1/8+	695	446	NA	NA	NA	NA	23/353 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC				
10*14036	C	5-22-4	WILDA WINTERS	GASTAR EXPLORATION USA, INC	1/8+	701	579	NA	NA	NA	NA	23/353 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC				
10*14037	C	5-22-4	JUDITH CHAMBERS	GASTAR EXPLORATION USA, INC	1/8+	701	577	NA	NA	NA	NA	23/353 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC				
10*14039	C	5-22-4	CHESTNUT HOLDINGS, INC.	GASTAR EXPLORATION, INC	1/8+	827	554	NA	NA	NA	NA	28/499 Gastar Exploration USA Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC				
10*14634	D	5-19-19	RUSSELL BLAKE & MARY BLAKE	GASTAR EXPLORATION USA, INC	1/8+	773	568	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc to Gastar Exploration, Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC				

Office of Oil and Gas
 AUG 14 2019
 WV Department of Environmental Protection

WW-6A1 Supplement

Operator's Well No. Burch Ridge S-6HU

Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*17190	O	5-23-28.2	MARK W. TENNANT CAROLYN L. TENNANT	CHESAPEAKE APPALACHIA, LLC	1/8+	715	570	NA	29/325 Chesapeake Appalachia, LLC to Statoll USA Onshore Properties, Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoll USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC	41/238 Statoll USA Onshore Properties Inc to TH Exploration LLC		
10*17716	P	5-23-23	MICHAEL J AND BARBARA L WILEY	TH EXPLORATION, LLC	1/8+	919	638	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17777	P	5-23-23	MICHELLE E AND ROBERT T BAKER	TH EXPLORATION, LLC	1/8+	921	128	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14710	Q	5-23-27	ROBERT L FRIEDLY	GASTAR EXPLORATION USA, INC	1/8+	800	408	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc to Gastar Exploration, Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC		
10*19421	Q	5-23-27	CAYCE DAVENPORT FRIEDLY	TH EXPLORATION, LLC	1/8+	940	262	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*19721	Q	5-23-27	MARK FRIEDLY AND ANNA FRIEDLY	TH EXPLORATION, LLC	1/8+	944	579	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22019	Q	5-23-27	BARBARIE HILL	TH EXPLORATION, LLC	1/8+	960	548	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22444	Q	5-23-27	MICHELLE E BAKER	TH EXPLORATION, LLC	1/8+	963	642	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22445	Q	5-23-27	MICHAEL J WILEY	TH EXPLORATION, LLC	1/8+	963	640	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22558	Q	5-23-27	JOLINE FRIEDLY REINHART	TH EXPLORATION, LLC	1/8+	965	608	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23817	Q	5-23-27	HELENA F. NEWMAN, ET AL	TH EXPLORATION, LLC	1/8+	1015	149	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23817	R	5-23-24	HELENA F. NEWMAN, ET AL	TH EXPLORATION, LLC	1/8+	1015	149	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*19855	R	5-23-24	MARK FRIEDLY AND ANNA FRIEDLY	TH EXPLORATION, LLC	1/8+	946	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22019	R	5-23-24	BARBARIE HILL	TH EXPLORATION, LLC	1/8+	960	548	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*22588	R	5-23-24	JOLINE FRIEDLY REINHART	TH EXPLORATION, LLC	1/8+	965	606	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14742	S	5-23-25	SUSAN GORE	GASTAR EXPLORATION USA, INC	1/8+	790	505	NA	NA	NA	NA	NA	21/41 Gaster Exploration USA Inc to Gaster Exploration, Inc	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14744	S	5-23-25	THE SAMUEL MILTON SHEETS TRUST	GASTAR EXPLORATION USA, INC	1/8+	791	637	NA	NA	NA	NA	29/157 Gaster Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gaster Exploration USA Inc to Gaster Exploration Inc	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14745	S	5-23-25	RALPH B. TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	794	485	NA	NA	NA	NA	30/136 Gaster Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gaster Exploration USA Inc to Gaster Exploration Inc	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*17716	S	5-23-25	MICHAEL J AND BARBARA L WILEY	TH EXPLORATION, LLC	1/8+	919	638	NA	NA	NA	NA	NA	NA	NA	NA
10*17777	S	5-23-25	MICHELLE E AND ROBERT T BAKER	TH EXPLORATION, LLC	1/8+	921	128	NA	NA	NA	NA	NA	NA	NA	NA
10*21420	S	5-23-25	DAVID D BURKETT	TH EXPLORATION, LLC	1/8+	957	3	NA	NA	NA	NA	NA	NA	NA	NA
10*21421	S	5-23-25	BRYANNA FLYNN RANKIN REBECCA MCMILLAN	TH EXPLORATION, LLC	1/8+	957	5	NA	NA	NA	NA	NA	NA	NA	NA
10*21437	S	5-23-25	AND ROBERT MCMILLAN	TH EXPLORATION, LLC	1/8+	957	1	NA	NA	NA	NA	NA	NA	NA	NA
10*21821	S	5-23-25	LINDA K TAYLOR AND RAY P MAGEE	TH EXPLORATION, LLC	1/8+	951	631	NA	NA	NA	NA	NA	NA	NA	NA
10*14944	T	5-23-22	HERBERT D MINOR	TRIENERGY HOLDINGS, LLC	1/8+	722	511	25/463 TriEnergy Holdings, LLC to NPAR, LLC	26/269 NPAR, LLC to Chevron USA, Inc	756/307 NPAR, LLC to Chevron USA, Inc	28/356 TriEnergy Holdings, LLC and TriEnergy, Inc to Chevron USA, Inc	32/355 Chevron USA, Inc to Gaster Exploration Inc and Atinum Marcellus I LLC	32/370 Chevron USA, Inc to Gaster Exploration Inc and Atinum Marcellus I LLC	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14849	U	5-23-29	DAVID GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	806	265	NA	NA	NA	NA	31/184 Gaster Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gaster Exploration USA Inc to Gaster Exploration Inc	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14853	U	5-23-29	DURWOOD WRIGHT	GASTAR EXPLORATION USA, INC	1/8+	809	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14861	U	5-23-29	NANCY WHITLATCH	GASTAR EXPLORATION USA, INC	1/8+	809	526	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14862	U	5-23-29	ANN GUSTEY	GASTAR EXPLORATION USA, INC	1/8+	809	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14864	U	5-23-29	CAROLYN DURWAY	GASTAR EXPLORATION USA, INC	1/8+	810	330	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14866	U	5-23-29	GARY CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	810	316	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14868	U	5-23-29	WOODROW CAMPBELL, JR.	GASTAR EXPLORATION USA, INC	1/8+	813	454	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14869	U	5-23-29	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	813	561	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14870	U	5-23-29	DAVID CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	816	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14872	U	5-23-29	DWIG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA, INC	1/8+	817	312	NA	NA	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14873	U	5-23-29	RAYMOND MILLER	GASTAR EXPLORATION INC	1/8+	821	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14874	U	5-23-29	RICHARD MILLER	GASTAR EXPLORATION INC	1/8+	822	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14875	U	5-23-29	DAVID DRAKE	GASTAR EXPLORATION INC	1/8+	827	273	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14876	U	5-23-29	SHIRLEY LARGENT	GASTAR EXPLORATION INC	1/8+	827	228	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14877	U	5-23-29	GARY OBLOY	GASTAR EXPLORATION INC	1/8+	836	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14878	U	5-23-29	ARTHUR BRUCE COULTER	GASTAR EXPLORATION INC	1/8+	839	519	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14879	U	5-23-29	THERESA RINE	GASTAR EXPLORATION INC	1/8+	840	162	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14880	U	5-23-29	IRIS LUCAS	GASTAR EXPLORATION INC	1/8+	849	545	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14881	U	5-23-29	MARY WHITLATCH	GASTAR EXPLORATION INC	1/8+	849	548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14882	U	5-23-29	GARY RINE	GASTAR EXPLORATION INC	1/8+	849	551	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14883	U	5-23-29	PAUL WISE	GASTAR EXPLORATION INC	1/8+	852	252	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14884	U	5-23-29	RENEE HAGERTY	GASTAR EXPLORATION INC	1/8+	852	255	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14885	U	5-23-29	HOWARD RINE	GASTAR EXPLORATION INC	1/8+	854	601	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14886	U	5-23-29	JODI YOHO	GASTAR EXPLORATION INC	1/8+	854	604	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14887	U	5-23-29	CHRISTINA ROBERTS	GASTAR EXPLORATION INC	1/8+	867	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14888	U	5-23-29	DARLENE BUTLER	GASTAR EXPLORATION INC	1/8+	867	395	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14889	U	5-23-29	HAROLD YOHO	GASTAR EXPLORATION INC	1/8+	870	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14890	U	5-23-29	HENRY MALONE JR	GASTAR EXPLORATION INC	1/8+	870	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14891	U	5-23-29	NANCY F FVE AND STEPHEN M FVE	GASTAR EXPLORATION INC	1/8+	885	606	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*16034	U	5-23-29	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	902	163	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*16648	U	5-23-29	GASTAR EXPLORATION USA INC	TH EXPLORATION, LLC	1/8+	894	278	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17145	U	5-23-29	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	458	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC
10*17146	U	5-23-29	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA, LLC	1/8+	685	464	NA	NA	NA	NA	NA	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC

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10*17147	U	5-23-29	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA, LLC	1/8+	685	470	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, TH Exploration, TH Exploration, LLC
10*17148	U	5-23-29	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	476	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, TH Exploration, TH Exploration, LLC
10*17149	U	5-23-29	WANDA M. BLAKE	CHESAPEAKE APPALACHIA, LLC	1/8+	685	482	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, TH Exploration, TH Exploration, LLC
10*17150	U	5-23-29	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	488	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, TH Exploration, TH Exploration, LLC
10*17502	U	5-23-29	PATRICIA E GUSTELY DONALD S BOBOVNIK AND DOLORES I	TH EXPLORATION, LLC	1/8+	942	334	NA	NA	NA	NA	NA	NA	NA	NA
10*17532	U	5-23-29	RONALD L MAYER AND DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA	NA	NA	NA
10*17535	U	5-23-29	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA	NA	NA	NA
10*17539	U	5-23-29	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA	NA	NA	NA	NA	NA
10*17594	U	5-23-29	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA
10*17595	U	5-23-29	THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA	NA	NA	NA	NA	NA	NA	NA
10*17640	U	5-23-29	PATRICIA A GARGAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA	NA	NA	NA

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10*17679	U	5-23-29	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17680	U	5-23-29	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17681	U	5-23-29	WALTER E LOSEY AND CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17682	U	5-23-29	JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17683	U	5-23-29	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17715	U	5-23-29	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17719	U	5-23-29	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17720	U	5-23-29	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17775	U	5-23-29	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17776	U	5-23-29	JAMES GARGAR AND MELISSA GARGAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17824	U	5-23-29	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17901	U	5-23-29	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17965	U	5-23-29	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18042	U	5-23-29	JOSEPH I ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18043	U	5-23-29	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18176	U	5-23-29	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*18247	U	5-23-29	MILDRED S KIRKPATRICK	TH EXPLORATION, LLC	1/8+	917	132	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18320	U	5-23-29	SAMUEL F HENRY	TH EXPLORATION, LLC	1/8+	931	246	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18329	U	5-23-29	COLLEEN HAGERTY WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18367	U	5-23-29	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18368	U	5-23-29	JOSEPH R RINE AND JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18598	U	5-23-29	MARK E GUSTEY	TH EXPLORATION, LLC	1/8+	935	52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18795	U	5-23-29	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	959	502	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18994	U	5-23-29	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*19736	U	5-23-29	DOROTHY HLINKA KETHJAY FISCHER AND DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	944	571	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21217	U	5-23-29	PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	952	643	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21222	U	5-23-29	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	946	43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21425	U	5-23-29	FRANCIS R SMITH AND ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21428	U	5-23-29	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21434	U	5-23-29	RICHARD RICH AND KAREN RICH	TH EXPLORATION, LLC	1/8+	957	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21451	U	5-23-29		TH EXPLORATION, LLC	1/8+	954	254	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*21452	U	5-23-29	KIMBERLY COX WARREN T COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	262	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21457	U	5-23-29	HUSTON A SMITH JR AND ANN C SMITH	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21458	U	5-23-29	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21459	U	5-23-29	MABEL SHILLINGBURG AND CLIFFORD	TH EXPLORATION, LLC	1/8+	954	258	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21498	U	5-23-29	MATTHEW COULTER AND SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21500	U	5-23-29	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21501	U	5-23-29	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21502	U	5-23-29	DARLENE M DAVIS CLARENCE RANDALL EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	954	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21503	U	5-23-29	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21626	U	5-23-29	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21632	U	5-23-29	JOHN OBLOY AND JANET L OBLOY	TH EXPLORATION, LLC	1/8+	959	331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21655	U	5-23-29	ROMALD J SALKOVICK JR & SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21657	U	5-23-29	JOYCE KAY BURTON AND SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21774	U	5-23-29	STUART WHITE AND BETTY WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21813	U	5-23-29																

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10*21815	U	5-23-29	JAMES NEAL EMERY AND RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*21816	U	5-23-29	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21817	U	5-23-29	MARY LOU HINKA AND RICHARD G HINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21819	U	5-23-29	MARY CATHERINE THOMS OTT	TH EXPLORATION, LLC	1/8+	958	360	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21820	U	5-23-29	MARION DAVID OTT & JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21832	U	5-23-29	MARQUITA CLVBURN	TH EXPLORATION, LLC	1/8+	959	510	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21886	U	5-23-29	THEODORE GROUNDS & ROBERTA H	TH EXPLORATION, LLC	1/8+	957	117	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21948	U	5-23-29	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21949	U	5-23-29	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21951	U	5-23-29	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21994	U	5-23-29	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22013	U	5-23-29	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22014	U	5-23-29	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22018	U	5-23-29	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22026	U	5-23-29	KEVIN D CHURCH	TH EXPLORATION, LLC	1/8+	957	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22027	U	5-23-29	STEPHEN C EMERY AND CATHY J EMERY	TH EXPLORATION, LLC	1/8+	954	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*22093	U	5-23-29	TODD LEARN AND KENDA LEARN	TH EXPLORATION, LLC	1/8+	954	314	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*22102	U	5-23-29	BONNIE LOU GRUBER	TH EXPLORATION, LLC	1/8+	954	302	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22128	U	5-23-29	BETTY PYSELL	TH EXPLORATION, LLC	1/8+	961	433	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22144	U	5-23-29	VICKY STRAUSS AND DENNIS A STRAUSS	TH EXPLORATION, LLC	1/8+	961	529	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22165	U	5-23-29	DEBRA L LYESKI AND GERALD A LYESKI	TH EXPLORATION, LLC	1/8+	954	306	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22178	U	5-23-29	ANGELA HENTHORN AND WILLIAM R HENTHORN	TH EXPLORATION, LLC	1/8+	972	58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22332	U	5-23-29	DORIS WEST AND ROBERT WEST	TH EXPLORATION, LLC	1/8+	962	542	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22339	U	5-23-29	BETTY LEE HOWARD LOY	TH EXPLORATION, LLC	1/8+	963	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22436	U	5-23-29	TESSEAN FAMILY REVOCABLE LIVING TRUST	TH EXPLORATION, LLC	1/8+	963	626	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22443	U	5-23-29	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22503	U	5-23-29	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22505	U	5-23-29	JAMES D DRAKE AND DONNA K DRAKE	TH EXPLORATION, LLC	1/8+	964	425	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22556	U	5-23-29	JAMES WILEY	TH EXPLORATION, LLC	1/8+	983	588	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22594	U	5-23-29	JAMES WADE	TH EXPLORATION, LLC	1/8+	965	481	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22609	U	5-23-29	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22613	U	5-23-29	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*22779	U	5-23-29	STEVEN WADE MARGARETT MCMURRY & WILLIAM F	TH EXPLORATION, LLC	1/8+	968	424	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22809	U	5-23-29	JOSEPH F GOBLOWSKY	TH EXPLORATION, LLC	1/8+	972	54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22812	U	5-23-29	LAURINE C CURTIS & EDGAR A CURTIS III	TH EXPLORATION, LLC	1/8+	968	428	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22861	U	5-23-29	JAMES DAVID CRANDALL	TH EXPLORATION, LLC	1/8+	976	147	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23166	U	5-23-29	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	984	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23168	U	5-23-29	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23368	U	5-23-29	JONNA MARPLE AND ERIK MARPLE	TH EXPLORATION, LLC	1/8+	988	447	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23371	U	5-23-29	ION GUSTELY AND MARILYN NILE	TH EXPLORATION, LLC	1/8+	988	442	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23398	U	5-23-29	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23410	U	5-23-29	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23505	U	5-23-29	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23647	U	5-23-29	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23648	U	5-23-29	LISA TUCKER AND FRANCIS TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23727	U	5-23-29	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23756	U	5-23-29	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*14862	V	5-23-18.1	ANN GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	809	568	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14864	V	5-23-18.1	CAROLYN DURWAY	GASTAR EXPLORATION USA, INC	1/8+	810	330	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14866	V	5-23-18.1	GARY CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	810	316	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14868	V	5-23-18.1	WOODROW CAMPBELL, JR.	GASTAR EXPLORATION USA, INC	1/8+	813	454	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14869	V	5-23-18.1	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	813	561	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14870	V	5-23-18.1	DAVID CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	816	16	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14872	V	5-23-18.1	DWG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA, INC	1/8+	817	312	NA	NA	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14873	V	5-23-18.1	RAYMOND MILLER	GASTAR EXPLORATION USA, INC	1/8+	821	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14874	V	5-23-18.1	RICHARD MILLER	GASTAR EXPLORATION INC	1/8+	822	260	NA	NA	NA	NA	NA	NA	NA	NA	RECEIVED Office of Oil and Gas	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14875	V	5-23-18.1	DAVID DRAKE	GASTAR EXPLORATION INC	1/8+	827	273	NA	NA	NA	NA	NA	NA	NA	NA	AUG 14 2019 NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14876	V	5-23-18.1	SHIRLEY LARGENT	GASTAR EXPLORATION INC	1/8+	827	228	NA	NA	NA	NA	NA	NA	NA	NA	WV Department of Environmental Protection NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14877	V	5-23-18.1	GARY OBLOY	GASTAR EXPLORATION INC	1/8+	836	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14878	V	5-23-18.1	ARTHUR BRUCE COULTER	GASTAR EXPLORATION INC	1/8+	839	519	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14879	V	5-23-18.1	THERESA RINE	GASTAR EXPLORATION INC	1/8+	840	162	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14880	V	5-23-18.1	IRIS LUCAS	GASTAR EXPLORATION INC	1/8+	849	545	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14881	V	5-23-18.1	MARY WHITLATCH	GASTAR EXPLORATION INC	1/8+	849	548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14882	V	5-23-18.1	GARY RINE	GASTAR EXPLORATION INC	1/8+	849	551	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14883	V	5-23-18.1	PAUL WISE	GASTAR EXPLORATION INC	1/8+	852	252	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14884	V	5-23-18.1	RENEE HAGERTY	GASTAR EXPLORATION INC	1/8+	852	255	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14885	V	5-23-18.1	HOWARD RINE	GASTAR EXPLORATION INC	1/8+	854	601	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14886	V	5-23-18.1	JODI YOHO	GASTAR EXPLORATION INC	1/8+	854	604	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14887	V	5-23-18.1	CHRISTINA ROBERTS	GASTAR EXPLORATION INC	1/8+	867	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14888	V	5-23-18.1	DARLENE BUTLER	GASTAR EXPLORATION INC	1/8+	867	395	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*14889	V	5-23-18.1	HAROLD YOHO	GASTAR EXPLORATION INC	1/8+	870	37	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*14890	V	5-23-18.1	HENRY MALONE JR	GASTAR EXPLORATION INC	1/8+	870	40	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*14891	V	5-23-18.1	NANCY F EYE AND STEPHEN M EYE	GASTAR EXPLORATION INC	1/8+	885	606	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*14912	V	5-23-18.1	MARK A. YOHO	GASTAR EXPLORATION INC	1/8+	822	268	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*16034	V	5-23-18.1	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	902	163	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*16648	V	5-23-18.1	GASTAR EXPLORATION USA INC	TH EXPLORATION, LLC	1/8+	894	278	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*17145	V	5-23-18.1	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	458	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*17146	V	5-23-18.1	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA, LLC	1/8+	685	464	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC
10*17147	V	5-23-18.1	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA, LLC	1/8+	685	470	NA	NA	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	43/605 Athnum Marcellus I LLC to TH Exploration II, LLC

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10*17148	V	5-23-18.1	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	476	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC	NA
10*17149	V	5-23-18.1	WANDA M. BLAKE	CHESAPEAKE APPALACHIA, LLC	1/8+	685	482	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC	NA
10*17150	V	5-23-18.1	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	488	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC	NA
10*17502	V	5-23-18.1	PATRICIA E GUSTELY DONNAD'S BOBOVNIK AND DOLORES J	TH EXPLORATION, LLC	1/8+	942	334	NA	NA	NA	NA	NA	NA	NA	NA
10*17532	V	5-23-18.1	RONALD L MAYER AND DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA	NA	NA	NA
10*17535	V	5-23-18.1	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA	NA	NA	NA
10*17539	V	5-23-18.1	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA	NA	NA	NA	NA	NA
10*17593	V	5-23-18.1	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA
10*17594	V	5-23-18.1	THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA	NA	NA	NA	NA	NA	NA	NA
10*17595	V	5-23-18.1	PATRICIA A GARGAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA	NA	NA	NA
10*17640	V	5-23-18.1	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA	NA
10*17680	V	5-23-18.1	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA

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10*17681	V	5-23-18.1	WALTER E LOSEY AND CINDY L LOSEY JAMES E GARLOCK AND MARY K GARLOCK	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17682	V	5-23-18.1	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17683	V	5-23-18.1	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	358	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17715	V	5-23-18.1	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17719	V	5-23-18.1	WILLIAM KOTSON AND DEBRA KOTSON HAROLD HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17720	V	5-23-18.1	JAMES GARGAR AND MELISSA GARGAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17775	V	5-23-18.1	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17776	V	5-23-18.1	ROBYN HAGERTY ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17824	V	5-23-18.1	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17901	V	5-23-18.1	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17965	V	5-23-18.1	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18042	V	5-23-18.1	MILDRED S KIRKPATRICK	TH EXPLORATION, LLC	1/8+	917	132	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18043	V	5-23-18.1	SAMUEL F HENRY	TH EXPLORATION, LLC	1/8+	931	246	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*23838	V	5-23-18.1	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Office of Oil and Gas RECEIVED July 14 2019	NA	
10*23883	V	5-23-18.1	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WV Department of Environmental Protection	NA	
10*24236	V	5-23-18.1	CONNIE L HALL	TH EXPLORATION, LLC	1/8+	1015	138	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*24274	V	5-23-18.1	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*24483	V	5-23-18.1	SUSAN AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*24551	V	5-23-18.1	LEONARD LEE AND DEBRA COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*24868	V	5-23-18.1	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*24917	V	5-23-18.1	WALTER AND CONNIE J STREIGHT	TH EXPLORATION, LLC	1/8+	1027	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*14849	W	5-23-21	DAVID GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	806	265	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14853	W	5-23-21	DURWOOD WRIGHT	GASTAR EXPLORATION USA, INC	1/8+	809	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14861	W	5-23-21	NANCY WHITLATCH	GASTAR EXPLORATION USA, INC	1/8+	809	526	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14862	W	5-23-21	ANN GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	809	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14864	W	5-23-21	CAROLYN DURWAY	GASTAR EXPLORATION USA, INC	1/8+	810	330	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14866	W	5-23-21	GARY CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	810	316	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14880	W	5-23-21	IRIS LUCAS	GASTAR EXPLORATION INC	1/8+	849	545	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14881	W	5-23-21	MARY WHITLATCH	GASTAR EXPLORATION INC	1/8+	849	548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14882	W	5-23-21	GARY RINE	GASTAR EXPLORATION INC	1/8+	849	551	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14883	W	5-23-21	PAUL WISE	GASTAR EXPLORATION INC	1/8+	852	252	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14884	W	5-23-21	RENEE HAGERTY	GASTAR EXPLORATION INC	1/8+	852	255	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14885	W	5-23-21	HOWARD RINE	GASTAR EXPLORATION INC	1/8+	854	601	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14886	W	5-23-21	JODI YOHO	GASTAR EXPLORATION INC	1/8+	854	604	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14887	W	5-23-21	CHRISTINA ROBERTS	GASTAR EXPLORATION INC	1/8+	867	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14888	W	5-23-21	DARLENE BUTLER	GASTAR EXPLORATION INC	1/8+	867	395	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14889	W	5-23-21	HAROLD YOHO	GASTAR EXPLORATION INC	1/8+	870	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14890	W	5-23-21	HENRY MALONE JR	GASTAR EXPLORATION INC	1/8+	870	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14891	W	5-23-21	NANCY F FYE AND STEPHEN M FYE	GASTAR EXPLORATION INC	1/8+	885	606	NA	NA	NA	WV Department of Environmental Protection	NA	NA	36/9 Gaster Exploration Inc to TH TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14912	W	5-23-21	MARK A. YOHO	GASTAR EXPLORATION INC	1/8+	822	268	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*16034	W	5-23-21	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	902	163	NA	NA	NA	NA	NA	NA	NA	NA
10*16648	W	5-23-21	GASTAR EXPLORATION USA INC	TH EXPLORATION, LLC	1/8+	894	278	NA	NA	NA	NA	NA	NA	NA	NA
10*17145	W	5-23-21	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	458	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17146	W	5-23-21	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA, LLC	1/8+	685	464	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17147	W	5-23-21	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA, LLC	1/8+	685	470	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17148	W	5-23-21	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	476	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17149	W	5-23-21	WANDA M. BLAKE	CHESAPEAKE APPALACHIA, LLC	1/8+	685	482	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC

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10*24483	W	5-23-21	SUSAN AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24551	W	5-23-21	LEONARD LEE AND DEBRA COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24868	W	5-23-21	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24917	W	5-23-21	WALTER AND CONNIE J STREIGHT	TH EXPLORATION, LLC	1/8+	1027	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14847	X	5-23-17.1	LETHA RUCKMAN	GASTAR EXPLORATION USA, INC	1/8+	806	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14849	X	5-23-17.1	DAVID GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	806	265	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14853	X	5-23-17.1	DURWOOD WRIGHT	GASTAR EXPLORATION USA, INC	1/8+	809	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14861	X	5-23-17.1	NANCY WHITLATCH	GASTAR EXPLORATION USA, INC	1/8+	809	526	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14862	X	5-23-17.1	ANN GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	809	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14864	X	5-23-17.1	CAROLYN DURWAY	GASTAR EXPLORATION USA, INC	1/8+	810	330	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14866	X	5-23-17.1	GARY CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	810	316	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14868	X	5-23-17.1	WOODROW CAMPBELL, JR.	GASTAR EXPLORATION USA, INC	1/8+	813	454	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14869	X	5-23-17.1	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	813	561	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14870	X	5-23-17.1	DAVID CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	816	16	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14872	X	5-23-17.1	DWG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA, INC	1/8+	817	312	NA	NA	NA	NA	NA	31/184 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc to Gastar Exploration Inc	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14873	X	5-23-17.1	RAYMOND MILLER	GASTAR EXPLORATION USA, INC	1/8+	821	44	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14874	X	5-23-17.1	RICHARD MILLER	GASTAR EXPLORATION INC	1/8+	822	260	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14875	X	5-23-17.1	DAVID DRAKE	GASTAR EXPLORATION INC	1/8+	827	273	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14876	X	5-23-17.1	SHIRLEY LARGENT	GASTAR EXPLORATION INC	1/8+	827	228	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14877	X	5-23-17.1	GARY OBLOY	GASTAR EXPLORATION INC	1/8+	836	112	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14878	X	5-23-17.1	ARTHUR BRUCE COULTER	GASTAR EXPLORATION INC	1/8+	839	519	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14879	X	5-23-17.1	THERESA RINE	GASTAR EXPLORATION INC	1/8+	840	162	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14880	X	5-23-17.1	IRIS LUCAS	GASTAR EXPLORATION INC	1/8+	849	545	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	

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10*14881	X	5-23-17.1	MARY WHITLATCH	GASTAR EXPLORATION INC	1/8+	849	548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14882	X	5-23-17.1	GARY RINE	GASTAR EXPLORATION INC	1/8+	849	551	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14883	X	5-23-17.1	PAUL WISE	GASTAR EXPLORATION INC	1/8+	852	252	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14884	X	5-23-17.1	RENEE HAGERTY	GASTAR EXPLORATION INC	1/8+	852	255	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14885	X	5-23-17.1	HOWARD RINE	GASTAR EXPLORATION INC	1/8+	854	601	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14886	X	5-23-17.1	JODI YOHO	GASTAR EXPLORATION INC	1/8+	854	604	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14887	X	5-23-17.1	CHRISTINA ROBERTS	GASTAR EXPLORATION INC	1/8+	867	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14888	X	5-23-17.1	DARLENE BUTLER	GASTAR EXPLORATION INC	1/8+	867	395	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14889	X	5-23-17.1	HAROLD YOHO	GASTAR EXPLORATION INC	1/8+	870	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14890	X	5-23-17.1	HENRY MALONE JR	GASTAR EXPLORATION INC	1/8+	870	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14891	X	5-23-17.1	NANCY F FYE AND STEPHEN M FYE	GASTAR EXPLORATION INC	1/8+	885	606	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	

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10*14847	Y	5-23-17.2	LETHA RUCKMAN	GASTAR EXPLORATION USA, INC	1/8+	806	270	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14849	Y	5-23-17.2	DAVID GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	806	265	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14853	Y	5-23-17.2	DURWOOD WRIGHT	GASTAR EXPLORATION USA, INC	1/8+	809	507	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14861	Y	5-23-17.2	NANCY WHITLATCH	GASTAR EXPLORATION USA, INC	1/8+	809	526	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14862	Y	5-23-17.2	ANN GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	809	568	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14864	Y	5-23-17.2	CAROLYN DURWAY	GASTAR EXPLORATION USA, INC	1/8+	810	330	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14866	Y	5-23-17.2	GARY CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	810	316	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14868	Y	5-23-17.2	WOODROW CAMPBELL, JR.	GASTAR EXPLORATION USA, INC	1/8+	813	454	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14869	Y	5-23-17.2	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	813	561	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14870	Y	5-23-17.2	DAVID CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	816	16	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14872	Y	5-23-17.2	DWIG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA, INC	1/8+	817	312	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*14873	Y	5-23-17.2	RAYMOND MILLER	GASTAR EXPLORATION USA, INC	1/8+	821	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14874	Y	5-23-17.2	RICHARD MILLER	GASTAR EXPLORATION INC	1/8+	822	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14875	Y	5-23-17.2	DAVID DRAKE	GASTAR EXPLORATION INC	1/8+	827	273	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14876	Y	5-23-17.2	SHIRLEY LARGENT	GASTAR EXPLORATION INC	1/8+	827	228	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14877	Y	5-23-17.2	GARY OBLOY	GASTAR EXPLORATION INC	1/8+	836	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14878	Y	5-23-17.2	ARTHUR BRUCE COULTER	GASTAR EXPLORATION INC	1/8+	839	519	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14879	Y	5-23-17.2	THERESA RINE	GASTAR EXPLORATION INC	1/8+	840	162	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14880	Y	5-23-17.2	IRIS LUCAS	GASTAR EXPLORATION INC	1/8+	849	545	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14881	Y	5-23-17.2	MARY WHITLATCH	GASTAR EXPLORATION INC	1/8+	849	548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14882	Y	5-23-17.2	GARY RINE	GASTAR EXPLORATION INC	1/8+	849	551	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14883	Y	5-23-17.2	PAUL WISE	GASTAR EXPLORATION INC	1/8+	852	252	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36/9 Gastar Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC

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10*14884	Y	5-23-17.2	RENEE HAGERTY	GASTAR EXPLORATION INC	1/8+	852	255	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14885	Y	5-23-17.2	HOWARD RINE	GASTAR EXPLORATION INC	1/8+	854	601	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14886	Y	5-23-17.2	JODI YOHO	GASTAR EXPLORATION INC	1/8+	854	604	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14887	Y	5-23-17.2	CHRISTINA ROBERTS	GASTAR EXPLORATION INC	1/8+	867	392	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14888	Y	5-23-17.2	DARLENE BUTLER	GASTAR EXPLORATION INC	1/8+	867	395	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14889	Y	5-23-17.2	HAROLD YOHO	GASTAR EXPLORATION INC	1/8+	870	37	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14890	Y	5-23-17.2	HENRY MALONE JR	GASTAR EXPLORATION INC	1/8+	870	40	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14891	Y	5-23-17.2	NANCY F FYE AND STEPHEN M FYE	GASTAR EXPLORATION INC	1/8+	885	606	NA	NA	NA	NA	NA	NA	NA	36/9 Gaster Exploration Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*16034	Y	5-23-17.2	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	902	163	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*16648	Y	5-23-17.2	GASTAR EXPLORATION USA INC	TH EXPLORATION, LLC	1/8+	894	278	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17145	Y	5-23-17.2	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	458	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC	

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10*17146	Y	5-23-17.2	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA, LLC	1/8+	685	464	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17147	Y	5-23-17.2	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA, LLC	1/8+	685	470	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17148	Y	5-23-17.2	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	476	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17149	Y	5-23-17.2	WANDA M. BLAKE	CHESAPEAKE APPALACHIA, LLC	1/8+	685	482	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17150	Y	5-23-17.2	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA, LLC	1/8+	685	488	NA	NA	23/127 Chesapeake Appalachia, LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia, LLC to SWN Production Company, LLC	33/424 Statoil Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC merger	41/238 Statoil Onshore Properties Inc to TH Exploration, TH Exploration, LLC	41/256 SWN Production Company, LLC to TH Exploration, LLC
10*17502	Y	5-23-17.2	PATRICIA E GUSTELY DUNALD'S BOBOVNIK AND DOLORES J	TH EXPLORATION, LLC	1/8+	942	334	NA	NA	NA	NA	NA	NA	NA	NA
10*17532	Y	5-23-17.2	RONALD L MAYER AND DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA	NA	NA	NA
10*17535	Y	5-23-17.2	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA	NA	NA	NA
10*17540	Y	5-23-17.2	MONTY ESTEL ROBERT D STRAWN AND TAMMY J	TH EXPLORATION, LLC	1/8+	941	624	NA	NA	NA	NA	NA	NA	NA	NA
10*17541	Y	5-23-17.2	STRAWN	TH EXPLORATION, LLC	1/8+	942	21	NA	NA	NA	NA	NA	NA	NA	NA

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10*17542	Y	5-23-17.2	JEFFREY G HAZEL AND SHEILA M HAZEL	TH EXPLORATION, LLC	1/8+	942	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*17543	Y	5-23-17.2	CARL EDWARD MCCOY AND CAROLYN SUE MCCOY	TH EXPLORATION, LLC	1/8+	942	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17544	Y	5-23-17.2	DEBORAH LYNN SCHWING	TH EXPLORATION, LLC	1/8+	942	377	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17545	Y	5-23-17.2	LINDA SWOPE SAMUEL EARL FRANCIS AND ALICE L FRANCIS	TH EXPLORATION, LLC	1/8+	942	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17546	Y	5-23-17.2	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	374	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17593	Y	5-23-17.2	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17594	Y	5-23-17.2	THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17640	Y	5-23-17.2	PATRICIA A GARGAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17679	Y	5-23-17.2	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17680	Y	5-23-17.2	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17681	Y	5-23-17.2	WALTER E LOSEY AND CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17682	Y	5-23-17.2	JAMES E GARDUCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17683	Y	5-23-17.2	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17684	Y	5-23-17.2	DAVID MCCOY AND LORI MCCOY	TH EXPLORATION, LLC	1/8+	942	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17715	Y	5-23-17.2	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*17719	Y	5-23-17.2	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*17720	Y	5-23-17.2	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17775	Y	5-23-17.2	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17776	Y	5-23-17.2	JAMES GARGAR AND MELISSA GARGAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17824	Y	5-23-17.2	SARA FULLTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17901	Y	5-23-17.2	ROBYN HAGERTY ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17965	Y	5-23-17.2	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18042	Y	5-23-17.2	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18043	Y	5-23-17.2	TRACEY ESTEL	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18044	Y	5-23-17.2	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18176	Y	5-23-17.2	MILDRED S KIRKPATRICK	TH EXPLORATION, LLC	1/8+	917	132	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18247	Y	5-23-17.2	SAMUEL F HENRY	TH EXPLORATION, LLC	1/8+	931	246	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18320	Y	5-23-17.2	COLLEEN HAGERTY WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18367	Y	5-23-17.2	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18368	Y	5-23-17.2		TH EXPLORATION, LLC	1/8+	931	457	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*22613	Y	5-23-17.2	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22644	Y	5-23-17.2	RICHARD EUGENE KELLER	TH EXPLORATION, LLC	1/8+	968	214	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22779	Y	5-23-17.2	STEVEN WADE MARGARET C	TH EXPLORATION, LLC	1/8+	968	424	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22809	Y	5-23-17.2	MCMURRY & WILLIAM F	TH EXPLORATION, LLC	1/8+	972	54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22811	Y	5-23-17.2	ROBERT E ROGERSON	TH EXPLORATION, LLC	1/8+	972	64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22812	Y	5-23-17.2	JOSEPH F GOBLOWSKY	TH EXPLORATION, LLC	1/8+	968	428	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22813	Y	5-23-17.2	WANDA M. BLAKE	TH EXPLORATION, LLC	1/8+	974	171	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22861	Y	5-23-17.2	LAURINE C CURTIS & EDGAR A CURTIS III	TH EXPLORATION, LLC	1/8+	976	147	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23166	Y	5-23-17.2	JAMES DAVID GRANDALL	TH EXPLORATION, LLC	1/8+	984	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23168	Y	5-23-17.2	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23368	Y	5-23-17.2	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	988	447	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23369	Y	5-23-17.2	STEFANIE CIRILLI AND MATTHEW CIRILLI	TH EXPLORATION, LLC	1/8+	988	451	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23370	Y	5-23-17.2	DENVER J TAYLOR	TH EXPLORATION, LLC	1/8+	988	454	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23371	Y	5-23-17.2	JONNA MARPLE AND ERIK MARPLE	TH EXPLORATION, LLC	1/8+	988	442	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23398	Y	5-23-17.2	JON GUSTELY AND MARILYN NIJE	TH EXPLORATION, LLC	1/8+	1008	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23410	Y	5-23-17.2	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*23428	Y	5-23-17.2	DAVID L SNYDER	TH EXPLORATION, LLC	1/8+	1008	313	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23444	Y	5-23-17.2	JENNIFER CUCHTA AND KEVIN CUCHTA	TH EXPLORATION, LLC	1/8+	1008	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23505	Y	5-23-17.2	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23647	Y	5-23-17.2	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23648	Y	5-23-17.2	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23672	Y	5-23-17.2	CHAD FRANCIS AND USA FRANCIS	TH EXPLORATION, LLC	1/8+	1010	356	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23727	Y	5-23-17.2	USA TUCKER AND FRANCIS TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23756	Y	5-23-17.2	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23757	Y	5-23-17.2	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23767	Y	5-23-17.2	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23771	Y	5-23-17.2	ROBIN ROSE STEVEN W SLATEN	TH EXPLORATION, LLC	1/8+	1014	485	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23792	Y	5-23-17.2	AND RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23793	Y	5-23-17.2	ETZABETH BENNETT AND DONNIE BENNETT	TH EXPLORATION, LLC	1/8+	1014	492	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23794	Y	5-23-17.2	PATTY JEAN LANTZ	TH EXPLORATION, LLC	1/8+	1014	495	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23826	Y	5-23-17.2	NANCY C DWYER AND WENDEL MARTINKOVIC	TH EXPLORATION, LLC	1/8+	1017	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23838	Y	5-23-17.2	RONALD DEAN YOHU & VICTORIA LYNN YOHU	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*23883	Y	5-23-17.2	VICKI ANN WILKINS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24236	Y	5-23-17.2	CONNIE L HALL	TH EXPLORATION, LLC	1/8+	1015	138	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24274	Y	5-23-17.2	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24483	Y	5-23-17.2	SUSAN AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24551	Y	5-23-17.2	LEONARD LEE AND DEBRA COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24751	Y	5-23-17.2	WILLIAM D AND KIM TAYLOR	TH EXPLORATION, LLC	1/8+	1027	315	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24752	Y	5-23-17.2	PATTI KENNEDY	TH EXPLORATION, LLC	1/8+	1027	312	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24860	Y	5-23-17.2	THE ESTATE OF HOWARD G TAYLOR	TH EXPLORATION, LLC	1/8+	1028	92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24868	Y	5-23-17.2	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24917	Y	5-23-17.2	WALTER AND CONNIE J STREIGHT	TH EXPLORATION, LLC	1/8+	1027	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14742	Z	5-23-26	SUSAN GORE	GASTAR EXPLORATION USA, INC	1/8+	790	505	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14744	Z	5-23-26	THE SAMUEL MILTON SHEETS TRUST	GASTAR EXPLORATION USA, INC	1/8+	791	637	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14745	Z	5-23-26	RALPH B. TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	794	485	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14747	Z	5-23-26	CHESTNUT HOLDINGS INC	GASTAR EXPLORATION INC	1/8+	827	564	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17716	Z	5-23-26	MICHAEL J AND BARBARA L WILEY	TH EXPLORATION, LLC	1/8+	919	638	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*17777	Z	5-23-26	MICHELLE E AND ROBERT T BAKER	TH EXPLORATION, LLC	1/8+	921	128	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21420	Z	5-23-26	DAVID D BURKETT	TH EXPLORATION, LLC	1/8+	957	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21421	Z	5-23-26	BRYANNA FLYNN RANKIN REBECCA MCMILLAN	TH EXPLORATION, LLC	1/8+	957	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21437	Z	5-23-26	AND ROBERT MCMILLAN	TH EXPLORATION, LLC	1/8+	957	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21821	Z	5-23-26	LINDA K TAYLOR AND RAY P MAGEE	TH EXPLORATION, LLC	1/8+	951	631	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14847	AA	5-23-17.4	LETHA RUCKMAN	GASTAR EXPLORATION USA, INC	1/8+	806	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14849	AA	5-23-17.4	DAVID GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	806	265	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14853	AA	5-23-17.4	DURWOOD WRIGHT	GASTAR EXPLORATION USA, INC	1/8+	809	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14861	AA	5-23-17.4	NANCY WHITLATCH	GASTAR EXPLORATION USA, INC	1/8+	809	526	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14862	AA	5-23-17.4	ANN GUSTELY	GASTAR EXPLORATION USA, INC	1/8+	809	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14864	AA	5-23-17.4	CAROLYN DURWAY	GASTAR EXPLORATION USA, INC	1/8+	810	330	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14866	AA	5-23-17.4	GARY CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	810	316	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14868	AA	5-23-17.4	WOODROW CAMPBELL, JR.	GASTAR EXPLORATION USA, INC	1/8+	813	454	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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31/184 Gastar Exploration USA Inc to 21/41 Gastar Exploration USA Inc to 36/9 Gastar Exploration Inc to TH Exploration II, LLC

31/184 Gastar Exploration USA Inc to 21/41 Gastar Exploration USA Inc to 36/9 Gastar Exploration Inc to TH Exploration II, LLC

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10*14869	AA	5-23-17.4	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	813	561	NA	NA	NA	NA	NA	NA	NA	NA
10*14870	AA	5-23-17.4	DAVID CARMICHAEL	GASTAR EXPLORATION USA, INC	1/8+	816	16	NA	NA	NA	NA	NA	NA	NA	NA
10*14872	AA	5-23-17.4	DWVG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA, INC	1/8+	817	312	NA	NA	NA	NA	NA	NA	NA	NA
10*14873	AA	5-23-17.4	RAYMOND MILLER	GASTAR EXPLORATION USA, INC	1/8+	821	44	NA	NA	NA	NA	NA	NA	NA	NA
10*14874	AA	5-23-17.4	RICHARD MILLER	GASTAR EXPLORATION INC	1/8+	822	260	NA	NA	NA	NA	NA	NA	NA	NA
10*14875	AA	5-23-17.4	DAVID DRAKE	GASTAR EXPLORATION INC	1/8+	827	273	NA	NA	NA	NA	NA	NA	NA	NA
10*14876	AA	5-23-17.4	SHIRLEY LARGENT	GASTAR EXPLORATION INC	1/8+	827	228	NA	NA	NA	NA	NA	NA	NA	NA
10*14877	AA	5-23-17.4	GARY OBLON	GASTAR EXPLORATION INC	1/8+	836	112	NA	NA	NA	NA	NA	NA	NA	NA
10*14878	AA	5-23-17.4	ARTHUR BRUCE COULTER	GASTAR EXPLORATION INC	1/8+	839	519	NA	NA	NA	NA	NA	NA	NA	NA
10*14879	AA	5-23-17.4	THERESA RINE	GASTAR EXPLORATION INC	1/8+	840	162	NA	NA	NA	NA	NA	NA	NA	NA
10*14880	AA	5-23-17.4	IRIS LUCAS	GASTAR EXPLORATION INC	1/8+	849	545	NA	NA	NA	NA	NA	NA	NA	NA

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10*14881	AA	5-23-17.4	MARY WHITLATCH	GASTAR EXPLORATION INC	1/8+	849	548	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	RECEIVED Gastar Office of Operations Inc to TH Exploration II, LLC	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14882	AA	5-23-17.4	GARY RINE	GASTAR EXPLORATION INC	1/8+	849	551	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	AUG 14 2013 36/9 Gastar Exploration Inc to TH Exploration II, LLC WV Department Environmental Protection	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC
10*14883	AA	5-23-17.4	PAUL WISE	GASTAR EXPLORATION INC	1/8+	852	252	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14884	AA	5-23-17.4	RENEE HAGERTY	GASTAR EXPLORATION INC	1/8+	852	255	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14885	AA	5-23-17.4	HOWARD RINE	GASTAR EXPLORATION INC	1/8+	854	601	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14886	AA	5-23-17.4	JODI YOHO	GASTAR EXPLORATION INC	1/8+	854	604	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14887	AA	5-23-17.4	CHRISTINA ROBERTS	GASTAR EXPLORATION INC	1/8+	857	392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14888	AA	5-23-17.4	DARLENE BUTLER	GASTAR EXPLORATION INC	1/8+	857	395	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14889	AA	5-23-17.4	HAROLD YOHO	GASTAR EXPLORATION INC	1/8+	870	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14890	AA	5-23-17.4	HENRY MALONE JR	GASTAR EXPLORATION INC	1/8+	870	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	
10*14891	AA	5-23-17.4	NANCY F FYE AND STEPHEN M FYE	GASTAR EXPLORATION INC	1/8+	885	606	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43/605 Atinum Marcellus I LLC to TH Exploration II, LLC	

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10*17640	AA	5-23-17.4	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*17679	AA	5-23-17.4	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17680	AA	5-23-17.4	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17681	AA	5-23-17.4	WALTER E LOSEY AND CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17682	AA	5-23-17.4	JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17683	AA	5-23-17.4	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17684	AA	5-23-17.4	DAVID MCCOY AND LORI MCCOY	TH EXPLORATION, LLC	1/8+	942	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17715	AA	5-23-17.4	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17719	AA	5-23-17.4	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17720	AA	5-23-17.4	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17775	AA	5-23-17.4	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17776	AA	5-23-17.4	JAMES GARCAR AND MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17824	AA	5-23-17.4	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17901	AA	5-23-17.4	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17965	AA	5-23-17.4	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18042	AA	5-23-17.4	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*18043	AA	5-23-17.4	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18044	AA	5-23-17.4	TRACEY ESTEL	TH EXPLORATION, LLC	1/8+	927	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18176	AA	5-23-17.4	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18247	AA	5-23-17.4	MILDRED S KIRKPATRICK	TH EXPLORATION, LLC	1/8+	917	132	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18320	AA	5-23-17.4	SAMUEL F HENRY	TH EXPLORATION, LLC	1/8+	931	246	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18329	AA	5-23-17.4	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18367	AA	5-23-17.4	WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18368	AA	5-23-17.4	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18371	AA	5-23-17.4	HERMAN D ESTEL	TH EXPLORATION, LLC	1/8+	931	461	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18386	AA	5-23-17.4	JOSEPH R RINE AND JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18598	AA	5-23-17.4	MARK E GUSTEY	TH EXPLORATION, LLC	1/8+	935	52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18795	AA	5-23-17.4	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	959	502	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18994	AA	5-23-17.4	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*19656	AA	5-23-17.4	DEBRA ROUDEBUSH	TH EXPLORATION, LLC	1/8+	944	105	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*19736	AA	5-23-17.4	DOROTHY HLINKA WELISSA ANN BRAUN AND RAYMOND AND RAYMOND BRAUN	TH EXPLORATION, LLC	1/8+	944	571	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*19999	AA	5-23-17.4		TH EXPLORATION, LLC	1/8+	951	627	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*21084	AA	5-23-17.4	FRAN DALL C ROGERSON & TRACY LYNN ROGERSON KEITH JAY FISCHER	TH EXPLORATION, LLC	1/8+	949	368	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*21217	AA	5-23-17.4	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	952	643	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21425	AA	5-23-17.4	FRANCIS R SMITH AND ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21428	AA	5-23-17.4	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21434	AA	5-23-17.4	RICHARD RICH AND KAREN RICH	TH EXPLORATION, LLC	1/8+	954	254	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21451	AA	5-23-17.4	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21452	AA	5-23-17.4	HUSTON A SMITH JR AND ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21457	AA	5-23-17.4	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21458	AA	5-23-17.4	MABEL SHILLINGBURG AND CLIFFORD SHILLINGBURG	TH EXPLORATION, LLC	1/8+	954	258	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21498	AA	5-23-17.4	MATTHEW COULTER AND SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21500	AA	5-23-17.4	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21501	AA	5-23-17.4	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21502	AA	5-23-17.4	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21503	AA	5-23-17.4																			

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10*21615	AA	5-23-17.4	GARY PARSONS AND JOANN J PARSONS	TH EXPLORATION, LLC	1/8+	959	347	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21626	AA	5-23-17.4	CLARENCE RANDALL EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21632	AA	5-23-17.4	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21655	AA	5-23-17.4	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21656	AA	5-23-17.4	JOHN OBLOY AND JANET L OBLOY	TH EXPLORATION, LLC	1/8+	959	331	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21657	AA	5-23-17.4	RONALD J SALKOVICK JR & SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21813	AA	5-23-17.4	STUART WHITE AND BETTY WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21815	AA	5-23-17.4	JAMES NEAL EMERY AND RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21816	AA	5-23-17.4	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21817	AA	5-23-17.4	MARYLOU HINKA AND RICHARD G HINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21819	AA	5-23-17.4	MARY CATHERINE THOMS OTT	TH EXPLORATION, LLC	1/8+	958	360	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21820	AA	5-23-17.4	MARION DAVID OTT & JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21832	AA	5-23-17.4	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21886	AA	5-23-17.4	THEODORE GROUNDS & ROBERTA H	TH EXPLORATION, LLC	1/8+	957	117	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21948	AA	5-23-17.4	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21949	AA	5-23-17.4	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*21950	AA	5-23-17.4	JUDITH A TAYLOR	TH EXPLORATION, LLC	1/8+	960	74	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
10*21951	AA	5-23-17.4	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21994	AA	5-23-17.4	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22013	AA	5-23-17.4	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22014	AA	5-23-17.4	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22018	AA	5-23-17.4	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22026	AA	5-23-17.4	KEVIN D CHURCH	TH EXPLORATION, LLC	1/8+	957	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22027	AA	5-23-17.4	STEPHEN C EMERY AND CATHY J EMERY	TH EXPLORATION, LLC	1/8+	954	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22093	AA	5-23-17.4	TODD LEARN AND KENDA LEARN	TH EXPLORATION, LLC	1/8+	954	314	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22102	AA	5-23-17.4	BONNIE LOU GRUBER	TH EXPLORATION, LLC	1/8+	954	302	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22128	AA	5-23-17.4	BETTY PYSELL	TH EXPLORATION, LLC	1/8+	961	433	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22142	AA	5-23-17.4	CHERYL L HILL WANDA J RIDING AND GERALD R	TH EXPLORATION, LLC	1/8+	961	423	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22143	AA	5-23-17.4	VICKY STRAUSS AND DENNIS A STRAUSS	TH EXPLORATION, LLC	1/8+	961	529	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22144	AA	5-23-17.4	DEBRA L LYESKI AND GERALD A LYESKI	TH EXPLORATION, LLC	1/8+	954	306	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22165	AA	5-23-17.4	ANGELA HENTHORN AND WILLIAM R HENTHORN	TH EXPLORATION, LLC	1/8+	972	58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*22287	AA	5-23-17.4	MISSY JONES AND MICHAEL JONES TESSEANT FAMILY	TH EXPLORATION, LLC	1/8+	962	195	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22436	AA	5-23-17.4	REVOCABLE LIVING TRUST	TH EXPLORATION, LLC	1/8+	963	626	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22437	AA	5-23-17.4	SHERRY L IMRIE AND DANIEL IMRIE JR	TH EXPLORATION, LLC	1/8+	963	631	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22440	AA	5-23-17.4	EUGENE FANKHAUSER	TH EXPLORATION, LLC	1/8+	963	153	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22443	AA	5-23-17.4	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22450	AA	5-23-17.4	JUDY ANN MERCER	TH EXPLORATION, LLC	1/8+	963	634	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22503	AA	5-23-17.4	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22504	AA	5-23-17.4	MELVIN FANKHAUSER	TH EXPLORATION, LLC	1/8+	974	351	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22505	AA	5-23-17.4	JAMES D DRAKE AND DONNA K DRAKE KANDY BERTSFORD	TH EXPLORATION, LLC	1/8+	964	425	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22509	AA	5-23-17.4	AND LINDA JO BERTSFORD	TH EXPLORATION, LLC	1/8+	964	429	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22560	AA	5-23-17.4	RONALD JOE KELLER RUSSELL W	TH EXPLORATION, LLC	1/8+	965	485	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22592	AA	5-23-17.4	ROGERSON AND SUSAN ROGERSON	TH EXPLORATION, LLC	1/8+	966	119	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22593	AA	5-23-17.4	RONALD E ROGERSON	TH EXPLORATION, LLC	1/8+	966	116	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22594	AA	5-23-17.4	JAMES WADE	TH EXPLORATION, LLC	1/8+	965	481	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22609	AA	5-23-17.4	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*22613	AA	5-23-17.4	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*23444	AA	5-23-17.4	JENNIFER CUICHTA AND KEVIN CUICHTA	TH EXPLORATION, LLC	1/8+	1008	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23505	AA	5-23-17.4	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23647	AA	5-23-17.4	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23648	AA	5-23-17.4	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23672	AA	5-23-17.4	CHAD FRANCIS AND LISA FRANCIS	TH EXPLORATION, LLC	1/8+	1010	356	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23756	AA	5-23-17.4	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23757	AA	5-23-17.4	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23767	AA	5-23-17.4	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23771	AA	5-23-17.4	ROBIN ROSE STEVEN W SLATEN	TH EXPLORATION, LLC	1/8+	1014	485	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23792	AA	5-23-17.4	AND RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23793	AA	5-23-17.4	ELIZABETH BENNETT AND DONNIE BENNETT	TH EXPLORATION, LLC	1/8+	1014	492	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23794	AA	5-23-17.4	PATTY JEAN LANITZ NANCY C DWYER	TH EXPLORATION, LLC	1/8+	1014	495	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23826	AA	5-23-17.4	AND WENDEL MARTINKOVIC	TH EXPLORATION, LLC	1/8+	1017	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*23883	AA	5-23-17.4	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24236	AA	5-23-17.4	CONNIE L HALL	TH EXPLORATION, LLC	1/8+	1015	138	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24274	AA	5-23-17.4	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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10*24483	AA	5-23-17.4	SUSAN AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24551	AA	5-23-17.4	LEONARD LEE AND DEBRA COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24751	AA	5-23-17.4	WILLIAM D AND KIM TAYLOR	TH EXPLORATION, LLC	1/8+	1027	315	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24752	AA	5-23-17.4	PATTI KENNEDY	TH EXPLORATION, LLC	1/8+	1027	312	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24860	AA	5-23-17.4	THE ESTATE OF HOWARD G TAYLOR	TH EXPLORATION, LLC	1/8+	1028	92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24868	AA	5-23-17.4	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*24917	AA	5-23-17.4	WALTER AND CONNIE J STREIGHT	TH EXPLORATION, LLC	1/8+	1027	95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14742	BB	5-26-5	SUSAN GORE	GASTAR EXPLORATION USA, INC	1/8+	790	505	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14744	BB	5-26-5	THE SAMUEL MILTON SHEETS TRUST	GASTAR EXPLORATION USA, INC	1/8+	791	637	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14745	BB	5-26-5	RALPH B. TAYLOR	GASTAR EXPLORATION USA, INC	1/8+	794	485	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*14747	BB	5-26-5	CHESTNUT HOLDINGS INC	GASTAR EXPLORATION INC	1/8+	827	564	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17716	BB	5-26-5	MICHAEL J AND BARBARA L WILEY	TH EXPLORATION, LLC	1/8+	919	638	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*17777	BB	5-26-5	MICHELLE E AND ROBERT T BAKER	TH EXPLORATION, LLC	1/8+	921	128	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21420	BB	5-26-5	DAVID D BURKETT	TH EXPLORATION, LLC	1/8+	957	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21421	BB	5-26-5	BRYANNA FLYNN RANKIN	TH EXPLORATION, LLC	1/8+	957	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Office of Oil and Gas
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WV Department of Environmental Protection

WW-6A1 Supplement

Operator's Well No. Burch Ridge S-6HU

Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*21437	BB	5-26-5	REBECCA WCMILLAN AND ROBERT MCMILLAN	TH EXPLORATION, LLC	1/8+	957	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*21821	BB	5-26-5	LINDA K TAYLOR AND RAY P MAGEE	TH EXPLORATION, LLC	1/8+	951	631	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10*18343	CC	5-26-7	DOMINION ENERGY TRANSMISSION INC	TH EXPLORATION, LLC	1/8+	936	79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Office of Oil and Gas

APR 14 2019

WV Department of
Environmental Protection

DPS LAND SERVICES CORP
6000 TOWN CENTER BOULEVARD, SUITE 145
CANDANBURG PA 15317-5841

BOOK 0043 PAGE 0605

STATE OF WEST VIRGINIA §
§
COUNTY OF MARSHALL §

ASSIGNMENT AND CONVEYANCE

THIS ASSIGNMENT AND CONVEYANCE (the "Assignment") is made and entered into this 30th day of April, 2019 (the "Effective Date"), by and between Atinum Marcellus I, LLC (hereinafter "Assignor") and TH Exploration II, LLC, (hereinafter "Assignee" and, together with Assignor, the "Parties"). Capitalized terms used but not defined herein shall have the meanings commonly given to such terms in the industry.

WITNESSETH:

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to one hundred feet (100 ft.) above the formations commonly referred to as the Utica and Point Pleasant Shale formations down to one hundred feet (100 ft.) below the same, in those certain Oil and Gas Leases, or the portions of those certain Oil and Gas Leases, situated in Marshall County, West Virginia, as described in Exhibit "A-1" and limited and described in Exhibit "A-2", attached hereto and made a part hereof. It being the Parties intention to assign all of Assignor's interest in each unit as described in Exhibit "A-1", including any changes, revisions, or amendments to the same, now or at any time in the future. (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 one hundred feet (100 ft.) above the formations commonly referred to as the Utica and Point Pleasant Shale formations down to one hundred feet (100 ft.) below the same, in the Leases, and the lands covered thereby, together with all rights incident thereto and appurtenances thereon. It being the Parties intention to assign all of Assignor's interest in each unit as described in Exhibit "A-1", including any changes, revisions, or amendments to the same, now or at any time in the future.

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 permits or easements, rights of way, surface leases and other rights with respect to surface operations that do not materially interfere with, impair or prohibit the operation of the affected Leases, hereinafter "Permitted Encumbrances") its interest in the Leases since the time that

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WV Department of
Environmental Protection

ASSIGNMENT AND CONVEYANCE

This Assignment and Conveyance (this "*Assignment*") is from STATOIL USA ONSHORE PROPERTIES INC., a Delaware corporation ("*Assignor*"), to TH Exploration, LLC, a Texas limited liability company ("*Assignee*"), and is executed on December 18, 2017 (the "*Effective Date*"). Assignor and Assignee may be referred to herein collectively as the "*Parties*," or individually as a "*Party*." Capitalized terms used herein but not otherwise defined herein (including in Section 3.7) shall have the meanings given such terms in that certain Acreage Trade Agreement between the Assignor and the Assignee dated August 24, 2017 (the "*Acreage Trade Agreement*").

ARTICLE 1
ASSIGNMENT OF ASSETS

Section 1.1 Assignment. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby GRANTS, BARGAINS, ASSIGNS, CONVEYS AND TRANSFERS unto Assignee all of Assignor's right, title and interest in and to (i) the oil and gas leases described in more detail on Exhibit A attached hereto (the "*Leases*") INSOFAR AND ONLY INSOFAR as they cover those lands described on Exhibit A (the "*Leasehold Rights*") and (ii) any surface use agreements that relate to such Leasehold Rights (collectively with the Leasehold Rights, the "*Conveyed Assets*").

TO HAVE AND TO HOLD the Conveyed Assets, together with all and singular the rights, privileges, contracts and appurtenances, in any way appertaining or belonging thereto, unto Assignee, its successors and assigns, forever, subject, to the terms and conditions of this Assignment.

Section 1.2 Assignment Subject to Acreage Trade Agreement. This Assignment is made in accordance with and is subject to the terms, covenants and conditions contained in that certain Acreage Trade Agreement. In the event of a conflict between the provisions of the Acreage Trade Agreement and this Assignment, the provisions of the Acreage Trade Agreement shall control. The execution and delivery of this Assignment by Assignor, and the execution and acceptance of this Assignment by Assignee, shall not operate to release or impair any surviving rights or obligations of either Party with respect to the other under the Acreage Trade Agreement.

ARTICLE 2
SPECIAL WARRANTY OF TITLE AND DISCLAIMERS

Section 2.1 Special Warranty of Title. Assignor hereby agrees to warrant and defend Defensible Title to the Leases unto Assignee, its successors and assigns, against every Person whomsoever lawfully claiming or to claim the same or any part thereof by, through or under Assignor or any of its Affiliates, but not otherwise.

Section 2.2 Disclaimers of Warranties and Representations.

(a) EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN SECTION VI OF THE ACREAGE TRADE AGREEMENT OR THIS ASSIGNMENT, ASSIGNOR MAKES NO, AND HEREBY EXPRESSLY DISCLAIMS, ANY REPRESENTATION OR

ASSIGNMENT AND CONVEYANCE

This Assignment and Conveyance (this "*Assignment*") is from SWN PRODUCTION COMPANY, LLC, a Texas limited liability company ("*Assignor*"), to TH Exploration, LLC, a Texas limited liability company ("*Assignee*"), and is executed on December 18, 2017 (the "*Effective Date*"). Assignor and Assignee may be referred to herein collectively as the "*Parties*," or individually as a "*Party*." Capitalized terms used herein but not otherwise defined herein (including in Section 3.7) shall have the meanings given such terms in that certain Acreage Trade Agreement between the Assignor and the Assignee dated August 24, 2017 (the "*Acreage Trade Agreement*").

**ARTICLE 1
ASSIGNMENT OF ASSETS**

Section 1.1 Assignment. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby **GRANTS, BARGAINS, ASSIGNS, CONVEYS AND TRANSFERS** unto Assignee all of Assignor's right, title and interest in and to (i) the oil and gas leases described in more detail on Exhibit A attached hereto (the "*Leases*") **INSOFAR AND ONLY INSOFAR** as they cover those lands described on Exhibit A (the "*Leasehold Rights*") and (ii) any surface use agreements that relate to such Leasehold Rights (collectively with the Leasehold Rights, the "*Conveyed Assets*").

TO HAVE AND TO HOLD the Conveyed Assets, together with all and singular the rights, privileges, contracts and appurtenances, in any way appertaining or belonging thereto, unto Assignee, its successors and assigns, forever, subject, to the terms and conditions of this Assignment.

Section 1.2 Assignment Subject to Acreage Trade Agreement. This Assignment is made in accordance with and is subject to the terms, covenants and conditions contained in that certain Acreage Trade Agreement. In the event of a conflict between the provisions of the Acreage Trade Agreement and this Assignment, the provisions of the Acreage Trade Agreement shall control. The execution and delivery of this Assignment by Assignor, and the execution and acceptance of this Assignment by Assignee, shall not operate to release or impair any surviving rights or obligations of either Party with respect to the other under the Acreage Trade Agreement.

**ARTICLE 2
SPECIAL WARRANTY OF TITLE AND DISCLAIMERS**

Section 2.1 Special Warranty of Title. Assignor hereby agrees to warrant and defend Defensible Title to the Leases unto Assignee, its successors and assigns, against every Person whomsoever lawfully claiming or to claim the same or any part thereof by, through or under Assignor or any of its Affiliates, but not otherwise.

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(a) EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN SECTION VI OF THE ACREAGE TRADE AGREEMENT OR THIS ASSIGNMENT, ASSIGNOR MAKES NO, AND HEREBY EXPRESSLY DISCLAIMS, ANY REPRESENTATION OR

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Office of Oil and Gas

AUG 14 2019

WV Department of
Environmental Protection



5-22-5
Tophole

Burch Ridge S-6HU



west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street SE, Charleston, WV 25304
304-926-0499 Ext 1274

Barry K. Lay, Chairman
dep.wv.gov

August 19, 2019

TH Exploration
1320 S. University Dr Ste 500
Ft Worth TX 76107

91 7199 9991 7039 1715 6944

RE: Intentional Deviation of New Deep Well
Tug Hill Operating, LLC – Burch Ridge S-6HU

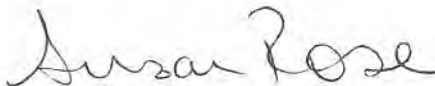
Dear Sir:

Please be advised that Tug Hill Operating, LLC, has applied to the Oil and Gas Conservation Commission for approval to intentionally deviate a new deep well. The Code of State Regulations Title 39 Section 1.4.10 requires that the Commission notify the offset operators of the applicants' intent to deviate the proposed well. You are receiving this notice because you are listed as an offset operator (unleased mineral owner is also an "offset operator") to the proposed well. Any offset operator has ten days to object to the Commission's granting approval to the proposed deviations. If you file an objection, the Commission will schedule a hearing and you will be notified of the date and time to attend.

A copy of the location plat is enclosed for your review. If no objection(s) are received within ten 10 days from the date of delivery, the application will be processed in the normal manner.

If you have any questions please call me at (304) 926-0499, extension 1274.

Sincerely,


 Susan Rose
 Administrator

encl:



August 28, 2019

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9171 9999 9170 3917 1569 44.

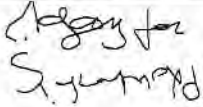
Item Details

Status:	Delivered, Front Desk/Reception/Mail Room
Status Date / Time:	August 23, 2019, 11:29 am
Location:	FORT WORTH, TX 76107
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™ Return Receipt Electronic

Shipment Details

Weight:	6lb, 3.9oz
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Recipient Signature

Signature of Recipient:	
Address of Recipient:	500

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Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004



west virginia department of environmental protection

Oil and Gas Conservation Commission
 601 57th Street SE, Charleston, WV 25304
 304-926-0499 Ext 1274

Barry K. Lay, Chairman
 dep.wv.gov

August 19, 2019

Atinum Marcellus I, LLC
 1 Riverway Ste 710
 Houston TX 77056

91 7199 9991 7039 1715 6937

RE: Intentional Deviation of New Deep Well
 Tug Hill Operating, LLC – Burch Ridge S-6HU

Dear Sir:

Please be advised that Tug Hill Operating, LLC, has applied to the Oil and Gas Conservation Commission for approval to intentionally deviate a new deep well. The Code of State Regulations Title 39 Section 1.4.10 requires that the Commission notify the offset operators of the applicants' intent to deviate the proposed well. You are receiving this notice because you are listed as an offset operator (unleased mineral owner is also an "offset operator") to the proposed well. Any offset operator has ten days to object to the Commission's granting approval to the proposed deviations. If you file an objection, the Commission will schedule a hearing and you will be notified of the date and time to attend.

A copy of the location plat is enclosed for your review. If no objection(s) are received within ten 10 days from the date of delivery, the application will be processed in the normal manner.

If you have any questions please call me at (304) 926-0499, extension 1274.

Sincerely,

Susan Rose
 Administrator

encl:



August 28, 2019

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9171 9999 9170 3917 1569 37.


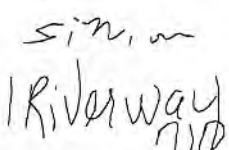
Item Details

Status:	Delivered, Left with Individual
Status Date / Time:	August 26, 2019, 2:29 pm
Location:	HOUSTON, TX 77056
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™ Return Receipt Electronic

Shipment Details

Weight: 6lb, 3.4oz

Recipient Signature

<p>Signature of Recipient: </p> <p>Address of Recipient: </p>
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Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

Burch Ridge S-6HU Offset Operators

AUG 14 2019

WELL	COUNTY	DISTRICT	PARCEL	OWNER	ADDRESS	WV Department of Environmental Protection
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-18	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-18	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-18.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-18.1	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-18.2	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-19	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-20	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-20	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-21	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-21	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-25	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-26	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-26	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-27	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-19-28	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-10	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-10	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-4	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-4	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-5	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-5	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-5.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-6	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-6	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-7	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-7	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-7.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-8	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-8	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056	
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-9	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107	

Burch Ridge S-6HU Offset Operators

AUG 14 2019

WV Department of Environmental Protection

Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-22-9	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-1	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-14	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-16	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-16	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-17	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-17.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-17.2	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-17.3	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-17.4	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-18	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-18.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-19	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-2	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-2	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-20	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-21	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-22	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-22	ATINUM MARCELLUS I LLC	1 Riverway, Suite 710 Houston, TX 77056
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-23	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-24	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-25	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-26	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-27	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-28	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-28.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-28.2	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-29	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-4	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107

Burch Ridge S-6HU Offset Operators

AUG 14 2019

WV Department of
Environmental Protection

Burch Ridge S-6HU	MARSHALL	FRANKLIN	5-23-9.1	TH EXPLORATION, LLC	1320 S. University Blvd. Suite 500 Fort Worth, TX 76107
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