



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, September 3, 2020
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

TUG HILL OPERATING, LLC
380 SOUTHPOINTE BLVD

CANONSBURG, PA 15317

Re: Permit Modification Approval for KNOB CREEK N-12HU
47-051-02268-00-00

*Modified lateral for Point Pleasant Exploration with a TMD of
24,952'*

TUG HILL OPERATING, LLC

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

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

James A. Martin
Chief

Operator's Well Number: KNOB CREEK N-12HU
Farm Name: DAVID LEE FRANKLIN
U.S. WELL NUMBER: 47-051-02268-00-00
Horizontal 6A New Drill
Date Modification Issued: Sept 3, 2020

Promoting a healthy environment.



west virginia department of environmental protection

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

Randall M. Albert, Chairman
dep.wv.gov

September 1, 2020

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

RE: Application for Deep Well Permit – API #47-051-02268 Modification

COMPANY: Tug Hill Operating, LLC

FARM: David Lee Franklin Knob Creek N-12HU

COUNTY: Marshall DISTRICT: Meade QUAD: Glen Easton

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

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

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

Sincerely,

Susan Rose
Administrator

**Heaven Hill 2-6HU 47-051-01910; Heaven Hill 2-7HU 47-051-01911; Heaven Hill 2-8HU 47-051-01912; Heaven Hill 2W-12HU 47-051-01952; Heaven Hill 2W-13HU 47-051-01957; Keith Stern N-13HU 47-051-02265; Keith Stern N-14HU 47-051-02252; Keith Stern N-15HU 47-051-02241; Keith Stern N-16HU 47-051-02242; Keith Stern S-19HU 47-051-02244; Keith Stern S-18HU 47-051-02243; Keith Stern S-17HU 47-051-02266; Knob Creek N-13HU 47-051-02269; Knob Creek S-14HU 47-051-02288; Knob Creek S-15HU 47-051-02289; Knob Creek S-16HU 47-051-02290; Knob Creek N-11HU 47-051-02287

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 Meade Glen Easton 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Knob Creek N-12HU Well Pad Name: Knob Creek

3) Farm Name/Surface Owner: David Lee Franklin Public Road Access: St. Joseph Road - CR 21

4) Elevation, current ground: 734.67' Elevation, proposed post-construction: 734.67'

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

(b) If Gas Shallow Deep

Horizontal

JM 8/27/2020

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):

Point Pleasant is the target formation at a depth of 11,129' - 11,007' - thickness of 102' and anticipated pressure of approx. 9500 psi.

8) Proposed Total Vertical Depth: 11,279'

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

10) Proposed Total Measured Depth: 24,952'

11) Proposed Horizontal Leg Length: 13,434.97'

12) Approximate Fresh Water Strata Depths: 70' ; 380'

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: 1,740'

15) Approximate Coal Seam Depths: Sewickley Coal - 292' ; Pittsburgh Coal - 374'

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

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

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

18) **CASING AND TUBING PROGRAM**

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	30"	NEW	BW	BW	120'	120'	259FT^3(CTS)
Fresh Water	20"	NEW	J55	106.5#	480'	480'	831 FT^3(CTS)
Coal	13 3/8"	NEW	J55	54.5#	2200'	2200'	1,558FT^3(CTS)
Intermediate	9 5/8"	NEW	HPP110	47#	9,887'	9,887'	3,206FT^3(CTS)
Production	5 1/2"	NEW	P110	23#	24,952'	24,952'	5,884FT^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		10,593'	
Liners							

JM 8/20/2020

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	30"	36"	1.0	2,333	1,866	CLASS A	1.2
Fresh Water	20"	26"	.5	2,410	1,928	SEE # 24	1.2
Coal	13 3/8"	17 1/2"	.38	2,740	2,192	SEE #24	1.2
Intermediate	9 5/8"	12 1/4"	.472	10,730	6,968	SEE #24	1.99
Production	5 1/2"	8 1/2"	.415	16,510	10,864	SEE #24	1.18
Tubing	2 7/8"			11,385	11,624		
Liners							

PACKERS

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

JM 8/20/2020

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. 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 17,250,000 lb proppant and 266,698 bbl of water. Max rate = 80 bpm; max psi = 12,000#.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 10.35 acres

22) Area to be disturbed for well pad only, less access road (acres): 4.32 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

*Note: Attach additional sheets as needed.



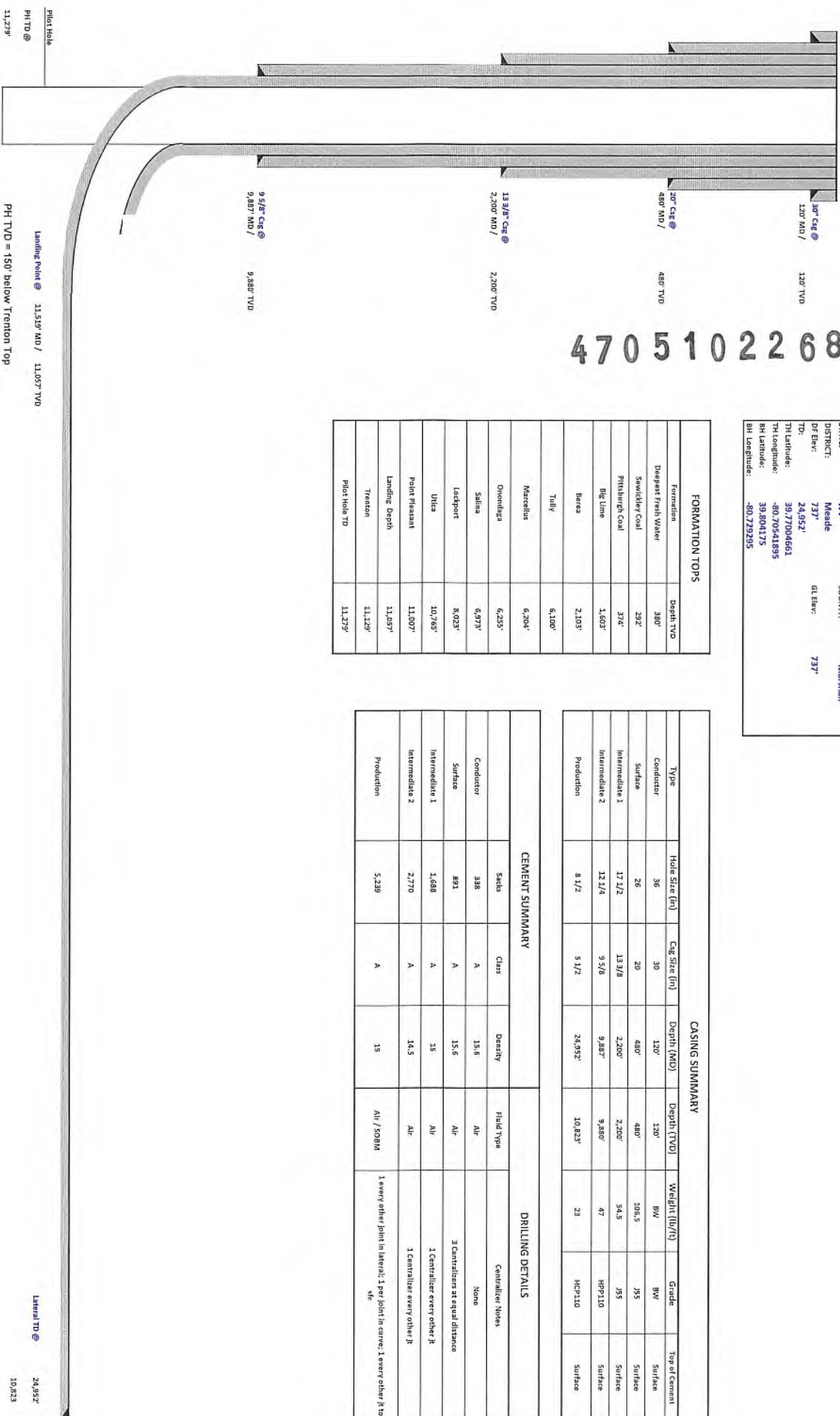
4705102268 MOD

WELL NAME:	Knob Creek N-12HU	COUNTY:	Marshall
STATE:	WV	GL Elev:	737'
DISTRICT:	Meade		
DF Elev:	737'		
TD:	24,952'		
TH Latitude:	39.77004661		
TH Longitude:	-80.70541895		
BH Latitude:	39.804175		
BH Longitude:	-80.729295		

FORMATION TOPS	Depth TVD
Formation	380'
Deepest Fresh Water	380'
Sawlicky Coal	292'
Pittsburgh Coal	396'
Big Lime	1,603'
Berea	2,103'
Tully	6,100'
Mercedius	6,204'
Ontonoga	6,255'
Salina	6,973'
Lackport	8,023'
Ulca	10,765'
Point Pleasant	11,007'
Landing Depth	11,097'
Trenton	11,129'
Pilot Hole TD	11,279'

CASING SUMMARY							
Type	Hole Size (in)	Csg Size (in)	Depth (MD)	Depth (TVD)	Weight (lb/ft)	Grade	Top of Cement
Conductor	36	30	120'	120'	8W	8W	Surface
Surface	26	20	490'	490'	108.5	J55	Surface
Intermediate 1	17 1/2	13 3/8	2,200'	2,200'	54.5	J55	Surface
Intermediate 2	12 1/4	9 5/8	9,887'	9,880'	47	HPP110	Surface
Production	8 1/2	5 1/2	24,952'	10,823'	23	HCP110	Surface

CEMENT SUMMARY				DRILLING DETAILS	
Sticks	Class	Density	Fluid Type	Centralizer	Notes
338	A	15.6	Alr	None	
891	A	15.6	Alr	3 Centralizers at equal distance	
1,688	A	15	Alr	1 Centralizer every other ft	
2,770	A	16.5	Alr	1 Centralizer every other ft	
5,239	A	15	Alr / SOBMA		1 every other joint in lateral; 1 per joint in curve; 1 every other ft to 4ft



Landing Point @ 11,319' MD / 11,057' TVD
PH TVD = 150' Below Trenton Top
11,279'

Lateral TD @ 24,952' H MD
10,823' H TVD

4705102268 MOD



Tug Hill Operating, LLC Casing and Cement Program

Knob Creek N-12HU

Casing

	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	20"	J55	26"	480'	CTS
Intermediate 1	13 3/8"	J55	17 1/2"	2,200'	CTS
Intermediate 2	9 5/8"	HPP110	12 1/4"	9,887'	CTS
Production	5 1/2"	HCP110	8 1/2"	24,952'	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



Well: Knob Creek N-12HU (slot M)
 Site: Knob Creek
 Project: Marshall County, West Virginia.
 Design: rev5

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

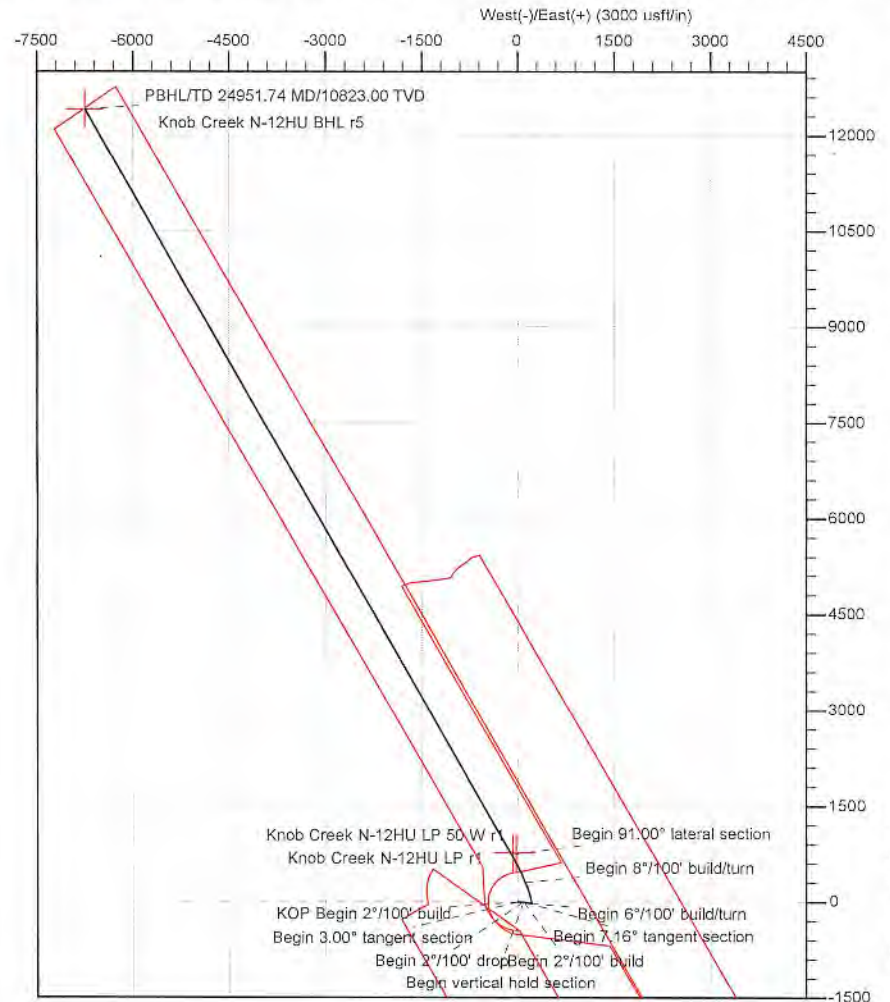
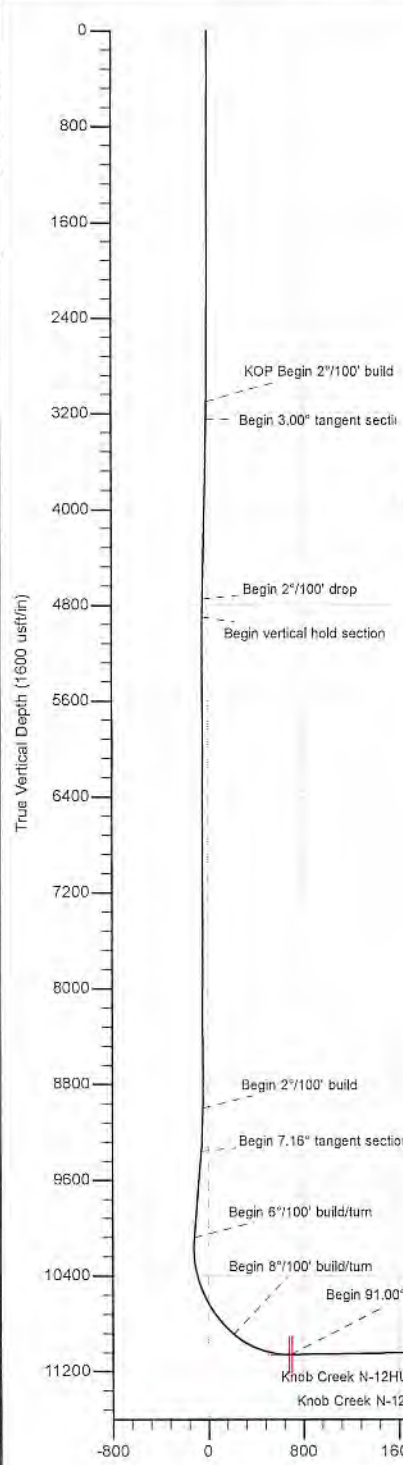
System Datum: Mean Sea Level
 Depth Reference: GL=737 @ 737.00usft
 Surface location
 Northing Easting Latitude Longitude
 14443135.94 1723190.50 39.77004661 -80.70541895

Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.881°



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	0.000	0.00	
2	3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.000	0.00	KOP Begin 2°/100' build
3	3250.00	3.00	90.00	3249.93	0.00	3.93	2.00	90.000	-1.88	Begin 3.00° tangent section
4	4750.00	3.00	90.00	4747.88	0.00	82.43	0.00	0.000	-39.38	Begin 2°/100' drop
5	4900.00	0.00	90.00	4897.81	0.00	86.36	2.00	180.000	-41.26	Begin vertical hold section
6	9002.19	0.00	90.00	9000.00	0.00	86.36	0.00	90.000	-41.26	Begin 2°/100' build
7	9360.19	7.16	103.59	9357.06	-5.25	108.07	2.00	103.588	-56.24	Begin 7.16° tangent section
8	10092.93	7.16	103.59	10084.09	-26.70	196.84	0.00	0.000	-117.50	Begin 6°/100' build/turn
9	11000.18	50.00	337.57	10887.09	306.68	112.79	6.00	-130.386	215.53	Begin 8°/100' build/turn
10	11519.26	91.00	330.34	11056.90	734.87	-100.91	8.00	-10.937	693.80	Begin 91.00° lateral section
11	24951.74	91.00	330.34	10823.00	12405.92	-8746.47	0.00	0.000	4121.68	PBHL/TD 24951.74 MD/10823.00 TVD



Vertical Section at 331.46° (1600 usft/m)

4705102268 MW



Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

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	Knob Creek				
Site Position:	Lat/Long	Northing:	14,443,053.74 usft	Latitude:	39.76982148
From:		Easting:	1,723,120.29 usft	Longitude:	-80.70566975
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.188 °

Well	Knob Creek N-12HU (slot M)					
Well Position	+N/-S	0.00 usft	Northing:	14,443,135.94 usft	Latitude:	39.77004661
	+E/-W	0.00 usft	Easting:	1,723,190.50 usft	Longitude:	-80.70541895
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level:	737.00 usft	

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/19/2017	-8.693	66.922	52,139.59563076

Design	rev5			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	331.46

Plan Survey Tool Program	Date 8/25/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	24,951.67 rev5 (Original Hole)	MWD MWD - Standard	



Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Plan Sections											
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00		
3,250.00	3.00	90.00	3,249.93	0.00	3.93	2.00	2.00	0.00	90.000		
4,750.00	3.00	90.00	4,747.88	0.00	82.43	0.00	0.00	0.00	0.000		
4,900.00	0.00	90.00	4,897.81	0.00	86.36	2.00	-2.00	0.00	180.000		
9,002.19	0.00	90.00	9,000.00	0.00	86.36	0.00	0.00	0.00	90.000		
9,360.19	7.16	103.59	9,357.06	-5.25	108.07	2.00	2.00	3.80	103.588		
10,092.93	7.16	103.59	10,084.09	-26.70	196.84	0.00	0.00	0.00	0.000		
11,000.18	50.00	337.57	10,887.09	306.68	112.79	6.00	4.72	-13.89	-130.386		
11,519.26	91.00	330.34	11,056.90	734.87	-100.91	8.00	7.90	-1.39	-10.937		
24,951.74	91.00	330.34	10,823.00	12,405.92	-6,746.47	0.00	0.00	0.00	0.000	Knob Creek N-12HU I	



Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
100.00	0.00	0.00	100.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
200.00	0.00	0.00	200.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
300.00	0.00	0.00	300.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
400.00	0.00	0.00	400.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
500.00	0.00	0.00	500.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
600.00	0.00	0.00	600.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
700.00	0.00	0.00	700.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
800.00	0.00	0.00	800.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
900.00	0.00	0.00	900.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,500.00	0.00	0.00	2,500.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,600.00	0.00	0.00	2,600.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,700.00	0.00	0.00	2,700.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,800.00	0.00	0.00	2,800.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
2,900.00	0.00	0.00	2,900.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
3,000.00	0.00	0.00	3,000.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
3,100.00	0.00	0.00	3,100.00	0.00	0.00	14,443,135.94	1,723,190.50	39.77004661	-80.70541895
KOP Begin 2°/100' build									
3,200.00	2.00	90.00	3,199.98	0.00	1.75	14,443,135.94	1,723,192.24	39.77004660	-80.70541274
3,250.00	3.00	90.00	3,249.93	0.00	3.93	14,443,135.94	1,723,194.42	39.77004658	-80.70540498
Begin 3.00° tangent section									
3,300.00	3.00	90.00	3,299.86	0.00	6.54	14,443,135.94	1,723,197.04	39.77004655	-80.70539567
3,400.00	3.00	90.00	3,399.73	0.00	11.78	14,443,135.94	1,723,202.27	39.77004651	-80.70537704
3,500.00	3.00	90.00	3,499.59	0.00	17.01	14,443,135.94	1,723,207.51	39.77004646	-80.70535841
3,600.00	3.00	90.00	3,599.45	0.00	22.24	14,443,135.94	1,723,212.74	39.77004641	-80.70533979
3,700.00	3.00	90.00	3,699.31	0.00	27.48	14,443,135.94	1,723,217.97	39.77004636	-80.70532116
3,800.00	3.00	90.00	3,799.18	0.00	32.71	14,443,135.94	1,723,223.21	39.77004632	-80.70530254
3,900.00	3.00	90.00	3,899.04	0.00	37.94	14,443,135.94	1,723,228.44	39.77004627	-80.70528391
4,000.00	3.00	90.00	3,998.90	0.00	43.18	14,443,135.94	1,723,233.68	39.77004622	-80.70526529
4,100.00	3.00	90.00	4,098.77	0.00	48.41	14,443,135.94	1,723,238.91	39.77004617	-80.70524666
4,200.00	3.00	90.00	4,198.63	0.00	53.65	14,443,135.94	1,723,244.14	39.77004613	-80.70522804
4,300.00	3.00	90.00	4,298.49	0.00	58.88	14,443,135.94	1,723,249.38	39.77004608	-80.70520941
4,400.00	3.00	90.00	4,398.36	0.00	64.11	14,443,135.94	1,723,254.61	39.77004603	-80.70519079
4,500.00	3.00	90.00	4,498.22	0.00	69.35	14,443,135.94	1,723,259.84	39.77004599	-80.70517216
4,600.00	3.00	90.00	4,598.08	0.00	74.58	14,443,135.94	1,723,265.08	39.77004594	-80.70515353
4,700.00	3.00	90.00	4,697.94	0.00	79.81	14,443,135.94	1,723,270.31	39.77004589	-80.70513491
4,750.00	3.00	90.00	4,747.88	0.00	82.43	14,443,135.94	1,723,272.93	39.77004587	-80.70512560
Begin 2°/100' drop									
4,800.00	2.00	90.00	4,797.83	0.00	84.61	14,443,135.94	1,723,275.11	39.77004585	-80.70511784



Planning Report - Geographic

4705102268 MDU

Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,900.00	0.00	90.00	4,897.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
Begin vertical hold section										
5,000.00	0.00	90.00	4,997.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,100.00	0.00	90.00	5,097.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,200.00	0.00	90.00	5,197.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,300.00	0.00	90.00	5,297.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,400.00	0.00	90.00	5,397.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,500.00	0.00	90.00	5,497.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,600.00	0.00	90.00	5,597.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,700.00	0.00	90.00	5,697.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,800.00	0.00	90.00	5,797.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
5,900.00	0.00	90.00	5,897.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,000.00	0.00	90.00	5,997.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,100.00	0.00	90.00	6,097.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,200.00	0.00	90.00	6,197.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,300.00	0.00	90.00	6,297.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,400.00	0.00	90.00	6,397.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,500.00	0.00	90.00	6,497.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,600.00	0.00	90.00	6,597.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,700.00	0.00	90.00	6,697.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,800.00	0.00	90.00	6,797.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
6,900.00	0.00	90.00	6,897.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,000.00	0.00	90.00	6,997.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,100.00	0.00	90.00	7,097.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,200.00	0.00	0.00	7,197.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,300.00	0.00	90.00	7,297.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,400.00	0.00	90.00	7,397.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,500.00	0.00	90.00	7,497.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,600.00	0.00	90.00	7,597.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,700.00	0.00	0.00	7,697.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,800.00	0.00	90.00	7,797.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
7,900.00	0.00	90.00	7,897.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,000.00	0.00	90.00	7,997.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,100.00	0.00	90.00	8,097.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,200.00	0.00	0.00	8,197.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,300.00	0.00	90.00	8,297.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,400.00	0.00	90.00	8,397.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,500.00	0.00	90.00	8,497.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,600.00	0.00	90.00	8,597.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,700.00	0.00	0.00	8,697.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,800.00	0.00	90.00	8,797.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
8,900.00	0.00	90.00	8,897.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
9,000.00	0.00	90.00	8,997.81	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
9,002.19	0.00	90.00	9,000.00	0.00	86.36	14,443,135.94	1,723,276.85	39.77004583	-80.70511162	
Begin 2°/100' build										
9,100.00	1.96	103.59	9,097.79	-0.39	87.98	14,443,135.55	1,723,278.48	39.77004474	-80.70510585	
9,200.00	3.96	103.59	9,197.65	-1.60	92.99	14,443,134.34	1,723,283.49	39.77004137	-80.70508803	
9,300.00	5.96	103.59	9,297.27	-3.63	101.39	14,443,132.31	1,723,291.89	39.77003572	-80.70505817	
9,360.19	7.16	103.59	9,357.06	-5.25	108.07	14,443,130.70	1,723,298.57	39.77003122	-80.70503441	
Begin 7.16° tangent section										
9,400.00	7.16	103.59	9,396.57	-6.41	112.89	14,443,129.53	1,723,303.39	39.77002798	-80.70501726	
9,500.00	7.16	103.59	9,495.79	-9.34	125.01	14,443,126.60	1,723,315.51	39.77001982	-80.70497418	
9,600.00	7.16	103.59	9,595.01	-12.27	137.12	14,443,123.67	1,723,327.62	39.77001167	-80.70493110	
9,700.00	7.16	103.59	9,694.23	-15.20	149.24	14,443,120.74	1,723,339.74	39.77000352	-80.70488802	



Planning Report - Geographic

4705102268 *Map*

Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,800.00	7.16	103.59	9,793.45	-18.13	161.35	14,443,117.82	1,723,351.85	39.76999537	-80.70484494	
9,900.00	7.16	103.59	9,892.67	-21.06	173.47	14,443,114.89	1,723,363.97	39.76998722	-80.70480186	
10,000.00	7.16	103.59	9,991.89	-23.98	185.58	14,443,111.96	1,723,376.08	39.76997907	-80.70475877	
10,092.93	7.16	103.59	10,084.09	-26.70	196.84	14,443,109.24	1,723,387.34	39.76997149	-80.70471874	
Begin 6°/100' build/turn										
10,100.00	6.89	100.89	10,091.11	-26.89	197.89	14,443,109.06	1,723,388.18	39.76997098	-80.70471574	
10,200.00	5.73	44.94	10,190.59	-24.49	207.11	14,443,111.46	1,723,397.61	39.76997749	-80.70468216	
10,300.00	9.48	7.81	10,289.75	-12.79	211.76	14,443,123.16	1,723,402.26	39.77000958	-80.70466549	
10,400.00	14.79	354.15	10,387.50	8.09	211.58	14,443,144.03	1,723,402.08	39.77006691	-80.70466589	
10,500.00	20.48	347.77	10,482.77	37.91	206.57	14,443,173.85	1,723,397.07	39.77014886	-80.70468336	
10,600.00	26.30	344.10	10,574.52	76.35	196.79	14,443,212.29	1,723,387.29	39.77025451	-80.70471772	
10,700.00	32.19	341.70	10,661.73	122.99	182.34	14,443,258.93	1,723,372.84	39.77038272	-80.70476859	
10,800.00	38.10	339.97	10,743.47	177.31	163.39	14,443,313.25	1,723,353.89	39.77053207	-80.70483540	
10,900.00	44.04	338.64	10,818.83	238.72	140.14	14,443,374.67	1,723,330.64	39.77070094	-80.70491743	
11,000.00	49.99	337.57	10,886.98	306.56	112.84	14,443,442.50	1,723,303.34	39.77088748	-80.70501378	
11,000.18	50.00	337.57	10,887.09	306.68	112.79	14,443,442.62	1,723,303.29	39.77088782	-80.70501396	
Begin 8°/100' build/turn										
11,100.00	57.86	335.79	10,945.82	380.69	80.82	14,443,516.63	1,723,271.31	39.77109134	-80.70512688	
11,200.00	65.75	334.28	10,993.04	460.50	43.61	14,443,596.44	1,723,234.11	39.77131086	-80.70525835	
11,300.00	73.65	332.96	11,027.72	544.44	1.95	14,443,680.38	1,723,192.45	39.77154177	-80.70540563	
11,400.00	81.56	331.74	11,049.17	630.87	-43.35	14,443,766.82	1,723,147.15	39.77177955	-80.70556585	
11,500.00	89.47	330.57	11,056.98	718.12	-91.42	14,443,854.07	1,723,099.08	39.77201959	-80.70573589	
11,519.26	91.00	330.34	11,056.90	734.88	-100.91	14,443,870.82	1,723,089.58	39.77206569	-80.70576950	
Begin 91.00° lateral section										
11,600.00	91.00	330.34	11,055.49	805.03	-140.86	14,443,940.97	1,723,049.64	39.77225871	-80.70591084	
11,700.00	91.00	330.34	11,053.75	891.92	-190.33	14,444,027.86	1,723,000.16	39.77249777	-80.70608590	
11,800.00	91.00	330.34	11,052.01	978.80	-239.81	14,444,114.75	1,722,950.69	39.77273683	-80.70626096	
11,900.00	91.00	330.34	11,050.27	1,065.69	-289.28	14,444,201.63	1,722,901.22	39.77297589	-80.70643602	
12,000.00	91.00	330.34	11,048.53	1,152.58	-338.76	14,444,288.52	1,722,851.74	39.77321495	-80.70661108	
12,100.00	91.00	330.34	11,046.79	1,239.46	-388.23	14,444,375.41	1,722,802.27	39.77345401	-80.70678615	
12,200.00	91.00	330.34	11,045.05	1,326.35	-437.70	14,444,462.29	1,722,752.79	39.77369307	-80.70696121	
12,300.00	91.00	330.34	11,043.30	1,413.24	-487.18	14,444,549.18	1,722,703.32	39.77393212	-80.70713628	
12,400.00	91.00	330.34	11,041.56	1,500.12	-536.65	14,444,636.07	1,722,653.85	39.77417118	-80.70731135	
12,500.00	91.00	330.34	11,039.82	1,587.01	-586.12	14,444,722.95	1,722,604.37	39.77441024	-80.70748642	
12,600.00	91.00	330.34	11,038.08	1,673.90	-635.60	14,444,809.84	1,722,554.90	39.77464930	-80.70766149	
12,700.00	91.00	330.34	11,036.34	1,760.78	-685.07	14,444,896.73	1,722,505.43	39.77488836	-80.70783656	
12,800.00	91.00	330.34	11,034.60	1,847.67	-734.55	14,444,983.62	1,722,455.95	39.77512741	-80.70801163	
12,900.00	91.00	330.34	11,032.86	1,934.56	-784.02	14,445,070.50	1,722,406.48	39.77536647	-80.70818670	
13,000.00	91.00	330.34	11,031.12	2,021.44	-833.49	14,445,157.39	1,722,357.00	39.77560553	-80.70836178	
13,100.00	91.00	330.34	11,029.37	2,108.33	-882.97	14,445,244.28	1,722,307.53	39.77584458	-80.70853686	
13,200.00	91.00	330.34	11,027.63	2,195.22	-932.44	14,445,331.16	1,722,258.06	39.77608364	-80.70871193	
13,300.00	91.00	330.34	11,025.89	2,282.11	-981.91	14,445,418.05	1,722,208.58	39.77632270	-80.70888701	
13,400.00	91.00	330.34	11,024.15	2,368.99	-1,031.39	14,445,504.94	1,722,159.11	39.77656175	-80.70906209	
13,500.00	91.00	330.34	11,022.41	2,455.88	-1,080.86	14,445,591.82	1,722,109.64	39.77680081	-80.70923717	
13,600.00	91.00	330.34	11,020.67	2,542.77	-1,130.34	14,445,678.71	1,722,060.16	39.77703986	-80.70941226	
13,700.00	91.00	330.34	11,018.93	2,629.65	-1,179.81	14,445,765.60	1,722,010.69	39.77727892	-80.70958734	
13,800.00	91.00	330.34	11,017.18	2,716.54	-1,229.28	14,445,852.48	1,721,961.21	39.77751797	-80.70976242	
13,900.00	91.00	330.34	11,015.44	2,803.43	-1,278.76	14,445,939.37	1,721,911.74	39.77775702	-80.70993751	
14,000.00	91.00	330.34	11,013.70	2,890.31	-1,328.23	14,446,026.26	1,721,862.27	39.77799608	-80.71011260	
14,100.00	91.00	330.34	11,011.96	2,977.20	-1,377.71	14,446,113.14	1,721,812.79	39.77823513	-80.71028769	
14,200.00	91.00	330.34	11,010.22	3,064.09	-1,427.18	14,446,200.03	1,721,763.32	39.77847419	-80.71046277	
14,300.00	91.00	330.34	11,008.48	3,150.97	-1,476.65	14,446,286.92	1,721,713.84	39.77871324	-80.71063787	
14,400.00	91.00	330.34	11,006.74	3,237.86	-1,526.13	14,446,373.80	1,721,664.37	39.77895229	-80.71081296	
14,500.00	91.00	330.34	11,005.00	3,324.75	-1,575.60	14,446,460.69	1,721,614.90	39.77919134	-80.71098805	



Planning Report - Geographic

Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,600.00	91.00	330.34	11,003.25	3,411.63	-1,625.07	14,446,547.58	1,721,565.42	39.77943040	-80.71116315
14,700.00	91.00	330.34	11,001.51	3,498.52	-1,674.55	14,446,634.46	1,721,515.95	39.77968945	-80.71133824
14,800.00	91.00	330.34	10,999.77	3,585.41	-1,724.02	14,446,721.35	1,721,466.48	39.77990850	-80.71151334
14,900.00	91.00	330.34	10,998.03	3,672.29	-1,773.50	14,446,808.24	1,721,417.00	39.78014755	-80.71168844
15,000.00	91.00	330.34	10,996.29	3,759.18	-1,822.97	14,446,895.12	1,721,367.53	39.78038660	-80.71186354
15,100.00	91.00	330.34	10,994.55	3,846.07	-1,872.44	14,446,982.01	1,721,318.05	39.78062565	-80.71203864
15,200.00	91.00	330.34	10,992.81	3,932.95	-1,921.92	14,447,068.90	1,721,268.58	39.78086470	-80.71221374
15,300.00	91.00	330.34	10,991.07	4,019.84	-1,971.39	14,447,155.78	1,721,219.11	39.78110375	-80.71238884
15,400.00	91.00	330.34	10,989.32	4,106.73	-2,020.86	14,447,242.67	1,721,169.63	39.78134280	-80.71256394
15,500.00	91.00	330.34	10,987.58	4,193.61	-2,070.34	14,447,329.56	1,721,120.16	39.78158185	-80.71273905
15,600.00	91.00	330.34	10,985.84	4,280.50	-2,119.81	14,447,416.44	1,721,070.68	39.78182090	-80.71291416
15,700.00	91.00	330.34	10,984.10	4,367.39	-2,169.29	14,447,503.33	1,721,021.21	39.78205995	-80.71308926
15,800.00	91.00	330.34	10,982.36	4,454.27	-2,218.76	14,447,590.22	1,720,971.74	39.78229900	-80.71326437
15,900.00	91.00	330.34	10,980.62	4,541.16	-2,268.23	14,447,677.10	1,720,922.26	39.78253805	-80.71343948
16,000.00	91.00	330.34	10,978.88	4,628.05	-2,317.71	14,447,763.99	1,720,872.79	39.78277710	-80.71361459
16,100.00	91.00	330.34	10,977.14	4,714.93	-2,367.18	14,447,850.88	1,720,823.32	39.78301615	-80.71378971
16,200.00	91.00	330.34	10,975.39	4,801.82	-2,416.66	14,447,937.77	1,720,773.84	39.78325520	-80.71396482
16,300.00	91.00	330.34	10,973.65	4,888.71	-2,466.13	14,448,024.65	1,720,724.37	39.78349424	-80.71413994
16,400.00	91.00	330.34	10,971.91	4,975.59	-2,515.60	14,448,111.54	1,720,674.89	39.78373329	-80.71431505
16,500.00	91.00	330.34	10,970.17	5,062.48	-2,565.08	14,448,198.43	1,720,625.42	39.78397234	-80.71449017
16,600.00	91.00	330.34	10,968.43	5,149.37	-2,614.55	14,448,285.31	1,720,575.95	39.78421139	-80.71466529
16,700.00	91.00	330.34	10,966.69	5,236.26	-2,664.02	14,448,372.20	1,720,526.47	39.78445043	-80.71484041
16,800.00	91.00	330.34	10,964.95	5,323.14	-2,713.50	14,448,459.09	1,720,477.00	39.78468948	-80.71501553
16,900.00	91.00	330.34	10,963.20	5,410.03	-2,762.97	14,448,545.97	1,720,427.53	39.78492852	-80.71519065
17,000.00	91.00	330.34	10,961.46	5,496.92	-2,812.45	14,448,632.86	1,720,378.05	39.78516757	-80.71536577
17,100.00	91.00	330.34	10,959.72	5,583.80	-2,861.92	14,448,719.75	1,720,328.58	39.78540662	-80.71554090
17,200.00	91.00	330.34	10,957.98	5,670.69	-2,911.39	14,448,806.63	1,720,279.10	39.78564566	-80.71571602
17,300.00	91.00	330.34	10,956.24	5,757.58	-2,960.87	14,448,893.52	1,720,229.63	39.78588471	-80.71589115
17,400.00	91.00	330.34	10,954.50	5,844.46	-3,010.34	14,448,980.41	1,720,180.16	39.78612375	-80.71606628
17,500.00	91.00	330.34	10,952.76	5,931.35	-3,059.82	14,449,067.29	1,720,130.68	39.78636280	-80.71624141
17,600.00	91.00	330.34	10,951.02	6,018.24	-3,109.29	14,449,154.18	1,720,081.21	39.78660184	-80.71641654
17,700.00	91.00	330.34	10,949.27	6,105.12	-3,158.76	14,449,241.07	1,720,031.73	39.78684088	-80.71659167
17,800.00	91.00	330.34	10,947.53	6,192.01	-3,208.24	14,449,327.95	1,719,982.26	39.78707993	-80.71676681
17,900.00	91.00	330.34	10,945.79	6,278.90	-3,257.71	14,449,414.84	1,719,932.79	39.78731897	-80.71694194
18,000.00	91.00	330.34	10,944.05	6,365.78	-3,307.18	14,449,501.73	1,719,883.31	39.78755801	-80.71711707
18,100.00	91.00	330.34	10,942.31	6,452.67	-3,356.66	14,449,588.61	1,719,833.84	39.78779706	-80.71729221
18,200.00	91.00	330.34	10,940.57	6,539.56	-3,406.13	14,449,675.50	1,719,784.37	39.78803610	-80.71746735
18,300.00	91.00	330.34	10,938.83	6,626.44	-3,455.61	14,449,762.39	1,719,734.89	39.78827514	-80.71764249
18,400.00	91.00	330.34	10,937.09	6,713.33	-3,505.08	14,449,849.27	1,719,685.42	39.78851418	-80.71781763
18,500.00	91.00	330.34	10,935.34	6,800.22	-3,554.55	14,449,936.16	1,719,635.94	39.78875323	-80.71799277
18,600.00	91.00	330.34	10,933.60	6,887.10	-3,604.03	14,450,023.05	1,719,586.47	39.78899227	-80.71816791
18,700.00	91.00	330.34	10,931.86	6,973.99	-3,653.50	14,450,109.93	1,719,537.00	39.78923131	-80.71834306
18,800.00	91.00	330.34	10,930.12	7,060.88	-3,702.97	14,450,196.82	1,719,487.52	39.78947035	-80.71851820
18,900.00	91.00	330.34	10,928.38	7,147.76	-3,752.45	14,450,283.71	1,719,438.05	39.78970939	-80.71869335
19,000.00	91.00	330.34	10,926.64	7,234.65	-3,801.92	14,450,370.59	1,719,388.58	39.78994843	-80.71886850
19,100.00	91.00	330.34	10,924.90	7,321.54	-3,851.40	14,450,457.48	1,719,339.10	39.79018747	-80.71904365
19,200.00	91.00	330.34	10,923.15	7,408.42	-3,900.87	14,450,544.37	1,719,289.63	39.79042651	-80.71921880
19,300.00	91.00	330.34	10,921.41	7,495.31	-3,950.34	14,450,631.25	1,719,240.15	39.79066555	-80.71939395
19,400.00	91.00	330.34	10,919.67	7,582.20	-3,999.82	14,450,718.14	1,719,190.68	39.79090459	-80.71956910
19,500.00	91.00	330.34	10,917.93	7,669.08	-4,049.29	14,450,805.03	1,719,141.21	39.79114363	-80.71974425
19,600.00	91.00	330.34	10,916.19	7,755.97	-4,098.77	14,450,891.91	1,719,091.73	39.79138267	-80.71991941
19,700.00	91.00	330.34	10,914.45	7,842.86	-4,148.24	14,450,978.80	1,719,042.26	39.79162171	-80.72009456
19,800.00	91.00	330.34	10,912.71	7,929.74	-4,197.71	14,451,065.69	1,718,992.78	39.79186074	-80.72026972
19,900.00	91.00	330.34	10,910.97	8,016.63	-4,247.19	14,451,152.58	1,718,943.31	39.79209978	-80.72044488
20,000.00	91.00	330.34	10,909.22	8,103.52	-4,296.66	14,451,239.46	1,718,893.84	39.79233882	-80.72062004



Planning Report - Geographic

4705102268 MD

Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
20,100.00	91.00	330.34	10,907.48	8,190.40	-4,346.13	14,451,326.35	1,718,844.36	39.79257786	-80.72079520	
20,200.00	91.00	330.34	10,905.74	8,277.29	-4,395.61	14,451,413.24	1,718,794.89	39.79281689	-80.72097036	
20,300.00	91.00	330.34	10,904.00	8,364.18	-4,445.08	14,451,500.12	1,718,745.42	39.79305593	-80.72114553	
20,400.00	91.00	330.34	10,902.26	8,451.07	-4,494.56	14,451,587.01	1,718,695.94	39.79329497	-80.72132069	
20,500.00	91.00	330.34	10,900.52	8,537.95	-4,544.03	14,451,673.90	1,718,646.47	39.79353400	-80.72149586	
20,600.00	91.00	330.34	10,898.78	8,624.84	-4,593.50	14,451,760.78	1,718,596.99	39.79377304	-80.72167102	
20,700.00	91.00	330.34	10,897.04	8,711.73	-4,642.98	14,451,847.67	1,718,547.52	39.79401208	-80.72184619	
20,800.00	91.00	330.34	10,895.29	8,798.61	-4,692.45	14,451,934.56	1,718,498.05	39.79425111	-80.72202136	
20,900.00	91.00	330.34	10,893.55	8,885.50	-4,741.93	14,452,021.44	1,718,448.57	39.79449015	-80.72219653	
21,000.00	91.00	330.34	10,891.81	8,972.39	-4,791.40	14,452,108.33	1,718,399.10	39.79472918	-80.72237170	
21,100.00	91.00	330.34	10,890.07	9,059.27	-4,840.87	14,452,195.22	1,718,349.62	39.79496822	-80.72254688	
21,200.00	91.00	330.34	10,888.33	9,146.16	-4,890.35	14,452,282.10	1,718,300.15	39.79520725	-80.72272205	
21,300.00	91.00	330.34	10,886.59	9,233.05	-4,939.82	14,452,368.99	1,718,250.68	39.79544629	-80.72289723	
21,400.00	91.00	330.34	10,884.85	9,319.93	-4,989.29	14,452,455.88	1,718,201.20	39.79568532	-80.72307240	
21,500.00	91.00	330.34	10,883.11	9,406.82	-5,038.77	14,452,542.76	1,718,151.73	39.79592435	-80.72324758	
21,600.00	91.00	330.34	10,881.36	9,493.71	-5,088.24	14,452,629.65	1,718,102.26	39.79616339	-80.72342276	
21,700.00	91.00	330.34	10,879.62	9,580.59	-5,137.72	14,452,716.54	1,718,052.78	39.79640242	-80.72359794	
21,800.00	91.00	330.34	10,877.88	9,667.48	-5,187.19	14,452,803.42	1,718,003.31	39.79664145	-80.72377312	
21,900.00	91.00	330.34	10,876.14	9,754.37	-5,236.66	14,452,890.31	1,717,953.83	39.79688048	-80.72394830	
22,000.00	91.00	330.34	10,874.40	9,841.25	-5,286.14	14,452,977.20	1,717,904.36	39.79711952	-80.72412349	
22,100.00	91.00	330.34	10,872.66	9,928.14	-5,335.61	14,453,064.08	1,717,854.89	39.79735855	-80.72429867	
22,200.00	91.00	330.34	10,870.92	10,015.03	-5,385.08	14,453,150.97	1,717,805.41	39.79759758	-80.72447386	
22,300.00	91.00	330.34	10,869.17	10,101.91	-5,434.56	14,453,237.86	1,717,755.94	39.79783661	-80.72464905	
22,400.00	91.00	330.34	10,867.43	10,188.80	-5,484.03	14,453,324.74	1,717,706.47	39.79807564	-80.72482423	
22,500.00	91.00	330.34	10,865.69	10,275.69	-5,533.51	14,453,411.63	1,717,656.99	39.79831467	-80.72499942	
22,600.00	91.00	330.34	10,863.95	10,362.57	-5,582.98	14,453,498.52	1,717,607.52	39.79855371	-80.72517462	
22,700.00	91.00	330.34	10,862.21	10,449.46	-5,632.45	14,453,585.40	1,717,558.04	39.79879274	-80.72534981	
22,800.00	91.00	330.34	10,860.47	10,536.35	-5,681.93	14,453,672.29	1,717,508.57	39.79903177	-80.72552500	
22,900.00	91.00	330.34	10,858.73	10,623.23	-5,731.40	14,453,759.18	1,717,459.10	39.79927080	-80.72570020	
23,000.00	91.00	330.34	10,856.99	10,710.12	-5,780.88	14,453,846.06	1,717,409.62	39.79950983	-80.72587539	
23,100.00	91.00	330.34	10,855.24	10,797.01	-5,830.35	14,453,932.95	1,717,360.15	39.79974885	-80.72605059	
23,200.00	91.00	330.34	10,853.50	10,883.89	-5,879.82	14,454,019.84	1,717,310.67	39.79998788	-80.72622579	
23,300.00	91.00	330.34	10,851.76	10,970.78	-5,929.30	14,454,106.73	1,717,261.20	39.80022691	-80.72640099	
23,400.00	91.00	330.34	10,850.02	11,057.67	-5,978.77	14,454,193.61	1,717,211.73	39.80046594	-80.72657619	
23,500.00	91.00	330.34	10,848.28	11,144.55	-6,028.24	14,454,280.50	1,717,162.25	39.80070497	-80.72675139	
23,600.00	91.00	330.34	10,846.54	11,231.44	-6,077.72	14,454,367.39	1,717,112.78	39.80094400	-80.72692659	
23,700.00	91.00	330.34	10,844.80	11,318.33	-6,127.19	14,454,454.27	1,717,063.31	39.80118303	-80.72710180	
23,800.00	91.00	330.34	10,843.06	11,405.22	-6,176.67	14,454,541.16	1,717,013.83	39.80142205	-80.72727700	
23,900.00	91.00	330.34	10,841.31	11,492.10	-6,226.14	14,454,628.05	1,716,964.36	39.80166108	-80.72745221	
24,000.00	91.00	330.34	10,839.57	11,578.99	-6,275.61	14,454,714.93	1,716,914.88	39.80190011	-80.72762742	
24,100.00	91.00	330.34	10,837.83	11,665.88	-6,325.09	14,454,801.82	1,716,865.41	39.80213913	-80.72780263	
24,200.00	91.00	330.34	10,836.09	11,752.76	-6,374.56	14,454,888.71	1,716,815.94	39.80237816	-80.72797784	
24,300.00	91.00	330.34	10,834.35	11,839.65	-6,424.04	14,454,975.59	1,716,766.46	39.80261719	-80.72815305	
24,400.00	91.00	330.34	10,832.61	11,926.54	-6,473.51	14,455,062.48	1,716,716.99	39.80285621	-80.72832826	
24,500.00	91.00	330.34	10,830.87	12,013.42	-6,522.98	14,455,149.37	1,716,667.51	39.80309524	-80.72850348	
24,600.00	91.00	330.34	10,829.13	12,100.31	-6,572.46	14,455,236.25	1,716,618.04	39.80333426	-80.72867869	
24,700.00	91.00	330.34	10,827.38	12,187.20	-6,621.93	14,455,323.14	1,716,568.57	39.80357329	-80.72885391	
24,800.00	91.00	330.34	10,825.64	12,274.08	-6,671.40	14,455,410.03	1,716,519.09	39.80381231	-80.72902913	
24,900.00	91.00	330.34	10,823.90	12,360.97	-6,720.88	14,455,496.91	1,716,469.62	39.80405134	-80.72920435	
24,951.74	91.00	330.34	10,823.00	12,405.92	-6,746.47	14,455,541.87	1,716,444.02	39.80417500	-80.72929500	

PBHL/TD 24951.74 MD/10823.00 TVD



Database:	DB_Aug1919_v14	Local Co-ordinate Reference:	Well Knob Creek N-12HU (slot M)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=737 @ 737.00usft
Project:	Marshall County, West Virginia.	MD Reference:	GL=737 @ 737.00usft
Site:	Knob Creek	North Reference:	Grid
Well:	Knob Creek N-12HU (slot M)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev5		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Knob Creek N-12HU BH - plan hits target center - Point	0.00	0.00	10,823.00	12,405.92	-6,746.47	14,455,541.87	1,716,444.02	39.80417500	-80.72929500
Knob Creek N-12HU LP - plan misses target center by 76.16usft at 11508.34usft MD (11057.01 TVD, 725.38 N, -95.52 E) - Point	0.00	0.00	11,057.00	762.93	-29.27	14,443,898.88	1,723,161.23	39.77214209	-80.70551418
Knob Creek N-12HU LP - plan misses target center by 32.69usft at 11532.92usft MD (11056.66 TVD, 746.75 N, -107.68 E) - Point	0.00	0.00	11,057.00	762.93	-79.27	14,443,898.88	1,723,111.23	39.77214254	-80.70569213

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
3,100.00	3,100.00	0.00	0.00	KOP Begin 2°/100' build
3,250.00	3,249.93	0.00	3.93	Begin 3.00° tangent section
4,750.00	4,747.88	0.00	82.43	Begin 2°/100' drop
4,900.00	4,897.81	0.00	86.36	Begin vertical hold section
9,002.19	9,000.00	0.00	86.36	Begin 2°/100' build
9,360.19	9,357.06	-5.25	108.07	Begin 7.16° tangent section
10,092.93	10,084.09	-26.70	196.84	Begin 6°/100' build/turn
11,000.18	10,887.09	306.68	112.79	Begin 8°/100' build/turn
11,519.26	11,056.90	734.88	-100.91	Begin 91.00° lateral section
24,951.74	10,823.00	12,405.92	-6,746.47	PBHL/TD 24951.74 MD/10823.00 TVD

4705102268MOD



Well Site Safety Plan

Tug Hill Operating, LLC

JM 8/27/2020

Well Name: Knob Creek N-11HU

Pad Location: Knob Creek

Wetzel County, West Virginia

UTM (meters), NAD83, Zone 17:

Northing: 4,402,270.92

Easting: 525,224.95

August 2020

WW-6A1
(5/13)

Operator's Well No. Knob Creek N-12HU

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

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

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

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

*See attached pages

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

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

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

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

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

Well Operator: Tug Hill Operating, LLC
 By: Amy L. Miller *Amy Miller*
 Its: Permitting Specialist - Appalachia Region

RECEIVED
Office of Oil and Gas

FEB 18 2020

WV Department of
Environmental Protection

**KNOB CREEK N LEASE
UTICA UNIT - 385.63 AC±
WELL 12HU
TUG HILL OPERATING**

T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°50'00"

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C.(FT) N. 464,863.27 E. 1,629,685.28
NAD'83 GEO. LAT-(N) 39.770047 LONG-(W) 80.705419
NAD'83 UTM (M) N. 4,402,276.64 E. 525,229.52

LANDING POINT

NAD'83 S.P.C.(FT) N. 465,600.0 E. 1,629,596.8
NAD'83 GEO. LAT-(N) 39.772066 LONG-(W) 80.705769
NAD'83 UTM (M) N. 4,402,500.6 E. 525,198.8

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 477,384.4 E. 1,623,144.8
NAD'83 GEO. LAT-(N) 39.804175 LONG-(W) 80.729295
NAD'83 UTM (M) N. 4,406,058.0 E. 523,173.2

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°42'30"

7,875' T.H.

10,622' B.H.

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-1-1	GERALD F. PADLOW	1.033
9-15-10	ARTHUR L. MOORE	3.96
9-13-11.1	SAMUEL & HEATHER SUHODOLSKI	0.49
9-15-13.1	THOMAS JOHN FOX	0.827
9-14-1.1	MICHAEL L. ALVAREZ	1.6
9-14-1.2	KENNETH N. & TERESA A. SMERTINECK	1.02
9-14-2	MICHAEL L. ALVAREZ	0.75
9-14-3	MICHAEL L. ALVAREZ	P/O PARCELS 3
9-14-4	MICHAEL L. ALVAREZ	3 PCLS & 1/8 AC
9-14-5	MICHAEL L. ALVAREZ	200' X 60' PCLS
9-14-6	MICHAEL L. ALVAREZ	120' X 200' PCLS
9-14-7	JOHN T. ERAZMUS, III	0.25
9-14-8	JOHNNY C. HOLCOMB & JOHNNY C. HOLCOMB, II	2/5 AC
9-14-9	JOHN E. DUFFY, ET UX	2/5 AC
9-14-10	ROBERT I. DUFFY - LIFE	25/100 AC
9-14-25	PATRICIA A. DUGAS	0.539
9-14-27	PATRICK J. SCHELLHASE - TRUST	3.004
9-14-28	CHARLES R. SCHELLHASE, ET UX	3.029
9-14-29	ANDREW FASOULETOS, ET UX	0.209
9-14-29.1	ANDREW FASOULETOS, ET UX	1.171
9-14-30	WILLIAM C. GROFT, ET UX	0.35
9-14-35	PAUL G. FOX	0.338
9-14-36	MARGARET FOX - LIFE	1600 SQ. FT.
9-14-37	MARGARET FOX - LIFE	LOT
9-14-40	MARGARET FOX - LIFE	19,560 SQ. FT.
9-14-41	MARGARET FOX - LIFE	9165 SQ. FT.
9-14-45	GEORGE R. TAYLOR, ET UX	10.98
9-14-46.1	MARTHA JANE FAZZARO	1.512
9-14-47	MICHAEL L. & CHERYL J. ACREE	0.355
9-14-48	MICHAEL L. & CHERYL J. ACREE	0.473
9-14-49	MICHAEL L. & CHERYL J. ACREE	0.118
9-14-50	RONALD MARSH	0.707
9-16-14	LYNN CAMP METHODIST CHURCH	0.762
9-16-15	RONALD R. YOUNG, ET UX - LIFE	52.02
9-16-15.1	ERIC J. YOUNG	1.98

TAC	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	MARGARET K. FOX (LIFE)	9-14-38	0.631
C	MARGARET K. FOX (LIFE)	9-14-39	8675 SQ. FT.
D	TWILA C. COFFIELD	9-14-32	0.583
E	TWILA C. COFFIELD	9-14-32.1	0.184
F	WILFORD F. NELSON, JR., ET UX	9-14-31	0.554
G	DAVID LEE FRANKLIN	9-14-44	2.913
H	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
I	JOHN C. LAGOS, ET UX	9-14-42	1.87
J	JAMES G. FOX	9-14-43	0.66
K	MARGARET K. FOX (LIFE)	9-13-13	15.513
L	JAMES E. PERLMAN	9-14-53	0.535
M	JAMES H. PERLMAN	9-14-52	0.439
N	RICHARD L. HARVETH, ET UX	9-14-54	1.649
O	GEORGE R. TAYLOR, ET UX	9-14-44.1	4.423
P	GEORGE R. TAYLOR, ET UX	9-14-51	1.621
Q	MARGARET K. FOX (LIFE)	9-14-46	18.888
R	MARGARET K. FOX (LIFE)	9-13-14	3.00
S	NILA JEAN FROHNAPFEL	9-13-12	91.1007
T	DANIEL JAY FITZWATER	9-13-20	105.5
U	ROBERT T. & BARBARA A. ANKROM	9-13-12.1	2.632
V	ELEANOR M. FOX EST.	9-13-18	30.00
W	KENNETH N. & TERESA A. SMERTINECK	9-13-11	112.67
X	SHUTLER FAMILY TRUST	P/O 9-13-8	56.04
Y	MARGARET K. FOX (LIFE)	9-11-2	84.378
Z	KENNETH P. GATEWOOD, ET UX	9-11-2.1	0.308
AA	GERALD PADLOW, ET UX	9-11-2.2	0.291
BB	RAY A. WHEITZAL, JR., ET AL	9-10-13	71.119
CC	WILLIAM MCCONNELL	9-10-4	15.00
DD	J. F. CROW ESTATE, ET AL	9-10-9	17 AC 14 P.
EE	J. F. CROW ESTATE, ET AL	9-10-11	60.00
FF	JOSEPH MICHAEL BONENE	9-10-15	44.00
GG	DAVID & PAMELA SCHIMMEL	9-10-7	1.00
HH	BRENT ALLEN CONNER	9-10-8	2.00
II	RONALD KEITH & RUBY MASON	9-6-12	59.00
JJ	KENNETH W. MASON EST.	9-10-6	43.00
KK	KENNETH W. MASON EST.	9-10-5	51.62
LL	KENNETH W. MASON EST.	9-6-14	19.37
MM	J. F. CROW ESTATE, ET AL	9-6-15	53.23
NN	JANE RICHARDSON HEIRS, ET AL	9-6-16	23.05
OO	ROBERT LEE CARNEY, ET UX	9-6-4	118.17
PP	WILLIAM N. ROUPE	9-6-3	110.09

NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- SEE REFERENCES FOR DWELLINGS LOCATED WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PROPOSED LATERAL OR TOP HOLE OF KNOB CREEK N-12HU (47-051-02268) IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OR EXISTING WELLS
KNOB CREEK N-11HU (47-051-02287),
KNOB CREEK N-13HU (47-051-02289),
KNOB CREEK S-14HU (47-051-02288),
KNOB CREEK S-15HU (47-051-02289),
KNOB CREEK S-16HU (47-051-02290),
KEITH STERN N-15HU (47-051-02265),
HEAVEN HILL 2W-12HU (47-051-01952),
HEAVEN HILL 2W-13HU (47-051-01957).

B.H.

T.H.

DETAIL
SCALE: 1" = 500'



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsvw.com

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

P.S. 849 *C. Victor Moyers*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE AUGUST 21, 20 19
REVISED 08/22/19, 09/18/19, 01/23/20, 02/14/20, 08/27/20
OPERATORS WELL NO. KNOB CREEK N-12HU
API WELL NO. 47 - 051 - 02268 MDD
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500
FILE NO. 8789P12HUR-REV5.dwg
KNOB CREEK N-12HU REV5
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)
SCALE 1" = 2000'

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



WELL TYPE: OIL ___ GAS X INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
LOCATION: GROUND = 732.20' ELEVATION PROPOSED = 734.67' WATERSHED FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
SURFACE OWNER DAVID LEE FRANKLIN ACREAGE 65.824±
ROYALTY OWNER DAVID LEE FRANKLIN, ET AL - SEE WW-6A1 ACREAGE 65.824±
PROPOSED WORK: LEASE NO. SEE WW-6A1
DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___
PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,279' TMD: 24,952'

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

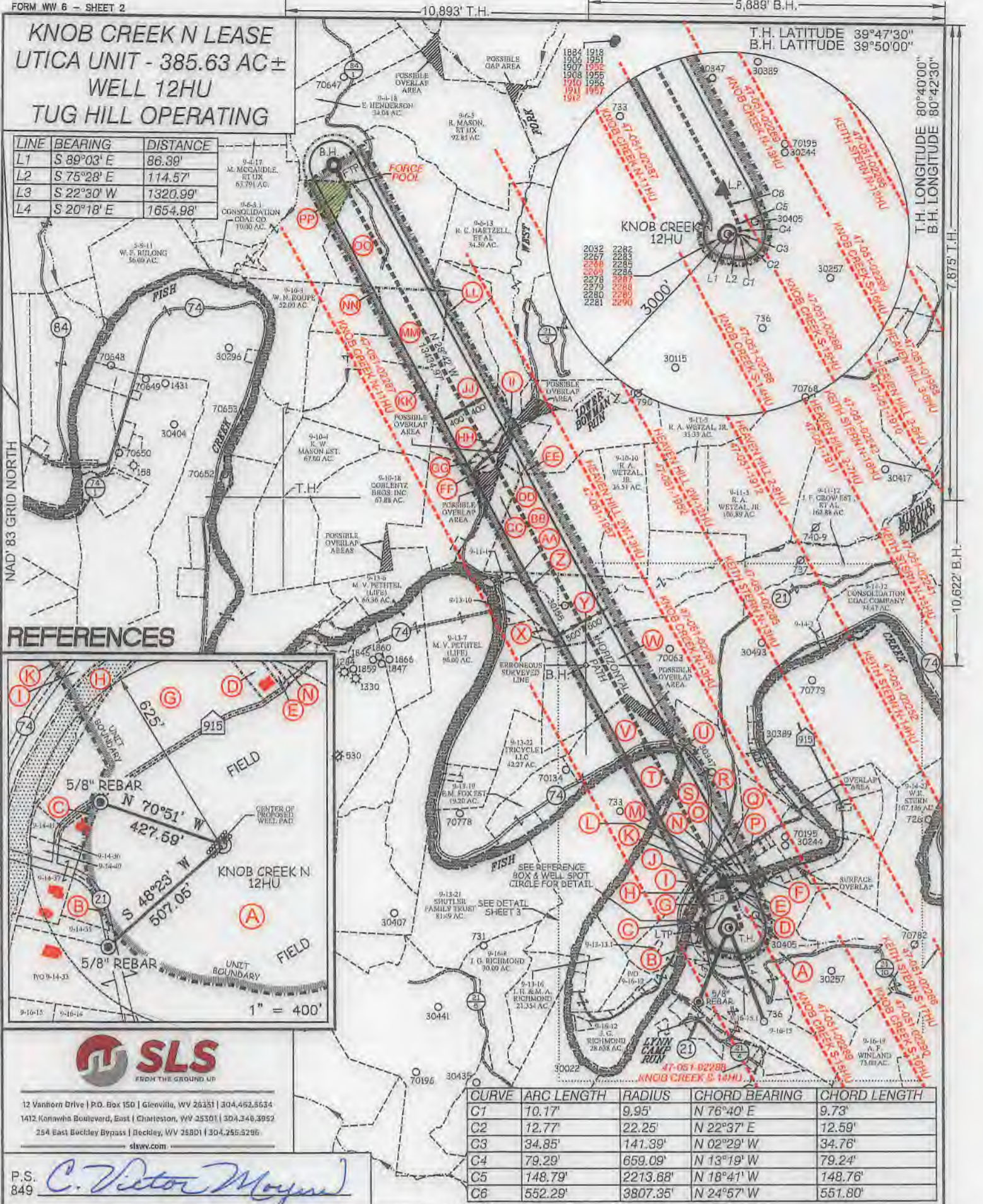
DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

COUNTY NAME

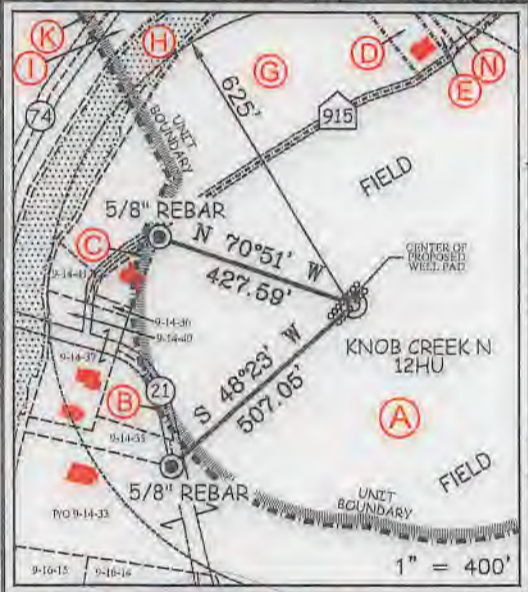
PERMIT

**KNOB CREEK N LEASE
UTICA UNIT - 385.63 AC ±
WELL 12HU
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	S 89°03' E	86.39'
L2	S 75°28' E	114.57'
L3	S 22°30' W	7320.99'
L4	S 20°18' E	1654.98'



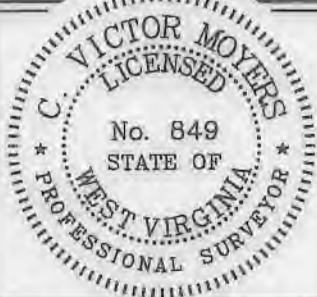
REFERENCES



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.452.5534
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254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5295
slsvw.com

P.S. 849 *C. Victor Moyers*

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	10.17'	9.95'	N 76°40' E	9.73'
C2	12.77'	22.25'	N 22°37' E	12.59'
C3	34.85'	141.39'	N 02°29' W	34.76'
C4	79.29'	659.09'	N 13°19' W	79.24'
C5	148.79'	2213.68'	N 18°41' W	148.76'
C6	552.29'	3807.35'	N 24°57' W	551.80'



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

LEGEND

- UNIT BOUNDARY
- LEASED TRACTS INSIDE UNIT BOUNDARY
- SURFACE LINE
- PROPOSED UTICA WELL LATERAL
- 400' OFFSET LINE
- 500' OFFSET LINE
- TIE LINE
- FORCE POOL TRACT
- CREEK
- ROAD
- PROPOSED FIRST TAKE POINT
- PROPOSED LAST TAKE POINT
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE ADDITIONAL SHEETS)

SCALE 1" = 2000' FILE NO. 8789P12HUR-REV5.dwg
KNOB CREEK N-12HU REV5
DATE AUGUST 21, 2019
REVISED 08/22/19, 09/18/19, 01/23/20, 02/14/20, 08/27/20
OPERATORS WELL NO. KNOB CREEK N-12HU
API WELL NO. 47 - 051 - 02268
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
M&D



DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

COUNTY NAME PERMIT

**KNOB CREEK N LEASE
UTICA UNIT - 385.63 AC±
WELL 12HU
TUG HILL OPERATING**

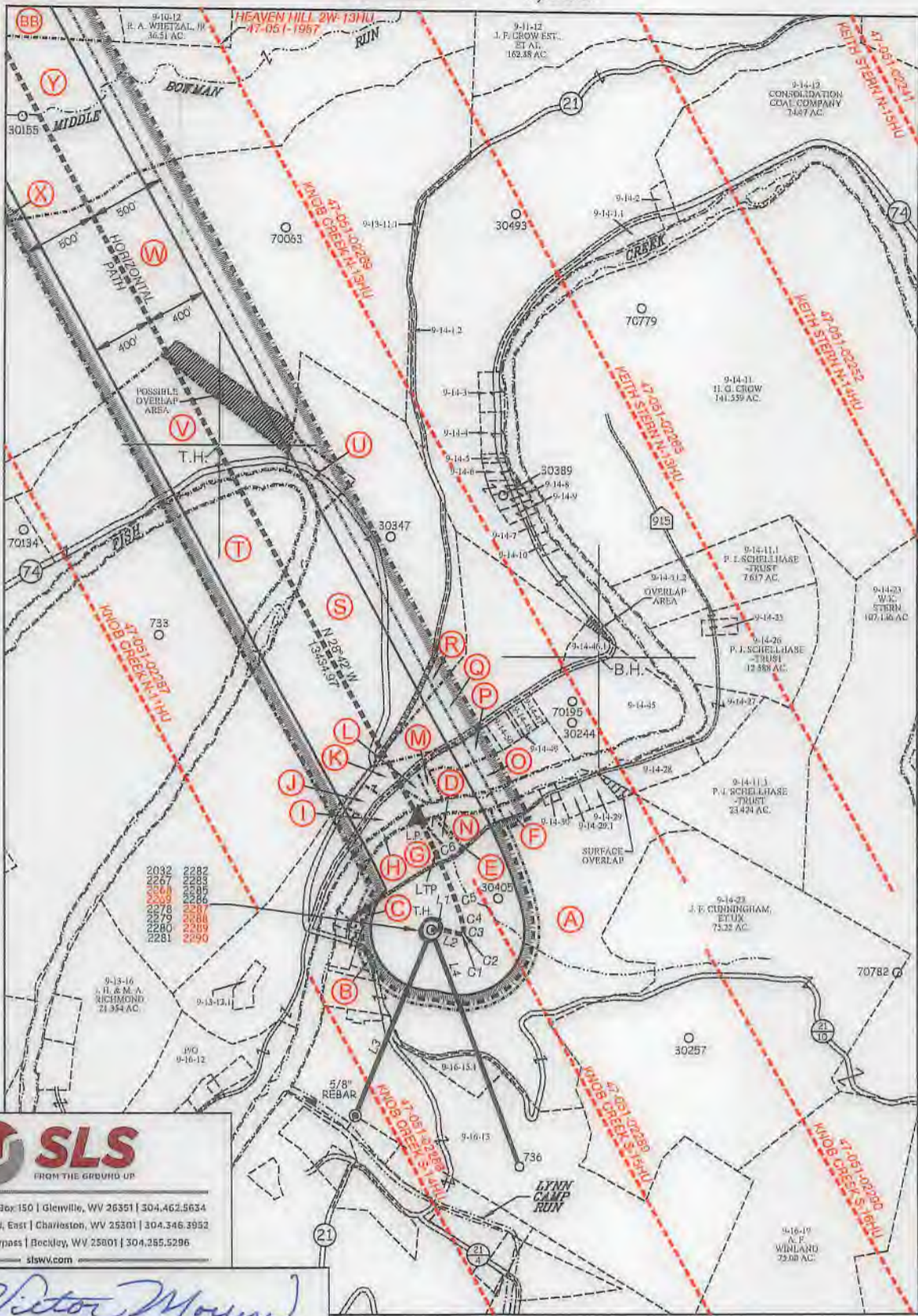
T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°50'00"

**SHEET 3 DETAIL
SCALE - 1" = 1,000'**

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°42'30"

7,875' T.H.

10,622' B.H.



NAD' 83 GRID NORTH



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slnv.com

P.S. 849 *C. Victor Moyers*

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

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- PERMITTED WELL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE ADDITIONAL SHEETS)

SCALE 1" = 1000' FILE NO. 8789P12HUR-REV5.dwg
 DATE AUGUST 21, 2019 KNOB CREEK N-12HU REV5
 REVISED 08/22/19, 09/18/19, 01/23/20, 02/14/20, 08/27/20
 OPERATORS WELL NO. KNOB CREEK N-12HU
 API WELL NO. 47 - 051 - 02268
 STATE COUNTY PERMIT MOD

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

WELL OPERATOR TUG HILL OPERATING, LLC	DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107	ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME PERMIT

**KNOB CREEK N LEASE
UTICA UNIT - 385.63 AC±
WELL 12HU
TUG HILL OPERATING**



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slovv.com

NO.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Book/Page	
1	10*47051.219.1	A	9-14-33	DAVID LEE FRANKLIN	937	385
2	10*47051.243.1	B	9-14-38	MARY A FOX, ET AL	879	332
3	10*47051.219.1	C	9-14-39	DAVID LEE FRANKLIN	937	385
4	10*47051.219.1	D	9-14-32	DAVID LEE FRANKLIN	937	385
5	10*47051.219.1	E	9-14-32.1	DAVID LEE FRANKLIN	937	385
6	10*47051.219.1	F	9-14-31	DAVID LEE FRANKLIN	937	385
7	10*47051.219.1	G	9-14-44	DAVID LEE FRANKLIN	937	385
8	10*23458	H	FISH CREEK - WV	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	1019	373
9	10*19538	I	9-14-42	JOHN C LAGOS AND CYNTHIA M LAGOS, ET AL	936	531
10	10*18732	J	9-14-43	SHERRILL M LEAVERS AND JAMES H LEAVERS, ET AL	938	245
11	10*18732	K	9-13-13	SHERRILL M LEAVERS AND JAMES H LEAVERS, ET AL	938	245
12	10*19565	L	9-14-53	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, ET AL	947	566
13	10*19565	M	9-14-52	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, ET AL	947	566
14	10*15523	N	9-14-54	RICHARD L HARVETH AND SANDRA J HARVETH	729	638
15	10*19565	O	9-14-44.1	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, ET AL	947	566
16	10*19565	P	9-14-51	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, ET AL	947	566
17	10*18298	Q	9-14-46	MAUREEN GREGG, ET AL	929	273
18	10*47051.243.1	R	9-13-14	MARY A FOX, ET AL	879	332
19	10*24858	S	9-13-12	NILA JEAN FROHNAPFEL	1028	119
20	10*17193	T	9-13-20	JOHN P. ICARD, ET AL	716	12
21	10*19942	U	9-13-12.1	ROBERT T ANKROM & BARBARA A ANKROM	949	207
22	10*18351	V	9-13-18	MARK ALLEN LENENBERG, ET AL	931	399
23	10*18265	W	9-13-11	KENNETH NELSON SMERTNECK AND TERESA ANN SMERTNECK	933	103
24	10*28299	X	9-13-8	SHUTLER FAMILY TRUST	1070	425
25	10*47051.243.1	Y	9-11-2	MARY A FOX, ET AL	879	332
26	10*47051.272.0	Z	9-11-2.1	KENNETH P GATEWOOD AND MARY M GATEWOOD	888	600
27	10*16526	AA	9-11-2.2	JUDITH PADLOW AKA JUDI L PADLOW	957	134
28	10*15567	BB	9-10-13	VICKIE MASON, ET AL	680	409
29	10*15600	CC	9-10-14	WILLIAM D MCCONNELL	715	447
30	10*15510	DD	9-10-9	ELAINE PHELPS ET VIR, ET AL	718	326
31	10*15510	EE	9-10-11	ELAINE PHELPS ET VIR, ET AL	718	326
32	10*47051.117.1	FF	9-10-15	JOSEPH MICHAEL BONENE	940	359
33	10*47051.117.1	GG	9-10-7	JOSEPH MICHAEL BONENE	940	359
34	10*47051.117.1	HH	9-10-8	JOSEPH MICHAEL BONENE	940	359
35	10*15525	II	9-6-12	RONALD KEITH MASON ET AL	772	445
36	10*15504	JJ	9-10-6	JAMES MASON ET AL	692	461
37	10*15504	KK	9-10-5	JAMES MASON ET AL	692	461
38	10*15504	LL	9-6-14	JAMES MASON ET AL	692	461
39	10*15510	MM	9-6-15	ELAINE PHELPS ET AL	718	326
40	10*15464	NN	9-6-16	MARY ALICE THOMAS MELLOTT ET AL	906	527
41	10*19116	OO	9-6-4	ROBERT LEE CARNEY AND BONNIE ANNE CARNEY	682	255
42	10*18839	PP	9-6-3	MARGARET DARLENE DUTTON, ET AL	937	607

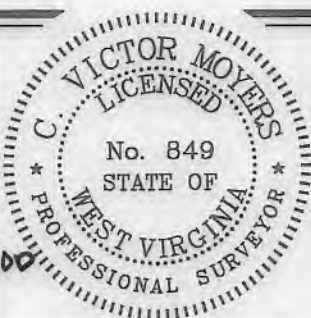
FILE NO. 8789P12HUR-REV5.dwg
KNOB CREEK N-12HU REV5

DATE AUGUST 21, 20 19

REVISED 08/22/19, 09/18/19, 01/23/20, 02/14/20, 08/27/20

OPERATORS WELL NO. KNOB CREEK N-12HU

API WELL NO. 47 — 051 — 02268
STATE COUNTY PERMIT



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



P.S. 849 *C. Victor Moyers*

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

DESIGNATED AGENT DIANNA STAMPER
ADDRESS CT CORPORATION SYSTEM
5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

COUNTY NAME

PERMIT

4705102268 MOD

Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*47051.219.1	9-14-33	A	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.1	9-14-38	B	MARY A FOX	TH EXPLORATION LLC	1/8+	879 332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.2	9-14-38	B	PAUL G FOX	TH EXPLORATION LLC	1/8+	879 335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.3	9-14-38	B	MARK H FOX	TH EXPLORATION LLC	1/8+	879 338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.4	9-14-38	B	DAVID E FOX	TH EXPLORATION LLC	1/8+	876 55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.5	9-14-38	B	LOUIS T FOX AND KAREN A FOX	TH EXPLORATION LLC	1/8+	876 58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.6	9-14-38	B	THOMAS J FOX	TH EXPLORATION LLC	1/8+	876 61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-39	C	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-32	D	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-32.1	E	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-31	F	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-44	G	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23458	FISH CREEK - WV	H	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	TH EXPLORATION LLC	1/8+	1019 373	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19538	9-14-42	I	JOHN C LAGOS AND CYNTHIA M LAGOS	TH EXPLORATION LLC	1/8+	936 531	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19565	9-14-42	I	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	TH EXPLORATION LLC	1/8+	947 566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18732	9-14-43	J	SHERRILL M LEAVERS AND JAMES H LEAVERS	TH EXPLORATION LLC	1/8+	938 245	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18734	9-14-43	J	KENNETH EMERY AND MARTHA L EMERY	TH EXPLORATION LLC	1/8+	938 247	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18735	9-14-43	J	DIANE E AND DENNIS P FOWLER	TH EXPLORATION LLC	1/8+	938 243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18736	9-14-43	J	DOROTHY JEAN HUSTON AND KENNETH HUSTON	TH EXPLORATION LLC	1/8+	938 221	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19401	9-14-43	J	JOYCE A WILSON AND D MURPHY WILSON	TH EXPLORATION LLC	1/8+	940 346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19402	9-14-43	J	HOWARD G AND CLARA J RICHMOND	TH EXPLORATION LLC	1/8+	940 348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19474	9-14-43	J	EDGAR ALLEN RICHMOND	TH EXPLORATION LLC	1/8+	941 318	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19475	9-14-43	J	ARDETH L PIPER AND PAUL E PIPER	TH EXPLORATION LLC	1/8+	941 316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19481	9-14-43	J	WILLIAM EMERY	TH EXPLORATION LLC	1/8+	941 314	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19674	9-14-43	J	DEBRA SHORT AND RODNEY SHORT	TH EXPLORATION LLC	1/8+	944 337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19675	9-14-43	J	BARBARA C LEISHMAN AND DANNY K LEISHMAN	TH EXPLORATION LLC	1/8+	944 432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19714	9-14-43	J	DAVID A ROBINSON AND PATRICIA A ROBINSON	TH EXPLORATION LLC	1/8+	944 434	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19868	9-14-43	J	TERRI J STREAM AND JOHN T STREAM	TH EXPLORATION LLC	1/8+	945 580	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19869	9-14-43	J	SHIRLEY J DUFFY	TH EXPLORATION LLC	1/8+	945 578	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19870	9-14-43	J	DORIS L MASTERS AND ROY N MASTERS	TH EXPLORATION LLC	1/8+	945 576	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21027	9-14-43	J	MARY D LING	TH EXPLORATION LLC	1/8+	951 126	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21087	9-14-43	J	THOMAS E DODD AND ANITA M DODD	TH EXPLORATION LLC	1/8+	951 124	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21088	9-14-43	J	DONALD E WEST AND MARTHA E WEST	TH EXPLORATION LLC	1/8+	951 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21104	9-14-43	J	LARRY W BAILEY AND MARSHA K BAILEY	TH EXPLORATION LLC	1/8+	951 131	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21105	9-14-43	J	THE CALVIN O WILLIAMS & PATSY S WILLIAMS REVOCABLE LIVING TRUST	TH EXPLORATION LLC	1/8+	951 137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21107	9-14-43	J	RONALD L WEST	TH EXPLORATION LLC	1/8+	951 135	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21108	9-14-43	J	SANDRA A WHITE	TH EXPLORATION LLC	1/8+	951 140	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21491	9-14-43	J	DARLENA BRY AND LEE V BRY	TH EXPLORATION LLC	1/8+	957 290	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21507	9-14-43	J	DONALD FURLONG AND LISA K FURLONG	TH EXPLORATION LLC	1/8+	951 128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21838	9-14-43	J	FIRST PRESBYTERIAN CHURCH OF CLARKSBURG	TH EXPLORATION LLC	1/8+	959 625	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21956	9-14-43	J	THEODORE F MASLOWSKI AND ANITA MASLOWSKI	TH EXPLORATION LLC	1/8+	960 13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21963	9-14-43	J	LINDA R JANSSEN AND DENNIS D JANSSEN	TH EXPLORATION LLC	1/8+	960 28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21964	9-14-43	J	WILLIAM R DODD AND SHIRLEY A DODD	TH EXPLORATION LLC	1/8+	960 30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21983	9-14-43	J	OPAL V BUCKMASTER	TH EXPLORATION LLC	1/8+	953 497	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22113	9-14-43	J	SYLVIA D WEST	TH EXPLORATION LLC	1/8+	962 224	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22117	9-14-43	J	DEBORAH L WROBEL AND GREGORY G WROBEL	TH EXPLORATION LLC	1/8+	961 354	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22119	9-14-43	J	JAMES S RICHMOND	TH EXPLORATION LLC	1/8+	953 499	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*22121	9-14-43	J	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION LLC	1/8+	961 352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22377	9-14-43	J	MONTY W BAILEY AND MARTHA E BAILEY	TH EXPLORATION LLC	1/8+	962 226	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22378	9-14-43	J	KEVIN R RICHMOND AND VALERIE L RICHMOND	TH EXPLORATION LLC	1/8+	962 228	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22458	9-14-43	J	JAMES RICHMOND AND CINDY L RICHMOND	TH EXPLORATION LLC	1/8+	963 132	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22463	9-14-43	J	STEVEN R MCCLINTOCK	TH EXPLORATION LLC	1/8+	964 458	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22517	9-14-43	J	PHYLLIS M RADER	TH EXPLORATION LLC	1/8+	964 456	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22545	9-14-43	J	JANICE L MASLOWSKI AND FLOYD F MECHLING	TH EXPLORATION LLC	1/8+	968 9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23140	9-14-43	J	MELISSA JENKINS	TH EXPLORATION LLC	1/8+	984 86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23144	9-14-43	J	MARGARET A WALTERS	TH EXPLORATION LLC	1/8+	984 84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23145	9-14-43	J	WILLIAM BENNETT	TH EXPLORATION LLC	1/8+	984 82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23146	9-14-43	J	RETA I GRIFFIN AND MARTIN A GRIFFIN	TH EXPLORATION LLC	1/8+	984 80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23154	9-14-43	J	CAROLYN FAY BENNETT	TH EXPLORATION LLC	1/8+	984 78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23188	9-14-43	J	LISA MCMANUS	TH EXPLORATION LLC	1/8+	984 530	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23299	9-14-43	J	PATRICIA L BECK	TH EXPLORATION LLC	1/8+	988 19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23312	9-14-43	J	DONNA M CARTER	TH EXPLORATION LLC	1/8+	988 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23559	9-14-43	J	ROBERT TOOMBS WRIGHT MONTAGUE BY DAVID C WHITE, ESQ, GUARDIAN AT LITEM	TH EXPLORATION LLC	1/8+	1009 249	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23577	9-14-43	J	JOHN WILLIAM MACKENZIE MONTAGUE BY DAVID C WHITE, ESQ, GUARDIAN AD LITEM	TH EXPLORATION LLC	1/8+	1009 253	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23578	9-14-43	J	DUDLEY PORTER THAYER MONTAGUE JR BY DAVID C WHITE, ESQ, GUARDIAN AD LITEM	TH EXPLORATION LLC	1/8+	1009 251	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24739	9-14-43	J	*RICARDO THOMAS MAYA	TH EXPLORATION LLC	1/8+	1025 611	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19418	9-14-43	J	NILA JEAN FROHNAPFEL	TH EXPLORATION LLC	1/8+	940 344	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25442	9-14-43	J	SARAH BETH PREWITT ET AL	TH EXPLORATION LLC	1/8+	1033 297	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18732	9-13-13	K	SHERILL M LEAVERS AND JAMES H LEAVERS	TH EXPLORATION LLC	1/8+	938 245	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18734	9-13-13	K	KENNETH EMERY AND MARTHA L EMERY	TH EXPLORATION LLC	1/8+	938 247	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18735	9-13-13	K	DIANE E AND DENNIS P FOWLER	TH EXPLORATION LLC	1/8+	938 243	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18736	9-13-13	K	DOROTHY JEAN HUSTON AND KENNETH HUSTON	TH EXPLORATION LLC	1/8+	938 221	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19401	9-13-13	K	JOYCE A WILSON AND D MURPHY WILSON	TH EXPLORATION LLC	1/8+	940 346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19402	9-13-13	K	HOWARD G AND CLARA J RICHMOND	TH EXPLORATION LLC	1/8+	940 348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19474	9-13-13	K	EDGAR ALLEN RICHMOND	TH EXPLORATION LLC	1/8+	941 318	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19475	9-13-13	K	ARDETH L PIPER AND PAUL E PIPER	TH EXPLORATION LLC	1/8+	941 316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19481	9-13-13	K	WILLIAM EMERY	TH EXPLORATION LLC	1/8+	941 314	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19674	9-13-13	K	DEBRA SHORT AND RODNEY SHORT	TH EXPLORATION LLC	1/8+	944 337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19675	9-13-13	K	BARBARA C LEISHMAN AND DANNY K LEISHMAN	TH EXPLORATION LLC	1/8+	944 432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19714	9-13-13	K	DAVID A ROBINSON AND PATRICIA A ROBINSON	TH EXPLORATION LLC	1/8+	944 434	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19868	9-13-13	K	TERRI J STREAM AND JOHN T STREAM	TH EXPLORATION LLC	1/8+	945 580	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19869	9-13-13	K	SHIRLEY J DUFFY	TH EXPLORATION LLC	1/8+	945 578	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19870	9-13-13	K	DORIS L MASTERS AND ROY N MASTERS	TH EXPLORATION LLC	1/8+	945 576	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21027	9-13-13	K	MARY D LING	TH EXPLORATION LLC	1/8+	951 126	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21087	9-13-13	K	THOMAS E DODD AND ANITA M DODD	TH EXPLORATION LLC	1/8+	951 124	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21088	9-13-13	K	DONALD E WEST AND MARTHA E WEST	TH EXPLORATION LLC	1/8+	951 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21104	9-13-13	K	LARRY W BAILEY AND MARSHA K BAILEY	TH EXPLORATION LLC	1/8+	951 131	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21105	9-13-13	K	THE CALVIN O WILLIAMS & PATSY S WILLIAMS REVOCABLE LIVING TRUST	TH EXPLORATION LLC	1/8+	951 137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21107	9-13-13	K	RONALD L WEST	TH EXPLORATION LLC	1/8+	951 135	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21108	9-13-13	K	SANDRA A WHITE	TH EXPLORATION LLC	1/8+	951 140	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21491	9-13-13	K	DARLENA BRY AND LEE V BRY	TH EXPLORATION LLC	1/8+	957 290	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21507	9-13-13	K	DONALD FURLONG AND LISA K FURLONG	TH EXPLORATION LLC	1/8+	951 128	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21838	9-13-13	K	FIRST PRESBYTERIAN CHURCH OF CLARKSBURG	TH EXPLORATION LLC	1/8+	959 625	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21956	9-13-13	K	THEODORE F MASLOWSKI AND ANITA MASLOWSKI	TH EXPLORATION LLC	1/8+	960 13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*21963	9-13-13	K	LINDA R JANSSEN AND DENNIS D JANSSEN	TH EXPLORATION LLC	1/8+	960 28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21964	9-13-13	K	WILLIAM R DODD AND SHIRLEY A DODD	TH EXPLORATION LLC	1/8+	960 30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21983	9-13-13	K	OPAL V BUCKMASTER	TH EXPLORATION LLC	1/8+	953 497	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22113	9-13-13	K	SYLVIA D WEST	TH EXPLORATION LLC	1/8+	962 224	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22117	9-13-13	K	DEBORAH L WROBEL AND GREGORY G WROBEL	TH EXPLORATION LLC	1/8+	961 354	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22119	9-13-13	K	JAMES S RICHMOND	TH EXPLORATION LLC	1/8+	953 499	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22121	9-13-13	K	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION LLC	1/8+	961 352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22377	9-13-13	K	MONTY W BAILEY AND MARTHA E BAILEY	TH EXPLORATION LLC	1/8+	962 226	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22378	9-13-13	K	KEVIN R RICHMOND AND VALERIE L RICHMOND	TH EXPLORATION LLC	1/8+	962 228	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22458	9-13-13	K	JAMES RICHMOND AND CINDY L RICHMOND	TH EXPLORATION LLC	1/8+	963 132	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22463	9-13-13	K	STEVEN R MCCLINTOCK	TH EXPLORATION LLC	1/8+	964 458	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22517	9-13-13	K	PHYLLIS M RADER	TH EXPLORATION LLC	1/8+	964 456	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22545	9-13-13	K	JANICE L MASLOWSKI AND FLOYD F MECHLING	TH EXPLORATION LLC	1/8+	968 9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23140	9-13-13	K	MELISSA JENKINS	TH EXPLORATION LLC	1/8+	984 86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23144	9-13-13	K	MARGARET A WALTERS	TH EXPLORATION LLC	1/8+	984 84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23145	9-13-13	K	WILLIAM BENNETT	TH EXPLORATION LLC	1/8+	984 82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23146	9-13-13	K	RETA I GRIFFIN AND MARTIN A GRIFFIN	TH EXPLORATION LLC	1/8+	984 80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23154	9-13-13	K	CAROLYN FAY BENNETT	TH EXPLORATION LLC	1/8+	984 78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23188	9-13-13	K	LISA MCMANUS	TH EXPLORATION LLC	1/8+	984 530	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23299	9-13-13	K	PATRICIA L BECK	TH EXPLORATION LLC	1/8+	988 19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23312	9-13-13	K	DONNA M CARTER	TH EXPLORATION LLC	1/8+	988 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23559	9-13-13	K	ROBERT TOOMBS WRIGHT MONTAGUE BY DAVID C WHITE, ESQ, GUARDIAN AT LITEM	TH EXPLORATION LLC	1/8+	1009 249	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23577	9-13-13	K	JOHN WILLIAM MACKENZIE MONTAGUE BY DAVID C WHITE, ESQ, GUARDIAN AD LITEM	TH EXPLORATION LLC	1/8+	1009 253	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23578	9-13-13	K	DUDLEY PORTER THAYER MONTAGUE JR BY DAVID C WHITE, ESQ, GUARDIAN AD LITEM	TH EXPLORATION LLC	1/8+	1009 251	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24739	9-13-13	K	*RICARDO THOMAS MAYA	TH EXPLORATION LLC	1/8+	1025 611	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25442	9-13-13	K	SARAH BETH PREWITT ET AL	TH EXPLORATION LLC	1/8+	1033 297	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19565	9-14-53	L	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	TH EXPLORATION LLC	1/8+	947 566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-53	L	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.41	9-14-53	L	WILLIAM K STERN AND BETTY L STERN	TH EXPLORATION LLC	1/8+	894 485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19565	9-14-52	M	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	TH EXPLORATION LLC	1/8+	947 566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-52	M	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.41	9-14-52	M	WILLIAM K STERN AND BETTY L STERN	TH EXPLORATION LLC	1/8+	894 485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15523	9-14-54	N	RICHARD L HARVETH AND SANDRA J HARVETH	TRINEERGY HOLDINGS, LLC	1/8+	729 638	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*19565	9-14-44.1	O	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	TH EXPLORATION LLC	1/8+	947 566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-44.1	O	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.41	9-14-44.1	O	WILLIAM K STERN AND BETTY L STERN	TH EXPLORATION LLC	1/8+	894 485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19565	9-14-51	P	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	TH EXPLORATION LLC	1/8+	947 566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-51	P	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937 385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.41	9-14-51	P	WILLIAM K STERN AND BETTY L STERN	TH EXPLORATION LLC	1/8+	894 485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18298	9-14-46	Q	MAUREEN GREGG	TH EXPLORATION LLC	1/8+	929 273	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18300	9-14-46	Q	ROBERT W ODOM AND CASSANDRA L ODOM	TH EXPLORATION LLC	1/8+	929 283	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*18805	9-14-46	Q	CINDY STEVENS	TH EXPLORATION LLC	1/8+	937	628	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19689	9-14-46	Q	EDMOND TURGEON JR AND CATHY STEVENS TURGEON	TH EXPLORATION LLC	1/8+	944	156	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19937	9-14-46	Q	JAMES D STEVENS AND DOROTHY M STEVENS	TH EXPLORATION LLC	1/8+	949	151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19938	9-14-46	Q	JOHN H STEVENS AND LYNDA L STEVENS	TH EXPLORATION LLC	1/8+	949	144	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.1	9-14-46	Q	DAVID LEE FRANKLIN	TH EXPLORATION LLC	1/8+	937	385	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.219.41	9-14-46	Q	WILLIAM K STERN AND BETTY L STERN	TH EXPLORATION LLC	1/8+	894	485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.1	9-13-14	R	MARY A FOX	TH EXPLORATION LLC	1/8+	879	332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.2	9-13-14	R	PAUL G FOX	TH EXPLORATION LLC	1/8+	879	335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.3	9-13-14	R	MARK H FOX	TH EXPLORATION LLC	1/8+	879	338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.4	9-13-14	R	DAVID E FOX	TH EXPLORATION LLC	1/8+	876	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.5	9-13-14	R	LOUIS T FOX AND KAREN A FOX	TH EXPLORATION LLC	1/8+	876	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.6	9-13-14	R	THOMAS J FOX	TH EXPLORATION LLC	1/8+	876	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24858	9-13-12	S	NILA JEAN FROHNAPFEL	TH EXPLORATION LLC	1/8+	1028	119	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17193	9-13-20	T	JOHN P. ICARD	CHESAPEAKE APPALACHIA LLC	1/8+	716	12	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 29/325	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Cert of Merger of SWN Exchange Titleholder LLC to SWN Production Company LLC: 19/624	Chesapeake Appalachia LLC to SWN Production Co. LLC: 33/110	SWN Production Company LLC to TH Exploration LLC: 41/256	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238
10*18351	9-13-20	T	MARK ALLEN LENENBERG	TH EXPLORATION LLC	1/8+	931	399	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18456	9-13-20	T	DANIEL J FITZWATER	TH EXPLORATION LLC	1/8+	933	180	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18469	9-13-20	T	THOMAS RICHMOND YOUNG ANITA A YOUNG	TH EXPLORATION LLC	1/8+	933	151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18470	9-13-20	T	CHERYL STEFFEN AND GREGORY STEFFEN	TH EXPLORATION LLC	1/8+	933	148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18471	9-13-20	T	MORGAN C GUMP AND MARY J GUMP	TH EXPLORATION LLC	1/8+	942	210	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18472	9-13-20	T	LEIGH A DURRAH	TH EXPLORATION LLC	1/8+	933	136	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18524	9-13-20	T	DAVID A GUMP AND BETTY J GUMP	TH EXPLORATION LLC	1/8+	933	597	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18527	9-13-20	T	ANN TURNER YOUNG SHRIVER	TH EXPLORATION LLC	1/8+	933	589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18967	9-13-20	T	NATALIE GIBBS	TH EXPLORATION LLC	1/8+	941	266	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19349	9-13-20	T	MARJOLEA A DEBOLD	TH EXPLORATION LLC	1/8+	932	409	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19516	9-13-20	T	JAMES E NICHOLAS AND BEVERLY D NICHOLAS	TH EXPLORATION LLC	1/8+	944	366	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19883	9-13-20	T	JILL A WILLIAMS AND TERRY L WILLIAMS	TH EXPLORATION LLC	1/8+	948	547	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19885	9-13-20	T	NANCY L RICHMOND AND GREGORY RICHMOND	TH EXPLORATION LLC	1/8+	948	549	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19886	9-13-20	T	MARK A RICHMOND & LISA D RICHMOND	TH EXPLORATION LLC	1/8+	948	543	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19887	9-13-20	T	ELIZABETH S SCOVELL & JONATHAN A SCOVELL	TH EXPLORATION LLC	1/8+	948	545	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19892	9-13-20	T	REX B FISHER AND DEBORAH FISHER	TH EXPLORATION LLC	1/8+	948	292	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21012	9-13-20	T	TIMOTHY R RICHMOND II AND BRANDI N RICHMOND	TH EXPLORATION LLC	1/8+	951	149	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21014	9-13-20	T	JAMES P MCLAUGHLIN & ALICE W MCLAUGHLIN	TH EXPLORATION LLC	1/8+	946	29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21015	9-13-20	T	ROBERT L MCLAUGHLIN	TH EXPLORATION LLC	1/8+	946	339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21485	9-13-20	T	ROBERT R FISHER AND AUDREY L IRVIN	TH EXPLORATION LLC	1/8+	942	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21504	9-13-20	T	PAULETA LINDA CHEATHAM AND CARL WOHLERS	TH EXPLORATION LLC	1/8+	951	142	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21598	9-13-20	T	THE MILDRED Y MILLS TRUST JULY 5TH 2007	TH EXPLORATION LLC	1/8+	954	332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21709	9-13-20	T	THOMAS YOUNG AND JANE CLAIRE YOUNG	TH EXPLORATION LLC	1/8+	959	350	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21710	9-13-20	T	PENELOPE A JONES	TH EXPLORATION LLC	1/8+	959	355	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22863	9-13-20	T	JAMES H CAMPBELL	TH EXPLORATION LLC	1/8+	977	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22864	9-13-20	T	MARGARET R DONOFRIO	TH EXPLORATION LLC	1/8+	977	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*23164	9-13-20	T	J C AND MARY RICHMOND	TG STILES	1/8+	63	154	Hope Natural Gas Company to Consolidated Gas Sply Corporation: 374/234	Consolidated Gas Supply Corporation to Consolidated Gas Transmission Corporation: 505/406	Consolidated Gas Transmission Corp. to CNG Development Co: 515/88	CNG Development Company merged into CNG Producing Company.	CNG Producing Company changed name to Dominion Exploration & Production Inc: July 11, 2000	Dominion Exploration & Production Inc. changed its name to Consol Gas Company: 19/546	Consol Gas Company merged with & into CNX Gas Company LLC: 11/415	CNX Gas Company LLC to TH Exploration LLC: 42/140
10*23190	9-13-20	T	COUNTY OF MARSHALL GENERAL RECEIVER FOR MARSHALL COUNTY	TH EXPLORATION LLC	1/8+	979	191	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19942	9-13-12.1	U	ROBERT T ANKROM & BARBARA A ANKROM	TH EXPLORATION LLC	1/8+	949	207	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18351	9-13-18	V	MARK ALLEN LENENBERG	TH EXPLORATION LLC	1/8+	931	399	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18469	9-13-18	V	THOMAS RICHMOND YOUNG ANITA A YOUNG	TH EXPLORATION LLC	1/8+	933	151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18470	9-13-18	V	CHERYL STEFFEN AND GREGORY STEFFEN	TH EXPLORATION LLC	1/8+	933	148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18527	9-13-18	V	ANN TURNER YOUNG SHRIVER	TH EXPLORATION LLC	1/8+	933	589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18694	9-13-18	V	PEGGY A GOULDSBERRY AND JOSEPH W GOULDSBERRY	TH EXPLORATION LLC	1/8+	938	283	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18695	9-13-18	V	JOSEPH S EMERY	TH EXPLORATION LLC	1/8+	938	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18696	9-13-18	V	CHARLES E EMERY AND DEBBIE EMERY	TH EXPLORATION LLC	1/8+	938	280	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18697	9-13-18	V	CHRYSYAL L RINE AND JOHN O RINE	TH EXPLORATION LLC	1/8+	938	499	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18698	9-13-18	V	LORETTA K CONNER AND OBERT L CONNER	TH EXPLORATION LLC	1/8+	938	490	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18699	9-13-18	V	JAMIE A LANTZ AND JAMES L LANTZ	TH EXPLORATION LLC	1/8+	938	286	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18700	9-13-18	V	NOVA PAYNE	TH EXPLORATION LLC	1/8+	938	488	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18701	9-13-18	V	SHERRI J ANDERSON AND GEORGE C ANDERSON	TH EXPLORATION LLC	1/8+	938	277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18702	9-13-18	V	JOHN W NICE JR	TH EXPLORATION LLC	1/8+	938	496	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18703	9-13-18	V	GREGORY W FRITZMAN	TH EXPLORATION LLC	1/8+	938	558	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18714	9-13-18	V	LARRY J RICHARDSON AND D MARGARET RICHARDSON	TH EXPLORATION LLC	1/8+	938	543	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18715	9-13-18	V	MARY ANN CROW RICHARDSON	TH EXPLORATION LLC	1/8+	938	546	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18716	9-13-18	V	MARCIA J MECHLING AND DENNIS J MECHLING	TH EXPLORATION LLC	1/8+	938	549	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18717	9-13-18	V	RACHEL E AND ALLAN L SHEASLEY	TH EXPLORATION LLC	1/8+	938	552	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18718	9-13-18	V	PEGGY L STEWART AND DEWEY R STEWART	TH EXPLORATION LLC	1/8+	938	555	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18719	9-13-18	V	DONNA M CROW	TH EXPLORATION LLC	1/8+	938	504	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18829	9-13-18	V	CAROL A SAVOY	TH EXPLORATION LLC	1/8+	937	620	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18958	9-13-18	V	NANCY L GABLER	TH EXPLORATION LLC	1/8+	941	259	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18959	9-13-18	V	SALLY L DUNMIRE AND DAVID W DUNMIRE	TH EXPLORATION LLC	1/8+	941	270	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18967	9-13-18	V	NATALIE GIBBS	TH EXPLORATION LLC	1/8+	941	266	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19461	9-13-18	V	KELLY OCONNOR	TH EXPLORATION LLC	1/8+	942	569	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19611	9-13-18	V	JOHN H EMERY AND JANET M EMERY	TH EXPLORATION LLC	1/8+	944	201	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19612	9-13-18	V	MARY JANE HYDE AND HARRY K HYDE	TH EXPLORATION LLC	1/8+	944	198	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19613	9-13-18	V	SHEILA LYNN GARRISON	TH EXPLORATION LLC	1/8+	944	196	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19832	9-13-18	V	DOWNIE E EMERY JR AND ELAINE EMERY	TH EXPLORATION LLC	1/8+	945	619	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19834	9-13-18	V	STEVEN D BEAKLEY	TH EXPLORATION LLC	1/8+	945	613	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19835	9-13-18	V	BARBARA JEAN SAMAJ AND ANDREW J SAMAJ	TH EXPLORATION LLC	1/8+	945	616	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19883	9-13-18	V	JILL A WILLIAMS AND TERRY L WILLIAMS	TH EXPLORATION LLC	1/8+	948	547	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19885	9-13-18	V	NANCY L RICHMOND AND GREGORY RICHMOND	TH EXPLORATION LLC	1/8+	948	549	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19886	9-13-18	V	MARK A RICHMOND & LISA D RICHMOND	TH EXPLORATION LLC	1/8+	948	543	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19887	9-13-18	V	ELIZABETH S SCOVELL & JONATHAN A SCOVELL	TH EXPLORATION LLC	1/8+	948	545	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19981	9-13-18	V	WILLIAM G EMERY	TH EXPLORATION LLC	1/8+	948	206	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21012	9-13-18	V	TIMOTHY R RICHMOND II AND BRANDI N RICHMOND	TH EXPLORATION LLC	1/8+	951	149	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21051	9-13-18	V	JAMES S NEPERENY AND PHOBE A NEPERENY	TH EXPLORATION LLC	1/8+	966	501	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21139	9-13-18	V	JOHN C BAKER JR AND TRACIE L BAKER	TH EXPLORATION LLC	1/8+	952	167	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21251	9-13-18	V	GREGORY R BAKER AND TRACEY L BAKER	TH EXPLORATION LLC	1/8+	953	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*21318	9-13-18	V	LINDA D GORDON AND JOHN L GORDON	TH EXPLORATION LLC	1/8+	944 204	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21341	9-13-18	V	RITA M BAKER	TH EXPLORATION LLC	1/8+	953 225	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21598	9-13-18	V	THE MILDRED Y MILLS TRUST JULY 5TH 2007	TH EXPLORATION LLC	1/8+	954 332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21613	9-13-18	V	ROBERT MATTHEW KEDWARD	TH EXPLORATION LLC	1/8+	959 462	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21614	9-13-18	V	NICOLE RAE BRACHER-MUSTY AND JASON BRACHER-MUSTY	TH EXPLORATION LLC	1/8+	959 464	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21709	9-13-18	V	THOMAS YOUNG AND JANE CLAIRE YOUNG	TH EXPLORATION LLC	1/8+	959 350	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21710	9-13-18	V	PENELOPE A JONES	TH EXPLORATION LLC	1/8+	959 355	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22002	9-13-18	V	DAVID E EMERY SR	TH EXPLORATION LLC	1/8+	953 223	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22038	9-13-18	V	SANDRA C SHAFFER AND RONALD G SHAFFER	TH EXPLORATION LLC	1/8+	954 334	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22271	9-13-18	V	MARY ANN CROW RICHARDSON LT ETAL	TH EXPLORATION LLC	1/8+	988 60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22415	9-13-18	V	PAUL A YOUNG	TH EXPLORATION LLC	1/8+	963 344	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22497	9-13-18	V	BRANDON C CANFIELD	TH EXPLORATION LLC	1/8+	966 622	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23190	9-13-18	V	COUNTY OF MARSHALL GENERAL RECEIVER FOR MARSHALL COUNTY	TH EXPLORATION LLC	1/8+	979 191	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23250	9-13-18	V	BUENA WELLMAN ET AL C/O HERMAN LANTZ, SPECIAL COMMISSIONER	TH EXPLORATION LLC	1/8+	979 189	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18265	9-13-11	W	KENNETH NELSON SMERTNECK AND TERESA ANN SMERTNECK	TH EXPLORATION LLC	1/8+	933 103	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28299	9-13-8	X	SHUTLER FAMILY TRUST	TH EXPLORATION LLC	1/8+	1070 425	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.1	9-11-2	Y	MARY A FOX	TH EXPLORATION LLC	1/8+	879 332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.2	9-11-2	Y	PAUL G FOX	TH EXPLORATION LLC	1/8+	879 335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.3	9-11-2	Y	MARK H FOX	TH EXPLORATION LLC	1/8+	879 338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.4	9-11-2	Y	DAVID E FOX	TH EXPLORATION LLC	1/8+	876 55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.5	9-11-2	Y	LOUIS T FOX AND KAREN A FOX	TH EXPLORATION LLC	1/8+	876 58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.243.6	9-11-2	Y	THOMAS J FOX	TH EXPLORATION LLC	1/8+	876 61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.272.0	9-11-2.1	Z	KENNETH P GATEWOOD AND MARY M GATEWOOD	TH EXPLORATION LLC	1/8+	888 600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16526	9-11-2.2	AA	JUDITH PADLOW AKA JUDI L PADLOW	TH EXPLORATION LLC	1/8+	957 134	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15567	9-10-13	BB	VICKIE MASON	CHESAPEAKE APPALACHIA LLC	1/8+	680 409	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/6	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148
10*15568	9-10-13	BB	MARY A SOUTH	CHESAPEAKE APPALACHIA LLC	1/8+	681 410	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/463	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148
10*15569	9-10-13	BB	MARK L WHETZAL	CHESAPEAKE APPALACHIA LLC	1/8+	682 560	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/463	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148
10*15570	9-10-13	BB	RAY A WHETZAL JR	CHESAPEAKE APPALACHIA LLC	1/8+	682 584	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/463	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148

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10*15571	9-10-13	BB	SHARON L WHETZAL	CHESAPEAKE APPALACHIA LLC	1/8+	682	568	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/463	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148
10*15572	9-10-13	BB	ROBERT L WHETZAL	CHESAPEAKE APPALACHIA LLC	1/8+	682	500	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/463	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148
10*15724	9-10-13	BB	JAMES RODNEY BRIGGS	TH EXPLORATION LLC	1/8+	901	325	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15725	9-10-13	BB	ROGER JACOB BRIGGS	TH EXPLORATION LLC	1/8+	901	318	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15726	9-10-13	BB	JOHN DEAN BRIGGS AND PATTY KAY BRIGGS	TH EXPLORATION LLC	1/8+	901	321	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16079	9-10-13	BB	LORI ASTON DIXON	TH EXPLORATION LLC	1/8+	904	565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16236	9-10-13	BB	FRANCIS Y RIGGLE	TH EXPLORATION LLC	1/8+	907	156	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16237	9-10-13	BB	GREGORY J ASTON AND TAMMY E ASTON	TH EXPLORATION LLC	1/8+	907	149	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16275	9-10-13	BB	JEFFREY A ASTON	TH EXPLORATION LLC	1/8+	907	153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21206	9-10-13	BB	WILLIAM CHIPPS	TH EXPLORATION LLC	1/8+	952	164	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.1	9-10-13	BB	MICHAEL A WHETZEL	TH EXPLORATION LLC	1/8+	885	51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.29	9-10-13	BB	PATRICIA ANN MCDOUGAL	TH EXPLORATION LLC	1/8+	901	306	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.30	9-10-13	BB	STEVEN L ASTON	TH EXPLORATION LLC	1/8+	901	308	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.31	9-10-13	BB	FRED T KERNS	TH EXPLORATION LLC	1/8+	901	298	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.36	9-10-13	BB	YVONNE K BOGERT	TH EXPLORATION LLC	1/8+	901	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.37	9-10-13	BB	CARL E ASTON	TH EXPLORATION LLC	1/8+	901	304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.38	9-10-13	BB	CAROLYN SUE WELLS	TH EXPLORATION LLC	1/8+	901	310	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.41	9-10-13	BB	ELMER ASTON	TH EXPLORATION LLC	1/8+	901	296	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.48	9-10-13	BB	WILLIAM ASTON	TH EXPLORATION LLC	1/8+	901	312	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.5	9-10-13	BB	BRENDA J WHETZEL	TH EXPLORATION LLC	1/8+	885	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.50	9-10-13	BB	DAVID U ASTON ESTATE BY EXECUTOR DAWN R MARKS	TH EXPLORATION LLC	1/8+	901	314	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.52	9-10-13	BB	CONNIE N ASTON	TH EXPLORATION LLC	1/8+	901	316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.53	9-10-13	BB	MARY JANE KYLE	TH EXPLORATION LLC	1/8+	901	339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.56	9-10-13	BB	PAULA HUNDL	TH EXPLORATION LLC	1/8+	901	347	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.57	9-10-13	BB	ROBERT B KERNS	TH EXPLORATION LLC	1/8+	901	349	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.58	9-10-13	BB	RONALD W KERNS	TH EXPLORATION LLC	1/8+	901	341	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.59	9-10-13	BB	PAUL ULYSSES KERNS ESTATE SALVATORE P PUGLISI, EXECUTOR	TH EXPLORATION LLC	1/8+	901	343	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.6	9-10-13	BB	TERRI MCCARDLE	TH EXPLORATION LLC	1/8+	895	23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.61	9-10-13	BB	AMANDA FEIGH	TH EXPLORATION LLC	1/8+	901	345	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.7	9-10-13	BB	GARY FRANCIS WHETZAL	TH EXPLORATION LLC	1/8+	895	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.73	9-10-13	BB	JOHN ASTON JR	TH EXPLORATION LLC	1/8+	901	351	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.77	9-10-13	BB	SHONDA WOOD	TH EXPLORATION LLC	1/8+	901	356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.78	9-10-13	BB	DONNA WOODS MOODY	TH EXPLORATION LLC	1/8+	901	354	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.108.79	9-10-13	BB	MARK A ASTON	TH EXPLORATION LLC	1/8+	901	358	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15600	9-10-14	CC	WILLIAM D MCCONNELL	CHESAPEAKE APPALACHIA LLC	1/8+	715	447	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 29/325	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	Chevron USA Inc to TH Exploration LLC: 36/148

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10*15510	9-10-9	DD	ELAINE PHELPS ET VIR	TRIENERGY HOLDINGS, LLC	1/8+	718	326	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15511	9-10-9	DD	DAVID E CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	376	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/463	NPAR LLC to Chevron USA Inc: 26/269	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15512	9-10-9	DD	FRANCES COFFEY	TRIENERGY HOLDINGS, LLC	1/8+	718	378	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15513	9-10-9	DD	KAY KEYES	TRIENERGY HOLDINGS, LLC	1/8+	718	330	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15514	9-10-9	DD	L PAUL CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	336	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15515	9-10-9	DD	DESIRE L CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	334	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15516	9-10-9	DD	ROSE MARIE KIELGCZEWSKI	TRIENERGY HOLDINGS, LLC	1/8+	718	354	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15517	9-10-9	DD	DIANNE GELLNER & GARY GELLNER	TRIENERGY HOLDINGS, LLC	1/8+	718	345	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15519	9-10-9	DD	JOHN CROW	TRIENERGY HOLDINGS, LLC	1/8+	726	580	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15520	9-10-9	DD	TIMOTHY CROW	TRIENERGY HOLDINGS, LLC	1/8+	726	582	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*47051.123.1	9-10-9	DD	LLOYD G BAKER	TH EXPLORATION LLC	1/8+	865	389	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.123.2	9-10-9	DD	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	TH EXPLORATION LLC	1/8+	873	143	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15510	9-10-11	EE	ELAINE PHELPS ET VIR	TRIENERGY HOLDINGS, LLC	1/8+	718	326	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15511	9-10-11	EE	DAVID E CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	376	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/463	NPAR LLC to Chevron USA Inc: 26/269	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148

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10*15512	9-10-11	EE	FRANCES COFFEY	TRIENERGY HOLDINGS, LLC	1/8+	718	378	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15513	9-10-11	EE	KAY KEYES	TRIENERGY HOLDINGS, LLC	1/8+	718	330	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15514	9-10-11	EE	L PAUL CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	336	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15515	9-10-11	EE	DESIRE L CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	334	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15516	9-10-11	EE	ROSE MARIE KIELGCZEWSKI	TRIENERGY HOLDINGS, LLC	1/8+	718	354	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15517	9-10-11	EE	DIANNE GELLNER & GARY GELLNER	TRIENERGY HOLDINGS, LLC	1/8+	718	345	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15519	9-10-11	EE	JOHN CROW	TRIENERGY HOLDINGS, LLC	1/8+	726	580	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15520	9-10-11	EE	TIMOTHY CROW	TRIENERGY HOLDINGS, LLC	1/8+	726	582	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*47051.123.1	9-10-11	EE	LLOYD G BAKER	TH EXPLORATION LLC	1/8+	865	389	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.123.2	9-10-11	EE	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	TH EXPLORATION LLC	1/8+	873	143	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.117.1	9-10-15	FF	JOSEPH MICHAEL BONENE	TH EXPLORATION LLC	1/8+	940	359	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.117.1	9-10-7	GG	JOSEPH MICHAEL BONENE	TH EXPLORATION LLC	1/8+	940	359	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.117.1	9-10-8	HH	JOSEPH MICHAEL BONENE	TH EXPLORATION LLC	1/8+	940	359	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15525	9-6-12	II	RONALD KEITH MASON ET UX	CHEVRON U.S.A. INC.	1/8+	772	445	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15541	9-6-12	II	MARY RUTH FROHNAPFEL	CHEVRON U.S.A. INC.	1/8+	781	312	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15542	9-6-12	II	KENNETH D SIBURT	CHEVRON U.S.A. INC.	1/8+	781	218	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15543	9-6-12	II	SANDRA FROWEN	CHEVRON U.S.A. INC.	1/8+	781	307	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148

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10*15544	9-6-12	II	VICKI J CHERRY AND RICKEY E CHERRY	CHEVRON U.S.A. INC.	1/8+	793	318	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15545	9-6-12	II	JAMES B SIBURT AND DELILA D SIBURT	CHEVRON U.S.A. INC.	1/8+	793	332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15546	9-6-12	II	ALAN K SIBURT ET UX	CHEVRON U.S.A. INC.	1/8+	793	325	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15547	9-6-12	II	RODNEY L SIBURT	CHEVRON U.S.A. INC.	1/8+	793	346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148
10*15504	9-10-6	JJ	JAMES MASON ET AL	AB RESOURCES	1/8+	692	461	N/A	N/A	N/A	N/A	AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 LP: 24/490	Chief Exploration & Development LLC, Chief O&G LLC, Radler 2000 LP & Enerplus Resources Corp to Chevron USA Inc: 25/1	AB Resources LLC to Chevron USA Inc: 756/397	Chevron USA Inc to TH Exploration LLC: 36/148
10*15504	9-10-5	KK	JAMES MASON ET AL	AB RESOURCES	1/8+	692	461	N/A	N/A	N/A	N/A	AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 LP: 24/490	Chief Exploration & Development LLC, Chief O&G LLC, Radler 2000 LP & Enerplus Resources Corp to Chevron USA Inc: 25/1	AB Resources LLC to Chevron USA Inc: 756/397	Chevron USA Inc to TH Exploration LLC: 36/148
10*15504	9-6-14	LL	JAMES MASON ET AL	AB RESOURCES	1/8+	692	461	N/A	N/A	N/A	N/A	AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 LP: 24/490	Chief Exploration & Development LLC, Chief O&G LLC, Radler 2000 LP & Enerplus Resources Corp to Chevron USA Inc: 25/1	AB Resources LLC to Chevron USA Inc: 756/397	Chevron USA Inc to TH Exploration LLC: 36/148
10*15510	9-6-15	MM	ELAINE PHELPS ET VIR	TRIENERGY HOLDINGS, LLC	1/8+	718	326	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15511	9-6-15	MM	DAVID E CROW	TRIENERGY HOLDINGS, LLC	1/8+	718	376	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/463	NPAR LLC to Chevron USA Inc: 26/269	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15512	9-6-15	MM	FRANCES COFFEY	TRIENERGY HOLDINGS, LLC	1/8+	718	378	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148

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10*15513	9-6-15	MM	KAY KEYES	TRIEENERGY HOLDINGS, LLC	1/8+	718 330	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15514	9-6-15	MM	L PAUL CROW	TRIEENERGY HOLDINGS, LLC	1/8+	718 336	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15515	9-6-15	MM	DESIRE L CROW	TRIEENERGY HOLDINGS, LLC	1/8+	718 334	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15516	9-6-15	MM	ROSE MARIE KIELGCZEWSKI	TRIEENERGY HOLDINGS, LLC	1/8+	718 354	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15517	9-6-15	MM	DIANNE GELLNER & GARY GELLNER	TRIEENERGY HOLDINGS, LLC	1/8+	718 345	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 24/430	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15519	9-6-15	MM	JOHN CROW	TRIEENERGY HOLDINGS, LLC	1/8+	726 580	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*15520	9-6-15	MM	TIMOTHY CROW	TRIEENERGY HOLDINGS, LLC	1/8+	726 582	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC to NPAR LLC: 25/449	NPAR LLC to Chevron USA Inc: 756/332	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Chevron USA Inc to TH Exploration LLC: 36/148
10*47051.123.1	9-6-15	MM	LLOYD G BAKER	TH EXPLORATION LLC	1/8+	865 389	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.123.2	9-6-15	MM	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	TH EXPLORATION LLC	1/8+	873 143	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15464	9-6-16	NN	MARY ALICE THOMAS MELLOTT	TH EXPLORATION LLC	1/8+	906 527	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15467	9-6-16	NN	DEBORAH ELEANOR MONROE THOMPSON AND JOSEPH THOMPSON	TH EXPLORATION LLC	1/8+	906 533	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15471	9-6-16	NN	GARY RICHARDSON	TH EXPLORATION LLC	1/8+	906 529	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15479	9-6-16	NN	BARBARA M GILBERT CHESNUT AND WAYNE H CHESNUT	TH EXPLORATION LLC	1/8+	906 525	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15483	9-6-16	NN	ROBERT R RICHARDSON AND ANDREA RICHARDSON	TH EXPLORATION LLC	1/8+	906 535	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15499	9-6-16	NN	IVAN NUNN AND BRIANA NUNN	TH EXPLORATION LLC	1/8+	906 558	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15675	9-6-16	NN	ALICIA J MONROE	TH EXPLORATION LLC	1/8+	906 560	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15676	9-6-16	NN	MARSHA ANN BOVEE AND DON EARL BOVEE	TH EXPLORATION LLC	1/8+	906 562	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15677	9-6-16	NN	JASON S LASHARE	TH EXPLORATION LLC	1/8+	906 564	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15678	9-6-16	NN	KEITH DAWSON	TH EXPLORATION LLC	1/8+	906 566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15723	9-6-16	NN	NANCY C LONG AND RONALD LONG	TH EXPLORATION LLC	1/8+	906 570	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15731	9-6-16	NN	MARYJO LORENA VINCENT	TH EXPLORATION LLC	1/8+	906 573	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15736	9-6-16	NN	LORETTA PEARL LUCAS	TH EXPLORATION LLC	1/8+	906 575	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15737	9-6-16	NN	JANICE LOUISE BLANTON	TH EXPLORATION LLC	1/8+	906 577	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15738	9-6-16	NN	DONALD E GILBERT AND PATRICIA GILBERT	TH EXPLORATION LLC	1/8+	906 579	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15739	9-6-16	NN	KENNETH EWELL	TH EXPLORATION LLC	1/8+	906 581	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15742	9-6-16	NN	MARY ELLEN FOSTER	TH EXPLORATION LLC	1/8+	906 583	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15743	9-6-16	NN	CLYDE WILLIAMS ROMEO	TH EXPLORATION LLC	1/8+	906 585	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*15744	9-6-16	NN	GARY LEE ROMEO AND SHELIA ROMEO	TH EXPLORATION LLC	1/8+	906 587	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*16015	9-6-16	NN	LARRY RAY GILBERT	TH EXPLORATION LLC	1/8+	906 603	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16016	9-6-16	NN	LINDA DARLENE MARTIN AND DALE MARTIN	TH EXPLORATION LLC	1/8+	906 608	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16044	9-6-16	NN	TERRY LEE SOVINSKY AND DAWN S SOVINSKY	TH EXPLORATION LLC	1/8+	906 613	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16045	9-6-16	NN	JASON ALAN PETROVIC AND VALARI PETROVIC	TH EXPLORATION LLC	1/8+	906 617	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16046	9-6-16	NN	JOSEPH MICHAEL ROMEO	TH EXPLORATION LLC	1/8+	906 619	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16055	9-6-16	NN	SYLVIA A GILBERT KRAFFT	TH EXPLORATION LLC	1/8+	906 611	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16112	9-6-16	NN	DAVID A JOHNSON AND KELLI A JOHNSON	TH EXPLORATION LLC	1/8+	906 623	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16117	9-6-16	NN	TRACY J GILBERT	TH EXPLORATION LLC	1/8+	906 621	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16142	9-6-16	NN	JON TEX RONSHAUSEN	TH EXPLORATION LLC	1/8+	906 627	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16146	9-6-16	NN	RICHARD K PETROVIC AND WENDY PETROVIC	TH EXPLORATION LLC	1/8+	906 625	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16185	9-6-16	NN	ANDREW R NUNN	TH EXPLORATION LLC	1/8+	913 592	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16188	9-6-16	NN	ELIZABETH ANN WENSYEL	TH EXPLORATION LLC	1/8+	906 631	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16231	9-6-16	NN	JAMES R RONSHAUSEN AND JOAN RONSHAUSEN	TH EXPLORATION LLC	1/8+	906 635	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16233	9-6-16	NN	MICHELLE DAWN MORENO	TH EXPLORATION LLC	1/8+	906 633	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16234	9-6-16	NN	MICHELLE LYNN MCNEIL	TH EXPLORATION LLC	1/8+	906 637	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16284	9-6-16	NN	RONDAL HALL	TH EXPLORATION LLC	1/8+	906 531	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16291	9-6-16	NN	THOMAS L CONNER AND MARY BETH CONNER	TH EXPLORATION LLC	1/8+	906 639	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16292	9-6-16	NN	BRENDA G KITCHENS	TH EXPLORATION LLC	1/8+	906 641	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16332	9-6-16	NN	JOHN RICHARDSON AND KAREN RICHARDSON	TH EXPLORATION LLC	1/8+	906 538	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16362	9-6-16	NN	MILDRED ALICE GILBERT SAPP AND EDGAR SAPP	TH EXPLORATION LLC	1/8+	906 548	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16363	9-6-16	NN	RHONDA OCONNOR AND TERRANCE OCONNOR	TH EXPLORATION LLC	1/8+	906 552	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16372	9-6-16	NN	ROBERT ALLAN PATERSON AND LEZLIE PATERSON	TH EXPLORATION LLC	1/8+	906 556	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16373	9-6-16	NN	CAROL L DUNCIL EARLEWINE	TH EXPLORATION LLC	1/8+	906 554	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16379	9-6-16	NN	TIMOTHY A LASHARE AND FELICIA E LASHARE	TH EXPLORATION LLC	1/8+	906 591	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16385	9-6-16	NN	MARSHA BAKER MORLOCK	TH EXPLORATION LLC	1/8+	906 593	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16386	9-6-16	NN	MARK A LASHARE AND JENNIFER L WETMORE	TH EXPLORATION LLC	1/8+	906 589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16387	9-6-16	NN	JAMES CLARK PETROVIC AND LORI J PETROVIC	TH EXPLORATION LLC	1/8+	906 595	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16388	9-6-16	NN	RICHARD WAYNE ROMEO	TH EXPLORATION LLC	1/8+	906 597	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16405	9-6-16	NN	JACKIE JAMES HIBBS HESS	TH EXPLORATION LLC	1/8+	906 545	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16417	9-6-16	NN	BILL DAWSON	TH EXPLORATION LLC	1/8+	906 550	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16420	9-6-16	NN	DAVID EUGENE ROMEO	TH EXPLORATION LLC	1/8+	906 601	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16431	9-6-16	NN	TRACY L MAJORS	TH EXPLORATION LLC	1/8+	906 629	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16447	9-6-16	NN	JODY LYNN ROMEO	TH EXPLORATION LLC	1/8+	913 594	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16489	9-6-16	NN	GINNIE L BANKS	TH EXPLORATION LLC	1/8+	913 596	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16509	9-6-16	NN	PEGGY SUE HILL DOLIN FORDYCE	TH EXPLORATION LLC	1/8+	913 598	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16512	9-6-16	NN	TIMOTHY D CONNER AND MELISSA S CONNER	TH EXPLORATION LLC	1/8+	913 600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16529	9-6-16	NN	CHARLES T LASHARE AND MELISSA S LASHARE	TH EXPLORATION LLC	1/8+	913 602	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16530	9-6-16	NN	THERESA ANN WOOLLARD	TH EXPLORATION LLC	1/8+	906 599	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16587	9-6-16	NN	KEVIN DEAN PETROVIC AND RENE THERESE PETROVIC	TH EXPLORATION LLC	1/8+	942 426	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16809	9-6-16	NN	TIMOTHY JOHNSON	TH EXPLORATION LLC	1/8+	913 606	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16841	9-6-16	NN	ROBERT A BAKER	TH EXPLORATION LLC	1/8+	913 604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16960	9-6-16	NN	FRANCES MARIE DOLIN	TH EXPLORATION LLC	1/8+	913 610	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16970	9-6-16	NN	WILLIAM E ROMEO JR AND JOSHUA WAYNE HOLDEN	TH EXPLORATION LLC	1/8+	913 608	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*16997	9-6-16	NN	RICHARD A DOLIN AND MARGARET ANN DOLIN	TH EXPLORATION LLC	1/8+	913 632	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17272	9-6-16	NN	HERSHEL DUTTON AND KATHY DOLIN DUTTON	TH EXPLORATION LLC	1/8+	913 634	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17418	9-6-16	NN	PENNY L SKOK AND ELVIN M SKOK	TH EXPLORATION LLC	1/8+	913 636	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17451	9-6-16	NN	MICHELE J PERKINS AND GARY WAYNE PERKINS	TH EXPLORATION LLC	1/8+	942 441	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17473	9-6-16	NN	LINDA J BRAZIS AND BERNARD A BRAZIS	TH EXPLORATION LLC	1/8+	942 439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17510	9-6-16	NN	JUDY LYNN KOHLER AND RONALD KOHLER	TH EXPLORATION LLC	1/8+	957 137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17524	9-6-16	NN	SHARON DOROTHY PETROVIC HANNAN	TH EXPLORATION LLC	1/8+	943 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17556	9-6-16	NN	NATHAN PATRICK MONROE	TH EXPLORATION LLC	1/8+	942 430	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*17557	9-6-16	NN	ROBERT JONES AND CLAUDIA JONES	TH EXPLORATION LLC	1/8+	942 428	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17562	9-6-16	NN	JOSEPH T MONROE JR	TH EXPLORATION LLC	1/8+	942 437	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17583	9-6-16	NN	CHRISTOPHER BRIAN BORDER, INCARCERATED PERSON COURT APPNTD GUARDIAN AD LITEM ERIC GORDON ESQ	TH EXPLORATION LLC	1/8+	916 114	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17669	9-6-16	NN	RICHARD D HUGHES	TH EXPLORATION LLC	1/8+	942 424	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17706	9-6-16	NN	KELLY JO DOLIN WETZEL	TH EXPLORATION LLC	1/8+	924 593	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17770	9-6-16	NN	CAROL A DIXON AND JAMES DIXON	TH EXPLORATION LLC	1/8+	932 565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*17832	9-6-16	NN	ROMAN CATHOLIC DIOCESE OF WHEELING BY MICHAEL J BRANSFIELD BISHOP	TH EXPLORATION LLC	1/8+	942 456	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18257	9-6-16	NN	BONNIE MCKENNA AND THOMAS MCKENNA	TH EXPLORATION LLC	1/8+	942 454	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18258	9-6-16	NN	PATRICIA M AVERY AND TERRY AVERY	TH EXPLORATION LLC	1/8+	929 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19629	9-6-16	NN	BRITTANY LEMASTERS AND RACHELLE KIM	TH EXPLORATION LLC	1/8+	944 190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19690	9-6-16	NN	GENERAL RECEIVER OF MARSHALL COUNTY ATTN: BERNIE TWIGG	TH EXPLORATION LLC	1/8+	944 335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21234	9-6-16	NN	HERB YOUNG JR AND GALE YOUNG	TH EXPLORATION LLC	1/8+	953 47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21235	9-6-16	NN	TAMMY GOULDSBERRY & DOUGLAS GOULDSBERRY	TH EXPLORATION LLC	1/8+	953 49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21236	9-6-16	NN	HELEN VIRGINIA LASHARE MCKOWN	TH EXPLORATION LLC	1/8+	953 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21237	9-6-16	NN	ANGEL M ROLLINS	TH EXPLORATION LLC	1/8+	953 43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21913	9-6-16	NN	MICHAEL WAYNE THOMAS AND DARLA R THOMAS	TH EXPLORATION LLC	1/8+	960 11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22413	9-6-16	NN	TERESA HUGHES	TH EXPLORATION LLC	1/8+	963 346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22414	9-6-16	NN	SHERYL A HUGHES	TH EXPLORATION LLC	1/8+	963 348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22487	9-6-16	NN	MARK A THOMAS AND MICHELLE D J THOMAS	TH EXPLORATION LLC	1/8+	964 485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22546	9-6-16	NN	PENNY WHITE	TH EXPLORATION LLC	1/8+	966 624	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22774	9-6-16	NN	PAMELA J THOMAS KNIRSCH	TH EXPLORATION LLC	1/8+	970 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22816	9-6-16	NN	VIRGINIA R THOMAS	TH EXPLORATION LLC	1/8+	972 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.1	9-6-16	NN	BONNIE A CARNEY AKA BONNIE ANNE CARNEY	TH EXPLORATION LLC	1/8+	898 428	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.10	9-6-16	NN	DOLLY M BOYER AND HUBERT R BOYER	TH EXPLORATION LLC	1/8+	906 491	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.11	9-6-16	NN	SONDRA G SHIBEN EARLEWINE	TH EXPLORATION LLC	1/8+	906 493	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.12	9-6-16	NN	SHIRLEY ANN PALMER MONROE	TH EXPLORATION LLC	1/8+	906 495	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.13	9-6-16	NN	MARYA L MCCLELLAND AND JOHN A MCCLELLAND	TH EXPLORATION LLC	1/8+	906 501	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.14	9-6-16	NN	THOMAS H MONROE SR AND JANET MONROE	TH EXPLORATION LLC	1/8+	906 503	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.15	9-6-16	NN	FREDA C COX	TH EXPLORATION LLC	1/8+	906 497	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.16	9-6-16	NN	JOSEPH M GRODHAUS	TH EXPLORATION LLC	1/8+	906 499	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.17	9-6-16	NN	CHARLES J RICHARDSON	TH EXPLORATION LLC	1/8+	906 505	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.18	9-6-16	NN	MELVIN ALFRED & REBECCA MONROE	TH EXPLORATION LLC	1/8+	906 507	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.19	9-6-16	NN	WILLIAM H MONROE AND KRISTA M MONROE	TH EXPLORATION LLC	1/8+	906 509	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.2	9-6-16	NN	BARBARA A FARMER	TH EXPLORATION LLC	1/8+	904 644	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.20	9-6-16	NN	CAROL N LARUE MONROE AND WILLIAM E BROWN	TH EXPLORATION LLC	1/8+	906 511	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.21	9-6-16	NN	MARLENE HRIVNAK	TH EXPLORATION LLC	1/8+	906 513	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.22	9-6-16	NN	DEBORAH HRIVNAK	TH EXPLORATION LLC	1/8+	906 515	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.23	9-6-16	NN	TERRI K SONDERGARD	TH EXPLORATION LLC	1/8+	906 517	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.24	9-6-16	NN	MARGARET GILBERT	TH EXPLORATION LLC	1/8+	913 579	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.25	9-6-16	NN	MARGARET GILBERT	TH EXPLORATION LLC	1/8+	906 523	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.26	9-6-16	NN	CAROLE A GILBERT	TH EXPLORATION LLC	1/8+	906 519	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.27	9-6-16	NN	GEORGE RONALD MONROE JR AND CRYSTAL L MONROE	TH EXPLORATION LLC	1/8+	906 521	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.3	9-6-16	NN	SHIRLEY C EARLEWINE	TH EXPLORATION LLC	1/8+	904 468	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.4	9-6-16	NN	CAROL A JONES	TH EXPLORATION LLC	1/8+	906 481	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.5	9-6-16	NN	BEATRICE PEARL COLVIN PROCHASKA	TH EXPLORATION LLC	1/8+	906 220	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.6	9-6-16	NN	BRANDON FORRESTER	TH EXPLORATION LLC	1/8+	906 483	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*47051.296.7	9-6-16	NN	ELIZABETH R MERCER AKA ROSE LEMASTERS MERCER	TH EXPLORATION LLC	1/8+	906	485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.8	9-6-16	NN	DAVID R JOHNSON	TH EXPLORATION LLC	1/8+	906	487	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*47051.296.9	9-6-16	NN	RUSSELL C LEMASTERS	TH EXPLORATION LLC	1/8+	906	489	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27528	9-6-16	NN	LAWRENCE EARLEWINE	TH EXPLORATION LLC	1/8+	1060	191	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27599	9-6-16	NN	LORI K. JARVIS	TH EXPLORATION LLC	1/8+	1060	587	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19116	9-6-4	OO	ROBERT LEE CARNEY AND BONNIE ANNE CARNEY	CHESAPEAKE APPALACHIA LLC	1/8+	682	255	N/A	N/A	N/A	N/A	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 22/671	Chesapeake Appalachia LLC to Chevron USA Inc: 30/392	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/404	Chevron USA Inc to TH Exploration LLC: 40/127
10*18839	9-6-3	PP	MARGARET DARLENE DUTTON	TH EXPLORATION LLC	1/8+	937	607	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18840	9-6-3	PP	JAY HAROLD DUTTON AND JANICE L DUTTON	TH EXPLORATION LLC	1/8+	937	609	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18841	9-6-3	PP	THEODORE FRANCIS DUTTON AND PHYLLIS JEAN DUTTON	TH EXPLORATION LLC	1/8+	937	612	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19000	9-6-3	PP	KENNETH M MCCARDLE AND DELORES MCCARDLE	CHEVRON USA INC	1/8+	789	154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19013	9-6-3	PP	SUSAN JANE MULLEN AND RICHARD S MULLEN	CHEVRON USA INC	1/8+	789	147	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19014	9-6-3	PP	JAMES F CARMICHAEL	CHEVRON USA INC	1/8+	793	366	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19015	9-6-3	PP	SUSAN J CARMICHAEL	CHEVRON USA INC	1/8+	793	433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19016	9-6-3	PP	JOHN LINDSEY DERROW	CHEVRON USA INC	1/8+	795	351	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19019	9-6-3	PP	CATHERINE HUMMEL	CHEVRON USA INC	1/8+	797	602	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19020	9-6-3	PP	DURWOOD WRIGHT BY CATHERINE HUMMEL AIF	CHEVRON USA INC	1/8+	796	191	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19022	9-6-3	PP	BETTY L ELMER	CHEVRON USA INC	1/8+	803	240	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19023	9-6-3	PP	DARLENE K ALBORN	CHEVRON USA INC	1/8+	803	573	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19024	9-6-3	PP	MARLENE F WAGMILLER	CHEVRON USA INC	1/8+	803	567	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19025	9-6-3	PP	ELLEN G KIRKBRIDE	CHEVRON USA INC	1/8+	804	615	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19028	9-6-3	PP	ELMER DEAN EVANS	CHEVRON USA INC	1/8+	805	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127

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10*19062	9-6-3	PP	BRENDA WOOD	CHEVRON USA INC	1/8+	818	151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19064	9-6-3	PP	JODY KORN	CHEVRON USA INC	1/8+	818	137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19194	9-6-3	PP	CHARLES D DERROW II	CHEVRON USA INC	1/8+	781	230	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19195	9-6-3	PP	DAVID DERROW	CHEVRON USA INC	1/8+	781	237	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19196	9-6-3	PP	JAMES W DERROW	CHEVRON USA INC	1/8+	781	223	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19197	9-6-3	PP	THOMAS J DERROW	CHEVRON USA INC	1/8+	781	244	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19198	9-6-3	PP	SAMUEL W DERROW	CHEVRON USA INC	1/8+	781	251	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19199	9-6-3	PP	CHRISTIE S MITCHELL	CHEVRON USA INC	1/8+	781	277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19200	9-6-3	PP	KATHLEEN A KELLEY	CHEVRON USA INC	1/8+	781	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19208	9-6-3	PP	MICHAEL E DERROW JR	CHEVRON USA INC	1/8+	786	146	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19215	9-6-3	PP	JOSEPH R DERROW	CHEVRON USA INC	1/8+	786	350	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19262	9-6-3	PP	BARBARA L MCGAHA	CHEVRON USA INC	1/8+	787	400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19263	9-6-3	PP	WILLIAM POLEN	CHEVRON USA INC	1/8+	788	224	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19264	9-6-3	PP	HOWARD E SPEAR AIF PATTIE S MADRID	CHEVRON USA INC	1/8+	788	219	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19265	9-6-3	PP	BETTY L STARKEY	CHEVRON USA INC	1/8+	788	384	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19266	9-6-3	PP	DALE ADORIN SALSBERY	CHEVRON USA INC	1/8+	791	66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19267	9-6-3	PP	REGINA F HAUGHT DANIEL HAUGHT	CHEVRON USA INC	1/8+	792	379	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127

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Operator's Well No. Knob Creek N - 12HU

Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page		Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	
10*19268	9-6-3	PP	ANITA STANLEY	CHEVRON USA INC	1/8+	790	99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19269	9-6-3	PP	LINDA D MAYO RONALD A MAYO	CHEVRON USA INC	1/8+	789	501	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19270	9-6-3	PP	FORREST STARKEY DODA STARKEY	CHEVRON USA INC	1/8+	790	110	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19271	9-6-3	PP	JANICE M HIXSON AND HARRY C HIXSON	CHEVRON USA INC	1/8+	790	208	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19272	9-6-3	PP	JOHN M SALSBERY	CHEVRON USA INC	1/8+	792	218	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19273	9-6-3	PP	JODIE R MORRIS JOHN MORRIS	CHEVRON USA INC	1/8+	790	188	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19274	9-6-3	PP	ETHEL E STARKEY	CHEVRON USA INC	1/8+	790	203	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19276	9-6-3	PP	SANDRA LEE KNAPSKI JOHN KNAPSKI	CHEVRON USA INC	1/8+	790	193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19277	9-6-3	PP	GINGER L SALSBERY	CHEVRON USA INC	1/8+	790	198	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19278	9-6-3	PP	DELLA J COVERDALE TOM COVERDALE	CHEVRON USA INC	1/8+	790	213	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19279	9-6-3	PP	CALLENE M PETERSON	CHEVRON USA INC	1/8+	789	342	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19280	9-6-3	PP	BRENT LEE STARKEY	CHEVRON USA INC	1/8+	789	357	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19281	9-6-3	PP	MAUREEN C COOPER	CHEVRON USA INC	1/8+	790	218	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19282	9-6-3	PP	KENNETH D MCMECHEN	CHEVRON USA INC	1/8+	789	337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19283	9-6-3	PP	SARAH SISLEY ROBERT W SISLEY	CHEVRON USA INC	1/8+	789	332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19284	9-6-3	PP	REXENA A CUNNINGHAM	CHEVRON USA INC	1/8+	790	157	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19285	9-6-3	PP	CARALOTTA J GIBSON	CHEVRON USA INC	1/8+	792	251	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127

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10*19286	9-6-3	PP	ELAINE M KENNER JACK KENNER	CHEVRON USA INC	1/8+	792	256	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19287	9-6-3	PP	DEBBIE MAE MOORE	CHEVRON USA INC	1/8+	792	234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19290	9-6-3	PP	RICHARD CECIL LUTISHIA CECIL	CHEVRON USA INC	1/8+	795	399	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19291	9-6-3	PP	JO ANN HYNDMAN ROBERT HYNDMAN	CHEVRON USA INC	1/8+	800	203	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*19292	9-6-3	PP	CHARLES M STARKEY TRUST THELMA B STARKEY, SOLE TRUSTEE	CHEVRON USA INC	1/8+	800	223	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 40/127
10*21007	9-6-3	PP	SANDRA EILEEN WORKMAN RUSH AND JAMES EARL RUSH	TH EXPLORATION LLC	1/8+	951	638	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21008	9-6-3	PP	DALE EDWARD WORKMAN	TH EXPLORATION LLC	1/8+	949	343	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21581	9-6-3	PP	DAVID CARMICHAEL	TH EXPLORATION LLC	1/8+	957	402	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21582	9-6-3	PP	GARY CARMICHAEL	TH EXPLORATION LLC	1/8+	957	393	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22327	9-6-3	PP	NANCY WHITLATCH	TH EXPLORATION LLC	1/8+	962	551	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23915	9-6-3	PP	GENERAL RECEIVER OF MARSHALL COUNTY ATTN: BERNIE TWIGG	TH EXPLORATION LLC	1/8+	1011	523	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24718	9-6-3	PP	DOUGLAS G DERROW	TH EXPLORATION LLC	1/8+	1027	598	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24786	9-6-3	PP	HADEN W DERROW	TH EXPLORATION LLC	1/8+	1027	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24788	9-6-3	PP	MICHAEL W DERROW	TH EXPLORATION LLC	1/8+	1027	596	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24959	9-6-3	PP	CODY S DERROW	TH EXPLORATION LLC	1/8+	1028	626	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24960	9-6-3	PP	CHARLES S DERROW	TH EXPLORATION LLC	1/8+	1028	624	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25289	9-6-3	PP	SHERRY KAY RISHER	TH EXPLORATION LLC	1/8+	1030	152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25499	9-6-3	PP	THOMAS G DERROW AND DOROTHY DERROW	TH EXPLORATION LLC	1/8+	1033	134	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*26369	9-6-3	PP	WILLIAM N ROUPE AND VIRGINIA A ROUPE	CHEVRON USA INC	1/8+	1026	35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration II LLC & TH Exploration LLC: 43/95
10*26370	9-6-3	PP	VINCENT PATRELLO AND AMANDA PATRELLO	CHEVRON USA INC	1/8+	1026	37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration II LLC & TH Exploration LLC: 43/95
10*26371	9-6-3	PP	WILLIAM B ROUPE AND KATHERINE A ROUPE	CHEVRON USA INC	1/8+	1026	39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration II LLC & TH Exploration LLC: 43/95
10*26372	9-6-3	PP	CHRISTOPHER A ROUPE AND KARI S ROUPE	CHEVRON USA INC	1/8+	1026	33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration II LLC & TH Exploration LLC: 43/95
10*26491	9-6-3	PP	MATTHEW ROY FURBEE	TH EXPLORATION LLC	1/8+	1037	438	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*26739	9-6-3	PP	*TIMOTHY SFAN GRIFFIN	TH EXPLORATION LLC	1/8+	1038 187	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27160	9-6-3	PP	*CHRISTOPHER FURBEE AND KATIE FURBEE	TH EXPLORATION LLC	1/8+	1047 441	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	9-6-3	PP	VICKY JO GRIFFIN AKA VICKIE JO GRIFFIN	STONE ENERGY CORPORATION	1/8+	870 134	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
FORCE POOL	9-6-3	PP	THOMAS MICHAEL GRIFFIN	STONE ENERGY CORPORATION	1/8+	870 128	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
FORCE POOL	9-6-3	PP	THE DERROW FAMILY IRREVOCABLE TRUST	STONE ENERGY CORPORATION	1/8+	874 500	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
FORCE POOL	9-6-3	PP	SONDRA S. MENENDEZ	STONE ENERGY CORPORATION	1/8+	864 565	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
FORCE POOL	9-6-3	PP	RUTH FLINNER	STONE ENERGY CORPORATION	1/8+	870 132	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
FORCE POOL	9-6-3	PP	JOSEPH MARK MENENDEZ	STONE ENERGY CORPORATION	1/8+	868 440	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
FORCE POOL	9-6-3	PP	CATHERINE E. GRIFFIN	STONE ENERGY CORPORATION	1/8+	889 13	Stone Energy Corp to EQT Production Company: 38/75							"FORCE POOL"
10*28402	9-6-3	PP	STONE HILL MINERAL HOLDINGS, LLC	TH EXPLORATION LLC	1/8+	1072 157	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	9-6-3	PP	BRIAN L FURBEE	UNLEASED	N/A	N/A N/A								"FORCE POOL"
FORCE POOL	9-6-3	PP	GREGORY D FURBEE	UNLEASED	N/A	N/A N/A								"FORCE POOL"
10*28333	9-6-3	PP	DOUGLAS S SINGER	TH EXPLORATION LLC	1/8+	1070 430	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28566	9-6-3	PP	JODY L JAMES	TH EXPLORATION LLC	1/8+	1072 42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FORCE POOL	9-6-3	PP	BRANDY R LOVERA	UNLEASED	N/A	N/A N/A								"FORCE POOL"
FORCE POOL	9-6-3	PP	EDMOND J FURBEE	UNLEASED	N/A	N/A N/A								"FORCE POOL"
FORCE POOL	9-6-3	PP	RANDY D ROBINSON	CHEVRON USA INC	1/8+	976 256	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 45/92
FORCE POOL	9-6-3	PP	MARK A ROBINSON	CHEVRON USA INC	1/8+	986 517	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 45/92
FORCE POOL	9-6-3	PP	JEFFREY D ROBINSON EY UX	CHEVRON USA INC	1/8+	976 253	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 45/92

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

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Document Type ASN
Pages Recorded 20
Book-Page 36-148
Recording Fee \$20.00
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ASSIGNMENT AND CONVEYANCE

THIS ASSIGNMENT AND CONVEYANCE (the "**Assignment**") is made and entered into this 17th day of May, 2016 (the "**Effective Date**"), by and between **CHEVRON U.S.A. INC.** (hereinafter "**Assignor**") and **TH EXPLORATION, LLC** (hereinafter "**Assignee**") pursuant to the terms of that certain Acreage Trade Agreement between the Assignor and the Assignee dated May 2, 2016 (the "**Acreage Trade Agreement**"). Capitalized terms used but not defined herein and defined in the Acreage Trade Agreement shall have the meanings given to such terms in the Acreage Trade Agreement.

WITNESSETH:

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to those certain Oil and Gas Leases situated in Marshall County, West Virginia, as described in **Exhibit "A"**, and as depicted in **Exhibits "A-1"** and **"A-2"**, attached hereto and made a part hereof (hereinafter the "**Leases**"); and

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

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

1. **Assignment.** Assignor does hereby grant, bargain, sell, convey, deliver, assign, set over and transfer, as of the Effective Date, to Assignee, its respective successors and assigns, forever, all of Assignor's right, title and interest in and to the Leases, and the lands covered thereby, together with all rights incident thereto and appurtenances thereon, except that Assignor accepts and reserves from this Assignment the Chevron ORRI previously conveyed to Assignor and as described in that certain Memorandum of Assignment of Oil and Gas Lease Interests dated November 6, 2012 by and between Cornell Holdings Incorporated and Chevron U.S.A. Inc., which is recorded at Book 0028, Page 0239 in the Office of the County Clerk of Marshall County, West Virginia.

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

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

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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

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PARTIAL ASSIGNMENT OF OIL AND GAS LEASES

This **PARTIAL ASSIGNMENT OF OIL AND GAS LEASES** (hereinafter, "**Assignment**"), made the 31 day of May, 2018 (hereinafter, "**Effective Date**"), is by and between **CNX GAS COMPANY LLC**, a Virginia limited liability company, whose address is 1000 CONSOL Energy Drive, Suite 400, Canonsburg, Pennsylvania 15317 (hereinafter "**Assignor**") and **TH EXPLORATION, LLC**, a Texas limited liability company, whose address is 1320 S. University Drive, Suite 500, Fort Worth, TX 76107 (hereinafter "**Assignee**"). All references in this Assignment to "**Party**" or "**Parties**" shall be deemed at all times to mean Assignor or Assignee or both. Capitalized terms used but not defined herein shall have the meaning given such terms in the Acreage Trade Agreement, by and between Assignor and Assignee dated April 9, 2018 (the "**ATA**").

WHEREAS, Assignor desires to assign all of Assignor's right, title and interest in and to those Oil and Gas Lease(s) as same may have been previously or will in the future be modified, extended, or amended (hereinafter, "**Lease**" or "**Leases**"), covering certain tracts of land (hereinafter, "**Lands**") located in Marshall County, West Virginia; such Leases and Lands covered thereby being more particularly described on **Exhibit "A"** attached hereto and made a part hereof insofar and only insofar as such Leases cover the Target Formations (as defined below).

NOW, THEREFORE, for and in consideration of TEN AND NO/100 DOLLARS (\$10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby **GRANT, BARGAIN, ASSIGN, TRANSFER, AND CONVEY** unto Assignee the following "**Assigned Rights**":

- (a) All of Assignor's right, title, and interest in and to those Leases set forth on **Exhibit A** attached hereto **INSOFAR AND ONLY INSOFAR** as to the particular Target Formation(s) (defined below) described and delineated on **Exhibit A** for each Lease:
- i. "**Target Formation(s)**" means, with respect to each Lease, two hundred feet (200') above the top and two hundred feet (200') below the base of the Marcellus Formation or the Utica Formation or both, as specified for each Lease on **Exhibit A**. For the purposes of this Assignment, the Marcellus Formation shall be defined as the formation commonly known as the Marcellus Shale Formation, with the top of the Marcellus Shale Formation defined as the correlative stratigraphic equivalent to that point found at 6517 feet (6517') measured depth on the Halliburton Simms U-5H Composite_DLL_DEN_NEU Log dated June 14, 2014 (the "**Log**")

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