

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, January 9, 2020 WELL WORK PERMIT Horizontal 6A / New Drill

TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD

CANONSBURG, PA 15317

Re: Permit approval for KNOB CREEK N-13HU

47-051-02269-00-00

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

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

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

> James A. Martin Chief

Operator's Well Number: KNOB CREEK N-13HU DAVID LEE FRANKLIN

Farm Name:

Horizontal 6A New Drill

U.S. WELL NUMBER: 47-051-02269-00-00

Date Issued: 1/9/2020

Promoting a healthy environment.

API Number: 47 051 02269

PERMIT CONDITIONS

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

CONDITIONS

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

API Number: 47 05 02269

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, sending an email to DEPOOGNotify@wv.gov.



west virginia department of environmental protection

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

Randall M. Albert, Chairman dep.wv.gov

November 18, 2019

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

RE: Application for Deep Well Permit - API #47-051-02269

COMPANY: Tug Hill Operating, LLC

FARM: <u>David Lee Franklin</u> <u>Knob Creek N-13HU</u>

COUNTY: Marshall DISTRICT: Meade QUAD: Glen Easton

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

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

- 1. Comments to Notice of Deviation filed? No
- 2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? Yes
- 3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: **yes; Docket 290-287 Exception Location Hearing
- 4. Provided a plat showing that the proposed location is a distance of <u>400</u> feet from the nearest lease line or unit boundary with the exception of the toe which is <u>10</u> feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

(Sincerely,

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; Knob Creek N-12HU 47-051-02268

Area of Review

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

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

Data Sources Reviewed:

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

Contacted Devin Ducoeur 724-705-0444, dducoeur@dpslandservices.com DPS GIS (08/14/2019) to have him make maps of the wellbores with his information. DPS utilizes WVGES maps for their mapping seems it as the best publicly available. See attached map he provided.

Request maps for:

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

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

- WVGES has plotted every well spot they have access to and are aware of with that contains a coordinate. 30000, 70000, and 90000 series wells are available via the WVGES online map. Some locations aren't great due to vintage and manipulation of maps through time
- 30000 series any well drilled prior to 1929 APIs were not assigned to original wells
- 90000 series Any sources that the WVGES has access that shows a well spot but has notifice of Oil and Gas additional supporting information. DEP does not have cooses. SEP - 3 2019
- Phil indicated that other Operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing a screenshot of the WVGES map with their operators are providing as a screenshot of the WVGES map with their operators are providing as a screenshot of the WVGES map with their operators are providing as a screenshot of the WVGES map with their operators are providing as a screenshot of the WVGES map with their operators are providing as a screenshot of the WVGES map with their operators are providing as a screenshot of the WVGES map with their operators are provided by the WVGES map with their operators are provided by the WVGES map with the WVGES map with

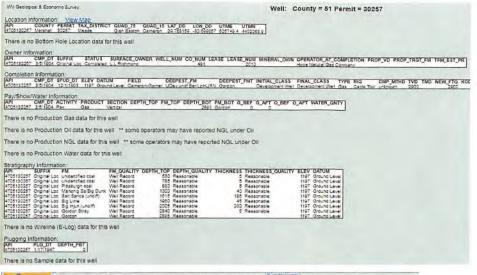
Permit well - Knob Creek N-13HU

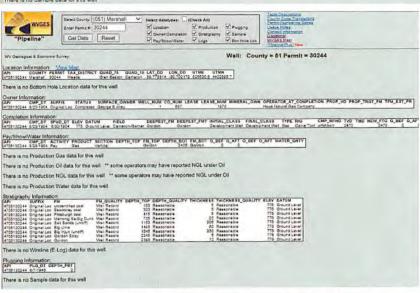
Wells within 500' Buffer
Note: Well spots depicted on Area of Review map (page 3) are derived from State held coordinates. The spots may differ from those depicted on the Well Plat

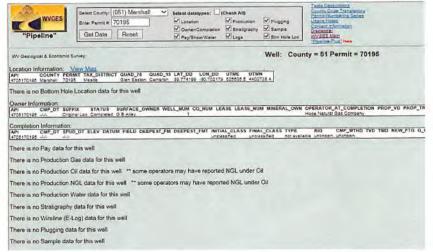
API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4705130405	Whilhelm & Jackson	unknown	Unknown	Unknown	Unknown but unlikley. Appears to be an lold shallow well, coal test bore hole or CBM well. Well has been plugged.	Well plugged 12/4/1959
4705130257	Hope Natural Gas Company	2900' TVD	Gordon Sandstone	Unknown	No, Well is too shallow to be within reasonable distance for fracture propagation from a Point Pleasant horizontal well.	Well plugged 1/17/1947
4705130244	Hope Natural Gas Company	2470' TVD	Gordon Sandstone	Unknown	No, Well is too shallow to be within reasonable distance for fracture propagation from a Marcellus horizontal well. Well has been plugged.	Well plugged 6/7/1946
4705170195	Hope Natural Gas	Unknown	Unknown	Unknown		Well records incomplete. Well records do not indicate productior or that the well has been plugged
	Manufacturers Light and Heat	Unknown	Unknown	Unknown	Unknown but unlikely, Appears to be an lold shallow well, coal test bore hole or CBM well. Well has been plugged.	Well records are incomplete. Well plugged -/-/1958
4705170063	Hope Natural Gas	2941' TVD	Gordon Sandstone	Unknown	No, Well is too shallow to be within reasonable distance for fracture propagation from a Marcellus horizontal well.	State well records are incomplete. Well records do not indicate production or that the well has been plugged

WVGES "Pipeline"	Select County: (C51) Marshall Ereer Pennst # 30405 Get Dates Reset	Select datatypes: [1] Location Owner Completion Pay Shoor Water	Production Strangraphy	Plugging Sample Stm Hole Loc	Tarina Denominana Berman Farina Maria Berman Sarina Annia Berman Sarina Maria Centra Monania Centra Monania Traca Canalia Traca Canali
WV Genepost & Economic Location Information: API COUNTY PER 4705130400 Warner 304	View Men	UAD_15 LAT_DO LON_DO ameron 29.770024 -80.702958	UTME UTMN 526362.1 44323		ty = 61 Permit = 30405
Owner Information:	e Location data for this well FIX STATUS SURFACE OWN TO LOC COMPLETE HARDSH & RICHTS	ER WELL NUM CO NUM LE	ASE LEASE_NU	MINERAL_OWN	OPERATOR_AT_COMPLETION PROP_VD PRO
4708120436 -/-/1903 -/	JD_DT ELEV DATUM FIELD DEF 783 Spirit Lave	EPEST_FM DEEPEST_FMT IN		AL_CLASS TYPE	RIG CMP_MTHD TVD TMD NEW_FTG
There is no Production					
Literature the transmission	Oil data for this well ** some or	perators may have reported	NGL under Oil		
There is no Production	NGL data for this well ** some	operators may have report	ed NGL under (Dil	
There is no Dead exten	Water data for this well				
There is no Production					
	data for this well				
There is no Stratigraphy There is no Wireline (E.					
There is no Straligraphy	-Log) data for this well				

Office of Oil and Gas
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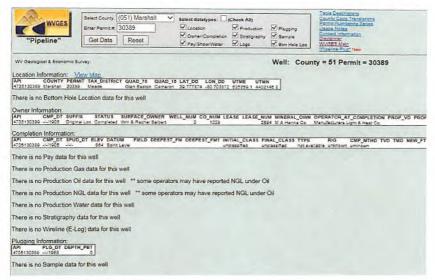


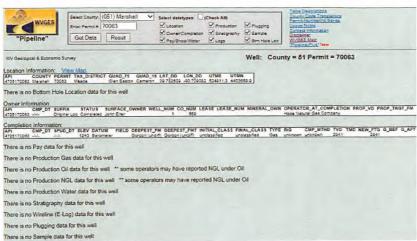


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WW Department of Environmental Protection

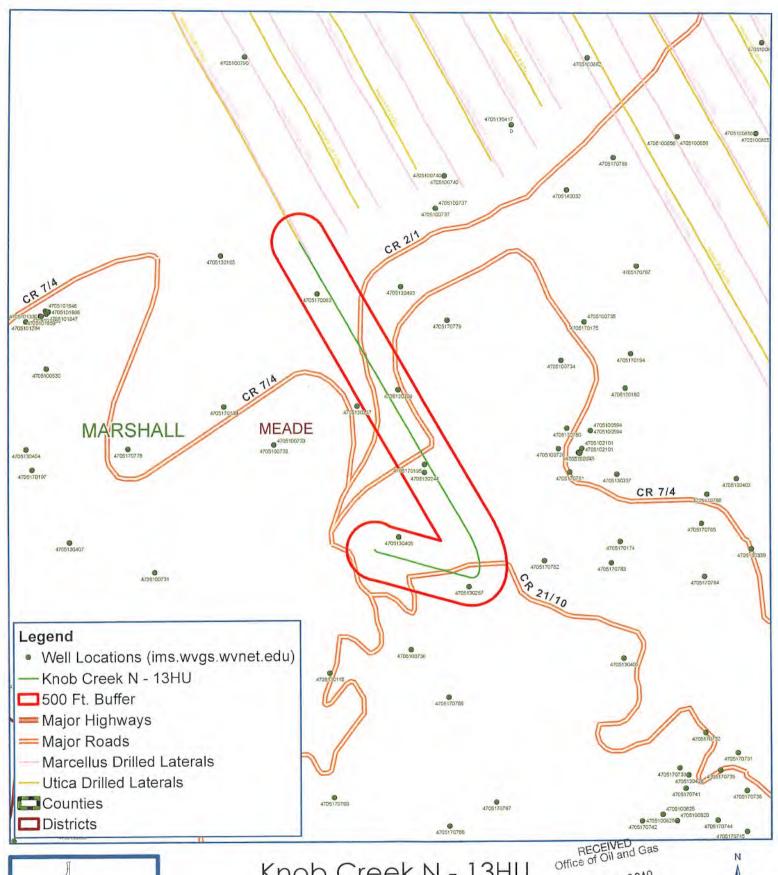




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WV Department of Environmental Protection





Knob Creek N - 13HU Meade District Marshall County, WV



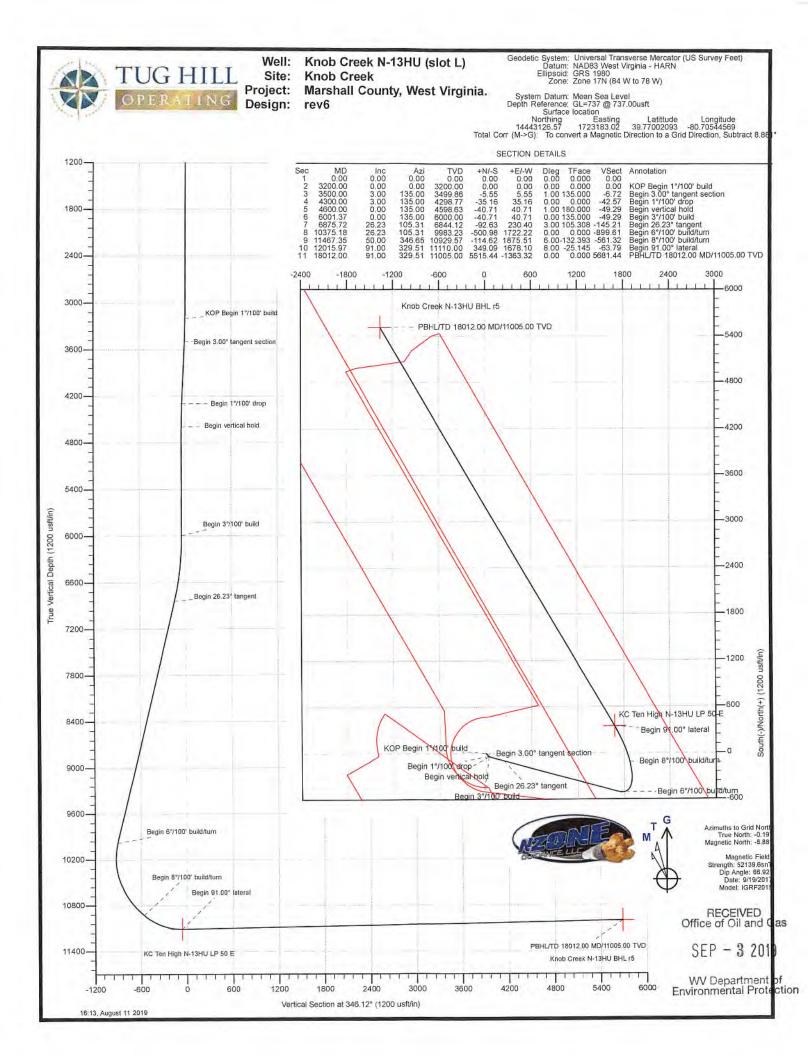
RECEIVED Gas
Office of Oil and Gas

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WV Department of Environmental Protection
Environmental Protection

LAND SERVICES

Map Created: August 14, 2019 Map Current As Of: August 14, 2019 Notes: All locations are approximate and are for visualization purposes only.





Database: Company: DB_Jul2216dt_v14 lt Tug Hill Operating LLC

Project: Site:

Marshall County, West Virginia. Knob Creek

Well:

Knob Creek N-13HU (slot L)

Wellbore:

Original Hole

Design:

rev6

Local Co-ordinate Reference:

TVD Reference: MD Reference

North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737.00usft GL=737 @ 737,00usft

Grid

Minimum Curvature

Project

Marshall County, West Virginia.

Map System:

Universal Transverse Mercator (US Survey Feet)

NAD83 West Virginia - HARN

Geo Datum:

System Datum:

Mean Sea Level

Map Zone:

Zone 17N (84 W to 78 W)

Site

Knob Creek

Site Position:

Lat/Long

Northing: Easting:

14,443,053.74 usft

Latitude:

Longitude:

39.76982148

Position Uncertainty:

0.00 usft Slot Radius: 1,723,120.29 usft 13-3/16"

Grid Convergence:

-80,70566975

0.188

Well Knob Creek N-13HU (slot L)

Well Position

+N/-S +E/-W

rev6

0.00 usft 0.00 usft Northing: Easting:

14,443,126.57 usft 1,723,183.01 usft Latitude: Longitude:

39.77002093 -80.70544569

Position Uncertainty

0.00 usft

Wellhead Elevation:

9/19/2017

Ground Level:

737.00 usft

Wellbore

Original Hole

Magnetics

Model Name

IGRF2015

Sample Date

Declination (°)

-8.693

Dip Angle (°)

Field Strength

(nT) 52,139.58561814

Design

Audit Notes: Version:

Phase:

PLAN

Tie On Depth:

0.00

66.922

Vertical Section:

Depth From (TVD) (usft) 0.00

+N/-S (usft) 0.00

+E/-W (usft) 0.00

Direction (°) 346.12

Plan Survey Tool Program

0.00

8/11/2019

Depth From (usft)

Depth To (usft)

Survey (Wellbore)

18,012.01 rev6 (Original Hole)

Tool Name MWD

MWD - Standard

Remarks

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WV Department of Environmental Protection



Database: Company: Project: DB_Jul2216dt_v14 lt Tug Hill Operating LLC Marshall County, West Virginia.

Site:

Knob Creek

Well: Wellbore: Knob Creek N-13HU (slot L)

Original Hole

rave

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737.00usft GL=737 @ 737.00usft

Grid

Minimum Curvature

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	0.000	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.000	
3,500.00	3.00	135.00	3,499.86	-5.55	5.55	1.00	1.00	0.00	135.000	
4,300.00	3.00	135.00	4,298.77	-35.16	35.16	0.00	0.00	0.00	0.000	
4,600.00	0.00	135.00	4,598.63	-40.71	40.71	1.00	-1.00	0.00	180.000	
6,001.37	0.00	135.00	6,000.00	-40.71	40.71	0.00	0.00	0.00	135.000	
6,875.72	26.23	105.31	6,844.12	-92.63	230.40	3.00	3.00	-3.40	105.308	
10,375.18	26.23	105.31	9,983.23	-500.98	1,722.22	0.00	0.00	0.00	0.000	
11,467.35	50.00	346.65	10,929.57	-114.62	1,875.51	6.00	2.18	-10.86	-132.393	
12,015.97	91.00	329.51	11,110.00	349.09	1,678.10	8.00	7.47	-3.12	-25.145	
18,012.01	91.00	329.51	11,005.00	5,515.44	-1,363.32	0.00	0.00	0.00	0.000	Knob Creek N-13HU

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WV Department of Environmental Protection



Database: Company:

DB_Jul2216dt_v14 lt Tug Hill Operating LLC Marshall County, West Virginia.

Project: Site:

Knob Creek

Well: Wellbore: Knob Creek N-13HU (slot L)

Original Hole

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737.00usft GL=737 @ 737.00usft

Grid

Minimum Curvature

esign:	rev6								
lanned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting		
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,443,126.57	1,723,183.01	39,77002093	-80.7054456
100.00	0.00	0.00	100.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
200.00	0.00	0.00	200.00	0.00	0.00	14,443,126.57	1,723,183.01	39,77002093	-80.705445
300.00	0.00	0.00	300.00	0.00	0.00	14,443,126.57	1,723,183.01	39,77002093	-80.705445
400.00	0.00	0.00	400.00	0.00	0.00	14,443,126.57	1,723,183.01	39,77002093	-80.705445
500.00	0.00	0.00	500.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
600.00	0.00	0.00	600.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
700.00	0.00	0.00	700.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
800.00	0.00	0.00	800.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
900.00	0.00	0.00	900.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,443,126.57	1,723,183.01	39,77002093	-80.705445
1,500.00	0.00	0.00	1,500,00	0.00	0.00	14,443,126.57	1,723,183.01	39,77002093	-80,705445
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,443,126.57	1,723,183,01	39.77002093	-80.705445
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80,705445
	0.00	0.00	1,800.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,800.00	0.00	0.00	1,900.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
1,900.00		0.00	2,000.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,000.00	0.00		2,100.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,100.00	0.00	0.00	2,200.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,200.00	0.00	0.00		0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,300.00	0.00	0.00	2,300.00		0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,500.00	0.00	0.00	2,500.00	0.00			1,723,183.01	39.77002093	-80.705445
2,600.00	0.00	0.00	2,600.00	0.00	0.00	14,443,126.57		39.77002093	-80.705445
2,700.00	0.00	0.00	2,700.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,800.00	0.00	0.00	2,800.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
2,900.00	0.00	0.00	2,900.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-80.705445
3,000.00	0.00	0.00	3,000.00	0.00	0.00	14,443,126.57	1,723,183.01		-80.705445
3,100.00	0.00	0.00	3,100.00	0.00	0.00	14,443,126.57	1,723,183,01	39.77002093	-80.705445
3,200.00	0.00	0.00	3,200.00	0.00	0.00	14,443,126.57	1,723,183.01	39.77002093	-60.705445
KOP Beg	gin 1°/100' bu	ild						10.000000000	00 705 440
3,300.00	1.00	135.00	3,299.99	-0.62	0.62	14,443,125.95	1,723,183.63	39.77001923	-80.705443
3,400.00	2.00	135.00	3,399.96	-2.47	2.47	14,443,124.10	1,723,185.48	39.77001413	-80.705436
3,500.00	3.00	135.00	3,499.86	-5.55	5.55	14,443,121.02	1,723,188.57	39.77000563	-80.705426
Begin 3.	00° tangent s	ection							
3,600.00	3.00	135.00	3,599.73	-9.25	9.25	14,443,117.32	1,723,192.27	39.76999544	-80.705412
3,700.00	3.00	135.00	3,699.59	-12.95	12.95	14,443,113.61	1,723,195.97	39.76998524	-80.705399
3,800.00	3.00	135.00	3,799.45	-16.65	16.65	14,443,109.91	1,723,199.67	39.76997504	-80.705386
3,900.00	3.00	135.00	3,899.31	-20.36	20.36	14,443,106.21	1,723,203.37	39,76996485	-80.705373
4,000.00	3.00	135.00	3,999.18	-24.06	24.06	14,443,102.51	1,723,207.07	39.76995465	-80.705360
4,100.00	3.00	135.00	4,099.04	-27.76	27.76	14,443,098.81	1,723,210.77	39.76994445	-80.705347
4,200.00	3.00	135,00	4,198.90	-31.46	31.46	14,443,095.11	1,723,214.47	39.76993426	-80.705334
4,300.00		135.00	4,298.77	-35.16	35.16	14,443,091.41	1,723,218.17	39,76992406	-80.705320
	/100' drop								
4,400.00		135.00	4,398.67	-38.24	38.24	14,443,088.33	1,723,221.26	39.76991556	-80.705310
4,500.00		135.00	4,498.63	-40.09	40.09	14,443,086.47	1,723,223.11	39.76991046	-80,705303
4,600.00		0.00	4,598.63	-40.71	40.71	14,443,085.86	1,723,223.73	39,76990876	-80.70530
		5,56	.,200,00				A. C. L. C. L. C. L. C. L. C.	2 W. S. S. S. S. S. S.	
	ertical hold	135.00	4,698.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.705301
4,700.00	0.00	135.00	4,798.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.705301
4,800.00				-40.71	40.71	14,443,085.86		WED 39.76990876	-80.705301
4,900.00	0.00	0.00	4,898.63	40.71	40,71	17,770,000,00	CHICA OF		20.7.2000

Office of Oil and Gas

COMPASS 5000.14 Build 85



Database: Company: Project: DB_Jul2216dt_v14 lt Tug Hill Operating LLC Marshall County, West Virginia.

Site: Knob Creek

Well:

Knob Creek N-13HU (slot L)

Wellbore: Original Hole
Design: rev6

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737,00usft GL=737 @ 737,00usft

Grid

Minimum Curvature

gn:									
nned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,000.00	0.00	135.00	4,998.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.705301
5,100.00	0.00	135.00	5,098.63	-40.71	40.71	14,443,085,86	1,723,223.73	39,76990876	-80.705301
5,200.00	0.00	135.00	5,198.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80,705301
5,300.00	0,00	135.00	5,298.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.705301
5,400.00	0.00	135.00	5,398.63	-40.71	40.71	14,443,085.86	1,723,223.73	39,76990876	-80.705301
5,500.00	0.00	0.00	5,498.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80,705301
5,600.00	0.00	135.00	5,598.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80,705301
5,700.00	0.00	135.00	5,698.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80,70530
5,800.00	0.00	135.00	5,798.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.70530
5,900.00	0.00	135.00	5,898.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.70530
6,000.00	0.00	135.00	5,998.63	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.70530
6,001.37	0.00	135.00	6,000.00	-40.71	40.71	14,443,085.86	1,723,223.73	39.76990876	-80.70530
	100' build		34.55						
6,100.00	2.96	105.31	6,098.59	-41.38	43.17	14,443,085.19	1,723,226.18	39.76990689	-80.70529
6,200.00	5.96	105.31	6,198.27	-43.43	50.66	14,443,083.13	1,723,233.68	39.76990119	-80,70526
6,300.00	8.96	105.31	6,297.41	-46.86	63.18	14,443,079.71	1,723,246.20	39.76989167	-80.70522
6,400.00	11.96	105.31	6,395.74	-51.65	80.69	14,443,074.91	1,723,263.70	39.76987835	-80.70515
6,500.00	14.96	105.31	6,492.98	-57.80	103.14	14,443,068.77	1,723,286.15	39.76986127	-80.70507
6,600.00	17.96	105.31	6,588.88	-65.28	130.46	14,443,061.29	1,723,313.48	39.76984048	-80,70498
6,700.00	20.96	105.31	6,683.15	-74.07	162.59	14,443,052.50	1,723,345.60	39.76981604	-80.70486
6,800.00	23.96	105.31	6,775.56	-84.16	199.43	14,443,042.41	1,723,382.45	39.76978801	-80.70473
6,875.72	26.23	105.31	6,844.13	-92.63	230.40	14,443,033.93	1,723,413.42	39.76976445	-80.70462
		103.51	0,044.10	-02.00	200.10	11,110,000.00	11. = 21. (23.) =		
100000000000000000000000000000000000000	.23° tangent	405.04	6,865.91	-95.47	240.75	14,443,031.10	1,723,423.77	39.76975658	-80.70459
6,900.00	26.23	105.31	6,955.61	-107.14	283.38	14,443,019.43	1,723,466.40	39.76972414	-80.70443
7,000.00	26.23	105.31		-118.80	326.01	14,443,007.76	1,723,509.03	39.76969171	-80.70428
7,100.00	26.23	105.31	7,045.31		368.64	14,442,996.09	1,723,551.66	39.76965928	-80.70413
7,200.00	26,23	105.31	7,135.01	-130.47		14,442,984.43	1,723,594.29	39.76962685	-80.70398
7,300.00	26.23	105.31	7,224.72	-142.14 -153.81	411.27 453.90	14,442,972.76	1,723,636.92	39.76959441	-80,70383
7,400.00	26.23	105.31	7,314.42	-165.48	496.53	14,442,961.09	1,723,679.55	39,76956198	-80.70368
7,500.00	26.23	105.31	7,404.12	-177.15	539.16	14,442,949,42	1,723,722.18	39.76952955	-80.70352
7,600.00	26,23	105.31	7,493.82	-188.82	581.79	14,442,937.75	1,723,764.81	39,76949711	-80.70337
7,700.00	26,23	105.31	7,583,53	-200.49	624,42	14,442,926,08	1,723,807.44	39,76946468	-80.70322
7,800.00	26.23	105.31	7,673.23		667.05	14,442,914.41	1,723,850.07	39.76943225	-80.70307
7,900.00	26.23	105.31	7,762.93	-212.16	709.68	14,442,902.74	1,723,892.70	39.76939981	-80.70292
8,000.00	26.23	105.31	7,852.63	-223.82 -235.49	752.31	14,442,891.07	1,723,935.33	39.76936738	-80.70277
8,100.00	26.23	105.31	7,942.33 8,032.04	-247.16	794.94	14,442,879.41	1,723,977.96	39.76933494	-80.70261
8,200.00	26.23	105.31 105.31		-258.83	837.57	14,442,867.74	1,724,020.59	39.76930251	-80.70246
8,300.00	26.23	105.31	8,121.74	-270.50	880.20	14,442,856.07	1,724,063.22	39.76927008	-80.70231
8,400.00	26.23	105.31	8,211.44 8,301.14	-282.17	922.83	14,442,844.40	1,724,105.85	39.76923764	-80.70216
8,500.00	26.23			-293.84	965.46	14,442,832.73	1,724,148.48	39.76920520	-80.70201
8,600.00	26.23	105.31	8,390.85 8,480.55	-305.51	1,008.09	14,442,821.06	1,724,191.11	39.76917277	-80.70186
8,700.00 8,800.00	26.23 26.23	105.31	8,570.25	-317.18	1,050.72	14,442,809.39	1,724,233.74	39.76914033	-80.70171
8,900.00	26,23	105.31	8,659.95	-328.84	1,093.35	14,442,797.72	1,724,276.37	39.76910790	-80.70155
9,000.00	26,23	105,31	8,749.66	-340.51	1,135.98	14,442,786.06	1,724,319.00	39.76907546	-80.70140
9,100.00	26.23	105,31	8,839,36	-352.18	1,178.61	14,442,774.39	1,724,361.63	39.76904303	-80.70125
9,200.00	26.23	105.31	8,929.06	-363.85	1,221.24	14,442,762.72	1,724,404.26	39.76901059	-80.70110
9,300.00	26.23	105.31	9,018.76	-375.52	1,263.87	14,442,751.05	1,724,446.89	39.76897815	-80,70095
9,400.00	26.23	105.31	9,108.47	-387,19	1,306.50	14,442,739.38	1,724,489.52	39.76894572	-80.70080
9,500.00	26,23	105.31	9,198.17	-398.86	1,349.13	14,442,727.71	1,724,532.15	39.76891328	-80.70064
9,600.00	26,23	105.31	9,287.87	-410.53	1,391.76	14,442,716.04	1,724,574.78	39.76888084	-80.70049
9,700.00	26.23	105.31	9,377.57	-422.19	1,434.39	14,442,704.37	1,724,617.41	39.76884841	-80,70034
9,800.00	26.23	105.31	9,467.28	-433.86	1,477.02	14,442,692.70	1,724,660.04	39.76881597	-80.70019
9,900.00	26.23	105.31	9,556.98	-445.53	1,519.65	14,442,681.04	1,724,702.67	39.76878353	-80.70004

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Office of Oil and Gas

COMPASS 5000.14 Build 85



Database: Company: Project:

Site:

DB_Jul2216dt_v14 lt Tug Hill Operating LLC Marshall County, West Virginia.

Knob Creek

Well:

Knob Creek N-13HU (slot L)

Wellbore: Original Hole
Design: rev6

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737.00usft GL=737 @ 737.00usft

Grid

Minimum Curvature

sign:	rev6								
anned Survey	1								
Measured Depth (usft)	Inclination (°)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,000.00	26,23	105.31	9,646.68	-457.20	1,562.28	14,442,669.37	1,724,745.30	39,76875109	-80,699891
10,100.00	26.23	105.31	9,736.38	-468.87	1,604.91	14,442,657.70	1,724,787.93	39.76871865	-80,699739
10,200.00	26.23	105.31	9,826.09	-480.54	1,647.54	14,442,646.03	1,724,830.56	39.76868622	-80.699588
10,300.00	26.23	105.31	9,915.79	-492.21	1,690,17	14,442,634.36	1,724,873.19	39.76865378	-80.699436
10,375.18	26.23	105.31	9,983.23	-500.98	1,722.22	14,442,625.59	1,724,905.23	39.76862939	-80.699322
	/100' build/tur		0,000.20	000.00	11	11,112,020,00	111 = 112 = 112		
10,400.00	25.25	102.73	10,005.58	-503.60	1,732.67	14,442,622.97	1,724,915.69	39.76862211	-80,699285
10,400.00	21.84	90.31	10,097.30	-508.40	1,772.12	14,442,618.17	1,724,955.13	39.76860855	-80.699145
10,600.00	19.65	74.48	10,190.89	-504.00	1,806.95	14,442,622.57	1,724,989.96	39.76862031	-80,699021
10,700.00	19.08	56.40	10,285.32	-490.45	1,836.79	14,442,636.12	1,725,019.80	39.76865726	-80,698914
10,800.00	20.29	38.88	10,379.55	-467.88	1,861.31	14,442,658.68	1,725,044.33	39.76871900	-80.698827
10,900.00	22.99	24.29	10,472.56	-436.56	1,880.25	14,442,690.01	1,725,063.26	39.76880485	-80,698759
11,000.00	26.73	13.09	10,563.33	-396.82	1,893.39	14,442,729.75	1,725,076.40	39.76891387	-80.698712
	31.14	4.66	10,650.86	-349.10	1,900.59	14,442,777.47	1,725,083.60	39.76904486	-80.698686
11,100.00	35.98	358.21	10,734.19	-293.91	1,901.78	14,442,832.66	1,725,084.79	39.76919639	-80.69868
11,200.00	41.08	353.14	10,734.13	-231.88	1,896.93	14,442,894.69	1,725,079.95	39.76936681	-80.698697
11,300.00	46.37	349.03	10,884.67	-163.66	1,886,11	14,442,962.90	1,725,069.12	39.76955424	-80.698735
11,467.35	50.00	346.65	10,929.57	-114.62	1,875.51	14,443,011.95	1,725,058.52	39.76968903	-80.698772
			10,323.07	-114.02	1,075.51	14,440,011.00	1,7 20,000,02	**********	
	/100' build/tur		40.050.04	90.04	4 960 22	14,443,036.63	1,725,052.34	39.76975686	-80.698794
11,500.00	52.37	345.25	10,950.04	-89.94	1,869.33		1,725,032.34	39.76997503	-80.698878
11,600.00	59.73	341.45	11,005,86	-10.58	1,845.47	14,443,115.99	1,724,997.57	39.77020563	-80.698987
11,700.00	67.18	338.19	11,050.53	73.29	1,814.56	14,443,199.85	1,724,960.21	39.77044415	-80.699119
11,800.00	74.69	335.27	11,083.17	160.02 247.92	1,777.20 1,734.12	14,443,286.58 14,443,374.49	1,724,917.13	39.77068597	-80.69927
11,900.00		332.55	11,103.17	335.30	1,686.15	14,443,461.87	1,724,869.17	39.77092637	-80.699440
12,000.00	89.80	329.93	11,110.11	349.09	1,678.10	14,443,475.66	1,724,861.11	39.77096432	-80.699469
12,015.97	91.00	329.51	11,110.00	349.09	1,070.10	14,443,473.00	1,724,001.11	55.77 555 152	200,000.00
-	1.00° lateral		11 100 50	101.50	4 005 40	44 440 540 00	1 704 919 40	39.77116355	-80.699620
12,100.00		329.51	11,108.53	421.50	1,635.48	14,443,548.06	1,724,818,49 1,724,767.77	39.77140064	-80.699799
12,200.00		329.51	11,106.78	507.66	1,584.75	14,443,634.23	1,724,717.04	39.77163774	-80.699979
12,300.00		329.51	11,105.03	593.82	1,534.03	14,443,720.39	The second secon	39.77187483	-80.70015
12,400.00		329.51	11,103.28	679.98	1,483.30	14,443,806.55	1,724,666.32	39.77211192	-80.70033
12,500.00		329.51	11,101.53	766.15	1,432.58	14,443,892.71	1,724,615.59	39.77234901	-80.70051
12,600.00		329,51	11,099.77	852,31	1,381.86	14,443,978.88	1,724,564.87	39.77258610	-80,70069
12,700.00		329.51	11,098.02	938.47	1,331.13	14,444,065.04	1,724,514.15	39.77282320	-80.70087
12,800.00		329,51	11,096.27	1,024.63	1,280.41	14,444,151.20	1,724,463.42	39,77306029	-80.70105
12,900.00		329.51	11,094.52	1,110.80	1,229.68	14,444,237,37	1,724,412.70 1,724,361.98	39.77329738	-80.70123
13,000.00		329.51	11,092.77	1,196.96	1,178.96	14,444,323.53		39.77353447	-80.70141
13,100.00		329.51	11,091.02	1,283.12	1,128,24	14,444,409.69	1,724,311.25	39.77377156	-80.70159
13,200.00		329.51	11,089.27	1,369.29	1,077.51	14,444,495.85 14,444,582.02	1,724,200.33	39.77400865	-80.70177
13,300.00		329.51	11,087.52	1,455.45	1,026,79			39.77424574	-80.70195
13,400.00		329.51	11,085.76	1,541.61	976.07	14,444,668.18 14,444,754.34	1,724,159.08 1,724,108.36	39.77448282	-80.70213
13,500.00		329.51	11,084.01	1,627.77	925.34		1,724,108.30	39.77471991	-80.70231
13,600.00		329.51	11,082.26	1,713.94	874.62 823.89	14,444,840.50 14,444,926.67	1,724,006.91	39.77495700	-80.70249
13,700.00		329.51	11,080.51	1,800.10 1,886.26	773.17	14,444,926.67	1,723,956.18	39.77519409	-80.70267
13,800.00		329.51 329.51	11,078.76 11,077.01	1,972.42	722.45	14,445,098.99	1,723,935.16	39,77543118	-80.70285
13,900.00					671.72	14,445,185.16	1,723,854.74	39.77566827	-80.70303
14,000.00		329.51	11,075.26	2,058.59 2,144.75	621.00	14,445,165.16	1,723,804.01	39.77590535	-80.70321
14,100.00		329.51 329.51	11,073.51 11,071.76	2,144.75	570.27	14,445,357.48	1,723,753.29	39.77614244	-80.70338
14,200.00		329.51	11,070.00	2,317.08	519.55	14,445,443.64	1,723,702.56	39.77637953	-80.70356
14,300.00		329.51	11,070.00	2,403,24	468,83	14,445,529.81	1,723,651.84	39.77661661	-80.70374
14,400.00		329.51	11,066,50	2,489.40	418.10	14,445,615.97	1,723,601.12	39,77685370	-80,70392
14,500.00 14,600.00		329.51	11,066,50	2,575.56	367.38	14,445,702.13	1,723,550.39	39.77709079	-80.70410
14,700.00		329.51	11,063.00	2,661.73	316.65	14,445,788.30	1,723,499.67	39.77732787	-80.70428

RECEIVED
Office of Oil and Gas COMPASS 5000.14 Build 85

SEP - 3 2019



Database: Company: Project:

Site:

DB_Jul2216dt_v14 lt Tug Hill Operating LLC Marshall County, West Virginia.

Knob Creek

Well: Knob Creek N-13HU (slot L)

Wellbore: Original Hole
Design: rev6

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TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737.00usft GL=737 @ 737.00usft

Grid

Minimum Curvature

lanned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,800.00	91.00	329,51	11,061.25	2,747.89	265.93	14,445,874.46	1,723,448.95	39.77756496	-80.7044670
14,900.00	91.00	329.51	11,059.50	2,834.05	215.21	14,445,960.62	1,723,398.22	39.77780204	-80.704646
15,000.00	91.00	329.51	11,057.75	2,920.22	164.48	14,446,046.78	1,723,347.50	39,77803913	-80.704826
15,100.00	91.00	329.51	11,055.99	3,006.38	113.76	14,446,132,95	1,723,296.77	39.77827621	-80.705005
15,200.00	91.00	329.51	11,054.24	3,092.54	63.04	14,446,219.11	1,723,246.05	39.77851330	-80.705185
15,300.00	91.00	329.51	11,052.49	3,178.70	12.31	14,446,305.27	1,723,195.33	39.77875038	-80.705364
15,400.00	91.00	329.51	11,050.74	3,264.87	-38.41	14,446,391,43	1,723,144.60	39.77898746	-80.705544
15,500.00	91.00	329.51	11,048.99	3,351.03	-89.14	14,446,477.60	1,723,093.88	39.77922455	-80.705723
15,600.00	91.00	329.51	11,047.24	3,437.19	-139.86	14,446,563.76	1,723,043.15	39.77946163	-80.705903
15,700.00	91.00	329.51	11,045.49	3,523.35	-190.58	14,446,649.92	1,722,992.43	39.77969871	-80.706082
15,800.00	91.00	329.51	11,043.74	3,609.52	-241.31	14,446,736.09	1,722,941.71	39.77993580	-80.706262
15,900.00	91.00	329.51	11,041.99	3,695.68	-292.03	14,446,822.25	1,722,890.98	39.78017288	-80.706441
16,000.00	91.00	329.51	11,040.23	3,781.84	-342.76	14,446,908.41	1,722,840.26	39.78040996	-80.706621
16,100.00	91.00	329.51	11,038.48	3,868.01	-393.48	14,446,994.57	1,722,789.53	39.78064704	-80.706800
16,200.00	91.00	329.51	11,036,73	3,954,17	-444.20	14,447,080.74	1.722,738.81	39.78088412	-80,706980
16,300.00	91.00	329.51	11,034.98	4,040.33	-494.93	14,447,166,90	1,722,688.09	39.78112120	-80.707160
16,400.00	91.00	329.51	11,033.23	4,126,49	-545.65	14,447,253.06	1,722,637.36	39,78135829	-80.707339
16,500.00	91.00	329,51	11,031.48	4,212.66	-596.38	14,447,339.22	1,722,586.64	39,78159537	-80.707519
16,600.00	91.00	329,51	11,029.73	4,298.82	-647.10	14,447,425.39	1,722,535.92	39.78183245	-80,707698
16,700.00	91.00	329.51	11,027,98	4,384.98	-697.82	14,447,511.55	1,722,485.19	39.78206953	-80.707878
16,800.00	91.00	329.51	11,026.22	4.471.14	-748.55	14,447,597.71	1,722,434.47	39.78230661	-80.708057
16.900.00	91.00	329.51	11,024.47	4,557.31	-799.27	14,447,683.88	1,722,383.74	39.78254369	-80.708237
17,000.00	91.00	329.51	11,022,72	4,643.47	-849.99	14,447,770.04	1,722,333.02	39.78278076	-80.708416
17,100.00	91.00	329.51	11,020.97	4,729.63	-900.72	14,447,856.20	1,722,282.30	39.78301784	-80.708596
17,200.00	91.00	329.51	11,019.22	4,815.80	-951.44	14,447,942.36	1,722,231.57	39.78325492	-80.708775
17,300.00	91.00	329.51	11,017.47	4,901.96	-1,002.17	14,448,028.53	1,722,180.85	39.78349200	-80.708955
17,400.00	91.00	329.51	11,015.72	4,988.12	-1,052.89	14,448,114.69	1,722,130.12	39.78372908	-80.709135
17,500.00	91.00	329.51	11,013.97	5,074.28	-1,103.61	14,448,200.85	1,722,079.40	39.78396616	-80.709314
17,600.00	91.00	329.51	11,012.22	5,160.45	-1,154.34	14,448,287.02	1,722,028.68	39.78420323	-80.709494
17,700.00	91.00	329.51	11,010,46	5,246.61	-1,205.06	14,448,373.18	1,721,977.95	39.78444031	-80.709673
17,800.00	91.00	329.51	11,008,71	5,332.77	-1,255.79	14,448,459.34	1,721,927.23	39.78467739	-80.709853
17,900.00	91.00	329.51	11,006.96	5,418.94	-1,306.51	14,448,545,50	1,721,876.51	39.78491446	-80.710032
18,000.00	91.00	329.51	11,005.21	5,505.10	-1,357.23	14,448,631.67	1,721,825.78	39.78515154	-80.710212
18,012.00	91.00	329,51	11,005.00	5,515,44	-1,363.32	14,448,642.01	1,721,819.69	39.78517999	-80.710233

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Knob Creek N-13HU BH - plan hits target cen - Point	0.00 ter	0.01	11,005.00	5,515.44	-1,363.32	14,448,642.01	1,721,819.69	39.78518000	-80.71023400
KC Ten High N-13HU LF - plan misses target - Point		0,00 usft at 1201	11,110.00 15.92usft MD	349,00 (11110.00 TVI	1,678.03 D, 349.05 N,	14,443,475.57 1678.12 E)	1,724,861.04	39.77096406	-80,69946972

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Database: Company: Project:

DB_Jul2216dt_v14 lt Tug Hill Operating LLC Marshall County, West Virginia.

Site:

Knob Creek

Well:

Knob Creek N-13HU (slot L)

Wellbore:

Original Hole rev6 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Knob Creek N-13HU (slot L)

GL=737 @ 737.00usft GL=737 @ 737.00usft

Grid

Minimum Curvature

- 1	Measured	Vertical	Local Coordinates			
	Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
	3,200.00	3,200.00	0.00	0.00	KOP Begin 1°/100' build	
	3,500.00	3,499.86	-5.55	5.55	Begin 3.00° tangent section	
	4,300.00	4,298.77	-35.16	35.16	Begin 1°/100' drop	
	4,600.00	4,598.63	-40.71	40.71	Begin vertical hold	
	6,001.37	6,000.00	-40.71	40.71	Begin 3°/100' build	
	6,875.72	6,844.13	-92.63	230.40	Begin 26.23° tangent	
	10,375.18	9,983.23	-500.98	1,722.22	Begin 6°/100' build/turn	
	11,467.35	10,929.57	-114.62	1,875.51	Begin 8°/100' build/turn	
	12,015.97	11,110.00	349.09	1,678.10	Begin 91.00° lateral	
	18,012.00	11.005.00	5,515,44	-1,363.32	PBHL/TD 18012.00 MD/11005.00 TVD	

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WV Department of Environmental Protection

API NO. 47-051		
OPERATOR WELL	NO.	Knob Creek N-13HU
Well Pad Name: K	Cnob C	reek

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-13l	HU Well P	ad Name: Kno	b Creek	
3) Farm Name/Surface Owne	r: David Lee Fran	klin Public Ro	oad Access: St.	Joseph Ro	oad - CR 21
4) Elevation, current ground:	734.67' E	Elevation, propose	d post-construc	tion: <u>734.6</u>	7'
5) Well Type (a) Gas X		Un	derground Stor	age	
Other _					
(b)If Gas	Shallow	Deep	X		- 10
]	Horizontal X		(JU 10	[11]17
6) Existing Pad: Yes or No	No				
7) Proposed Target Formatio	n(s), Depth(s), Anti	icipated Thickness	s and Expected	Pressure(s):	
Point Pleasant is the target formation at a depth of t	1,100 - 77,017 - unocioso si 122 did t				
8) Proposed Total Vertical D	epth: 11,332'				A CONTRACTOR OF THE CONTRACTOR
9) Formation at Total Vertica		:			
10) Proposed Total Measure	d Depth: 18,012'				
11) Proposed Horizontal Leg	= 00= 4	2'			
12) Approximate Fresh Water	er Strata Depths:	70' ; 380'			
13) Method to Determine Fr		Offset well reports o	r noticeable flow at	the flowline or	when need to start soaping
14) Approximate Saltwater l					
15) Approximate Coal Seam		ey Coal - 292' ; P	ittsburgh Coal	- 374'	
16) Approximate Depth to P	ossible Void (coal	mine, karst, other	none		
17) Does Proposed well local directly overlying or adjacen	ation contain coal so nt to an active mine	eams ? Yes]	No <u>x</u>	
(a) If Yes, provide Mine la					
(a) Il 103, provide l'illie il	Depth:				
	Seam:				
	Owner:				

WW-6B	
(04/15)	

API NO. 47-051__-

OPERATOR WELL NO. Knob Creek N-13HU

Well Pad Name: Knob Creek

18)

CASING AND TUBING PROGRAM



TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	NEW	BW	BW	120'	120'	259FT^3(CTS)
Fresh Water	20"	NEW	J55	106.5#	503'	503'	865 FT^3(CTS)
Coal	13 3/8"	NEW	J55	54.5#	2800'	2800'	1,974FT^3(CTS)
Intermediate	9 5/8"	NEW	HPP110	47#	10,071'	10,071'	3,293FT^3(CTS)
Production	5 1/2"	NEW	P110	23#	18,012'	18,012'	4,687FT^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		11,120'	
Liners							

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

PACKERS

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

WW-6B
(10/14)

API NO. 47- 051 OPERATOR WELL NO. Knob Creek N-13HU
Well Pad Name: Knob Creek

| Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek | Knob Creek |

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 14,990,000 lb proppant and 231,756 bbl of water. Max rate = 80 bpm; max psi = 12,000#.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 12.93 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 5.55 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.

Marchall Masade Masade 18,012* 18,012* 39,77020293 40,7020293 40,70209	Marshall 737' Type Conductor Surface Intermediate 2 Preduction Preduction Preduction Preduction	Hole Size (in) Cag Size (in) 36 30 26 20 27 1/2 133/8 12 1/4 95/8 8 1/2 51/2 Sacks CEMENT SUMMARY Sacks A 891 A 3767 A 3767 A		CASING SUMMARY Depth (MD) Depth 120" 7 2,200" 7 19,249" 8 19,012" 1 15,6 15,6 15,6 15 14,5 15 15 15 16 17 18 18 19 19 19 19 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Depth (TVD)
--	--	---	--	--	-------------



Tug Hill Operating, LLC Casing and Cement Program

Knob Creek N-13HU

-		
1000	S II IO O	
1 1 4		
Va	sing	

	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"	10,249'	CTS
Production	5 1/2"	HCP110	8 1/2"	18,012'	CTS

Cement

Surface:

Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water - Surface Cement mixed at 15.6 ppg, Y=1.2

Intermediate 1:

Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 15.6 ppg, Y=1.2

Intermediate 2:

Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water - Intermediate Cement mixed at 15.6 ppg, Y=1.99

Production:

50:50 Poz: Premium NE-1 + .1% bwoc ASA-301 + 60lb/sk ASCA-1 + .35% bwoc BA-10A + .25% bwoc MPA-170, 44 lb sack + .5% bwoc R-3 + .75 gals/100sk FP-13L — Production Cement mixed at 15.2ppg, Y = 1.18

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WV Department of Environmental Protection

API Number 47 -	051	-
Operator'	e Wall No	Knob Crook N 12UII

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

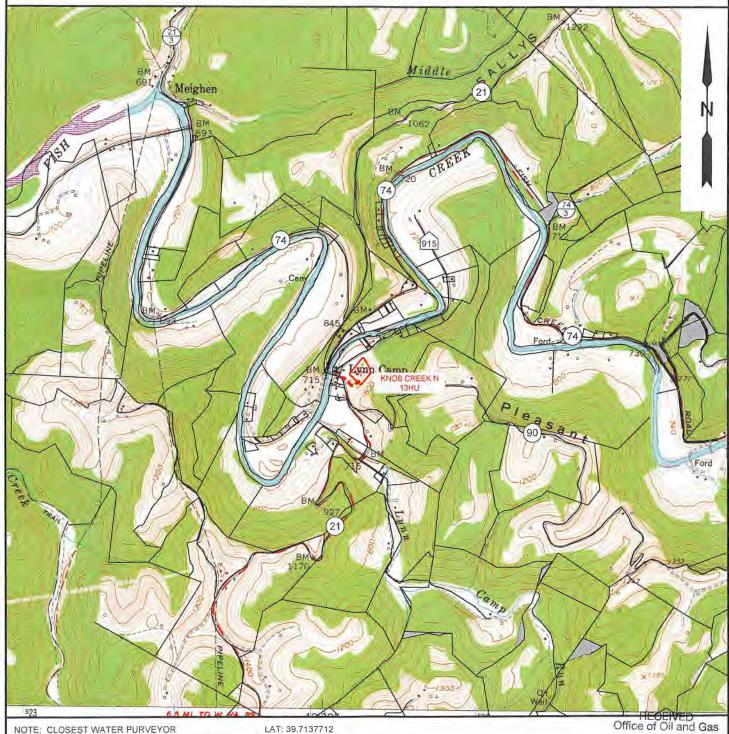
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Tug Hill Operating, LLC	OP Code 494510851
Watershed (HUC 10) Fish Creek	Quadrangle Glen Easton 7.5'
Do you anticipate using more than 5,000 bl	ols of water to complete the proposed well work? Yes V No
Will a pit be used? Yes No	
If so, please describe anticipated p	it waste: AST Tanks with proper containment will be used for staging fresh water for frac and flow back water
Will a synthetic liner be used in th	e pit? Yes No V If so, what ml.? AST Tapks will be used with phopor containing
Proposed Disposal Method For Tr	eated Pit Wastes:
Land Applicatio	1
	ection (UIC Permit Number_ UIC 2459, UIC 965, UIC 359, UIC 2D0732540, UIC 2D0732523)
Reuse (at API N Off Site Disposa	(Supply form WW-9 for disposal location)
Other (Explain	Conf. O serve of the server of
Will closed loop system be used? If so, de	cribe: Yes - For Vertical and Horizontal Drilling
Drilling medium anticipated for this well (v	ertical and horizontal)? Air, freshwater, oil based, etc. Air for vertical / Oil for Horizontal
-If oil based, what type? Synthetic	e, petroleum, etc. Synthetic Oil Base
Additives to be used in drilling medium?	Barite for weight
Drill cuttings disposal method? Leave in p	t, landfill, removed offsite, etc. All drill cuttings to be disposed of in a Landfill
-If left in pit and plan to solidify w	hat medium will be used? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit no	mber? Wetzel County Sanitary Landfil (SWF-1021 / WV0108185) and Westmoreland Sanitary Landfill, LLC (SAN1405 / PA DEP EC#1388426)
	Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any ce shall be provided within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and provisions of the permit are enforceable by law or regulation can lead to enforcement a I certify under penalty of law the application form and all attachments the obtaining the information, I believe that	Gas of the West Virginia Department of Environmental Protection. I understand that the value. Violations of any term or condition of the general permit and/or other applicable ection. It I have personally examined and am familiar with the information submitted on this reto and that, based on my inquiry of those individuals immediately responsible for the information is true, accurate, and complete. I am aware that there are significant including the possibility of fine or imprisonment.
Company Official (Typed Name) Jim Pan	RECEIVED Office of Oil and Gas
Company Official Title VP Geosciences	SEP - 3 2019
Subscribed and sworn before me this	22 day of AUGUST , 20_19 WV Department of Environmental Protection
Maureen AS	Notary Public Commonwealth of Pennsylvania - Notary Seal MAUREEN A STEAD - Notary Public Washington County
My commission expires/	26/23 My Commission Expires Jan 28, 2023 Commission Number: 1259926

Proposed Revegetation Treatme	nt: Acres Disturbed 12	2.93 Prevegetation pH	6.0
	Tons/acre or to correc		
Fertilizer type 10-20-		, to pii	
Fertilizer amount_500		lbs/acre	
Mulch 2.5		_Tons/acre	
		Seed Mixtures	
Temp	oorary	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Orchard Grass	12
Spring Oats	96	Ladino	3
		White Clover	2
Maps(s) of road, location, pit an provided). If water from the pit vacreage, of the land application a	will be land applied, incl area.	application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit vacreage, of the land application application of involved	will be land applied, inclarea. 1.7.5' topographic sheet.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit vacreage, of the land application a Photocopied section of involved Plan Approved by:	will be land applied, incl area.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit vacreage, of the land application a Photocopied section of involved Plan Approved by:	will be land applied, inclarea. 1.7.5' topographic sheet.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit watereage, of the land application a Photocopied section of involved Plan Approved by:	will be land applied, inclarea. 1.7.5' topographic sheet.	application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit watereage, of the land application a Photocopied section of involved Plan Approved by:	will be land applied, inclarea. 1.7.5' topographic sheet.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit watereage, of the land application a Photocopied section of involved Plan Approved by:	will be land applied, inclarea. 1.7.5' topographic sheet.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit watereage, of the land application a Photocopied section of involved Plan Approved by:	will be land applied, inclarea. 1.7.5' topographic sheet.	application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in
Maps(s) of road, location, pit an provided). If water from the pit vacreage, of the land application a Photocopied section of involved	will be land applied, inclarea. 1.7.5' topographic sheet.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), and area in RECEIVED Office of Oil and
provided). If water from the pit vacreage, of the land application a	will be land applied, inclarea. 1.7.5' topographic sheet.	lude dimensions (L x W x D) of the pit, and	dimensions (L x W), and area in

SUPPLEMENT PG. 2

PROPOSED KNOB CREEK N - 13HU



NOTE: CLOSEST WATER PURVEYOR GRANDVIEW - DOOLIN PUBLIC SERVICE DISTRICT PROCTOR, WV

LAT: 39.7137712 LON: -80.8258327

LOCATED: S 59"36"12" W AT 39,574.55" FROM THE CENTER OF KNOB CREEK N WEST PADL GCATION



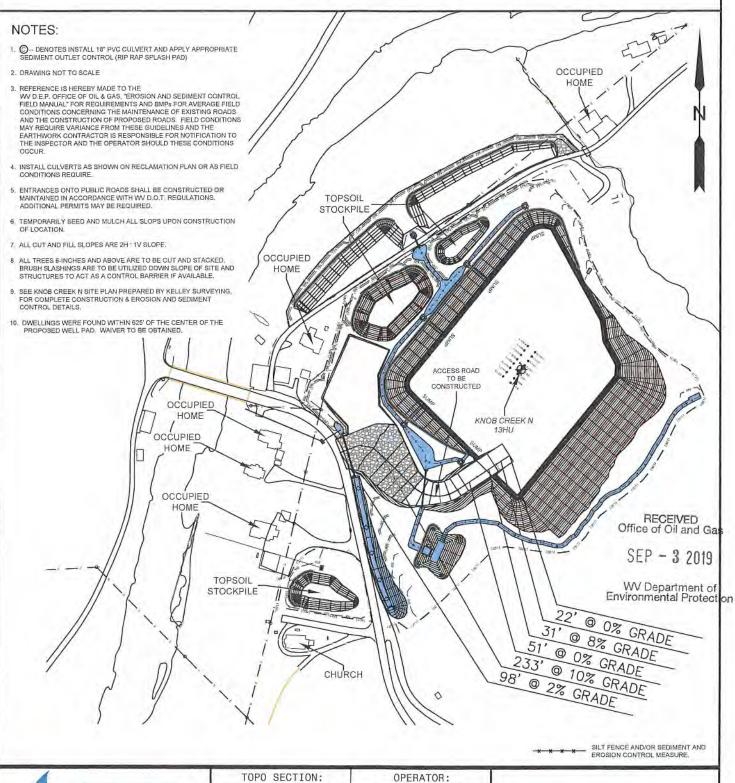
Lanu	o cheryy Development
	Solutions from the ground up.
P.O. Box 150	 12 Vanhorn Drive ■ Glenville, WV 26351 ■ (304) 462-5634
	www.slswv.com

Í	TOPO S	ECTION:	OPERA	ATOR:
	GLEN EAS	STON 7.5'	PREPARED FOR	
9	COUNTY	DISTRICT	SUITE 200	
1	MARSHALL	MEADE		
9	DRAWN BY	JOB NO.	DATE	SCALE
	K.G.M.	8789	08/20/2019	1" - 2000'



SUPPLEMENT PG. 1

PROPOSED KNOB CREEK N - 13HU





Land	& Energy Development
	Solutions from the ground up.
P.O. Box 150	 12 Vanhorn Drive • Glenville, WV 26351 • (304)-462-5634
	way welshy com

TOPO SE	CTION:	OPERAT	OR:
GLEN EAS	STON 7.5'	PREPARED FOR: TUG HILL OPERA	
COUNTY	DISTRICT	380 SOUTHPOINT	TE BLVD
MARSHALL MEADE		SUITE 200 CANONSBURG, I	PA 15317
DRAWN BY	JOB NO.	DATE	SCALE
K.G.M.	8789	08/20/2019	NONE





Well Site Safety Plan Tug Hill Operating, LLC

J8/22/19

Well Name: Knob Creek N-13HU

Pad Location: Knob Creek

Marshall County, West Virginia

UTM (meters), NAD83, Zone 17:

NORTHING - 4,402,373.78

EASTING - 525,227.23

August 2019

RECEIVED Office of Oil and Gas

SEP - 3 2019

WV Department of Environmental Protection

KNOB CREEK N LEASE UTICA UNIT - 599.24 AC± WELL 13HU TUG HILL OPERATING

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-11-1	GERALD F. PADLOW	1.033
9-13-10	ARTHUR L. MOORE	3.96
9-13-13.1	THOMAS JOHN FOX	0.827
9-14-2	MICHAEL L. ALVAREZ	0.75
9-14-35	PAUL G. FOX	0,338
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.
9-16-14	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

-T.H.

T.H. LATITUDE 39°47'30' B.H. LATITUDE 39°47'30'

80°42'30"

LONGITUDE

T.H. B.H.

B.H.

PARCEL ACRES

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD'83 S.P.C.(FT) N. 464,854.03 E. 1,629,677.64 LAT-(N) 39.770021 LONG-(W) 80.705446 NAD'83 GEO.

NAD'83 UTM (M) N. 4,402,273.78 E. 525,227.23

<u>LANDING POINT</u> NAD'83 S.P.C.(FT) N. 465,175.1 E. 1,631,361.9

LAT-(N) 39.770964 LONG-(W) 80.699469 N. 4,402,380.2 E. 525,738.7

<u>BOTTOM HOLE</u> NAD'83 S.P.C.(FT) N. 470,393.3 E. 1,628,406.2 NAD'83 GEO. LAT-(N) 39.785180 LONG-(W) 80.710234 NAD'83 UTM (M) N. 4,403,954.9

TAG

NAD'83 GEO.

NAD'83 UTM (M)

E. 524,811.7

TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
В	JOHN F. CUNNINGHAM, ET UX	9-14-22	75.22
			0.35
C	WILLIAM C. GROFT, ET UX	9-14-30	
D	MARGARET K. FOX (LIFE)	9-14-38	0.631
E	MARGARET K. FOX (LIFE)	9-14-36	1600 SQ. FT.
F	MARGARET K. FOX (LIFE)	9-14-39	8675 SQ. FT.
G	DAVID LEE FRANKLIN	9-14-44	2.913
Н	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
1	IOHN C, LAGOS, ET UX	9-14-42	1.87
1	PATRICK J. SCHELLHASE TRUST	9-14-11.3	23,424
K	CHARLES R. SHELLHASE, ET UX	9-14-28	3.029
L	ANDREW FASOULETOS, ET UX	9-14-29	0.209
M	PATRICK J. SCHELLHASE	9-14-27	3.004
N	ANDREW FASOULETOS, ET UX	9-14-29.1	1.171
0		9-14-32	0.583
	TWILA C. COFFELD		
P	JAMES G. FOX	9-14-43	0,66
Q	TWILA C. COPPIELD	9-14-32.1	0.184
R	MARGARET K. FOX (LIFE)	9-13-13	15.513
S	JAMES E. PEBLMAN	9-14-53	0,555
T			0.439
	JAMES E. PEELMAN	9-14-52	
U	RICHARD L. HARVETH, ET UX	9-14-54	1,649
V	GEORGE R. TAYLOR, ET UX	9-14-44.1	4,423
W	WILFORD F. NELSON, JR., ET UX	9-14-31	0.954
х	MARGARET K. FOX (LIFE)	9-14-46	18.888
v		9-14-50	0.707
	RONALD MARSH		
Z	MICHAEL L. & CHERYL J. ACREE	9-14-47	0.355
AA	GEORGER, TAYLOR, ET UX	9-14-45	10.98
BB	MARTHA JANE FAZZARO	9-14-46.1	1.512
CC	GEORGE R. TAYLOR, ET UX	9-14-51	1.621
DD	NILA JEAN FROHNAPFEL	9-13-12	91.1007
EE			
	MARGARET K. FOX (LIFE)	9-13-14	3,00
FF	DANIEL JAY FITZWATER	9-13-20	105,5
GG	ROBERT I. DUFFEY - LIFE	9-14-10	25/100 AC.
HH	MICHAEL L. & CHERYL J. ACREE	9-14-48	0.473
11	LOYE A. BLAKE, JR.	9-14-11.2	4.00
11	MICHAEL L. & CHERYL J. ACREE	9-14-49	0.118
KK	JOHN T. ERAZMUS, III	9-14-7	0.25
LL	JOHN E. DUFFEY, ET UX	9-14-9	2/5 A.C.
MM	JOHNNY C. HOLCOMB & JOHNNY C. HOLCOMB, II	9-14-8	2/5 A.C.
NN	HOY GLENN CROW	9-14-11	141.559
00	MICHAEL L. ALVAREZ	9-14-6	120 X 200
PP	MICHAEL L. ALVAREZ	9-14-5	200° X 60°
1.1	WILCHARD I. ALVANDE	3-4-1-2	
QQ	MICHAEL L. ALVAREZ	9-14-4	3 PCLS &
0.41		100000	1/8 AC.
RR	SAMUEL & HEATHER SUHODOLKI	9-14-1	86.48
SS	ROBERT T. & BARBARA A. ANKROM	9-13-12.1	2.632
TT	ELEANOR M. FOX EST.	9-13-18	30.00
UU	KENNETH N. & TERESA A. SMERTNECK	9-13-11	112.67
VV	MICHAEL L. ALVAREZ	9-14-1.1	1.6
ww	MICHAEL L, ALVAREZ	9-14-3	N PT PCLS
41.41	MINISTERIAL IN TANDA	3-14-3	3-4-5
XX	KENNETH N. & TERESA A. SMERTNECK	9-14-1.2	1.02
YY	SAMUEL & HEATHER SUHODOLKI	9-13-11.1	0.49
22	MARGARET K. FOX (LIFE)	9-11-2	84.378
A0	KENNETH P. GATEWOOD, ET UX	9-11-2,1	0.308
AL	GERALD PADLOW, ET UX	9-11-2.2	0.291
A2	RAY A. WHETZAL, JR., ET AL	9-10-13	71.119
A3	WILLIAM MCCONNELL	9-10-14	15.00
	THE OPENING METAL AND ALL		
Α4	J. F. CROW ESTATE, ET AL	9-10-9	17 AC, 14 P
	J. F. CROW ESTATE, ET AL	9-10-11	60.00
A5		9-10-15	44.00
A6	JOSEPH MICHAEL BONENE		
A6			1.00
A6 A7	DAVID & PAMELA SCHIMMEL	9-10-7	1.00
A6 A7 A8	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER	9-10-7 9-10-8	2.00
A6 A7 A8 A9	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER KENNETH W. MASON EST.	9-10-7 9-10-8 9-10-6	2.00 43.00
A6 A7 A8	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER	9-10-7 9-10-8	2.00
A6 A7 A8 A9 B0	DAVID & PAMELA SCHIMMEL, BRENT ALLEN CONNER. KENNETH W. MASON EST. RONALD KETTH & RUBY MASON	9-10-7 9-10-8 9-10-6 9-6-12	2.00 43.00 59.00
A6 A7 A8 A9 B0 B1	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER KENNETH W. MASON EST. RONALD KEITH & RUBY MASON XENNETH W. MASON EST.	9-10-7 9-10-8 9-10-6 9-6-12 9-10-5	2.00 43.00 59.00 51.62
A6 A7 A8 A9 B0 B1 B2	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER KENNETH W. MASON EST. RONALD KEITH & RUBY MASON KENNETH W. MASON EST. KENNETH W. MASON EST.	9-10-7 9-10-8 9-10-6 9-6-12 9-10-5 9-6-14	2.00 43.00 59.00 51.62 19.37
A6 A7 A8 A9 B0 B1 B2 B3	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER KENNETH W. MASON EST. RONALD KEITH & RUBY MASON KENNETH W. MASON EST. EKNNETH W. MASON EST. J. P. CROW ESTATE, ET AL.	9-10-7 9-10-8 9-10-6 9-6-12 9-10-5 9-6-14 9-6-15	2.00 43.00 59.00 51.62 19.37 55.23
A6 A7 A8 A9 B0 B1 B2	DAVID & PAMELA SCHIMMEL BRENT ALLEN CONNER KENNETH W. MASON EST. RONALD KEITH & RUBY MASON KENNETH W. MASON EST. KENNETH W. MASON EST.	9-10-7 9-10-8 9-10-6 9-6-12 9-10-5 9-6-14	2:00 43:00 59:00 51:62 19:37

NOTES ON SURVEY

- 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'.

 MELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

 MELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

 MELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

 MELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

 SASED ON WY DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS. PROPOSED LATERAL OR TOP HOLE OF KNOB CREEK N−13HU IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF EXISTING WELLS PROPOSED KNOB CREEK N−11HU, PROPOSED KNOB CREEK N−12HU, PROPOSED KNOB CREEK S−14HU, PROPOSED KNOB CREEK S−16HU, HEAVEN HILL 2W−12HU (47−051−01952), HEAVEN HILL 2W−12HU (47−051−01952), HEAVEN HILL 2W−13HU (47−051−01952), KEITH STERN N−14HU (47−051−02241), KEITH STERN N−16HU (47−051−02242), KEITH STERN S−18HU (47−051−02243), KEITH STERN S−18HU (47−051−02244), PROPOSED KEITH STERN N−13HU, PROPOSED KEITH STERN N−17HU.



MINIMUM DEGREE

HORIZONTAL & VERTICAL

CONTROL DETERMINED BY

OF ACCURACY

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.

PS 849

1 / 2500

No. 849
STATE OF
STONAL SURMING FILE NO. 8789P13HUR.dwg

KNOB CREEK N-13HU REV6

1" = 20001 SCALE DGPS (SURVEY GRADE TIE TO CORS NETWORK) (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE_ _ ,20 __ SEPTEMBER 3

REVISED_OCTOBER 14, 2019

OPERATORS WELL NO. KNOB CREEK N-13HU API

WELL47 051

STATE

02269 COUNTY PERMIT

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



WELL TYPE: OIL	GAS_X_ INJECTION	WASTE _ DISPOSAL	IF "GAS" PRODUCTIONX	STORAGE	DEEP X SHALLOW
LOCATION: ELEVATION	GROUND = 733.40' 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, E	ET AL - SEE WW-6A1		ACREAGE	65.824±
PROPOSED WORK	avelle v			LEASE NO	SEE WW-6A1

DRILL DEEPER _____ REDRILL ____ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION__ PERFORATE NEW FORMATION _____ PLUG AND ABANDON ____ CLEAN OUT AND REPLUG_ OTHER

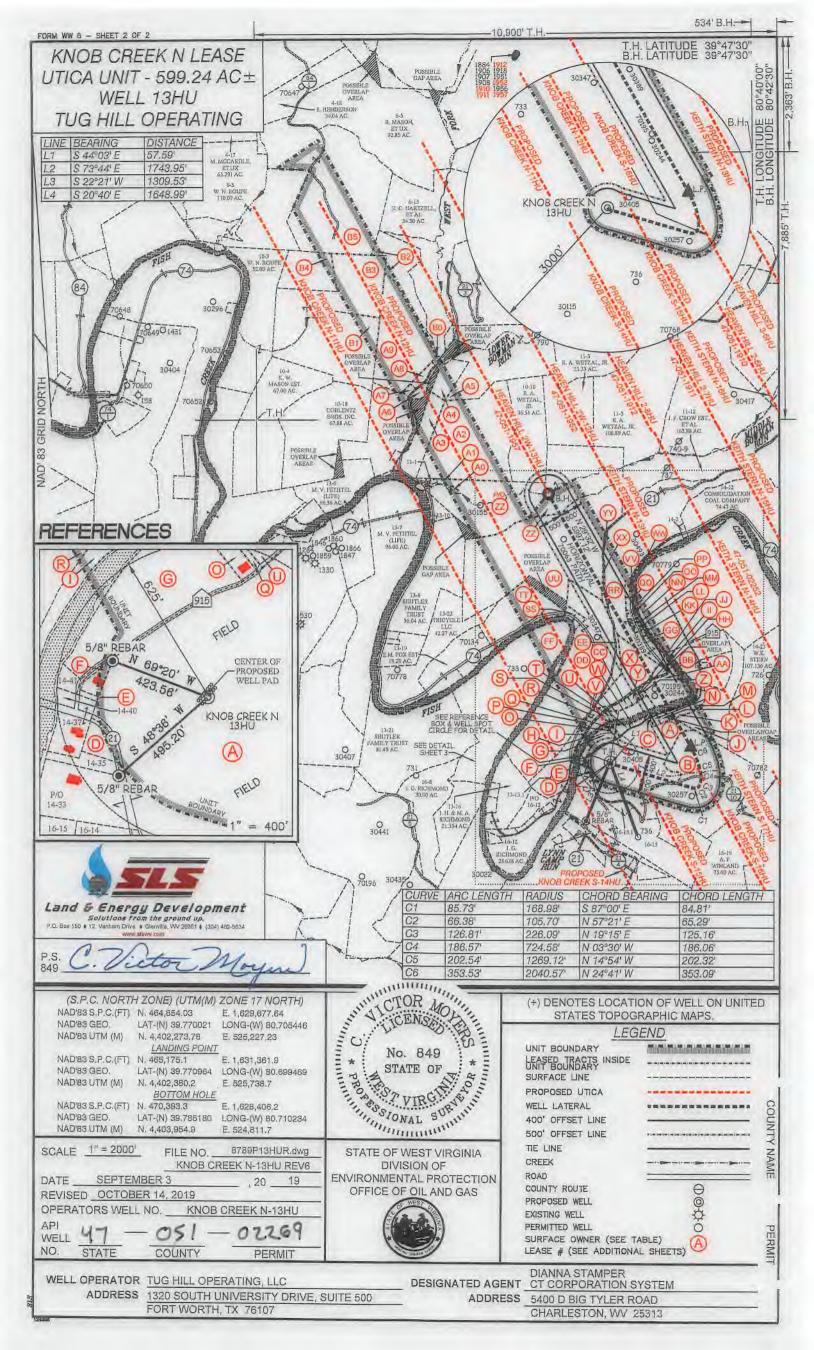
PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION _ POINT PLEASANT ESTIMATED DEPTH_ TVD: 11,3327 TMD: 18,012

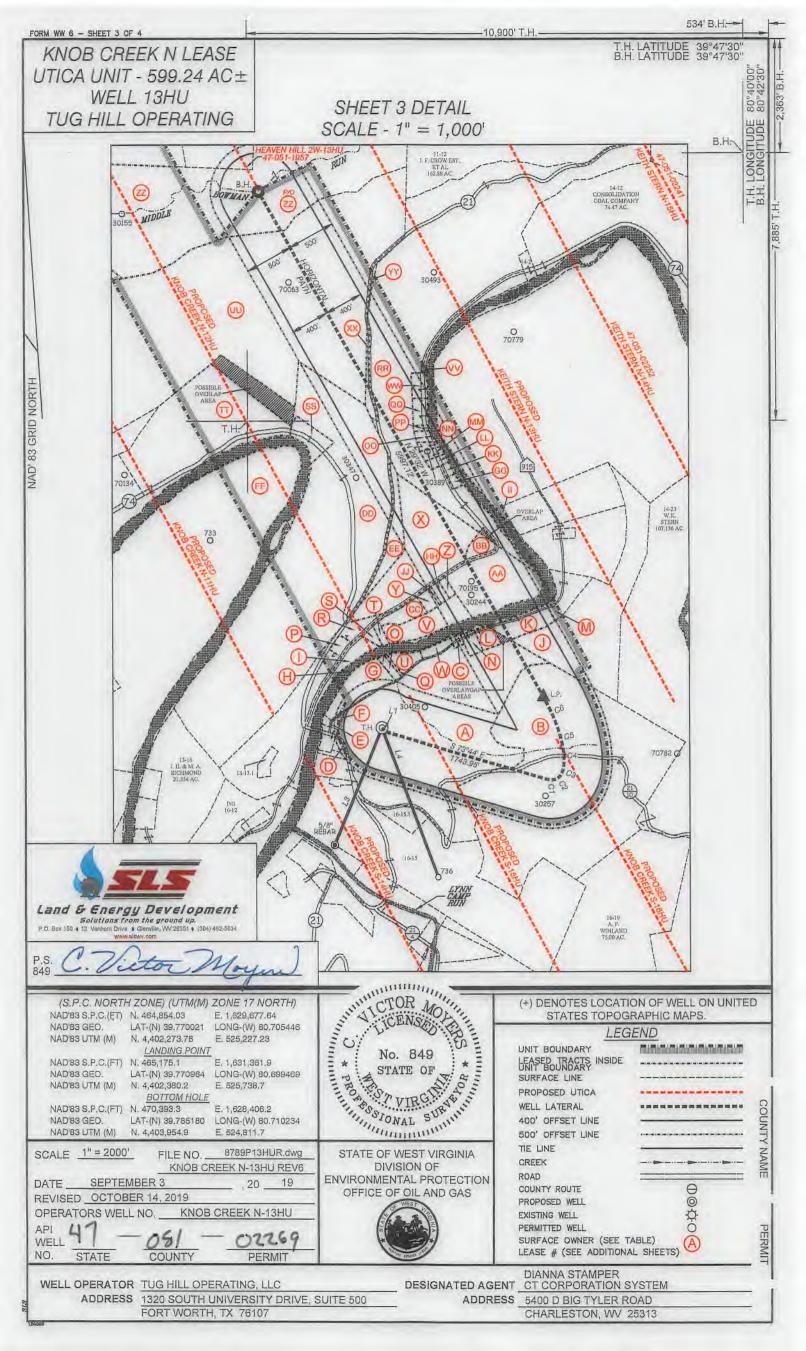
WELL OPERATOR TUG HILL OPERATING, LLC

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





KNOB CREEK N LEASE UTICA UNIT - 599.24 AC± WELL 13HU TUG HILL OPERATING



NO.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Bo	
1	10*47051.219.1	Α	9-14-33	DAVID LEE FRANKLIN	937	385
2	10*16479	В	9-14-22	JOHN F CUNNINGHAM AND BERNEICE K CUNNINGHAM	826	88
3	10*47051.219.1	C	9-14-30	DAVID LEE FRANKLIN	937	385
4	10*47051.243.1	D	9-14-38	MARY A FOX, ET AL	879	332
5	10*47051.219.1	E	9-14-36	DAVID LEE FRANKLIN	937	385
6	10*47051.219.1	F	9-14-39	DAVID LEE FRANKLIN	937	385
7	10*47051.219.1	G	9-14-44	DAVID LEE FRANKLIN	937	385
8	10*23458	н	FISH CREEK - WV	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	1019	373
9	10*19538	- 1	9-14-42	JOHN C LAGOS AND CYNTHIA MLAGOS, ET AL	936	531
10	10*23053	1	9-14-11.3	CE YOUNG	63	146
11	10*23053	К	9-14-28	CE YOUNG	63	146
**				THE ANDREW & KAREN FASOULETOS 2017 IRREVOCABLE TRUST	7 6 1	
12	10*22394	E.	9-14-29	DATED SEPT 14 2017	964	513
13	10*23053	М	9-14-27	CE YOUNG	63	146
14.0	40 23033		22727	THE ANDREW & KAREN FASOULETOS 2017 IRREVOCABLE TRUST	7.5	
14	10*22394	N	9-14-29.1	DATED SEPT 14 2017	964	513
15	10*47051,219,1	0	9-14-32	DAVID LEE FRANKLIN	937	385
_		P			938	245
16	10*18732		9-14-43	SHERRILL M LEAVERS AND JAMES H LEAVERS, ET AL		385
17	10*47051.219.1	Q	9-14-32.1	DAVID LEE FRANKLIN	937	-
18	10*18732	R	9-13-13	SHERRILL M LEAVERS AND JAMES H LEAVERS, ET AL	938	245
19	10*19565	5	9-14-53	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	947	566
4.2	10 19303	a	U AT JU	HIGHWAYS, ET AL	-,/1	200
20	10*19565	Т	9-14-52	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	947	566
20	10-19503		9-14-52	HIGHWAYS, ET AL	247	300
21	10*15523	U	9-14-54	RICHARD L HARVETH AND SANDRA J HARVETH	729	538
				WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF		
22	10*19565	V	9-14-44.1	HIGHWAYS, ET AL	947	566
23	10*47051,219,1	W	9-14-31	DAVID LEE FRANKLIN	937	385
24	10*18298	X	9-14-46	MAUREEN GREGG, ET AL	929	273
4.4	10 10230	^	3-14-40	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	200	212
25	10*19565	Υ	9-14-50	Production of the Production of the Control of the Production of the Control of t	947	566
	-	_	-	HIGHWAYS, ET AL		-
26	10*19565	Z	9-14-47	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	947	566
			-	HIGHWAYS, ET AL		
27	10*19565	AA	9-14-45	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	947	566
4,7	10 15505	00	2 24.42	HIGHWAYS, ET AL	2.11	500
28	10*18298	BB	9-14-46.1	MAUREEN GREGG, ET AL	929	273
20		-	044.54	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	047	
29	10*19565	CC	9-14-51	HIGHWAYS, ET AL	947	566
30	10*24858	DD	9-13-12	NILA JEAN FROHNAPFEL	1028	119
31	10*47051.243.1	EE	9-13-14	MARY A FOX, ET AL	879	333
32	10*17193	FF	9-13-20	JOHN P. ICARD, ET AL	716	12
33	10*19621	GG	9-14-10	MARY RUTH FROHNAPFEL, ET AL	938	595
22	10 15021	00	5-14-10	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	330	35.
34	10*19565	HH	9-14-48		947	566
21	40402050	- 11	044440	HIGHWAYS, ET AL		***
35	10*23053	- 41	9-14-11.2	CEYOUNG	63	146
36	10*19565	JJ	9-14-49	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF	947	566
- 01	12 4 July 24 CV2	- 25	- CX / S	HIGHWAYS, ET AL	-	-
37	10*19621	KK	9-14-7	MARY RUTH FROHNAPFEL, ET AL	938	599
38	10*19621	LL	9-14-9	MARY RUTH FROHNAPFEL, ET AL	938	595
39	10*19621	MM	9-14-8	MARY RUTH FROHNAPFEL, ET AL	938	599
40	10*23053	NN	9-14-11	CEYOUNG	63	146
41	10*19621	00	9-14-6	MARY RUTH FROHNAPFEL, ET AL	938	595
42	10*19621	PP	9-14-5	MARY RUTH FROHNAPFEL, ET AL	938	595
43	10*19621	QQ	9-14-4	MARY RUTH FROHNAPFEL, ET AL	938	59
44	10*19621	RR	9-14-1	MARY RUTH FROHNAPFEL, ET AL	938	595
45	10*19942	SS	9-13-12.1	ROBERT T ANKROM & BARBARA A ANKROM	949	20
46	10*18351	TT	9-13-18	MARK ALLEN LENENBERG, ET AL	931	399
47	10*18265	UU	9-13-11	KENNETH NELSON SMERTNECK AND TERESA ANN SMERTNECK	933	103
48	10*19621	VV		MARY RUTH FROHNAPFEL, ET AL		
			9-14-1.1	THE RESERVE OF THE PARTY OF THE	938	595
49	10*19621	WW	9-14-3	MARY RUTH FROHNAPFEL, ET AL	938	598
50	10*19621	XX	9-14-1.2	MARY RUTH FROHNAPFEL, ET AL	938	59
51	10*18265	YY	9-13-11.1	KENNETH NELSON SMERTNECK AND TERESA ANN SMERTNECK	933	103
52	10*47051.243.1	ZZ	9-11-2	MARY A FOX, ET AL	879	33:
53	10*47051.272.0	A0	9-11-2.1	KENNETH P GATEWOOD AND MARY M GATEWOOD	888	60
54	10*16526	A1	9-11-2.2	JUDITH PADLOW AKA JUDI L PADLOW	957	13
55	10*15567	A2	9-10-13	VICKIE MASON, ET AL	680	40
56	10*15600	A3	9-10-14	WILLIAM D MCCONNELL	715	44
57	10*15510	A4	9-10-9	ELAINE PHELPS ET VIR, ET AL	718	32
58	10*15510	A5	9-10-11	ELAINE PHELPS ET VIR, ET AL	718	32
59	10*47051.117.1	A6	9-10-15	JOSEPH MICHAEL BONENE	940	35
60	10*47051.117.1	A7	9-10-7	JOSEPH MICHAEL BONENE	940	35
61	10*47051.117.1	A8	9-10-8	JOSEPH MICHAEL BONENE	940	
62						35
_	10*15504	A9	9-10-6	JAMES MASON ET AL	692	46
63	10*15525	BO	9-6-12	RONALD KEITH MASON ET UX, ET AL	772	44
64	10*15504	B1	9-10-5	JAMES MASON ET AL	692	46
65	10*15504	B2	9-6-14	JAMES MASON ET AL	692	46
66	10*15510	B3	9-6-15	ELAINE PHELPS ET VIR, ET AL	718	326
67	10*15464	B4	9-6-16	MARY ALICE THOMAS MELLOTT, ET AL	906	527
68	10*19116	B5	9-6-4	ROBERT LEE CARNEY AND BONNIE ANNE CARNEY	682	255

F	FILE NO. <u>8789P13HUR.dwg</u> KNOB CREEK N-13HU REV	6
DATESEPTEMBE	R 3 , 20	3
REVISED OCTOBER 1	14, 2019	_ 1
OPERATORS WELL NO	KNOB CREEK N-13	10
WELL 47 — STATE	COUNTY PERMIT	_ '

No. 849
STATE OF
STONAL SURVINIONAL SURVIN

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



P.S.

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

COUNTY NAME

CHARLESTON, WV 25313

WW-6A	Į
(5/13)	

Operator s well ino.	Operator's Well No.	Knob Creek N-13HU
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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			W 15 16 15	D 1/D
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

*See attached pages

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

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

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

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

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

CERTIFICATE OF CONSENT AND EASEMENT

The state of the s

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

Executed this 29 th day of March, 2018.

David Lee Franklin

Linda Lee Franklin

STATE OF WEST VIRGINIA

SS:

COUNTY OF MARSHALL

On this, the Tar-day of March, 2018, before me, a notary public, the undersigned officer, personally appeared David Lee Franklin, known to me (or satisfactorily proven) to be the person who's name is subscribed to the within instrument, and acknowledged that he/she executed the same for purposed therein contained.

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

STATE OF WEST VIRGINIA ERIC M. GORDON 514 7th St. Moundsville, WV 26041 My Commission Expires January 18, 2022

My Commission Expires: To 18, 2022
Signature/Notary Public: Exc. Gordon

STATE OF WEST VIRGINIA

SS:

COUNTY OF MARSHALL

On this, the 21th day of February, 2018, before me, a notary public, the undersigned officer, personally appeared Linda Lee Franklin, known to me (or satisfactorily proven) to be the person who's name is subscribed to the within instrument, and acknowledged that he/she executed the same for purposed therein contained.

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

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
ERIC M. GORDON
514 7th St.
Moundsville, WV 28041
My Commission Expires January 18, 2022

This instrument prepared by: WV Oil and Gas Conservation Commission 601 57th Street Charleston, WV 25304 My Commission Expires: Ja 18 2022 Signature/Notary Public: Jack Corden

Marshall County

Jan Pest, Clerk

Recording Cost \$

Instrument 1439948

05/03/2018 @ 02:09:35 PM

RIGHT OF WAY W/O CONSIDERATIO Book 970 @ Page 241 Pages Recorded 2

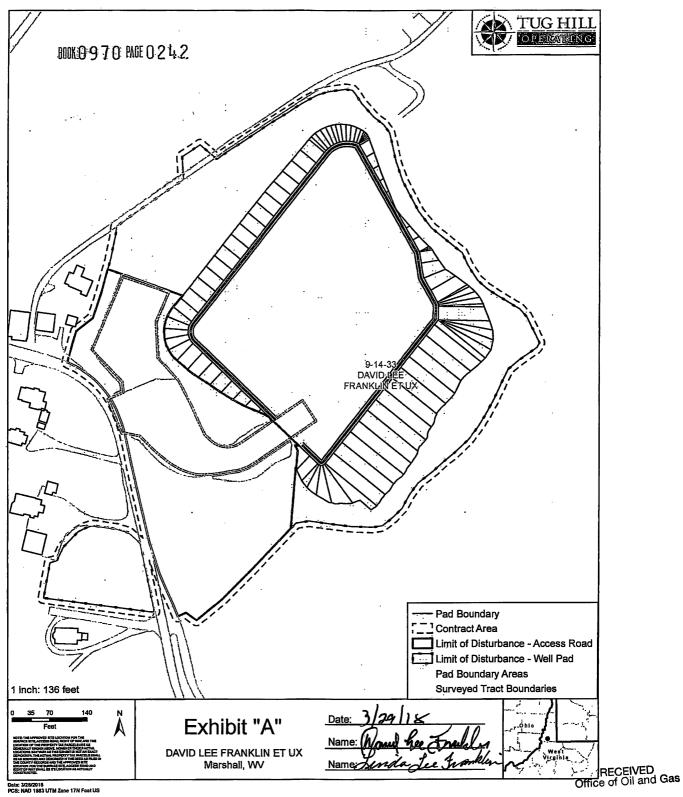
11.00

RECEIVED
Office of Oil and Gas

SEP - 3 2019

WV Department of Environmental Protection

4838-2618-8605v2



STATE OF WEST VIRGINIA, MARSHALL COUNTY, SCT.:

SEP - 3 2019

- Amont of	
I, JAN PEST, Clerk of the County Commission of said County, do hereby certify that the annexed writing, bearing Department of Environmental Protection	on
date on the	
the above certificate as to the parties therein named this 3rd day of May 2018 at 2:09 o'clock P.M.	
the above continuate as to the parties motion named this Originally of	
TESTE: Land Van Clerk.	

WW-6A1 Supplement

Operator's Well No. Knob Creek N - 13HU

	-	_		N/A	N/A	N/A	×	44	- /×+	TH TAPLOKATION LLC	TITOX CITY XII HIVI INII			
N/A	N/A	N/A	N/A	N/A	N/A	N/A	348	940	1/8+	TH EXPLORATION LLC	HOWARD & AND CLARA J RICHMOND	, -	9-14-43	10*19402
N/A	N/A	N/A	N/A	N/A	N/A	N/A	346	940	1/8+	TH EXPLORATION LLC	JOYCE A WILSON AND D MURPHY WILSON	۰	9-14-43	10*19401
N/A	N/A	N/A	N/A	N/A	N/A	N/A	221	938	1/8+	TH EXPLORATION LLC	DOROTHY JEAN HUSTON AND KENNETH HUSTON	٦	9-14-43	10*18736
N/A	N/A	N/A	N/A	N/A	N/A	N/A	344	940	1/8+	TH EXPLORATION LLC	NILA JEAN FROHNAPFEL	7	9-14-43	10*19418
N/A	N/A	N/A	N/A	N/A	N/A	N/A	243	938	1/8+	TH EXPLORATION LLC	DIANE E AND DENNIS P FOWLER	P	9-14-43	10*18735
N/A	N/A	N/A	N/A	N/A	N/A	N/A	247	938	1/8+	TH EXPLORATION LLC	KENNETH EMERY AND MARTHA LEMERY	P	9-14-43	10*18734
N/A	N/A	N/A	N/A	N/A	N/A	N/A	245	938	1/8+	TH EXPLORATION LLC	SHERRILL M LEAVERS AND JAMES H LEAVERS	Р	9-14-43	10*18732
N/A	N/A	N/A	N/A	N/A	N/A	N/A	385	937	1/8+	TH EXPLORATION LLC	DAVID LEE FRANKLIN	0	9-14-32	10*47051.219.1
N/A	N/A	N/A	N/A	N/A	N/A	N/A	513	964	1/8+	TH EXPLORATION LLC	THE ANDREW & KAREN FASOULETOS 2017 IRREVOCABLE TRUST DATED SEPT 14 2017	z	9-14-29.1	10*22394
11/415	Company: 19/546 11/	11, 2000	Company.	Co: 515/88	Corporation: 505/406	374/234	146	ස	1/8+	TG STILES	CE YOUNG	Z	9-14-27	10*23053
Gas Company LLC:	Gas	Production Inc: July	into CNG Producing	CNG Development	Transmission	Spply Corporation:								
merged with & into CNX	_	Exploration &		Transmission Corp. to	Consolidated Gas	Consolidated Gas								
Consol Gas Company		name to Dominion	CNG Development	Consolidated Gas	Supply Corporation to	Company to								
		Company changed			Consolidated Gas	Hope Natural Gas								
N/A	N/A	N/A	N/A	N/A	N/A	N/A	513	964	1/8+	TH EXPLORATION LLC	THE ANDREW & KAREN FASOULETOS 2017 IRREVOCABLE TRUST DATED SEPT 14 2017	_	9-14-29	10*22394
11/415	Company: 19/546 11/	11, 2000	Company.	Co: 515/88	Corporation: 505/406	374/234	146	63	1/8+	TG STILES	CE YOUNG	~	9-14-28	10*23053
Gas Company LLC:	its name to Consol Gas Gas	Production Inc: July	into CNG Producing	CNG Development	Transmission	Spply Corporation:								
merged with & into CNX	Production Inc. changed me	Exploration &		Transmission Corp. to	Consolidated Gas	Consolidated Gas			_					
Consol Gas Company		name to Dominion	CNG Development	Consolidated Gas	Supply Corporation to	Company to		_						
		Company changed			Consolidated Gas	Hope Natural Gas								
11/415	Company: 19/546 11/	11, 2000	Company.	Co: 515/88	Corporation: 505/406	374/234	146	63	1/8+	TG STILES	CE YOUNG	_	9-14-11.3	10*23053
Gas Company LLC:	Gas	Production Inc: July	into CNG Producing	CNG Development	Transmission	Spply Corporation:								
merged with & into CNX	-	Exploration &		Transmission Corp. to	Consolidated Gas	Consolidated Gas								
Consol Gas Company		name to Dominion	CNG Development	Consolidated Gas	Supply Corporation to	Company to			_					
		Company changed			Consolidated Gas	Hope Natural Gas								
14/17	N/N	CNG Producing	N/A	N/A	N/A	N/A	566	94/	1/8+	IH EXPLORATION LLC	DIVISION OF HIGHWAYS	-	9-14-42	10+19565
N/A	N/6	N	N/A	N/2	21/2	21/2	7	24	1 10	THE EVEL OF ATION INC	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,	-		10*10
N/A	N/A	N/A	N/A	N/A	N/A	N/A	531	936	1/8+	TH EXPLORATION LLC	OHN C LAGOS AND CYNTHIA M LAGOS	-	9-14-42	10*19538
N/A	N/A	N/A	N/A	N/A	N/A	N/A	373	1019	1/8+	TH EXPLORATION LLC	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	Н	wv	10*23458
													FISH CREEK -	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	385	937	1/8+	TH EXPLORATION LLC	DAVID LEE FRANKLIN	G	9-14-44	10*47051.219.1
N/A	N/A	N/A	N/A	N/A	N/A	N/A	385	937	1/8+	TH EXPLORATION LLC	DAVID LEE FRANKLIN	T	9-14-39	10*47051.219.1
N/A	N/A	N/A	N/A	N/A	N/A	N/A	385	937	1/8+	TH EXPLORATION LLC	DAVID LEE FRANKLIN	E	9-14-36	10*47051.219.1
N/A	N/A	N/A	N/A	N/A	N/A	N/A	61	876	1/8+	TH EXPLORATION LLC	THOMAS J FOX	D	9-14-38	10*47051.243.6
N/A	N/A	N/A	N/A	N/A	N/A	N/A	58	876	1/8+	TH EXPLORATION LLC	LOUIS T FOX AND KAREN A FOX	۰	9-14-38	10*47051.243.5
N/A	N/A	N/A	N/A	N/A	N/A	N/A	я	876	1/8+	TH EXPLORATION LLC	DAVID E FOX	5	9-14-38	10*47051 243 4
N/A	N/A	N/A	N/A	N/A	N/A	N/A	338	879	1/8+	TH EXPLORATION LLC	MARK H FOX	0	9-14-38	10*47051.243.3
N/A	N/A	N/A	N/A	N/A	N/A	N/A	335	879	1/8+	TH EXPLORATION LLC	PAUL G FOX	D	9-14-38	10*47051.243.2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	332	879	1/8+	TH EXPLORATION LLC	MARY A FOX	D	9-14-38	10*47051.243.1
N/A	N/A	N/A	N/A	N/A	N/A	N/A	385	937	+	TH EXPLORATION LLC	DAVID LEE FRANKLIN	^	9-14-30	10*47051.219.1
32/398		N/A	N/A	N/A	N/A	N/A	8	826	1/8+	FOSSIL CREEK OHIO, LLC	CUNNINGHAM	В	9-14-22	10*16479
Gulfport Energy Corp:											JOHN F CUNNINGHAM AND BERNEICE K			
Fossil Creek Ohio LLC to	Fossil Creek Ohio LLC to Fos		•											
					.4	.45.	- 8	+	1,0			:		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	1/8+ 937 385	937	1/8+	TH EXPLORATION LLC	DAVID LEE FRANKLIN	» į	9-14-33	10*47051 219.1
Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	OOK/Page	v i Deeu i	10401	I GIGIILEE, LESSEE, Etc.	Cigiita: 152901: 1564			

Operator's Well No. Knob Creek N - 13HU

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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3 297	1/8+ 1033	TH EXPLORATION LLC 1,	P SARAH BETH PREWITT ET AL	9-14-43	10*25442
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	┝	+	-	RICARDO THOMAS MAYA	9-14-43	10*24739
	N/A	N/A	N/A	N/A	N/A	N/A	N/A		<u> </u>		DUDLEY PORTER THAYER MONTAGUE JR BY DAVID C WHITE, ESQ, GUARDIAN AD LITEM	9-14-43	10*23578
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	253	1/8+ 1009		JOHN WILLIAM MACKENZIE MONTAGUE BY DAVID C P WHITE, ESQ. GUARDIAN AD LITEM	9-14-43	10*23577
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	249	_	TH EXPLORATION LLC 1,		9-14-43	10*23559
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17			R	9-14-43	10*23312
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	\dashv	4	PATRICIA L BECK	9-14-43	10*23299
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+		-	LISA MCMANUS	9-14-43	10*23188
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	78	+	1	CAROLYN FAY BENNETT	9-14-43	10*23154
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	+	+	RETA I GRIFFIN AND MARTIN A GRIFFIN	9-14-43	10*23146
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	1/8+ 984	TH EXPLORATION LLC 1	WILLIAM RENNETT	9-14-45	10*23145
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	86	+	+		9-14-43	10*23144
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	┝	╁	-	JANICE L MASLOWSKI AND FLOYD F MECHLING	9-14-43	10*22545
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	_	H		PHYLLIS M RADER	9-14-43	10*22517
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	_	1/8+ 964		STEVEN R MCCLINTOCK	9-14-43	10*22463
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	132	1/8+ 963	TH EXPLORATION LLC 1,	P JAMES RICHMOND AND CINDY L RICHMOND T	9-14-43	10*22458
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				MOND	9-14-43	10*22378
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	+	+	MONTY W BAILEY AND MARTHA E BAILEY	9-14-43	10*22377
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	352	1/8+ 961	TH EXPLORATION LLC 1	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	9-14-43	10*22121
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	+		AND GREGORI G WROBEL	9-14-43	10 2211/
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	╁	+	SYLVIA D WEST	9-14-43	10*22113
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	497	+-	-	OPAL V BUCKMASTER	9-14-43	10*21983
	N/A	N/A	N/A	N/A	N/A	N/A	N/A		H	-	WILLIAM R DODD AND SHIRLEY A DODD	9-14-43	10*21964
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28	Н	TH EXPLORATION LLC 1		9-14-43	10*21963
	N/A	N/A	N/A	N/A	N/A	N/A	N/A		1/8+ 960		P THEODORE F MASLOWSKI AND ANITA MASLOWSKI	9-14-43	10*21956
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	625	1/8+ 959	TH EXPLORATION LLC 1	P FIRST PRESBYTERIAN CHURCH OF CLARKSBURG T	9-14-43	10*21838
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	-		DONALD FURLONG AND LISA K FURLONG	9-14-43	10*21507
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	290	1/8+ 957	TH EXPLORATION LLC 1	P DARLENA BRY AND LEE V BRY	9-14-43	10*21491
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	╀	+	╀	RONALD L WEST	9-14-43	10*21107
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<u> </u>	-		REVOCABLE LIVING TRUST	9-14-43	10*21105
	147.		14/22	2/2	2/2	N/A	N/A	101	1/0+ 20/1	IN EXPENDITION LLC	THE CALVIN O WILLIAMS & PATCY S WILLIAMS	Ch.hT.C	+0117 OI
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	╀	+	+		9-14-43	10*21104
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	╁	╁		THOMAS E DODD AND ANITA M DODD	9-14-43	10*21087
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		H	L	MARY D LING	9-14-43	10*21027
	N/A	N/A	N/A	N/A	N/A	N/A	N/A		1/8+ 945	TH EXPLORATION LLC 1	P DORIS L MASTERS AND ROY N MASTERS	9-14-43	10*19870
	N/A	N/A	N/A	N/A	N/A	N/A	N/A		\dashv		P SHIRLEY J DUFFY T	9-14-43	10*19869
	N/A	N/A	N/A	N/A	N/A	N/A	N/A					9-14-43	10*19868
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	434	1/8+ 944	TH EXPLORATION LLC 1	P DAVID A ROBINSON AND PATRICIA A ROBINSON T	9-14-43	10*19714
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	432	1/8+ 944	TH EXPLORATION LLC 1	P BARBARA C LEISHMAN AND DANNY K LEISHMAN T	9-14-43	10*19675
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	337	Н		ND RODNEY SHORT	9-14-43	10*19674
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		-		WILLIAM EMERY	9-14-43	10*19481
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	941 316	1/8+ 941	TH EXPLORATION LLC 1	ARDETH L PIPER AND PAUL E PIPER	9-14-43	10*19475
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Operator's Well No. Knob Creek N - 13HU

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9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	-	1 9-14-45	9-14-45	11 9-14-47	╁	9-14-47	11 9-14-50	╀	9-14-50	11 9-14-46	╁	┝	9-14-46	9-14-46	9-14-46	9-14-46	9-14-46	1 9-14-31	41 9-14-44.1	1 9-14-44.1	9-14-44.1	9-14-54	41 9-14-52	-	9-14-52	41 9-14-53	Н	9-14-53	9-13-13	9-13-13	9-13-13	cr-cr-6	0 10 10	9-13-13	Parcel
BB	T	1 BB	1 BB	T		1 BB			AA	A	2	l	Z	~		~	\dagger	×				T	×	-	8	1 <	1 V	1 V	C	-	ī	-		S				R	2		ZD	Tag
CHES INCT HOLDINGS INC		SANDRA SIBURT FROWEN & GEORGE FROWEN	L			ROBERT W ODOM AND CASSANDRA L ODOM	MAUREEN GREGG	D BETTY L STERN	DAVID LEE FRANKLIN	DIVISION OF HIGHWAYS	4-		DIVISION OF HIGHWAYS	+		DIVISION OF HIGHWAYS	_		D LYNDA L STEVENS	JAMES D STEVENS AND DOROTHY M STEVENS	TURGEON		CASSANDRA L ODOM	MAUREEN GREGG	DAVID LEE FRANKLIN	WILLIAM K STERN AND BETTY L STERN	DAVID LEE FRANKLIN	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	RICHARD L HARVETH AND SANDRA J HARVETH	WILLIAM K STERN AND BETTY L STERN		WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	WILLIAM K STERN AND BETTY L STERN		WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	SARAH BETH PREWITT ET AL		_	DUDLEY PORTER THAYER MONTAGUE JR BY DAVID C	AGUE BY DAVID C	WHITE, ESQ, GUARDIAN AT LITEM	\perp
IH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TRIENERGY HOLDINGS,	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	IN EXPLORATION LLC	TH EVRI OBATION I I C	TH EXPLORATION LLC	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/0+	1/0	1/8+	Royalty
949	944	938	938	938	937	929	929	894	937	947	894	937	947	894	937	947	894	937	949	949	944	937	929	929	937	894	937	947	729	894	937	947	894	937	947	1033	1025	1009	FOOT	1000	1009	Deed Book/Page
309	192	600	597	595	628	283	273	485	385	566	485	385	566	485	385	566	485	385	144	151	156	628	283	273	385	485	385	566	638	485	385	566	485	385	566	297	611	251	200	753	249	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N / A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21/2	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	A/N	A/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/2	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	147	N/A	N/A	Assignment
14/14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/2	N/A	N/A	Assignment
3/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	& Chevron USA Inc to TH n Exploration LLC: 36/148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/15	N/A	N/A	Assignment

10*19885	10*19883	10*19516	10*19349	10*18967	10*18527	10*18524	10*18472	10*18471	10*18470	10*18469	10*18456	10*18351	10*17193				10*47051.243.6	10*47051.243.5	10*47051.243.4	10*47051.243.3	10*47051.243.2	10*47051.243.1	10*24858	10*47051.219.41	10*47051.219.1	10*19565	T+:CT7:TC0/# OT	10*47051 219 41	10*47051 210 1	10*2435	10*2286	10*22516	10*22466	10*22465	10*22464	10*21559		10*21216	10*21215	10*21214	10*21213	10*19938	10*19937	10*19725	10*19689	TO-136/9	10*10670	10*19678	Lease ID
9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20				9-13-14	9-13-14	9-13-14	9-13-14	9-13-14	9-13-14	-+	-	9-14-51	9-14-51	T 2-T4-40.T		-	9-14-46.1	9-14-40.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1		9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	9-14-46.1	y-14-46.1	0 14 46 1	9-14-46.1	Parcel
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NANCY L RICHMOND AND GREGORY RICHMOND	JILL A WILLIAMS AND TERRY L WILLIAMS	JAMES E NICHOLAS AND BEVERLY D NICHOLAS	MARJOLEA A DEBOLD	NATALIE GIBBS	ANN TURNER YOUNG SHRIVER	DAVID A GUMP AND BETTY J GUMP	LEIGH A DURRAH	MORGAN C GUMP AND MARY J GUMP	CHERYL STEFFEN AND GREGORY STEFFEN	THOMAS RICHMOND YOUNG ANITA A YOUNG	DANIEL J FITZWATER	MARK ALLEN LENENBERG	JOHN P. ICARD				THOMAS J FOX	LOUIS T FOX AND KAREN A FOX	DAVID E FOX	MARK H FOX	PAUL G FOX	MARY A FOX	NILA JEAN FROHNAPFEL	WILLIAM K STERN AND BETTY L STERN	DAVID LEE FRANKLIN	DIVISION OF HIGHWAYS	WIEST VIRGINIA DEBARTMENT DE TRANSDORTATION	WILLIAM & STERN AND RETTY I STERN	DAVID LEE ERANKLIN	LLOYD C. ARNOLD & JUDITH C. ARNOLD	GEORGE COWARDS	SHARON RUSSELL	JUDITH MAY CONNER	LOIS KURPIL FKA LOIS HERCULES	DONNA KYLE	IRREVOCABLE TRUST	GUY L BUZZARD TRUSTEE THE GUY L BUZZARD 2017	RODNEY L SIBURT	ALAN K SIBURT ET UX	VICKI J CHERRY AND RICKEY E CHERRY	JAMES B SIBURT AND DELILA D SIBURT	JOHN H STEVENS AND LYNDA L STEVENS	JAMES D STEVENS AND DOROTHY M STEVENS	MAMIE V ARNOLD	TURGEON	EDMOND TURGEON JR AND CATHY STEVENS	DANITA CI OLIGH-DARRAH	WILLIAM O. JOBES	Grantor, Lessor, Etc.
TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	шс	CHESAPFAKE APPALACHIA			TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	ווו באו בסוארווסוא בבכ	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC		TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	IN EXPLORATION C.C.	TH EXPLORATION LLC	TH EXPLORATION LLC	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+				1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/01	1/8+	1/8+	1/8+	1/81	1/8+	1/8+	1/8+	1/8+	1/8+		1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/07	1/81	1/8+	Royalty
948	948	944	932	941	933	933	933	942	933	933	933	931	716				876	876	876	879	879	879	1028	894	937	947	5	894	937	1008	077	964	964	964	964	957		949	949	949	957	949	949	944	944	940	210	944	Deed Book/Page
549	547	366	409	266	589	597	136	210	148	151	180	399	12				61	58	55	338	335	332	119	485	385	566	ţ	485	38.	301	71 6	464	468	472	470	388		142	136	139	1077	144	151	454	156	- t	54	188	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4/0	N/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	A/N	N/A	N/A	N/A	N/A	A/N	A/N	N/A	N/A	N/A				N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/O	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/N	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	29/325	Properties Inc:	Appalachia LLC to Statoil USA Onshore	Chesapeake	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3/0	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/14	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	LLC: 33/424	Exchange Titleholder	Statoil USA Onshore Properties Inc to SWN		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3/2	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	LLC: 19/624		Exchange Titleholder LLC to SWN	Cert of Merger of SWN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	.,,.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3/2	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Co. LLC: 33/110	LLC to SWN Production	Chesapeake Appalachia		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1475	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC: 41/256	Company LLC to TH	SWN Production		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	Exploration LLC:	Statoil USA Onshore Properties Inc to TH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	Assignment

4.705102269 Operator's Well No. Knob Creek N - 13HU

10*47051.219.41	10*47051.219.1	10*19565	10*23435	10*22856	10*22518	10*22516	10*22466	10*22465	10*22464	10*21559	TO. 2777P	10*2121C	10*21214	10*21213	10*19725	10*19679	10*19655	10*19678	10*19627	10*19623	10*19622	10*19621	10*23190	10"23164	10		10*22864	10*22863	10*21710	10*21709	10*21598	10*21504	10*21485	10*21015	10*21014	10*21012	10*19892	10*19887	10*19886	Lease ID
11 9-14-48	-	9-14-48	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-14-10	9-13-20	9-13-20	2		9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	9-13-20	Parcel
표	H	풒	GG	GG	GG	GG	ရှ	GG	GG	GG	GG	Se	66	GG	GG	GG	GG	GG	GG	GG	GG	GG	#	7	n n		뀨	뀨	Ŧ	뀨	뀨	FF	FF	FF	Ŧ	Ŧ	Ŧ	뀌	뀨	Tag
WILLIAM K STERN AND BETTY L STERN		WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	-	CHARLES W MILLER AND ESTHER JEAN MILLER	S			KA LOIS HERCULES		IRREVOCABLE TRUST	1	CX	CKEY E CHERRY			DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH	CHESTNUT HOLDINGS INC	WILLIAM O. JOBES	RONALD S YOUNG	SANDRA SIBURT FROWEN & GEORGE FROWEN	KENNETH D SIBURT JR AND LORI SIBURT	MARY RUTH FROHNAPFEL	MARSHALL GENERAL RECEIVER FOR	L			FRIO					WOHLERS	ROBERT R FISHER AND AUDREY L IRVIN	ROBERT L MCLAUGHLIN	JAMES P MCLAUGHLIN & ALICE W MCLAUGHLIN TH EXPLORATION LLC	TIMOTHY R RICHMOND II AND BRANDI N RICHMOND		WELL	& LISA D RICHMOND	Grantor, Lessor, Etc.
TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	IH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	I G SIILES	70 971 70		TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	Grantee, Lessee, Etc.										
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	+8/T	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	100		1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+		Royalty
894	937	947	1008	977	964	964	964	964	964	957	949	949	949	957	944	946	949	944	944	938	938	938	979	g	3		977	977	959	959	954	951	942	946	946	951	948	948	948	Deed Book/Page
485	385	566	301	51	466	464	468	472	470	388	142	136	139	1077	454	54	309	188	192	600	597	595	191	154			53	55	355	350	332	142	572	339	29	149	292	545	543	ok/Page
N/A	A/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3/4/234	Hope Natural Gas Company to Consolidated Gas Spply Corporation:		N/A	N/A	N/A	N/A	N/A	N/A	A/N	Assignment						
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	corporation: 505/406			N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment						
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CO: 212/00	Consolidated Gas Transmission Corp. to CNG Development		N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment						
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/N	N/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	company.	CNG Development Company merged into CNG Producing		N/A	N/A	N/A	N/A	A/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/2	N/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11, 2000	Company changed name to Dominion Exploration & Production Inc: July 11 2000	CNG Producing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment						
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Company. 10/070	Dominion Exploration & Production Inc. changed its name to Consol Gas		N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment						
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11/110	Consol Gas Company merged with & into CNX Gas Company LLC: 11/415		N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment						
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11/11/2	CNX Gas Company LLC to TH Exploration LLC:	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment						

4.70510226 Operator's Well No. Knob Creek N - 13HU

10*23435	10*22856	10*22518	10*22516	10*22466	10*22465	10*22464	10*21559	10*21216	104212	10*21215	10*21214	10*21213	10*19725	10*19679	10*19678	10*19655	10*19627	10*19623	10*19622	10*19621	10*23435	10*22856	10*22518	10*22516	10*22466	10*22465	10*22464	10*21559	01717.01	10*21215 CT2T7_0T	10*21214	10"21213	10*19725	10*19679		10*19678	10*19655	TO-19623	10*19622	10*19621	10*47051.219.41	10*47051.219.1	10*19565		10*23053					Lease ID
9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	0 14	9_14_9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-9	9-14-7	9-14-7	9-14-7	9-14-7	9-14-7	9-14-7	9-14-7	9-14-7	2-T4-/	9-14-7	9-14-/	9-14-/	9-14-7	9-14-7		9-14-7	9-14-/	9-14-/	9-14-/	9-14-/	+	+	9-14-49		9-14-11.2					Parcel
F	F	F	П	ㄷ	П	Ή	П	F		=	F	F	F	F	ר	וו	F	F	F	F	Ξ.	즛	Ξ.	Ξ.	Ş.	Ã	Ş	즞	3	2	2	2	Ę Ģ	Ę		Ž Ž	Ž Ž	3	2	2	£	: =	٦		=					Tag
LLOYD C. ARNOLD & JUDITH C. ARNOLD	CHARLES W MILLER AND ESTHER JEAN MILLER	GEORGE EDWARDS	SHARON RUSSELL	JUDITH MAY CONNER	LOIS KURPIL FKA LOIS HERCULES	DONNA KYLE	IRREVOCABLE TRUST	ROUNEY L SIBURI	DOMESTICAL CONTROL ON	ALAN K SIBLIRT ET LIX	VICKI J CHERRY AND RICKEY E CHERRY	JAMES B SIBURT AND DELILA D SIBURT	MAMIE V ARNOLD	DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH	WILLIAM O. JOBES	CHESTNUT HOLDINGS INC	RONALD S YOUNG	SANDRA SIBURT FROWEN & GEORGE FROWEN	KENNETH D SIBURT JR AND LORI SIBURT	MARY RUTH FROHNAPFEL	LLOYD C. ARNOLD & JUDITH C. ARNOLD	CHARLES W MILLER AND ESTHER JEAN MILLER	GEORGE EDWARDS	SHARON RUSSELL	JUDITH MAY CONNER	IOIS KURPII FKA IOIS HERCULES	DONNA KYLE	IRREVOCABLE TRUST	GUY L BUZZARD TRUSTEE THE GUY L BUZZARD 2017	ADAN KORONI EL OX	VICKI J CHERRY AND RICKEY E CHERRY	JAIMES & SIBURT AND DELICA D SIBURT	MAMIE V ARNOLU	DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH		WILLIAM O. JOBES	CHESTNIT HOLDINGS INC	DANDRA SIBURI FROWEN & GEORGE FROWEN	SANDRA SIBILIBE EBOWEN & GEORGE EBOWEN	WARY ROLL FROM NAPPEL	WILLIAM & SIERN AND BEILY L SIERN	DAVID LEE FRANKLIN	DIVISION OF HIGHWAYS	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,	CE YOUNG					Grantor, Lessor, Etc.
TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	IH EXPLORATION LLC	THE EXPLODATION LEC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	IN EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC		TH EXPLORATION LLC	TH EXPLORATION LLC	IT EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC		TG STILES					Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1,01	1/84	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/0+	1/0+	1/8+	1/8+	1/8+	1/8+		1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+		1/8+					Royalty
1008	977	964	964	964	964	964	957	949	240	9/9	949	957	944	946	944	949	944	938	938	938	1008	977	964	964	964	964	964	957	343	249	949	75/	944	946		944	944	938	938	938	894	93/	947		හි					Deed Book/Page
301	51	466	464	468	472	470	388	142	120	126	139	1077	454	54	188	309	192	60	597	595	301	51	466	464	468	477	470	388	747	1 10	136	10//	454	54	:	8 8	200	90	59/	25.25	485	385	566	4	146 37	? C	<u> </u>	· =	_ _	k/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/2	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		374/234	Consolidated Gas	Company to	Hope Natural Gas	(Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/41	N/N	N/A	N/A	N/A	N/A	:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		Corporation: 505/406	Transmission	Supply Corporation to	Consolidated Gas		Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	47	N/N	N/A	N/A	N/A	N/A		N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A		Co: 515/88	CNG Development	Consolidated Gas	1		Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30	N/A	N/A	N/A	N/A	N/A		N/A	N/A	1/2	N/A	N/A	N/A	N/A	N/A		Company.	into CNG Producing	Company merged	7		Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NI/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/15	N/A	N/A	N/A	N/A	N/A	2 /	N/A	N/A	2/2	N/A	N/N	N/A	N/A	N/A		11, 2000	Production Inc: July	Fynloration &	Company changed	CNG Producing	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	47	N/A	N/A	N/N	N/A	N/A	21/2	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A		Company: 19/546	its name to Consol Gas	Production Inc. changed	Paminian Evaloration &		Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	2/2	N/A	N/A		11/415	Gas Company LLC:	merged with & into CNX			Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1477	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	NI/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		42/140		X CNX Gas Company LLC			Assignment

4~7~0~5~1~0~2~2~6~ Operator's Well No. Knob Creek N - 13HU

10*19627 9-1									10*22465 9-1		10*21559 9-1		10*21216 9-1	10*21215 9-1	10*21214 9-1		10*19725 9-1	10*19679 9-1	TO-136/8 9-1			10*19627 9_1				10*23053 9-1					10*23435 9-		-	10*22516 9-:				10*21559 9-2				10*21214 9-3		10*19725 9-1	10*19679 9-1	10*19678 9-:				10*19622 9-1		Lease ID Pa
9-14-5	Н			_	1	-	+	\dashv	9-14-6	9-14-6	9-14-6		H	9-14-6	9-14-6	9-14-6	9-14-6	9-14-6	9-14-b	t	Ť	\dagger	1	\dashv	\dashv	9-14-11					9-14-8		9-14-8	╁	+	9-14-8	9-14-8	9-14-8	\dashv	\dashv	\dashv	9-14-8	_	9-14-8	9-14-8	9-14-8	\vdash	\vdash	9-14-8	H		Parcel
PP RO						OO GE		_			OO IRR		L	L		L		OO DA'	W	╧		O S	┙		8 M						MM LLC	\perp						MM IRR		\perp	_			L	MM DA	MM	L		MM SAI			Tag Gra
RONALD S YOUNG	OWEN	LORI SIBURT			AND ESTHER JEAN MILLER	S			LOIS KURPIL FKA LOIS HERCULES		IRREVOCABLE TRUST	STEE THE GUY L BUZZARD 2017		ALAN K SIBURT ET UX	VICKI J CHERRY AND RICKEY E CHERRY	JAMES B SIBURT AND DELILA D SIBURT		DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH	WILLIAM O. JOBES	Sinc			OW/EN	LORI SIBURT	H FROHNAPFEL	CE YOUNG .					LLUYU C. ARNOLU & JUDITH C. ARNOLU	AILLEO			NER	LOIS KURPIL FKA LOIS HERCULES		RREVOCABLE TRUST	RUSTEE THE GUY L BUZZARD 2017				ND DELILA D SIBURT	MAMIE V ARNOLD	DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH	WILLIAM O. JOBES	IGS INC		SANDRA SIBURT FROWEN & GEORGE FROWEN) LORI SIBURT	APFEL	Grantor, Lessor, Etc.
TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC		TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	IH EXPLORATION LLC	H EAFLORATION LLC	TH EXPLOBATION LIC	H EXPLORATION ITC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TG STILES					IH EXPLORATION LLC	III EXPLODATION LEC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC		TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	Grantee, Lessee, Etc.										
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+		1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/04	1/01	1/81	1/8±	1/8+	1/8+	1/8+					1/8+	1/07	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+		1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
944	938	938	938	1008	977	964	964	964	964	964	957	,	949	949	949	957	944	946	944	242	0/0	0//	028	938	938	ස					1008	3//	964	964	964	964	964	957		949	949	949	957	944	946	944	949	944	938	938	938	Deed Book/Page
192	600	597	595	301	51	466	464	468	472	470	388		142	136	139	1077	454	54	188	200	202	3 8	5	597		146 374	2 9		- -	<u>.</u>	301	1	466	464	468	472	470	388		142	136	139	1077	454	54	188	309	192	600	597	595	k/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A		74/234	Spoly Cornoration:	Consolidated Gas	Company to	Hone Natural Gas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/17	N/A	N/A	N/A	N/A	_	505/406	Transmission		9	Consolidated Gas	N/A	14/2	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Co: 515/88	CNG Development	Transmission Corp. to	Consolidated Gas		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		into CNG Producing	Company merged	CNG Development		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	A/N	A/N	A/N	N/A	A/N	N/A	A/N	N/A	N/A	N/A	:	N/A	N/A	N/A	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A		11, 2000	Production Inc: July	Exploration &	name to Dominion	Company changed	CNG producing	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	14/12	N/A	N/A	N/A	N/A	N/A	N/A	Company: 19/546	its name to Consol Gas	Production Inc. changed	Dominion Exploration &		N/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	, Abo	N/A	N/A	N/A	N/A	N/A	N/A	11/415	Gas Company LLC:	merged with & into	Consol Gas Company		14/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	14/27	N/A	N/A	N/A	N/A	N/A	N/A	42/140	to TH Exploration LLC:	X CNX Gas Company LLC			14/2	N/A	N/A	2/2	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment

4.705102269 Operator's Well No. Knob Creek N - 13HU

×		N/A	N/A N/A	N/A N/A
ļ				
	N/A		N/A	N/A N/A
	N/A	N/A N/A		N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A	N/A N/A	N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
	2/2		N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A			N/A N/A
	N/A		N/A	N/A
	N/A		N/A	N/A
	N/A		N/A	N/A N/A
	N/A	N/A N/A	N/A	N/A N/A
	N/A		N/A	N/A N/A
	N/A		N/A	N/A N/A
,,	A		N/A	N/A
N/			N/A	N/A N/A
N/,			N/A	N/A N/A
N/A		N/A		N/A
N/A		N/A		N/A
N/A		N/A		N/A
N/A	1	N/A		N/A
N/A		N/A		N/A
N/A		N/A		N/A
N/A		N/A		N/A
N/A	1	N/A		N/A
N/A			N/A	N/A N/A
N/A			N/A	N/A N/A
Z,	Α	/A N/A	N/A	N/A N/A
N/	A		N/A	N/A N/A
N/			N/A	N/A N/A
Z	A		N/A	N/A N/A
N/A			N/A	N/A N/A
N/A				N/A
N/A	l	N/A	N/A N/A	
N/A N/A	l	N/A	N/A	1/0
ent Assignment			-	N/A

948 948 951		N/A N/A N/A N/A	N/A	N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
1212	 	938 488 N/A 938 277 N/A 938 277 N/A 938 496 N/A 938 543 N/A 938 549 N/A 938 555 N/A 938 555 N/A 938 550 N/A 938 550 N/A 938 500 N/A 941 250 N/A 941 256 N/A 941 266 N/A 944 198 N/A 944 196 N/A 944 196 N/A 945 613 N/A 948 547 N/A 948 543 N/A 948 543 N/A 948 543 N/A	938 277 N/A N/A 938 496 N/A N/A 938 558 N/A N/A 938 558 N/A N/A 938 543 N/A N/A 938 546 N/A N/A 938 555 N/A N/A 938 555 N/A N/A 938 555 N/A N/A 938 504 N/A N/A 938 504 N/A N/A 937 620 N/A N/A 941 256 N/A N/A 941 270 N/A N/A 942 569 N/A N/A 943 196 N/A N/A 944 198 N/A N/A 945 613 N/A N/A 948 547 N/A N/A 948 543 N/A N/A 948 543 N/A N/A 948 545 N/A 948 546 N/A 948 547 N/A 948 548 N/A 948 549 N/A 94	938 277 N/A N/A N/A N/A 938 496 N/A N/A N/A N/A N/A 938 558 N/A N/A N/A N/A N/A 938 543 N/A N/A N/A N/A 938 549 N/A N/A N/A N/A 938 549 N/A N/A N/A N/A 938 549 N/A N/A N/A N/A 938 552 N/A N/A N/A N/A 938 552 N/A N/A N/A N/A 941 259 N/A N/A N/A N/A 941 259 N/A N/A N/A N/A 942 269 N/A N/A N/A N/A 944 198 N/A N/A N/A N/A 945 613 N/A N/A N/A	938 277 N/A	938 277 N/A N/A N/A N/A N/A 938 496 N/A N/A N/A N/A N/A N/A 938 558 N/A N/A N/A N/A N/A N/A 938 558 N/A N/A N/A N/A N/A N/A 938 546 N/A N/A N/A N/A N/A N/A 938 546 N/A N/A N/A N/A N/A N/A 938 552 N/A N/A N/A N/A N/A N/A 938 552 N/A N/A N/A N/A N/A N/A 938 552 N/A N/A N/A N/A N/A N/A 941 259 N/A N/A N/A N/A N/A N/A 941 270 N/A N/A N/A N/A N/A N/A N/A
8		488 N/A 277 N/A 496 N/A 558 N/A 543 N/A 546 N/A 549 N/A 552 N/A 555 N/A 550 N/A 550 N/A 270 N/A	277 N/A N/A N/A 496 N/A N/A N/A N/A N/A S58 N/A N/A N/A N/A S43 N/A N/A N/A S52 N/A N/A N/A S55 N/A N/A N/A N/A S55 N/A N/A N/A N/A S69 N/A N/A N/A N/A N/A S613 N/A N/A N/A N/A S43 N/A N/A N/A N/A S43 N/A	277 N/A N/A N/A 436 N/A N/A N/A 558 N/A N/A N/A 543 N/A N/A N/A 549 N/A N/A N/A 552 N/A N/A N/A 553 N/A N/A N/A 550 N/A N/A N/A 550 N/A N/A N/A 550 N/A N/A N/A 259 N/A N/A N/A 270 N/A N/A N/A 270 N/A N/A N/A 198 N/A N/A N/A N/A N/A N/A <	277 N/A N/A N/A N/A	277
ł		488 N/A 277 N/A 496 N/A 558 N/A 548 N/A 548 N/A 549 N/A 552 N/A 5552 N/A 555 N/A 5610 N/A 270 N/A 270 N/A 270 N/A 569 N/A 266 N/A 270 N/A 569 N/A 569 N/A 569 N/A 569 N/A 560 N/A 570 N/A 580 N/A	277 N/A N/A 496 N/A N/A 496 N/A N/A 558 N/A N/A 543 N/A N/A 549 N/A N/A 552 N/A N/A 552 N/A N/A 620 N/A N/A 620 N/A N/A 259 N/A N/A 259 N/A N/A 266 N/A N/A 270 N/A N/A 613 N/A N/A 613 N/A N/A 547 N/A N/A 548 N/A 549 N/A N/A 549 N/A	277 N/A N/A N/A 436 N/A N/A N/A 558 N/A N/A N/A 548 N/A N/A N/A 549 N/A N/A N/A 552 N/A N/A N/A 553 N/A N/A N/A 550 N/A N/A N/A 259 N/A N/A N/A 270 N/A N/A N/A 198 N/A N/A N/A 198 N/A N/A N/A 196 N/A N/A N/A 196 N/A N/A N/A 196 N/A N/A N/A 196 N/A N/A N/A	277 N/A N/A N/A N/A	277 N/A N/A N/A N/A N/A 496 N/A N/A N/A N/A N/A N/A 558 N/A N/A N/A N/A N/A N/A 543 N/A N/A N/A N/A N/A N/A 543 N/A N/A N/A N/A N/A N/A 543 N/A N/A N/A N/A N/A N/A 549 N/A N/A N/A N/A N/A N/A 555 N/A N/A N/A N/A N/A N/A 550 N/A N/A N/A N/A N/A N/A 529 N/A N/A N/A N/A N/A N/A 256 N/A N/A N/A N/A N/A N/A 201 N/A N/A N/A N/A N/A N/A 198 N/A N/A
+	277 496 496 543 5443 5446 5449 545 555 555 555 555 555 555 555 55	N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A	N/A N/A N/A	N/A	N/A
948	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N/A N/A N/A N/A N/A N/A N/A N/A	N/A	N/A N/A N/A	N/A	N/A
948		N/A N/A N/A N/A N/A N/A N/A N/A	N/A	N/A N/A N/A	N/A N/A	N/A
945		N/A N/A N/A N/A N/A N/A N/A N/A	N/A	N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A <	N/A N/A N/A N/A N/A N/A N/A <
945			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A <
944	· · · · · · · · · · · · · · · · · · ·		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A <
944			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
942	! ! <u> </u>		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
941			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
941			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
941			N/A N/A N/A N/A N/A N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
937			N/A N/A N/A N/A N/A N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
938			N/A N/A N/A N/A N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
938			N/A N/A N/A N/A	N/A	N/A	N/A N/A N/A
938			N/A N/A N/A N/A	N/A	N/A	N/A N/A N/A N/A
938			N/A N/A N/A	N/A	N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
938			N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A	N/A
938			N/A N/A	N/A N/A N/A N/A N/A	N/A	N/A
938			N/A	N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A
938	_		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A
938	1					
938			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
938	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
1/8+ 938 490	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
938				N/A	N/A N/A	N/A N/A N/A
938			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A
\vdash			N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A
	T					
1/8+ 933 589	Ī		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
933	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
1/8+ 931 399	T	N/A N/A		N/A	N/A N/A	N/A N/A N/A
949			N/A	N/A N/A	N/A N/A	NIA NIA NIA NIA
+			N/A	N/A	N/A N/A	N/A N/A N/A N/A
1000	Γ		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
1/8+ 977 51	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
964	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A
964	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A
964	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
1/8+ 964 472	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
	T		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
1/8+ 964 470		N/A N/A	N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A N/A
957 964	•					Configurate Config

4~7~0~5~1~0~2~2~6~9 Operator's Well No. Knob Creek N - 13HU

10*21215	10*21214	10*21213	10*19725	10*19679	10*19678	10*19655	10*19627	10*19623	10*19622	10*19621	10*23435	10*22856	10*22518	10*22516	10*22466	10*22465	10*22464	10*21559	10*21216	10*21215	10*21214	10*21213	10*19725	10*19679	10*19678	10*19655	10*19627	10*19623	10*19622	10*18265 10*19621		10*23250	10*23190	10*22497	10*22415	10*22271	10*22038	10*22002	10*21710	10*21709	10*21614	10*21613	10*21598	10*21341	10*21318	10*21251	Lease ID
9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-14-1.1	9-13-11 9-14-1 1		9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	9-13-18	Parcel
WW	WW	ww	WW	WW	WW	WW	WW	WW	WW	WW	W	٧	W	٧	\$	W	>	\$	8	5	\$	\$	\$	>	\$	٧	٧	>	€ :	≨ E		П	#	=	∄	п	⊐	⊐	╗	# :	=	Ħ	Ħ	П	Ħ	П	Tag
		JAMES B SIBURT AND DELILA D SIBURT		SR AND ANITA SLOUGH-DARRAH	WILLIAM O. JOBES	JGS INC	RONALD S YOUNG	SANDRA SIBURT FROWEN & GEORGE FROWEN	KENNETH D SIBURT JR AND LORI SIBURT	MARY RUTH FROHNAPFEL		CHARLES W MILLER AND ESTHER JEAN MILLER	GEORGE EDWARDS			LOIS KURPIL FKA LOIS HERCULES		IRREVOCABLE TRUST	1	ALAN K SIBURT ET UX	VICKI J CHERRY AND RICKEY E CHERRY		MAMIE V ARNOLD	DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH	WILLIAM O. JOBES	CHESTNUT HOLDINGS INC		OWEN	I ORI SIRI IRT	\perp	TNECK AND TERESA ANN	BUENA WELLMAN ET AL C/O HERMAN LANTZ, SPECIAL COMMISSIONER	COUNTY OF MARSHALL GENERAL RECEIVER FOR MARSHALL COUNTY				SANDRA C SHAFFER AND RONALD G SHAFFER			AS YOUNG AND JANE CLAIRE YOUNG	NICOLE RAE BRACHER-MUSIY AND JASON BRACHER-	+	Y MILLS TRUST JULY 5TH 2007		LINDA D GORDON AND JOHN L GORDON		Grantor, Lessor, Etc.
TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC		TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	170	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
949	949	957	944	946	944	949	944	938	938	938	1008	977	964	964	964	964	964	957	949	949	949	957	944	946	944	949	944	938	938	933	9.5	979	979	966	963	988	954	953	959	959	959	959	954	953	944	953	Deed Book/Page
136	139	1077	454	54	188	309	192	600	597	595	301	51	466	464	468	472	470	388	142	136	139	1077	454	54	188	309	192	600	597	ý 103 103	18	189	191	622	344	60	334	223	355	350	464	462	332	225	204	62	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment

Operator's Well No. Knob Creek N - 13HU

4705102269

10*15568	10*15567	10*16526	10*47051.272.0	10*47051.243.6	10*47051.243.5	10*47051.243.4	10*47051.243.3	10*47051.243.2	10*47051.243.1	10*18265	10*23435	10*22856	10*22518	10*22516	10*22465	10*22464	10*21559	10*21216	10*21215	10*21214	10*21213	10*19725	10*19679	10*19678	10*19655	10*19627	10*19623	10*19622	10*19621	10*23435	10*22856	10*22518	10*22516	10*22466	10*22465	10*22464	10*21559	10*21216	Lease ID
9-10-13	9-10-13	9-11-2.2	9-11-2.1	9-11-2	9-11-2	Н	9-11-2	9-11-2		9-13-11.1	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-1.2	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	9-14-3	Parcel
A2	A2	A1	AO	77	72	77	77	77		⋨	×	×	×	×	×	Г	×	×		T			XX	×	×		7	×	7	××	WW:	××	X	WW.	××	٧W	ww	WW	Tag
MARY A SOUTH	VICKIE MASON	JUDITH PADLOW AKA JUDI L PADLOW	KENNETH P GATEWOOD AND MARY M GATEWOOD	THOMAS J FOX	LOUIS T FOX AND KAREN A FOX	DAVID E FOX	MARK H FOX	PAUL G FOX	MARY A FOX	KENNETH NELSON SMERTNECK AND TERESA ANN SMERTNECK	LLOYD C. ARNOLD & JUDITH C. ARNOLD	CHARLES W MILLER AND ESTHER JEAN MILLER	GEORGE EDWARDS	SHARON RUSSELL	LOIS KURPIL FKA LOIS HERCULES	DONNA KYLE	GUY L BUZZARD TRUSTEE THE GUY L BUZZARD 2017 IRREVOCABLE TRUST	RODNEY L SIBURT	ALAN K SIBURT ET UX	VICKI J CHERRY AND RICKEY E CHERRY	JAMES B SIBURT AND DELILA D SIBURT	MAMIE V ARNOLD	DAVID A DARRAH SR AND ANITA SLOUGH-DARRAH	WILLIAM O. JOBES	CHESTNUT HOLDINGS INC	RONALD S YOUNG	SANDRA SIBURT FROWEN & GEORGE FROWEN	KENNETH D SIBURT JR AND LORI SIBURT	MARY RUTH FROHNAPFEL	LLOYD C. ARNOLD & JUDITH C. ARNOLD	CHARLES W MILLER AND ESTHER JEAN MILLER	GEORGE EDWARDS	SHARON RUSSELL	JUDITH MAY CONNER	LOIS KURPIL FKA LOIS HERCULES	DONNA KYLE	GUY L BUZZARD TRUSTEE THE GUY L BUZZARD 2017 IRREVOCABLE TRUST	RODNEY L SIBURT	Grantor, Lessor, Etc.
CHESAPEAKE APPALACHIA	CHESAPEAKE APPALACHIA	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
681	680	957	888	876	876	876	879	879	879	933	1008	977	964	964	964	964	957	949	949	949	957	944	946	944	949	944	938	938	938	1008	977	964	964	964	964	964	957	949	Deed Book/Page
410	409	134	600	61	58	55	338	335	332	103	301	51	466	464	472	470	388	142	136	139	1077	454	54	188	309	192	60	597	595	301	51	466	464	468	472	470	388	142	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/463	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 23/6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
Statoil USA Onshore Chesapeake Appalachia Properties Inc to Chevron LLC to Chevron USA Inc: 3 USA Inc: 30/427 30/461	Statoil USA Onshore Properties Inc to Chevron USA Inc: 30/427	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
Chesapeake Appalachia LLC to Chevron USA Inc. 30/461	Chesapeake Appalachia LLC to Chevron USA Inc: 30/461	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
Chevron USA Inc to TH: Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment

N/A N/A
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Assignment Assignment

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4.7 <u>k.10.5</u>
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Q-1
eek N

10*15510	10*47051.123.2	10*47051.123.1	10*15520	10*15519	10*15517	10*15516	10*15515	10*15514	10*15513	10*15512	10*15511	10*15510	10*15600	Lease ID
9-10-11	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-9	9-10-14	Parcel
A5	A4	A4	Α4	A4	A4	A4	A 4	A4	A4	A4	24	4	A3	Tag
ELAINE PHELPS ET VIR	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	LLOYD G BAKER	TIMOTHY CROW	JOHN CROW	DIANNE GELLNER & GARY GELLNER	ROSE MARIE KIELGCZEWSKI	DESIRE L CROW	L PAUL CROW	KAY KEYES	FRANCES COFFEY	DAVID E CROW	ELAINE PHELPS ET VIR	WILLIAM D MCCONNELL	Grantor, Lessor, Etc.
TRIENERGY HOLDINGS,	TH EXPLORATION LLC	TH EXPLORATION LLC	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	CHESAPEAKE APPALACHIA	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
718	873	865	726	726	718	718	718	718	718	718	718	718	715	Royalty Deed Book/Page
326	143	389	582	580	345	354	334	336	330	378	376	326	447	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	N/A	N/A	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/463 USA Inc.: 26/269	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc: 29/325 USA Inc: 30/427	Assignment
NPAR LLC to Chevron USA Inc: 756/332	N/A	N/A	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 26/269	NPAR LLC to Chevron USA Inc: 756/332	Statoil USA Onshore Properties Inc to Chevror USA Inc: 30/427	Assignment
TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	N/A	N/A	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & Chevron USA Inc TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	Statoil USA Onshore Chesapeake Appalachia Properties Inc to Chevron LLC to Chevron USA Inc: 30/427 30/461	Assignment
LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	N/A	N/A	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA inc to TH evron Exploration LLC: 36/148	LC & Chevron USA inc to TH viron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Assignment

10*15541	10*15525	10*15504	10*47051.117.1	10*47051.117.1	10*47051.117.1	10*47051.123.2	10*15520	10*15519	10*15517	10*15516	10*15515	10*15514	10*15513	10*15512	10*15511	Lease ID
9-6-12	9-6-12	9-10-6	9-10-8	9-10-7	9-10-15	9-10-11	9-10-11	9-10-11	9-10-11	9-10-11	9-10-11	9-10-11	9-10-11	9-10-11	9-10-11	Parcel
ВО	во	A9	A8	A7	A6	25	A5	A5	A5	A5	A5	A5	A5	AS	A5	Tag
MARY RUTH FROHNAPFEL	RONALD KEITH MASON ET UX	JAMES MASON ET AL	JOSEPH MICHAEL BONENE	JOSEPH MICHAEL BONENE	JOSEPH MICHAEL BONENE	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	TIMOTHY CROW	JOHN CROW	DIANNE GEILNER & GARY GELLNER	ROSE MARIE KIELGCZEWSKI	DESIRE L CROW	L PAUL CROW	KAY KEYES	FRANCES COFFEY	DAVID E CROW	Grantor, Lessor, Etc.
CHEVRON U.S.A. INC.	CHEVRON U.S.A. INC.	AB RESOURCES	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
781	772	692	940	940	940	873	726	726	718	718	718	718	718	718	718	Deed Book/Page
312	445	461	359	359	359	143	582	580	345	354	334	336	330	378	376	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 LP:	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/463 USA Inc: 26/269	Assignment
N/A	N/A	Chief Exploration & Development LLC, Chief O&G LLC, Radier 2000 LP & Enerplus Resources Corp to Chevron USA Inc. 25/1	N/A	N/A	N/A	N/A	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 26/269	Assignment
N/A	N/A	AB Resources LLC to	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & Chevron USA Inc to TH TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & Chevron USA Inc to TH TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & Chevron USA Inc to TH TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & Chevron USA Inc to TH TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & Chevron USA Inc to TH TriEnergy Inc to Chevron Exploration LLC: USA Inc: 28/356 36/148	Assignment
Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to 1H Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	N/A	N/A	N/A	N/A	: Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Assignment

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10*15515	10*15514	10*15513	10*15512	10*15511	10*15510	10*15504	10*15504	10*15547	10*15546	10*15545	10*15544	10*15543	10*15542	Lease ID
9-6-15	9-6-15	9-6-15	9-6-15	9-6-15	9-6-15	9-6-14	9-10-5	9-6-12	9-6-12	9-6-12	9-6-12	9-6-12	9-6-12	Parcel
83	83	B3	B3	B3	B3	B2	81	В0	B0	во	во	80	во	Tag
DESIRE L CROW	LPAULCROW	KAY KEYES	FRANCES COFFEY	DAVID E CROW	ELAINE PHELPS ET VIR	JAMES MASON ET AL	JAMES MASON ET AL	RODNEY L SIBURT	ALAN K SIBURT ET UX	JAMES B SIBURT AND DELILA D SIBURT	VICKI J CHERRY AND RICKEY E CHERRY	SANDRA FROWEN	KENNETH D SIBURT	Grantor, Lessor, Etc.
TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	AB RESOURCES	AB RESOURCES	CHEVRON U.S.A. INC.	Grantee, Lessee, Etc.					
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
718	718	718	718	718	718	692	692	793	793	793	793	781	781	Royalty Deed Book/Page
334	336	330	378	376	326	461	461	346	325	332	318	307	218	ok/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	A/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
Trienergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	Trienergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	Trienergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/463 USA Inc: 26/269	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 LP:	AB Resources LLC & NPAR LLC to Chief Exploration & Development LLC & Radler 2000 LP:	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 26/269	NPAR LLC to Chevron USA Inc: 756/332	Chief Exploration & Development LLC, Chief O&G LLC, Radler 2000 LP & Enerplus Resources Corp to Chevron USA Inc. 25/1	Chief Exploration & Development LLC, Chief O&G LLC, Radler 2000 LP & Enerplus Resources Corp to Chevron USA Inc: 25/1	N/A	N/A	N/A	N/A	N/A	N/A	Assignment			
TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	AB Resources LLC to Chevron USA Inc: 756/397	AB Resources LLC to Chevron USA Inc: 756/397	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	k Chevron USA Inc to TH Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	LLC & Chevron USA Inc to TH evron Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Assignment

10*16231	10*16188	10*16185	10*16146	10*16142	10*16117	10*16112	10*16055	10*16046	10*16045	10*16044	10*16016	10*16015	10*15744	10*15743	10*15742	10*15738	10*15737	10*15736	10*15731	10*15723	10*15678	10*15677	10*15676	10*15675	10*15499	10*15483	10*15479	10 10171	10*15471	10*15467	10*15464	10*47051.123.2	10*47051.123.1	10*15520	10*15519	10*15517	10*15516	Lease ID
9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9T-9-T9	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9-6-16	9	9-6-16	9-6-16	9-6-16	9-6-15	9-6-15	9-6-15	9-6-15	9-6-15	9-6-15	Parcel
В4	В4	В4	B4	В4	В4	В4	84	B	84	В4	В4	В4	B4	В4	P. 2	2 4	B4	В4	В4	В4	В4	8	2	84	В4	84	B4	5	84	28	84	В3	83	B3	B3	83	B3	Tag
JAMES R RONSHAUSEN AND JOAN RONSHAUSEN	ELIZABETH ANN WENSYEL	ANDREW R NUNN	RICHARD K PETROVIC AND WENDY PETROVIC	JON TEX RONSHAUSEN	TRACY J GILBERT	DAVID A JOHNSON AND KELLI A JOHNSON	SYLVIA A GILBERT KRAFFT	JOSEPH MICHAEL ROMEO	JASON ALAN PETROVIC AND VALARI PETROVIC	TERRY LEE SOVINSKY AND DAWN S SOVINSKY	LINDA DARLENE MARTIN AND DALE MARTIN	LARRY RAY GILBERT	GARY LEE ROMEO AND SHELIA ROMEO	CLYDE WILLIAMS ROMEO	MARY FILEN FOSTER	DONALD E GILBERT AND PATRICIA GILBERT	JANICE LOUISE BLANTON	LORETTA PEARL LUCAS	MARYJO LORENA VINCENT	NANCY C LONG AND RONALD LONG	KEITH DAWSON	JASON S LASHARE	MARSHA ANN BOVEE AND DON EARL BOVEE	ALICIA J MONROE	IVAN NUNN AND BRIANA NUNN	ROBERT R RICHARDSON AND ANDREA RICHARDSON	CHESNUT	BARBARA M GII BERT CHESNIIT AND WAYNE H	GARY RICHARDSON	DEBORAH ELEANOR MONROE THOMPSON AND JOSEPH THOMPSON	MARY ALICE THOMAS MELLOTT	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	LLOYD G BAKER	тімотну скоw	JOHN CROW	DIANNE GELLNER & GARY GELLNER	ROSE MARIE KIELGCZEWSKI	Grantor, Lessor, Etc.
TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	ייי באי בסומיווסא בבס	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TH EXPLORATION LLC	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	TRIENERGY HOLDINGS,	Grantee, Lessee, Etc.
1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Ļ	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	1/8+	Royalty
906	906	913	906	906	906	906	906	906	906	906	906	906	906	906	906	96	906	906	906	906	906	906	906	906	906	906	906	2	906	906	906	873	865	726	726	718	718	Deed Book/Page
635	631	592	625	627	621	623	611	619	617	613	808	603	587	585	583	5/9	577	575	573	570	566	564	562	260	558	535	525	į	579	533	527	143	389	582	580	345	354	k/Page
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	A/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14/11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	147.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A	A/N	A/N	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	A/N	N/A	N/A	N/A	N/A	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 25/449 USA Inc: 756/332	TriEnergy Holdings LLC to NPAR LLC: 24/430	TriEnergy Holdings LLC NPAR LLC to Chevron to NPAR LLC: 24/430 USA Inc: 756/332	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	NPAR LLC to Chevron USA Inc: 756/332	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	TriEnergy Holdings LLC & TriEnergy Inc to Chevron USA Inc: 28/356	Assignment
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Chevron USA Inc to TH Exploration LLC: 36/148	Assignment

Operator's Well No. Knob Creek N - 13HU

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10*17832 10*18257 10*17770 10*17770 10*17583 10*17669 10*16970 10*16997 10*17272 10*17418 10*17418 10*17451 10*17473 10*17510 10*17524 10*17556 10*17556 10*16809 10*16841 10*16960 Lease ID 10*16233 10*16234 10*16284 10*16291 10*16292 10*16385 10*16386 10*16387 10*16387 10*16405 10*16405 10*16420 10*16420 10*16431 10*16431 10*16489 10*16509 10*16512 10*16363 0*16362 9-6-16 Parcel 9-6-16 9-6-16 9-6-16 9-6-16 9-6-16 9-6-16 2 2 2 2 뫼 2 2 2 2 4 4 4 4 4 2 2 2 4 4 4 4 B4 B4 В4 8 8 8 8 2 2 2 В4 2 2 2 型 TIMOTHY JOHNSON ROBERT A BAKER FRANCES MARIE DOLIN DAVID EUGENE ROMEO Grantor, Lessor, Etc. BONNIE MCKENNA AND THOMAS MCKENNA CAROL A DIXON AND JAMES DIXON ROMAN CATHOLIC DIOCESE OF WHEELING BY KELLY JO DOLIN WETZEL RICHARD D HUGHES CHRISTOPHER BRIAN BORDER, INCARCERATED ROBERT JONES AND CLAUDIA JONES JUDY LYNN KOHLER AND RONALD KOHLER SHARON DOROTHY PETROVIC HANNAN MICHELE J PERKINS AND GARY WAYNE PERKINS RICHARD A DOLIN AND MARGARET ANN DOLIN KEVIN DEAN PETROVIC AND RENE THERESE TIMOTHY D CONNER AND MELISSA'S CONNER CHARLES T LASHARE AND MELISSA'S LASHARE GINNIE L BANKS BILL DAWSON JACKIE JAMES HIBBS HESS MARK A LASHARE AND JENNIFER L WETMORE JAMES CLARK PETROVIC AND LORI J PETROVIC RHONDA OCONNOR AND TERRANCE OCONNOR JOHN RICHARDSON AND KAREN RICHARDSON BRENDA G KITCHENS MICHELLE LYNN MCNEIL MICHELLE DAWN MORENO RONDAL HALL GORDON ESQ PERSON COURT APPNTED GUARDIAN AD LITEM ERIC OSEPH T MONROE JR NATHAN PATRICK MONROE INDA J BRAZIS AND BERNARD A BRAZIS PENNY L SKOK AND ELVIN M SKOK RICHARD WAYNE ROMEO MARSHA BAKER MORLOCK WILDRED ALICE GILBERT SAPP AND EDGAR SAPP THOMAS L CONNER AND MARY BETH CONNER MICHAEL J BRANSFIELD BISHOP VILLIAM E ROMEO JR AND JOSHUA WAYNE HOLDEN HERESA ANN WOOLLARD EGGY SUE HILL DOLIN FORDYCE ODY LYNN ROMEO RACY L MAJORS ROBERT ALLAN PATERSON AND LEZLIE PATERSON IMOTHY A LASHARE AND FELICIA E LASHARE AROL L DUNCIL EARLEWINE ERSHEL DUTTON AND KATHY DOLIN DUTTON TH EXPLORATION LLC Grantee, Lessee, Etc. TH EXPLORATION LLC Royalty 1/8+ 1/8 1/8 1/8 1/8 1/8 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ $\begin{array}{c} 1/8 \\$ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ Deed Book/Page 942 916 942 924 932 913 913 913 913 942 942 942 942 942 942 942 913 913 913 913 906 906 906 906 906 906 913 906 906 913 906 906 906 906 906 906 456 454 114 424 593 565 608 632 634 636 636 441 439 137 137 137 430 438 426 606 604 550 601 594 596 598 598 599 554 591 593 593 593 595 595 545 552 548 538 641 633 637 639 Assignment N/A N N N N N N N N N/A × N/A N/A N/A Assignment N N ZZZZ N N N \(\begin{align*} \be N N N Assignment N/A N/A N/A N/A N/A N/A N/A N/A N/A N N N N N N N N/A N. N/A Z A × **₹** N N N N N N N Assignment N/A N N N N N N/A N N N N N/A N/A N N N N N N. N N Assignment N/A N/A N/A N N N N N/A N N N N N Assignment N N N N N N N N N N × N/A Assignment N/A N/A N/A N/A N/A N/A N/A N/A N/A N N N N N N N N N N N/A N/A

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Section Sect	10*18258	9-6-16	P .	PATRICIA M AVERY AND TERRY AVERY	TH EXPLORATION LLC	1/8+	929	2 2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10*19629	9-6-16	49	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
1,000,000,000,000,000,000,000,000,000,0				GENERAL RECEIVER OF MARSHALL COUNTY ATTN:											•	
Part	10*21234	0 6 1 6 0 -0-10	2 2	DERIVICIONE IN CALE VOLING	TH EXPLORATION LLC	1/0+	OF 2	200	N/A	2/2	14/3	1/2	2/2	N/A	N/A	N/A
Part	+C217 01	y-0-10	ţ		III LAS EQUALITON LEC	7/07	900	ţ	2	1/2	4/2	3	3	14/2	: 17	
	10*21235	9-6-16	2 2	000000000000000000000000000000000000000	TH EXPLORATION LLC	1/8+	953	45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Section Sect	10*21227	0.6.16	2 2	ANGEL M BOLLING	TH EXBLOBATION LLC	1/01	053	2 6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1. 1.5 1.5 1.5	10*21237	9-6-16	84	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
1	10*21913	9-6-16	B4	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
1	10*22413	9-6-16	В4	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
2-5-5-5-6-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7	10*22414	9-6-16	84	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
1	10*22487	9-6-16	84	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
1.	10*22546	9-6-16	84	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
1964.15 64.5 64.00 70000000 AND COMPANION CONTROLL 17.00 200.00 17.00 18.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00 17.00	10*22774	9-6-16	84	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
258.1 94.56 84 DOINTE ACASTRA MA DITIONE CONTROLL 12.9- 808 42.9 M/A	10*22816	9-6-16	84	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
2285.13 94-516 84 DOLLAM BOTER AND LIBERT ROOTES THI DECIGANTION LLC 1/8+ 906 935 M/A	10*47051.296.1	9-6-16	84	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
1285-11 9-516 84 SUNINA CSHERE MARKANE THE EXCOLANTON LLC 1/8+ 905 935 N/A N	10*47051.296.10	Н	B4	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
228.21 36-15 34 SHEEP ANN PAURE MONROE THE DEPORATIONILL 1/8- 905 495 M/A M/A	10*47051.296.11	-	84	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
Production Pro	10*47051.296.12	+	84	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
1,285.41 9-515 B4 INDIVIDAS H MONOCE SIANDIANET MONOCE IN EPRODATIONILLE 1/8+ 905 439 N/A	10*47051.296.13	_	84	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
PRINCE 19-515 1	10*47051.296.14	Н	В4	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
1965-15 6-16 6-16 6-16 105EPH M GRODHAUS THE EPOLONATION LLC 1/8- 906 939 N/A N/	10*47051.296.15	┢	В4	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
1286.17 9-5-16 94 HEARLES I RICHARDON THE EPOPARITION LLC 1/24- 906 505 N/A N/A	10*47051.296.16	†-	B4	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
296-15 94-16 94 MILLIN ALRED & REBECKA MONROE THE PRODATION LIC 1/8+ 906 509 N/A N/A	10*47051.296.17	╁	В4	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
1255-12 9-5-15 9-5-16	10*47051.296.18	+	84	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
150-12 54-15 54 IMABIGNA FANNITE THE PROPORTION ILLE 1/8+ 906 511 N/A N/	TO 4/051.250.15	+	2 2	WILLIAM I I MONDOL AND KNISTA W MONDOE	THE EXPLORATION LEC	1/07	300	203	N/A	10/2	N/M	1/N	2/2	14/2	NI/A	N/A
295.20 9-5-15	10*47051.296.2	9-6-16	28	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
1286.21 96-16 84 MARICHE HRIVNAK HECHODATION LIC 1/8+ 906 513 N/A 296.23 96-15 84 TERRIK SONDERGARD HECHODATION LIC 1/8+ 906 517 N/A 296.23 96-15 84 MARICARET GILBERT HECHODATION LIC 1/8+ 906 517 N/A N/	10*47051.296.20	+	84	CAROL N LARUE MONROE AND WILLIAM E BROWN	IH EXPLORATION LLC	1/8+	906	511	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
159-125 54-16 54 DEDINATH PRIVINAR THE EXPLORATION LLC 1/28+ 906 515 N/A	10*47051.296.21	╁	B4		TH EXPLORATION LLC	1/8+	906	513	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.296.25 9-6-16 B4 RENNE SANUERONAD 11 EXPLORATION ILC 1/8+ 906 521 N/A N/A	10*47051.296.22	+	2 84		TH EXPLORATION LLC	1/8+	906	515	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.296.25 9-6.16 B4 CAROLE A GILBERT THE EXPLORATION LLC 1/8+ 906 523 N/A N/A	10*47051.296.23	+	2 2	MARGARET GII BERT	TH EXPLORATION LLC	1/8+	906	579	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.296.26 3-6-16 84 CAROLE A GILBERT TH EXPLORATION LIC 1/8+ 906 519 N/A N/A	10*47051.296.25	\dashv	B4	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
SECURCE RONALD MONROE JR AND CRYSTAL HEXPLORATION LIC 1/8+ 906 521 N/A	10*47051.296.26	\dashv	В4	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
296.27 9-6.16 B4 MONROE THE EXPLORATION LIC 1/8+ 906 521 N/A																
1.296.4 3-6-16 84 SHIREY CEARLEWINE TH EXPLORATION LIC 1/8+ 904 48 N/A N	10*47051.296.27	9-6-16	В4		TH EXPLORATION LLC	1/8+	906	521	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
L296.4 9-6-16 B4 CAROLAJONES TH EXPLORATION LLC 1/8+ 906 481 N/A N/A N/A N/A N/A N/A L296.5 9-6-16 B4 BEATRICE PEARL COLVIN PROCHASKA TH EXPLORATION LLC 1/8+ 906 220 N/A	10*47051.296.3	9-6-16	84	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
L296.5 9-6-16 B4 BEATRICE PEARL COLVIN PROCHASKA TH EXPLORATION LLC 1/8+ 906 220 N/A	10*47051.296.4	9-6-16	В4	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
L296.6 9-6-16 B4 BRANDON FORRESTER TH EXPLORATION LLC 1/8+ 906 483 N/A N/A N/A N/A N/A N/A L296.7 9-6-16 B4 MERCER TH EXPLORATION LLC 1/8+ 906 485 N/A N/A N/A N/A N/A L296.7 9-6-16 B4 MERCER AKROCE EARLEWINE TH EXPLORATION LLC 1/8+ 906 485 N/A N/A <td< td=""><td>10*47051.296.5</td><td>9-6-16</td><td>84</td><td></td><td>TH EXPLORATION LLC</td><td>1/8+</td><td>906</td><td>220</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td></td<>	10*47051.296.5	9-6-16	84		TH EXPLORATION LLC	1/8+	906	220	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ELIZABETH R MERCER AKA ROSE LEMASTERS	10*47051.296.6	9-6-16	В4		TH EXPLORATION LLC	1/8+	906	483	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.296.7 3-6-16 84 MERCLEX))	,			;	}	i			<u>:</u>	:			2	
1.252.0 9-9-10 D4 RUSSELL CLEMASTERS THE EXPLORATION LLC 1/8+ 906 489 N/A	10*47051.296.7	9-0-10	2 4	IOHNICON	TH EXPLORATION LLC	1/0+	906	485	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.220.3 5-9-10 D4 INDISERIES IN EXPLORATION LLC 1/0+ PENDING N/A	10*47051.296.8	9-6-16	24		TH EXPLORATION LLC	1/8+	906	487	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9-5-16 B4 LORIK JARVIS THEXPLORATION ILC 1/8+ PENDING N/A	BENIDING TO:4/UST.296.9	9-6-16	2 2		TH EXPLORATION LLC	1/8+	906	489	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1971 1971 1971 1971 1971 1971 1971 1971	PENDING	9-6-16	B4		TH EXPLORATION LLC	1/8+	PENC	DING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book	ok/Page	Assignment	Assignment	Assignment	Assignment	Assignment Chesapeake	Assignment	Assignment Statoil USA Onshore	Assignmen
												Appalachia LLC to	Chesapeake Appalachia Properties Inc to	Properties Inc to	Chevron USA Inc to
				CHESAPEAKE APPALACHIA								Statoil USA Onshore	Statoil USA Onshore LLC to Chevron USA Inc: Chevron USA Inc:	Chevron USA Inc:	Exploration LL
10*10116	0 0	25	ROBERT LEE CARNEY AND BONNIE ANNE CARNEY	IIC	1/8+	682	255	N/A	N/A	N/A	N/A	Properties Inc: 22/671 30/392		30/404	40/127

10*19116			
9-6-4			-
85			
ROBERT LEE CARNEY AND BONNIE ANNE CARNEY			
EC.	CHESAPEAKE APPALACHIA		
1/8+			
682			
255			
N/A			
Properties Inc: 22/671	Statoil USA Onshore LLC to Chevron USA Inc: Chevron USA Inc:	Appalachia LLC to	Chesapeake
30/392	LLC to Chevron USA Inc:	Chesapeake Appalachia	
30/404	Chevron USA Inc:	Properties Inc to	Statoil USA Onshore
40/127	Exploration LLC:	Chevron USA Inc to	

STATE OF WEST VIRGINIA

& & &

COUNTY OF MARSHALL

Jan Pest
MARSHALL County 02:05:39 PM
Instrument No 1415451
Date Recorded 10/04/2016
Document Type ASN
Pages Recorded 7
Rook-Page 36-535
Recording Fee \$7.00
Additional \$6.00

ASSIGNMENT AND CONVEYANCE

This Assignment and Conveyance (this "Assignment") is from GULFPORT ENERGY CORPORATION, a Delaware corporation ("Gulfport"), and FOSSIL CREEK OHIO, LLC, a Delaware limited liability company ("Fossil Creek" and, together with Gulfport, "Assignors"), to TH Exploration, LLC, a Texas limited liability company ("Assignee"), and is executed on September 23, 2016 (the "Effective Date"). Assignors 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 Assignors and the Assignee dated June 24, 2016 (the "Acreage Trade Agreement").

ARTICLE 1 ASSIGNMENT OF ASSETS

Section 1.1 <u>Assignment</u>. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Assignor hereby GRANTS, BARGAINS, ASSIGNS, CONVEYS AND TRANSFERS unto Assignee its right, title and interest in and to the oil and gas leases described in more detail on <u>Exhibit A</u> attached hereto (the "Leases") and any surface use agreements that relate to such Leases insofar as such surface use agreements relate to the portion of lands covered by such Leases (collectively with the Leases, 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 1.4 <u>Assignment Subject to Acreage Trade Agreement</u>. 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 Assignors, 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 <u>Special Warranty of Title</u>. Each 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 Assignors or any of their respective Affiliates, but not otherwise.

Section 2.2 <u>Disclaimers of Warranties and Representations.</u>

(a) EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN <u>SECTION VI AND VII</u> OF THE ACREAGE TRADE AGREEMENT OR THIS ASSIGNMENT, ASSIGNORS MAKE NO, AND HEREBY EXPRESSLY DISCLAIM, ANY

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Office of Oil and Gas

SEP - 3 2019

WV Department of Environmental Protection

PARTIAL ASSIGNMENT OF OIL AND GAS LEASES

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 <u>Exhibit A</u> attached hereto **INSOFAR AND ONLY INSOFAR** as to the particular Target Formation(s) (defined below) described and delineated on <u>Exhibit A</u> 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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OPS LAND SERVICE 5000 TOWN GENTER SLVD STE 145 CANONSBURG, PA 15317-5841

STATE OF WEST VIRGINIA § § COUNTY OF MARSHALL §

Jan Pest
MARSHALL County 12:43:01 PM
Instrument No 1404976
Date Recorded 05/20/2016
Document Type ASM
Pages Recorded 20
Book-Fage 36-148
Recording Fee \$20.00
Additional \$8.00

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 <u>Assignment</u>. 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 <u>Exhibit A</u> attached hereto (the "Leases") INSOFAR AND ONLY INSOFAR as they cover those lands described on <u>Exhibit A</u> (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 <u>Disclaimers of Warranties and Representations</u>.

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

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Office of Oil and Gas



August 29, 2019

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

RE: Knob Creek N-13HU

Subject: Marshall County Route 21 and 74 Road Crossing Letter

Dear Laura:

Tug Hill Operating, LLC (THO) hereby submits this letter as confirmation that THO has obtained the right to drill, extract and produce the minerals under Marshall County Route 21 and 74 in the area reflected on the Knob Creek N-12HU well plat. THO has conducted a full title search in the relevant Court House to confirm its ownership under said County Routes and is not currently aware of any recorded document that would suggest an ownership other than THO.

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

Sincerely,

Amy L. Miller

Permitting Specialist - Appalachia

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SEP - 3 2019

WV Department of Environmental Protection Date of Notice Certification: 08/29/2019

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

API No. 47- 051

Operator's Well No. Knob Creek N-13HU

		Well Pad N	Vame: Knob Cr	reek
	e provisions in West Virginia Code §	§ 22-6A, the Operator has provided the requ	uired parties v	with the Notice Forms list
	tract of land as follows:	Englises	525,227.23	
State: County:	West Virginia Marshall	UTM NAD 83 Easting: Northing:	4,402,273.78	
District:	Meade	Public Road Access:	St. Joseph Road	- CR 21
Quadrangle:	Glen Easton 7.5	Generally used farm name:	David Len Franki	
Vatershed:	Fish Creek (HUC 10)			
prescribed by it has provident information real of giving the requirements Virginia Code	the secretary, shall be verified and significant the owners of the surface described and (c), securified by subsections (b) and (c), securified owner notice of entry to surface owner notice of entry to surface owner notice of subsection (b), section sixteen or	every permit application filed under this hall contain the following information: (14 bed in subdivisions (1), (2) and (4), subsection sixteen of this article; (ii) that the requivey pursuant to subsection (a), section to f this article were waived in writing by the ender proof of and certify to the secretary to the	 A certificati ection (b), see quirement was en of this arti the surface ov 	on from the operator that ction ten of this article, deemed satisfied as a re- icle six-a; or (iii) the no- wner; and Pursuant to W
that the Ope	West Virginia Code § 22-6A, the Oprator has properly served the require ECK ALL THAT APPLY	perator has attached proof to this Notice Cod parties with the following:	ertification	OOG OFFICE USE
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BECAUSEISMIC ACTIVITY WAS CONDUCT		RECEIVED/ NOT REQUIRED
■ 2. NO	ΠCE OF ENTRY FOR PLAT SURV	YEY or NO PLAT SURVEY WAS CO	ONDUCTED	☐ RECEIVED
		T		
☐ 3. NO	TICE OF INTENT TO DRILL OF	NOTICE NOT REQUIRED BECAU NOTICE OF ENTRY FOR PLAT SURV WAS CONDUCTED or		RECEIVED/ NOT REQUIRED
☐ 3. NO	TICE OF INTENT TO DRILL or	NOTICE OF ENTRY FOR PLAT SURV	/EY	The state of the s
	TICE OF INTENT TO DRILL OF	NOTICE OF ENTRY FOR PLAT SURV WAS CONDUCTED or WRITTEN WAIVER BY SURFAC (PLEASE ATTACH)	/EY	The state of the s
■ 4. NO		NOTICE OF ENTRY FOR PLAT SURV WAS CONDUCTED or WRITTEN WAIVER BY SURFAC (PLEASE ATTACH)	/EY	NOT REQUIRED

Required Attachments:

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

RECEIVED Office of Oil and Gas Its:

Certification of Notice is hereby given:

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

Well Operator: Tug Hill Operating, LLC

By: Amy L. Miller WWWW

Amy L. Miller My Sullar Permitting Specialist - Appalachia

Telephone: 724-749-8388

Address: 380 Southpointe Boulevard, Plaza II, Suite 200

Canonsburg, PA 15317

Facsimile: 724-749-8388

Email: amiller@tug-hillop.com

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
Chester Arthur West IV, Notary Public
Pine Twp., Allegheny County
My Commission Expires Feb. 10, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this

Notary Public

My Commission Expires

2-10-2020

Oil and Gas Privacy Notice:

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

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WW-6A (9-13)

470510226

OPERATOR WELL NO. Knob Creek N-13HU Well Pad Name: Knob Creek

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 8/26/2019 Date Permit Application Filed: 8/27/2019 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A ☐ PERSONAL RECEIPT OR SIGNATURE CONFIRMATION SERVICE MAIL Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: ☑ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: David Lee Franklin Name: CNX Land Resources, Inc. Address: 131 Saint Joseph Road Address: 1000 Consol Energy Drive Glen Easton, WV 26039 Canonsburg, PA 15318 ☐ COAL OPERATOR Name: Address: Name: Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: David Lee Franklin ☑ SURFACE OWNER OF WATER WELL Address: 131 Saint Joseph Road AND/OR WATER PURVEYOR(s) Glen Easton, WV 26039 Name: *See attached list Name: Address: Address: □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Name: Address: RECEIVED Address: Office of Oil and Gas *Please attach additional forms if necessary

WV Department of

WW-6A (8-13)

API NO. 47-4705102269 OPERATOR WELL NO. Knob Creek N-13HU

Well Pad Name: Knob Creek

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental CEIVED Gas Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gar.but Oil and Gas SEP - 3 2019 and-gas/pages/default.aspx.

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

WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. Knob Creek N-13HU

Well Pad Name: Knob Creek

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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Office of Oil and Gas

SEP - 3 2019

WV Department of

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

API NO. 47-

OPERATOR WELL NO. Knob Creek N-13HU

Well Pad Name: Knob Creek

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. Knob Creek N-13HU Well Pad Name: Knob Creek

Notice is hereby given by:

Well Operator: Tug Hill Operating, LLC

Telephone: 724-749-8388

Email: amiller@tug-hillop.com

Address: 380 Southpointe Boulevard, Plaza II, Suite 200

Canonsburg, PA 15317

Facsimile: 724-338-2030

Oil and Gas Privacy Notice:

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

Commonwealth of Pennsylvania - Notary Seal MAUREEN A STEAD - Notary Public Washington County My Commission Expires Jan 28, 2023 Commission Number 1259926 Subscribed and sworn before me this 26 day of AV6, 2019

___ Notary Public

My Commission Expires_

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Exhibit WW-6A

Tug Hill Operating, LLC 380 Southpointe Blvd, Suite 200 Cannonsburg, PA 15137

Residences within Two-Thousand Feet (2,000')

Well:

KNOB CREEK N - 13HU

District:

Meade (Residence #'s 1-12, 14-26) (Church #13)

State:

WV

There are twenty-five (25) residences, no businesses, one (1) church, no schools or no emergency facilities within two-thousand feet (2,000') of the above referenced well location.

Residence # 1 TM 14 Pcl. 39 Margaret K. Fox – Life c/o Paul Fox Phone: 304-455-3817 (Per Tax Address – Paul G. Fox) Physical Address: 31 Crow Dr. Glen Easton, WV 26039 Tax Address: 5761 Saint Joseph Rd. Proctor, WV 26055	Residence # 2 TM 14 Pcl. 32 Twila C. Coffield Phone: 304-845-5941 Physical Address: 184 Crow Dr. Glen Easton, WV 26039 Tax Address: 16 Sandy Ave. Moundsville, WV 26041-1020	Residence # 3 TM 14 Pcl. 54 Richard L. Harveth, Et Ux c/o Richard Lee Harveth Phone: 304-845-7397; 304-845-5128 Physical Address: 220 Crow Dr. Glen Easton, WV 26039 Tax Address: Same
Residence # 4 TM 14 Pcl. 42 John C. Lagos, Et Ux Phone: 304-845-2793 Physical Address: 12529 Fish Creek Rd. Glen Easton, WV 26039 Tax Address: 404 Jefferson Ave. Glen Dale, WV 26038	Residence # 5 TM 14 Pcl. 53 James E. Peelman Phone: None Found Physical Address: 12551 Fish Creek Rd. Glen Easton, WV 26039 Tax Address: 12551 Fish Creek Rd. Glen Easton, WV 26039	Residence # 6 TM 14 Pcl. 29.1 Andrew Fasouletos, Et Ux Phone: 304-845-9009 Physical Address: 329 Crow Dr. Glen Easton, WV 26039 Tax Address: 1. Rd. 2 Box 150 Proctor, WV 26055 2. 3391 Taylors Ridge Rd. Proctor, WV 26055-9723
Residence # 7 TM 14 Pcl. 29.1 Andrew Fasouletos, Et Ux Phone: 304-845-9009 Physical Address: 361 Crow Dr. Glen Easton, WV 26039 Tax Address: 1. Rd. 2 Box 150 Proctor, WV 26055 2. 3391 Taylors Ridge Rd. Proctor, WV 26055-9723	Residence # 8 TM 14 Pcl. 29 Andrew Fasouletos, Et Ux c/o Tena Marie Stricklin Phone: 304-845-9009 Physical Address: 389 Crow Dr. Glen Easton, WV 26039 Tax Address: 1. 3391 Taylors Ridge Rd. Proctor, WV 26055-9723 2. Rd. 2 Box 150	Residence # 9 TM 14 Pcl. 48 Michael L. & Cheryl J. Acree Phone: 304-455-2148; 304-455-5859 Physical Address: 12725 Fish Creek Rd. Glen Easton, WV 26039 Tax Address: 189 Plum St. Proctor, WV 26055 WV Department of Environmental Protection

Proctor, WV 26055

Residence #11 Residence # 12 Residence # 10 TM 16 Pcl. 15 TM 14 Pcl. 45 TM 16 Pcl. 15.1 Ronald R. Young, Et Ux - Life George R. Taylor, Et Ux Eric J. Young Phone: 304-845-6044 (Per Tax Address -Phone: 304-686-3398: 304-905-1986 Phone: 304-845-2987 Geraldine M. Young) (Per Address - Chelsey Long); 304-845-Physical Address: 12781 Fish Creek Rd. 0154 (Per Address - Bill J. Blatt) Physical Address: Glen Easton, WV 26039 **Physical Address:** 348 Saint Joseph Rd. Glen Easton, WV 26039 153 Young Ln. Tax Address: Tax Address: Glen Easton, WV 26039 Same Tax Address: Same Same Church # 13 Residence # 14 Residence # 15 TM 16 Pcl. 14 TM 16 Pcl. 15 TM 16 Pcl. 13.5 Paul R. Blake & Paul R. Blake II Lynn Camp Methodist Church Ronald R. Young, Et Ux - Life Phone: 304-845-6044 (Per Tax Address Phone: 304-845-9369 Phone: Physical Address: - Geraldine M. Young) Physical Address: 171 Saint Joseph Rd. Physical Address: 616 Saint Joseph Rd. Glen Easton, WV 26039 Glen Easton, WV 26039 323 Saint Joseph Rd. Tax Address: Glen Easton, WV 26039 Tax Address: Unknown Address Tax Address: 121 Vandivere Ln. Glen Easton, WV 26039-9707 Moundsville, WV 26041 348 Saint Joseph Rd. Glen Easton, WV 26039 Residence # 16 Residence #17 Residence # 18 TM 16 Pcl. 13.3 TM 16 Pcl. 13.1 TM 16 Pcl. 13.6 Paul W. Blake - Life Wesley D. Yeater, Et Ux Paul R. Blake Phone: 304-845-9369 Phone: 304-845-2999 Phone: 304-843-5212 Physical Address: Physical Address: Physical Address: 581 Saint Joseph Rd. 37 Vandivere In. 121 Vandivere Ln. Glen Easton, WV 26039 Glen Easton, WV 26039 Glen Easton, WV 26039 Tax Address: Tax Address: Tax Address: 1500 8th St. Same Same Moundsville, WV 26041-2031 Residence #19 Residence # 20 Residence # 21 TM 16 Pcl. 12.2 TM 16 Pcl. 12.7 TM 16 Pcl. 12.1 Spencer J. & Carrie A. Richmond Spencer J. & Carrie A. Richmond James G. Richmond, Et Ux Phone: 304-845-2274; 304-845-8186 Phone: 304-845-2274; 304-845-8186 Phone: 304-845-8186 Physical Address: Physical Address: Physical Address: 293 Richmond Ln. 243 Richmond Ln. 157 Richmond Ln. Glen Easton, WV 26039 Glen Easton, WV 26039 Glen Easton, WV 26039 RECEIVED Tax Address: Tax Address: Tax Address: Office of Oil and Gas 243 Richmond Ln. Same Same SEP - 3 2019 Glen Easton, WV 26039 MV Department of Extremental Protection Residence # 22 Residence # 23 Residence # 24 TM 14 Pcl. 33 TM 14 Pcl. 37 TM 14 Pcl. 37 David Lee Franklin Margaret K. Fox - Life Margaret K. Fox - Life Phone: 304-845-6025; 304-845-3203 c/o Paul Fox c/o Paul Fox Physical Address: Phone: 304-455-3817 (Per Tax Address Phone: 304-455-3817 (Per Tax Address -131 Saint Joseph Rd. - Paul G. Fox) Paul G. Fox) Glen Easton, WV 26039 Physical Address: Physical Address: Tax Address: 107 Saint Joseph Rd. 51 Saint Joseph Rd. 131 Saint Joseph Rd. Glen Easton, WV 26039 Glen Easton, WV 26039 Glen Easton, WV 26039 Tax Address: Tax Address: 5761 Saint Joseph Rd. 5761 Saint Joseph Rd. Proctor, WV 26055 Proctor, WV 26055

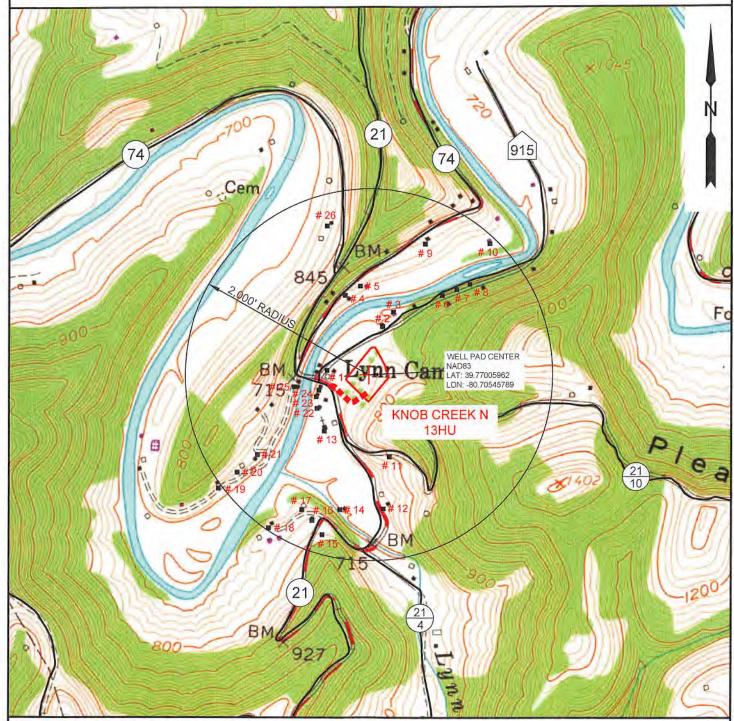
Residence # 25 Residence # 26 TM 13 Pcl. 13 TM 13 Pcl. 12 Nila Jean Prohnapfel Margaret K. Fox - Life Phone: None Found c/o Paul Fox Phone: 304-455-3817 (Per Tax Address **Physical Address:** 11975 Fish Creek Rd. - Paul G. Fox) **Physical Address:** Glen Easton, WV 26039 28 Richmond Ln. Tax Address: Glen Easton, WV 26039 Rd. 1 Box 190 Tax Address: Proctor, WV 26055-9703

5761 Saint Joseph Rd. Proctor, WV 26055

> RECEIVED Office of Oil and Gas

PROPOSED KNOB CREEK N - 13HU

SUPPLEMENT PG. 1B



NOTE: THERE APPEARS TO BE TWENTY-SIX (26) POSSIBLE WATER SOURCES WITHIN 2,000'.

RECEIVED Office of Oil and Gas



Land & Energy Development

Solutions from the ground up.

2.0. Box 150 •12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-6634

www.siswv.com

TOPO SI	ECTION:	OPER	ATOR:				
GLEN EAS	STON 7.5'	PREPARED FOR					
COUNTY	DISTRICT	380 SOUTHPOI	NTE BLVD				
MARSHALL	MEADE	SUITE 200 CANONSBURG	PA 15317				
DRAWN BY	JOB NO.	DATE	SCALE				
K.G.M.	8789	08/20/2019 1" - 1000					



WW-6A3 (1/12)

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

Date of Noti	ce: 2/5/2018	Date of Pla	nned E	ntry: 2/12/2018			
Delivery me	hod pursu	ant to West Virginia C	ode § 2	22-6A-10a			
☐ PERSO	NAL	REGISTERED	m	METHOD OF DEL	IVERY THAT RE	EOUIRES A	
SERVIC		MAIL		RECEIPT OR SIGN			
on to the surf but no more to beneath such owner of min and Sediment Secretary, wh	ace tract to han forty-fi tract that ha erals under! Control M ich stateme	a Code § 22-6A-10(a), I conduct any plat survey ve days prior to such en as filed a declaration pur lying such tract in the coanual and the statutes arent shall include contact to obtain copies from the	s require try to: (suant to ounty tand and rules information	red pursuant to this ar (1) The surface owner to section thirty-six, and ax records. The notice related to oil and gas ation, including the ac-	ticle. Such notice : r of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	shall be provided at to any owner or less wenty-two of this co atement that copies production may be o	least seven days see of coal seams ode; and (3) any of the state Erosion btained from the
Notice is her	eby provid	ed to:					
■ SURFA	CE OWNER	R(s)		COAL	L OWNER OR LE	SSEE	
Name: David L	ee Franklin (Pad	and Access Road)		Name: CN	K Land Resources, Inc.	,	
Address: 131			/		1000 Consal Energy Drive		
Gle	Easton, WV 2	6039			Canonsburg, PA 15318		-
Name:				(21)	ario bassassina		
Address:					ERAL OWNER(s)	1	
NT			-	Control of the contro	id Lee Franklin	/	
Name: Address:			->		131 Saint Joseph Road		3
Address.			-		Glen Easton, WV 26039 h additional forms if ne	cessary	-
	est Virgini/	1: a Code § 22-6A-10(a), r of land as follows:	notice is		e undersigned wel	l operator is plannin	
County:	Marshall			Public Road A		St. Joseph Road - County	Route 21
District:	Meade			Watershed:		Fish Creek (HUC 10)	
Quadrangle:	Glen Easton 7	7.5'		Generally use	d farm name;	David Lee Franklin	
may be obtain Charleston, V	ned from the VV 25304 (on and Sediment Contro e Secretary, at the WV I (304-926-0450). Copies ary by visiting <u>www.der</u>	Departn of sucl	nent of Environmenta h documents or additi	l Protection headq onal information r	uarters, located at 6	01 57th Street, SE,
Notice is he	reby giver	h by:					DECEMEN
Well Operato		perating, LLC		Address:	380 Southpointe Boulev	vard Plaza II Suite 200	RECEIVED Office of Oil and Gas
Telephone:	724-749-83				Canonsburg, PA 15317		
Email:	-	g-hillop.com		Facsimile:	724-338-2030		SEP - 3 2019
Oil and Gas							WV Department of Environmental Protection

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

WW-6A5 (1/12)

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

Date o	Time Ro f Notice:	08/23/2019 Date	Permit A	pplication Filed: 08/2	7/2019	
Delive	ry metho	od pursuant to West Virgin	ia Code §	22-6A-16(c)		
	TO THE	EDMAIL		HAND		
		ED MAIL I RECEIPT REQUESTED		DELIVERY		
return if the pla require drilling damage (d) The of notice	receipt re nned ope d to be p g of a ho es to the e notices ce.	equested or hand delivery, giveration. The notice require rovided by subsection (b), so rizontal well; and (3) A properties affected by oil and grequired by this section shall	ve the surfact by this section ten of posed surfact as operation be given to	ace owner whose land ubsection shall inclused this article to a surface use and compensus to the extent the date the surface owner and the surface owner a	I will be used for de: (1) A copy ace owner whos ation agreement amages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
Notice	is hereb	y provided to the SURFAC isted in the records of the sh	E OWNE	R(s)		
				Name:		
	Jame; David Lee Franklin ddress: 131 Saint Joseph Road			Address:		
	s: 131 Sair	nt Joseph Road		2 I CICII CO		
Addres Glen Eas Notice Pursua	is hereb	oy given: st Virginia Code § 22-6A-16	(c), notice	is hereby given that tl	ne undersigned	well operator has developed a planned
Addres Glen Ear Notice Pursuar operati State: County	is hereb nt to Weson on th	oy given: st Virginia Code § 22-6A-16 e surface owner's land for th West Virginia Marshall	(c), notice te purpose o	is hereby given that the formal of drilling a horizonta of the UTM NAD 8	ne undersigned of l well on the tra Easting: Northing:	act of land as follows: 525,227.23 4,402,273.78
Notice Pursua: operati State: County District	is hereb nt to Weston on the	y given: st Virginia Code § 22-6A-16 e surface owner's land for th West Virginia Marshall Meade	(c), notice e purpose o	is hereby given that the following of drilling a horizonta UTM NAD 8 Public Road	ne undersigned of the transfer of the undersigned o	act of land as follows: 525,227.23 4,402,273.78 St. Joseph Road - CR 21
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duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact

DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

March 5, 2018

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

Jill M. Newman Deputy Commissioner

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

Subject: DOH Permit for the Knob Creek Pad, Marshall County Knob Creek N-13HU Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0224 which has been issued to Tug Hill Operating, LLC for access to the State Road for a well site located off of Marshall County Route 21 SLS.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Jonathan White

Tug Hill Operating, LLC

CH, OM, D-6

File

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PLANNED ADDITIVES TO BE USED IN FRACTURING OR STIMULATION

Well No. Knob Creek N-13HU

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

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