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west virginia department of environmental protection

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

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

March 1, 2018  
PERMIT MODIFICATION APPROVAL  
Horizontal 6A / New Drill

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

Re: Permit Modification Approval for HEAVEN HILL 3-5HM  
47-051-01948-00-00

**Modified Bottom Hole Coordinates thereby Shortening the Lateral**

TUG HILL OPERATING, LLC

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

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

James A. Martin  
Chief

Operator's Well Number: HEAVEN HILL 3-5HM  
Farm Name: RICKY L. WHITLATCH  
U.S. WELL NUMBER: 47-051-01948-00-00  
Horizontal 6A / New Drill  
Date Issued: March 1, 2018

Promoting a healthy environment.

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: Heaven Hill 3-5HM      Well Pad Name: Heaven Hill 3

3) Farm Name/Surface Owner: Ricky L. Whitlatch      Public Road Access: Yeater Land CR 21/11

4) Elevation, current ground: 1342'      Elevation, proposed post-construction: 1326'

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

Other \_\_\_\_\_

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

Horizontal  \_\_\_\_\_

*JW*  
*2/5/18*

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus is the target formation at a depth of 6724 - 6776' thickness of 52' and anticipated pressure of approx. 3800 psi

8) Proposed Total Vertical Depth: 6,876'

9) Formation at Total Vertical Depth: Onondaga

10) Proposed Total Measured Depth: 14,866'

11) Proposed Horizontal Leg Length: 7,476'

12) Approximate Fresh Water Strata Depths: 70', 1038'

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

14) Approximate Saltwater Depths: 2,167'

15) Approximate Coal Seam Depths: Sewickly Coal - 946' and Pittsburgh Coal - 1031'

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

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

(a) If Yes, provide Mine Info: Name: Marshall County Coal Co. / Marshall County Mine  
Depth: 1031' TVD and 311' subsea level  
Seam: Pittsburgh #8  
Owner: Murray Energy / Consolidated Coal Co.

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18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	NEW	BW	BW	120'	120'	338FT^3(CTS)
Fresh Water	13 3/8"	NEW	H40	48#	1,120'	1,120'	1142ft^3(CTS)
Coal	13 3/8"	NEW	H40	48#	1,120'	1,120'	1142ft^3(CTS)
Intermediate	9 5/8"	NEW	J55	36#	2,802'	2,802'	896ft^3(CTS)
Production	5 1/2"	NEW	P110	20#	14,866'	14,866'	3357ft^3(CTS)
Tubing	2 3/8"	NEW	N80	4.7#		7,231'	
Liners							

*Handwritten signature*  
2/2/18

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"	1.0	2,333	1,866	CLASS A	1.2
Fresh Water	13 3/8"	17 1/2"	.33	1,730	1,384	SEE #24	1.2
Coal	13 3/8"	17 1/2"	.33	1,730	1,384	SEE#24	1.2
Intermediate	9 5/8"	12 1/4"	.352	3,520	2,816	SEE#24	1.19
Production	5 1/2"	8 7/8_8 3/4	.361	12,640	10,112	SEE#24	1.17/1.19
Tubing	2 3/8"		.19	11,200	8,960		
Liners							

PACKERS

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

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*JW*  
*2/5/18*

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

Drill through the Marcellus and TD Pilot Hole 100' into the Onondaga. 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 30,792,500 lb prop and approximately 476,075 bbl of water. Max rate = 80 bpm; max psi = 9,000#.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 18.43

22) Area to be disturbed for well pad only, less access road (acres): 7.15

23) Describe centralizer placement for each casing string:

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

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

\*See Attachment

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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.

SI-01948Mdb



WELL NAME: Heaven Hill 3-SHM  
 STATE: West Virginia COUNTY: Marshall  
 DISTRICT: Meade  
 OF Elev: 1,325' GL Elev: 1,325'  
 TD: 11,866'  
 IN Location: 39.80663272  
 IN Longitude: -80.69317425  
 BH Location: 39.78701046  
 BH Longitude: -80.67428554

30" Csg @ 120' TVD

13 3/8" Csg @ 1,120' TVD

9 5/8" Csg @ 2,800' TVD

KOP @ 6,731' ft MID

Landing Point @ 7,300' MD / 6,253' TVD

PH TD @ 6,876' TVD

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**CASING SUMMARY**

Type	Hole Size (in)	Csg Size (in)	Depth (MD)	Depth (TVD)	Weight (lb/ft)	Grade	Top of Cement
Conductor	35	30	120'	120'	BW	BW	Surface
Surface	17.5	13 3/8	1,120'	1,120'	48	H40	Surface
Intermediate 1	12 1/4	9 5/8	2,802'	2,800'	36	J55	Surface
Production	8 7/8 x 8 3/4	5 1/2	14,855'	6,883'	20	P110	Surface

**CEMENT SUMMARY**

Stacks	Class	Density	Fluid Type	Centralizer Notes
Conductor	A	15.6	Air	None
Surface	A	15.6	Air	3 Centralizers at equal distance
Intermediate 1	A	15	Air	1 Centralizer every other ft
Production	A	14.5	Air / SCBM	1 every other joint in lateral; 1 per joint in curve; 1 every other ft to stc

**FORMATION TOPS**

Formation	Depth TVD
Deepen Fresh Water	1038
Sewickley Coal	946
Pittsburgh Coal	1031
Big Lime	2060
Weir	2486
Berea	2684
Gordon	2946
Rhinolinet	6068
Genesco/Bunkett	6586
Tully	6617
Herrilton	6650
Marellus	6724
Landing Depth	6753
Onondaga	6776
Pilot Hole Depth	6876

*8/15/18*

Lateral TD @ 14,855' ft MID  
 6,883' ft TVD

### 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](mailto:dducoeur@dpslandservices.com) DPS GIS (12/19/2016) 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
- 70000 series – Well spots pulled from old Farm line maps that the WVGES has access to
- 90000 series – Any sources that the WVGES has access that shows a well spot but has no additional supporting information. DEP does not have 90000 series on their maps.
- There can be duplication between wells in the 3 series
- Phil indicated that other Operators are providing a screenshot of the WVGES map with their planned well and using that for permits

Permit well - Heaven Hill 3-5HM

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 because the Plat locations represent actual field surveyed locations. Please refer to the Plat for surveyed well spots

API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4705101934	Tug Hill	6737' TVD planned	None	None	No, Permitted Marcellus well	Permitted Marcellus well. Not yet drilled
4705101962	Tug Hill	6737' TVD planned	None	None	No, Permitted Marcellus well	Permitted Marcellus well. Not yet drilled
4705101963	Tug Hill	6737' TVD planned	None	None	No, Permitted Marcellus well	Permitted Marcellus well. Not yet drilled
4705101947	Tug Hill	6737' TVD planned	None	None	No, Permitted Marcellus well	Permitted Marcellus well. Not yet drilled
4705100846	Hope Natural Gas Co.	Unknown	Unknown	Unknown	Unknown but unlikely, Appears to be a coal test bore well	Well records are incomplete, plug date 12/12/1999
4705100843	Hope Natural Gas Co.	Unknown	Unknown	Unknown	Unknown but unlikely, Appears to be a coal test bore well	Well records are incomplete, plug date 9/16/1999
4705100595	Columbia Gas Transmission Corp.	2545	Gordon	Unknown	No. TVD depth of well is too shallow to be within Range of potential Fracture propagation from Marcellus wells	Well not plugged but no production reported in 2015
4705100853	Wheeling Natural Gas Co.	Unknown	Unknown	Unknown	Unknown but unlikely, Appears to be a shallow coal test bore well.	Well records are incomplete, plug date 3/6/2002

WV Geological & Economic Survey. Well: County = 61 Permit = 00846. Report Time: Thursday, J

Well Reassignment Information: Reassigned From  
 OLD\_COUNTY OLD\_PERMIT NEW\_COUNTY NEW\_PERMIT  
 61 00846 61 00846

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX DISTRICT	QUAD_75	QUAD_12	LAT_00	LONG_00	UTM_E	UTM_N
4705100846	Marshall	648	Meigs	Old Station	Carleton	39.727852	-80.654326	627024.4	4406258.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_V
4705100846	12/12/1999		Plugging	Archie Wrenk	M-53			592	Consolidation Coal Co	Medley Coal Company	

Completion Information:

API	CMP_DT	SPUD_DT	ELEV DATUM	FIELD	DEEPEST_FM	DEEPEST_FTM	INITIAL_CLASS	FINAL_CLASS	TYPE	RQW	CMP_MTHD	TVD	TRD
4705100846	12/12/1999	12/01/1999	1052	Ground Level			undrilled	undrilled	not available	unknown	unknown		

There is no Pay data for this well

There is no Production Gas data for this well

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

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

There is no Stratigraphy data for this well

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

Plugging Information:

API	PLG_DT	DEPTH_PBT
4705100846	12/12/1999	0

There is no Sample data for this well

**WVGS**  
"Pipeline"

Select County: (051) Marshall  
Enter Permit #: 00843  
Get Data Reset

Select datatypes: (Check All)  
 Location  Production  Plugging  
 Owner/Completion  Stratigraphy  Sample  
 Pay/Show/Water  Logs  Bottom Hole Log

[Table Descriptions](#)  
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[Permit/Completion Series](#)  
[Status Series](#)  
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WV Geological & Economic Survey. **Well: County = 51 Permit = 00843** Report Time: Thursday

**Well Reassignment Information: Reassigned From**  
 OLD\_COUNTY OLD\_PERMIT NEW\_COUNTY NEW\_PERMIT  
 51 70887 51 843

**Location Information: View Map**  
 API COUNTY PERMIT TAX\_DISTRICT QUAD\_75 QUAD\_15 LAT\_DD LON\_DD UTM\_E UTM\_N  
 470510043 Marshall 523 Meigs Glen Easton Cameron 39 701419 -80 630268 527282.8 4426047.9

There is no Bottom Hole Location data for this well

**Owner Information:**  
 API CMP\_DT SUFFIX STATUS SURFACE\_OWNER WELL\_NUM CO\_NUM LEASE LEASE\_NUM MINERAL\_OWN OPERATOR\_AT\_COMPLETION PROP\_VD PRG  
 470510043 5/15/1999 Plugging Completed Naomi Guigay M-25 Naomi Guigay McElroy Coal Company  
 470510043 5/15/1999 Plugging Completed H.A. Richmond 523 Naomi Guigay Hope Natural Gas Company

**Completion Information:**  
 API CMP\_DT SPUD\_DT ELEV DATUM FIELD DEEPEST\_FM DEEPEST\_FMT INITIAL\_CLASS FINAL\_CLASS TYPE RIG CMP\_MTHD TVD TMD  
 470510043 5/15/1999 5/3/1999 1322 Ground Level UNCLASSIFIED UNCLASSIFIED not available unknown unknown  
 470510043 5/15/1999 5/3/1999 1322 Ground Level UNCLASSIFIED UNCLASSIFIED not available unknown unknown

There is no Pay data for this well

There is no Production Gas data for this well

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

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

There is no Stratigraphy data for this well

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

**Plugging Information:**  
 API P.L.O. DT DEPTH\_FBT  
 470510043 5/15/1999 0

There is no Sample data for this well

**WVGS**  
"Pipeline"

Select County: (051) Marshall  
Enter Permit #: 00595  
Get Data Reset

Select datatypes: (Check All)  
 Location  Production  Plugging  
 Owner/Completion  Stratigraphy  Sample  
 Pay/Show/Water  Logs  Bottom Hole Log

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WV Geological & Economic Survey. **Well: County = 51 Permit = 00595** Report Time: Thursday, June 04, 2017 5:15

**Location Information: View Map**  
 API COUNTY PERMIT TAX\_DISTRICT QUAD\_75 QUAD\_15 LAT\_DD LON\_DD UTM\_E UTM\_N  
 470510054 Marshall 525 Meigs Glen Easton Cameron 39 720718 -80 615622 527917.0 4424498.1

There is no Bottom Hole Location data for this well

**Owner Information:**  
 API CMP\_DT SUFFIX STATUS SURFACE\_OWNER WELL\_NUM CO\_NUM LEASE LEASE\_NUM MINERAL\_OWN OPERATOR\_AT\_COMPLETION PROP\_VD PROP\_TRUST\_PRG  
 470510054 5/15/1905 Original Lease Completed Riley Miner 1 1224 Manufacture Light & Heat Co  
 470510054 5/15/1905 Original Lease Completed Nora M Alley et al 01225 Columbia Gas Transmission Corp

**Completion Information:**  
 API CMP\_DT SPUD\_DT ELEV DATUM FIELD DEEPEST\_FM DEEPEST\_FMT INITIAL\_CLASS FINAL\_CLASS TYPE RIG CMP\_MTHD TVD NEW\_FTO  
 470510054 5/15/1905 4/25/1905 Cameron-Cameron Gordon Gordon UNCLASSIFIED UNCLASSIFIED Gas unknown Not Over H 2540 2546  
 470510054 5/15/1905 4/25/1905 Cameron-Cameron Gordon Gordon UNCLASSIFIED UNCLASSIFIED Gas unknown Not Over H 2540 2546

There is no Pay data for this well

**WVGS**  
"Pipeline"

Select County: (051) Marshall  
Enter Permit #: 00863  
Get Data Reset

Select datatypes: (Check All)  
 Location  Production  Plugging  
 Owner/Completion  Stratigraphy  Sample  
 Pay/Show/Water  Logs  Bottom Hole Log

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WV Geological & Economic Survey. **Well: County = 51 Permit = 00863** Report Time: Thursday, June 04,

**Well Reassignment Information: Reassigned From**  
 OLD\_COUNTY OLD\_PERMIT NEW\_COUNTY NEW\_PERMIT  
 51 70114 51 851

**Location Information: View Map**  
 API COUNTY PERMIT TAX\_DISTRICT QUAD\_75 QUAD\_15 LAT\_DD LON\_DD UTM\_E UTM\_N  
 470510083 Marshall 523 Meigs Glen Easton Cameron 39 70227 -80 674532 527312.3 4424452.1

There is no Bottom Hole Location data for this well

**Owner Information:**  
 API CMP\_DT SUFFIX STATUS SURFACE\_OWNER WELL\_NUM CO\_NUM LEASE LEASE\_NUM MINERAL\_OWN OPERATOR\_AT\_COMPLETION PROP\_VD PRG  
 470510083 3/6/2002 Plugging Completed Nyma R Gordon M-22 Completion Coal Co Completion Coal Co  
 470510083 3/6/2002 Plugging Completed Jemma Miner 1 M-27 Completion Coal Co Westinghouse Gas Co, The

**Completion Information:**  
 API CMP\_DT SPUD\_DT ELEV DATUM FIELD DEEPEST\_FM DEEPEST\_FMT INITIAL\_CLASS FINAL\_CLASS TYPE RIG CMP\_MTHD TVD TMD NEW\_FTO  
 470510083 3/6/2002 2/14/2002 845 Ground Level UNCLASSIFIED UNCLASSIFIED not available unknown unknown  
 470510083 3/6/2002 2/14/2002 845 Ground Level UNCLASSIFIED UNCLASSIFIED not available unknown unknown

There is no Pay data for this well

There is no Production Gas data for this well

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

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

There is no Stratigraphy data for this well

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

**Plugging Information:**  
 API P.L.O. DT DEPTH\_FBT  
 470510083 3/6/2002 0

There is no Sample data for this well







**Tug Hill Operating, LLC Casing and Cement Program**

**Heaven Hill 3-5HM**

**Casing**

	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	13 3/8"	H40	17 1/2"	1,120'	CTS
Intermediate	9 5/8"	J55	12 1/4"	2,302'	CTS
Production	5 1/2"	P110	6 7/8 x 8 3/4"	14,866'	CTS

**Cement**

- Conductor: Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Conductor Cement mixed at 15.6 ppg, Y=1.2
- Surface: Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Surface Cement mixed at 15.6 ppg, Y=1.2
- Intermediate: Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 15.6 ppg, Y=1.19
- Kick Off Plug: Class H Cement + 1% CD-32 + .7% Sodium Metasilicate + .1% R-3 + .75 gal/100sk FP-13L – KOP Plug
- Production: 50:50 Poz: Premium NE-1 + .1% bwoc ASA-301 + 60lb/sk ASCA-1 + .35% bwoc BA-10A + .25% bwoc MPA-170, 44 lb sack + .5% bwoc R-3 + .75 gals/100sk FP-13L – Production Cement mixed at 15.2ppg, Y = 1.19

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51-01948max

WW-6A1  
(5/13)

Operator's Well No. Heaven Hill 3-5HM

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

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

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

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

\*See attached sheets

**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

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

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

# WW-6A1 Supplement

# Operator's Well No. Heaven Hill 3 - 5HM

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~~10\*15636~~  
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~~10\*15650~~

Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*15557	A	9-7-30	RICKY L WHITTATOH ET AL	CHEVRON USA INC	1/8+	780 226	N/A	N/A	Chevron to Tug Hill: 36/148
10*15557	B	9-7-21	RICKY L WHITTATOH ET AL	CHEVRON USA INC	1/8+	780 226	N/A	N/A	Chevron to Tug Hill: 36/148
10*15486	C	9-7-22	RICHARD NEAL NORRIS AND CAROL NORRIS	TH EXPLORATION LLC	1/8+	905 430	N/A	N/A	N/A
10*15487	C	9-7-22	WILLIAM C RUTAN	TH EXPLORATION LLC	1/8+	905 475	N/A	N/A	N/A
10*15489	C	9-7-22	DONALD T SNODGRASS AND LILA F SNODGRASS	TH EXPLORATION LLC	1/8+	915 189	N/A	N/A	N/A
10*15492	C	9-7-22	HEATHER WHORTON STILLION AND CHRISTOPHER STILLION	TH EXPLORATION LLC	1/8+	905 473	N/A	N/A	N/A
10*15609	C	9-7-22	MICHELLE R WILHELM	CHEVRON USA INC	1/8+	834 456	N/A	N/A	Chevron to Tug Hill: 36/148
10*15610	C	9-7-22	SARAH STEVENS	CHEVRON U.S.A. INC.	1/8+	834 432	N/A	N/A	Chevron to Tug Hill: 36/148
10*15611	C	9-7-22	ROBERT S ZEHNDER	CHEVRON U.S.A. INC.	1/8+	834 437	N/A	N/A	Chevron to Tug Hill: 36/148
10*15612	C	9-7-22	VERA SHIRLENE & ARTHUR WORKMAN	CHEVRON U.S.A. INC.	1/8+	837 361	N/A	N/A	Chevron to Tug Hill: 36/148
10*15613	C	9-7-22	THOMAS L STEVENS	CHEVRON U.S.A. INC.	1/8+	836 290	N/A	N/A	Chevron to Tug Hill: 36/148
10*15614	C	9-7-22	DAVID F RINE	CHEVRON U.S.A. INC.	1/8+	837 130	N/A	N/A	Chevron to Tug Hill: 36/148
10*15615	C	9-7-22	PAUL WAYNE RINE	CHEVRON USA INC	1/8+	837 133	N/A	N/A	Chevron to Tug Hill: 36/148
10*15616	C	9-7-22	PHILLIP C RINE	CHEVRON U.S.A. INC.	1/8+	836 332	N/A	N/A	Chevron to Tug Hill: 36/148
10*15617	C	9-7-22	GLADYS M RINE	CHEVRON U.S.A. INC.	1/8+	836 329	N/A	N/A	Chevron to Tug Hill: 36/148
10*15618	C	9-7-22	CHARLES A RINE	CHEVRON U.S.A. INC.	1/8+	835 22	N/A	N/A	Chevron to Tug Hill: 36/148
10*15619	C	9-7-22	SHARON M REYNOLDS	CHEVRON U.S.A. INC.	1/8+	840 322	N/A	N/A	Chevron to Tug Hill: 36/148
10*15620	C	9-7-22	GLADYS RUCKMAN	CHEVRON U.S.A. INC.	1/8+	840 319	N/A	N/A	Chevron to Tug Hill: 36/148
10*15621	C	9-7-22	KATHERINE A STALMAKER	CHEVRON U.S.A. INC.	1/8+	840 325	N/A	N/A	Chevron to Tug Hill: 36/148
10*15622	C	9-7-22	JAY LEROY RINE	CHEVRON U.S.A. INC.	1/8+	840 351	N/A	N/A	Chevron to Tug Hill: 36/148
10*15623	C	9-7-22	SUSAN JANE WHEELER	CHEVRON U.S.A. INC.	1/8+	847 473	N/A	N/A	Chevron to Tug Hill: 36/148
10*15624	C	9-7-22	RONALD A ZEHNDER	CHEVRON U.S.A. INC.	1/8+	847 213	N/A	N/A	Chevron to Tug Hill: 36/148
10*15625	C	9-7-22	LAWRENCE W STRILING	CHEVRON U.S.A. INC.	1/8+	852 384	N/A	N/A	Chevron to Tug Hill: 36/148
10*15626	C	9-7-22	ROBERT J SEAVER	CHEVRON U.S.A. INC.	1/8+	854 77	N/A	N/A	Chevron to Tug Hill: 36/148
10*15627	C	9-7-22	PAULA R SEAVER	CHEVRON U.S.A. INC.	1/8+	853 483	N/A	N/A	Chevron to Tug Hill: 36/148
10*15628	C	9-7-22	JENNIFER SEAVER	CHEVRON U.S.A. INC.	1/8+	853 272	N/A	N/A	Chevron to Tug Hill: 36/148
10*15629	C	9-7-22	DANIEL L RINE	CHEVRON U.S.A. INC.	1/8+	860 86	N/A	N/A	Chevron to Tug Hill: 36/148
10*15630	C	9-7-22	JANE L HELPER	CHEVRON U.S.A. INC.	1/8+	836 342	N/A	N/A	Chevron to Tug Hill: 36/148
10*15631	C	9-7-22	DAVID HEINZERTH	CHEVRON U.S.A. INC.	1/8+	836 219	N/A	N/A	Chevron to Tug Hill: 36/148
10*15632	C	9-7-22	MARIAN D JONES	CHEVRON U.S.A. INC.	1/8+	835 38	N/A	N/A	Chevron to Tug Hill: 36/148
10*15633	C	9-7-22	ROGER W GATTS	CHEVRON U.S.A. INC.	1/8+	835 35	N/A	N/A	Chevron to Tug Hill: 36/148
10*15634	C	9-7-22	JAMES W DAYTON	CHEVRON U.S.A. INC.	1/8+	847 567	N/A	N/A	Chevron to Tug Hill: 36/148
10*15635	C	9-7-22	ELLEN L BETTNAZZI	CHEVRON U.S.A. INC.	1/8+	847 496	N/A	N/A	Chevron to Tug Hill: 36/148
10*15636	C	9-7-22	JOSEPH ASTON JR BY HIS ATTORNEY-IN-FACT MELVIN J. ASTON	CHEVRON U.S.A. INC.	1/8+	848 280	N/A	N/A	Chevron to Tug Hill: 36/148
10*15637	C	9-7-22	DONALD ASTON	CHEVRON U.S.A. INC.	1/8+	848 274	N/A	N/A	Chevron to Tug Hill: 36/148
10*15638	C	9-7-22	PAUL J ASTON A/K/A JACK ASTON	CHEVRON U.S.A. INC.	1/8+	848 277	N/A	N/A	Chevron to Tug Hill: 36/148
10*15639	C	9-7-22	DELLA M BURKEY A/K/A MAXINE ASTON	CHEVRON U.S.A. INC.	1/8+	848 435	N/A	N/A	Chevron to Tug Hill: 36/148
10*15640	C	9-7-22	EMMA JANE DAVIS A/K/A EMA ASTON	CHEVRON U.S.A. INC.	1/8+	848 271	N/A	N/A	Chevron to Tug Hill: 36/148
10*15641	C	9-7-22	HENRY W ASTON	CHEVRON U.S.A. INC.	1/8+	847 138	N/A	N/A	Chevron to Tug Hill: 36/148
10*15642	C	9-7-22	KENNETH L DAYTON	CHEVRON U.S.A. INC.	1/8+	852 366	N/A	N/A	Chevron to Tug Hill: 36/148
10*15643	C	9-7-22	NORMAN G JOHNSON	CHEVRON U.S.A. INC.	1/8+	848 363	N/A	N/A	Chevron to Tug Hill: 36/148
10*15644	C	9-7-22	RONALD BEN LAUGHTON	CHEVRON U.S.A. INC.	1/8+	852 360	N/A	N/A	Chevron to Tug Hill: 36/148
10*15645	C	9-7-22	KAREN K OLDFIELD	CHEVRON USA INC	1/8+	854 111	N/A	N/A	Chevron to Tug Hill: 36/148
10*15646	C	9-7-22	JUDITH A CIRONE	CHEVRON USA INC	1/8+	848 428	N/A	N/A	Chevron to Tug Hill: 36/148
10*15647	C	9-7-22	KENNETH WENDELL OLDFIELD	CHEVRON U.S.A. INC.	1/8+	861 589	N/A	N/A	Chevron to Tug Hill: 36/148
10*15648	C	9-7-22	MARTHA CRAWFORD	CHEVRON U.S.A. INC.	1/8+	863 542	N/A	N/A	Chevron to Tug Hill: 36/148
10*15649	C	9-7-22	MARY JANE DANIEL	CHEVRON U.S.A. INC.	1/8+	858 28	N/A	N/A	Chevron to Tug Hill: 36/148
10*15650	C	9-7-22	MARY GLADYS KUHN BY ATTORNEY IN FACT CONNIE LYONS	CHEVRON USA INC	1/8+	860 89	N/A	N/A	Chevron to Tug Hill: 36/148

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Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*15651	C	9-7-22	THOMAS G ASTON	CHEVRON U.S.A. INC.	1/8+	860 83	N/A	N/A	Chevron to Tug Hill: 36/148
10*15652	C	9-7-22	ISAAC R ASTON A/K/A IKE ASTON	CHEVRON U.S.A. INC.	1/8+	886 136	N/A	N/A	Chevron to Tug Hill: 36/148
10*15653	C	9-7-22	EMILY M HENCEROTH	CHEVRON U.S.A. INC.	1/8+	862 574	N/A	N/A	Chevron to Tug Hill: 36/148
10*15654	C	9-7-22	GEORGE E HENNIGER	CHEVRON U.S.A. INC.	1/8+	863 612	N/A	N/A	Chevron to Tug Hill: 36/148
10*15655	C	9-7-22	ANNA EMERSON A/K/A ANNIE ASTON	CHEVRON U.S.A. INC.	1/8+	864 603	N/A	N/A	Chevron to Tug Hill: 36/148
10*15656	C	9-7-22	PATTY L MYERS	CHEVRON U.S.A. INC.	1/8+	867 100	N/A	N/A	Chevron to Tug Hill: 36/148
10*15657	C	9-7-22	MARY MARGARET ASTON	CHEVRON U.S.A. INC.	1/8+	868 283	N/A	N/A	Chevron to Tug Hill: 36/148
10*15658	C	9-7-22	GLEN MATTHEW LAUGHTON	CHEVRON U.S.A. INC.	1/8+	873 324	N/A	N/A	Chevron to Tug Hill: 36/148
10*15659	C	9-7-22	WILLIAM E DAYTON BY HIS AIF	CHEVRON U.S.A. INC.	1/8+	871 190	N/A	N/A	Chevron to Tug Hill: 36/148
10*15660	C	9-7-22	DOUGLAS PAUL HENCEROTH BY HIS AIF	CHEVRON U.S.A. INC.	1/8+	871 193	N/A	N/A	Chevron to Tug Hill: 36/148
10*15662	C	9-7-22	LARRY LEE CONKLE	CHEVRON U.S.A. INC.	1/8+	863 354	N/A	N/A	Chevron to Tug Hill: 36/148
10*15663	C	9-7-22	ROY A CONKLE SR	CHEVRON USA INC	1/8+	863 311	N/A	N/A	Chevron to Tug Hill: 36/148
10*15664	C	9-7-22	THERESA ANNE HUGHES	CHEVRON USA INC	1/8+	863 343	N/A	N/A	Chevron to Tug Hill: 36/148
10*15666	C	9-7-22	BRENDA J WHETZEL	CHEVRON USA INC	1/8+	863 635	N/A	N/A	Chevron to Tug Hill: 36/148
10*15673	C	9-7-22	DIANE B ASTON	CHEVRON U.S.A. INC.	1/8+	864 595	N/A	N/A	Chevron to Tug Hill: 36/148
10*15679	C	9-7-22	CARA BONAR FREESE AND GEORGE H FREESE	TH EXPLORATION LLC	1/8+	905 481	N/A	N/A	N/A
10*15680	C	9-7-22	ROBERTA JANE CLAYTON	TH EXPLORATION LLC	1/8+	905 485	N/A	N/A	N/A
10*15688	C	9-7-22	JOSH GARY AND CHRISTINA M GARY	TH EXPLORATION LLC	1/8+	905 487	N/A	N/A	N/A
10*15689	C	9-7-22	JOHN LEROY BAKER AND CYNTHIA A BAKER	TH EXPLORATION LLC	1/8+	905 491	N/A	N/A	N/A
10*15690	C	9-7-22	ROBERT WHORTON AND LINDSAY WHORTON	TH EXPLORATION LLC	1/8+	905 489	N/A	N/A	N/A
10*15728	C	9-7-22	MARY LOU KITTELBERGER AND FREDERICK W KITTELBERGER	TH EXPLORATION LLC	1/8+	905 483	N/A	N/A	N/A
10*15729	C	9-7-22	DONNA KAY ALLEN AND ROGER ALLEN	TH EXPLORATION LLC	1/8+	905 493	N/A	N/A	N/A
10*15747	C	9-7-22	WILLIAM H BAKER	TH EXPLORATION LLC	1/8+	905 499	N/A	N/A	N/A
10*15748	C	9-7-22	CAROLYN LEE FUREY AND MARTIN J FUREY	TH EXPLORATION LLC	1/8+	905 495	N/A	N/A	N/A
10*15749	C	9-7-22	DIANA SMITH KNIGHT	TH EXPLORATION LLC	1/8+	905 497	N/A	N/A	N/A
10*16019	C	9-7-22	ROGER E GALLAGHER AND CONIE M GALLAGHER	TH EXPLORATION LLC	1/8+	905 503	N/A	N/A	N/A
10*16029	C	9-7-22	MARTHA ASHWORTH KNIGHT	TH EXPLORATION LLC	1/8+	905 505	N/A	N/A	N/A
10*16049	C	9-7-22	DANNY SHAWN KERNS AND AMY LYNN KERNS	TH EXPLORATION LLC	1/8+	905 518	N/A	N/A	N/A
10*16114	C	9-7-22	WILLIAM L GALLAGHER	TH EXPLORATION LLC	1/8+	905 512	N/A	N/A	N/A
10*16123	C	9-7-22	ROBERT SANDFORD BLACK AND JOAN BLACK	TH EXPLORATION LLC	1/8+	905 510	N/A	N/A	N/A
10*16177	C	9-7-22	PHYLLIS R GATTO	TH EXPLORATION LLC	1/8+	905 520	N/A	N/A	N/A
10*16179	C	9-7-22	JOSEPHINE BROWN	TH EXPLORATION LLC	1/8+	905 530	N/A	N/A	N/A
10*16287	C	9-7-22	DANA BERRY COPELAND	TH EXPLORATION LLC	1/8+	905 532	N/A	N/A	N/A
10*16295	C	9-7-22	CHARLINE M ENGLE AND KEVIN E ENGLE	TH EXPLORATION LLC	1/8+	905 534	N/A	N/A	N/A
10*16384	C	9-7-22	DONALD H SNYDER JR AND KAREN S SNYDER	TH EXPLORATION LLC	1/8+	903 183	N/A	N/A	N/A
10*16389	C	9-7-22	DANIELLE BONAR OSTER AND LOUIS MICHAEL OSTER	TH EXPLORATION LLC	1/8+	905 501	N/A	N/A	N/A
10*16423	C	9-7-22	CHARLES BERRY	TH EXPLORATION LLC	1/8+	905 508	N/A	N/A	N/A
10*16426	C	9-7-22	GAIL L. VAUGHN & LARRY L. VAUGHN	TH EXPLORATION LLC	1/8+	905 536	N/A	N/A	N/A
10*16440	C	9-7-22	RENE J RUTAN	TH EXPLORATION, LLC	1/8+	905 538	N/A	N/A	N/A
10*16501	C	9-7-22	MELANIE C WILKINS AND ROBERT WILKINS	TH EXPLORATION LLC	1/8+	927 462	N/A	N/A	N/A
10*16513	C	9-7-22	LLOYD DOYLE MOORE AND GWENDOLYN K MOORE	TH EXPLORATION LLC	1/8+	907 392	N/A	N/A	N/A
10*16546	C	9-7-22	LOWELL D AND JANICE L KNIGHT	TH EXPLORATION LLC	1/8+	927 458	N/A	N/A	N/A
10*16553	C	9-7-22	WALTER C AND CHERYL A RINE	TH EXPLORATION LLC	1/8+	927 456	N/A	N/A	N/A
10*16558	C	9-7-22	MARK EDWARD AND KARRIE A GOODMAN	TH EXPLORATION LLC	1/8+	909 81	N/A	N/A	N/A
10*16571	C	9-7-22	PAUL BONAR KNIGHT AND SUZANNE L HOPKINS-KNIGHT	TH EXPLORATION LLC	1/8+	927 460	N/A	N/A	N/A
10*16585	C	9-7-22	GRACE LAURA BONAR	TH EXPLORATION LLC	1/8+	907 411	N/A	N/A	N/A
10*16588	C	9-7-22	DALE BRIAN GOODMAN	TH EXPLORATION LLC	1/8+	909 506	N/A	N/A	N/A
10*16588	C	9-7-22	EDWIN M KNABENSHUE ADMINISTRATOR OF THE ESTATE OF SARAH J KNABENSHUE, DECEASED	TH EXPLORATION LLC	1/8+	907 408	N/A	N/A	N/A

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Operator's Well No. Heaven Hill 3 - 5HM

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Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*16589	C	9-7-22	MARY L WHITTINGTON	TH EXPLORATION LLC	1/8+	907 400	N/A	N/A	N/A
10*16719	C	9-7-22	HOWARD T CONNER AND NANETTE CONNER	TH EXPLORATION LLC	1/8+	912 37	N/A	N/A	N/A
10*16844	C	9-7-22	HOLLY A LONGFELLOW	TH EXPLORATION LLC	1/8+	927 454	N/A	N/A	N/A
10*16845	C	9-7-22	TRACY L AND KEITH W BARNEY	TH EXPLORATION LLC	1/8+	927 452	N/A	N/A	N/A
10*16896	C	9-7-22	MARTHA J BLACK	TH EXPLORATION LLC	1/8+	927 450	N/A	N/A	N/A
10*17296	C	9-7-22	DANIEL W HEINZEROTH AND KATHLEEN E HEINZEROTH	TH EXPLORATION LLC	1/8+	914 528	N/A	N/A	N/A
10*17365	C	9-7-22	MWSTI JOANNE GOODMAN	TH EXPLORATION LLC	1/8+	927 468	N/A	N/A	N/A
10*17370	C	9-7-22	KELLY JUNE GOODMAN	TH EXPLORATION LLC	1/8+	927 470	N/A	N/A	N/A
10*17497	C	9-7-22	SUZANNA DOOLING AND MICHAEL DOOLING	TH EXPLORATION LLC	1/8+	927 464	N/A	N/A	N/A
10*17584	C	9-7-22	WILLIAM THOMAS BONAR AND MONICA BONAR	TH EXPLORATION LLC	1/8+	927 466	N/A	N/A	N/A
10*47051.295.10	C	9-7-22	DEENA J PALOMO	TH EXPLORATION LLC	1/8+	905 470	N/A	N/A	N/A
10*47051.295.11	C	9-7-22	REGINA D FIGUEROA AND DAVID FIGUEROA	TH EXPLORATION LLC	1/8+	905 435	N/A	N/A	N/A
10*47051.295.12	C	9-7-22	EARL D WEILMAN	TH EXPLORATION LLC	1/8+	905 432	N/A	N/A	N/A
10*47051.295.13	C	9-7-22	THE DOLLVE F WOOD REVOCABLE TRUST BY NICHOLAS CHARLES WOOD AS TRUSTEE	TH EXPLORATION LLC	1/8+	904 641	N/A	N/A	N/A
10*47051.295.3	C	9-7-22	HAZEL ARIZONA MOORE REYNOLDS	TH EXPLORATION LLC	1/8+	904 632	N/A	N/A	N/A
10*47051.295.4	C	9-7-22	LLOYD D MOORE	TH EXPLORATION LLC	1/8+	904 459	N/A	N/A	N/A
10*47051.295.5	C	9-7-22	DALE R MOORE	TH EXPLORATION LLC	1/8+	904 635	N/A	N/A	N/A
10*47051.295.6	C	9-7-22	MARY I BURKHART	TH EXPLORATION LLC	1/8+	904 638	N/A	N/A	N/A
10*47051.295.7	C	9-7-22	JEANNE V MELCHIORI	TH EXPLORATION LLC	1/8+	904 462	N/A	N/A	N/A
10*47051.295.9	C	9-7-22	JAMES E HIMELRICK JR AND KAREN HIMELRICK	TH EXPLORATION LLC	1/8+	904 465	N/A	N/A	N/A
10*47051.256.22	D	9-7-23	BEVERLY J HOPSON	TH EXPLORATION LLC	1/8+	913 581	N/A	N/A	N/A
10*16121	D	9-7-23	ISALAH BENNETT BY K SHERINGTON	TH EXPLORATION LLC	1/8+	933 105	N/A	N/A	N/A
10*47051.256.1	D	9-7-23	BRENDA J WHEITZEL	TH EXPLORATION LLC	1/8+	881 145	N/A	N/A	N/A
10*15746	D	9-7-23	BRUCE D SCHURR	TH EXPLORATION LLC	1/8+	921 478	N/A	N/A	N/A
10*16247	D	9-7-23	CAROL RIGGLE PARSLEY AND JAMES DENNIS PARSLEY	TH EXPLORATION LLC	1/8+	925 327	N/A	N/A	N/A
10*47051.256.24	D	9-7-23	CATHERINE BONAR PETTIT BILLIE	TH EXPLORATION LLC	1/8+	904 628	N/A	N/A	N/A
10*47051.256.16	D	9-7-23	CHARLOTTE B HUMMEL	TH EXPLORATION LLC	1/8+	905 45	N/A	N/A	N/A
10*47051.256.15	D	9-7-23	CHARLOTTE J BONAR YOHO	TH EXPLORATION LLC	1/8+	904 455	N/A	N/A	N/A
10*17506	D	9-7-23	CHASKIA F HARRIS AND JAMES M HARRIS	TH EXPLORATION LLC	1/8+	919 239	N/A	N/A	N/A
10*17507	D	9-7-23	DEZRAY METCALF	TH EXPLORATION LLC	1/8+	919 235	N/A	N/A	N/A
10*17508	D	9-7-23	DILLION PITSENBARGER	TH EXPLORATION LLC	1/8+	919 241	N/A	N/A	N/A
10*17415	D	9-7-23	DILLON PITSENBARGER	TH EXPLORATION LLC	1/8+	919 241	N/A	N/A	N/A
10*16115	D	9-7-23	EARL W HARRIS	TH EXPLORATION LLC	1/8+	925 329	N/A	N/A	N/A
10*47051.256.10	D	9-7-23	GRACE LAURA BONAR	TH EXPLORATION LLC	1/8+	905 35	N/A	N/A	N/A
10*47051.256.14	D	9-7-23	HUGH R BUZZARD	TH EXPLORATION LLC	1/8+	905 43	N/A	N/A	N/A
10*47051.256.21	D	9-7-23	JACK L MASON AND JEAN M MASON	TH EXPLORATION LLC	1/8+	904 626	N/A	N/A	N/A
10*47051.256.20	D	9-7-23	JEFFREY THOMAS PYLES AND TERESA A PYLES	TH EXPLORATION LLC	1/8+	907 209	N/A	N/A	N/A
10*47051.256.11	D	9-7-23	JOHN L MASON	TH EXPLORATION LLC	1/8+	905 37	N/A	N/A	N/A
10*47051.256.18	D	9-7-23	JOHN WILLIAM BONAR AND SHIRLEY BONAR	TH EXPLORATION LLC	1/8+	913 522	N/A	N/A	N/A
10*47051.256.7	D	9-7-23	MARILYN SUE BUMER	TH EXPLORATION LLC	1/8+	905 29	N/A	N/A	N/A
10*47051.256.17	D	9-7-23	MAXINE G JOHNSON	TH EXPLORATION LLC	1/8+	904 457	N/A	N/A	N/A
10*47051.256.19	D	9-7-23	MICHAEL DAVID PYLES AND CYNTHIA A PYLES	TH EXPLORATION LLC	1/8+	907 207	N/A	N/A	N/A
10*47051.256.8	D	9-7-23	PAMELA ANN MASON	TH EXPLORATION LLC	1/8+	905 31	N/A	N/A	N/A
10*47051.256.23	D	9-7-23	ROBERT L BONAR	TH EXPLORATION LLC	1/8+	913 556	N/A	N/A	N/A
10*47051.256.12	D	9-7-23	STEVEN A BOHRER	TH EXPLORATION LLC	1/8+	905 39	N/A	N/A	N/A
10*16021	D	9-7-23	TOMMY BONAR AND TANYA S BONAR	TH EXPLORATION LLC	1/8+	925 325	N/A	N/A	N/A
10*47051.256.9	D	9-7-23	WANDA MASON SUNSHINE	TH EXPLORATION LLC	1/8+	905 33	N/A	N/A	N/A
10*47051.256.13	D	9-7-23	WILLIAM W CRAIG AND GLENDA L CRAIG	TH EXPLORATION LLC	1/8+	905 41	N/A	N/A	N/A

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**Operator's Well No. Heaven Hill 3 - 5HM**

10-018560  
10-018560

10-018560  
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10*15662	E	9-7-24	LARRY LEE CONKLE
10*15663	E	9-7-24	ROY A CONKLE SR
10*15664	E	9-7-24	THERESA ANNE HUGHES
10*15666	E	9-7-24	BRENDA J WHETZEL
10*16049	E	9-7-24	DANNY SHAWN KERNS AND AMY LYNN KERNS
10*16501	E	9-7-24	LLOYD DOYLE MOORE AND GWENDOLYN K MOORE
10*16553	E	9-7-24	MARK EDWARD AND KARRIE A GOODMAN
10*16585	E	9-7-24	DALE BRIAN GOODMAN
10*17365	E	9-7-24	MYSTI JOANNE GOODMAN
10*17370	E	9-7-24	KELLY JUNE GOODMAN
10*47051.295.10	E	9-7-24	DEENA J PALOMO
10*47051.295.11	E	9-7-24	REGINA D FIGUEROA AND DAVID FIGUEROA
10*47051.295.12	E	9-7-24	EARL D WELLMAN
10*47051.295.13	E	9-7-24	THE DOLLVE F WOOD REVOCABLE TRUST BY NICHOLAS CHARLES WOOD AS TRUSTEE
10*47051.295.3	E	9-7-24	HAZEL ARIZONA MOORE RENOLDS
10*47051.295.4	E	9-7-24	LLOYD D MOORE
10*47051.295.5	E	9-7-24	DALE R MOORE
10*47051.295.6	E	9-7-24	MARY J BURKHART
10*47051.295.7	E	9-7-24	JEANNE V MELCHIORI
10*47051.295.9	E	9-7-24	JAMES E HIMELRICK JR AND KAREN HIMELRICK
10*47051.256.22	F	9-11-7	BEVERLY J HOPSON
10*47051.256.1	F	9-11-7	BRENDA J WHETZEL
10*15746	F	9-11-7	BRUCE D SCHURR
10*16247	F	9-11-7	CAROL RIGGLE PARSLEY AND JAMES DENNIS PARSLEY
10*47051.256.24	F	9-11-7	CATHERINE BONAR PETTIT BILLIE
10*47051.256.16	F	9-11-7	CHARLOTTE B HUMMEL
10*47051.256.15	F	9-11-7	CHARLOTTE J BONAR YOHO
10*17506	F	9-11-7	CHASKIA F HARRIS AND JAMES M HARRIS
10*17507	F	9-11-7	DEZRAY METCALF
10*17415	F	9-11-7	DILLON PITSENBARGER
10*16115	F	9-11-7	EARL W HARRIS
10*47051.256.10	F	9-11-7	GRACE LAURA BONAR
10*47051.256.14	F	9-11-7	HUGH R BUZZARD
10*47051.256.21	F	9-11-7	JACK L MASON AND JEAN M MASON
10*47051.256.20	F	9-11-7	JEFFREY THOMAS PYLES AND TERESA A PYLES
10*47051.256.11	F	9-11-7	JOHN L MASON
10*47051.256.18	F	9-11-7	JOHN WILLIAM BONAR AND SHIRLEY BONAR
10*47051.256.7	F	9-11-7	MARILYN SUE BUMER
10*47051.256.17	F	9-11-7	MAXINE G JOHNSON
10*47051.256.19	F	9-11-7	MICHAEL DAVID PYLES AND CYNTHIA A PYLES
10*47051.256.8	F	9-11-7	PAMELA ANN MASON
10*47051.256.23	F	9-11-7	ROBERT L BONAR
10*47051.256.12	F	9-11-7	STEVEN A BOHRER
10*16021	F	9-11-7	TOMMY BONAR AND TANAYA S BONAR
10*47051.256.9	F	9-11-7	WANDA MASON SUNSHINE
10*47051.256.13	F	9-11-7	WILLIAM W CRAIG AND GLENDA L CRAIG
10*47051.256.22	G	9-11-7.1	BEVERLY J HOPSON
10*47051.256.1	G	9-11-7.1	BRENDA J WHETZEL

Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
CHEVRON U.S.A. INC.	1/8+	863 354	N/A	N/A	Chevron to Tug Hill: 36/148
CHEVRON USA INC	1/8+	863 311	N/A	N/A	Chevron to Tug Hill: 36/148
CHEVRON USA INC	1/8+	863 343	N/A	N/A	Chevron to Tug Hill: 36/148
CHEVRON USA INC	1/8+	863 635	N/A	N/A	Chevron to Tug Hill: 36/148
TH EXPLORATION LLC	1/8+	905 518	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	907 392	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	909 81	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	909 506	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	927 468	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	927 470	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 470	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 435	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 432	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 641	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 632	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 459	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 635	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 638	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 462	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 465	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	913 581	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	881 145	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	921 478	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	925 327	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 628	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 45	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 455	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	919 239	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	919 235	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	919 241	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	925 329	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 35	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 43	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 626	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	907 209	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 37	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	913 522	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 29	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	904 457	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	907 207	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 31	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	913 556	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 39	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	925 325	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 33	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	905 41	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	913 581	N/A	N/A	N/A
TH EXPLORATION LLC	1/8+	881 145	N/A	N/A	N/A

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10\*15746  
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Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*15746	G	9-11-7.1	BRUCE D SCHURR	TH EXPLORATION LLC	1/8+	921 478	N/A	N/A	N/A
10*16247	G	9-11-7.1	CAROL RIGGLE PARSLEY AND JAMES DENNIS PARSLEY	TH EXPLORATION LLC	1/8+	925 327	N/A	N/A	N/A
10*47051.256.24	G	9-11-7.1	CATHERINE BONAR PETTIT BILLIE	TH EXPLORATION LLC	1/8+	904 628	N/A	N/A	N/A
10*47051.256.16	G	9-11-7.1	CHARLOTTE B HUMMELL	TH EXPLORATION LLC	1/8+	905 45	N/A	N/A	N/A
10*47051.256.15	G	9-11-7.1	CHARLOTTE J BONAR VOHO	TH EXPLORATION LLC	1/8+	904 455	N/A	N/A	N/A
10*17506	G	9-11-7.1	CHASKIA F HARRIS AND JAMES M HARRIS	TH EXPLORATION LLC	1/8+	919 239	N/A	N/A	N/A
10*17507	G	9-11-7.1	DEZRAY METCALF	TH EXPLORATION LLC	1/8+	919 235	N/A	N/A	N/A
10*17415	G	9-11-7.1	DILLON PITSENBARGER	TH EXPLORATION LLC	1/8+	919 241	N/A	N/A	N/A
10*16115	G	9-11-7.1	EARL W HARRIS	TH EXPLORATION LLC	1/8+	925 329	N/A	N/A	N/A
10*47051.256.10	G	9-11-7.1	GRACE LAURA BONAR	TH EXPLORATION LLC	1/8+	905 35	N/A	N/A	N/A
10*47051.256.14	G	9-11-7.1	HUGH R BUZZARD	TH EXPLORATION LLC	1/8+	905 43	N/A	N/A	N/A
10*47051.256.21	G	9-11-7.1	JACK L MASON AND JEAN M MASON	TH EXPLORATION LLC	1/8+	904 626	N/A	N/A	N/A
10*47051.256.20	G	9-11-7.1	JEFFREY THOMAS PYLES AND TERESA A PYLES	TH EXPLORATION LLC	1/8+	907 209	N/A	N/A	N/A
10*47051.256.11	G	9-11-7.1	JOHN L MASON	TH EXPLORATION LLC	1/8+	905 37	N/A	N/A	N/A
10*47051.256.18	G	9-11-7.1	JOHN WILLIAM BONAR AND SHIRLEY BONAR	TH EXPLORATION LLC	1/8+	913 522	N/A	N/A	N/A
10*47051.256.7	G	9-11-7.1	MARILYN SUE BUMER	TH EXPLORATION LLC	1/8+	905 29	N/A	N/A	N/A
10*47051.256.17	G	9-11-7.1	MAXINE G JOHNSON	TH EXPLORATION LLC	1/8+	904 457	N/A	N/A	N/A
10*47051.256.19	G	9-11-7.1	MICHAEL DAVID PYLES AND CYNTHIA A PYLES	TH EXPLORATION LLC	1/8+	907 207	N/A	N/A	N/A
10*47051.256.8	G	9-11-7.1	PAMELA ANN MASON	TH EXPLORATION LLC	1/8+	905 31	N/A	N/A	N/A
10*47051.256.23	G	9-11-7.1	ROBERT L BONAR	TH EXPLORATION LLC	1/8+	913 556	N/A	N/A	N/A
10*47051.256.12	G	9-11-7.1	STEVEN A BOHRER	TH EXPLORATION LLC	1/8+	905 39	N/A	N/A	N/A
10*16021	G	9-11-7.1	TOMMY BONAR AND TANYA S BONAR	TH EXPLORATION LLC	1/8+	925 325	N/A	N/A	N/A
10*47051.256.9	G	9-11-7.1	WANDA MASON SUNSHINE	TH EXPLORATION LLC	1/8+	905 33	N/A	N/A	N/A
10*47051.256.13	G	9-11-7.1	WILLIAM W CRAIG AND GLENDA L CRAIG	TH EXPLORATION LLC	1/8+	905 41	N/A	N/A	N/A
10*15463	H	9-11-8	CHARLES A RINE	TH EXPLORATION LLC	1/8+	908 274	N/A	N/A	N/A
10*15481	H	9-11-8	DEAN P RIGBY AND SUSAN RIGBY	TH EXPLORATION LLC	1/8+	908 197	N/A	N/A	N/A
10*15482	H	9-11-8	SUSAN NELSON	TH EXPLORATION LLC	1/8+	908 203	N/A	N/A	N/A
10*15686	H	9-11-8	JOHN OMER BOLTZ	TH EXPLORATION LLC	1/8+	908 160	N/A	N/A	N/A
10*15750	H	9-11-8	SANDRA K TRULL	TH EXPLORATION LLC	1/8+	908 229	N/A	N/A	N/A
10*16058	H	9-11-8	MATTIE RUTH JACKSON PRESCOTT	TH EXPLORATION LLC	1/8+	908 231	N/A	N/A	N/A
10*16118	H	9-11-8	RUBY RIDGLE JACKSON	TH EXPLORATION LLC	1/8+	908 233	N/A	N/A	N/A
10*16297	H	9-11-8	ROBERT A LEADBETTER AND M REBECCA LEADBETTER	TH EXPLORATION LLC	1/8+	908 235	N/A	N/A	N/A
10*16298	H	9-11-8	GEOFFREY A SHIEFER AND STEPHANIE L SCHIEFER	TH EXPLORATION LLC	1/8+	908 238	N/A	N/A	N/A
10*16383	H	9-11-8	ROBERT STEPHEN DRIGGERS	TH EXPLORATION LLC	1/8+	908 224	N/A	N/A	N/A
10*16414	H	9-11-8	MARY ELIZABETH DRIGGERS	TH EXPLORATION, LLC	1/8+	908 208	N/A	N/A	N/A
10*16415	H	9-11-8	TERENCE J & NANCY J ANDERSON	TH EXPLORATION, LLC	1/8+	908 213	N/A	N/A	N/A
10*16416	H	9-11-8	CYNTHIA HUDSON	TH EXPLORATION, LLC	1/8+	908 219	N/A	N/A	N/A
10*16424	H	9-11-8	ROBERT J RIGBY	TH EXPLORATION, LLC	1/8+	908 241	N/A	N/A	N/A
10*16448	H	9-11-8	RALPH L AND JUANITA L CRIM	TH EXPLORATION LLC	1/8+	908 584	N/A	N/A	N/A
10*16478	H	9-11-8	MARION L AND EMILY CAMPBELL	TH EXPLORATION LLC	1/8+	908 245	N/A	N/A	N/A
10*16514	H	9-11-8	ALEX RUSSELL AND JOYCE A CAMPBELL	TH EXPLORATION LLC	1/8+	908 248	N/A	N/A	N/A
10*16515	H	9-11-8	ANNA MARIE JACKSON	TH EXPLORATION LLC	1/8+	908 251	N/A	N/A	N/A
10*16516	H	9-11-8	WILSON ANDREW JACKSON	TH EXPLORATION LLC	1/8+	908 253	N/A	N/A	N/A
10*16545	H	9-11-8	ROBERT G & ELLEN FOUNDS	TH EXPLORATION LLC	1/8+	908 260	N/A	N/A	N/A
10*16662	H	9-11-8	RICHARD THOMAS AND VICKI J MIMS	TH EXPLORATION LLC	1/8+	908 863	N/A	N/A	N/A
10*16666	H	9-11-8	MICHAEL P PYLE	TH EXPLORATION LLC	1/8+	908 255	N/A	N/A	N/A
10*16667	H	9-11-8	CHARLES F AND GAIL ANN PYLE	TH EXPLORATION LLC	1/8+	908 266	N/A	N/A	N/A
10*16668	H	9-11-8	JACK I AND MERRILEE PYLE	TH EXPLORATION LLC	1/8+	908 257	N/A	N/A	N/A



**WW-6A1 Supplement**

**51-01948**

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**Operator's Well No. Heaven Hill 3 - 5HM1**

Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*16669	H	9-11-8	JOHN S AND PATRICIA S DADO	TH EXPLORATION LLC	1/8+	908 269	N/A	N/A	N/A
10*16686	H	9-11-8	CHERYLE M TRACEY	TH EXPLORATION LLC	1/8+	927 475	N/A	N/A	N/A
10*16688	H	9-11-8	SHERRYL PYLE BAIR	TH EXPLORATION LLC	1/8+	927 481	N/A	N/A	N/A
10*16689	H	9-11-8	JOHN C FOUNDS	TH EXPLORATION LLC	1/8+	927 490	N/A	N/A	N/A
10*16690	H	9-11-8	RICARDO ORTIZ	TH EXPLORATION LLC	1/8+	921 352	N/A	N/A	N/A
10*16720	H	9-11-8	DONNA ELAINE BRASKETT	TH EXPLORATION LLC	1/8+	921 152	N/A	N/A	N/A
10*16742	H	9-11-8	PAUL C WILSON	TH EXPLORATION LLC	1/8+	927 490	N/A	N/A	N/A
10*16747	H	9-11-8	WILLIAM DALE BRASKETT	TH EXPLORATION LLC	1/8+	921 96	N/A	N/A	N/A
10*16798	H	9-11-8	PATRICK A RANKIN AND ROBIN A RANKIN	TH EXPLORATION LLC	1/8+	921 364	N/A	N/A	N/A
10*16800	H	9-11-8	JAMES KENNETH JACKSON AND JULIE JACKSON	TH EXPLORATION LLC	1/8+	921 93	N/A	N/A	N/A
10*16802	H	9-11-8	CHRISTOPHER AND TAMMY RICHARDSON	TH EXPLORATION LLC	1/8+	921 495	N/A	N/A	N/A
10*16804	H	9-11-8	WILLIAM N AND SHERRY D TAYLOR	TH EXPLORATION LLC	1/8+	921 510	N/A	N/A	N/A
10*16806	H	9-11-8	VIRGINIA I WHITMAN	TH EXPLORATION LLC	1/8+	921 528	N/A	N/A	N/A
10*16807	H	9-11-8	DAVID TULLER AND SUSAN STORTS-TULLER	TH EXPLORATION LLC	1/8+	921 513	N/A	N/A	N/A
10*16808	H	9-11-8	MICHAEL L ORTIZ	TH EXPLORATION LLC	1/8+	921 349	N/A	N/A	N/A
10*16815	H	9-11-8	HAROLD W PYLE	TH EXPLORATION LLC	1/8+	921 357	N/A	N/A	N/A
10*16819	H	9-11-8	TERESA ORTIZ BIGGS	TH EXPLORATION LLC	1/8+	921 147	N/A	N/A	N/A
10*16821	H	9-11-8	SHEILA BRASKETT WEICHEY	TH EXPLORATION LLC	1/8+	921 516	N/A	N/A	N/A
10*16836	H	9-11-8	RICK A AND LENORE A STORTS	TH EXPLORATION LLC	1/8+	921 507	N/A	N/A	N/A
10*16837	H	9-11-8	TERRY L AND THELMA A POFF	TH EXPLORATION LLC	1/8+	927 472	N/A	N/A	N/A
10*16838	H	9-11-8	ROBERT G FUNARI	TH EXPLORATION LLC	1/8+	921 82	N/A	N/A	N/A
10*16839	H	9-11-8	JAMES B FOUNDS AND LYNN M MOWERY	TH EXPLORATION LLC	1/8+	921 73	N/A	N/A	N/A
10*16863	H	9-11-8	TINA MOORE	TH EXPLORATION LLC	1/8+	921 334	N/A	N/A	N/A
10*16868	H	9-11-8	MICHAEL W STORTS AND JESSICA M STORTS	TH EXPLORATION LLC	1/8+	921 504	N/A	N/A	N/A
10*16879	H	9-11-8	MARK E AND LESLEY A STORTS	TH EXPLORATION LLC	1/8+	921 501	N/A	N/A	N/A
10*16880	H	9-11-8	BEVERLY ANN STORTS	TH EXPLORATION LLC	1/8+	921 498	N/A	N/A	N/A
10*16902	H	9-11-8	MARY BARCAW DUKE	TH EXPLORATION LLC	1/8+	921 105	N/A	N/A	N/A
10*16962	H	9-11-8	DENNIS P AND BARBARA EZZEL FLORY	TH EXPLORATION LLC	1/8+	921 70	N/A	N/A	N/A
10*16976	H	9-11-8	LESTER G AND CONSTANCE B NICKOLSON	TH EXPLORATION LLC	1/8+	921 343	N/A	N/A	N/A
10*16977	H	9-11-8	JEREMY COCHENOUR	TH EXPLORATION LLC	1/8+	921 102	N/A	N/A	N/A
10*16987	H	9-11-8	LAURIE EZZEL PERRY	TH EXPLORATION LLC	1/8+	921 355	N/A	N/A	N/A
10*16989	H	9-11-8	BRITTANY RICHARDSON	TH EXPLORATION LLC	1/8+	921 376	N/A	N/A	N/A
10*16991	H	9-11-8	MARYELLEN FOUNDS AND LAUREN FOUNDS	TH EXPLORATION LLC	1/8+	921 79	N/A	N/A	N/A
10*16996	H	9-11-8	THOMAS RANKIN	TH EXPLORATION LLC	1/8+	917 75	N/A	N/A	N/A
10*17130	H	9-11-8	CINDY L BARGER	TH EXPLORATION LLC	1/8+	921 137	N/A	N/A	N/A
10*17155	H	9-11-8	JESSE LEON JR AND TERESA GAIL EZZELLE	TH EXPLORATION LLC	1/8+	921 118	N/A	N/A	N/A
10*17156	H	9-11-8	HENRI NELL JACKSON KENT BARNES	TH EXPLORATION LLC	1/8+	921 139	N/A	N/A	N/A
10*17157	H	9-11-8	JAMES N REEVES JR AND RITA M REEVES	TH EXPLORATION LLC	1/8+	921 367	N/A	N/A	N/A
10*17198	H	9-11-8	THOMAS G AND DIANE W BAYLESS	TH EXPLORATION LLC	1/8+	921 141	N/A	N/A	N/A
10*17205	H	9-11-8	SANDRA JEAN WILSON	TH EXPLORATION LLC	1/8+	921 524	N/A	N/A	N/A
10*17208	H	9-11-8	PATRICK S GALLAGHER AND JOYCE ANN FOUNDS	TH EXPLORATION LLC	1/8+	921 86	N/A	N/A	N/A
10*17274	H	9-11-8	DAVID H WILSON	TH EXPLORATION LLC	1/8+	921 474	N/A	N/A	N/A
10*17275	H	9-11-8	JOHN R REEVES AND MONA G REEVES	TH EXPLORATION LLC	1/8+	921 373	N/A	N/A	N/A
10*17276	H	9-11-8	BERTHA EZZEL WYATT	TH EXPLORATION LLC	1/8+	921 526	N/A	N/A	N/A
10*17278	H	9-11-8	MICHAEL L EZZELLE	TH EXPLORATION LLC	1/8+	921 121	N/A	N/A	N/A
10*17339	H	9-11-8	JOSEPH W FOUNDS	TH EXPLORATION LLC	1/8+	921 76	N/A	N/A	N/A
10*17377	H	9-11-8	MILTON HOWARD EZZELLE JR AND ELIZABETH A EZZELLE	TH EXPLORATION LLC	1/8+	921 123	N/A	N/A	N/A
10*17416	H	9-11-8	ANDREW M. ORTIZ	TH EXPLORATION, LLC	1/8+	921 346	N/A	N/A	N/A

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Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*17438	H	9-11-8	DENNIS M WILSON	TH EXPLORATION LLC	1/8+	921 476	N/A	N/A	N/A
10*17440	H	9-11-8	KENDRA WALISA	TH EXPLORATION LLC	1/8+	927 484	N/A	N/A	N/A
10*17441	H	9-11-8	RALPH J WILSON	TH EXPLORATION LLC	1/8+	921 522	N/A	N/A	N/A
10*17442	H	9-11-8	SHANE ALLEN AND MENDY JEAN ALLEN	TH EXPLORATION LLC	1/8+	921 134	N/A	N/A	N/A
10*17443	H	9-11-8	MICHELE MORROW-BACK	TH EXPLORATION LLC	1/8+	921 337	N/A	N/A	N/A
10*17444	H	9-11-8	KELLY FOUNDS CAMPBELL	TH EXPLORATION LLC	1/8+	921 99	N/A	N/A	N/A
10*17449	H	9-11-8	PHYLLIS J BLAKE	TH EXPLORATION LLC	1/8+	921 150	N/A	N/A	N/A
10*17482	H	9-11-8	TERESA EZELE RALYA AND DAVID L RALYA	TH EXPLORATION LLC	1/8+	927 487	N/A	N/A	N/A
10*17483	H	9-11-8	RICHARD I PYLE	TH EXPLORATION LLC	1/8+	921 359	N/A	N/A	N/A
10*17484	H	9-11-8	NELDA S JACKSON	TH EXPLORATION LLC	1/8+	921 330	N/A	N/A	N/A
10*17485	H	9-11-8	MARGIE ANN JACKSON ROBBINS GRAHAM	TH EXPLORATION LLC	1/8+	921 91	N/A	N/A	N/A
10*17526	H	9-11-8	JEFFREY L REEVES AND JODY L REEVES	TH EXPLORATION LLC	1/8+	921 370	N/A	N/A	N/A
10*17527	H	9-11-8	JAMES MICHAEL EZELE AND LUCILLE D EZELE	TH EXPLORATION LLC	1/8+	921 111	N/A	N/A	N/A
10*17538	H	9-11-8	CHERYL RANKIN-KING	TH EXPLORATION LLC	1/8+	952 160	N/A	N/A	N/A
10*17552	H	9-11-8	JOHN BEVACQUA AND PATRICIA A BEVACQUA	TH EXPLORATION LLC	1/8+	921 144	N/A	N/A	N/A
10*17554	H	9-11-8	MICHAEL T RANKIN	TH EXPLORATION LLC	1/8+	921 361	N/A	N/A	N/A
10*17561	H	9-11-8	KATHRYN L & ROGER L TYRELL	TH EXPLORATION LLC	1/8+	921 519	N/A	N/A	N/A
10*17564	H	9-11-8	JAMES R & TRACEY E NICKOLSON	TH EXPLORATION, LLC	1/8+	921 340	N/A	N/A	N/A
10*17565	H	9-11-8	JESSE ALLEN JACKSON AND ELIZABETH D JACKSON	TH EXPLORATION LLC	1/8+	921 327	N/A	N/A	N/A
10*17566	H	9-11-8	NATHAN P & BARBARA T ERDOSSY	TH EXPLORATION, LLC	1/8+	921 108	N/A	N/A	N/A
10*17588	H	9-11-8	JAMES M JACKSON	TH EXPLORATION LLC	1/8+	921 325	N/A	N/A	N/A
10*17589	H	9-11-8	MARY CHRISTINE MCKENNA	TH EXPLORATION, LLC	1/8+	921 332	N/A	N/A	N/A
10*17677	H	9-11-8	GEORGE M GONITA JR	TH EXPLORATION, LLC	1/8+	921 89	N/A	N/A	N/A
10*17744	H	9-11-8	SAM PRESLEY EZELE	TH EXPLORATION LLC	1/8+	921 116	N/A	N/A	N/A
10*47051.223.1	H	9-11-8	JEAN ANNE GORBY STORCH	TH EXPLORATION LLC	1/8+	877 216	N/A	N/A	N/A
10*47051.223.10	H	9-11-8	ROBERT E GORBY	TH EXPLORATION LLC	1/8+	908 47	N/A	N/A	N/A
10*47051.223.11	H	9-11-8	ELIZABETH ESTEP	TH EXPLORATION LLC	1/8+	908 37	N/A	N/A	N/A
10*47051.223.12	H	9-11-8	ALICE GORBY MARTIN	TH EXPLORATION LLC	1/8+	908 52	N/A	N/A	N/A
10*47051.223.13	H	9-11-8	JUSTIN RINE AND BECKY RINE	TH EXPLORATION LLC	1/8+	908 42	N/A	N/A	N/A
10*47051.223.14	H	9-11-8	LARRY D TAUNT AND NANCY L TAUNT	TH EXPLORATION LLC	1/8+	907 639	N/A	N/A	N/A
10*47051.223.15	H	9-11-8	BETTY LOU STERN AND WILLIAM KEITH STERN	TH EXPLORATION LLC	1/8+	908 64	N/A	N/A	N/A
10*47051.223.16	H	9-11-8	RALPH E HUNTER JR AND CHARLOTTE HUNTER	TH EXPLORATION LLC	1/8+	908 9	N/A	N/A	N/A
10*47051.223.17	H	9-11-8	BRITNEY MIENEAR	TH EXPLORATION LLC	1/8+	908 57	N/A	N/A	N/A
10*47051.223.18	H	9-11-8	JASON RINE AND HEATHER RINE	TH EXPLORATION LLC	1/8+	907 629	N/A	N/A	N/A
10*47051.223.19	H	9-11-8	BARBARA A BUZZARD	TH EXPLORATION LLC	1/8+	908 24	N/A	N/A	N/A
10*47051.223.20	H	9-11-8	GARY T WARD AND SHARON D WARD	TH EXPLORATION LLC	1/8+	908 19	N/A	N/A	N/A
10*47051.223.21	H	9-11-8	SALLY COLE	TH EXPLORATION LLC	1/8+	908 74	N/A	N/A	N/A
10*47051.223.22	H	9-11-8	RONALD S CRIM	TH EXPLORATION LLC	1/8+	908 79	N/A	N/A	N/A
10*47051.223.23	H	9-11-8	JO DEE K DAVIS	TH EXPLORATION LLC	1/8+	908 136	N/A	N/A	N/A
10*47051.223.24	H	9-11-8	JOANNE WELCH	TH EXPLORATION LLC	1/8+	908 141	N/A	N/A	N/A
10*47051.223.25	H	9-11-8	WENDY L SMARKEI	TH EXPLORATION LLC	1/8+	908 69	N/A	N/A	N/A
10*47051.223.26	H	9-11-8	TIM J HOBBS	TH EXPLORATION LLC	1/8+	908 277	N/A	N/A	N/A
10*47051.223.27	H	9-11-8	KAREN S GAST	TH EXPLORATION LLC	1/8+	908 150	N/A	N/A	N/A
10*47051.223.28	H	9-11-8	PATSY JO RAUJ	TH EXPLORATION LLC	1/8+	908 155	N/A	N/A	N/A
10*47051.223.29	H	9-11-8	LAURIE DRIGGERS MANDERSON	TH EXPLORATION LLC	1/8+	908 165	N/A	N/A	N/A
10*47051.223.30	H	9-11-8	JANICE M GONITA GAVALIK	TH EXPLORATION LLC	1/8+	908 180	N/A	N/A	N/A
10*47051.223.31	H	9-11-8	JOSEPH GORBY DAKAN	TH EXPLORATION LLC	1/8+	908 175	N/A	N/A	N/A

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10*47051.223.33	H	9-11-8	NANCY CIAFFAGNONE HOUSLEY	TH EXPLORATION LLC	1/8+	908 185	N/A	N/A	N/A
10*47051.223.34	H	9-11-8	JOHN CIAFFAGNONE	TH EXPLORATION LLC	1/8+	908 170	N/A	N/A	N/A
10*47051.223.35	H	9-11-8	DEBRA L CIAFFAGNONE	TH EXPLORATION LLC	1/8+	908 190	N/A	N/A	N/A
10*47051.223.5	H	9-11-8	HAROLD S BROWN II AND MARIA A BROWN	TH EXPLORATION LLC	1/8+	907 641	N/A	N/A	N/A
10*47051.223.6	H	9-11-8	JOSHUA RINE AND REBECCA RINE	TH EXPLORATION LLC	1/8+	907 634	N/A	N/A	N/A
10*47051.223.7	H	9-11-8	JACK R WILSON JR AND JANE A WILSON	TH EXPLORATION LLC	1/8+	908 4	N/A	N/A	N/A
10*47051.223.8	H	9-11-8	DAVID M WILSON	TH EXPLORATION LLC	1/8+	907 649	N/A	N/A	N/A
10*47051.223.9	H	9-11-8	LINDA DELBERT	TH EXPLORATION LLC	1/8+	908 32	N/A	N/A	N/A
10*15606	I	9-12-2	CHK-MAC LLC	CHESPAPEAKE APPALACHIA LLC	1/8+	798 150	N/A	Chesapeake to Chevron: 30/461	Chevron to Tug Hill: 36/148
10*47051.309.3	I	9-12-2	GERALD W QUIGLEY AND VICKI L QUIGLEY	TH EXPLORATION LLC	1/8+	905 12	N/A	N/A	N/A
10*16932	I	9-12-2	HAYMAKER PROPERTIES LP	CHEVRON U.S.A. INC.	1/8+	902 447	N/A	N/A	Chevron to Tug Hill: 37/437
10*47051.309.1	I	9-12-2	LESLIE E QUIGLEY	TH EXPLORATION LLC	1/8+	905 8	N/A	N/A	N/A
10*47051.309.2	I	9-12-2	LEWIS M QUIGLEY AND MAXINE V QUIGLEY	TH EXPLORATION LLC	1/8+	907 217	N/A	N/A	N/A
10*16238	I	9-12-2	SUSAN MARIE JOHNSON AKA SUSAN MARIE HUBER	TH EXPLORATION LLC	1/8+	924 614	N/A	N/A	N/A
10*15461	J	9-12-30	SANDRA SUE HALL AND DAVID HALL	TH EXPLORATION LLC	1/8+	905 622	N/A	N/A	N/A
10*15462	J	9-12-30	JUDITH F TEMPLE AND LOUIS I TEMPLE	TH EXPLORATION LLC	1/8+	905 617	N/A	N/A	N/A
10*15468	J	9-12-30	KEITH W STORCH AND DEBORAH A STORCH	TH EXPLORATION LLC	1/8+	905 624	N/A	N/A	N/A
10*15496	J	9-12-30	FRANK A STORCH JR AND SUSAN STORCH	TH EXPLORATION LLC	1/8+	906 1	N/A	N/A	N/A
10*15497	J	9-12-30	TOM ALLEY	TH EXPLORATION LLC	1/8+	905 644	N/A	N/A	N/A
10*15498	J	9-12-30	DELBERT D RUSH AND BETTY RUTH RUSH	TH EXPLORATION LLC	1/8+	905 647	N/A	N/A	N/A
10*15682	J	9-12-30	THELMA W BIRDWELL	TH EXPLORATION LLC	1/8+	906 9	N/A	N/A	N/A
10*15684	J	9-12-30	CHARLES R WILLAMSON JR	TH EXPLORATION LLC	1/8+	906 7	N/A	N/A	N/A
10*15685	J	9-12-30	TRACY RAND	TH EXPLORATION LLC	1/8+	906 4	N/A	N/A	N/A
10*15727	J	9-12-30	TIMOTHY LEE COLLEY	TH EXPLORATION LLC	1/8+	906 12	N/A	N/A	N/A
10*15740	J	9-12-30	LARRY W ALLEY	TH EXPLORATION LLC	1/8+	912 49	N/A	N/A	N/A
10*16032	J	9-12-30	MELINDA M GREENOUGH AND DOUGLAS CORWIN GREENOUGH	TH EXPLORATION LLC	1/8+	906 26	N/A	N/A	N/A
10*16035	J	9-12-30	CLARISSA MALONE	TH EXPLORATION LLC	1/8+	906 23	N/A	N/A	N/A
10*16047	J	9-12-30	PEGGY KOHRMANN AND DAVID KOHRMANN	TH EXPLORATION LLC	1/8+	906 32	N/A	N/A	N/A
10*16054	J	9-12-30	MEGAN R AUSTIN AND ANTHONY B POWERS	TH EXPLORATION LLC	1/8+	906 29	N/A	N/A	N/A
10*16071	J	9-12-30	VIRGINIA LESLIE BERTRAM	TH EXPLORATION LLC	1/8+	901 370	N/A	N/A	N/A
10*16110	J	9-12-30	KATHLEEN D AND STEVEN MONIGOLD	TH EXPLORATION LLC	1/8+	906 35	N/A	N/A	N/A
10*16137	J	9-12-30	RODNEY K. BANE & CATHIE J. BANE	TH EXPLORATION LLC	1/8+	906 41	N/A	N/A	N/A
10*16184	J	9-12-30	RAYMOND P RIEK AND GARDALEE RIECK	TH EXPLORATION LLC	1/8+	906 44	N/A	N/A	N/A
10*16189	J	9-12-30	MARLENE BAKER	TH EXPLORATION LLC	1/8+	906 50	N/A	N/A	N/A
10*16232	J	9-12-30	DANIEL L ALLEY AND TERESA ALLEY	TH EXPLORATION LLC	1/8+	906 53	N/A	N/A	N/A
10*16241	J	9-12-30	NANNETTE BERLECH AND MATTHEW S BERLECH JR	TH EXPLORATION LLC	1/8+	906 56	N/A	N/A	N/A
10*16243	J	9-12-30	CATHERINE I AND ERNEST M SILVERIO	TH EXPLORATION LLC	1/8+	906 47	N/A	N/A	N/A
10*16280	J	9-12-30	CHRISTOPHER SAUDERS	TH EXPLORATION LLC	1/8+	905 612	N/A	N/A	N/A
10*16290	J	9-12-30	JENNIFER ALLEY	TH EXPLORATION LLC	1/8+	906 59	N/A	N/A	N/A
10*16330	J	9-12-30	LISA R IMHOFF AND CHAD IMHOFF	TH EXPLORATION LLC	1/8+	905 626	N/A	N/A	N/A
10*16331	J	9-12-30	LOLA F BLEVINS	TH EXPLORATION LLC	1/8+	905 630	N/A	N/A	N/A
10*16366	J	9-12-30	STEVEN P ROBERTS	TH EXPLORATION LLC	1/8+	905 628	N/A	N/A	N/A
10*16374	J	9-12-30	KAREN L ZUCKER AND MICHAEL D ZUCKER	TH EXPLORATION LLC	1/8+	905 632	N/A	N/A	N/A
10*16375	J	9-12-30	GEORGE E HOLMES AND SUSAN HOLMES	TH EXPLORATION LLC	1/8+	905 635	N/A	N/A	N/A
10*16381	J	9-12-30	DONNA BURNS	TH EXPLORATION LLC	1/8+	906 20	N/A	N/A	N/A
10*16382	J	9-12-30	LINDA M HONE AND VAUGHN HONE SR	TH EXPLORATION LLC	1/8+	906 17	N/A	N/A	N/A
10*16410	J	9-12-30	SUSAN I BAKER	TH EXPLORATION LLC	1/8+	905 638	N/A	N/A	N/A
10*16418	J	9-12-30	DENZIL ALLEY JR	TH EXPLORATION, LLC	1/8+	905 641	N/A	N/A	N/A

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10*16435	J	9-12-30	DENISE WILLIAMSON	TH EXPLORATION LLC	1/8+	926	622	N/A	N/A
10*16437	J	9-12-30	BECKY LANDRIS	TH EXPLORATION LLC	1/8+	926	625	N/A	N/A
10*16487	J	9-12-30	JOHN WILLIAMSON JR	TH EXPLORATION LLC	1/8+	927	27	N/A	N/A
10*16488	J	9-12-30	RACHEL AND FRED THORNE JR	TH EXPLORATION LLC	1/8+	926	628	N/A	N/A
10*16491	J	9-12-30	BELA N WELLENREITER	TH EXPLORATION LLC	1/8+	921	467	N/A	N/A
10*16508	J	9-12-30	JUDITH C LORADTCH	TH EXPLORATION LLC	1/8+	926	631	N/A	N/A
10*16528	J	9-12-30	ROSELLA M HORR AND WILLARD L HORR	TH EXPLORATION LLC	1/8+	927	1	N/A	N/A
10*16539	J	9-12-30	KATHRYN BROWN AND BRUCE G BROWN	TH EXPLORATION LLC	1/8+	926	641	N/A	N/A
10*16541	J	9-12-30	DEBORAH L TURLEY	TH EXPLORATION LLC	1/8+	926	644	N/A	N/A
10*16578	J	9-12-30	JESSE HOLMES	TH EXPLORATION LLC	1/8+	909	502	N/A	N/A
10*16606	J	9-12-30	WILLIAM T AND BARBARA W PAUL	TH EXPLORATION LLC	1/8+	919	252	N/A	N/A
10*16607	J	9-12-30	LOUISE M AND WILSON D MCELHINNY	TH EXPLORATION LLC	1/8+	909	72	N/A	N/A
10*16616	J	9-12-30	WILLIAM BRYAN COLLEY	TH EXPLORATION LLC	1/8+	913	628	N/A	N/A
10*16671	J	9-12-30	NATHAN AND KARI KOHRMANN	TH EXPLORATION LLC	1/8+	913	40	N/A	N/A
10*16672	J	9-12-30	ANNE R AND JOSEPH A MURPHY	TH EXPLORATION LLC	1/8+	910	215	N/A	N/A
10*16737	J	9-12-30	ARIC A HOLMES AND CARI M HOLMES	TH EXPLORATION LLC	1/8+	913	389	N/A	N/A
10*16744	J	9-12-30	THE JENNIFER TEACHNOR GAFFEY LIVING TRUST DATED OCTOBER 30TH 2013	TH EXPLORATION LLC	1/8+	926	634	N/A	N/A
10*16769	J	9-12-30	CHARLES C SEAMON	TH EXPLORATION LLC	1/8+	910	219	N/A	N/A
10*16785	J	9-12-30	JOSHUA W SEAMON	TH EXPLORATION LLC	1/8+	910	223	N/A	N/A
10*16818	J	9-12-30	BRENDA REED	TH EXPLORATION LLC	1/8+	927	30	N/A	N/A
10*16823	J	9-12-30	PEGGY N AND JAMES E GLASER	TH EXPLORATION LLC	1/8+	913	373	N/A	N/A
10*16886	J	9-12-30	DALE R ALLEY	TH EXPLORATION LLC	1/8+	927	19	N/A	N/A
10*16898	J	9-12-30	VICTOR E ALLEY JR AND DEBRA A ALLEY	TH EXPLORATION LLC	1/8+	926	647	N/A	N/A
10*17172	J	9-12-30	LINDA K AND MICHAEL HUMES	TH EXPLORATION LLC	1/8+	927	33	N/A	N/A
10*17177	J	9-12-30	JAMES P MILLER	TH EXPLORATION LLC	1/8+	926	608	N/A	N/A
10*17294	J	9-12-30	JOHN P HOLMES AND DEBRA A HOLMES	TH EXPLORATION LLC	1/8+	927	6	N/A	N/A
10*17375	J	9-12-30	GEORGE R CORNELIUS JR AND JANINA JANOUSEK CORNELIUS	TH EXPLORATION LLC	1/8+	927	36	N/A	N/A
10*17388	J	9-12-30	LORI A FARMER AND DANIEL K FARMER	TH EXPLORATION LLC	1/8+	927	13	N/A	N/A
10*17475	J	9-12-30	LARRY R CRANE	TH EXPLORATION LLC	1/8+	927	207	N/A	N/A
10*17476	J	9-12-30	CHRISTINA NESTELL AND CHARLES E NESTELL III	TH EXPLORATION LLC	1/8+	927	39	N/A	N/A
10*17477	J	9-12-30	MICHAEL SAUDERS AND AMI SAUDERS	TH EXPLORATION LLC	1/8+	927	16	N/A	N/A
10*17496	J	9-12-30	STACY L BARNHART	TH EXPLORATION LLC	1/8+	909	512	N/A	N/A
10*17536	J	9-12-30	MABEL MCCARTHY	TH EXPLORATION LLC	1/8+	927	211	N/A	N/A
10*17619	J	9-12-30	BRENDA GILBERT	TH EXPLORATION LLC	1/8+	927	204	N/A	N/A
10*17620	J	9-12-30	DANIEL E WILLIAMSON AND HEATHER R WILLIAMSON	TH EXPLORATION LLC	1/8+	927	215	N/A	N/A
10*17665	J	9-12-30	ANN M & CURTIS STEVENS	TH EXPLORATION, LLC	1/8+	927	218	N/A	N/A
10*17678	J	9-12-30	KATHERINE & DANIEL DEGROOT	TH EXPLORATION, LLC	1/8+	927	200	N/A	N/A
10*17705	J	9-12-30	EARL & LYDIA ARMENTA FRAZIER	TH EXPLORATION, LLC	1/8+	927	480	N/A	N/A
10*17726	J	9-12-30	C FREEMAN MCCALL AND SUSAN M MCCALL	TH EXPLORATION LLC	1/8+	921	66	N/A	N/A
10*17809	J	9-12-30	MARY M MORRIS	TH EXPLORATION LLC	1/8+	919	252	N/A	N/A
10*17815	J	9-12-30	THE TESTAMENTARY TRUST OF CAREY B PAUL III	TH EXPLORATION LLC	1/8+	917	128	N/A	N/A
10*17818	J	9-12-30	KATHLEEN REILLY MANNIX AND J MICHAEL MANNIX	TH EXPLORATION, LLC	1/8+	924	552	N/A	N/A
10*17882	J	9-12-30	MARY E HANM	TH EXPLORATION, LLC	1/8+	924	545	N/A	N/A
10*17893	J	9-12-30	ERIC D & AMANDA N PETRUCCI	TH EXPLORATION, LLC	1/8+	905	569	N/A	N/A
10*47051.318.1	J	9-12-30	JOSEPH PAUL FOX AND MARGARET H FOX	TH EXPLORATION LLC	1/8+	904	600	N/A	N/A
10*47051.318.10	J	9-12-30	DONNA JUNE STRAIT	TH EXPLORATION LLC	1/8+	904	604	N/A	N/A
10*47051.318.11	J	9-12-30	RICHARD TAYLOR	TH EXPLORATION LLC	1/8+	904	604	N/A	N/A
10*47051.318.12	J	9-12-30	BARBARA J BEVERIDGE	TH EXPLORATION LLC	1/8+	904	606	N/A	N/A

Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment
10*47051.318.15	J	9-12-30	DONNA CHMELYSKI	TH EXPLORATION LLC	1/8+	904 610	N/A	N/A
10*47051.318.16	J	9-12-30	BULA F YOST	TH EXPLORATION LLC	1/8+	904 614	N/A	N/A
10*47051.318.17	J	9-12-30	CORA ALICE DAUBE	TH EXPLORATION LLC	1/8+	904 618	N/A	N/A
10*47051.318.18	J	9-12-30	MICHAEL WAYNE ALLEY AND LINDA ALLEY	TH EXPLORATION LLC	1/8+	904 622	N/A	N/A
10*47051.318.19	J	9-12-30	JUDY LYNN CHILPINSKI	TH EXPLORATION LLC	1/8+	904 496	N/A	N/A
10*47051.318.2	J	9-12-30	CHRISTAL L SCHAFER	TH EXPLORATION LLC	1/8+	904 531	N/A	N/A
10*47051.318.20	J	9-12-30	CHARLES R BENNETT JR AND DONNA S BENNETT	TH EXPLORATION LLC	1/8+	904 500	N/A	N/A
10*47051.318.21	J	9-12-30	DORETTA RUSH	TH EXPLORATION LLC	1/8+	904 504	N/A	N/A
10*47051.318.22	J	9-12-30	ELIZABETH STARC	TH EXPLORATION LLC	1/8+	904 508	N/A	N/A
10*47051.318.23	J	9-12-30	EMMA CRISWELL	TH EXPLORATION LLC	1/8+	904 512	N/A	N/A
10*47051.318.24	J	9-12-30	CARLA MAE ALLEY	TH EXPLORATION LLC	1/8+	904 516	N/A	N/A
10*47051.318.25	J	9-12-30	MAARIANN T DARGUSCH AND JONATHON DARGUSCH	TH EXPLORATION LLC	1/8+	905 549	N/A	N/A
10*47051.318.27	J	9-12-30	KAREN J BRUGEMAN	TH EXPLORATION LLC	1/8+	904 520	N/A	N/A
10*47051.318.28	J	9-12-30	LORAIN GAIL STARC HORNER AND CHARLES HORNER	TH EXPLORATION LLC	1/8+	904 524	N/A	N/A
10*47051.318.3	J	9-12-30	RANDY W MORRIS AND CHERYL MORRIS	TH EXPLORATION LLC	1/8+	904 535	N/A	N/A
10*47051.318.30	J	9-12-30	CYNTHIA TEACHNOR GRAHAM	TH EXPLORATION LLC	1/8+	905 553	N/A	N/A
10*47051.318.31	J	9-12-30	WILLIAM RICHARD FOX	TH EXPLORATION LLC	1/8+	905 561	N/A	N/A
10*47051.318.32	J	9-12-30	SHARON KELLER JOEY KELLER JR	TH EXPLORATION LLC	1/8+	904 539	N/A	N/A
10*47051.318.33	J	9-12-30	J RONALD FOX	TH EXPLORATION LLC	1/8+	905 565	N/A	N/A
10*47051.318.34	J	9-12-30	DONNA SMITH WEEKLEY	TH EXPLORATION LLC	1/8+	905 442	N/A	N/A
10*47051.318.35	J	9-12-30	ANNA MAE PATTERSON	TH EXPLORATION LLC	1/8+	905 573	N/A	N/A
10*47051.318.36	J	9-12-30	DANNY CARMICHAEL III	TH EXPLORATION LLC	1/8+	905 576	N/A	N/A
10*47051.318.37	J	9-12-30	GENELDA MASON	TH EXPLORATION LLC	1/8+	905 580	N/A	N/A
10*47051.318.38	J	9-12-30	SHERWOOD MASON NILA JUNE MASON	TH EXPLORATION LLC	1/8+	905 448	N/A	N/A
10*47051.318.39	J	9-12-30	DONNA K DUNN AND JAMES DUNN	TH EXPLORATION LLC	1/8+	905 444	N/A	N/A
10*47051.318.4	J	9-12-30	MARY ELISE CAMP	TH EXPLORATION LLC	1/8+	905 557	N/A	N/A
10*47051.318.40	J	9-12-30	NANCY MARIE DUNN AND GEORGE L DUNN	TH EXPLORATION LLC	1/8+	905 590	N/A	N/A
10*47051.318.41	J	9-12-30	JOHN T CRISWELL AND CATHERINE A CRISWELL	TH EXPLORATION LLC	1/8+	905 582	N/A	N/A
10*47051.318.42	J	9-12-30	TARA E CAUSEY	TH EXPLORATION LLC	1/8+	905 586	N/A	N/A
10*47051.318.43	J	9-12-30	CHAD ERIC BENNETT AND MARY A BENNETT	TH EXPLORATION LLC	1/8+	905 588	N/A	N/A
10*47051.318.44	J	9-12-30	STACY R BENNETT	TH EXPLORATION LLC	1/8+	905 596	N/A	N/A
10*47051.318.45	J	9-12-30	PATRICIA KIRCHNER	TH EXPLORATION LLC	1/8+	905 592	N/A	N/A
10*47051.318.46	J	9-12-30	CAROL L BOBBY AND DONALD J BOBBY	TH EXPLORATION LLC	1/8+	905 603	N/A	N/A
10*47051.318.47	J	9-12-30	FRIEDA A REINBEAU AND RONALD REINBEAU	TH EXPLORATION LLC	1/8+	905 598	N/A	N/A
10*47051.318.49	J	9-12-30	DEBORAH SUE KYLE 231 EAST 24TH AVENUE	TH EXPLORATION LLC	1/8+	905 600	N/A	N/A
10*47051.318.5	J	9-12-30	WILLIAM F EWART JR AND JOAN REED EWART	TH EXPLORATION LLC	1/8+	905 594	N/A	N/A
10*47051.318.52	J	9-12-30	SHEILA SIMMONS	TH EXPLORATION LLC	1/8+	905 606	N/A	N/A
10*47051.318.53	J	9-12-30	PETER G STORCH AND LAURIE L STORCH	TH EXPLORATION LLC	1/8+	905 608	N/A	N/A
10*47051.318.56	J	9-12-30	ROSEMARIE BERISFORD	TH EXPLORATION LLC	1/8+	905 610	N/A	N/A
10*47051.318.57	J	9-12-30	SALLY MERRICK	TH EXPLORATION LLC	1/8+	905 614	N/A	N/A
10*47051.318.6	J	9-12-30	RHONDA L PALASOTA AND SAM A PALASOTA	TH EXPLORATION LLC	1/8+	904 620	N/A	N/A
10*47051.318.7	J	9-12-30	JOSEPH F STARC JR AND DONNA STARC	TH EXPLORATION LLC	1/8+	904 596	N/A	N/A
10*47051.318.8	J	9-12-30	REED O MILLER AND EFFIE M MILLER	TH EXPLORATION LLC	1/8+	904 598	N/A	N/A
10*47051.318.9	J	9-12-30	JOHN M SHALLENBERGER AND JOANNE SHALLENBERGER	TH EXPLORATION LLC	1/8+	905 541	N/A	N/A
10*47051.317.0	K	9-12-37	JANICE M MIEDER	TH EXPLORATION LLC	1/8+	905 545	N/A	N/A
10*47051.140.1	L	9-12-32	JAN GRIMES SIMNACHER LEONARD A SIMNACHER DAVID P CHAPMAN & DEBORAH BORCK-CHAPMAN	TH EXPLORATION LLC TH EXPLORATION LLC	1/8+ 1/8+	904 472 866 318	N/A N/A	N/A N/A

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10*47051.140.2	L	9-12-32	DOROTHY SULLIVAN POA JAMES REID SULLIVAN	TH EXPLORATION LLC	1/8+	873 501	N/A	N/A
10*17555	M	9-14-18	AARON AND JANA K PARRY	TH EXPLORATION LLC	1/8+	924 113	N/A	N/A
10*17452	M	9-14-18	ALAN H & MARY K DEGARMO	TH EXPLORATION LLC	1/8+	924 164	N/A	N/A
10*17139	M	9-14-18	ALICE G WEINER AND GERALD S WEINER	TH EXPLORATION LLC	1/8+	915 131	N/A	N/A
10*16183	M	9-14-18	ALLEN R L DAVIS AND DIANA LEE PATTERSON	TH EXPLORATION LLC	1/8+	906 285	N/A	N/A
10*17436	M	9-14-18	ANDREW M HOOVER AND DINAH R HOOVER	TH EXPLORATION LLC	1/8+	924 156	N/A	N/A
10*16239	M	9-14-18	ANGELA L OLDFIELD AND KENNETH W OLDFIELD	TH EXPLORATION LLC	1/8+	906 287	N/A	N/A
10*17880	M	9-14-18	ANNA M WRIGHT	TH EXPLORATION LLC	1/8+	924 586	N/A	N/A
10*16443	M	9-14-18	BARBARA BROWN CHAMBERS	TH EXPLORATION LLC	1/8+	924 621	N/A	N/A
10*16018	M	9-14-18	BARBARA MCFADDEN ALBRIGHT	TH EXPLORATION LLC	1/8+	906 262	N/A	N/A
10*17708	M	9-14-18	BETTY LOU NOBLE	TH EXPLORATION LLC	1/8+	923 127	N/A	N/A
10*17612	M	9-14-18	BEVERLY A LEDBETTER	TH EXPLORATION LLC	1/8+	923 480	N/A	N/A
10*16240	M	9-14-18	BONNIE SUE PATTERSON SWISHER	TH EXPLORATION LLC	1/8+	906 289	N/A	N/A
10*17830	M	9-14-18	BRIAN AND MELINDA MASTERS	TH EXPLORATION LLC	1/8+	925 319	N/A	N/A
10*16031	M	9-14-18	CARL J CHMIELEWSKI AND KATHLEEN A CHMIELEWSKI	TH EXPLORATION LLC	1/8+	906 266	N/A	N/A
10*17613	M	9-14-18	CARLTON DOBBS JR AND MIKHAIL PROKOPENKO	TH EXPLORATION LLC	1/8+	924 120	N/A	N/A
10*16444	M	9-14-18	CATHERINE ELLEN CHAMBERS	TH EXPLORATION LLC	1/8+	924 623	N/A	N/A
10*16083	M	9-14-18	CECIL HARRY LILLY, III AND PAMELA KAY KNIGHT LILLY	TH EXPLORATION LLC	1/8+	912 47	N/A	N/A
10*17771	M	9-14-18	CHARLES AND USA WARRICK	TH EXPLORATION, LLC	1/8+	923 477	N/A	N/A
10*16535	M	9-14-18	CHARLES E CARSON AND MARY KAY CARSON	TH EXPLORATION LLC	1/8+	906 420	N/A	N/A
10*17396	M	9-14-18	CHRISTINE L KIDD	TH EXPLORATION LLC	1/8+	924 158	N/A	N/A
10*16486	M	9-14-18	DAVID ALAN WILKINSON AND PATRICIA LYNN WILKINSON	TH EXPLORATION LLC	1/8+	924 180	N/A	N/A
10*17614	M	9-14-18	DAVID DOBBS	TH EXPLORATION, LLC	1/8+	923 489	N/A	N/A
10*17528	M	9-14-18	DEAN E GARRISON	TH EXPLORATION LLC	1/8+	923 535	N/A	N/A
10*17487	M	9-14-18	DEBORAH R MOKOSH	TH EXPLORATION LLC	1/8+	924 166	N/A	N/A
10*17711	M	9-14-18	DEBRA A WENNEMAN AND KURT J WENNEMAN	TH EXPLORATION LLC	1/8+	923 520	N/A	N/A
10*16995	M	9-14-18	DIANE ELSIE RAMSEY	TH EXPLORATION LLC	1/8+	924 146	N/A	N/A
10*17579	M	9-14-18	DON COFFIELD & GLENDA DOBBS	TH EXPLORATION, LLC	1/8+	923 525	N/A	N/A
10*17563	M	9-14-18	DONALD L WOOD	TH EXPLORATION LLC	1/8+	923 523	N/A	N/A
10*16953	M	9-14-18	DONALD T AND JEAN K HOGAN	TH EXPLORATION LLC	1/8+	924 140	N/A	N/A
10*16582	M	9-14-18	DORA BROCK BRAMMER	TH EXPLORATION LLC	1/8+	907 429	N/A	N/A
10*16445	M	9-14-18	DOUGLAS C AND GWENDLYN D LEWTON	TH EXPLORATION LLC	1/8+	925 123	N/A	N/A
10*16511	M	9-14-18	DOUGLAS R BOWEN	TH EXPLORATION LLC	1/8+	906 475	N/A	N/A
10*17766	M	9-14-18	EDWARD S & NANCY A ROSENTHAL	TH EXPLORATION, LLC	1/8+	923 495	N/A	N/A
10*16131	M	9-14-18	ERIC S DOBBS	TH EXPLORATION, LLC	1/8+	902 68	N/A	N/A
10*16835	M	9-14-18	ERNEST CARL AUGUSTINE JR	TH EXPLORATION LLC	1/8+	924 188	N/A	N/A
10*16182	M	9-14-18	FIRST CHRISTIAN CHURCH OF MOUNDSVILLE BY ROGER FRANCIS AND ROBERT ALBERT TRUSTEES	TH EXPLORATION LLC	1/8+	906 283	N/A	N/A
10*16017	M	9-14-18	FLOYD A MCFADDEN	TH EXPLORATION LLC	1/8+	906 260	N/A	N/A
10*15730	M	9-14-18	FRANCES V CARPENTER	TH EXPLORATION LLC	1/8+	906 256	N/A	N/A
10*16442	M	9-14-18	FRED T AND JERRY L CHAMBERS	TH EXPLORATION LLC	1/8+	924 174	N/A	N/A
10*17448	M	9-14-18	FREDERICK L HERVEY AND CATHY J HERVEY	TH EXPLORATION LLC	1/8+	924 162	N/A	N/A
10*16948	M	9-14-18	FREDERICK M LEWTON	TH EXPLORATION LLC	1/8+	924 136	N/A	N/A
10*17209	M	9-14-18	GAYLE S SHANNON	TH EXPLORATION LLC	1/8+	924 168	N/A	N/A
10*16441	M	9-14-18	GEORGE FRANKLIN AND NANCY ANN REED	TH EXPLORATION LLC	1/8+	924 619	N/A	N/A
10*17515	M	9-14-18	GLADYS E DOBBS	TH EXPLORATION LLC	1/8+	923 541	N/A	N/A
10*17769	M	9-14-18	GLADYS FRAZIER KING	TH EXPLORATION, LLC	1/8+	923 492	N/A	N/A
10*17504	M	9-14-18	GREGG ALAN MILLER AND BETH ANN MILLER	TH EXPLORATION LLC	1/8+	924 118	N/A	N/A
10*17675	M	9-14-18	GREGORY D & CAROLYN J WIBLE	TH EXPLORATION, LLC	1/8+	923 507	N/A	N/A

Office of Oil and Gas  
 FEB 6 2018  
 WV Department of Environmental Protection

# WW-6A1 Supplement

# Operator's Well No. Heaven Hill 3 - 5HM

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WV Department of  
Environmental Protection

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10*16580	M	9-14-18	HAROLD C MCFADDEN	TH EXPLORATION LLC	1/8+	907 480	N/A	N/A	N/A
10*17289	M	9-14-18	HAROLD R HUNT JR AND ELIZABETH A HUNT	TH EXPLORATION LLC	1/8+	924 170	N/A	N/A	N/A
10*17879	M	9-14-18	HARRY R WRIGHT JR	TH EXPLORATION, LLC	1/8+	924 588	N/A	N/A	N/A
10*16581	M	9-14-18	HELEN L SCHILLING	TH EXPLORATION, LLC	1/8+	907 489	N/A	N/A	N/A
10*17674	M	9-14-18	HOWARD L & BETH E WOOD	TH EXPLORATION, LLC	1/8+	923 505	N/A	N/A	N/A
10*16540	M	9-14-18	JAMES A WINTER AND CONNIE G WINTER	TH EXPLORATION, LLC	1/8+	924 184	N/A	N/A	N/A
10*17676	M	9-14-18	JAMES C & DEIDRE G DORIA	TH EXPLORATION, LLC	1/8+	923 513	N/A	N/A	N/A
10*47051.325.4	M	9-14-18	JAMES H WHITE AND RITA FRANKS WHITE	TH EXPLORATION LLC	1/8+	906 230	N/A	N/A	N/A
10*17731	M	9-14-18	JAMES J MCGHEE AND JEANNINE CHAMBERS MCGHEE	TH EXPLORATION LLC	1/8+	914 519	N/A	N/A	N/A
10*17671	M	9-14-18	JAMES L STOUT	TH EXPLORATION LLC	1/8+	923 484	N/A	N/A	N/A
10*16882	M	9-14-18	JAMES LEROY AND DARLENE DOBBS OWENS	TH EXPLORATION LLC	1/8+	924 190	N/A	N/A	N/A
10*16569	M	9-14-18	JANICE C BALE	TH EXPLORATION LLC	1/8+	907 425	N/A	N/A	N/A
10*17503	M	9-14-18	JANICE L KUHN	TH EXPLORATION LLC	1/8+	924 122	N/A	N/A	N/A
10*16950	M	9-14-18	JAY E AND CECILIA E LEWTON	TH EXPLORATION LLC	1/8+	924 134	N/A	N/A	N/A
10*16532	M	9-14-18	JEAN ANN MCFADDEN	TH EXPLORATION LLC	1/8+	906 459	N/A	N/A	N/A
10*16285	M	9-14-18	JOHN A SHUTZ AND CYNTHIA J SHUTZ	TH EXPLORATION LLC	1/8+	906 291	N/A	N/A	N/A
10*16483	M	9-14-18	JOHN C AND BARBARA H WINTER	TH EXPLORATION LLC	1/8+	924 178	N/A	N/A	N/A
10*16966	M	9-14-18	JOHN GILLETTE AND BARBARA GILLETTE	TH EXPLORATION LLC	1/8+	913 377	N/A	N/A	N/A
10*17885	M	9-14-18	JOHN RUSSELL BECKER	TH EXPLORATION, LLC	1/8+	924 540	N/A	N/A	N/A
10*17582	M	9-14-18	JOHN THOMAS ERAZMUS AND JEAN R ERAZMUS	TH EXPLORATION LLC	1/8+	924 124	N/A	N/A	N/A
10*47051.325.1	M	9-14-18	JOSEPH F CHMIELEWSKI AND SANDRA CHMIELEWSKI	TH EXPLORATION LLC	1/8+	906 264	N/A	N/A	N/A
10*16993	M	9-14-18	JUDITH A LEWANDOSKY AND ALAN E LEWANDOSKY	TH EXPLORATION LLC	1/8+	906 225	N/A	N/A	N/A
10*17517	M	9-14-18	JULIA HOOVER	TH EXPLORATION LLC	1/8+	924 150	N/A	N/A	N/A
10*16085	M	9-14-18	JULIO ENRIQUE & DEBRA K TORRES	TH EXPLORATION, LLC	1/8+	923 537	N/A	N/A	N/A
10*16086	M	9-14-18	KATHARIN ANNETTE LILLY LAING AND FREDDIE JOE LAING	TH EXPLORATION LLC	1/8+	912 43	N/A	N/A	N/A
10*16531	M	9-14-18	KATHARIN DAY LILLY	TH EXPLORATION LLC	1/8+	906 272	N/A	N/A	N/A
10*17668	M	9-14-18	KENNETH R DOBBS	TH EXPLORATION, LLC	1/8+	923 503	N/A	N/A	N/A
10*16537	M	9-14-18	KIM D BOWEN AND MADONNA M BOWEN	TH EXPLORATION LLC	1/8+	907 415	N/A	N/A	N/A
10*15752	M	9-14-18	KIM O CHAMBERS AND DEBRA CHAMBERS	TH EXPLORATION LLC	1/8+	906 258	N/A	N/A	N/A
10*16180	M	9-14-18	LARRY L CHAMBERS	TH EXPLORATION LLC	1/8+	906 280	N/A	N/A	N/A
10*17131	M	9-14-18	LAURA E TOTTEN AND LONNIE R TOTTEN	TH EXPLORATION LLC	1/8+	924 154	N/A	N/A	N/A
10*16726	M	9-14-18	LESLY K WHITE	TH EXPLORATION LLC	1/8+	924 182	N/A	N/A	N/A
10*16576	M	9-14-18	LINDA A MINER AND MICHAEL W MINER	TH EXPLORATION LLC	1/8+	907 484	N/A	N/A	N/A
10*16992	M	9-14-18	LINDA C ABRAMAM	TH EXPLORATION LLC	1/8+	924 148	N/A	N/A	N/A
10*17520	M	9-14-18	LUCY P SULLIVAN	TH EXPLORATION LLC	1/8+	923 533	N/A	N/A	N/A
10*17559	M	9-14-18	MARVIN JERRY BLAKE AND LINDA D BLAKE	TH EXPLORATION LLC	1/8+	923 528	N/A	N/A	N/A
10*16087	M	9-14-18	MARY PENELOPE LILLY MURPHY	TH EXPLORATION LLC	1/8+	912 41	N/A	N/A	N/A
10*17516	M	9-14-18	MARY V DOBBS	TH EXPLORATION LLC	1/8+	923 539	N/A	N/A	N/A
10*17505	M	9-14-18	MICHAEL R & LEANNE DOBBS	TH EXPLORATION, LLC	1/8+	924 116	N/A	N/A	N/A
10*47051.325.3	M	9-14-18	NICHOLAS D PAVLIK AND GLORIA K PAVLIK	TH EXPLORATION LLC	1/8+	906 228	N/A	N/A	N/A
10*16181	M	9-14-18	NORMA CHRISTINE WHIPP AND GERALD WAYNE BLACK	TH EXPLORATION LLC	1/8+	906 281	N/A	N/A	N/A
10*16144	M	9-14-18	PATTIE S MADRID	TH EXPLORATION LLC	1/8+	906 278	N/A	N/A	N/A
10*17580	M	9-14-18	PAUL CRAIG CUNNINGHAM	TH EXPLORATION LLC	1/8+	923 530	N/A	N/A	N/A
10*17615	M	9-14-18	PAULA JO WRIGHT	TH EXPLORATION, LLC	1/8+	923 482	N/A	N/A	N/A
10*17581	M	9-14-18	PAULA WEIRES	TH EXPLORATION LLC	1/8+	923 486	N/A	N/A	N/A
10*47051.325.8	M	9-14-18	RICK PAVLIK	TH EXPLORATION LLC	1/8+	906 239	N/A	N/A	N/A
10*16570	M	9-14-18	ROBERT D BOWEN AND MARGA M R BOWEN	TH EXPLORATION LLC	1/8+	907 420	N/A	N/A	N/A

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15-0948  
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 Environmental Protection

Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment
10*17878	M	9-14-18	ROBERT E & SARAH M ROUSH	TH EXPLORATION, LLC	1/8+	924 590	N/A	N/A	N/A
10*17413	M	9-14-18	ROBERTA M CHAMBERS AND CHARLOTTE A CHAMBERS	TH EXPLORATION LLC	1/8+	924 160	N/A	N/A	N/A
10*17129	M	9-14-18	ROBERTA JANE PARKINSON	TH EXPLORATION LLC	1/8+	924 142	N/A	N/A	N/A
10*17700	M	9-14-18	ROGER L & MARILYN L GARRISON	TH EXPLORATION, LLC	1/8+	923 472	N/A	N/A	N/A
10*17616	M	9-14-18	RONALD & ELIZABETH DOBBS	TH EXPLORATION, LLC	1/8+	924 107	N/A	N/A	N/A
10*15477	M	9-14-18	RONALD A WYCINSKI	TH EXPLORATION LLC	1/8+	906 241	N/A	N/A	N/A
10*16680	M	9-14-18	RONALD J AND JENNIFER CHAMBERS FICCA	TH EXPLORATION LLC	1/8+	924 186	N/A	N/A	N/A
10*16990	M	9-14-18	ROSEMARY H BEAVERS	TH EXPLORATION, LLC	1/8+	923 152	N/A	N/A	N/A
10*17664	M	9-14-18	RUDOLPH H PARSONS	TH EXPLORATION, LLC	1/8+	923 511	N/A	N/A	N/A
10*16952	M	9-14-18	RUSSELL D HERVEY	TH EXPLORATION, LLC	1/8+	924 132	N/A	N/A	N/A
10*47051.325.5	M	9-14-18	SAMUEL ALAN MCCORD AND WINIFRED A MCKEE	TH EXPLORATION LLC	1/8+	906 232	N/A	N/A	N/A
10*16733	M	9-14-18	SARAH L BISHOP	TH EXPLORATION LLC	1/8+	924 172	N/A	N/A	N/A
10*47051.325.7	M	9-14-18	SHERON JONES	TH EXPLORATION, LLC	1/8+	906 237	N/A	N/A	N/A
10*16533	M	9-14-18	SHIRLEY ANN DOBBS	TH EXPLORATION, LLC	1/8+	906 469	N/A	N/A	N/A
10*17703	M	9-14-18	SHIRLEY N COX	TH EXPLORATION, LLC	1/8+	923 498	N/A	N/A	N/A
10*16949	M	9-14-18	STEVEN R AND BRIANNE L UTT	TH EXPLORATION, LLC	1/8+	924 138	N/A	N/A	N/A
10*17701	M	9-14-18	SUE ANN WORD	TH EXPLORATION, LLC	1/8+	923 470	N/A	N/A	N/A
10*17702	M	9-14-18	TAMMY BETH RAMSEY	TH EXPLORATION, LLC	1/8+	925 500	N/A	N/A	N/A
10*16967	M	9-14-18	TARA JEANNE MINOR AND JENNIFER A KNAPP	TH EXPLORATION, LLC	1/8+	914 612	N/A	N/A	N/A
10*16534	M	9-14-18	TERRY LEE LASAVAGE	TH EXPLORATION, LLC	1/8+	906 443	N/A	N/A	N/A
10*17667	M	9-14-18	THOMAS BRIAN WARRICK	TH EXPLORATION, LLC	1/8+	923 509	N/A	N/A	N/A
10*47051.325.6	M	9-14-18	THOMAS O MCCORD	TH EXPLORATION, LLC	1/8+	906 235	N/A	N/A	N/A
10*47051.325.2	M	9-14-18	TIMMY LEE STOUT AND DOROTHY MARIE STOUT	TH EXPLORATION, LLC	1/8+	906 222	N/A	N/A	N/A
10*17560	M	9-14-18	TREVOR HOOKS	TH EXPLORATION, LLC	1/8+	924 110	N/A	N/A	N/A
10*17134	M	9-14-18	UNITED CHRISTIAN MISSIONARY SOCIETY	TH EXPLORATION, LLC	1/8+	924 144	N/A	N/A	N/A
10*17617	M	9-14-18	UNITED DISCIPLES OF CHRIST CHURCH	TH EXPLORATION, LLC	1/8+	924 129	N/A	N/A	N/A
10*17881	M	9-14-18	WAYLON L & ANGELA J MURPHEE	TH EXPLORATION, LLC	1/8+	924 555	N/A	N/A	N/A
10*16490	M	9-14-18	WILLIAM H AND MERRY C COTTON	TH EXPLORATION, LLC	1/8+	924 176	N/A	N/A	N/A
10*17767	M	9-14-18	WILLIAM K & LINDA J MERRITT	TH EXPLORATION, LLC	1/8+	923 474	N/A	N/A	N/A
10*16965	M	9-14-18	WILLIAM L WRIGHT AND CAROLINA WRIGHT	TH EXPLORATION, LLC	1/8+	914 524	N/A	N/A	N/A





# Well Site Safety Plan

## Tug Hill Operating, LLC

*2/5/18*

Well Name: Heaven Hill 3-5HM

Pad Location: Heaven Hill 3

Marshall County, West Virginia

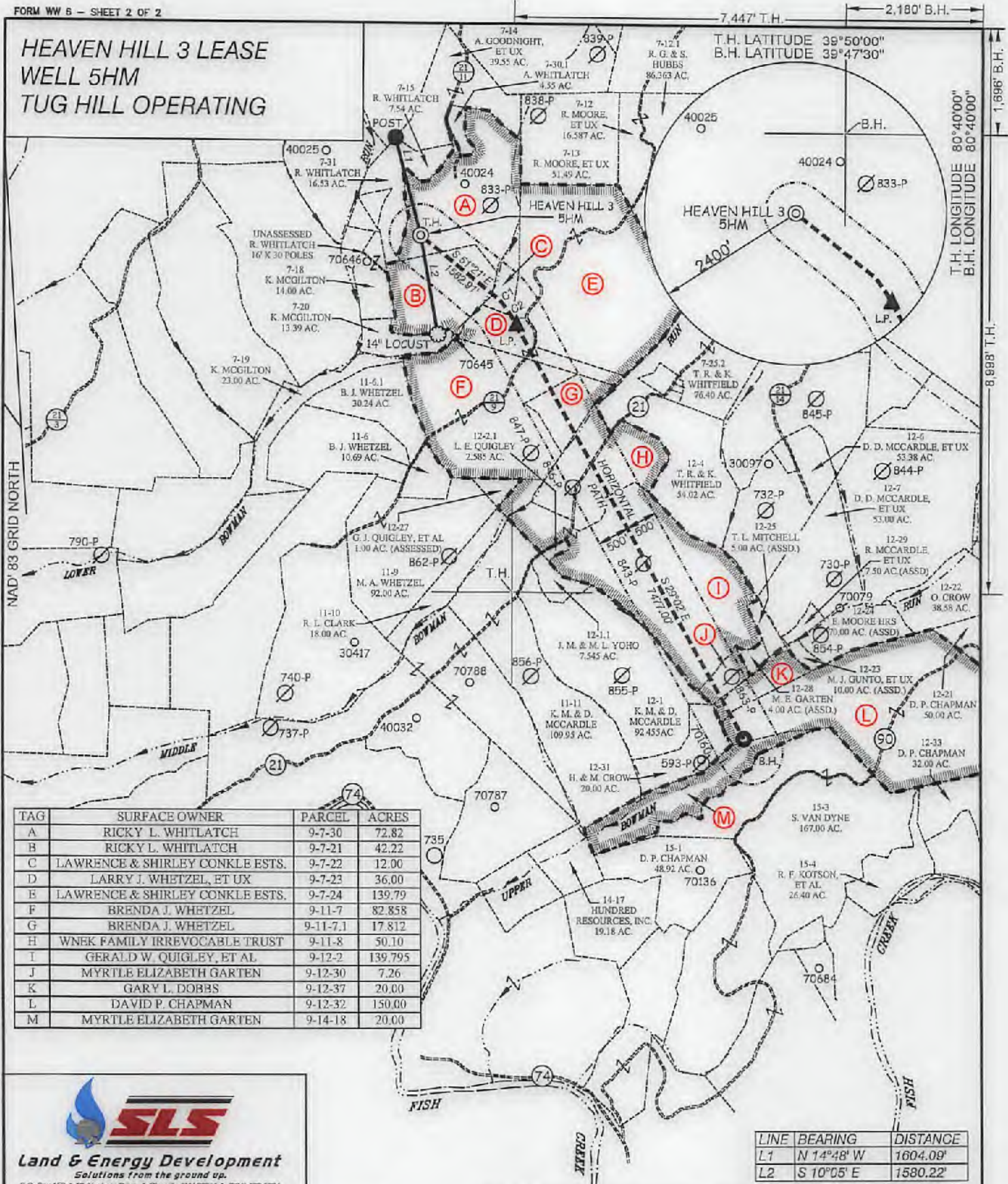
UTM (meters), NAD83, Zone 17:

Northing-4,406,562.70

Easting -526,263.54

February 2018

**HEAVEN HILL 3 LEASE  
WELL 5HM  
TUG HILL OPERATING**



7,447' T.H.      2,180' B.H.  
T.H. LATITUDE 39°50'00"  
B.H. LATITUDE 39°47'30"

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

TAG	SURFACE OWNER	PARCEL	ACRES
A	RICKY L. WHITLATCH	9-7-30	72.82
B	RICKY L. WHITLATCH	9-7-21	42.22
C	LAWRENCE & SHIRLEY CONKLE ESTS.	9-7-22	12.00
D	LARRY J. WHETZEL, ET UX	9-7-23	36.00
E	LAWRENCE & SHIRLEY CONKLE ESTS.	9-7-24	139.79
F	BRENDA J. WHETZEL	9-11-7	82.858
G	BRENDA J. WHETZEL	9-11-7.1	17.812
H	WNEK FAMILY IRREVOCABLE TRUST	9-11-8	50.10
T	GERALD W. QUIGLEY, ET AL	9-12-2	139.795
J	MYRTLE ELIZABETH GARTEN	9-12-30	7.26
K	GARY L. DOBBS	9-12-37	20.00
L	DAVID P. CHAPMAN	9-12-32	150.00
M	MYRTLE ELIZABETH GARTEN	9-14-18	20.00

LINE	BEARING	DISTANCE
L1	N 14°48' W	1604.09'
L2	S 10°05' E	1580.22'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	139.20'	604.64'	S 44°16' E	138.90'
C2	397.01'	2480.56'	S 33°09' E	396.59'

P.O. Box 150 | 12 Vanhorn Drive | Glenville, WV 26031 | (304) 452-5534  
www.slsurveys.com

P.S. 677  
*Gregory A. Smith*

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'83 S.P.C. (FT) N. 478,871.18 E. 1,633,313.44  
 NAD'83 GEO. LAT.-(N) 39.809893 LONG.-(W) 80.693174  
 NAD'83 UTM (M) N. 4,405,562.70 E. 528,263.54  
**LANDING POINT**  
 NAD'83 S.P.C. (FT) N. 477,483.4 E. 1,634,847.7  
 NAD'83 GEO. LAT.-(N) 39.804824 LONG.-(W) 80.697647  
 NAD'83 UTM (M) N. 4,405,141.6 E. 525,738.1  
**BOTTOM HOLE**  
 NAD'83 S.P.C. (FT) N. 470,925.5 E. 1,638,477.3  
 NAD'83 GEO. LAT.-(N) 39.787010 LONG.-(W) 80.674425  
 NAD'83 UTM (M) N. 4,404,168.6 E. 527,877.2



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

**LEGEND**

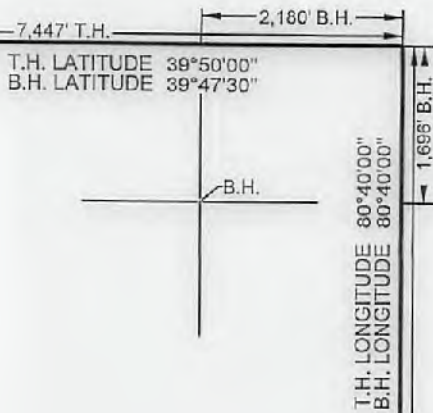
- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- LEASE # (SEE WW-6A1)
- SURFACE OWNER (SEE TABLE)

SCALE 1" = 2000' FILE NO. 8854P5HMR.dwg  
 DATE JUNE 30, 20 17  
 REVISED FEBRUARY 2, 20 18  
 OPERATORS WELL NO. HEAVEN HILL 3-5HM  
 API WELL NO. 47 — 051 — 01948  
 STATE COUNTY PERMIT

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

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

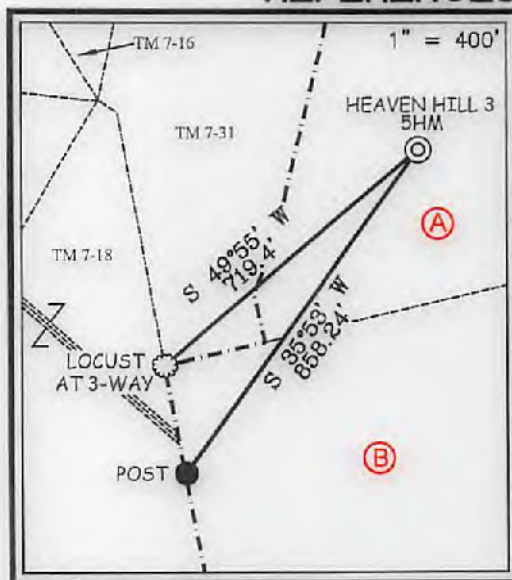
**HEAVEN HILL 3 LEASE  
WELL 5HM  
TUG HILL OPERATING**



(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)		
NAD'83 S.P.C.(FT)	N. 478,871.18	E. 1,633,313.44
NAD'83 GEO.	LAT-(N) 39.808633	LONG-(W) 80.693174
NAD'83 UTM (M)	N. 4,408,562.70	E. 526,263.54
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 477,463.4	E. 1,634,847.7
NAD'83 GEO.	LAT-(N) 39.804824	LONG-(W) 80.687647
NAD'83 UTM (M)	N. 4,408,141.8	E. 526,738.1
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 470,926.5	E. 1,636,477.3
NAD'83 GEO.	LAT-(N) 39.787010	LONG-(W) 80.674425
NAD'83 UTM (M)	N. 4,404,168.6	E. 527,877.2



**REFERENCES**



**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'



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



P.S. 677 *Gregory A. Smith*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE JUNE 30, 20 17  
 REVISED FEBRUARY 2, 20 18  
 OPERATORS WELL NO. HEAVEN HILL 3-5HM  
 API WELL NO. 47-051-01948 *#to A MOD*  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8654P5HMR.dwg  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION GROUND = 1,342.20' PROPOSED = 1,326.35' WATERSHED LOWER BOWMAN RUN OF FISH CREEK (HUC 10)  
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER RICKY L. WHITLATCH ACREAGE 72.82±  
 ROYALTY OWNER RICKY L. WHITLATCH, ET AL - SEE WW-6A1 ACREAGE 72.82±  
 LEASE NO. SEE WW-6A1

PROPOSED WORK:  
 DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
 PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER   
 PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION MARCELLUS  
 ESTIMATED DEPTH TVD: 6,876' / TMD: 14,866'

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

COUNTY NAME PERMIT