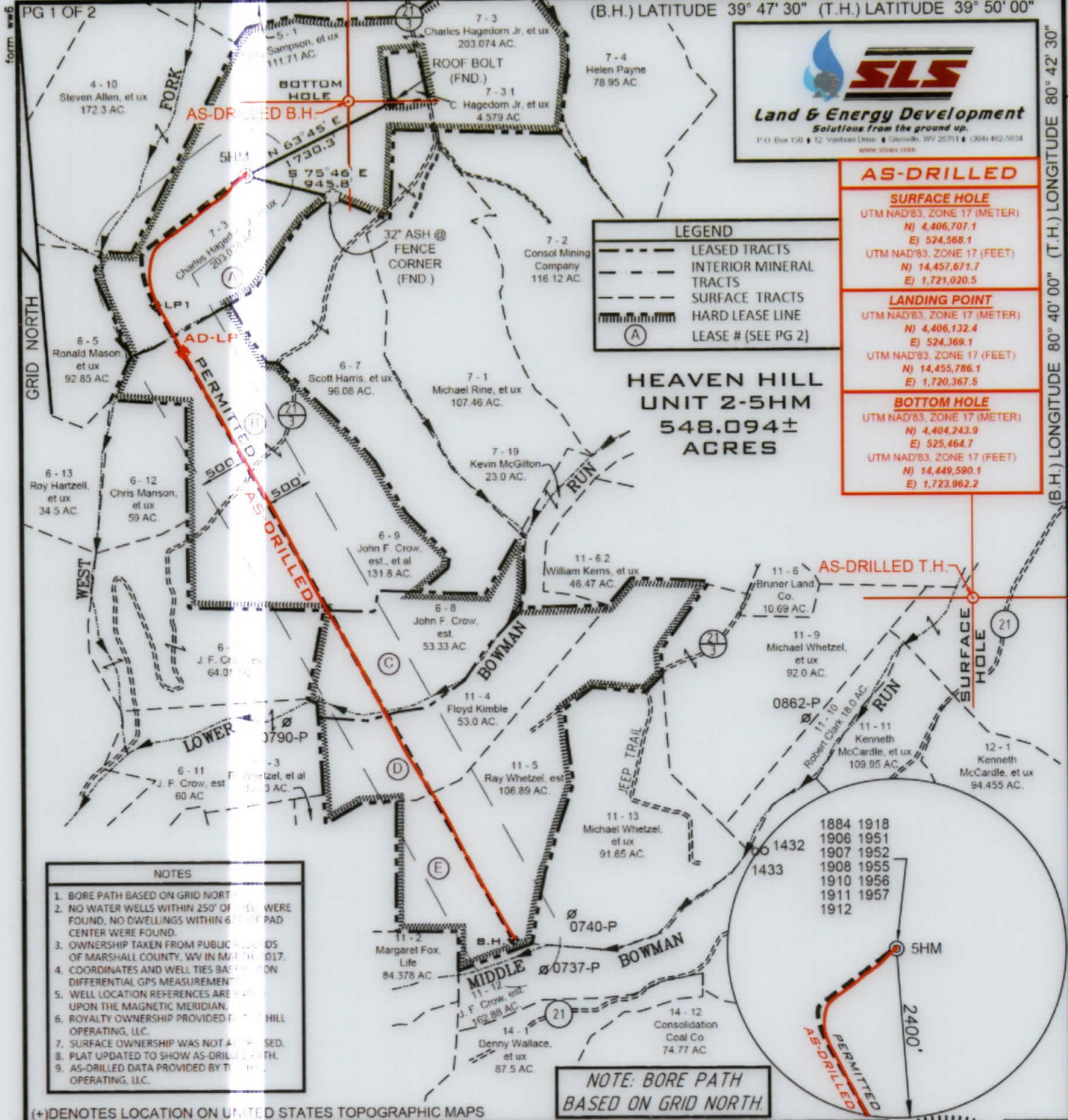


AS-DRILLED B.H. 10,151'

AS-DRILLED T.H. 1,358'

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



<b>AS-DRILLED</b>
<b>SURFACE HOLE</b> UTM NAD'83, ZONE 17 (METER) N) 4,406,707.1 E) 524,568.1 UTM NAD'83, ZONE 17 (FEET) N) 14,457,671.7 E) 1,721,020.5
<b>LANDING POINT</b> UTM NAD'83, ZONE 17 (METER) N) 4,406,132.4 E) 524,369.1 UTM NAD'83, ZONE 17 (FEET) N) 14,455,786.1 E) 1,720,367.5
<b>BOTTOM HOLE</b> UTM NAD'83, ZONE 17 (METER) N) 4,404,243.9 E) 525,464.7 UTM NAD'83, ZONE 17 (FEET) N) 14,449,590.1 E) 1,723,962.2

LEGEND	
	LEASED TRACTS
	INTERIOR MINERAL TRACTS
	SURFACE TRACTS
	HARD LEASE LINE
	LEASE # (SEE PG 2)

**HEAVEN HILL  
UNIT 2-5HM  
548.094±  
ACRES**

- NOTES**
- BORE PATH BASED ON GRID NORTH.
  - NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 600' OF PAD CENTER WERE FOUND.
  - OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH 2017.
  - COORDINATES AND WELL TIES BASED ON DIFFERENTIAL GPS MEASUREMENTS.
  - WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
  - ROYALTY OWNERSHIP PROVIDED BY HEAVEN HILL OPERATING, LLC.
  - SURFACE OWNERSHIP WAS NOT APPLIED.
  - PLAT UPDATED TO SHOW AS-DRILLED PATH.
  - AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

**NOTE: BORE PATH  
BASED ON GRID NORTH.**

FILE NUMBER	163-697
DRAWING NUMBER	HHU2_WP_5HM REV1
SCALE	1" = 1500'
MINIMUM DEGREE OF ACCURACY	1/2500
PROVEN SOURCE OF ELEVATION	SUBMETER MAPPING GRADE GPS

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

P.S. 849 *C. Victor Moyers*



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



DATE: OCTOBER 17, 2018  
DATE REVISED: OCTOBER 17, 2019  
OPERATORS WELL NO. Heaven Hill Unit 2-5HM As-Drilled

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW  API WELL NO. 47-051-01884  
STATE COUNTY PERMIT

LOCATION ELEVATION 1331' WATERSHED (HUC 10) FISH CREEK  
DISTRICT MEADE COUNTY MARSHALL  
QUADRANGLE GLEN EASTON 7.5' LEASE NUMBER SEE ATTACHED PG 2 OF 2

SURFACE OWNER CHARLES R. HAGEDORN, JR., ET UX ACREAGE 203.074  
OIL & GAS ROYALTY OWNER CHARLES R. HAGEDORN, JR., ET AL LEASE ACREAGE 548.094  
PROPOSED WORK: DRILL  CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION \_\_\_  
PERFORM NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE (SPECIFY) \_\_\_

TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD 6,851' TMD: 15,084'  
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

COUNTY NAME PERMIT



**HEAVEN HILL UNIT 2-5HM  
WELL PLAT LEASE INFORMATION**

Lease No.	Tag	Parcel	Oil & Gas Royalty Owner	Deed Book	Deed Page
10*15505	A	9-7-3	RALPH E. WELLMAN	686	412
10*15521	A	9-7-3	VENANGO 21ST CENTURY ENERGY INC	722	281
10*15608	A	9-7-3	CHARLES R HAGEDORN JR	816	423
10*47051 123.1	A	9-7-3	VENANGO 21ST CENTURY ENERGY INC	888	618
10*47051 123.2	A	9-7-3	PATRIOT RESTORATIONS LLC	908	541
10*47051 123.3	A	9-7-3	TRIENERGY HOLDINGS, LLC	878	330
10*15510	B	9-6-9	ELAINE PHELPS ET VIR	718	326
10*15511	B	9-6-9	DAVID E CROW	718	376
10*15512	B	9-6-9	FRANCES COFFEY	718	328
10*15513	B	9-6-9	KAY KEYES	718	330
10*15514	B	9-6-9	L PAUL CROW	716	336
10*15515	B	9-6-9	DESIRE L CROW	718	334
10*15516	B	9-6-9	ROSE MARIE KIELGCZEWSKI	718	354
10*15517	B	9-6-9	DIANNE GELLNER & GARY GELLNER	718	345
10*15518	B	9-6-9	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	718	347
10*15519	B	9-6-9	JOHN CROW	726	580
10*15520	B	9-6-9	TIMOTHY CROW	726	582
10*47051 123.1	B	9-6-9	LLOYD G BAKER	865	389
10*47051 123.2	B	9-6-9	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	873	143
10*15510	C	9-6-8	ELAINE PHELPS ET VIR	718	326
10*15511	C	9-6-8	DAVID E CROW	718	376
10*15512	C	9-6-8	FRANCES COFFEY	718	328
10*15513	C	9-6-8	KAY KEYES	718	330
10*15514	C	9-6-8	L PAUL CROW	718	336
10*15515	C	9-6-8	DESIRE L CROW	718	334
10*15516	C	9-6-8	ROSE MARIE KIELGCZEWSKI	718	354
10*15517	C	9-6-8	DIANNE GELLNER & GARY GELLNER	718	345
10*15518	C	9-6-8	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	718	347
10*15519	C	9-6-8	JOHN CROW	726	580
10*15520	C	9-6-8	TIMOTHY CROW	726	582
10*15521	C	9-6-8	CYNTHIA GAY BURNS	782	114
10*15522	C	9-6-8	JOYCE HOPE JARMON	782	329
10*15523	C	9-6-8	FLOY CARLEEN CRADDOCK	782	348
10*15524	C	9-6-8	ANN MADISON	783	176
10*15530	C	9-6-8	JO ANN LITTLEFIELD	783	141
10*15531	C	9-6-8	FLOYDENE S GROVES	783	619
10*15532	C	9-6-8	ALTA BELL KAY	782	89
10*15533	C	9-6-8	LAURA L MORGAN	782	119
10*15534	C	9-6-8	WILLIAM RIAL DENMAN	782	109
10*15535	C	9-6-8	MERRIET E LEWIS	782	125
10*15536	C	9-6-8	JEFFIE HAMAR	792	213
10*15537	C	9-6-8	CHARLOTTE L LOWRY	783	208
10*15538	C	9-6-8	JAMIE C BOREN	797	331
10*15539	C	9-6-8	WILLIAM K HAVINS	800	144
10*15540	C	9-6-8	REBECCA BELL LEVESQUE	800	515
10*15541	C	9-6-8	CHARLOTTE PRICKETT	783	191
10*15542	C	9-6-8	WILLIAM H STURMAN	782	145
10*15543	C	9-6-8	CRAIG STURMAN	782	130
10*15544	C	9-6-8	JOHN FRANK STURMAN	782	135
10*15545	C	9-6-8	JANIE E STURMAN	782	140
10*47051 123.1	C	9-6-8	LLOYD G BAKER	865	389
10*47051 123.2	C	9-6-8	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	873	143
10*16547	D	9-11-4	RHDK INVESTMENTS	907	550
10*15548	E	9-11-5	VICKIE MASON	686	239
10*15549	E	9-11-5	SHARON L WHETZAL	687	147
10*15550	E	9-11-5	MARY A SOUTH	690	615
10*15551	E	9-11-5	ROBERT L WHETZAL	690	559
10*15552	E	9-11-5	RAY A WHETZAL JR	693	571
10*15553	E	9-11-5	MARK L WHETZAL	693	576
10*47051 108.1	E	9-11-5	MICHAEL A WHETZEL	885	51
10*47051 108.5	E	9-11-5	BRENDA J WHETZEL	885	55

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