

**HEAVEN HILL 2W LEASE
WELL 9HM
TUG HILL OPERATING**

T.H. LATITUDE 38°50'00"
B.H. LATITUDE 39°47'30"

B.H.

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

1,752' B.H.

8,453' T.H.

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
NAD83 S.P.C.(FT) N. 479,510.20 E. 1,627,767.93
NAD83 GEO. LAT-(N) 39.810184 LONG-(W) 80.712874
NAD83 UTM (M) N. 4,406,729.24 E. 624,676.73

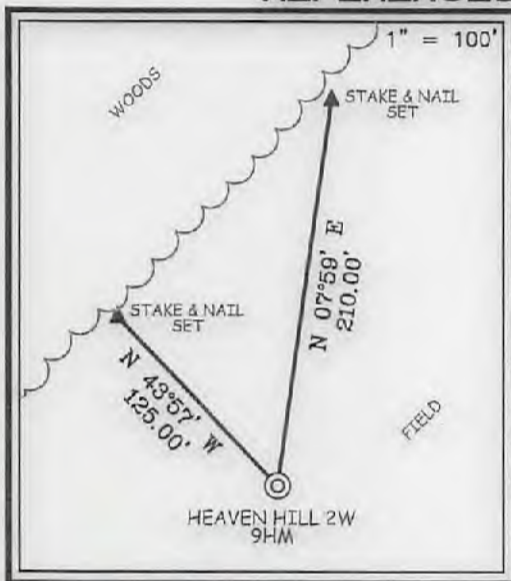
LANDING POINT
NAD83 S.P.C.(FT) N. 478,648.5 E. 1,625,810.3
NAD83 GEO. LAT-(N) 39.807737 LONG-(W) 80.720581
NAD83 UTM (M) N. 4,406,455.6 E. 529,917.9

BOTTOM HOLE
NAD83 S.P.C.(FT) N. 470,885.0 E. 1,629,856.9
NAD83 GEO. LAT-(N) 39.786858 LONG-(W) 80.705101
NAD83 UTM (M) N. 4,404,142.5 E. 525,250.6

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 & TOP MARK SCALE IS 1"=2000'

REFERENCES



Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Deed Book/Page
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*47051.073.1	A	9-7-3	VENANGO 21ST CENTURY ENERGY INC	888 618
10*47051.073.2	A	9-7-3	PATRIOT RESTORATIONS LLC	908 541
10*47051.073.3	A	9-7-3	TREENERGY HOLDINGS, LLC	878 330
10*17729	B	9-4-10	STEPHEN MENENDEZ	913 66
10*15661	C	9-6-5	CHESTNUT HOLDINGS LLC	839 170
10*15507	D	9-6-13	BAY C. HARTZELL AND CAROL J. HARTZELL, HUSB	699 162
10*15510	E	9-6-9	ELAINE PHELPS ET VIR	718 326
10*15511	E	9-6-9	DAVID E CROW	718 376
10*15512	E	9-6-9	FRANCES COFFEY	718 378
10*15513	E	9-6-9	KAY KEYES	718 330
10*15514	E	9-6-9	L PAUL CROW	718 336
10*15515	E	9-6-9	DESIRE L CROW	718 334
10*15516	E	9-6-9	ROSE MARIE KIELGCZEWSKI	718 354
10*15517	E	9-6-9	DIANNE GELLNER & GARY GELLNER	718 345
10*15518	E	9-6-9	JAMES P HOLIDAY AND JACQUELINE HOLIDAY	718 347
10*15519	E	9-6-9	JOHN CROW	726 582
10*15520	E	9-6-9	TIMOTHY CROW	726 582
10*47051.123.1	E	9-6-9	LLOYD G BAKER	865 389
10*47051.123.2	E	9-6-9	JAMES P HOLIDAY AND JACQUELINE HOLIDAY	873 143
10*15525	F	9-6-12	RONALD KEITH MASON ET UX	772 445
10*15541	F	9-6-12	MARY RUTH FROHNAPFEL	751 312
10*15542	F	9-6-12	KENNETH D SIBURT	751 218
10*15543	F	9-6-12	SANDRA FROWEN	751 307
10*15544	F	9-6-12	VICKI J CHERRY A/K/A VICKIE L CHERRY	753 318
10*15545	F	9-6-12	JAMES B SIBURT ET UX	753 332
10*15546	F	9-6-12	ALAN K SIBURT ET UX	753 325
10*15547	F	9-6-12	ROONEY L SIBURT	753 346
10*15510	G	9-6-10	ELAINE PHELPS ET VIR	718 326
10*15511	G	9-6-10	DAVID E CROW	718 376
10*15512	G	9-6-10	FRANCES COFFEY	718 378
10*15513	G	9-6-10	KAY KEYES	718 330
10*15514	G	9-6-10	L PAUL CROW	718 336
10*15515	G	9-6-10	DESIRE L CROW	718 334
10*15516	G	9-6-10	ROSE MARIE KIELGCZEWSKI	718 354
10*15517	G	9-6-10	DIANNE GELLNER & GARY GELLNER	718 345
10*15518	G	9-6-10	JAMES P HOLIDAY AND JACQUELINE HOLIDAY	718 347
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10*15510	H	9-10-11	ELAINE PHELPS ET VIR	718 326
10*15511	H	9-10-11	DAVID E CROW	718 376
10*15512	H	9-10-11	FRANCES COFFEY	718 378
10*15513	H	9-10-11	KAY KEYES	718 330
10*15514	H	9-10-11	L PAUL CROW	718 336
10*15515	H	9-10-11	DESIRE L CROW	718 334
10*15516	H	9-10-11	ROSE MARIE KIELGCZEWSKI	718 354
10*15517	H	9-10-11	DIANNE GELLNER & GARY GELLNER	718 345
10*15518	H	9-10-11	JAMES P HOLIDAY AND JACQUELINE HOLIDAY	718 347
10*15519	H	9-10-11	JOHN CROW	726 582
10*15520	H	9-10-11	TIMOTHY CROW	726 582
10*47051.123.1	H	9-10-11	LLOYD G BAKER	865 389
10*47051.123.2	H	9-10-11	JAMES P HOLIDAY AND JACQUELINE HOLIDAY	873 143
10*16517	I	9-11-4	RHDK INVESTMENTS LLC KEITH B KIMBLE	507 550
10*15541	J	9-11-3	VICKIE MASON	680 413
10*15562	J	9-11-3	MARY A SOUTH	682 231
10*15563	J	9-11-3	MARK L WHETZAL	682 244
10*15564	J	9-11-3	RAY A WHETZAL JR	682 548
10*15565	J	9-11-3	ROBERT L WHETZAL	682 552
10*15566	J	9-11-3	SHARON L WHETZAL	682 556
10*47051.108.1	J	9-11-3	MICHAEL A WHETZEL	885 51
10*47051.108.5	J	9-11-3	BRENDA J WHETZEL	885 55
10*47051.108.6	J	9-11-3	TERRI MCCARDE	885 29
10*47051.108.7	J	9-11-3	GARY FRANCIS WHETZAL	885 26
10*15584	K	9-11-5	VICKIE MASON	686 289
10*15585	K	9-11-5	SHARON L WHETZAL	687 147
10*15586	K	9-11-5	MARY A SOUTH	690 615
10*15587	K	9-11-5	ROBERT L WHETZAL	690 559
10*15588	K	9-11-5	RAY A WHETZAL JR	693 571
10*15589	K	9-11-5	MARK L WHETZAL	693 576
10*47051.108.1	K	9-11-5	MICHAEL A WHETZEL	885 51
10*47051.108.5	K	9-11-5	BRENDA J WHETZEL	885 55
10*47051.243.1	L	9-11-2	MARY A FOX	879 332
10*47051.243.2	L	9-11-2	PAUL G FOX	879 335
10*47051.243.3	L	9-11-2	MARK H FOX	879 338
10*47051.243.4	L	9-11-2	DAVID E FOX	876 55
10*47051.243.5	L	9-11-2	LOUIS T FOX	876 58
10*47051.243.6	L	9-11-2	THOMAS J FOX	876 61

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Land & Energy Development
Solutions from the ground up.
P.O. Box 150 # 12 Van Horn Drive • Glenville, WV 26351 • (304) 462-9834
www.slsurveys.com

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

P.S. 677
Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JULY 17, 20 17

REVISED _____, 20 _____
OPERATORS WELL NO. HEAVEN HILL 2W-9HM

API WELL NO. 47 - 051 - 01951
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8703P9HM.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 X LIQUID INJECTION _____ WASTE DISPOSAL _____ IF "GAS" PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X

LOCATION: ELEVATION GROUND = 1,360.0' PROPOSED = 1,331.26' WATERSHED WEST FORK OF LOWER BOWMAN RUN OF FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER C.R. JR. & A.H. HAGEDORN ACREAGE 203.07±
ROYALTY OWNER C.R. JR. & A.H. HAGEDORN ET AL (SEE ABOVE) ACREAGE 203.07±

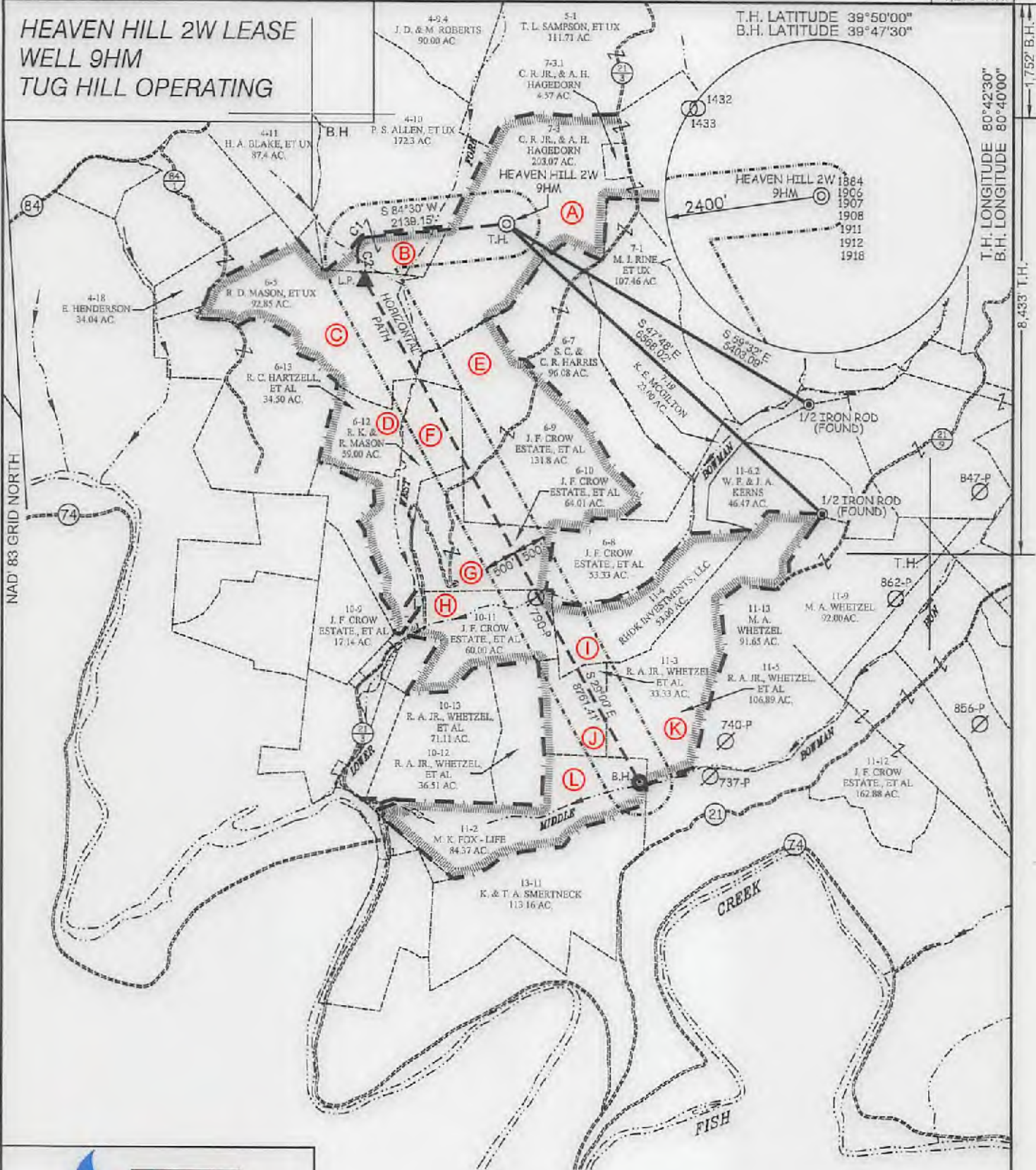
PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____ OTHER _____
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
ESTIMATED DEPTH TVD: 6,879' / TMD: 16,535'

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

COUNTY NAME PERMIT

09/22/2017

**HEAVEN HILL 2W LEASE
WELL 9HM
TUG HILL OPERATING**



T.H. LONGITUDE 80°42'30"
B.H. LONGITUDE 80°40'00"
1,752' B.H.
8,433' T.H.

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www.slsurvey.com

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	258.45'	185.47'	79°50'37"	S 42°11' W	238.04'
C2	502.20'	760.58'	37°49'54"	S 13°09' E	493.13'

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

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(+) 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 PGS. 3,4,5)
- SURFACE OWNER (SEE TABLE)

09/22/2017

SCALE 1" = 2000' FILE NO. 8703P9HM.dwg

DATE JULY 17, 20 17

REVISED _____, 20 _____

OPERATORS WELL NO. HEAVEN HILL 2W-9HM

API WELL NO. **47** — **051** — **01951**

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 CT CORPORATION SYSTEM
FORT WORTH, TX 76107	5400 D BIG TYLER ROAD
	CHARLESTON, WV 25313