

HEAVEN HILL 2W LEASE
WELL 10HM
TUG HILL OPERATING

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

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

AS-DRILLED

AS-DRILLED

AS-DRILLED

A.D. B.H.

A.D. T.H.

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

NAD'83 S.P.C.(FT) N. 479,490.49 E. 1,627,771.95
NAD'83 GEO. LAT-(N) 39.810129 LONG-(W) 80.712928
NAD'83 UTM (M) N. 4,406,723.16 E. 524,572.15

LANDING POINT

NAD'83 S.P.C.(FT) N. 478,091.3 E. 1,625,055.8
NAD'83 GEO. LAT-(N) 39.806187 LONG-(W) 80.722528
NAD'83 UTM (M) N. 4,406,283.1 E. 523,751.8

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 470,508.7 E. 1,629,273.2
NAD'83 GEO. LAT-(N) 39.785529 LONG-(W) 80.707155
NAD'83 UTM (M) N. 4,403,994.4 E. 525,075.2

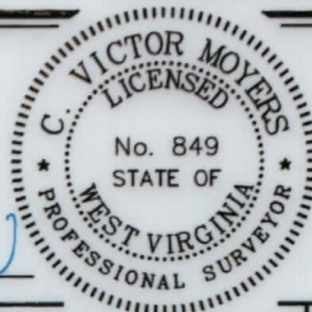
NOTES ON SURVEY

- 1. 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.
- 2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'
- 3. ROYALTY OWNERSHIP PROVIDED BY TUG HILL OPERATING, LLC.
- 4. SURFACE OWNERSHIP PROVIDED WAS NOT ADDRESSED
- 5. AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- 6. PLAT UPDATED TO SHOW AS-DRILLED PATH.

Table with columns: No., Lease Name or No., Trg., Parcel, Grantor, Lessee, etc., Deed Book, Page. Lists various land parcels and their owners.



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



P.S. 849 *C. Victor Moyers*

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

DATE OCTOBER 17, 20 18

REVISED OCTOBER 17, 20 19

OPERATORS WELL NO. HEAVEN HILL 2W-10HM

API WELL NO. 47 - 051 - 01955
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8703AD10HMR.dwg SCALE 1" = 2000'

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

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



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

LOCATION: GROUND = 1,350.0' ELEVATION 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: 16,799'

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

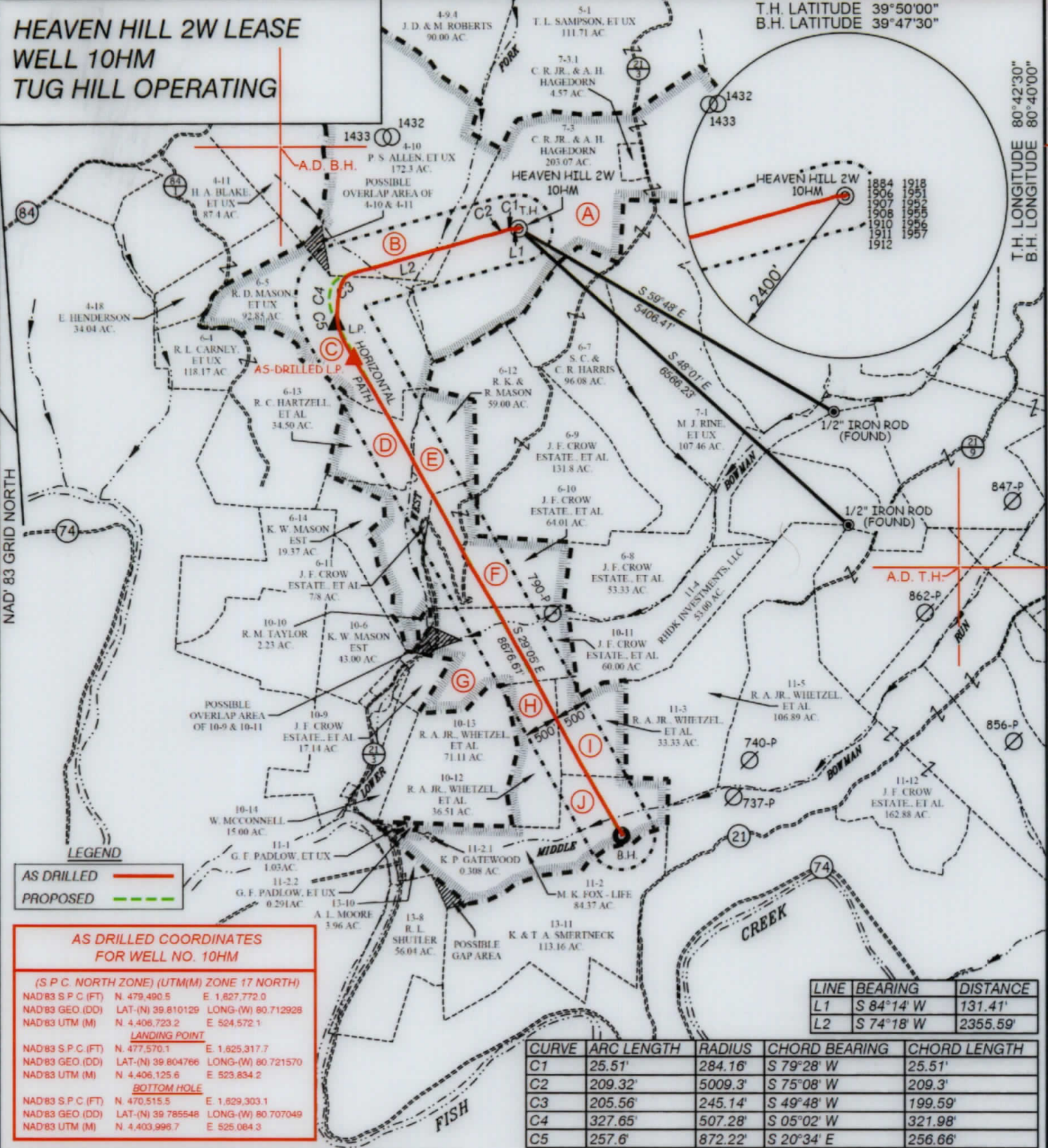
DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

COUNTY NAME PERMIT

**HEAVEN HILL 2W LEASE
WELL 10HM
TUG HILL OPERATING**

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

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B.H. LONGITUDE 80°40'00"



LEGEND
AS DRILLED ———
PROPOSED - - - - -

AS DRILLED COORDINATES FOR WELL NO. 10HM

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

NAD83 S.P.C.(FT)	N. 479,490.5	E. 1,627,772.0
NAD83 GEO.(DD)	LAT.-(N) 39.810129	LONG.-(W) 80.712928
NAD83 UTM (M)	N. 4,406,723.2	E. 524,572.1

LANDING POINT

NAD83 S.P.C.(FT)	N. 477,570.1	E. 1,625,317.7
NAD83 GEO.(DD)	LAT.-(N) 39.804766	LONG.-(W) 80.721570
NAD83 UTM (M)	N. 4,406,125.6	E. 523,834.2

BOTTOM HOLE

NAD83 S.P.C.(FT)	N. 470,515.5	E. 1,629,303.1
NAD83 GEO.(DD)	LAT.-(N) 39.785548	LONG.-(W) 80.707049
NAD83 UTM (M)	N. 4,403,996.7	E. 525,064.3

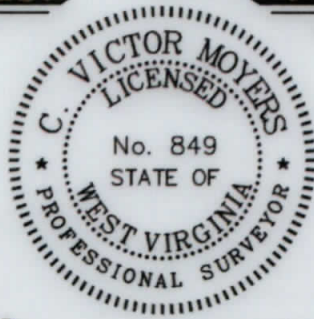
LINE	BEARING	DISTANCE
L1	S 84°14' W	131.41'
L2	S 74°18' W	2355.59'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	25.51'	284.16'	S 79°28' W	25.51'
C2	209.32'	5009.3'	S 75°08' W	209.3'
C3	205.56'	245.14'	S 49°48' W	199.59'
C4	327.65'	507.28'	S 05°02' W	321.98'
C5	257.6'	872.22'	S 20°34' E	256.66'



SLS Land & Energy Development
Solutions from the ground up.

P.O. Box 150 | 12 Varnhorn Drive | Glenville, WV 26351 | (304) 462-5634
www.slsrv.com



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

FILE NO. 8703AD10HMR.dwg SCALE 1" = 2000'

DATE OCTOBER 17, 2018

REVISED OCTOBER 17, 2019

OPERATORS WELL NO. HEAVEN HILL 2W-10HM

API WELL NO. **47 - 051 - 01955**
STATE COUNTY PERMIT

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P.S. 849 *C. Victor Moyers*

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
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LEGEND

LEASE LINE	— — — — —	COUNTY ROUTE	⊙
SURFACE LINE	— — — — —	PROPOSED WELL	⊙
WELL LATERAL	— — — — —	EXISTING WELL	⊙
OFFSET LINE	— — — — —	PERMITTED WELL	⊙
TIE LINE	— — — — —	TAX MAP-PARCEL	00-00
CREEK	— — — — —	LEASE # (SEE PG. 1)	(A)
ROAD	— — — — —	SURFACE OWNER (SEE TABLE)	(A)

COUNTY NAME PERMIT

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

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