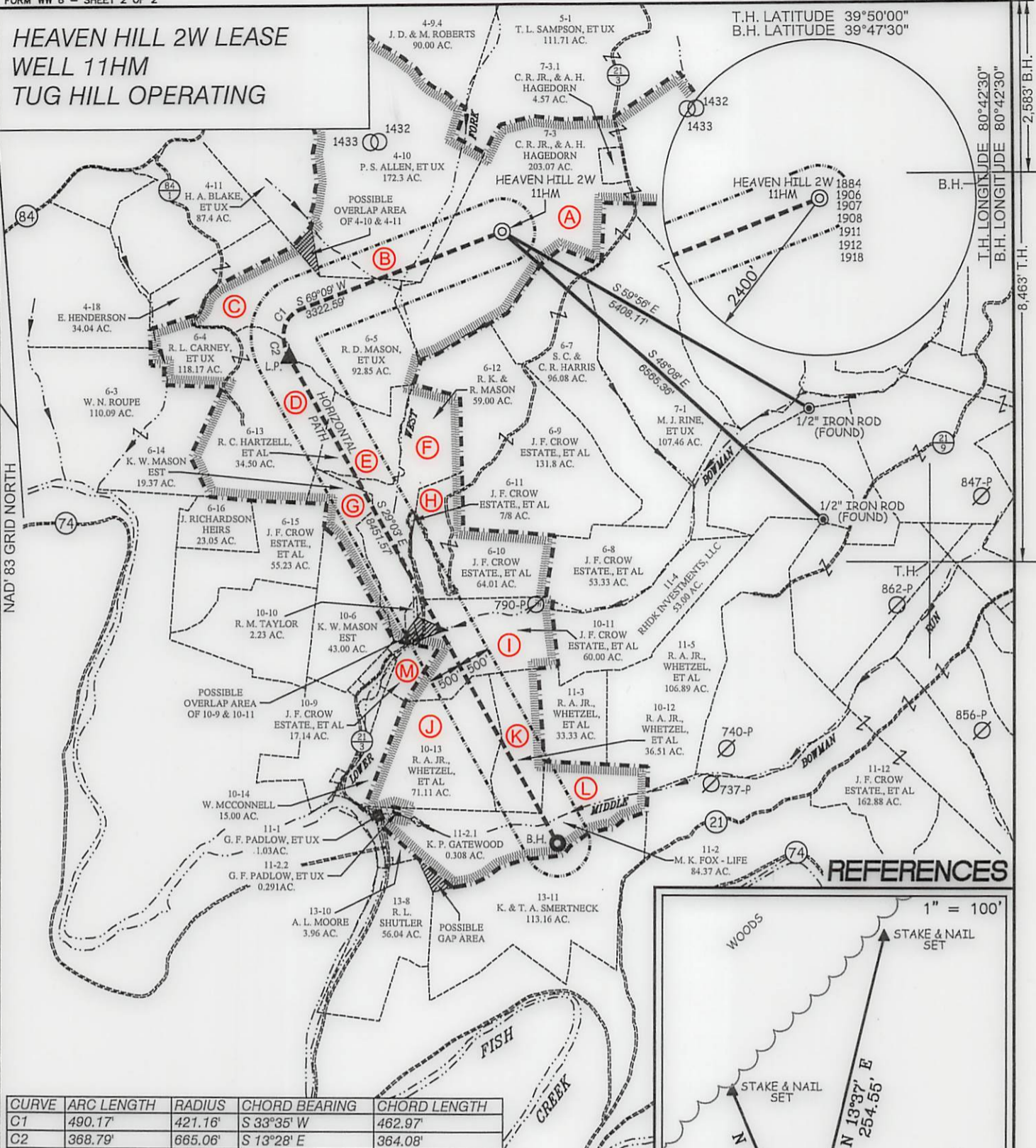
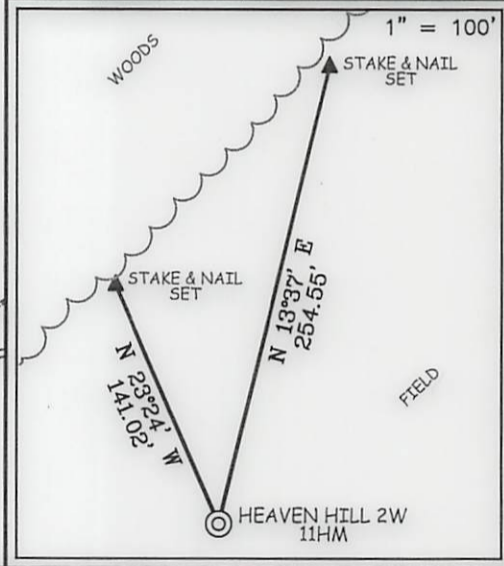


**HEAVEN HILL 2W LEASE
WELL 11HM
TUG HILL OPERATING**



REFERENCES



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	490.17'	421.16'	S 33°35' W	462.97'
C2	368.79'	665.06'	S 13°28' E	364.08'

Handwritten signature and date: 8/14/17

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

NAD'83 S.P.C.(FT)	N. 479,480.63	E. 1,627,764.26
NAD'83 GEO.	LAT-(N) 39.810102	LONG-(W) 80.712955
NAD'83 UTM (M)	N. 4,406,720.12	E. 524,569.86

LANDING POINT

NAD'83 S.P.C.(FT)	N. 477,558.7	E. 1,624,487.8
NAD'83 GEO.	LAT-(N) 39.804704	LONG-(W) 80.724524
NAD'83 UTM (M)	N. 4,406,117.9	E. 523,581.4

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 470,170.5	E. 1,628,592.0
NAD'83 GEO.	LAT-(N) 39.784575	LONG-(W) 80.709562
NAD'83 UTM (M)	N. 4,403,888.0	E. 524,869.4

GREGORY A. SMITH
LICENSED
No. 677
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

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

SCALE 1" = 2000' FILE NO. 8703P11HM.dwg

DATE JULY 27, 20 17

REVISED _____, 20 _____

OPERATORS WELL NO. HEAVEN HILL 2W-11HM

API WELL NO. 47 — 051 — 01956H6A

NO. STATE COUNTY PERMIT

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

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 PAGE 1)

00-00 (A)

Glenn Easton

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

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

COUNTY NAME PERMIT

HEAVEN HILL 2W LEASE WELL 11HM TUG HILL OPERATING

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

Table with 4 columns: No., Lease Name or No., Tag, Parcel, Grantor, Lessor, etc., Deed Book/Page. Lists various lease and deed records.

Table with 4 columns: No., Lease Name or No., Tag, Parcel, Grantor, Lessor, etc., Deed Book/Page. Lists various lease and deed records.

T.H. LONGITUDE 80°42'30" B.H. LONGITUDE 80°42'30" 2,563' B.H. 8,463' T.H.

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

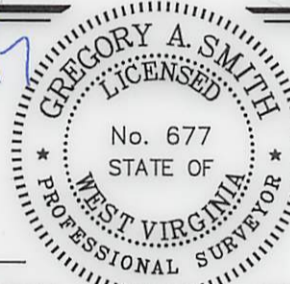
NOTES ON SURVEY

- 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'

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD83 S.P.C.(FT) N. 479,480.63 E. 1,627,764.26 NAD83 GEO. LAT.(-N) 39.810102 LONG.(-W) 80.712955 NAD83 UTM (M) N. 4,406,720.12 E. 524,569.86 LANDING POINT NAD83 S.P.C.(FT) N. 477,558.7 E. 1,624,487.8 NAD83 GEO. LAT.(-N) 39.804704 LONG.(-W) 80.724524 NAD83 UTM (M) N. 4,406,117.9 E. 523,581.4 BOTTOM HOLE NAD83 S.P.C.(FT) N. 470,170.5 E. 1,628,592.0 NAD83 GEO. LAT.(-N) 39.784575 LONG.(-W) 80.709562 NAD83 UTM (M) N. 4,403,888.0 E. 524,869.4

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 27, 20 17 REVISED, 20 OPERATORS WELL NO. HEAVEN HILL 2W-11HM API WELL NO. 47-051-01956 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8703P11HM.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 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: 17,164'

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