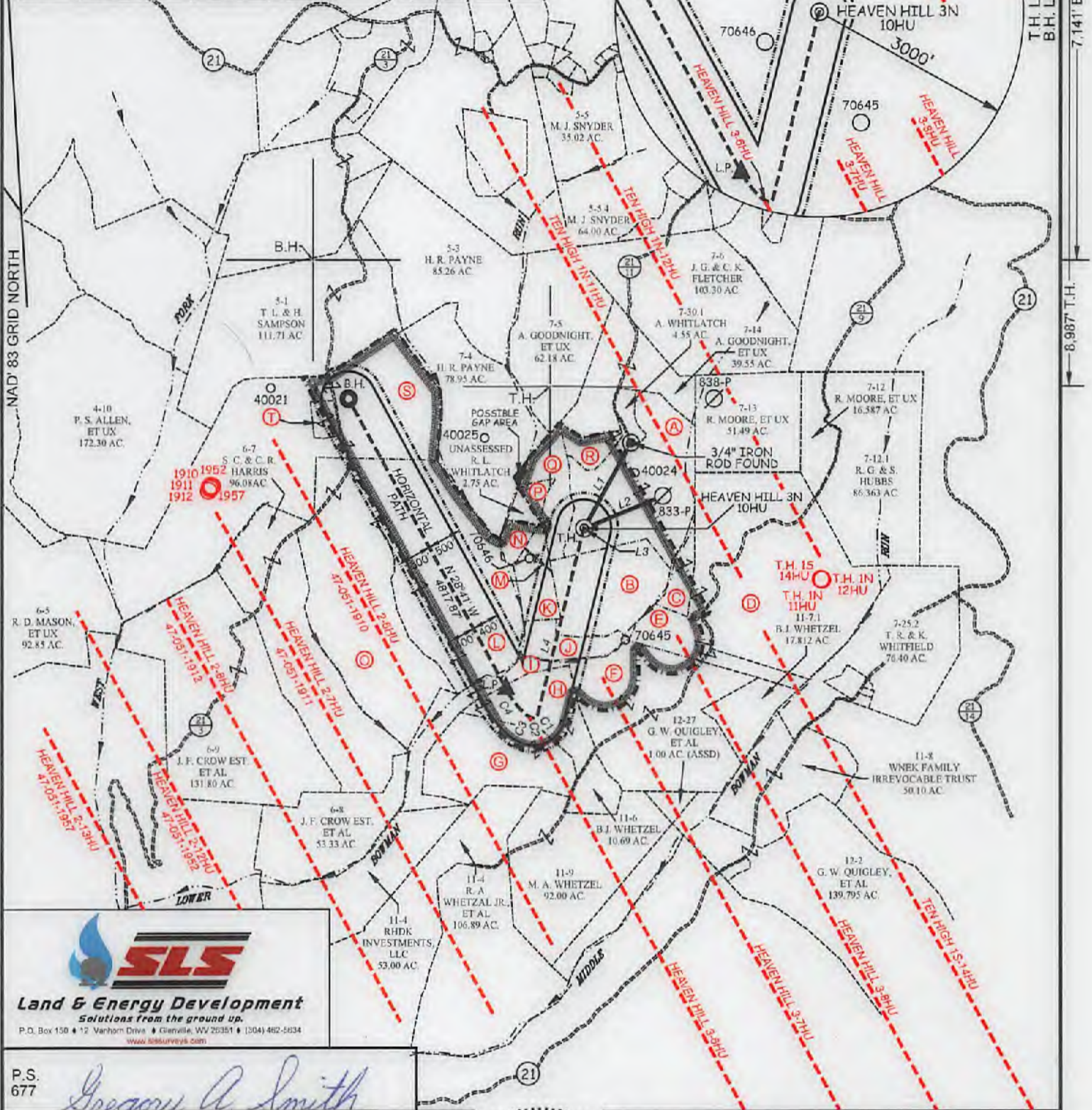


**HEAVEN HILL 3N LEASE
UTICA UNIT - 368.00 AC ±
WELL 10HU
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	N 28°51' E	1432.41'
L2	N 67°40' E	1251.85'
L3	N 00°58' E	20.95'
L4	S 13°58' W	2814.92'

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

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	64.36'	74.74'	S 34°13' W	62.39'
C2	50.49'	79.34'	S 86°14' W	49.64'
C3	135.53'	313.67'	N 58°33' W	134.48'
C4	451.38'	1439.67'	N 36°45' W	449.53'



NAD 83 GRID NORTH

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

7,141' B.H.

8,987' T.H.



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P.S. 677
Gregory A. Smith



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

LEGEND

- UNIT BOUNDARY
- LEASED TRACTS INSIDE
- UNIT BOUNDARY
- SURFACE LINE
- PROPOSED UTICA
- WELL LATERAL
- 400' OFFSET LINE
- 500' OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE ADDITIONAL SHEETS)

COUNTY NAME
PERMIT

05/25/2018

SCALE 1" = 2000' FILE NO. 8654P10HUR3.dwg
DATE FEBRUARY 20 20 18
REVISED MARCH 26, APRIL 11, MAY 17 20 18
OPERATORS WELL NO. HEAVEN HILL 3N-10HU
API WELL NO. 47 - 051 - 02016 HGA
STATE COUNTY PERMIT

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



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

10,979' B.H.

7,496' T.H.

**HEAVEN HILL 3N LEASE
UTICA UNIT - 368.00 AC±
WELL 10HU
TUG HILL OPERATING**

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

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)		
NAD'83 S.P.C.(FT)	N. 478,883.22	E. 1,633,264.78
NAD'83 GEO.	LAT-(N) 39.808664	LONG-(W) 80.693348
NAD'83 UTM (M)	N. 4,406,566.12	E. 526,248.66
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 476,547.9	E. 1,632,117.7
NAD'83 GEO.	LAT-(N) 39.802211	LONG-(W) 80.697320
NAD'83 UTM (M)	N. 4,405,848.8	E. 525,911.1
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 480,774.5	E. 1,629,805.2
NAD'83 GEO.	LAT-(N) 39.813729	LONG-(W) 80.705752
NAD'83 UTM (M)	N. 4,407,124.7	E. 525,185.1

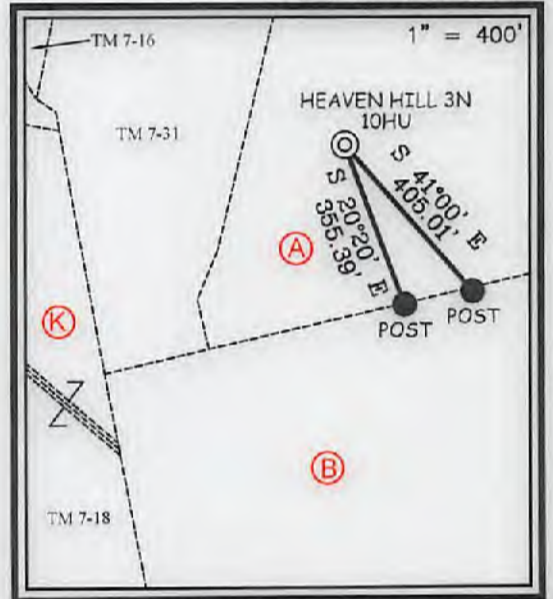
T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°40'00"

B.H.

T.H.

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	LAWRENCE & SHIRLEY CONKLE ESTS.	9-7-24	139.79
E	LARRY J. WHETZEL, ET UX	9-7-23	36.00
F	BRENDA J. WHETZEL	9-11-7	82.858
G	WILLIAM F. & JULIA A. KERNS	9-11-6.2	46.47
H	BRENDA J. WHETZEL	9-11-6.1	30.24
I	KEVIN E. MCGILTON	9-7-19	23.00
J	KEVIN E. MCGILTON	9-7-20	13.39
K	KEVIN E. MCGILTON	9-7-18	14.00
L	CONSOL MINING COMPANY LLC	9-7-2	116.12
M	RICKY L. WHITLATCH	NOT ASSD.	16'X32P
N	KEVIN E. MCGILTON	9-7-17	5.12
O	MICHAEL PINE, ET UX	9-7-1	107.46
P	KEVIN E. MCGILTON	9-7-16	8.00
Q	RICKY L. WHITLATCH	9-7-31	16.53
R	RICKY L. WHITLATCH	9-7-15	7.54
S	CHARLES R. JR. & ANNA MARIE HAGEDORN	9-7-3	203.074
T	CHARLES R. JR. & ANNA MARIE HAGEDORN	9-7-3.1	4.579

REFERENCES



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. PROPOSED LATERAL OR TOP HOLE OF HEAVEN HILL 3-10HU IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF API'S 47-051-1910, 47-051-1911, 47-051-1912, 47-051-1952, 47-051-1957 AND PROPOSED WELLS HEAVEN HILL 3-6HU, HEAVEN HILL 3-7HU, HEAVEN HILL 3-8HU, TEN HIGH 1S-14HU, TEN HIGH 1N-11HU, AND TEN HIGH 1N-12HU.



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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 FEBRUARY 20, 20 18
REVISED MARCH 26, APRIL 11, MAY 17, 20 18
OPERATORS WELL NO. HEAVEN HILL 3N-10HU
API WELL NO. 47-051-02016 ^{H6A}
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8554P10HUR3.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 LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION GROUND = 1,336.70' 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 ADDITIONAL SHEETS ACREAGE 72.82±

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 POINT PLEASANT
ESTIMATED DEPTH: TVD: 11,583' / TMD: 17,471'

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

COUNTY NAME PERMIT

05/25/2018