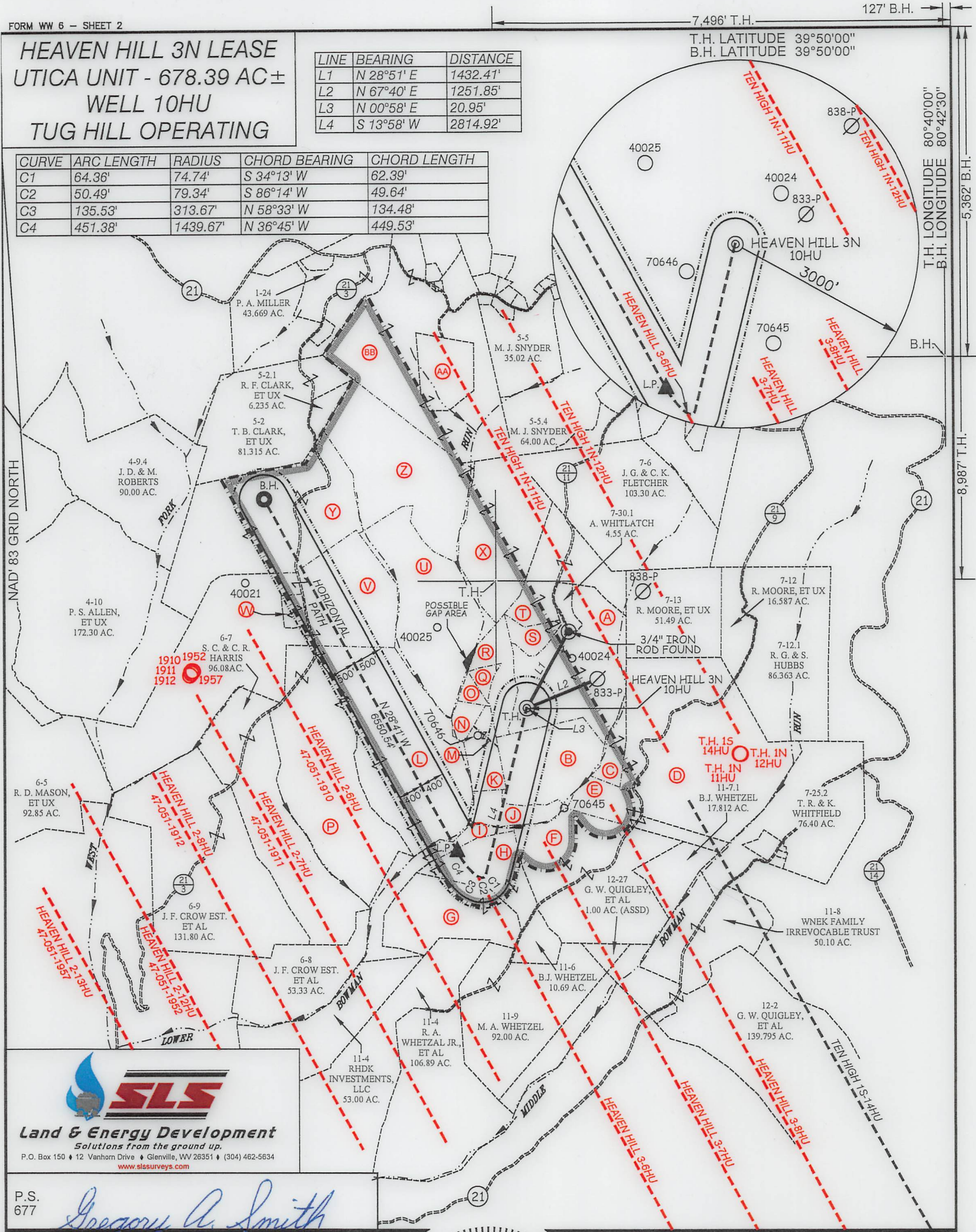


**HEAVEN HILL 3N LEASE  
UTICA UNIT - 678.39 AC ±  
WELL 10HU  
TUG HILL OPERATING**

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'

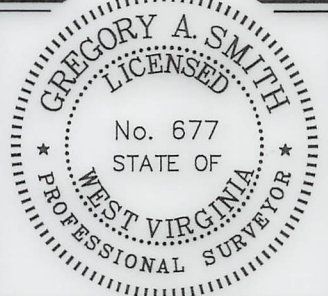
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	64.36'	74.74'	S 34°13' W	62.39'
C2	50.49'	79.34'	S 86°14' W	49.64'
C3	135.53'	313.67'	N 58°33' W	134.48'
C4	451.38'	1439.67'	N 36°45' W	449.53'



**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

P.S. 677  
*Gregory A. Smith*

(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. 482,294.6	E. 1,628,973.6
NAD'83 GEO.	LAT-(N) 39.817871	LONG-(W) 80.708785
NAD'83 UTM (M)	N. 4,407,583.6	E. 524,924.0



(+) 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)	

SCALE 1" = 2000' FILE NO. 8654P10HUR5.dwg  
DATE FEBRUARY 20, 20 18  
REVISED 03-26-18, 07-05-18, 09-13-18  
OPERATORS WELL NO. HEAVEN HILL 3N-10HU  
API WELL 47 - 051 - 02016 MOD  
NO. STATE COUNTY PERMIT #671

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
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**HEAVEN HILL 3N LEASE  
UTICA UNIT - 678.39 AC±  
WELL 10HU  
TUG HILL OPERATING**

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

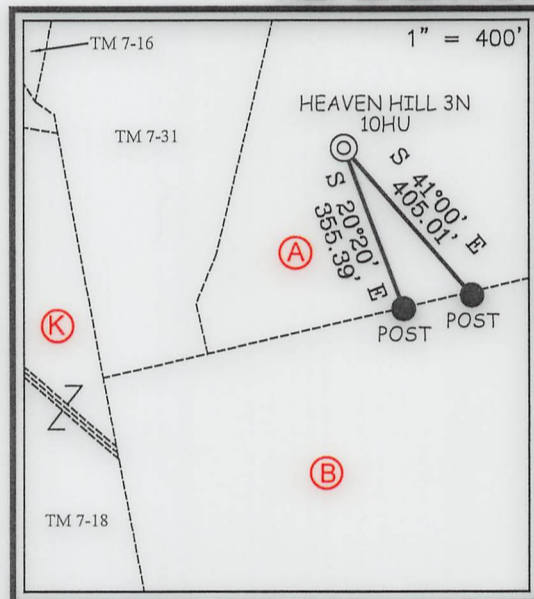
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 NAD'83 UTM (M) N. 4,407,583.6 E. 524,924.0

T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°42'30"  
5,362' B.H.  
8,987' 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' X 32P
N	KEVIN E. MCGILTON	9-7-17	5.12
O	RICKY L. WHITLATCH	NOT ASSD.	2.75
P	MICHAEL PINE, ET UX	9-7-1	107.46
Q	KEVIN E. MCGILTON	9-7-16	8.00
R	RICKY L. WHITLATCH	9-7-31	16.53
S	RICKY L. WHITLATCH	9-7-15	7.54
T	ARNIE GOODNIGHT, ET UX	9-7-14	39.55
U	HELEN ROBERTSON PAYNE	9-7-4	78.95
V	CHARLES R. JR. & ANNA MARIE HAGEDORN	9-7-3	203.074
W	CHARLES R. JR. & ANNA MARIE HAGEDORN	9-7-3.1	4.579
X	ARNIE GOODNIGHT, ET UX	9-7-5	62.18
Y	TERRI L. & HARIKLIYA SAMPSON	9-5-1	111.71
Z	HELEN ROBERTSON PAYNE	9-5-3	85.26
AA	CONSOLIDATION COAL COMPANY	9-5-4.1	22.775
BB	ELMER L. ASTON	9-5-4	108.225

T.H.

**REFERENCES**



**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 & TOPO MARK SCALE IS 1"=2000'
- 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 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 FEBRUARY 20, 20 18

REVISED 03-26-18, 07-05-18, 09-13-18

OPERATORS WELL NO. HEAVEN HILL 3N-10HU  
API WELL NO. 47 - 051 - 02016 MOD  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8654P10HUR5.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 X SHALLOW \_\_\_

LOCATION: GROUND = 1,336.70' ELEVATION 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: LEASE NO. SEE ADDITIONAL SHEETS  
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 POINT PLEASANT ESTIMATED DEPTH TVD: 11,898' / TMD: 19,203'

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