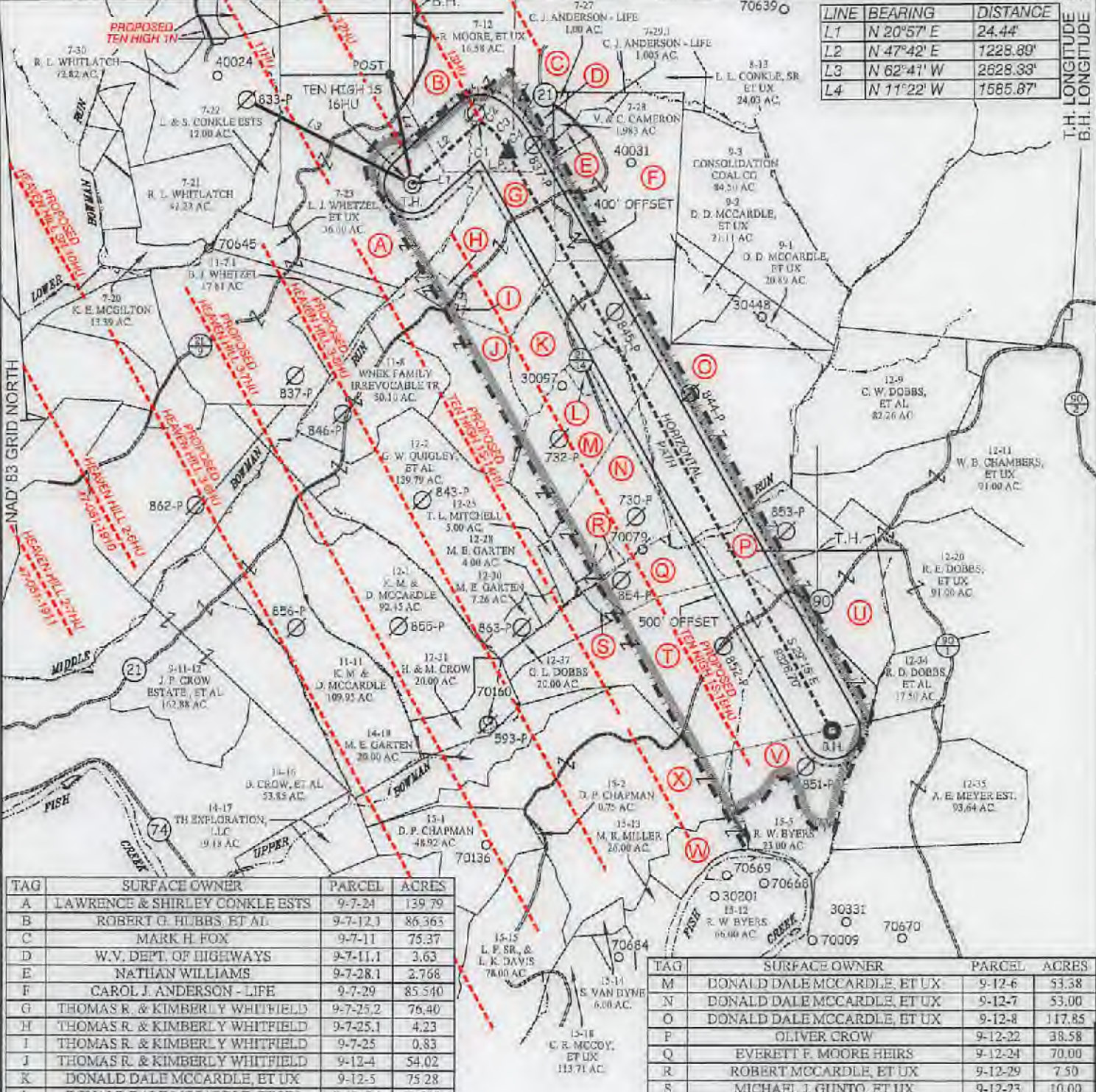


**TEN HIGH 1S LEASE  
UTICA UNIT - 623.86 AC. ±  
WELL 16HU  
TUG HILL OPERATING**

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

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	67.23'	66.59'	N 78°01' E	64.41'
C2	103.12'	262.09'	S 62°42' E	102.45'
C3	233.35'	915.93'	S 43°43' E	232.72'
C4	232.90'	1728.43'	S 33°07' E	232.72'

LINE	BEARING	DISTANCE
L1	N 20°57' E	24.44'
L2	N 47°42' E	1228.89'
L3	N 62°41' W	2628.33'
L4	N 11°22' W	1665.87'



TAG	SURFACE OWNER	PARCEL	ACRES
A	LAWRENCE & SHIRLEY CONKLE ESTS	9-7-24	139.79
B	ROBERT G. HUBBS, ET AL.	9-7-12.1	86.363
C	MARK H. FOX	9-7-11	75.37
D	W.V. DEPT. OF HIGHWAYS	9-7-11.1	3.63
E	NATHAN WILLIAMS	9-7-28.1	2.768
F	CAROL J. ANDERSON - LIFE	9-7-29	85.540
G	THOMAS R. & KIMBERLY WHITFIELD	9-7-25.2	76.40
H	THOMAS R. & KIMBERLY WHITFIELD	9-7-25.1	4.23
I	THOMAS R. & KIMBERLY WHITFIELD	9-7-25	0.83
J	THOMAS R. & KIMBERLY WHITFIELD	9-12-4	54.02
K	DONALD DALE MCCARDLE, ET UX	9-12-5	75.28
L	DONALD DALE MCCARDLE, ET UX	9-12-6.1	2.620

TAG	SURFACE OWNER	PARCEL	ACRES
M	DONALD DALE MCCARDLE, ET UX	9-12-6	53.38
N	DONALD DALE MCCARDLE, ET UX	9-12-7	53.00
O	DONALD DALE MCCARDLE, ET UX	9-12-8	117.85
P	OLIVER CROW	9-12-22	38.58
Q	EVERETT F. MOORE HEIRS	9-12-24	70.00
R	ROBERT MCCARDLE, ET UX	9-12-29	7.50
S	MICHAEL J. GUNTO, ET UX	9-12-23	10.00
T	DAVID P. CHAPMAN	9-12-32	150.00
U	DAVID P. CHAPMAN	9-12-21	50.00
V	DAVID P. CHAPMAN	9-12-33	32.00
W	ROBERT FRANK ROTSON, ET AL.	9-15-4	26.40
X	SUSAN VAN DYNE	9-15-3	167.00

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P.S. 677  
*Gregory A. Smith*

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

NAD'83 S.P.C.(FT)	N. 478,152.80	E. 1,696,758.08
NAD'83 GEO.	LAT-(N) 39.805786	LONG-(W) 80.680960
NAD'83 UTM (M)	N. 4,406,361.38	E. 527,316.63

LANDING POINT

NAD'83 S.P.C.(FT)	N. 478,605.8	E. 1,838,117.8
NAD'83 GEO.	LAT-(N) 39.809078	LONG-(W) 80.678062
NAD'83 UTM (M)	N. 4,406,506.3	E. 527,728.6

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 470,467.8	E. 1,942,674.0
NAD'83 GEO.	LAT-(N) 39.765901	LONG-(W) 80.659471
NAD'83 UTM (M)	N. 4,404,080.2	E. 529,158.1



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

**LEGEND**

UNIT BOUNDARY	—
LEASED TRACTS INSIDE UNIT BOUNDARY	- - -
SURFACE LINE	—
WELL LATERAL	—
400' OFFSET LINE	—
500' OFFSET LINE	—
TIE LINE	—
CREEK	—
ROAD	—
COUNTY ROUTE	—
PROPOSED WELL	○
EXISTING WELL	⊙
PERMITTED WELL	⊙
TAX MAP-PARCEL	00-00-00
SURFACE OWNER (SEE TABLE)	(A)
LEASE # (SEE SHEETS 3 & 4)	

SCALE 1" = 2000' FILE NO. 8655P16HUR3.dwg  
DATE AUGUST 29, 2017  
REVISED 09-01-2017, 01-12-2018 & 03-22-18  
OPERATORS WELL NO. TEN HIGH 1S-16HU  
API WELL NO. 47-051-02028 H0A  
NO. 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 CT CORPORATION SYSTEM ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME PERMIT

07720/2018



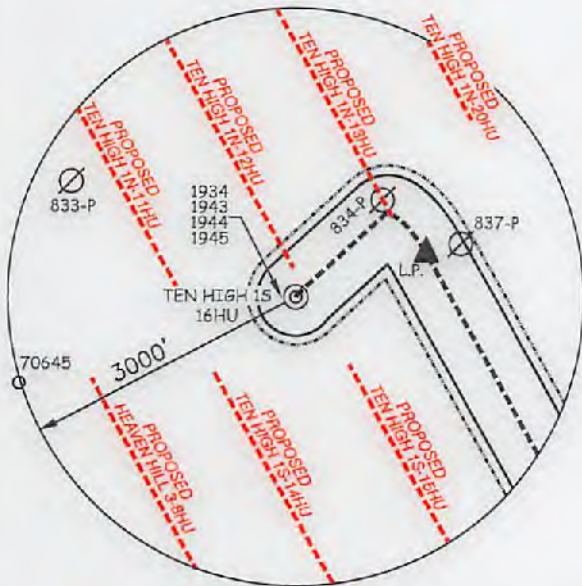
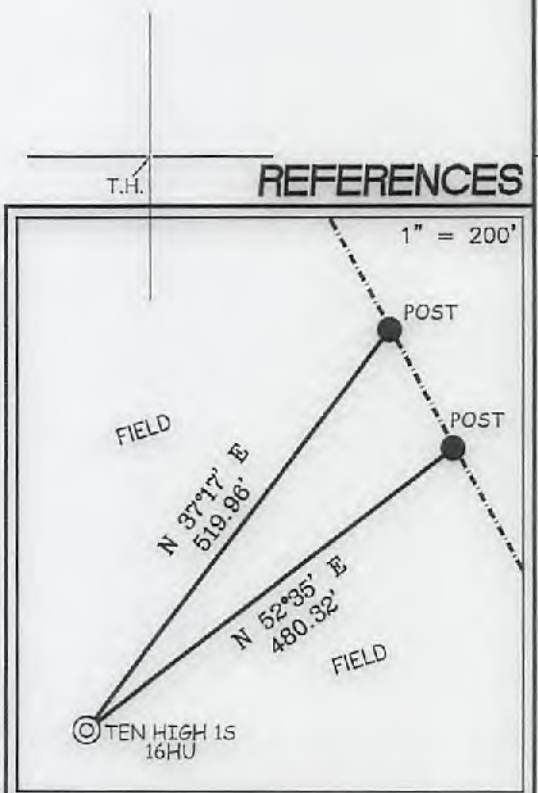
TEN HIGH 1S LEASE  
 UTICA UNIT - 623.86 AC. ±  
 WELL 16HU  
 TUG HILL OPERATING

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

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)			
NAD'83 S.P.C.(FT)	N. 478,152.80	E. 1,838,758.08	
NAD'83 GEO.	LAT-(N) 39.806786	LONG-(W) 80.680880	
NAD'83 UTM (M)	N. 4,406,361.38	E. 627,316.63	
<b>LANDING POINT</b>			
NAD'83 S.P.C.(FT)	N. 478,605.9	E. 1,938,117.8	
NAD'83 GEO.	LAT-(N) 39.808078	LONG-(W) 80.676062	
NAD'83 UTM (M)	N. 4,406,506.3	E. 527,728.6	
<b>BOTTOM HOLE</b>			
NAD'83 S.P.C.(FT)	N. 470,467.8	E. 1,642,674.0	
NAD'83 GEO.	LAT-(N) 39.785901	LONG-(W) 80.659471	
NAD'83 UTM (M)	N. 4,404,050.2	E. 529,156.1	

T.H. LONGITUDE 80°40'00"  
 B.H. LONGITUDE 80°37'30"

B.H.



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'

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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 AUGUST 29, 20 17  
 REVISED 09-01-2017, 01-12-2018 & 03-22-18  
 OPERATORS WELL NO. TEN HIGH 1S-16HU  
 API WELL NO. 47 - OSI - HGA 02028  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P16HUR3.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  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: GROUND = 1,322.90' ELEVATION PROPOSED = 1,310.06' WATERSHED MIDDLE BOWMAN RUN OF FISH CREEK (HUC 10)  
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER LAWRENCE & SHIRLEY CONKLE ESTS ACREAGE 139.79±  
 ROYALTY OWNER ANDY PAUL & JACKIE KUHN, ET AL - SEE SHEETS 3 & 4 ACREAGE 139.79±

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: 11,878' / TMD: 21,511'

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

COUNTY TIME PERMIT

07/20/2018