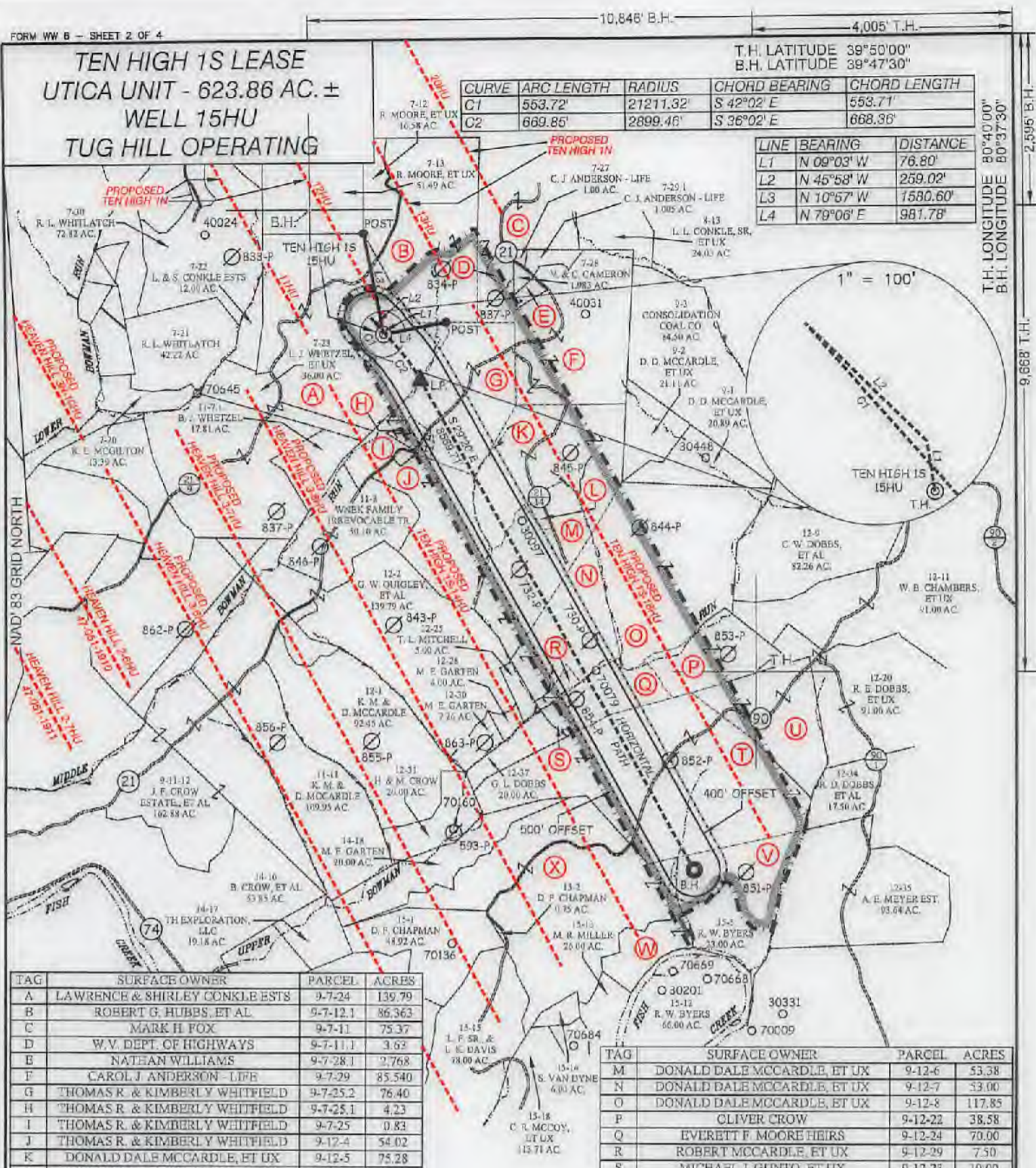


**TEN HIGH 1S LEASE  
UTICA UNIT - 623.86 AC. ±  
WELL 15HU  
TUG HILL OPERATING**

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

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	553.72'	21211.32'	S 42°02' E	553.71'
C2	669.85'	2899.46'	S 36°02' E	668.36'

LINE	BEARING	DISTANCE
L1	N 09°03' W	76.80'
L2	N 45°58' W	259.02'
L3	N 10°57' W	1580.60'
L4	N 79°06' E	981.78'



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	33.00
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 KOTSON, 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*



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

**LEGEND**

- UNIT BOUNDARY
- LEASED TRACTS INSIDE UNIT BOUNDARY
- SURFACE LINE
- DEED WELL LATERAL WITHIN 3000'
- WELL LATERAL
- 400' OFFSET LINE
- 500' OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- SURFACE OWNER (SEE TABLE - SHEET 2)
- LEASE # (SEE SHEETS 3 & 4)

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

NAD'83 S.P.C.(FT)	N. 478,155.79	E. 1,826,745.94
NAD'83 GEO.	LAT-(N) 39.806793	LONG-(W) 80.680923
NAD'83 UTM (M)	N. 4,406,362.22	E. 527,912.91

**LANDING POINT**

NAD'83 S.P.C.(FT)	N. 477,489.8	E. 1,637,311.5
NAD'83 GEO.	LAT-(N) 39.804903	LONG-(W) 80.678878
NAD'83 UTM (M)	N. 4,406,153.1	E. 527,488.8

**BOTTOM HOLE**

NAD'83 S.P.C.(FT)	N. 469,988.5	E. 1,641,509.0
NAD'83 GEO.	LAT-(N) 39.764544	LONG-(W) 80.663584
NAD'83 UTM (M)	N. 4,403,698.3	E. 528,805.6

SCALE 1" = 2000' FILE NO. 8655P15HUR3.dwg

DATE AUGUST 29, 2017

REVISED 09-01-2017, 01-12-2018 & 03-22-18

OPERATORS WELL NO. TEN HIGH 1S-15HU

API WELL 47 - 051 - D2027 HGA

NO. STATE COUNTY PERMIT

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

07/13/2018

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

T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°37'30"  
2,595' B.H.  
9,668' T.H.

COUNTY NAME PERMIT

10,846' B.H.

4,005' T.H.

TEN HIGH 1S LEASE  
 UTICA UNIT - 623.86 AC. ±  
 WELL 15HU  
 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. 478,155.79 E. 1,636,745.94  
 NAD'83 GEO. LAT-(N) 39.806793 LONG-(W) 80.680923  
 NAD'83 UTM (M) N. 4,408,362.22 E. 627,312.91

LANDING POINT

NAD'83 S.P.C.(FT) N. 477,459.9 E. 1,637,311.5  
 NAD'83 GEO. LAT-(N) 39.804903 LONG-(W) 80.678878  
 NAD'83 UTM (M) N. 4,408,153.1 E. 627,488.8

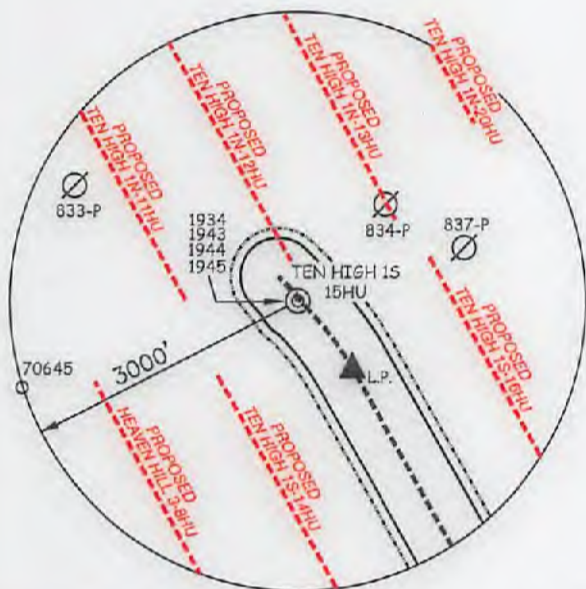
BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 489,988.5 E. 1,641,509.0  
 NAD'83 GEO. LAT-(N) 39.784544 LONG-(W) 80.683594  
 NAD'83 UTM (M) N. 4,403,898.3 E. 528,805.6

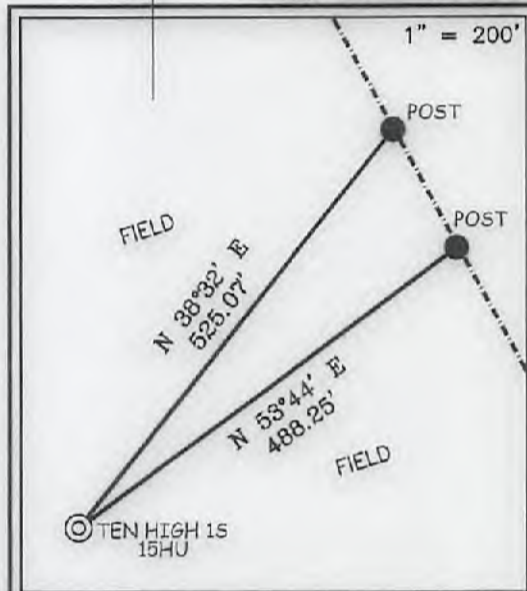
T.H. LONGITUDE 80°40'00"  
 B.H. LONGITUDE 80°37'30"

2,595' B.H.  
 9,668' T.H.

B.H.



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'

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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-15HU

API WELL NO. 47 - 051 - 02027  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P15HUR3.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 = 1,323.00' 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: LEASE NO. SEE SHEETS 3 & 4

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: 11,878' / TMD: 21,188'

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  
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07/13/2018