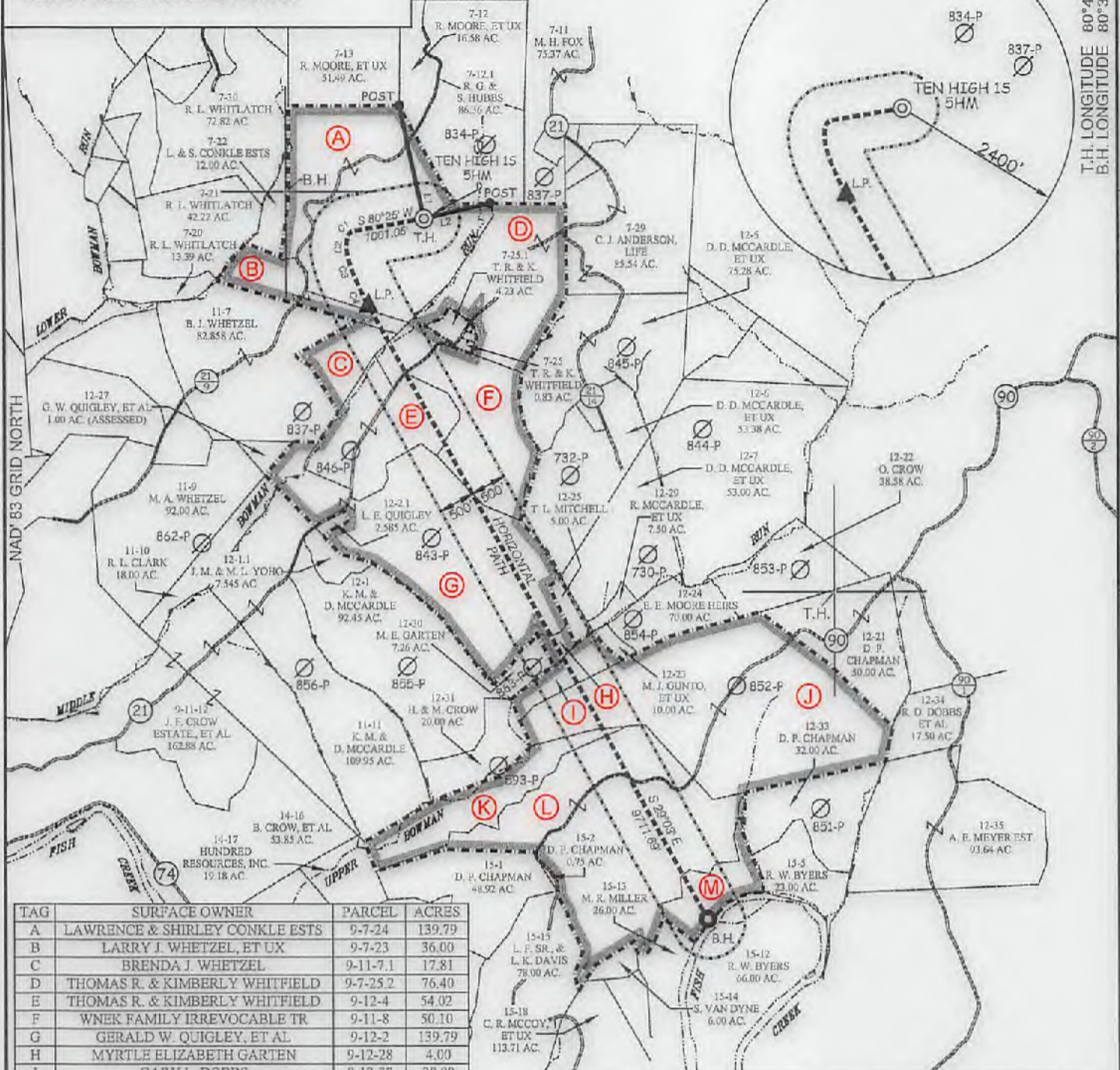


TEN HIGH 1S LEASE
WELL 5HM
TUG HILL OPERATING

LINE	BEARING	DISTANCE
L1	N 12°15' W	1621.00'
L2	N 76°41' E	945.95'

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

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



TAG	SURFACE OWNER	PARCEL	ACRES
A	LAWRENCE & SHIRLEY CONKLE ESTS	9-7-24	139.79
B	LARRY J. WHETZEL, ET UX	9-7-23	36.00
C	BRENDA J. WHETZEL	9-11-7.1	17.81
D	THOMAS R. & KIMBERLY WHITFIELD	9-7-25.2	76.40
E	THOMAS R. & KIMBERLY WHITFIELD	9-12-4	54.02
F	WNEK FAMILY IRREVOCABLE TR	9-11-8	50.10
G	GERALD W. QUIGLEY, ET AL	9-12-2	139.79
H	MYRTLE ELIZABETH GARTEN	9-12-28	4.00
I	GARY L. DOBBS	9-12-37	20.00
J	DAVID P. CHAPMAN	9-12-32	150.00
K	MYRTLE ELIZABETH GARTEN	9-14-18	20.00
L	SUSAN VAN DYNE	9-15-3	167.00
M	ROBERT FRANK KOYSON, ET AL	9-15-4	26.40

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	125.55'	113.21'	S 44°44' W	119.21'
C2	270.07'	648.72'	S 00°26' E	267.30'
C3	389.15'	7644.99'	S 19°58' E	388.24'
C4	355.73'	3708.21'	S 25°48' E	355.59'

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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. 476,126.48	E. 1,636,786.50
NAD'83 GEO.	LAT-(N) 39.8063706	LONG-(W) 80.680787
NAD'83 UTM (M)	N. 4,406,352.90	E. 527,326.35
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 476,919.9	E. 1,636,007.9
NAD'83 GEO.	LAT-(N) 39.803374	LONG-(W) 80.683492
NAD'83 UTM (M)	N. 4,405,981.9	E. 527,094.3
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 468,429.3	E. 1,640,722.5
NAD'83 GEO.	LAT-(N) 39.780236	LONG-(W) 80.686320
NAD'83 UTM (M)	N. 4,403,419.2	E. 526,573.9



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

SCALE 1" = 2000' FILE NO. 8655P5HMR.dwg

DATE AUGUST 10, 2017

REVISED DECEMBER 19, 2017

OPERATORS WELL NO. TEN HIGH 1S-5HM

API WELL NO. 47 — 051 — 01964MOD

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 00-00
- LEASE # (SEE PAGES 1,3,4,&5) (A)

COUNTY NAME PERMIT

03/09/2018

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

11,613' B.H.

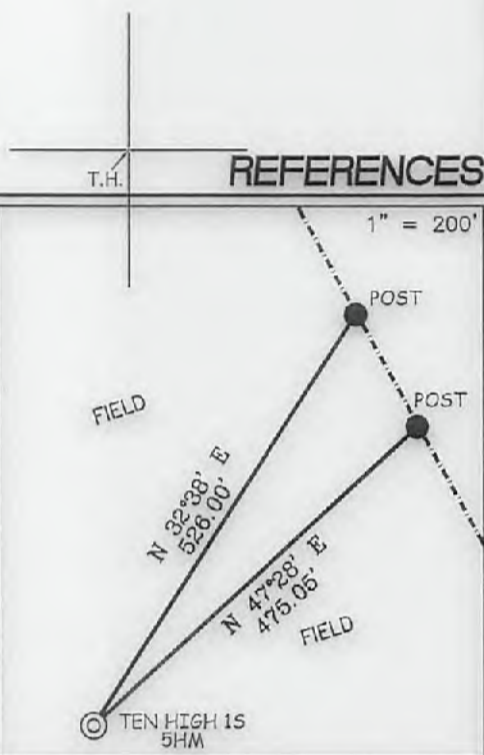
3,961' T.H.

TEN HIGH 1S LEASE
WELL 5HM
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. 478,123.48	E. 1,636,789.50
NAD'83 GEO.	LAT-(N) 39.806706	LONG-(W) 80.680767
NAD'83 UTM (M)	N. 4,408,352.60	E. 527,326.85
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 476,919.8	E. 1,636,007.9
NAD'83 GEO.	LAT-(N) 39.803374	LONG-(W) 80.683492
NAD'83 UTM (M)	N. 4,405,961.9	E. 527,094.3
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 468,429.3	E. 1,640,722.6
NAD'83 GEO.	LAT-(N) 39.780236	LONG-(W) 80.666320
NAD'83 UTM (M)	N. 4,403,419.2	E. 528,573.9

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°37'30"
4,164' B.H.
9,700' T.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 10, 20 17
REVISED DECEMBER 19, 20 17
OPERATORS WELL NO. TEN HIGH 1S-5HM
API WELL NO. 47 - 051 - 01964400
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P5HMR.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 <input type="checkbox"/>	GAS <input checked="" type="checkbox"/>	LIQUID INJECTION <input type="checkbox"/>	WASTE DISPOSAL <input type="checkbox"/>	IF "GAS" PRODUCTION <input checked="" type="checkbox"/>	STORAGE <input type="checkbox"/>	DEEP <input type="checkbox"/>	SHALLOW <input checked="" type="checkbox"/>											
LOCATION:	GROUND = 1,317.20' 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 ABOVE AND SHEETS 3-5				ACREAGE	139.79±													
PROPOSED WORK:	LEASE NO. <u>SEE ABOVE & SHEETS 3-5</u> 03/09/2018																		
DRILL	<input checked="" type="checkbox"/>	CONVERT	<input type="checkbox"/>	DRILL DEEPER	<input type="checkbox"/>	REDRILL	<input type="checkbox"/>	FRACTURE OR STIMULATE	<input checked="" type="checkbox"/>	PLUG OFF OLD FORMATION	<input type="checkbox"/>	PERFORATE NEW FORMATION	<input type="checkbox"/>	PLUG AND ABANDON	<input type="checkbox"/>	CLEAN OUT AND REPLUG	<input type="checkbox"/>	OTHER	<input type="checkbox"/>
PHYSICAL CHANGE IN WELL (SPECIFY)					TARGET FORMATION	MARCELLUS													
					ESTIMATED DEPTH	TVD: 6,865' / TMD: 17,466'													

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