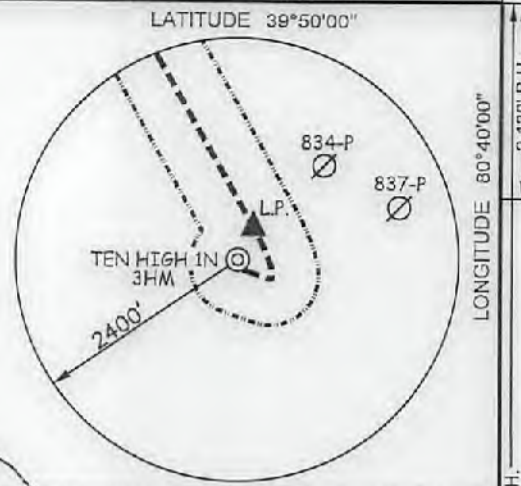
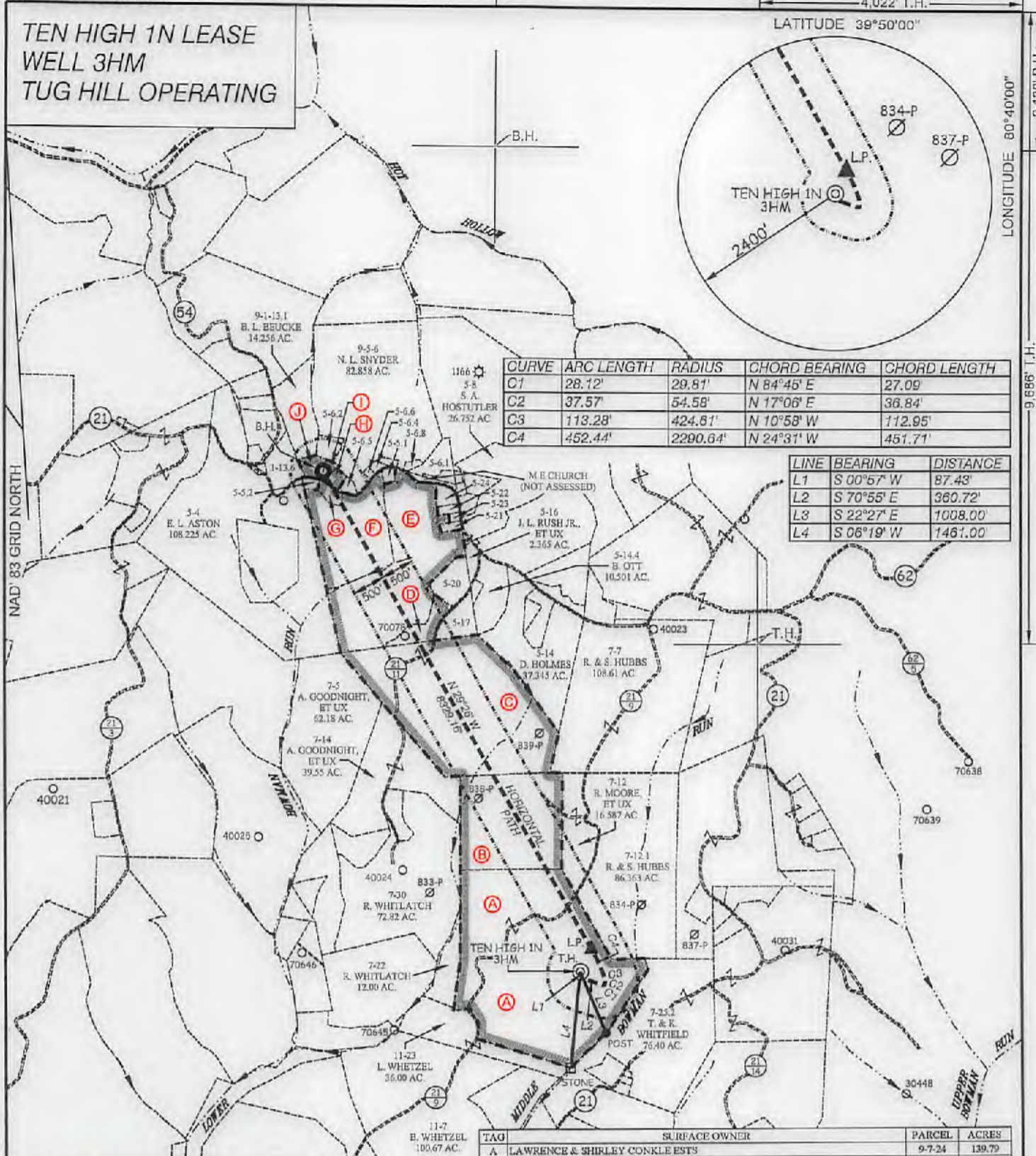


TEN HIGH 1N LEASE
WELL 3HM
TUG HILL OPERATING



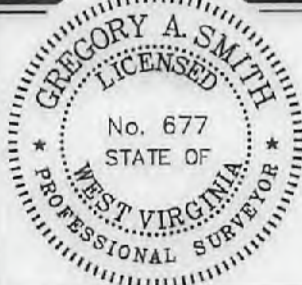
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	28.12'	29.81'	N 84°45' E	27.09'
C2	37.57'	54.58'	N 17°06' E	36.84'
C3	118.28'	424.81'	N 10°58' W	112.95'
C4	452.44'	2290.64'	N 24°31' W	451.71'

LINE	BEARING	DISTANCE
L1	S 00°57' W	87.43'
L2	S 70°55' E	360.72'
L3	S 22°27' E	1008.00'
L4	S 06°19' W	1461.00'

TAG	SURFACE OWNER	PARCEL	ACRES
A	LAWRENCE & SHIRLEY CONKLE ESTS	9-7-24	139.79
B	RONALD MOORE, ET UX	9-7-13	51.49
C	TERESA L. HORNER WITH JERRY G. & CAROLYN K. FLETCHER (LIFE ESTATE)	9-7-6	103.30
D	KELLY WILSON WITH DONLD E. LEACH (LIFE ESTATE)	9-5-18	5.807
E	MICHAEL JOSEPH SNYDER	9-5-5-4	64.00
F	MICHAEL JOSEPH SNYDER	9-5-5	35.02
G	MICHAEL JOSEPH SNYDER & NANCY L. SNYDER	9-5-5-3	1.870
H	DEUTSCHE BANK NATIONAL TRUST CO.	9-5-6-3	1.391
I	ALICE J. & DOUGLAS J. MARTIN	9-1-14-1	0.905
J	ALICIA JANE MARTIN	9-1-14	2.4602

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www.slsurveyors.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 478,138.87 E. 1,638,728.80
 NAD'83 GEO. LAT-(N) 39.805745 LONG-(W) 80.680984
 NAD'83 UTM (M) N. 4,408,356.88 E. 527,307.78
 LANDING POINT
 NAD'83 S.P.C.(FT) N. 478,492.6 E. 1,638,897.2
 NAD'83 GEO. LAT-(N) 39.807723 LONG-(W) 80.680401
 NAD'83 UTM (M) N. 4,408,465.6 E. 527,357.3
 BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 485,746.3 E. 1,632,803.5
 NAD'83 GEO. LAT-(N) 39.827487 LONG-(W) 80.685315
 NAD'83 UTM (M) N. 4,408,654.7 E. 526,073.2



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

P.S. 677
Gregory A. Smith

LEGEND

LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
TAX MAP-PARCEL	
SURFACE OWNER (SEE TABLE)	
LEASE # (SEE WW-6A1)	

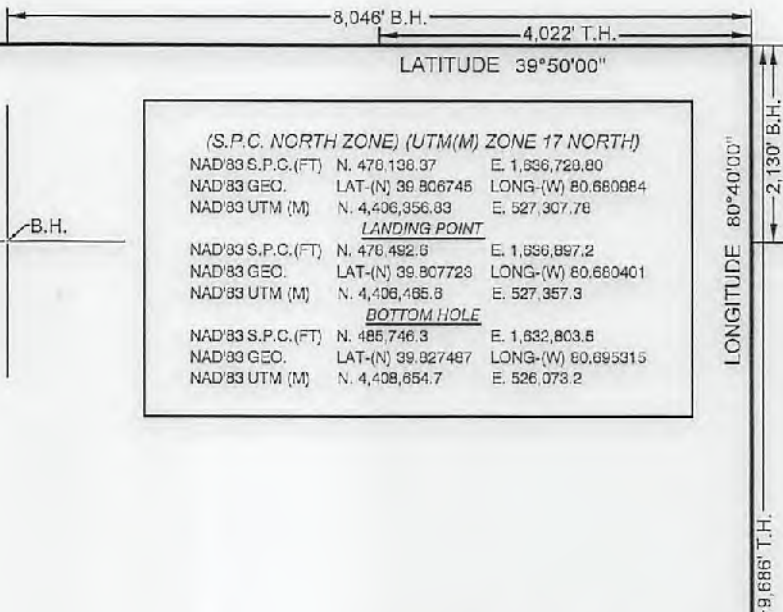
SCALE 1" = 2000' FILE NO. 8655P3HMR4.dwg
 DATE JUNE 15, 20 17
 REVISED 09/12/2017, 12/28/2017 & 02/19/18
 OPERATORS WELL NO. TEN HIGH 1N-3HM
 API WELL NO. 47 - OSI - 01ayy MOD
 NO. STATE COUNTY PERMIT

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

03/16/2018

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

**TEN HIGH 1N LEASE
WELL 3HM
TUG HILL OPERATING**



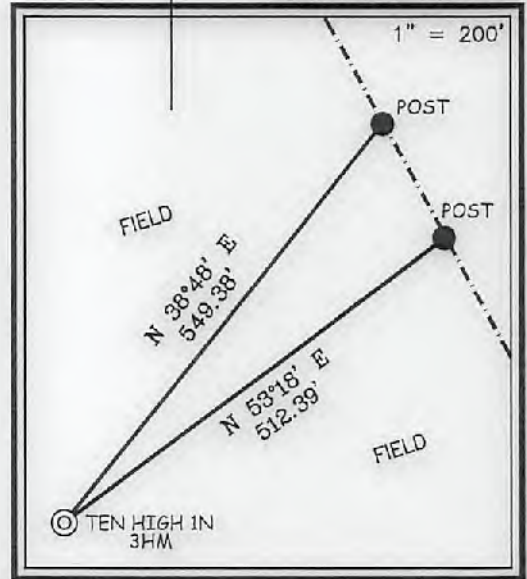
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)		
NAD'83 S.P.C.(FT)	N. 470,130.97	E. 1,896,720.80
NAD'83 GEO.	LAT-(N) 39.806745	LONG-(W) 80.680984
NAD'83 UTM (M)	N. 4,406,956.89	E. 527,307.78
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 470,492.5	E. 1,896,897.2
NAD'83 GEO.	LAT-(N) 39.807723	LONG-(W) 80.680401
NAD'83 UTM (M)	N. 4,408,485.8	E. 527,357.3
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 485,746.3	E. 1,832,803.5
NAD'83 GEO.	LAT-(N) 39.827487	LONG-(W) 80.695315
NAD'83 UTM (M)	N. 4,408,654.7	E. 526,073.2

MAPPARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-1-13.5	GERALD E. LOGSDON, ET UX	7.621
9-5-5.1	DAVID M. TOLER, ET UX	0.985
9-5-5.2	PETER PARKER	0.873
9-5-6.1	ION E. CRAWFORD	4.679
9-5-6.2	MICHAEL JOSEPH SNYDER	2.82
9-5-6.4	NANCY L. SNYDER	0.694
9-5-6.5	LINDA GORBY DELBERT	1.087
9-5-6.6	NANCY L. SNYDER	0.420
9-5-6.8	NANCY L. SNYDER	0.691
9-5-17	CARLA SUE CROW	6.341
9-5-20	KEITH WILSON - DONALD E. LEACH (LIFE ESTATE)	6.924
9-5-21	RALPH E. WELLMAN, ET UX	1.00
9-5-22	RALPH E. WELLMAN, ET UX	0.5
9-5-23	RALPH E. WELLMAN, ET UX	1.00
9-5-24	ALVIE & MARCELLA DARRAH	1.986

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'

REFERENCES



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 JUNE 15, 20 17
 REVISED 09/12/2017, 12/28/2017 & 02/19/18
 OPERATORS WELL NO. TEN HIGH 1N-3HM
 API WELL NO. 47 - 051 - 01944 MOD
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P3HMR4.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 = 1,321.20' 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 WW-6A1 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 MARCELLUS
 ESTIMATED DEPTH: TVD: 6,885' / TMD: 15,465'

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

03/16/2018