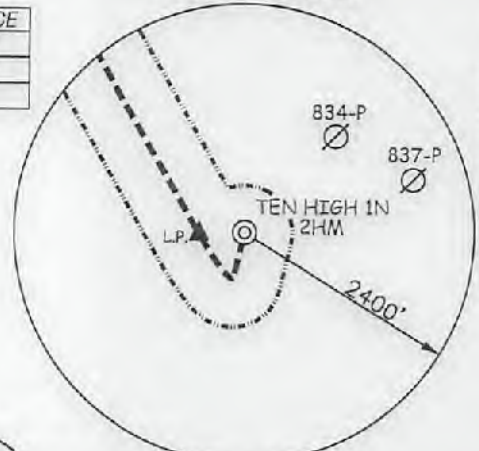


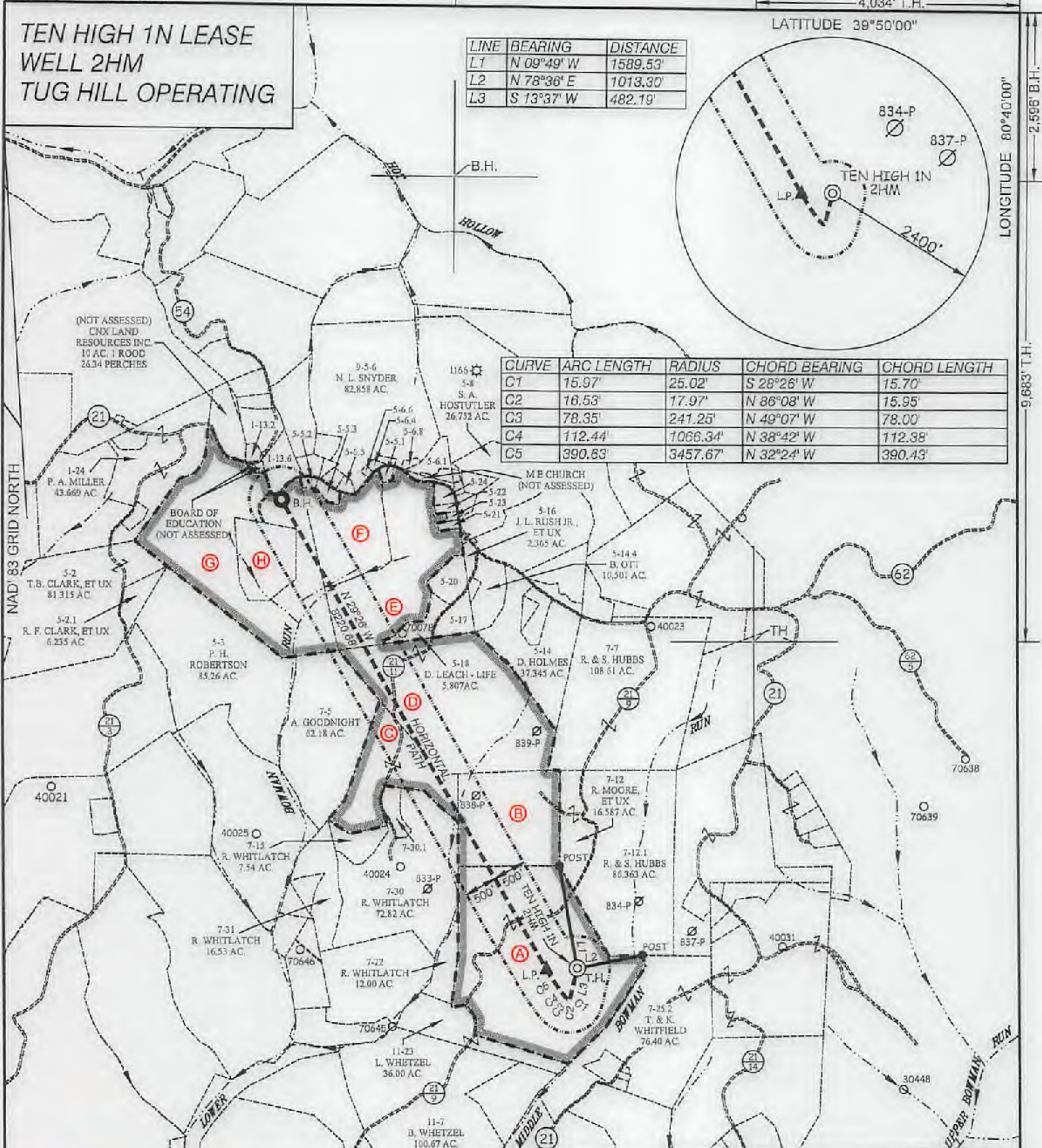
**TEN HIGH 1N LEASE
WELL 2HM
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	N 09°49' W	1589.53'
L2	N 78°36' E	1013.30'
L3	S 13°37' W	482.19'



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	15.97'	25.02'	S 28°26' W	15.70'
C2	16.53'	17.97'	N 86°08' W	15.95'
C3	78.35'	241.25'	N 49°07' W	78.00'
C4	112.44'	1066.34'	N 38°42' W	112.38'
C5	390.63'	3457.67'	N 32°24' W	390.43'

NAD'83 GRID NORTH



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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	ARNIE GOODNIGHT, ET UX	9-7-14	39.55
D	TERESA L. HORNER WITH JERRY G. & CAROLYN K. FLETCHER (LIFE ESTATE)	9-7-6	103.30
E	MICHAEL JOSEPH SNYDER	9-5-5.4	64.00
F	MICHAEL JOSEPH SNYDER	9-5-5	35.02
G	ELMER ASTON	9-5-4	108.225
H	CONSOLIDATION COAL COMPANY	9-5-4.1	22.775

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

NAD'83 S.P.C.(FT)	N. 478,141.34	E. 1,636,716.66
NAD'83 GEO.	LAT-(N) 39.806753	LONG-(W) 80.681027
NAD'83 UTM (M)	N. 4,408,357.67	E. 527,304.07

LANDING POINT

NAD'83 S.P.C.(FT)	N. 478,128.4	E. 1,636,241.3
NAD'83 GEO.	LAT-(N) 39.806700	LONG-(W) 80.682718
NAD'83 UTM (M)	N. 4,408,351.3	E. 527,159.3

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 485,266.1	E. 1,632,201.6
NAD'83 GEO.	LAT-(N) 39.828207	LONG-(W) 80.697438
NAD'83 UTM (M)	N. 4,408,512.0	E. 525,692.2

GREGORY A. SMITH
LICENSED
No. 677
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

(+) 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. 8655P2HMR5.dwg
DATE APRIL 20, 20 17
REVISED 06/15/17, 09/12/17, 12/28/17 & 02/19/18
OPERATORS WELL NO. TEN HIGH 1N-2HM
API WELL NO. 47 — 051 — 01934MOD
NO. STATE COUNTY PERMIT

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

H6A

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 PERMIT

08/03/2018

TEN HIGH 1N LEASE
WELL 2HM
TUG HILL OPERATING

8,642' B.H. 4,034' T.H.

LATITUDE 39°50'00"

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 478,141.34 E. 1,636,716.86
 NAD'83 GEO. LAT-(N) 39.806753 LONG-(W) 80.681027
 NAD'83 UTM (M) N. 4,406,357.67 E. 527,304.07
LANDING POINT
 NAD'83 S.P.C.(FT) N. 478,128.4 E. 1,636,241.3
 NAD'83 GEO. LAT-(N) 39.806700 LONG-(W) 80.682718
 NAD'83 UTM (M) N. 4,406,351.3 E. 527,159.3
BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 485,289.1 E. 1,632,201.6
 NAD'83 GEO. LAT-(N) 39.826207 LONG-(W) 80.697436
 NAD'83 UTM (M) N. 4,408,512.0 E. 525,892.2

B.H.

LONGITUDE 80°40'00"

2,596' B.H.

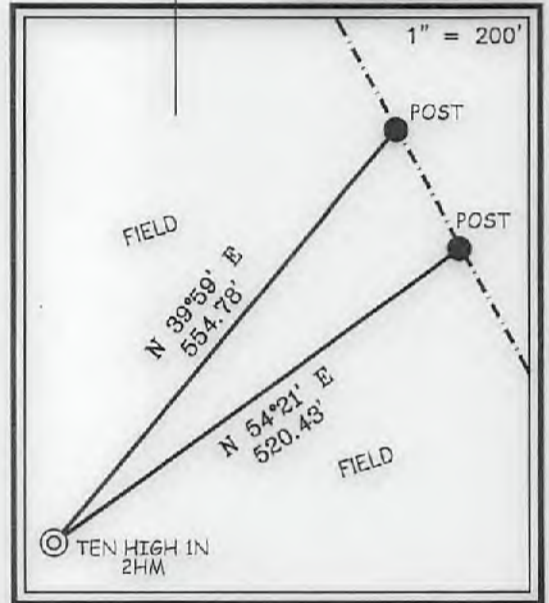
9,683' T.H.

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-1-13.2	RANDALL A. KEREKES	1.518
9-1-13.6	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
9-5-5.3	MICHAEL J. & NANCY L. SNYDER	1.870
9-5-6.1	JON B. CRAWFORD	4.679
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	5.341
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
9-7-30.1	ANDREW COREY WHITLATCH	4.55

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 APRIL 20, 20 17
 REVISED 06/15/17, 09/12/17, 12/28/17 & 02/19/18
 OPERATORS WELL NO. TEN HIGH 1N-2HM
 API WELL NO. 47-051-01934 moo **H6A**
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8655P2HMR5.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 = 1,321.00' 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 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: 6,865' / TMD: 15,329'

COUNTY NAME PERMIT

08/03/2018

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