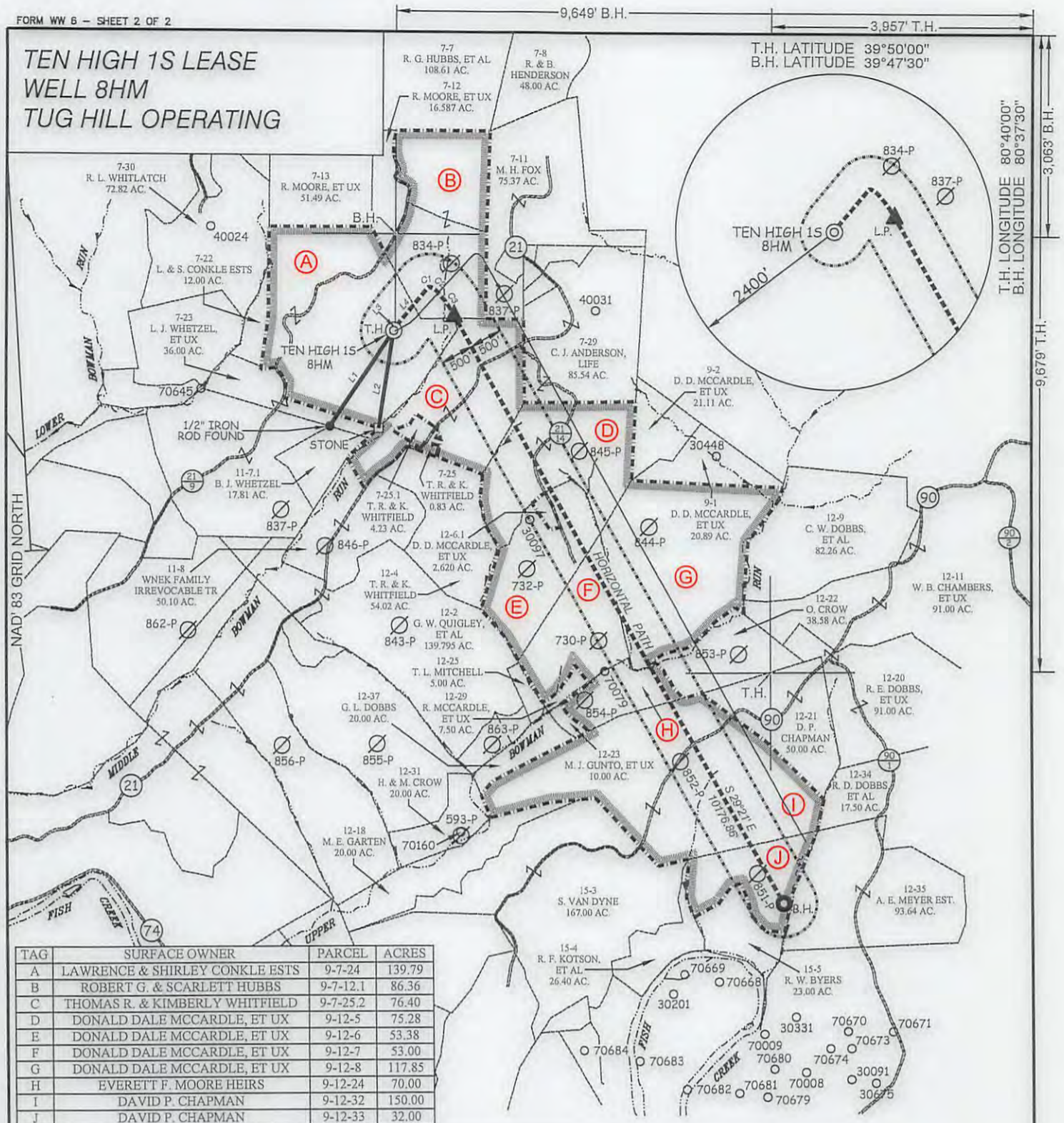


**TEN HIGH 1S LEASE
WELL 8HM
TUG HILL OPERATING**



| TAG | SURFACE OWNER | PARCEL | ACRES |
|-----|--------------------------------|----------|--------|
| A | LAWRENCE & SHIRLEY CONKLE ESTS | 9-7-24 | 139.79 |
| B | ROBERT G. & SCARLETT HUBBS | 9-7-12.1 | 86.36 |
| C | THOMAS R. & KIMBERLY WHITFIELD | 9-7-25.2 | 76.40 |
| D | DONALD DALE MCCARDLE, ET UX | 9-12-5 | 75.28 |
| E | DONALD DALE MCCARDLE, ET UX | 9-12-6 | 53.38 |
| F | DONALD DALE MCCARDLE, ET UX | 9-12-7 | 53.00 |
| G | DONALD DALE MCCARDLE, ET UX | 9-12-8 | 117.85 |
| H | EVERETT F. MOORE HEIRS | 9-12-24 | 70.00 |
| I | DAVID P. CHAPMAN | 9-12-32 | 150.00 |
| J | DAVID P. CHAPMAN | 9-12-33 | 32.00 |

| CURVE | ARC LENGTH | RADIUS | CHORD BEARING | CHORD LENGTH |
|-------|------------|----------|---------------|--------------|
| C1 | 38.63' | 43.38' | N 75°15' E | 37.36' |
| C2 | 146.91' | 297.14' | S 55°28' E | 145.42' |
| C3 | 425.69' | 1750.31' | S 35°32' E | 424.64' |

| LINE | BEARING | DISTANCE |
|------|------------|----------|
| L1 | S 34°00' W | 1730.51' |
| L2 | S 08°50' W | 1475.13' |
| L3 | N 31°08' E | 106.20' |
| L4 | N 39°28' E | 724.85' |

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 | 12 Vanhorn Drive | Glenville, WV 26031 | (304) 462-5634
www.slsurveyors.com

P.S.
677

Gregory A. Smith

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

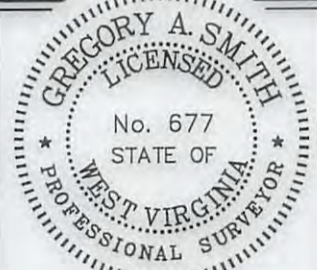
| | | |
|-------------------|-------------------|--------------------|
| NAD'83 S.P.C.(FT) | N. 478,143.88 | E. 1,636,794.50 |
| NAD'83 GEO. | LAT-(N) 39.806762 | LONG-(W) 80.680750 |
| NAD'83 UTM (M) | N. 4,406,358.84 | E. 527,327.77 |

LANDING POINT

| | | |
|-------------------|-------------------|--------------------|
| NAD'83 S.P.C.(FT) | N. 478,376.0 | E. 1,637,712.9 |
| NAD'83 GEO. | LAT-(N) 39.807433 | LONG-(W) 80.677492 |
| NAD'83 UTM (M) | N. 4,406,434.2 | E. 527,606.4 |

BOTTOM HOLE

| | | |
|-------------------|-------------------|--------------------|
| NAD'83 S.P.C.(FT) | N. 469,504.7 | E. 1,642,699.8 |
| NAD'83 GEO. | LAT-(N) 39.783258 | LONG-(W) 80.659335 |
| NAD'83 UTM (M) | N. 4,403,756.9 | E. 529,170.8 |



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

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. 8655P8HMR.dwg

DATE SEPTEMBER 13, 2017

REVISED DECEMBER 18, 2017

OPERATORS WELL NO. TEN HIGH 1S-8HM

API WELL NO. 47-051-01975H6A

NO. STATE COUNTY PERMIT

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

DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

COUNTY NAME PERMIT

03/09/2018

9,649' B.H.

3,957' T.H.

TEN HIGH 1S LEASE
WELL 8HM
TUG HILL OPERATING

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

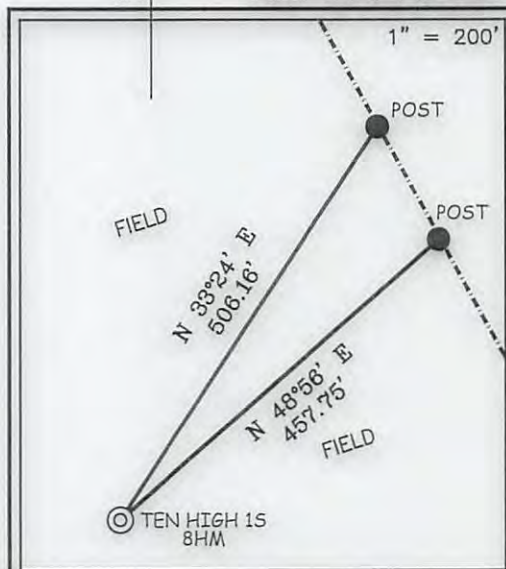
| | | |
|--|-------------------|--------------------|
| (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) | | |
| NAD'83 S.P.C.(FT) | N. 478,143.88 | E. 1,636,794.50 |
| NAD'83 GEO. | LAT-(N) 39.806762 | LONG-(W) 80.680750 |
| NAD'83 UTM (M) | N. 4,406,358.84 | E. 527,327.77 |
| LANDING POINT | | |
| NAD'83 S.P.C.(FT) | N. 478,376.0 | E. 1,637,712.9 |
| NAD'83 GEO. | LAT-(N) 39.807433 | LONG-(W) 80.677492 |
| NAD'83 UTM (M) | N. 4,406,434.2 | E. 527,606.4 |
| BOTTOM HOLE | | |
| NAD'83 S.P.C.(FT) | N. 469,504.7 | E. 1,642,699.8 |
| NAD'83 GEO. | LAT-(N) 39.783258 | LONG-(W) 80.659335 |
| NAD'83 UTM (M) | N. 4,403,756.9 | E. 529,170.8 |

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°37'30"
3,063' B.H.
9,679' T.H.

B.H.

T.H.

REFERENCES



NOTES ON SURVEY

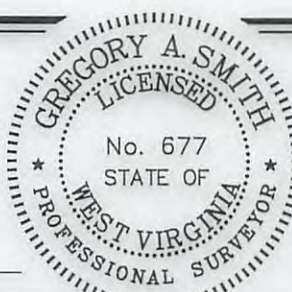
1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'



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 SEPTEMBER 13, 20 17
REVISED DECEMBER 18, 20 17
OPERATORS WELL NO. TEN HIGH 1S-8HM
API WELL NO. 47-051-087546A
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P8HMR.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 = 1,320.20' 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 - 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 LEASE NO. SEE WW-6A1

ESTIMATED DEPTH TVD: 6,865' / TMD: 17,354'

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

03/09/2018