

**TEN HIGH 1N LEASE  
UTICA UNIT - 537.97 AC±  
WELL 12HU  
TUG HILL OPERATING**

**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- PROPOSED LATERAL OR TOP HOLE OF TEN HIGH 1N-12HU (47-051-01961) IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF THE FOLLOWING:  
HEAVEN HILL 3-6HU (47-051-01968),  
HEAVEN HILL 3-7HU (47-051-01969),  
HEAVEN HILL 3-8HU (47-051-01967),  
HEAVEN HILL 3N-10HU (47-051-02016),  
PROPOSED HEAVEN HILL 3N-16HU,  
TEN HIGH 1N-11HU (47-051-01960),  
TEN HIGH 1N-13HU (47-051-01965),  
TEN HIGH 1S-14HU (47-051-01966),  
TEN HIGH 1S-15HU (47-051-02027),  
TEN HIGH 1S-16HU (47-051-02028),  
TEN HIGH 1S-17HU (47-051-02033),  
TEN HIGH 1N-20HU (47-051-02021).

| TAG | SURFACE OWNER  | PARCEL   | ACRES    |
|-----|--|----------|----------|
| A   | LAWRENCE & SHIRLEY CONKLE ESTS                                     | 9-7-24   | 139.79   |
| B   | ROBERT G. HUBBS & SCARLETTE E. OTTE                                | 9-7-12.1 | 86.363   |
| C   | RONALD MOORE, ET UX  | 9-7-12   | 16.587   |
| D   | LAWRENCE & SHIRLEY CONKLE ESTS                                     | 9-7-22   | 12.00    |
| E   | RICKY L. WHITLATCH   | 9-7-30   | 72.82    |
| F   | ANDREW COREY WHITLATCH   | 9-7-30.1 | 4.55     |
| G   | RONALD MOORE, ET UX  | 9-7-13   | 51.49    |
| H   | RICKY L. WHITLATCH   | 9-7-15   | 7.54     |
| I   | ARNIE GOODNIGHT, ET UX   | 9-7-14   | 39.55    |
| J   | TERESA L. HORNER WITH JERRY G. & CAROLYN K. FLETCHER (LIFE ESTATE) | 9-7-6    | 103.30   |
| K   | ARNIE GOODNIGHT, ET UX   | 9-7-5    | 62.18    |
| L   | HELEN ROBERTSON PAYNE  | 9-5-3    | 85.26    |
| M   | ELMER ASTON  | 9-5-4    | 108.225  |
| N   | MICHAEL JOSEPH SNYDER  | 9-5-5.4  | 64.00    |
| O   | KELLY WILSON WITH DONLD E. LEACH (LIFE ESTATE)                     | 9-5-18   | 5.807    |
| P   | CARLA SUE CROW   | 9-5-17   | 6.341    |
| Q   | MICHAEL JOSEPH SNYDER  | 9-5-5    | 35.02    |
| R   | CONSOLIDATION COAL COMPANY   | 9-5-4.1  | 22.775   |
| S   | MICHAEL JOSEPH SNYDER & NANCY L. SNYDER                            | 9-5-5.3  | 1.870    |
| T   | LINDA GORBY DELBERT  | 9-5-6.5  | 1.087    |
| U   | DEUTSCHE BANK NATIONAL TRUST CO.                                   | 9-5-6.3  | 1.391    |
| V   | PETER PARKER   | 9-5-5.2  | 0.873    |
| W   | ALICIA JANE MARTIN   | 9-1-14   | 2.4602   |
| X   | ALICE J. & DOUGLAS J. MARTIN                                       | 9-1-14.1 | 0.905    |
| Y   | NANCY L. SNYDER  | 9-5-6    | 82.858   |
| Z   | MICHAEL JOSEPH SNYDER  | 9-5-6.2  | 2.82     |
| AA  | BOARD OF EDUCATION   | NOT ASSD | NOT ASSD |
| BB  | BOARD OF EDUCATION   | NOT ASSD | NOT ASSD |
| CC  | RANDALL A. KEREKES   | 9-1-13.2 | 1.518    |
| DD  | CNX LAND RESOURCES   | NOT ASSD | 10+/-    |

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

|                    |                   |                    |
|--------------------|-------------------|--------------------|
| NAD'83 S.P.C. (FT) | N. 478,132.41     | E. 1,636,753.08    |
| NAD'83 GEO.        | LAT-(N) 39.806729 | LONG-(W) 80.680897 |
| NAD'83 UTM (M)     | N. 4,406,355.14   | E. 527,315.21      |

**LANDING POINT**

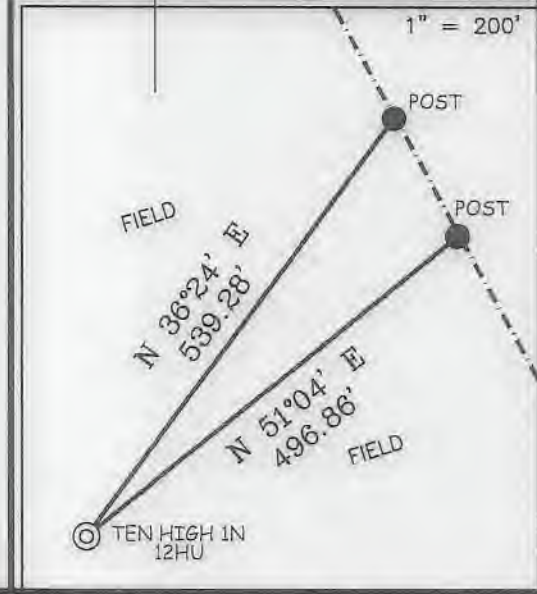
|                    |                   |                    |
|--------------------|-------------------|--------------------|
| NAD'83 S.P.C. (FT) | N. 478,849.9      | E. 1,636,634.1     |
| NAD'83 GEO.        | LAT-(N) 39.808146 | LONG-(W) 80.681345 |
| NAD'83 UTM (M)     | N. 4,406,512.2    | E. 527,276.3       |

**BOTTOM HOLE**

|                    |                   |                    |
|--------------------|-------------------|--------------------|
| NAD'83 S.P.C. (FT) | N. 485,764.7      | E. 1,632,680.1     |
| NAD'83 GEO.        | LAT-(N) 39.827533 | LONG-(W) 80.695755 |
| NAD'83 UTM (M)     | N. 4,408,659.6    | E. 526,035.5       |

| MAP/PARCEL | ADJOINING SURFACE OWNER LIST                 | ACRES  |
|------------|--|--------|
| 9-1-13.1   | BURDETTE L. BEUCKE                           | 14.256 |
| 9-1-13.3   | CNX LAND LLC                                 | 8.127  |
| 9-1-13.4   | MACK L. CROW                                 | 4.273  |
| 9-1-13.5   | MACK L. CROW                                 | 2.491  |
| 9-1-13.6   | GERALD E. LOGSDON, ET UX                     | 7.621  |
| 9-1-13.7   | SHARON D. TUCKER                             | 7.817  |
| 9-5-5.1    | DAVID M. TOLER, ET UX                        | 0.983  |
| 9-5-6.1    | JON B. CRAWFORD                              | 4.679  |
| 9-5-6.4    | NANCY L. SNYDER                              | 0.694  |
| 9-5-6.6    | NANCY L. SNYDER                              | 0.420  |
| 9-5-6.7    | NANCY L. SNYDER                              | 0.678  |
| 9-5-6.8    | NANCY L. SNYDER                              | 0.691  |
| 9-5-19     | BETTY R. OTT                                 | 0.933  |
| 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  |

**REFERENCES**



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634  
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
254 East Beckley Bypass | Beckley, WV 25601 | 304.255.5295  
slswv.com

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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. 849 *C. Victor Moyers*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE JULY 21 20 17  
REVISED 01/10/18, 02/08/18, 02/20/18, 03/29/18, 09/26/18, 10/10/19, 11/12/19, 07/08/20, 7/22/20  
OPERATORS WELL NO. TEN HIGH 1N-12HU  
API WELL NO. 47 - 051 - 01961 *HCA med*  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1" / 2500  
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)  
FILE NO. 8655P12HUR11.dwg  
SCALE 1" = 2000'  
TEN HIGH 1N 12HU Rev8

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 = 1,320.70' 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 LARRY LEE CONKLE, ET AL - SEE ADDITIONAL SHEETS ACREAGE 139.79±  
PROPOSED WORK: LEASE NO. SEE ADDITIONAL SHEETS

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 POINT PLEASANT ESTIMATED DEPTH TVD: 11,883' / TMD: 20,248'

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

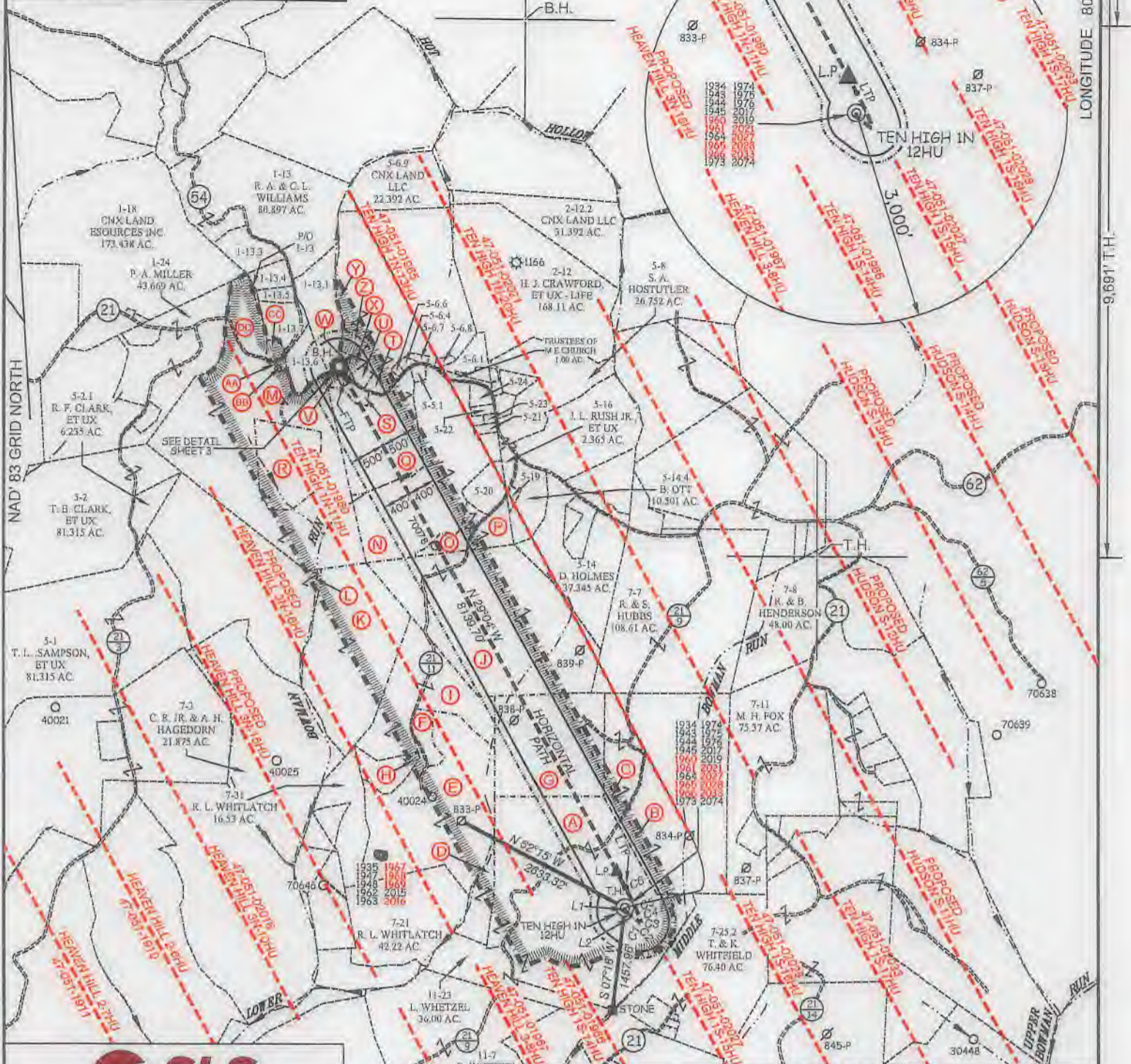
COUNTY NAME PERMIT

**TEN HIGH 1N LEASE  
UTICA UNIT - 537.97 AC ±  
WELL 12HU  
TUG HILL OPERATING**

| LINE TABLE |            |          |
|------------|------------|----------|
| LINE       | BEARING    | DISTANCE |
| L1         | S 00°57' W | 52.36'   |
| L2         | S 53°19' E | 253.57'  |

LATITUDE 39°50'00"

LONGITUDE 80°40'00"



NAD 83 GRID NORTH

2,113' B.H.

9,691' T.H.



12 Van Horn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634  
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3352  
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
slswv.com

P.S. 849 *C. Victor Moyers*

| CURVE TABLE |            |          |               |              |
|-------------|------------|----------|---------------|--------------|
| CURVE       | ARC LENGTH | RADIUS   | CHORD BEARING | CHORD LENGTH |
| C1          | 14.09'     | 29.63'   | S 65°12' E    | 13.96'       |
| C2          | 7.81'      | 5.70'    | N 48°27' E    | 7.21'        |
| C3          | 13.91'     | 41.12'   | N 00°50' E    | 13.84'       |
| C4          | 56.31'     | 327.05'  | N 15°36' W    | 56.24'       |
| C5          | 210.67'    | 2355.26' | N 23°25' W    | 210.60'      |
| C6          | 520.33'    | 9040.45' | N 27°35' W    | 520.26'      |

| (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) |                   |                    |  |
|--|-------------------|--------------------|--|
| NAD83 S.P.C.(FT)                           | N. 478,132.41     | E. 1,636,753.08    |  |
| NAD83 GEO.                                 | LAT-(N) 39.806729 | LONG-(W) 80.680897 |  |
| NAD83 UTM (M)                              | N. 4,406,355.14   | E. 527,315.21      |  |
| LANDING POINT                              |                   |                    |  |
| NAD83 S.P.C.(FT)                           | N. 478,649.9      | E. 1,636,634.1     |  |
| NAD83 GEO.                                 | LAT-(N) 39.808146 | LONG-(W) 80.681345 |  |
| NAD83 UTM (M)                              | N. 4,406,512.2    | E. 527,276.3       |  |
| BOTTOM HOLE                                |                   |                    |  |
| NAD83 S.P.C.(FT)                           | N. 485,764.7      | E. 1,632,680.1     |  |
| NAD83 GEO.                                 | LAT-(N) 39.827533 | LONG-(W) 80.695755 |  |
| NAD83 UTM (M)                              | N. 4,408,659.6    | E. 526,085.5       |  |



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

| LEGEND                             |  |
|------------------------------------|--|
| UNIT BOUNDARY                      |  |
| LEASED TRACTS INSIDE UNIT BOUNDARY |  |
| SURFACE LINE                       |  |
| PROPOSED UTICA                     |  |
| WELL LATERAL                       |  |
| 400' OFFSET LINE                   |  |
| 500' OFFSET LINE                   |  |
| TIE LINE                           |  |
| CREEK                              |  |
| ROAD                               |  |
| PROPOSED FIRST TAKE POINT          |  |
| PROPOSED LAST TAKE POINT           |  |
| COUNTY ROUTE                       |  |
| PROPOSED WELL                      |  |
| EXISTING WELL                      |  |
| PERMITTED WELL                     |  |
| SURFACE OWNER (SEE TABLE)          |  |
| LEASE # (SEE ADDITIONAL SHEETS)    |  |

SCALE 1" = 2000' FILE NO. 8855P12HUR11.dwg  
DATE JULY 21, 2017  
REVISED 01/10/18, 02/08/18, 02/20/18, 03/29/18, 09/26/18, 10/10/19, 11/12/19, 07/08/20, 7/22/20  
OPERATORS WELL NO. TEN HIGH 1N-12HU  
API WELL NO. 47 - 051 - 01961  
STATE COUNTY PERMIT MDO

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
H6A

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

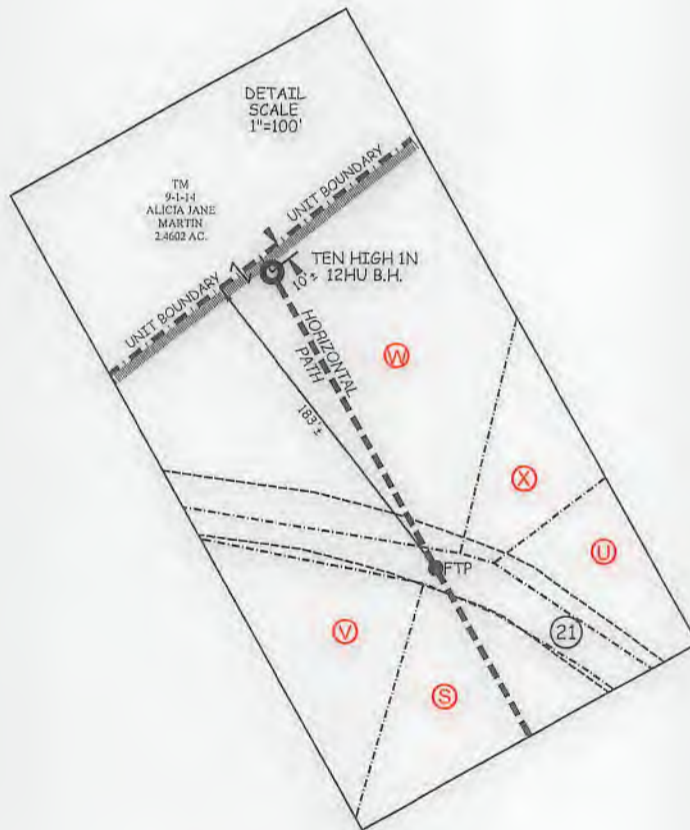
COUNTY NAME PERMIT

**TEN HIGH 1N LEASE  
UTICA UNIT - 537.97 AC±  
WELL 12HU  
TUG HILL OPERATING**



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634  
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
slsvw.com

| No. | Lease Name or No. | Tag | Parcel   | Grantors, Lessors, etc.                               | Deed Book/Page |
|-----|-------------------|-----|----------|---|----------------|
| 1   | 10*15662          | A   | 9-7-24   | LARRY LEE CONKLE, ET AL                               | 863 354        |
| 2   | 10*15501          | B   | 9-7-12.1 | RONALD AND EDNA MOORE                                 | 661 449        |
| 3   | 10*15501          | C   | 9-7-12   | RONALD AND EDNA MOORE                                 | 661 449        |
| 4   | 10*15486          | D   | 9-7-22   | RICHARD NEAL NORRIS AND CAROL NORRIS, ET AL           | 905 430        |
| 5   | 10*15557          | E   | 9-7-30   | RICKY L WHITLATCH ET AL                               | 780 226        |
| 6   | 10*15557          | F   | 9-7-30.1 | RICKY L WHITLATCH ET AL                               | 780 226        |
| 7   | 10*15501          | G   | 9-7-13   | RONALD AND EDNA MOORE                                 | 661 449        |
| 8   | 10*15557          | H   | 9-7-15   | RICKY L WHITLATCH ET AL                               | 780 226        |
| 9   | 10*15558          | I   | 9-7-14   | ARNIE AND BOBBIE B GOODNIGHT                          | 777 59         |
| 10  | 10*15500          | J   | 9-7-6    | JERRY FLETCHER AND CAROLYN FLETCHER, HUSBAND AND WIFE | 661 154        |
| 11  | 10*15502          | J   | 9-7-6    | SHERWOOD YEATER                                       | 748 268        |
| 12  | 10*15558          | K   | 9-7-5    | ARNIE AND BOBBIE B GOODNIGHT                          | 777 59         |
| 13  | 10*21588          | L   | 9-5-3    | LAWRENCE ALLEN WAYT                                   | 687 233        |
| 14  | 10*21591          | L   | 9-5-3    | BEATRICE ANN KIDD                                     | 687 230        |
| 15  | 10*15481          | M   | 9-5-4    | DEAN P RIGBY AND SUSAN RIGBY, ET AL                   | 908 197        |
| 16  | 10*15481          | N   | 9-5-5.4  | DEAN P RIGBY AND SUSAN RIGBY, ET AL                   | 908 197        |
| 17  | 10*15481          | O   | 9-5-18   | DEAN P RIGBY AND SUSAN RIGBY, ET AL                   | 908 197        |
| 18  | 10*15481          | P   | 9-5-17   | DEAN P RIGBY AND SUSAN RIGBY, ET AL                   | 908 197        |
| 19  | 10*15481          | Q   | 9-5-5    | DEAN P RIGBY AND SUSAN RIGBY, ET AL                   | 908 197        |
| 20  | 10*15482          | R   | 9-5-4.1  | SUSAN NELSON, ET AL                                   | 908 203        |
| 21  | 10*15482          | S   | 9-5-5.3  | SUSAN NELSON, ET AL                                   | 908 203        |
| 22  | 10*16448          | T   | 9-5-6.5  | RALPH L AND JUANITA L CRIM                            | 908 584        |
| 23  | 10*16545          | T   | 9-5-6.5  | ROBERT G FOUNDS AND ELLEN FOUNDS, ET AL               | 908 260        |
| 24  | 10*16448          | U   | 9-5-6.3  | RALPH L AND JUANITA L CRIM, ET AL                     | 908 584        |
| 25  | 10*15482          | V   | 9-5-5.2  | SUSAN NELSON, ET AL                                   | 908 203        |
| 26  | 10*16448          | W   | 9-1-14   | RALPH L AND JUANITA L CRIM, ET AL                     | 908 584        |
| 27  | 10*16448          | X   | 9-1-14.1 | RALPH L AND JUANITA L CRIM, ET AL                     | 908 584        |
| 28  | 10*16448          | Y   | 9-5-6    | RALPH L AND JUANITA L CRIM, ET AL                     | 908 584        |
| 29  | 10*16448          | Z   | 9-5-6.2  | RALPH L AND JUANITA L CRIM, ET AL                     | 908 584        |
| 30  | 10*24536          | AA  | NOT ASSD | MARSHALL COUNTY BOARD OF EDUCATION                    | 1026 67        |
| 31  | 10*24536          | BB  | NOT ASSD | MARSHALL COUNTY BOARD OF EDUCATION                    | 1026 67        |
| 32  | 10*15482          | CC  | 9-1-13.2 | SUSAN NELSON, ET AL                                   | 908 203        |
| 33  | 10*21695          | DD  | NOT ASSD | ROBERT A WILLIAMS & CHERYL L WILLIAMS                 | 947 521        |

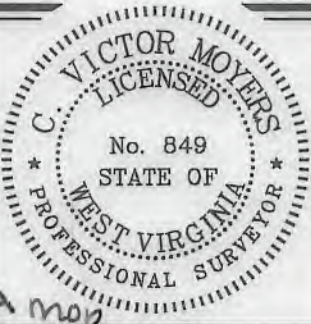


FILE NO. 8655P12HUR11.dwg  
TEN HIGH 1N 12HU Rev8

DATE JULY 21, 20 17  
REVISED 01/10/18, 02/08/18, 02/20/18, 03/29/18, 09/26/18, 10/10/19, 11/12/19, 07/08/20, 7/22/20

OPERATORS WELL NO. TEN HIGH 1N-12HU

API WELL NO. 47 — 051 — 01961  
STATE COUNTY PERMIT



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



P.S. C. Victor Moyers  
849

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

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

COUNTY NAME

PERMIT