

8,696' B.H. AS DRILLED

4,030' T.H. AS DRILLED

**TEN HIGH 1N LEASE
WELL 4HM
TUG HILL OPERATING**

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°52'30"

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

NAD'83 S.P.C.(FT) N. 478,161.74 E. 1,636,721.66
NAD'83 GEO. LAT-(N) 39.806809 LONG-(W) 80.681010
NAD'83 UTM (M) N. 4,406,363.91 E. 527,305.49

LANDING POINT

NAD'83 S.P.C.(FT) N. 478,856.9 E. 1,637,548.1
NAD'83 GEO. LAT-(N) 39.808747 LONG-(W) 80.678101
NAD'83 UTM (M) N. 4,406,579.9 E. 527,553.7

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 488,474.5 E. 1,632,202.6
NAD'83 GEO. LAT-(N) 39.834954 LONG-(W) 80.697584
NAD'83 UTM (M) N. 4,409,482.7 E. 525,876.2

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

TAG	SURFACE OWNER	PARCEL	ACRES
A	LAWRENCE & SHIRLEY CONKLE ESTS	9-7-24	139.79
B	THOMAS R & KIMBERLY WHITEFIELD	9-7-25 2	76.40
C	ROBERT G & SCARLETT HUBBS	9-7-12 1	86.364
D	RONALD MOORE, ET UX	9-7-12	16.587
E	RONALD MOORE, ET UX	9-7-13	51.49
F	ROBERT GLENN HUBBS, ET AL	9-7-7	108.61
G	TERESA L. HORNER WITH JERRY G & CAROLYN K. FLETCHER (LIFE ESTATE)	9-7-6	103.30
H	CARLA SUE CROW	9-5-17	6.341
I	KELLY WILSON WITH DONLD E. LEACH (LIFE ESTATE)	9-5-18	5.807
J	KELLY WILSON WITH DONLD E. LEACH (LIFE ESTATE)	9-5-20	6.924
K	MICHAEL JOSEPH SNYDER	9-5-5 4	64.00
L	DAVID M. TOLER	9-5-5 1	0.985
M	MICHAEL JOSEPH SNYDER	9-5-5	35.02
N	NANCY L. SNYDER	9-5-6 4	0.694
O	NANCY L. SNYDER	9-5-6 7	0.678
P	NANCY L. SNYDER (LIFE ESTATE)	9-5-6	82.858
Q	ROBERT A & CHERYL I. WILLIAMS	9-1-13	80.897

MAP PARCEL	ADJOINING SURFACE OWNER LIST (SEE SHEET 2)	ACRES
9-1-13 1	BURDETTE L. BEUCKE	14.256
9-1-13 4	MACK I. CROW	4.273
9-1-14 1	ALICE J & DOUGLAS J. MARTIN	0.905
9-5-5 2	PETER PARKER	0.873
9-5-5 3	MICHAEL JOSEPH BAUM, ET AL	1.870
9-5-6 1	JON B. CRAWFORD	4.679
9-5-6 2	MICHAEL JOSEPH SNYDER	2.82
9-5-6 3	DEUTSCHE BANK NATL TR CO	1.391
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
9-5-14 4	BETTY R. OTT	10.501
9-5-19	BETTY R. OTT	0.933
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	ALVIF & MARCELLA DARRAH	1.986



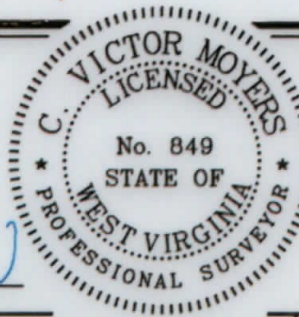
12 Vinhorn Drive | P.O. Box 150 | Glenville, WV 26031 | 304.462.5634
1402 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3932
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
sfsww.com

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 & TOPD MARK SCALE IS 1"=2000'
- AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.

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. 849 *C. Victor Moyers*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JANUARY 17, 20 19
REVISED MARCH 24, 20 20
OPERATORS WELL NO. TEN HIGH 1N-4HM
API WELL NO. 47 - 051 - 1945
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P4HMADR.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 = 1,322.70' 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 ANDY PAUL & JACKIE KUHN, ET AL - SEE WW-6A1 ACREAGE 139.79±

PROPOSED WORK: LEASE NO. SEE WW-6A1
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: 18,304'

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

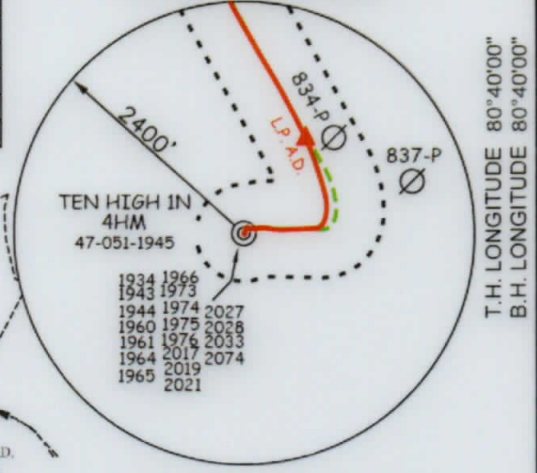
9,662' T.H. AS DRILLED
14,595' B.H. AS DRILLED

8,696' B.H. AS DRILLED 4,030' T.H. AS DRILLED

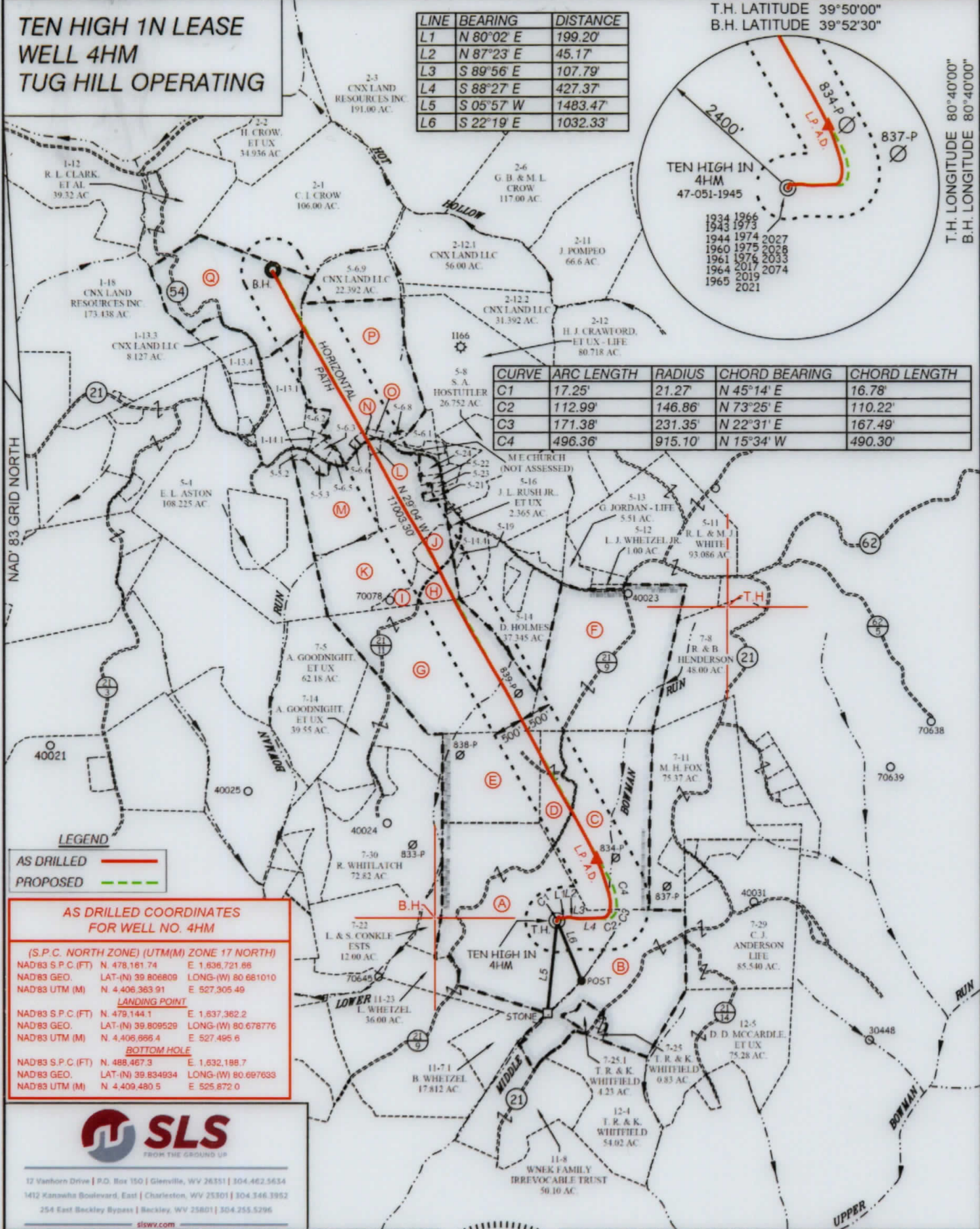
**TEN HIGH 1N LEASE
WELL 4HM
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	N 80°02' E	199.20'
L2	N 87°23' E	45.17'
L3	S 89°56' E	107.79'
L4	S 88°27' E	427.37'
L5	S 05°57' W	1483.47'
L6	S 22°19' E	1032.33'

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°52'30"



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



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	17.25'	21.27'	N 45°14' E	16.78'
C2	112.99'	146.86'	N 73°25' E	110.22'
C3	171.38'	231.35'	N 22°31' E	167.49'
C4	496.36'	915.10'	N 15°34' W	490.30'

LEGEND
AS DRILLED (Red solid line)
PROPOSED (Green dashed line)

AS DRILLED COORDINATES FOR WELL NO. 4HM

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD83 S.P.C.(FT) N. 478,161.74 E. 1,636,721.66
 NAD83 GEO. LAT.-(N) 39.806809 LONG.-(W) 80.681010
 NAD83 UTM (M) N. 4,406,363.91 E. 527,305.49

LANDING POINT
 NAD83 S.P.C.(FT) N. 478,144.1 E. 1,637,362.2
 NAD83 GEO. LAT.-(N) 39.809529 LONG.-(W) 80.678776
 NAD83 UTM (M) N. 4,406,866.4 E. 527,495.6

BOTTOM HOLE
 NAD83 S.P.C.(FT) N. 488,467.3 E. 1,632,198.7
 NAD83 GEO. LAT.-(N) 39.834934 LONG.-(W) 80.697633
 NAD83 UTM (M) N. 4,409,480.5 E. 525,872.0

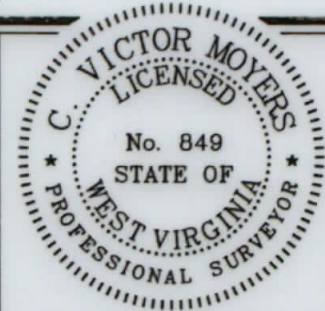


12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
 254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
 slsvw.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD83 S.P.C.(FT) N. 478,161.74 E. 1,636,721.66
 NAD83 GEO. LAT.-(N) 39.806809 LONG.-(W) 80.681010
 NAD83 UTM (M) N. 4,406,363.91 E. 527,305.49

LANDING POINT
 NAD83 S.P.C.(FT) N. 478,856.9 E. 1,637,548.1
 NAD83 GEO. LAT.-(N) 39.808747 LONG.-(W) 80.678101
 NAD83 UTM (M) N. 4,406,579.9 E. 527,553.7

BOTTOM HOLE
 NAD83 S.P.C.(FT) N. 488,474.5 E. 1,632,202.6
 NAD83 GEO. LAT.-(N) 39.834954 LONG.-(W) 80.697584
 NAD83 UTM (M) N. 4,409,482.7 E. 525,876.2



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

P.S. 849 *C. Victor Moyers*

SCALE 1" = 2000' FILE NO. 8655P4HMADR.dwg
 DATE JANUARY 17, 20 19
 REVISED MARCH 24, 20 20
 OPERATORS WELL NO. TEN HIGH 1N-4HM
 API WELL NO. 47 — 051 — 1945
 NO. 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
 SURFACE OWNER (SEE TABLE)
 LEASE # (SEE WW-6A1)

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

COUNTY NAME
 PERMIT