

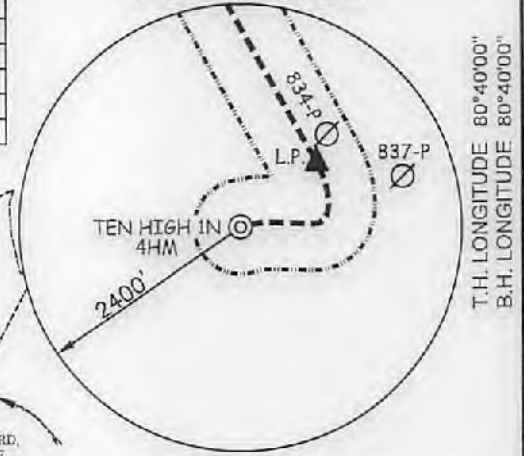
9,351' B.H.

4,030' T.H.

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

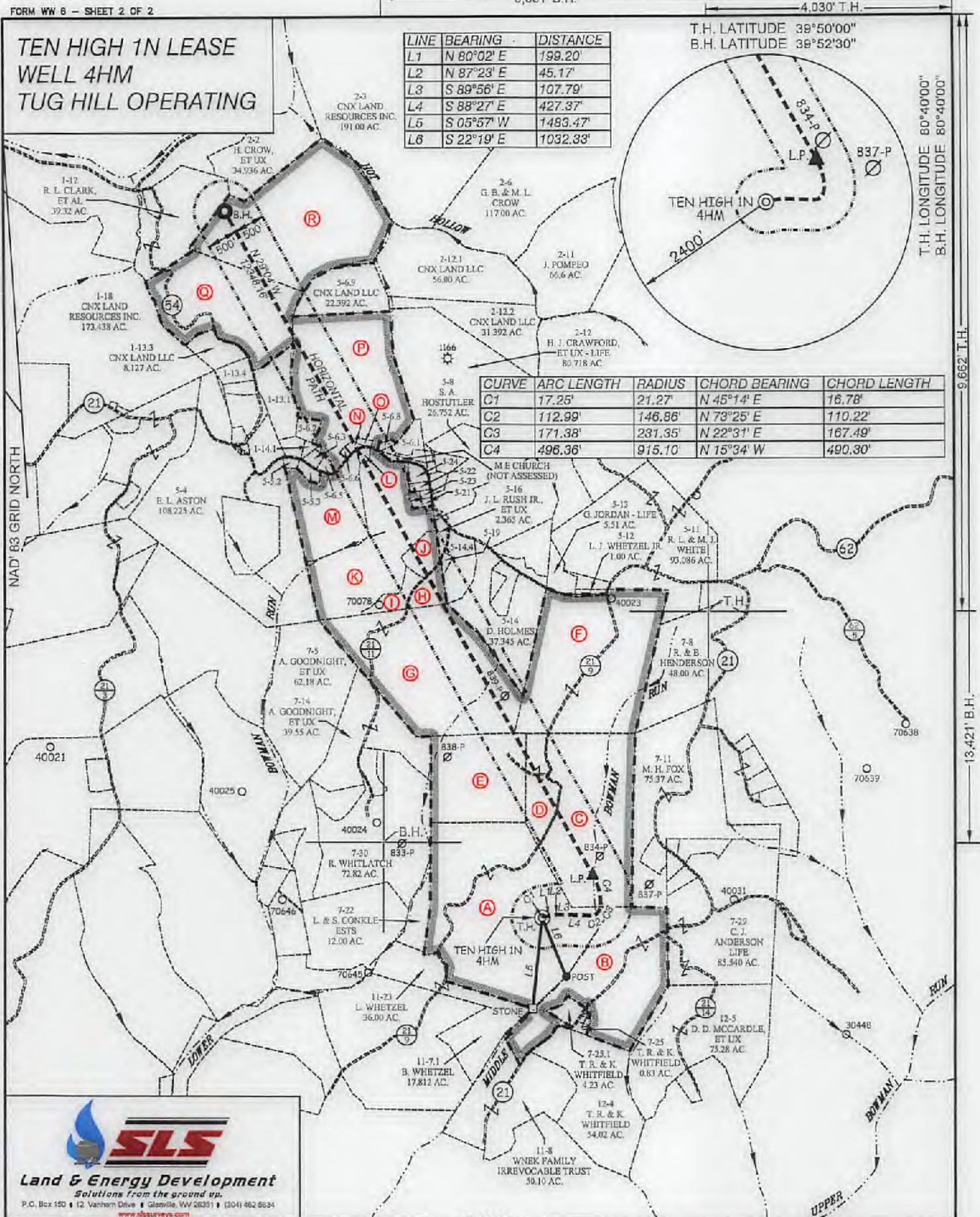
LINE	BEARING	DISTANCE
L1	N 80°02' E	199.20'
L2	N 87°23' E	45.17'
L3	S 89°56' E	107.79'
L4	S 88°27' E	427.37'
L5	S 05°57' W	1483.47'
L6	S 22°19' E	1032.33'

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'



SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 • 12 Vanham Drive • Glasgow, WV 26031 • (304) 462-6634
www.slsurveys.com

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

NAD83 S.P.C.(FT)	N. 478,161.74	E. 1,638,721.88
NAD83 GEO.	LAT-(N) 39.806609	LONG-(W) 80.981010
NAD83 UTM (M)	N. 4,408,383.91	E. 527,308.49

LANDING POINT

NAD83 S.P.C.(FT)	N. 478,856.9	E. 1,637,548.1
NAD83 GEO.	LAT-(N) 39.808747	LONG-(W) 80.978101
NAD83 UTM (M)	N. 4,406,579.9	E. 527,553.7

BOTTOM HOLE

NAD83 S.P.C.(FT)	N. 499,650.0	E. 1,631,549.3
NAD83 GEO.	LAT-(N) 39.838157	LONG-(W) 80.989966
NAD83 UTM (M)	N. 4,409,837.5	E. 525,971.2

SCALE 1" = 2000' FILE NO. 8655P4HMR5.dwg

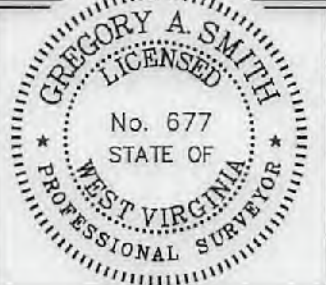
DATE JUNE 15, 20 17

REVISED 09/12/2017, 12/28/2017 & 02/20/18

OPERATORS WELL NO. TEN HIGH 1N-4HM

API WELL NO. 47 - 051 - 01945 MOD

STATE COUNTY PERMIT



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

(+) 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)

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

9,351' B.H.

4,030' T.H.

**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)
NAD83 S.P.C.(FT) N. 478,161.74 E. 1,636,721.66
NAD83 GEO. LAT:(N) 39.808809 LONG-(W) 80.681010
NAD83 UTM (M) N. 4,406,363.91 E. 527,905.49

LANDING POINT
NAD83 S.P.C.(FT) N. 478,858.9 E. 1,637,548.1
NAD83 GEO. LAT:(N) 39.808747 LONG-(W) 80.678101
NAD83 UTM (M) N. 4,406,579.9 E. 527,559.7

BOTTOM HOLE
NAD83 S.P.C.(FT) N. 489,650.0 E. 1,631,548.3
NAD83 GEO. LAT:(N) 39.638157 LONG-(W) 80.699996
NAD83 UTM (M) N. 4,409,837.5 E. 525,671.2

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 WHITFIELD	9-7-25.2	76.40
C	ROBERT G. & SCARLETT HUBBS	9-7-12.1	86.363
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 L. WILLIAMS	9-1-13	80.897
R	CLARA I. CROW	9-2-1	106.00

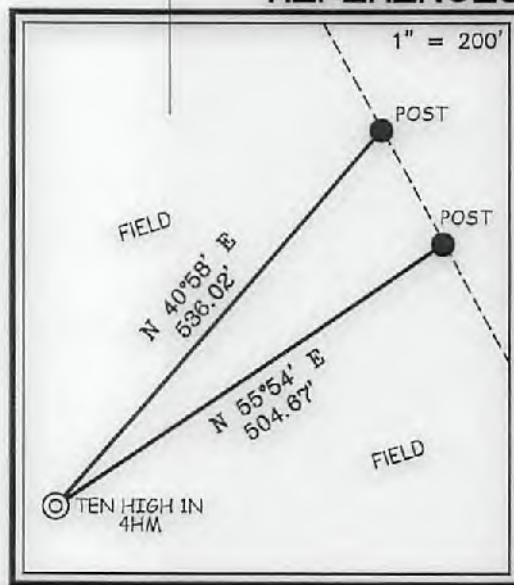
MAP/PARCEL	ADJOINING SURFACE OWNER LIST (SEE SHEET 2)	ACRES
9-1-13.1	BURDETTE L. BEUCKE	14.256
9-1-13.4	MACK L. CROW	4.273
9-1-14.1	ALICE J. & DOUGLAS J. MARTIN	0.903
9-5-5.2	PETER PARKER	0.873
9-5-5.3	MICHAEL JOSEPH BAUM, ET AL	1.870
9-5-6.1	JON E. CRAWFORD	4.079
9-5-6.2	MICHAEL JOSEPH SNYDER	2.82
9-5-6.3	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	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 825' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'

B.H.

REFERENCES



9,662' T.H.
13,421' B.H.



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 & 02/20/18
OPERATORS WELL NO. TEN HIGH 1N-4HM
API WELL NO. 47-051-01945 MOD
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P4HMR5.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: 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: 19,621'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS CT CORPORATION SYSTEM
FORT WORTH, TX 76107 ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

COUNTY NAME PERMIT

03/16/2018