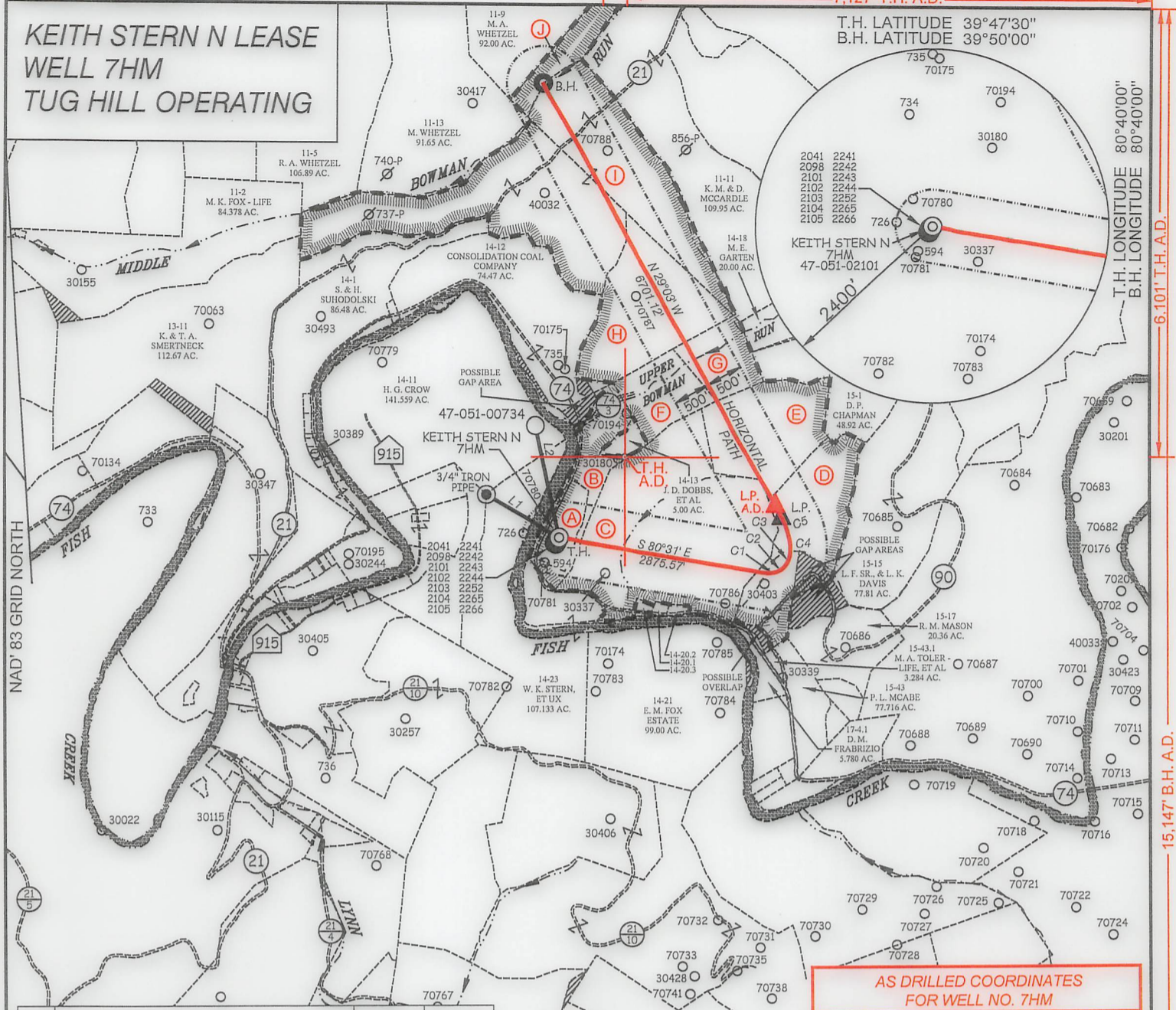


**KEITH STERN N LEASE
WELL 7HM
TUG HILL OPERATING**

7,449' B.H. A.D.
7,127' T.H. A.D.

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



TAG	SURFACE OWNER	PARCEL	ACRES
A	TH EXPLORATION, LLC	9-14-24.1	10.05
B	WILLIAM K. STERN, ET UX	9-14-24	RES. OF 37.06
C	WILLIAM K. STERN, ET UX	9-14-20	120.323
D	WILLIAM K. & BETTY L. STERN	9-15-16	50.13
E	DAVID P. CHAPMAN	9-14-19	42.87
F	JOHN D. DOBBS & GARY L. DOBBS	9-14-15	21.78
G	TH EXPLORATION, LLC	9-14-17	19.18
H	BRADLEY CROW, ET AL	9-14-16	53.85
I	J. F. CROW ESTATE, ET AL	9-11-12	162.88
J	ROBERT L. CLARK	9-11-10	18.00

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-14-20.1	WILLIAM K. STERN, ET UX	1.321
9-14-20.2	WILLIAM K. STERN, ET UX	1.525
9-14-20.3	WILLIAM K. STERN, ET UX	0.831

AS DRILLED COORDINATES FOR WELL NO. 7HM

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

NAD'83 S.P.C.(FT) N. 466,587.52 E. 1,633,473.69
 NAD'83 GEO. LAT-(N) 39.774919 LONG-(W) 80.692024
 NAD'83 UTM (M) N. 4,402,821.23 E. 526,374.90

LANDING POINT

NAD'83 S.P.C.(FT) N. 467,027.7 E. 1,636,412.5
 NAD'83 GEO. LAT-(N) 39.776234 LONG-(W) 80.681599
 NAD'83 UTM (M) N. 4,402,970.3 E. 527,268.0

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 472,722.5 E. 1,633,230.9
 NAD'83 GEO. LAT-(N) 39.791751 LONG-(W) 80.693178
 NAD'83 UTM (M) N. 4,404,689.0 E. 526,269.7

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 59°33' W	1147.50'
L2	N 12°02' W	1546.18'

CURVE TABLE

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	118.72'	271.59'	N 84°56' E	117.78'
C2	112.58'	228.17'	N 57°10' E	111.44'
C3	230.76'	372.08'	N 22°22' E	227.08'
C4	259.24'	656.21'	N 05°49' W	257.55'
C5	225.66'	1031.27'	N 22°37' W	225.21'



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

LEGEND

AS DRILLED ——— (Red line)

PROPOSED - - - - - (Green dashed line)

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

NAD'83 S.P.C.(FT) N. 466,587.52 E. 1,633,473.69
 NAD'83 GEO. LAT-(N) 39.774919 LONG-(W) 80.692024
 NAD'83 UTM (M) N. 4,402,821.23 E. 526,374.90

LANDING POINT

NAD'83 S.P.C.(FT) N. 466,858.9 E. 1,636,494.7
 NAD'83 GEO. LAT-(N) 39.775773 LONG-(W) 80.681289
 NAD'83 UTM (M) N. 4,402,919.3 E. 527,293.9

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 472,717.3 E. 1,633,241.3
 NAD'83 GEO. LAT-(N) 39.791737 LONG-(W) 80.693140
 NAD'83 UTM (M) N. 4,404,687.5 E. 526,272.9



(+) 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 00-00

LEASE # (SEE WW-6A1) (A)

SURFACE OWNER (SEE TABLE)

COUNTY NAME _____

PERMIT _____

SCALE 1" = 2000' FILE NO. 8811P7HMR2-AD.dwg
 KEITH STERN N-7HM-REV2

DATE FEBRUARY 15, 20 23

REVISED _____

OPERATORS WELL NO. KEITH STERN N-7HM

API WELL NO. 47 — 051 — 02101

NO. STATE COUNTY PERMIT

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

WELL OPERATOR TUG HILL OPERATING, LLC
 ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 400 FORT WORTH, TX 76107

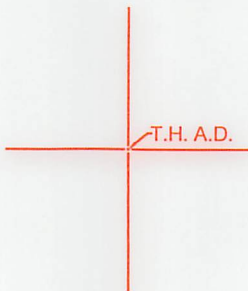
DESIGNATED AGENT DARREN BROWN - CT CORPORATION
 ADDRESS 5098 WASHINGTON ST. W, STE 407 CHARLESTON, WV 25313-1561

**KEITH STERN N LEASE
WELL 7HM
TUG HILL OPERATING**

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

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17)		
NAD'83 S.P.C.(FT)	N. 466,587.52	E. 1,633,473.69
NAD'83 GEO.	LAT-(N) 39.774919	LONG-(W) 80.692024
NAD'83 UTM (M)	N. 4,402,821.23	E. 526,374.90
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 466,858.9	E. 1,636,494.7
NAD'83 GEO.	LAT-(N) 39.775773	LONG-(W) 80.681289
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BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 472,717.3	E. 1,633,241.3
NAD'83 GEO.	LAT-(N) 39.791737	LONG-(W) 80.693140
NAD'83 UTM (M)	N. 4,404,687.5	E. 526,272.9

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



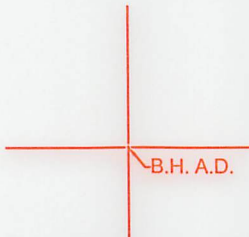
6.101' T.H. A.D.

NOTES ON SURVEY

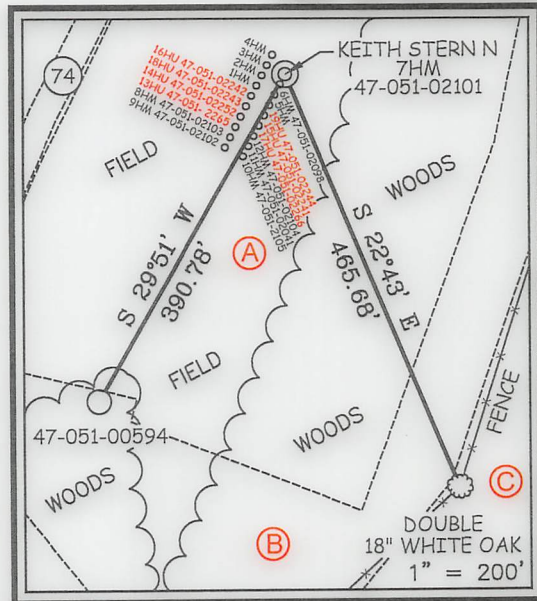
1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS OR DWELLINGS > 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
3. PLAT UPDATED TO SHOW AS-DRILLED PATH.
4. AS DRILLED DATA PROVIDED BY TUG HILL OPERATING.



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1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slswv.com



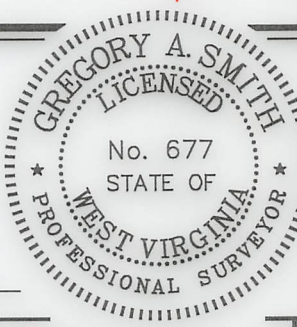
REFERENCES



15.147' B.H. A.D.

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 FEBRUARY 15, 20 23
REVISED _____
OPERATORS WELL NO. KEITH STERN N-7HM
API WELL NO. 47 - 051 - 02101
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8811P7HMR2-AD.dwg
KEITH STERN N-7HM-REV2
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 X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION GROUND = 741.20' PROPOSED = 744.65' WATERSHED FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER TH EXPLORATION, LLC ACREAGE 10.05±
ROYALTY OWNER ISAAC CROW, ET AL - SEE WW-6A1 ACREAGE 10.05±

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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: 6,417' / TMD: 14,479'

COUNTY NAME

PERMIT

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN - CT CORPORATION
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5098 WASHINGTON ST. W, STE 407
FORT WORTH, TX 76107 CHARLESTON, WV 25313-1561

09/22/2023