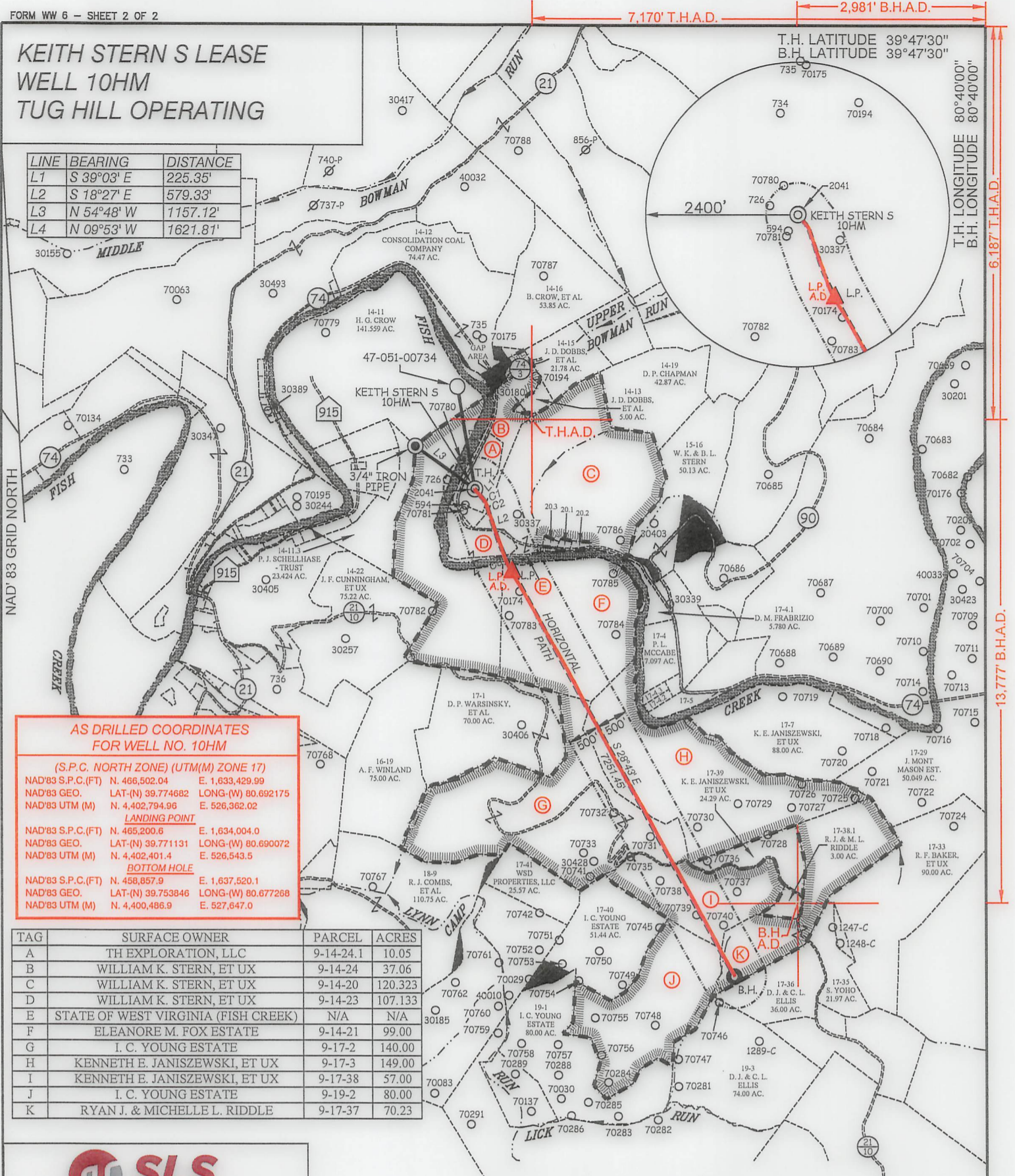


KEITH STERN S LEASE WELL 10HM TUG HILL OPERATING

LINE	BEARING	DISTANCE
L1	S 39°03' E	225.35'
L2	S 18°27' E	579.33'
L3	N 54°48' W	1157.12'
L4	N 09°53' W	1621.81'

NAD'83 GRID NORTH



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

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

6,187' T.H.A.D.

13,777' B.H.A.D.

**AS DRILLED COORDINATES
FOR WELL NO. 10HM**

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

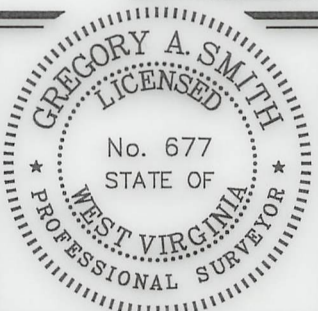
NAD'83 S.P.C.(FT)	N. 466,502.04	E. 1,633,429.99
NAD'83 GEO.	LAT-(N) 39.774682	LONG-(W) 80.692175
NAD'83 UTM (M)	N. 4,402,794.96	E. 526,362.02
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 465,200.6	E. 1,634,004.0
NAD'83 GEO.	LAT-(N) 39.771131	LONG-(W) 80.690072
NAD'83 UTM (M)	N. 4,402,401.4	E. 526,543.5
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 458,857.9	E. 1,637,520.1
NAD'83 GEO.	LAT-(N) 39.753846	LONG-(W) 80.677268
NAD'83 UTM (M)	N. 4,400,486.9	E. 527,647.0

TAG	SURFACE OWNER	PARCEL	ACRES
A	TH EXPLORATION, LLC	9-14-24.1	10.05
B	WILLIAM K. STERN, ET UX	9-14-24	37.06
C	WILLIAM K. STERN, ET UX	9-14-20	120.323
D	WILLIAM K. STERN, ET UX	9-14-23	107.133
E	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
F	ELEANORE M. FOX ESTATE	9-14-21	99.00
G	I. C. YOUNG ESTATE	9-17-2	140.00
H	KENNETH E. JANISZEWSKI, ET UX	9-17-3	149.00
I	KENNETH E. JANISZEWSKI, ET UX	9-17-38	57.00
J	I. C. YOUNG ESTATE	9-19-2	80.00
K	RYAN J. & MICHELLE L. RIDDLE	9-17-37	70.23



12 Vanhorn Drive | P.O. Box 150 | Glenview, 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
slsrv.com

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	70.65'	328.42'	S 26°52' E	70.52'
C2	68.31'	1574.23'	S 21°02' E	68.30'
C3	490.12'	4316.88'	S 26°02' E	489.85'



(+) 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)
- SURFACE OWNER (SEE TABLE) (A)

SCALE 1" = 2000' FILE NO. 8811P10HMv2-AD.dwg
DATE FEBRUARY 15, 2023
REVISED _____, 20____
OPERATORS WELL NO. KEITH STERN S-10HM
API WELL NO. 47-051-02105
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

COUNTY NAME PERMIT

7,170' T.H.A.D.

2,981' B.H.A.D.

**KEITH STERN S LEASE
WELL 10HM
TUG HILL OPERATING**

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

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

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

NAD'83 S.P.C.(FT) N. 466,502.04 E. 1,633,429.99
NAD'83 GEO. LAT-(N) 39.774682 LONG-(W) 80.692175
NAD'83 UTM (M) N. 4,402,794.96 E. 526,362.02

LANDING POINT

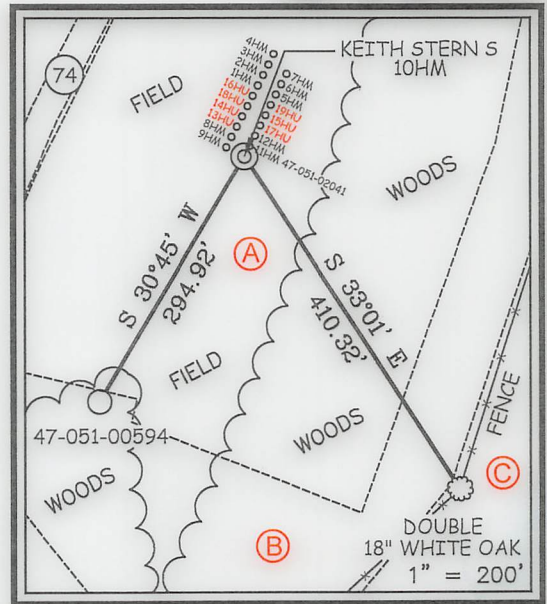
NAD'83 S.P.C.(FT) N. 465,210.7 E. 1,634,026.6
NAD'83 GEO. LAT-(N) 39.771159 LONG-(W) 80.689992
NAD'83 UTM (M) N. 4,402,404.6 E. 526,550.4

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 458,851.3 E. 1,637,511.3
NAD'83 GEO. LAT-(N) 39.753828 LONG-(W) 80.677299
NAD'83 UTM (M) N. 4,400,484.9 E. 527,644.3

TAX MAP/PCL	ADJOINING SURFACE OWNER	ACRES
14-20.1	WILLIAM K. STERN, ET UX	1.321
14-20.2	WILLIAM K. STERN, ET UX	1.525
14-20.3	WILLIAM K. STERN, ET UX	0.831
17-4.2	RICKY E. DAVIS	1.301
17-4.3	SYLVIA JEAN NEEHOUSE	1.329
17-5	KENNETH E. JANISZEWSKI, ET UX	5.00

REFERENCES



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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slswv.com

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 _____, 20 _____

OPERATORS WELL NO. KEITH STERN S-10HM

API WELL NO. 47 - 051 - 02105

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8811P10HMv2-AD.dwg SCALE 1" = 2000'

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

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



WELL TYPE: OIL _____ GAS INJECTION _____ WASTE DISPOSAL _____ IF "GAS" PRODUCTION STORAGE _____ DEEP _____ SHALLOW

LOCATION: GROUND = 741.00' ELEVATION 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 12.08/2023

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: 6,405' / TMD: 13,996'

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

COUNTY NAME PERMIT