

11,055' B.H.

8,779' T.H.

**WILLETT S LEASE  
UTICA UNIT - 375.17 AC±  
WELL 17HU  
TUG HILL OPERATING**

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

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

NAD'83 S.P.C.(FT)	N. 483,988.00	E. 1,643,751.76
NAD'83 GEO.	LAT-(N) 39.823054	LONG-(W) 80.656255
NAD'83 UTM (M)	N. 4,408,174.71	E. 529,417.58
<b>LANDING POINT</b>		
NAD'83 S.P.C.(FT)	N. 484,325.3	E. 1,647,773.9
NAD'83 GEO.	LAT-(N) 39.824121	LONG-(W) 80.641951
NAD'83 UTM (M)	N. 4,408,299.0	E. 530,641.2
<b>BOTTOM HOLE</b>		
NAD'83 S.P.C.(FT)	N. 474,623.0	E. 1,653,066.3
NAD'83 GEO.	LAT-(N) 39.797670	LONG-(W) 80.622678
NAD'83 UTM (M)	N. 4,405,369.0	E. 532,303.0

T.H. LONGITUDE 80°37'30"  
B.H. LONGITUDE 80°35'00"  
3,745' T.H.

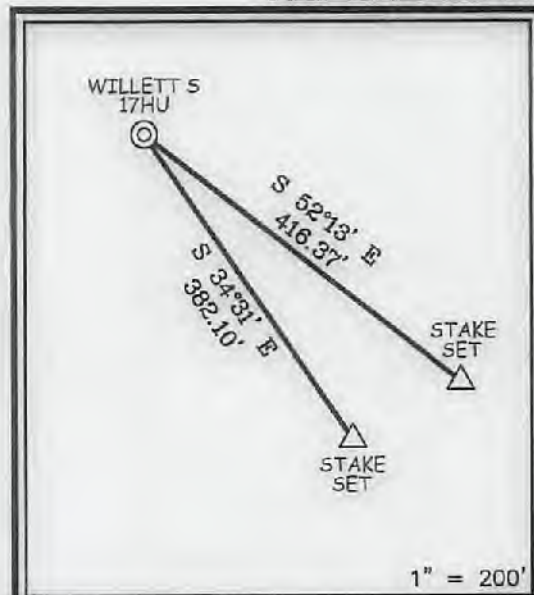
T.H.

TAG	SURFACE OWNER	PARCEL	ACRES
A	CNX LAND, LLC	9-8-5	110.37
B	CNX LAND, LLC	9-8-6	27.596
C	CNX LAND, LLC	9-3-17	65.86
D	LARRY S. NEELY - LIFE	9-8-7.1	76.005
E	RAYMOND DEWAINÉ DOBBS, ET AL	9-3-15	70.7424
F	RAYMOND DEWAINÉ DOBBS	9-3-12	66.843
G	XCL PROCESSING OPERATING LLC	9-3-13	28.00
H	RAYMOND DEWAINÉ DOBBS, ET AL	9-3-14	81.331
I	JEFFREY B. THOMAS	9-3-14.2	2.83
J	RAYMOND DEWAINÉ DOBBS, ET AL	9-9-7.1	9.00
K	JEFFREY B. THOMAS	9-9-7.3	1.297
L	XCL PROCESSING OPERATING LLC	9-3-13.1	10.00
M	XCL PROCESSING OPERATING LLC	9-9-7.2	3.907
N	JAMES R. THOMAS, ET UX	9-9-7	60.796
O	JAMES D. BLAKE, ET AL	9-9-8	52.144
P	ANNA D. MORRIS - TOD	7-1-1	179.00
Q	JOSEPH B. & JUDITH PATRELLO	9-9-9.1	149.924
R	NICHOLAS J. EVANS	7-1-5.2	22.42
S	KAREN S. EVANS & JUDY KAY MATTHEWS	7-1-5	116.915
T	CNX LAND, LLC	7-1-4	52.00
U	LARRY A. PAYNIER, ET UX	7-1-5.1	1.165
V	GEO A. BURRIS	7-8-14	95.44
W	KAREN S. EVANS & JUDY KAY MATTHEWS	7-7-1	124.12
X	BLAINE E. STERN, JR.	7-8-13	104.92

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
3-19-80	XCL PROCESSING OPERATING LLC	30.54
3-19-82	XCL PROCESSING OPERATING LLC	14.89
7-1-5	NANCY L. PARSONS	1.00
7-1-7.1	NANCY L. PARSONS	0.5
7-1-8	NANCY L. PARSONS	33.00
7-1-19	JEAN JAMISON	51.89
7-7-2	KAREN S. EVANS & JUDY KAY MATTHEWS	24.50
7-7-8.1	KENNETH WAYNE STEELE TRUST	79.03
9-3-14.1	RAYMOND DEWAINÉ DOBBS, ET AL	0.499
9-3-15.1	MARSHALL COUNTY PUBLIC SERVICE DISTRICT #4	0.2296
9-3-17.1	BRIAN & LEAH KESTNER	11.8
9-8-5.1	CNX LAND, LLC	1.040
9-8-5.2	AMY EVANS & KAREN WHETZAL	4.586
9-8-6.1	KAYLA E. BRATTON	1.423
9-9-8.1	DIANA MAE PIATT	2.253
9-9-8.2	VINCENT PATRELLO	0.723
9-9-9	VINCENT P. PATRELLO	1.076

12,991' B.H.

**REFERENCES**



B.H.

**NOTES ON SURVEY**

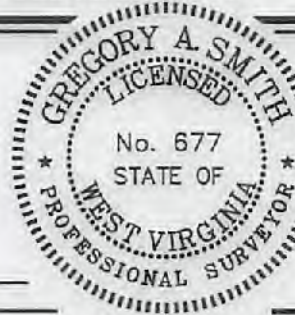
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOP MARK SCALE ARE 1"=2000'
- PROPOSED LATERAL OR TOP HOLE OF PROPOSED WILLETT S-17HU IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF PROPOSED OR EXISTING WELLS:  
 PROPOSED WILLETT S-16HU,  
 PROPOSED HUDSON S-13HU (47-051-02293),  
 PROPOSED HUDSON S-14HU (47-051-02327),  
 PROPOSED HUDSON S-15HU (47-051-02328),  
 PROPOSED HUDSON S-18HU (47-051-02329),  
 PROPOSED BRECKENRIDGE S-17HU (47-051-02396),  
 PROPOSED BRECKENRIDGE S-18HU (47-051-02397),  
 PROPOSED BRECKENRIDGE N-11HU.



12 Vinhorn 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 | 304.255.6296  
 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 DECEMBER 1, 20 21  
 REVISED \_\_\_\_\_, 20 \_\_\_\_  
 OPERATORS WELL NO. WILLETT S 17HU  
 API WELL NO. 47 - 051 - 02424  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8939P17HU.dwg  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY: DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'  
 WILLETT S 17HU-REV2

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:  
 ELEVATION 1,310.03' WATERSHED TRIBUTARY OF UPPER BOWMAN RUN  
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'  
 SURFACE OWNER CNX LAND LLC ACREAGE 27.596±  
 ROYALTY OWNER APPALACHIAN BASIN MINERALS, LP, ET AL ACREAGE 01/28/2022  
 PROPOSED WORK: LEASE NO. SEE WV-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 POINT PLEASANT  
 ESTIMATED DEPTH TVD: 12,097' / TMD: 24,309'

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

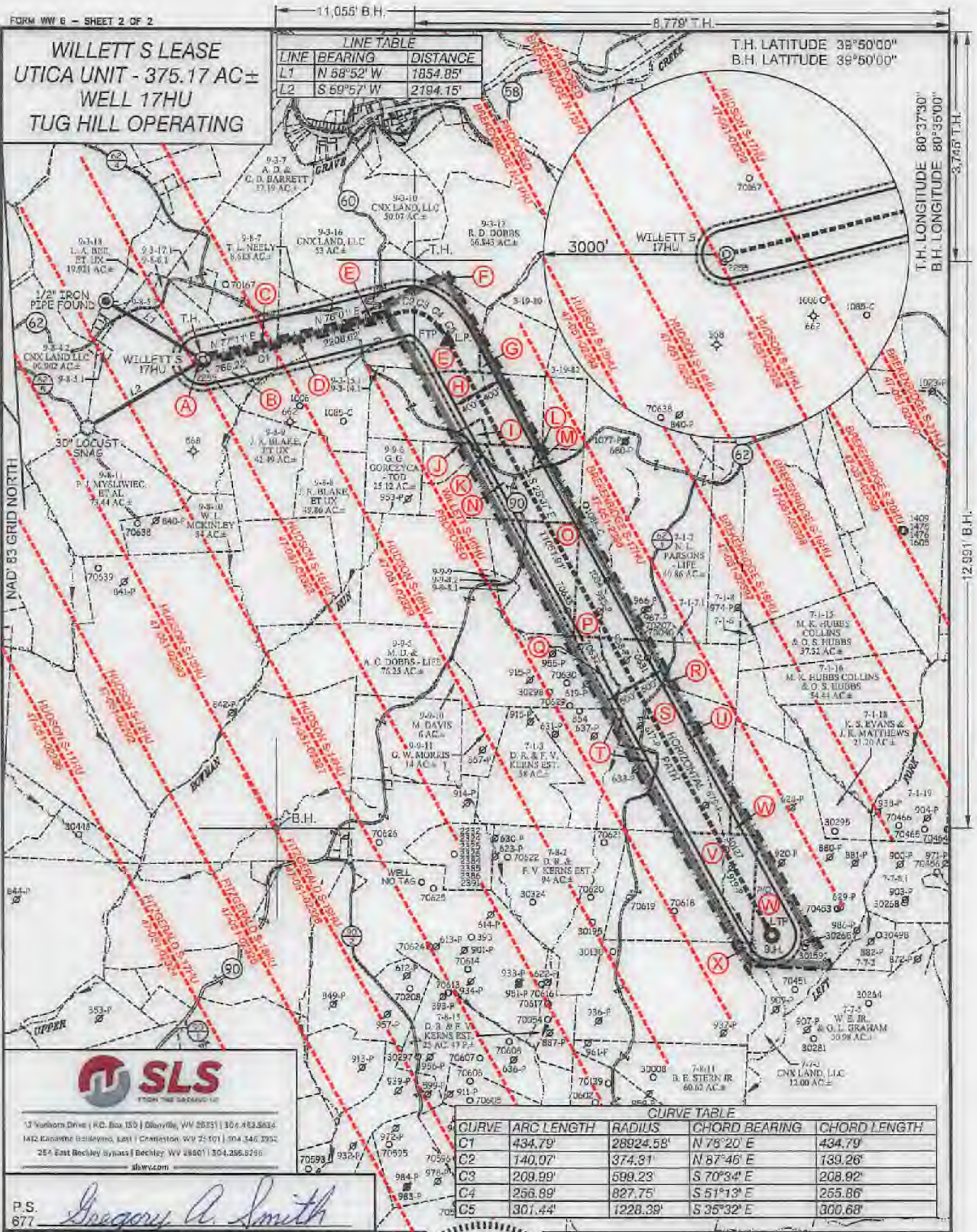
COUNTY NAME PERMIT

**WILLETT S LEASE  
UTICA UNIT - 375.17 AC±  
WELL 17HU  
TUG HILL OPERATING**

**LINE TABLE**

LINE	BEARING	DISTANCE
L1	N 58°52' W	1854.85'
L2	S 69°57' W	2194.15'

T.H. LATITUDE 38°50'00"  
B.H. LATITUDE 39°50'00"



**CURVE TABLE**

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	434.79'	28924.58'	N 78°20' E	434.79'
C2	140.07'	374.31'	N 87°46' E	130.26'
C3	209.99'	599.23'	S 70°34' E	208.92'
C4	256.89'	827.75'	S 51°13' E	255.86'
C5	301.44'	1228.39'	S 35°32' E	300.68'



13 Yorktown Drive | P.O. Box 150 | Glenville, WV 25331 | 304.482.5634  
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
254 East Beckley Avenue | Beckley, WV 25801 | 304.286.6796  
slsvv.com

P.S. 677 *Gregory A. Smith*



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

**LEGEND**

- EXTERIOR UNIT BOUNDARY
- INTERIOR LEASE 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)

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

NAD83 S.P.C. (FT)	N. 483,988.00	E. 1,643,751.76
NAD83 GEO.	LAT. (N) 39.923054	LONG. (W) 80.856256
NAD83 UTM (M)	N. 4,409,174.71	E. 529,417.58

**LANDING POINT**

NAD83 S.P.C. (FT)	N. 484,325.3	E. 1,647,773.8
NAD83 GEO.	LAT. (N) 39.824121	LONG. (W) 80.841951
NAD83 UTM (M)	N. 4,409,296.0	E. 530,641.2

**BOTTOM HOLE**

NAD83 S.P.C. (FT)	N. 474,823.0	E. 1,653,088.3
NAD83 GEO.	LAT. (N) 39.797670	LONG. (W) 80.822678
NAD83 UTM (M)	N. 4,405,998.0	E. 532,903.0

SCALE 1" = 3000' FILE NO. 8939P17HU.dwg  
WILLETT S 17HU-REV2  
DATE DECEMBER 1, 20 21  
REVISED \_\_\_\_\_, 20 \_\_\_\_  
OPERATORS WELL NO. WILLETT S 17HU  
API WELL 47 - 051 - 02424  
NO. STATE COUNTY PERMIT

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

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

01/28/2022

COUNTY NAME PERMIT

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sfsww.com

NO.	Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Deed Book/Page
1	10*23739	9-8-5	A	APPALACHIAN BASIN MINERALS LP, ET AL	1011 538
✓ 2	10*21602	9-8-6	B	CAROL STACY SAUNDERS, ET AL	959 289
✓ 3	10*21602	9-3-17	C	CAROL STACY SAUNDERS, ET AL	959 289
✓ 4	10*28092	9-8-7.1	D	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, ET AL	1073 370
✓ 5	10*38639	9-3-15	E	RAYMOND D DOBBS	677 229
6	10*38524	9-3-12	F	C. WILLIAM HARRIS	670 177
7	10*25188	9-3-13	G	JEFFREY LEE ALBRIGHT AND HYESOO PARK ALBRIGHT, ET AL	1029 505
✓ 8	10*19737	9-3-14	H	ALICE BUZZARD, ET AL	948 195
9	10*19922	9-3-14.2	I	MARLENE GARIN, ET AL	946 320
10	10*22724	9-9-7.1	J	RONI MICHELLE TOWE AND ROBERT T TOWE	968 286
11	10*21244	9-9-7.3	K	JEFFREY B THOMAS AND ASHLEY N THOMAS	988 471
12	10*25188	9-3-13.1	L	JEFFREY LEE ALBRIGHT AND HYESOO PARK ALBRIGHT, ET AL	1029 505
13	10*22767	9-9-7.2	M	DAVID L KINNEY	970 78
✓ 14	10*26738	9-9-7	N	JAMES R THOMAS & DEBORAH L THOMAS	1041 153
✓ 15	10*39474	9-9-8	O	SHERMAN E KNOX SR AND AMARYLISS J KNOX	1120 493
✓ 16	10*39627	7-1-1	P	ANNA D MORRIS	1125 543
17	10*22615	9-9-9.1	Q	DAVID D MURRAY AND MARY ANN MURRAY, ET AL	965 591
18	10*26711	7-1-5.2	R	CNX GAS COMPANY LLC	1074 593
✓ 19	10*31110	7-1-5	S	CNX GAS COMPANY LLC	1098 608
20	10*17969	7-1-4	T	BOUNTY MINERALS LLC, ET AL	928 424
21	10*26711	7-1-5.1	U	CNX GAS COMPANY LLC	1074 593
✓ 22	10*25508	7-8-14	V	THE AMY M TOUPS FAMILY TRUST OF 2013 DATED JUNE 14, 2013, ET AL	827 119
✓ 23	10*25527	7-7-1	W	JUDY K MATTHEWS, ET AL	945 103
24	10*25501	7-8-13	X	AMP FUND III LP, ET AL	925 459

FILE NO. 8939P17HU.dwg  
WILLETT S 17HU-REV2

DATE DECEMBER 1, 2021

REVISED \_\_\_\_\_, 20\_\_\_\_\_

OPERATORS WELL NO. WILLETT S 17HU

API WELL NO. 47 — 051 — 02424  
STATE COUNTY PERMIT



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



01/28/2022

P.S. 677 Gregory A. Smith

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ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500  
FORT WORTH, TX 76107

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