

**OLD CROW N LEASE
WELL 1HM
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. 468,171.20 E. 1,613,489.83
NAD'83 GEO. LAT-(N) 39.778516 LONG-(W) 80.763196
NAD'83 UTM (M) N. 4,403,201.98 E. 520,278.65

LANDING POINT

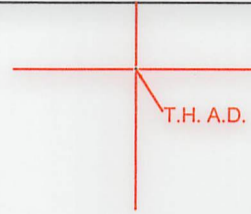
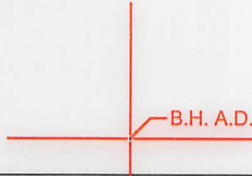
NAD'83 S.P.C.(FT) N. 470,219.7 E. 1,612,313.1
NAD'83 GEO. LAT-(N) 39.784094 LONG-(W) 80.767486
NAD'83 UTM (M) N. 4,403,820.1 E. 519,909.7

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 481,944.8 E. 1,605,732.0
NAD'83 GEO. LAT-(N) 39.816023 LONG-(W) 80.791501
NAD'83 UTM (M) N. 4,407,358.7 E. 517,845.1

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°45'00"

6,310' B.H. A.D. 4,791' T.H. A.D.

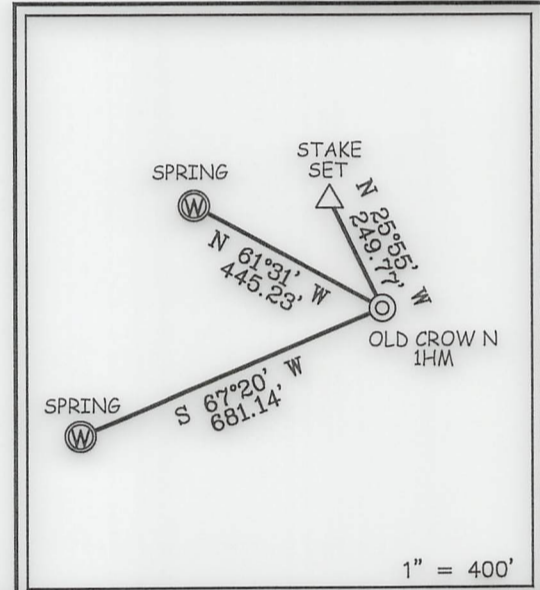


MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
5-8A-13	LETHA I. RUCKMAN	2.993
5-8A-14	BOARD OF EDUCATION	137 SQ RODS
5-8A-32	JONATHAN DAVID BOPP	0.580
5-8A-33	ELAIN & JEFFREY D. WILLS	2.51
5-8A-34	NORMAN G. JOHNSON ET UX - LIFE	11,123 SQ. FT.
5-8A-36	WILLIAM J. GAMBLE ET UX	1.031
5-8A-42	ROBERT M. WHITE	7.23
5-8A-43	CHARLES G. STEIN & EVA A. WADE	0.17
5-8A-44	CHARLES G. STEIN & EVA A. WADE	0.18
5-8A-48	RAYMOND A., JR. & LARLETTE SCOTT	2.12
5-8A-49	RAYMOND A., JR. & LARLETTE SCOTT	0.159
5-8A-54	DONALD D. & CHRISTINE S. DANIELS	0.68
5-8A-54.1	DONALD D. & CHRISTINE S. DANIELS	0.69
5-8-2	CONSOLIDATED COAL COMPANY-MURRAY ENERGY	136.87
5-8-4.1	FRANCES E. NIEMAN	33.46
5-8-9.1	SCOTT E. JACKSON, TAMMY S. SOUTH & MARION JACKSON	1.957
5-11-1.2	JAY A. CONNER, ET UX	5.824
5-11-1.3	JAY A. CONNER, ET UX	4.256
5-11-1.5	PAUL & SANDY WHITT	3.507
5-11-1.7	WILLIAM S. & MARY K. ADAMS	8.00
5-11-6	ROBERT & REBECCA ARRICK	1.29
5-11-7	MT. HOBART MISSIONARY BAPTIST CHURCH	0.25
5-11-8	MT. HOBART MISSIONARY BAPTIST CHURCH	0.8
5-11-9.2	MICHAEL R. BRYAN	3.143
5-11-9.4	JACK S. HUGGINS, ET UX	4.129
5-11-9.5	SOUTHERN COUNTRY FARMS INC.	2.559
5-11-9.6	SOUTHERN COUNTRY FARMS INC.	2.488
5-11-9.9	LEONARD L. PARSONS, ET UX	5.89
5-11-9.10	JOHN A. & JANET L. BEUCKE	2.348

NOTES ON SURVEY

- 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.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.
- AS DRILLED DATA PROVIDED BY TUG HILL OPERATING.

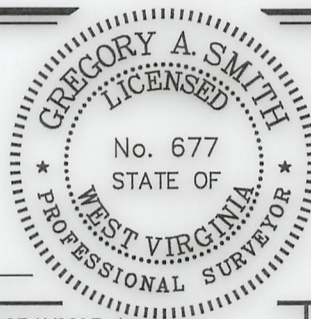
REFERENCES



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
slsvv.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 JANUARY 17, 20 23
REVISED _____
OPERATORS WELL NO. OLD CROW N-1HM
API WELL NO. 47 - 051 - 2189
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P1HMAD.dwg
OLD CROW NORTH 1HM REV1
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 = 1,283.80' ELEVATION PROPOSED = 1,264.99' WATERSHED TRIBUTARY OF FISH CREEK (HUC-10)
DISTRICT FRANKLIN COUNTY MARSHALL QUADRANGLE POWHATAN POINT 7.5'

SURFACE OWNER DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO ACREAGE 71.205±
ROYALTY OWNER DONNA VIVIAN YOHO, ET AL ACREAGE 71.205±

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: 6,679' / TMD: 20,814'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN - CT CORPORATION
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 CHARLESTON, WV 25313-1561

COUNTY NAME PERMIT

03/17/2023

**OLD CROW N LEASE
WELL 1HM
TUG HILL OPERATING**

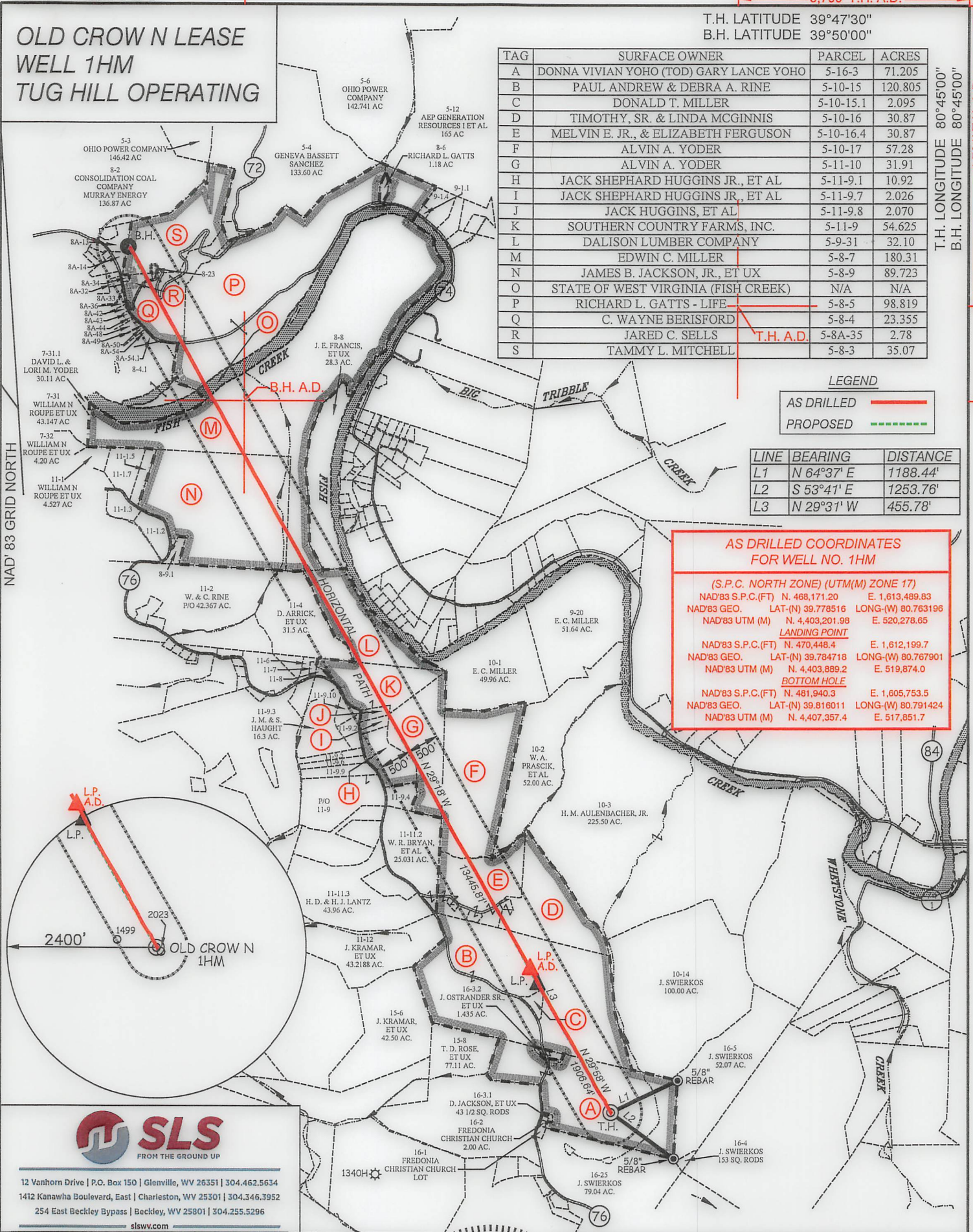
T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°50'00"

TAG	SURFACE OWNER	PARCEL	ACRES
A	DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO	5-16-3	71.205
B	PAUL ANDREW & DEBRA A. RINE	5-10-15	120.805
C	DONALD T. MILLER	5-10-15.1	2.095
D	TIMOTHY, SR. & LINDA MCGINNIS	5-10-16	30.87
E	MELVIN E. JR., & ELIZABETH FERGUSON	5-10-16.4	30.87
F	ALVIN A. YODER	5-10-17	57.28
G	ALVIN A. YODER	5-11-10	31.91
H	JACK SHEPHARD HUGGINS JR., ET AL	5-11-9.1	10.92
I	JACK SHEPHARD HUGGINS JR., ET AL	5-11-9.2	2.026
J	JACK HUGGINS, ET AL	5-11-9.8	2.070
K	SOUTHERN COUNTRY FARMS, INC.	5-11-9	54.625
L	DALISON LUMBER COMPANY	5-9-31	32.10
M	EDWIN C. MILLER	5-8-7	180.31
N	JAMES B. JACKSON, JR., ET UX	5-8-9	89.723
O	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
P	RICHARD L. GATTS - LIFE	5-8-5	98.819
Q	C. WAYNE BERISFORD	5-8-4	23.355
R	JARED C. SELLS	5-8A-35	2.78
S	TAMMY L. MITCHELL	5-8-3	35.07

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°45'00"

6,310' B.H. A.D.
4,791' T.H. A.D.

NAD'83 GRID NORTH



LEGEND

AS DRILLED ————

PROPOSED - - - - -

LINE	BEARING	DISTANCE
L1	N 64°37' E	1188.44'
L2	S 53°41' E	1253.76'
L3	N 29°31' W	455.78'

AS DRILLED COORDINATES FOR WELL NO. 1HM

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

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NAD'83 UTM (M)	N. 4,403,201.98	E. 520,278.65

LANDING POINT

NAD'83 S.P.C.(FT)	N. 470,448.4	E. 1,612,199.7
NAD'83 GEO.	LAT-(N) 39.784718	LONG-(W) 80.767901
NAD'83 UTM (M)	N. 4,403,889.2	E. 519,874.0

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 481,940.3	E. 1,605,732.0
NAD'83 GEO.	LAT-(N) 39.816011	LONG-(W) 80.791424
NAD'83 UTM (M)	N. 4,407,357.4	E. 517,851.7



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
slswv.com



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

P.S. 677 *Gregory A. Smith*

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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) ————

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



SCALE 1" = 2000' FILE NO. 8796P1HMAD.dwg
DATE JANUARY 17, 2023
REVISED
OPERATORS WELL NO. OLD CROW N-1HM
API WELL 47 — 051 — 2189
NO. STATE COUNTY PERMIT

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

03/17/2023

COUNTY NO. PERMIT