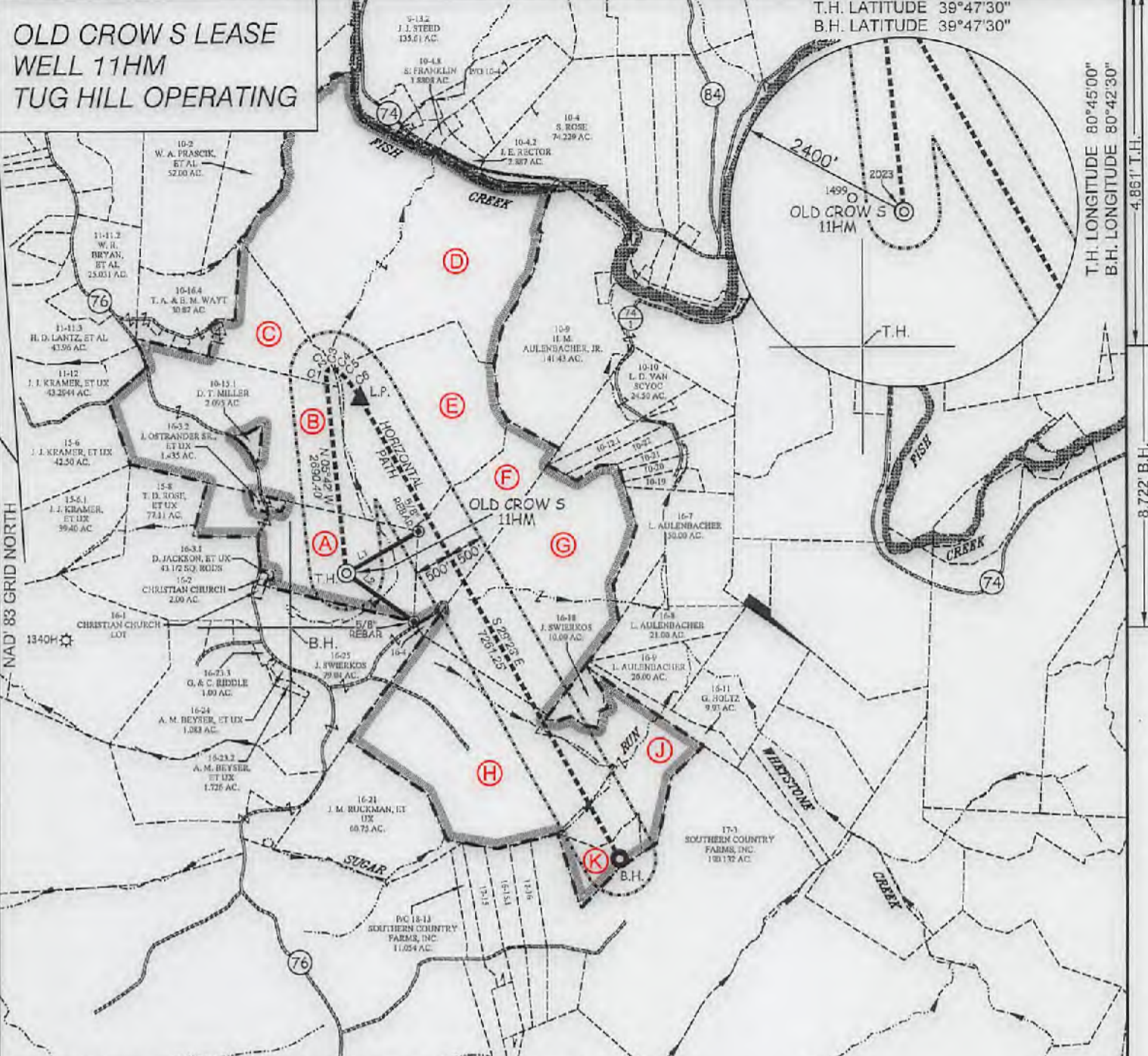


**OLD CROW S LEASE
WELL 11HM
TUG HILL OPERATING**

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

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°42'30"



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	112.61'	229.05'	N 05°38' E	111.48'
C2	57.17'	57.80'	N 47°45' E	54.87'
C3	55.73'	106.09'	S 83°41' E	55.09'
C4	80.09'	319.07'	S 59°49' E	79.88'
C5	106.39'	750.12'	S 47°43' E	106.30'
C6	362.58'	1537.02'	S 35°39' E	361.74'

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	TIMOTHY, SR., & LINDA MCGINNIS	5-10-16	30.87
D	HERBERT M. AULENBACHER, JR.	5-10-3	225.50
E	JOHN SWIERKOS	5-10-14	100.00
F	JOHN SWIERKOS	5-16-5	52.07
G	JOHN SWIERKOS	5-16-6	134.05
H	BETHANY A. REDO & ROBERT W. RAHM	5-16-19	129.16
J	CARA DAVIS & BRIAN TESLOVICH, ET AL	5-16-17	55.34
K	GLEN A. GUNTO	5-16-16	9.702

LINE	BEARING	DISTANCE
L1	N 59°40' E	1150.77'
L2	S 54°11' E	1146.29'

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26031 • (304) 492-5634
www.slsurveys.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD83 S.P.C (FT) N. 468,099.26 E. 1,613,570.41
 NAD83 GEO. LAT-(N) 39.778322 LONG-(W) 80.762906
 NAD83 UTM (M) N. 4,403,190.48 E. 520,303.56
LANDING POINT
 NAD83 S.P.C (FT) N. 470,512.5 E. 1,613,767.8
 NAD83 GEO. LAT-(N) 39.784954 LONG-(W) 80.762325
 NAD83 UTM (M) N. 4,403,916.7 E. 520,351.4
BOTTOM HOLE
 NAD83 S.P.C (FT) N. 464,185.5 E. 1,617,330.6
 NAD83 GEO. LAT-(N) 39.767723 LONG-(W) 80.749335
 NAD83 UTM (M) N. 4,402,007.3 E. 521,469.1



(+) 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)

06/29/2018

SCALE 1" = 2000' FILE NO. 8796P11HMR.dwg
 DATE APRIL 17, 20 18
 REVISED APRIL 24, 20 18
 OPERATORS WELL NO. OLD CROW S-11HM
 API WELL NO. 47-051-02042 H64
 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 500 FORT WORTH, TX 76107
 DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

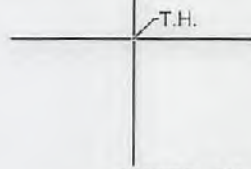
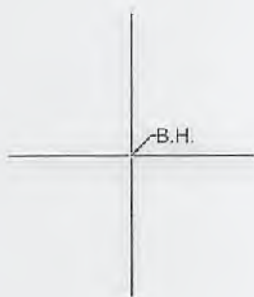
**OLD CROW S LEASE
WELL 11HM
TUG HILL OPERATING**

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

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 468,099.29 E. 1,613,570.41
 NAD'83 GEO. LAT-(N) 39.778322 LONG-(W) 80.762906
 NAD'83 UTM (M) N. 4,403,180.48 E. 520,303.56
LANDING POINT
 NAD'83 S.P.C.(FT) N. 470,512.5 E. 1,613,767.8
 NAD'83 GEO. LAT-(N) 39.784954 LONG-(W) 80.762325
 NAD'83 UTM (M) N. 4,403,918.7 E. 520,351.4
BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 464,185.5 E. 1,617,330.6
 NAD'83 GEO. LAT-(N) 39.767723 LONG-(W) 80.749335
 NAD'83 UTM (M) N. 4,402,007.3 E. 521,489.1

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°42'30"

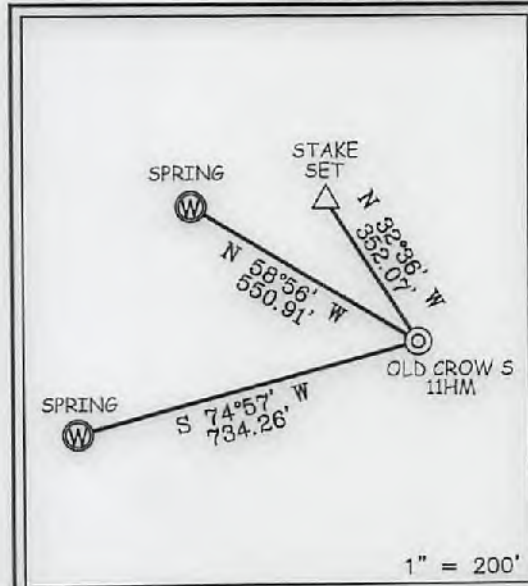
MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
5-10-12.1	JOHN PAUL SMITH, JR., ET AL	8.86
5-10-19	BRADLEY L. & CONNIE L. HUBBARD	3.209
5-10-20	LOUIS AULENBAUCHER	3.554
5-10-21	LOUIS AULENBAUCHER	3.677
5-10-22	LOUIS AULENBAUCHER	6.461
5-16-4	JOHN SWIERKOS	133 SQ. RODS
5-16-15.1	GLEN GUNTO	10.170
5-17-15	GLEN GUNTO	10.220
5-17-16	GLEN GUNTO	9.702



NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS OR 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'

REFERENCES



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 APRIL 17, 20 18
 REVISED APRIL 24, 20 18
 OPERATORS WELL NO. OLD CROW S-11HM
 API WELL NO. 47-051-02042 *HA*
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8796P11HMR.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: ELEVATION GROUND = 1,285.50' 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: 6,893' / TMD: 15,101'

WELL OPERATOR TUG HILL OPERATING, LLC
 ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107

DESIGNATED AGENT DIANNA STAMPER CT CORPORATION SYSTEM
 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME PERMIT

06/29/2018