

**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 NORTH)

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. 1,605,732.6
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. ANGLE 80°45'00"  
B.H. ANGLE 80°45'00"  
4,791' T.H.  
6,305' B.H.

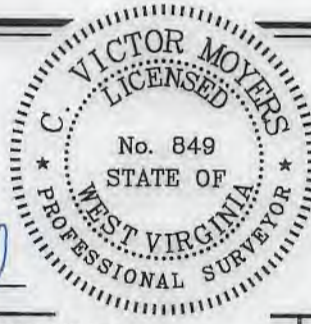
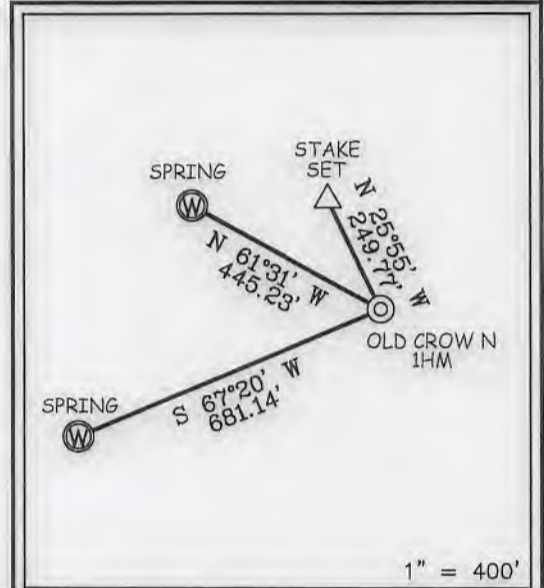


MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
5-8A-13	LETHA I. RUCKMAN	2.993
5-8A-14	BOARD OF EDUCATION	137 SQ RODS
5-8A-32	JONATHAN DAVID BOPP	0.580
5-8A-33	ELAIN & JEFFREY D. WILLS	2.51
5-8A-34	NORMAN G. JOHNSON ET UX - LIFE	11,123 SQ. FT.
5-8A-36	WILLIAM J. GAMBLE ET UX	1.031
5-8A-42	ROBERT M. WHITE	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. & LARIETTE SCOTT	2.12
5-8A-49	RAYMOND A., JR. & LARIETTE 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.

**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. 849 *C. Victor Moyers*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE JUNE 22, 20 18  
REVISED 08/23/2018, 1/17/2019  
OPERATORS WELL NO.            OLD CROW N-1HM  
API WELL NO. 47 — 051 — 02189  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P1HMR1.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 DIANNA STAMPER  
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD  
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME  
PERMIT

**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	5-11-9.7	2.026
J	JACK HUGGINS, ET AL	5-11-9.5	0.4122619
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 GATTS - LIFE	5-8-5	98.819
Q	WAYNE C. BERISFORD	5-8-4	23.3555
R	JARED C. SELLS	5-8A-35	2.78
S	TAMMY L. MITCHELL	5-8-3	35.07

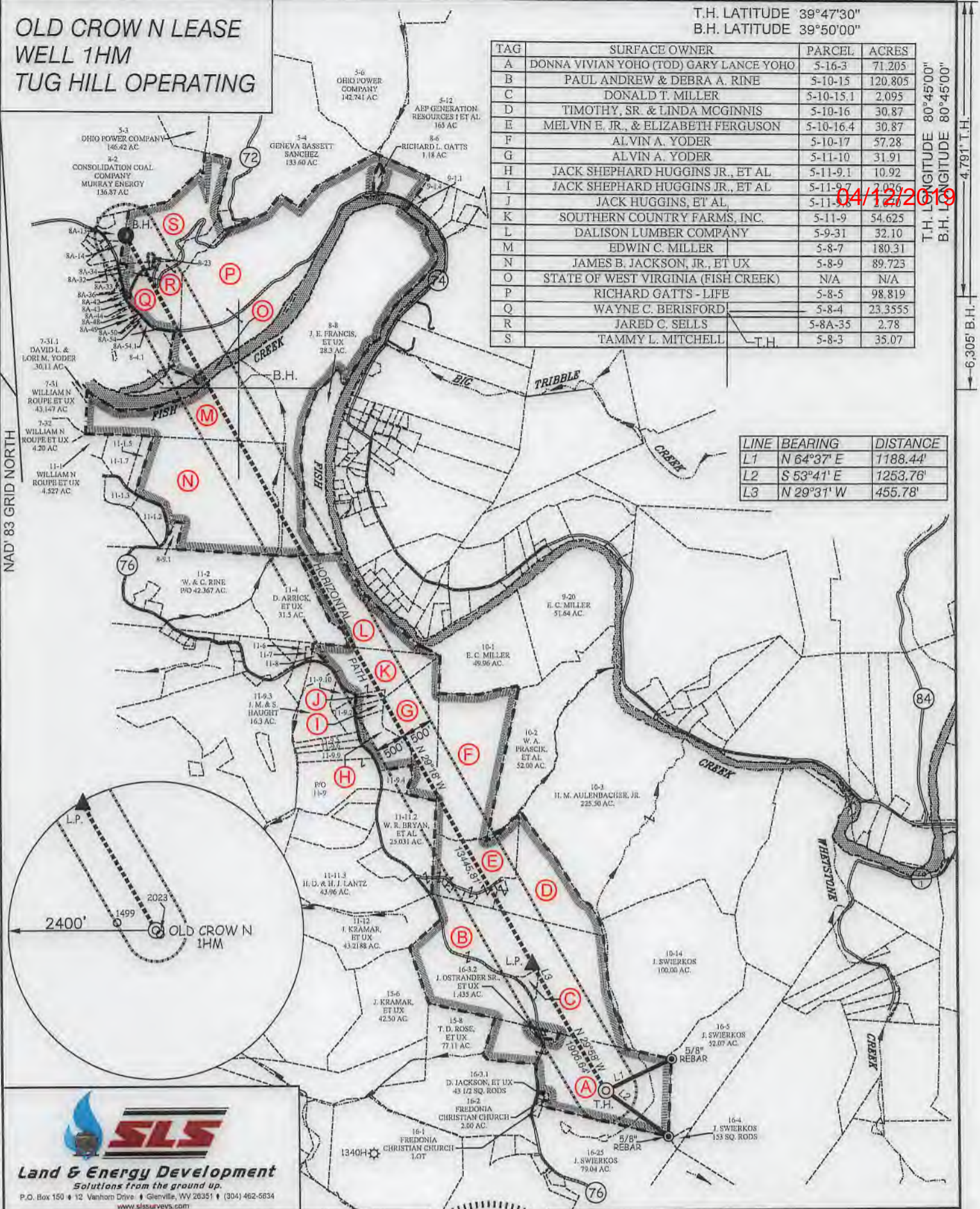
LINE	BEARING	DISTANCE
L1	N 64°37' E	1188.44'
L2	S 53°41' E	1253.76'
L3	N 29°31' W	455.78'

NAD'83 GRID NORTH

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

4,791' T.H.

6,305' B.H.



**SLS**  
Land & Energy Development  
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(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

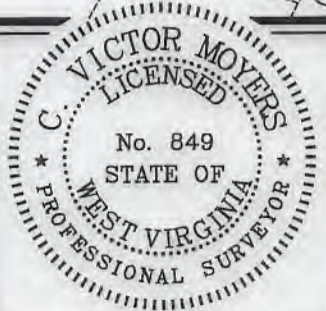
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P.S. *C. Victor Moyers*  
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**LEGEND**

- 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)

SCALE 1" = 2000' FILE NO. 8796P1HMR1.dwg  
 OLD CROW NORTH 1HM REV1  
 DATE JUNE 22, 2018  
 REVISED 08/23/2018, 1/17/2019  
 OPERATORS WELL NO. OLD CROW N-1HM  
 API WELL NO. 47-051-02189  
 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 CT CORPORATION SYSTEM ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313