

9,727' B.H. A.D.

3,632' T.H. A.D.

**OLD CROW S LEASE
WELL 13HM
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. 468,130.93 E. 1,613,566.48
NAD'83 GEO. LAT-(N) 39.778409 LONG-(W) 80.762922
NAD'83 UTM (M) N. 4,403,190.10 E. 520,302.21

LANDING POINT

NAD'83 S.P.C.(FT) N. 470,803.7 E. 1,615,322.4
NAD'83 GEO. LAT-(N) 39.785813 LONG-(W) 80.756808
NAD'83 UTM (M) N. 4,404,013.3 E. 520,823.6

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 464,043.1 E. 1,619,126.0
NAD'83 GEO. LAT-(N) 39.767400 LONG-(W) 80.742941
NAD'83 UTM (M) N. 4,401,973.0 E. 522,016.8

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 AULENBACHER	3.554
5-10-21	LOUIS AULENBACHER	3.677
5-10-22	LOUIS AULENBACHER	6.461
5-17-1.6	LOLA M. SLAUGHTER	6.347
5-17-3.1	WILBUR L. RIDDLE, ET UX	10.148
5-17-16	GLEN A. GUNTO	9.702

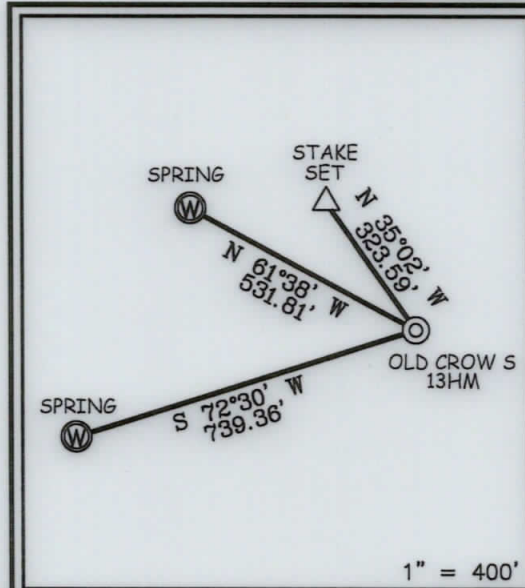
T.H.
A.D.

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 & TOPO MARK SCALE IS 1"=2000'
- AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.

B.H.
A.D.

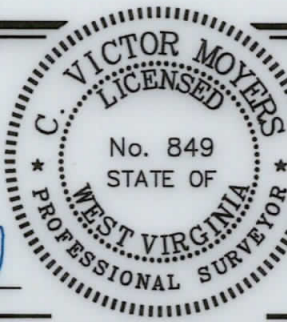
REFERENCES



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
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. 849 *C. Victor Moyers*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JUNE 10, 20 20
REVISED _____, 20 ____
OPERATORS WELL NO. OLD CROW S-13HM
API WELL NO. 47 - 051 - 2168
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P13HMAD.dwg
OLD CROW NORTH 13HM REV0

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 X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1,265' 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 X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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: 6,706' / TMD: 15,817'

COUNTY NAME
PERMIT

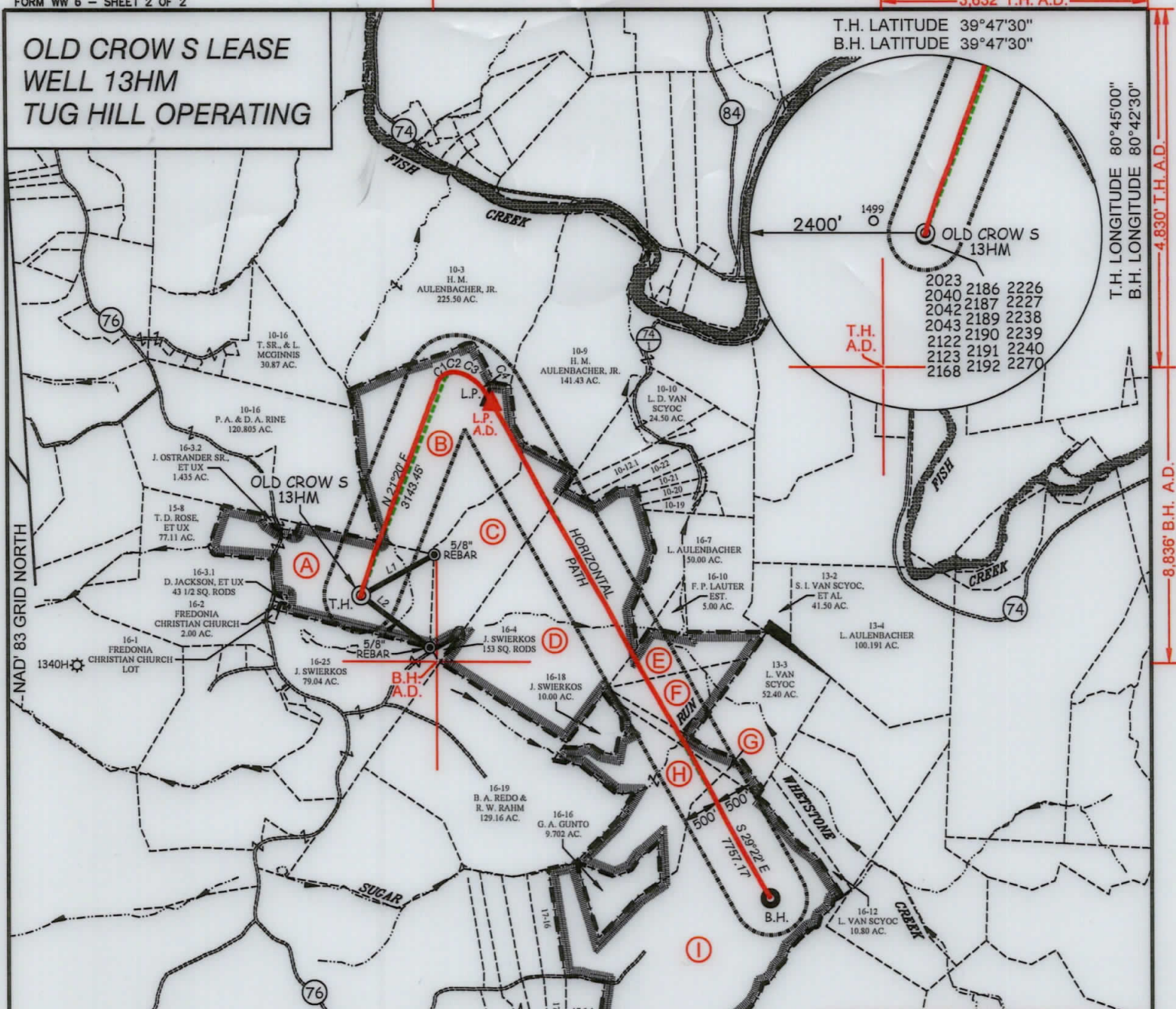
WELL OPERATOR TUG HILL OPERATING, LLC ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107
DESIGNATED AGENT DIANNA STAMPER CT CORPORATION SYSTEM ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

08/27/2021

**OLD CROW S LEASE
WELL 13HM
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"
4,830' T.H. A.D.
8,836' B.H. A.D.



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	138.03'	187.25'	N 43°03' E	134.93'
C2	112.35'	196.39'	N 84°33' E	110.83'
C3	221.47'	453.61'	S 62°53' E	219.28'
C4	342.81'	966.18'	S 39°07' E	341.02'

AS DRILLED COORDINATES FOR WELL NO. 13HM

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

NAD'83 S.P.C.(FT)	N. 468,130.93	E. 1,613,566.48
NAD'83 GEO.	LAT-(N) 39.778409	LONG-(W) 80.762922
NAD'83 UTM (M)	N. 4,403,190.10	E. 520,302.21

LANDING POINT

NAD'83 S.P.C.(FT)	N. 470,743.8	E. 1,615,361.4
NAD'83 GEO.	LAT-(N) 39.785650	LONG-(W) 80.756666
NAD'83 UTM (M)	N. 4,403,995.3	E. 520,835.8

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 464,046.3	E. 1,619,127.4
NAD'83 GEO.	LAT-(N) 39.767409	LONG-(W) 80.742936
NAD'83 UTM (M)	N. 4,401,974.0	E. 522,017.2

LEGEND

AS DRILLED ———

PROPOSED - - - - -

LINE	BEARING	DISTANCE
L1	N 61°08' E	1138.55'
L2	S 53°02' E	1168.22'

TAG	SURFACE OWNER	PARCEL	ACRES
A	DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO	5-16-3	71.205
B	JOHN SWIERKOS	5-10-14	100.00
C	JOHN SWIERKOS	5-16-5	52.07
D	JOHN SWIERKOS	5-16-6	134.05
E	LOUIS AULENBACHER	5-16-8	21.00
F	LOUIS AULENBACHER	5-16-9	20.00
G	GERTRUDE HOLTZ	5-16-11	9.93
H	CARA DAVIS & BRIAN TESLOVICH, ET AL	5-16-17	55.34
I	SOUTHERN COUNTRY FARMS, INC.	5-17-3	190.132



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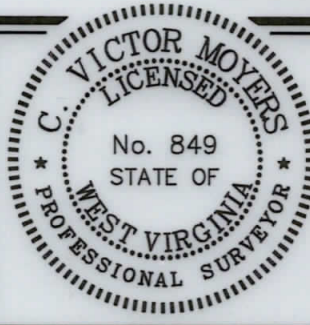
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(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

P.S. 849 *C. Victor Moyers*

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. 8796P13HMAD.dwg
OLD CROW NORTH 13HM REV0
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REVISED, 20
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API WELL NO. 47 - 051 - 2168
NO. STATE COUNTY PERMIT

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DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

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CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

WELL OPERATOR TUG HILL OPERATING, LLC
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FORT WORTH, TX 76107

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