

← 3,636' T.H. A.D. → 1,232' B.H. A.D. →

**OLD CROW S LEASE  
WELL 9HM  
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. 468,107.27	E. 1,613,561.45
NAD'83 GEO.	LAT-(N) 39.778344	LONG-(W) 80.762938
NAD'83 UTM (M)	N. 4,403,182.87	E. 520,300.80
<u>LANDING POINT</u>		
NAD'83 S.P.C.(FT)	N. 469,784.1	E. 1,612,455.9
NAD'83 GEO.	LAT-(N) 39.782904	LONG-(W) 80.766956
NAD'83 UTM (M)	N. 4,403,688.1	E. 519,955.5
<u>BOTTOM HOLE</u>		
NAD'83 S.P.C.(FT)	N. 463,689.1	E. 1,615,889.9
NAD'83 GEO.	LAT-(N) 39.766305	LONG-(W) 80.754435
NAD'83 UTM (M)	N. 4,401,848.7	E. 521,032.7

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



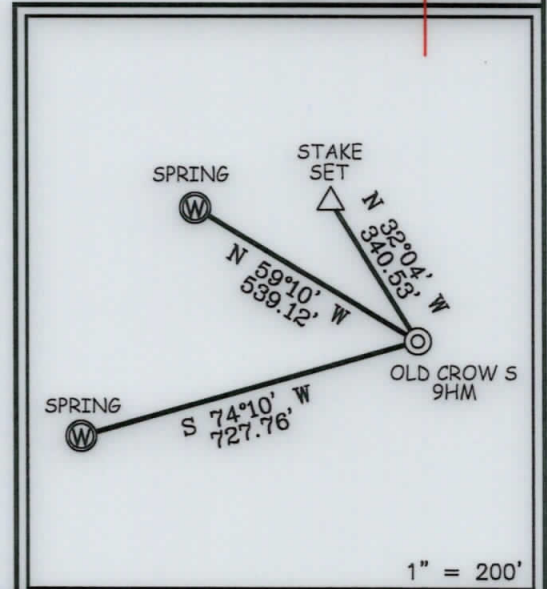
9,228' B.H. A.D.

4,854' T.H. A.D.

**NOTES ON SURVEY**

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

**REFERENCES**

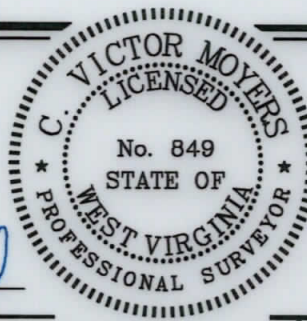


12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634  
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
slswv.com

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*



STATES TOPOGRAPHIC MAPS.

DATE JUNE 10, 20 20

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

OPERATORS WELL NO. OLD CROW S-9HM

API WELL NO. 47 - 051 - 2023  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P9HMAD.dwg  
SCALE 1" = 2000'

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

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 = 1,286.00' ELEVATION PROPOSED = 1,265.49' 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: LEASE NO. SEE WW-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 MARCELLUS  
ESTIMATED DEPTH TVD: 6,681' / TMD: 14,723'

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

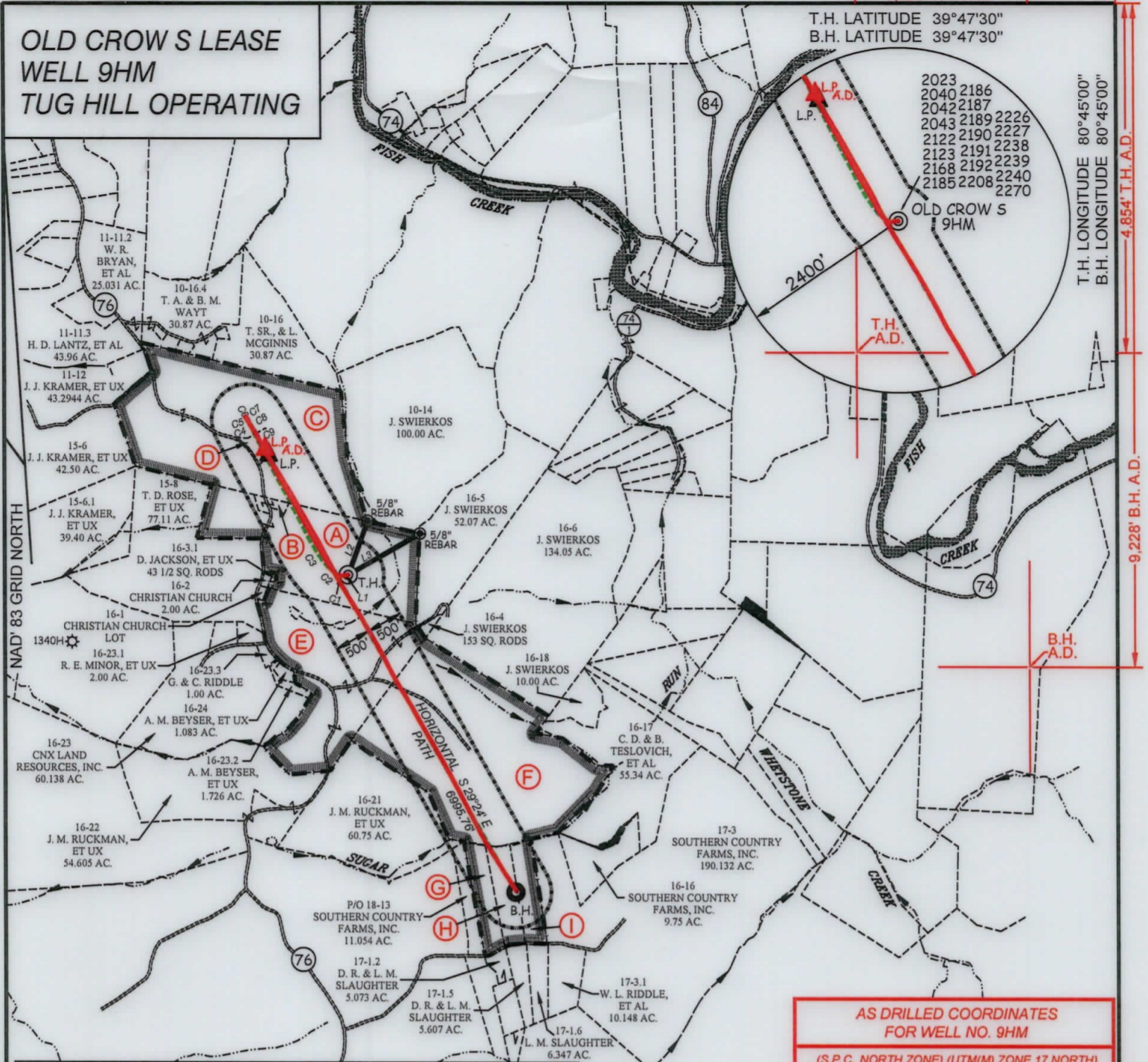
DESIGNATED AGENT DIANNA STAMPER CT CORPORATION SYSTEM  
ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME

PERMIT

08/27/2021

**OLD CROW S LEASE  
WELL 9HM  
TUG HILL OPERATING**



2023 2186  
2042 2187  
2043 2189 2226  
2122 2190 2227  
2123 2191 2238  
2168 2192 2239  
2185 2208 2240  
2270

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

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

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	90.31'	161.12'	N 80°51' W	89.14'
C2	156.71'	440.01'	N 53°02' W	155.88'
C3	450.41'	1762.86'	N 34°19' W	449.19'
C4	128.44'	2933.94'	N 26°35' W	128.43'
C5	29.88'	173.65'	N 21°04' W	29.85'
C6	2.97'	1.17'	N 70°12' E	2.23'
C7	21.19'	101.93'	S 39°12' E	21.15'
C8	60.08'	1418.18'	S 33°13' E	60.08'
C9	480.78'	12249.49'	S 30°20' E	480.75'

**AS DRILLED COORDINATES FOR WELL NO. 9HM**

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

NAD'83 S.P.C.(FT)	N. 468,107.27	E. 1,613,561.45
NAD'83 GEO.	LAT-(N) 39.778344	LONG-(W) 80.762938
NAD'83 UTM (M)	N. 4,403,182.87	E. 520,300.80

**LANDING POINT**

NAD'83 S.P.C.(FT)	N. 469,867.5	E. 1,612,408.7
NAD'83 GEO.	LAT-(N) 39.783131	LONG-(W) 80.767128
NAD'83 UTM (M)	N. 4,403,713.3	E. 519,940.6

**BOTTOM HOLE**

NAD'83 S.P.C.(FT)	N. 463,699.0	E. 1,615,905.1
NAD'83 GEO.	LAT-(N) 39.766333	LONG-(W) 80.754381
NAD'83 UTM (M)	N. 4,401,851.8	E. 521,037.2

**LEGEND**

AS DRILLED ———

PROPOSED - - - - -

TAG	SURFACE OWNER	PARCEL	ACRES
A	DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO	5-16-3	71.205
B	JIMMY OSTRANDER, SR., ET UX	5-16-3.2	1.435
C	PAUL ANDREW & DEBRA A. RINE	5-10-15	120.805
D	DONALD T. MILLER	5-10-15.1	2.095
E	JOHN SWIERKOS	5-16-25	79.04
F	BETHANY A. REDO & ROBERT W. RAHM	5-16-19	129.16
G	GLEN GUNTO	5-17-15	10.220
H	GLEN GUNTO	5-16-15.1	10.170
I	GLEN GUNTO	5-17-16	9.702

LINE	BEARING	DISTANCE
L1	S 80°57' W	62.62'
L2	N 20°00' E	798.12'
L3	N 60°14' E	1154.52'



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slsww.com



(+) 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 00-00

SURFACE OWNER (SEE TABLE) ⊙

LEASE # (SEE WW-6A1) ⊙

SCALE 1" = 2000' FILE NO. 8796P9HMD.dwg

DATE JUNE 10, 20 20

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

OPERATORS WELL NO. OLD CROW S-9HM

API WELL NO. 47 — 051 — 2023

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 DIANNA STAMPER  
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD  
FORT WORTH, TX 76107 CHARLESTON, WV 25313