

8,648' B.H. A.D.

3,623' T.H. A.D.

**OLD CROW S LEASE
WELL 14HM
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. 468,122.95	E. 1,613,575.44
NAD'83 GEO.	LAT-(N) 39.778387	LONG-(W) 80.762889
NAD'83 UTM (M)	N. 4,403,187.72	E. 520,304.98

LANDING POINT

NAD'83 S.P.C.(FT)	N. 470,949.3	E. 1,616,099.7
NAD'83 GEO.	LAT-(N) 39.786243	LONG-(W) 80.754049
NAD'83 UTM (M)	N. 4,404,061.6	E. 521,059.6

BOTTOM HOLE

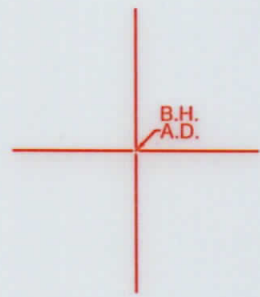
NAD'83 S.P.C.(FT)	N. 463,637.7	E. 1,620,209.3
NAD'83 GEO.	LAT-(N) 39.766328	LONG-(W) 80.739068
NAD'83 UTM (M)	N. 4,401,855.0	E. 522,348.9

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°42'30"
4,838' T.H. A.D.

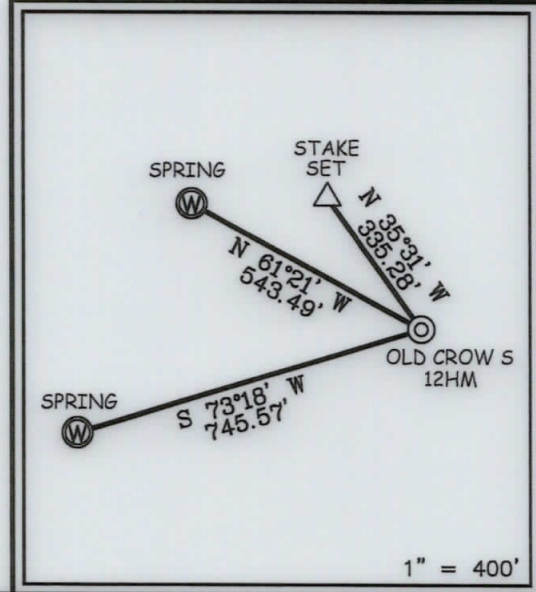
MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
5-10-5	WILLIAM F. RULONG, ET AL	27.50
5-10-6	WILLIAM F. RULONG, ET AL	P/O ACRE
5-10-7	WILLIAM F. RULONG, ET AL	22.872
5-10-8	WILLIAM F. RULONG, ET AL	70.6672
5-10-11	JOSEPH LEE CROW	P/O PCL 5
5-10-13.1	DAVID LEE QUIGLEY, JR.	2.88
5-10-19	BRADLEY L. & CONNIE L. HUBBARD	3.209
5-10-20	LOUIS AULENBACHER	3.554
5-10-21	LOUIS AULENBACHER	3.677
5-16-4	JOHN SWIERKOS	153 SQ. RODS
5-17-1.6	LOLA M. SLAUGHTER	6.347
5-17-3.1	WILBUR L. RIDDLE, ET UX	10.148
5-17-16	GLEN GUNTO	9.702

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.



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-14HM
API WELL NO. 47 - 051 - 2185
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P14HMAD.dwg
OLD CROW NORTH 14HM 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 08/27/2021

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: 6,713' / TMD: 16,690'

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

8,648' B.H. A.D.

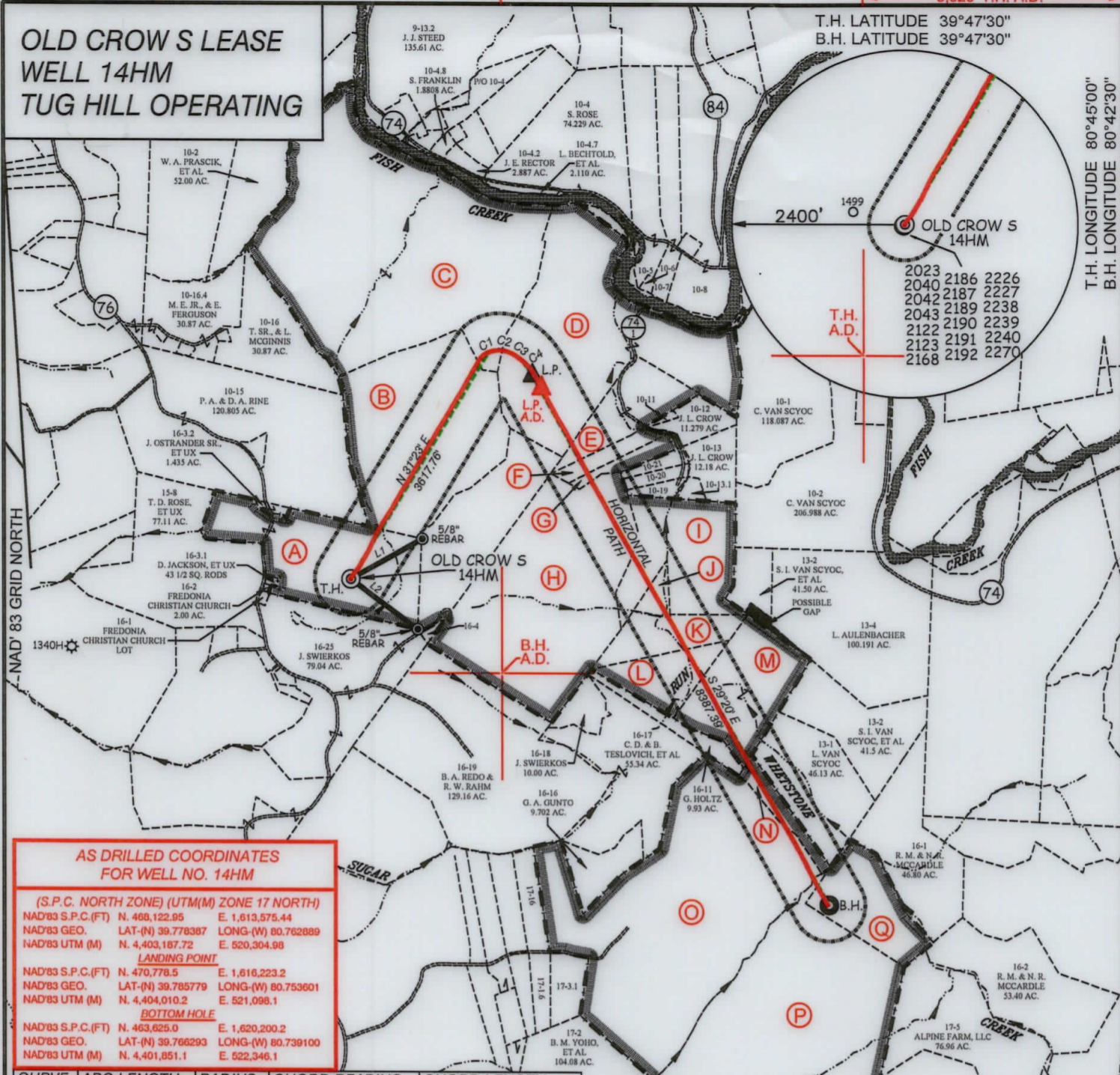
3,623' T.H. A.D.

**OLD CROW S LEASE
WELL 14HM
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"

NAD'83 GRID NORTH



**AS DRILLED COORDINATES
FOR WELL NO. 14HM**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)			
NAD'83 S.P.C.(FT)	N. 468,122.95	E. 1,613,575.44	
NAD'83 GEO.	LAT-(N) 39.778387	LONG-(W) 80.762889	
NAD'83 UTM (M)	N. 4,403,187.72	E. 520,304.98	
LANDING POINT			
NAD'83 S.P.C.(FT)	N. 470,778.5	E. 1,616,223.2	
NAD'83 GEO.	LAT-(N) 39.785779	LONG-(W) 80.753601	
NAD'83 UTM (M)	N. 4,404,010.2	E. 521,098.1	
BOTTOM HOLE			
NAD'83 S.P.C.(FT)	N. 463,625.0	E. 1,620,200.2	
NAD'83 GEO.	LAT-(N) 39.766293	LONG-(W) 80.739100	
NAD'83 UTM (M)	N. 4,401,851.1	E. 522,346.1	

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	181.65'	208.67'	N 58°41' E	175.96'
C2	173.36'	301.51'	S 79°17' E	170.98'
C3	214.70'	640.66'	S 54°20' E	213.70'
C4	247.69'	941.84'	S 36°58' E	246.97'

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	HERBERT M. AULENBACHER, JR.	5-10-3	225.50
D	HERBERT M. AULENBACHER, JR.	5-10-9	141.43
E	LOUIS DELBERT VAN SCYOC	5-10-10	24.50
F	JOHN PAUL SMITH, JR., ET AL	5-10-12.1	8.86
G	LOUIS AULENBACHER	5-10-22	6-4.61
H	JOHN SWIERKOS	5-16-6	134.05
I	LOUIS AULENBACHER	5-16-7	50.00
J	FRANK P. LAUTER EST.	5-16-10	5.00
K	LOUIS AULENBACHER	5-16-8	21.00
L	LOUIS AULENBACHER	5-16-9	20.00
M	LOUIS VAN SCYOC	9-13-3	52.40
N	LOUIS VAN SCYOC	5-16-12	10.80
O	SOUTHERN COUNTRY FARMS, INC.	5-17-3	190.132
P	ALPINE FARM LLC	5-17-4	212.00
Q	DAVID ALAN RUBCICH, ET AL	5-16-13	33.31

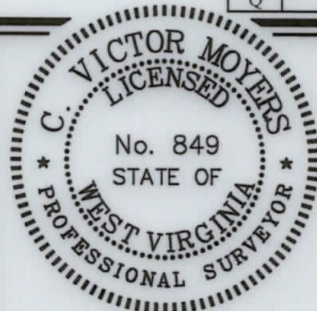
LEGEND



LINE	BEARING	DISTANCE
L1	N 60°34' E	1134.62'
L2	S 53°05' E	1156.27'



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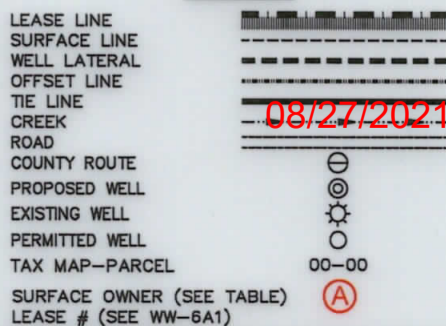


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LEGEND



SCALE 1" = 2000' FILE NO. 8796P14HMAD.dwg
OLD CROW NORTH 14HM REV0

DATE JUNE 10, 20 20
REVISED, 20

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API WELL NO. 47 — 051 — 2185
STATE COUNTY PERMIT

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



COUNTY NAME
PERMIT

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

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

08/27/2021