

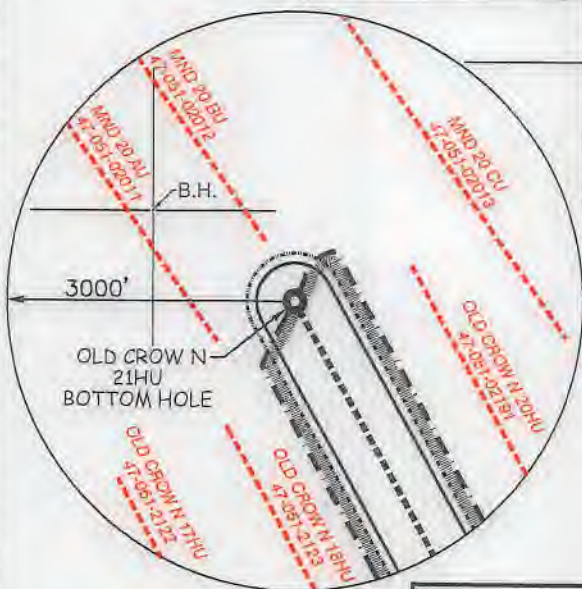
**OLD CROW N LEASE  
UTICA UNIT - 484.05 AC ±  
WELL 21HU  
TUG HILL OPERATING**

T.H. LATITUDE 39°47'30"  
B.H. LATITUDE 39°50'00"

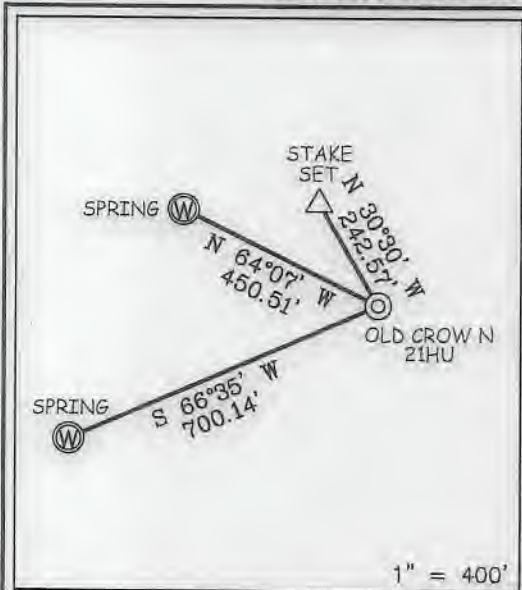
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C.(FT)	N. 468,186.86	E. 1,813,503.81
NAD'83 GEO.	LAT-(N) 39.778560	LONG-(W) 80.763147
NAD'83 UTM (M)	N. 4,403,206.82	E. 520,282.83
<b>LANDING POINT</b>		
NAD'83 S.P.C.(FT)	N. 469,885.5	E. 1,815,936.4
NAD'83 GEO.	LAT-(N) 39.782767	LONG-(W) 80.754567
NAD'83 UTM (M)	N. 4,403,675.8	E. 521,018.3
<b>BOTTOM HOLE</b>		
NAD'83 S.P.C.(FT)	N. 481,866.1	E. 1,809,172.2
NAD'83 GEO.	LAT-(N) 39.815942	LONG-(W) 80.779251
NAD'83 UTM (M)	N. 4,407,352.2	E. 518,893.6

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
5-9-4.3	HARRY E. JR. & MICHELA KARR	1.471
5-9-4.5	DYLAN AULENBACHER	0.991
5-9-4.7	FRANCIS D. BARR, ET UX	0.481
5-9-4.9	THOMAS MIDCAP, ET UX	0.375
5-9-4.11	GARY PORTER	1.00
5-9-4.12	SAMUEL L. & DEBRA N. CANTERBURY	0.650
5-9-4.13	SAMUEL LEE CANTERBURY, ET UX	0.9284
5-9-4.16	SAMUEL L. & DEBRA N. CANTERBURY	0.517
5-9-13	KAREN M. KAZEMKA (N.K.A. KAREN M. WILSON)	3.69
5-9-14	DENNIS P. CADMUS	136 POLES
5-9-15	DENNIS P. CADMUS	3.85
5-9-16	SHEENA ROSE	1.65
5-9-17	DENNIS P. CADMUS	28.063
5-9-28	WILLIAM N. & DELORES E. MCDONOUGH - LIFE	4.01
5-9-29	JAMES M. & ROBERTA L. STERN	3.1777
5-9-30	MATTHEW B. GRIFFITH	2.708
5-9-30.1	DAVID JR. & MELISSA LOVE	2.518
5-9-30.3	MATTHEW B. GRIFFITH	0.82
5-9-32	MILLARD JUNIOR BONNETTE, ET UX	2.321
5-9-32.3	RUBY M. HENRY ESTATE	0.552
5-9-32.4	DAVID D. & CHRISTINE S. DANIELS	1.025
5-9-32.5	GARNET D. MIDCAP	270'x390'
5-9-32.8	TIMOTHY Q. HOYT, ET UX	0.711
5-9-32.10	TIMOTHY Q. HOYT, ET UX	0.588
5-9-32.11	TIMOTHY Q. HOYT, ET UX	1.717
5-9-32.12	JOHN DRAKE ALBAUGH	1.09
5-9-33.1	KEITH D. & BEVERLY A. DANIELS	1.00
5-9-33.2	KEITH D. & BEVERLY A. DANIELS	1.534
5-9-33.4	DAVID D. & CHRISTINE S. DANIELS	1.025
5-9-36	FRANK T. & ANNA M. WALKER	1.55
5-9-37	FRANK T. & ANNA M. WALKER	10.857
5-9-38	SHIRLEY A. HILL ESTATE	3.331
5-9-38.10	ROBERT S. COWGILL	0.920
5-9-40	SHIRLEY A. HILL ESTATE	3.92
5-10-4.2	JACK E. RECTOR	2.887
5-10-4.3	ANTHONY A. & KAREN L. ANKROM	5.697
5-10-4.7	LINDA BECHTOLD, ET AL	2.110
5-10-4.8	SAMUEL FRANKLIN	1.8808
5-10-4.9	JAMES E. KAREN M. WILSON	0.8692
5-10-4.10	SHEENA ROSE	0.803
5-10-4.11	JASON E. BONNETTE	1.50
5-10-11	JOSEPH LEE CROW	LOT
5-10-19	BRADLEY L. & CONNIE L. HUBBARD	3.209
5-10-20	LOUIS AULENBAUCHER	3.554
5-10-21	LOUIS AULENBAUCHER	3.667



**REFERENCES**



**NOTES ON SURVEY**

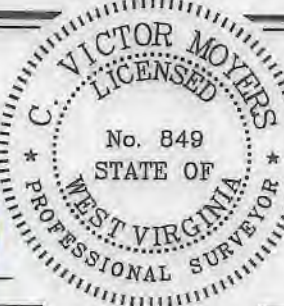
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 825' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOP MARK SCALE ARE 1"=2000'
- PROPOSED LATERAL OR TOP HOLE OF PROPOSED OLD CROW N-21HU IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF EXISTING WELLS: BRYAN N 13HU (47-051-02030), BRYAN N 14HU (47-051-02031), OLD CROW N-17HU (47-051-02122), OLD CROW N-18HU (47-051-02123), OLD CROW N-20HU (47-051-02191), MND20 AU (47-051-02011), MND20 BU (47-051-02012), MND20 CU (47-051-02013), & MND20 DU (47-051-02014).
- THE ASSESSMENT OF THE 1/10 ACRE LOT, OWNED BY JASON J. STEED AND DESCRIBED AS THE SECOND PARCEL IN DEED BOOK 643 PAGE 319 AND CORRECTIVE DEED 843 PAGE 300, IS NOT CURRENTLY ACCOUNTED FOR WITHIN THE 135.61 ACRE ASSESSMENT OF SURFACE TAX MAP 5-9-13.2
- THIS PLAT WAS CREATED FOR REVISED BOREHOLE PERMIT.
- MINIMUM OFFSET SPACING REQUIREMENTS EXEMPTED BY WAIVER WITH THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS AND OFFSET LEASEHOLDER AGREEMENTS AS PROVIDED BY TUG HILL OPERATING.



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  
slsvv.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 FEBRUARY 28, 20 20  
REVISED AUGUST 3, 2020  
OPERATORS WELL NO. OLD CROW N-21HU  
API WELL NO. 47-051-02335 *HBA*  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P21HUR.dwg  
OLD CROW NORTH 21HU 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  INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: GROUND = 1,286.80' 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 - SEE ADDITIONAL SHEETS 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 POINT PLEASANT ESTIMATED DEPTH TVD: 11,613' / TMD: 26,673'

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

T.H. LONGITUDE 80°45'00"  
B.H. LONGITUDE 80°45'00"  
4,775' T.H.  
6,335' B.H.



**OLD CROW N LEASE  
UTICA UNIT - 484.05 AC ±  
WELL 21HU  
TUG HILL OPERATING**

T.H. LATITUDE 39°47'30"  
B.H. LATITUDE 39°50'00"

**LINE TABLE**

LINE	BEARING	DISTANCE
L1	N 75°57' E	225.35'
L2	N 69°48' W	1236.06'
L3	S 79°31' W	963.18'

NAD'83 GRID NORTH

TAG	SURFACE OWNER	PARCEL	ACRES
A	JOHN SWIERKOS	5-16-25	79.04
B	DONNA VIVIAN YOHO - TOD	5-16-3	71.205
C	JOHN SWIERKOS	5-10-14	100.00
D	JOHN SWIERKOS	5-16-5	52.07
E	JOHN SWIERKOS	5-16-6	134.05
F	LOUIS AULENBAUCHER	5-10-22	6.461
G	JOHN PAUL SMITH, JR. ET AL	5-10-12.1	8.86
H	LOUIS DELBERT VAN SCYOC	5-10-10	24.50
I	HERBERT M. AULENBAUCHER, JR.	5-10-9	141.43
J	HERBERT M. AULENBAUCHER, JR.	5-10-3	225.50
K	FISH CREEK-WV DIVISION OF NATURAL RESOURCES	N/A	N/A
L	JASON J. STEED	5-9-13.2	135.61
M	WILLIAM A. PRASCIK, ET AL	5-10-2	52.00
N	EDWIN C. MILLER	5-9-20	51.64
O	EDWIN C. MILLER	5-10-1	49.96
P	JOHN F. KAZEMKA	5-9-27	4.02
Q	EDWIN C. MILLER	5-9-26	1.00
R	ALBERT F. KAZEMKA	5-9-22	0.50
S	ALBERT F. KAZEMKA	5-9-21	100 PCL.
T	MARK S. STOCKLASK	5-9-17.1	1.187
U	MALCOMB H. BROWNLEE, ET AL	5-9-18	25,300 SQ FT
V	DENNIS P. CADMUS	5-9-42	5.42
W	MARK STEPHEN STOCKLASK	5-9-19	2.38
X	DELBERT K. & LINDA K. MYERS	5-9-23	7.00
Y	DELBERT K. & LINDA K. MYERS	5-9-25	14.49
Z	DENNIS P. CADMUS	5-9-24	21AC 49P
AA	DENNIS P. CADMUS	5-9-39	9.50
BB	KEITH D. DANIELS, ET UX	5-9-33	40.331
CC	LLOYD C. & JUDITH C. ARNOLD	5-9-41	93.00
DD	LLOYD C. & JUDITH C. ARNOLD	5-9-4	18.854
EE	SAMUEL L. CANTERBURY, ET UX	5-9-4.19	2.078
FF	SAMUEL L. CANTERBURY, ET UX	5-9-4.17	0.500
GG	PAUL G. BROWN	5-9-4.18	0.657
HH	PAUL G. BROWN	5-9-4.15	0.500
II	PAUL G. BROWN	5-9-4.14	0.500
JJ	DEBORAH S. MIDCAP	5-9-4.10	0.819
KK	LLOYD C. & JUDITH C. ARNOLD	5-9-35	47.00
LL	THOMAS MIDCAP, ET UX	5-9-4.8	0.376
MM	GEORGE F. MINOR, ET AL - LIFE	5-9-35.1	0.641
NN	JAMES R. LEGG ESTATE	5-9-2	23.141
OO	KENNETH E. WHITE, ET UX	5-9-2.2	0.359
PP	JEFFREY L. LEGG ESTATE	5-9-2.1	20.5
QQ	EDWIN C. MILLER	5-8-7	180.31



**SLS**  
FROM THE GROUND UP

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254 East Beckley Bypass | Beckley, WV 25601 | 304.255.5296

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P.S. 849 *C. Victor Moyers*

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

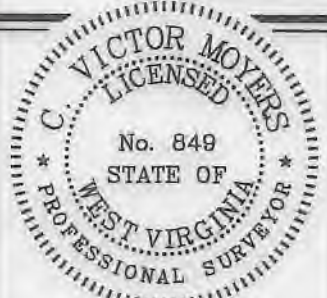
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**LANDING POINT**

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**BOTTOM HOLE**

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NAD'83 UTM (M)	N. 4,407,382.2	E. 518,893.6




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

**LEGEND**

UNIT BOUNDARY	
LEASED TRACTS INSIDE	
UNIT BOUNDARY	
SURFACE LINE	
PROPOSED UTICA	
WELL LATERAL	
400' OFFSET LINE	
500' OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
PROPOSED FIRST TAKE POINT	● FTP
PROPOSED LAST TAKE POINT	● LTP
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
SURFACE OWNER (SEE TABLE)	
LEASE # (SEE ADDITIONAL SHEETS)	

SCALE 1" = 2000' FILE NO. 8796P21HUR.dwg  
OLD CROW NORTH 21HU REV0  
DATE FEBRUARY 28, 2020  
REVISED AUGUST 3, 2020  
OPERATORS WELL NO. OLD CROW N-21HU  
API WELL 47-051-02011-0233546A  
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 FORT WORTH, TX 76107	ADDRESS	5400 D BIG TYLER ROAD CHARLESTON, WV 25313

**CURVE TABLE**

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	7.86'	43.84'	N 83°34' E	7.85'
C2	101.88'	622.72'	N 79°44' E	101.77'
C3	550.42'	3343.70'	N 69°15' E	549.80'
C4	353.71'	856.34'	N 51°57' E	351.21'
C5	241.72'	654.77'	N 29°14' E	240.35'
C6	317.07'	619.32'	N 03°05' E	313.62'
C7	424.53'	1301.08'	N 20°01' W	422.65'

COUNTY NAME  
PERMIT



**OLD CROW N LEASE  
UTICA UNIT - 484.05 AC±  
WELL 21HU  
TUG HILL OPERATING**



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 26801 | 304.255.5296

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No.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Book/Page	
1	10*21468	A	5-16-25	JOHN A SWIERKOS	953	317
2	10*19340	B	5-16-3	DONNA V YOHO	665	407
3	10*14920	C	5-10-14	CHESTNUT HOLDINGS INC	836	119
4	10*14919	D	5-16-5	CHESTNUT HOLDINGS INC	836	117
5	10*21468	E	5-16-6	JOHN A SWIERKOS	953	317
6	10*18396	F	5-10-22	LOUIS AULENBACHER	932	468
7	10*21468	G	5-10-12.1	JOHN A SWIERKOS	953	317
8	10*21468	H	5-10-10	JOHN A SWIERKOS	953	317
9	10*19249	I	5-10-9	HERBERT M AULENBACHER	914	551
10	10*14918	J	5-10-3	CHESTNUT HOLDINGS INC	836	115
11	Q091960000	K	FISH CREEK	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	865	558
12	10*47051.170.0	L	5-9-13.2	JASON J STEED	865	344
13	10*47051.260.0	M	5-10-2	WILLIAM A PRASCIC ET AL	879	302
14	10*47051.127.1	N	5-9-20	EDWIN C MILLER AND KIMBERLY ANN MILLER	885	61
15	10*18970	O	5-10-1	DONALD E BERISFORD	941	287
16	10*17512	P	5-9-27	BONNIE LOU POSTLEWAIT	917	68
17	10*17512	Q	5-9-26	BONNIE LOU POSTLEWAIT	917	68
18	10*17512	R	5-9-22	BONNIE LOU POSTLEWAIT	917	68
19	10*18796	S	5-9-21	DWG OIL & GAS ACQUISITIONS LLC	938	476
20	10*18796	T	5-9-17.1	DWG OIL & GAS ACQUISITIONS LLC	938	476
21	10*18796	U	5-9-18	DWG OIL & GAS ACQUISITIONS LLC	938	476
22	10*18796	V	5-9-42	DWG OIL & GAS ACQUISITIONS LLC	938	476
23	10*18796	W	5-9-19	DWG OIL & GAS ACQUISITIONS LLC	938	476
24	10*17512	X	5-9-23	BONNIE LOU POSTLEWAIT	917	68
25	10*17512	Y	5-9-25	BONNIE LOU POSTLEWAIT	917	68
26	CVX935271	Z	5-9-24	CHARLES W. MILLER	853	59
27	CVX935271	AA	5-9-39	CHARLES W. MILLER	853	59
28	10*27025	BB	5-9-33	STONE HILL MINERALS HOLDINGS LLC	1034	626
29	10*26046	CC	5-9-41	ARNOLD LLOYD C ET UX	915	628
30	CVX939752	DD	5-9-4	LLOYD C ARNOLD AND JUDITH C ARNOLD	915	582
31	CVX936589	EE	5-9-4.19	LLOYD C. ARNOLD AND JUDITH C ARNOLD	863	511
32	CVX936589	FF	5-9-4.17	LLOYD C. ARNOLD AND JUDITH C ARNOLD	863	511
33	CVX936589	GG	5-9-4.18	LLOYD C. ARNOLD AND JUDITH C ARNOLD	863	511
34	CVX936589	HH	5-9-4.15	LLOYD C. ARNOLD AND JUDITH C ARNOLD	863	511
35	CVX936589	II	5-9-4.14	LLOYD C. ARNOLD AND JUDITH C ARNOLD	863	511
36	CVX868468	JJ	5-9-4.10	DEBORAH S. MIDCAP	737	260
37	CVX935273	KK	5-9-35	PAUL PARSONS ET UX	853	430
38	CVX868688	LL	5-9-4.8	THOMAS E. MIDCAP FRED A M MIDCAP	738	482
39	CVX935271	MM	5-9-35.1	CHARLES W. MILLER	853	59
40	Q081124002	NN	5-9-2	JAMES REDMAN LEGG II ET AL	879	580
41	Q080154002	OO	5-9-2.2	KENNETH EUGENE WHITE AND LESLIE A WHITE	879	577
42	Q081123002	PP	5-9-2.1	JEFFREY L LEGG	879	575
43	10*21546	QQ	5-8-7	EDWIN C MILLER AND KIMBERLY ANN MILLER	957	257

FILE NO. 8796P21HUR.dwg  
OLD CROW NORTH 21HU REV0

DATE FEBRUARY 28, 20 20

REVISED AUGUST 3, 2020

OPERATORS WELL NO. OLD CROW N-21HU

API WELL NO. 47 — 051 — 02335 H6A  
STATE COUNTY PERMIT



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



P.S. 849 *C. Victor Moyers*

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

COUNTY NAME

PERMIT







**OLD CROW N LEASE  
UTICA UNIT - 484.05 AC ±  
WELL 21HU  
TUG HILL OPERATING**



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NO.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Book/Page
201	090332001	T	5-9-17-1	WILLIAM E MILLER AND KAREN S MILLER	860 538
202	090332002	T	5-9-17-2	LORETTA JEAN RIGGLE ET VIR	860 538
203	090332003	T	5-9-17-3	PATTY BERISFORD ET VIR	860 558
204	090332007	T	5-9-17-1	ROBERT RANDOLPH WOODBURN ET UX	860 568
205	10*18796	U	5-9-18	DWG OIL & GAS ACQUISITIONS LLC, et al	939 476
206	10*21814	U	5-9-18	CHARLES R STOCKTON AND BETTY M HUDSON	959 310
207	10*21473	U	5-9-18	MARY E BISHOP	957 232
208	10*21475	U	5-9-18	WOODROW N WARD AND HILDA A WARD	957 124
209	10*21478	U	5-9-18	CHILDRENS HOME SOCIETY OF WEST VIRGINIA	960 173
210	10*21547	U	5-9-18	GARY A MILLER AND MARCELLE T MILLER	952 370
211	10*21549	U	5-9-18	JEANNE M MILLER	952 386
212	10*21608	U	5-9-18	BONNIE LOU POSTLEWAIT	959 313
213	10*21719	U	5-9-18	ROBERT A MILLER	952 389
214	10*21835	U	5-9-18	KENNETH ALLEN AND CARLA JO ALLEN	962 572
215	10*21937	U	5-9-18	WHEELING SOCIETY FOR CRIPPLED CHILDREN JAY E PRAGER PRESIDENT	960 33
216	10*22044	U	5-9-18	MICHAEL A BISHOP	960 421
217	10*22045	U	5-9-18	DOUGLAS R BISHOP	961 417
218	10*22296	U	5-9-18	NOAH BAKER AND ALISA BAKER	962 200
219	10*22326	U	5-9-18	RACHEL SONDA AND SCOTT SONDA	962 532
220	10*22407	U	5-9-18	BRADLEY MURPHY	962 575
221	10*22430	U	5-9-18	DEBORAH VANVRANKEN	964 510
222	10*22451	U	5-9-18	GERALD L BISHOP III	964 32
223	10*22492	U	5-9-18	FAITH MARIE FREESTONE AND ERIC FREESTONE	972 50
224	10*22566	U	5-9-18	LAWRENCE EDWARD MURPHY AND JOAN MARIE MURPHY	966 628
225	10*22636	U	5-9-18	KENNETH A MILLER	964 233
226	10*22806	U	5-9-18	ROBERT B MURPHY AND LINDA MURPHY	966 469
227	10*22836	U	5-9-18	CHANDA WILSON AND DANIEL WILSON	966 226
228	10*23035	U	5-9-18	DEAN S CARR	977 364
229	10*23058	U	5-9-18	MICHAEL A MURPHY	1009 98
230	10*24888	U	5-9-18	ARTHUR LEE MILLER ET AL	1027 187
231	10*24984	U	5-9-18	JONATHAN BAKER	1027 558
232	10*25488	U	5-9-18	LINDA KAY MYERS	1030 118
233	10*25488	U	5-9-18	SANDRA AKA KATHERINE S PARDINI	1031 544
234	10*25488	U	5-9-18	LORETTA JEAN RIGGLE ET VIR	860 538
235	10*25488	U	5-9-18	PATTY BERISFORD ET VIR	860 558
236	10*25488	U	5-9-18	ROBERT RANDOLPH WOODBURN ET UX	860 568
237	10*25488	U	5-9-18	DWG OIL & GAS ACQUISITIONS LLC, et al	939 476
238	10*25488	U	5-9-18	CHARLES R STOCKTON AND BETTY M HUDSON	959 310
239	10*25488	U	5-9-18	MARY E BISHOP	957 232
240	10*25488	U	5-9-18	WOODROW N WARD AND HILDA A WARD	957 124
241	10*25488	U	5-9-18	CHILDRENS HOME SOCIETY OF WEST VIRGINIA	960 173
242	10*25488	U	5-9-18	GARY A MILLER AND MARCELLE T MILLER	952 370
243	10*25488	U	5-9-18	JEANNE M MILLER	952 386
244	10*25488	U	5-9-18	BONNIE LOU POSTLEWAIT	959 313
245	10*25488	U	5-9-18	ROBERT A MILLER	952 389
246	10*25488	U	5-9-18	KENNETH ALLEN AND CARLA JO ALLEN	962 572
247	10*25488	U	5-9-18	WHEELING SOCIETY FOR CRIPPLED CHILDREN JAY E PRAGER PRESIDENT	960 33
248	10*25488	U	5-9-18	MICHAEL A BISHOP	960 421
249	10*25488	U	5-9-18	DOUGLAS R BISHOP	961 417
250	10*25488	U	5-9-18	NOAH BAKER AND ALISA BAKER	962 200
251	10*25488	U	5-9-18	RACHEL SONDA AND SCOTT SONDA	962 532
252	10*25488	U	5-9-18	BRADLEY MURPHY	962 575
253	10*25488	U	5-9-18	DEBORAH VANVRANKEN	964 510
254	10*25488	U	5-9-18	GERALD L BISHOP III	964 32
255	10*25488	U	5-9-18	FAITH MARIE FREESTONE AND ERIC FREESTONE	972 50
256	10*25488	U	5-9-18	LAWRENCE EDWARD MURPHY AND JOAN MARIE MURPHY	966 628
257	10*25488	U	5-9-18	KENNETH A MILLER	964 233
258	10*25488	U	5-9-18	ROBERT B MURPHY AND LINDA MURPHY	966 469
259	10*25488	U	5-9-18	CHANDA WILSON AND DANIEL WILSON	966 226
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261	10*25488	U	5-9-18	MICHAEL A MURPHY	1009 98
262	10*25488	U	5-9-18	ARTHUR LEE MILLER ET AL	1027 187
263	10*25488	U	5-9-18	JONATHAN BAKER	1027 558
264	10*25488	U	5-9-18	LINDA KAY MYERS	1030 118
265	10*25488	U	5-9-18	SANDRA AKA KATHERINE S PARDINI	1031 544
266	10*25488	U	5-9-18	LORETTA JEAN RIGGLE ET VIR	860 538
267	10*25488	U	5-9-18	PATTY BERISFORD ET VIR	860 558
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279	10*25488	U	5-9-18	WHEELING SOCIETY FOR CRIPPLED CHILDREN JAY E PRAGER PRESIDENT	960 33
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282	10*25488	U	5-9-18	NOAH BAKER AND ALISA BAKER	962 200
283	10*25488	U	5-9-18	RACHEL SONDA AND SCOTT SONDA	962 532
284	10*25488	U	5-9-18	BRADLEY MURPHY	962 575
285	10*25488	U	5-9-18	DEBORAH VANVRANKEN	964 510
286	10*25488	U	5-9-18	GERALD L BISHOP III	964 32
287	10*25488	U	5-9-18	FAITH MARIE FREESTONE AND ERIC FREESTONE	972 50
288	10*25488	U	5-9-18	LAWRENCE EDWARD MURPHY AND JOAN MARIE MURPHY	966 628
289	10*25488	U	5-9-18	KENNETH A MILLER	964 233
290	10*25488	U	5-9-18	ROBERT B MURPHY AND LINDA MURPHY	966 469
291	10*25488	U	5-9-18	CHANDA WILSON AND DANIEL WILSON	966 226
292	10*25488	U	5-9-18	DEAN S CARR	977 364
293	10*25488	U	5-9-18	MICHAEL A MURPHY	1009 98
294	10*25488	U	5-9-18	ARTHUR LEE MILLER ET AL	1027 187
295	10*25488	U	5-9-18	JONATHAN BAKER	1027 558
296	10*25488	U	5-9-18	LINDA KAY MYERS	1030 118
297	10*25488	U	5-9-18	SANDRA AKA KATHERINE S PARDINI	1031 544
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299	10*25488	U	5-9-18	PATTY BERISFORD ET VIR	860 558
300	10*25488	U	5-9-18	ROBERT RANDOLPH WOODBURN ET UX	860 568

NO.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Book/Page
301	10*17512	X	5-9-23	BONNIE LOU POSTLEWAIT, et al	957 68
302	10*22044	X	5-9-23	MICHAEL A BISHOP	960 421
303	10*22296	X	5-9-23	NOAH BAKER AND ALISA BAKER	962 200
304	10*22326	X	5-9-23	RACHEL SONDA AND SCOTT SONDA	962 532
305	10*22407	X	5-9-23	BRADLEY MURPHY	962 575
306	10*22430	X	5-9-23	DEBORAH VANVRANKEN	964 510
307	10*22451	X	5-9-23	FAITH MARIE FREESTONE AND ERIC FREESTONE	972 50
308	10*22492	X	5-9-23	LAWRENCE EDWARD MURPHY AND JOAN MARIE MURPHY	966 628
309	10*22566	X	5-9-23	ROBERT B MURPHY AND LINDA MURPHY	966 469
310	10*22636	X	5-9-23	CHANDA WILSON AND DANIEL WILSON	966 226
311	10*23035	X	5-9-23	DEAN S CARR	977 364
312	10*23058	X	5-9-23	MICHAEL A MURPHY	1009 98
313	10*24888	X	5-9-23	ARTHUR LEE MILLER ET AL	1027 187
314	10*24984	X	5-9-23	JONATHAN BAKER	1027 558
315	10*25488	X	5-9-23	LINDA KAY MYERS	1030 118
316	10*25488	X	5-9-23	SANDRA AKA KATHERINE S PARDINI	1031 544
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318	090332002	X	5-9-23	PATTY BERISFORD ET VIR	860 558
319	090332007	X	5-9-23	ROBERT RANDOLPH WOODBURN ET UX	860 568
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324	10*22407	Y	5-9-25	BRADLEY MURPHY	962 575
325	10*22430	Y	5-9-25	DEBORAH VANVRANKEN	964 510
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330	10*23035	Y	5-9-25	DEAN S CARR	977 364
331	10*23058	Y	5-9-25	MICHAEL A MURPHY	1009 98
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333	10*24984	Y	5-9-25	JONATHAN BAKER	1027 558
334	10*25488	Y	5-9-25	LINDA KAY MYERS	1030 118
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358	10*17512	AA	6-9-24	BONNIE LOU POSTLEWAIT, et al	853 59
359	10*22044	AA	6-9-24	MICHAEL A BISHOP	960 421
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372	10*25488	AA	6-9-24	LINDA KAY MYERS	1030 118
373	10*25488	AA			



**OLD CROW N LEASE  
UTICA UNIT - 484.05 AC±  
WELL 21HU  
TUG HILL OPERATING**



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

NO.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Book/Page	
403	CVX935969	MM	5-9-35.1	TIMOTHY HUFF ET UX	864	47
404	CVX936053	MM	5-9-35.1	LLOYD C. ARNOLD ET UX	864	39
405	CVX936054	MM	5-9-35.1	MARY JO CRONIN	864	43
406	CVX936058	MM	5-9-35.1	RICHARD KURPILET UX	863	594
407	CVX936061	MM	5-9-35.1	CLARA MAE CLIFTON	853	426
408	CVX936062	MM	5-9-35.1	GEORGE EDWARDS ET UX	853	418
409	CVX936112	MM	5-9-35.1	DONNA FAE KYLE	853	449
410	CVX936113	MM	5-9-35.1	JUDITH MAY CONNER	853	445
411	CVX866958	MM	5-9-35.1	ANITA L. SLOUGH ET AL	696	7
412	CVX866959	MM	5-9-35.1	PAUL SCHEIBELHOOD ET AL	695	629
413	Q081124002	NN	5-9-2	JAMES REDMAN LEGG II ET AL	879	580
414	Q080154002	OO	5-9-2.2	KENNETH EUGENE WHITE AND LESLIE A WHITE	879	577
415	Q081123002	PP	5-9-2.1	JEFFREY L LEGG	879	575
416	10*21546	QQ	5-8-7	EDWIN C MILLER AND KIMBERLY ANN MILLER	957	257

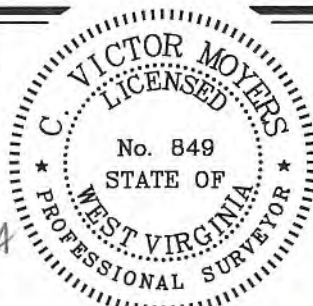
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Office of Oil and Gas

JUN 24 2020

WV Department of  
Environmental Protection

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FILE NO. 8796P21HU.dwg  
OLD CROW NORTH 19HU REV0  
DATE FEBRUARY 25, 20 20  
REVISED \_\_\_\_\_  
OPERATORS WELL NO. OLD CROW N-21HU  
API WELL NO. 47 — 051 — 0233546A  
STATE COUNTY PERMIT



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



P.S.  
849

*C. Victor Moyers*

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