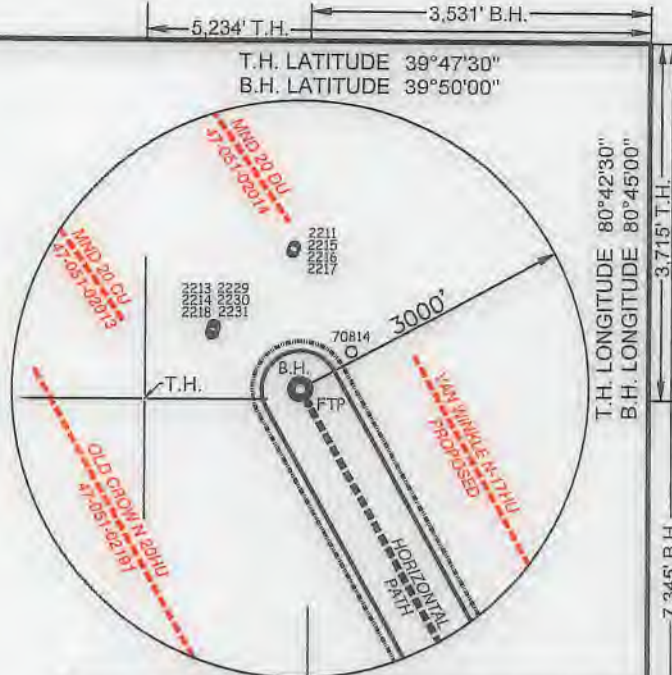


**HUNTER PETHTEL LEASE
UTICA UNIT - 468.51 AC±
VAN WINKLE N 16HU WELL
TUG HILL OPERATING**

TAG	SURFACE OWNER	PARCEL	ACRES
A	XCL MIDSTREAM OPERATING, LLC	9-13-5	190.12
B	LOUIS AULENBACHER	9-13-4	100.191
C	H & L EQUIPMENT LLC	9-13-4.1	0.449
D	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
E	JOHN E. & JANET E. KELLEY, ET AL	9-10-19	113.08
F	CAROL VAN SCYOC	9-10-2	206.988
G	CAROL VAN SCYOC	9-10-1	118.087
H	JOSEPH LEE CROW	5-10-13	12.18
I	JOSEPH LEE CROW	5-10-12	11.279
J	HERBERT M. AULENBACHER, JR.	5-10-9	141.43
K	JOSHUA A. & SHANNON N. HOYT	9-10-1.2	2.436
L	JOSHUA A. & SHANNON N. HOYT	9-10-20	9.942
M	WILLIAM F. RULONG, ET AL	5-10-8	70.6672
N	FINLEY D. MONTGOMERY, ET UX	9-10-1.3	20.294
O	SAMUEL D. & BECKY ROBINSON	5-10-8.1	1.511
P	WILLIAM F. RULONG, ET AL	5-10-6	P/O 1.00
Q	WILLIAM F. RULONG, ET AL	5-10-4.1	0.39
R	HISTORIC SCHOOL LOT (NOW IN WYDOH ROW)	N/A	N/A
S	WILLIAM F. RULONG, ET AL	5-10-7	22.872
T	WILLIAM F. RULONG, ET AL	5-10-5	27.5
U	SHEENA ROSE	5-10-4	74.229
V	ROBERT GREGORY MCGUIRE, ET UX	5-9-10	139.60
W	ROBERT GREGORY MCGUIRE, ET UX	5-9-12	78.28
X	SHEENA ROSE	5-10-4.12	20.07
Y	JASON J. STEED	5-9-13.2	135.61
Z	PATRICIA A. MCCLINTOCK N/K/A/ PATRICIA FRIEND	5-9-7	110.02
AA	PATRICIA A. MCCLINTOCK N/K/A/ PATRICIA FRIEND	5-9-6	101.00
BB	JAMES REDMAN LEGG II, ET AL	5-9-3	49.00
CC	PATRICIA A. MCCLINTOCK N/K/A/ PATRICIA FRIEND	5-9-5	22.5

PARCEL	SURFACE ADJOINER	ACRES
5-9-2	JAMES R. LEGG ESTATE	23.141
5-9-2.1	JEFFREY L. LEGG ESTATE	20.5
5-9-13	KAREN M. KAZEMKA (NKA KAREN M. WILSON)	3.69
5-9-14	DENNIS P. CADMUS	136 POLYBS
5-9-15	DENNIS P. CADMUS	3.85
5-9-16	SHEENA ROSE	1.65
5-9-17	DENNIS P. CADMUS	28.063
5-9-24	DENNIS P. CADMUS	21 AC. 49 P.
5-9-35	LLOYD C. & JUDITH C. ARNOLD	47.00
5-10-4.3	ANTHONY A. & KAREN L. ANGRIM	5.697
5-10-4.7	LINDA BECHTOLD, ET AL	2.110
5-10-10	LOUIS D. VAN SCYOC	24.50
5-10-11	JOSEPH L. CROW	LOT
5-10-12.1	JOHN PAUL SMITH	8.86
5-10-13.1	DAVID LEE QUIGLEY, JR	2.88
5-10-19	BRADLEY L. & CONNIE L. HUBBARD	3.509
5-10-20	LOUIS AULENBACHER	3.554
5-10-21	LOUIS AULENBACHER	3.677
5-10-22	LOUIS AULENBACHER	6.461
5-16-7	LOUIS AULENBACHER	39.00
9-10-1.1	CONNIE S. CUNNINGHAM	0.482
9-10-2.1	SHERBY VAN SCYOC YOCUM & BLAINE VAN SCYOC	5.00
9-10-2.2	WALTER J. BECAT, JR., ET UX	3.00
9-10-19.1	XCL MIDSTREAM OPERATING, LLC	10.00
9-10-21	JAMES & VICKIE J. MASON	2.00
9-10-22	JAMES & VICKIE J. MASON	1.169
9-13-7	MARY VIRGINIA PETHTEL (LIFE)	96.00
9-13-24	ROBERT N. & NANCY R. MCCARDLE	30.64
9-13-25	ROBERT N. & NANCY R. MCCARDLE	48.00
9-13-26	ROBERT N. & NANCY R. MCCARDLE	9.02



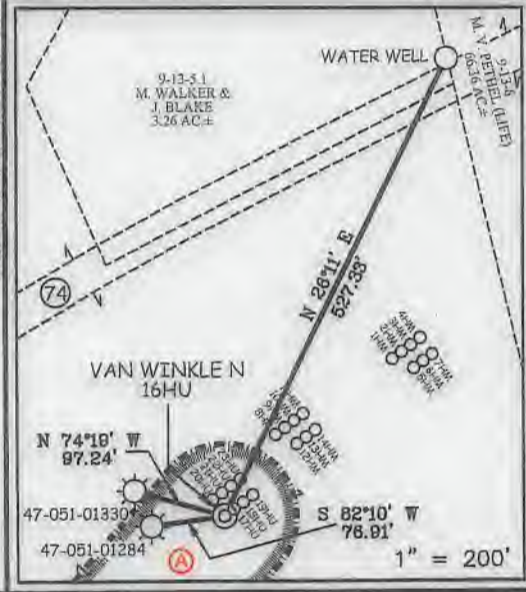
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

B.H.	NAD'83 S.P.C.(FT)	N. 469,105.46	E. 1,623,688.63
	NAD'83 GEO. <td>LAT-(N) 39.781469</td> <td>LONG-(W) 80.726957</td>	LAT-(N) 39.781469	LONG-(W) 80.726957
	NAD'83 UTM (M) <td>N. 4,403,538.52</td> <td>E. 523,381.01</td>	N. 4,403,538.52	E. 523,381.01
LANDING POINT			
	NAD'83 S.P.C.(FT) <td>N. 467,928.3</td> <td>E. 1,620,939.9</td>	N. 467,928.3	E. 1,620,939.9
	NAD'83 GEO. <td>LAT-(N) 39.778134</td> <td>LONG-(W) 80.736679</td>	LAT-(N) 39.778134	LONG-(W) 80.736679
	NAD'83 UTM (M) <td>N. 4,403,185.9</td> <td>E. 522,549.6</td>	N. 4,403,185.9	E. 522,549.6
BOTTOM HOLE			
	NAD'83 S.P.C.(FT) <td>N. 480,790.6</td> <td>E. 1,613,843.5</td>	N. 480,790.6	E. 1,613,843.5
	NAD'83 GEO. <td>LAT-(N) 39.813171</td> <td>LONG-(W) 80.762569</td>	LAT-(N) 39.813171	LONG-(W) 80.762569
	NAD'83 UTM (M) <td>N. 4,407,048.3</td> <td>E. 520,322.2</td>	N. 4,407,048.3	E. 520,322.2

NOTES ON SURVEY

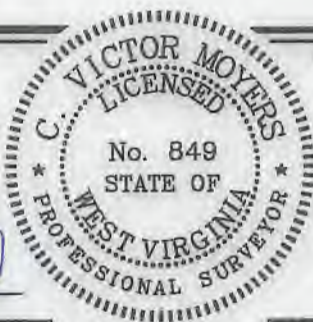
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 825' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PROPOSED LATERAL OR TOP HOLE OF VAN WINKLE N-16HU IS WITHIN 3000' OF TOP HOLES OR LATERALS OF: PROPOSED VAN WINKLE N-17HU, PROPOSED VAN WINKLE N-18HU, PROPOSED VAN WINKLE N-19HU, PROPOSED VAN WINKLE S-20HU, PROPOSED VAN WINKLE S-21HU, PROPOSED VAN WINKLE S-22HU, PROPOSED VAN WINKLE S-23HU, OLD CROW N-20HU (47-051-02191), KNOB CREEK N-11HU (47-051-02287), MND 20 CU (47-051-02013), MND 20 DU (47-051-02014).

REFERENCES



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26031 | 304.462.5624
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East DeChilay Bypass | Beckley, WV 25801 | 304.255.5296
slsvv.com

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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. C. Victor Moyers
849

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JANUARY 14, 20 21
REVISED MARCH 2, 2021
OPERATORS WELL NO. VAN WINKLE N 16HU
API WELL NO. 47 - 051 - 02349 HGA Deep
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8952P16HUR.dwg
VAN WINKLE N 16HU-REV3
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: 756.10' PROPOSED: 753.50' WATERSHED FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
SURFACE OWNER XCL MIDSTREAM OPERATING, LLC ACREAGE 190.12 ±
ROYALTY OWNER DENNIS HUNTER, ET AL - SEE WV-6A1 ACREAGE 190.12 ±
PROPOSED WORK: LEASE NO. SEE WV-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 POINT PLEASANT
ESTIMATED DEPTH TVD: 11,198' / TMD: 26,709'

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

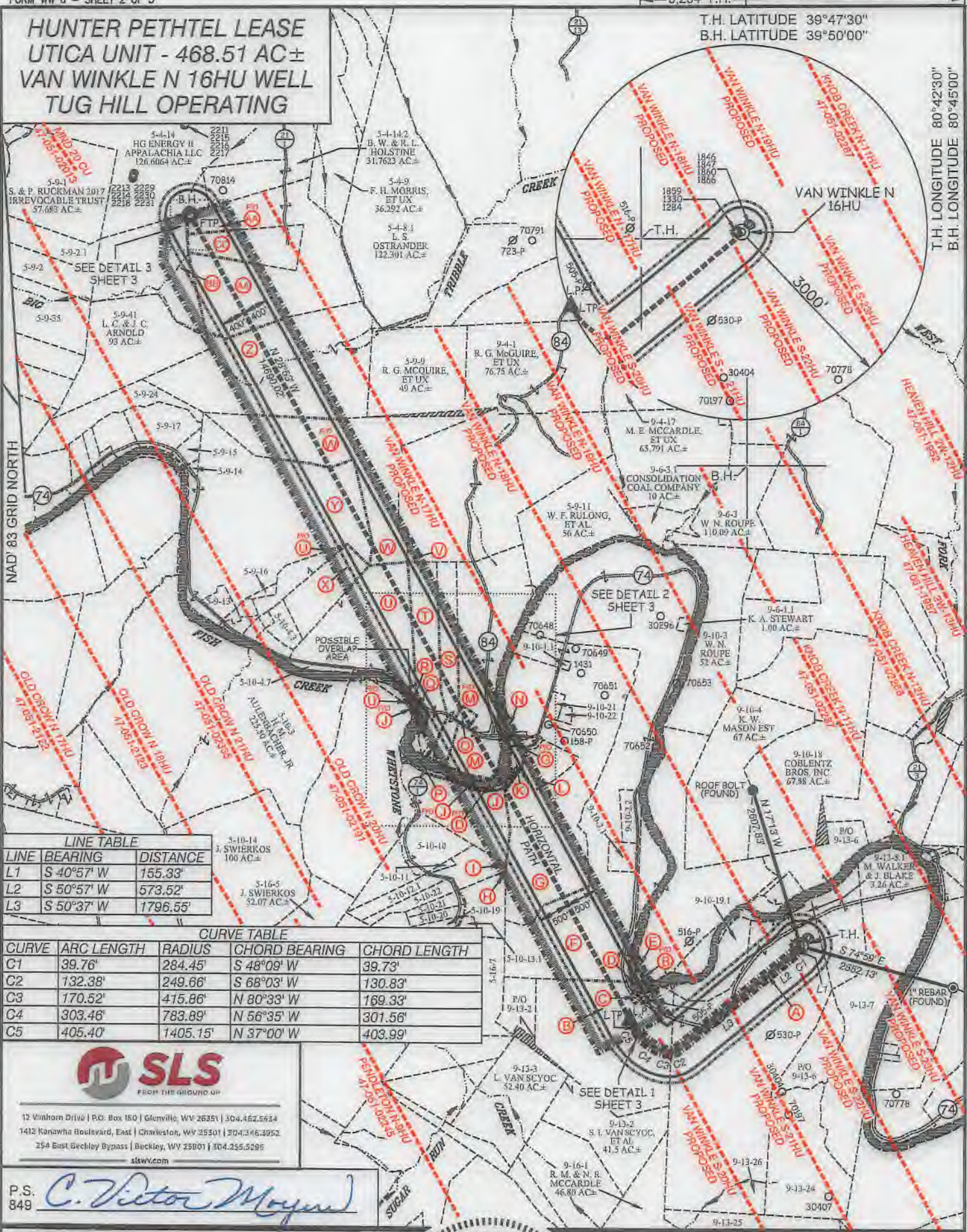
COUNTY NAME PERMIT

05/07/2021

**HUNTER PETHTEL LEASE
UTICA UNIT - 468.51 AC±
VAN WINKLE N 16HU WELL
TUG HILL OPERATING**

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

T.H. LONGITUDE 80°42'30"
B.H. LONGITUDE 80°45'00"



LINE TABLE

LINE	BEARING	DISTANCE
L1	S 40°57' W	155.33'
L2	S 50°57' W	573.52'
L3	S 50°37' W	1796.55'

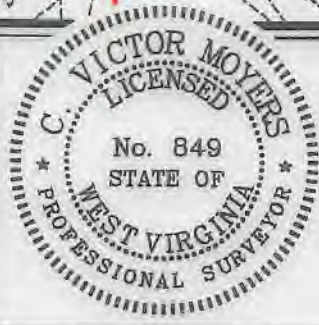
CURVE TABLE

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	39.76'	284.45'	S 48°09' W	39.73'
C2	132.38'	249.66'	S 68°03' W	130.83'
C3	170.52'	415.86'	N 80°33' W	169.33'
C4	303.46'	783.89'	N 56°35' W	301.56'
C5	405.40'	1405.15'	N 37°00' W	403.99'



12 Vinhorn 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 | 304.355.5295
slsv.com

P.S. 849 *C. Victor Moyers*



(+) 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
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE ADDITIONAL SHEETS)

SCALE 1" = 2000' FILE NO. 8952P16HUR.dwg
VAN WINKLE N 16HU-REV3
DATE JANUARY 14, 2021
REVISED MARCH 2, 2021
OPERATORS WELL NO. VAN WINKLE N 16HU
API WELL NO. 47-051-02349 Deep HGA
NO. 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

05/07/2021

COUNTY NAME PERMIT

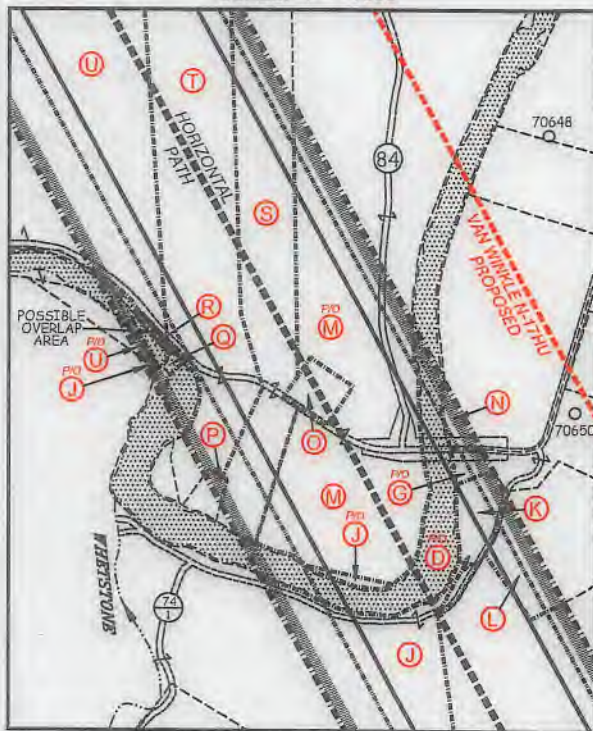
**HUNTER PETHTEL LEASE
UTICA UNIT - 468.51 AC±
VAN WINKLE N 16HU WELL
TUG HILL OPERATING**



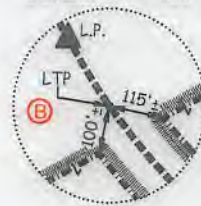
12 VanHorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slswv.com

NO.	Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Deed Book/Page
1	10*31312	9-13-5	A	DENNIS W & KATHY A HUNTER	668 155
2	10*19250	9-13-4	B	LOUIS AULENBACHER, ET AL	902 444
3	10*22355	9-13-4.1	C	DEL T KELLEY AND DEBORAH A KELLEY, ET AL	916 84
4	10*23458	FISH CREEK - M	D	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	1019 373
5	10*27752	FISH CREEK	D	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	1068 550
6	10*31384	9-10-19	E	JOHN E KELLEY & JANET E KELLEY	693 6
7	10*19894	9-10-2	F	CAROL L VANSYOC	941 392
8	10*19894	9-10-1	G	CAROL L VANSYOC	941 392
9	10*18892	5-10-13	H	JOSEPH LEE CROW	966 88
10	10*18892	5-10-12	I	JOSEPH LEE CROW	966 88
11	10*19249	5-10-9	J	HERBERT MAULENBACHER	914 551
12	10*29359	9-10-1.2	K	JOSHUA A HOYT AND SHANNON N HOYT, ET AL	1096 535
13	10*29359	9-10-20	L	JOSHUA A HOYT AND SHANNON N HOYT, ET AL	1096 535
14	10*18726	5-10-8	M	EMILY K RULONG AND WILLIAM F RULONG SR, ET AL	941 441
15	10*31374	9-10-1.3	N	FINLEY MONTGOMERY ET UX	794 177
16	10*18402	5-10-8.1	O	BECKY ROBINSON, ET AL	932 607
17	10*18726	5-10-6	P	EMILY K RULONG AND WILLIAM F RULONG SR, ET AL	941 441
18	10*18350	5-10-4.1	Q	PEGGY SUE HILL DOLIN FORDYCE, ET AL	931 401
19	10*19248	SCHOOL LOT	R	ALBERT F KAZEMKA	848 419
20	10*18726	5-10-7	S	EMILY K RULONG AND WILLIAM F RULONG SR, ET AL	941 441
21	10*18350	5-10-5	T	PEGGY SUE HILL DOLIN FORDYCE, ET AL	931 401
22	10*19248	5-10-4	U	ALBERT F KAZEMKA	848 419
23	10*47051.144.0	5-9-10	V	ROBERT G & TERRI L MCGUIRE	867 581
24	10*47051.144.0	5-9-12	W	ROBERT G & TERRI L MCGUIRE	867 581
25	10*19248	5-10-4.12	X	ALBERT F KAZEMKA	848 419
26	10*47051.170.0	5-9-13.2	Y	JASON J STEED	865 344
27	10*47051.097.0	5-9-7	Z	P & D REALTY	859 439
28	10*29860	5-9-6	AA	P&D REALTY	1101 305
29	Q081124002	5-9-3	BB	JAMES REDMAN LEGG II ET AL	1041 913
30	10*29860	5-9-5	CC	P & D REALTY	1101 305

DETAIL 2
SCALE: 1" = 1000'



DETAIL 1
SCALE: 1" = 400'



DETAIL 3
SCALE: 1" = 500'



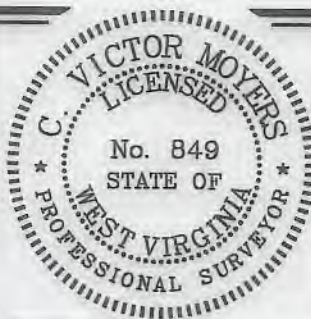
FILE NO. 8952P16HUR.dwg
VAN WINKLE N 16HU-REV3

DATE JANUARY 14, 20 21

REVISED MARCH 2, 2021

OPERATORS WELL NO. VAN WINKLE N 16HU

API WELL NO. 47 — 051 — 02349 Deep HGA
STATE COUNTY PERMIT



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



05/07/2021

P.S. 849 *C. Victor Moyers*

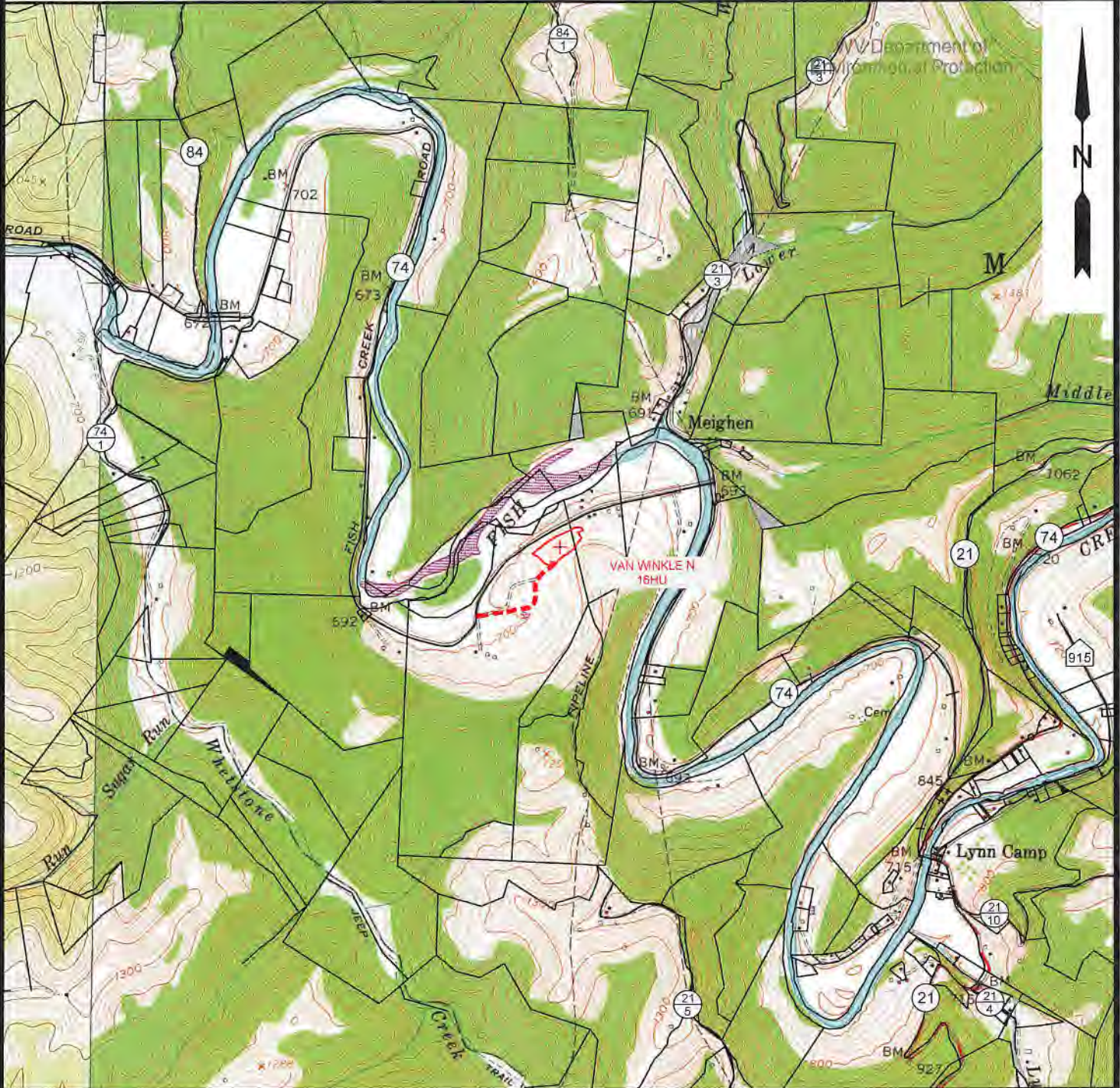
WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

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

COUNTY NAME PERMIT

PROPOSED VAN WINKLE N - 16HU

JAN 19



NOTE: CLOSEST WATER PURVEYOR
GRANDVIEW - DOOLIN PUBLIC SERVICE DISTRICT
PROCTOR, WV

LAT: 39.7137712
LON: -80.8258327
LOCATED: S 49°13'48" W AT 37,316.19' FROM THE CENTER OF HUNTER PETHTEL N WELL PAD LOCATION.



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1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.9296
slswv.com

TOPO SECTION:		OPERATOR:	
GLEN EASTON 7.5'		PREPARED FOR: TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD SUITE 200 CANONSBURG, PA 15317	
COUNTY	DISTRICT		
MARSHALL	MEADE		
DRAWN BY	JOB NO.	DATE	SCALE
K.G.M.	8952	12/24/2020	1" = 2000'



**TUG HILL
OPERATING**

05/07/2021