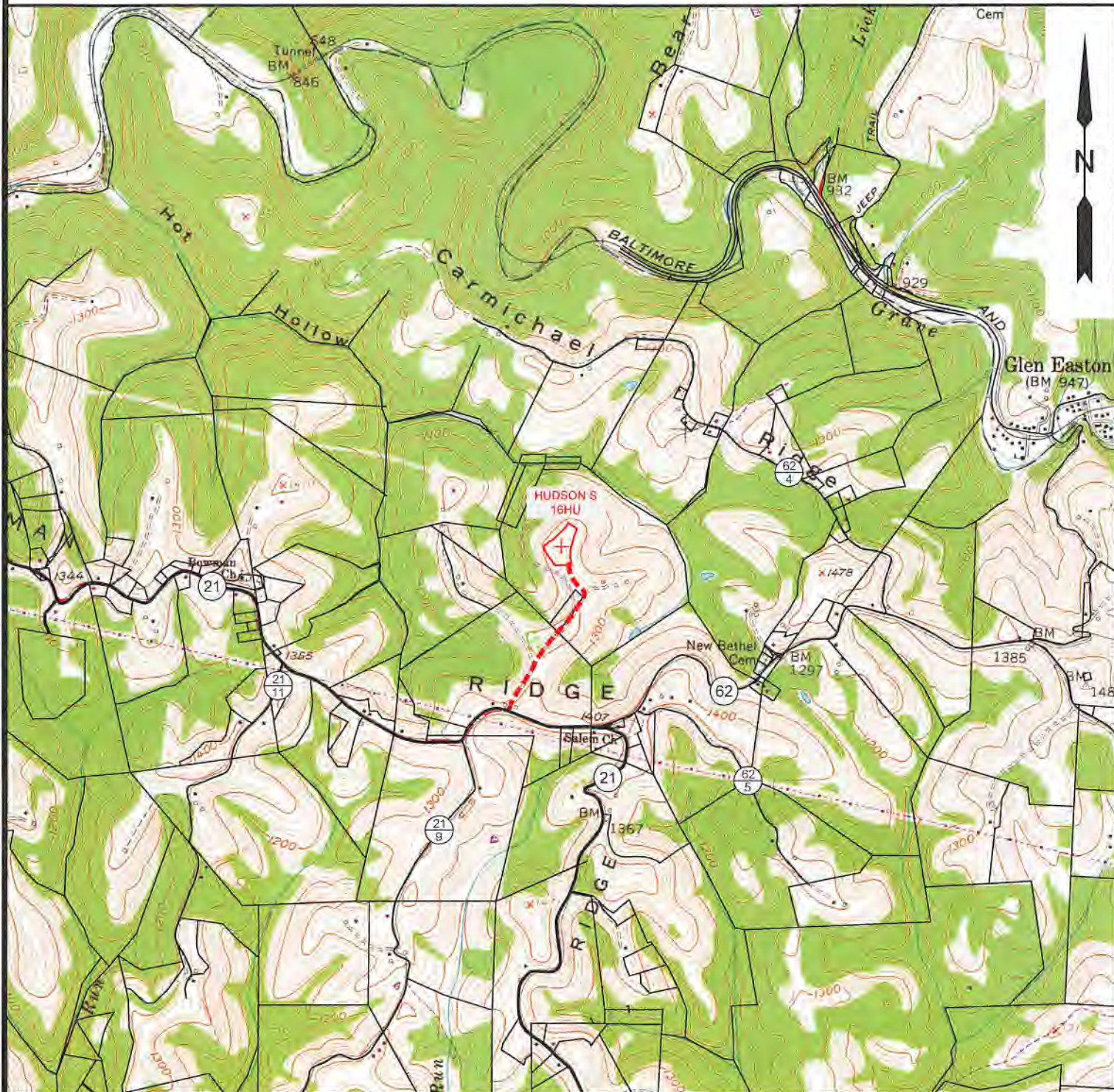


PROPOSED HUDSON S - 16HU



NOTE: CLOSEST WATER PURVEYOR
CITY OF CAMERON - FRANK WALKER RESERVOIR
CAMDEN, WV

LAT: 39.829865
LON: -80.573724
LOCATED: N 89°55'26" E AT 27,779.45' FROM THE CENTER OF HUDSON S WELL PAD LOCATION.



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26391 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.253.5296
slswv.com

TOPO SECTION:		OPERATOR:	
GLEN EASTON 7.5'		PREPARED FOR:	
COUNTY	DISTRICT	TUG HILL OPERATING, LLC	
MARSHALL	MEADE	380 SOUTHPOINTE BLVD	
DRAWN BY		DATE	SCALE
K.G.M.		03/10/2020	1" - 2000'

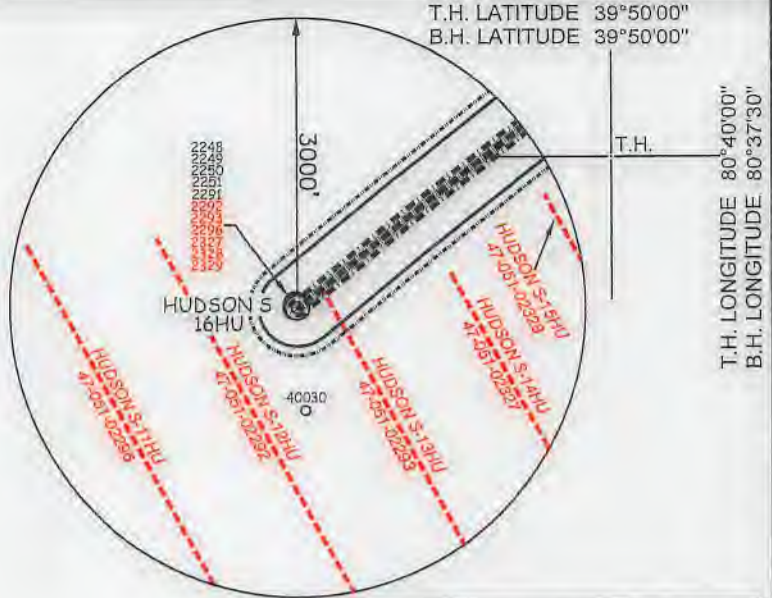


TUG HILL
OPERATING

**HUDSON S LEASE
UTICA UNIT - 591.18 AC±
WELL 16HU
TUG HILL OPERATING**

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-2-9.2	CONSOLIDATION COAL CO.	1.00
9-2-9.3	RAYMOND E. & CINDY WHITE, ET AL	1.00E
9-3-1.1	CONSOLIDATION COAL CO.	5.00
9-3-1.2	CONSOLIDATION COAL CO.	1.00
9-3-1.3	CNX LAND CO. LLC	2.245
9-3-2.2	JOHN W. & RACHEL A. HOLPP	0.483
9-3-4.3	JOHN W. & RACHEL A. HOLPP	0.870
9-3-4.4	JIM & GINGER REGIEC	1.004
9-3-6.1	JOSEPH L. MILETO, II	1.046E
9-3-18.2	RAYMOND E. & CINDY WHITE, ET AL	2.103
9-3-18.3	RAYMOND & CINDY WHITE	0.086
9-3-19	CNX LAND CO. LLC	0.5
9-5-10	ROBERT J. & MELINDA J. WHITE	27.957
9-5-10.1	CNX LAND CO. LLC	8.453
9-8-5.1	CNX LAND CO. LLC	1.040
9-8-5.2	CNX LAND CO. LLC	4.586
9-8-6.1	MARK E. WOOD & SUNNI H. HARTLEY	1.423

TAG	SURFACE OWNER	PARCEL	ACRES
A	CNX LAND LLC	9-3-1	106.935
B	JOHN W. & RACHEL A. HOLPP	9-3-2.5	56.259
C	STEPHEN W. JOHNSON	9-3-2.3	0.591
D	KENNETH F. LIGHTNER, ET UX	9-3-2.1	0.940
E	JAMES & GINGER REGIEC	9-3-2	29.49
F	JAMES & GINGER REGIEC	9-3-4.7	25.025
G	LISA A. MOWRY	9-3-3	68.30
H	JIM & GINGER REGIEC	9-3-4.4	1.044
I	GRANT M. & MALISSA D. CARTER	9-3-4.5	50.543
J	GRANT M. & MALISSA D. CARTER	9-3-4	7.507
K	GRANT M. & MALISSA D. CARTER	9-3-4.2	0.720
L	DAVID E. WEST, ET UX	9-3-4.6	12.035
M	RAYMOND E. & CINDY L. WHITE	9-3-20	127.00
N	DANIEL WEST, ET UX	9-3-4.1	0.986
O	JOHN & RACHEL HOLPP	9-3-4.3	0.870
P	JOSEPH L. MILETO, II	9-3-6.1	1.046E
Q	ALVIN D. & CAROL D. BARRETT	9-3-6	29.9702
R	LLOYD ANDREW BEE, ET UX	9-3-18.1	1.010
S	LLOYD ANDREW BEE, ET UX	9-3-18	19.921
T	ALVIN D. & CAROL D. BARRETT	9-3-7	27.19
U	CNX LAND LLC	9-3-17	77.66
V	KENNETH L. & CAROL J. NEELY - TODD	9-8-7	8.613
W	CNX LAND LLC	9-8-6	27.596
X	LARRY S. NEELY	9-8-7.1	76.055
Y	JAMES RICHARD BLAKE, ET UX	9-8-9	42.49
Z	JAMES RICHARD BLAKE, ET UX	9-8-8	49.86
AA	GLEN G. GORCZYCA	9-9-5	25.12
BB	MARY LOU RUBINI, ET AL	9-9-4	268.39
CC	JOSEPH B. & JUDITH PATRELLO	9-9-9.1	149.924
DD	MARVIN D. & ADA C. DOBBS (LIFE), ET AL	9-9-5	76.25
EE	MARTIN DAVIS	9-9-10	6.00
FF	GARY W. MORRIS	9-9-12	54.74
GG	GARY W. MORRIS	9-9-11	14.00
HH	DANNY R. & FRANCES V. KERNS ESTATE	9-9-14	48.308
II	DANNY R. & FRANCES V. KERNS ESTATE	7-1-3	58.00
JJ	DANNY R. & FRANCES V. KERNS ESTATE	7-8-1	27.00
KK	DANNY R. & FRANCES V. KERNS ESTATE	7-8-2	94.00
LL	GEO A. HURRIS	7-8-14	95.44
MM	BLAINE E. STERN, JR	7-8-13	104.92
NN	BLAINE E. STERN, JR	7-8-11	60.62
OO	CONSOLIDATION COAL COMPANY	7-1-4	32.00



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

NAD'83 S.P.C.(FT)	N. 466,090.76	E. 1,639,175.98
NAD'83 GEO.	LAT-(N) 39.828663	LONG-(W) 80.672643
NAD'83 UTM (M)	N. 4,408,782.03	E. 528,012.84

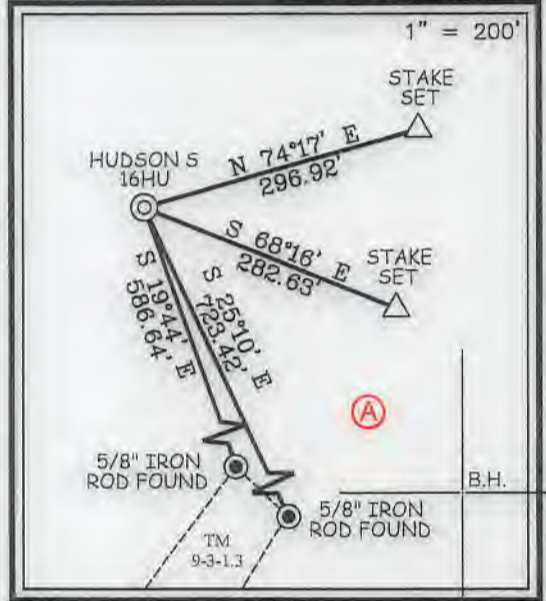
LANDING POINT

NAD'83 S.P.C.(FT)	N. 488,000.2	E. 1,642,809.7
NAD'83 GEO.	LAT-(N) 39.834034	LONG-(W) 80.659794
NAD'83 UTM (M)	N. 4,409,392.3	E. 529,110.1

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 472,556.1	E. 1,851,353.5
NAD'83 GEO.	LAT-(N) 39.791937	LONG-(W) 80.628681
NAD'83 UTM (M)	N. 4,404,730.6	E. 531,791.7

REFERENCES



NOTES ON SURVEY

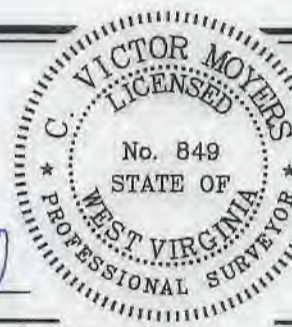
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPD MARK SCALE ARE 1"=2000'
- PROPOSED LATERAL OR TOP HOLE OF HUDSON S-16HU (47-051-02329) IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF HUDSON S-11HU (47-051-02295), HUDSON S-12HU (47-051-02292), HUDSON S-13HU (47-051-02293), HUDSON S-14HU (47-051-02327), HUDSON S-15HU (47-051-02328).
- 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
slew.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 APRIL 1, 20 20
APRIL 17, JULY 16, AUGUST 12;
REVISED SEPT. 16, SEPT. 22, DEC. 22, 20 20
OPERATORS WELL NO. HUDSON S-16HU
API WELL NO. 47 - 051 - 02329
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8911P16HUR7.dwg
HUDSON S-16HU REV7
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



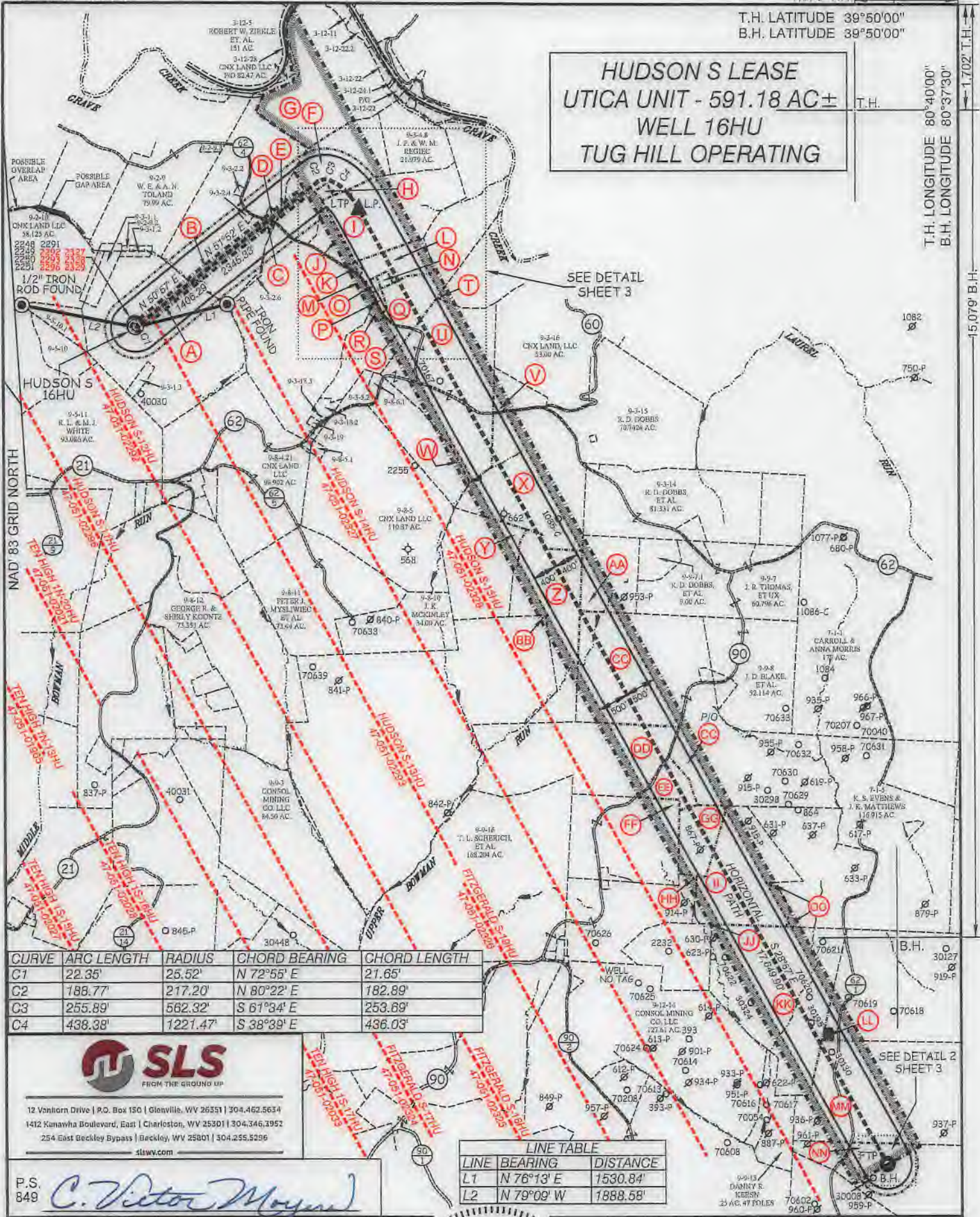
WELL TYPE: OIL GAS INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
LOCATION: GROUND = 1,366.80' ELEVATION PROPOSED = 1,344.81' WATERSHED HOT HOLLOW OF GRAVE CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
SURFACE OWNER CNX LAND LLC ACREAGE 106.935±
ROYALTY OWNER CHARLENE L. BAKER, ET AL ACREAGE 106.935±
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: 12,001' / TMD: 30,760'

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

COUNTY NAME PERMIT

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 80°50'00"

**HUDSON S LEASE
UTICA UNIT - 591.18 AC±
WELL 16HU
TUG HILL OPERATING**



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	22.35'	25.52'	N 72°55' E	21.65'
C2	188.77'	217.20'	N 80°22' E	182.89'
C3	255.89'	562.32'	S 61°34' E	253.69'
C4	438.38'	1221.47'	S 38°39' E	436.03'



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slsw.com

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 76°13' E	1530.84'
L2	N 79°09' W	1888.58'

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
- PROPOSED FIRST TAKE POINT
- PROPOSED LAST TAKE POINT
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE ADDITIONAL SHEETS)

SCALE 1" = 2000' FILE NO. 8911P16HUR7.dwg
HUDSON S-16HU REV7
DATE APRIL 1, 2020
REVISED APRIL 17, JULY 16, AUGUST 12, 2020
REVISED SEPT. 16, SEPT. 22, DEC. 22, 2020
OPERATORS WELL NO. HUDSON S-16HU
API WELL 47 - 051 - 02329
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

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°37'30"

15,079' B.H.

COUNTY NAME

PERMIT

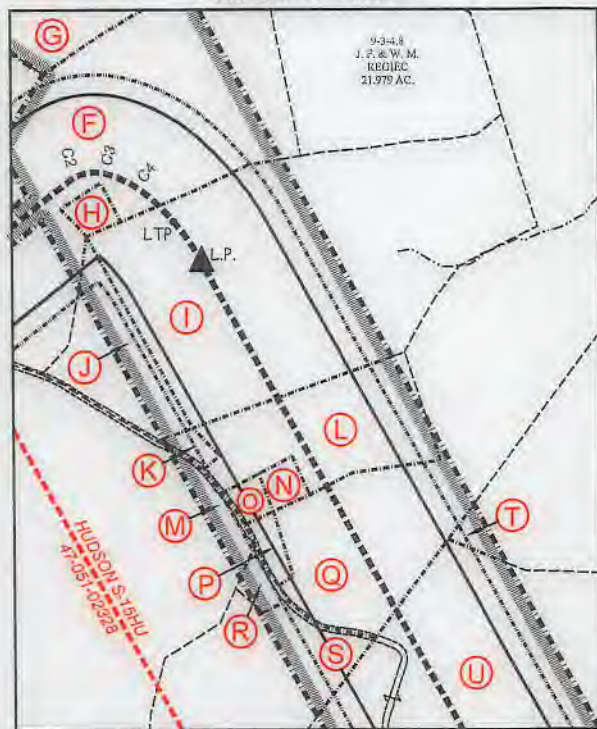
**HUDSON S LEASE
UTICA UNIT - 591.18 AC ±
WELL 16HU
TUG HILL OPERATING**



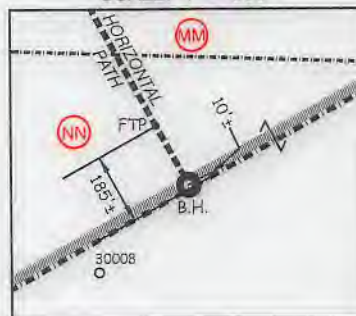
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1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slwv.com

NO.	Lease ID	Parcel	Tags	Grantor, Lessor, Etc.	Deed Book/Page	
1	10*26041	9-3-1	A	FREDDIE C WHITE AND VIOLET L WHITE, ET AL	728	527
2	10*28190	9-3-2.5	B	J RUSSELL LOGSDON, ET AL	1068	309
3	10*28190	9-3-2.3	C	J RUSSELL LOGSDON, ET AL	1068	309
4	10*28190	9-3-2.1	D	J RUSSELL LOGSDON, ET AL	1068	309
5	10*28190	9-3-2	E	J RUSSELL LOGSDON, ET AL	1068	309
6	10*31219	9-3-4.7	F	DONNA FAYE EARNEST, ET AL	690	341
7	10*18339	9-3-3	G	RESOURCE MINERALS HEADWATER I LP	940	448
8	10*31219	9-3-4.4	H	DONNA FAYE EARNEST, ET AL	690	341
9	10*31219	9-3-4.5	I	DONNA FAYE EARNEST, ET AL	690	341
10	10*31219	9-3-4	J	DONNA FAYE EARNEST, ET AL	690	341
11	10*31219	9-3-4.2	K	DONNA FAYE EARNEST, ET AL	690	341
12	10*31219	9-3-4.6	L	DONNA FAYE EARNEST, ET AL	690	341
13	10*21345	9-3-20	M	AARON PARRY SR AND JANA PARRY TRUSTEES AARON PARRY SR & JANA PARRY REV LIV TRUS	957	280
14	10*31219	9-3-4.1	N	DONNA FAYE EARNEST, ET AL	690	341
15	10*31219	9-3-4.3	O	DONNA FAYE EARNEST, ET AL	690	341
16	10*28454	9-3-6.1	P	TRAVIS J POSTLETHWAIT	1072	379
17	10*31225	9-3-6	Q	ALVIN D. BARRETT	727	112
18	10*21412	9-3-18.1	R	GARY DOBBS AND SUSAN DOBBS	957	270
19	10*21412	9-3-18	S	GARY DOBBS AND SUSAN DOBBS	957	270
20	NA	9-3-7	T	ALVIN D. BARRETT	726	464
21	10*21602	9-3-17	U	CAROL STACY SAUNDERS, ET AL	959	289
22	10*28092	9-8-7	V	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, ET AL	1073	370
23	10*21602	9-8-6	W	CAROL STACY SAUNDERS, ET AL	959	289
24	10*28092	9-8-7.1	X	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, ET AL	1073	370
25	10*22055	9-8-9	Y	STONE HILL MINERALS HOLDINGS LLC, ET AL	1010	226
26	10*22055	9-8-8	Z	STONE HILL MINERALS HOLDINGS LLC, ET AL	1010	226
27	10*19634	9-9-6	AA	JANICE L PIETERSE, ET AL	960	153
28	10*31001	9-9-4	BB	ERIC KATZMEYER, ET AL	791	226
29	10*22615	9-9-9.1	CC	DAVID D MURRAY AND MARY ANN MURRAY, ET AL	965	591
30	10*28244	9-9-5	DD	MICHAEL D DOBBS AND STEPHANIE J DOBBS, ET AL	1068	569
31	10*27304	9-9-10	EE	H3 LLC	1058	559
32	10*21859	9-9-12	FF	GARY WAYNE MORRIS	960	192
33	10*21859	9-9-11	GG	GARY WAYNE MORRIS	960	192
34	10*28697	9-9-14	HH	DANNY S KERNS, ET AL	1075	134
35	10*17969	7-1-3	II	BOUNTY MINERALS LLC, ET AL	928	424
36	10*25518	7-8-1	JJ	DANNY S KERNS, ET AL	1010	532
37	10*25518	7-8-2	KK	DANNY S KERNS, ET AL	1010	532
38	10*25508	7-8-14	LL	THE AMY M TOUPS FAMILY TRUST OF 2013 DATED JUNE 14, 2013	827	119
39	10*25501	7-8-13	MM	AMP FUND III LP, ET AL	925	459
40	10*23026	7-8-11	NN	BLAINE E STERN JR AND CONNIE J STERN	977	339
41	10*26562	7-1-4	OO	MARTHA SUE FORBES	1038	510

DETAIL
SCALE: 1" = 1000'



DETAIL 2
SCALE: 1" = 500'



FILE NO. 8911P16HUR7.dwg
HUDSON S-16HU REV7

DATE APRIL 1, 20 20
REVISED APRIL 17, JULY 16, AUGUST 12,
SEPT. 16, SEPT. 22, DEC. 22, 20 20

OPERATORS WELL NO. HUDSON S-16HU
API WELL NO. 47 — 051 — 02329
NO. 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