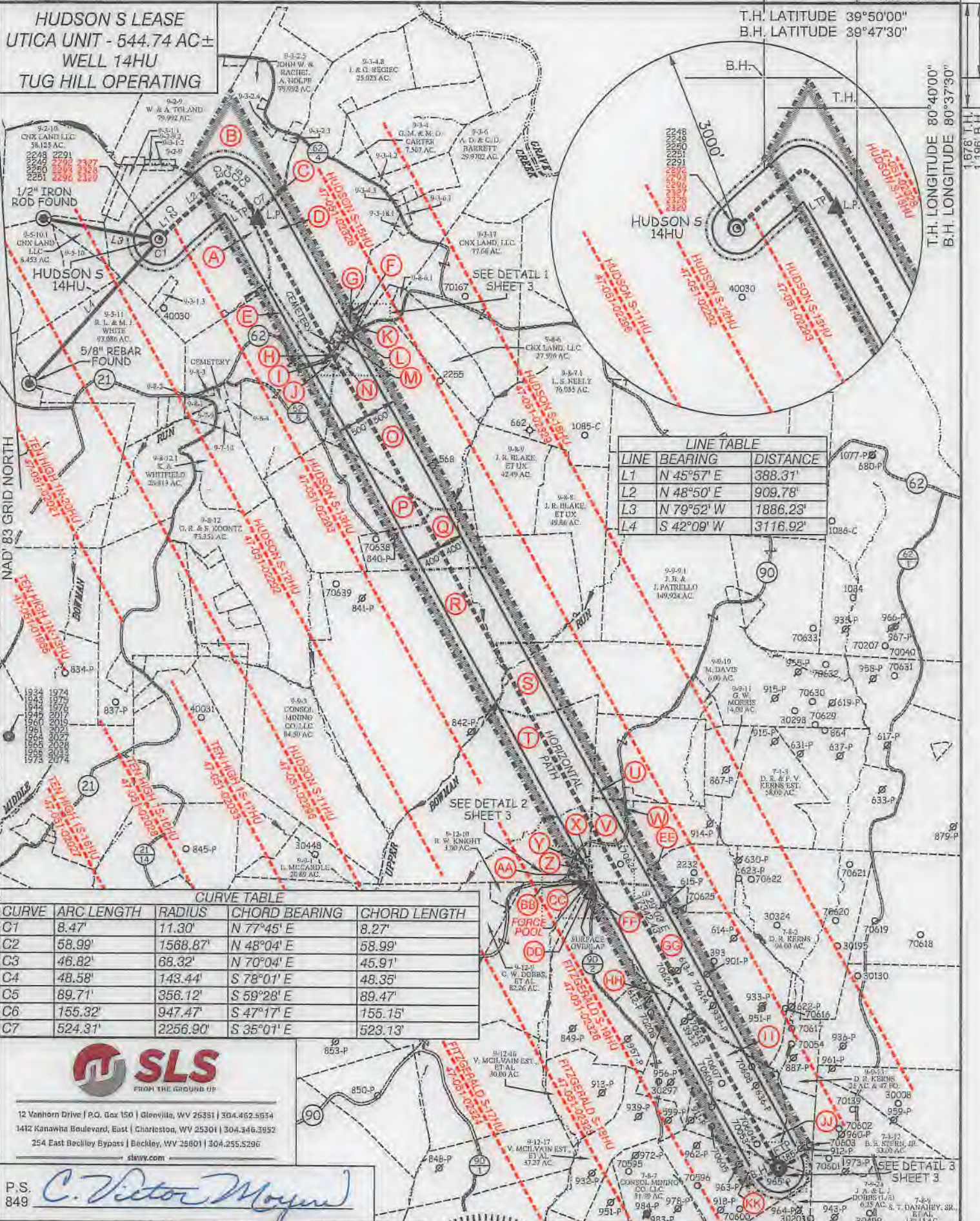


**HUDSON S LEASE  
UTICA UNIT - 544.74 AC±  
WELL 14HU  
TUG HILL OPERATING**

3,176' B.H. 1,677' T.H.  
T.H. LATITUDE 39°50'00"  
B.H. LATITUDE 39°47'30"



**LINE TABLE**

LINE	BEARING	DISTANCE
L1	N 45°57' E	388.31'
L2	N 48°50' E	909.78'
L3	N 79°52' W	1886.23'
L4	S 42°09' W	3116.92'

**CURVE TABLE**

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	8.47'	11.30'	N 77°45' E	8.27'
C2	58.99'	1568.67'	N 48°04' E	58.99'
C3	46.82'	68.32'	N 70°04' E	45.91'
C4	48.58'	143.44'	S 78°01' E	48.35'
C5	89.71'	356.12'	S 59°28' E	89.47'
C6	155.32'	947.47'	S 47°17' E	155.15'
C7	524.31'	2256.90'	S 35°01' E	523.13'



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5934  
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254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
slawv.com

P.S. 849 *C. Victor Moyers*

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

NAD'83 S.P.C.(FT)	N. 486,114.40	E. 1,639,177.97
NAD'83 GEO.	LAT-(N) 39.828728	LONG-(W) 80.672637
NAD'83 UTM (M)	N. 4,408,799.24	E. 528,013.32

**LANDING POINT**

NAD'83 S.P.C.(FT)	N. 486,450.9	E. 1,640,775.7
NAD'83 GEO.	LAT-(N) 39.829709	LONG-(W) 80.666964
NAD'83 UTM (M)	N. 4,408,909.9	E. 528,498.4

**BOTTOM HOLE**

NAD'83 S.P.C.(FT)	N. 471,289.7	E. 1,649,195.8
NAD'83 GEO.	LAT-(N) 39.788386	LONG-(W) 80.636302
NAD'83 UTM (M)	N. 4,404,333.8	E. 531,140.8



(+) 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
- FORCE POOL TRACT
- 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. 891P14HUR4.dwg  
HUDSON S-14HU REV6  
DATE APRIL 2, 20 20  
REVISED JULY 14, JULY 16, AUGUST 12, 20 20  
OPERATORS WELL NO. HUDSON S-14HU  
API WELL NO. 47 - 051 - 02327  
NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
H6A

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

COUNTY NAME PERMIT

**HUDSON S LEASE  
UTICA UNIT - 544.74 AC±  
WELL 14HU  
TUG HILL OPERATING**

3,176' B.H. 1,677' T.H.  
T.H. LATITUDE 39°50'00"  
B.H. LATITUDE 39°47'30"

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

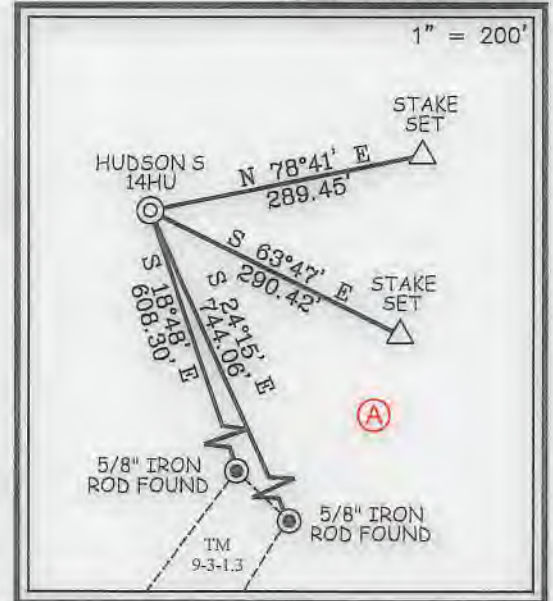
NAD'83 S.P.C.(FT)	N. 486,114.40	E. 1,639,177.97
NAD'83 GEO.	LAT-(N) 39.828728	LONG-(W) 80.672637
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NAD'83 S.P.C.(FT)	N. 486,450.9	E. 1,640,775.7
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NAD'83 UTM (M)	N. 4,408,909.9	E. 528,498.4
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 471,289.7	E. 1,649,195.8
NAD'83 GEO.	LAT-(N) 39.798386	LONG-(W) 80.636302
NAD'83 UTM (M)	N. 4,404,333.8	E. 531,140.8

T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°37'30"  
1,876' T.H.  
1,166' B.H.

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	RAYMOND E. & CINDY L. WHITE	9-3-2.6	0.619
D	RAYMOND E. & CINDY L. WHITE	9-3-20	127.00
E	CNX LAND LLC	9-8-4.2	96.902
F	LLOYD ANDREW BEE, ET UX	9-3-18	19.921
G	RAYMOND E. & CINDY L. WHITE	9-3-18.2	2.103
H	BOARD OF EDUCATION (NOT ASSESSED)	NA	NA
I	CNX LAND LLC	9-3-19	45 SQ RODS & 3280 SQ FT
J	CNX LAND RESOURCES, INC.	9-8-4.1	0.333
K	CNX LAND RESOURCES, INC.	9-8-5.2	4.586
L	RAYMOND E. & CINDY L. WHITE	9-3-18.3	0.086
M	CNX LAND LLC	P/O 9-3-19	0.5
N	CNX LAND LLC	9-8-5.1	1.040
O	CNX LAND RESOURCES, INC.	9-8-5	110.37
P	PETER J. MYSLIWEK, ET AL.	9-8-11	73.44
Q	JUDY KAY MCKINLEY	9-8-10	34.00
R	MARY LOU RUBIN, ET AL.	9-9-4	268.39
S	MARVIN D. & ADA C. DOBBS (LIFE), ET AL.	9-9-5	76.25
T	TODD L. SCHERICH, ET AL.	9-9-16	168.204
U	GARY W. MORRIS	9-9-12	54.74
V	DANNY R. & FRANCES V. KERNS ESTATE	9-9-14	48.308
W	AMERICAN ENERGY-MARCELLUS LLC	9-9-14.1	0.40
X	NAUVOO CEMETERY ASSOC. INC.	9-9-16.1	0.126
Y	NAUVOO CEMETERY ASSOC. INC.	9-9-14.2	0.292
Z	NAUVOO CEMETERY ASSOC. INC.	9-9-17	1.00
AA	GARY W. MORRIS	9-9-22	0.15
BB	WARREN BERYLE & ELEANOR LOU CHAMBERS - LIFE	9-12-11	91.00
CC	TRUSTEES OF THE REORGANIZED CHURCH OF LATTER DAY SAINTS	9-9-15	LOT
DD	WHIPKEY TRUST	9-12-12	61.00
EE	DANNY R. & FRANCES V. KERNS ESTATE	7-8-1	27.00
FF	VIRGINIA MCILVAIN ESTATE & THE WHIPKEY TRUST	9-9-18	LOT
GG	CONSOL MINING CO., LLC	9-12-14	127.61
HH	WHIPKEY TRUST	9-12-15	12.00
II	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-8-4	65.65
JJ	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-8-5	24.00
KK	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-8-8	51.97

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-2-9.2	CONSOLIDATION COAL CO.	1.00
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
9-3-2.3	JOHN W. & RACHEL A. HOLPP	0.591
9-3-2.4	JOHN W. & RACHEL A. HOLPP	0.618
9-3-4.2	GRANT M. & MALISSA D. CARTER	0.720
9-3-4.3	JOHN W. & RACHEL A. HOLPP	0.870
9-3-6.1	JOSEPH L. MILETO, II	1.0468
9-3-18.1	LLOYD ANDREW BEE, ET UX	1.010
9-5-10	ROBERT J. & MELINDA J. WHITE	27.957
9-7-9	CNX LAND CO. LLC	2.00
9-7-10	DONALD M. & THERESA L. HARRIS	3.00
9-8-1	CNX LAND CO. LLC	P/O 1.00
9-8-2	CNX LAND CO. LLC	6000 SQ. FT.
9-8-3	CHURCH OF CHRIST	NO ASSD. AC.
9-8-4	DONALD M. & THERESA L. HARRIS	3.183
9-8-6.1	MARK E. WOOD & SUNNI H. HARTLEY	1.423

**REFERENCES**



**NOTES ON SURVEY**

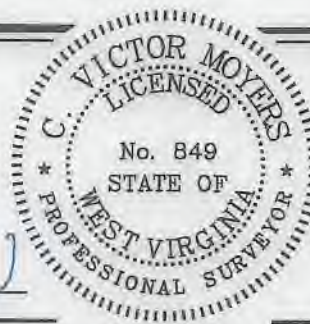
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE ARE 1"=2000'
- PROPOSED LATERAL OR TOP HOLE OF HUDSON S-14HU (47-051-02327) IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF HUDSON S-11HU (47-051-02296), HUDSON S-12HU (47-051-02292), HUDSON S-13HU (47-051-02293), HUDSON S-15HU (47-051-02328), HUDSON S-16HU (47-051-02329), FITZGERALD S-18HU (47-051-02325), FITZGERALD S-19HU (47-051-02326).
- 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.
- WVDOT/DOH OWNERSHIP WITHIN UNIT SET FORTH IN WW-6A-1.



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1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952  
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
slaww.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 2, 20 20  
REVISED JULY 14, JULY 16, AUGUST 12, 20 20  
OPERATORS WELL NO. HUDSON S-14HU  
API WELL NO. 47 - 051 - 02327  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8911P14HUR4.dwg  
HUDSON S-14HU REV6  
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 = 1,366.50' 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: 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 POINT PLEASANT  
ESTIMATED DEPTH TVD: 11,980' / TMD: 29,676'

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

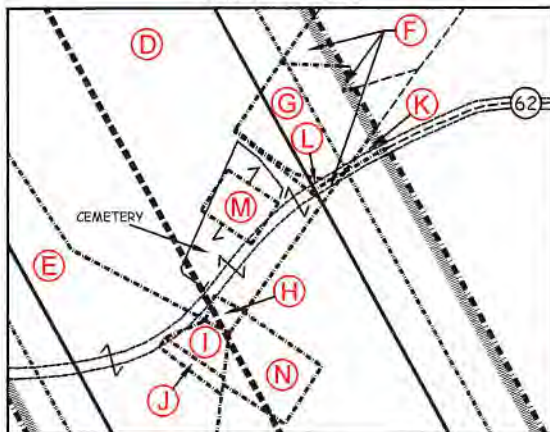
**HUDSON S LEASE  
UTICA UNIT - 544.74 AC±  
WELL 14HU  
TUG HILL OPERATING**



12 Van Horn Drive | P.O. Box 150 | Glenview, WV 26031 | 808.462.5634  
1413 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.7952  
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296  
slswv.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	9-3-2.6	C	J RUSSELL LOGSDON, ET AL	1068 309
4	10*21345	9-3-20	D	AARON PARRY SR AND JANA PARRY TRUSTEES AARON PARRY SR & JANA PARRY REV LIV TRUS, ET AL	957 280
5	10*28092	9-8-4.2	E	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, ET AL	1073 370
6	10*21412	9-3-18	F	GARY DOBBS AND SUSAN DOBBS, ET AL	957 270
7	10*21412	9-3-18.2	G	GARY DOBBS AND SUSAN DOBBS, ET AL	957 270
8	10*28092	9-3-19	H	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAY, ET AL	1073 370
9	10*28092	9-3-19	I	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAY, ET AL	1073 370
10	10*22760	9-8-4.1	J	DONALD MAND THERESA L HARRIS, ET AL	968 294
11	10*21602	9-8-5.2	K	CAROL STACY SAUNDERS, ET AL	959 289
12	10*21412	9-3-18.3	L	GARY DOBBS AND SUSAN DOBBS, ET AL	957 270
13	10*3100	9-3-19	M	CHARLOTTE A WHITE	738 474
14	10*31000	9-8-5.1	N	CHARLOTTE A WHITE	738 474
15	10*23739	9-8-5	O	APPALACHIAN BASIN MINERALS LP, ET AL	1011 538
16	10*22745	9-8-11	P	BONNIE J JENKINS, ET AL	968 288
17	10*21246	9-8-10	Q	THE ESTATE OF THERESA M ROGERSON CHARLES J ROGERSON EXECUTOR, ET AL	952 422
18	10*31001	9-9-4	R	ERIC KATZMEYER, ET AL	791 226
19	10*28244	9-9-5	S	MICHAEL D DOBBS AND STEPHANIE J DOBBS, ET AL	1068 569
20	10*19987	9-9-16	T	LESLEY D BALLA, ET AL	955 103
21	10*21859	9-9-12	U	GARY WAYNE MORRIS	960 192
22	10*28697	9-9-14	V	DANNY S KERNS, ET AL	1075 134
23	10*28697	9-9-14.1	W	DANNY S KERNS, ET AL	1075 134
24	10*19987	9-9-16.1	X	LESLEY D BALLA, ET AL	955 103
25	10*27299	9-9-14.2	Y	NAUVOO CEMETERY ASSOCIATION	1057 357
26	10*27299	9-9-17	Z	NAUVOO CEMETERY ASSOCIATION	1057 357
27	10*24535	9-9-22	AA	BOARD OF EDUCATION OF MARSHALL COUNTY	1026 64
28	10*15494	9-12-11	BB	CHRISTOPHER SINGER AND SHEREA SINGER, ET AL	898 433
29	NA	9-9-15	CC	TRUSTEES OF THE REORGANIZED CHURCH OF LATTER DAY SAINTS	NA NA
30	10*19557	9-12-12	DD	TERRY L BLAKE, ET AL	944 649
31	10*25518	7-8-1	EE	DANNY S KERNS, ET AL	1010 532
32	10*27774	9-9-18	FF	RESOURCE MINERALS HEADWATER I LP	1063 258
33	10*18339	9-12-14	GG	RESOURCE MINERALS HEADWATER I LP, ET AL	940 448
34	10*21512	9-12-15	HH	THE WHIPKEY TRUST, ET AL	949 266
35	10*18988	7-8-4	II	MICHAEL R DOBBS AND LEANNE DOBBS, ET AL	957 307 940 238
36	10*21112	7-8-5	JJ	CLARENCE C STOVER JR AND LOU E STOVER, ET AL	952 382
37	10*21112	7-8-8	KK	CLARENCE C STOVER JR AND LOU E STOVER, ET AL	952 382

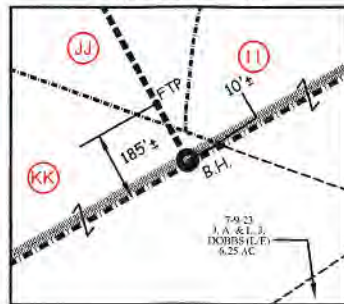
DETAIL 1  
SCALE: 1" = 500'



DETAIL 2  
SCALE: 1" = 500'



DETAIL 3  
SCALE: 1" = 500'



FILE NO. 8911P14HUR4.dwg  
HUDSON S-14HU REV6

DATE APRIL 2, 20 20

REVISED JULY 14, JULY 16, AUGUST 12, 20 20

OPERATORS WELL NO. HUDSON S-14HU

API WELL NO. 47 - 051 - 02327  
STATE COUNTY PERMIT



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



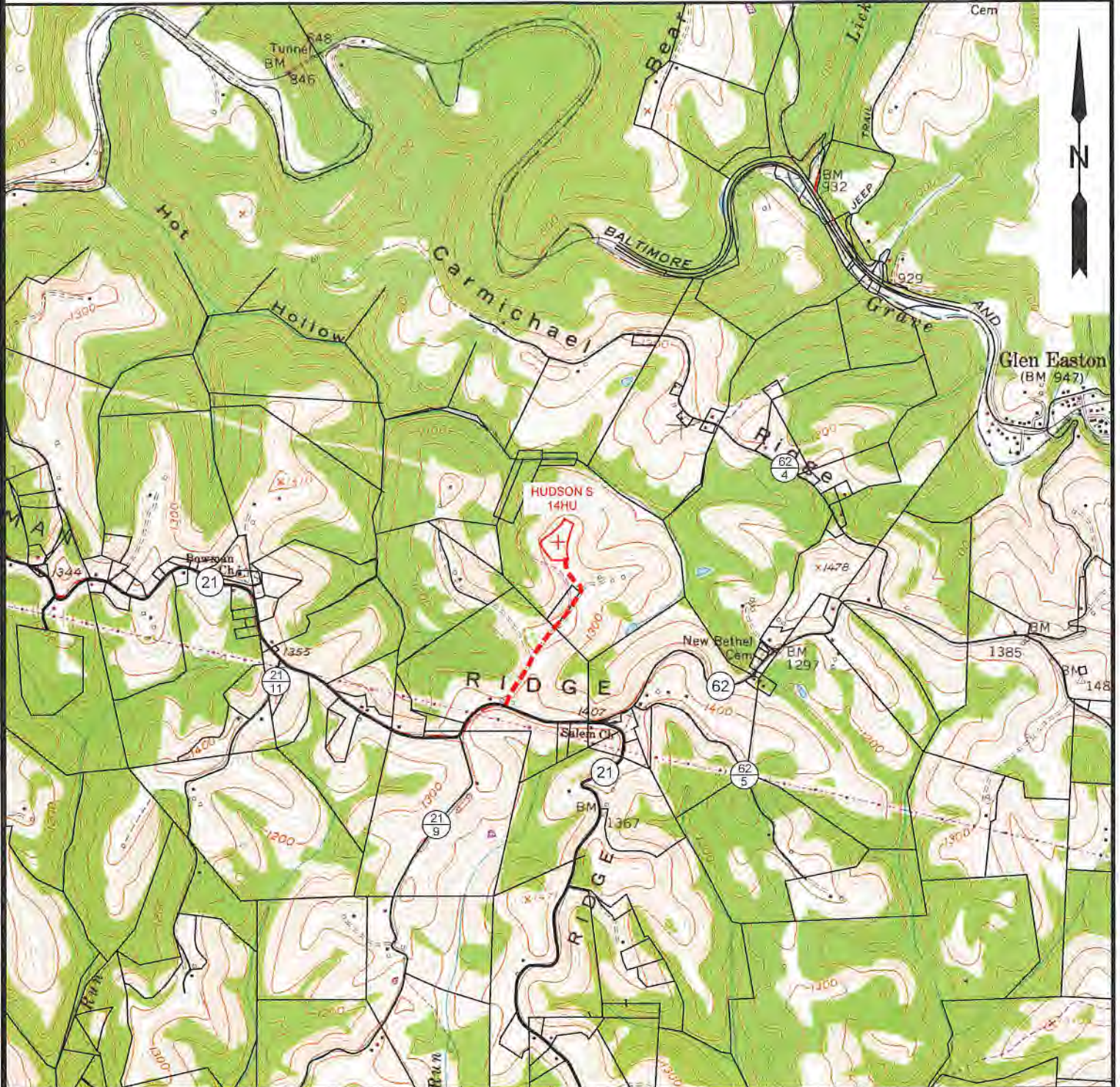
P.S. 849 *C. Victor Moyers*

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

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

COUNTY NAME PERMIT

# PROPOSED HUDSON S - 14HU



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.



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

TOPO SECTION:		OPERATOR:	
GLEN EASTON 7.5'		PREPARED FOR:	
COUNTY	DISTRICT	TUG HILL OPERATING, LLC	
MARSHALL	MEADE	380 SOUTHPOINTE BLVD	
		SUITE 200	
		CANONSBURG, PA 15317	
DRAWN BY	JOB NO.	DATE	SCALE
K.G.M.	8911	03/10/2020	1" = 2000'

