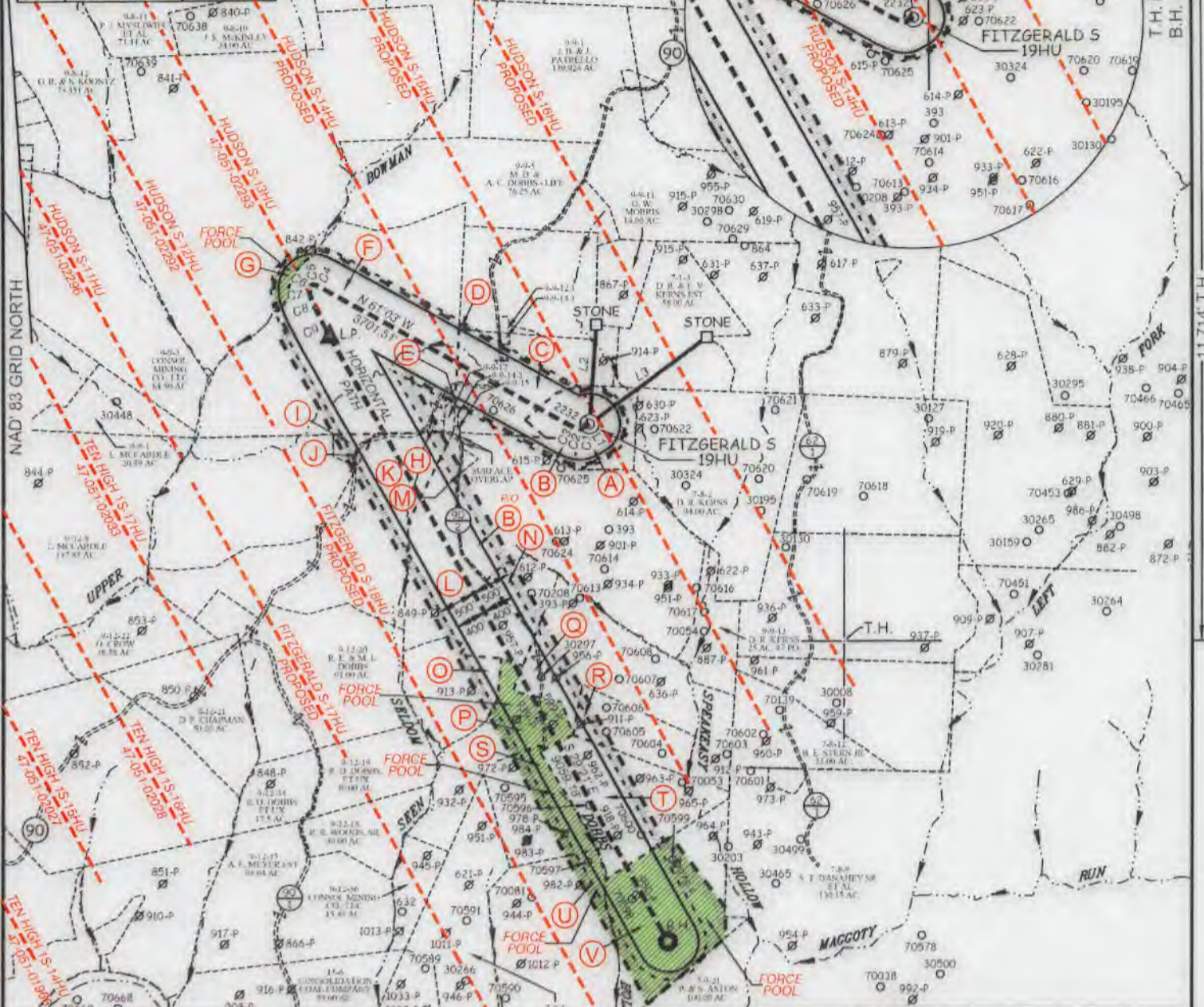


**FITZGERALD S LEASE  
UTICA UNIT - 377.27 AC ±  
WELL 19HU  
TUG HILL OPERATING**

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

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

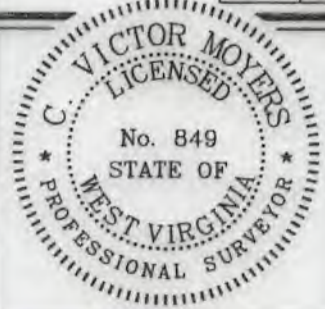
LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 60°57' W	125.90'
L2	N 04°03' E	1299.78'
L3	N 53°29' E	1915.09'



CURVE TABLE				
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	20.32'	41.27'	S 87°39' W	20.12'
C2	38.87'	250.60'	N 73°20' W	38.83'
C3	136.17'	1287.06'	N 64°47' W	136.11'
C4	84.83'	258.98'	N 67°28' W	84.46'
C5	40.60'	66.37'	S 82°38' W	39.97'
C6	53.81'	60.38'	S 27°39' W	52.05'
C7	88.47'	278.59'	S 06°40' E	88.10'
C8	208.62'	1139.99'	S 21°38' E	208.33'
C9	390.81'	5958.89'	S 27°34' E	390.74'

**SLS**  
SLS Engineering & Surveying, Inc.  
100 West Virginia Avenue, Charleston, WV 25301  
Tel: (304) 725-1111  
www.sls.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	
FORCE POOL TRACT	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
SURFACE OWNER (SEE TABLE) LEASE # (SEE ADDITIONAL SHEETS)	

SCALE 1" = 2000' FILE NO. 8910P19HU.dwg  
DATE APRIL 13 20 20  
REVISED 20  
OPERATORS WELL NO. FITZGERALD S-19HU  
API WELL NO. 47-051-02324 HUB Deep  
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



**FITZGERALD S LEASE  
UTICA UNIT - 377.27 AC±  
WELL 19HU  
TUG HILL OPERATING**

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. 475,965.85	E. 1,647,885.21
NAD'83 GEO.	LAT-(N) 39.801177	LONG-(W) 80.641177
NAD'83 UTM (M)	N. 4,405,751.76	E. 530,717.71
<b>LANDING POINT</b>		
NAD'83 S.P.C.(FT)	N. 477,118.2	E. 1,644,481.7
NAD'83 GEO.	LAT-(N) 39.804221	LONG-(W) 80.653343
NAD'83 UTM (M)	N. 4,406,085.5	E. 529,674.9
<b>BOTTOM HOLE</b>		
NAD'83 S.P.C.(FT)	N. 469,221.9	E. 1,648,922.1
NAD'83 GEO.	LAT-(N) 39.782700	LONG-(W) 80.637183
NAD'83 UTM (M)	N. 4,403,702.4	E. 531,067.9

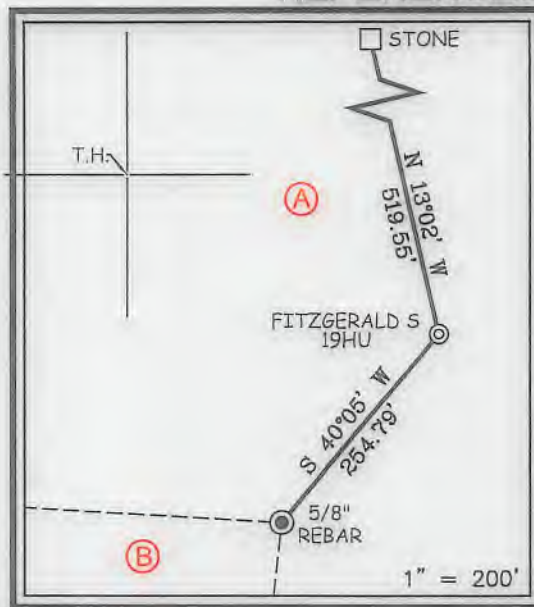
TAG	SURFACE OWNER	PARCEL	ACRES
A	DANNY R. & FRANCES V. KERNS ESTATE	7-8-1	27.00
B	CONSOL MINING CO., LLC	9-12-14	127.61
C	DANNY R. & FRANCES V. KERNS ESTATE	9-9-14	48.308
D	GARY W. MORRIS	9-9-12	54.74
E	NAUVOO CEMETERY ASSOC. INC.	9-9-16.1	0.125
F	TODD L. SCHERICH, ET AL	9-9-16	168.204
G	MARY LOU RUBINI, DAVID & ERIC KATZMEYER	9-9-4	268.39
H	GARY W. MORRIS	9-9-22	0.15
I	ROBERT W. KNIGHT	9-12-10	3.00
J	CHARLES WILLIAM DOBBS, ET AL	9-12-9	82.26
K	WARREN BERYLE & ELEANOR LOU CHAMBERS - LIFE	9-12-11	91.00
L	WHIPKEY TRUST	9-12-12	61.00
M	VIRGINIA MCILVAIN ESTATE & THE WHIPKEY TRUST	9-9-18	LOT
N	WHIPKEY TRUST	9-12-15	12.00
O	VIRGINIA MCILVAIN ESTATE & THE WHIPKEY TRUST	9-12-16	30.00
P	VIRGINIA MCILVAIN ESTATE & THE WHIPKEY TRUST	9-12-17	37.27
Q	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-8-4	65.65
R	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-8-5	24.00
S	CONSOL MINING CO., LLC	7-8-7	31.99
T	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-8-8	51.97
U	CONSOL MINING CO., LLC	7-9-22	101.36
V	JOHN ALFRED & LEORA JEAN DOBBS - LIFE	7-9-23	60.25

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-9-12.1	JESSICA R. & DAVID A. II DEMPEWOLF	1.26
9-9-14.1	AMERICAN ENERGY-MARCELLUS, LLC	0.40
9-9-14.2	NAUVOO CEMETERY ASSOCIATION, INC.	0.292
9-9-15	TRUSTEES OF THE REORGANIZED CHURCH OF LATTER DAY SAINTS	LOT
9-9-17	NAUVOO CEMETERY ASSOCIATION, INC.	1.00

**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 FITZGERALD S-19HU IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF PROPOSED FITZGERALD S-17HU, PROPOSED FITZGERALD S-18HU, HUDSON S-11HU (47-051-02296), HUDSON S-12HU (47-051-02292), HUDSON S-13HU (47-051-02293), PROPOSED HUDSON S-14HU, PROPOSED HUDSON S-15HU, PROPOSED HUDSON S-16HU.

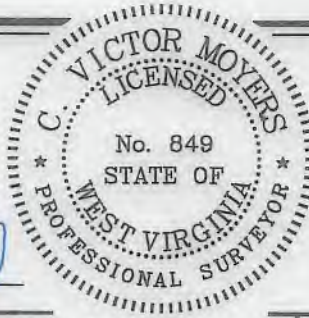
**REFERENCES**



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 | 304.255.5295  
sllsvv.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 MARCH 13, 2020  
REVISED \_\_\_\_\_, 20\_\_\_\_  
OPERATORS WELL NO. FITZGERALD S-19HU  
API WELL NO. 47-051-02326 DEEP  
STATE COUNTY PERMIT HGA

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8910P19HU.dwg  
FITZGERALD S-19HU REV9  
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 X SHALLOW \_\_\_  
LOCATION: GROUND = 1,320.00' ELEVATION PROPOSED = 1,344.81' WATERSHED SPEAKEASY HOLLOW OF MAGGOTY RUN  
DISTRICT LIBERTY COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'  
SURFACE OWNER DANNY AND FRANCES KERNS ESTATE ACREAGE 27.00±  
ROYALTY OWNER DANNY S. KERNS, ET AL ACREAGE 27.00±  
PROPOSED WORK: LEASE NO. SEE WW-6A1  
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 POINT PLEASANT ESTIMATED DEPTH TVD: 12,076' / TMD: 22,323'

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°37'30"  
B.H. LONGITUDE 80°37'30"  
3,267' B.H.  
11,714' T.H.



**FITZGERALD S LEASE  
UTICA UNIT - 377.27AC±  
WELL 19HU  
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	Tags	Parcel	Grantor, Lessor, Etc.	Deed Book/Page
1	10*25518	A	7-8-1	DANNY S KERNS, MARRIED MAN DEALING WITH HIS SOLE AND SEPARATE PROPERTY	1010 532
2	10*18339	B	9-12-14	RESOURCE MINERALS HEADWATER I LP	940 448
3	PENDING	C	9-9-14	REGINA DANETTE FIGUEROA	1075 137
4	10*21859	D	9-9-12	GARY WAYNE MORRIS	960 192
5	10*19987	E	9-9-16.1	LESLEY D BALLA	955 103
6	10*19987	F	9-9-16	LESLEY D BALLA	955 103
7	**	G	9-9-4	MARY LOU RUBINI AKA MARY LOU MILLER	793 287
8	10*24535	H	9-9-22	BOARD OF EDUCATION OF MARSHALL COUNTY	1026 64
9	10*23656	I	9-12-10	ROBERT W KNIGHT AND BARBARA J KNIGHT	1011 504
10	10*15999	J	9-12-9	CHARLES W DOBBS AND JUDITH M DOBBS	702 171
11	10*15494	K	9-12-11	CHRISTOPHER SINGER AND SHEREA SINGER	898 433
12	10*19557	L	9-12-12	TERRY L BLAKE	944 649
13	10*22524	M	9-9-18	ALYCE LYNN MCGUFFIE	1027 233
14	10*21512	N	9-12-15	THE WHIPKEY TRUST ACTING TRUSTEES DAVID L AND CAROL J WHIPKEY	949 266
15	10*21512	O	9-12-16	THE WHIPKEY TRUST	949 266
16	10*21532	P	9-12-17	CHARLES E RICHARDSON AND SHIRLEY S RICHARDSON	957 327
17	10*18988	Q	7-8-4	MICHAEL R DOBBS AND LEANNE DOBBS	957 307
18	10*21112	R	7-8-5	CLARENCE C STOVER JR AND LOU E STOVER	952 382
19	10*21532	S	7-8-7	CHARLES E RICHARDSON AND SHIRLEY S RICHARDSON	1017 620
20	10*21112	T	7-8-8	CLARENCE C STOVER JR AND LOU E STOVER	952 382
21	10*17930	U	7-9-22	BOUNTY MINERALS LLC	928 396
22	**	V	7-9-23	O E BURGE AND SARAH L BURGE ET AL	395 586

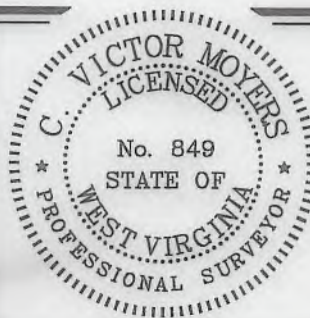
FILE NO. 8910P19HU.dwg  
FITZGERALD S-19HU REV9

DATE MARCH 13, 2020

REVISED \_\_\_\_\_, 20\_\_\_\_

OPERATORS WELL NO. FITZGERALD S-19HU

API WELL NO. 47 — 051 — 02326 <sup>HGA</sup> Deep  
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

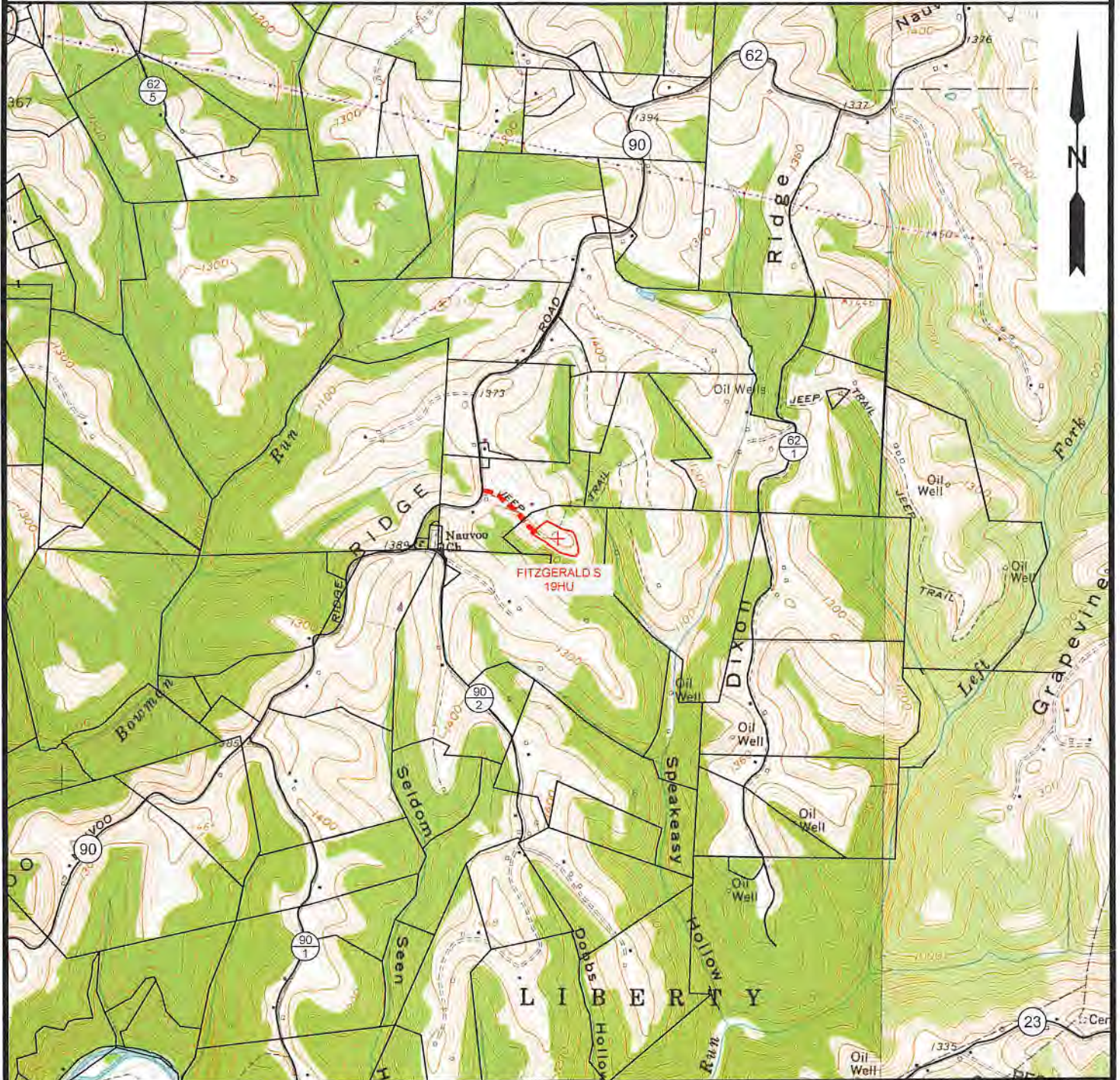
PERMIT



WW-9

# PROPOSED FITZGERALD S - 19HU

SUPPLEMENT PG. 2



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

LAT: 39.829865  
LON: -80.573724  
LOCATED: N 62°00'46" E AT 21,684.26' FROM THE CENTER OF FITZGERALD S WELL PLAT LOCATION.

RECEIVED  
Office of Oil and Gas  
MAR 17 2020



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 | 304.255.9296  
slsw.com

<b>TOPO SECTION:</b>		<b>OPERATOR:</b>	
GLEN EASTON 7.5' & CAMERON 7.5'		PREPARED FOR: TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD SUITE 200 CANONSBURG, PA 15317	
<b>COUNTY</b>	<b>DISTRICT</b>		
MARSHALL	LIBERTY & MEADE		
<b>DRAWN BY</b>	<b>JOB NO.</b>	<b>DATE</b>	<b>SCALE</b>
K.G.M.	8910	03/03/2020	1" = 2000'



WV Department of Environmental Protection  
**TUG HILL OPERATING**