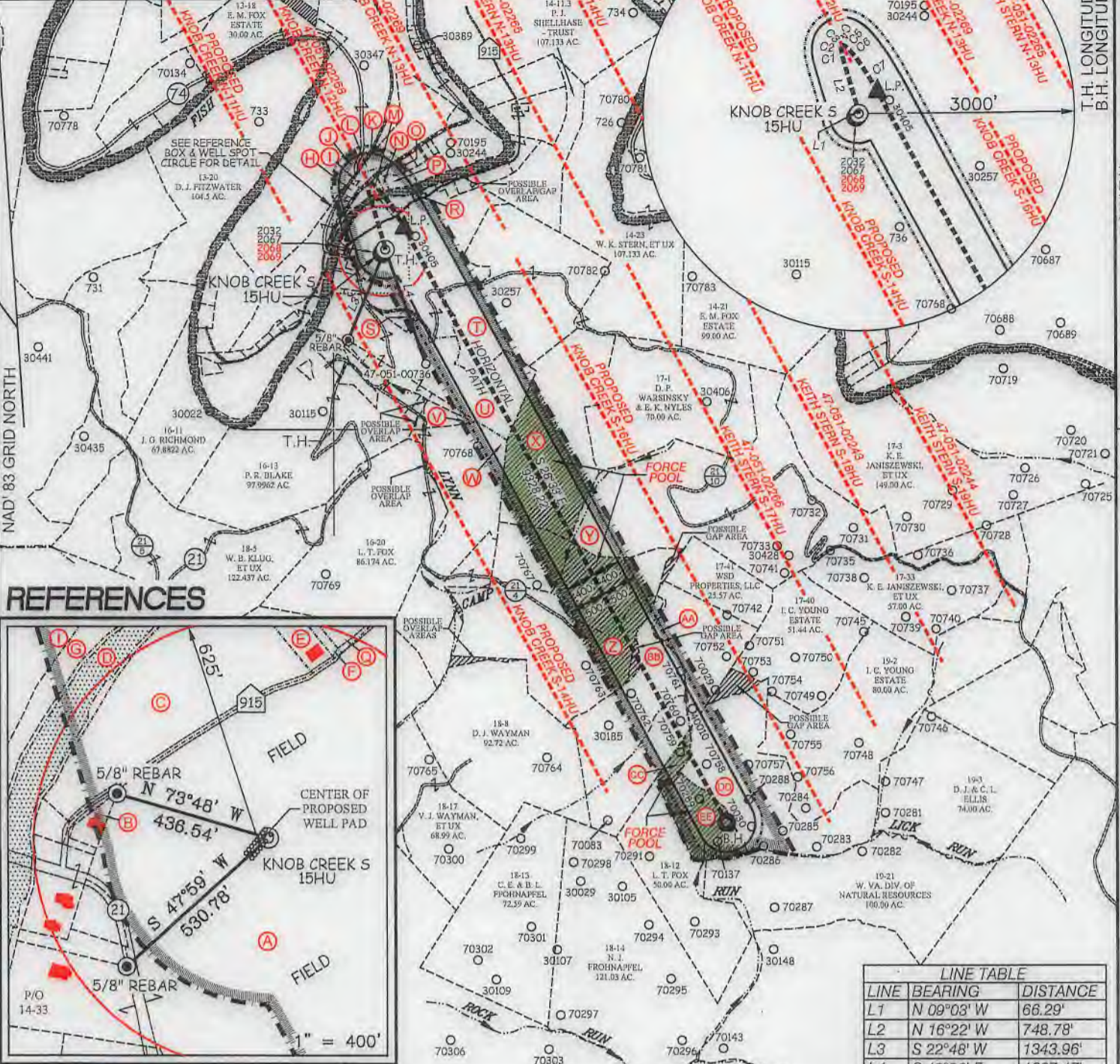
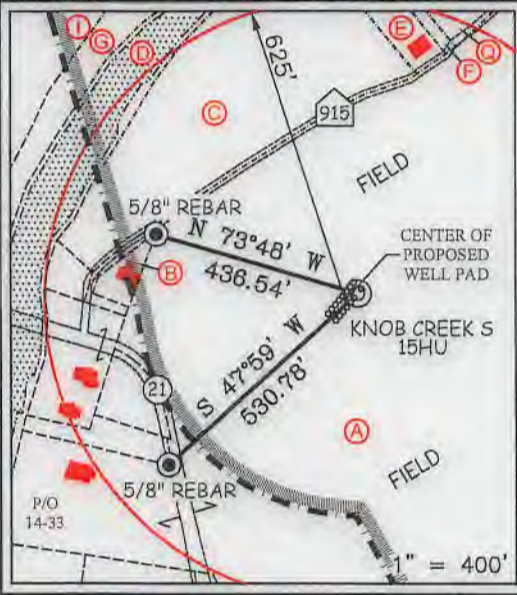


**KNOB CREEK S LEASE  
UTICA UNIT - 292.62 AC ±  
WELL 15HU  
TUG HILL OPERATING**



**REFERENCES**



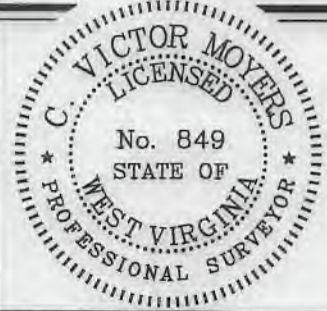
LINE	BEARING	DISTANCE
L1	N 09°03' W	66.29'
L2	N 16°22' W	748.78'
L3	S 22°48' W	1343.96'
L4	S 19°36' E	1667.17'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	105.33'	530.99'	N 10°59' W	105.16'
C2	36.84'	112.82'	N 05°26' E	36.67'
C3	22.87'	25.90'	N 42°50' E	22.14'
C4	27.05'	43.78'	S 80°27' E	26.62'
C5	63.89'	236.87'	S 53°36' E	63.70'
C6	161.69'	1111.48'	S 41°27' E	161.54'
C7	557.59'	3534.10'	S 32°32' E	557.01'

**SLS**  
Land & Energy Development  
Solutions from the ground up.  
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26031 • (304) 482-6634  
www.slsllc.com

P.S. 849 *C. Victor Moyers*

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)			
NAD'83 S.P.C.(FT)	N. 464,881.79	E. 1,629,700.56	
NAD'83 GEO.	LAT-(N) 39.770098	LONG-(W) 80.705365	
NAD'83 UTM (M)	N. 4,402,282.36	E. 525,234.08	
LANDING POINT			
NAD'83 S.P.C.(FT)	N. 465,188.7	E. 1,629,961.6	
NAD'83 GEO.	LAT-(N) 39.770950	LONG-(W) 80.704451	
NAD'83 UTM (M)	N. 4,402,377.2	E. 525,312.0	
BOTTOM HOLE			
NAD'83 S.P.C.(FT)	N. 456,995.2	E. 1,634,420.5	
NAD'83 GEO.	LAT-(N) 39.748621	LONG-(W) 80.688204	
NAD'83 UTM (M)	N. 4,399,903.7	E. 526,712.2	



SCALE 1" = 2000' FILE NO. 8789P15HU.dwg  
KNOB CREEK S-15HU REV4  
DATE OCTOBER 1, 2019  
REVISED  
OPERATORS WELL NO. KNOB CREEK S-15HU  
API WELL NO. 47-051-02289 WGA  
NO. STATE COUNTY PERMIT

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

(+) 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)

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

**KNOB CREEK S LEASE  
UTICA UNIT - 292.62 AC±  
WELL 15HU  
TUG HILL OPERATING**

B.H.

T.H. LATITUDE 39°47'30"  
B.H. LATITUDE 39°45'00"

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

NAD'83 S.P.C.(FT)	N. 464,881.79	E. 1,629,700.56
NAD'83 GEO.	LAT-(N) 39.770098	LONG-(W) 80.705365
NAD'83 UTM (M)	N. 4,402,282.36	E. 525,234.08
<b>LANDING POINT</b>		
NAD'83 S.P.C.(FT)	N. 465,188.7	E. 1,629,961.6
NAD'83 GEO.	LAT-(N) 39.770950	LONG-(W) 80.704451
NAD'83 UTM (M)	N. 4,402,377.2	E. 525,312.0
<b>BOTTOM HOLE</b>		
NAD'83 S.P.C.(FT)	N. 456,995.2	E. 1,634,420.5
NAD'83 GEO.	LAT-(N) 39.748621	LONG-(W) 80.688204
NAD'83 UTM (M)	N. 4,399,903.7	E. 526,712.2

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

503' B.H.

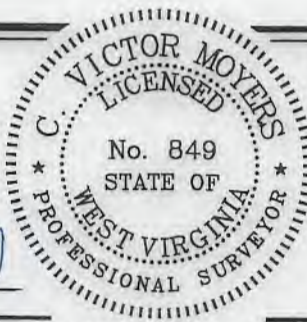
7,857' T.H.

TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	MARGARET FOX - LIFE	9-14-39	8,675 SQ. FT
C	DAVID LEE FRANKLIN	9-14-44	2.913
D	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
E	TWILA C. COFFIELD	9-14-32	0.583
F	TWILA C. COFFIELD	9-14-32.1	0.184
G	JOHN C. LAGOS, ET UX	9-14-42	1.87
H	JAMES G. FOX	9-14-43	0.66
I	MARGARET FOX - LIFE	9-13-13	15.513
J	NILA JEAN FROHNAPPEL	9-13-12	91.1007
K	MARGARET K. FOX - LIFE	9-13-14	3.00
L	MARGARET K. FOX - LIFE	9-14-46	18.888
M	JAMES E. PEELMAN	9-14-53	0.555
N	JAMES E. PEELMAN	9-14-52	0.439
O	GEORGE R. TAYLOR, ET UX	9-14-51	1.621
P	GEORGE R. TAYLOR, ET UX	9-14-44.1	4.423
Q	RICHARD L. HARVETH, ET UX	9-14-54	1.649
R	WILFORD F. NELSON, JR., ET UX	9-14-31	0.954
S	ERIC J. YOUNG	9-16-15.1	1.98
T	JOHN F. CUNNINGHAM, ET UX	9-14-22	75.22
U	RONALD R. YOUNG, ET UX - LIFE	9-16-15	52.02
V	ROBIN D. & DAVID G. STEWART	9-16-18.1	3.333
W	ALICE FAYE WINLAND	9-16-18	48.667
X	ALICE FAYE WINLAND	9-16-19	75.00
Y	I. C. YOUNG ESTATE	9-17-2	140.00
Z	ROBERT J. COMBS, ET AL	9-18-9	110.75
AA	BETTY J. GOULDSBERRY ESTATE, ET AL	9-18-10	20.00
BB	BETTY J. GOULDSBERRY ESTATE, ET AL	9-18-11	60.00
CC	LOUIS T. FOX	9-18-12	50.00
DD	I. C. YOUNG ESTATE	9-19-1	80.00
EE	LOUIS T. FOX	9-19-19.1	21.68

T.H.

**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- SEE REFERENCES FOR DWELLINGS LOCATED WITHIN 625' 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 KNOB CREEK S-15HU IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF EXISTING WELLS PROPOSED KNOB CREEK N-11HU, KNOB CREEK N-12HU (47-051-02268), KNOB CREEK N-13HU (47-051-02269), PROPOSED KNOB CREEK S-14HU, PROPOSED KNOB CREEK S-16HU, KEITH STERN N-13HU (47-051-02265), KEITH STERN S-17HU (47-051-02266).



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 OCTOBER 1, 20 19  
REVISED \_\_\_\_\_  
OPERATORS WELL NO. KNOB CREEK S-15HU  
API WELL NO. 47 051 02269 Deep H10A  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789P15HU.dwg  
KNOB CREEK S-15HU REV4  
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  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: GROUND = 729.90' ELEVATION PROPOSED = 734.67' WATERSHED FISH CREEK (HUC 10)  
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER DAVID LEE FRANKLIN ACREAGE 65.824±  
ROYALTY OWNER DAVID LEE FRANKLIN, ET AL - SEE ADDITIONAL SHEETS ACREAGE 65.824±

PROPOSED WORK: LEASE NO. SEE ADDITIONAL SHEETS  
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: 11,315' TMD: 21,065'

COUNTY NAME

PERMIT

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