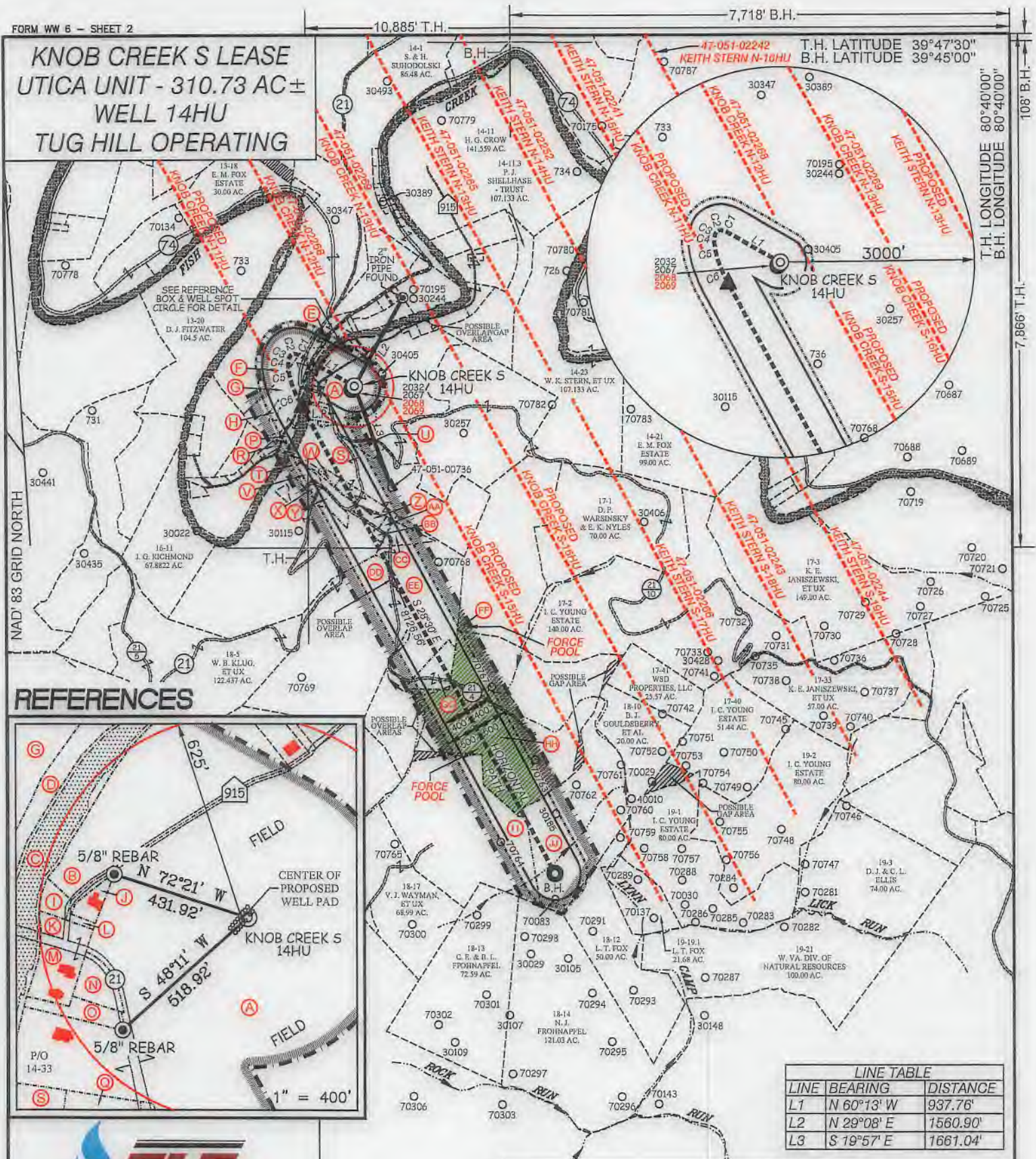
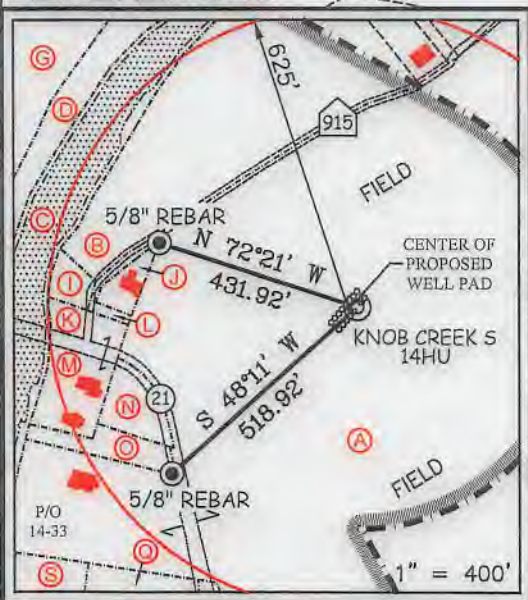


**Knob Creek S Lease  
Utica Unit - 310.73 AC±  
Well 14HU  
Tug Hill Operating**



**REFERENCES**



LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 60°13' W	937.76'
L2	N 29°08' E	1560.90'
L3	S 19°57' E	1661.04'

CHORD BEARING				
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	93.12'	262.75'	N 69°18' W	92.64'
C2	91.01'	89.43'	S 71°30' W	87.13'
C3	70.37'	149.45'	S 24°37' W	69.72'
C4	96.82'	391.36'	S 03°55' W	96.57'
C5	280.49'	1131.40'	S 11°23' E	279.77'
C6	389.12'	2199.17'	S 23°40' E	388.61'

**SLS**  
Land & Energy Development  
Solutions from the ground up.  
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634  
www.sls-wv.com

P.S. 849 *C. Victor Moyers*

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)			
NAD'83 S.P.C.(FT)	N. 464,872.53	E. 1,629,692.92	
NAD'83 GEO.	LAT-(N) 39.770072	LONG-(W) 80.705392	
NAD'83 UTM (M)	N. 4,402,279.50	E. 525,231.80	
LANDING POINT			
NAD'83 S.P.C.(FT)	N. 464,553.4	E. 1,628,885.9	
NAD'83 GEO.	LAT-(N) 39.769167	LONG-(W) 80.708250	
NAD'83 UTM (M)	N. 4,402,178.2	E. 524,987.4	
BOTTOM HOLE			
NAD'83 S.P.C.(FT)	N. 457,411.7	E. 1,632,763.0	
NAD'83 GEO.	LAT-(N) 39.749704	LONG-(W) 80.694118	
NAD'83 UTM (M)	N. 4,400,022.1	E. 525,205.1	



(+) 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. 8789P14HUR.dwg  
 DATE OCTOBER 1, 20 19  
 REVISED DECEMBER 18, 20 19  
 OPERATORS WELL NO. Knob Creek S-14HU  
 API WELL NO. 47 - D51 - 02288 H6A  
 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  
 ADDRESS CT CORPORATION SYSTEM 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

108° B.H. LONGITUDE 80°40'00"  
 7,866' T.H.  
 7,718' B.H.  
 39°47'30" T.H. LATITUDE  
 39°45'00" B.H. LATITUDE  
 COUNTY NAME  
 PERMIT

10,885' T.H.

7,718' B.H.

B.H.

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

**KNOB CREEK S LEASE  
UTICA UNIT - 310.73 AC±  
WELL 14HU  
TUG HILL OPERATING**

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

NAD'83 S.P.C.(FT) N. 464,872.53 E. 1,629,692.92  
NAD'83 GEO. LAT-(N) 39.770072 LONG-(W) 80.705392  
NAD'83 UTM (M) N. 4,402,279.50 E. 525,231.80

LANDING POINT

NAD'83 S.P.C.(FT) N. 464,553.4 E. 1,628,885.3  
NAD'83 GEO. LAT-(N) 39.769167 LONG-(W) 80.708250  
NAD'83 UTM (M) N. 4,402,178.2 E. 524,987.4

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 457,411.7 E. 1,632,763.0  
NAD'83 GEO. LAT-(N) 39.749704 LONG-(W) 80.694118  
NAD'83 UTM (M) N. 4,400,022.1 E. 526,205.1

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

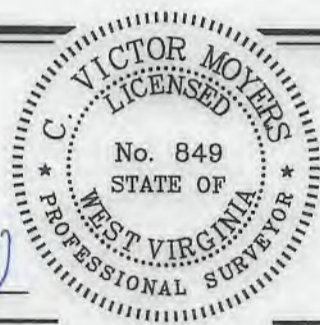
TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	DAVID LEE FRANKLIN	9-14-44	2.913
C	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
D	JOHN C. LAGOS, ET UX	9-14-42	1.87
E	JAMES G. FOX	9-14-43	0.66
F	NILA JEAN FROHNAPFEL	9-13-12	91.1007
G	MARGARET FOX - LIFE	9-13-13	15.513
H	THOMAS JOHN FOX	9-13-13.1	0.827
I	MARGARET FOX - LIFE	9-14-41	9,163 SQ. FT
J	MARGARET FOX - LIFE	9-14-39	8,675 SQ. FT
K	MARGARET FOX - LIFE	9-14-40	19,560 SQ. FT
L	MARGARET FOX - LIFE	9-14-36	1,600 SQ. FT
M	MARGARET FOX - LIFE	9-14-37	LOT
N	MARGARET FOX - LIFE	9-14-38	0.631
O	PAUL G. FOX	9-14-35	0.338
P	JAMES RICHMOND	9-16-12	28.638
Q	LYNN CAMP METHODIST CHURCH	9-16-14	0.762
R	JAMES G. RICHMOND, ET UX	9-16-12.1	0.691
S	RONALD R. YOUNG, ET UX - LIFE	9-16-15	52.02
T	PAUL R. BLAKE	9-16-13	97.9962
U	ERIC J. YOUNG	9-16-15.1	1.98
V	WESLEY D. YEATER, ET UX	9-16-13.6	2.144
W	CLINTON B. WHITEFATCH, SR.	9-16-16	1 AC. & 5 6/10 P.
X	PAUL W. BLAKE - LIFE	9-16-13.1	0.91
Y	PAUL R. BLAKE & PAUL R. BLAKE, II	9-16-13.5	2.291
Z	ELEANOR M. FOX ESTATE	9-16-13.2	1.570
AA	ELEANOR M. FOX ESTATE	9-16-17	0.741
BB	JOHN FOX	9-16-13.4	0.533
CC	ROBIN D. & DAVID G. STEWART	9-16-18.1	3.333
DD	LOUIS T. FOX	9-16-20	86.174
EE	ALICE FAYE WINLAND	9-16-18	48.667
FF	ALICE FAYE WINLAND	9-16-19	75.00
GG	LOUIS T. FOX	9-18-7	27.864
HH	ROBERT J. COMBS, ET AL	9-18-9	110.75
II	DOUGLAS J. WAYMAN	9-18-8	92.72
JJ	BETTY J. GOULDSBERRY ESTATE, ET AL	9-18-11	60.00

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-14HU 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-15HU, PROPOSED KNOB CREEK S-16HU, KEITH STERN N-13HU (47-051-02265).



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 DECEMBER 18, 20 19  
OPERATORS WELL NO. KNOB CREEK S-14HU  
API WELL NO. 47-051-02288116A  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789P14HUR.dwg  
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'  
KNOB CREEK S-14HU REV3

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 = 730.90' 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: 11,295'/ TMD: 19,886'

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