

**Knob Creek N Lease  
Well 4HM  
Tug Hill Operating**

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

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

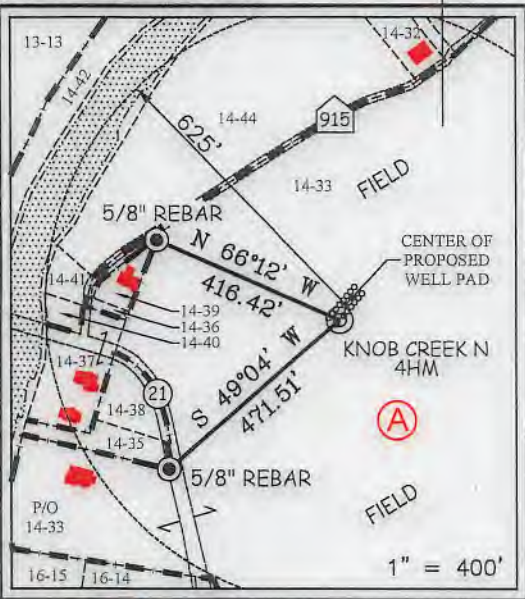
NAD'83 S.P.C.(FT)	N. 464,835.51	E. 1,629,662.35
NAD'83 GEO.	LAT-(N) 39.769970	LONG-(W) 80.705499
NAD'83 UTM (M)	N. 4,402,268.07	E. 525,222.67
<b>LANDING POINT</b>		
NAD'83 S.P.C.(FT)	N. 466,248.2	E. 1,630,017.6
NAD'83 GEO.	LAT-(N) 39.773861	LONG-(W) 80.704303
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<b>BOTTOM HOLE</b>		
NAD'83 S.P.C.(FT)	N. 477,618.2	E. 1,623,654.4
NAD'83 GEO.	LAT-(N) 39.804836	LONG-(W) 80.727493
NAD'83 UTM (M)	N. 4,406,131.8	E. 523,327.2

T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°42'30"

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-10-8	BRENT ALLEN CONNER	2.00
9-10-10	RALPH MARTIN TAYLOR	2.23
9-10-14	WILLIAM MCCONNELL	15.00
9-11-1	GERALD F. PADLOW	1.033
9-11-2.1	KENNETH P. GATEWOOD, ET UX	0.308
9-11-2.2	GERALD F. PADLOW, ET UX	0.291
9-13-10	ARTHUR L. MOORE	3.96
9-13-13	MARGARET K. FOX - LIFE	15.513
9-14-1.2	KENNETH N. & TERESA A. SMERTNECK	1.02
9-14-11.3	PATRICK J. SCHELLHASE - TRUST	23.424
9-14-28	CHARLES R. SCHELLHASE, ET UX	3.029
9-14-29	ANDREW FASOULETOS, ET UX	0.209
9-14-29.1	ANDREW FASOULETOS, ET UX	1.171
9-14-30	WILLIAM C. GROFT, ET UX	0.55
9-14-32	TWILA C. COFFIELD	0.383
9-14-32.1	TWILA C. COFFIELD	0.184
9-14-35	PAUL G. FOX	0.338
9-14-36	MARGARET FOX - LIFE	1600 SQ. FT.
9-14-37	MARGARET FOX - LIFE	LOT

MAP/PARCEL	ADJOINING SURFACE OWNER LIST - CONTINUED	ACRES
9-14-38	MARGARET FOX - LIFE	0.631
9-14-39	MARGARET FOX - LIFE	8675 SQ. FT.
9-14-40	MARGARET FOX - LIFE	19,360 SQ. FT.
9-14-41	MARGARET FOX - LIFE	9165 SQ. FT.
9-14-42	JOHN C. LAGOS, ET UX	1.87
9-14-43	JAMES G. FOX	0.65
9-14-44	DAVID LEE FRANKLIN	2.913
9-14-45	GEORGE R. TAYLOR, ET UX	10.98
9-14-46.1	MARTHA JANE FAZZARO	1.512
9-14-47	MICHAEL L. & CHERYL J. ACREE	0.355
9-14-48	MICHAEL L. & CHERYL J. ACREE	0.473
9-14-49	MICHAEL L. & CHERYL J. ACREE	0.118
9-14-50	RONALD MARSH	0.707
9-14-52	JAMES E. PEELMAN	0.439
9-14-53	JAMES E. PEELMAN	0.555
9-14-54	RICHARD L. HARVETH, ET UX	1.649
9-16-14	LYNN CAMP METHODIST CHURCH	0.762
9-16-15	RONALD R. YOUNG, ET UX - LIFE	52.02
9-16-15.1	ERIC J. YOUNG	1.98

**REFERENCES**



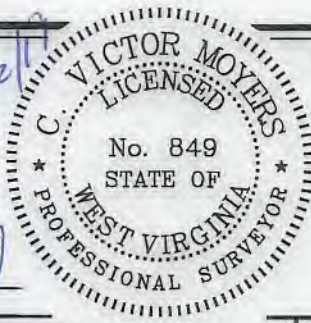
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P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 260351 • (304) 462-5834  
www.slsww.com

**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.

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 JULY 27, 2018

REVISED AUGUST 20, 2019

OPERATORS WELL NO. Knob Creek N-4HM

API WELL NO. 47 - 051 - 02267

STATE STATE COUNTY COUNTY PERMIT PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789P4HMR.dwg

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

KNOB CREEK N-4HM REV2

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 = 734.20' 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 WW-6A1 ACREAGE 65.824±

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 MARCELLUS ESTIMATED DEPTH TVD: 6,359' / TMD: 19,823'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER

ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS CT CORPORATION SYSTEM

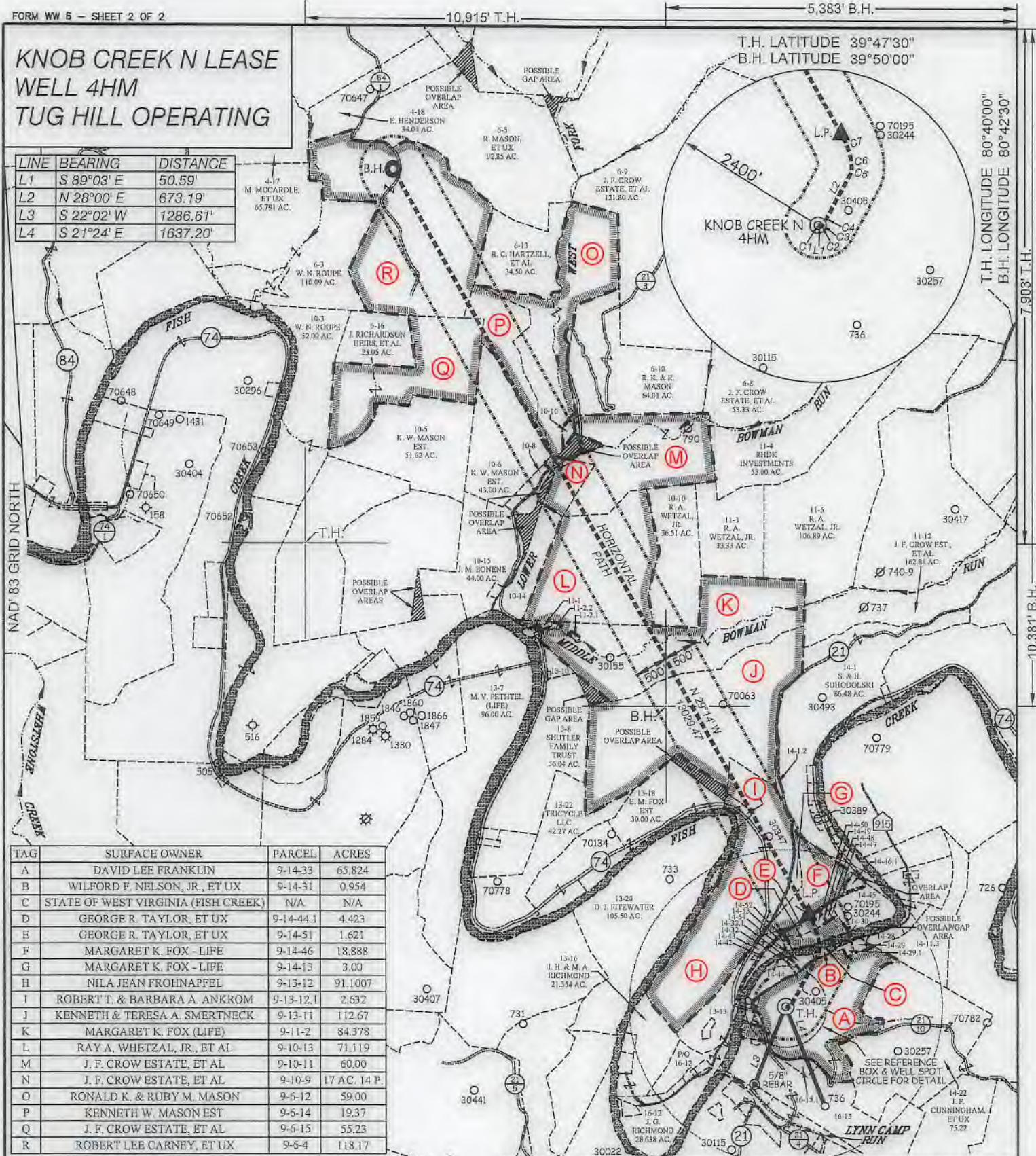
FORT WORTH, TX 76107 ADDRESS 5400 D BIG TYLER ROAD

CHARLESTON, WV 25313

COUNTY NAME  
PERMIT

**KNOB CREEK N LEASE  
WELL 4HM  
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	S 89°03' E	50.59'
L2	N 28°00' E	673.19'
L3	S 22°02' W	1286.61'
L4	S 21°24' E	1637.20'



TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	WILFORD F. NELSON, JR., ET UX	9-14-31	0.954
C	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
D	GEORGE R. TAYLOR, ET UX	9-14-44.1	4.423
E	GEORGE R. TAYLOR, ET UX	9-14-51	1.621
F	MARGARET K. FOX - LIFE	9-14-46	18,888
G	MARGARET K. FOX - LIFE	9-14-13	3.00
H	NILA JEAN FROHNAPPEL	9-13-12	91.1007
I	ROBERT T. & BARBARA A. ANKROM	9-13-12.1	2.632
J	KENNETH & TERESA A. SMERTNECK	9-13-11	112.67
K	MARGARET K. FOX (LIFE)	9-11-2	84.378
L	RAY A. WHETZAL, JR., ET AL	9-10-13	71.119
M	J. F. CROW ESTATE, ET AL	9-10-11	60.00
N	J. F. CROW ESTATE, ET AL	9-10-9	17 AC. 14 P.
O	RONALD K. & RUBY M. MASON	9-6-12	59.00
P	KENNETH W. MASON EST	9-6-14	19.37
Q	J. F. CROW ESTATE, ET AL	9-6-15	55.23
R	ROBERT LEE CARNEY, ET UX	9-5-4	118.17

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	3.50'	6.71'	S 66°38' E	3.46'
C2	8.10'	11.53'	N 60°51' E	7.94'
C3	28.03'	122.16'	N 40°21' E	27.97'
C4	200.90'	2018.24'	N 30°07' E	200.82'
C5	109.60'	244.40'	N 11°52' E	108.69'
C6	174.52'	736.03'	N 07°19' W	174.11'
C7	371.40'	1415.28'	N 22°19' W	370.33'

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SCALE 1" = 2000' FILE NO. 8789P4HMR.dwg  
KNOB CREEK N-4HM REV2  
DATE JULY 27, 2018  
REVISED AUGUST 20, 2019  
OPERATORS WELL NO. KNOB CREEK N-4HM  
API WELL NO. 47-051-02247  
STATE COUNTY PERMIT

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

**LEGEND**

- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE WW-6A1)

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