

**KNOB CREEK N LEASE
WELL 2HM
TUG HILL OPERATING**

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

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

NAD'83 S.P.C.(FT) N. 464,848.89 E. 1,629,646.16
NAD'83 GEO. LAT-(N) 39.770006 LONG-(W) 80.705557
NAD'83 UTM (M) N. 4,402,272.06 E. 525,217.67

LANDING POINT

NAD'83 S.P.C.(FT) N. 465,442.4 E. 1,628,749.9
NAD'83 GEO. LAT-(N) 39.771602 LONG-(W) 80.708774
NAD'83 UTM (M) N. 4,402,448.3 E. 524,941.6

BOTTOM HOLE

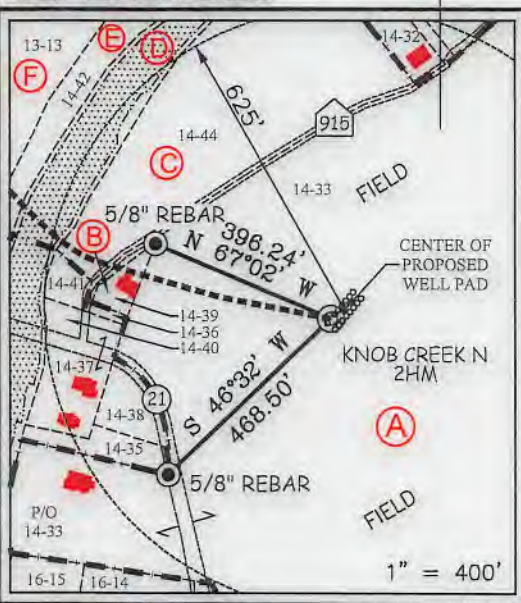
NAD'83 S.P.C.(FT) N. 466,237.8 E. 1,628,304.7
NAD'83 GEO. LAT-(N) 39.773769 LONG-(W) 80.710396
NAD'83 UTM (M) N. 4,402,688.4 E. 524,801.9

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°42'30"
7,890' T.H.
6,519' B.H.

NOTES ON SURVEY

1. 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.
2. SEE REFERENCES FOR DWELLINGS LOCATED WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
3. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
4. BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.

REFERENCES



MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-6-1.2	CONSOLIDATION COAL COMPANY, MURRAY ENERGY	2.222
9-6-5.1	CONSOLIDATION COAL COMPANY, MURRAY ENERGY	10.00
9-10-7	DAVID & PAMELA SCHIMMEL	1.00
9-10-8	BRENT ALLEN CONNER	2.00
9-10-14	WILLIAM MCCONNELL	15.00
9-10-16	WILLIAM D. MCCONNELL	0.859
9-11-1	GERALD F PADLOW	1.033
9-11-2.1	KENNETH P. GATEWOOD, ET UX	0.308
9-11-2.2	GERALD PADLOW, ET UX	0.291
9-13-9	ARTHUR L. MOORE	30 X 100 SQ. FT.
9-13-10	ARTHUR L. MOORE	3.96
9-13-12.1	ROBERT T. & BARBARA A. ANKROM	2.632
9-13-13.1	THOMAS JOHN FOX	0.827
9-13-14	MARGARET FOX - LIFE	3.00
9-13-16	IVAN H. & MARGARET A. RICHMOND	21.354
9-13-22.1	HENRY, JR. & BARBARA DICK	11.82
9-13-22.2	EUGENE A. SCHERRER	0.925
9-13-23	MARGARET K. FOX - LIFE	1.52
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. GROFF, ET UX	0.35
9-14-31	WILFORD F. NELSON, JR., ET UX	0.954
9-14-32	TWILA C. COFFIELD	0.583
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
9-14-38	MARGARET FOX - LIFE	0.631
9-14-40	MARGARET FOX - LIFE	19,560 SQ. FT.
9-14-41	MARGARET FOX - LIFE	9165 SQ. FT.
9-14-43	JAMES G. FOX	0.66
9-14-44.1	GEORGE R. TAYLOR, ET UX	4.423
9-14-45	GEORGE R. TAYLOR, ET UX	10.98
9-14-46	MARGARET K. FOX - LIFE	18.888
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
9-14-51	GEORGE R. TAYLOR, ET UX	1.621
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

B.H.

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 | 12 Vanhorn Drive | Glenville, WV 26351 | (304) 462-5634
www.slsurveys.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 JULY 27, 20 18
REVISED SEPTEMBER 30, 20 19
OPERATORS WELL NO. KNOB CREEK N-2HM
API WELL NO. 47 - 051 - 02279
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789P2HMR.dwg
KNOB CREEK N-2HM REV3
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

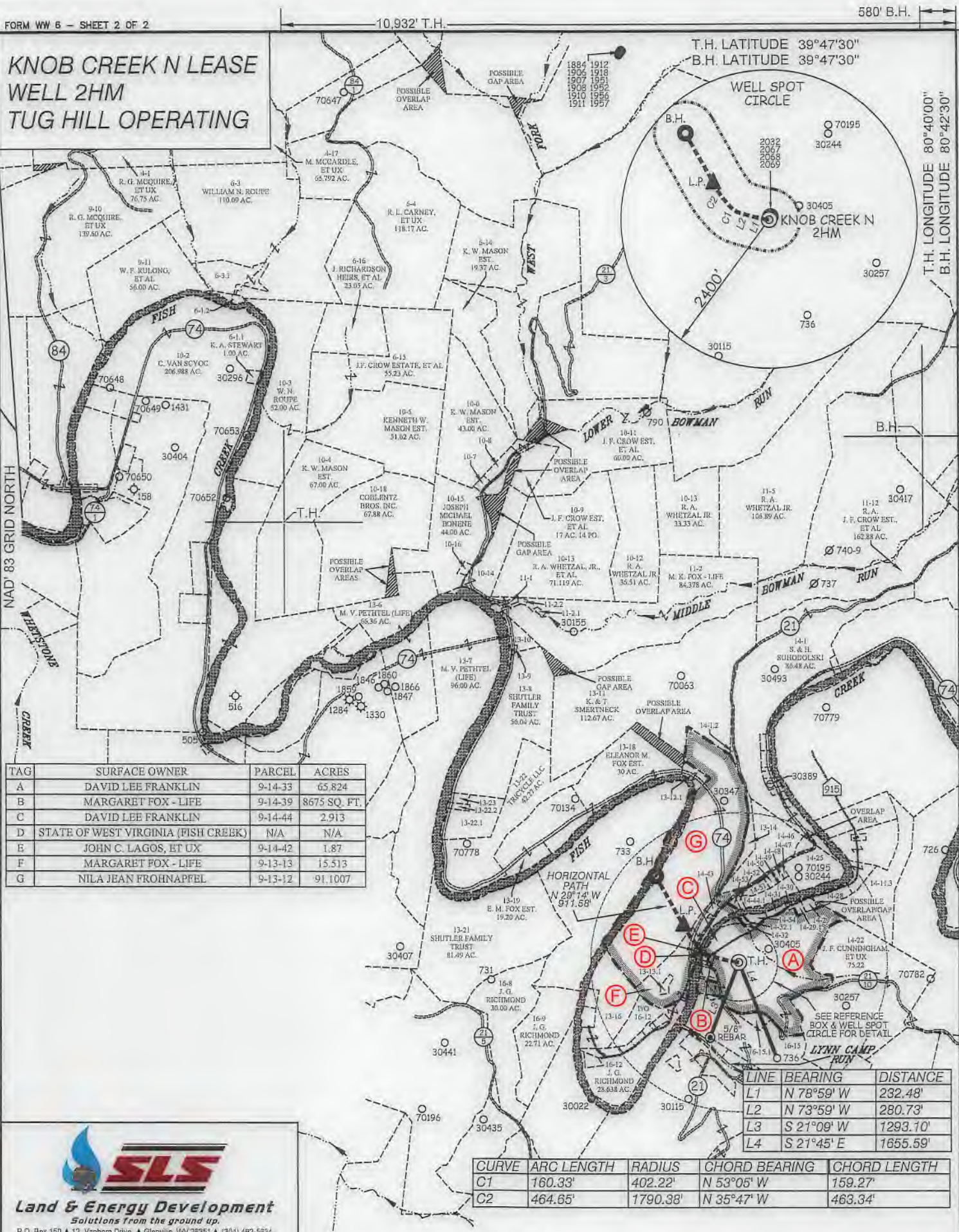
STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
LOCATION: GROUND = 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: 6,343' / TMD: 7,552'

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

**KNOB CREEK N LEASE
WELL 2HM
TUG HILL OPERATING**



TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	MARGARET FOX - LIFE	9-14-39	8675 SQ. FT.
C	DAVID LEE FRANKLIN	9-14-44	2.913
D	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
E	JOHN C. LAGOS, ET UX	9-14-42	1.87
F	MARGARET FOX - LIFE	9-13-13	15.513
G	NILA JEAN FROHNAPFEL	9-13-12	91.1007

LINE	BEARING	DISTANCE
L1	N 78°59' W	232.48'
L2	N 73°59' W	280.73'
L3	S 21°09' W	1293.10'
L4	S 21°45' E	1655.59'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	160.33'	402.22'	N 53°05' W	159.27'
C2	464.65'	1790.38'	N 35°47' W	463.34'

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 25951 • (304) 462-5634
www.slsurveys.com



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

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

P.S. 849 *C. Victor Moyers*

LEGEND

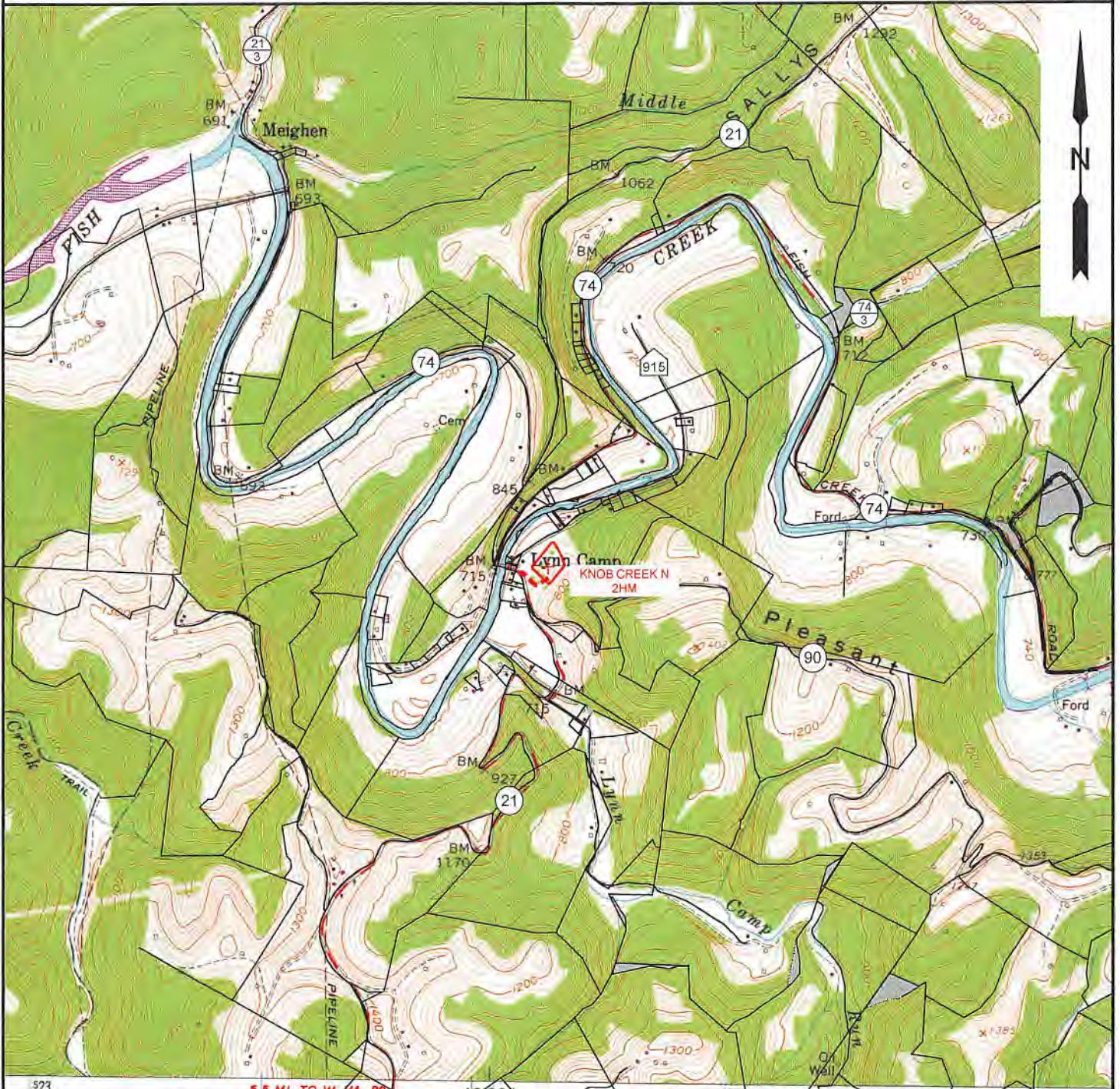
- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- 500' OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE WW-6A1)

SCALE 1" = 2000' FILE NO. 8789P2HMR.dwg
DATE JULY 27, 2018 KNOB CREEK N-2HM REV3
REVISED SEPTEMBER 30, 2019
OPERATORS WELL NO. KNOB CREEK N-2HM
API WELL NO. 47
STATE COUNTY PERMIT

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

COUNTY NAME PERMIT

PROPOSED KNOB CREEK N - 2HM



NOTE: CLOSEST WATER PURVEYOR
GRANDVIEW - DOOLIN PUBLIC SERVICE DISTRICT
PROCTOR, WV

LAT: 39.7137712
LON: -80.8258327
LOCATED: S 59°36'12" W AT 39,574.55' FROM THE CENTER OF KNOB CREEK N WELL PAD LOCATION.

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634
www.slsurveys.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.	8789	07/27/2018	1" = 2000'

TUG HILL
OPERATING