

**KNOB CREEK N LEASE
WELL 3HM
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. 464,858.14 E. 1,629,653.80
NAD'83 GEO. LAT-(N) 39.770031 LONG-(W) 80.705531
NAD'83 UTM (M) N. 4,402,274.92 E. 525,219.95

LANDING POINT

NAD'83 S.P.C.(FT) N. 466,297.5 E. 1,629,056.0
NAD'83 GEO. LAT-(N) 39.773961 LONG-(W) 80.707726
NAD'83 UTM (M) N. 4,402,710.4 E. 525,030.5

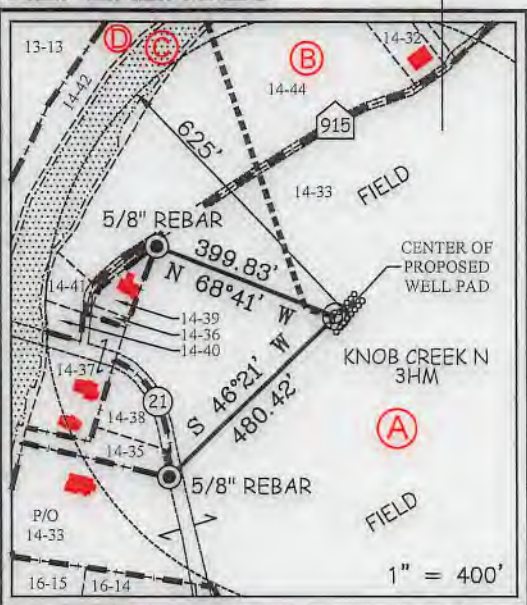
BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 466,980.7 E. 1,628,678.4
NAD'83 GEO. LAT-(N) 39.775822 LONG-(W) 80.709102
NAD'83 UTM (M) N. 4,402,916.6 E. 524,912.0

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-6-12	CONSOLIDATION COAL COMPANY, MURRAY ENERGY	2.222
9-6-31	CONSOLIDATION COAL COMPANY, MURRAY ENERGY	10.00
9-10-9	J. F. CROW EST., ET AL	17 AC. 14 P.
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 F. PADLOW, ET UX	0.291
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 K. FOX - LIFE	3.00
9-13-16	IVAN H. & MARGARET A. RICHMOND	21.354
9-14-1.2	KENNETH N. & TERESA A. SMERTNECK	1.02
9-14-11.3	PATRICK J. SCHELLHASE - TRUST	23.474
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	0.35
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

MAP/PARCEL	ADJOINING SURFACE OWNER LIST - CONTINUED	ACRES
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
9-14-39	MARGARET FOX - LIFE	8675 SQ. FT.
9-14-40	MARGARET FOX - LIFE	19,560 SQ. FT.
9-14-41	MARGARET FOX - LIFE	9165 SQ. FT.
9-14-42	JOHN C. LAGOS, ET UX	1.87
9-14-44	DAVID LEE FRANKLIN	2.913
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	1.021
9-14-52	JAMES E. PEELMAN	0.439
9-14-53	JAMES E. PEELMAN	8.555
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



P.O. Box 150 | 12 Vanhorn Drive | Glenville, WV 26351 | (304) 462-5634
www.slsurveys.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, 20 18
REVISED SEPTEMBER 30, 20 19
OPERATORS WELL NO. KNOB CREEK N-3HM
API WELL NO. 47 - 051 - 02280
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8789P3HMR.dwg
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'
KNOB CREEK N-3HM REV3

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: LEASE NO. SEE WW-6A1

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: 7,922'

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°40'00"
B.H. LONGITUDE 80°42'30"
7,891' T.H.
5,772' B.H.

COUNTY NAME
PERMIT

**KNOB CREEK N LEASE
WELL 3HM
TUG HILL OPERATING**



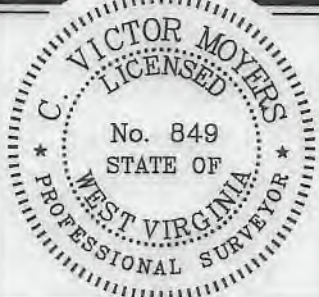
TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-14-33	65.824
B	DAVID LEE FRANKLIN	9-14-44	2.913
C	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
D	JOHN C. LAGOS, ET UX	9-14-42	1.87
E	JAMES G. FOX	9-14-43	0.66
F	MARGARET K. FOX (LIFE)	9-13-13	15.513
G	NILA JEAN FROHNAPPEL	9-13-12	91.1007

LINE	BEARING	DISTANCE
L1	N 76°03' W	57.64'
L2	N 19°01' W	1042.98'
L3	S 21°19' W	1304.49'
L4	S 21°23' E	1661.39'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	21.91'	37.87'	N 33°35' W	21.60'
C2	462.82'	2835.03'	N 24°17' W	462.30'

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 • 12 Vanham Drive • Glenville, WV 26031 • (304) 462-5834
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(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
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 P.S. 849 *C. Victor Moyers*

SCALE 1" = 2000' FILE NO. 8789P3HMR.dwg
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 REVISED SEPTEMBER 30, 2019
 OPERATORS WELL NO. KNOB CREEK N-3HM
 API WELL NO. 47 - 051 - 02280
 STATE COUNTY PERMIT

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

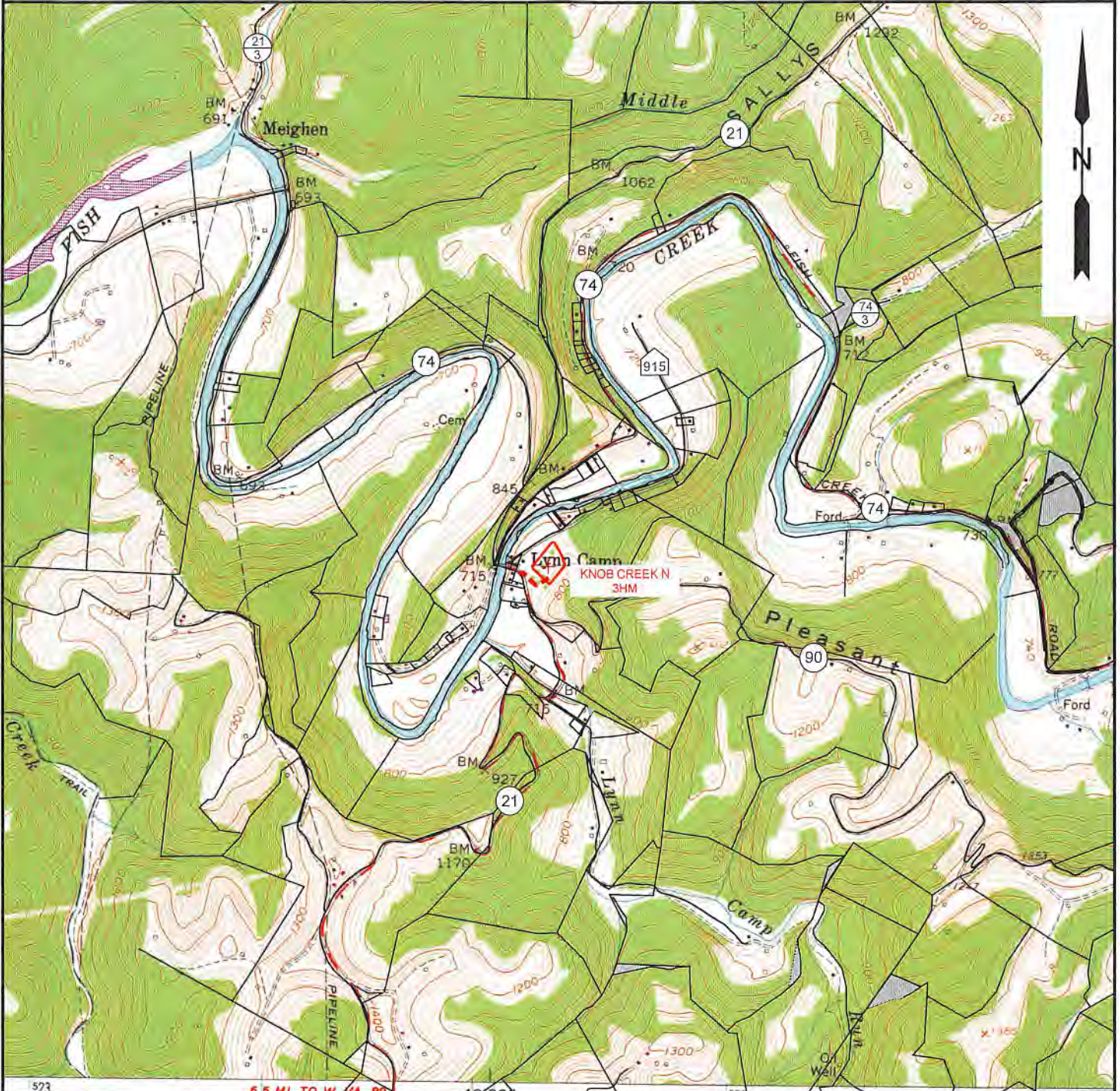
LEGEND

- 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)

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

PROPOSED KNOB CREEK N - 3HM



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.



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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