

**KNOB CREEK N LEASE
UTICA UNIT - 458.32 AC±
WELL 11HU
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. 464,844.77 E. 1,629,670.00
NAD'83 GEO. LAT-(N) 39.769995 LONG-(W) 80.705472
NAD'83 UTM (M) N. 4,402,270.92 E. 525,224.95

LANDING POINT

NAD'83 S.P.C.(FT) N. 464,992.5 E. 1,628,542.5
NAD'83 GEO. LAT-(N) 39.770359 LONG-(W) 80.709491
NAD'83 UTM (M) N. 4,402,310.2 E. 524,880.7

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 476,749.9 E. 1,622,075.4
NAD'83 GEO. LAT-(N) 39.802393 LONG-(W) 80.733070
NAD'83 UTM (M) N. 4,405,859.2 E. 522,850.6

MAR/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
9-11-1	GERALD F. PADLOW	1.033
9-13-10	ARTHUR L. MOORE	3.96
9-13-13.1	THOMAS JOHN FOX	0.827
9-14-2	MICHAEL L. ALVAREZ	0.75
9-14-35	PAUL G. FOX	0.338
9-14-37	MARGARET FOX - LIFE	LOT
9-14-40	MARGARET FOX - LIFE	19,560 SQ. FT.
9-14-41	MARGARET FOX - LIFE	9163 SQ. FT.
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

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

7,894' T.H.

11,271' B.H.

TAG	SURFACE OWNER	PARCEL	ACRES
A	DAVID LEE FRANKLIN	9-19-39	65.824
B	RONALD R. YOUNG, ET UX - LIFE	9-16-15	52.02
C	LYNN CAMP METHODIST CHURCH	9-16-14	0.762
D	PAUL G. FOX	9-14-35	0.338
E	MARGARET FOX - LIFE	9-14-38	0.631
F	MARGARET FOX - LIFE	9-14-37	LOT
G	MARGARET FOX - LIFE	9-14-40	19,560 SQ. FT.
H	MARGARET FOX - LIFE	9-14-36	1,000 SQ. FT.
I	MARGARET FOX - LIFE	9-14-39	8,675 SQ. FT.
J	MARGARET FOX - LIFE	9-14-41	9,163 SQ. FT.
K	DAVID LEE FRANKLIN	9-14-44	2.973
L	STATE OF WEST VIRGINIA (FISH CREEK)	N/A	N/A
M	JAMES RICHMOND	9-16-12	28.628
N	THOMAS JOHN FOX	9-13-13.1	0.827
O	MARGARET FOX - LIFE	9-13-13	15.313
P	JOHN C. LAGOS, ET UX	9-14-42	1.87
Q	NILA JEAN FROHNAPPEL	9-13-12	91.1097
R	DANIEL JAY FITZWATER	9-13-20	105.5
S	ELEANOR M. FOX ESTATE	9-13-18	30.00
T	ELEANOR M. FOX ESTATE	9-13-19	19.20
U	TRICYCLE LLC	9-13-22	42.27
V	KENNETH & TERESA A. SMERTNECK	9-13-11	112.67
W	SHUTLER FAMILY TRUST	9-13-8	36.04
X	MARY VIRGINIA PETHTELL - LIFE	9-13-7	96.00
Y	ARTHUR L. MOORE	9-13-9	50' X 100' SQ. FT.
Z	ARTHUR L. MOORE	9-13-10	3.96
AA	MARGARET FOX - LIFE	9-11-2	84.378
BB	GERALD PADLOW, ET UX	9-11-2.2	0.291
CC	GERALD PADLOW, ET UX	9-11-1	1.033
DD	RAY A. WHETZAL, JR., ET AL.	9-10-13	71.119
EE	WILLIAM MCCONNELL	9-10-14	15.00
FF	MARY VIRGINIA PETHTELL - LIFE	9-13-6	66.36
GG	WILLIAM D. MCCONNELL	9-10-16	0.839
HH	JOSEPH MICHAEL BONENE	9-10-15	41.00
II	COBLENTZ BROS. INC.	9-10-18	67.83
JJ	KENNETH W. MASON ESTATE	9-10-6	43.00
KK	KENNETH W. MASON ESTATE	9-10-4	67.00
LL	KENNETH W. MASON ESTATE	9-10-5	21.62
MM	J. F. CROW ESTATE, ET AL.	9-6-15	33.23
NN	JANE RICHARDSON HEIRS, ET AL.	9-6-16	23.00
OO	WILLIAM N. ROUPE	9-10-3	52.00
PP	ROBERT LEE CARNEY, ET UX	9-6-4	118.17
QQ	WILLIAM N. ROUPE	9-6-5	110.09
RR	CONSOLIDATION COAL COMPANY/MURRAY ENERGY	9-6-3.1	16.00

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 & TOPD 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 N-11HU (47-051-02287) IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF EXISTING WELLS:
KNOB CREEK N-12HU (47-051-02268),
KNOB CREEK N-13HU (47-051-02269),
KNOB CREEK S-14HU (47-051-02288),
KNOB CREEK S-15HU (47-051-02289),
KNOB CREEK S-16HU (47-051-02290),
HEAVEN HILL 2W-13HU (47-051-01957),
KEITH STERN N-13HU (47-051-02285).



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsvv.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 OCTOBER 1, 2019

REVISED 08/27/2020

OPERATORS WELL NO. KNOB CREEK N-11HU

API WELL NO. 47 - 051 - 02287
STATE COUNTY PERMIT

MOY

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8789P11HUR.dwg
KNOB CREEK N-11HU 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 = 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 ADDITIONAL SHEETS 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 POINT PLEASANT ESTIMATED DEPTH TVD: 11,298' TMD: 25,044'

COUNTY NAME

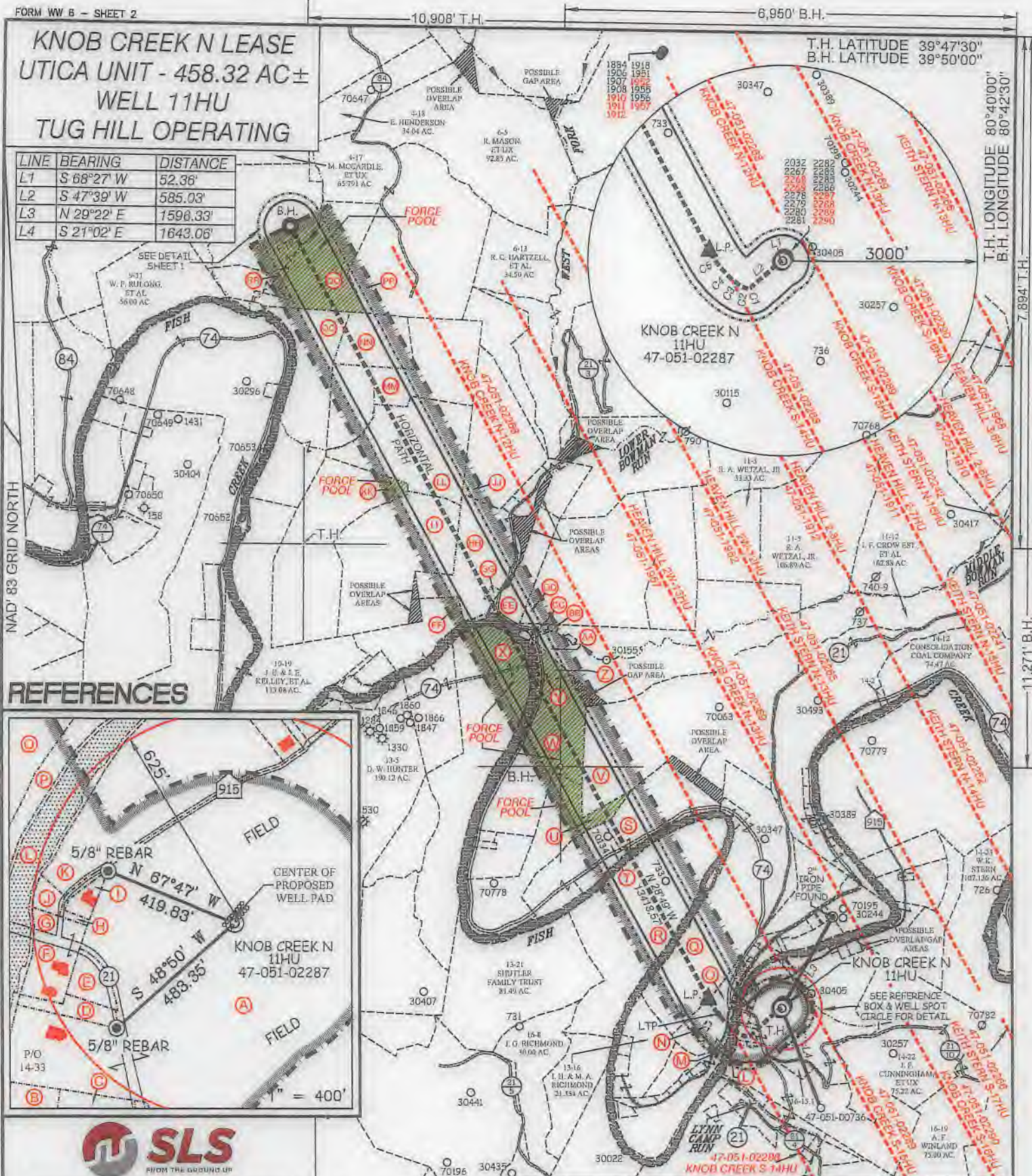
PERMIT

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

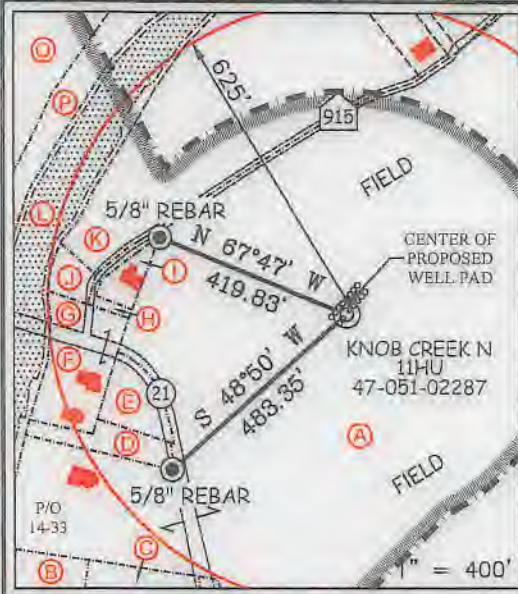
DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

**KNOB CREEK N LEASE
UTICA UNIT - 458.32 AC ±
WELL 11HU
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	S 68°27' W	52.36'
L2	S 47°39' W	585.03'
L3	N 29°22' E	1598.33'
L4	S 21°02' E	1643.06'



REFERENCES



12 Vanhook Drive | P.O. Box 150 | Glenview, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.546.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5295
sllsv.com

P.S. 849 *C. Victor Moyers*

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	56.78'	70.73'	S 73°15' W	55.26'
C2	99.70'	256.68'	N 71°44' W	99.07'
C3	220.06'	996.75'	N 54°12' W	219.62'
C4	161.65'	1120.16'	N 44°42' W	161.51'
C5	367.90'	1775.97'	N 34°28' W	367.24'



(+) 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
- FORCE POOL TRACT
- CREEK
- ROAD
- PROPOSED FIRST TAKE POINT
- PROPOSED LAST TAKE POINT
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE ADDITIONAL SHEETS)

SCALE 1" = 2000' FILE NO. 8789P11HUR.dwg
DATE OCTOBER 1, 2019
REVISED 08/27/2020
OPERATORS WELL NO. KNOB CREEK N-11HU
API WELL NO. 47-051-02287
STATE COUNTY PERMIT MOD

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

DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

COUNTY NAME PERMIT

**KNOB CREEK N LEASE
UTICA UNIT - 458.32 AC±
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254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
sllw.com

NO.	Lease ID	Parcel	Tag	Grantor, Lessor, Etc.	Deed Book/Page	
1	10*47051.219.1	9-14-33	A	DAVID LEE FRANKLIN	874	312
2	10*23112	9-16-15	B	JOHN V AND RACHEL M SHEPHERD	63	219
3	10*23112	9-16-14	C	JOHN V AND RACHEL M SHEPHERD	63	219
4	10*47051.219.1	9-14-35	D	DAVID LEE FRANKLIN	937	385
5	10*47051.293.1	9-14-38	E	MARY A FOX, ET AL	879	332
6	10*47051.219.1	9-14-37	F	DAVID LEE FRANKLIN, ET AL.	937	385
7	10*18298	9-14-40	G	MAUREEN GREGG, ET AL.	929	273
8	10*47051.219.1	9-14-36	H	DAVID LEE FRANKLIN	937	385
9	10*47051.219.1	9-14-39	I	DAVID LEE FRANKLIN	937	385
10	10*47051.219.1	9-14-41	J	DAVID LEE FRANKLIN	937	385
11	10*47051.219.1	9-14-44	K	DAVID LEE FRANKLIN	937	385
12	10*23458	FISH CREEK	L	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	1019	373
13	10*16481	9-16-12	M	JAMES GRICHMOND AND CINDY L RICHMOND	829	71
14	10*18732	9-13-13.1	N	SHERILL M LEAVERS AND JAMES H LEAVERS, ET AL.	938	245
15	10*18732	9-13-13	O	SHERILL M LEAVERS AND JAMES H LEAVERS, ET AL.	938	245
16	10*19538	9-14-42	P	JOHN C LAGOS AND CYNTHIA M LAGOS	936	531
17	10*24858	9-13-12	Q	NILA JEAN FROHNAPFEL	1028	119
18	10*17193	9-13-20	R	JOHN P. ICARD, ET AL.	716	12
19	10*18351	9-13-18	S	MARK ALLEN LENENBERG, ET AL.	931	399
20	10*18351	9-13-19	T	MARK ALLEN LENENBERG, ET AL.	931	399
21	*FORCE POOL*	9-13-22	U	TRICYCLE, LLC	881	615
22	10*27247	9-13-22	U	DANIEL R AND JOANNA L JOHNSON	1053	3
23	10*27248	9-13-22	U	NILA K & THOMAS R MOWDER	1053	5
24	10*18265	9-13-11	V	KENNETH NELSON SMERTNECK AND TERESA ANN SMERTNECK	933	103
25	*FORCE POOL*	9-13-8	W	ROBERT LEE SHUTLER AND PAATRICIA A. SHULER, TRUSTEES OF THE SHUTLER FAMILY TRUST	702	386
26	*FORCE POOL*	9-13-7	X	FRANK E. PETHEL AND MARY VIRGINIA PETHEL (LIFE ESTATE)	668 672 771	525 171 11
27	10*19534	9-13-9	Y	ARTHUR L MOORE AND SHARON A MOORE	936	553
28	*FORCE POOL*	9-13-9	Y	ROBERT LEE SHUTLER AND PAATRICIA A. SHULER, TRUSTEES OF THE SHUTLER FAMILY TRUST	702	386
29	10*19534	9-13-10	Z	ARTHUR L MOORE AND SHARON A MOORE	936	553
30	*FORCE POOL*	9-13-10	Z	ROBERT LEE SHUTLER AND PAATRICIA A. SHULER, TRUSTEES OF THE SHUTLER FAMILY TRUST	702	386
31	10*47051.243.1	9-11-2	AA	MARY A FOX, ET AL.	879	332
32	10*16526	9-11-2.2	BB	JUDITH PADLOW AKA JUDI L PADLOW	957	134
33	10*16526	9-11-1	CC	JUDITH PADLOW AKA JUDI L PADLOW	957	134
34	10*15567	9-10-13	DD	VICKIE J MASON, ET AL.	680	409
35	10*15600	9-10-14	EE	WILLIAM D MCCONNELL	715	447
36	"FORCE POOL"	9-13-6	FF	FRANK E. PETHEL AND MARY VIRGINIA PETHEL (LIFE ESTATE)	668 672 771	525 171 11
37	10*16510	9-10-16	GG	WILLIAM D MCCONNELL	957	148
38	10*47051.117.1	9-10-15	HH	JOSEPH MICHAEL BONENE	876	79
39	10*17383	9-10-18	II	JACQUES ROY, ET AL.	919	631
40	10*17385	9-10-18	II	GABRIEL ARTHUR KRAUSE ROY	919	633
41	10*17386	9-10-18	II	LYNNE MERYL KRAUSE	919	629
42	10*17387	9-10-18	II	JACINTHE KRAUSE-ROY	919	636
43	10*15504	9-10-6	JJ	JAMES MASON ET AL.	692	461
44	*FORCE POOL*	9-10-4	KK	JAMES MASON ET AL.	692	461
45	10*19749	9-10-4	KK	JOHN CALVERT	944	428
46	10*19750	9-10-4	KK	DELORES J MYERS	944	430
47	10*19824	9-10-4	KK	ROBERT BRADLEY HIGGINS	946	57
48	10*19972	9-10-4	KK	ALBERT J WARSINKY AIF ELLEN K NYLES	948	209
49	10*15504	9-10-5	LL	JAMES MASON ET AL.	692	461
50	10*15511	9-6-15	MM	DAVID E CROW, ET AL.	718	376
51	10*15464	9-6-16	NN	MARY ALICE THOMAS MELLOTT, ET AL.	906	527
52	10*23561	9-10-3	OO	VINCENT PATRELLO AND AMANDA PATRELLO, ET AL.	988	97
53	10*19116	9-6-4	PP	ROBERT LEE CARNEY AND BONNIE ANNE CARNEY	682	255
54	10*18839	9-6-3	QQ	MARGARET DARLENE DUTTON, ET AL.	937	607
55	*FORCE POOL*	9-6-3	QQ	VICKY JO GRIFFIN AKA VICKIE JO GRIFFIN	870	134
56	*FORCE POOL*	9-6-3	QQ	THOMAS MICHAEL GRIFFIN	870	128
57	*FORCE POOL*	9-6-3	QQ	THE DERROW FAMILY IRREVOCABLE TRUST	874	500
58	*FORCE POOL*	9-6-3	QQ	SONDRA S. MENENDEZ	864	565
59	*FORCE POOL*	9-6-3	QQ	RUTH FUNNER	870	132
60	*FORCE POOL*	9-6-3	QQ	JOSEPH MARK MENENDEZ	868	440
61	*FORCE POOL*	9-6-3	QQ	CATHERINE E. GRIFFIN	889	13
62	10*18839	9-6-3.1	RR	MARGARET DARLENE DUTTON, ET AL.	937	607
63	*FORCE POOL*	9-6-3.1	RR	VICKY JO GRIFFIN AKA VICKIE JO GRIFFIN	870	134
64	*FORCE POOL*	9-6-3.1	RR	THOMAS MICHAEL GRIFFIN	870	128
65	*FORCE POOL*	9-6-3.1	RR	THE DERROW FAMILY IRREVOCABLE TRUST	874	500
66	*FORCE POOL*	9-6-3.1	RR	SONDRA S. MENENDEZ	864	565
67	*FORCE POOL*	9-6-3.1	RR	RUTH FUNNER	870	132
68	*FORCE POOL*	9-6-3.1	RR	JOSEPH MARK MENENDEZ	868	440
69	*FORCE POOL*	9-6-3.1	RR	CATHERINE E. GRIFFIN	889	13

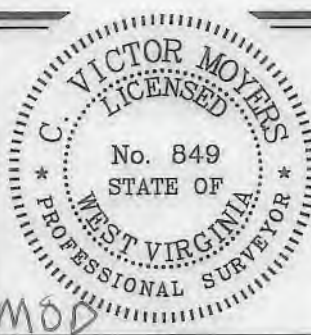
FILE NO. 8789P11HUR.dwg
KNOB CREEK N-11HU REV4

DATE OCTOBER 1, 20 19

REVISED 08/27/2020

OPERATORS WELL NO. KNOB CREEK N-11HU

API WELL NO. 47 — 051 — 02287
STATE COUNTY PERMIT



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

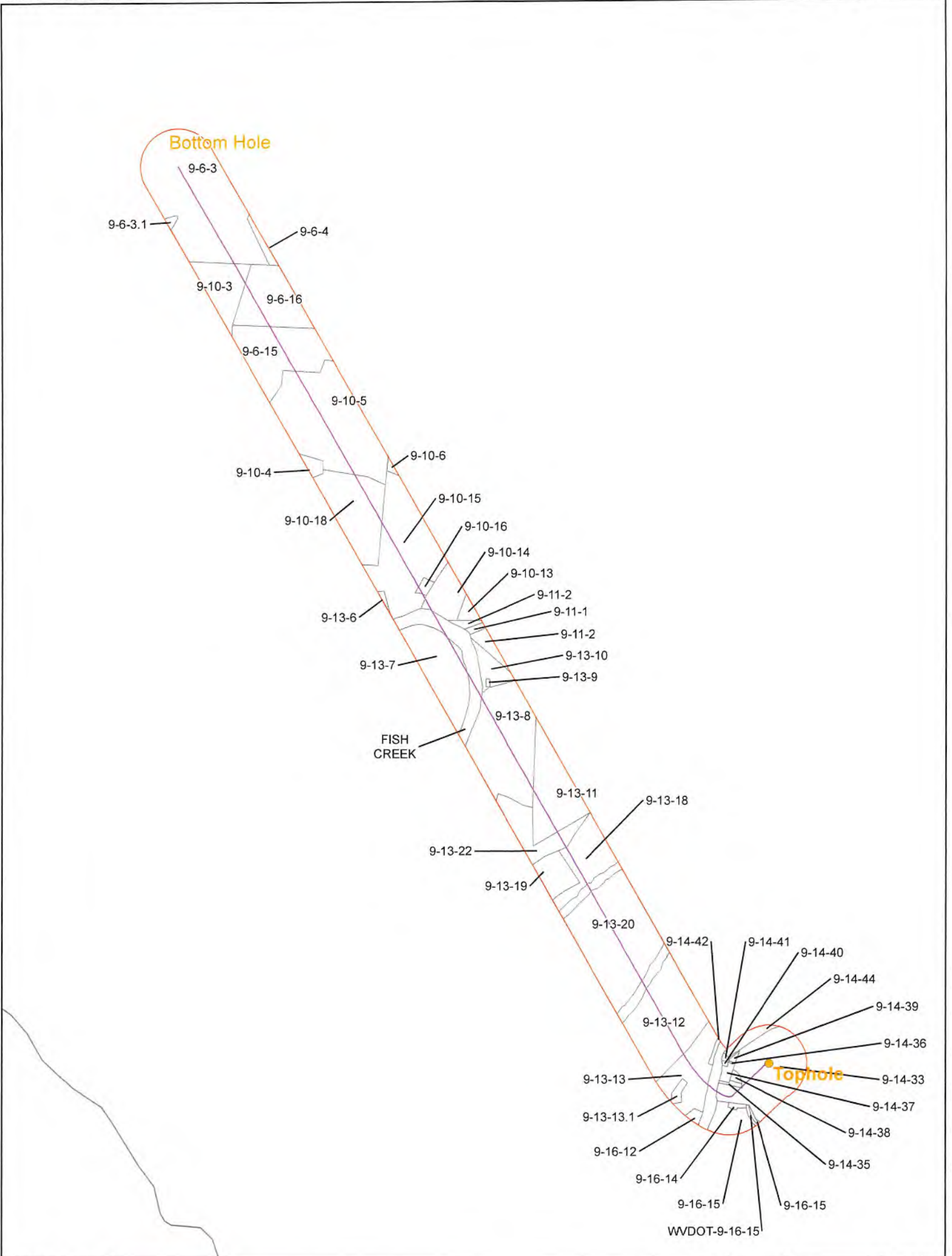


P.S. 849 *C. Victor Moyers*

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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



Coordinate System: NAD 1983 MTM Zone 17N
 Projection: Transverse Mercator
 Datum: North American 1983
 False Easting: 1,000,000.0000
 False Northing: 0.0000
 Central Meridian: -81.0000
 Scale Factor: 0.9999
 Latitude Of Origin: 39.0000
 Units: Feet US

CONFIDENTIAL

0 12,000 24,000 48,000 Feet

— Utica Well
 — 500' Buffer

Knob Creek N-11HU
 Operators within 500 Feet of Well Borehole

