

10,466' B.H.

7,435' T.H.

HEAVEN HILL 3N
WELL 13HM
TUG HILL OPERATING

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

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

NAD'83 S.P.C.(FT) N. 478,668.32 E. 1,633,326.09
NAD'83 GEO. LAT-(N) 39.808253 LONG-(W) 80.693133
NAD'83 UTM (M) N. 4,406,561.88 E. 526,267.11

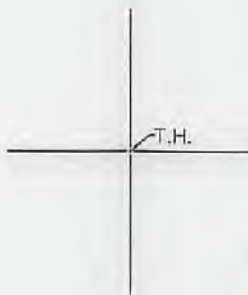
LANDING POINT

NAD'83 S.P.C.(FT) N. 477,521.7 E. 1,633,871.5
NAD'83 GEO. LAT-(N) 39.804949 LONG-(W) 80.691124
NAD'83 UTM (M) N. 4,406,154.4 E. 526,440.4

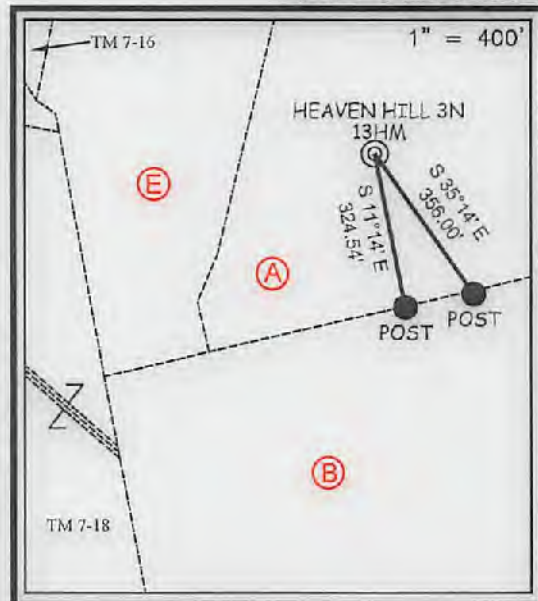
BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 484,057.7 E. 1,630,360.8
NAD'83 GEO. LAT-(N) 39.822762 LONG-(W) 80.703931
NAD'83 UTM (M) N. 4,408,127.8 E. 525,837.6

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°40'00"
3,651' B.H.



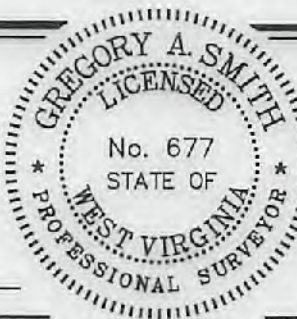
REFERENCES



12 Vanhorn Drive | R.D. Box 130 | Glenville, WV 26031 | 304.462.5534
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
234 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsw.com

NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'



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 Gregory A. Smith

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE AUGUST 30, 20 19
REVISED NOVEMBER 5, 2019 & MAY 13, 2022
OPERATORS WELL NO. HEAVEN HILL 3N-13HM
API WELL NO. 47 — 051 — 02450
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 8654P13HMR2.dwg
HEAVEN HILL 3-13HM 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: ELEVATION 1,328.00' WATERSHED LOWER BOWMAN RUN OF FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
SURFACE OWNER ANDREW C. WHITLATCH ET UX ACREAGE 72.82±
ROYALTY OWNER RICKY L. WHITLATCH, ET AL ACREAGE 72.82±
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: 6,969' / TMD: 15,110'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5098 WASHINGTON ST. W. STE 407
FORT WORTH, TX 76107 CHARLESTON, WV 25313-1561

COUNTY NAME PERMIT

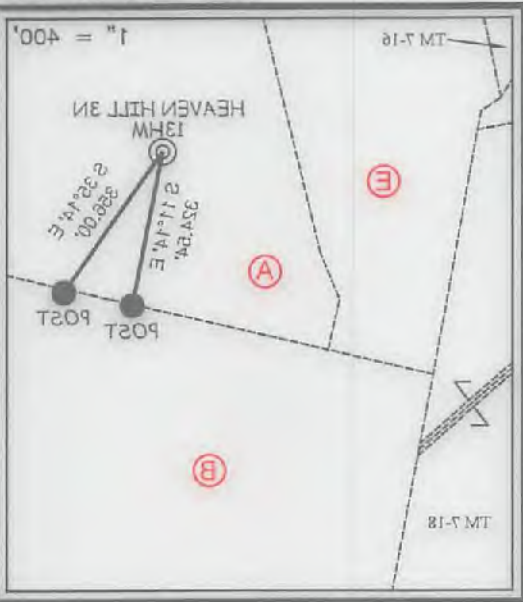
07/01/2022

TUG HILL OPERATING WELL 13HM HEAVEN HILL 3N

BOTTOM HOLE	
NAD83 UTM (M)	N. 408,157.8 E. 852,937.8
NAD83 GEO.	LAT-(N) 38.852782 LONG-(W) 90.703931
NAD83 S.P.C.(FT)	N. 484,087.7 E. 1,830,980.8
LANDING POINT	
NAD83 UTM (M)	N. 406,184.4 E. 856,440.4
NAD83 GEO.	LAT-(N) 38.804949 LONG-(W) 90.691154
NAD83 S.P.C.(FT)	N. 477,821.7 E. 1,833,871.8
(S.P.C. NORTH ZONE) UTM(M) ZONE 17 NORTH	
NAD83 UTM (M)	N. 406,881.88 E. 856,587.11
NAD83 GEO.	LAT-(N) 38.808523 LONG-(W) 90.693133
NAD83 S.P.C.(FT)	N. 478,888.82 E. 1,833,828.09



REFERENCES



NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL NO AGRICULTURAL BUILDINGS ≤ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 858' OF THE CENTER OF PROPOSED WELL PAD.
 2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'



284 East Beckley bypass | Beckley, WV 26001 | 204.282.5288
 1413 Canaway Boulevard East | Charleston, WV 25301 | 204.246.2922
 15 Vashon Drive | P.O. Box 150 | Glenville, WV 26021 | 204.483.2834
 slc.com

BY THE DIVISION OF ENVIRONMENTAL PROTECTION, THE REGULATIONS ISSUED AND PRESCRIBED THE INFORMATION REQUIRED BY LAW AND THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL I THE UNDERSIGNED, HEREBY CERTIFY THAT

Gregory A. Smith
 P. 2. 849



NO. 47 - STATE PERMIT
 WELL 13HM - COUNTY
 OPERATORS WELL NO. HEAVEN HILL 3N-13HM
 REVISED NOVEMBER 5, 2018 & MAY 13, 2022
 DATE AUGUST 30, 2022
 STATES TOPOGRAPHIC MAPS
 (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

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

CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)
 HORIZONTAL & VERTICAL SCALE 1" = 2000'
 FILE NO. 8884P13HMRS.dwg
 HEAVEN HILL 3-13HM REV3
 MINIMUM DEGREE OF ACCURACY 1:2500

WELL TYPE: OIL GAS LIQUID WASTE INJECTION DISPOSAL "GAS" PRODUCTION STORAGE DEEP SHALLOW LOCATION: ELEVATION 1,328.00' WATERSHED LOWER BOWMAN RUN OF FISH CREEK (HUC 10)

DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7 S.
 SURFACE OWNER ANDREW C. WHITLATCH ET UX
 RICKY L. WHITLATCH, ET AL

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: 8,999' TMD: 18,110'

WELL OPERATOR TUG HILL OPERATING, LLC
 ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
 FORT WORTH, TX 76107
 DESIGNATED AGENT DARREN BROWN
 CT CORPORATION
 ADDRESS 6088 WASHINGTON ST. W. STE 407
 CHARLESTON, WV 25313-1581

07/01/2022

COUNTY NAME

PERMIT

3'284.81' B.H.

8'001.11' T.H.

T.H. LATITUDE 38°50'00"
 B.H. LATITUDE 38°50'00"

7'438.71' T.H.

10'488.81' B.H.

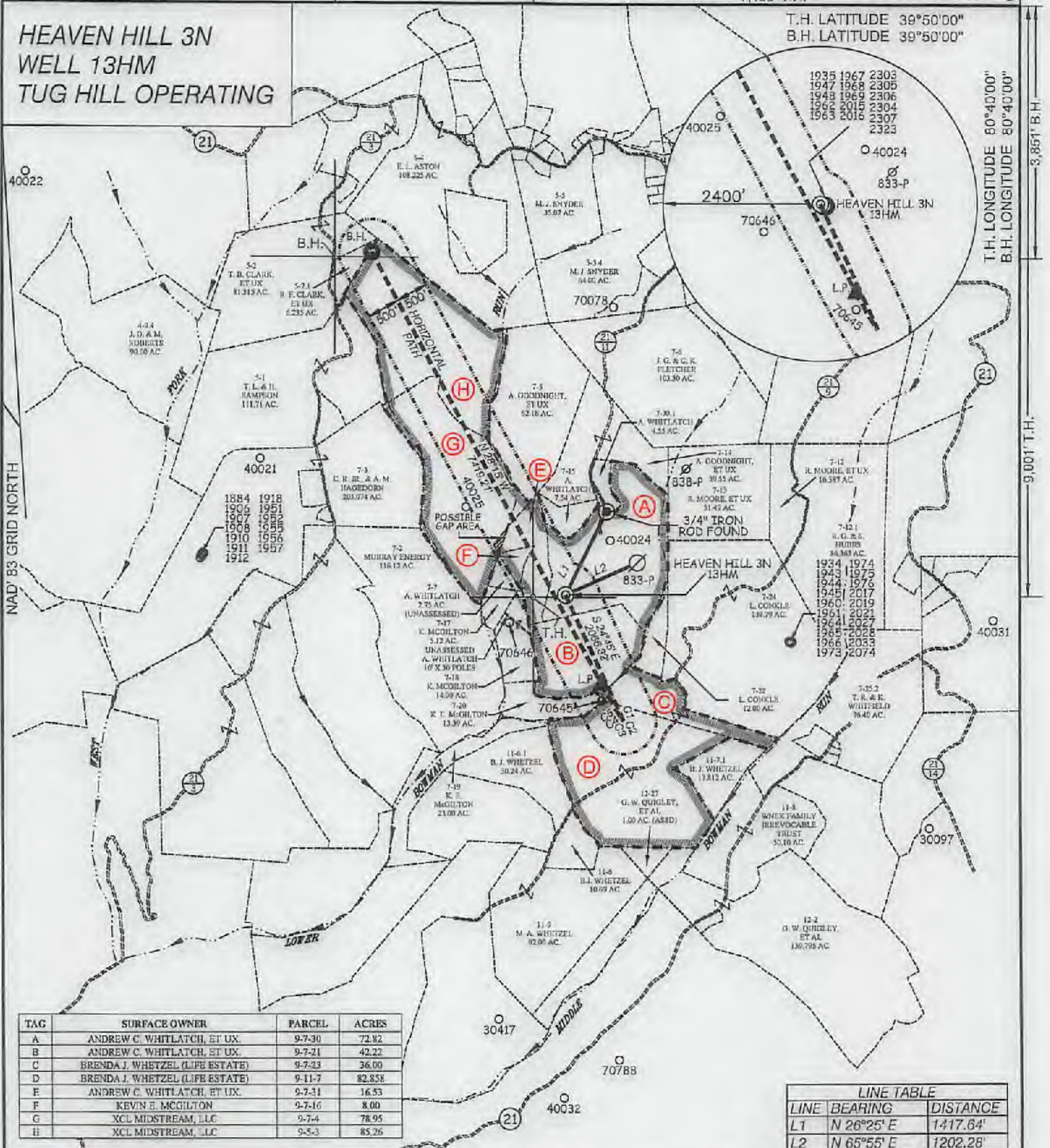
10,466' B.H.

7,435' T.H.

**HEAVEN HILL 3N
WELL 13HM
TUG HILL OPERATING**

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

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



TAG	SURFACE OWNER	PARCEL	ACRES
A	ANDREW C. WHITLATCH, ET UX.	9-7-30	72.82
B	ANDREW C. WHITLATCH, ET UX.	9-7-21	42.22
C	BRENDA J. WHETZEL (LIFE ESTATE)	9-7-23	36.00
D	BRENDA J. WHETZEL (LIFE ESTATE)	9-11-7	82.858
E	ANDREW C. WHITLATCH, ET UX.	9-7-31	16.53
F	KEVIN E. MCGILTON	9-7-16	8.00
G	XCL MIDSTREAM, LLC	9-7-4	78.95
H	XCL MIDSTREAM, LLC	9-5-3	85.26

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 26°25' E	1417.64'
L2	N 65°55' E	1202.28'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	32.89'	263.82'	S 20°12' E	32.87'
C2	5.56'	8.46'	S 07°04' W	5.46'
C3	10.10'	20.46'	N 46°38' W	10.00'
C4	60.14'	467.52'	N 34°02' W	60.10'
C5	585.52'	9873.19'	N 29°29' W	585.43'



12 Vashon Drive | P.O. Box 150 | Glenville, WV 26031 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3252
254 East Seckley Bypass | Beckley, WV 26001 | 304.255.3286
slsw.com



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

P.S. 849 *Gregory A. Smith*

LEGEND	
LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
TAX MAP-PARCEL	00-00
SURFACE OWNER (SEE TABLE)	(A)
LEASE # (SEE WW-8A1)	

SCALE 1" = 2000' FILE NO. 8654P13HMR2.dwg
HEAVEN HILL 3-13HM REV3
DATE AUGUST 30, 2019
REVISED NOVEMBER 5, 2019 & MAY 13, 2022
OPERATORS WELL NO. HEAVEN HILL 3N-13HM
API WELL NO. 47-051-02450
STATE COUNTY PERMIT

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

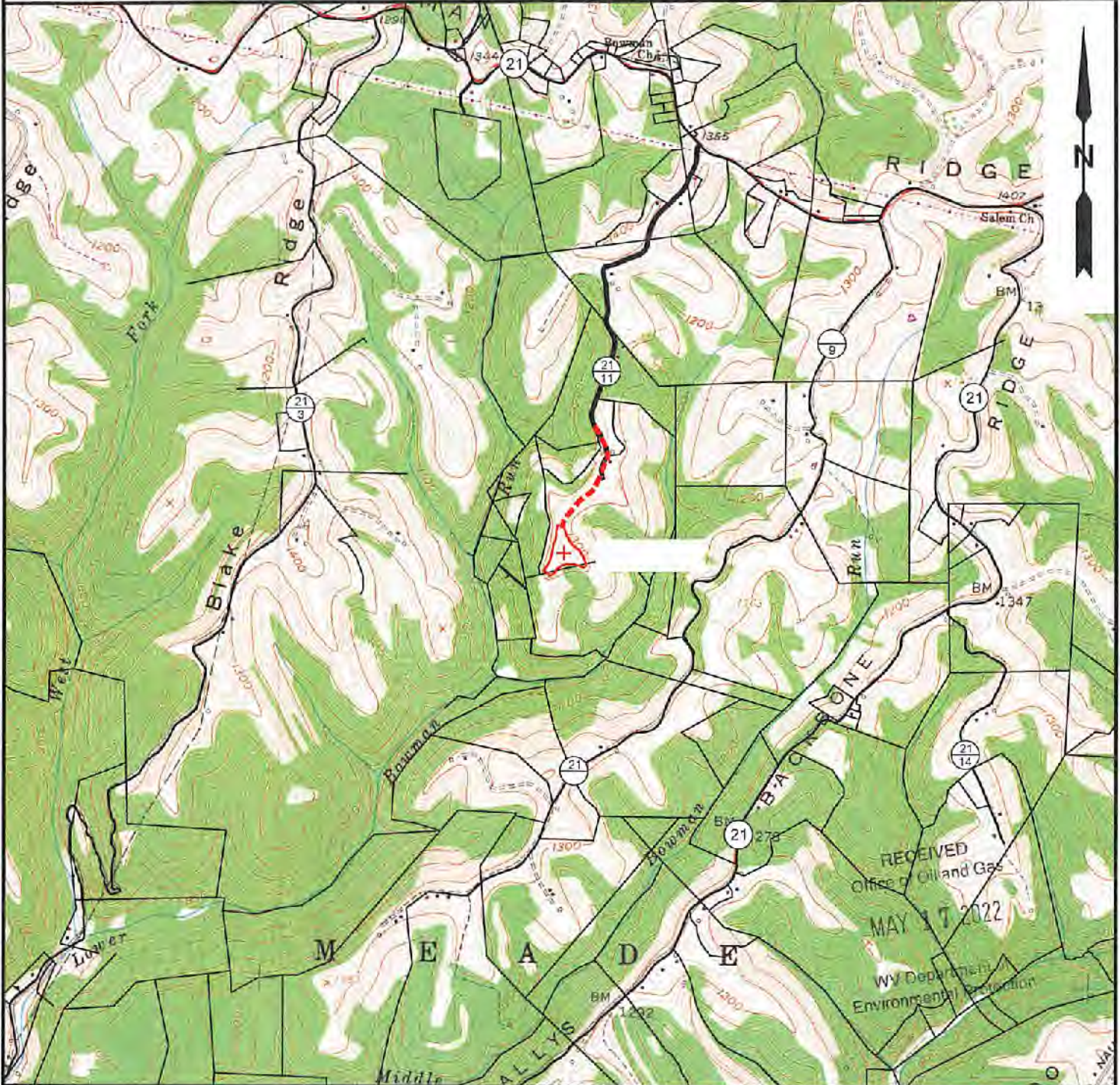


WELL OPERATOR TUG HILL OPERATING, LLC ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107
DESIGNATED AGENT DARREN BROWN CT CORPORATION ADDRESS 5098 WASHINGTON ST. W, STE 407 CHARLESTON, WV 25313-1561

COUNTY NAME PERMIT

07/01/2022

PROPOSED HEAVEN HILL 3N - 13HM



NOTE: CLOSEST WATER PURVEYOR
CITY OF CAMERON - FRANK WALKER RESERVOIR
CAMDEN, WV

LAT: 39.829865
LON: -80.573724
LOCATED: N 77°44'18" E AT 34,474.56' FROM THE CENTER OF HEAVEN HILL 3N WELL PAD LOCATION.

RECEIVED
Office of Oil and Gas
MAY 17 2022
WV Department of Environmental Protection

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26031 • (304) 462-5034
www.slsurveys.com

TOPO SECTION:		OPERATOR:	
GLEN EASTON 7.5'		PREPARED FOR: TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD SUITE 200 CANONSBURG, PA 15317	
COUNTY	DISTRICT		
MARSHALL	MEADE		
DRAWN BY	JOB NO.	DATE	SCALE
K.G.M.	8654	06/21/2019	1" = 2000'

TUG HILL
OPERATING

07/01/2022