

HEAVEN HILL LATITUDE 39° 50' 00"
UNIT 2-8HU
501.42±
ACRES UNIT

| LEGEND | |
|--------|--------------------|
| --- | LEASED TRACTS |
| --- | SURFACE TRACTS |
| --- | UNIT BOUNDARY |
| (A) | LEASE # (SEE PG 2) |

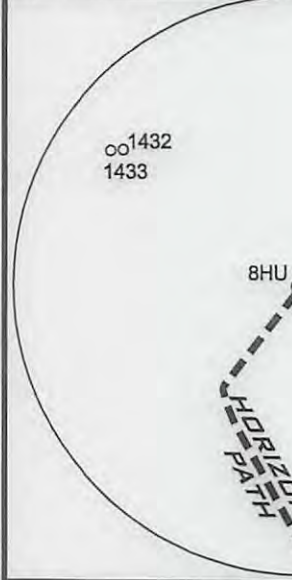
NOTES
 1. BORE PATH BASED ON GRID NORTH.
 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN JULY, 2016. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
N)4,406,704.10
E)524,565.80

LANDING POINT
 UTM. NAD83, ZONE 17
 IN METERS
N)4,406,216.62
E)524,388.37

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
N)4,404,357.27
E)525,461.86

| LINE | BEARING | DISTANCE |
|---------------|--------------|----------|
| L1 | S 37°25' W | 1333.46' |
| CURVE | ARC LENGTH | RADIUS |
| C1 | 48.41' | 64.94' |
| C2 | 527.84' | 1748.81' |
| CHORD BEARING | CHORD LENGTH | |
| C1 | S 05°23' W | 47.30' |
| C2 | S 23°03' E | 525.83' |



FILE NUMBER 163-697

DRAWING NUMBER HHU2_WP_8HU

SCALE 1" = 1500'

MINIMUM DEGREE OF ACCURACY 1/2500

PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

P.S. 2122
Jonathan N. White
 12/27/16



WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET, SE
 CHARLESTON, WV 25304



DATE: DECEMBER 20, 2016

OPERATORS WELL NO. Heaven Hill Unit 2-8HU

API WELL NO. 47-051-01912 H6A

STATE WV COUNTY MARSHALL PERMIT 01912 H6A

LOCATION ELEVATION 1331' WATERSHED (HUC 10) FISH CREEK

DISTRICT MEADE COUNTY MARSHALL

QUADRANGLE GLEN EASTON 7.5' LEASE NUMBER SEE ATTACHED PG 2 AND 3

SURFACE OWNER CHARLES R. HAGEDORN, JR., ET UX ACREAGE 203.074

OIL & GAS ROYALTY OWNER CHARLES R. HAGEDORN, JR., ET AL LEASE ACREAGE 501.42 UNIT

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION

PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____

TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD 11,784' TMD 19,019'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER

ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

05/12/2017

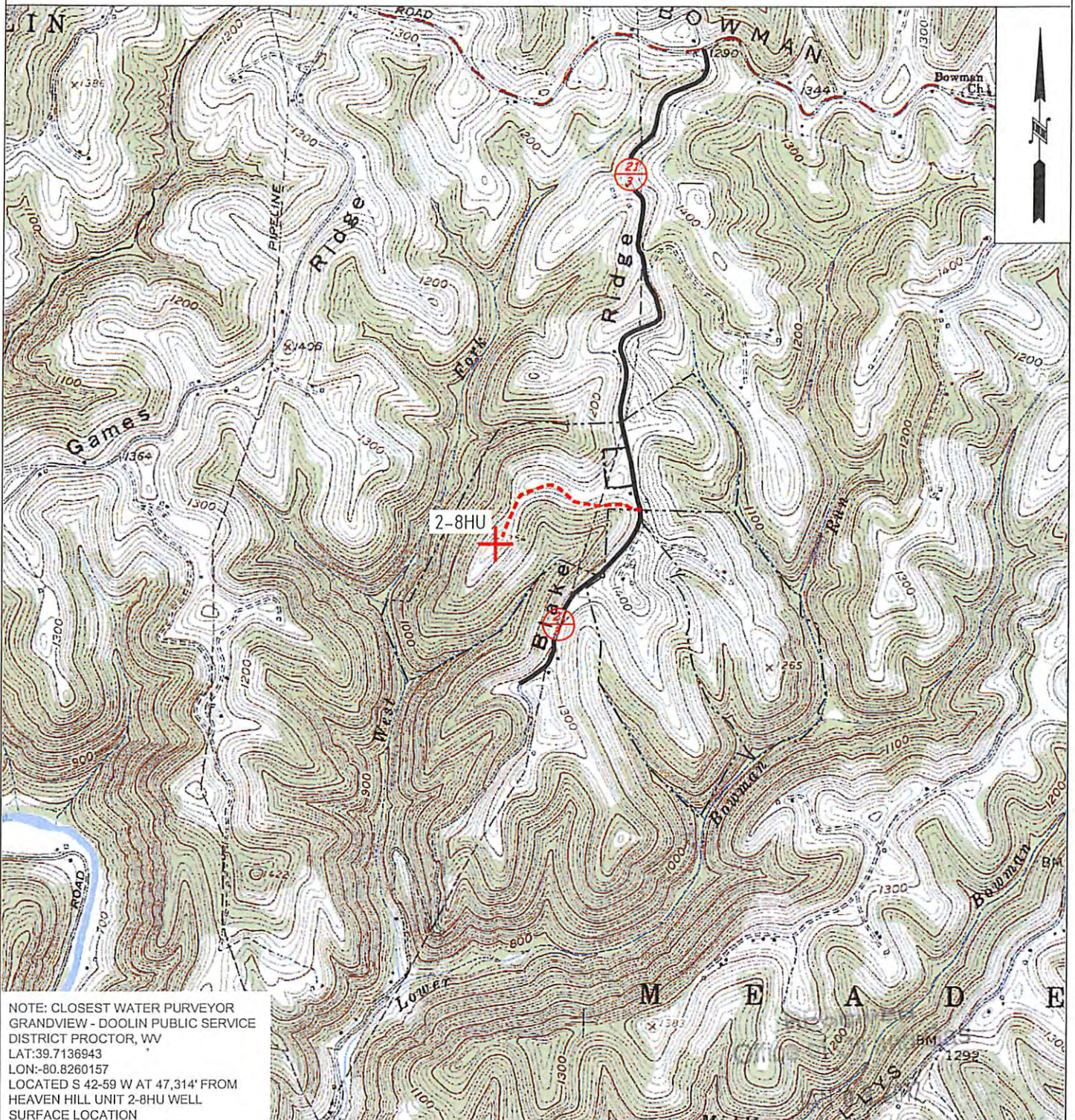
COUNTY NAME
 PERMIT

SI-01912

WW-9

SUPPLEMENT PG 2

PROPOSED HEAVEN HILL UNIT 2-8HU



NOTE: CLOSEST WATER PURVEYOR
 GRANDVIEW - DOOLIN PUBLIC SERVICE
 DISTRICT PROCTOR, WV
 LAT: 39.7136943
 LON: -80.8260157
 LOCATED S 42-59 W AT 47,314' FROM
 HEAVEN HILL UNIT 2-8HU WELL
 SURFACE LOCATION



OPERATOR **163-697(CEC)**
 TUG HILL OPERATING, LLC
 380 SOUTHPOINTE BLVD
 SUITE 200
 CANONSBURG, PA 15317

TOPO SECTION **WV Department of Environmental Protection**
 GLEN EASTON 7.5' **HEAVEN HILL UNIT 2**
 SCALE: **DATE:**
 1" = 2000' **DATE: 12/20/16**

05/12/2017