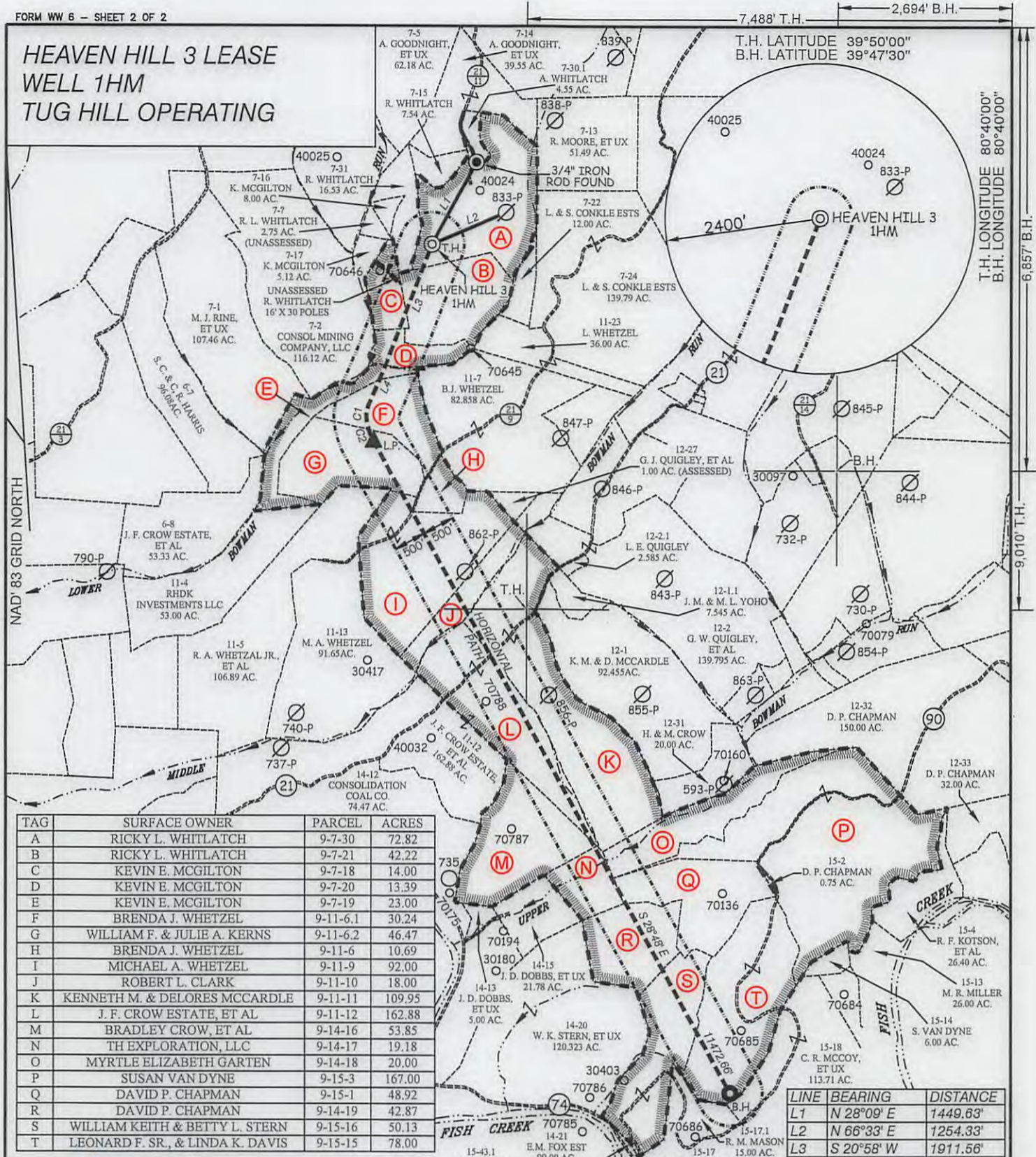


**HEAVEN HILL 3 LEASE  
WELL 1HM  
TUG HILL OPERATING**



TAG	SURFACE OWNER	PARCEL	ACRES
A	RICKY L. WHITLATCH	9-7-30	72.82
B	RICKY L. WHITLATCH	9-7-21	42.22
C	KEVIN E. MCGILTON	9-7-18	14.00
D	KEVIN E. MCGILTON	9-7-20	13.39
E	KEVIN E. MCGILTON	9-7-19	23.00
F	BRENDA J. WHETZEL	9-11-6.1	30.24
G	WILLIAM F. & JULIE A. KERNS	9-11-6.2	46.47
H	BRENDA J. WHETZEL	9-11-6	10.69
I	MICHAEL A. WHETZEL	9-11-9	92.00
J	ROBERT L. CLARK	9-11-10	18.00
K	KENNETH M. & DELORES MCCARDLE	9-11-11	109.95
L	J. F. CROW ESTATE, ET AL	9-11-12	162.88
M	BRADLEY CROW, ET AL	9-14-16	53.85
N	TH EXPLORATION, LLC	9-14-17	19.18
O	MYRTLE ELIZABETH GARTEN	9-14-18	20.00
P	SUSAN VAN DYNE	9-15-3	167.00
Q	DAVID P. CHAPMAN	9-15-1	48.92
R	DAVID P. CHAPMAN	9-14-19	42.87
S	WILLIAM KEITH & BETTY L. STERN	9-15-16	50.13
T	LEONARD F. SR., & LINDA K. DAVIS	9-15-15	78.00

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	273.02'	489.36'	S 03°35' W	269.49'
C2	293.63'	934.25'	S 19°59' E	292.42'

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www.slsurveyors.com



P.S. 677  
*Gregory A. Smith*

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'83 S.P.C.(FT) N. 478,859.71 E. 1,633,272.01  
 NAD'83 GEO. LAT-(N) 39.808600 LONG-(W) 80.693321  
 NAD'83 UTM (M) N. 4,406,558.99 E. 526,250.98  
**LANDING POINT**  
 NAD'83 S.P.C.(FT) N. 475,826.9 E. 1,632,370.3  
 NAD'83 GEO. LAT-(N) 39.800242 LONG-(W) 80.696387  
 NAD'83 UTM (M) N. 4,405,630.5 E. 525,991.7  
**BOTTOM HOLE**  
 NAD'83 S.P.C.(FT) N. 465,773.0 E. 1,637,896.7  
 NAD'83 GEO. LAT-(N) 39.772843 LONG-(W) 80.676251  
 NAD'83 UTM (M) N. 4,402,595.6 E. 527,726.5

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

SCALE 1" = 2000' FILE NO. 8654P1HMR4.dwg  
 DATE APRIL 20, 2017  
 REVISED 08-30-17, 02-02-18 & 03-22-18  
 OPERATORS WELL NO. HEAVEN HILL 3-1HM  
 API WELL NO. 47-051-01935  
 NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS  
 H6A MOD

**LEGEND**

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

05/11/2018

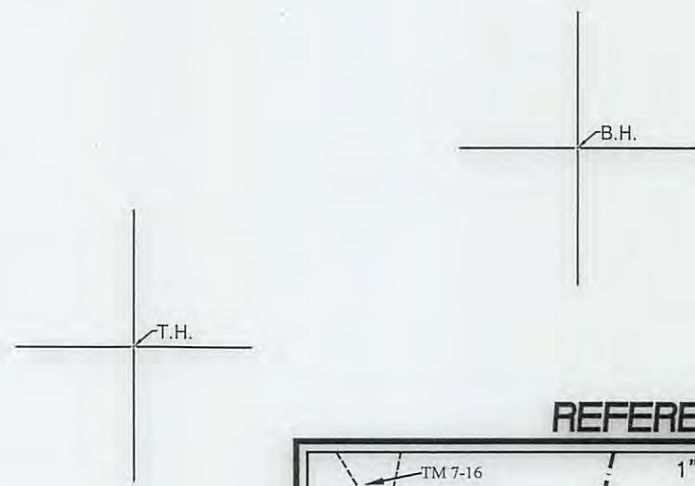
WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER  
 ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD  
 FORT WORTH, TX 76107 CHARLESTON, WV 25313

HEAVEN HILL 3 LEASE  
WELL 1HM  
TUG HILL OPERATING

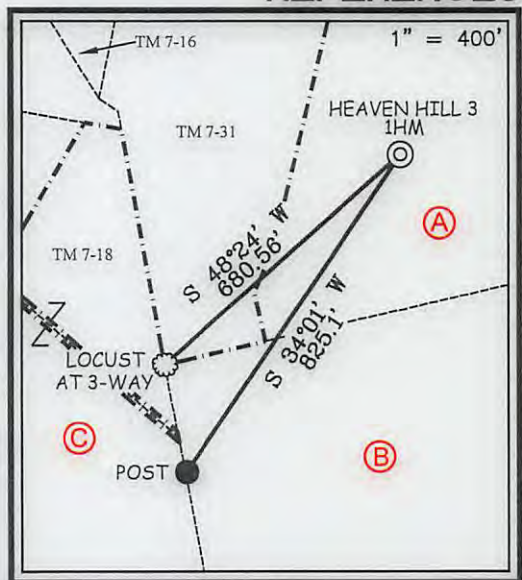
7,488' T.H.      2,694' B.H.  
T.H. LATITUDE 39°50'00"  
B.H. LATITUDE 39°47'30"

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)		
NAD'83 S.P.C.(FT)	N. 478,859.71	E. 1,633,272.01
NAD'83 GEO.	LAT-(N) 39.808600	LONG-(W) 80.693321
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NAD'83 GEO.	LAT-(N) 39.772843	LONG-(W) 80.676251
NAD'83 UTM (M)	N. 4,402,595.6	E. 527,726.5

T.H. LONGITUDE 80°40'00"  
B.H. LONGITUDE 80°40'00"  
6,857' B.H.  
9,010' T.H.



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 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'

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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. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE APRIL 20, 20 17  
REVISED 08-30-17, 02-02-18 & 03-22-18  
OPERATORS WELL NO. HEAVEN HILL 3-1HM  
API WELL NO. 47 - 051 - 01935  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8654P1HMR4.dwg  
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 GROUND = 1,339.40' PROPOSED = 1,326.35' WATERSHED LOWER BOWMAN RUN OF FISH CREEK (HUC 10) DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER RICKY L. WHITLATCH ACREAGE 72.82±  
ROYALTY OWNER RICKY L. WHITLATCH, ET AL - SEE WW-6A1 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: 6,876' / TMD: 19,500'

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

HoA MOD

05/11/2018