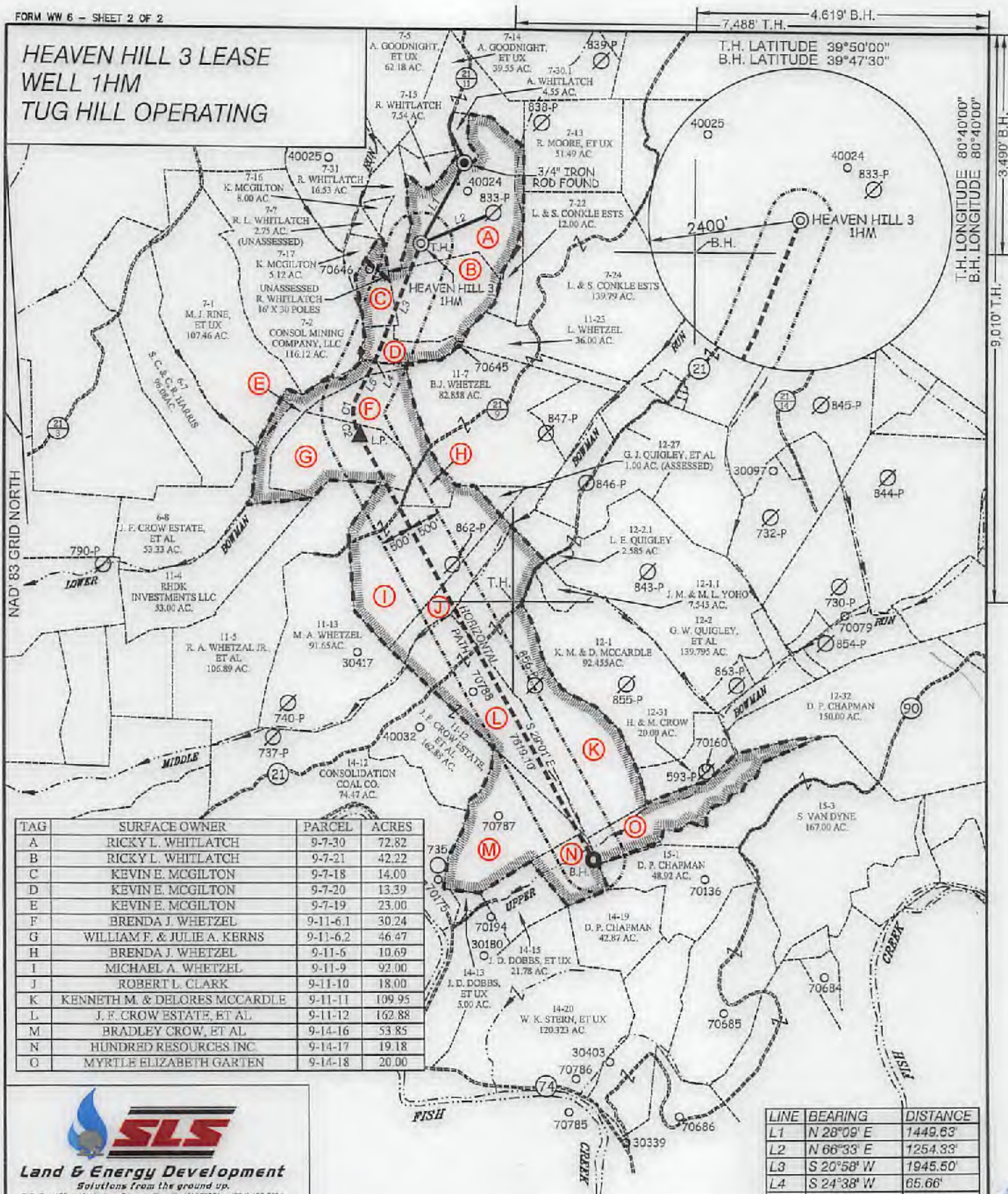


**HEAVEN HILL 3 LEASE
WELL 1HM
TUG HILL OPERATING**



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	HUNDRED RESOURCES INC.	9-14-17	19.18
O	MYRTLE ELIZABETH GARTEN	9-14-18	20.00

LINE	BEARING	DISTANCE
L1	N 28°09' E	1449.63'
L2	N 66°33' E	1254.33'
L3	S 20°58' W	1945.50'
L4	S 24°38' W	65.66'
L5	S 27°01' W	670.48'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	272.62'	464.82'	S 05°48' W	268.73'
C2	310.09'	919.14'	S 19°33' E	308.62'

P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26031 • (304) 452-5634
www.slsurveys.com

P.S. 677
Gregory A. Smith



(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 478,869.71 E. 1,633,272.01
 NAD'83 GEO. LAT-(N) 39.806800 LONG-(W) 80.693321
 NAD'83 UTM (M) N. 4,406,568.99 E. 526,250.98
LANDING POINT
 NAD'83 S.P.C.(FT) N. 475,827.8 E. 1,632,320.3
 NAD'83 GEO. LAT-(N) 39.800242 LONG-(W) 80.698565
 NAD'83 UTM (M) N. 4,405,630.4 E. 525,976.5
BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 469,164.8 E. 1,638,015.7
 NAD'83 GEO. LAT-(N) 39.782008 LONG-(W) 80.683101
 NAD'83 UTM (M) N. 4,403,619.4 E. 527,138.2

SCALE 1" = 2000' FILE NO. 8654P1HMR3.dwg
 DATE APRIL 20, 2017
 REVISED AUGUST 30, 2017 & FEBRUARY 2, 2018
 OPERATORS WELL NO. HEAVEN HILL 3-1HM
 API WELL NO. 47 - 051 - 01935 MOD
 STATE COUNTY PERMIT

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

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

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)

03/02/2018

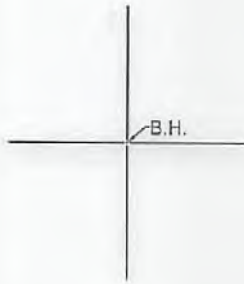
WELL OPERATOR TUG HILL OPERATING, LLC ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107
 DESIGNATED AGENT DIANNA STAMPER CT CORPORATION SYSTEM ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

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

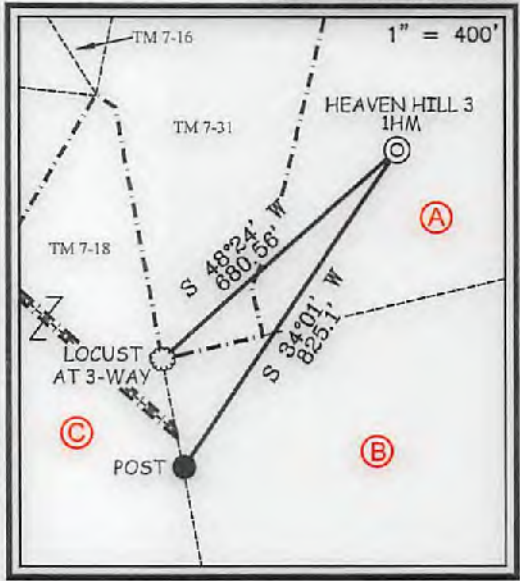
7,488' T.H. 4,619' B.H.
T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°47'30"

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°40'00"
3,490' B.H.
T.H. 010.6

(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) 39.908600	LONG-(W) 80.693321
NAD'83 UTM (M)	N. 4,406,558.89	E. 526,250.98
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 475,827.8	E. 1,632,320.3
NAD'83 GEO.	LAT-(N) 39.900242	LONG-(W) 80.696565
NAD'83 UTM (M)	N. 4,405,630.4	E. 525,978.5
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 469,164.9	E. 1,638,015.7
NAD'83 GEO.	LAT-(N) 39.782086	LONG-(W) 80.663101
NAD'83 UTM (M)	N. 4,403,819.4	E. 527,136.2



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'



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 AUGUST 30, 2017 & FEBRUARY 2, 2018
OPERATORS WELL NO. HEAVEN HILL 3-1HM
API WELL NO. 47-051-01935 MOD
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8654P1HMR3.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: GROUND = 1,339.40' ELEVATION 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: 15,640'

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

03/02/2018