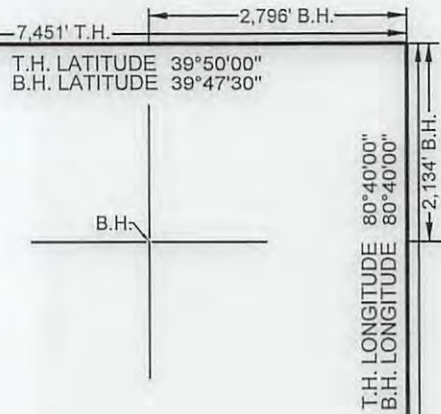


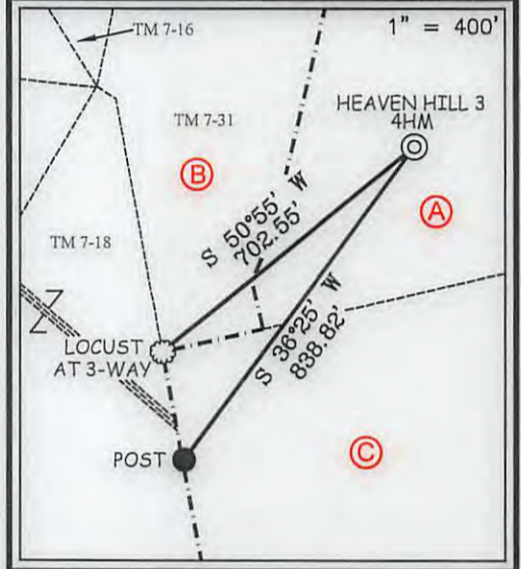
**HEAVEN HILL 3 LEASE
WELL 4HM
TUG HILL OPERATING**



(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)		
NAD'83 S.P.C.(FT)	N. 478,850.79	E. 1,633,308.44
NAD'83 GEO.	LAT-(N) 39.808577	LONG-(W) 80.693191
NAD'83 UTM (M)	N. 4,406,556.46	E. 526,262.12
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 477,098.0	E. 1,634,189.9
NAD'83 GEO.	LAT-(N) 39.803797	LONG-(W) 80.689971
NAD'83 UTM (M)	N. 4,406,026.9	E. 526,539.6
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 470,496.6	E. 1,637,855.5
NAD'83 GEO.	LAT-(N) 39.785808	LONG-(W) 80.676617
NAD'83 UTM (M)	N. 4,404,034.5	E. 527,689.9



REFERENCES

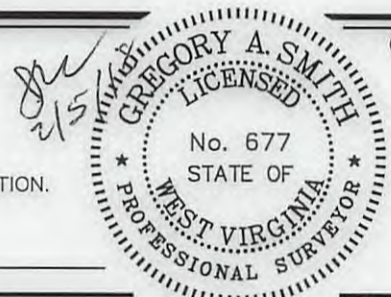


NOTES ON SURVEY

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.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JUNE 30, 20 17
 REVISED FEBRUARY 2, 20 18
 OPERATORS WELL NO. HEAVEN HILL 3-4HM
 API WELL NO. 47-051-01947
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8654P4HMR.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 = 1,344.50' 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±

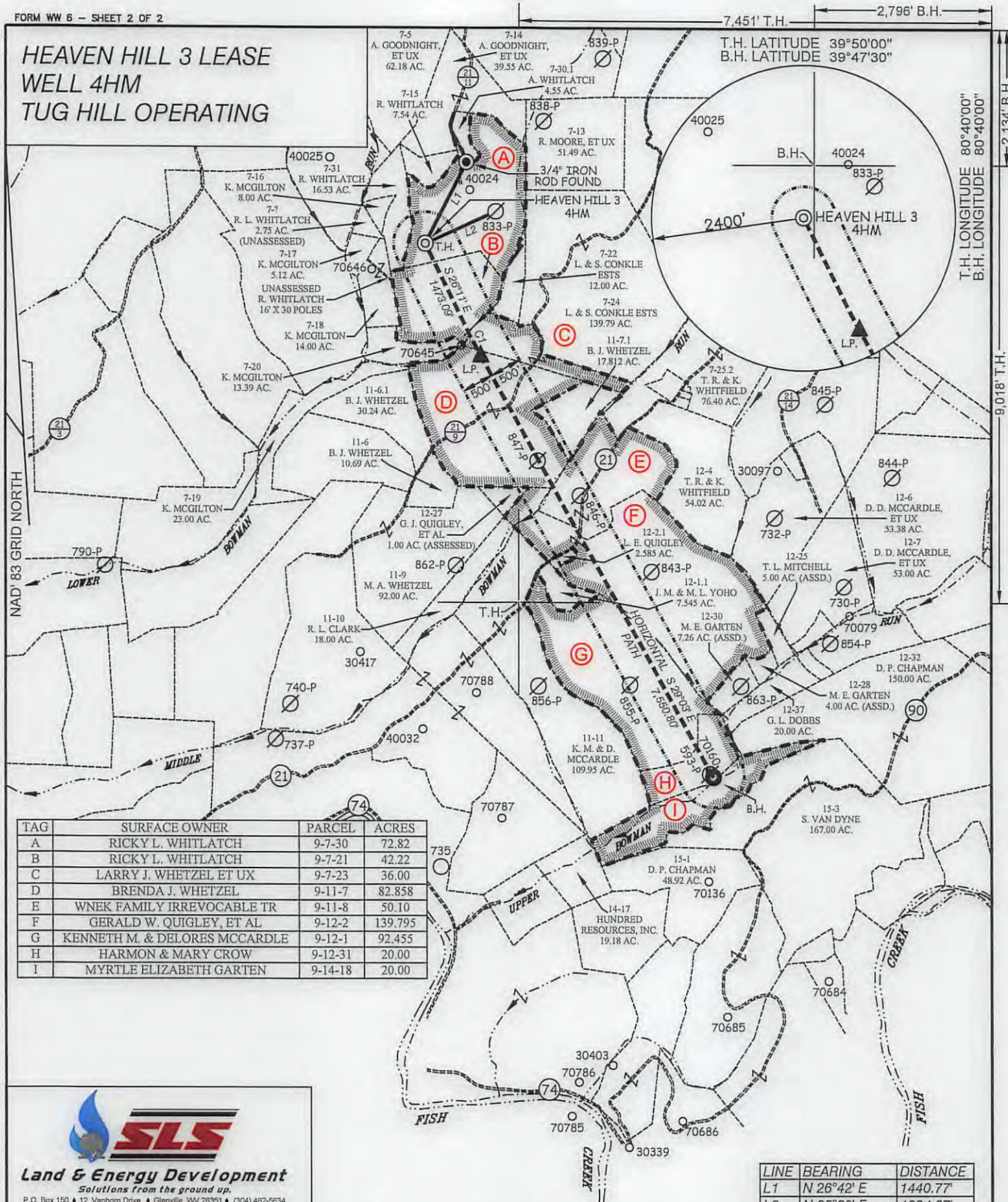
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: 6,876' / TMD: 14,895'

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

**HEAVEN HILL 3 LEASE
WELL 4HM
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	LARRY J. WHETZEL ET UX	9-7-23	36.00
D	BRENDA J. WHETZEL	9-11-7	82.858
E	WNEK FAMILY IRREVOCABLE TR	9-11-8	50.10
F	GERALD W. QUIGLEY, ET AL	9-12-2	139.795
G	KENNETH M. & DELORES MCCARDLE	9-12-1	92.455
H	HARMON & MARY CROW	9-12-31	20.00
I	MYRTLE ELIZABETH GARTEN	9-14-18	20.00

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 150 ♦ 12 Vanhorn Drive ♦ Glenville, WV 26031 ♦ (304) 462-5634
www.slsurveys.com

P.S. 677
Gregory A. Smith

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	489.16'	14875.34'	S 28°16' E	489.14'

LINE	BEARING	DISTANCE
L1	N 26°42' E	1440.77'
L2	N 65°30' E	1224.67'

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C. (FT) N. 476,850.79 E. 1,633,308.44
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SCALE 1" = 2000' FILE NO. 8654P4HMR.dwg
 DATE JUNE 30, 20 17
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 OPERATORS WELL NO. HEAVEN HILL 3-4HM
 API WELL NO. 47 — 051 — 01947
 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)

00-00
 03/02/2018
 A

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