

10,902' B.H.

7,524' T.H.

HEAVEN HILL 3N
WELL 12HM
TUG HILL OPERATING

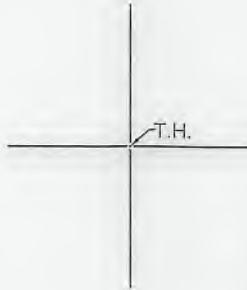
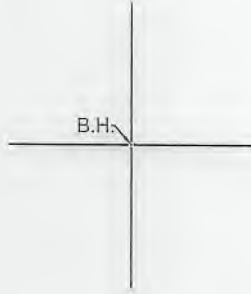
T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°50'00"

| (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) | | |
|--|-------------------|--------------------|
| NAD'83 S.P.C.(FT) | N. 478,868.67 | E. 1,633,235.65 |
| NAD'83 GEO. | LAT-(N) 39.808623 | LONG-(W) 80.693451 |
| NAD'83 UTM (M) | N. 4,406,561.54 | E. 526,239.86 |
| LANDING POINT | | |
| NAD'83 S.P.C.(FT) | N. 477,158.1 | E. 1,633,215.1 |
| NAD'83 GEO. | LAT-(N) 39.803927 | LONG-(W) 80.693443 |
| NAD'83 UTM (M) | N. 4,406,040.3 | E. 526,242.3 |
| BOTTOM HOLE | | |
| NAD'83 S.P.C.(FT) | N. 483,307.8 | E. 1,629,915.3 |
| NAD'83 GEO. | LAT-(N) 39.820687 | LONG-(W) 80.705481 |
| NAD'83 UTM (M) | N. 4,407,897.0 | E. 525,205.7 |

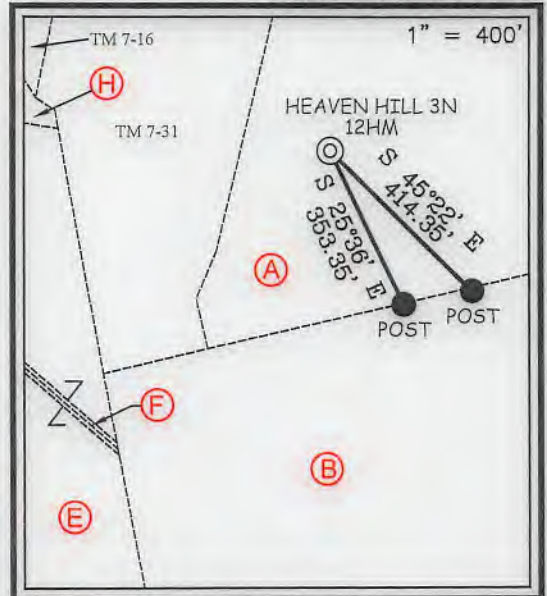
T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°40'00"

4,607' B.H.

9,001' T.H.



REFERENCES



NOTES ON SURVEY

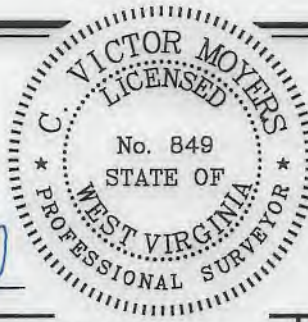
1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL, NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'



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

C. Victor Moyers



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE AUGUST 30, 20 19
REVISED NOVEMBER 5, 20 19
OPERATORS WELL NO. HEAVEN HILL 3N-12HM
API WELL NO. 47-051-02304
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8654P12HMR.dwg
HEAVEN HILL 3-12HM REV2
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



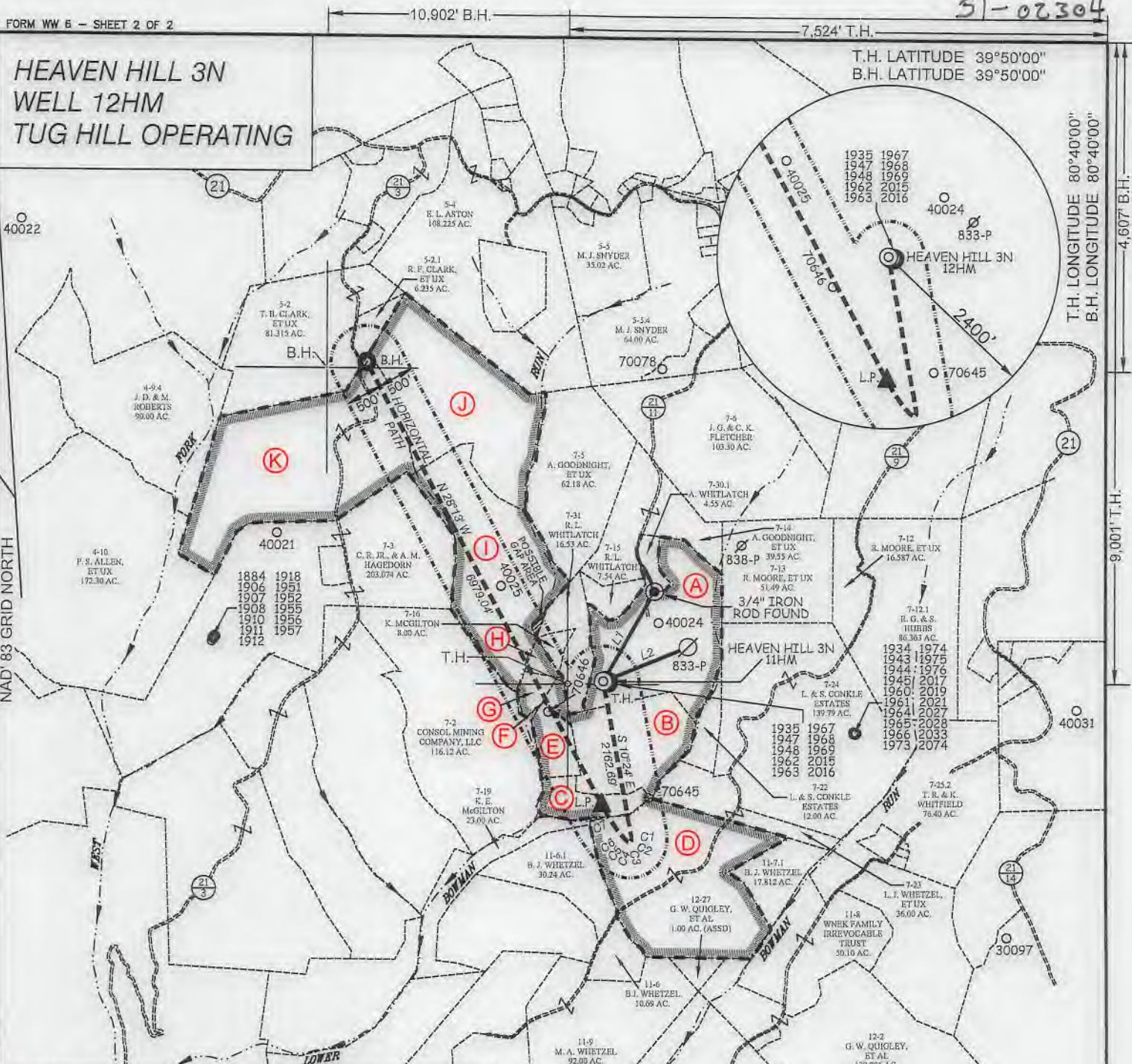
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW
LOCATION: GROUND = 1,333.10' ELEVATION PROPOSED = 1,326.35' WATERSHED LOWER BOWMAN RUN OF FISH CREEK (HUC 10)
DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
SURFACE OWNER RICKY L. WHITLATCH ACREAGE 72.82±
ROYALTY OWNER RICKY L. WHITLATCH, ET AL 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: 14,733'

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

COUNTY NAME
PERMIT

**HEAVEN HILL 3N
WELL 12HM
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 | 9-7-20 | 13.39 |
| D | BRENDA J. WHETZEL | 9-11-7 | 82.858 |
| E | KEVIN E. MCGILTON | 9-7-18 | 14.00 |
| F | RICKY L. WHITLATCH | NOT ASSD. | 16' X 32P |
| G | KEVIN E. MCGILTON | 9-7-17 | 5.12 |
| H | RICKY L. WHITLATCH | NOT ASSD. | 2.75 |
| I | HELEN ROBERTSON PAYNE | 9-7-4 | 78.95 |
| J | HELEN ROBERTSON PAYNE | 9-5-3 | 85.26 |
| K | TERRI L. & HARIKIA SAMPSON | 9-5-1 | 111.71 |

| LINE TABLE | | |
|------------|------------|----------|
| LINE | BEARING | DISTANCE |
| L1 | N 29°34' E | 1459.33' |
| L2 | N 67°34' E | 1284.33' |

| CURVE TABLE | | | | |
|-------------|------------|----------|---------------|--------------|
| CURVE | ARC LENGTH | RADIUS | CHORD BEARING | CHORD LENGTH |
| C1 | 55.89' | 252.45' | S 03°44' E | 55.78' |
| C2 | 32.40' | 47.96' | S 21°59' W | 31.79' |
| C3 | 17.30' | 23.59' | S 74°51' W | 16.92' |
| C4 | 24.16' | 67.44' | N 70°50' W | 24.03' |
| C5 | 56.82' | 265.58' | N 52°30' W | 56.71' |
| C6 | 150.84' | 998.98' | N 41°04' W | 150.69' |
| C7 | 413.78' | 2697.68' | N 32°08' W | 413.37' |

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www.slswv.com

VICTOR MOYERS
LICENSED
No. 849
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

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

P.S. 849 *C. Victor Moyers*

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| 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) | |
| LEASE # (SEE WW-6A1) | |

| | | | |
|-------------------------|---------------------|----------|----------------|
| SCALE | 1" = 2000' | FILE NO. | 8654P12HMR.dwg |
| HEAVEN HILL 3-12HM REV2 | | | |
| DATE | AUGUST 30 | | 20 19 |
| REVISED | NOVEMBER 5 | | 20 19 |
| OPERATORS WELL NO. | HEAVEN HILL 3N-12HM | | |
| API WELL NO. | 47 | | |
| NO. | STATE | COUNTY | PERMIT |

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

| | | | |
|---------------|--|------------------|---|
| 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 |

COUNTY NAME
PERMIT