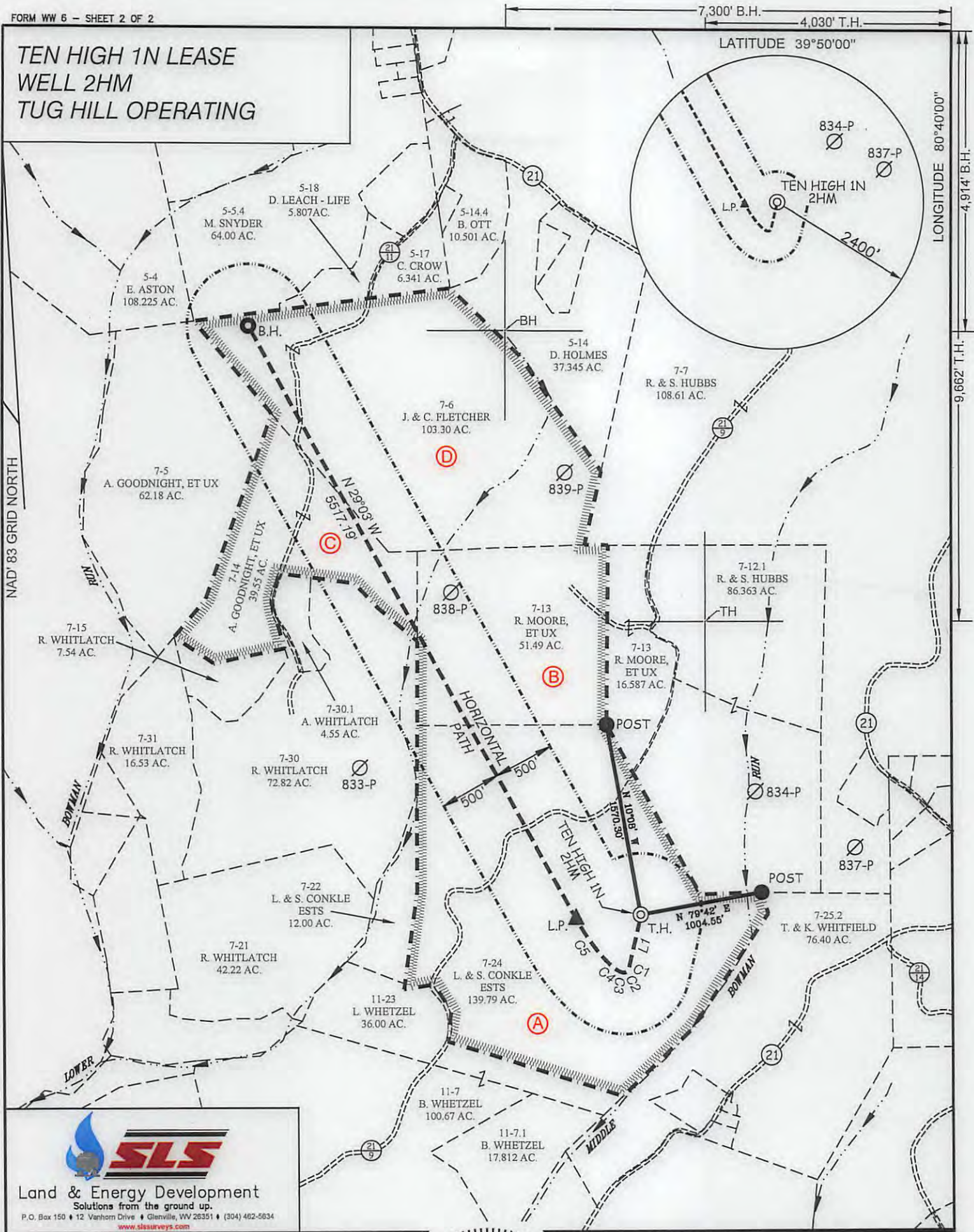
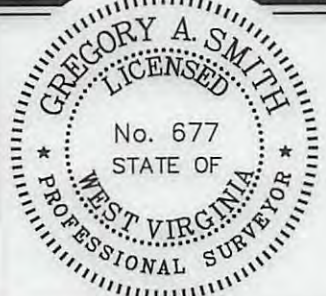


TEN HIGH 1N LEASE
WELL 2HM
TUG HILL OPERATING



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(+) 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 PG. 1)

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)		
NAD'83 S.P.C.(FT)	N. 478,161.7	E. 1,636,721.7
NAD'83 GEO.	LAT-(N) 39.806809	LONG-(W) 80.681010
NAD'83 UTM (M)	N. 4,406,363.91	E. 527,305.49
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 478,129.2	E. 1,636,191.2
NAD'83 GEO.	LAT-(N) 39.806700	LONG-(W) 80.682896
NAD'83 UTM (M)	N. 4,406,351.3	E. 527,144.1
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 482,952.7	E. 1,633,512.9
NAD'83 GEO.	LAT-(N) 39.819844	LONG-(W) 80.692657
NAD'83 UTM (M)	N. 4,407,807.2	E. 526,903.5

SCALE 1" = 1000' FILE NO. 8655P2HMR.dwg

DATE APRIL 20, 20 17

REVISED _____, 20 _____

OPERATORS WELL NO. TEN HIGH 1N-2HM

API WELL NO. 47 — 051 — 01934

STATE COUNTY PERMIT

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

DIANNA STAMPER
DESIGNATED AGENT
CT CORPORATION SYSTEM

ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

COUNTY NAME PERMIT

08/11/2017

**TEN HIGH 1N LEASE
WELL 2HM
TUG HILL OPERATING**

LINE	BEARING	DISTANCE
L1	S 12°47' W	444.01'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	16.79'	234.83'	S 16°19' W	16.78'
C2	39.34'	45.07'	S 45°56' W	38.10'
C3	47.25'	79.53'	N 80°21' W	46.56'
C4	105.43'	362.11'	N 53°29' W	105.06'
C5	461.53'	1710.83'	N 35°53' W	460.13'

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 478,161.7 E. 1,636,721.7
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 NAD'83 UTM (M) N. 4,407,807.2 E. 526,303.5

LATITUDE 39°50'00"

LONGITUDE 80°40'00"
4,914' B.H.
9,662' T.H.

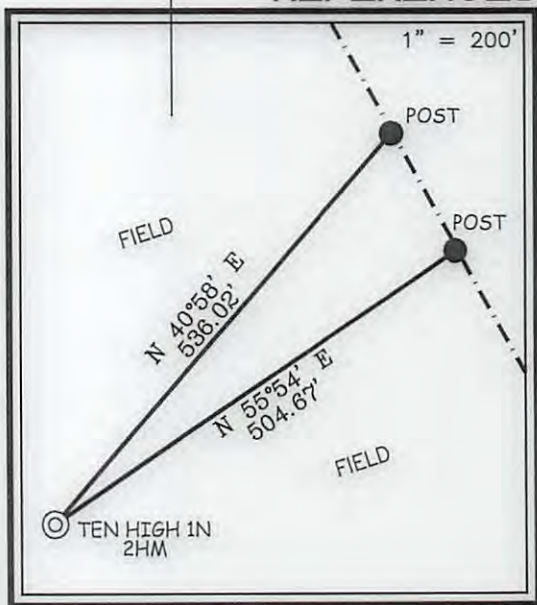
B.H.

LEASE NO.	TAG	PARCEL	OIL & GAS ROYALTY OWNER	DEED	BOOK / PG.
10*16140	A	9-7-24	ANDY PAUL & JACKIE KUHN	905	526
10*15558	A	9-7-24	ARNIE GOODNIGHT	777	59
10*15666	A	9-7-24	BRENDA J. WHETZEL	863	635
10*16585	A	9-7-24	DALE BRIAN GOODMAN	909	506
10*47051.295.5	A	9-7-24	DALE R. MOORE	904	506
10*16049	A	9-7-24	DANNY SHAWN KERNS & MARY LYNN KERNS	905	518
10*47051.295.10	A	9-7-24	DEENA J. PALOMO	905	470
10*47051.295.12	A	9-7-24	EARL D. WELLMAN	905	432
10*47051.295.3	A	9-7-24	HAZEL ARIZONA MOORE REYNOLDS	904	632
10*16141	A	9-7-24	HOWARD L. KUHN & MARY L. KUHN	905	528
10*16139	A	9-7-24	HUBERT DEAN KUHN & ANDREA KUHN	905	524
10*47051.295.9	A	9-7-24	JAMES HIMELRICH JR. & KAREN HIMELRICK	904	465
10*47051.295.7	A	9-7-24	JEANNE V. MELCHIORI	904	462
10*15662	A	9-7-24	LARRY LEE CONKLE	863	354
10*16138	A	9-7-24	LARRY W. KUHN & VICKIE B. KUHN	905	522
10*47051.295.4	A	9-7-24	LLOYD D. MOORE	904	459
10*16501	A	9-7-24	LLOYD D. & GWENDOLYN MOORE	907	392
10*16553	A	9-7-24	MARK EDWARD & KARRIE A. GOODMAN	909	81
10*47051.295.6	A	9-7-24	MARY I. BURKHART	904	638
10*47051.295.11	A	9-7-24	REGINA D. FIGUEROA & DAVID	905	435
10*16820	A	9-7-24	ROBERTA ANN & DAVID S. GIBB	919	237
10*15663	A	9-7-24	ROY A. CONKLE SR.	863	311
10*47051.291.13	A	9-7-24	THE DOLLYE F. WOOD REVOCABLE TRUST BY NICHOLAS CHARLES WOOD AS TRUSTEE	904	641
10*15664	A	9-7-24	THERESA ANN HUGHES	863	343
10*15501	B	9-7-13	RONALD & EDNA MOORE	661	449
10*15558	C	9-7-14	ARNIE GOODNIGHT	777	59
10*15500	D	9-7-6	JERRY FLETCHER & CAROLYN FLETCHER	661	154
10*15502	D	9-7-6	SHERWOOD YEATER	748	268

NOTES ON SURVEY

- 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.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'

REFERENCES



SLS
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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 _____, 20 _____
 OPERATORS WELL NO. TEN HIGH 1N-2HM
 API WELL NO. 47-051-01934 HCA
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P2HMR.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 1000'

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 = 1,322.70' PROPOSED = 1,310.06' WATERSHED MIDDLE BOWMAN RUN OF FISH CREEK (HUC-10)
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER LAWRENCE & SHIRLEY CONKLE ESTS ACREAGE 139.79±
 ROYALTY OWNER ANDY PAUL & JACKIE KUHN, ET AL - SEE TABLE ABOVE ACREAGE 139.79±

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: 6,865' / TMD: 12,689'

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

08/11/2017