

11,626' AS DRILLED B.H.

3,961' AS DRILLED T.H.

**TEN HIGH 1S LEASE
WELL 5HM
TUG HILL OPERATING**

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. 478,123.48 E. 1,636,789.50
NAD'83 GEO. LAT-(N) 39.806706 LONG-(W) 80.680767
NAD'83 UTM (M) N. 4,406,352.80 E. 527,326.35

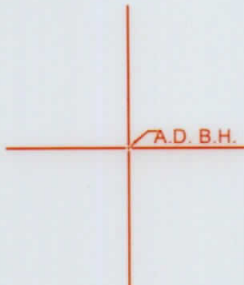
LANDING POINT

NAD'83 S.P.C.(FT) N. 476,919.8 E. 1,636,007.8
NAD'83 GEO. LAT-(N) 39.803374 LONG-(W) 80.683492
NAD'83 UTM (M) N. 4,405,981.9 E. 527,094.3

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 468,429.3 E. 1,640,722.6
NAD'83 GEO. LAT-(N) 39.780236 LONG-(W) 80.666320
NAD'83 UTM (M) N. 4,403,419.2 E. 528,573.9

T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°37'30"
4,104' AS DRILLED B.H.
9,700' T.H.



**AS DRILLED COORDINATES
FOR WELL NO. 5HM**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

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NAD'83 UTM (M) N. 4,406,352.80 E. 527,326.35

LANDING POINT

NAD'83 S.P.C.(FT) N. 477,124.4 E. 1,635,906.3
NAD'83 GEO. LAT-(N) 39.803932 LONG-(W) 80.683863
NAD'83 UTM (M) N. 4,406,043.7 E. 527,062.4

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 468,489.7 E. 1,640,710.1
NAD'83 GEO. LAT-(N) 39.780401 LONG-(W) 80.666367
NAD'83 UTM (M) N. 4,403,437.6 E. 528,569.8



NOTES ON SURVEY

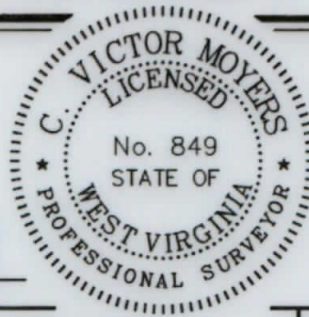
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN - 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'
- AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slswv.com

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 MARCH 24, 20 20
REVISED _____, 20 ____
OPERATORS WELL NO. TEN HIGH 1S-5HM
API WELL NO. 47 - 051 - 1964
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8655P5HMAD.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 X INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION GROUND = 1,317.20' 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 ABOVE AND SHEETS 3-5 ACREAGE 139.79±

PROPOSED WORK: LEASE NO. SEE ABOVE & SHEETS 3, 4, & 5
DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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: 17,476'

COUNTY NAME
PERMIT

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

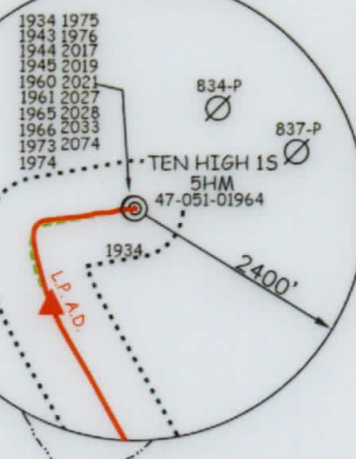
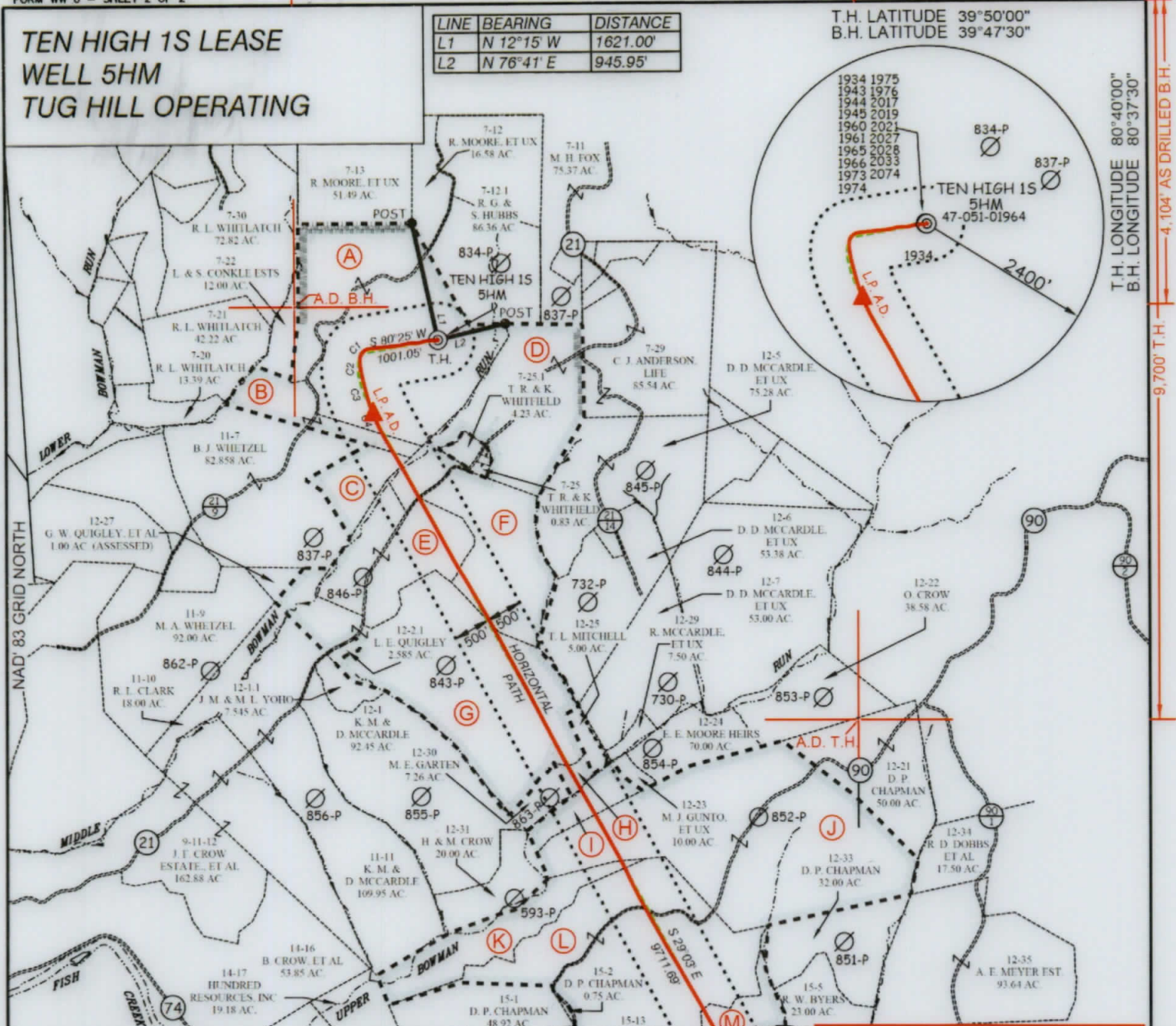
11,626' AS DRILLED B.H.

3,961' AS DRILLED T.H.

TEN HIGH 1S LEASE
WELL 5HM
TUG HILL OPERATING

LINE	BEARING	DISTANCE
L1	N 12°15' W	1621.00'
L2	N 76°41' E	945.95'

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°47'30"



T.H. LONGITUDE 80°40'00"
B.H. LONGITUDE 80°37'30"
4,104' AS DRILLED B.H.
9,700' T.H.

TAG	SURFACE OWNER	PARCEL	ACRES
A	LAWRENCE & SHIRLEY CONKLE ESTS	9-7-24	139.79
B	LARRY J. WHITZEL, ET UX	9-7-23	36.00
C	BRENDA J. WHITZEL	9-11-7.1	17.81
D	THOMAS R. & KIMBERLY WHITFIELD	9-7-25.2	76.40
E	THOMAS R. & KIMBERLY WHITFIELD	9-12-4	54.02
F	WNEK FAMILY IRREVOCABLE TR	9-11-8	50.10
G	GERALD W. QUIGLEY, ET AL	9-12-2	139.79
H	MYRTLE ELIZABETH GARTEN	9-12-28	4.00
I	GARY L. DOBBS	9-12-37	20.00
J	DAVID P. CHAPMAN	9-12-32	150.00
K	MYRTLE ELIZABETH GARTEN	9-14-18	20.00
L	SUSAN VAN DYNE	9-15-3	167.00
M	ROBERT FRANK KOTSON, ET AL	9-15-4	26.40

AS DRILLED COORDINATES FOR WELL NO. 5HM

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD83 S.P.C. (FT)	N 478,123.48	E 1,636,789.50
NAD83 GEO.	LAT-(N) 39.806706	LONG-(W) 80.680767
NAD83 UTM (M)	N 4,406,352.60	E 527,326.35

LANDING POINT

NAD83 S.P.C. (FT)	N 477,124.4	E 1,635,806.3
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CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	125.55'	113.21'	S 44°44' W	119.21'
C2	270.07'	543.72'	S 00°25' E	267.30'
C3	389.15'	1644.99'	S 19°58' E	388.24'
C4	355.73'	3708.21'	S 25°48' E	355.59'



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slsvw.com

LEGEND
AS DRILLED ————
PROPOSED - - - - -

P.S.
849

C. Victor Moyers

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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	00-00
LEASE # (SEE PAGES 1,3,4,&5)	(A)

SCALE 1" = 2000' FILE NO. 8655P5HMAD.dwg
DATE MARCH 24, 20 20
REVISED _____, 20 ____
OPERATORS WELL NO. TEN HIGH 1S-5HM
API WELL NO. 47 — 051 — 1964
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	ADDRESS	CT CORPORATION SYSTEM
	FORT WORTH, TX 76107		5400 D BIG TYLER ROAD
			CHARLESTON, WV 25313