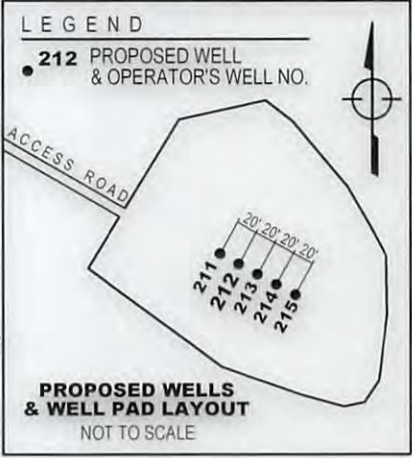


2,840' to Bottom Hole

BOTTOM HOLE LATITUDE 39° 22'30"  
TOP HOLE LATITUDE 39° 20'00"

TOP HOLE LONGITUDE 79° 50'00"  
BOTTOM HOLE LONGITUDE 79° 52'30"

10,829' to Top Hole  
15,150' to Bottom Hole



**LEGEND**  
 - - - LEASE BOUNDARY  
 - - - SURFACE PROPERTY LINE  
 ······ 500' BUFFER AROUND LATERAL  
 ——— BEVERLY & MORGANTOWN TURNPIKE  
 ☀ EXISTING WELL



Tax Map / Parcel	Surface Owner
A	23 / 1 T. & B. HAMILTON
B	23 / 1.1 D. HAMILTON
C	22 / 13 HAMILTON FAMILY TRUST
D	15 / 23 HAMILTON FAMILY TRUST
E	15 / 22.1 J. & L. CLARKSON
F	15 / 21 J. & L. CLARKSON
G	15 / 20 J. & L. CLARKSON
H	15 / 12 R. AUSTIN KNOTTS
I	15 / 6 J. & L. CLARKSON
J	15 / 7 W. & G. WAGNER
K	15 / 3 W. & G. WAGNER
L	9 / 14.2 JAMES E. GRAGG
M	15 / 7.1 T. & S. SUMMERS
N	NO TM / P STATE OF WEST VIRGINIA

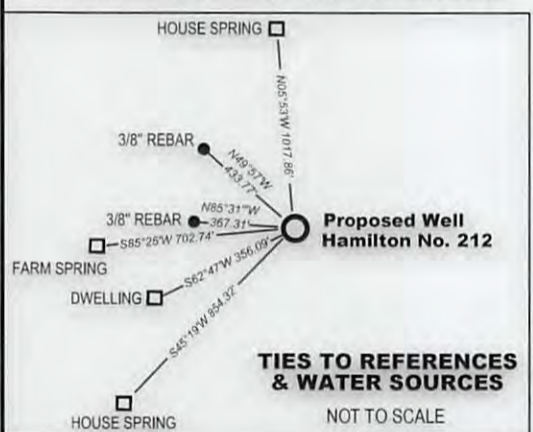
NOTE: No railroads are crossed by the proposed Hamilton 212 lateral.

**Proposed Well Hamilton No. 212**  
Elev. 1562.00'

**WELL TIE LINES**  
 a - N86°38'15"W 760.39'  
 b - S11°56'57"W 870.66'  
 c - S32°51'03"E 1067.03'

Bottom Hole Thornton 7.5'

Hamilton No. 212	UTM Zone 17 nad83 (meters)	Latitude / Longitude (WGS84)
Top Hole (TH)	N4351088.223 E598067.562	N39°18'13.068" W79°51'45.396"
Landing Point (LP)	N4351157.327 E597638.217	N39°18'15.484" W79°52'03.283"
Bottom Hole (BH)	N4354381.020 E596133.661	N39°20'00.644" W79°53'04.432"



**MSES consultants, inc.**  
 P. O. Drawer 190, Clarksburg, WV 26302-0190  
 (304) 624-9700

Rev. 8/11/17  
 FILE NO. 13-284-Hamilton#212 Arsenal Well Plat  
 SCALE 1" = 2000' DRAWN BY RLR  
 MIN. DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION:  
 GPS (SURVEY GRADE)

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief, and that it shows all information required by law and the rules issued and prescribed by the department of environmental protection.

(SIGNED) *Charles H. Muncy, Jr.*  
 R.P.E. 8137 P.S.

WVDEP  
 OFFICE OF OIL & GAS  
 601 57th STREET  
 CHARLESTON, WV 25304



DATE APRIL 4 20 17  
 OPERATOR'S WELL NO. HAMILTON NO. 212  
**47 077 00626 H6A**  
 STATE COUNTY PERMIT NO.  
 API WELL NO.

WELL TYPE : OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 IF "GAS", PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION : ELEVATION ORIG. 1562' - AS-BUILT 1563' WATERSHED LITTLE SANDY CREEK  
 DISTRICT RENO COUNTY PRESTON  
 SURFACE OWNER TERRY D. & BETTY HAMILTON  
 OIL & GAS ROYALTY OWNER T. & B. Hamilton, D.K. Hamilton, M.A. Hamilton, J.B. & L. Clarkson, R. Knotts,  
 W. W. & M. & J. E. Gragg, J. B. & L. Clarkson, & W. R. & G. Wagner

QUADRANGLE FELLOWSVILLE, W V 7.5'  
 THORNTON, W V 7.5'  
 NEAREST TOWN DENT 08/18/2017  
 ACREAGE 95.06  
 LEASE ACREAGE 99.06

PROPOSED WORK : DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  CLEAN OUT AND REPLUG   
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ PLUG AND ABANDON   
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD 7,795' MD 20,054.0'  
 WELL OPERATOR ARSENAL RESOURCES DESIGNATED AGENT WILLIAM VEIGEL  
 ADDRESS 6031 WALLACE ROAD EXTENSION #300 ADDRESS 65 PROFESSIONAL PLACE, SUITE 200  
 WEXFORD, PA 15090 BRIDGEPORT, WV 26330

77-00626



**BEARINGS & DISTANCE CHART**  
**Hamilton No. 211**

HOUSE SPRING	N04°51'W	1007.18'
FARM SPRING	S84°33'W	684.53'
HOUSE SPRING	S47°59'W	847.28'

**BEARINGS & DISTANCE CHART**  
**Hamilton No. 212**

HOUSE SPRING	N05°48'W	1018.25'
FARM SPRING	S85°27'W	701.25'
HOUSE SPRING	S45°16'W	852.91'

**BEARINGS & DISTANCE CHART**  
**Hamilton No. 213**

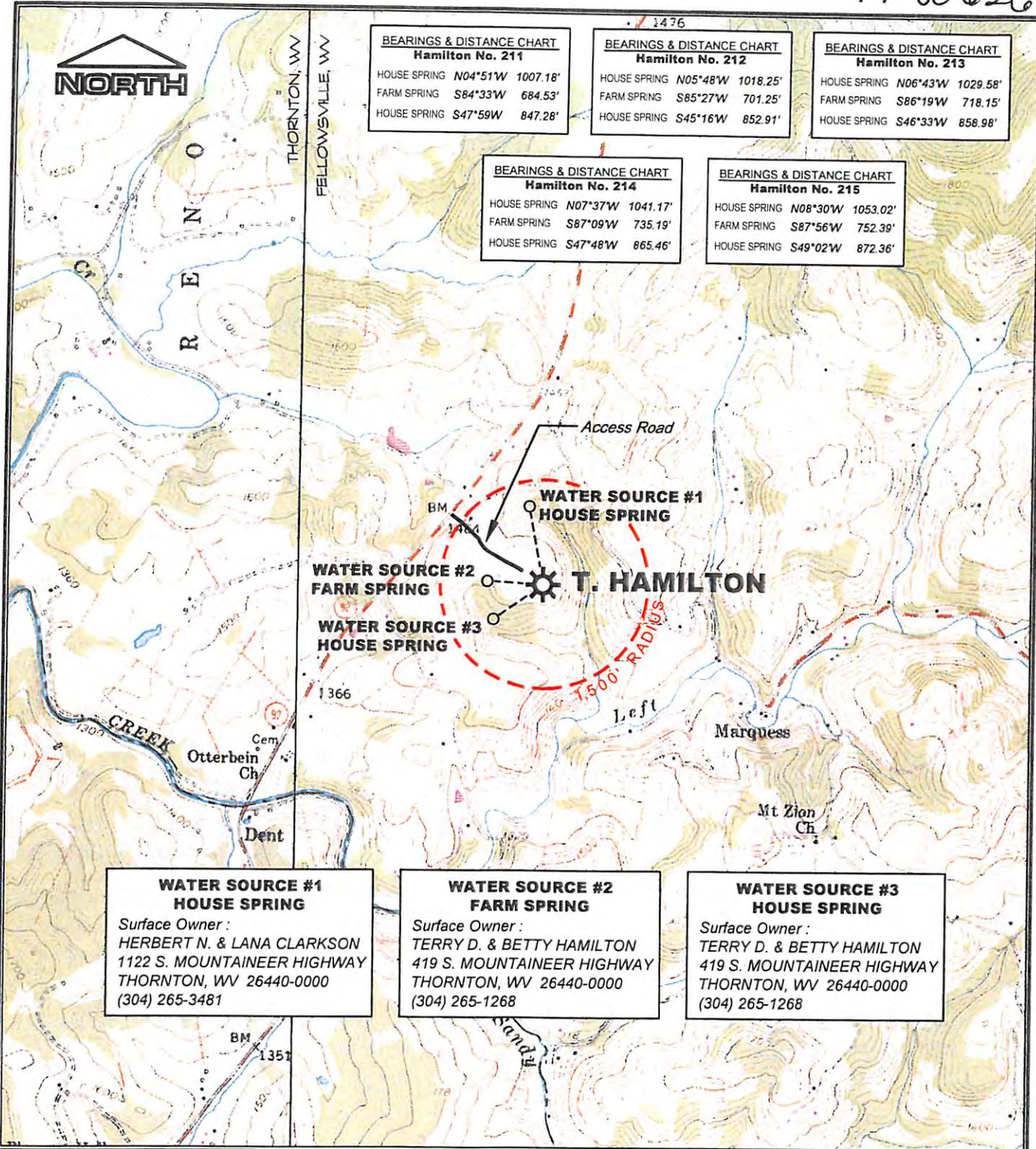
HOUSE SPRING	N06°43'W	1029.58'
FARM SPRING	S86°19'W	718.15'
HOUSE SPRING	S46°33'W	858.98'

**BEARINGS & DISTANCE CHART**  
**Hamilton No. 214**

HOUSE SPRING	N07°37'W	1041.17'
FARM SPRING	S87°09'W	735.19'
HOUSE SPRING	S47°48'W	865.46'

**BEARINGS & DISTANCE CHART**  
**Hamilton No. 215**

HOUSE SPRING	N08°30'W	1053.02'
FARM SPRING	S87°56'W	752.39'
HOUSE SPRING	S49°02'W	872.36'



**WATER SOURCE #1**  
**HOUSE SPRING**

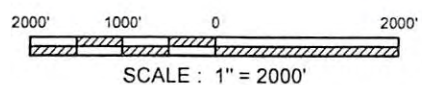
Surface Owner :  
HERBERT N. & LANA CLARKSON  
1122 S. MOUNTAINEER HIGHWAY  
THORNTON, WV 26440-0000  
(304) 265-3481

**WATER SOURCE #2**  
**FARM SPRING**

Surface Owner :  
TERRY D. & BETTY HAMILTON  
419 S. MOUNTAINEER HIGHWAY  
THORNTON, WV 26440-0000  
(304) 265-1268

**WATER SOURCE #3**  
**HOUSE SPRING**

Surface Owner :  
TERRY D. & BETTY HAMILTON  
419 S. MOUNTAINEER HIGHWAY  
THORNTON, WV 26440-0000  
(304) 265-1268



**REFERENCE**  
U.S.G.S. 7.5' TOPOGRAPHIC QUADRANGLES :  
FELLOWSVILLE, WV 1958 (P.R. 1976)  
THORNTON, WV 1958 (P.R. 1976)

**ARSENAL RESOURCES**

**PROPOSED T. HAMILTON WELL**  
**SURROUNDING WATER SOURCES**

Drawn by	RLR	2/14
Engineer	DDT	2/14
Checked by	RVS	2/14
Prepared by	WV Department of Environmental Protection	Date

Rev. 4/25/17

MSES consultants, inc.

Scale: AS SHOWN

1 of 1

08/18/2017

F:\On-going\Projects\13-284 Mountaineer Keystone Well Surveys\13-284 T. Hamilton Well\13-284-Hamilton Drafting\13-284 Hamilton Arsenal Water Source Exhibit.dwg, Hamilton, 4/26/2017 4:37:40 PM, Sharon Cottrill