

1,310' to Bottom Hole

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

Tax Map / Parcel	Surface Owner
A	23/1 T. & B. HAMILTON
B	23/2 H. & L. CLARKSON
C	16/36 P. LAREW
D	16/37.1 D. MATLICK
E	16/35 T. & B. HAMILTON
F	16/37.4 P. & L. CLARKSON
G	15/21 J. & L. CLARKSON
H	15/14 EDWIN C. RUNNER
I	15/8 G. & C. CLUTTER
J	15/7 W. & G. WAGNER
K	15/4 F. & P. JENNINGS
L	NO TM/P STATE OF WEST VIRGINIA
M	9/16 HERSHMAN FAMILY TRUST
N	9/14.2 JAMES E. GRAGG
O	23/1.1 D. HAMILTON

NOTE: No railroads are crossed by the proposed Hamilton 214 lateral.



WELL TIE LINES

- a - N88°01'00"W 725.73'
- b - S09°33'00"W 883.51'
- c - S32°51'03"E 1067.03'

LEGEND

- LEASE BOUNDARY
- SURFACE PROPERTY LINE
- 500' BUFFER AROUND LATERAL
- BEVERLY & MORGANTOWN TURNPIKE
- ☼ EXISTING WELL

LEGEND

● 214 PROPOSED WELL & OPERATOR'S WELL NO.

ACCESS ROAD



PROPOSED WELLS & WELL PAD LAYOUT NOT TO SCALE

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

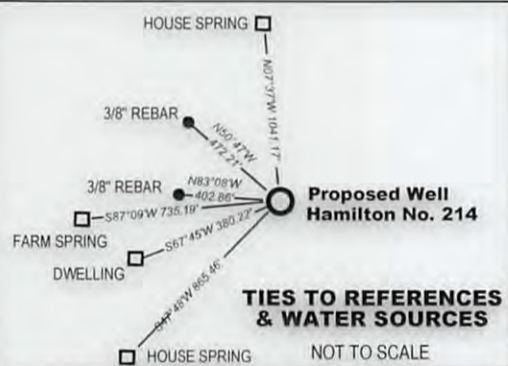
10,847' to Top Hole

15,150' to Bottom Hole



Proposed Well Hamilton No. 214

Proposed Well Hamilton No. 214
Elev. 1562.00'



Hamilton No. 214	UTM Zone 17 nad83 (meters)	Latitude / Longitude (WGS84)
Top Hole (TH)	N4351081.696 E598078.113	N39°18'12.852" W79°51'44.959"
Landing Point (LP)	N4351334.092 E598021.449	N39°18'21.061" W79°51'47.192"
Bottom Hole (BH)	N4354388.719 E596596.836	N39°20'00.708" W79°52'45.084"



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

Rev. 8/11/17
FILE NO. 13-284-Hamilton#214 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. 214
47 077 00628H6A
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

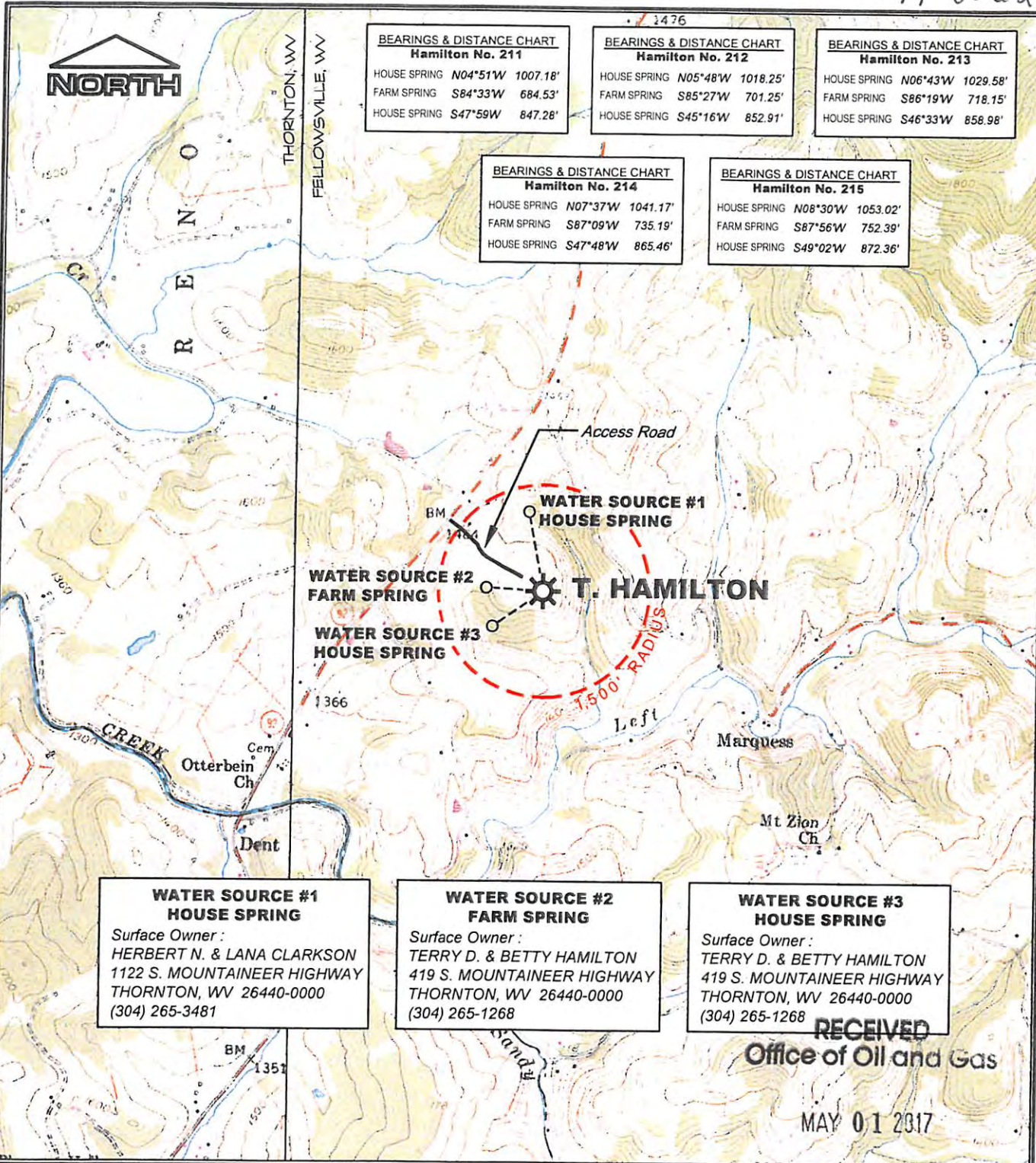
OIL & GAS ROYALTY OWNER T. & B. Hamilton, H. N. & L. B. Clarkson, P. A. Larew, D. W. Matlick, T. & B. Hamilton, P. Mason & L. Clarkson, J. B. & L. Clarkson, H. Runner Hrs c/o E. Runner, G. W. & C. S. Clutter, F. & P. Jennings, W. R. & G. Wagner, J. E. Gragg, Steven Bolyard, D. R. & C. A. Hershman

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 ONONDAGA (PILOT) - MARCELLUS (LATERAL) ESTIMATED DEPTH TVD = 7,910' (PILOT) 7,795' (LATERAL) MD 19,245.9'

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

77-00628



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

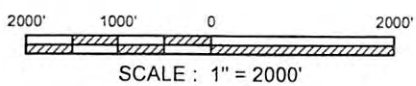
Surface Owner :
TERRY D. & BETTY HAMILTON
419 S. MOUNTAINEER HIGHWAY
THORNTON, WV 26440-0000
(304) 265-1268

WATER SOURCE #3
HOUSE SPRING

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

RECEIVED
Office of Oil and Gas

MAY 01 2017



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

WV Department of
ARSENAL RESOURCES
Environmental Protection

PROPOSED T. HAMILTON WELL
SURROUNDING WATER SOURCES

Drawn by	RLR	2/14
Engineer	DDT	2/14
Checked by	RVS	2/14
	Rev. 4/25/17	Date

Scale: AS SHOWN

1 of 1

Prepared by **MSES consultants, inc.**

08/18/2017