

Ms. Jill Van Dyke
Michigan Department of Environmental Quality
Water Resources Division
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Subject:

October 2000 Hydrogeologic Assessment Technical Memorandum
Spring Hill Camp Study Area
Osceola County, Michigan

ENVIRONMENT

Date:

April 26, 2017

Dear Ms. Van Dyke:

Contact:

Mike Pozniak

Attached is the 2000 Hydrogeologic Assessment Technical Memorandum for the Spring Hill Camp Study Area as requested by the Michigan Department of Environmental Quality (MDEQ). This report was prepared by Malcom Pirnie, LLC which was acquired by Arcadis in 2009. The technical memorandum was completed for the purpose of documenting the findings of an initial hydrogeologic evaluation of the Spring Hill Camp Study Area (currently referred to as the White Pine Springs site) to determine its potential as a spring water source site for Nestle Waters North America (formerly known as Great Spring Waters of America). The technical memorandum discusses:

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Our ref:

04065

- Subsurface stratigraphy encountered during well drilling of the study area
- Hydrogeology of the area (groundwater flow direction, aquifer properties, groundwater quality)
- Assessment and determination of baseline conditions

In 2000, a 7-day aquifer test was conducted using three test wells TW-1, TW-2, and TW-3) pumping at a combined rate of 723 gallons per minute (gpm). These wells were located approximately 200 feet north of the spring area. Based on the results of the extensive field investigations that were conducted at that time, production well PW-101 was subsequently drilled over 1375 feet north (upgradient) of the test wells and 1,575 feet from the spring area (see attached figure).

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In 2001, site investigations and hydrogeological monitoring continued and production well PW-101 was extensively tested. In June 2001, a nine-day aquifer test was conducted at production well PW-101 at a rate of 400 gpm for eight days and increased to 700 gpm for the last (9th) day. The results of this testing are presented in Section 17 of Michigan Safe Drinking Water Act Application Information Package which was submitted to MDEQ in July 2016.

Should you need additional information, please contact us at 517-337-0111.

Sincerely,

Arcadis of Michigan, LLC



Michael Pozniak, CPG
Senior Geologist

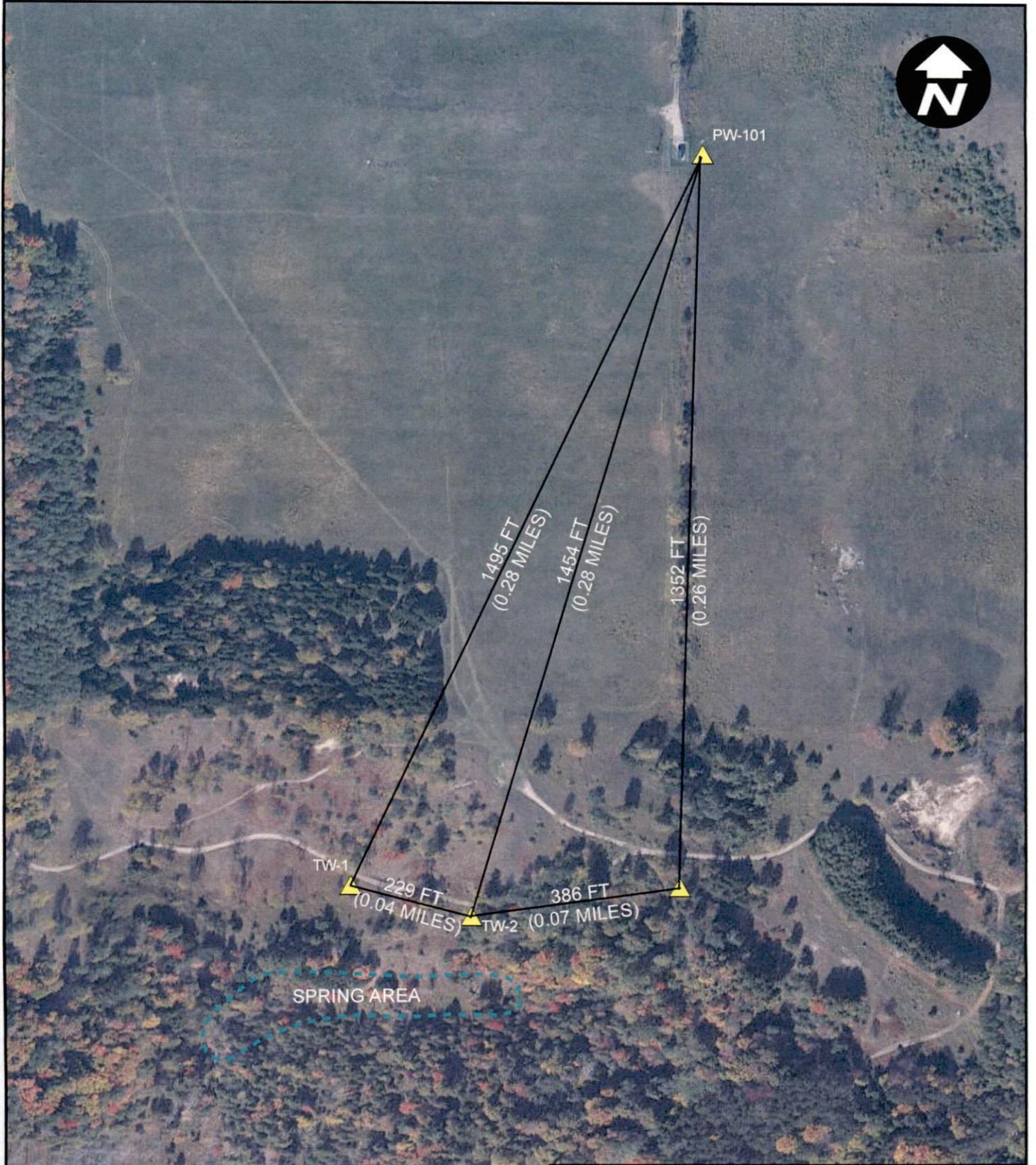


Greg Foote, CPG
Principal Geologist

Enclosures:

Report

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NESTLE WATERS NORTH AMERICA

WELL DISTANCES



FIGURE

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