

## Underground Storage Tank Report

**Project Site:** 2497 West 7<sup>th</sup> Avenue, Vancouver, BC, V6K 1Y6

Examination Date: February 4, 2016

**Client: NDH Developments** 

Report Prepared By: M.Grunde













Underground Storage Tank Report 4 February 2016 Page 1 of 2



Date of Survey:

4 February 2016

**Project Address:** 

2497 West 7th Avenue, Vancouver, BC, V6K 1Y6.

**Objective:** 

The purpose of the Ground Penetrating Radar (GPR) Survey was to verify the presence and location of any Underground Oil Storage Tanks (USTs) at 2497 West 7<sup>th</sup> Avenue, Vancouver, BC, V6K 1Y6.

**Survey Details:** 

The survey was completed using a 500 MHz Ground Penetrating Radar (GPR) antenna and a ferromagnetic locator. All areas around the house were scanned with an overlapping grid pattern. The exterior of the house were checked for visual signs of a tank, such as, a vent pipe, filler cap, supply lines, etc. Ground conditions were good, with good GPR imaging resolution.

**Evidence Observed:** 

**≻**None

**Inconclusive Areas:** 

Partial areas under the deck could not be scanned due to shelving covering the ground space (Image 1).

The rear garage and garage addition could not be scanned due to lack of access. The client stated on site that the garages were encroached on public property and as such were not part of the property to be scanned (Images 2 and 3).

Densely vegetated areas of the property could not be scanned with Ground Penetrating Radar; these areas were, however, scanned with ferromagnetic detection with no signature rebounds resembling an oil tank found (Image 4).

Results:

The ferromagnetic scan identified some metallic objects on the property; however, successive overlapping passes with the GPR did not detect any anomalies on the areas of the property scanned that would indicate the presence of an Underground Oil Storage Tank.

**Conclusion:** 

After examining the data collected from the survey area, it has been concluded that there are no anomalies characteristic of an Underground Oil Storage Tank present on the areas of the property surveyed.

<u>Limitations</u>: Areas containing surface obstructions or unmovable objects, such as vegetation, planters, walls, storage items, etc. will restrict the movement of the GPR antenna and thus cannot be fully scanned. GPR equipment cannot scan within eighteen inches of a wall or other surface obstructions. Any areas containing air gaps or void spaces, such as raised wooden decks, interfere with the radar signal and cannot be scanned. Concrete areas containing a layer of mesh may cause radar distortion, resulting in poor data resolution.

Underground Storage Tank Report 4 February 2016 Page 2 of 2



## Field Data







Image 1: Partial area under the deck could not be scanned with GP due to shelving in the way.

Image 2: The garage could not be scanned due to lack of access.

Image 3: The garage addition could not be scanned due to lack of access.



Image 4: Densely vegetated areas of the property could not be scanned with GPR; these areas were scanned, however with ferromagnetic detection.