SUBSURFACE INVESTIGATIVE WORK PLAN

KoscoHeritage – South Fallsburg Terminal
74 Griff Court
South Fallsburg, Sullivan County, New York

NYSDEC PBS NO. 3-123226
NYSDEC SPILL NO. 19-00538

July 19, 2019

DT CONSULTING SERVICES, INC.
1291 Old Post Road
Ulster Park, New York 12487
(845) 658-3484 (phone)
dtconsulting@hvc.rr.com

July 19, 2019

Mr. John Ringel
LL Fuel Storage, LLC
Post Office Box 797
Lake Katrine, New York 12449

RE: SUBSURFACE INVESTIGATIVE WORK PLAN
KoscoHeritage – South Fallsburg Terminal
74 Griff Court
South Fallsburg, Sullivan County, New York

NYSDEC PBS NO. 3-123226/NYSDEC SPILL NO. 19-00538

Dear Mr. Ringel:

Pursuant to your request, DT Consulting Services, Inc. (DTCS) is please to present the following Subsurface Investigative Work Plan for your approval. As required, a copy of this report will be forwarded to the New York State Department of Environmental Conservation (NYSDEC) for their review and comment. Once the work plan is approved by the Department, DTCS will schedule and perform field activities as described in this plan.

If you should have any questions or require additional information please feel free to contact me at (845) 658-3484. DTCS thanks you for the opportunity to work with you on this project.

Sincerely,
DT CONSULTING SERVICES, INC.

Deborah J. Thompson
Deborah J. Thompson
Senior Geologist/Project Manager

Cc: NYSDEC Region III

DT CONSULTING SERVICES, INC.

SUBSURFACE INVESTIGATIVE WORK PLAN

Pertaining to:

KoscoHeritage – South Fallsburg Terminal
74 Griff Court
South Fallsburg, Sullivan County, New York

Prepared for:

Mr. John Ringel
KoscoHeritage
Post Office Box 797
Lake Katrine, New York 12449

Prepared by:

Ms. Deborah J. Thompson
Senior Geologist/Project Manager
DT CONSULTING SERVICES, INC.
1291 Old Post Road
Ulster Park, New York 12487

Date: July 19, 2019

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1.0 INTRODUCTION/ SITE INFORMATION

DT Consulting Services, Inc. (DTCS) has been authorized by LL Fuel Storage, LLC (property owner) to generate a Subsurface Investigative Work Plan (SIWP) for the commercial property known as the KoscoHeritage – South Fallsburg Terminal located at 74 Griff Court, South Fallsburg, Sullivan County, New York referenced heretofore as the Site or Subject Property. Note that since the Site is located at the intersection of Griff Court and Laurel Avenue, the Subject Facility has also been referenced with a Site address of 25 Laurel Avenue. Attached as Figures 1 and 2 are Site Location and Site (base) Maps, respectively for your review.

The irregularly shaped +/- 1.76-acre Site includes a total of two tax parcels and is currently utilized as an unmanned, petroleum bulk storage (PBS) terminal. The Site is improved with an approximate 3,200-ft² unoccupied office and dry goods storage building along with ten aboveground storage tanks (ASTs), a fuel truck loading rack and an oil-water separator utilized to treat storm water run-off within the secondary containment area surrounding the ASTs prior to discharge. Note that the facility does maintain a Spill Prevention Control and Countermeasure (SPCC) Plan. Under the New York State Department of Environmental Conservation (NYSDEC) PBS Program, facilities with a combined petroleum storage capacity of greater than eleven hundred gallons or which have any underground storage tanks (USTs) with capacities greater than 110-gallons or which have a stationary waste oil tank are required to comply with registration, handling, storage, and record keeping requirements established in 6 NYRCRR Part 613. Review of a NYSDEC PBS Registration Certificate revealed that the KoscoHeritage facility is registered under PBS No. 3-123226.

Stone base driveways and operational areas are found along the north, east and western sides of the main Site structure. The Subject Property is situated within a mixed use setting and is accessed from Laurel Avenue located east of the Subject

Property. In Site is generally level and at grade with the adjacent roadway. The nearest water body in relation to the Site is the Sheldrake Stream due west of the Site, which flows southward to discharge into Pleasant Lake. Based upon available documentation, as the Site is unoccupied, there are no private wells or septic systems utilized on-Site.

2.0 BACKGROUND

On April 16, 2019 a spill was reported to the NYSDEC based upon the findings of a Limited Phase II Environmental Site Assessment (ESA) performed by Continental Placer, Inc. (CPI) of Albany, New York. As a result of this notification, Spill Number 19-00538 has been assigned to the Site by the Department. The ESA included the advancement of four soil borings to a depth of approximately 15 – 20 feet below grade surface (bgs). In total, four soil samples and one groundwater sample was submitted for laboratory analysis by CPI. Results indicated low level volatile and semi-volatile organic compounds (VOCs/SVOCs) within three of the four monitoring locations; although only one soil boring location (SB-3) displayed VOCs above NYSDEC Soil Clean-up Criteria (see Figure 2 for locations). DTCS was subsequently retained by LL Fuel Storage, LLC to generate a Subsurface Investigative Work Plan to delineate the extent of petroleum impacts on-Site as per the request of the Department.

3.0 SUBSURFACE INVESTIGATIVE WORKPLAN

The purpose of this investigation is to delineate the extent of subsurface impacts identified during a recent Limited Phase II ESA performed on the Subject Facility.

3.1 Proposed Subsurface Investigative Procedures

Soil samples will be collected at six pre-selected borehole locations (see Figure 2 for proposed locales), continuously from grade to an approximate depth of twenty feet below grade surface (bgs). Total depth and final locations of the boreholes may vary depending upon subsurface conditions and field identification of subsurface utilities/conduits, respectively. These subsurface conditions would include resistance, detection of groundwater and/or a positive response with a photoionization detector (PID). Soil borings will be terminated upon drilling two feet into the groundwater table. In addition, if total volatile organic compounds are detected with the PID during soil collection, coring will continue until conditions (like those described above) warrant termination of the borehole. To provide a complete characterization of the site, additional borings other than those proposed may be necessary for delineation purposes. The samples will be obtained by advancing a forty-eight inch long, two inch outer diameter, hollow core sampler into undisturbed soils. To prevent cross-contamination, all sampling equipment would be decontaminated between each soil boring location.

An on-site Geologist would perform soil screening and classification immediately following collection of subsurface materials. The screening will be conducted using a calibrated Mini-Rae Photoionization Detector or equivalent. As most petroleum products contain volatile organic compounds, PID screening can indicate the presence of volatile organics in a soil sample. If positive readings are detected with the PID in the unsaturated zone, a soil sample will be collected from the section of the soil core which displays the highest PID reading and at the soil-water interface of the borehole for laboratory testing. Alternatively, if positive PID readings are not detected within a soil boring location, a soil sample will be obtained at the bottom of the borehole for analysis.

To assess hydro-geologic conditions; DTCS also proposes to collect groundwater samples during this investigation, if encountered. Each shallow temporary well will be constructed of one inch inside diameter (ID), schedule 40 PVC casing and 0.01 inch slotted PVC screen. The screened section of the well will extend a minimum of five feet above and five feet below the groundwater table, for a total of ten feet. Prior to development and sampling, the wells will be gauged utilizing a sonic interface probe to determine the thickness of free phase product (if present), depth to water and depth to bottom of the well. These measurements will be recorded in a field log along with details of sampling procedures. Upon gauging the well, each monitoring point will be developed in an attempt to restore the natural hydraulic connection between the well screen and surrounding soils. Groundwater will be purged from each well until the water is free of appreciable sediment. A minimum of five well volumes of water will be removed during development. Once the groundwater samples are obtained, the casing materials will be removed and the borehole backfilled and capped with cement. All sampling equipment that enters the well will be dedicated, discarded or decontaminated after use to prevent cross-contamination between wells.

Since potential contaminates would be related to petroleum based hydrocarbons, soil samples will be submitted for the NYSDEC CP-51 list for volatile and semi-volatile organic compound analysis via EPA Test Methods 8260 and 8270 B/N, respectively. All samples would be placed in pre-cleaned laboratory supplied glassware and packed on ice for transport/analysis and follow standard chain of custody protocols.

3.2 Surveying and Mapping

The locations of each soil boring/monitoring point will be determined and included in a site plan. The boreholes will be located horizontally by measuring the distance to the nearest 0.10-foot, to at least two permanent structures.

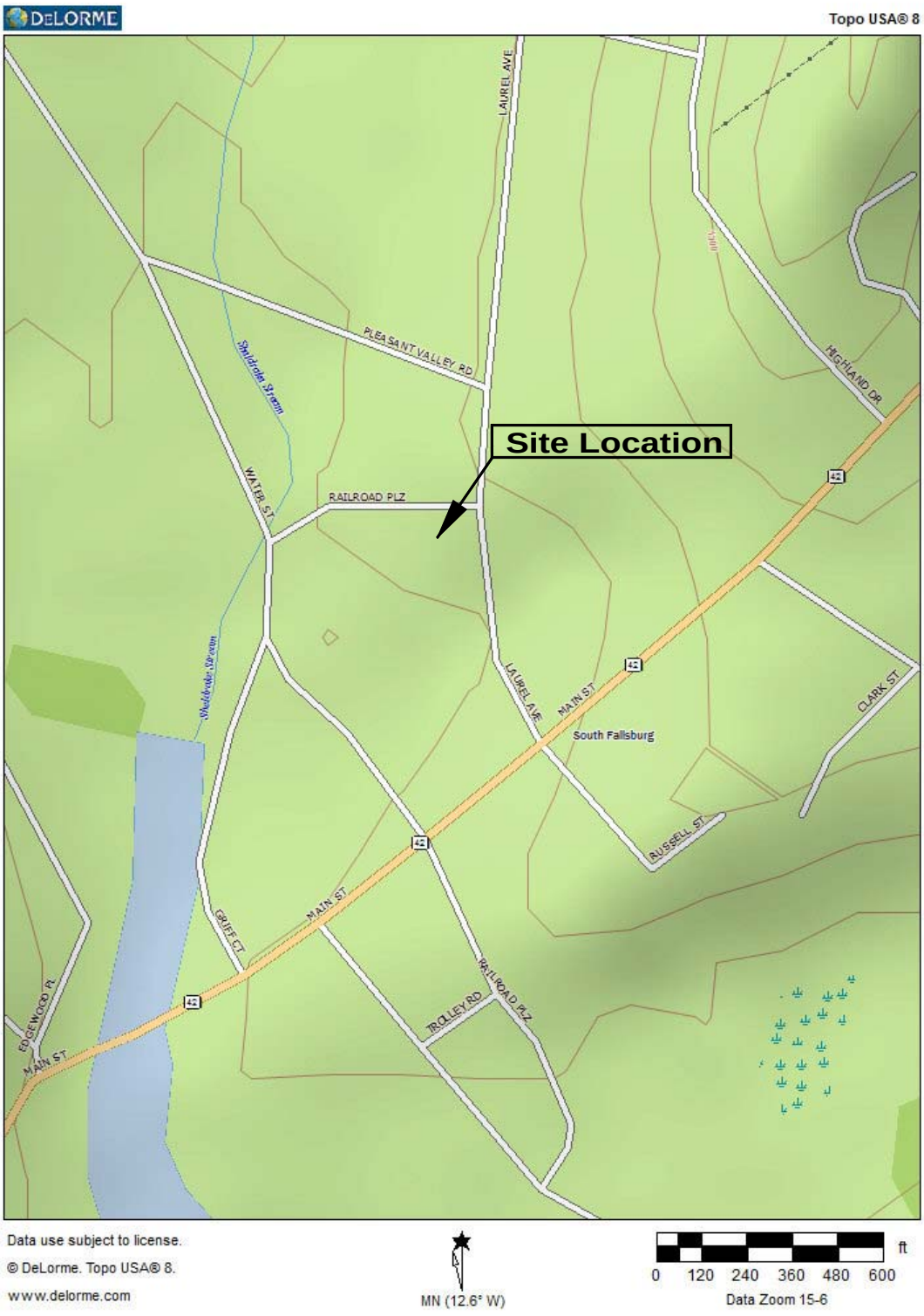
Locations of all sampling locations and other significant features will be shown on a scaled site plan preceding the investigation.

3.3 Reporting

At the conclusion of the fieldwork, DTCS will submit a detailed report to LL Fuel Storage, LLC and the NYSDEC to document the results of this investigation. The report will include the following items at minimum:

- Site background information;
- Scaled site plan;
- Site geology/hydrogeology;
- Description of field work;
- Drilling logs/lithologic record;
- Analytical results and discussion; and
- Recommendations for additional work (as necessary).

FIGURES



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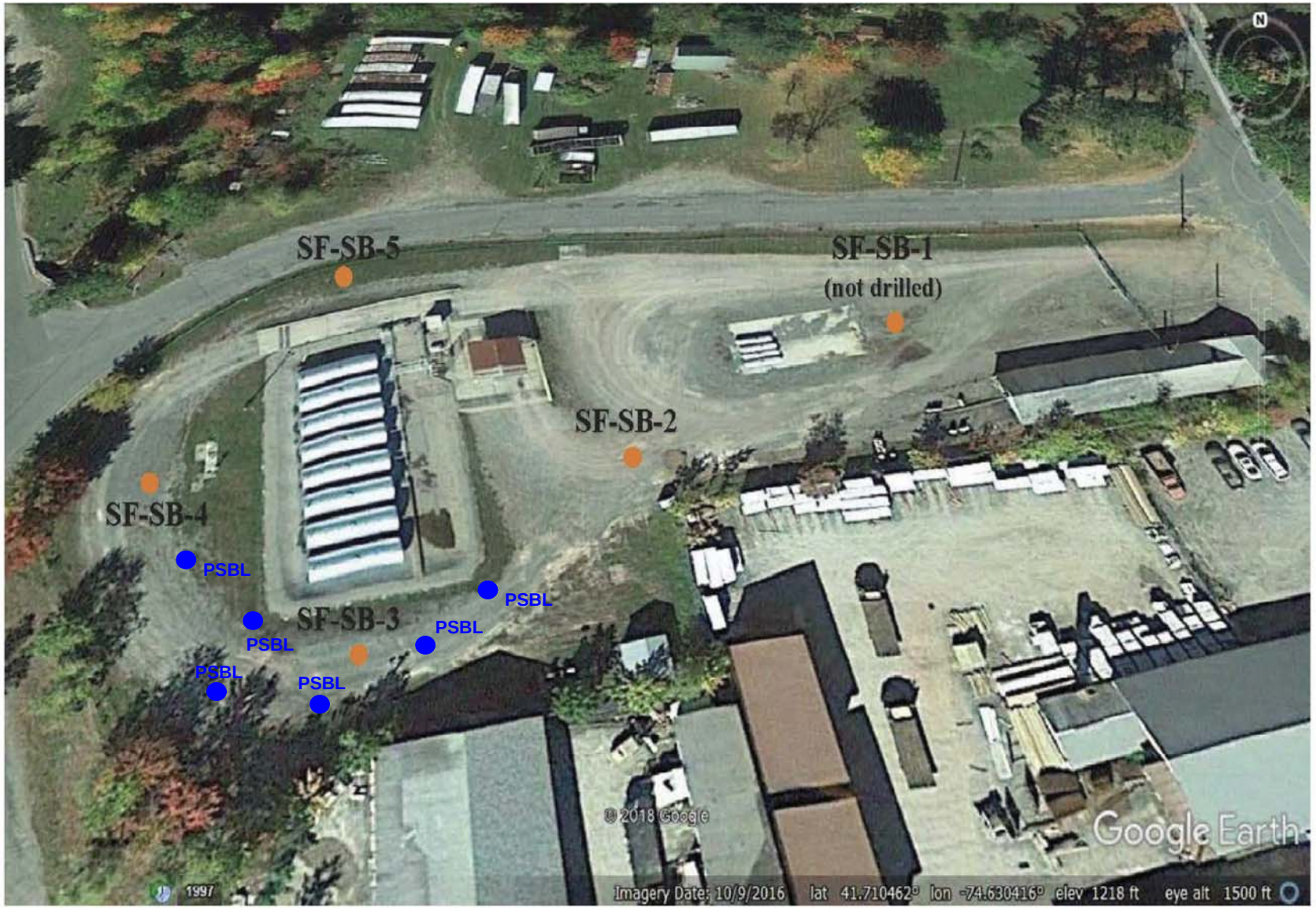
Client:	LL Fuel Storage, LLC		
Location:	74 Griff Court, South Fallsburg, New York		
Title:	Site Location Map		Spill No: 19-00538
Scale:	Graphic	Drawn By: O.T.	Fig.#: 1



CPI, Limited Phase II ESA Soil Boring Location DTCS Proposed Soil Boring Location (PSBL)

Site map as originally depicted by CPI

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Client:	LL Fuel Storage, LLC		
Location:	74 Griff Court, South Fallsburg, Sullivan County, New York		
Title:	Site (base) Map		
Scale: None	Drawn By: O.T.	Spill No: 19-00538	Fig.#: 2