May 16, 2013

Mr. Chad Staniszewski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: **SVE Discontinuation Evaluation**
Scott Rotary Seals Site (Site No. C905036)
Olean NY

Dear Mr. Staniszewski:

As per the Remedial Action Work Plan (RAWP) and Site Management Plan (SMP) prepared for DST Properties NY, LLC and Scott Rotary Seals, TurnKey has been monitoring the soil vapor extraction system since March 2012. This purpose of this letter is to summarize the results of monitoring for the volatile organic compound (VOC) mass removal and propose the soil vapor extraction (SVE) discontinuation evaluation (soil sampling) be completed in accordance with the RAWP and SMP.

BACKGROUND

DST Properties NY, LLC (DST), has undertaken the redevelopment of the property located at 301 Franklin Street, Olean, New York under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in March 2010. DST completed remedial work and has opened a new 15,000 square foot office building and warehouse. A certificate of completion (COC) was issued for the site in December 2012.

SVE SYSTEM

As part of the redevelopment, a soil vapor extraction system (SVE) was installed and has been operated nearly continuously since March 2012. The operation, maintenance and monitoring (OMM) of the SVE system is part of the monitoring required in the approved Site Management Plan. Table 1 attached provides a summary of the monitoring. As described in the RAWP Section 3.2.5 SVE Discontinuation Criteria, there are two criteria that are to be met to initiate the discontinuation evaluation: 1) a significant reduction in mass removal rate; and 2) a decrease in the benefit of continued SVE operation due to a tailing-off of the mass removal rate.

Table 2 Statistical Summary of Mass Removal Rates

Parameter	Summary of Mass Removal Rate (lbs/day)	
	2012	2013
Minimum	10.8	4.1
Maximum	60.1	12.4
Average	27.6	7.0

The purpose of the SVE system is to reduce the mass of VOCs from the vadose zone. As shown in Table 2 above, the range and average VOC mass removal rate has decreased significantly from 2012 to 2013; based on the average mass removal rate there is a 75% reduction from 2012 to 2013. This significant reduction in mass removal meets the first criterion for SVE discontinuation evaluation. Referring to Chart 1 attached, the SVE system has removed over 7,600 pounds of VOCs from the subsurface. Moreover, the rate of VOC mass removal has tailed-off (reached quasi-equilibrium) for the past 3 months, which meets the second criterion for SVE discontinuation evaluation (refer to Chart 2).

SVE Discontinuation Evaluation

On the basis of the foregoing, TurnKey on behalf of DST is proposing to collect post-treatment soil samples using the sampling, handling and testing procedures described in the RAWP and SMP. Attachment 2 provides excerpts from the RAWP Section 3.2.5 and 3.2.6 which includes the agreed upon sampling locations, depths, and testing procedures. Figure 1 in Attachment 2 includes the planned sampling locations adjusted to limit disturbance to Scott Rotary operations. The SVE system is currently shut-down (since late last week) for maintenance; once the maintenance is completed, the system will be reactivated.

We are prepared to initiate the SVE discontinuation evaluation (soil sampling) once we receive your approval. If you have questions or comments, please contact us.

Sincerely,
TurnKey Environmental Restoration, LLC

Raymond Laport, P.E.
Project Manager

Michael Lesakowski
Project Manager

cc: C. Wiech, Scott Rotary Seals (w/att.)
File: 189-013-001

TurnKey

TABLES

Table 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time (days)	SVE Operation Time (days)	Time	Influent (Untreated) PID Reading (ppm)	Corrected Influent Concentration[1] (mg/m^3)	Air Flow Rate (SCFM)	Rate of VOC Removal (lb/day)	Total VOC Removal to Date (lb)	Notes
3/14/12	0	0	3:45 PM	93	439	349	13.8		
3/16/12	2	2	5:00 PM	230	1086	349	34.1	49	
3/30/12	16	16	8:45 AM	298	1407	349	44.1	583	
4/6/12	23	23	9:45 AM	286	1350	349	42.4	888	
4/13/12	30	30	8:00 AM	294	1388	349	43.5	1,185	
4/13/12	30	30	8:30 AM	73	345	349	10.8	1,186	Valved down the intake air from the system
4/17/12	34	34	1:06 PM		0				System shut-down for 22 days pending carbon testing and change-out.
5/9/12	56	34	11:50 AM	118	557	351	17.6	1,244	Restarted system
5/11/12	58	36	12:42 PM	222	1048	349	32.9	1,297	Adjusted system to close off addition of outdoor air
5/15/12	62	40	11:00 AM	248	1171	346	36.4	1,433	
5/21/12	68	46	9:00 AM	134	632	349	19.8	1,599	
5/22/12	69	47	9:00 AM	135	637	347	19.9	1,619	
5/30/12	77	55	4:00 PM	135	637	348	19.9	1,784	Blower down. Based on hour meter, blower went down at ~4:00 PM on May 30.
5/30/12	77	55	5:10 PM	166	784	345	24.3	1,784	
6/13/12	91	69	8:15 AM	166	784	345	24.3	2,116	
6/14/12	92	70	8:10 AM	185	873	348	27.3	2,162	
6/25/12	102	80	1:00 AM	185	873	348	27.3	2,454	System Shut Down
6/25/12	103	80	4:00 PM	144	680	348	21.2	2,454	System reactivated
7/31/12	139	116	2:23 PM	132	623	348	19.5	3,186	
8/2/12	141	118	10:50 AM	141	666	352	21.0	3,333	Carbon Removed, stack discharge
8/3/12	142	119	3:32 PM	141	546	348	17.1	3,356	Power outage; system down; used previous measurments for calculations
8/6/12	145	119	9:53 AM	134	519	351	16.3	3,356	System restarted
8/9/12	148	123	6:40 PM	134	519	352	16.4	3,411	Power outage; system down; used previous measurments for calculations
8/10/12	149	123	2:10 PM	123	476	346	14.8	3,411	
8/21/12	160	134	5:15 PM	139	538	348	16.8	3,587	
8/21/12	160	134	6:40 PM	187	724	343	22.3	3,589	Shut off extraction wells 2, 5, and 6
8/24/12	163	137	3:00 PM	199	770	346	23.9	3,654	
8/25/12	164	138	3:26 PM	199	770	342	23.7	3,679	System shut down
8/27/12	166	138	8:15 AM	180	697	342	21.4	3,679	Reactivated
9/1/12	171	143	2:55 PM	180	697	344	21.5	3,792	System Shut Down
9/4/12	174	143	8:20 AM	180	697	344	21.5	3,792	Reactivated
9/7/12	176	146	2:00 PM	180	697	343	21.5	3,849	
9/8/12	178	147	10:34 AM	505	1955	337	59.3	3,907	Used data from 9/19/12 for mass removal calculations
9/10/12	180	149	8:25 AM	505	1955	332	58.3	4,019	Used data from 9/19/12 for mass removal calculations
9/19/12	189	158	10:00 AM	505	1955	342	60.1	4,356	
9/19/12	189	158	2:00 PM	400	1548	342	47.6	4,365	Well 2 opened, 5 and 6 still off
9/25/12	194	164	4:25 PM	152	588	348	18.4	4,544	System down; no time known
9/26/12	195	165	1:00 AM	400	1548	343	47.7	4,578	Assumed extracted vapors returned to pre-shut down condition
10/12/12	212	181	12:00 PM	201	778	354	24.8	5,174	
10/21/12	221	190	10:17 AM	201	778	354	24.8	5,395	System shut-down due to high vac alarm; used data from 10/12/12 for mass calculations
11/14/12	245	190	3:30 PM	162	627	365	20.6	5,395	System repair to well SVE-2 (cracked pipe); used PID reading from 11/29/12 as PID malfunctioned
11/29/12	260	205	10:00 AM	162	627	365	20.6	5,699	SVE Wells 1, 7, 8 & 9 on; all other wells valved off
11/29/12	260	205	12:50 PM	333	1289	365	42.2	5,703	
12/4/12	265	210	12:50 PM	358	1385	365	45.4	5,922	
12/19/12	280	225	4:00 PM	115	445	365	14.6	6,376	
12/21/12	282	227	3:00 PM	240	929	365	30.4	6,441	
1/21/13	313	258	12:18 PM	51.2	198	365	6.5	7,012	
1/30/13	322	267	2:30 PM	97.4	377	365	12.4	7,098	
2/6/13	329	274	11:00 AM	91.2	353	365	11.6	7,180	
2/20/13	343	288	11:00 AM	37.5	145	365	4.8	7,294	All wells valved open except SVE-2
2/27/13	350	295	12:00 PM	35	135	365	4.4	7,326	
3/13/13	364	309	11:00 AM	32	124	365	4.1	7,386	
3/29/13	380	325	2:00 PM	59	228	354	7.3	7,477	
4/12/13	394	339	12:00 PM	50	194	365	6.3	7,572	
4/25/13	407	352	8:40 AM	45	174	377	5.9	7,650	

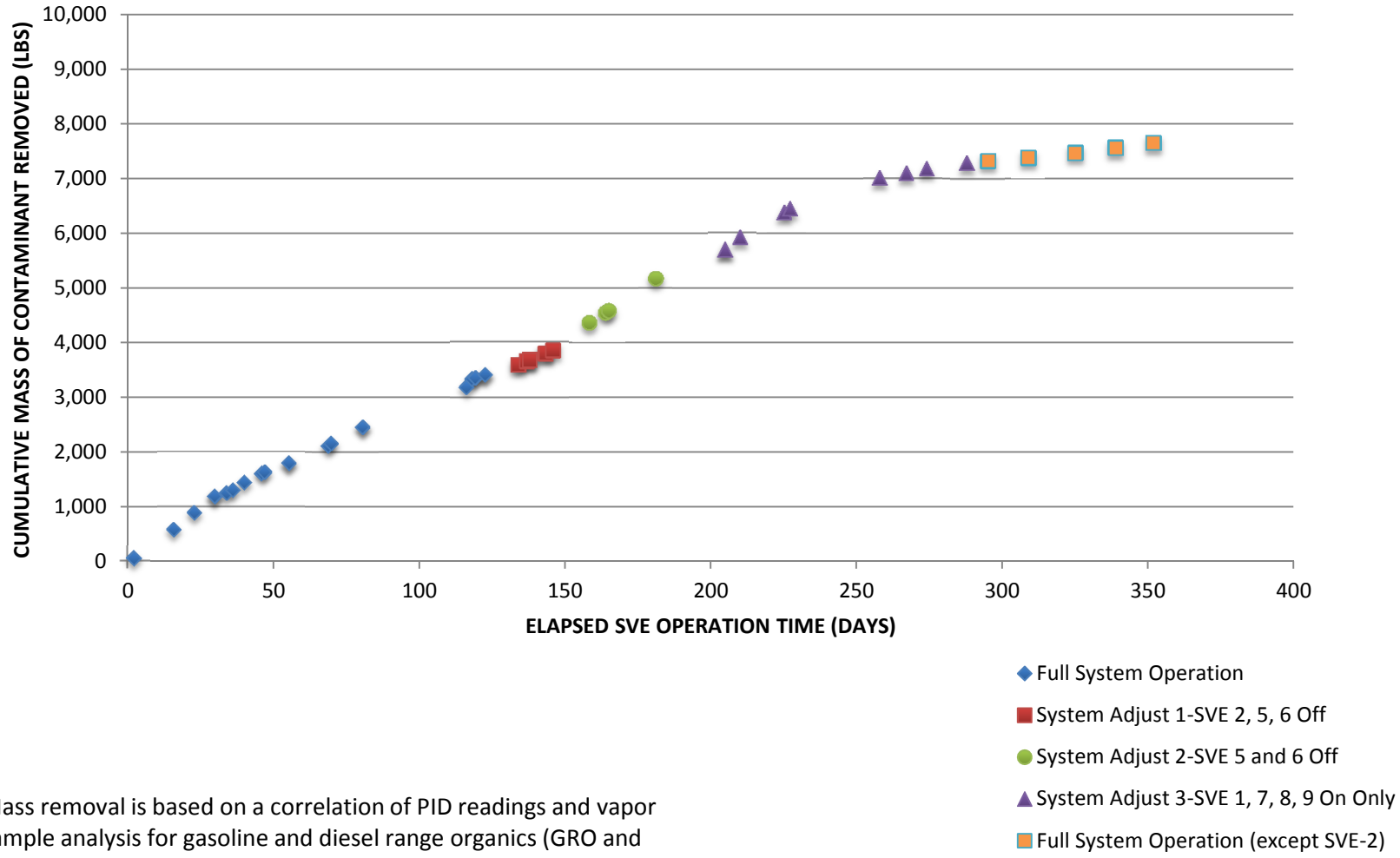
Notes:

1. The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading. Sample from 3/16/12 had a concentration of GRO and DRO of 890 mg/cubic meter which equates to a 3.87 ratio to the PID reading; Sample from 5/22/12 had a concentration of GRO and DRO of 750 mg/cubic meter which equates to a 5.56 ratio to the PID reading; used the average of the ratios of 4.72.

ATTACHMENT 1

CHARTS

Chart 1
CUMULATIVE MASS REMOVAL VERSUS TIME
SVE SYSTEM
SCOTT ROTARY SEALS



Mass removal is based on a correlation of PID readings and vapor sample analysis for gasoline and diesel range organics (GRO and DRO) measured in influent air.

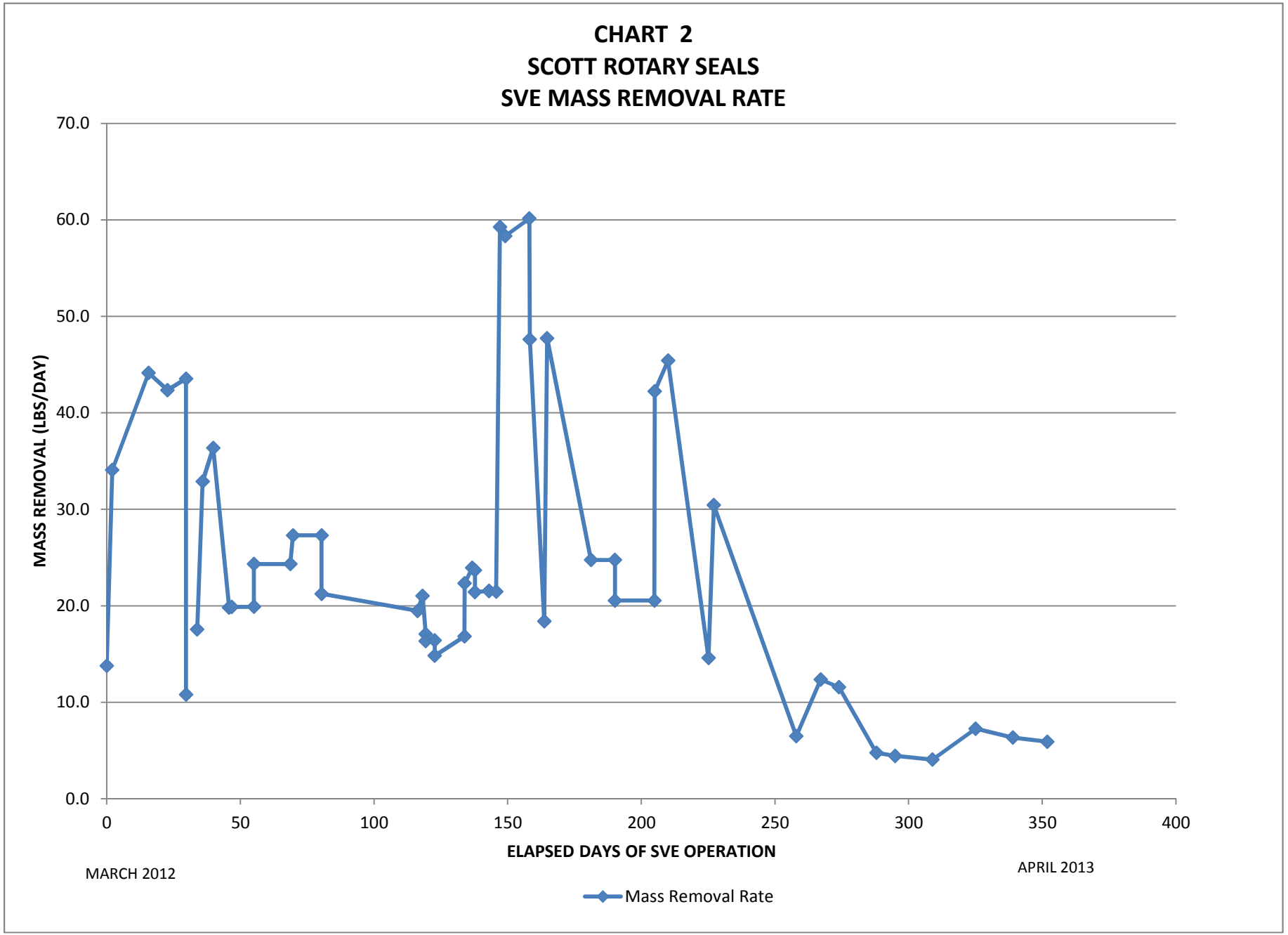


CHART 2
SCOTT ROTARY SEALS
SVE MASS REMOVAL RATE
MASS REMOVAL (LBS/DAY)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
50
100
150
200
250
300
350
400
ELAPSED DAYS OF SVE OPERATION
MARCH 2012
APRIL 2013
Mass Removal Rate

ATTACHMENT 2

EXCERPTS FROM RAWP

Remedial Action Work Plan

Scott Rotary Seals Site
Olean, New York
BCP Site No. 905036

Revised June 2011 0189-001-105

Prepared For: DST Properties NY, LLC
Scott Rotary Seals

TurnKey Environmental Restoration, LLC

2558 Hamburg Turnpike, Buffalo, New York | phone: (716) 856-0599 | fax: (716) 856-0583

SVE system monitoring will be conducted on a maximum frequency of bi-weekly and minimum frequency of monthly throughout the operation period. SVE system monitoring will include: monitoring of mechanical system components for proper operation, vacuum monitoring at each SVE well and at the main intake; and, VOC vapor PID screening at each SVE well and between the GAC vessels.

3.2.5 SVE Discontinuation Criteria

SVE discontinuation will be based primarily on VOC concentrations in the untreated air samples and the VOC concentrations in soil samples as compared to initial VOC samples, and the benefit of continued SVE operation. Specifically, shut-down will take into consideration significant reduction in the VOC mass in the samples between startup and shutdown and the total mass of volatile organics removed by the SVE system. Assuming system startup in July 2011, SVE discontinuation will be evaluated no sooner than January 2012 and no later than March 2012.

3.2.6 SVE Discontinuation Evaluation

Sampling of the unsaturated soil on the 301 Franklin Street parcel will be performed to determine if significant reduction of VOCs have been achieved. Samples will be collected from two (2) locations representing the areas of TP-9 (1254 ppm PID reading at approximately 12 feet below final grade) and TP-23 (1,767 ppm PID reading at approximately 10 feet below final grade) using a direct-push drill rig (e.g., Geoprobe or equivalent rig). Sample locations will be measured against a fixed reference point and recorded on the project field log. At each location, soil borings will be advanced to a target depth of approximately 10-12 feet below final grade. A soil/fill sample will be collected from a two-inch x four-foot macro-core representing soils in the range of 8 to 12 feet below final grade, as this was the depth at which unsaturated soils previously indicated elevated VOCs.

The two samples will be field screened for visual and olfactory observations of VOCs and elevated PID readings and submitted for analysis of TCL VOCs plus TICs in accordance with USEPA SW-846 Method 8260 with an equivalent Category B deliverable package to allow for third party data validation. Quality control samples that will be collected to assist in evaluation of the data will include a blind duplicate, matrix spike and a matrix spike duplicate.

Following receipt of the data, it will undergo a third party usability evaluation. A letter report will be prepared and transmitted to NYSDEC comparing the data to previously collected qualitative and quantitative data and making recommendations for termination of SVE remedial measures, if appropriate.

3.3 Non-Aqueous Phase Liquid Removal

During October 2010 groundwater monitoring activities, LNAPL was observed in MW-2 and MW-4 at trace levels (approximated at 0.01 feet) and in MW-6 at an approximate thickness of 0.88 feet. However, in a subsequent groundwater monitoring in March 2011, LNAPL was not present in any of the wells. The presence/absence of LNAPL may be attributable to seasonal fluctuations in groundwater elevations, which have varied by approximately 3 to 5 feet in these monitoring wells.

LNAPL removal will be achieved in two ways: using adsorbent socks in MW-2 and MW-4; and, using a passive LNAPL skimmer (Petro-Trap™) in MW-6. These methods are further discussed below.

3.3.1 MW-2 and MW-4 Hydrocarbon Adsorbent Socks

Given the relative slight thickness of LNAPL in MW-2 and MW-4, hydrocarbon adsorbent socks will be utilized to collect LNAPL in those wells. Adsorbent socks (Chemtex, Inc. Well Sock OILM206, or similar) will be installed into the wells at the LNAPL/water interface. Adsorbent socks will be inspected for evidence of oil staining/saturation on a monthly basis. During monthly inspections, socks that have obvious staining/saturation of LNAPL will be removed and replaced with new socks. Used socks will be drummed, labeled, characterized and properly disposed off-Site at a permitted commercial solid waste landfill.

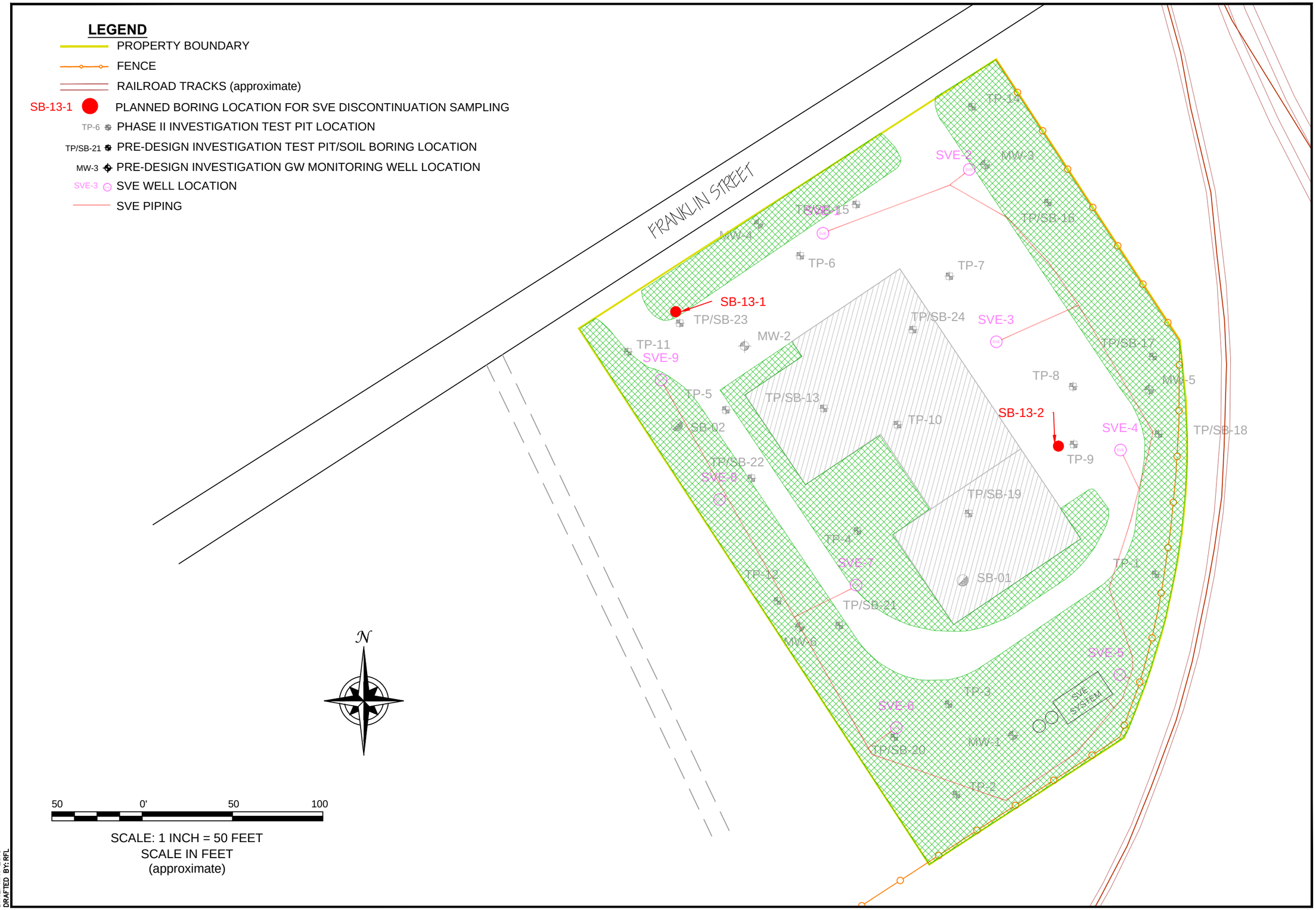
3.3.2 MW-6 Product Skimmer Installation and Performance

A PetroTrap™ free product passive skimmer will be installed in MW-6 to mitigate the apparent localized LNAPL layer in and adjacent to that monitoring well. The PetroTrap™ free product passive skimmer separates and recovers petroleum and light hydrocarbons from the groundwater. Incorporating hydrophobic filter technology with a storage canister, the device will automatically collect floating product down to a sheen. The PetroTrap™ has a vertical travel of 24 inches to compensate for water table fluctuation.

F:\CAD\TurnKey\Scott Rotary Seals\SVE Discontinuation Evaluation\Figure Sampling Location Drawing.dwg

LEGEND

- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (approximate)
- SB-13-1 — PLANNED BORING LOCATION FOR SVE DISCONTINUATION SAMPLING
- TP-6 — PHASE II INVESTIGATION TEST PIT LOCATION
- TP/SB-21 — PRE-DESIGN INVESTIGATION TEST PIT/SOIL BORING LOCATION
- MW-3 — PRE-DESIGN INVESTIGATION GW MONITORING WELL LOCATION
- SVE-3 — SVE WELL LOCATION
- SVE PIPING



SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

DATE: MAY 2013
DRAFTED BY: RFL

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TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0189-013-001

SVE DISCONTINUATION EVALUATION

OPERATION, MAINTENANCE AND MONITORING

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

PREPARED FOR
DST PROPERTIES NY, LLC

FIGURE 1