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**DEPARTMENT OF THE NAVY**

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
JBPHH, HAWAII 96860-5101

5090

Ser N45/0443  
February 10, 2016

CERTIFIED NO: 7015 0640 0002 4677 5338

Mr. Richard Takaba  
Hawaii State Department of Health  
Environmental Management Division  
Solid and Hazardous Waste Branch  
Underground Storage Tank Section  
919 Ala Moana Boulevard, Room 212  
Honolulu, HI 96814

Dear Mr. Takaba:

SUBJECT: RED HILL TANK COMPLEX  
SOIL VAPOR SAMPLING RESULTS FOR JANUARY 2016  
DOH FACILITY ID NO. 9-102271  
DOH RELEASE ID NO. 990051, 010011, 020028, AND 140010

Soil vapor samples were collected from beneath all active and accessible Red Hill Tanks on January 20, 2015.

Soil vapor VOC concentrations were measured in the field using a photo-ionization detector. The soil vapor sampling results are being submitted as Enclosure 1.

A conservative approach is to assess the integrity of the associated tank system if VOC concentrations exceed 280,000 ppbv in soil vapor monitoring points (SVMPs) beneath tanks containing JP-5 or JP-8, or 14,000 ppbv in SVMPs beneath tanks containing marine diesel fuel. These values are 50 percent of the calculated vapor concentration from fuel-saturated water.

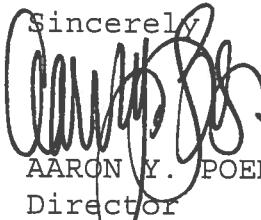
At Tank 5, the concentrations of VOCs detected in the front, middle, and outer edge soil vapor monitoring probes were 303,367 ppbv, 66,763 ppbv, and 165,267 ppbv, respectively. Tank 5 was emptied in January 2014 and has not contained fuel since that time. VOC concentrations were within historical measurements.

All other VOC concentrations measured in January were about 10 to 600 times below the action levels, with no consistent trending. Soil vapor VOC concentration trends will continue to

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be monitored. The next soil vapor sampling event is scheduled for February 2016, and will include collecting samples from soil vapor monitoring probes beneath all active and accessible tanks.

If there are any questions regarding this matter, or if more information is needed, please contact Ms. Raelynn Kishaba at (808) 471-1171, extension 233.

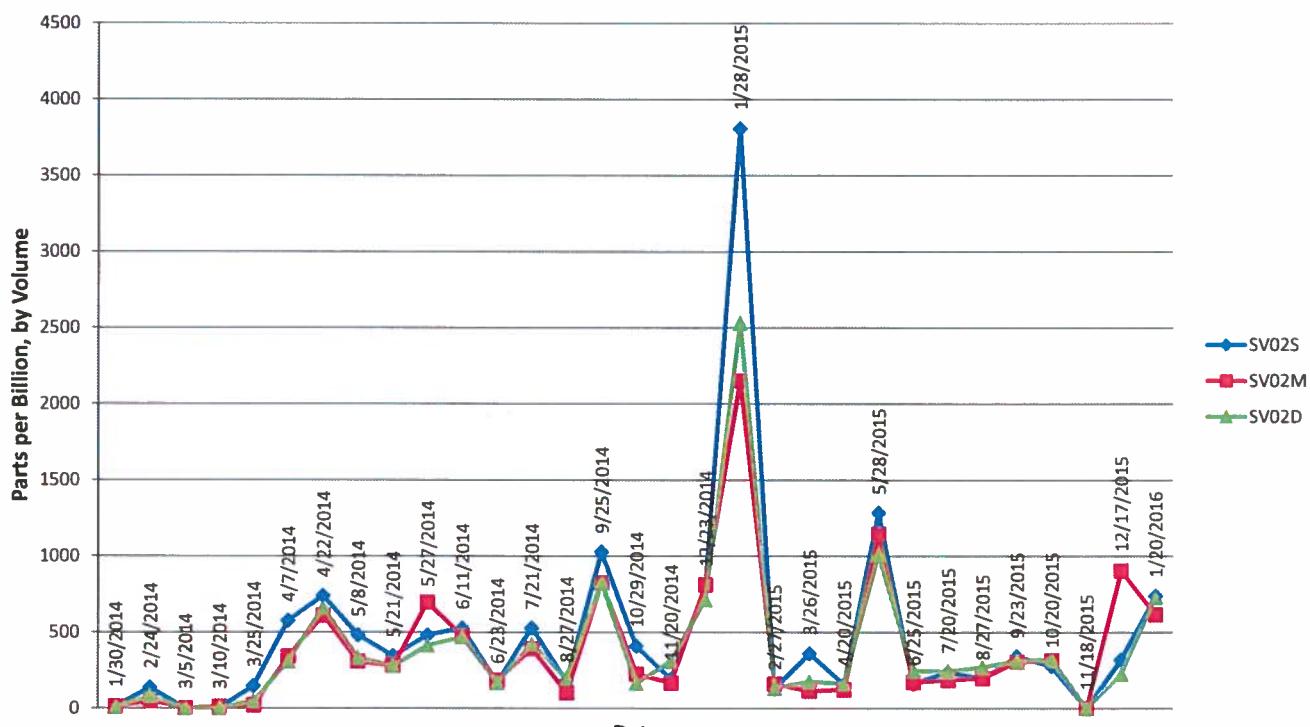
Sincerely  


AARON Y. POENTIS  
Director  
Regional Environmental Department  
By direction of the  
Commander

Enclosure: 1. Summary of Soil Vapor Sampling Results for Tanks 2 through 18 and 20 through January 2016  
(18 pages)

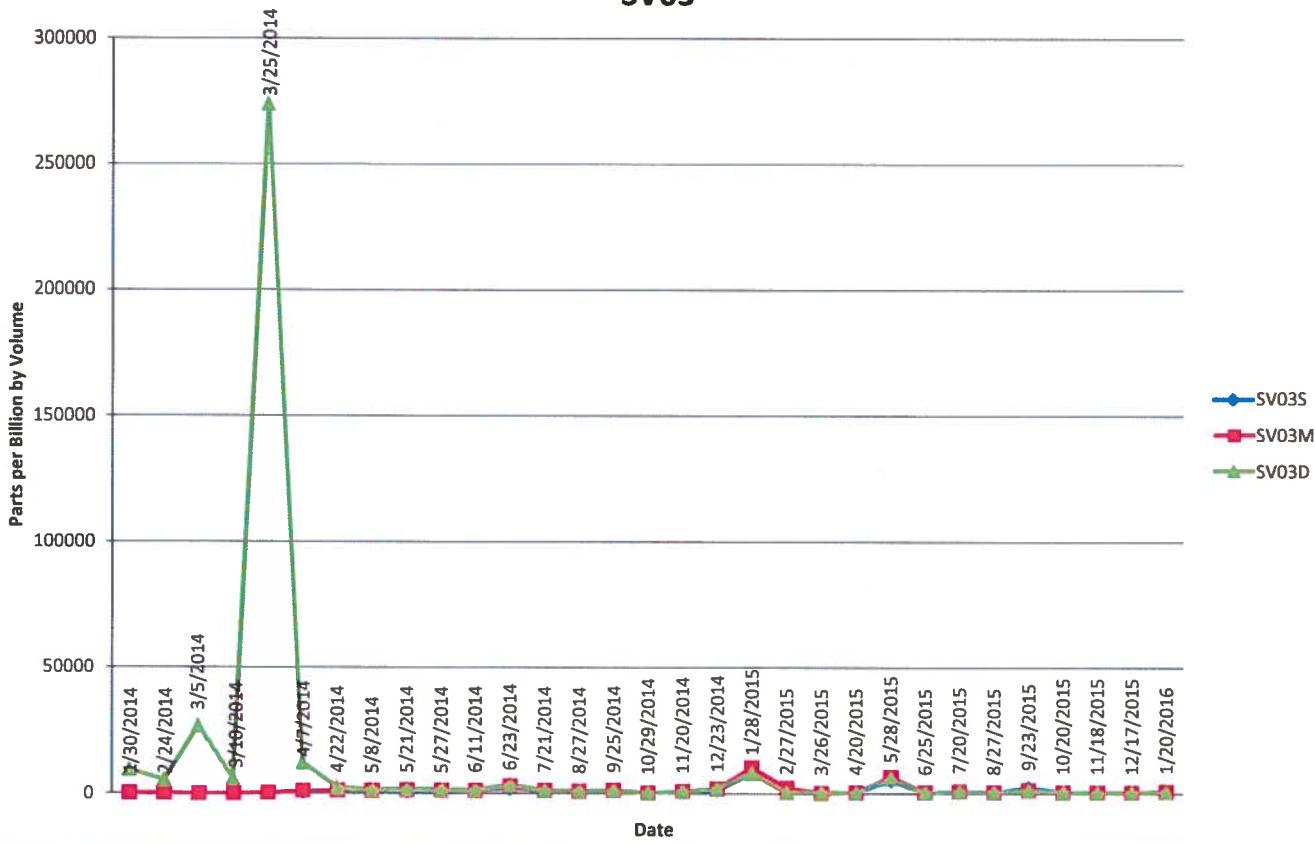
Copy to: Mr. Bob Pallarino, U.S. EPA Region 9, Underground Storage Tank Program Office (via email)  
LCDR Andrew Lovgren, NAVSUP FLC Pearl Harbor  
Mr. Rockne Krill, DLA Energy Pacific

**Figure 1**  
**Soil Vapor Measurements**  
**SV02**

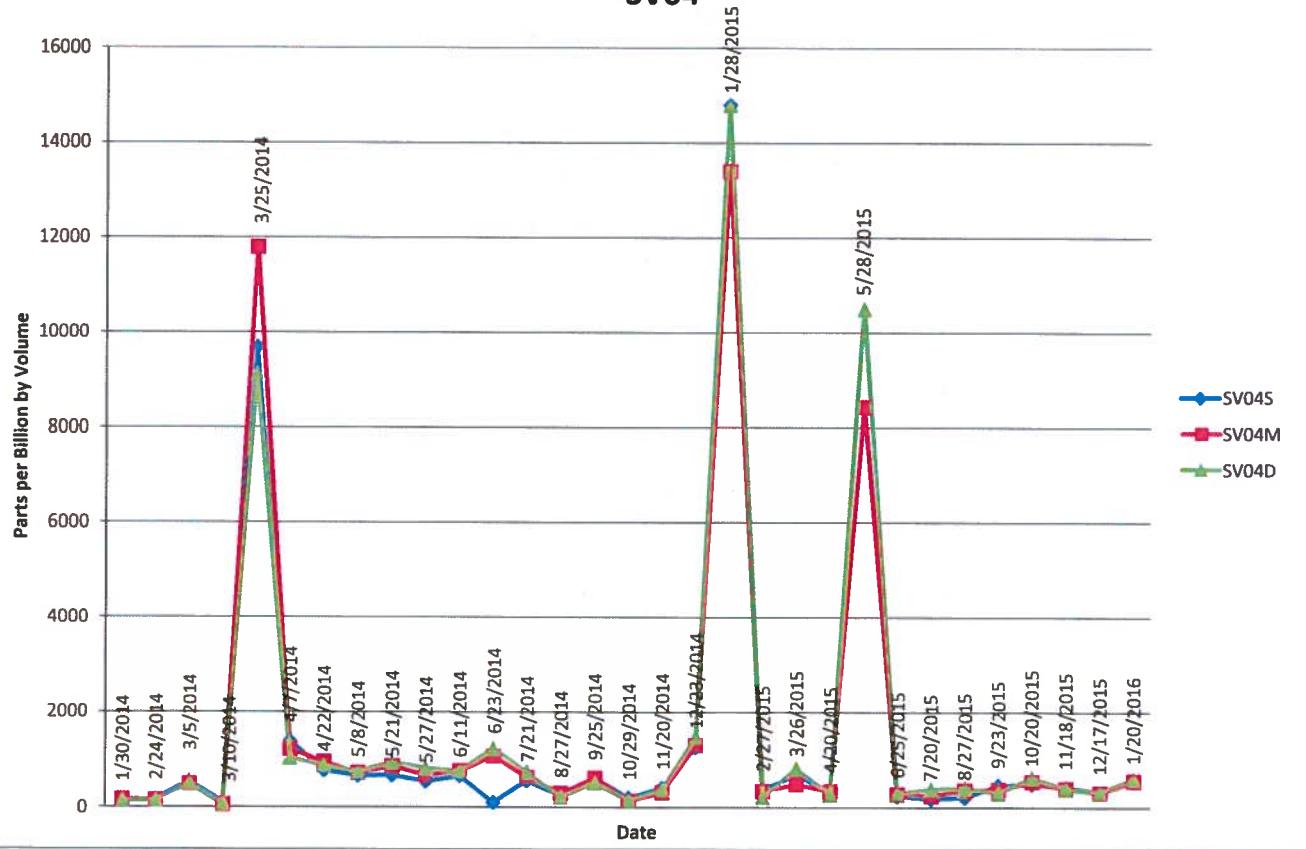


ENCLOSURE(1)

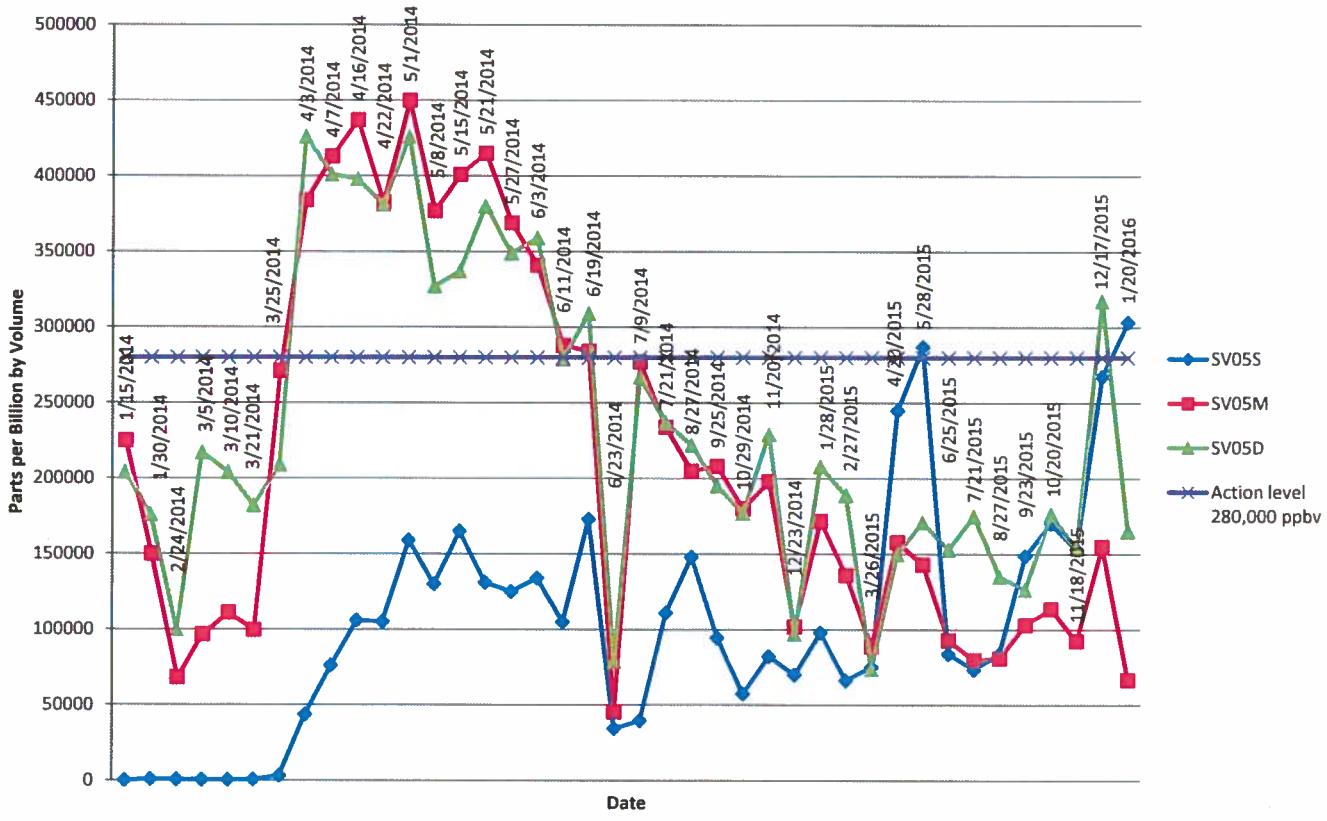
**Figure 2**  
**Soil Vapor Measurements**  
**SV03**



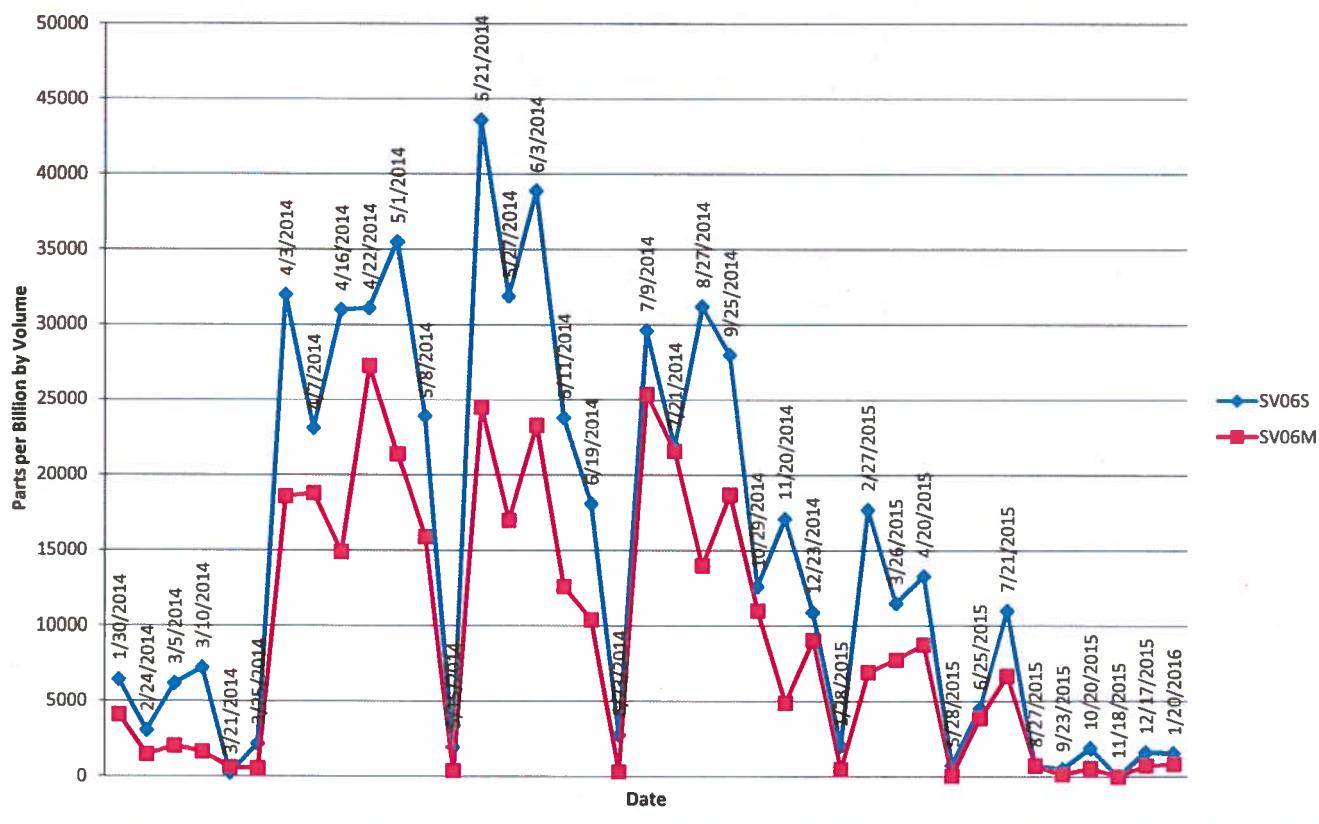
**Figure 3**  
**Soil Vapor Measurements**  
**SV04**



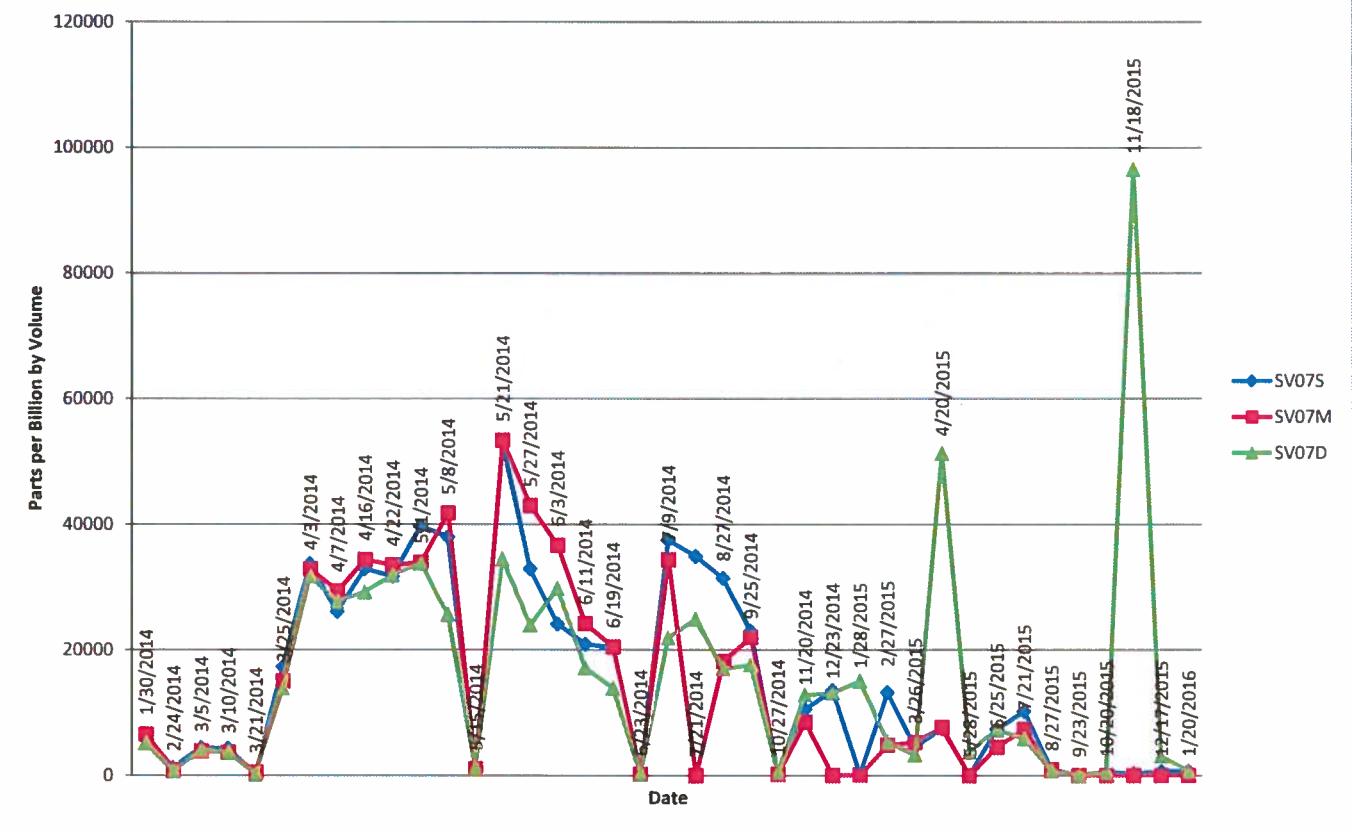
**Figure 4**  
**Soil Vapor Measurements**  
**SV05**



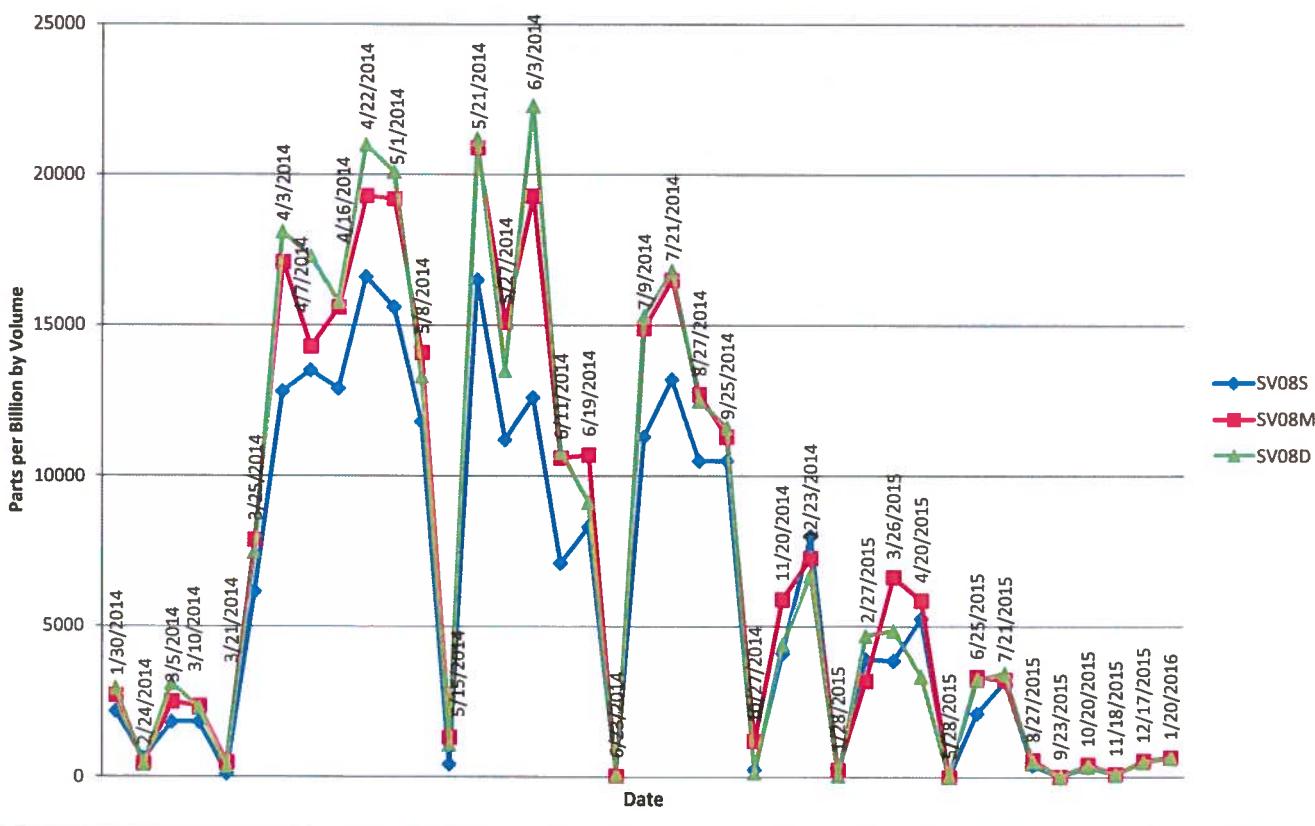
**Figure 5**  
**Soil Vapor Measurements**  
**SV06**



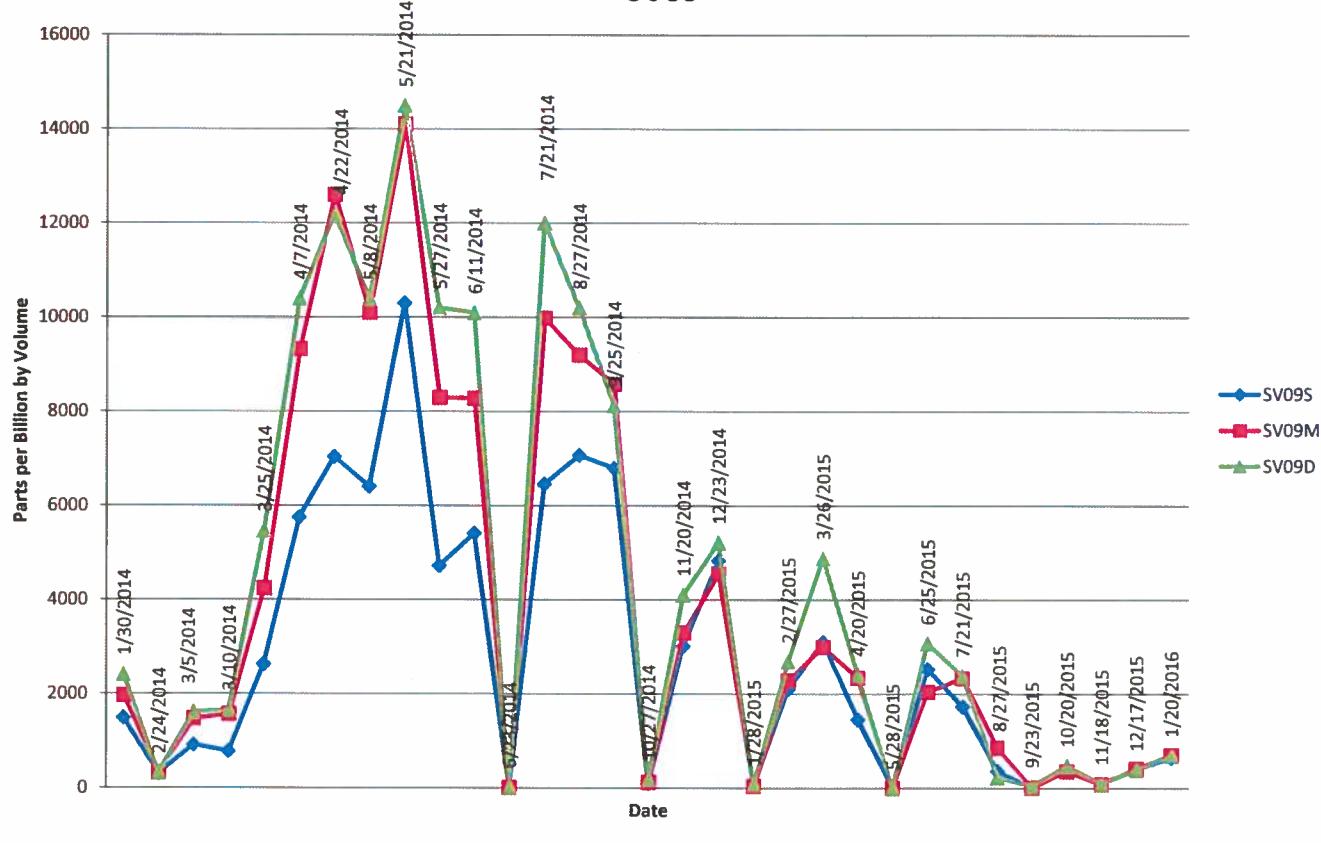
**Figure 6**  
**Soil Vapor Measurements**  
**SV07**



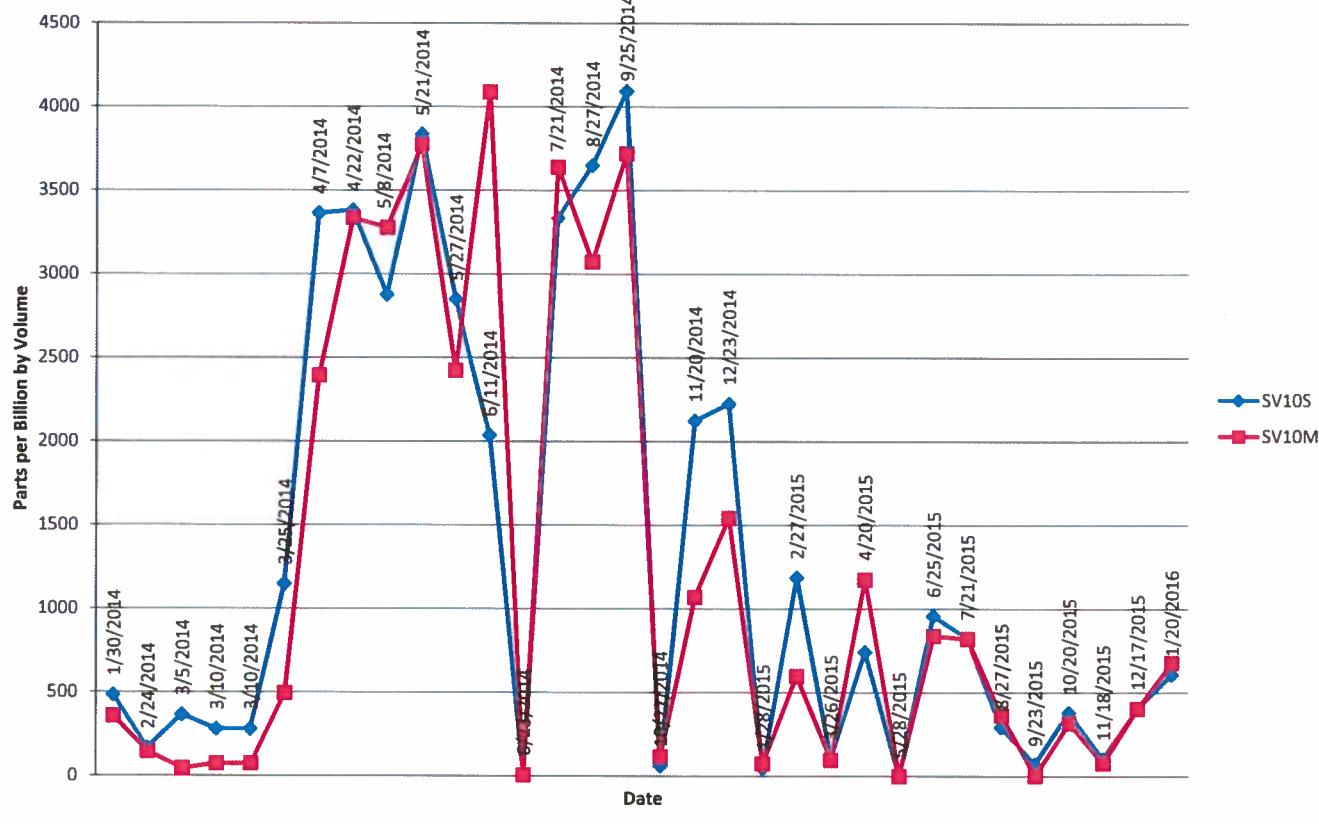
**Figure 7**  
**Soil Vapor Measurements**  
**SV08**



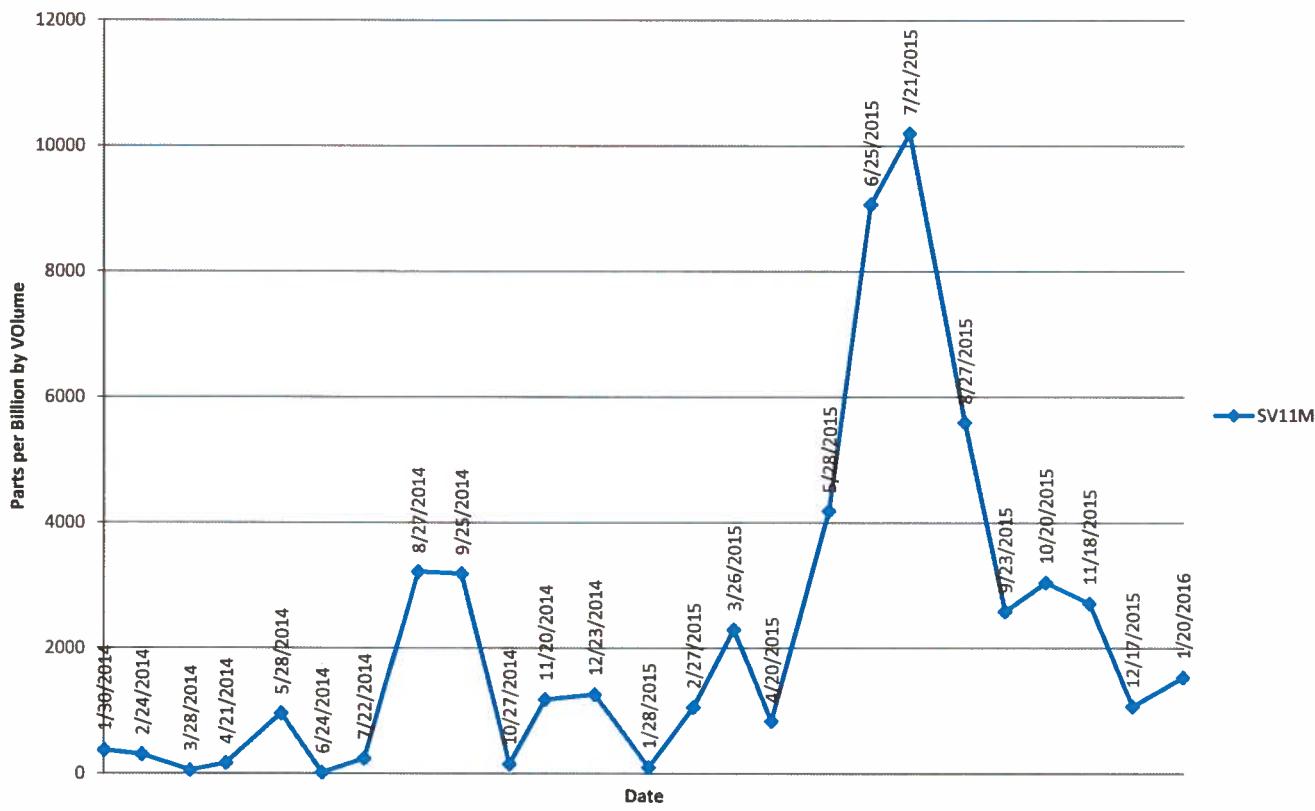
**Figure 8**  
**Soil Vapor Measurements**  
**SV09**



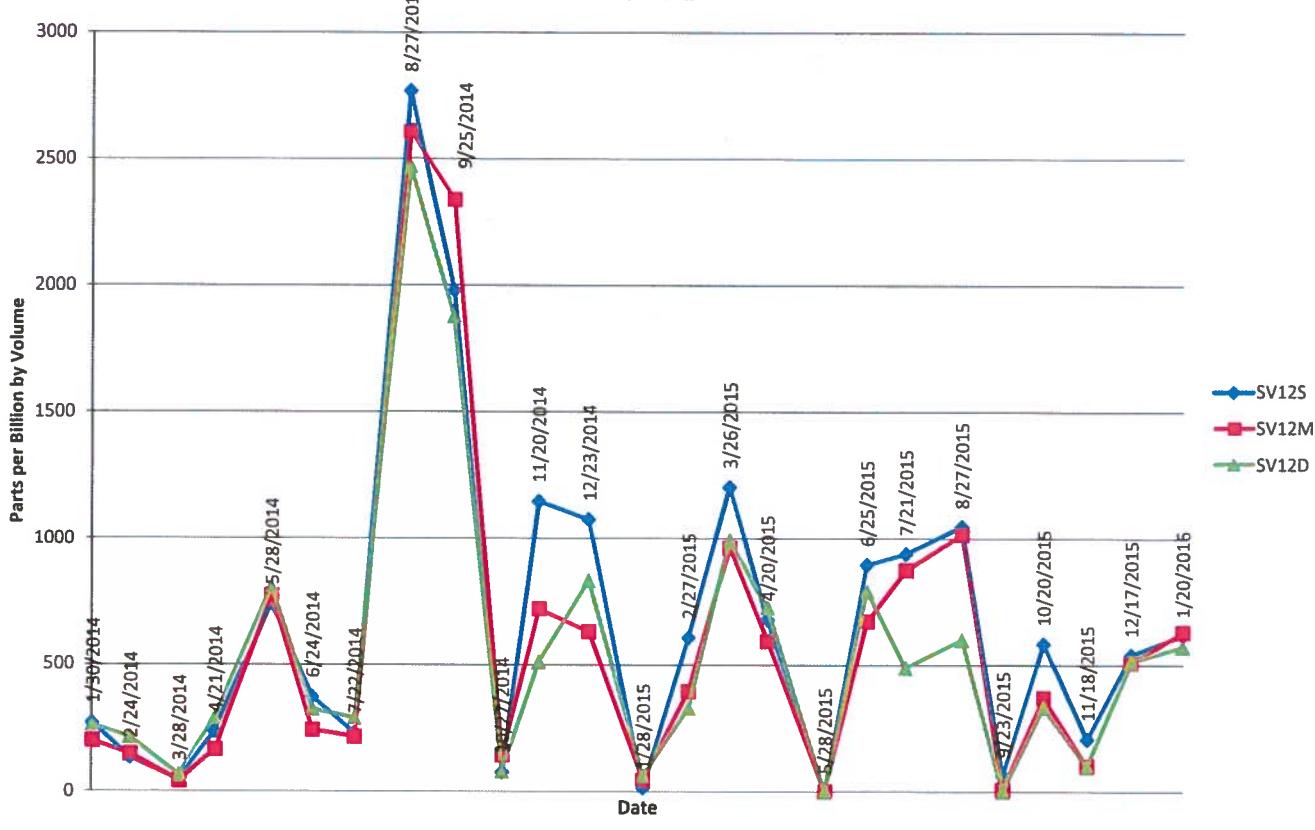
**Figure 9**  
**Soil Vapor Measurements**  
**SV10**



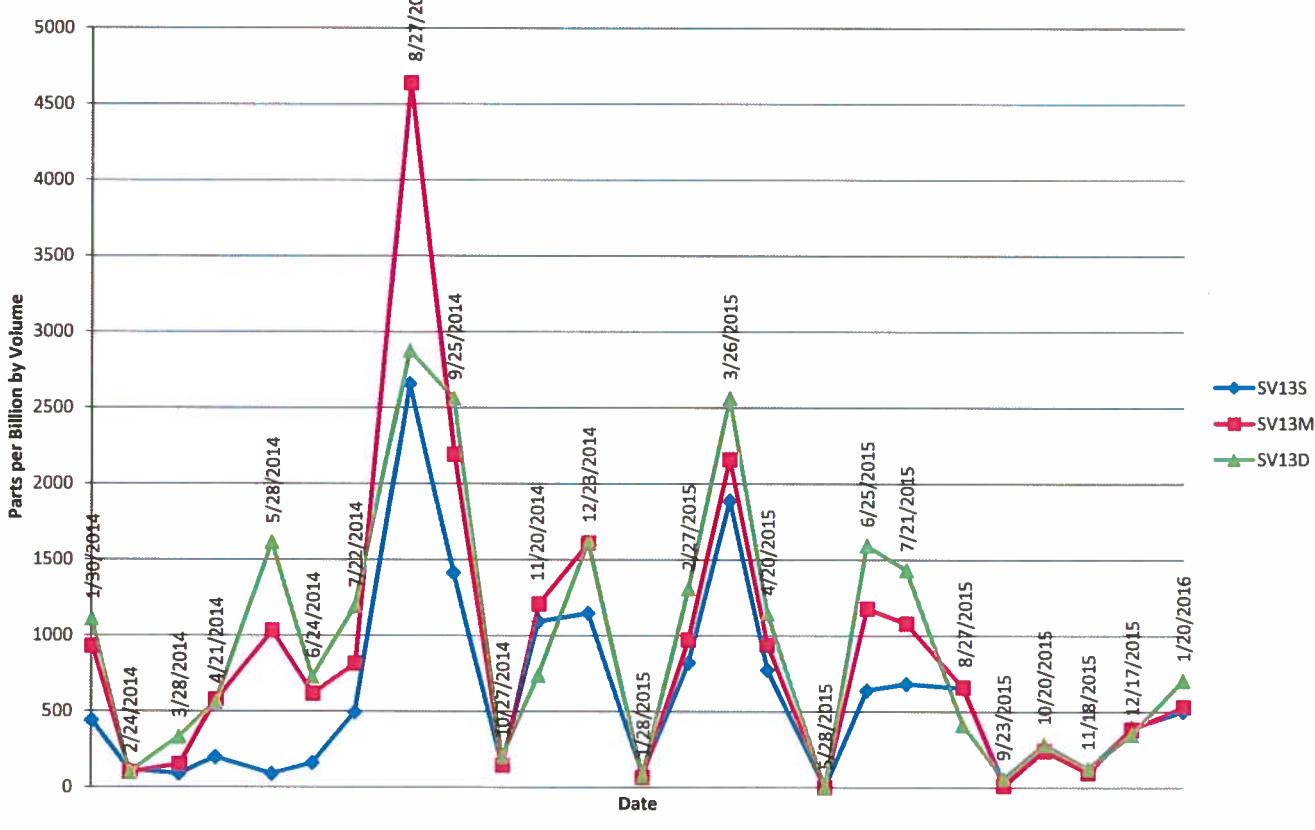
**Figure 10**  
**Soil Vapor Measurements**  
**SV11**



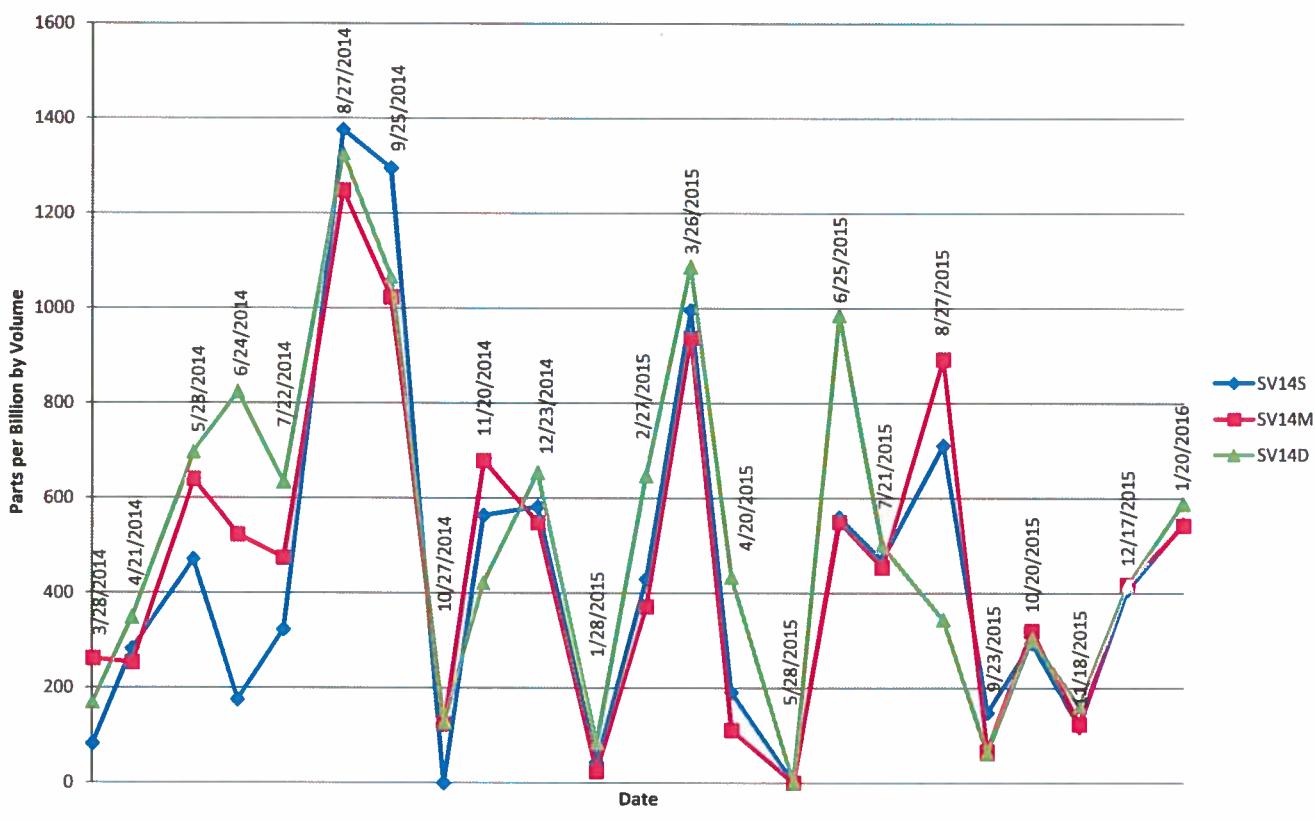
**Figure 11**  
**Soil Vapor Measurements**  
**SV12**



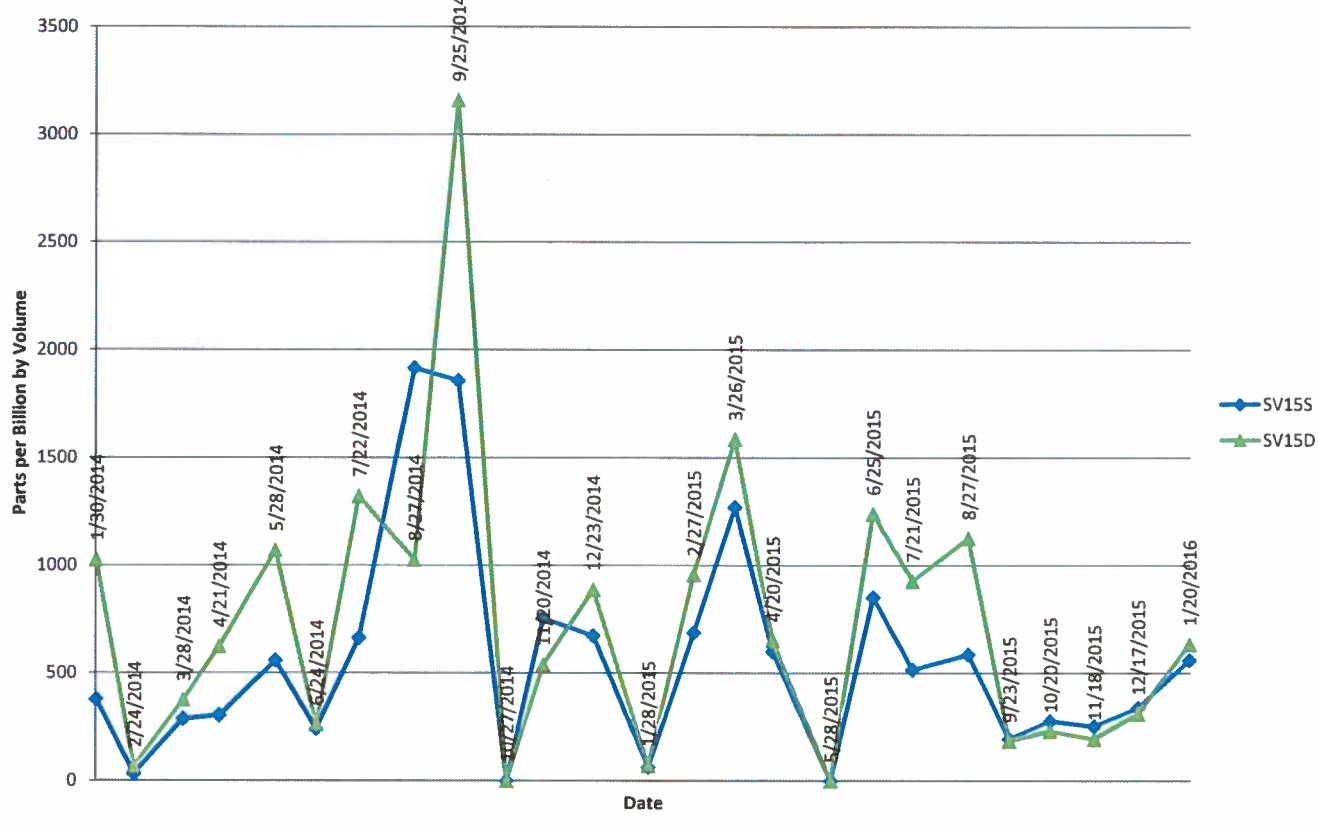
**Figure 12**  
**Soil Vapor Measurements**  
**SV13**



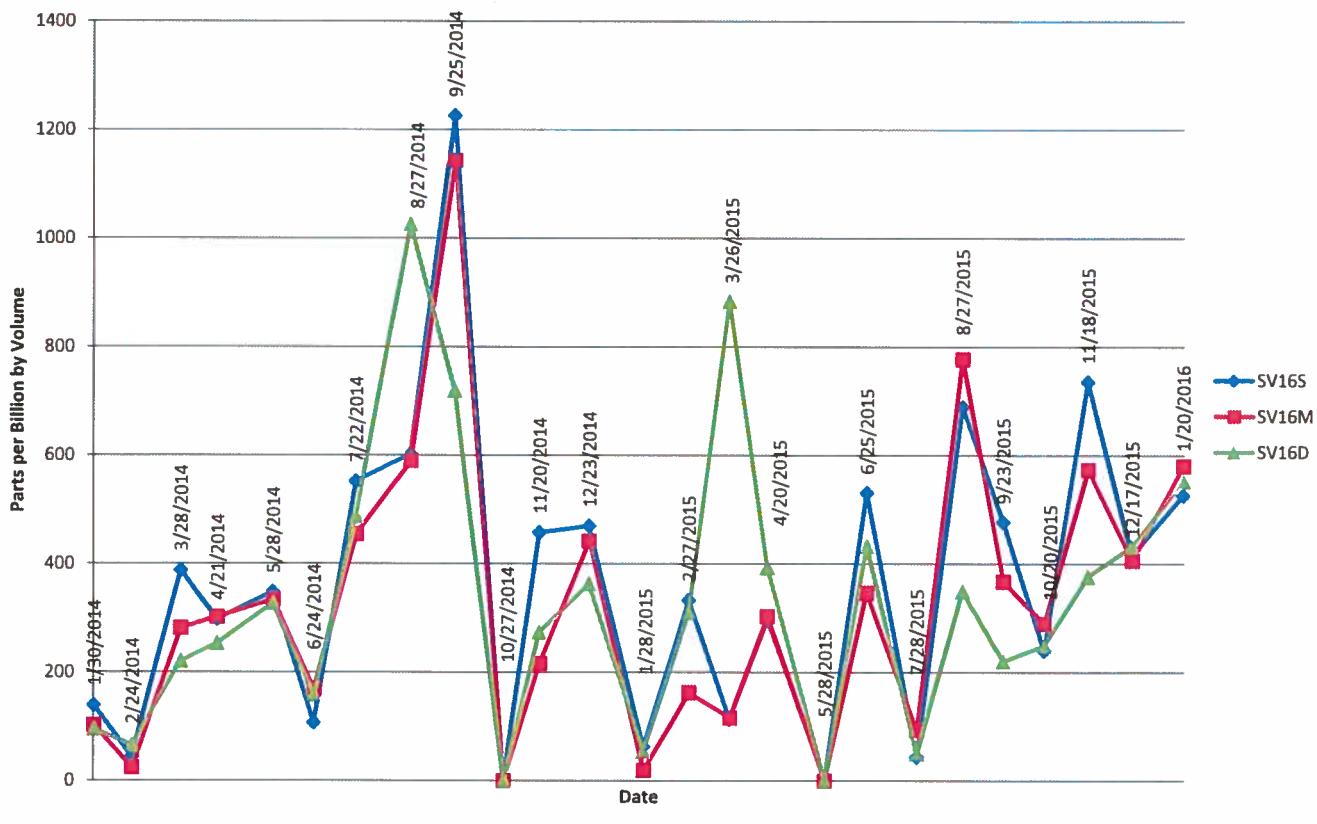
**Figure 13**  
**Soil Vapor Measurements**  
**SV14**



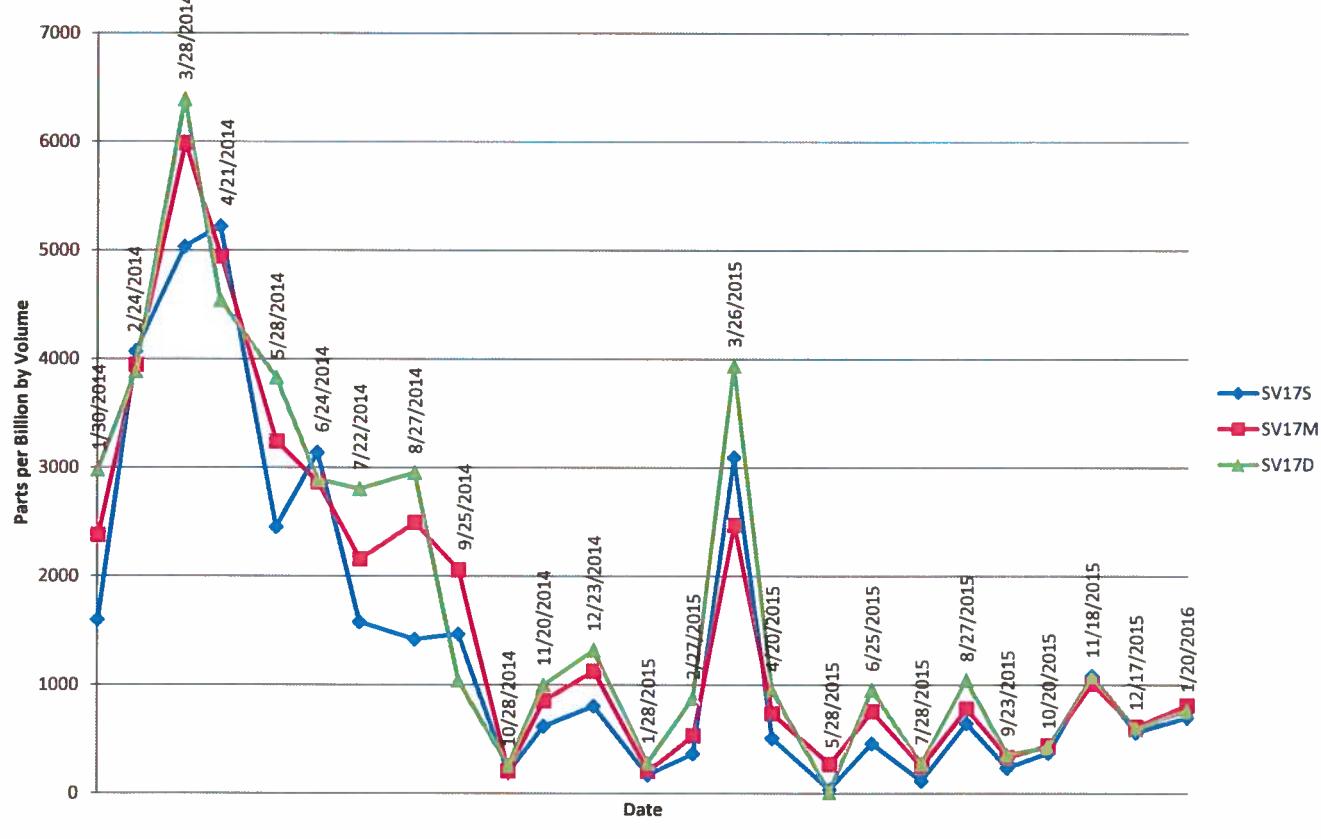
**Figure 14**  
**Soil Vapor Measurements**  
**SV15**



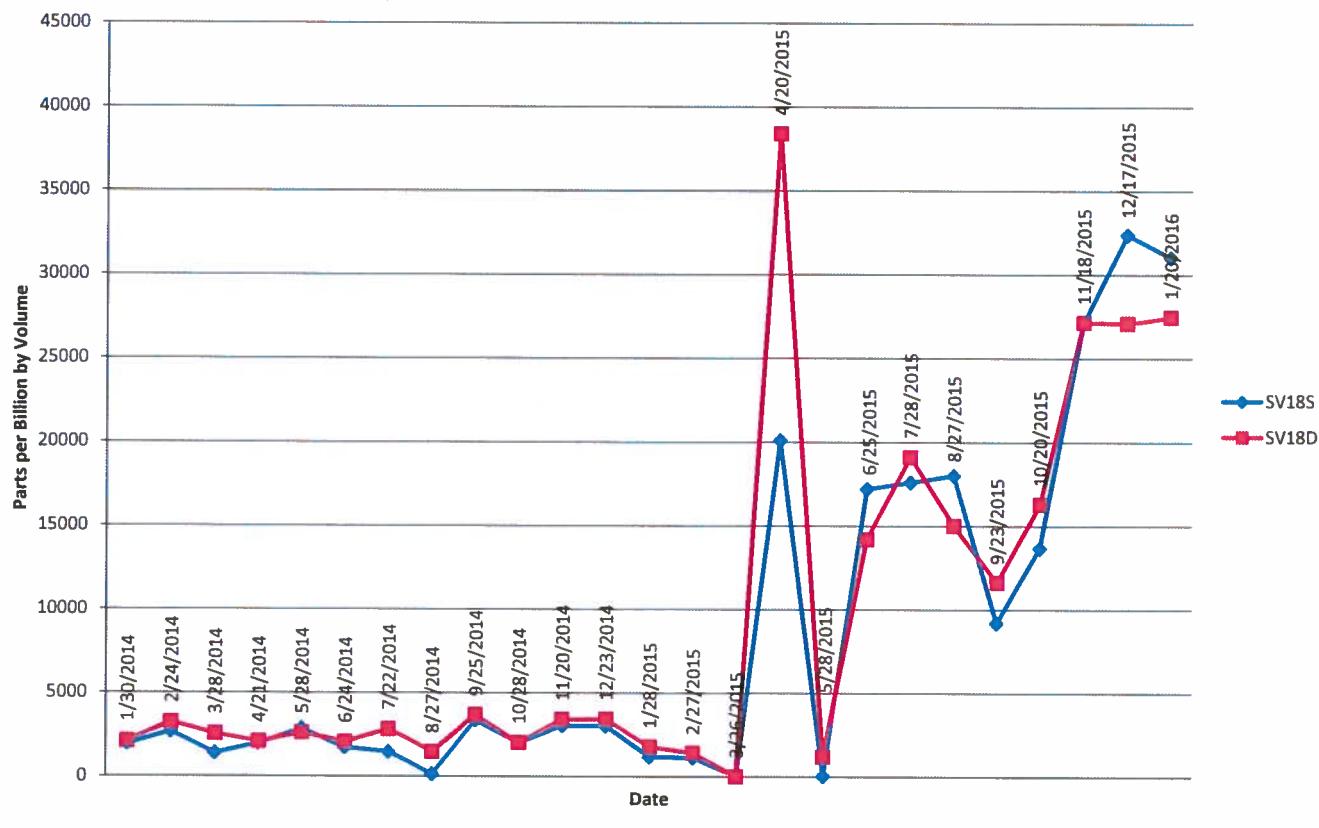
**Figure 15**  
**Soil Vapor Measurements**  
**SV16**



**Figure 16**  
**Soil Vapor Measurements**  
**SV17**



**Figure 17**  
**Soil Vapor Measurements**  
**SV18**



**Figure 18**  
**Soil Vapor Measurements**  
**SV20**

