

Date: 7/9/24

Activity: Weekly

Team: JV/NN

Location: RHBFSF

PPE: Level D

Ref: E2 HSP/WP Navy PPM

0830: E2 on-site

0840: Calibrate P ID

0900: Arrive @ SVMP - 7/8

0920: Arrive @ SVMP - 5/6

0952: Arrive @ SVMP - 2

1005: Arrive @ SVMP - 3/4

1037: Arrive @ SVMP - 9/10

1104: Arrive @ SVMP - 11/12

Cal check

1133: Arrive @ SVMP - 13/14

1202: Arrive @ SVMP - 15/16

1233: Arrive @ SVMP - 17/18

1301: Arrive @ SVMP - 20

Cal check

1315: E2 demob

1330: E2 off site to grab ~~extra tools~~ socket ext.

1419: E2 back on site

1425: Arrive @ SVMP &

1945: EZ demob again
1900: EZ offsite



DAILY INSTRUMENT CALIBRATION LOG

Date: 7/9/24 E2 Team: JV/NN

Instrument Type, Model/Serial No.: PID, ppBRAE 3000 (PGM-7340) / 594-906662

INITIAL CALIBRATION: * All calibration is conducted with moisture filter attached.

| Zero Calibration | | | Notes |
|---|----------------------------|-------------|-------|
| Zeroing Tube (Make/P/N/Batch No.) OR Zeroing Gas (Manufacturer/Lot No./Exp.) | Calibration Reading (ppbv) | Pass? (Y/N) | |
| Gasco/304-402761501-1/06-20-2027 | 1 | Y | |
| Span Calibration | | | |
| Calibration Gas – 10 ppm, Isobutylene (Manufacturer/Lot No./Exp.) | Calibration Reading (ppbv) | Pass? (Y/N) | |
| Gasco/304-402544200-1/10-07-2020 | 10000 | Y | |

Calibration Pass Criteria*: (1) Zero calibration = ± 100 ppb, (2) Span Calibration = ± 3% (300 ppb)

Temperature (°F) (measured from PID): 77

Background Reading (ppbv) (moisture filter attached): 0

CALIBRATION CHECK: *Calibration checks are conducted with moisture filter on. At minimum, one check at midpoint and one check at the end of monitoring. Additional checks conducted, as needed, to verify initial consecutive zero readings or suspected drift in PID readings.

| Time | Calibration Gas – Concentration as indicated on initial span calibration (specify if other) | | | Notes (e.g., Location) |
|------|--|----------------------------|-------------|------------------------|
| | Manufacturer/Lot No./Exp. | Calibration Reading (ppbv) | Pass? (Y/N) | |
| 1104 | " " " | 9822 | Y | SUMP-11/12 |
| 1301 | " " " | 9890 | Y | SUMP-2e |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Calibration Check Pass Criteria*: Span Calibration Gas = ± 10% (1,000 ppb)

Date: _____

*Note: If any parameter fails to meet the acceptable range, perform maintenance as needed and re-calibrate PID.

Soil Vapor Monitoring Log

| | |
|--|--|
| Contract No.: <u>N62742-17-D-1802 CTO N6274221F0148</u> | Date: <u>7/9/24</u> |
| E2 Job No.: <u>210045</u> | |
| Project Title: <u>Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility (RHBFSF)</u> | Location: <u>RHBFSF, JBPHH, Hawaii</u> |
| Personnel: NN/NN | |
| Instrument Model: <u>ppBRAE 3000 (PGM-7340)</u> | Serial No.: <u>594-906662</u> |
| Calibration: <u>per SOP (see Instrument Calibration Log)</u> | |

| SVMP No. (Material) | Purge Start Time | Sample Start Time | PID Reading ² | | | Reading Time | Background PID Reading | Notes |
|------------------------|---------------------|----------------------|--------------------------|------|------|-----------------|---------------------------|-------|
| | | | 1 | 2 | 3 | | | |
| SV02 S(C) | 954 | 955 | 390 | 330 | 322 | 959 | 743 | |
| SV02 M(C) | 954 | 955 | 358 | 316 | 317 | 1000 | | |
| SV02 D(C) | 954 | 959 | 348 | 330 | 321 | 1001 | | |
| SV03 S(S) | 1023 | 1024 | 509 | 504 | 500 | 1028 | 850 | |
| SV03 M(S) | 1023 | 1024 | 596 | 606 | 638 | 1030 | | |
| SV03 D(S) | 1023 | 1028 | 750 | 728 | 677 | 1032 | | |
| SV04 S(S) | 1008 | 1009 | 1065 | 963 | 874 | 1014 | 1020 | |
| SV04 M(S) | 1008 | 1009 | 844 | 776 | 735 | 1015 | | |
| SV04 D(S) | 1008 | 1014 | 710 | 678 | 667 | 1017 | | |
| SV05 S(S) | 939 | 940 | 546 | 547 | 561 | 945 | 566 | |
| SV05 M(S) | 939 | 940 | 568 | 576 | 592 | 946 | | |
| SV05 D(S) | 939 | 945 | 620 | 628 | 639 | 947 | | |
| SV06 S(C) | 929 | 927 | 3817 | 5382 | 7044 | 932 | 770 | |
| SV06 M(C) | 929 | 927 | 1911 | 1338 | 1087 | 933 | | |
| SV07 S(S) | 905 | 900 | 0 | 0 | 0 | 911 | 46 | |
| SV07 M(S) | 905 | 900 | 0 | 0 | 0 | 911 | | |
| SV07 D(S) | 905 | 911 | 0 | 0 | 0 | 913 | | |
| SV08 S(S) | 1430 | 1431 | 1248 | 1195 | 1135 | 1437 | 1538 | |
| SV08 M(S) | 1430 | 1431 | 1067 | 1098 | 1094 | 1439 | | |
| SV08 D(S) | 1430 | 1437 | 1470 | 1596 | 1603 | 1440 | | |
| SV09 S(S) | 1051 | 1052 | 700 | 682 | 679 | 1056 | 913 | |
| SV09 M(S) | 1051 | 1052 | 687 | 671 | 665 | 1057 | | |
| SV09 D(S) | 1051 | 1056 | 620 | 620 | 623 | 1059 | | |
| SV10 S(C) | 1039 | 1041 | 873 | 845 | 823 | 1045 | 1082 | |
| SV10 M/D(C) | 1039 | 1041 | 787 | 763 | 740 | 1046 | | |

1. S - Shallow/Front (Yellow); M - Middle (Blue); M/D - Middle to Deep (Blue & White); D - Deep/Back (White); MD - Marine diesel (F-76); C - Copper tubing (O.D. ~1/4-in.); S - Stainless Steel Tubing (O.D. ~3/16 in.)
2. Readings are measured in part per billion by volume (ppbv) unless otherwise noted. Threshold for summa cannister sampling for jet fuels (JP-5, F-24) is 50,000 ppbv and for marine diesel (F-76) is 8,000 ppbv.

Comments:

Date: _____

Soil Vapor Monitoring Log

| SVMP No. | Purge Start Time | Sample Start Time | PID Reading ² | | | Reading Time | Background PID Reading | Notes |
|--------------------------|------------------|-------------------|--------------------------|-------|-------|--------------|------------------------|-------|
| | | | 1 | 2 | 3 | | | |
| SV11 S _(C) | 11 23 | 11 25 | 502 | 505 | 522 | 11 27 | 609 | |
| SV11 M/D _(C) | 11 23 | 11 25 | 490 | 458 | 490 | 11 28 | | |
| SV12 S _(C) | 11 08 | 11 10 | 502 | 532 | 544 | 11 16 | 632 | |
| SV12 M _(C) | 11 08 | 11 10 | 532 | 529 | 536 | 11 17 | | |
| SV12 D _(C) | 11 08 | 11 16 | 475 | 505 | 539 | 11 18 | | |
| SV13 S _(S) | 11 49 | 11 50 | 1042 | 1028 | 997 | 11 55 | 939 | |
| SV13 M _(S) | 11 49 | 11 50 | 883 | 880 | 878 | 11 56 | | |
| SV13 D _(S) | 11 49 | 11 55 | 891 | 898 | 937 | 11 58 | | |
| SV14 S _(C) | 11 36 | 11 38 | 854 | 860 | 861 | 11 43 | 737 | |
| SV14 M _(C) | 11 36 | 11 38 | 823 | 842 | 865 | 11 42 | | |
| SV14 D _(C) | 11 36 | 11 42 | 759 | 756 | 784 | 11 44 | | |
| MD SV15 S _(S) | 12 14 | 12 15 | 671 | 670 | 675 | 12 20 | 887 | |
| MD SV15 M _(S) | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | | |
| MD SV15 D _(S) | 12 14 | 12 15 | 776 | 796 | 809 | 12 22 | | |
| MD SV16 S _(C) | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | 817 | |
| MD SV16 M _(C) | 12 05 | 12 07 | 841 | 893 | 904 | 12 09 | | |
| MD SV16 D _(C) | 12 05 | 12 07 | 872 | 920 | 941 | 12 10 | | |
| SV17 S _(S) | 12 48 | 12 49 | 780 | 767 | 769 | 12 53 | 1755 | |
| SV17 M _(S) | 12 48 | 12 49 | 809 | 862 | 864 | 12 54 | | |
| SV17 D _(S) | 12 48 | 12 53 | 890 | 866 | 852 | 12 57 | | |
| SV18 S _(S) | 12 36 | 12 37 | 1430 | 1563 | 1676 | 12 41 | 1162 | |
| SV18 D _(S) | 12 36 | 12 37 | 1677 | 1794 | 1901 | 12 44 | | |
| SV20 S _(S) | 13 05 | 13 06 | 1249 | 1296 | 1250 | 13 10 | 853 | |
| SV20 M _(S) | 13 05 | 13 06 | 1286 | 1296 | 1310 | 13 11 | | |
| SV20 D _(S) | 13 05 | 13 10 | 1325 | 1346 | 1341 | 13 13 | | |

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2. Readings are measured in part per billion by volume (ppbv) unless otherwise noted. Threshold for summa cannister sampling for both jet fuels (JP-5, F-24) is 50,000 ppbv and for marine diesel (F-76) is 8,000 ppbv.

Comments:

07/09/2024 Red Hill SVMP Photographs



Photo 1. SVMP-02



Photo 2. SVMP-3



Photo 3. SVMP-04



Photo 4. SVMP-05



Photo 5. SVMP-06



Photo 6. SVMP-07



Photo 7. SVMP-08



Photo 8. SVMP-09



Photo 9. SVMP-10



Photo 10. SVMP-11



Photo 11. SVMP-12



Photo 12. SVMP-13



Photo 13. SVMP-14



Photo 14. SVMP-15



Photo 15. SVMP-16



Photo 16. SVMP-17



Photo 17. SVMP-18



Photo 18. SVMP-20