

18 DATE Tuesday June 11, 2024

Activity: Weekly monitoring, Summa canister.

Team: JA, JV, NN

Location: R4B5F5

PPE: Level D

Ref: E2 HSP/WP, NAVY PPM,

650: Arrive @ Aft to safety Brief, calibrate

700: Arrive @ cart

710: Arrive @ Tank 7 - starting @ tanks 7 & 8
due to contractor work.

720: Arrive @ Tank 8

739: Arrive @ Tank 20 (Summa canister) sample

800: Arrive @ Tank 17 Summa + sample

821: Arrive @ Tank 18 Summa + sample

848: Arrive @ Tank 15 Summa + sample

856: Complete Summa canister sampling + vapor monitoring
samples @ Tank 15, 17, 18, 20. Team continues
vapor monitoring.

859: Arrive @ Tank 16

912: Arrive @ Tank 2

920: Arrive @ Tank 4 + Tank 3

940: Arrive @ Tank 6 + Tank 5, perform cal check

955: Arrive @ Tank 10 + Tank 9

1010: Arrive @ Tank 12 + Tank 11

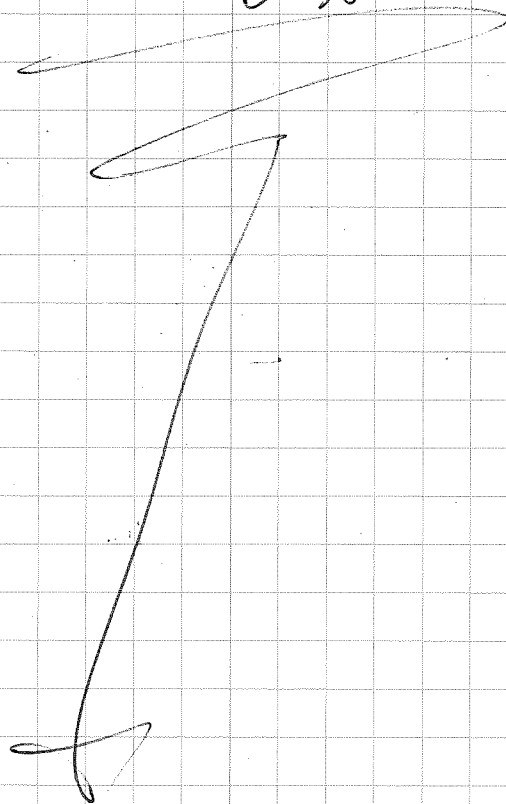
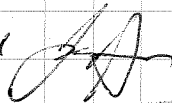
1024: Arrive @ Tank 14 + Tank 13, cal check

1035: Arrive @ cart return area.

19

All sand bags & filter socks (as available)
have been replaced after closing vaults.

6/11/24





DAILY INSTRUMENT CALIBRATION LOG

Date: 6/11/2024

E2 Team: JA, 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)	
69460/304-402761569-1 06/00/2027	Ø	Y	
Span Calibration			
Calibration Gas – 10 ppm, Isobutylene (Manufacturer/Lot No./Exp.)	Calibration Reading (ppbv)	Pass? (Y/N)	
69460/304-402544200-1 10/3/2026	10.00 ppm	Y	

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

Temperature (°F) (measured from PID): 85

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

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)	
0949	69460/304-402544200-1 10/3/2026	9748	Y	Aft. Tank 6
1039	" "	9536	Y	Aft tank. 13

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

Date: 6/11/2024

*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>6/11/2024</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: <u>JA, JA, NN</u>	
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)	0914	0916	251	254	263	0917	733	
SV02 M _(C)	0914	0916	503	521	554	0918		
SV02 D _(C)	0914	0917	397	400	396	0914		
SV03 S _(S)	0923	0924	327	323	316	0927	574	
SV03 M _(S)	0923	0924	338	340	342	0928		
SV03 D _(S)	0923	0927	487	493	491	0931		
SV04 S _(S)	0927	0928	633	619	606	0936	658	
SV04 M _(S)	0928	0929	474	466	463	0937		
SV04 D _(S)	0929	0931	495	488	483	0938		
SV05 S _(S)	0940	0941	712	842	983	0952	769	
SV05 M _(S)	0941	0942	1220	1274	1319	0953		
SV05 D _(S)	0942	0943	746	727	720	0954		
SV06 S _(C)	0940	0942	4823	5867	6501	0944	655	
SV06 M _(C)	0940	0942	1821	1489	1309	0945		
SV07 S _(S)	0713	0714	142	141	111	0716	1157	
SV07 M _(S)	0713	0714	144	101	72	0717		
SV07 D _(S)	0713	0715	345	336	332	0717		
SV08 S _(S)	0721	0722	16	9	11	0725	328	
SV08 M _(S)	0721	0722	76	74	71	0725		
SV08 D _(S)	0721	0725	337	325	327	0727		
SV09 S _(S)	0957	0958	677	679	674	1006	882	
SV09 M _(S)	0958	0959	657	650	646	1007		
SV09 D _(S)	0959	1000	632	633	635	1008		
SV10 S _(C)	0956	0958	329	320	322	1000	1048	
SV10 M/D _(C)	0956	0958	518	564	546	1002		

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 canister sampling for jet fuels (JP-5, F-24) is 50,000 ppbv and for marine diesel (F-76) is 8,000 ppbv.

Comments:
 Tanks 7&8 were sampled first due to construction work. PID readings were taken ^{before} with
 summa samples @ tanks 15, 17, 18, 20.

Date: 6/14/24

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)	1015	1017	642	643	638	1020	816	
SV11 M/D(C)	1016	1018	582	602	601	1021		
SV12 S(C)	1011	1013	438	440	543	1014	658	
SV12 M(C)	1011	1013	662	677	672	1015		
SV12 D(C)	1011	1014	591	594	600	1016		
SV13 S(S)	1029	1030	563	578	590	1035	718	
SV13 M(S)	1031	1032	524	535	565	1036		
SV13 D(S)	1031	1034	622	664	715	1037		
SV14 S(C)	1023	1025	437	455	462	1027	595	
SV14 M(C)	1023	1025	488	510	521	1028		
SV14 D(C)	1023	1029	543	566	581	1030		
MD SV15 S(S)	0821	0822	350	352	354	0850	455	
MD SV15 M(S)								Blocked
MD SV15 D(S)	0821	0822	417	422	429	0851		
MD SV16 S(C)							969	Broken
MD SV16 M(C)	0829	0890	385	419	445	0959		
MD SV16 D(C)	0829	0890	762	748	758	0903		
SV17 S(S)	0800	0801	538	522	516	0813	960	
SV17 M(S)	0800	0801	550	539	531	0814		
SV17 D(S)	0800	0804	533	520	496	0815		
SV18 S(S)	0809	0810	1487	1657	1783	0827	1381	
SV18 D(S)	0809	0810	2596	3196	3478	0828		
SV20 S(S)	0740	0741	651	609	577	0754	1140	
SV20 M(S)	0740	0741	816	786	763	0757		
SV20 D(S)	0740	0745	1082	1062	1045	0809		

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 both jet fuels (JP-5, F-24) is 50,000 ppbv and for marine diesel (F-76) is 8,000 ppbv.

Comments:



Location/Project Name: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility Project Number: 210045
Date: 01/17/2024 Samplers: _____

SVMP No:	<u>18</u>	Sample ID:	<u>SVMP-185</u>
Sample canister no:	<u>C10659</u>	Flow Controller number:	<u>A10101</u>
Canister size:	<u>1.4L</u>	Rate (mL/min):	<u>150ccm</u> *as specified on flow controller
Notes:			
1. Sample collected after SVMP purged at 1L/min for 2 min			
2. Shut-in test performed prior to sample collection			
Sample Start Time:	<u>0827</u>	Sample Start Vacuum:	<u>28 hg</u>
Sample End Time:	<u>0834</u>	Sample End Vacuum:	<u>5 hg</u>
Comments:			
SVMP No:	<u>18</u>	Sample ID:	<u>SVMP-18D</u>
Sample canister no:	<u>C1023A</u>	Flow Controller number:	<u>A1012A</u>
Canister size:	<u>1.4L</u>	Rate (mL/min):	<u>150ccm</u> *as specified on flow controller
Notes:			
1. Sample collected after SVMP purged at 1L/min for 2 min			
2. Shut-in test performed prior to sample collection			
Sample Start Time:	<u>0827</u>	Sample Start Vacuum:	<u>29 hg</u>
Sample End Time:	<u>0836</u>	Sample End Vacuum:	<u>5 hg</u>
Comments:			
SVMP No:	<u>15</u>	Sample ID:	<u>SVMP-155</u>
Sample canister no:	<u>C1023B</u>	Flow Controller number:	<u>A10589</u>
Canister size:	<u>1.4L</u>	Rate (mL/min):	<u>150ccm</u> *as specified on flow controller
Notes:			
1. Sample collected after SVMP purged at 1L/min for 2 min			
2. Shut-in test performed prior to sample collection			
Sample Start Time:	<u>0847</u>	Sample Start Vacuum:	<u>27 hg</u>
Sample End Time:	<u>0854</u>	Sample End Vacuum:	<u>5 hg</u>
Comments:			
SVMP No:	<u>15</u>	Sample ID:	<u>SVMP-15D</u>
Sample canister no:	<u>C10234</u>	Flow Controller number:	<u>A1063B</u>
Canister size:	<u>1.4L</u>	Rate (mL/min):	<u>150ccm</u> *as specified on flow controller
Notes:			
1. Sample collected after SVMP purged at 1L/min for 2 min			
2. Shut-in test performed prior to sample collection			
Sample Start Time:	<u>0847</u>	Sample Start Vacuum:	<u>28 hg</u>
Sample End Time:	<u>0855</u>	Sample End Vacuum:	<u>5 hg</u>
Comments:			



Location/Project Name: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility Project Number: 210045
Date: 6/11/2024 Samplers: _____

SVMP No: 20 Sample ID: SVMP-20M
Sample canister no: C10376 Flow Controller number: A10806
Canister size: 1.4L Rate (mL/min): 150cmm*as specified on flow controller
Notes:
1. Sample collected after SVMP purged at 1L/min for 2 min
2. Shut-in test performed prior to sample collection
Sample Start Time: 0752 Sample Start Vacuum: 30 Hg
Sample End Time: 0800 Sample End Vacuum: 5 hg
Comments:

SVMP No: 20 Sample ID: SVMP-20D
Sample canister no: C10724 Flow Controller number: A10661
Canister size: 1.4L Rate (mL/min): 150cmm *as specified on flow controller
Notes:
1. Sample collected after SVMP purged at 1L/min for 2 min
2. Shut-in test performed prior to sample collection
Sample Start Time: 0754 Sample Start Vacuum: 26 Hg
Sample End Time: 0802 Sample End Vacuum: 5 hg
Comments:

SVMP No: 17 Sample ID: SVMP-17S
Sample canister no: C10379 Flow Controller number: A10053
Canister size: 1.4L Rate (mL/min): 150cmm *as specified on flow controller
Notes:
1. Sample collected after SVMP purged at 1L/min for 2 min
2. Shut-in test performed prior to sample collection
Sample Start Time: 0812 Sample Start Vacuum: 28 hg
Sample End Time: 0818 Sample End Vacuum: 5 hg
Comments:

SVMP No: 17 Sample ID: SVMP-17D
Sample canister no: C10287 Flow Controller number: A10662
Canister size: 1.4L Rate (mL/min): 150cmm *as specified on flow controller
Notes:
1. Sample collected after SVMP purged at 1L/min for 2 min
2. Shut-in test performed prior to sample collection
Sample Start Time: 0811 Sample Start Vacuum: 26 hg
Sample End Time: 0816 Sample End Vacuum: 5 hg
Comments:

06/11/2024 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