

34 Date: 8/13/2024 Team: [REDACTED]  
Activity: Weekly + Summary  
Location: RHBFSE Weather: Cloudy / drizzle  
PPE: Level D  
Ref: E2 HSP/WP, Em-385-1-1, Navy PPM

8:05: E2 Arrive @ Jobit 6. Calibrate Ppb Pnc

8:45: Arrive @ Tank 718. Start here due to contractor  
request.

9:09: Arrive @ Tanks 5/6.

9:24: Arrive @ Tank 2.

9:33: Arrive @ Tanks 3/4

9:51: Arrive @ Tanks 9/10

10:05: Arrive @ Tanks 11/12.

Conduct cal. check.

10:18: Arrive @ Tanks 13/14

10:36: Arrive @ Tank 15

10:52: Arrive @ Tank 16

11:04: Arrive @ Tank 17

11:22: Arrive @ Tank 18

11:37: Arrive @ Tank 20.

11:51: Conduct calcheck @ Tank 20.

12:00 Return to cart park

E2 Demob.

12:15 E2 off site.

- All mats and sand bags replaced  
to position. — END of Notes 8/13/24



**DAILY INSTRUMENT CALIBRATION LOG**

Date: 3/13/24

E2 Team: [REDACTED]

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)	
G4960 304-402761569-1 06/20/2027	0	Y	
Span Calibration			
Calibration Gas – 10 ppm, Isobutylene (Manufacturer/Lot No./Exp.)	Calibration Reading (ppbv)	Pass? (Y/N)	
G4960 304-402544200-1 10/23/2026	10.01 (ppm)	Y	
Calibration Pass Criteria*: (1) Zero calibration = ± 100 ppb, (2) Span Calibration = ± 3% (300 ppb)			

Temperature (°F) (measured from PID): 83

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)	
1006	G4960 304-402544200-1 10/23/2026	9988	Y	@ Tanks 11/12 - after tank 10.
1151	" "	9992	Y	@ Tank 20
Calibration Check Pass Criteria*: Span Calibration Gas = ± 10% (1,000 ppb)				

Date: 3/13/24

\*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>8/13/24</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: <span style="background-color: black; color: black;">XXXXXXXXXX</span>	
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 <sup>2</sup>			Reading Time	Background PID Reading	Notes
			1	2	3			
SV02 S(C)	925	927	369	332	309	928	992	
SV02 M(C)	925	927	472	392	351	929		
SV02 D(C)	926	928	406	383	367	929		
SV03 S(S)	933	934	608	580	564	946	810	
SV03 M(S)	936	937	573	566	554	946		
SV03 D(S)	939	940	587	547	550	947		
SV04 S(S)	934	935	838	781	743	937	1021	
SV04 M(S)	934	937	691	652	626	940		
SV04 D(S)	940	941	637	605	589			
SV05 S(S)	909	910	837	810	791	919	753	
SV05 M(S)	912	913	1712	1710	1699	920		
SV05 D(S)	915	916	649	633	618	921		
SV06 S(C)	911	913	4397	5290	5980	916	524	
SV06 M(C)	911	915	1620	1402	1255	917		
SV07 S(S)	857	858	568	478	423	902	1160	
SV07 M(S)	857	858	479	412	387	903		
SV07 D(S)	900	901	753	703	701	903		
SV08 S(S)	849	850	556	432	339	854	1252	
SV08 M(S)	849	850	369	314	272	855		
SV08 D(S)	850	852	452	386	340	856		
SV09 S(S)	<del>953</del> 952	953	223	225	229	1000	423	
SV09 M(S)	955	956	258	262	264	1001		
SV09 D(S)	958	959	305	313	318	1002		
SV10 S(C)	953	955	242	249	258	956	412	
SV10 M/D(C)	953	956	270	276	281	958		

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:

Start @ tanks 7/8, then 5/6 due to construction work in LT.

Date: 8/13/24

# Soil Vapor Monitoring Log

SVMP No.	Purge Start Time	Sample Start Time	PID Reading <sup>2</sup>			Reading Time	Background PID Reading	Notes
			1	2	3			
SV11 S <sub>(C)</sub>	1006	1008	238	247	239	1009	256	
SV11 M/D <sub>(C)</sub>	1006	1008	290	292	296	1010		
SV12 S <sub>(C)</sub>	1011	1013	306	333	357	1014	369	
SV12 M <sub>(C)</sub>	1011	1013	321	325	327	1015		
SV12 D <sub>(C)</sub>	1012	1014	343	360	367	1016		
SV13 S <sub>(S)</sub>	1019	1020	654	663	667	1030	867	
SV13 M <sub>(S)</sub>	1022	1023	664	674	682	1031		
SV13 D <sub>(S)</sub>	1025	1026	801	814	826	1032		
SV14 S <sub>(C)</sub>	1021	1023	512	614	430	1026	746	
SV14 M <sub>(C)</sub>	1021	1024	518	564	546	1027		
SV14 D <sub>(C)</sub>	1024	1026	458	487	512	1028		
MD SV15 S <sub>(S)</sub>	1036	1037	600	608	609	1042	634 draw line to sur.	
MD SV15 M <sub>(S)</sub>								Blacked
MD SV15 D <sub>(S)</sub>	1034	1037	637	642	640	1043		
MD SV16 S <sub>(C)</sub>	1054	1056	492	550	565	1058	580	← Broken, move reading plugged to (16M)
MD SV16 M <sub>(C)</sub>								
MD SV16 D <sub>(C)</sub>	1054	1056	477	552	561	1100		
SV17 S <sub>(S)</sub>	1105	1106	477	484	490	1110	648	
SV17 M <sub>(S)</sub>	1108	1109	446 <sup>446</sup>	467	474	1112		
SV17 D <sub>(S)</sub>	1105	1106	496	504	509	1111		
SV18 S <sub>(S)</sub>	1122	1123	1142	1388	1490	1129	834	
SV18 D <sub>(S)</sub>	1122	1123	2584	3054	3302	1131		
SV20 S <sub>(S)</sub>	1140	1141	599	639	680	1146	520	
SV20 M <sub>(S)</sub>	1144	1145	1241	1401	1492	1147		
SV20 D <sub>(S)</sub>	1140	1141	1088	1064	1052	1148		

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:

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Location/Project Name: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility Project Number: 210045  
Date: \_\_\_\_\_ Samplers: \_\_\_\_\_

SVMP No:	<u>155</u>	Sample ID:	<u>SVMP-155</u>
Sample canister no:	<u>C10650</u>	Flow Controller number:	<u>A10244</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1040</u>	Sample Start Vacuum:	<u>30</u>
Sample End Time:	<u>1044</u>	Sample End Vacuum:	<u>5</u>
Comments:			
SVMP No:	<u>150</u>	Sample ID:	<u>SVMP-150</u>
Sample canister no:	<u>C10448</u>	Flow Controller number:	<u>A10396</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1041</u>	Sample Start Vacuum:	<u>29</u>
Sample End Time:	<u>1049</u>	Sample End Vacuum:	<u>5</u>
Comments:			
SVMP No:	<u>175</u>	Sample ID:	<u>SVMP-175</u>
Sample canister no:	<u>C10342</u>	Flow Controller number:	<u>A10402</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1109</u>	Sample Start Vacuum:	<u>29</u>
Sample End Time:	<u>1117</u>	Sample End Vacuum:	<u>5</u>
Comments:			
SVMP No:	<u>170</u>	Sample ID:	<u>SVMP-170</u>
Sample canister no:	<u>C10227</u>	Flow Controller number:	<u>A10318</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1109</u>	Sample Start Vacuum:	<u>28</u>
Sample End Time:	<u>1117</u>	Sample End Vacuum:	<u>5</u>
Comments:			



Location/Project Name: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility Project Number: 180025  
Date: \_\_\_\_\_ Samplers: \_\_\_\_\_

SVMP No:	<u>SVMP-185</u>	Sample ID:	<u>SVMP-185</u>
Sample canister no:	<u>C10194</u>	Flow Controller number:	<u>A10448</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1127</u>	Sample Start Vacuum:	<u>30</u>
Sample End Time:	<u>1135</u>	Sample End Vacuum:	<u>5</u>
Comments:			
SVMP No:	<u>18D</u>	Sample ID:	<u>SVMP-18D</u>
Sample canister no:	<u>C10224</u>	Flow Controller number:	<u>A10607</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1128</u>	Sample Start Vacuum:	<u>28</u>
Sample End Time:	<u>1134</u>	Sample End Vacuum:	<u>5</u>
Comments:			
SVMP No:	<u>205</u>	Sample ID:	<u>SVMP-205</u>
Sample canister no:	<u>C10120</u>	Flow Controller number:	<u>A10207</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1144</u>	Sample Start Vacuum:	<u>30</u>
Sample End Time:	<u>1153</u>	Sample End Vacuum:	<u>5</u>
Comments:			
SVMP No:	<u>20D</u>	Sample ID:	<u>SVMP-20D</u>
Sample canister no:	<u>C10309</u>	Flow Controller number:	<u>A10604</u>
Canister size:	<u>1.4</u>	Rate (mL/min):	<u>150</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>1145</u>	Sample Start Vacuum:	<u>30</u>
Sample End Time:	<u>1203</u>	Sample End Vacuum:	<u>5</u>
Comments:			

08/13/2024 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