 8/12/25

Activity: Weekly + Summa
Team - [redacted]
Location - RHBFSF
PPE - Level D
Weather - Sunny
Ref E2 HSD/WP EM385-1-1

9:30 Safety Meeting + Cal check
9:45 Set up New Jack Box
10:45 Arrived at ~~Adi~~ SUMP 2
10:59 Arrived @ SUMP 3+4
11:06 Arrived @ SUMP 4+5
11:18 Arrived @ SUMP 5+6
11:26 Arrived @ SUMP 7+8
11:38 Arrived @ SUMP 9+10
12:00 Cal check
12:51 Arrived @ SUMP 11+12
12:06 Arrived @ SUMP 13+14
12:21 Arrived @ SUMP 15+16
12:49 Arrived @ SUMP 17+18
1:30 Arrived @ SUMP 20
1:45 Cal check
* All mats + sand bags placed over SUMPS
1:10 E2 off site

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Project Title: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility (RHBFSF)
E2 Job No.: 210045

DAILY INSTRUMENT CALIBRATION LOG

Date: 8/12/25 **E2 Team:** [redacted]

INITIAL CALIBRATION: ** All calibrations are conducted with moisture filter attached.*

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

Zero Calibration			Notes
Zeroing Tube *(Make/P /N /Batch No.)* or **Zeroing Gas** *(Manufacturer/Lot No./Exp.)*	**Calibration Reading (ppbv)**	**Pass?** *(Y/N)*	
Gasco 10/31/26 304-4025491184	Ø	Y	
Span Calibration			
Calibration Gas – Isobutylene 10 ppm *(Manufacturer/Lot No./Exp.)*	**Calibration Reading (ppbv)**	**Pass?** *(Y/N)*	
Geotech 24-1736 6/4/29	10,000	Y	@ adit 6
Calibration Pass Criteria*: (1) Zero calibration = ± 100 ppb, (2) Span Calibration= ± 10%			

Temperature (°F) *(measured from PID):* 82

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

Cal check

~~**Instrument Type, Model/Serial No.:** PID (ppm), MiniRAE Lite/~~

Zero Calibration			Notes
Zeroing Tube *(Make/P /N /Batch No.)* or **Zeroing Gas** *(Manufacturer/Lot No./Exp.)*	**Calibration Reading (ppmv)**	**Pass?** *(Y/N)*	
Span Calibration			
Calibration Gas – Isobutylene 100 ppm *(Manufacturer/Lot No./Exp.)*	**Calibration Reading (ppmv)**	**Pass?** *(Y/N)*	
Geotech 24-1736 6/4/29	9487	Y	@ SUMP-11 @ 12:00 pm
Calibration Pass Criteria*: (1) Zero calibration = ± 0.1 ppm, (2) Span Calibration= ± 10%			

Cal check **Background Reading (ppmv)** *(moisture filter attached):*

Geotech 24-1736 6/4/29	9701	Y	@ SUMP-20 @ 1345

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

Last revised November 2021

Soil Vapor Monitoring Log

Contract No.: N62742-17-D-1802 CTO N6274221F0148 Date: 8/12/25

E2 Job No.: 210045

Project Title: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facility (RHBFSF) Location: RHBFSF, JBPHH, Hawaii

Personnel: [redacted]

Instrument Mode[redacted]E 3000 (PGM-7340) Serial No.: 594-906662

Calibration: per SOP (see Instrument Calibration Log)

SVMP No. (Material)	Purge Start Time	Sample Start Time	PID Reading[2] 1	2	3	Reading Time	Background PID Reading	Notes
SV02 $S_{(C)}$	1050	1052	0	0	0	1055	168	
SV02 $M_{(C)}$	1050	1052	0	0	0	1055		Fan
SV02 $D_{(C)}$	1050	1052	211	220	224	1056		
SV03 $S_{(S)}$	1100	1101	0	0	0	1105	275	
SV03 $M_{(S)}$	1100	1101	0	0	0	1105		Fan
SV03 $D_{(S)}$	1100	1101	0	0	0	1106		
SV04 $S_{(S)}$	1107	1108	0	0	0	1111	67	
SV04 $M_{(S)}$	1107	1108	9	8	5	1111		Fan
SV04 $D_{(S)}$	1107	1108	0	0	0	1112		
SV05 $S_{(S)}$	1119	1120	0	0	0	1123	154	
SV05 $M_{(S)}$	1119	1120	0	0	0	1124		Fan
SV05 $D_{(S)}$	1119	1120	302	341	351	1124		
SV06 $S_{(C)}$	1113	1115	1458	2605	3510	1118	153	Fan
SV06 $M_{(C)}$	1113	1115	963	633	486	1118		
SV07 $S_{(S)}$	1126	1127	258	208	176	1129	893	Solvent smell
SV07 $M_{(S)}$	1126	1127	84	59	46	1129		
SV07 $D_{(S)}$	1126	1127	127	118	107	1130		
SV08 $S_{(S)}$	1132	1133	345	277	253	1136	686	Solvent Smell
SV08 $M_{(S)}$	1132	1133	238	215	185	1136		
SV08 $D_{(S)}$	1132	1133	158	148	145	1137		
SV09 $S_{(S)}$	1139	1140	30	24	18	1143	185	
SV09 $M_{(S)}$	1139	1140	19	18	16	1143		
SV09 $D_{(S)}$	1139	1140	97	80	71	1144		
SV10 $S_{(C)}$	1145	1147	0	0	0	1150	139	
SV10 $M/D_{(C)}$	1145	1147	28	25	22	1151		

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) and marine diesel (F-76) is 50,000 ppbv.

Comments:

Soil Vapor Monitoring Log

Date: 8/12/25

SVMP No.	Purge Start Time	Sample Start Time	PID Reading[2] 1	2	3	Reading Time	Background PID Reading	Notes
SV11 $S_{(C)}$	1152	1154	0	0	0	1158	115	Calcheck
SV11 $M/D_{(C)}$	1152	1154	0	0	0	1158		
SV12 $S_{(C)}$	1200	1202	0	0	0	1205		
SV12 $M_{(C)}$	1200	1202	0	0	0	1205	137	
SV12 $D_{(C)}$	1200	1202	0	0	0	1206		
SV13 $S_{(S)}$	1207	1208	0	0	0	1211		
SV13 $M_{(S)}$	1207	1208	22	27	26	1211	99	
SV13 $D_{(S)}$	1207	1208	39	48	57	1212		
SV14 $S_{(C)}$	1214	1216	70	61	52	1219		
SV14 $M_{(C)}$	1214	1216	27	28	28	1219	193	
SV14 $D_{(C)}$	1214	1216	26	34	31	1220		
^{MD}SV15 $S_{(S)}$	1222	1223	75	50	64	1225		
^{MD}SV15 $M_{(S)}$							202	
^{MD}SV15 $D_{(S)}$	1222	1223	61	64	63	1226		
^{MD}SV16 $S_{(C)}$	~~1228~~	~~1230~~				~~1234~~		Bolec 100
^{MD}SV16 $M_{(C)}$	1228	1230	71	75	79	1234	233	
^{MD}SV16 $D_{(C)}$	1228	1230	98	105	104	1234		
SV17 $S_{(S)}$	1250	1251	0	0	0	1304		
SV17 $M_{(S)}$	1250	1251	3	0	0	1304	244	
SV17 $D_{(S)}$	1250	1251	11	12	15	1305		
SV18 $S_{(S)}$	1307	1308	504	610	732	1316	313	
SV18 $D_{(S)}$	1307	1308	1036	1145	1229	1317		
SV20 $S_{(S)}$	1335	1336	167	154	146	1340		
SV20 $M_{(S)}$	1335	1336	157	155	154	1340	486	
SV20 $D_{(S)}$	1335	1336	177	180	181	1341		Calcheck

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) and marine diesel (F-76) is 50,000 ppbv.

Comments:

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Soil Vapor Probe Sampling Log

Location/Project Name: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facili[redacted]mber: 210045

Date: 8/21/25 Samplers: [redacted]

SVMP No: SVMP 18S Sample ID: SVMP-18S
Sample canister no: C10695 Flow Controller number: A10200
Canister size: 1.4L Rate (mL/min): 150 *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: 1314 Sample Start Vacuum: 27
Sample End Time: 1321 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 18D Sample ID: SVMP-18D
Sample canister no: C10194 Flow Controller number: A11047
Canister size: 1.4L Rate (mL/min): 150 *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: 1315 Sample Start Vacuum: 27
Sample End Time: 1322 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 20S Sample ID: SVMP-20S
Sample canister no: C10452 Flow Controller number: A10699
Canister size: 1.4L Rate (mL/min): 150 *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: 1340 Sample Start Vacuum: 28
Sample End Time: 1347 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 20D Sample ID: SVMP-20D
Sample canister no: C10136 Flow Controller number: A10564
Canister size: 1.4L Rate (mL/min): 150 *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: 1339 Sample Start Vacuum: 28
Sample End Time: 1347 Sample End Vacuum: 5
Comments:

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Soil Vapor Probe Sampling Log

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

Date: 8/12/25 Samplers: [redacted]

SVMP No: SVMP 15S Sample ID: SVMP-15S
Sample canister no: C10154 Flow Controller number: ~~A10416~~ A10640
Canister size: 1.4 L Rate (mL/min): 150 *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: 1240 Sample Start Vacuum: 27
Sample End Time: 1247 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 15D Sample ID: SVMP-15D
Sample canister no: C10335 Flow Controller number: A10254
Canister size: 1.4 L Rate (mL/min): 150 *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: 1241 Sample Start Vacuum: 29
Sample End Time: 1249 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 17S Sample ID: SVMP-17S
Sample canister no: C11908 Flow Controller number: A10240
Canister size: 1.4 Rate (mL/min): 150 *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: 1300 Sample Start Vacuum: 29
Sample End Time: 1308 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 17D Sample ID: SVMP-17D
Sample canister no: C10323 Flow Controller number: A10432
Canister size: 1.4 Rate (mL/min): 150 *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: 1302 Sample Start Vacuum: 27
Sample End Time: 1310 Sample End Vacuum: 5
Comments:

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Soil Vapor Probe Sampling Log

Location/Project Name: Long-Term Monitoring, Red Hill Bulk Fuel Storage Facili[redacted]ber: 210045

Date: 8/21/25 Samplers: [redacted]

SVMP No: SVMP 18S Sample ID: SVMP-18S
Sample canister no: C10695 Flow Controller number: A10200
Canister size: 1.4L Rate (mL/min): 150 *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: 1314 Sample Start Vacuum: 27
Sample End Time: 1321 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 18D Sample ID: SVMP-18D
Sample canister no: C10194 Flow Controller number: A11047
Canister size: 1.4L Rate (mL/min): 150 *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: 1315 Sample Start Vacuum: 27
Sample End Time: 1322 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 20S Sample ID: SVMP-20S
Sample canister no: C10452 Flow Controller number: A10699
Canister size: 1.4L Rate (mL/min): 150 *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: 1340 Sample Start Vacuum: 28
Sample End Time: 1347 Sample End Vacuum: 5
Comments:

SVMP No: SVMP 20D Sample ID: SVMP-20D
Sample canister no: C10136 Flow Controller number: A10564
Canister size: 1.4L Rate (mL/min): 150 *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: 1339 Sample Start Vacuum: 28
Sample End Time: 1347 Sample End Vacuum: 5
Comments:

08/12/2025 Red Hill SVMP Photographs

Photo 1. SVMP-02

Photo 2. SVMP-03

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