

In Field Instrument Review
2020.09.06 – 2020.10.24
Performed by Colleen O'Bryant

100355 (Homer PD) – 1/16 RFI on Subject Test, 1/6 Blank Error on VOC, 1/6 Diagnostic Failed on VOC due to RFI – Status messages occurred on VOCs while instrument was being relocated inside Homer PD (100355 2020.09.23 Change In Status). Followed by two completed VOCs. No action taken.

100366 (APD) – 3/134 Pump Error on Subject Tests, 1/134 Blank Error on Subject Test – No action taken

100367 (Seward PD) – 1/3 RFI on VOC, followed by two successful VOCs – No action taken

100371 (AST/Ketchikan) – 1/4 Blank Error on Subject Test, followed by completed test – No action taken

100375 (Denali National Park) – 1/4 Internal Standard Error on Subject Test. All four subject tests were conducted using “test/test” scenario, 1/3 Blank Error on VOC, followed by two completed VOCs – No action taken.

100376 (Wasilla PD) – 4/54 RFI on Subject Tests – No action taken

100378 (AST/Fairbanks) – 2/34 RFI on Subject Tests – No action taken

100381 (AST/Soldotna) – 1/38 RFI on Subject Test, 1/38 Interference on Subject Test – No action taken

100382 (UAF PD) – 1/4 Tank Interference on VOC, followed by completed VOC, (100382 2020.11.15 Change In Status) – Instrument removed from service for preventative maintenance.

100386 (AST/Unalakleet) – 1/1 Standard out of Range on VOC, followed by a completed VOC on 2020.11.03 both at low psi.– Monitor Instrument

100392 (Kotzebue PD) – 2/4 Tank Interference on Subject Tests, 3 out of 4 subject tests (including status messages) occurred on “test/test” scenarios, final test occurred without status messages – No action taken.

100402 (Soldotna PD) – 1/20 RFI on Subject Test – No action taken

100403 (Metlakatla) – 1/13 Pump Error on Subject Test, followed by completed test – No action taken.

100406 (Juneau PD) – 1/30 RFI on Subject Test – No action taken – Monitoring recommended during 2020.09.05 VOC cycle no longer needed.

100412 (Unalaska DPS) – 5/19 Tank Interference on Subject Tests, 3/19 Ambient Fail on Subject Tests, 6/19 Internal Standard Error on Subject Tests, 1/19 Filter 1 Won't Zero on Subject Tests, 1/5 Diagnostic Fail (Internal Standard Error) on VOC – Recommended instrument replacement, new instrument sent 2020.10.23.

100413 (Kenai PD) – 1/35 RFI on Subject Test, 1/35 Interference on Subject Test – No action taken.

100414 (AST/Delta) – 1/5 Gas Flow Error on Subject Test, 1/5 Blank Error on VOC, 1/5 Gas Flow Error on VOC, 1/5 Ambient Fail on VOC, 1/5 Diagnostic Fail on VOC – Recommended instrument replacement, new instrument sent 2020.11.10.

100416 (Fairbanks PD) – 1/27 RFI on Subject Test – No action taken

100421 (JBER) – 1/9 Interference on Subject Test – No action taken

100675 (Bethel PD) – 1/6 RFI on Subject Test, 1/6 Blank Error on Subject Test – No action taken

100678 (AST/Mat-Su West) – 1/25 Pump Error on Subject Test, 2/25 Tank Interference on Subject Tests, 2/25 Blank Error on Subject Tests, 1/25 Standard out of Range on Subject Test – Tank interference were both followed by completed subject tests. All other status messages occurred on the same subject. Completed with high level subject sample. – No action taken.

100682 (Kodiak PD) – 3/11 Interference on Subject Tests, all three tests were conducted on the same subject with elevated filter 2 results – No action taken.

100683 (AST/Glennallen) – 1/4 Blank Error on Subject Test, followed by a completed test – No action taken

100686 (Whittier DP) – 1/2 RFI on VOC – Contacted Supervisor to troubleshoot 2020.11.18

100689 (Anchorage PD) – 2/131 Pump Error on Subject Tests, 3/131 Interference on Subject Tests, 2/131 Tank Interference on Subject Tests, 1/131 Standard out of Range on Subject Test, 2/131 Internal Standard Error on Subject Tests, 1/4 Tank Interference on VOC – Monitor Instrument

100692 (AST/Girdwood) – 2/3 RFI on VOC – both failed VOCs were followed by completed VOCs (2020.10.09, 2020.11.03), possibly environmental. Monitor instrument and agency supervisor contacted 2020.11.29.

100693 (Juneau PD) – 1/6 Blank Error on Subject Test, followed by completed test – No action taken

100698 (Nome PD) – 1/7 Blank Error on Subject Test, followed by completed test – No action taken

100700 (Wrangell PD) – 1/4 Tank Interference on subject test, followed by a completed test – No action taken

Instruments previously being monitored during 2020.09.05 VOC Cycle

100363 (AST/Anchor Point) - 1/1 VOC Diagnostic Failed (Filter Wheel Error) – Failed VOC occurred on 07/18/2020, Successful VOC completed on 07/28/2020. Recommend Monitoring Instrument during 2020.07.18 VOC Cycle IFIR – Limited tests on 2020.09.05 VOC Cycle IFIR – 3 successful VOCs and 11 subject tests completed since 2020.05.31 – Monitoring recommended during 2020.07.18 VOC Cycle IFIR no longer needed.

100679 (Skagway) – previously 2/4 Tank interference on subject tests – 9 tests conducted 2020.09.08 – 2020.11.10 without status messages - Monitoring recommended during 2020.09.05 VOC cycle no longer needed.

**Agencies not included in this review are Eielson AFB (100346), Sand Point PD (100360), Hoonah PD (100385), North Slope Borough PD (100397) and Ft. Wainwright MP (100423).

Subject Test Data

Serial Number	Total Subject Tests	RFI		Pump Error		Interference		Tank Interference		Date Range		Total Tests		Total Messages		Ambient Fail		Internal Standard Error		Diagnostic Failed					
										9/6/2020		10/24/2020		813		64		7.9%							
100355	16	1	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100366	134	0	0%	3	2%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%				
100371	4	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%				
100375	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%				
100376	54	4	7%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100378	34	2	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100381	38	1	3%	0	0%	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100392	4	0	0%	0	0%	0	0%	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100402	20	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100403	13	0	0%	1	8%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100406	30	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100412	19	0	0%	0	0%	0	0%	5	26%	0	0%	0	0%	0	0%	3	16%	6	32%	0	0%				
100413	35	1	3%	0	0%	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100414	5	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%	0	0%	0	0%	0	0%				
100416	27	1	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100421	9	0	0%	0	0%	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100675	6	1	17%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%				
100678	25	0	0%	1	4%	0	0%	2	8%	2	8%	1	4%	0	0%	0	0%	0	0%	0	0%				
100682	11	0	0%	0	0%	3	27%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
100683	4	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%				
100689	131	0	0%	2	2%	3	2%	2	2%	0	0%	1	1%	0	0%	0	0%	2	2%	0	0%				
100693	6	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%				
100698	7	0	0%	0	0%	0	0%	0	0%	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%				
100700	4	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%				
Total	813	13	2%	7	1%	9	1%	12	1%	8	1%	2	0%	1	0%	3	0%	9	1%	0	0%				

Subject Test Data

Serial Number	Total Subject Tests	User Abort		Detector Overflow		Barometer Error		Filter Wheel Error		Date Range		Total Tests		Total Messages		Samp Chamb Low		Breath Tube High		Static Analysis Error	
										9/6/2020	10/24/2020		813	1	0.1%						
100412	19	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%
Total	813	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%	0	0%	0	0%	0	0%	0	0%

VOC Data

Serial Number	Total VOC Tests	RFI		Pump Error		Interference		Tank Interference		Blank Error		Standard Out of Range		Gas Flow Error		Ambient Fail		Internal Standard Error		Diagnostic Failed			
		Date Range								Total Messages		116		12.9%									
		9/6/2020	10/24/2020																				
100355	6	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%	1	17%
100367	3	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100375	3	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100382	4	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100386	1	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
100412	5	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%
100414	5	0	0%	0	0%	0	0%	0	0%	1	20%	0	0%	1	20%	1	20%	0	0%	0	0%	1	20%
100686	2	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100689	4	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100692	3	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	116	4	3%	0	0%	0	0%	2	2%	3	3%	1	1%	1	1%	1	1%	0	0%	0	0%	3	3%

