

In Field Instrument Review  
2020.02.21 – 2020.04.11  
Prepared by Colleen O'Bryant

**100255 (Clear AFB)** – 1/3 RFI – No action taken

**100343 (Sitka PD)** – 2/5 Tank Interference on VOC – Occurred during instrument being placed in service following initial tank change. Successful VOC performed twice following status message. – No action taken

**100357 (Juneau PD)** – 1/3 Diagnostic Failed on VOC – Failed for Pump On. Occurred during instrument being placed in service. Successful VOC performed following. – No action taken.

**100360 (Sand Point PD)** – 3/5 Gas Flow Errors on VOC – Tank change performed following 3 status messages – no further status messages – No action taken

**100361 (JBER)** – 4/31 RFI, 1/31 Pump Error, 1/31 Tank Interference, 3/31 Blank Error, 1/31 Standard out of Range, 1/31 Ambient Fail – **Remove from service, loaner instrument.**

**100364 (Kodiak PD)** – 1/22 Blank Error – No action taken

**100365 (Unalaska PD)** – 4/4 Gas Flow Errors on VOCs – Instrument removed from service on 3/4/2020.

**100369 (Bethel PD)** – 4/10 Filter Wheel Error on Subject tests, 1/6 Ambient Fail on VOC, 1/6 Diagnostic Failed on VOC (Filter Wheel Error) – 3/30/2020 troubleshooting documented on a change in status form, instrument successfully performed ~ 6 tests following troubleshooting. **Instrument removed from service on 4/24/2020.**

**100371 (AST/Ketchikan)** – 1/5 RFI – No action taken

**100378 (AST/Fairbanks)** – 1/37 RFI – No action taken

**100379 (Wasilla PD)** – 1/23 RFI, 1/23 Interference – No action taken

**100380 (Anchorage PD)** – 1/5 Interference – No action taken

**100381 (AST/Soldotna)** – 4/26 RFI – No action taken

**100396 (Glacier Bay NP)** – 1/3 Blank Error on VOC – Followed by successful VOC – No action taken.

**100400 (Craig PD)** – 1/2 Tank Interference on VOC – Followed by a successful VOC – No action taken.

**100402 (Soldotna PD)** – 1/9 RFI – No action taken

**100406 (Juneau PD)** – 1/15 Blank Error, 1/15 Ambient Fail – Both status messages occurred during testing of the same subject followed by a completed test. Instrument being monitored for pump errors, none occurred. – No action taken.

**100411 (North Pole PD)** – 2/3 Diagnostic Failed on VOC (Filter Wheel Error) – Instrument never placed in service. Attempt documented on Change In Instrument Status Form 3/9/2020. No action needed.

**100412 (Unalaska DPS)** – 5/20 Tank Interference on VOC, 1/20 Blank Error on VOC, 1/20 Ambient Fail on VOC, 1/20 Internal Standard Error on VOC, 6 Diagnostic Fails on VOC (Internal Standard Failure X4, Pump ON/OFF Fail X2) – Change in Instrument Status Form 3/4/2020 documents failed VOCs and troubleshooting. Issues appeared to be environmental. **Monitor Instrument.**

**100413 (Kenai PD)** – 2/17 RFI – No action taken

**100415 (Fort Wainwright)** – 1/8 Pump Error, 3/8 Ambient Fail – Instrument removed from service 4/23/2020.

**100418 (Kenai PD)** – 2/2 Diagnostic Fails on VOCs (Internal Standard Errors) – Instrument removed from service on 2/18/2020.

**100668 (Palmer PD)** – 6/37 RFI – No action taken

**100678 (AST/MSW)** – 3/19 RFI – No action taken

**100680 (Dillingham PD)** – 1/6 Standard Out of Range – Followed by completed test, subject with elevated alcohol level. No action taken.

**100683 (AST/Glennallen)** – 2/6 RFI – No action taken

**100689 (Anchorage PD)** – 1/152 RFI, 2/152 Blank Error, 2/152 Ambient Fail, 1/152 Static Analysis Error – Static Analysis Error followed by successful subject test - No action taken.

**100690 (Bristol Bay Borough PD)** – 1/2 Tank Interference on VOC – Followed by a successful VOC – No action taken.

**100692 (AST/Girdwood)** – 2/3 RFI – Both occurred on the same subject followed by a completed test. No action taken

**100693 (Seward PD)** – 2/5 RFI, 1/5 Blank Error – Blank error occurred on a subject with an elevated alcohol level followed by a completed subject test. RFIs were on the same subject followed by a completed test. **Recommend replacement to investigate if blank errors are environmental or analytical.**

**100694 (Anchorage PD)** – 1/139 RFI, 2/139 Blank Error – Instrument monitored for blank errors, both were followed by a completed test. No action taken

**100695 (AST/Talkeetna)** – 1/3 Diagnostic Failed on VOC – Followed by successful VOCs – No action taken

**100698 (Nome PD)** – 1/9 Interference, 1/9 Blank Error – No action taken

All instruments listed to monitor on 2020.02.21 were addressed above.

Data from the following agencies was NOT included in this review: King Cove PD and Hoonah PD.

# Subject Test Data

Serial Number	Total Subject 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		Total Tests		Total Messages		Total Tests		Total Messages		Total Tests		Total Messages		Total Tests		Total Messages	
		2/21/2020	4/11/2020	58	8.4%	689	58	8.4%	689	58	8.4%	689	58	8.4%	689	58	8.4%	689	58	8.4%	689
100255	3	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100361	31	4	13%	1	3%	0	0%	1	3%	3	10%	1	3%	0	0%	1	3%	0	0%	0	0%
100364	22	0	0%	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%	0	0%	0	0%	0	0%
100371	5	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100378	37	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100379	23	1	4%	0	0%	1	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100380	5	0	0%	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100381	26	4	15%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100402	9	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100406	15	0	0%	0	0%	0	0%	0	0%	1	7%	0	0%	0	0%	1	7%	0	0%	0	0%
100413	17	2	12%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100415	8	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%	0	0%	3	38%	0	0%	0	0%
100668	37	6	16%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100678	19	3	16%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100680	6	0	0%	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%
100683	6	2	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100689	152	1	1%	0	0%	0	0%	0	0%	2	1%	0	0%	0	0%	2	1%	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%
100693	5	2	40%	0	0%	0	0%	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%
100694	139	1	1%	0	0%	0	0%	0	0%	2	1%	0	0%	0	0%	0	0%	0	0%	0	0%
100698	9	0	0%	0	0%	1	11%	0	0%	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	689	32	5%	2	0%	3	0%	1	0%	11	2%	2	0%	0	0%	7	1%	0	0%	0	0%

## Subject Test Data

Serial Number	Total Subject Tests	User Abort		Detector Overflow		Barometer Error		Filter Wheel Error		Suck Back Error		Undefined Error		Filter 1 Won't Zero		Samp Chamb Low		Breath Tube High		Static Analysis Error	
								Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
100369	10	0	0%	0	0%	0	0%	4	40%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100689	152	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%
<b>Total</b>	<b>689</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>4</b>	<b>1%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>1</b>	<b>0%</b>

Date Range

2/21/2020 4/11/2020

Total Tests

689

Total Messages

5

0.7%

# VOC Data

Serial Number	Total VOC Tests	RFI		Pump Error		Interference		Tank Interference		Date Range		Total Messages		Total Tests		Ambient Fail		Internal Standard Error		Diagnostic Failed	
										2/21/2020	4/11/2020	Total	Percentage	Total	Percentage						
										Blank Error	Standard Out of Range	Gas Flow Error									
100343	5	0	0%	0	0%	0	0%	2	40%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100357	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
100360	5	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	60%	0	0%	0	0%	0	0%
100365	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4	100%	0	0%	0	0%	0	0%
100369	6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%	1	17%
100396	3	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%
100400	2	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100411	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	67%
100412	20	0	0%	0	0%	0	0%	5	25%	1	5%	0	0%	0	0%	1	5%	1	5%	6	30%
100418	2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%
100690	2	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100695	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
Total	197	0	0%	0	0%	0	0%	9	5%	2	1%	0	0%	7	4%	2	1%	1	1%	13	7%

# VOC Data

Date Range

Total Tests

197

2/21/2020 4/11/2020

Total Messages

0

0.0%

Serial Number	Total VOC Tests	User Abort	Detector Overflow	Barometer Error	Filter Wheel Error	Suck Back Error	Undefined Error	Filter 1 Won't Zero	Samp Chamb Low	Breath Tube High	Static Analysis Error
100255	2	0	0%	0	0%	0	0%	0	0%	0	0%
100342	0	0	0%	0	0%	0	0%	0	0%	0	0%
100343	5	0	0%	0	0%	0	0%	0	0%	0	0%
100344	1	0	0%	0	0%	0	0%	0	0%	0	0%
100345	0	0	0%	0	0%	0	0%	0	0%	0	0%
100346	1	0	0%	0	0%	0	0%	0	0%	0	0%
100347	0	0	0%	0	0%	0	0%	0	0%	0	0%
100348	3	0	0%	0	0%	0	0%	0	0%	0	0%
100349	2	0	0%	0	0%	0	0%	0	0%	0	0%
100350	2	0	0%	0	0%	0	0%	0	0%	0	0%
100351	0	0	0%	0	0%	0	0%	0	0%	0	0%
100352	3	0	0%	0	0%	0	0%	0	0%	0	0%
100353	0	0	0%	0	0%	0	0%	0	0%	0	0%
100354	2	0	0%	0	0%	0	0%	0	0%	0	0%
100355	2	0	0%	0	0%	0	0%	0	0%	0	0%
100356	2	0	0%	0	0%	0	0%	0	0%	0	0%
100357	3	0	0%	0	0%	0	0%	0	0%	0	0%
100358	0	0	0%	0	0%	0	0%	0	0%	0	0%
100359	0	0	0%	0	0%	0	0%	0	0%	0	0%
100360	5	0	0%	0	0%	0	0%	0	0%	0	0%
100361	2	0	0%	0	0%	0	0%	0	0%	0	0%
100362	2	0	0%	0	0%	0	0%	0	0%	0	0%
100363	2	0	0%	0	0%	0	0%	0	0%	0	0%
100364	2	0	0%	0	0%	0	0%	0	0%	0	0%
100365	4	0	0%	0	0%	0	0%	0	0%	0	0%
100366	2	0	0%	0	0%	0	0%	0	0%	0	0%
100367	2	0	0%	0	0%	0	0%	0	0%	0	0%
100368	2	0	0%	0	0%	0	0%	0	0%	0	0%
100369	6	0	0%	0	0%	0	0%	0	0%	0	0%
100370	2	0	0%	0	0%	0	0%	0	0%	0	0%
100371	2	0	0%	0	0%	0	0%	0	0%	0	0%
100372	0	0	0%	0	0%	0	0%	0	0%	0	0%
100373	2	0	0%	0	0%	0	0%	0	0%	0	0%
100374	0	0	0%	0	0%	0	0%	0	0%	0	0%
100375	2	0	0%	0	0%	0	0%	0	0%	0	0%
100376	0	0	0%	0	0%	0	0%	0	0%	0	0%
100377	1	0	0%	0	0%	0	0%	0	0%	0	0%
100378	2	0	0%	0	0%	0	0%	0	0%	0	0%
100379	2	0	0%	0	0%	0	0%	0	0%	0	0%
100380	2	0	0%	0	0%	0	0%	0	0%	0	0%
100381	4	0	0%	0	0%	0	0%	0	0%	0	0%
100382	2	0	0%	0	0%	0	0%	0	0%	0	0%
100384	0	0	0%	0	0%	0	0%	0	0%	0	0%
100385	1	0	0%	0	0%	0	0%	0	0%	0	0%
100386	2	0	0%	0	0%	0	0%	0	0%	0	0%
100387	2	0	0%	0	0%	0	0%	0	0%	0	0%
100388	2	0	0%	0	0%	0	0%	0	0%	0	0%
100389	2	0	0%	0	0%	0	0%	0	0%	0	0%
100390	2	0	0%	0	0%	0	0%	0	0%	0	0%
100391	2	0	0%	0	0%	0	0%	0	0%	0	0%
100392	2	0	0%	0	0%	0	0%	0	0%	0	0%
100395	2	0	0%	0	0%	0	0%	0	0%	0	0%
100396	3	0	0%	0	0%	0	0%	0	0%	0	0%
100397	2	0	0%	0	0%	0	0%	0	0%	0	0%
100398	1	0	0%	0	0%	0	0%	0	0%	0	0%
100399	0	0	0%	0	0%	0	0%	0	0%	0	0%
100400	2	0	0%	0	0%	0	0%	0	0%	0	0%
100402	2	0	0%	0	0%	0	0%	0	0%	0	0%
100403	2	0	0%	0	0%	0	0%	0	0%	0	0%
100404	2	0	0%	0	0%	0	0%	0	0%	0	0%
100405	0	0	0%	0	0%	0	0%	0	0%	0	0%
100406	2	0	0%	0	0%	0	0%	0	0%	0	0%
100410	2	0	0%	0	0%	0	0%	0	0%	0	0%
100411	3	0	0%	0	0%	0	0%	0	0%	0	0%
100412	20	0	0%	0	0%	0	0%	0	0%	0	0%
100413	2	0	0%	0	0%	0	0%	0	0%	0	0%
100414	2	0	0%	0	0%	0	0%	0	0%	0	0%
100415	1	0	0%	0	0%	0	0%	0	0%	0	0%
100416	2	0	0%	0	0%	0	0%	0	0%	0	0%
100417	0	0	0%	0	0%	0	0%	0	0%	0	0%
100418	2	0	0%	0	0%	0	0%	0	0%	0	0%
100420	2	0	0%	0	0%	0	0%	0	0%	0	0%
100421	0	0	0%	0	0%	0	0%	0	0%	0	0%
100422	0	0	0%	0	0%	0	0%	0	0%	0	0%
100423	1	0	0%	0	0%	0	0%	0	0%	0	0%
100424	2	0	0%	0	0%	0	0%	0	0%	0	0%
100665	2	0	0%	0	0%	0	0%	0	0%	0	0%
100666	1	0	0%	0	0%	0	0%	0	0%	0	0%
100667	0	0	0%	0	0%	0	0%	0	0%	0	0%
100668	2	0	0%	0	0%	0	0%	0	0%	0	0%
100669	2	0	0%	0	0%	0	0%	0	0%	0	0%
100670	2	0	0%	0	0%	0	0%	0	0%	0	0%
100671	0	0	0%	0	0%	0	0%	0	0%	0	0%
100672	0	0	0%	0	0%	0	0%	0	0%	0	0%
100673	0	0	0%	0	0%	0	0%	0	0%	0	0%
100674	1	0	0%	0	0%	0	0%	0	0%	0	0%
100675	1	0	0%	0	0%	0	0%	0	0%	0	0%
100676	2	0	0%	0	0%	0	0%	0	0%	0	0%
100677	0	0	0%	0	0%	0	0%	0	0%	0	0%
100678	2	0	0%	0	0%	0	0%	0	0%	0	0%
100679	1	0	0%	0	0%	0	0%	0	0%	0	0%
100680	2	0	0%	0	0%	0	0%	0	0%	0	0%
100681	0	0	0%	0	0%	0	0%	0	0%	0	0%
100682	1	0	0%	0	0%	0	0%	0	0%	0	0%
100683	2	0	0%	0	0%	0	0%	0	0%	0	0%
100684	0	0	0%	0	0%	0	0%	0	0%	0	0%
100685	0	0	0%	0	0%	0	0%	0	0%	0	0%
100686	2	0	0%	0	0%	0	0%	0	0%	0	0%
100687	0	0	0%	0	0%	0	0%	0	0%	0	0%
100688	0	0	0%	0	0%	0	0%	0	0%	0	0%
100689	3	0	0%	0	0%	0	0%	0	0%	0	0%
100690	2	0	0%	0	0%	0	0%	0	0%	0	0%
100691	0	0	0%	0	0%	0	0%	0	0%	0	0%
100692	2	0	0%	0	0%	0	0%	0	0%	0	0%
100693	2	0	0%	0	0%	0	0%	0	0%	0	0%
100694	3	0	0%	0	0%	0	0%	0	0%	0	0%
100695	3	0	0%	0	0%	0	0%	0	0%	0	0%
100696	3	0	0%	0	0%	0	0%	0	0%	0	0%
100697	2	0	0%	0	0%	0	0%	0	0%	0	0%
100698	2	0	0%	0	0%	0	0%	0	0%	0	0%
100699	0	0	0%	0	0%	0	0%	0	0%	0	0%
100700	2	0	0%	0	0%	0	0%	0	0%	0	0%
Total	197	0	0%	0	0%	0	0%	0	0%	0	0%