## **In Field Instrument Review**

## 02/22/2021 to 04/11/2021

## **Performed by Derek Walton**

100348 (North Pole PD): 1/7 RFI on subject tests – No action taken

100349 (AST Angoon): 1/3 RFI on VOC, followed by a completed VOC – No action taken

100355 (Homer PD): 1/11 RFI on subject tests – No action taken

**100356 (Anchorage PD):** 2/112 RFI on subject tests, 4/112 Subject interference on subject tests – No action taken

**100366 (Anchorage PD):** 2/125 RFI on subject tests, 2/125 Subject interference on subject tests, 5/125 Blank errors on subject tests, 2/125 Standard out of range on subject tests, 1/125 Internal standard error on subject tests. Standard out of range messages and one blank error all occurred on the same subject on the same date and appear to be interrelated. Internal standard error followed by a completed test – *Recommend monitoring* 

**100367 (Seward PD):** 3/15 RFI on subject tests, 1/15 Pump error on subject tests, 1/15 Blank error on subject tests, Blank error followed by a completed test – No action taken

**100370 (Ketchikan PD):** 1/13 RFI on subject tests, 1/13 Subject interference on subject tests, 3/13 Detector overflow on subject tests. All 3 Detector overflows on the same subject who was suspected of using an inhalant. This status message has not reoccurred since that time. Refer to 100370 2021.02.25 Change in Status – No action taken

**100380 (Anchorage PD):** 1/23 Ambient fail on subject tests, 4/23 Diagnostic failed on subject tests. All 4 Diagnostic failed status messages happened in mid-March, 2021 and were caused by the breath hose temperature being too low. This status message has not reoccurred since that timeframe – No action taken

**100381 (AST Soldotna):** 7/36 RFI on subject tests, 1/3 Diagnostic failed on VOCs. Diagnostic failed status message was due to RFI during the diagnostic on the VOC. All RFI status messages (including VOC) followed by completed tests – <u>Recommend replacement</u>

100385 (AST Fairbanks): 2/19 RFI on subject tests – No action taken

**100386 (AST Unalakleet):** 1/1 Blank error on VOCs, followed by a completed remote VOC on 04/15/2021 (after date range for this In Field Instrument Review). Refer to 100386 2021.04.16 Change In Status – No action taken

100389 (Cordova PD): 1/8 RFI on subject tests – No action taken

**100392 (Kotzebue PD):** 1/6 Pump error on subject tests, 1/6 Standard out of range on subject tests – Standard out of range occurred on a subject with a high alcohol concentration and was followed by a completed test – No action taken

**100416 (Fairbanks PD):** 3/42 Tank interference on subject tests, 2/4 Tank interference on VOCs – Instrument removed from service for preventive maintenance on 04/16/2021 (Refer to 100416 2021.04.14 Change In Status)

100421 (JBER): 1/15 RFI on subject tests, 1/15 Pump error on subject tests – No action taken

**100668 (Palmer PD):** 4/30 RFI on subject tests, 1/30 Blank error on subject tests, 1/3 RFI on VOCs – Blank error followed by a completed test, Failed VOC followed by a completed VOC on the same day – No action taken

100670 (Unalaska PD): 1/5 RFI on subject tests – No action taken

**100678 (AST Mat-Su West):** 3/25 RFI on subject tests, 1/25 Tank interference on subject tests, 1/25 Standard out of range on subject tests, 1/25 Ambient fail on subject tests, Ambient fail and Standard out of range occurred on the same subject who had a high alcohol concentration, Tank interference status message was followed by a completed test – No action taken

**100680 (Dillingham PD):** 3/11 Standard out of range on subject tests, All occurred on the same subject on the same day. No additional standard out of range status messages before or after this during the In Field cycle – No action taken

## Follow ups from previous In Field Instrument Review

**100381 (AST Soldotna):** Recommend replacement due to continued high prevalence of RFI status messages

**100406 (Juneau PD):** No further Internal standard errors since last In Field cycle – Discontinue monitoring

**100416 (Fairbanks PD):** Instrument replaced for preventive maintenance – Refer to Refer to 100416 2021.04.14 Change In Status

Locations not included in this review were: Eielson AFB (100346) and North Slope Borough PD (100397)

		0	. la 1 a . a 4	т	L D - L	-				Date	Range		Total Tests	675							
		ઝા	ubject	les	t Dat	а				2/22/2021	4/11/2021	Tot	al Messages	64	9.5%						
Serial Number	Total Subject Tests		RFI	Pump	Error	Interfe	erence	Tank Inte	rference	Blanl	Error	Standard C	out of Range	Gas Fl	ow Error	Ambie	nt Fail	Internal S	tandard Error	Diagnos	stic Failed
100348	7	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100355	11	1	9%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100356	112	2	2%	0	0%	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100366	125	2	2%	0	0%	2	2%	0	0%	5	4%	2	2%	0	0%	0	0%	1	1%	0	0%
100367	15	3	20%	1	7%	0	0%	0	0%	1	7%	0	0%	0	0%	0	0%	0	0%	0	0%
100370	13	1	8%	0	0%	1	8%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100380	23	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	4%	0	0%	4	17%
100381	36	7	19%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100385	19	2	11%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100389	8	1	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100392	6	0	0%	1	17%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%
100416	42	0	0%	0	0%	0	0%	3	7%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100421	15	1	7%	1	7%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100668	30	4	13%	0	0%	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%
100670	5	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100678	25	3	12%	0	0%	0	0%	1	4%	0	0%	1	4%	0	0%	1	4%	0	0%	0	0%
100680	11	0	0%	Ó	0%	0	0%	Ō	0%	Ō	0%	3	27%	Ó	0%	Ó	0%	0	0%	0	0%
Total	675	29	4%	3	0%	7	1%	4	1%	7	1%	7	1%	0	0%	2	0%	1	0%	4	1%

		0		Test D	- 4 -					Date F	Range		Total Tests	675								
		2/22/2021	4/11/2021	Tota	I Messages	3	0.4%															
Serial Number	Total Subject Tests	User	Abort	Detector	Detector Overflow E		Barometer Error		Filter Wheel Error		Suck Back Error		Undefined Error		Filter 1 Won't Zero		Samp Chamb Low		Breath Tube High		Static Analysis Error	
100370	13	0	0%	3	23%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	
Total	675	0	0%	3	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	

			VO	<u> </u>	4-					Date	Range		Total Tests	101							
			٧Ŭ	C Da	iia					2/25/2021	4/11/2021	Tot	al Messages	6	5.9%						
Serial Number	Total VOC Tests		RFI	Pump	Error	Interfe	erence	Tank Inte	ference	Blan	k Error	Standard C	out of Range	Gas Flo	ow Error	Ambier	nt Fail	Internal S	tandard Error	Diagnos	stic Failed
100349	3	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100381	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%
100386	1	0	0%	0	0%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
100416	4	0	0%	0	0%	0	0%	2	50%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100668	3	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	101	2	2%	0	0%	0	0%	2	2%	1	1%	0	0%	0	0%	0	0%	0	0%	1	1%

				Data		-				2/25/2021		Tota	Total Tests I Messages	0	0.0%				
Serial Number 100255	Total VOC Tests 1	User 0	Abort 0%	Detector 0	Overflow 0%	Barome 0	ter Error 0%	Filter Wr 0	0%	Suck Ba 0	0%	Undefin 0	ed Error 0%	Filter 1 V	Von't Zero 0%	Samp Cr 0	namb Low 0%	Breath Tube High 0 0%	Static Analysis Error 0 0%
100342 100343	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100344	2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100345 100346	1 0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100347 100348	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100349	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100350 100351	0 2	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100352 100353	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100354	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100355 100356	1 2	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100357 100358	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100359 100360	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100360	1 0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100362 100363	2	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100364	2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100365 100366	0 2	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100367 100368	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100369	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100370 100371	1 1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100372 100373	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100374	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100375 100376	2 2	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0% 0 0%	0 0%
100377 100378	1 0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100379	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100380 100381	3	0	0% 0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0 0%	0 0%
100382 100384	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100385	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100386 100387	1	0	0% 0%	0	0%	0	0%	0	0%	0	0% 0%	0	0%	0	0%	0	0%	0 0%	0 0% 0 0%
100388 100389	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100390 100391	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0% 0 0%
100392	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100395 100396	1	0	0% 0%	0	0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100397 100398	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0% 0 0%
100399	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100400 100402	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100403 100404	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100405	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100406 100410	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100411 100412	1 0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100413	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100414 100415	2 1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100416 100417	4	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100418	2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100420 100421	1 1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0% 0 0%
100422 100423	0 1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100424 100665	1	0	0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0 0%	0 0%
100666	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100667 100668	1 3	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0% 0 0%
100669 100670	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0% 0 0%
100671	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100672 100673	0 2	0	0% 0%	0	0% 0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0 0%	0 0%
100674 100675	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100676	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0% 0%	0 0%	0 0%
100677 100678	2	0	0% 0%	0	0%	0	0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0 0%	0 0%
100679 100680	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100681 100682	3	0	0% 0%	0	0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100683	1	0	0%	0	0%	0	0%	0	0%	0	0% 0%	0	0%	0	0%	0	0%	0 0%	0 0%
100684 100685	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100686 100687	1 0	0	0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0	0% 0%	0	0%	0 0%	0 0%
100688	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100689 100690	0 2	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100691 100692	0	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100693	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100694 100695	1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
100696 100697	2	0	0% 0%	0	0% 0%	0	0% 0%	0	0%	0	0%	0	0% 0%	0	0% 0%	0	0%	0 0%	0 0%
100698	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%
100699 100700	0 1	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0	0% 0%	0 0%	0 0%
Total	101	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0 0%	0 0%