

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 – **Recommend replacement**

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)

Subject Test Data

Serial Number	Total Subject Tests	Date Range								Total Tests				Total Messages							
		2/22/2021		4/11/2021		2/22/2021		4/11/2021		675		64		9.5%							
		RFI	Pump Error	Interference	Tank Interference	Blank Error	Standard Out of Range	Gas Flow Error	Ambient Fail	Internal Standard Error	Diagnostic Failed										
100348	7	1	14%	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%		
100356	112	2	2%	0	0%	4	4%	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%		
100367	15	3	20%	1	7%	0	0%	0	0%	1	7%	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%		
100380	23	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%		
100385	19	2	11%	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%		
100392	6	0	0%	1	17%	0	0%	0	0%	0	0%	1	17%	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%		
100421	15	1	7%	1	7%	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%		
100670	5	1	20%	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%		
100680	11	0	0%	0	0%	0	0%	0	0%	0	0%	3	27%	0	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%

VOC Data

Serial Number	Total VOC Tests	RFI		Pump Error		Interference		Tank Interference		Date Range		Total Tests		Total Messages		Ambient Fail		Internal Standard Error		Diagnostic Failed	
										2/25/2021	4/11/2021	101	6	5.9%	Standard Out of Range		Gas Flow Error		Diagnostic 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%

