

In Field Instrument Review

5/31/2021 – 07/18/2021

Performed by Carlie Bailey and Colleen O'Bryant

100344 (Juneau PD 1): 2/33 RFI on subject tests, 2/33 subject interference on subject tests – No action taken

100345 (Valdez PD): 1/9 RFI on subject tests, 1/9 blank error on subject tests, 1/9 standard out of range on subject tests. The blank error and standard out of range error were isolated to 1 subject – No action taken

100347 (Denali NP): 3/6 gas flow error on subject tests, 1/6 internal standard error on subject tests. This instrument was removed from service (100347 2021.07.31 Change in Status) due to gas flow errors.

100348 (North Pole PD): 1/6 subject interference on subject tests, followed by a completed test – No action taken, discontinue monitoring

100351 (Kenai PD): 1/14 subject interference on subject tests, 1/14 tank interference on subject tests, 2/14 blank error on subject tests, 3/14 internal standard error on subject tests, 1/14 static analysis error on subject tests - removed from service on 06/19/2021 (100351 2021.06.19 Change in Status) due to internal standard errors, blank errors, interference detected, and static analysis error.

100355 (Homer PD): 1/28 RFI on subject tests, 2/28 pump error on subject tests, 1/28 blank error on subject tests – No action taken

100358 (AST/Matsu West): 1/3 tank interference on VOC, followed by a completed VOC – No action taken

100360 (Sand Point PD): 1/3 blank error on VOC, followed by a completed VOC – No action taken

100363 (AST Anchor Point): No status messages this cycle. Instrument was removed from service on 7/1/2021 (100363 2021.07.01 Change in Status).

100364 (Anchorage Airport PD): 1/7 blank error on subject tests, followed by a completed test – No action taken

100365 (AST Soldotna): 1/7 RFI on subject tests, 3/7 internal standard error on subject tests, 1/4 internal standard error on VOC, 3/4 diagnostic failed on VOC (due to failed internal standard). Instrument was removed from service on 6/8/2021 due to internal standard errors (100365 2021.06.08 Change in Status).

100366 (Anchorage PD Jail 1): 2/135 RFI on subject tests, 1/135 tank interference on subject tests, 1/135 blank error on subject tests, 2/135 standard out of range on subject tests, 1/135 ambient fail on subject tests, 1/135 undefined error on subject tests. RFI, tank interference, blank error and standard out of range error were all followed by completed tests. Undefined error was not repeated during date range – No action taken

100367 (Seward PD): 5/33 RFI on subject tests, 4 were on one subject, followed by a completed test – No action taken

100376 (Wasilla PD): 1/38 pump error on subject tests, followed by a completed test – No action taken

100380 (Anchorage PD): 1/132 subject interference on subject tests, 1/132 blank error on subject tests, 1/4 gas flow error on VOC. Instrument was removed from service on 7/16/2021 due to a leaking gas regulator (100380 2021.07.16 Change in Status).

100385 (AST Fairbanks): 1/48 pump error on subject tests followed by a completed test – No action taken

100386 (AST Unalakleet): 2/5 ambient fail on subject tests. This instrument was replaced due to SD card not working properly (100386 2021.06.08 Change in Status and 100386 2021.06.26 Change in Status).

100389 (Cordova PD): 1/5 blank error on subject tests – No action taken

100395 (Fairbanks Airport PD): 1/4 tank interference on VOC, 1/4 blank error on VOC, followed by passing VOCs, tank was changed on 7/28/2021 – No action taken

100399 (NSBPD): 2/10 blank error on VOC, 7/10 diagnostic failed on VOC. Instrument was never placed in service due to internal standard errors associated with diagnostic failed and instrument was returned to the lab (100399 2021.07.27 Change in Status).

100400 (Craig PD): 1/6 pump error on subject tests, followed by a completed test – No action taken

100411 (Fairbanks PD): 3/30 RFI on subject tests – No action taken

100421 (Elmendorf-Richardson): 1/12 subject interference on subject tests, 1/12 blank error on subject tests – No action taken

100424 (Eielson AFB): 1/7 pump error on subject tests, followed by a completed test – No action taken

100668 (Palmer PD): 1/29 RFI on subject tests – No action taken

100669 (AST Soldotna): 7/41 RFI on subject tests (4 on one subject followed by a completed test), 5/41 subject interference on subject tests (isolated to 2 individuals with a detector response), 1/41 tank interference on subject tests (followed by a completed test), 1/41 blank error on subject tests (followed by a completed test) – No action taken

100670 (Unalaska PD): 2/12 pump error on subject tests, isolated to 1 individual followed by a completed test – No action taken

100675 (AST Bethel): 1/5 pump error on subject tests, followed by a completed test – No action taken

100683 (AST Glennallen): 2/9 blank error on subject tests, both followed by completed tests – No action taken

100687 (NSBPD): 7/8 internal standard error on subject tests, 6/7 diagnostic failed on VOC. Instrument was removed from service on 6/29/2021 due to internal standard errors (100687 2021.06.29 Change in Status).

100690 (Soldotna PD): 1/9 blank error on subject tests, 1/9 standard out of range on subject tests (followed by a completed test), 2/3 tank interference on VOC. Troubleshooting occurred to attempt to address the tank interference errors (100690 2021.08.10 Change in Status) - *Continue monitoring*

100694 (University of Alaska Fairbanks PD): 1/5 pump error on subject tests, followed by a completed test – No action taken

100698 (Nome PD): 1/9 blank error on subject tests, followed by a completed test – No action taken

100699 (Kenai PD): 1/11 tank interference on subject tests (followed by a completed test), 1/3 internal standard on VOC followed by a completed VOC– *Recommend monitoring*

Locations for which data was not included in this review: Eielson AFB (100424) has data included through 6/15/2021, but not through the most recent VOC day, 7/18/2021.

Subject Test Data

Serial Number	Total Subject Tests	Date Range								Total Tests		Total Messages									
		5/31/2021				7/18/2021				822		86									
		RFI		Pump Error		Interference		Tank Interference		Blank Error		Standard Out of Range		Gas Flow Error		Ambient Fail		Internal Standard Error		Diagnostic Failed	
100344	33	2	6%	0	0%	2	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100345	9	1	11%	0	0%	0	0%	0	0%	1	11%	1	11%	0	0%	0	0%	0	0%	0	0%
100347	6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	50%	0	0%	1	17%	0	0%
100348	6	0	0%	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100351	14	0	0%	0	0%	1	7%	1	7%	2	14%	0	0%	0	0%	0	0%	3	21%	0	0%
100355	28	1	4%	2	7%	0	0%	0	0%	1	4%	0	0%	0	0%	0	0%	0	0%	0	0%
100364	7	0	0%	0	0%	0	0%	0	0%	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%
100365	7	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3	43%	0	0%
100366	135	2	1%	0	0%	0	0%	1	1%	1	1%	2	1%	0	0%	1	1%	0	0%	0	0%
100367	33	5	15%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100376	38	0	0%	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100380	132	0	0%	0	0%	1	1%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%
100385	48	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100386	5	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	40%	0	0%	0	0%
100389	5	0	0%	0	0%	0	0%	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%
100400	6	0	0%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100411	30	3	10%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100421	12	0	0%	0	0%	1	8%	0	0%	1	8%	0	0%	0	0%	0	0%	0	0%	0	0%
100424	7	0	0%	1	14%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100668	29	1	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100669	41	7	17%	0	0%	5	12%	1	2%	1	2%	0	0%	0	0%	0	0%	0	0%	0	0%
100670	12	0	0%	2	17%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100675	5	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100683	9	0	0%	0	0%	0	0%	0	0%	2	22%	0	0%	0	0%	0	0%	0	0%	0	0%
100687	8	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	7	88%	0	0%
100690	9	0	0%	0	0%	0	0%	0	0%	1	11%	1	11%	0	0%	0	0%	0	0%	0	0%
100694	5	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100698	9	0	0%	0	0%	0	0%	0	0%	1	11%	0	0%	0	0%	0	0%	0	0%	0	0%
100699	11	0	0%	0	0%	0	0%	1	9%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	822	23	3%	10	1%	11	1%	4	0%	14	2%	4	0%	3	0%	3	0%	14	2%	0	0%

Subject Test Data

Serial Number	Total Subject Tests	User Abort		Detector Overflow		Barometer Error		Filter Wheel Error		Suck Back Error		Date Range		Total Tests		Total Messages		Filter 1 Won't Zero		Samp Chamb Low		Breath Tube High		Static Analysis Error	
												5/31/2021	7/18/2021	822	0.2%	2	0.2%	0	0%	0	0%	0	0%	0	0%
100351	14	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	7%
100366	135	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	822	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%

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	
										6/2/2021	7/18/2021	128	27	21.1%	0	0%	0	0%	0	0%	0
100358	3	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100360	3	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%
100365	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%	3	75%
100380	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%
100395	4	0	0%	0	0%	0	0%	1	25%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%
100399	10	0	0%	0	0%	0	0%	0	0%	2	20%	0	0%	0	0%	0	0%	0	0%	7	70%
100687	7	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	6	86%
100690	3	0	0%	0	0%	0	0%	2	67%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
100699	3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	33%	0	0%
Total	128	0	0%	0	0%	0	0%	4	3%	4	3%	0	0%	1	1%	0	0%	2	2%	16	13%

Date range was retrieved starting 5/31/2021. Date range above begins at 6/2/2021 due to no VOC tests being present from 5/31/2021-6/1/2021. CKB 8/13/2021

VOC Data

Date Range
6/2/2021 7/18/2021

Total Tests
128

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	1	0	0%	0	0%	0	0%	0	0%	0	0%
100342	2	0	0%	0	0%	0	0%	0	0%	0	0%
100343	1	0	0%	0	0%	0	0%	0	0%	0	0%
100344	1	0	0%	0	0%	0	0%	0	0%	0	0%
100345	1	0	0%	0	0%	0	0%	0	0%	0	0%
100346	0	0	0%	0	0%	0	0%	0	0%	0	0%
100347	1	0	0%	0	0%	0	0%	0	0%	0	0%
100348	1	0	0%	0	0%	0	0%	0	0%	0	0%
100349	1	0	0%	0	0%	0	0%	0	0%	0	0%
100350	0	0	0%	0	0%	0	0%	0	0%	0	0%
100351	1	0	0%	0	0%	0	0%	0	0%	0	0%
100352	1	0	0%	0	0%	0	0%	0	0%	0	0%
100353	0	0	0%	0	0%	0	0%	0	0%	0	0%
100354	1	0	0%	0	0%	0	0%	0	0%	0	0%
100355	1	0	0%	0	0%	0	0%	0	0%	0	0%
100356	0	0	0%	0	0%	0	0%	0	0%	0	0%
100357	0	0	0%	0	0%	0	0%	0	0%	0	0%
100358	3	0	0%	0	0%	0	0%	0	0%	0	0%
100359	0	0	0%	0	0%	0	0%	0	0%	0	0%
100360	3	0	0%	0	0%	0	0%	0	0%	0	0%
100361	1	0	0%	0	0%	0	0%	0	0%	0	0%
100362	1	0	0%	0	0%	0	0%	0	0%	0	0%
100363	0	0	0%	0	0%	0	0%	0	0%	0	0%
100364	1	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	1	0	0%	0	0%	0	0%	0	0%	0	0%
100368	1	0	0%	0	0%	0	0%	0	0%	0	0%
100369	1	0	0%	0	0%	0	0%	0	0%	0	0%
100370	1	0	0%	0	0%	0	0%	0	0%	0	0%
100371	1	0	0%	0	0%	0	0%	0	0%	0	0%
100372	0	0	0%	0	0%	0	0%	0	0%	0	0%
100373	0	0	0%	0	0%	0	0%	0	0%	0	0%
100374	2	0	0%	0	0%	0	0%	0	0%	0	0%
100375	0	0	0%	0	0%	0	0%	0	0%	0	0%
100376	1	0	0%	0	0%	0	0%	0	0%	0	0%
100377	1	0	0%	0	0%	0	0%	0	0%	0	0%
100378	1	0	0%	0	0%	0	0%	0	0%	0	0%
100379	3	0	0%	0	0%	0	0%	0	0%	0	0%
100380	4	0	0%	0	0%	0	0%	0	0%	0	0%
100381	0	0	0%	0	0%	0	0%	0	0%	0	0%
100382	0	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	1	0	0%	0	0%	0	0%	0	0%	0	0%
100388	2	0	0%	0	0%	0	0%	0	0%	0	0%
100389	1	0	0%	0	0%	0	0%	0	0%	0	0%
100390	1	0	0%	0	0%	0	0%	0	0%	0	0%
100391	1	0	0%	0	0%	0	0%	0	0%	0	0%
100392	1	0	0%	0	0%	0	0%	0	0%	0	0%
100395	4	0	0%	0	0%	0	0%	0	0%	0	0%
100396	1	0	0%	0	0%	0	0%	0	0%	0	0%
100397	1	0	0%	0	0%	0	0%	0	0%	0	0%
100398	1	0	0%	0	0%	0	0%	0	0%	0	0%
100399	10	0	0%	0	0%	0	0%	0	0%	0	0%
100400	1	0	0%	0	0%	0	0%	0	0%	0	0%
100402	0	0	0%	0	0%	0	0%	0	0%	0	0%
100403	1	0	0%	0	0%	0	0%	0	0%	0	0%
100404	1	0	0%	0	0%	0	0%	0	0%	0	0%
100405	0	0	0%	0	0%	0	0%	0	0%	0	0%
100406	1	0	0%	0	0%	0	0%	0	0%	0	0%
100410	1	0	0%	0	0%	0	0%	0	0%	0	0%
100411	1	0	0%	0	0%	0	0%	0	0%	0	0%
100412	2	0	0%	0	0%	0	0%	0	0%	0	0%
100413	1	0	0%	0	0%	0	0%	0	0%	0	0%
100414	0	0	0%	0	0%	0	0%	0	0%	0	0%
100415	1	0	0%	0	0%	0	0%	0	0%	0	0%
100416	0	0	0%	0	0%	0	0%	0	0%	0	0%
100417	1	0	0%	0	0%	0	0%	0	0%	0	0%
100418	1	0	0%	0	0%	0	0%	0	0%	0	0%
100420	3	0	0%	0	0%	0	0%	0	0%	0	0%
100421	1	0	0%	0	0%	0	0%	0	0%	0	0%
100422	2	0	0%	0	0%	0	0%	0	0%	0	0%
100423	1	0	0%	0	0%	0	0%	0	0%	0	0%
100424	0	0	0%	0	0%	0	0%	0	0%	0	0%
100665	1	0	0%	0	0%	0	0%	0	0%	0	0%
100666	1	0	0%	0	0%	0	0%	0	0%	0	0%
100667	1	0	0%	0	0%	0	0%	0	0%	0	0%
100668	1	0	0%	0	0%	0	0%	0	0%	0	0%
100669	2	0	0%	0	0%	0	0%	0	0%	0	0%
100670	1	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	1	0	0%	0	0%	0	0%	0	0%	0	0%
100674	0	0	0%	0	0%	0	0%	0	0%	0	0%
100675	1	0	0%	0	0%	0	0%	0	0%	0	0%
100676	1	0	0%	0	0%	0	0%	0	0%	0	0%
100677	0	0	0%	0	0%	0	0%	0	0%	0	0%
100678	0	0	0%	0	0%	0	0%	0	0%	0	0%
100679	1	0	0%	0	0%	0	0%	0	0%	0	0%
100680	1	0	0%	0	0%	0	0%	0	0%	0	0%
100681	0	0	0%	0	0%	0	0%	0	0%	0	0%
100682	2	0	0%	0	0%	0	0%	0	0%	0	0%
100683	1	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	1	0	0%	0	0%	0	0%	0	0%	0	0%
100687	7	0	0%	0	0%	0	0%	0	0%	0	0%
100688	0	0	0%	0	0%	0	0%	0	0%	0	0%
100689	1	0	0%	0	0%	0	0%	0	0%	0	0%
100690	3	0	0%	0	0%	0	0%	0	0%	0	0%
100691	0	0	0%	0	0%	0	0%	0	0%	0	0%
100692	1	0	0%	0	0%	0	0%	0	0%	0	0%
100693	1	0	0%	0	0%	0	0%	0	0%	0	0%
100694	1	0	0%	0	0%	0	0%	0	0%	0	0%
100695	1	0	0%	0	0%	0	0%	0	0%	0	0%
100696	1	0	0%	0	0%	0	0%	0	0%	0	0%
100697	0	0	0%	0	0%	0	0%	0	0%	0	0%
100698	1	0	0%	0	0%	0	0%	0	0%	0	0%
100699	3	0	0%	0	0%	0	0%	0	0%	0	0%
100700	1	0	0%	0	0%	0	0%	0	0%	0	0%
Total	128	0	0%	0	0%	0	0%	0	0%	0	0%

Date range was retrieved starting 5/31/2021. Date range above begins at 6/2/2021 due to no VOC tests being present from 5/31/2021-6/1/2021. CKB 8/13/2021