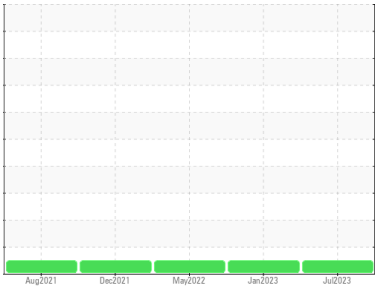
FUEL REPORT

Sample Rating Trend



NORMAL

Machine Id
TANK 019
Component
Tank Jet Fuel
Fluid
JET FUEL Type A (10000 GAL)

DIAGNOSIS

Recommendation
All laboratory tests indicate that this sample meets specifications for Jet-A fuel.

Wear
All metal levels are normal indicating no corrosion in the system.

Contamination
The water content is negligible. There is no Bacteria, Yeast and/or Fungus indicated in the sample. There is no indication of any contamination in the fuel. The amount and size of particulates present in the system are acceptable.

Fluid Condition
Sulfur value derived by ASTM D5453 method for ULSD validation. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0710463**	WC0710458	WC0589743
Sample Date		Client Info		**17 Jul 2023**	11 Jan 2023	17 May 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298		**0.805**	0.803	0.803
Fuel Color	text	*Visual Screen		**Clear**	Clear	Clear
ASTM Color	scalar	*ASTM D1500		**0.5**	L3.5	L0.5
Visc @ 40°C	cSt	ASTM D445	<8.0	**1.37**	1.34	1.31
Pensky-Martens Flash Point	°C	*PMCC Calculated	38	**54**	54	51
Cloud Point	°C	ASTM D5771		**-47**	-48	-53
Pour Point	°C	ASTM D5950	-45	**-45**	-45	-54

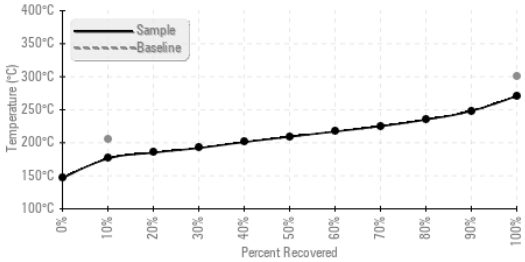
SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	<3000	**563**	635	337
Sulfur (UVF)	ppm	ASTM D5453		**414**	304	366

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86		**146**	148	154
5% Distillation Point	°C	ASTM D86		**170**	170	172
10% Distill Point	°C	ASTM D86	205	**176**	176	177
15% Distillation Point	°C	ASTM D86		**181**	181	181
20% Distill Point	°C	ASTM D86		**185**	186	184
30% Distill Point	°C	ASTM D86		**192**	193	189
40% Distill Point	°C	ASTM D86		**201**	200	197
50% Distill Point	°C	ASTM D86		**209**	208	203
60% Distill Point	°C	ASTM D86		**217**	216	210
70% Distill Point	°C	ASTM D86		**225**	225	218
80% Distill Point	°C	ASTM D86		**235**	234	227
85% Distillation Point	°C	ASTM D86		**241**	240	233
90% Distill Point	°C	ASTM D86		**248**	247	240
95% Distillation Point	°C	ASTM D86		**259**	257	251
Final Boiling Point	°C	ASTM D86	300	**271**	268	263
Distillation Residue	%	ASTM D86	1.5	**1.2**	1.2	1.2
Distillation Loss	%	ASTM D86	1.5	**0.6**	0.6	0.6

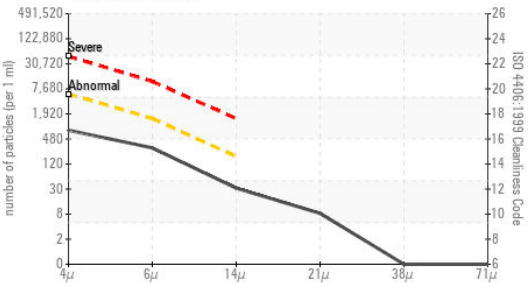
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	44	**44.3**	44.7	44.7
Cetane Index		ASTM D4737	<40.0	**47.1**	48.2	46.4

FUEL REPORT

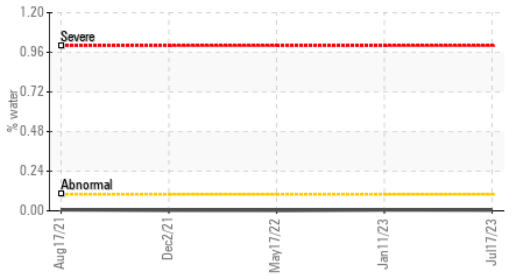
Fuel Distillation Curve



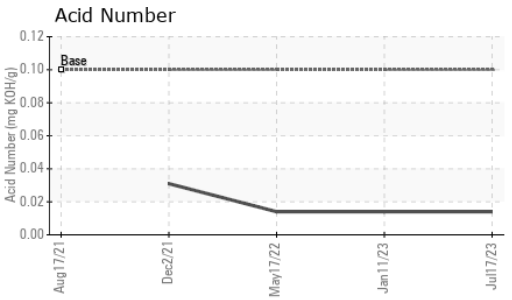
Particle Count



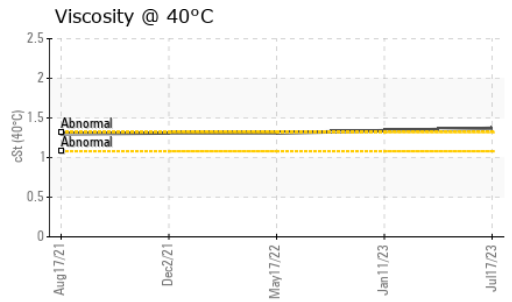
Water



Acid Number



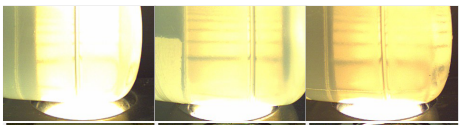
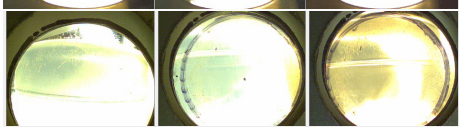
Viscosity @ 40°C



CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	**0**	<1	0
Sodium	ppm	ASTM D5185m	<0.1	**0**	0	0
Potassium	ppm	ASTM D5185m	<0.1	**0**	0	0
Water	%	ASTM D6304	<0.05	**0.004**	0.005	0.002
ppm Water	ppm	ASTM D6304	<500	**47.0**	55.5	24.9
% Gasoline	%	*In-House	<0.50	**0.0**	0.0	0.0
% Biodiesel	%	*In-House	<20.0	**0.0**	0.0	0.0

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	**682**	286	220
Particles >6µm	ASTM D7647	>1300	**258**	68	75
Particles >14µm	ASTM D7647	>160	**28**	12	15
Particles >21µm	ASTM D7647	>40	**7**	5	4
Particles >38µm	ASTM D7647	>10	**0**	0	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	**17/15/12**	15/13/11	15/13/11

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	**<1**	0	<1
Nickel	ppm	ASTM D5185m	<0.1	**0**	0	0
Lead	ppm	ASTM D5185m	<0.1	**0**	0	0
Vanadium	ppm	ASTM D5185m	<0.1	**<1**	0	0
Iron	ppm	ASTM D5185m	<0.1	**0**	0	0
Calcium	ppm	ASTM D5185m	<0.1	**0**	0	0
Magnesium	ppm	ASTM D5185m	<0.1	**<1**	0	0
Phosphorus	ppm	ASTM D5185m	<0.1	**0**	5	0
Zinc	ppm	ASTM D5185m	<0.1	**0**	0	0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0710463 **Received** : 18 Jul 2023
Lab Number : 05901996 **Diagnosed** : 25 Jul 2023
Unique Number : 10563352 **Diagnostician** : Doug Bogart
Test Package : DF-3 (Additional Tests: API, CC Flash, Cetane, CldPt, Color-ASTM, Fuel, GC-PercFuel, ICP, KF, KV40,

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

BAE SYSTEMS
1100 BAIRS RD
YORK, PA
US 17408
Contact: DOUG RUSSO
doug.russo@baesystems.com
T: (717)524-0737
F: (717)225-8311