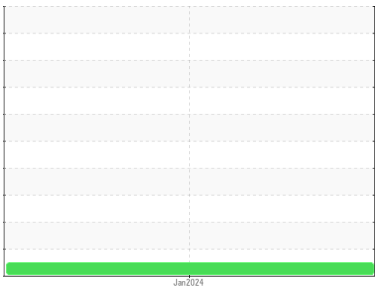
FUEL REPORT

Sample Rating Trend



NORMAL

Machine Id
STBD MAIN ENG MGO
Component
Starboard Diesel Fuel
Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation
Laboratory test indicate that this fuel is suitable for use and meets all test requirements. Resample at the next service interval to monitor.

Corrosion
{not applicable}

Contaminants
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. There is no indication of any contamination in the diesel fuel.

Fuel Condition
All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PP**	---	---
Sample Date		Client Info		**07 Jan 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Sample Status				**NORMAL**	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	**0.845**	---	---
Fuel Color	text	Visual Screen*	Yllow	**Yllow**	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	**2.8**	---	---
Pensky-Martens Flash Point	°C	ASTM D7215*	52	**63.6**	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	10	**8**	---	---

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	**174**	---	---
5% Distillation Point	°C	ASTM D2887*		**196**	---	---
10% Distill Point	°C	ASTM D2887*	201	**208**	---	---
15% Distillation Point	°C	ASTM D2887*		**217**	---	---
20% Distill Point	°C	ASTM D2887*	216	**225**	---	---
30% Distill Point	°C	ASTM D2887*	230	**241**	---	---
40% Distill Point	°C	ASTM D2887*	243	**254**	---	---
50% Distill Point	°C	ASTM D2887*	255	**267**	---	---
60% Distill Point	°C	ASTM D2887*	267	**280**	---	---
70% Distill Point	°C	ASTM D2887*	280	**294**	---	---
80% Distill Point	°C	ASTM D2887*	295	**309**	---	---
85% Distillation Point	°C	ASTM D2887*		**320**	---	---
90% Distill Point	°C	ASTM D2887*	310	**331**	---	---
95% Distillation Point	°C	ASTM D2887*		**349**	---	---
Final Boiling Point	°C	ASTM D2887*	341	**376**	---	---

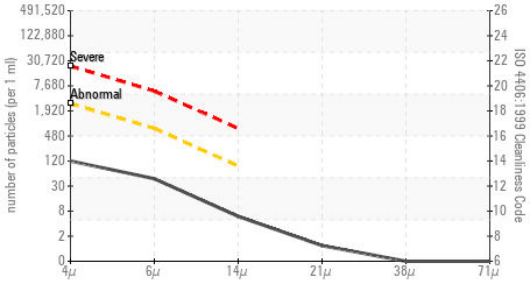
IGNITION QUALITY	method	limit/base	current	history1	history2
API Gravity	ASTM D1298*	37.7	**35**	---	---
Cetane Index	ASTM D4737*	<40.0	**48**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	**0**	---	---
Sodium	ppm	ASTM D5185(m)	<0.1	**0**	---	---
Potassium	ppm	ASTM D5185(m)	<0.1	**0**	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	**106**	---	---
Particles >6µm	ASTM D7647	>640	**40**	---	---
Particles >14µm	ASTM D7647	>80	**5**	---	---
Particles >21µm	ASTM D7647	>20	**1**	---	---
Particles >38µm	ASTM D7647	>4	**0**	---	---
Particles >71µm	ASTM D7647	>3	**0**	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	**14/12/10**	---	---

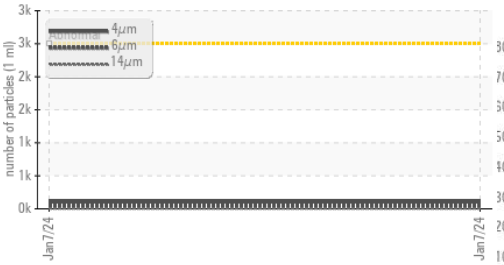
FUEL REPORT

Particle Count

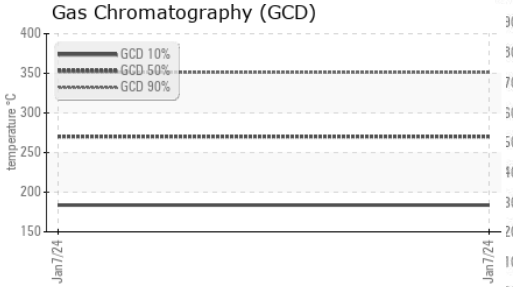


Viscosity @ 40°C

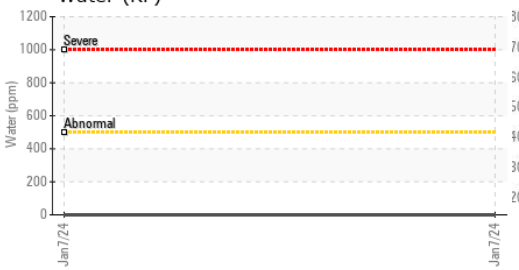
Particle Trend



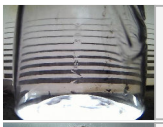
Gas Chromatography (GCD)



Water (KF)

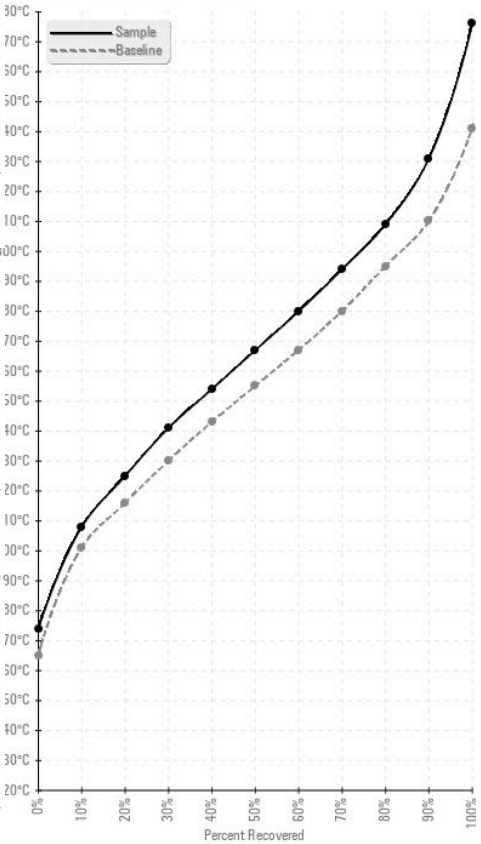


HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m)	<0.1	0	---	---
Nickel	ppm	ASTM D5185(m)	<0.1	0	---	---
Lead	ppm	ASTM D5185(m)	<0.1	0	---	---
Vanadium	ppm	ASTM D5185(m)	<0.1	0	---	---
Iron	ppm	ASTM D5185(m)	<0.1	0	---	---
Calcium	ppm	ASTM D5185(m)	<0.1	0	---	---
Magnesium	ppm	ASTM D5185(m)	<0.1	0	---	---
Phosphorus	ppm	ASTM D5185(m)	<0.1	0	---	---
Zinc	ppm	ASTM D5185(m)	<0.1	0	---	---

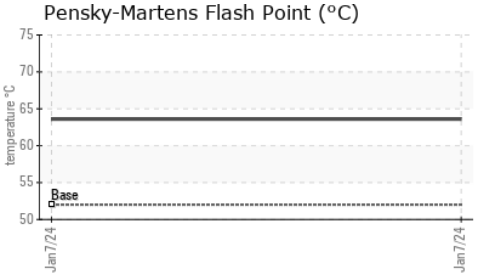
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

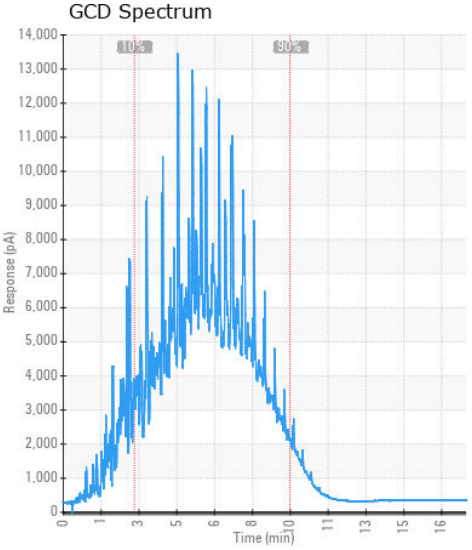
Fuel Distillation Curve



Pensky-Martens Flash Point (°C)



GCD Spectrum



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HUSKY SEA ROSE /AKER SOLUTIONS**
Sample No. : PP **Recieved** : 08 Jan 2024 PO BOX 20
Lab Number : 02607337 **Diagnosed** : 17 Jan 2024 ST. JOHN`S, NL
Unique Number : 5708423 **Diagnostician** : Kevin Marson CA A1C 6C9
Test Package : FUEL (Additional Tests: CC Flash, GC-PercFuel, PrtCount, SpecGravity) Contact: Nick Fewer

To discuss this sample report, contact Customer Service at 1-800-268-2131. nick.fewer@akersolutions.com
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (709)757-4582
Validity of results and interpretation are based on the sample and information as supplied. F: (709)722-8730