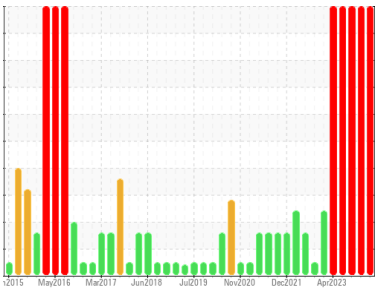
PROBLEM SUMMARY

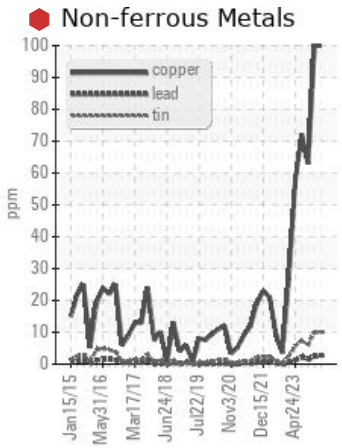
Sample Rating Trend

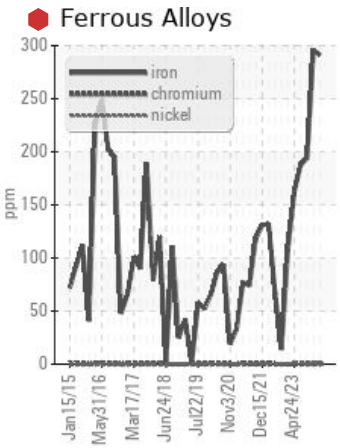


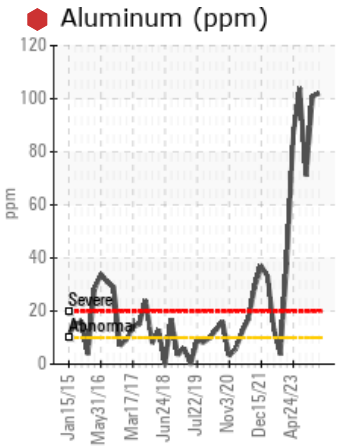
WEAR

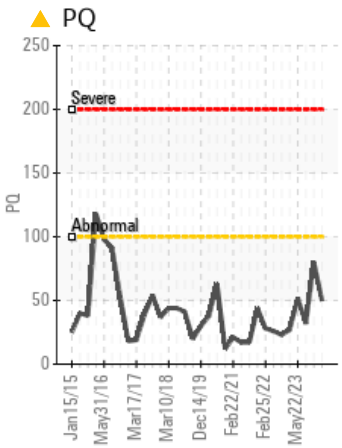
Area
ENGINE ROOM 3RD DECK
Machine Id
27-K-6410A MAIN AIR COMPRESSOR A (S/N Maint Plan 22465)
Component
1 Air Compressor
Fluid
MOBIL RARUS 826 (4 LTR)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend that you inspect the oil pump. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
PQ		ASTM D8184*		▲ **50**	▲ 80	32
Iron	ppm	ASTM D5185(m)	>50	⬢ **291**	⬢ 296	⬢ 194
Aluminum	ppm	ASTM D5185(m)	>10	⬢ **102**	⬢ 101	⬢ 71
Copper	ppm	ASTM D5185(m)	>40	⬢ **100**	⬢ 100	▲ 63
Tin	ppm	ASTM D5185(m)	>5	▲ **10**	▲ 10	▲ 6

Customer Id: SPESTJ
Sample No.: PP
Lab Number: 02607514
Test Package: IND 1

To manage this report scan the QR code

To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We recommend that you inspect the oil pump.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

16 Nov 2023 Diag: Kevin Marson

WEAR

We recommend that you drain the oil from the component if this has not already been done. We recommend that you inspect the oil pump. We recommend an early resample to monitor this condition.Aluminum and copper and iron ppm levels are severe. PQ levels are abnormal. Tin ppm levels are abnormal. Cylinder or oil pump wear indicated. Oil cooler core leaching or motor piston wear is indicated. Bearing wear is indicated. Piston wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

26 Aug 2023 Diag: Bill Quesnel

WEAR

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.Aluminum and iron ppm levels are severe. Tin and copper ppm levels are abnormal. Oil cooler core leaching or motor piston wear is indicated. Bearing wear is indicated. Piston wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

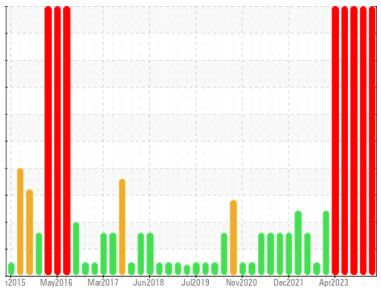
22 May 2023 Diag: Kevin Marson

WEAR

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
ENGINE ROOM 3RD DECK
Machine Id
27-K-6410A MAIN AIR COMPRESSOR A (S/N Maint Plan 22465)
Component
1 Air Compressor
Fluid
MOBIL RARUS 826 (4 LTR)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend that you inspect the oil pump. We recommend an early resample to monitor this condition.

Wear

Aluminum and copper and iron ppm levels are severe. PQ levels are abnormal. Tin ppm levels are abnormal. Cylinder or oil pump wear indicated. Oil cooler core leaching or motor piston wear is indicated. Bearing wear is indicated. Piston wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PP**	PP	PP
Sample Date		Client Info		**27 Nov 2023**	16 Nov 2023	26 Aug 2023
Machine Age	days	Client Info		**0**	0	0
Oil Age	days	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.6	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		▲ **50**	▲ 80	32
Iron	ppm	ASTM D5185(m)	>50	● **291**	● 296	● 194
Chromium	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>10	● **102**	● 101	● 71
Lead	ppm	ASTM D5185(m)	>20	**3**	2	2
Copper	ppm	ASTM D5185(m)	>40	● **100**	● 100	▲ 63
Tin	ppm	ASTM D5185(m)	>5	▲ **10**	▲ 10	▲ 6
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

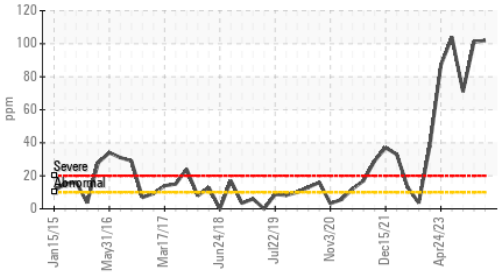
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**2**	2	2
Barium	ppm	ASTM D5185(m)		**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)		**14**	14	9
Manganese	ppm	ASTM D5185(m)		**2**	3	2
Magnesium	ppm	ASTM D5185(m)		**1**	<1	<1
Calcium	ppm	ASTM D5185(m)		**2**	2	2
Phosphorus	ppm	ASTM D5185(m)		**141**	149	117
Zinc	ppm	ASTM D5185(m)		**31**	30	23
Sulfur	ppm	ASTM D5185(m)		**15**	49	35
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**18**	19	13
Sodium	ppm	ASTM D5185(m)		**<1**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	2	1

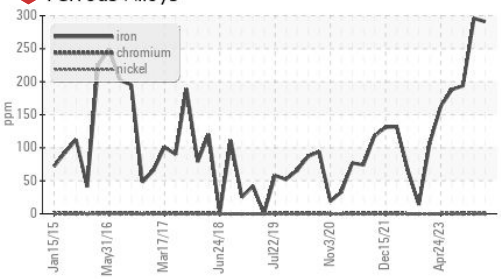
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	.12	**0.25**	0.13	---

OIL ANALYSIS REPORT

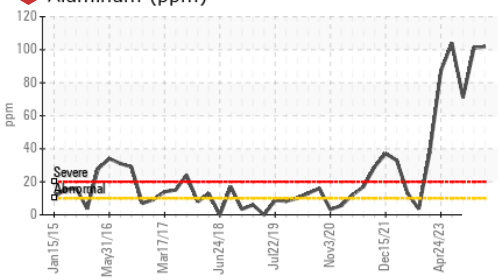
Aluminum (ppm)



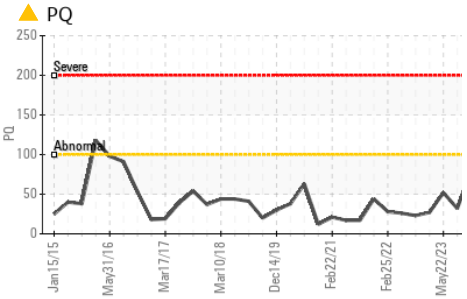
Ferrous Alloys



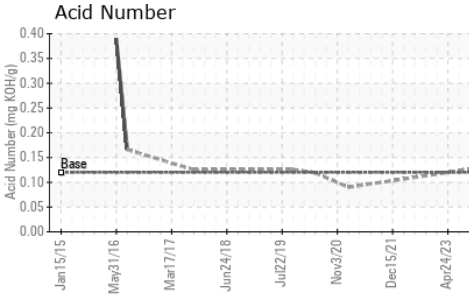
Aluminum (ppm)



PQ



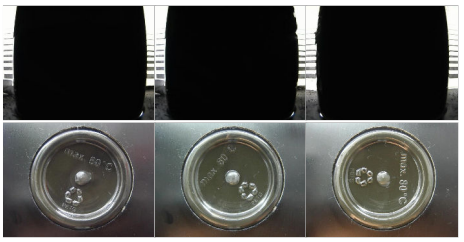
Acid Number



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.6	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

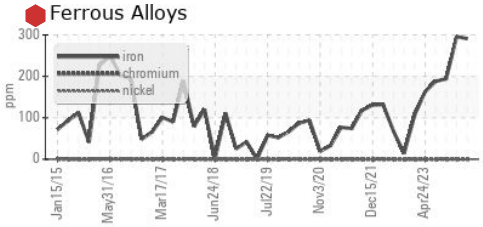
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	66.5	**69.2**	69.4	64.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

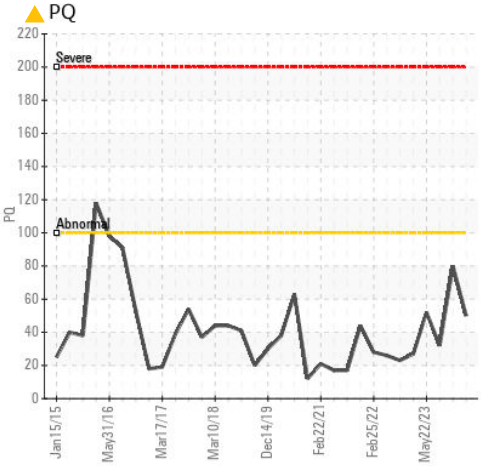


GRAPHS

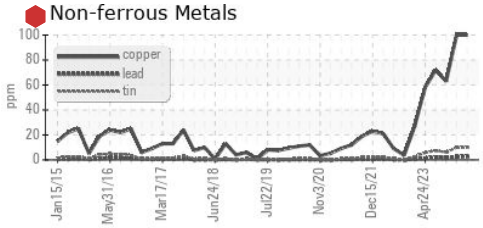
Ferrous Alloys



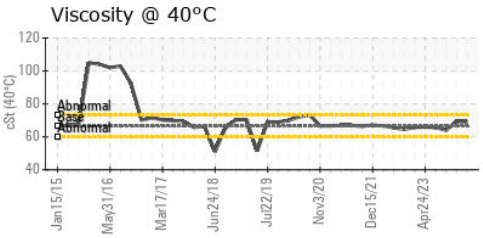
PQ



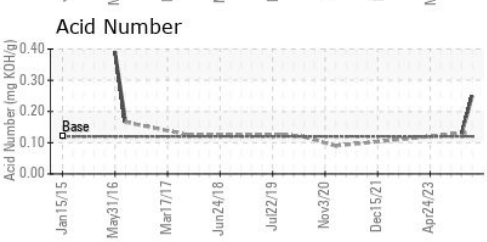
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



CALA
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HUSKY SEA ROSE /AKER SOLUTIONS**
Sample No. : PP **Recieved** : 09 Jan 2024
Lab Number : 02607514 **Diagnosed** : 10 Jan 2024
Unique Number : 5708600 **Diagnostician** : Kevin Marson
Test Package : IND 1 (Additional Tests: PQ, TAN Auto, TAN Man)

PO BOX 20
ST. JOHN`S, NL
CA A1C 6C9
Contact: Maintenance Supervisor
maintsuper.searose@huskyenergy.ca
T: x:
F: x:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.