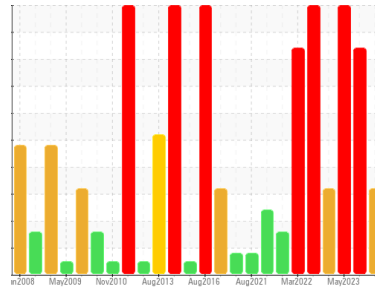




# PROBLEM SUMMARY

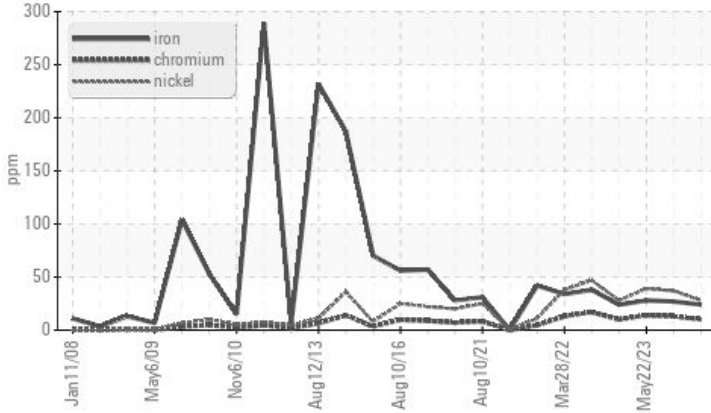
Area  
**TURRET**  
 Machine Id  
**91-X-9605 SWIVEL 6, 12**  
 Component  
**Sealing System**  
 Fluid  
**MOBIL MOBILGEAR 634 (--- GAL)**

Sample Rating Trend

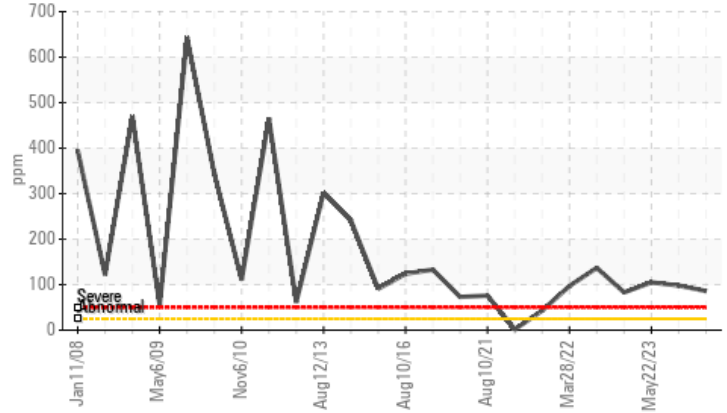


## COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Silicon (ppm)



## RECOMMENDATION

Check seals and/or filters for points of contaminant entry. We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	SEVERE	SEVERE
Chromium	ppm	ASTM D5185(m) >3	▲ 10	▲ 13	▲ 14
Nickel	ppm	ASTM D5185(m) >8	▲ 28	● 37	● 39
Silicon	ppm	ASTM D5185(m) >25	▲ 86	▲ 98	● 105

Customer Id: SPESTJ  
 Sample No.: PP  
 Lab Number: 02592276  
 Test Package: IND 2



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](mailto:Kevin.Marson@wearcheck.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.
Filter Fluid	---	---	?	We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type.

## HISTORICAL DIAGNOSIS

### 28 Jun 2023 Diag: Kevin Marson

WEAR



Check seals and/or filters for points of contaminant entry. We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Nickel ppm levels are severe. Chromium ppm levels are abnormal. Elemental level of silicon (Si) above normal indicating ingress of seal material and/or dirt. The AN level is acceptable for this fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

view report



### 22 May 2023 Diag: Kevin Marson

WEAR



We advise that you check all areas where dirt can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Nickel ppm levels are severe. Chromium ppm levels are abnormal. High concentration of dirt present in the fluid. High amount of ingressed dirt has caused abrasive wear to the component. The AN level is acceptable for this fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

view report



### 05 Feb 2023 Diag: Kevin Marson

DIRT



Check seals and/or filters for points of contaminant entry. We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Chromium and nickel ppm levels are abnormal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

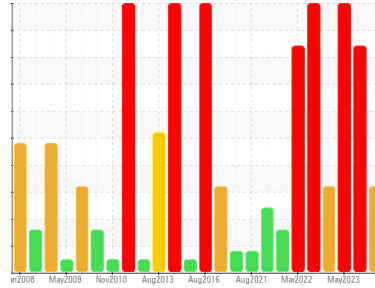
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area  
**TURRET**  
 Machine Id  
**91-X-9605 SWIVEL 6, 12**  
 Component  
**Sealing System**  
 Fluid  
**MOBIL MOBILGEAR 634 (--- GAL)**

## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

Chromium and nickel ppm levels are abnormal.

### Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

### Fluid Condition

The AN level is acceptable for this fluid. The fluid 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	<b>25 Oct 2023</b>	28 Jun 2023	22 May 2023
Machine Age	days	Client Info	0	0
Oil Age	days	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		<b>ABNORMAL</b>	SEVERE	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	0	0
Iron	ppm ASTM D5185(m) >100	<b>24</b>	27	28
Chromium	ppm ASTM D5185(m) >3	<b>▲ 10</b>	▲ 13	▲ 14
Nickel	ppm ASTM D5185(m) >8	<b>▲ 28</b>	● 37	● 39
Titanium	ppm ASTM D5185(m)	0	<1	<1
Silver	ppm ASTM D5185(m)	<1	<1	0
Aluminum	ppm ASTM D5185(m) >3	<1	<1	<1
Lead	ppm ASTM D5185(m)	0	0	0
Copper	ppm ASTM D5185(m) >3	<1	<1	<1
Tin	ppm ASTM D5185(m)	0	0	0
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)	<b>19</b>	21	22
Barium	ppm ASTM D5185(m)	<1	<1	<1
Molybdenum	ppm ASTM D5185(m)	<b>5</b>	7	7
Manganese	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185(m)	<b>2</b>	<1	<1
Calcium	ppm ASTM D5185(m)	<b>13</b>	14	14
Phosphorus	ppm ASTM D5185(m)	<b>306</b>	333	323
Zinc	ppm ASTM D5185(m)	<b>4</b>	4	2
Sulfur	ppm ASTM D5185(m)	<b>12395</b>	13723	13698
Lithium	ppm ASTM D5185(m)	<1	<1	<1

## CONTAMINANTS

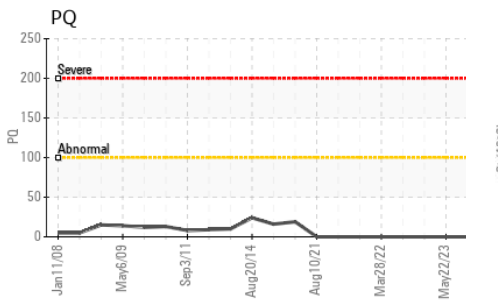
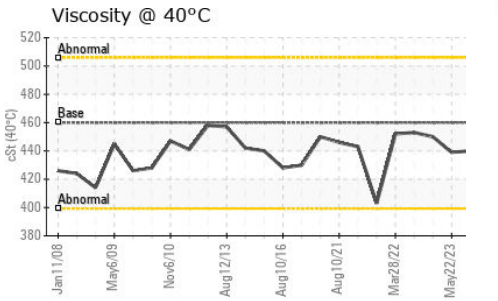
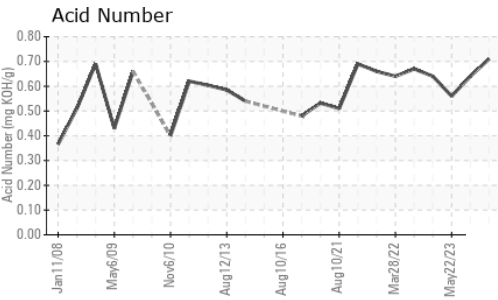
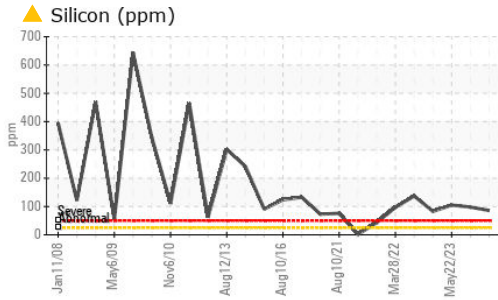
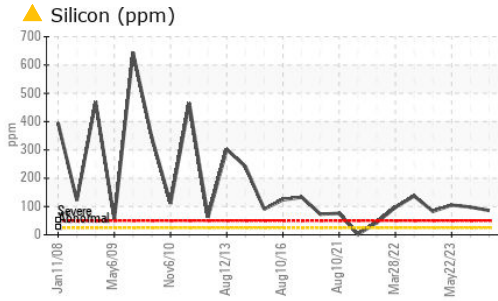
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>▲ 86</b>	▲ 98	● 105
Sodium	ppm ASTM D5185(m)	<1	<1	<1
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	<1	0

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	<b>0.71</b>	0.64	0.56



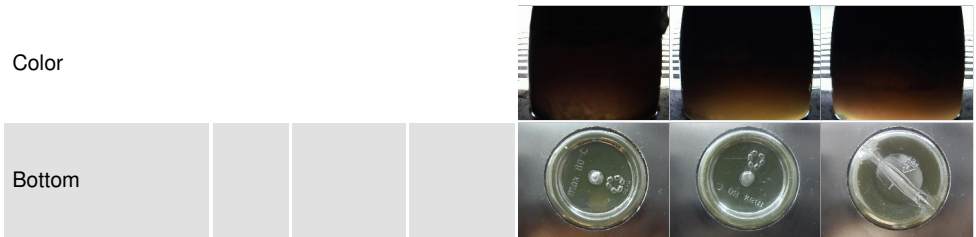
# OIL ANALYSIS REPORT



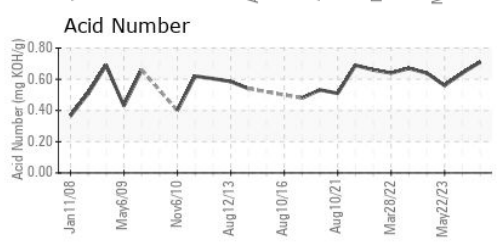
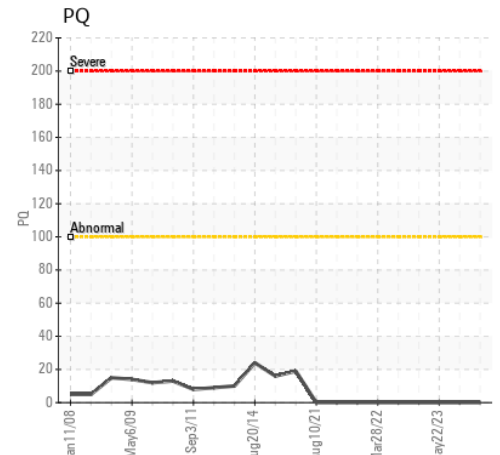
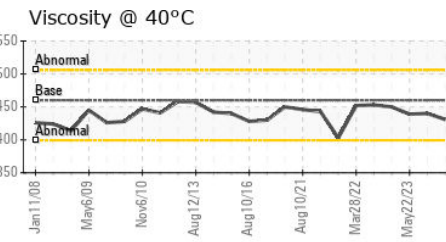
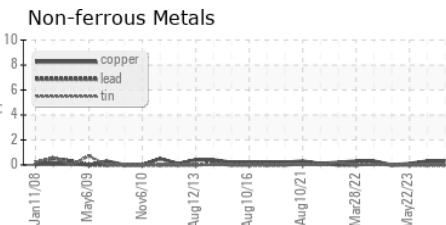
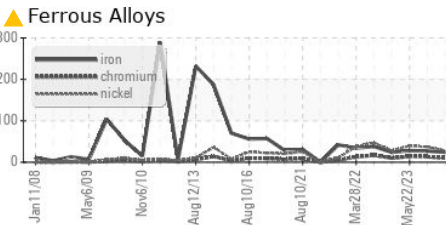
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	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)	460	431	440

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 HUSKY SEA ROSE /AKER SOLUTIONS  
**Sample No.** : PP **Received** : 26 Oct 2023  
**Lab Number** : 02592276 **Diagnosed** : 27 Oct 2023  
**Unique Number** : 5669355 **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

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.

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 T: x:  
 F: x: