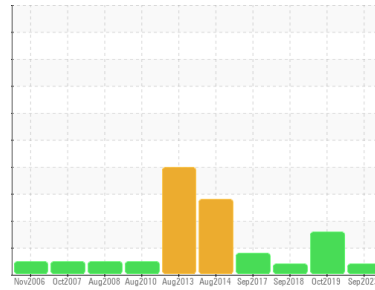




# PROBLEM SUMMARY

Sample Rating Trend



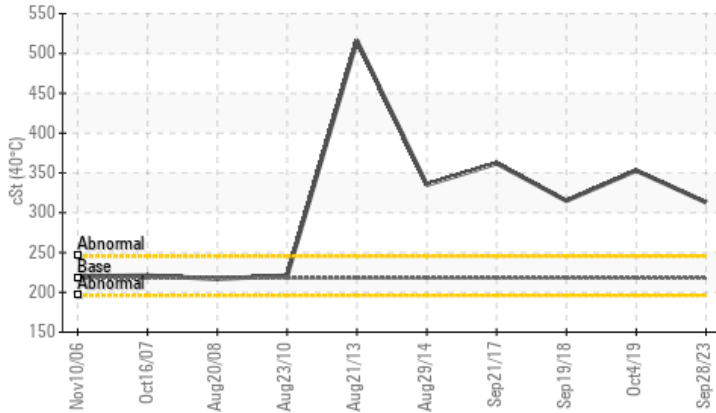
## VISCOSITY



Machine Id  
**EASAT YYZ-N-ASDE (S/N AR1750012)**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 630 (80 LTR)**

### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



### RECOMMENDATION

Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	SEVERE	ABNORMAL
Visc @ 40°C	cSt	ASTM D7279(m)	217.7	▲ 313	▲ 353	▲ 315

Customer Id: NAV605MIS  
 Sample No.: WC785062  
 Lab Number: 02587348  
 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

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

### 04 Oct 2019 Diag: Kevin Marson

#### ADDITIVES



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. All component wear rates are normal. Lithium (Li) level severe at 247 ppm., indicates possible grease contamination. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

view report



### 19 Sep 2018 Diag: Kevin Marson

#### VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 21 Sep 2017 Diag: Bill Quesnel

#### VISCOSITY



We advise that you check all areas where grease 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. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. **DISCLAIMER:** Interpretation of laboratory tests is based on sample, as received from client. Source of sample and sampling technique cannot be verified. All component wear rates are normal. Moderate concentration of grease present in the oil (suspect a lithium-based grease). Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid.

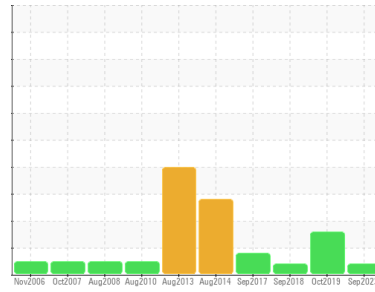
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**EASAT YYZ-N-ASDE (S/N AR1750012)**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 630 (80 LTR)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

Viscosity of sample indicates oil is within ISO 320 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC785062</b>	WC979536	WC782396
Sample Date	Client Info		<b>28 Sep 2023</b>	04 Oct 2019	19 Sep 2018
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	SEVERE	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	11	10
Iron	ppm	ASTM D5185(m) >200	<b>0</b>	24	12
Chromium	ppm	ASTM D5185(m) >15	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>0</b>	9	6
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >200	<b>&lt;1</b>	2	<1
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>&lt;1</b>	1	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	<b>0</b>	2	1
Calcium	ppm	ASTM D5185(m)	<b>&lt;1</b>	7	4
Phosphorus	ppm	ASTM D5185(m)	<b>409</b>	576	516
Zinc	ppm	ASTM D5185(m)	<b>&lt;1</b>	32	21
Sulfur	ppm	ASTM D5185(m)	<b>86</b>	304	155
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	247	155

### CONTAMINANTS

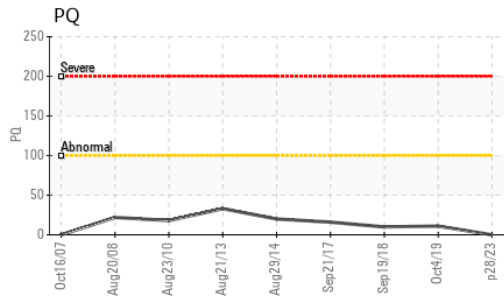
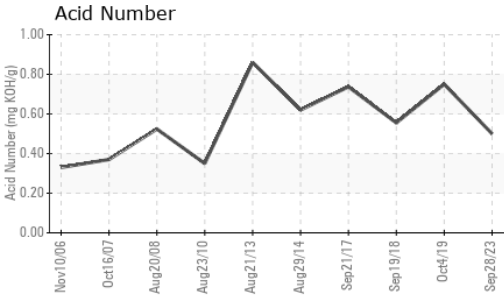
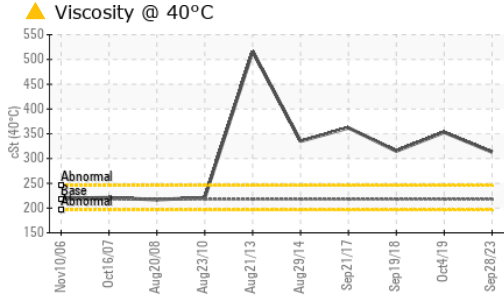
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>24</b>	42	29
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.50</b>	0.750	0.555



# 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	NONE	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*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	217.7 ▲ 313	▲ 353	▲ 315

SAMPLE IMAGES	method	limit/base	current	history1	history2
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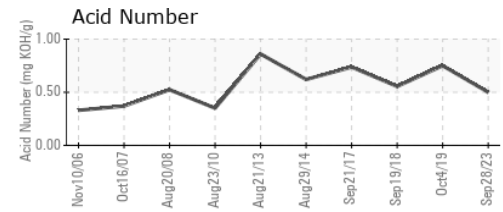
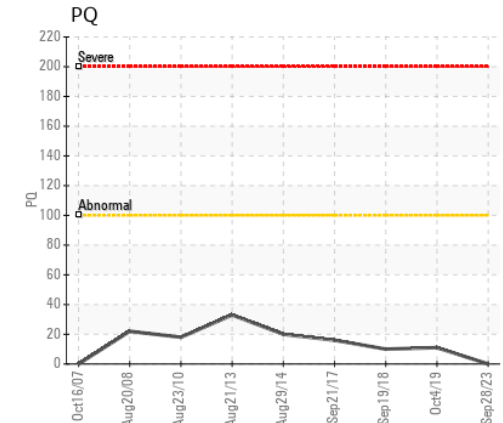
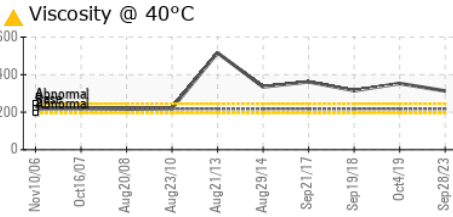
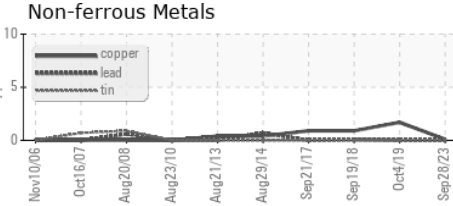
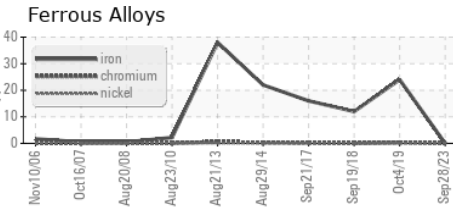
**Color**

**Bottom**

**PrtFilter**

no image      no image      no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC785062      **Received** : 05 Oct 2023  
**Lab Number** : 02587348      **Diagnosed** : 06 Oct 2023  
**Unique Number** : 5656414      **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**NAV CANADA**  
 6110 MIDFIELD ROAD  
 MISSISSAUGA, ON  
 CA L4W 2P7  
 Contact: Shawn Burke  
 shawn.burke@navcanada.ca  
 T: (905)676-3516  
 F: (905)676-4654

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.