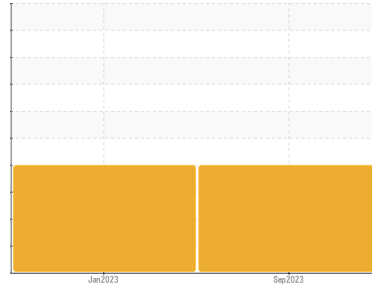




PROBLEM SUMMARY

Sample Rating Trend



ISO



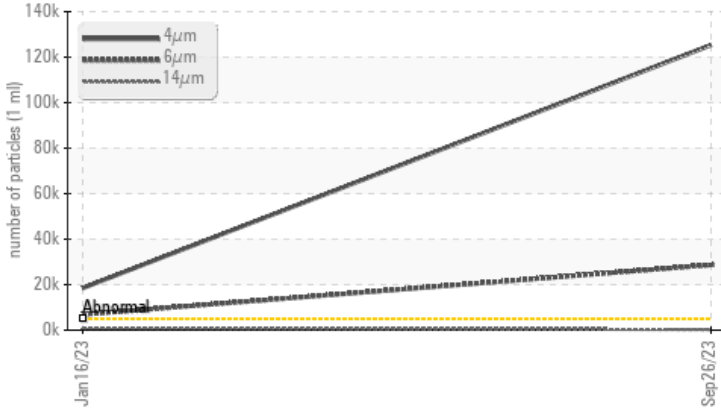
Machine Id
HEAD RIG

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

COMPONENT CONDITION SUMMARY

Particle Trend



RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Check seals and/or filters for points of contaminant entry. 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 you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	---
Particles >4µm	ASTM D7647	>5000	🔴 125332	🟡 18501	---
Particles >6µm	ASTM D7647	>1300	🔴 28662	🟡 6886	---
Particles >14µm	ASTM D7647	>160	🟡 215	🟡 933	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	🔴 24/22/15	🟡 21/20/17	---

Customer Id: ISLQUA
 Sample No.: WC0767897
 Lab Number: 02588905
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Alert	---	---	?	Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample. 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.

HISTORICAL DIAGNOSIS

ISO



16 Jan 2023 Diag: Kevin Marson

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We advise that you check all areas where contaminants 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. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. Particles >21µm are severely high. Particles >4µm are abnormally high. Particles >38µm are abnormally high. Particles >6µm are abnormally high. Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report





OIL ANALYSIS REPORT

Sample Rating Trend

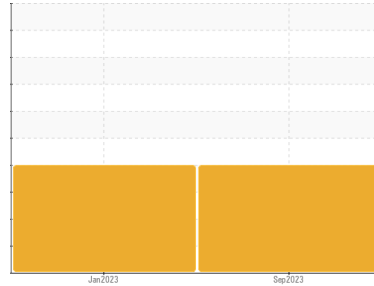
ISO



Machine Id
HEAD RIG

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)



DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Check seals and/or filters for points of contaminant entry. 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 you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

Sample Number	Client Info	method	limit/base	current	history1	history2
WC0767897	Client Info			WC0767897	WC0767895	---
26 Sep 2023	Client Info			26 Sep 2023	16 Jan 2023	---
25	Client Info			25	0	---
1	Client Info			1	0	---
Not Changed	Client Info			Not Changed	Not Changed	---
SEVERE	Client Info			SEVERE	SEVERE	---

WEAR METALS

Element	unit	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	4	<1	---
Chromium	ppm	ASTM D5185(m)	>20	0	0	---
Nickel	ppm	ASTM D5185(m)	>20	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		<1	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	0	---
Lead	ppm	ASTM D5185(m)	>20	2	<1	---
Copper	ppm	ASTM D5185(m)	>20	4	3	---
Tin	ppm	ASTM D5185(m)	>20	0	0	---
Antimony	ppm	ASTM D5185(m)		0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

Element	unit	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1	<1	---
Barium	ppm	ASTM D5185(m)	5	<1	0	---
Molybdenum	ppm	ASTM D5185(m)	5	0	<1	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)	25	0	1	---
Calcium	ppm	ASTM D5185(m)	200	126	54	---
Phosphorus	ppm	ASTM D5185(m)	300	346	359	---
Zinc	ppm	ASTM D5185(m)	370	441	399	---
Sulfur	ppm	ASTM D5185(m)	2500	2235	2134	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

Element	unit	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	3	2	---
Sodium	ppm	ASTM D5185(m)		0	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<1	0	---

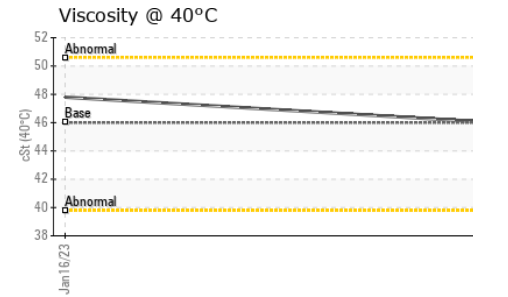
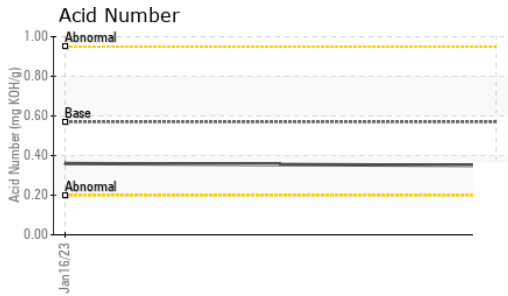
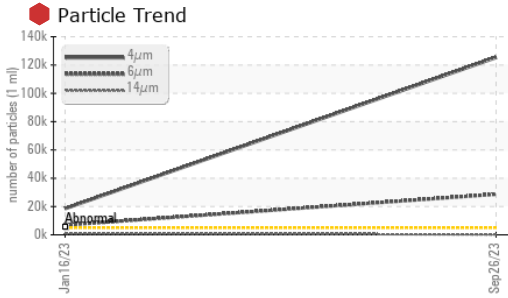
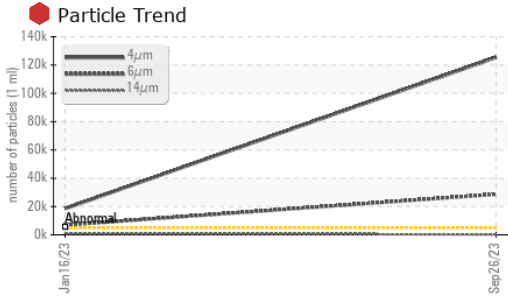
FLUID CLEANLINESS

Parameter	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	125332	18501	---
Particles >6µm	ASTM D7647	>1300	28662	6886	---
Particles >14µm	ASTM D7647	>160	215	933	---
Particles >21µm	ASTM D7647	>40	29	374	---
Particles >38µm	ASTM D7647	>10	2	36	---
Particles >71µm	ASTM D7647	>3	0	2	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	24/22/15	21/20/17	---

FLUID DEGRADATION

Parameter	unit	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.35	0.36	---

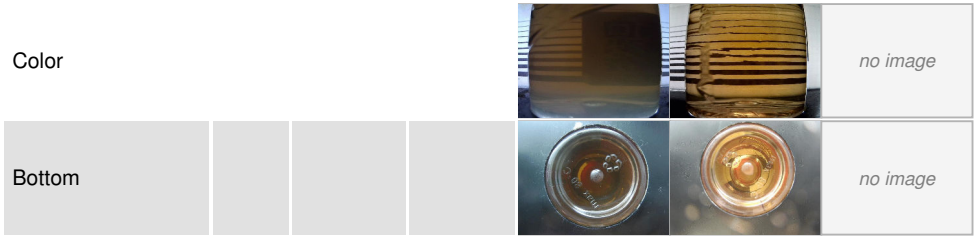
OIL ANALYSIS REPORT



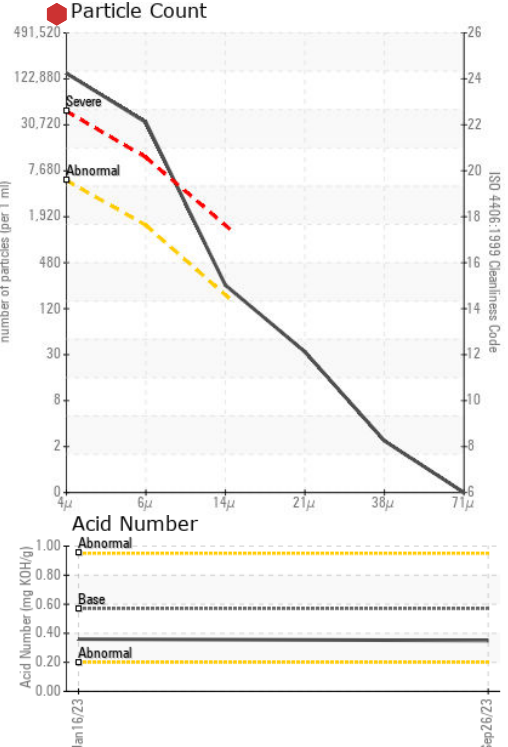
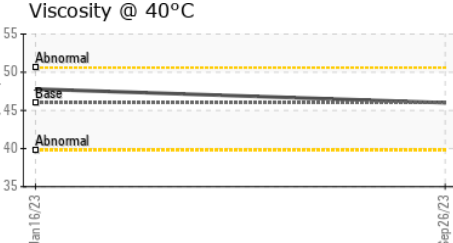
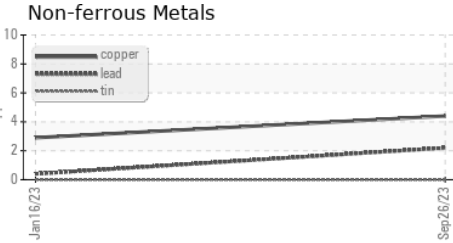
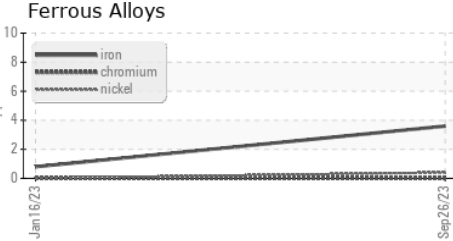
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	46.0	47.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0767897 **Received** : 13 Oct 2023
Lab Number : 02588905 **Diagnosed** : 16 Oct 2023
Unique Number : 5657971 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: TAN Man)

Island Hydrostatics Inc.
 1063 Centre Cres
 Qualicum Beach, BC
 CA V9K 2G6
 Contact: Justin Kovac
 islandhydrostatics@gmail.com
 T: (250)714-6174
 F:

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.