

Area

Vessel

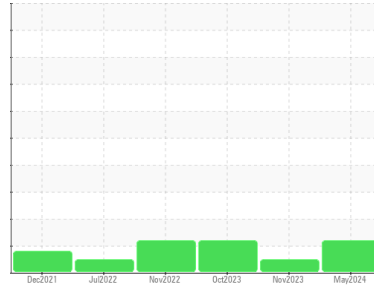
Machine Id
KAT 023 (AFT (MAIN WINCH) HYDRAULIC SERVO)

Component

Hydraulic System

Fluid

SHELL TELLUS 22 (500 LTR)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

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			PC0080251	PC0080316	PC0011771
Sample Date	Client Info			17 May 2024	22 Nov 2023	18 Oct 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				ATTENTION	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	NEG	NEG

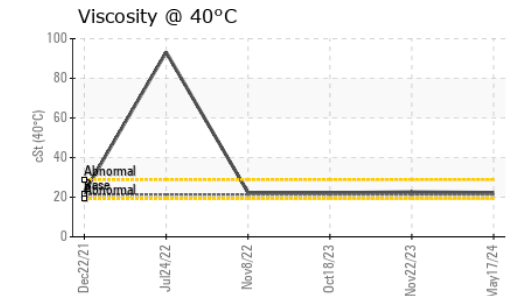
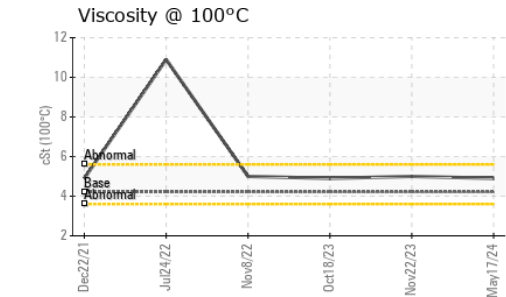
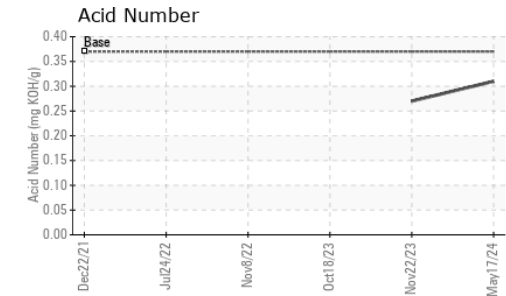
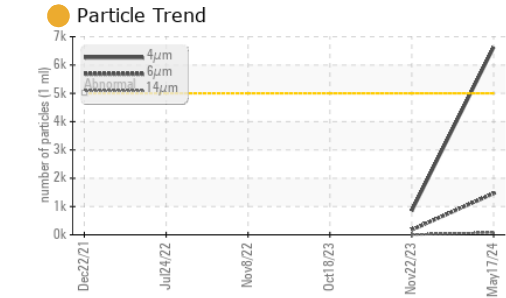
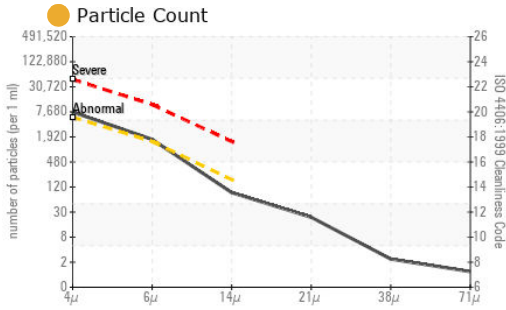
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	1	<1	1
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>10	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	0	<1	<1
Copper	ppm	ASTM D5185(m)	>20	5	2	5
Tin	ppm	ASTM D5185(m)	>10	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)		0	<1	<1
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	11	9	8	9
Calcium	ppm	ASTM D5185(m)	35	33	46	34
Phosphorus	ppm	ASTM D5185(m)	259	254	261	243
Zinc	ppm	ASTM D5185(m)	270	299	321	300
Sulfur	ppm	ASTM D5185(m)	1849	1247	1462	1310
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1	10	2
Sodium	ppm	ASTM D5185(m)		2	<1	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	6623	845	---	
Particles >6µm	ASTM D7647	>1300	1463	178	---	
Particles >14µm	ASTM D7647	>160	78	8	---	
Particles >21µm	ASTM D7647	>40	20	3	---	
Particles >38µm	ASTM D7647	>10	2	1	---	
Particles >71µm	ASTM D7647	>3	1	1	---	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	20/18/13	17/15/10	---	

OIL ANALYSIS REPORT

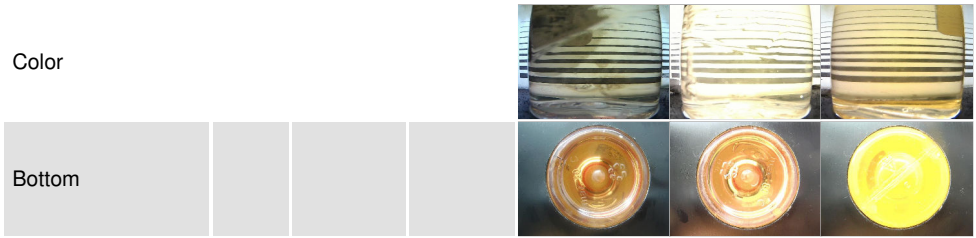


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.37	0.31	0.27	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	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*	>0.05	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)	21.33	22.3	22.6	▲ 22.2
Visc @ 100°C	cSt	ASTM D7279(m)	4.21	4.9	5	▲ 4.9
Viscosity Index (VI)	Scale	ASTM D2270*	99	149	155	▲ 151

SAMPLE IMAGES



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080251
Lab Number : **02637998**
Unique Number : 5787160
Test Package : IND 2 (Additional Tests: KV100, VI)

Ocean Choice International - Katsheshuk II
 1315 Topsail Rd, P.O. Box 8190
 St. John's, NL
 CA A1B 3N4

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.

Contact: Chief Engineer
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