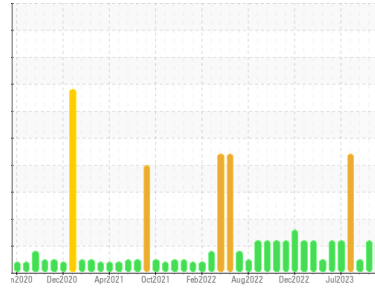




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
M13
 Machine Id
71-G-3300B MAIN POWER GENERATOR B (71-T-3580B) (S/N Maint Plan 22480)
 Component
Turbine
 Fluid
MOBIL DTE 846 (11708 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

Wear

Component wear rates appear to be normal (unconfirmed).

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

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

method	limit/base	current	history1	history2
Sample Number	Client Info	PP	PP	PP
Sample Date	Client Info	28 Nov 2023	16 Oct 2023	11 Sep 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ATTENTION	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >15	0	0	0
Chromium	ppm	ASTM D5185(m) >4	0	0	0
Nickel	ppm	ASTM D5185(m) >2	<1	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	<1	<1
Aluminum	ppm	ASTM D5185(m) >10	<1	<1	0
Lead	ppm	ASTM D5185(m)	0	0	<1
Copper	ppm	ASTM D5185(m) >5	<1	<1	<1
Tin	ppm	ASTM D5185(m) >5	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	0	<1
Barium	ppm	ASTM D5185(m)	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	0	0
Calcium	ppm	ASTM D5185(m)	<1	<1	0
Phosphorus	ppm	ASTM D5185(m)	1191	1206	1238
Zinc	ppm	ASTM D5185(m)	<1	<1	<1
Sulfur	ppm	ASTM D5185(m)	2	14	13
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

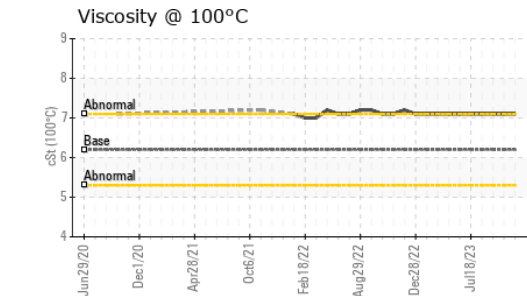
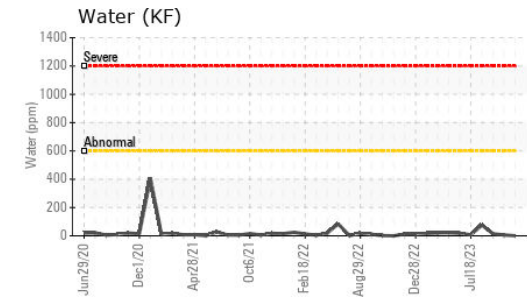
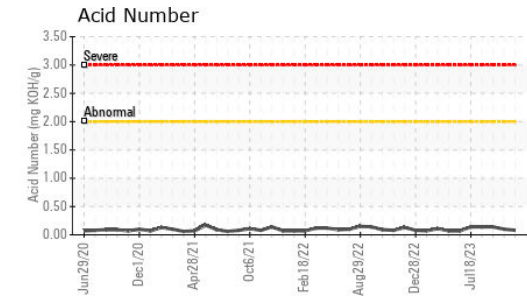
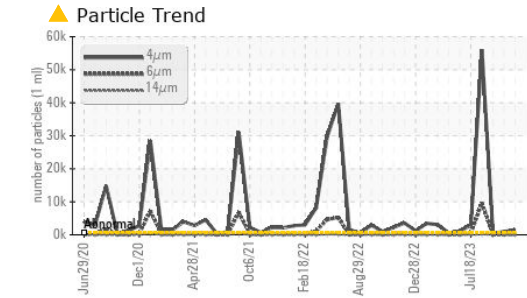
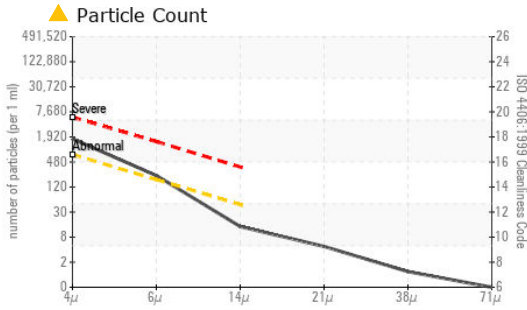
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >15	0	0	<1
Sodium	ppm	ASTM D5185(m)	0	0	0
Potassium	ppm	ASTM D5185(m) >20	2	0	<1
Water	%	ASTM D6304* >0.06	0.00	0.001	0.001
ppm Water	ppm	ASTM D6304* >600	0	6.2	14.3

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >640	▲ 1511	▲ 969	484
Particles >6µm	ASTM D7647 >160	▲ 200	▲ 201	130
Particles >14µm	ASTM D7647 >40	12	13	13
Particles >21µm	ASTM D7647 >10	4	4	3
Particles >38µm	ASTM D7647 >3	1	1	1
Particles >71µm	ASTM D7647 >3	0	1	1
Oil Cleanliness	ISO 4406 (c) >16/14/12	▲ 18/15/11	▲ 17/15/11	16/14/11



OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.08	0.10	0.14
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	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*	>0.06	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)	42.4	43.7	43.7	43.7
Visc @ 100°C	cSt	ASTM D7279(m)	6.2	7.1	7.1	7.1
Viscosity Index (VI)	Scale	ASTM D2270*	106	122	122	122

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 HUSKY SEA ROSE /AKER SOLUTIONS
Sample No. : PP
Lab Number : 02605888
Unique Number : 5706974
Test Package : IND 2 (Additional Tests: COC Flash, KV100, TAN Auto, VI)

Received : 02 Jan 2024
Diagnosed : 04 Jan 2024
Diagnostician : Kevin Marson

PO BOX 20
 ST. JOHN'S, NL
 CA A1C 6C9
 Contact: Nick Fewer
 nick.fewer@akersolutions.com
 T: (709)757-4582
 F: (709)722-8730

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.