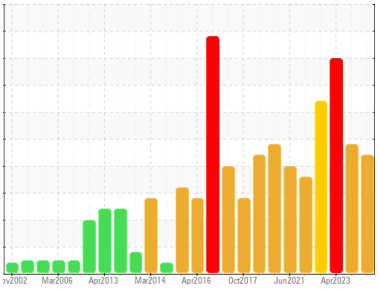
PROBLEM SUMMARY

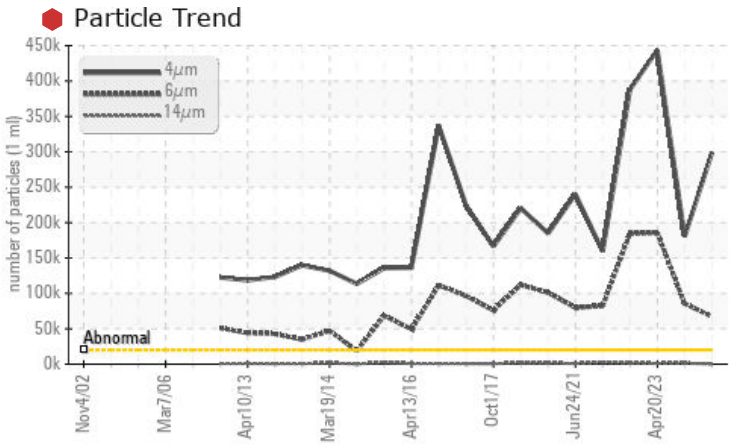
Sample Rating Trend

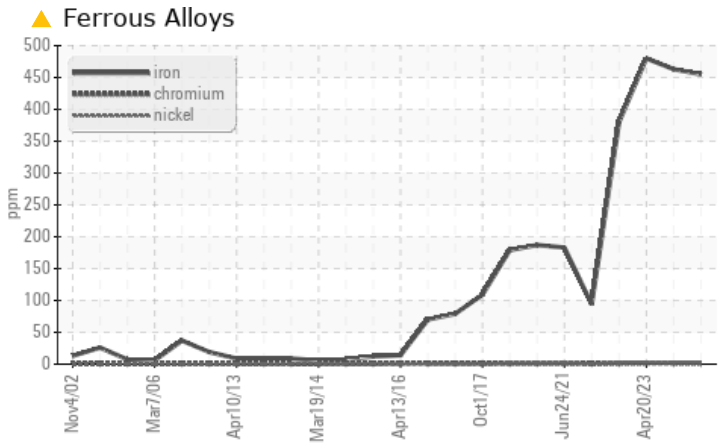


ISO

Area
Lime Kilns Route #1
Machine Id
PHILIDELPHIA 185HP-3 102311 Kiln #1 Main Drive Reducer
Component
Gear Reducer
Fluid
MOBIL MOBILGEAR 600 XP 320 (50 GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>150	▲ **455**	▲ 463	▲ 480
Particles >4µm		ASTM D7647	>20000	⬢ **298828**	⬢ 180403	⬢ 443697
Particles >6µm		ASTM D7647	>5000	⬢ **67355**	⬢ 85335	⬢ 185770
Oil Cleanliness		ISO 4406 (c)	>21/19/16	⬢ **25/23/14**	⬢ 25/24/18	⬢ 26/25/17

Customer Id: BEAING
Sample No.: WC0877626
Lab Number: 02609138
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

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.
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

16 Nov 2023 Diag: Kevin Marson

ISO

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.Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

20 Apr 2023 Diag: Kevin Marson

ISO

We advise that you check for the source of water entry. 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 advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

08 Oct 2022 Diag: Kevin Marson

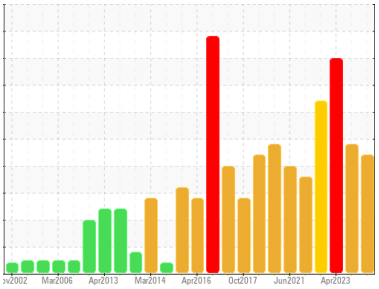
ISO

We advise that you check for the source of water entry. 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 advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. Particles >6µm are severely high. Oil Cleanliness are severely high. Particles >4µm are severely high. Particles >4µm are severely high.. Particles >14µm are abnormally high. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Lime Kilns Route #1
Machine Id
PHILIDELPHIA 185HP-3 102311 Kiln #1 Main Drive Reducer
Component
Gear Reducer
Fluid
MOBIL MOBILGEAR 600 XP 320 (50 GAL)

DIAGNOSIS

Recommendation

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.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

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 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		**WC0877626**	WC0868737	WC0804941
Sample Date		Client Info		**12 Dec 2023**	16 Nov 2023	20 Apr 2023
Machine Age	yrs	Client Info		**0**	0	0
Oil Age	yrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

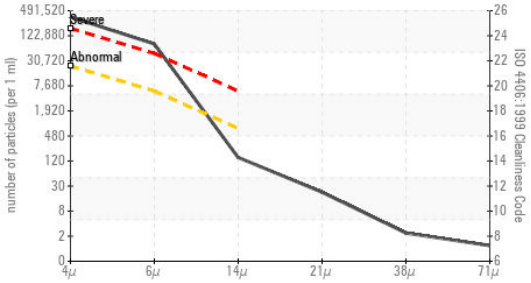
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**19**	31	43
Iron	ppm	ASTM D5185(m)	>150	▲ **455**	▲ 463	▲ 480
Chromium	ppm	ASTM D5185(m)	>10	**1**	1	2
Nickel	ppm	ASTM D5185(m)	>10	**3**	2	3
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>100	**0**	<1	<1
Copper	ppm	ASTM D5185(m)	>50	**1**	1	2
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
Antimony	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
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)		**15**	15	20
Barium	ppm	ASTM D5185(m)		**1**	2	1
Molybdenum	ppm	ASTM D5185(m)		**0**	0	<1
Manganese	ppm	ASTM D5185(m)		**6**	6	8
Magnesium	ppm	ASTM D5185(m)		**6**	5	8
Calcium	ppm	ASTM D5185(m)		**33**	32	38
Phosphorus	ppm	ASTM D5185(m)		**306**	304	335
Zinc	ppm	ASTM D5185(m)		**7**	7	11
Sulfur	ppm	ASTM D5185(m)		**11379**	11089	10915
Lithium	ppm	ASTM D5185(m)		**7**	7	9

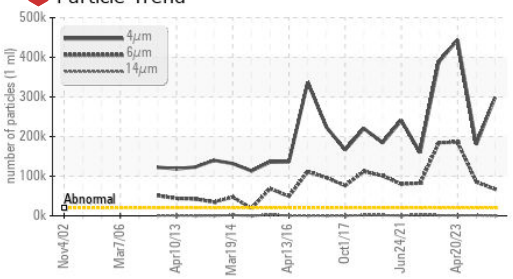
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**4**	4	6
Sodium	ppm	ASTM D5185(m)		**<1**	<1	1
Potassium	ppm	ASTM D5185(m)	>20	**3**	3	4

OIL ANALYSIS REPORT

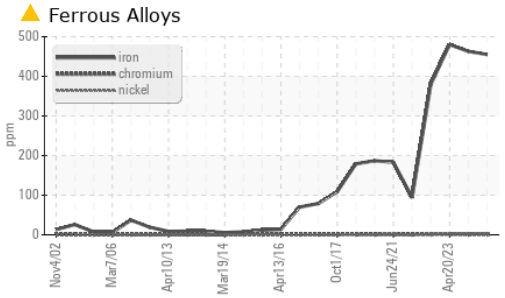
Particle Count



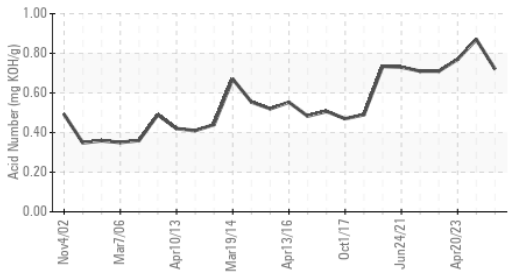
Particle Trend



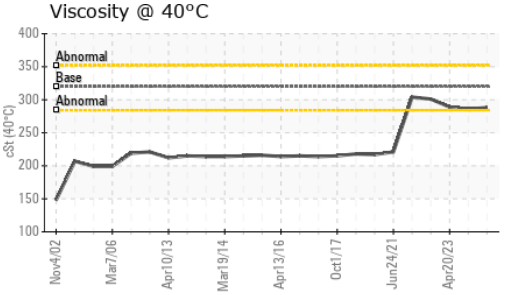
Ferrous Alloys



Acid Number



Viscosity @ 40°C



FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**298828**	180403	443697
Particles >6µm		ASTM D7647	>5000	**67355**	85335	185770
Particles >14µm		ASTM D7647	>640	**129**	1430	999
Particles >21µm		ASTM D7647	>160	**19**	184	124
Particles >38µm		ASTM D7647	>40	**2**	6	3
Particles >71µm		ASTM D7647	>10	**1**	1	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**25/23/14**	25/24/18	26/25/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.72**	0.87	0.77

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*	>0.1	**NEG**	NEG	.2%
Free Water	scalar	Visual*		**NEG**	NEG	1%

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	**288**	286	289

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
Sample No. : WC0877626 **Recieved** : 16 Jan 2024
Lab Number : 02609138 **Diagnosed** : 17 Jan 2024
Unique Number : 5710224 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

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.

CARMEUSE LIME
374681 OXFORD COUNTY ROAD 6,, P.O. BOX 190
INGERSOLL, ON
CA N5C 3K5
Contact: Jeff Geddes
jeff.geddes@carmeusena.com
T: (519)423-6283
F: (519)423-6568