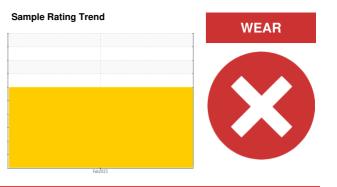


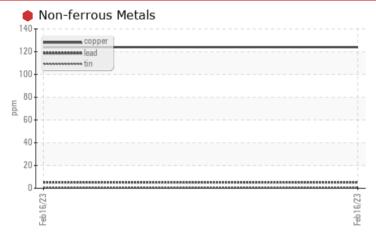
PROBLEM SUMMARY



KMGP UNIT 1

Component Outboard Pump Fluid ROYAL PURPLE SYNFILM GT 32 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Sample Status SEVERE Copper ppm ASTM D5185m >30 124	PROBLEMATIC T	EST RE	SULTS			
Copper ppm ASTM D5185m >30 124	Sample Status				SEVERE	
	Copper	ppm	ASTM D5185m	>30	e 124	

Customer Id: MAGHOU Sample No.: RP0028246 Lab Number: 05797611 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED AC	CTIONS			
Action	Status	Date	Done By	Description
Inspect Wear Source			?	We advise that you inspect for the source(s) of wear.
Change Filter			?	We recommend you service the filters on this component if applicable.
Resample			?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



KMGP UNIT 1

Component Outboard Pump Fluid ROYAL PURPLE SYNFILM GT 32 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

🛑 Wear

Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

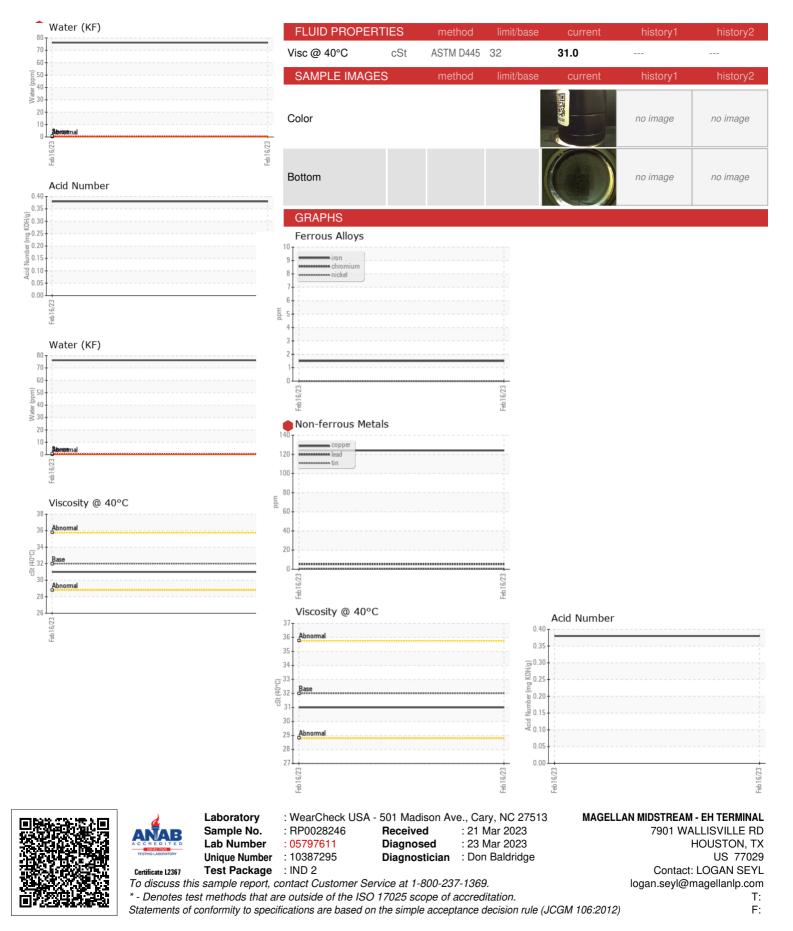
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATIONmethodlimit/basecurrenthistory1history1Sample NumberClient Info16 Feb 2023Sample DateClient Info0Machine AgehrsClient Info0Oil AgehrsClient Info0Oil ChangedClient InfoN/ASample StatusSEVEREWEAR METALSmethodlimit/basecurrenthistory1IronppmASTM D5185m<>902ChromiumppmASTM D5185m<>50NickelppmASTM D5185m<>3<-1SilverppmASTM D5185m<>30AluminumppmASTM D5185m<>125CopperppmASTM D5185m<>9<1VanadiumppmASTM D5185m<>9<1ADDITIVESmethodlimit/basecurrenthistory1hisBoronppmASTM D5185m0ManganeseppmASTM D5185m0ManganeseppmASTM D5185m25ManganeseppmASTM D5185m25ManganeseppmASTM D5185m3 <trr< th=""></trr<>
Sample DateClient Info16 Feb 2023Machine AgehrsClient Info0Oil AgehrsClient Info0Oil ChangedClient InfoN/ASample StatusImit/basecurrenthistory1history1VEAR METALSmethodimit/basecurrenthistory1history1IronppmASTM D5185m<>902NickelppmASTM D5185m<>50NickelppmASTM D5185m<>3<1SilverppmASTM D5185m<>30AluminumppmASTM D5185m<>30LeadppmASTM D5185m<>30124VanadiumppmASTM D5185m<>9<1VanadiumppmASTM D5185m<<00ADDITIVESmethodimit/basecurrenthistory1history1BoronppmASTM D5185m0MagneseppmASTM D5185m25ManganeseppmASTM D5185m25PhosphorusppmASTM D5185m25PhosphorusppmASTM D5185m25PhosphorusppmASTM D5185m25
Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info N/A Sample Status Imathematical Severe WEAR METALS method imit/base current history1 hist Iron ppm ASTM D5185m >90 2 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >3 <1
Machine Age hrs Client Info 0 Oil Age hrs Client Info N/A Oil Changed Client Info N/A Sample Status Image Client Info N/A WEAR METALS method limit/base current history1 history1 history1 Iron ppm ASTM D5185m >90 2 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Aluminum ppm ASTM D5185m >3 0 Lead ppm ASTM D5185m >3 0 Vanadium ppm ASTM D5185m >9 <1
Oil Changed Sample StatusClient InfoN/AWEAR METALSmethodlimit/basecurrenthistory1histIronppmASTM D5185m>902ChromiumppmASTM D5185m>50NickelppmASTM D5185m>50TitaniumppmASTM D5185m>3<1
Oil ChangedClient InfoN/ASample StatusImat/DescriptionSEVEREImat/DescriptionWEAR METALSmethodimit/basecurrenthistory1history1IronppmASTM D5185m>902ChromiumppmASTM D5185m>50NickelppmASTM D5185m>50TitaniumppmASTM D5185m>30SilverppmASTM D5185m>30AluminumppmASTM D5185m>7<1
WEAR METALS method limit/base current history1 his Iron ppm ASTM D5185m >90 2 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Titanium ppm ASTM D5185m >3 <1
Iron ppm ASTM D5185m >90 2 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Titanium ppm ASTM D5185m >3 <1
Iron ppm ASTM D5185m >90 2 Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Titanium ppm ASTM D5185m >3 <1 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >3 0 Lead ppm ASTM D5185m >7 <1 Copper ppm ASTM D5185m >12 5 Yanadium ppm ASTM D5185m >9 <1 Vanadium ppm ASTM D5185m >9 <1 Cadmium ppm ASTM D5185m 0 Boron ppm ASTM D5185m 0 Molybdenum ppm ASTM D
Chromium ppm ASTM D5185m >5 0 Nickel ppm ASTM D5185m >5 0 Titanium ppm ASTM D5185m >3 <1
Nickel ppm ASTM D5185m >5 0 Titanium ppm ASTM D5185m >3 <1
Titanium ppm ASTM D5185m >3 <1
Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >7 <1
Aluminum ppm ASTM D5185m >7 <1
Lead ppm ASTM D5185m >12 5 Copper ppm ASTM D5185m >30 124 Tin ppm ASTM D5185m >9 <1
Copper ppm ASTM D5185m >30 124 Tin ppm ASTM D5185m >9 <1
Tin ppm ASTM D5185m >9 <1 Vanadium ppm ASTM D5185m <1 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 his Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Maganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 25 Calcium ppm ASTM D5185m 0 Phosphorus ppm ASTM D5185m 24 CONTAMINANTS method limit/base current history1 history1
VanadiumppmASTM D5185m<1CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1BoronppmASTM D5185m0BariumppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m<1
CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1hisBoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m<1
ADDITIVESmethodlimit/basecurrenthistory1hisBoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m<1
Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m <1
Molybdenum ppm ASTM D5185m <1 Manganese ppm ASTM D5185m <1
Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 25 Calcium ppm ASTM D5185m 0 Phosphorus ppm ASTM D5185m 3 Zinc ppm ASTM D5185m 24 CONTAMINANTS method limit/base current history1 history1
Magnesium ppm ASTM D5185m 25 Calcium ppm ASTM D5185m 0 Phosphorus ppm ASTM D5185m 3 Zinc ppm ASTM D5185m 24 CONTAMINANTS method limit/base current history1 hist
CalciumppmASTM D5185m0PhosphorusppmASTM D5185m3ZincppmASTM D5185m24CONTAMINANTSmethodlimit/basecurrenthistory1history1
Phosphorus ppm ASTM D5185m 3 Zinc ppm ASTM D5185m 24 CONTAMINANTS method limit/base current history1 history1
Zinc ppm ASTM D5185m 24 CONTAMINANTS method limit/base current history1 his
CONTAMINANTS method limit/base current history1 his
Silicon ppm ASTM D5185m >60 2
Sodium ppm ASTM D5185m <1
Potassium ppm ASTM D5185m >20 0
Water % ASTM D6304 0.007
ppm Water ppm ASTM D6304 >.1 76.2
FLUID DEGRADATION method limit/base current history1 his
Acid Number (AN) mg KOH/g ASTM D8045 0.38
VISUAL method limit/base current history1 his
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 LIGHT
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONE
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORML
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORML
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORML



OIL ANALYSIS REPORT



Contact/Location: LOGAN SEYL - MAGHOU