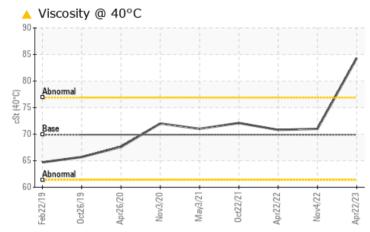
# **PROBLEM SUMMARY**

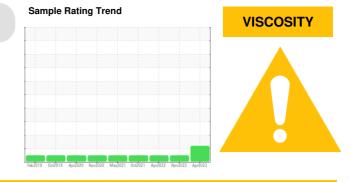
### Area NFDM [1718886] Machine Id PT12PP02BB01 Component

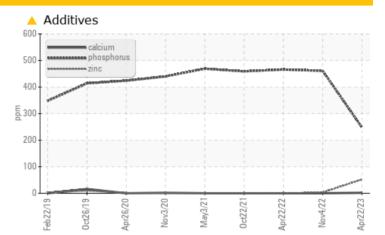
**JEA** 

Bearing Fluid MOBIL SHC 626 (--- QTS)

## COMPONENT CONDITION SUMMARY







### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS										
Sample Status				ATTENTION	NORMAL	NORMAL				
Phosphorus	ppm	ASTM D5185m		<u> </u>	461	466				
Sulfur	ppm	ASTM D5185m		<b>A</b> 1343	29	0				
Visc @ 40°C	cSt	ASTM D445	69.9	<u> </u>	71.0	70.8				

Customer Id: LEPGRE Sample No.: WC0805925 Lab Number: 05833312 Test Package: IND 1



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

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

### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

## 04 Nov 2022 Diag: Wes Davis



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



## 22 Apr 2022 Diag: Wes Davis



 $\checkmark$ 

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



22 Oct 2021 Diag: Don Baldridge

#### NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





## **OIL ANALYSIS REPORT**

### Area **NFDM** [1718886] Machine Id **PT12PP02BB01** Component

Bearing Fluid

MOBIL SHC 626 (--- QTS)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

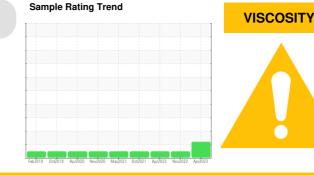
All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

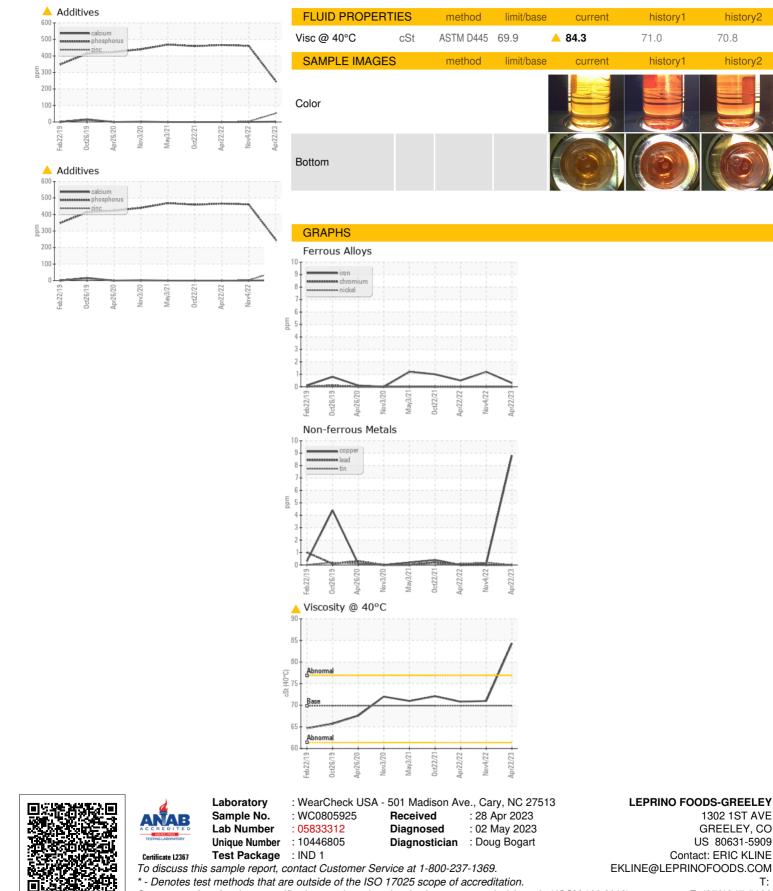
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.



Oil Changed Sample Status         Client Info         N/A         N/A         N/A         N/A           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         <1         1         <1           Chromium         ppm         ASTM D5185m         >15         0         0         0           Nickel         ppm         ASTM D5185m         >15         0         0         0           Silver         ppm         ASTM D5185m         >15         0         0         0           Lead         ppm         ASTM D5185m         >225         0         <1         <1           Aluminum         ppm         ASTM D5185m         >200         9         <1         <1           Lead         ppm         ASTM D5185m         >200         9         <1         <1           Vanadium         ppm         ASTM D5185m         >5              Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0 <td< th=""><th>SAMPLE INFORM</th><th>IATION</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine AgeClient Info111Oil AgeClient Info1111Oil ChangedClient InfoN/AN/AN/ASample StatusClient InfoN/ANORMALNORMALWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185m>200<11<1ChromiumppmASTM D5185m>15000NickelppmASTM D5185m>250<1<1ItaniumppmASTM D5185m>250<1<1LeadppmASTM D5185m>250<1<1CopperppmASTM D5185m>250<1<1AtimonyppmASTM D5185m>250<1<1VanadiumppmASTM D5185m>2009<100CopperppmASTM D5185m>2009<100TinppmASTM D5185m55AntimonyppmASTM D5185m00000RadiumppmASTM D5185m00000AdminumppmASTM D5185m00000BaronppmASTM D5185m20000AdminumppmASTM D5185m20000Baron	Sample Number		Client Info		WC0805925	WC0745804	WC0693958
Oil Age     Client Info     1     1     1       Oil Changed     Client Info     N/A     N/A     N/A       Sample Status     Image     Image     Client Info     N/A     N/A     N/A       WEAR METALS     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >200     <1     1     <1       Chromium     ppm     ASTM D5185m     >15     0     0     0       Nickel     ppm     ASTM D5185m     >15     0     0     0       Silver     ppm     ASTM D5185m     >200     9     <1     <1       Lead     ppm     ASTM D5185m     >200     9     <1     0       Copper     ppm     ASTM D5185m     >200     9     <1     0       Antimony     ppm     ASTM D5185m     >200     9     <1     0       Antimony     ppm     ASTM D5185m     >200     0     0     0       Antimony     ppm     ASTM D5185m     0     0     0     0       Astm D5185m     ppm     ASTM D5185m     0     0     0     0       Astm D5185m     ppm     ASTM D5185m     0     <1	Sample Date		Client Info		22 Apr 2023	04 Nov 2022	22 Apr 2022
Oli Changed Sample StatusClient InfoN/AN/AN/AN/AWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185>200<11<1ChromiumppmASTM D5185>15000NickelppmASTM D5185>15000TitaniumppmASTM D5185>15000SilverppmASTM D5185>250<1<1AuminumppmASTM D5185>250<1<1LeadppmASTM D5185>250<1<1AtimonyppmASTM D5185>250<1<1VanadiumppmASTM D5185>5<VanadiumppmASTM D5185>5<VanadiumppmASTM D51850000Astm D5185>5<VanadiumppmASTM D51850000BoronppmASTM D51850000MalybdenumpmASTM D51852000MaganeseppmASTM D51852000MaganeseppmASTM D51852000SulfurpmASTM D5185200<11MolybdenumpmASTM D5185 </th <th>Machine Age</th> <th></th> <th>Client Info</th> <th></th> <th>1</th> <th>1</th> <th>1</th>	Machine Age		Client Info		1	1	1
Sample Status         Image: method         Imit/base         Current         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         <1         1         <1           Chromium         ppm         ASTM D5185m         >15         0         0         0           Nickel         ppm         ASTM D5185m         >15         0         0         0           Silver         ppm         ASTM D5185m         >25         0         <1         <1           Aluminum         ppm         ASTM D5185m         >25         0         <1         <1           Lead         ppm         ASTM D5185m         >200         9         <1         0           Tin         ppm         ASTM D5185m         >20         <1         <1         <1           Antimony         ppm         ASTM D5185m         20         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0	Oil Age		Client Info		1	1	1
WEAR METALS         method         limi/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         <1         1         <1           Chromium         ppm         ASTM D5185m         >15         0         0         0           Nickel         ppm         ASTM D5185m         >15         0         0         0           Silver         ppm         ASTM D5185m         >20         <1         <1         <1           Lead         ppm         ASTM D5185m         >200         9         <1         0         0           Copper         ppm         ASTM D5185m         >200         9         <1         0         0           Antimony         ppm         ASTM D5185m         >200         9         <1         0         0         0           Antimony         ppm         ASTM D5185m         >20         0	Oil Changed		Client Info		N/A	N/A	N/A
IronppmASTM D5185m>200<1	Sample Status				ATTENTION	NORMAL	NORMAL
ChromiumppmASTM D5185m>15000NickelppmASTM D5185m>15000SilverppmASTM D5185m0<1<1ppmASTM D5185m>20<1<1<1LeadppmASTM D5185m>209<10CopperppmASTM D5185m>2009<10TinppmASTM D5185m>250<1<1AntimonyppmASTM D5185m>55<1VanadiumpmASTM D5185m0000CadmiumppmASTM D5185m0000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0000MagnesiumppmASTM D5185m0000MagnesiumppmASTM D5185m2000PhosphorusppmASTM D5185m2300SulfurppmASTM D5185m2300SulfurppmASTM D5185m20-11SulfurppmASTM D5185m2300SulfurppmASTM D5185m2300SulfurppmASTM D5185m2300SulfurppmASTM D5185m20-1<	WEAR METALS		method	limit/base	current	history1	history2
NickelppmASTM D5185m>15000TitaniumppmASTM D5185m0<1	Iron	ppm	ASTM D5185m	>200	<1	1	<1
Titanium         ppm         ASTM D5185m         0         0         0           Silver         ppm         ASTM D5185m         0         <1	Chromium	ppm	ASTM D5185m	>15	0	0	0
SilverppmASTM D5185m0<1<1AluminumppmASTM D5185m>250<1	Nickel	ppm	ASTM D5185m	>15	0	0	0
Aluminum         ppm         ASTM D5185m         >25         0         <1         <1           Lead         ppm         ASTM D5185m         >100         0         0         0           Copper         ppm         ASTM D5185m         >200         9         <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead         ppm         ASTM D5185m         >100         0         0         0           Copper         ppm         ASTM D5185m         >200         9         <1	Silver	ppm	ASTM D5185m		0	<1	<1
Copper         ppm         ASTM D5185m         >200         9         <1         0           Tin         ppm         ASTM D5185m         >25         0         <1	Aluminum	ppm	ASTM D5185m	>25	0	<1	<1
TinppmASTM D5185m>250<1<1AntimonyppmASTM D5185m>5VanadiumppmASTM D5185m0000CadmiumppmASTM D5185m0000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0000BariumppmASTM D5185m0000MolybdenumppmASTM D5185m1<1	Lead	ppm	ASTM D5185m	>100	0	0	0
TinppmASTM D5185m>250<1<1AntimonyppmASTM D5185m>5VanadiumppmASTM D5185m0000CadmiumppmASTM D5185m0000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0000BariumppmASTM D5185m0000MolybdenumppmASTM D5185m1<1	Copper	ppm	ASTM D5185m	>200	9	<1	0
VanadiumppmASTM D5185m000CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0000BariumppmASTM D5185m0000MolybdenumppmASTM D5185m0000ManganeseppmASTM D5185m2000ManganeseppmASTM D5185m2000CalciumppmASTM D5185m2000PhosphorusppmASTM D5185m2000SulfurppmASTM D5185m52300SulfurppmASTM D5185m52300CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1		ppm	ASTM D5185m	>25	0	<1	<1
CadmiumppmASTM D5185m00ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m000BariumppmASTM D5185m0<1	Antimony	ppm	ASTM D5185m	>5			
CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m000BariumppmASTM D5185m000MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m200CalciumppmASTM D5185m200MagnesiumppmASTM D5185m200CalciumppmASTM D5185m200PhosphorusppmASTM D5185m200SulfurppmASTM D5185m5230SulfurppmASTM D5185m41343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1		ppm	ASTM D5185m		0	0	0
BoronppmASTM D5185m000BariumppmASTM D5185m0<1	Cadmium	ppm	ASTM D5185m		0	0	0
BariumppmASTM D5185m0<1	ADDITIVES		method	limit/base	current	history1	history2
MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m0MagnesiumppmASTM D5185m200CalciumppmASTM D5185m200PhosphorusppmASTM D5185m200PhosphorusppmASTM D5185m248461466ZincppmASTM D5185m2230SulfurppmASTM D5185m1343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5001VOLVALmethodlimit/basecurrenthistory1history2VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORLNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLNORML	Boron	ppm	ASTM D5185m		0	0	0
ManganeseppmASTM D5185m<1<1<10MagnesiumppmASTM D5185m200CalciumppmASTM D5185m200PhosphorusppmASTM D5185m248461466ZincppmASTM D5185m5230SulfurppmASTM D5185m1343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Barium	ppm	ASTM D5185m		0	<1	0
MagnesiumppmASTM D5185m200CalciumppmASTM D5185m200PhosphorusppmASTM D5185m248461466ZincppmASTM D5185m5230SulfurppmASTM D5185m1343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Molybdenum	ppm	ASTM D5185m		0	0	0
CalciumppmASTM D5185m200PhosphorusppmASTM D5185m▲ 248461466ZincppmASTM D5185m▲ 248461466ZincppmASTM D5185m5230SulfurppmASTM D5185m▲ 1343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Manganese	ppm	ASTM D5185m		<1	<1	0
PhosphorusppmASTM D5185m248461466ZincppmASTM D5185m5230SulfurppmASTM D5185m1343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Magnesium	ppm	ASTM D5185m		2	0	0
ZincppmASTM D5185m5230SulfurppmASTM D5185m1343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Calcium	ppm	ASTM D5185m		2	0	0
SulfurppmASTM D5185mI 343290CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Phosphorus	ppm	ASTM D5185m		<u> </u>	461	466
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>500<1	Zinc	ppm	ASTM D5185m		52	3	0
SiliconppmASTM D5185m>500<1	Sulfur	ppm	ASTM D5185m		<b>A</b> 1343	29	0
SodiumppmASTM D5185m0<1	CONTAMINANTS		method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>200<11VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Silicon	ppm	ASTM D5185m	>50	0	<1	<1
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Sodium	ppm	ASTM D5185m		0	<1	0
White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Potassium	ppm	ASTM D5185m	>20	0	<1	1
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Precipitate	scalar		NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor         scalar         *Visual         NORML         NORML         NORML         NORML         NORML           Emulsified Water         scalar         *Visual         >0.2         NEG         NEG         NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
-		scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG



# **OIL ANALYSIS REPORT**



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: MICHAEL VILLASENOR

Page 4 of 4

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history2

history2

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