

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend





### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### **Fluid Condition**

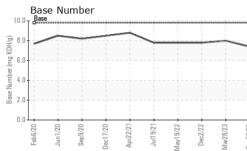
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

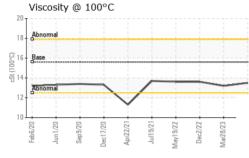
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L)		Feb2020 Jun2	020 Sep2020 Dec2020 Apr2	021 Jul2021 May2022 Dec2022 Mar2	023 Sep2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0082844	PCA0069575	PCA0069293
Sample Date		Client Info		26 Sep 2023	28 Mar 2023	02 Dec 2022
Machine Age	hrs	Client Info		0	8578	5420
Dil Age	hrs	Client Info		0	3158	5420
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	12	11	11
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	0	4	2
Lead	ppm	ASTM D5185m	>40	4	2	5
Copper	ppm	ASTM D5185m		<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	4	3
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m ASTM D5185m		63 <1	65 <1	63 <1
Manganese Magnesium	ppm ppm	ASTM D5185m		874	999	1078
Calcium	ppm	ASTM D5185m		1058	1226	1269
Phosphorus	ppm	ASTM D5185m		987	1068	1095
Zinc	ppm	ASTM D5185m		1163	1299	1460
Sulfur	ppm	ASTM D5185m		2854	3463	3989
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	6
Sodium	ppm	ASTM D5185m		0	2	1
Potassium	ppm	ASTM D5185m	>20	4	3	5
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.5	9.9	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	20.1	20.8
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	16.4	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.4	8.0	7.8



# **OIL ANALYSIS REPORT**

VISUAL





I		VISUAL		metrioa	iimii/base	current	nistory i	nistory2
		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
Jul19/21	May 19/22 Dec2/22 Mar28/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
April	De Mar	Ödor	scalar	*Visual	NORML	NORML	NORML	NORML
		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
		Free Water	scalar	*Visual		NEG	NEG	NEG
		FLUID PROPI	ERTIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D445	15.6	13.5	13.2	13.6
-		GRAPHS						
		Ferrous Alloys						
721+-	22	12 iron	$\frown$					
Jul19/21	May 19/22 Dec2/22 Mar28/23	10-		$\sim$				
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		Feb6/20 Jun1/20 Sep9/20 Dec17/20	Apr22/21 Jul19/21	May19/22 Dec2/22 Mar28/23	Sep26/23			
		Non-ferrous Meta		2 2	0,			
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		Feb6/20 - Jun1/20 - Sep9/20 -	Apr22/21- Jul19/21-	May19/22 - Dec2/22 - Mar28/23 -	Sep26/23 -			
				May1 Dec Mar2	Sep2			
		Viscosity @ 100°	С		Base N	Base Number		
		18 Abnormal			10	0 Base		
		17-			- 8	.0-	$\sim$	
		16 Base			E E E	i i i		
		16 Base			e KOH	.0 -		
		16 - <b>Base</b> 0 15	_		e mper (mg KOH			
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		16 Base 0015 14 13 Abnomal	$\checkmark$		0	0		
		16 Base 3-15 3-14 13 12 11 10	19/21	9,22	0	0	7/20 22/21 19/21 9/22	.2722 .8723 -
		16-Base 3-15- 3-15- 3-14- 3- 4bnormal 12- 11-	Apr22/21	May19/22	0	0	Deci 1/20 + Apr22/21 + Jull 9/21 + Mav19/22 +	Dec2/22 Mar28/23
	l shorotor:	Base (1-001) tso 12 14 10 10 10 10 10 10 10 10 10 10 10 10 10			0 Sep26/23	Feb6/20 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
	Laboratory Sample No.	Base ()-001/30 13 		son Ave., Ca	0 Sep26/23	Feb6/20 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	APPLE VALLE	Y READY M
NAB		Base 1015 114 Abnormal 12 10 027 14 007 14 14 14 14 15 15 15 15 15 15 15 15 15 15	501 Madis	son Ave., Ca 1 : 16 (	ry, NC 2751	Feb6/20 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	APPLE VALLE 14698	
	Sample No.	: WearCheck USA - : PCA0082844 r : 05979436 er : 10696731	501 Madis Received	son Ave., Ca 1 : 16 ( ad : 17 (	ry, NC 2751 Doct 2023	Feb6/20 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	APPLE VALLE 14698 APPLI	<b>Y READY M</b> GALAXY AV

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

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