

## FLEET 2227084. N643758 **Bottom Diesel Engine** DIESEL ENGINE OIL SAE 30 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

## CONTAMINATION

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

-	Test	UOM	Method	Limit/Abn	Current	History1	History2
5	Sample Number		Client Info		PCA0123609	PCA0112314	PCA0108160
5	Sample Date		Client Info		01 May 2024	23 Dec 2023	30 Oct 2023
	Machine Age	hrs	Client Info		0	0	0
C	Oil Age	hrs	Client Info		0	0	0
F	Filter Age	hrs	Client Info		0	0	0
C	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				NORMAL	ABNORMAL	ABNORMAL
I	ron	ppm	ASTM D5185m	>100	23	16	38
(	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
1	Nickel	ppm	ASTM D5185m	>4	4	3	3
	Titanium	ppm	ASTM D5185m		0	0	<1
9	Silver	ppm	ASTM D5185m	>3	<1	4	18
1	Aluminum	ppm	ASTM D5185m	>20	5	9	27
l	_ead	ppm	ASTM D5185m	>40	0	0	0
(	Copper	ppm	ASTM D5185m	>330	172	<b>A</b> 390	152
-	Tin	ppm	ASTM D5185m	>15	0	2	4
١	Vanadium	ppm	ASTM D5185m		0	0	0
١	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
`	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Silicon	ppm	ASTM D5185m	>25	6	11	<u>▲</u> 56
	Potassium	ppm	ASTM D5185m	>20	16	15	71
	Fuel	%	ASTM D3524	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
(	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.1	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	10.9	9.1	10.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	19.6	24.8
	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
E	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
ę	Sodium	ppm	ASTM D5185m	>75	5	0	4
	Boron	ppm	ASTM D5185m	250	2	13	187
	Barium	ppm	ASTM D5185m	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	63	68	117
	Vanganese	ppm	ASTM D5185m		<1	2	3
	Magnesium	ppm	ASTM D5185m	450	913	887	637
	Calcium	ppm	ASTM D5185m	3000	1211	1088	1397
	Phosphorus	ppm	ASTM D5185m	1150	935	933	551
	Zinc	ppm	ASTM D5185m	1350	1138	1156	777
	Sulfur	ppm	ASTM D5185m	4250	2514	2543	2172
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	16.7	22.9
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.0	6.4	7.5
	Visc @ 100°C	cSt	ASTM D445	10.9	10.5	10.4	9.3
		501	. 10 1 10 0 1 10	10.0	10.0	10.7	0.0

WEAR

CONTAMINATION

FLUID CONDITION

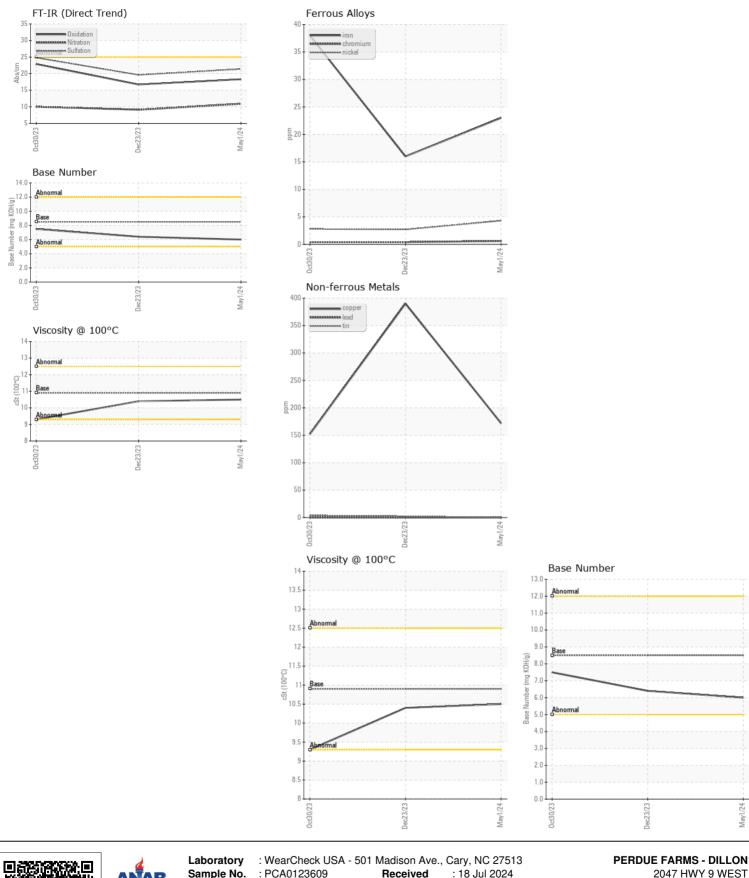
NORMAL

NORMAL

NORMAL

## **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.



Sample No. : PCA0123609 Received 2047 HWY 9 WEST : 18 Jul 2024 Lab Number : 06240115 Tested DILLON, SC : 19 Jul 2024 Unique Number : 11128949 Diagnosed : 19 Jul 2024 - Wes Davis US 29536 Test Package : FLEET (Additional Tests: FuelDilution) Contact: KEVIN HOOKS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. kevin.hooks@perdue.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (843)841-8069 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (843)841-8070