



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**FSP137688 (S/N 3HAMMMMN7KL056814)**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (18 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0875713</b>	WC0875854	WC0787816
Sample Date		Client Info		<b>11 Jan 2024</b>	19 Nov 2023	14 Aug 2023
Machine Age	mls	Client Info		<b>0</b>	0	122473
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>16</b>	18	16
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>9</b>	13	9
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	3	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

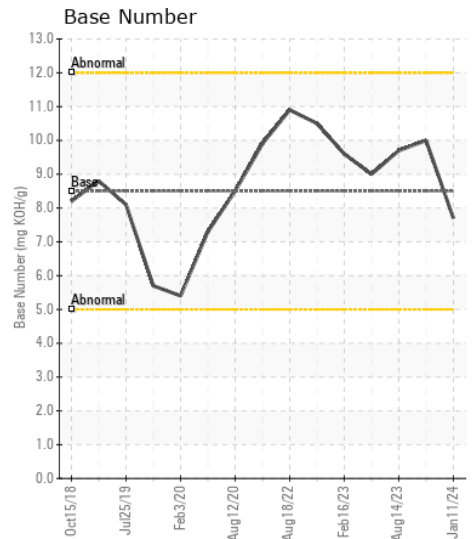
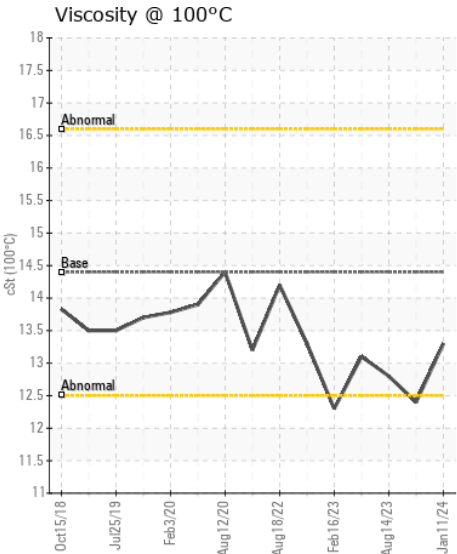
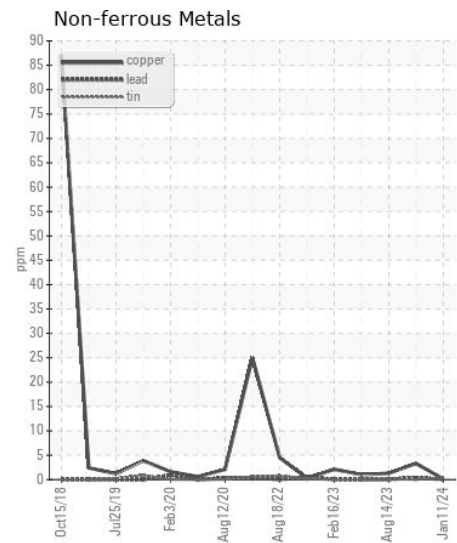
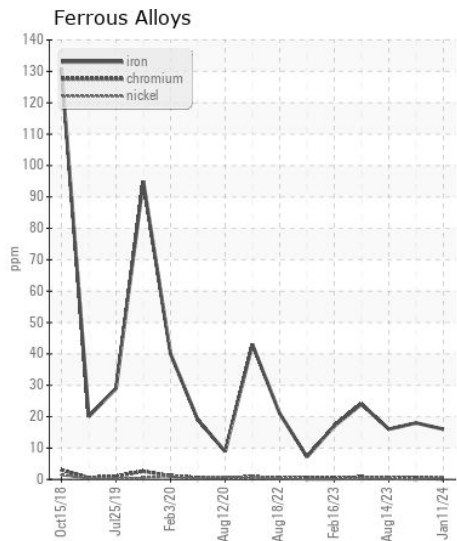
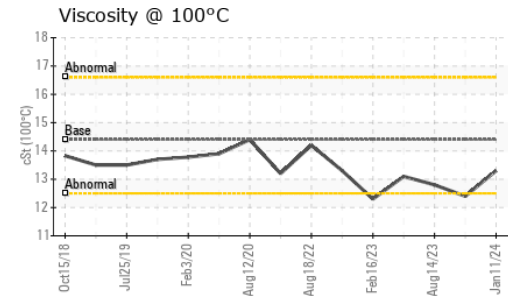
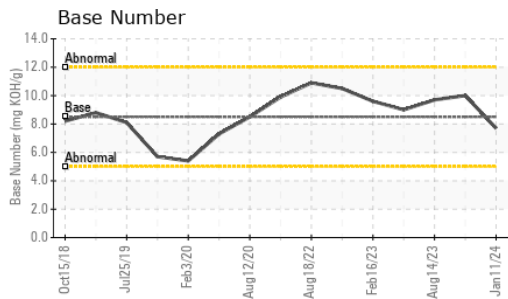
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	6	3
Fuel		WC Method	>2.0	<b>&lt;1.0</b>	1.8	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	8.3	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	20.1	19.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m	>158	<b>&lt;1</b>	2	1
Boron	ppm	ASTM D5185m	250	<b>398</b>	8	9
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>80</b>	90	72
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>453</b>	1001	1018
Calcium	ppm	ASTM D5185m	3000	<b>1247</b>	1152	1177
Phosphorus	ppm	ASTM D5185m	1150	<b>1043</b>	1115	1133
Zinc	ppm	ASTM D5185m	1350	<b>1219</b>	1338	1350
Sulfur	ppm	ASTM D5185m	4250	<b>3161</b>	3531	4126
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	16.4	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.7</b>	10.0	9.7
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.3</b>	▲ 12.4	12.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0875713 **Received** : 30 Jan 2024  
**Lab Number** : 06073633 **Diagnosed** : 30 Jan 2024  
**Unique Number** : 10850310 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**FRESHPOINT**  
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 T:  
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)