



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

**5C07**

Machine Id

**INTERNATIONAL 4900 FBK2901 (S/N 1HTSDAAN3YH269199)**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 5W40 (32 GAL)**

### 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>ARI0007577</b>	ARI0005291	ARI05106198
Sample Date		Client Info		<b>24 Jan 2024</b>	10 Mar 2022	02 Nov 2020
Machine Age	mls	Client Info		<b>138452</b>	137739	0
Oil Age	mls	Client Info		<b>713</b>	1899	0
Filter Age	mls	Client Info		<b>713</b>	1899	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>7</b>	14	60
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185m	>330	<b>0</b>	1	5
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

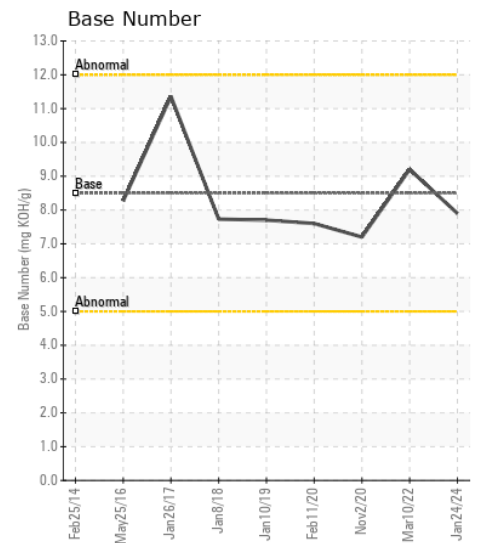
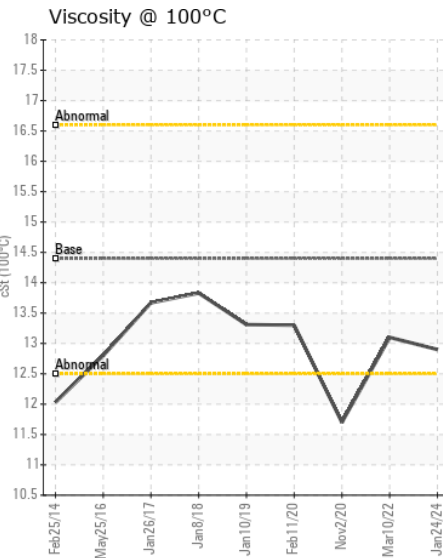
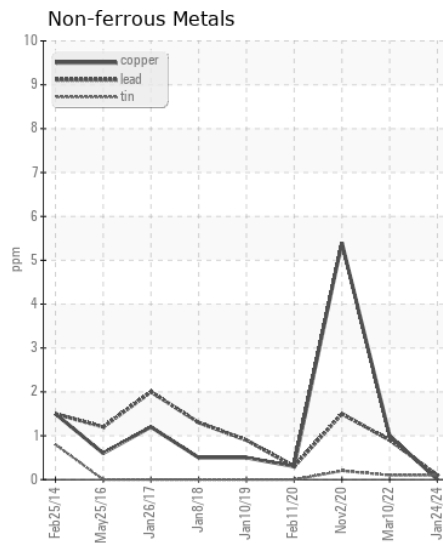
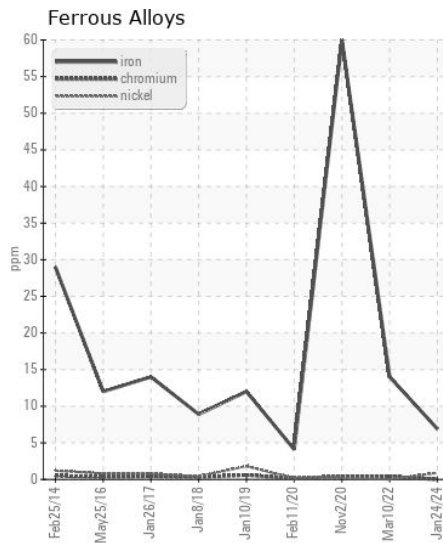
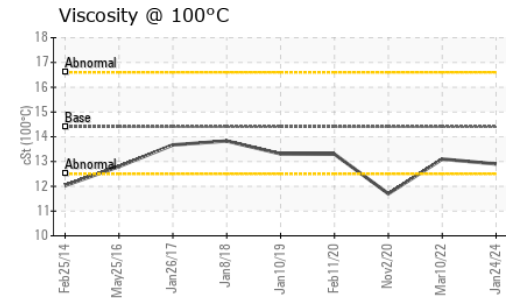
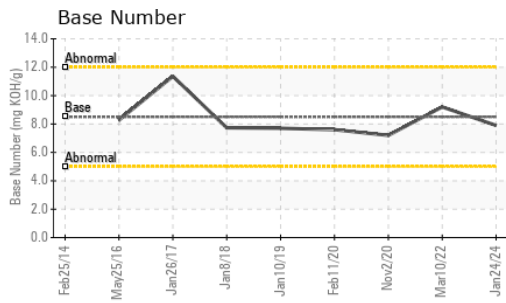
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	9
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	13
Fuel		WC Method	>2.0	<b>&lt;1.0</b>	0.0	▲ 4.1
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	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.2</b>	6.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.4</b>	18.3	20.3
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	>44	<b>&lt;1</b>	<1	9
Boron	ppm	ASTM D5185m	250	<b>6</b>	15	72
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>61</b>	71	78
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>923</b>	861	163
Calcium	ppm	ASTM D5185m	3000	<b>1057</b>	1312	1770
Phosphorus	ppm	ASTM D5185m	1150	<b>1045</b>	1095	916
Zinc	ppm	ASTM D5185m	1350	<b>1270</b>	1323	978
Sulfur	ppm	ASTM D5185m	4250	<b>3139</b>	2862	3065
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	13.1	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.9</b>	9.2	7.2
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.9</b>	13.1	▲ 11.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ARI0007577 **Received** : 30 Jan 2024  
**Lab Number** : 06074447 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856538 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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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)