



# OIL ANALYSIS REPORT

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

Machine Id  
**FSP89178 (S/N CHBK9058)**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (30 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0875831</b>	WC0432848	WC0349955
Sample Date		Client Info		<b>03 Jan 2024</b>	29 Jan 2020	30 Oct 2019
Machine Age	mls	Client Info		<b>299476</b>	12630	16226
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	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>48</b>	69	38
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	4	4
Nickel	ppm	ASTM D5185m	>2	<b>4</b>	1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	7	15
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	4	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

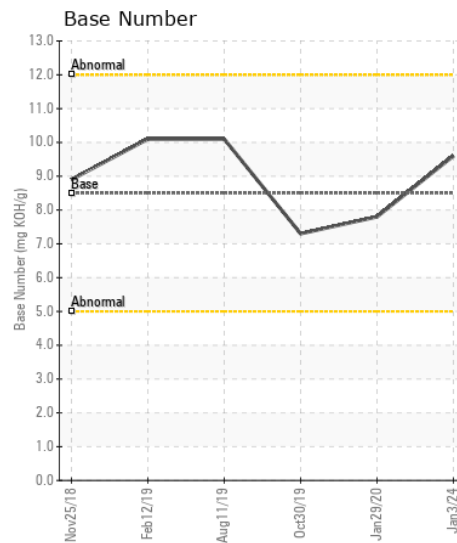
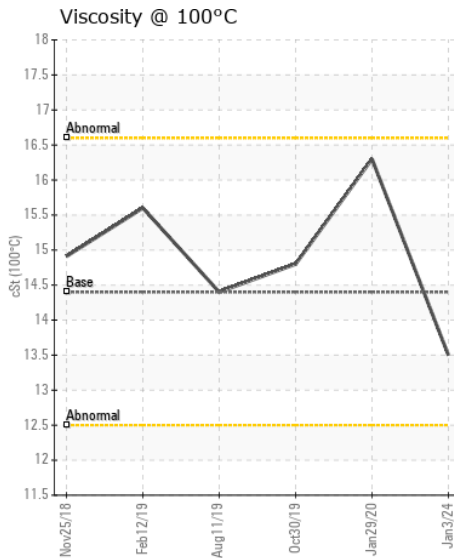
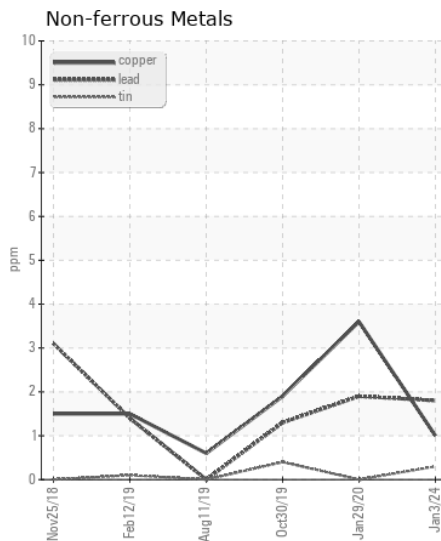
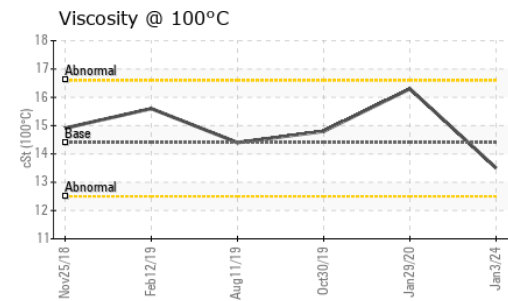
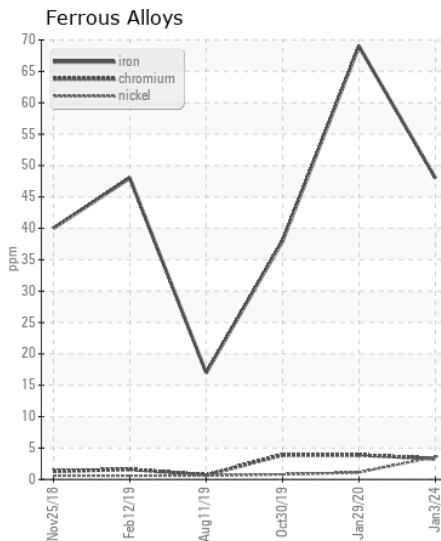
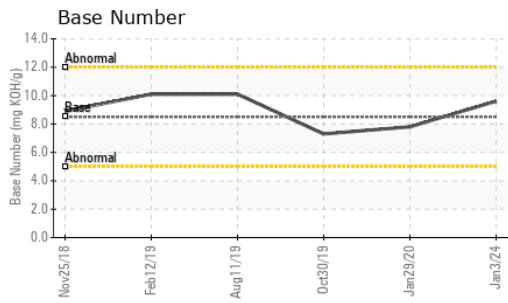
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	9	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>1.7</b>	2.5	1.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	12	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.1</b>	25.3	22.5
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>7</b>	3	2
Boron	ppm	ASTM D5185m	250	<b>4</b>	16	23
Barium	ppm	ASTM D5185m	10	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185m	100	<b>62</b>	21	18
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>937</b>	179	152
Calcium	ppm	ASTM D5185m	3000	<b>1028</b>	2314	2212
Phosphorus	ppm	ASTM D5185m	1150	<b>1108</b>	935	930
Zinc	ppm	ASTM D5185m	1350	<b>1268</b>	1151	1071
Sulfur	ppm	ASTM D5185m	4250	<b>3179</b>	2632	1558
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.2</b>	16	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.6</b>	7.8	7.3
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	16.3	14.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0875831 **Received** : 17 Jan 2024  
**Lab Number** : 06063397 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834779 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**FRESHPOINT**  
 8801 EXCHANGE DRIVE  
 ORLANDO, FL  
 US 32809  
 Contact: CRAIG EVANS  
 evans\_craig@sbcglobal.net

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)

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F: