



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KAWASAKI 95ZV-2 F-66 (S/N 97C5-5459)**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 SDE SAE 15W40 (13 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0879521</b>	WC0828400	WC0879551
Sample Date		Client Info		<b>30 Jan 2024</b>	15 Dec 2023	10 Nov 2023
Machine Age	hrs	Client Info		<b>23321</b>	23025	959
Oil Age	hrs	Client Info		<b>296</b>	260	959
Filter Age	hrs	Client Info		<b>296</b>	260	959
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>9</b>	7	12
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>90</b>	79	67
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>1</b>	1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

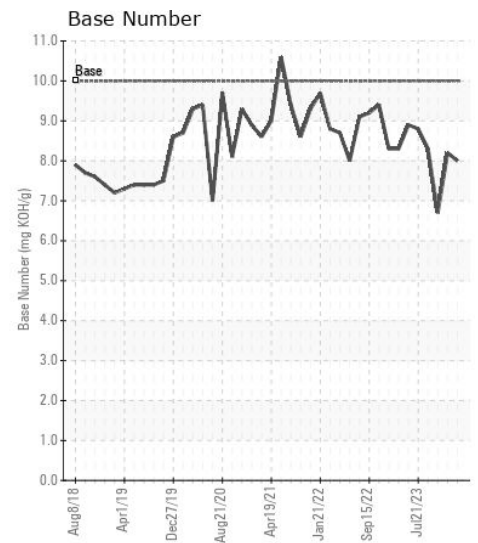
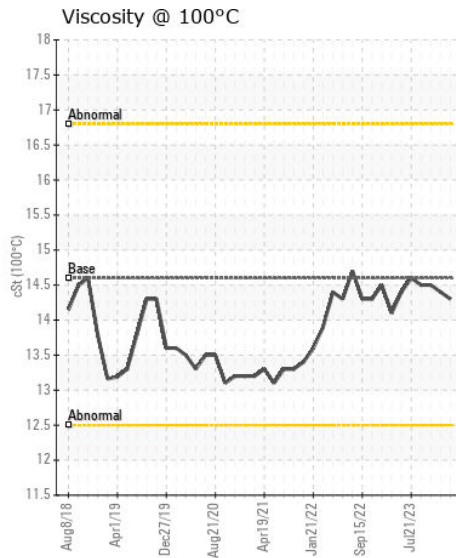
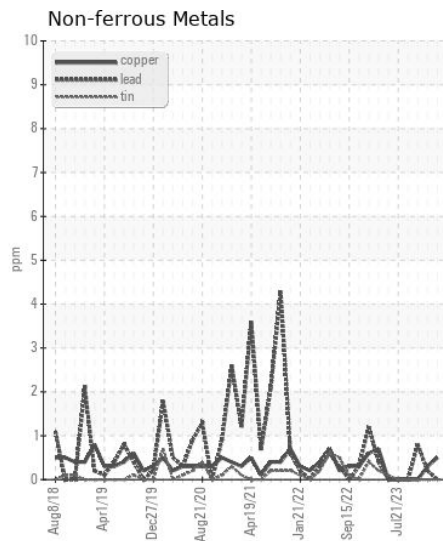
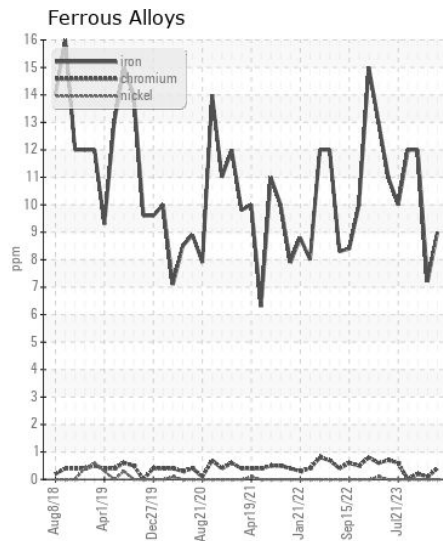
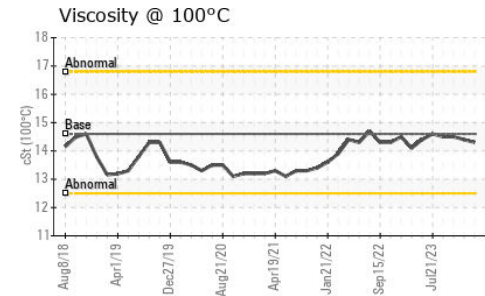
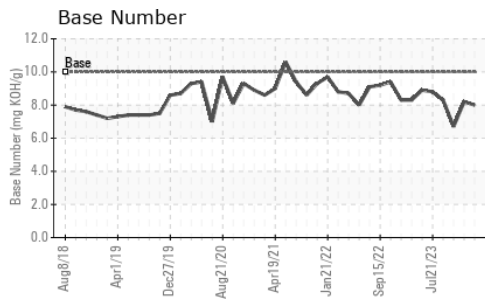
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	1	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>0.5</b>	0.6	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	8.3	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.2</b>	21.4	21.0
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		<b>&lt;1</b>	3	3
Boron	ppm	ASTM D5185m		<b>140</b>	124	83
Barium	ppm	ASTM D5185m		<b>12</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	5	17
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>400</b>	442	591
Calcium	ppm	ASTM D5185m		<b>1767</b>	1676	1656
Phosphorus	ppm	ASTM D5185m	760	<b>1090</b>	1077	1079
Zinc	ppm	ASTM D5185m	800	<b>1180</b>	1240	1341
Sulfur	ppm	ASTM D5185m	3000	<b>4688</b>	3862	3943
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.7</b>	15.6	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>8.0</b>	8.2	6.7
Visc @ 100°C	cSt	ASTM D445	14.6	<b>14.3</b>	14.4	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0879521 **Received** : 14 Feb 2024  
**Lab Number** : 06088607 **Tested** : 15 Feb 2024  
**Unique Number** : 10876052 **Diagnosed** : 15 Feb 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: TBN )

**FRANKLIN IRON & METAL CORP**  
 1939 EAST 1ST ST  
 DAYTON, OH  
 US 45403  
 Contact: BILL PITTL JR  
 parts@frankliniron.com  
 T: (937)253-8184  
 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)