



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
KAWASAKI 90ZV F-62 (S/N 90C4-5231)
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 SDE SAE 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0920319	WC0920328	WC0879492
Sample Date		Client Info		15 Jun 2024	24 Apr 2024	29 Jan 2024
Machine Age	hrs	Client Info		41704	41421	41074
Oil Age	hrs	Client Info		283	347	958
Filter Age	hrs	Client Info		283	347	958
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	3	5	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	67	64	76
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	<1	1	2
Lead	ppm	ASTM D5185m	>40	0	<1	1
Copper	ppm	ASTM D5185m	>330	0	<1	<1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

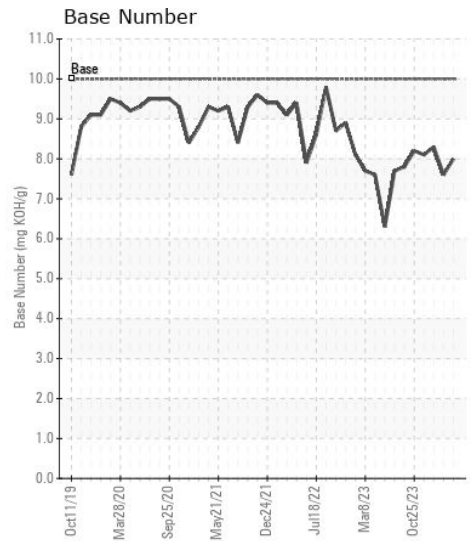
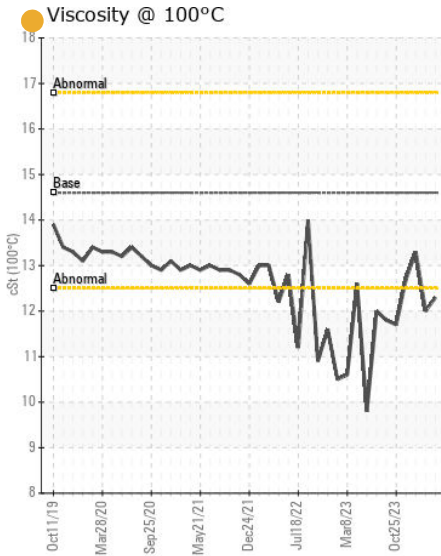
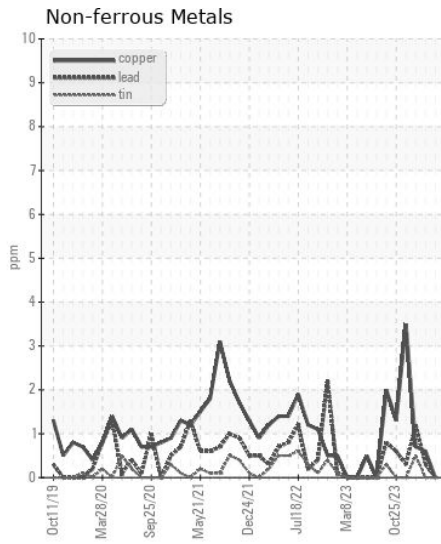
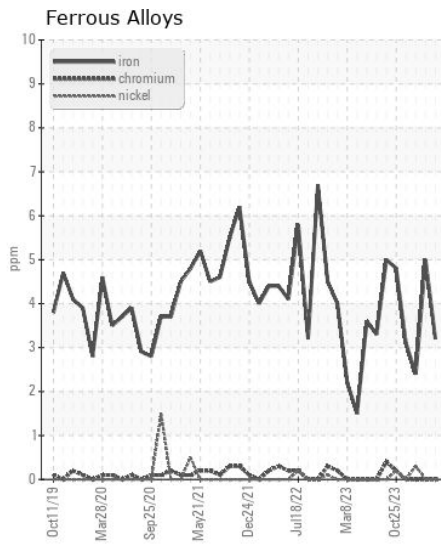
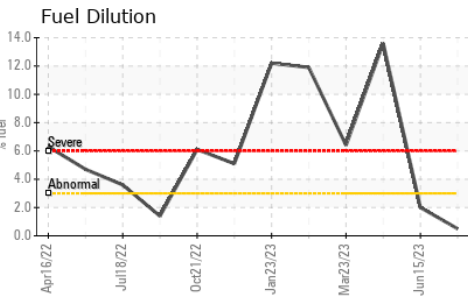
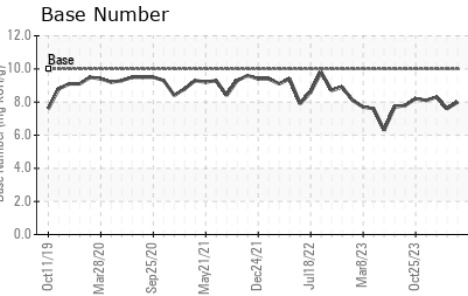
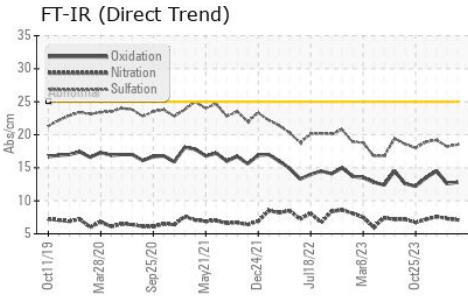
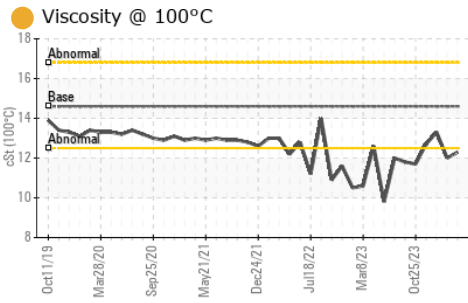
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	4	5
Potassium	ppm	ASTM D5185m	>20	4	2	4
Fuel	%	ASTM D3524	>3.0	<1.0	0.5	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.3	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	18.2	19.2
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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		3	3	2
Boron	ppm	ASTM D5185m		99	113	137
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	1	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		322	335	380
Calcium	ppm	ASTM D5185m		1825	2064	1715
Phosphorus	ppm	ASTM D5185m	760	952	1021	1072
Zinc	ppm	ASTM D5185m	800	1143	1247	1206
Sulfur	ppm	ASTM D5185m	3000	4195	4490	3938
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.8	12.6	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	8.0	7.6	8.3
Visc @ 100°C	cSt	ASTM D445	14.6	12.3	12.0	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0920319 **Received** : 27 Jun 2024
Lab Number : 06222145 **Tested** : 28 Jun 2024
Unique Number : 11100342 **Diagnosed** : 28 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, 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)