



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
KAWASAKI 90ZV F-62 (S/N 90C4-5231)

Component
Hydraulic System

Fluid
CHEVRON RANDO HD 46 (44 GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

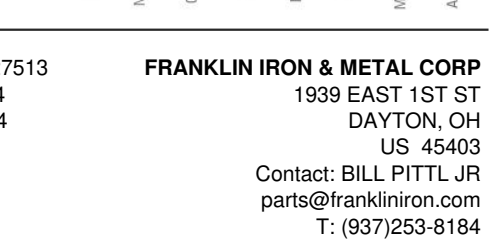
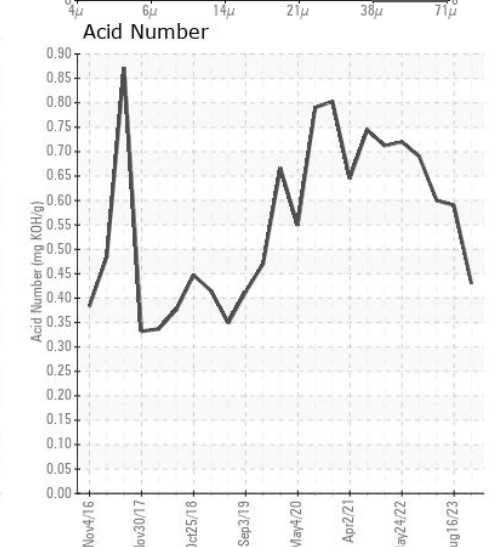
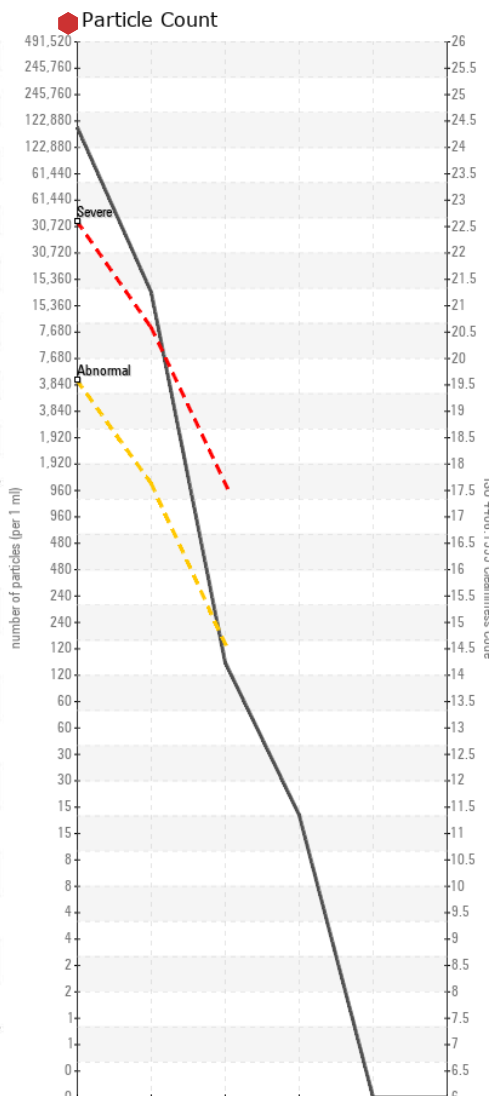
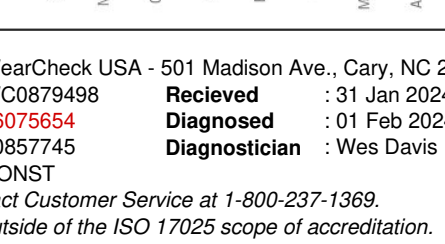
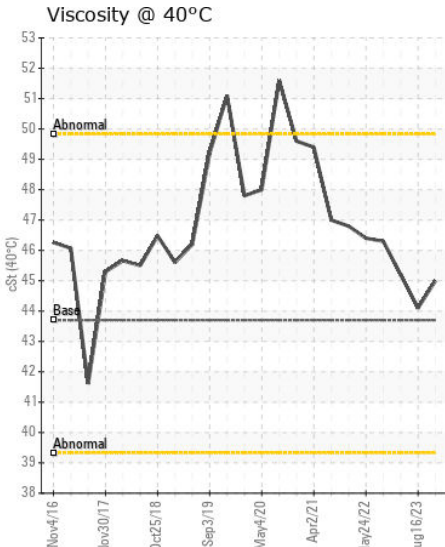
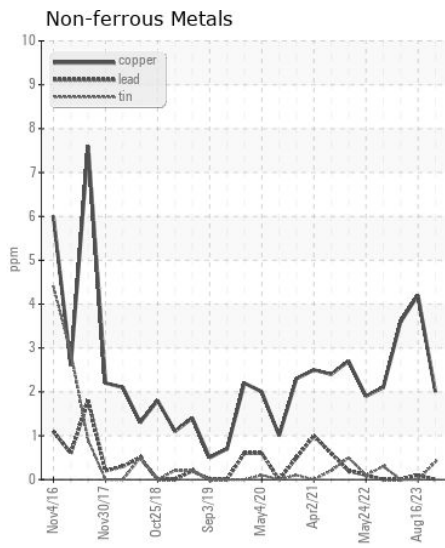
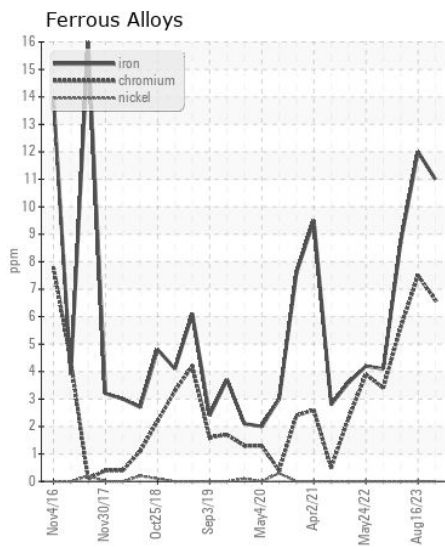
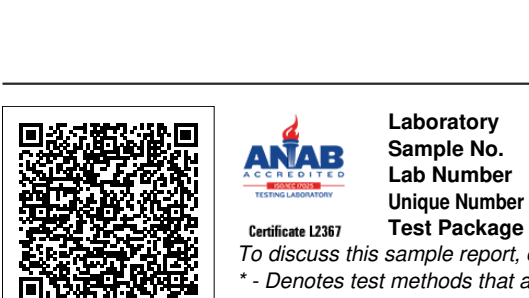
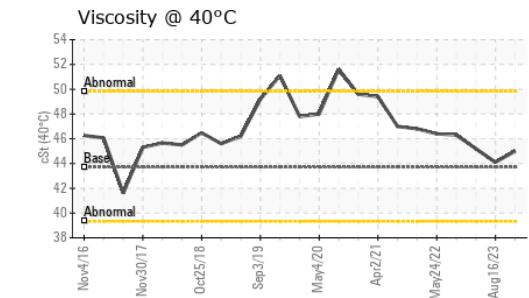
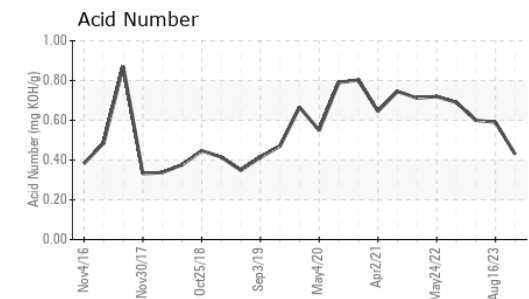
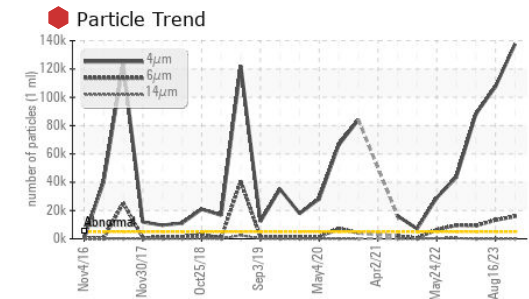
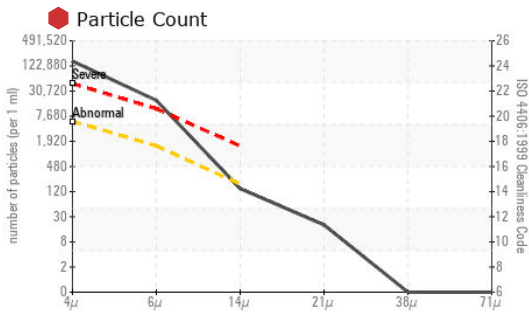
CONTAMINATION

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0879498	WC0833565	WC0709476
Sample Date		Client Info		29 Jan 2024	16 Aug 2023	02 Dec 2022
Machine Age	hrs	Client Info		41074	40116	38540
Oil Age	hrs	Client Info		958	1576	2318
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	11	12	9
Chromium	ppm	ASTM D5185m	>10	7	8	6
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	2	4	4
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	2	3	2
Potassium	ppm	ASTM D5185m	>20	0	1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	137674	107531	88147
Particles >6µm		ASTM D7647	>1300	15905	13225	9330
Particles >14µm		ASTM D7647	>160	125	91	89
Particles >21µm		ASTM D7647	>40	17	14	9
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	24/21/14	24/21/14	24/20/14
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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m		10	18	13
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		4	6	3
Calcium	ppm	ASTM D5185m		667	1008	1025
Phosphorus	ppm	ASTM D5185m		480	570	543
Zinc	ppm	ASTM D5185m		558	722	681
Sulfur	ppm	ASTM D5185m		1287	1877	1941
Acid Number (AN)	mg KOH/g	ASTM D8045		0.43	0.59	0.60
Visc @ 40°C	cSt	ASTM D445	43.7	45.0	44.1	45.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0879498 **Received** : 31 Jan 2024
Lab Number : 06075654 **Diagnosed** : 01 Feb 2024
Unique Number : 10857745 **Diagnostician** : Wes Davis
Test Package : CONST

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)