



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
COSTCO 1414 [MC-00137-1]
 Machine Id
410000047745 - RACK B (S/N CMP1912004-2)
 Component
Reciprocating Compressor
 Fluid
BITZER BSE 85K (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0789037	WC0789041	WC0789043
Sample Date		Client Info		20 Feb 2024	09 Jun 2023	13 Mar 2023
Machine Age	yrs	Client Info		4	3	3
Oil Age	yrs	Client Info		4	3	3
Filter Age	yrs	Client Info		1	1	1
Oil Changed		Client Info		Filtered	Filtered	Filtered
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>50	0	0	0
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)		0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	0	<1
Lead	ppm	ASTM D5185(m)	>25	0	0	<1
Copper	ppm	ASTM D5185(m)	>50	<1	<1	0
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

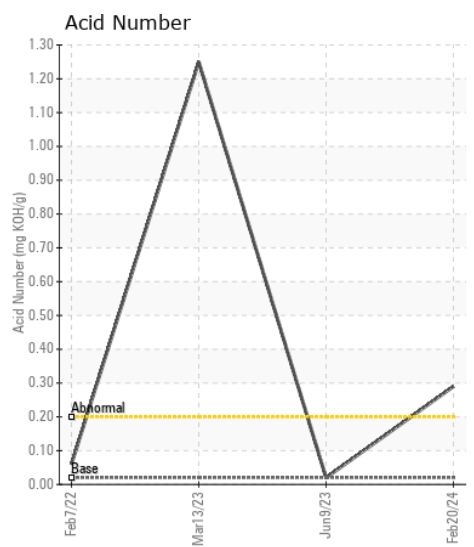
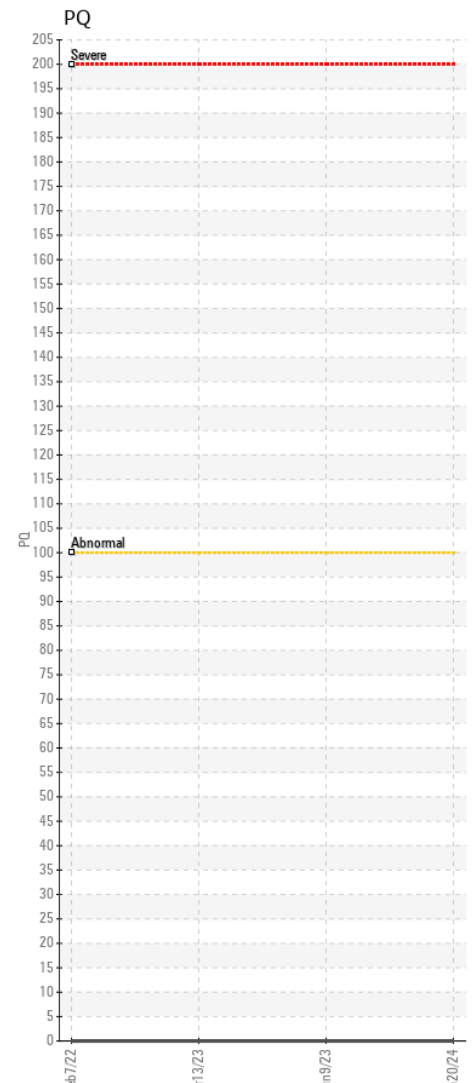
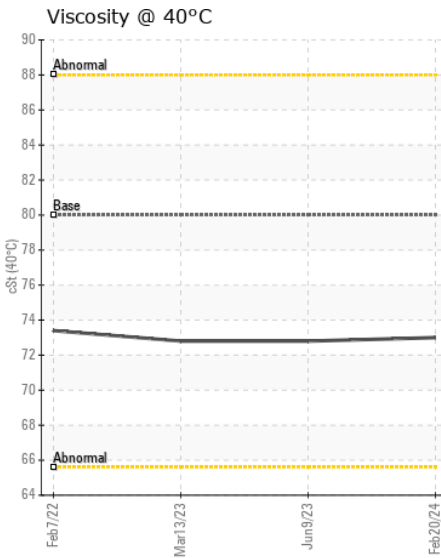
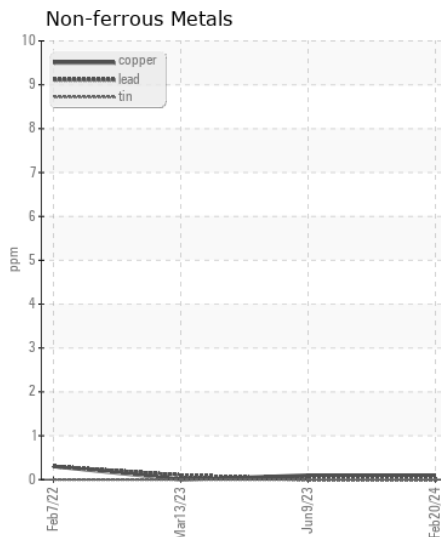
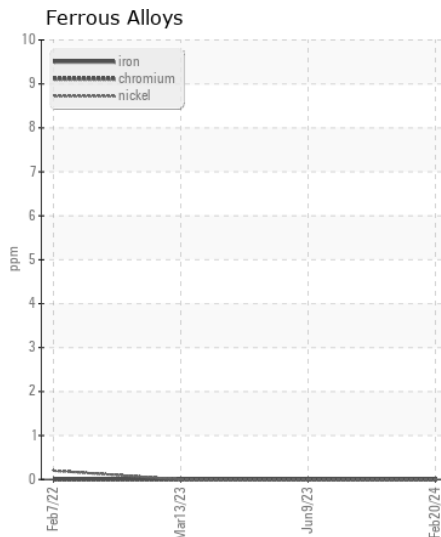
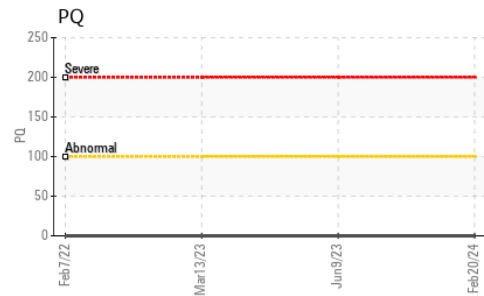
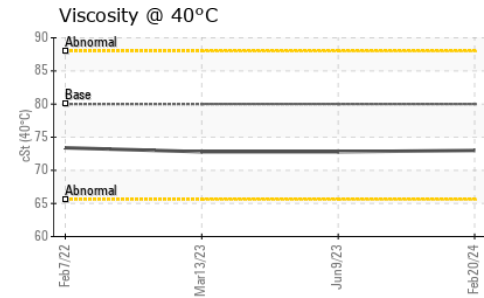
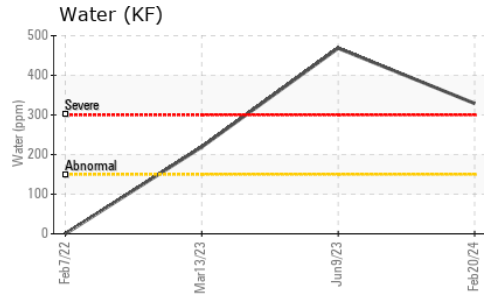
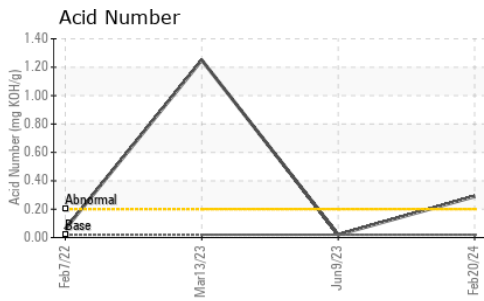
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<1	<1	2
Potassium	ppm	ASTM D5185(m)	>20	1	<1	0
Water	%	ASTM D6304*	>0.015	0.032	0.046	0.021
ppm Water	ppm	ASTM D6304*	>150	329	468.5	219.3
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*	>0.015	.2%	NEG	NEG

FLUID CONDITION

An increase in the AN level is noted. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		0	<1	<1
Boron	ppm	ASTM D5185(m)	0	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	0	0	0
Calcium	ppm	ASTM D5185(m)	0	0	<1	0
Phosphorus	ppm	ASTM D5185(m)	1200	1277	1321	1378
Zinc	ppm	ASTM D5185(m)	0	<1	1	<1
Sulfur	ppm	ASTM D5185(m)	0	0	4	4
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	0.29	0.02	▲ 1.25
Visc @ 40°C	cSt	ASTM D7279(m)	80	73.0	72.8	72.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0789037 **Received** : 21 Feb 2024
Lab Number : 02617078 **Tested** : 22 Feb 2024
Unique Number : 5734188 **Diagnosed** : 23 Feb 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: KF, TAN Man)

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.