



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**[001337-1]**

Machine Id  
**COSTCO #253 RACK G HILL PHOENIX RACK (S/N 61539-5 410000027126)**

Component  
**Reciprocating Compressor**

Fluid  
**EMKARATE RL 32H (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please note that there was insufficient sample submitted to perform all assigned tests.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0907725</b>	WC0672576	WC0438173
Sample Date		Client Info		<b>13 Feb 2024</b>	22 Feb 2022	02 Mar 2021
Machine Age	yrs	Client Info		<b>10</b>	10	10
Oil Age	yrs	Client Info		<b>10</b>	10	2
Filter Age	yrs	Client Info		<b>1</b>	1	2
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m)	>50	<b>3</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<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

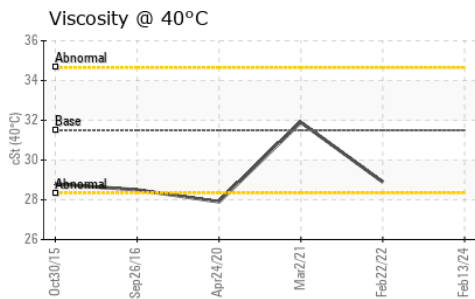
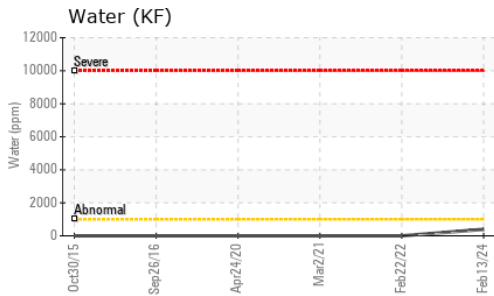
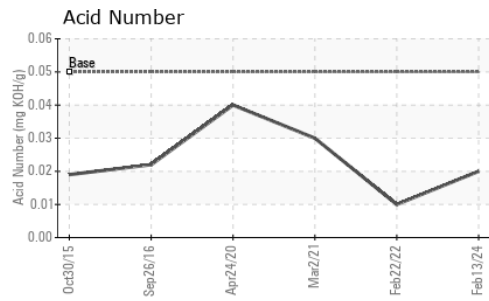
Insufficient sample was received to conduct all the routine laboratory tests.

Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304*	>0.1	<b>0.039</b>	---	---
ppm Water	ppm	ASTM D6304*	>1000	<b>394</b>	---	---
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>	FREON	FREON

## FLUID CONDITION

The condition of the oil is acceptable for the time in service (unconfirmed).

Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185(m)	5	<b>0</b>	<1	<1
Zinc	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	<1	<1
Sulfur	ppm	ASTM D5185(m)	50	<b>0</b>	3	10
Acid Number (AN)	mg KOH/g	ASTM D974*	.05	<b>0.02</b>	0.01	0.03
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	<b>---</b>	28.9	31.9



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0907725  
**Lab Number** : 02617283  
**Unique Number** : 5734393  
**Test Package** : TEST ( Additional Tests: ICP, KF, KV40, TAN Man )

**Received** : 21 Feb 2024  
**Tested** : 27 Feb 2024  
**Diagnosed** : 27 Feb 2024 - Kevin Marson

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.

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