WEAR CONTAMINATION FLUID CONDITION

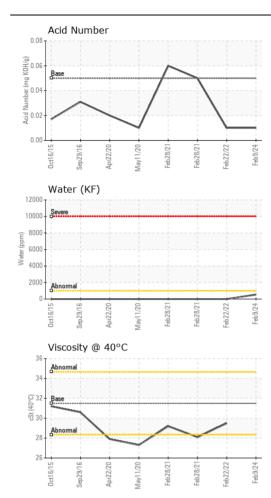
NORMAL NORMAL NORMAL

[001315-1]

HILL PHOENIX COSTCO #1169 MISSISSAUGA RACK "C" HILL PHOENIX RACK MOPDEL #69454 (S/N 410000033076)

Component Reciprocating Compressor

EMKARATE RL 32H (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please note that there was insufficient sample submitted to perform all assigned tests.	Sample Number		Client Info		WC0907697	WC0672574	WC0556256
	Sample Date		Client Info		09 Feb 2024	22 Feb 2022	28 Feb 2021
	Machine Age	yrs	Client Info		10	7	10
	Oil Age	yrs	Client Info		10	7	1
	Filter Age	yrs	Client Info		1	1	1
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	Changed	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185(m)	>50	<1	<1	1
All component wear rates are normal.	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	<1
	Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
	Lead	ppm	ASTM D5185(m)	>25	<1	<1	<1
	Copper	ppm	ASTM D5185(m)	>50	4	3	6
	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	Silicon	ppm	ASTM D5185(m)	>25	2	2	2
Insufficient sample was received to conduct all the routine laboratory tests.	Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
	Water	%	ASTM D6304*	>0.1	0.054		
	ppm Water	ppm	ASTM D6304*	>1000	543		
	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	FREON	FREON
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		0	0	0
The condition of the oil is acceptable for the time in service (unconfirmed).	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
	Magnesium	ppm	ASTM D5185(m)	0	0	0	<1
	Calcium	ppm	ASTM D5185(m)	0	0	0	<1
	Phosphorus	ppm	ASTM D5185(m)	5	2	2	<1
	Zinc	ppm	ASTM D5185(m)	10	<1	<1	<1
	Sulfur	ppm	ASTM D5185(m)	50	0	1	10
	Acid Number (AN)	mg KOH/g	ASTM D974*	.05	0.01	0.01	0.05
	Visc @ 40°C	cSt	ASTM D7279(m)	31.5		29.5	28.1





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0907697 Lab Number : 02617288

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Unique Number : 5734398

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.

Received : 21 Feb 2024 **Tested** : 27 Feb 2024 Diagnosed

: 27 Feb 2024 - Kevin Marson

Test Package : TEST (Additional Tests: ICP, KF, KV40, TAN Man)

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