WEAR CONTAMINATION **FLUID CONDITION**

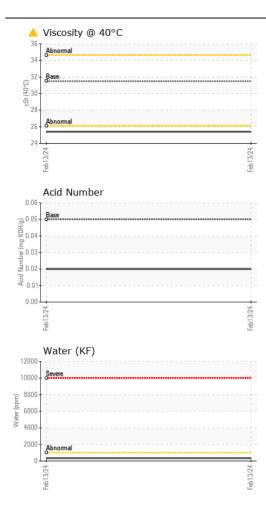
NORMAL NORMAL ABNORMAL

[001337-1]

HILL PHOENIX 410000027125 RACK F

Component Reciprocating Compressor

EMKARATE RL 32H (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0907698		
	Sample Date		Client Info		13 Feb 2024		
	Machine Age	yrs	Client Info		10		
	Oil Age	yrs	Client Info		10		
	Filter Age	yrs	Client Info		1		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>50	3		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>10	0		
	Nickel	ppm	ASTM D5185(m)		<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)	>25	<1		
	Lead	ppm	ASTM D5185(m)	>25	0		
	Copper	ppm	ASTM D5185(m)		<1		
	Tin	ppm		>15	0		
	Vanadium	ppm	ASTM D5185(m)	NONE	0		
	White Metal	scalar	Visual*	NONE	NONE		
<u></u>	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1		
	Water	%	ASTM D6304*	>0.1	0.033		
	ppm Water	ppm	ASTM D6304*	>1000	333		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		0		
Viscosity of sample indicates oil is within ISO 22 range, advise investigate.	Boron	ppm	ASTM D5185(m)	0	<1		
	Barium	ppm	ASTM D5185(m)	0	0		
	Molybdenum	ppm	ASTM D5185(m)	0	0		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		0		
	Calcium	ppm	ASTM D5185(m)		0		
	Phosphorus	ppm	ASTM D5185(m)		0		
	Zinc	ppm	ASTM D5185(m)	10	<1		
	Sulfur	ppm	ASTM D5185(m)		0		
	Acid Number (AN)	mg KOH/g	ASTM D974*	.05	0.02		
	Visc @ 40°C	cSt	ASTM D7279(m)	31.5	25.4		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. Lab Number : 02617284

: WC0907698

Unique Number : 5734394 Test Package : TEST (Additional Tests: ICP, KF, KV40, TAN Man)

Tested Diagnosed

Received

: 21 Feb 2024 : 27 Feb 2024

: 27 Feb 2024 - Kevin Marson

mike.squires@neelands.com T: (905)975-0794 F: (905)334-7090

Neelands Group Limited

4131 Palladium Way

Contact: Mike Squires

Burlington, ON

CA L7M 0V9

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.