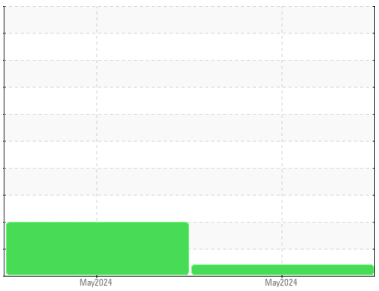
OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS

Machine Id
LEROI VRUOXY0041 - RED TANKS 27/28 OGS (S/N LE15927)
Component
Compressor
Fluid
CIMARRON HB-150 (--- GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

Contamination
Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**TO90004074**	TO90004245	---
Sample Date		Client Info		**28 May 2024**	13 May 2024	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	N/A	---
Sample Status				**ABNORMAL**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>70	**2**	2	---
Chromium	ppm	ASTM D5185m	>10	**0**	<1	---
Nickel	ppm	ASTM D5185m		**<1**	0	---
Titanium	ppm	ASTM D5185m		**0**	0	---
Silver	ppm	ASTM D5185m		**0**	<1	---
Aluminum	ppm	ASTM D5185m	>3	**1**	<1	---
Lead	ppm	ASTM D5185m	>4	**0**	1	---
Copper	ppm	ASTM D5185m	>20	**0**	<1	---
Tin	ppm	ASTM D5185m	>3	**2**	1	---
Vanadium	ppm	ASTM D5185m		**<1**	<1	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**6**	0	---
Barium	ppm	ASTM D5185m	0	**0**	0	---
Molybdenum	ppm	ASTM D5185m	0	**0**	0	---
Manganese	ppm	ASTM D5185m		**<1**	0	---
Magnesium	ppm	ASTM D5185m	0	**3**	0	---
Calcium	ppm	ASTM D5185m	0	**9**	0	---
Phosphorus	ppm	ASTM D5185m	0	**37**	53	---
Zinc	ppm	ASTM D5185m	0	**12**	0	---
Sulfur	ppm	ASTM D5185m	0	**705**	926	---

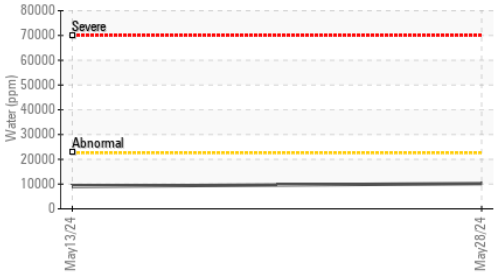
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>45	**41**	<1	---
Sodium	ppm	ASTM D5185m		**2**	4	---
Potassium	ppm	ASTM D5185m	>20	**5**	3	---
Water	%	ASTM D6304	>2.26	**1.02**	0.908	---
ppm Water	ppm	ASTM D6304	>22600	**10200**	9080	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**---**	▲ 66425	---
Particles >6µm		ASTM D7647	>2500	**---**	▲ 22383	---
Particles >14µm		ASTM D7647	>320	**---**	▲ 1036	---
Particles >21µm		ASTM D7647	>80	**---**	▲ 104	---
Particles >38µm		ASTM D7647	>20	**---**	1	---
Particles >71µm		ASTM D7647	>4	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**---**	▲ 23/22/17	---

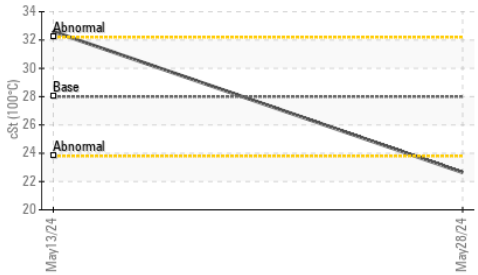
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.34**	0.36	---

OIL ANALYSIS REPORT

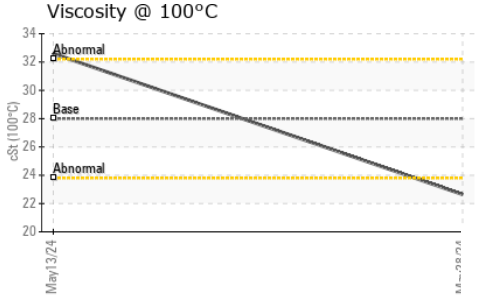
Water (KF)



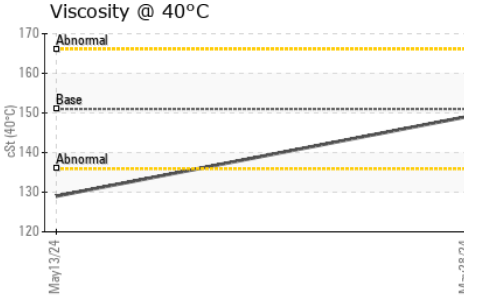
Viscosity @ 100°C



Viscosity @ 100°C



Viscosity @ 40°C



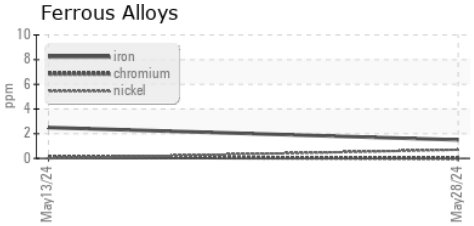
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>2.26	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	**149**	129	---
Visc @ 100°C	cSt	ASTM D445	28	**22.64**	32.6	---
Viscosity Index (VI)	Scale	ASTM D2270	224	**180**	292	---

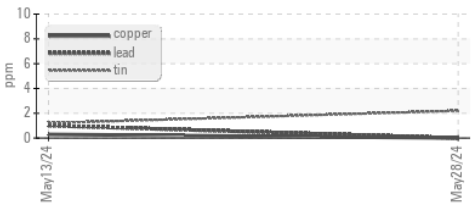
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

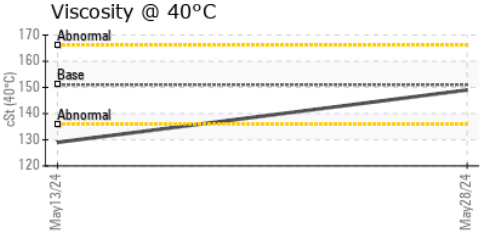
Ferrous Alloys



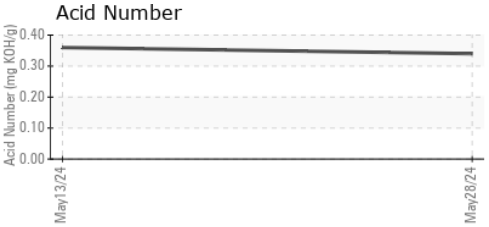
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90004074 **Received** : 10 Jun 2024
Lab Number : 06205572 **Tested** : 18 Jun 2024
Unique Number : 11073033 **Diagnosed** : 18 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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)

CIMARRON ENERGY - CARLSBAD
4425 GRANDI RD, UNIT F
CARLSBAD, NM
UM 88220-8923
Contact: CARLOS LEAL
cleal@cimarron.com
T:
F:

Report Id: CIMCAR [WUSCAR] 06205572 (Generated: 06/22/2024 19:09:35) Rev: 1

Contact/Location: CARLOS LEAL - CIMCAR