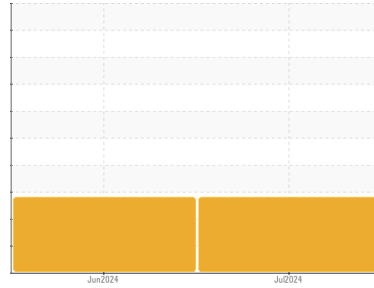


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
LEROI OXY0079
Component
Compressor
Fluid
CIMARRON HB-150 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

The iron level is abnormal. All other component wear rates are normal.

Contamination

There is a high amount of particulates 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			TO90004477	TO90004540	---
Sample Date	Client Info			09 Jul 2024	10 Jun 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	>50	▲ 134	▲ 61	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m		<1	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	<1	---
Lead	ppm	ASTM D5185m	>25	<1	<1	---
Copper	ppm	ASTM D5185m	>50	0	0	---
Tin	ppm	ASTM D5185m	>15	1	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	0	2	2	---
Calcium	ppm	ASTM D5185m	0	0	0	---
Phosphorus	ppm	ASTM D5185m	0	7	14	---
Zinc	ppm	ASTM D5185m	0	0	3	---
Sulfur	ppm	ASTM D5185m	0	1604	1577	---

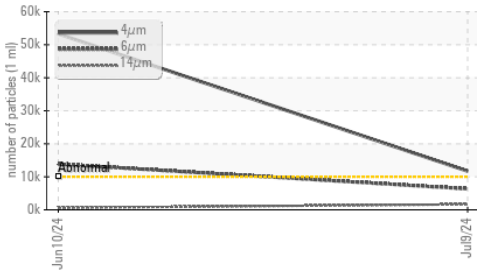
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	2	---
Sodium	ppm	ASTM D5185m		8	4	---
Potassium	ppm	ASTM D5185m	>20	3	6	---
Water	%	ASTM D6304	>2.26	0.667	0.106	---
ppm Water	ppm	ASTM D6304	>22600	6670	1060	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ 11723	▲ 53294	---
Particles >6µm		ASTM D7647	>2500	▲ 6344	▲ 13843	---
Particles >14µm		ASTM D7647	>320	▲ 1658	▲ 589	---
Particles >21µm		ASTM D7647	>80	▲ 502	▲ 124	---
Particles >38µm		ASTM D7647	>20	7	8	---
Particles >71µm		ASTM D7647	>4	0	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 21/20/18	▲ 23/21/16	---

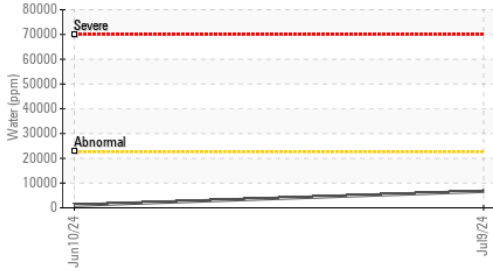
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.33	0.14	---

OIL ANALYSIS REPORT

Particle Trend



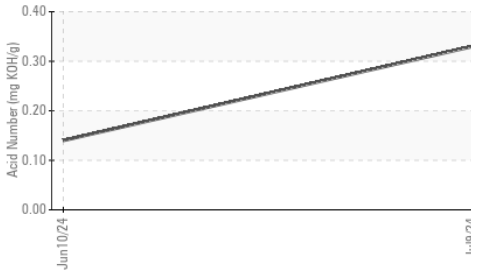
Water (KF)



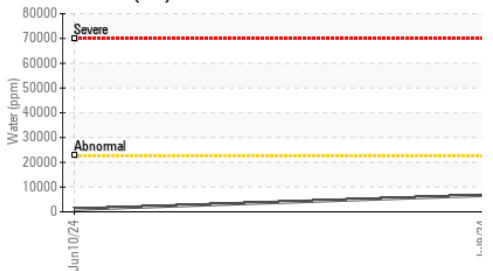
Viscosity @ 100°C



Acid Number



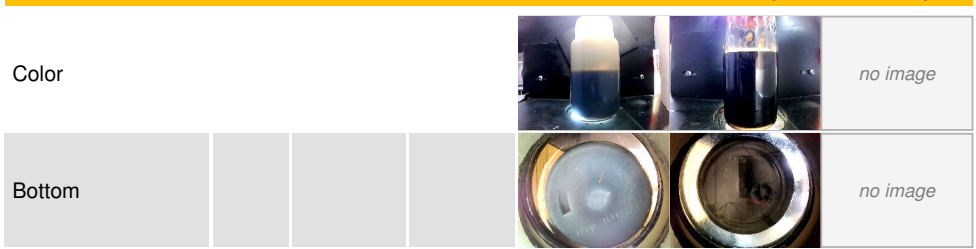
Water (KF)



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
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	---
Emulsified Water	scalar	*Visual	>2.26	NEG	---
Free Water	scalar	*Visual		NEG	---

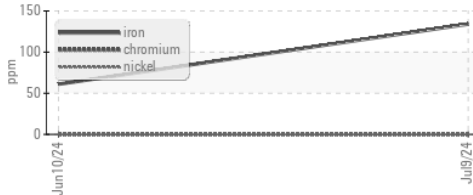
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	132	---
Visc @ 100°C	cSt	ASTM D445	28	23.5	---
Viscosity Index (VI)	Scale	ASTM D2270	224	210	---

SAMPLE IMAGES

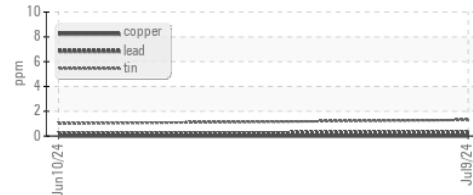


GRAPHS

Ferrous Alloys



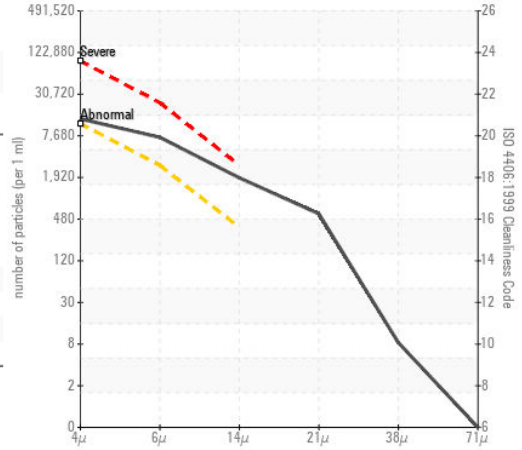
Non-ferrous Metals



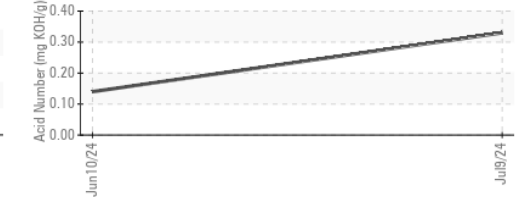
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TO90004477

Lab Number : 06238439

Unique Number : 11127273

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)

Received : 16 Jul 2024

Tested : 18 Jul 2024

Diagnosed : 18 Jul 2024 - Don Baldrige

CIMARRON ENERGY - CARLSBAD

4425 GRANDI RD, UNIT F

CARLSBAD, NM

UM 88220-8923

Contact: CARLOS LEAL

cleal@cimarron.com

T:

F: