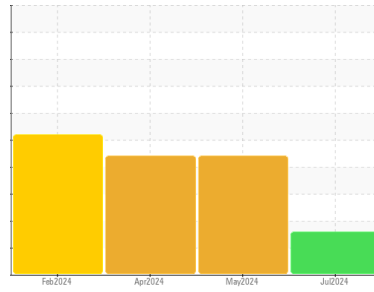


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[4501726872]
 Machine Id
LEROI 112044 - HP1 (S/N 5680X79)
 Component
Compressor
 Fluid
CIMARRON HB-150 (70 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All 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			TO90004469	TO90004004	TO90003978
Sample Date	Client Info			11 Jul 2024	02 May 2024	15 Apr 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				ABNORMAL	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	26	12
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m		<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	2	3
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>50	0	<1	<1
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	0	2
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	0	0	<1	1
Calcium	ppm	ASTM D5185m	0	0	7	4
Phosphorus	ppm	ASTM D5185m	0	3	61	67
Zinc	ppm	ASTM D5185m	0	0	10	12
Sulfur	ppm	ASTM D5185m	0	145	886	555

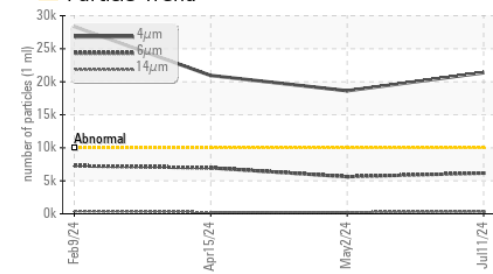
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	1
Sodium	ppm	ASTM D5185m		0	6	8
Potassium	ppm	ASTM D5185m	>20	3	2	1
Water	%	ASTM D6304	>2.26	0.408	▲ 1.08	▲ 1.361
ppm Water	ppm	ASTM D6304	>22600	4080	▲ 10800	▲ 13619

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ 21367	● 18633	▲ 20947
Particles >6µm		ASTM D7647	>2500	▲ 6160	▲ 5619	▲ 6966
Particles >14µm		ASTM D7647	>320	▲ 333	250	250
Particles >21µm		ASTM D7647	>80	54	38	28
Particles >38µm		ASTM D7647	>20	2	1	1
Particles >71µm		ASTM D7647	>4	0	1	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 22/20/16	▲ 21/20/15	▲ 22/20/15

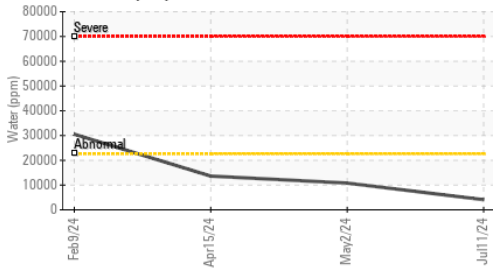
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.17	0.45	0.63

OIL ANALYSIS REPORT

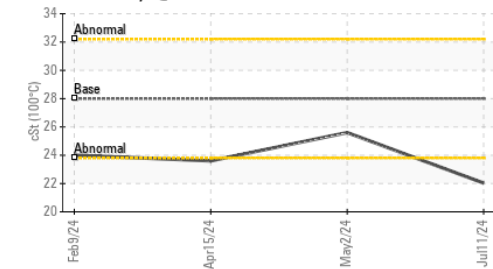
Particle Trend



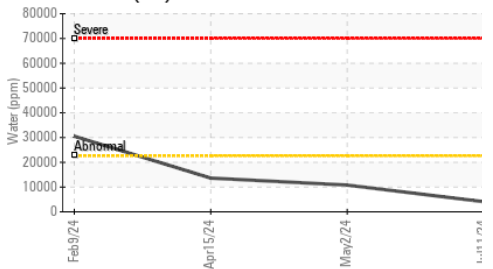
Water (KF)



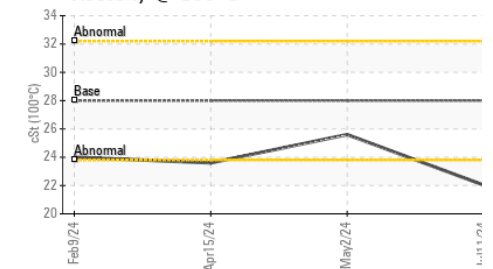
Viscosity @ 100°C



Water (KF)



Viscosity @ 100°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	NONE	NONE
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	141	128
Visc @ 100°C	cSt	ASTM D445	28	25.6	23.6
Viscosity Index (VI)	Scale	ASTM D2270	224	217	216

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

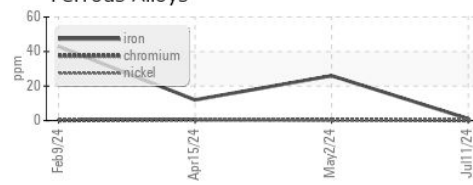


Bottom

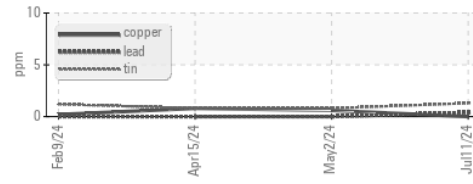


GRAPHS

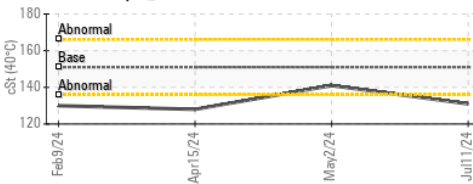
Ferrous Alloys



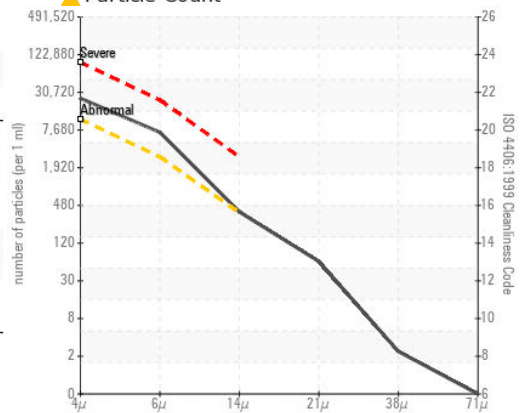
Non-ferrous Metals



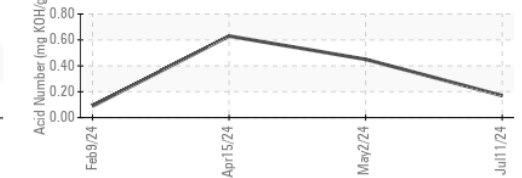
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

Sample No. : TO90004469

Lab Number : 06233922

Unique Number : 11122756

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 : 11 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Jonathan Hester

CIMARRON ENERGY - CARLSBAD

4425 GRANDI RD, UNIT F

CARLSBAD, NM

UM 88220-8923

Contact: CARLOS LEAL

cleal@cimarron.com

T:

F: