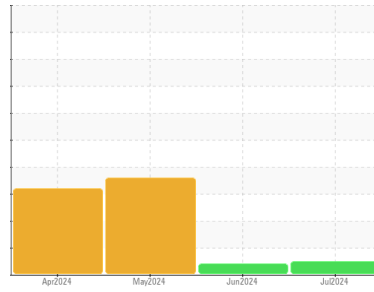


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
LEROI VRUOXY0002 - HP2 (S/N LE17850)
 Component
Compressor
 Fluid
CIMARRON HB-150 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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			TO90004506	TO90004111	TO90004209
Sample Date	Client Info			02 Jul 2024	24 Jun 2024	07 May 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	N/A	Changed
Sample Status				NORMAL	ABNORMAL	SEVERE

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

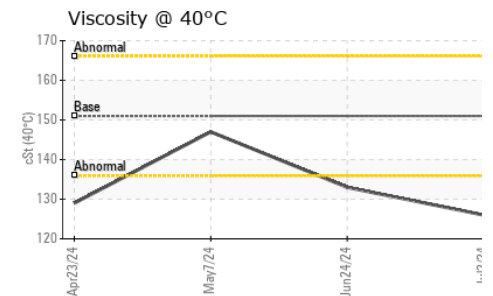
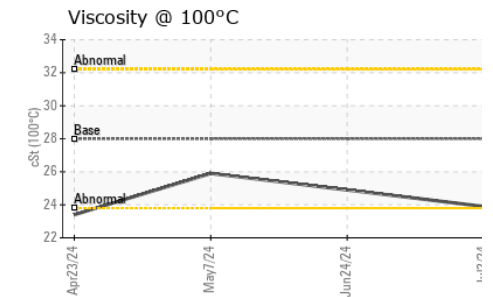
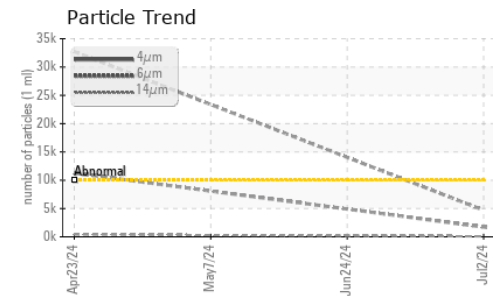
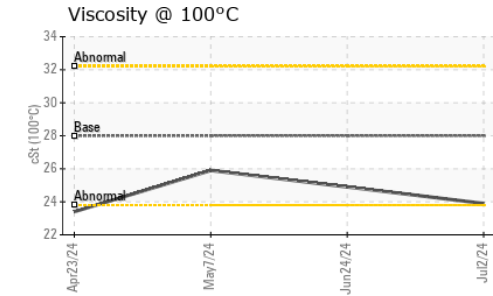
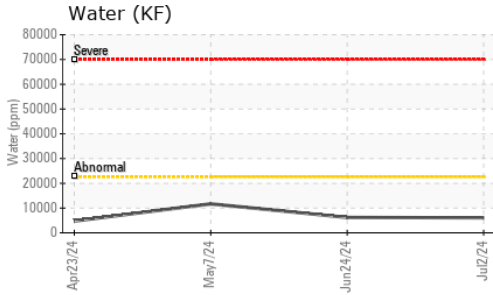
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	1	<1	0
Barium	ppm	ASTM D5185m	0	0	0	1
Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	<1
Calcium	ppm	ASTM D5185m	0	0	0	4
Phosphorus	ppm	ASTM D5185m	0	0	2	14
Zinc	ppm	ASTM D5185m	0	0	0	3
Sulfur	ppm	ASTM D5185m	0	137	761	160

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	23
Sodium	ppm	ASTM D5185m		0	<1	2
Potassium	ppm	ASTM D5185m	>20	3	2	2
Water	%	ASTM D6304	>2.26	0.605	0.620	▲ 1.17
ppm Water	ppm	ASTM D6304	>22600	6050	6200	▲ 11700

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	4700	---	---
Particles >6µm		ASTM D7647	>2500	1725	---	---
Particles >14µm		ASTM D7647	>320	80	---	---
Particles >21µm		ASTM D7647	>80	8	---	---
Particles >38µm		ASTM D7647	>20	0	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	19/18/13	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.014	0.24	0.067

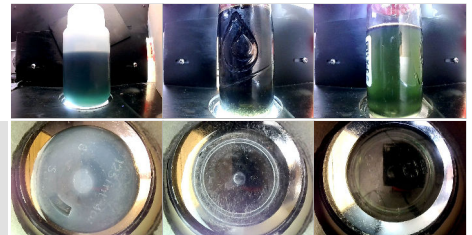
OIL ANALYSIS REPORT



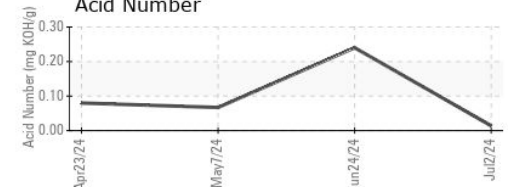
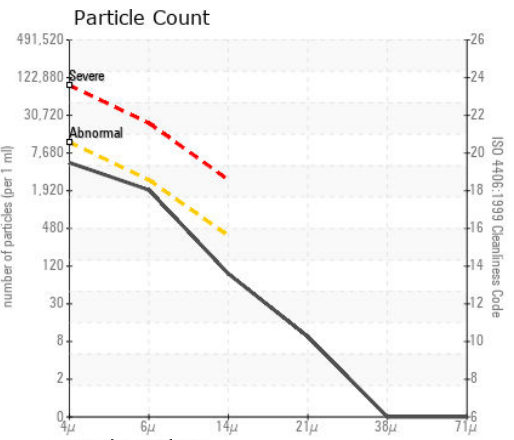
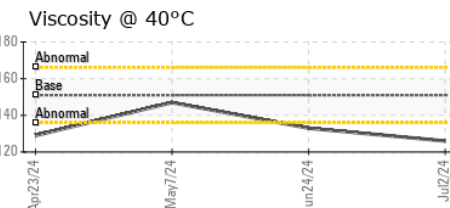
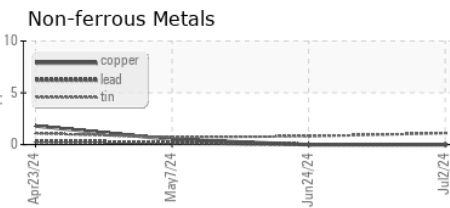
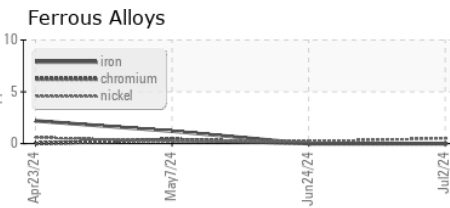
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	▲ MODER
Appearance	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	126	133
Visc @ 100°C	cSt	ASTM D445	28	23.9	24.9
Viscosity Index (VI)	Scale	ASTM D2270	224	222	221

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90004506 **Received** : 11 Jul 2024
Lab Number : 06233917 **Tested** : 16 Jul 2024
Unique Number : 11122751 **Diagnosed** : 16 Jul 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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

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)