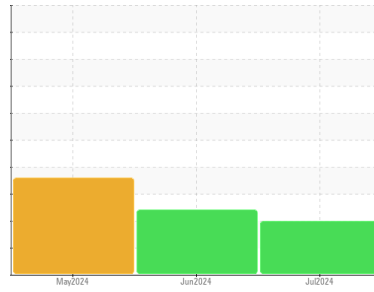


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
LEROI 112046 (S/N 5680X72)
 Component
Compressor
 Fluid
CIMARRON HB-150 (--- GAL)

DIAGNOSIS

Recommendation
 We recommend you service the filters on this component if applicable. 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			TO90004498	TO90004063	TO90004260
Sample Date	Client Info			15 Jul 2024	10 Jun 2024	12 May 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	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	<1	4
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m		1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	2
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>50	7	<1	3
Tin	ppm	ASTM D5185m	>15	1	1	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	<1

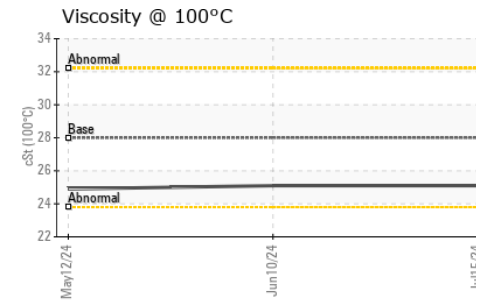
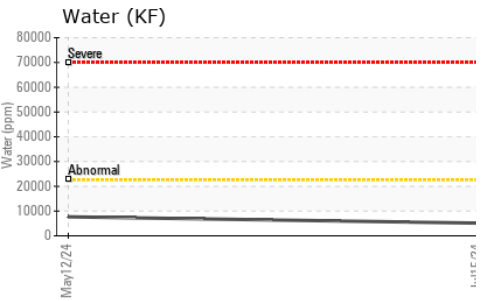
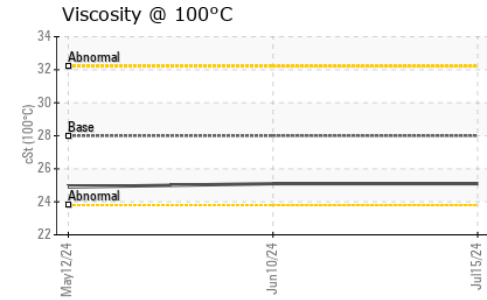
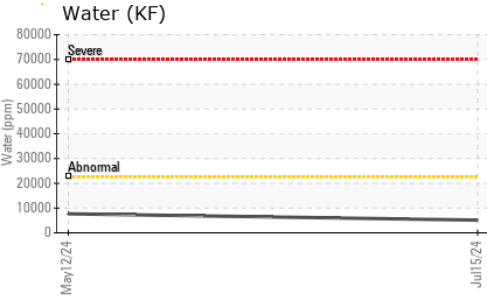
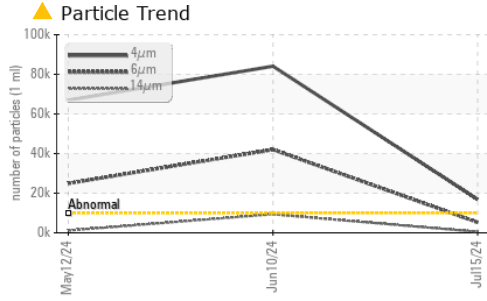
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	2	0	0
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Manganese	ppm	ASTM D5185m		1	<1	0
Magnesium	ppm	ASTM D5185m	0	4	1	<1
Calcium	ppm	ASTM D5185m	0	5	3	7
Phosphorus	ppm	ASTM D5185m	0	12	14	30
Zinc	ppm	ASTM D5185m	0	0	4	5
Sulfur	ppm	ASTM D5185m	0	1694	1521	1806

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	<1
Sodium	ppm	ASTM D5185m		7	3	8
Potassium	ppm	ASTM D5185m	>20	4	5	2
Water	%	ASTM D6304	>2.26	0.513	---	▲ 0.768
ppm Water	ppm	ASTM D6304	>22600	5130	---	▲ 7680

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ 16910	▲ 84089	▲ 66969
Particles >6µm		ASTM D7647	>2500	▲ 5279	▲ 42034	▲ 24907
Particles >14µm		ASTM D7647	>320	▲ 503	▲ 9353	▲ 1147
Particles >21µm		ASTM D7647	>80	▲ 150	▲ 3044	▲ 276
Particles >38µm		ASTM D7647	>20	11	▲ 154	4
Particles >71µm		ASTM D7647	>4	1	4	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 21/20/16	▲ 24/23/20	▲ 23/22/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.47	0.449	0.62

OIL ANALYSIS REPORT

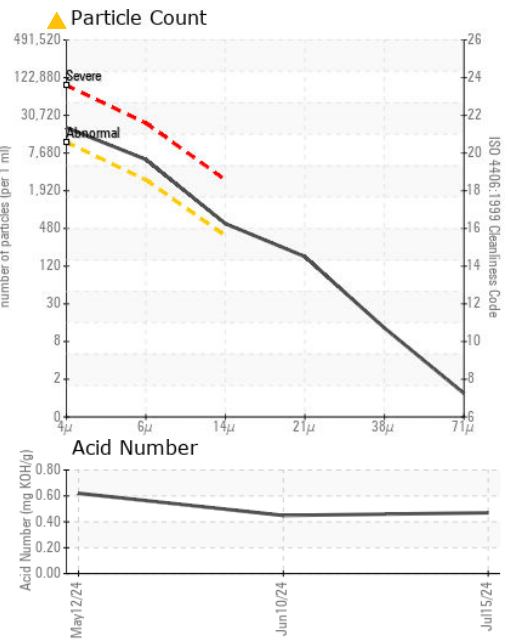
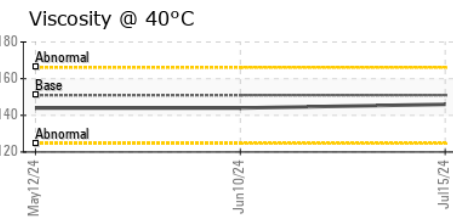
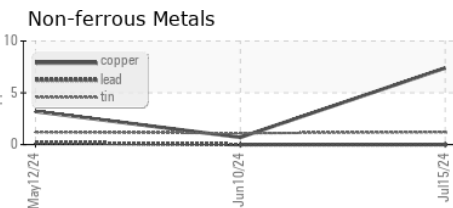
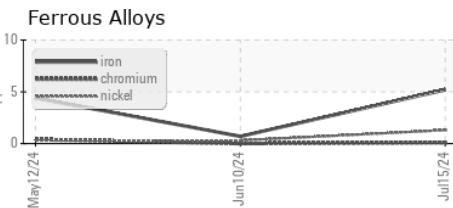


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	146	144
Visc @ 100°C	cSt	ASTM D445	28	25.1	24.9
Viscosity Index (VI)	Scale	ASTM D2270	224	206	209

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90004498 **Received** : 16 Jul 2024
Lab Number : 06238445 **Tested** : 18 Jul 2024
Unique Number : 11127279 **Diagnosed** : 18 Jul 2024 - Don Baldrige
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)