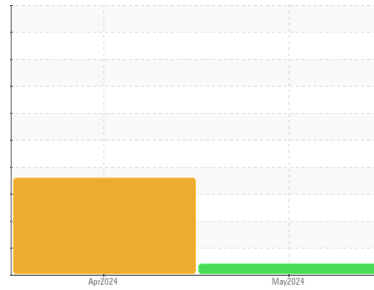


OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
112039 (S/N 5329X6055)
Component
Compressor
Fluid
CIMARRON HB-150 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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. Please note that there was too much water present in the oil to perform an accurate viscosity test @100C.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			TO90004127	TO90004200	---
Sample Date	Client Info			28 May 2024	24 Apr 2024	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

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

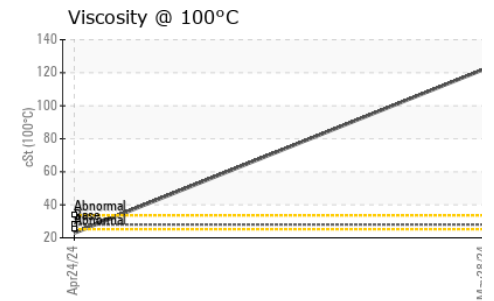
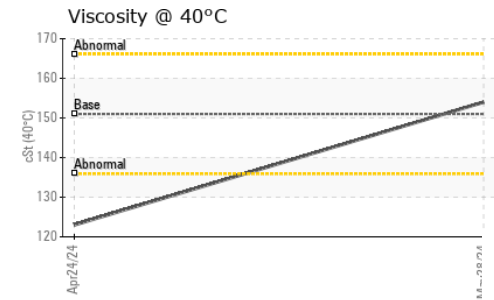
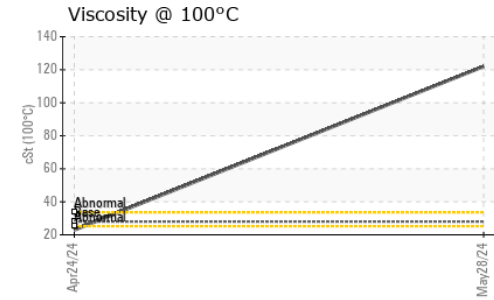
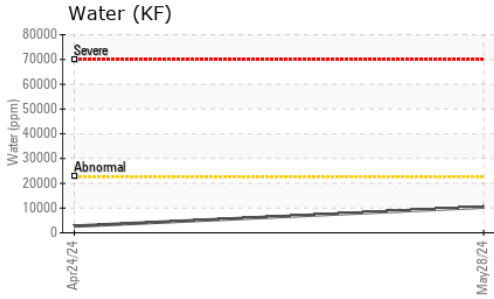
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	0	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	0	0	0	---
Calcium	ppm	ASTM D5185m	0	0	0	---
Phosphorus	ppm	ASTM D5185m	0	31	0	---
Zinc	ppm	ASTM D5185m	0	0	0	---
Sulfur	ppm	ASTM D5185m	0	1541	0	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	---
Sodium	ppm	ASTM D5185m		0	<1	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Water	%	ASTM D6304	>2.26	1.035	▲ 0.271	---
ppm Water	ppm	ASTM D6304	>22600	10356	▲ 2710	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	---	▲ 47441	---
Particles >6µm		ASTM D7647	>2500	---	▲ 14431	---
Particles >14µm		ASTM D7647	>320	---	▲ 967	---
Particles >21µm		ASTM D7647	>80	---	▲ 198	---
Particles >38µm		ASTM D7647	>20	---	3	---
Particles >71µm		ASTM D7647	>4	---	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	---	▲ 23/21/17	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.41	0.49	---

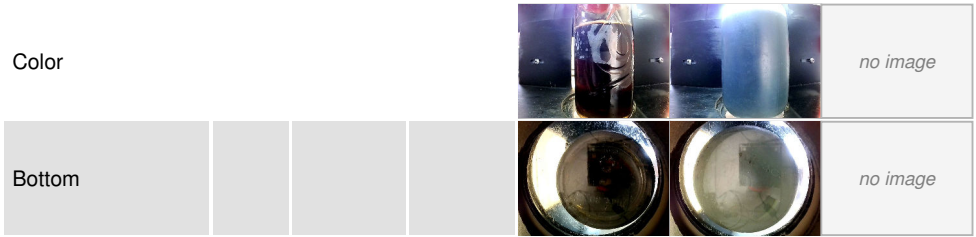
OIL ANALYSIS REPORT



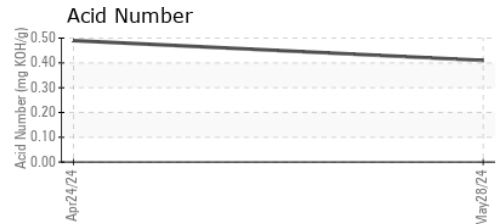
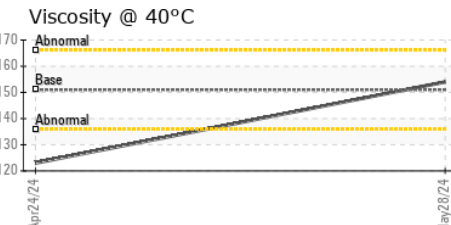
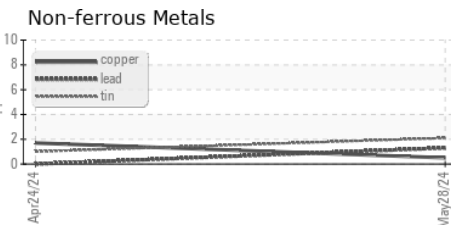
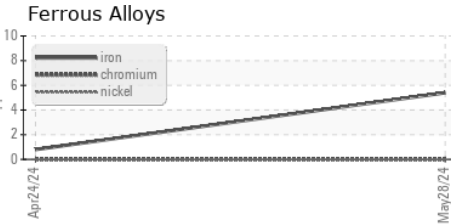
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	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	154	123	---
Visc @ 100°C	cSt	ASTM D445	28	122	22.9	---
Viscosity Index (VI)	Scale	ASTM D2270	224	614	217	---

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90004127 **Received** : 10 Jun 2024
Lab Number : **06204745** **Tested** : 13 Jun 2024
Unique Number : 11072206 **Diagnosed** : 13 Jun 2024 - Doug Bogart
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)