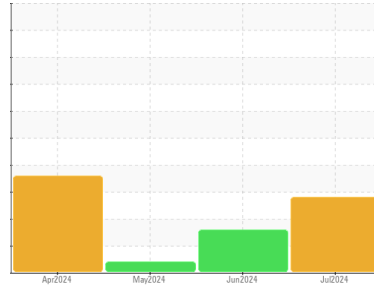


# OIL ANALYSIS REPORT

Sample Rating Trend



**SEDIMENT**



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

**DIAGNOSIS**

**Recommendation**

Oil and filter change at the time of sampling has been noted. 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. There is a moderate amount of visible silt present in the sample.

**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			<b>TO90004509</b>	TO90004526	TO90004127
Sample Date	Client Info			<b>03 Jul 2024</b>	27 Jun 2024	28 May 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

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

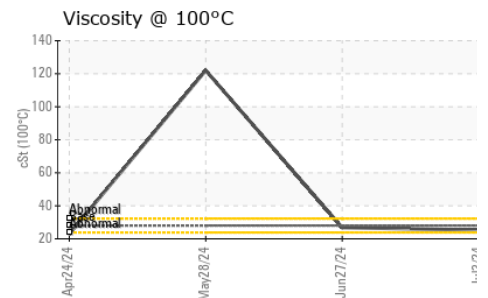
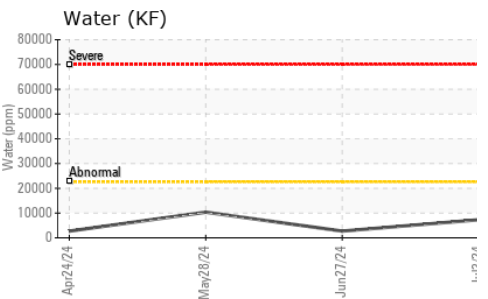
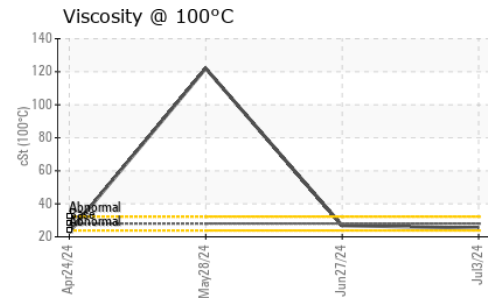
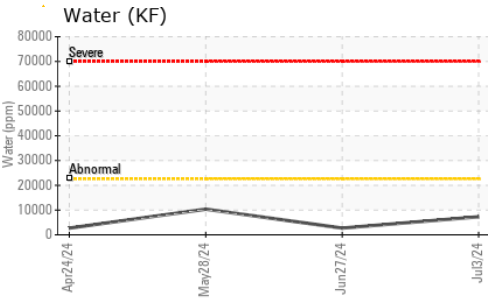
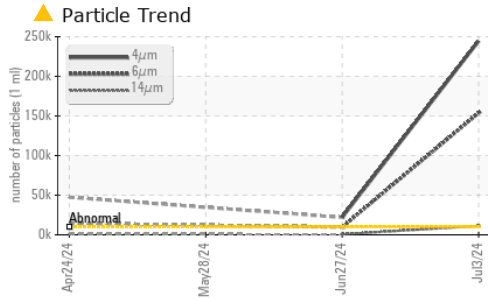
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	0	<b>4</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>54</b>	84	31
Zinc	ppm	ASTM D5185m	0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m	0	<b>876</b>	1136	1541

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	3
Water	%	ASTM D6304	>2.26	<b>0.729</b>	0.271	1.035
ppm Water	ppm	ASTM D6304	>22600	<b>7290</b>	2710	10356

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>▲ 244432</b>	▲ 21896	---
Particles >6µm		ASTM D7647	>2500	<b>▲ 153816</b>	▲ 9698	---
Particles >14µm		ASTM D7647	>320	<b>▲ 11256</b>	▲ 604	---
Particles >21µm		ASTM D7647	>80	<b>▲ 1152</b>	67	---
Particles >38µm		ASTM D7647	>20	<b>7</b>	1	---
Particles >71µm		ASTM D7647	>4	<b>1</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>▲ 25/24/21</b>	▲ 22/20/16	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.27</b>	0.32	0.41

# OIL ANALYSIS REPORT

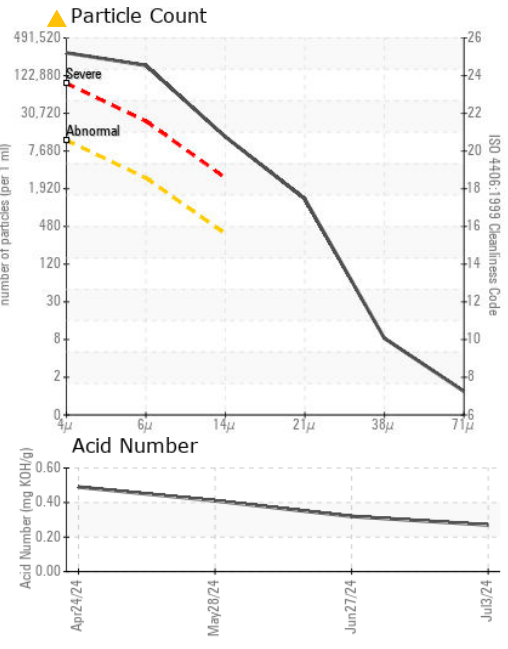
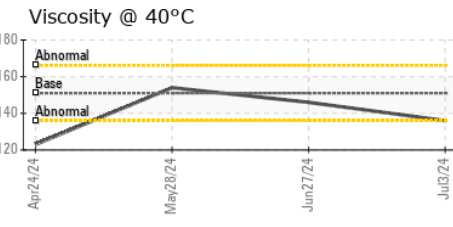
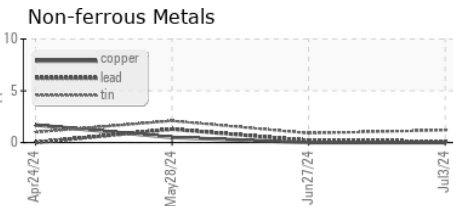
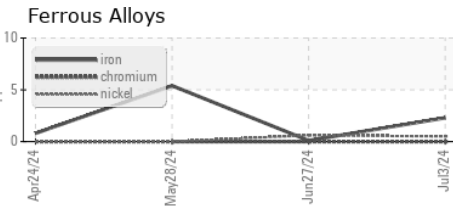


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
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	136	146
Visc @ 100°C	cSt	ASTM D445	28	25.3	26.8
Viscosity Index (VI)	Scale	ASTM D2270	224	221	221

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90004509 **Received** : 11 Jul 2024  
**Lab Number** : 06233927 **Tested** : 16 Jul 2024  
**Unique Number** : 11122761 **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)