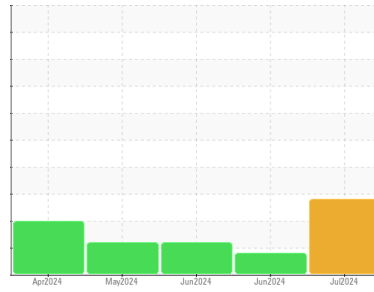


# OIL ANALYSIS REPORT

## Sample Rating Trend



## ADDITIVES



Machine Id  
**LEROI VRUOXY0005 - HP5 (S/N 5680X173)**  
 Component  
**Compressor**  
 Fluid  
**CIMARRON HB-150 (--- GAL)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

#### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>TO90004505</b>	TO90004112	TO90004153
Sample Date	Client Info			<b>02 Jul 2024</b>	24 Jun 2024	04 Jun 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>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	2	3
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	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>0</b>	<1	1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	2
Copper	ppm	ASTM D5185m	>50	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

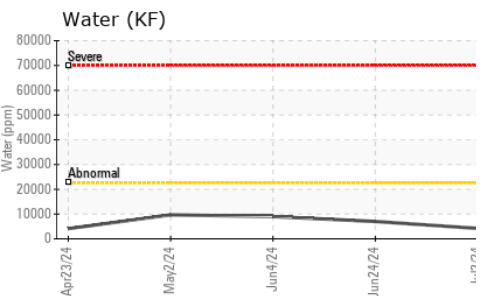
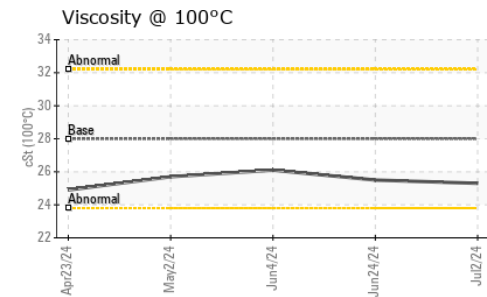
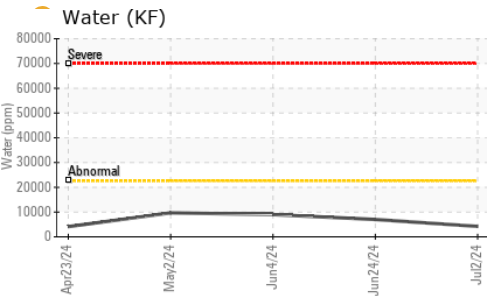
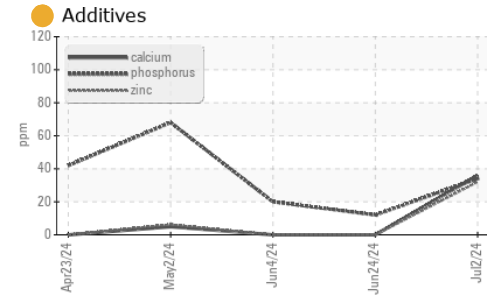
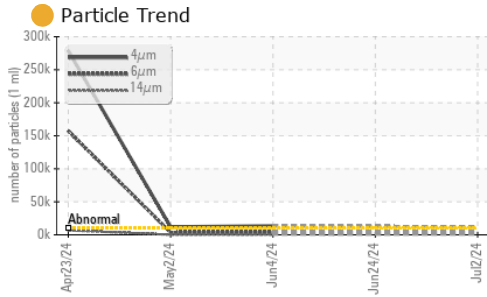
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>4</b>	<1	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>12</b>	0	0
Calcium	ppm	ASTM D5185m	0	<b>36</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>34</b>	12	20
Zinc	ppm	ASTM D5185m	0	<b>32</b>	0	0
Sulfur	ppm	ASTM D5185m	0	<b>1097</b>	195	839

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	1	3
Water	%	ASTM D6304	>2.26	<b>0.421</b>	0.701	0.897
ppm Water	ppm	ASTM D6304	>22600	<b>4210</b>	7010	8976

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>11538</b>	---	13607
Particles >6µm		ASTM D7647	>2500	<b>3952</b>	---	4084
Particles >14µm		ASTM D7647	>320	<b>224</b>	---	106
Particles >21µm		ASTM D7647	>80	<b>37</b>	---	10
Particles >38µm		ASTM D7647	>20	<b>1</b>	---	0
Particles >71µm		ASTM D7647	>4	<b>1</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>21/19/15</b>	---	21/19/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.25</b>	0.255	0.124

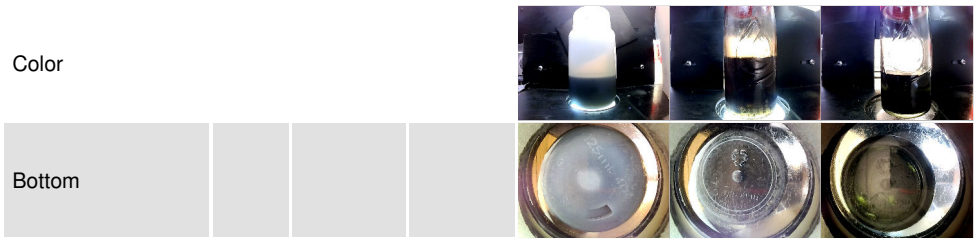
# OIL ANALYSIS REPORT



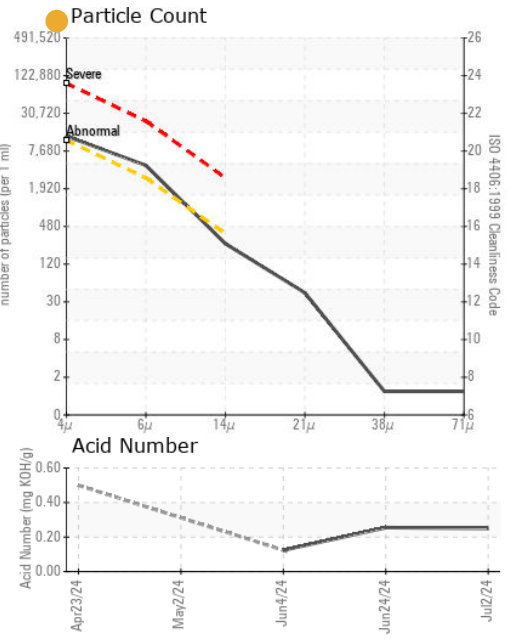
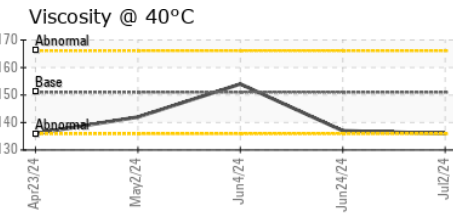
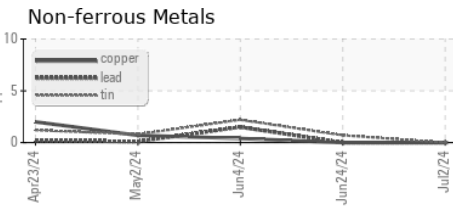
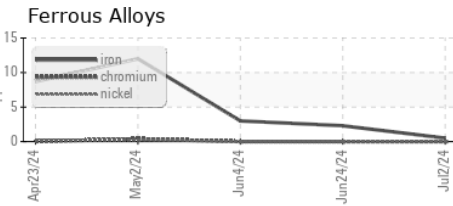
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	136	137
Visc @ 100°C	cSt	ASTM D445	28	25.3	25.5
Viscosity Index (VI)	Scale	ASTM D2270	224	221	205

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90004505 **Received** : 11 Jul 2024  
**Lab Number** : 06233918 **Tested** : 17 Jul 2024  
**Unique Number** : 11122752 **Diagnosed** : 17 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)