

# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**LEROI VRUOXY0031 (S/N LE17493)**  
 Component  
**Compressor**  
 Fluid  
**CIMARRON HB-150 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
 We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please note that this is a corrected copy.

**Wear**  
 The iron level is abnormal.

**Contamination**  
 There is a high amount of particulates present in the oil. There is a high concentration of water 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		<b>TO90004181</b>	---	---
Sample Date	Client Info		<b>16 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>▲ 95</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	<b>2</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	---	---
Lead	ppm	ASTM D5185m >25	<b>1</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>1</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>1</b>	---	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 0	<b>1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>1</b>	---	---
Magnesium	ppm	ASTM D5185m 0	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m 0	<b>6</b>	---	---
Phosphorus	ppm	ASTM D5185m 0	<b>90</b>	---	---
Zinc	ppm	ASTM D5185m 0	<b>1</b>	---	---
Sulfur	ppm	ASTM D5185m 0	<b>715</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	---	---
Sodium	ppm	ASTM D5185m	<b>9</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---
Water	%	ASTM D6304 >2.26	<b>▲ 3.99</b>	---	---
ppm Water	ppm	ASTM D6304 >22600	<b>▲ 39900</b>	---	---

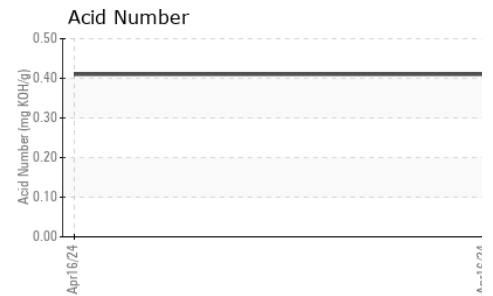
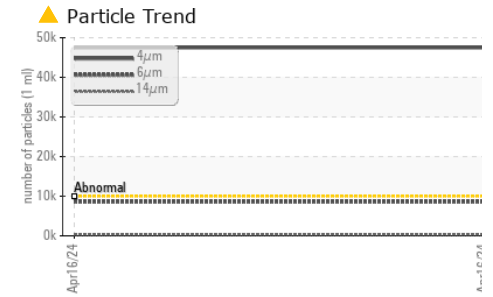
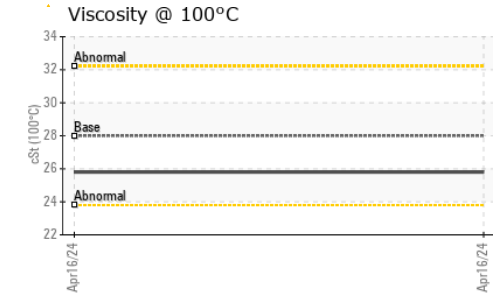
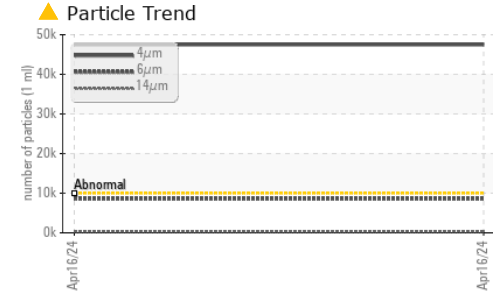
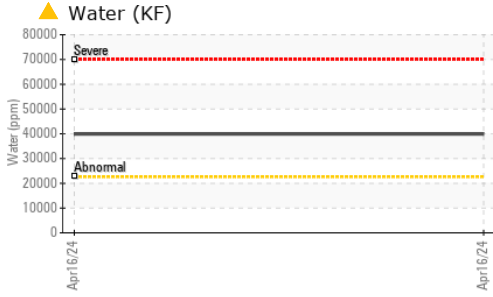
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 47488</b>	---	---
Particles >6µm	ASTM D7647	>2500	<b>▲ 8595</b>	---	---
Particles >14µm	ASTM D7647	>320	<b>● 329</b>	---	---
Particles >21µm	ASTM D7647	>80	<b>64</b>	---	---
Particles >38µm	ASTM D7647	>20	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 23/20/16</b>	---	---

## FLUID DEGRADATION

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

# OIL ANALYSIS REPORT



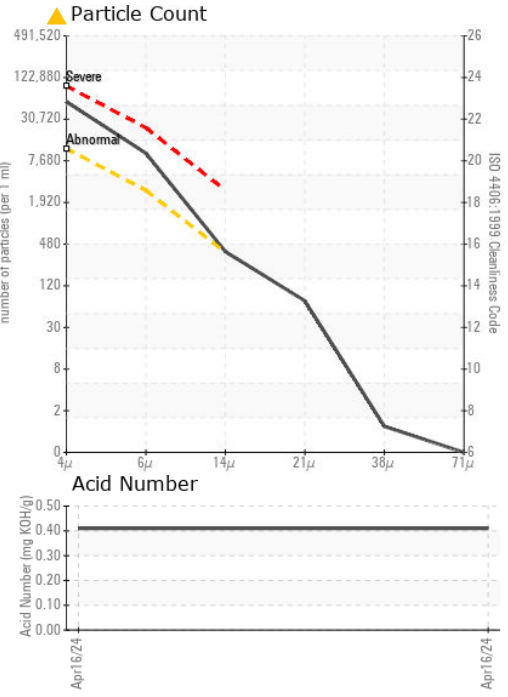
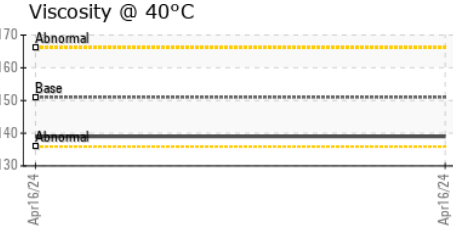
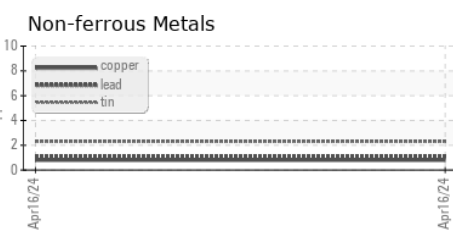
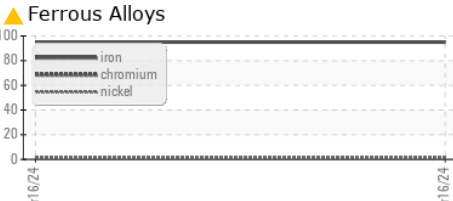
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>2.26	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	139	---
Visc @ 100°C	cSt	ASTM D445	28	25.8	---
Viscosity Index (VI)	Scale	ASTM D2270	224	221	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90004181  
**Lab Number** : 06159821  
**Unique Number** : 10995244  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )  
**Received** : 24 Apr 2024  
**Tested** : 14 Jun 2024  
**Diagnosed** : 14 Jun 2024 - Doug Bogart

**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)