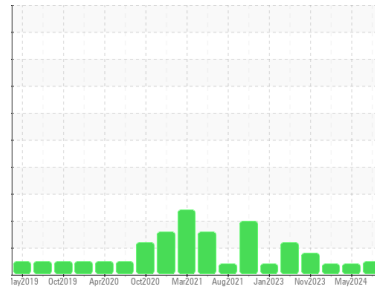




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**BL-032702**

Component  
**Blower**

Fluid  
**ROYAL PURPLE SYNFILM GT 32 (300 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The water content is negligible. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>RP0039416</b>	RP0036052	RP0039414
Sample Date	Client Info		<b>04 Jun 2024</b>	01 May 2024	04 Feb 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>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>1</b>	2	2
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	1	<1
Lead	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	0
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	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>84</b>	81	87
Calcium	ppm	ASTM D5185m	<b>2</b>	5	5
Phosphorus	ppm	ASTM D5185m	<b>1</b>	3	4
Zinc	ppm	ASTM D5185m	<b>2</b>	0	5

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	2	3
Sodium	ppm	ASTM D5185m	<b>2</b>	1	2
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	4
Water	%	ASTM D6304	<b>0.020</b>	0.014	0.008
ppm Water	ppm	ASTM D6304	<b>209</b>	144	81

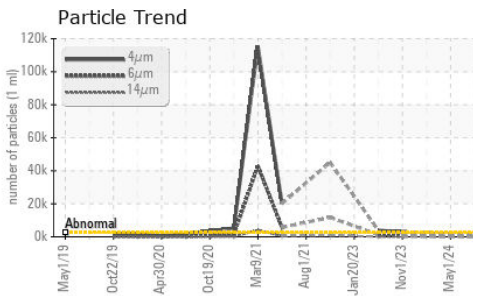
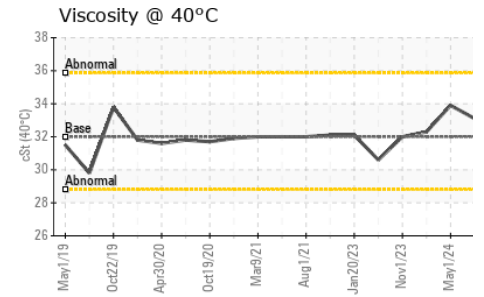
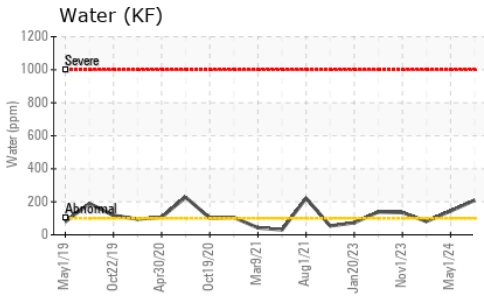
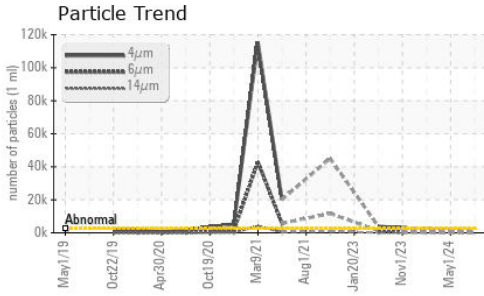
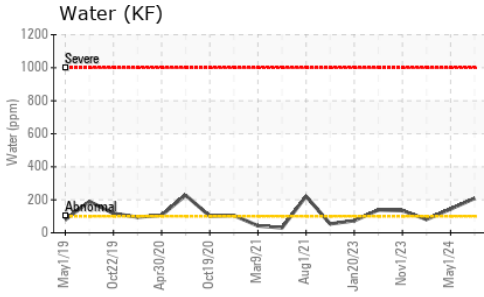
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	<b>849</b>	---	---
Particles >6µm	ASTM D7647	>640	<b>72</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>2</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>1</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>17/13/9</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.41</b>	0.37	0.28

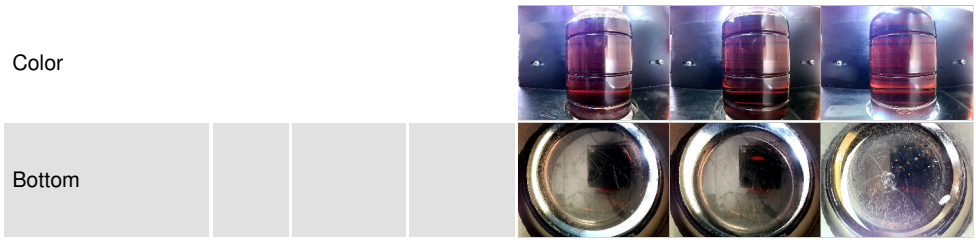
# OIL ANALYSIS REPORT



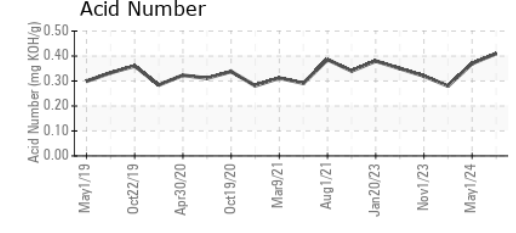
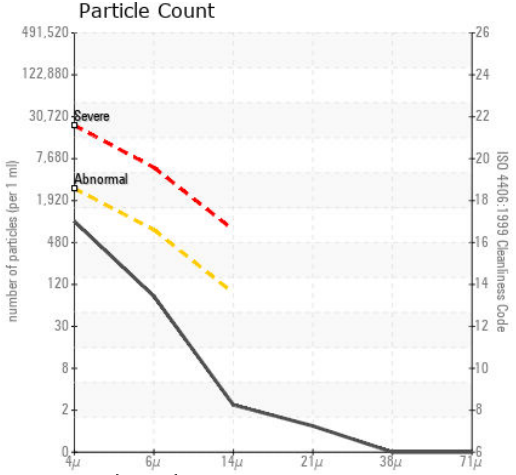
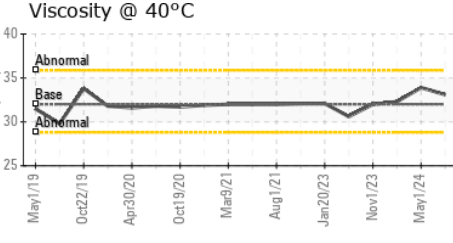
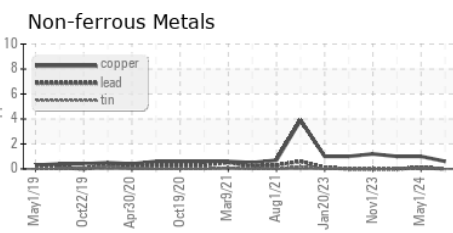
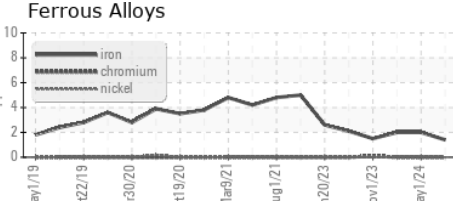
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	33.1	33.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0039416 **Received** : 05 Jun 2024  
**Lab Number** : 06200258 **Tested** : 13 Jun 2024  
**Unique Number** : 11062381 **Diagnosed** : 13 Jun 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**CALUMET MONTANA REFINERY**  
 1807 3RD ST NW  
 GREAT FALLS, MT  
 US 59404

Contact: CODY MCRADY  
 brian.schoechert@clmt.com  
 T: (406)454-9854  
 F:   
 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)