

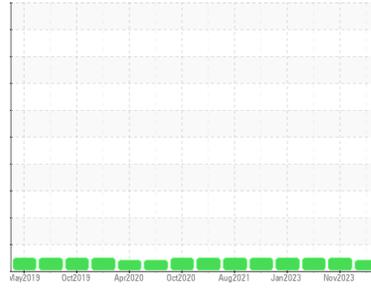
# PROBLEM SUMMARY

Sample Rating Trend

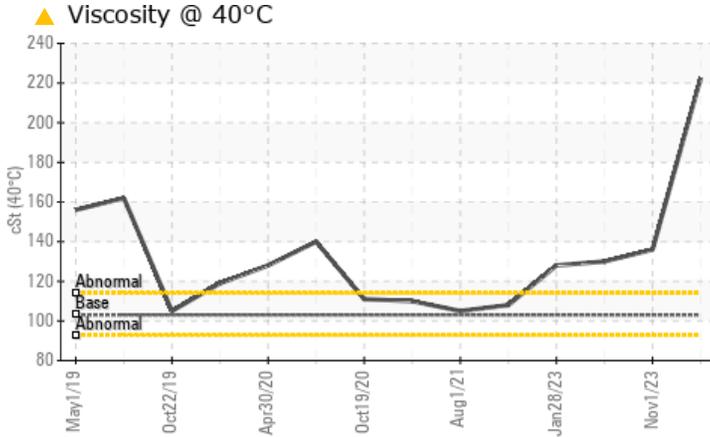
**VISCOSITY**



Machine Id  
**C-040307 (S/N 2XK-6)**  
 Component  
**Compressor**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 100 (25 GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	---	NORMAL
Visc @ 40°C	cSt	ASTM D445	103	▲ 222.5	136	130

Customer Id: CALGREMT  
 Sample No.: RP0038321  
 Lab Number: 05996804  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 01 Nov 2023 Diag:

UNKNOWN



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### 26 Apr 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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### 28 Jan 2023 Diag: Don Baldrige

NORMAL



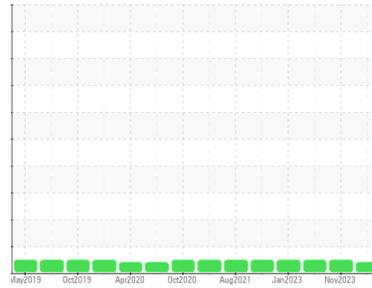
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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# OIL ANALYSIS REPORT

Sample Rating Trend



**VISCOSITY**



Machine Id  
**C-040307 (S/N 2XK-6)**  
 Component  
**Compressor**  
 Fluid  
**ROYAL PURPLE SYNFILM GT 100 (25 GAL)**

**DIAGNOSIS**

**▲ Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

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

**▲ Fluid Condition**

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

**SAMPLE INFORMATION**    method    limit/base    current    history1    history2

Sample Number	Client Info		<b>RP0038321</b>	RP0038316	RP0024401
Sample Date	Client Info		<b>01 Nov 2023</b>	01 Nov 2023	26 Apr 2023
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>ATTENTION</b>	---	NORMAL

**WEAR METALS**    method    limit/base    current    history1    history2

Iron	ppm	ASTM D5185m	>50	<b>1</b>	3	3
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>50	<b>2</b>	8	4
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

**ADDITIVES**    method    limit/base    current    history1    history2

Boron	ppm	ASTM D5185m		<b>5</b>	0	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	90	<b>71</b>	75	68
Calcium	ppm	ASTM D5185m		<b>7</b>	1	<1
Phosphorus	ppm	ASTM D5185m	35	<b>0</b>	0	2
Zinc	ppm	ASTM D5185m		<b>0</b>	4	4

**CONTAMINANTS**    method    limit/base    current    history1    history2

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Water	%	ASTM D6304	>0.1	<b>0.007</b>	0.005	0.010
ppm Water	ppm	ASTM D6304	>1000	<b>73.0</b>	58.5	103.8

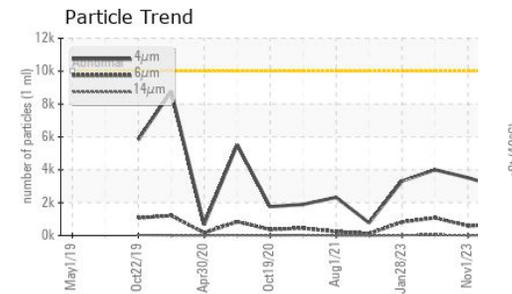
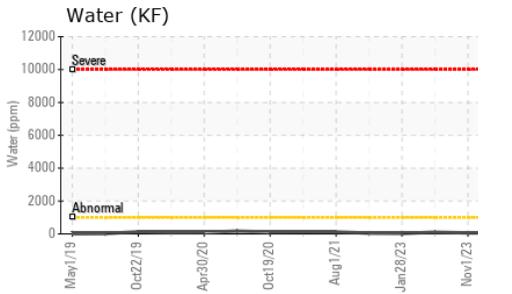
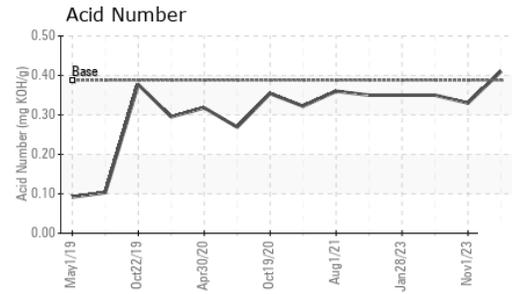
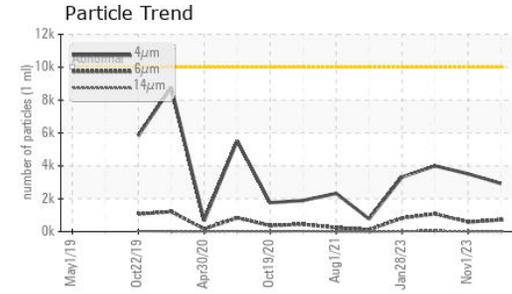
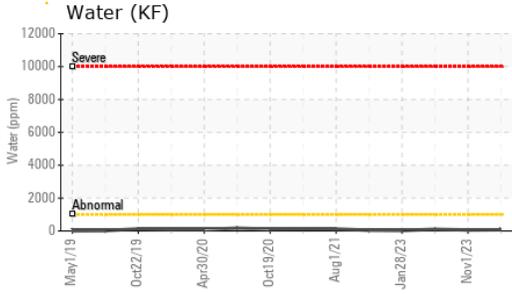
**FLUID CLEANLINESS**    method    limit/base    current    history1    history2

Particles >4µm		ASTM D7647	>10000	<b>3517</b>	2928	4001
Particles >6µm		ASTM D7647	>2500	<b>588</b>	718	1075
Particles >14µm		ASTM D7647	>320	<b>17</b>	21	45
Particles >21µm		ASTM D7647	>80	<b>3</b>	2	7
Particles >38µm		ASTM D7647	>20	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>19/16/11</b>	19/17/12	19/17/13

**FLUID DEGRADATION**    method    limit/base    current    history1    history2

Acid Number (AN)	mg KOH/g	ASTM D8045	0.388	<b>0.41</b>	0.33	0.35
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# OIL ANALYSIS REPORT



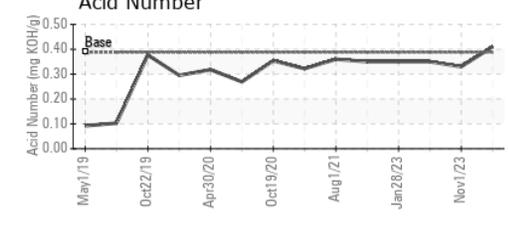
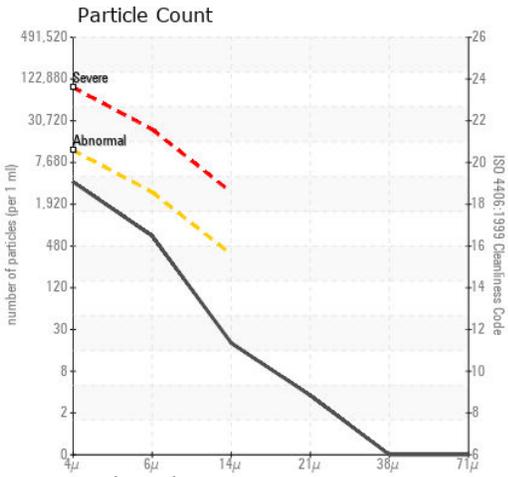
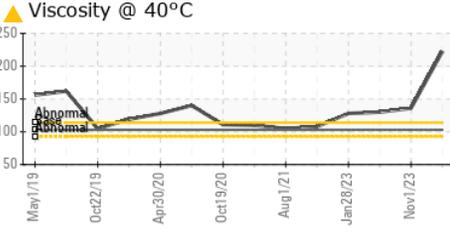
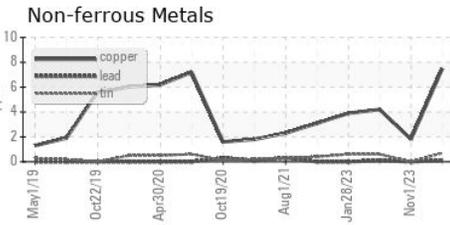
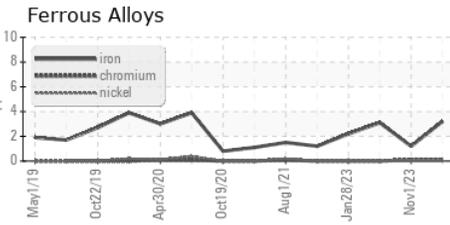
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 103	▲ 222.5	136	130

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038321 **Received** : 02 Nov 2023  
**Lab Number** : 05996804 **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10725164 **Diagnostician** : Doug Bogart  
**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)