



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**RED BUD 2 - RED BUD**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PTK0005686</b>	PTK0005337	PTK0004692
Sample Date		Client Info		<b>02 Apr 2024</b>	29 Dec 2023	27 Sep 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</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	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>2</b>	1	1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

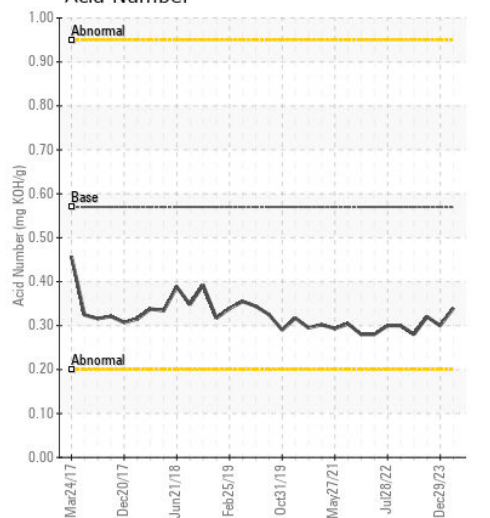
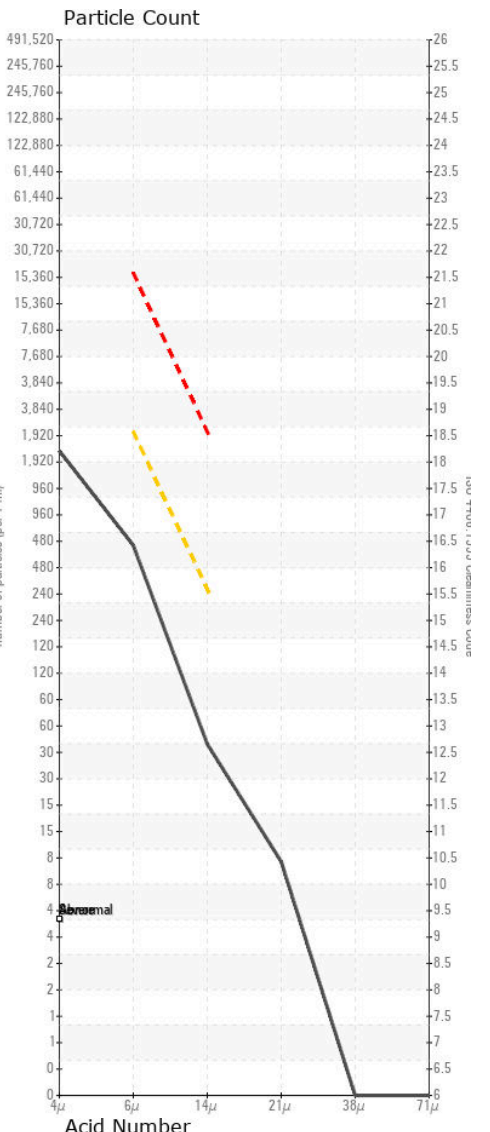
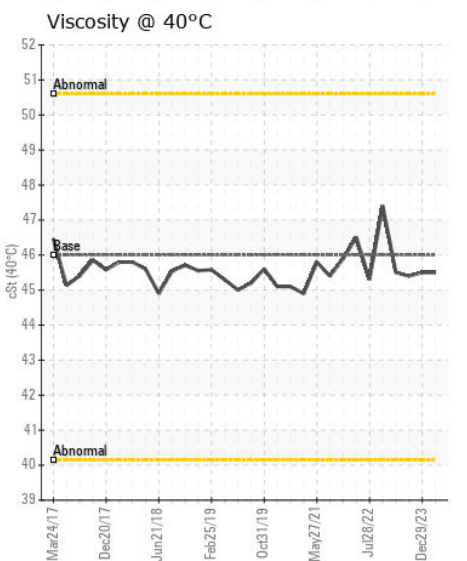
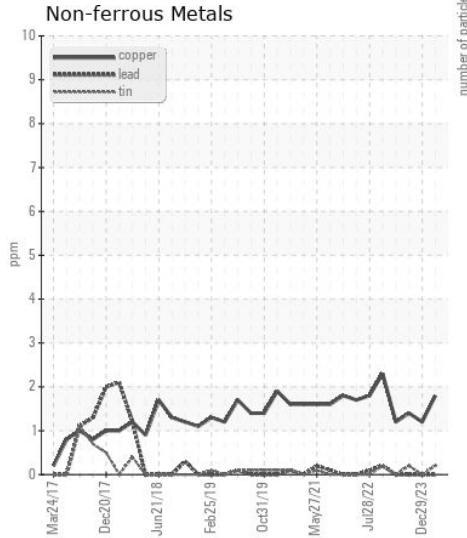
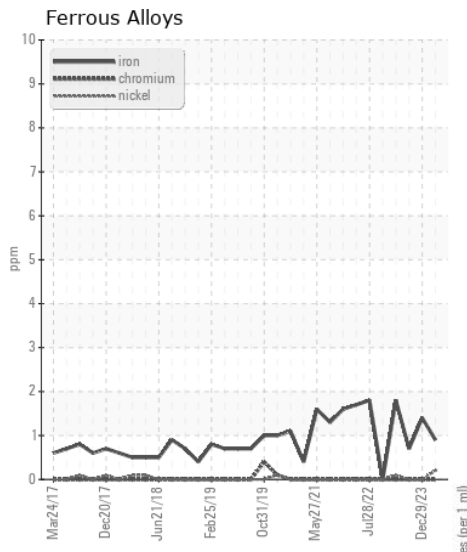
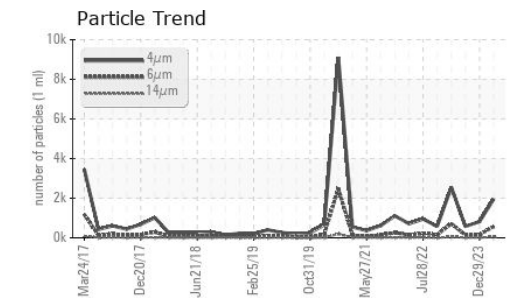
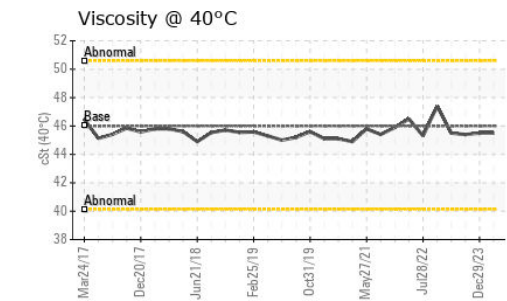
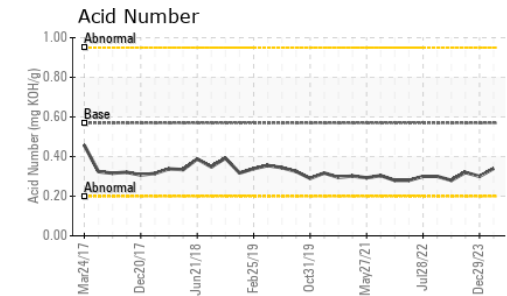
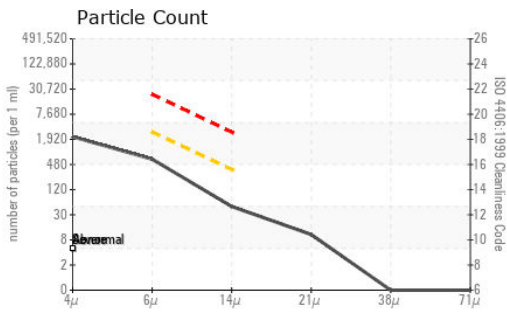
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>1945</b>	816	573
Particles >6µm		ASTM D7647	>2500	<b>565</b>	158	145
Particles >14µm		ASTM D7647	>320	<b>42</b>	10	11
Particles >21µm		ASTM D7647	>80	<b>9</b>	3	4
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)	>18/15	<b>16/13</b>	14/10	14/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	<1	0
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	25	<b>4</b>	2	5
Calcium	ppm	ASTM D5185m	200	<b>64</b>	58	62
Phosphorus	ppm	ASTM D5185m	300	<b>397</b>	327	348
Zinc	ppm	ASTM D5185m	370	<b>442</b>	390	389
Sulfur	ppm	ASTM D5185m	2500	<b>1522</b>	1117	1238
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.34</b>	0.30	0.32
Visc @ 40°C	cSt	ASTM D445	46	<b>45.5</b>	45.5	45.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PTK0005686  
**Lab Number** : 06218211  
**Unique Number** : 11096408  
**Test Package** : MOB 2

**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Wes Davis

**VIKING MATERIALS**  
 3225 COMO AVE  
 MINNEAPOLIS, MN  
 US 55414  
 Contact: RICK FAUE  
 rickf@vikingmaterials.com  
 T: (612)617-5800  
 F: (612)917-5814

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)