



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**2433**  
 Component  
**Hydraulic System**  
 Fluid  
**PROGARD ARCTIC AW 15 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RW0004920</b>	RW0001875	RW0000217
Sample Date		Client Info		<b>12 Jan 2024</b>	12 Oct 2020	10 Sep 2019
Machine Age	hrs	Client Info		<b>6348</b>	3960	3
Oil Age	hrs	Client Info		<b>0</b>	0	3
Filter Age	hrs	Client Info		<b>0</b>	0	1
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<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

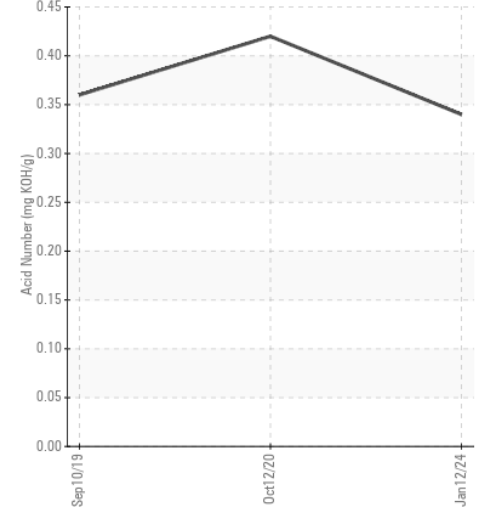
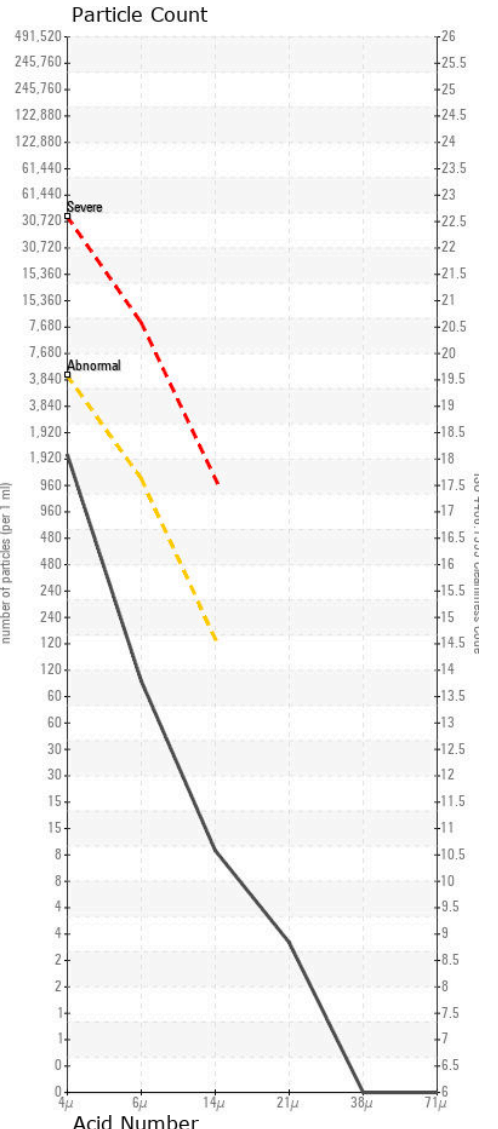
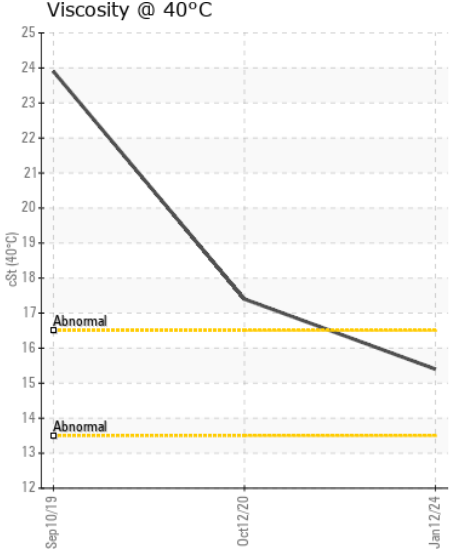
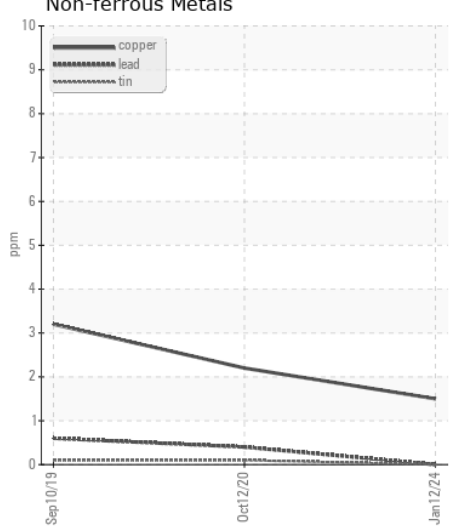
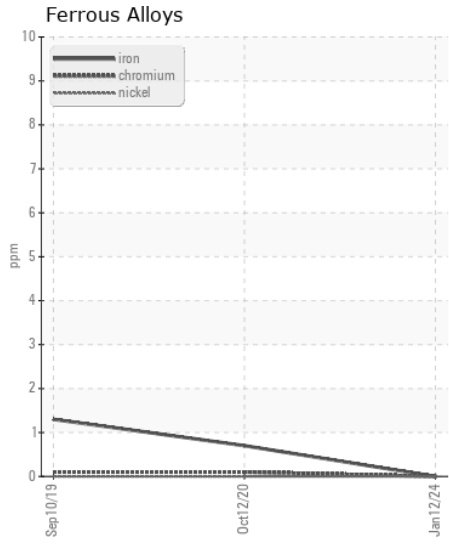
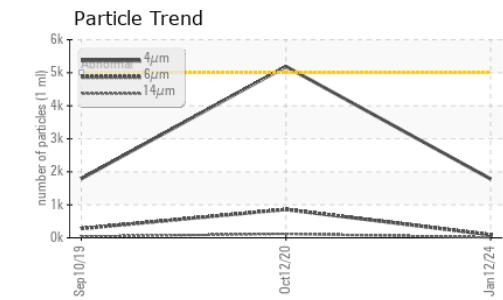
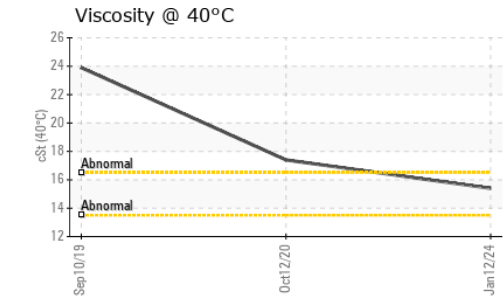
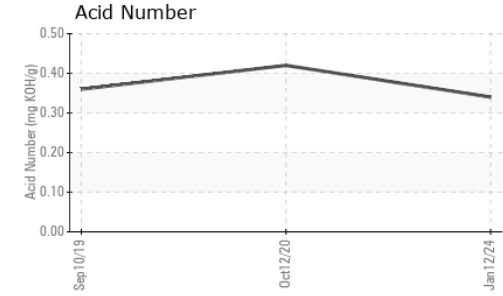
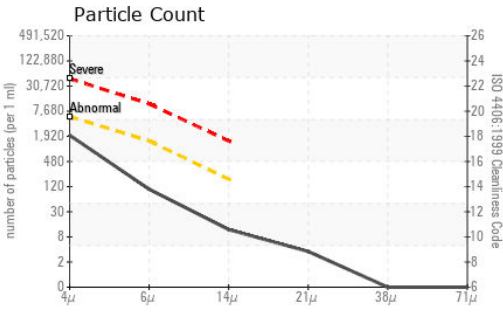
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>1781</b>	▲ 5189	1791
Particles >6µm		ASTM D7647	>1300	<b>92</b>	860	278
Particles >14µm		ASTM D7647	>160	<b>10</b>	119	38
Particles >21µm		ASTM D7647	>40	<b>3</b>	41	16
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	5
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/14/10</b>	▲ 20/17/14	18/15/12
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>&lt;1</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	<1	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Calcium	ppm	ASTM D5185m		<b>97</b>	105	53
Phosphorus	ppm	ASTM D5185m		<b>365</b>	338	411
Zinc	ppm	ASTM D5185m		<b>434</b>	418	469
Sulfur	ppm	ASTM D5185m		<b>911</b>	736	873
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.34</b>	0.420	0.360
Visc @ 40°C	cSt	ASTM D445		<b>15.4</b>	17.4	23.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RW0004920  
**Lab Number** : 06084775  
**Unique Number** : 10872220  
**Test Package** : MOB 2  
**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Doug Bogart

**NEWKIRK ELECTRIC**  
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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)