

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id **2593** Component **Hydraulic System** Fluid **PROGUARD ARCTIC AW 15 (--- GAL)**

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

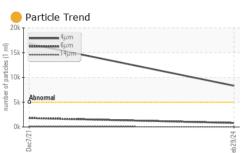
			Dec2021	Feb2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RW0004694	RW0003064	
Sample Date		Client Info		29 Feb 2024	07 Dec 2021	
Machine Age	hrs	Client Info		3997	2114	
Oil Age	hrs	Client Info		1900	2114	
Oil Changed	1113	Client Info		Changed	Changed	
Sample Status				ATTENTION	ABNORMAL	
			line it //e e e e		-	
CONTAMINATIO	N	method	limit/base		history1	history2
Water		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	4	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>75	4	7	
Tin	ppm	ASTM D5185m	>10	0	<1	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	1	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m		0	0	
Calcium	ppm	ASTM D5185m		46	50	
Phosphorus	ppm	ASTM D5185m		368	359	
Zinc	ppm	ASTM D5185m		453	415	
Sulfur	ppm	ASTM D5185m		1092	851	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<1	<1	
Sodium	ppm	ASTM D5185m		<1	<1	
Potassium	ppm	ASTM D5185m	>20	0	0	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	8327	▲ 16782	
Particles >6µm		ASTM D7647		815	1803	
Particles >14µm		ASTM D7647	>1600	32	88	
Particles >21µm		ASTM D7647		9	27	
Particles >38µm		ASTM D7647	>10	0	0	
Particles >71µm		ASTM D7647		0	0	
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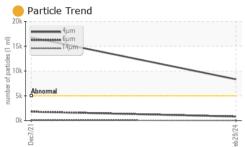
ISO 4406 (c) >19/17/14 **20/17/12**

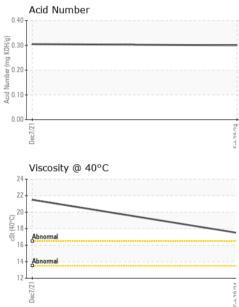
Oil Cleanliness

🔺 21/18/14



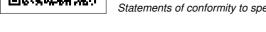






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	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.30	0.305	
	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
24	Silt	scalar	*Visual	NONE	NONE	NONE	
Feb 29/24	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	>0.1	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPERT	TIFS	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445		17.5	21.5	
Feb29/24	SAMPLE IMAGES		method	limit/base	current	history1	history2
Febi	Color						no image
	Bottom					\bigcirc	no image
	GRAPHS						
ţ	Ferrous Alloys			101 50	Particle Coun	t	20
3	10 iron 1			491,520			1 ²⁶
	툴. 5 - nickel			122,880	Savara		-24
				30,720	-		-22
		*******		7,680	Abnormal		-20
	Dec7/21			Feb29/24 s (per 1 mll			
	ă			2 명 1.920 당 당 당		•	+20 +18 +16 +14
	Non-ferrous Metal	S		pitted 480			-16
	10 copper 1			b 120			-14
	E 5-			Feb/29/24 Feb/29/24 100 Fee 1 ml) 100 Fee 1 ml)			
A C D C				50	Ī		12
Ent				8			-10
	21.			Feb29/24	+		-8
	Dec7			0 Feb2			
	Viscosity @ 40°C			2	ني Acid Number	14μ 21μ	38µ 71µ
	25			0.00 0.20 0.20 0.20 0.00 0.10 0.00 0.00			
	ç 20			9.30	-		
	G 20 Abnormal			<u>لة</u> 0.20			
	형 15 - Abnormal			J.10			
	10			Acid 24			
	Dec7/2			Feb29/24	Dec7/2		
	: 10950057	1 Madiso Recei Teste Diagr	ived : 27 d : 28		Baldridge	1875 M	RK ELECTRI ROBERTS S ⁻ USKEGON, M US 4944 act: ERIC KIN



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Contact/Location: ERIC KING - NEWMUS