

OIL ANALYSIS REPORT

North Plant-Purification AG-32101

Component **Gear Reducer** Elui **ROYAL PURPLE SYNFILM GT 320 (30 GAL)**

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 INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0870646	WC0786780	WC0765958
Sample Date		Client Info		10 Jan 2024	10 Aug 2023	20 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ATTENTION	ATTENTION
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>250	8	5	7
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	0
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	0
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	1	1
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	129	67	87
Calcium	ppm	ASTM D5185m		3	1	1
Phosphorus	ppm	ASTM D5185m		37	4	6
Zinc	ppm	ASTM D5185m		0	3	3
Sulfur	ppm	ASTM D5185m		25331	21058	18314
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	<1	<1	<1
Sodium	ppm	ASTM D5185m		0	0	0
Potassium	ppm	ASTM D5185m	>20	2	1	1
Water	%	ASTM D6304	>0.2	0.008	0.045	0.005
ppm Water	ppm	ASTM D6304	>2000	81	456.5	59.5
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	2036	▲ 25062	27073
Particles >6µm		ASTM D7647	>5000	314	3359	3264
Particles >14µm		ASTM D7647	>640	31	222	187
Particles >21µm		ASTM D7647	>160	10	60	58
Particles >38µm		ASTM D7647	>40	1	3	9
Particles >71µm		ASTM D7647	>10	0	1	4
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/15/12	22/19/15	2 2/19/15
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
A stal Niccost and (ANI)			0.05	0.40	0.47	0.00

0.40

Acid Number (AN)

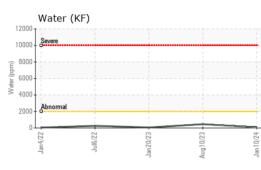
mg KOH/g ASTM D8045 0.25

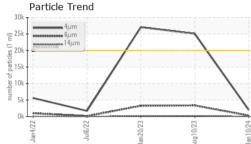
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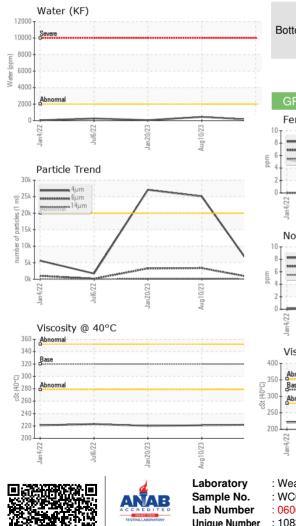
0.39



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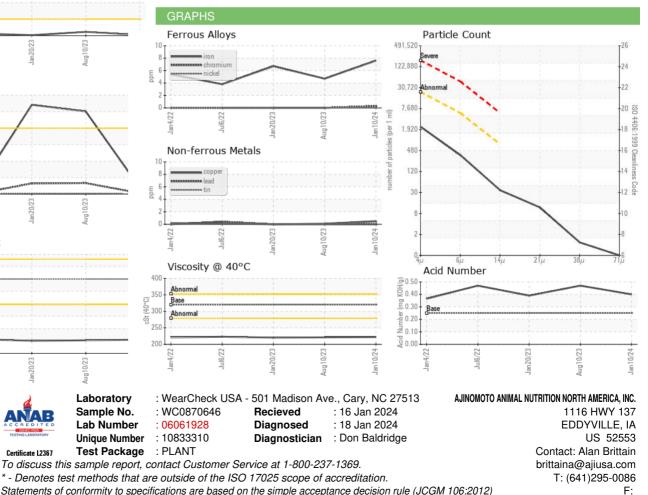






VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	222	221	220
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
				1Can		

Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)