

## **OIL ANALYSIS REPORT**

### North Plant-Purification Machine Id AG-32341 Component

Gear Reducer Fluid ROYAL PURPLE SYNFILM GT 320 (30 GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

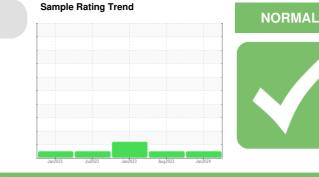
All component wear rates are normal.

#### 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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0870633	WC0786774	WC0765957
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	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>250	8	6	8
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	0	<1
Magnesium	ppm	ASTM D5185m	90	68	55	68
Calcium	ppm	ASTM D5185m		1	2	<1
Phosphorus	ppm	ASTM D5185m		35	5	5
Zinc	ppm	ASTM D5185m		0	7	4
Sulfur	ppm	ASTM D5185m		19747	21216	17919
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	<1	<1	<1
Water	%	ASTM D6304	>0.2	0.009	0.040	0.015
ppm Water	ppm	ASTM D6304	>2000	90	402.4	153.2
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	3274	2693	
Particles >6µm		ASTM D7647	>5000	658	425	
Particles >14µm		ASTM D7647	>640	51	25	
Particles >21µm		ASTM D7647	>160	13	6	
Particles >38µm		ASTM D7647	>40	1	0	
Particles >71µm		ASTM D7647	>10	1	0	
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/17/13	19/16/12	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
					0.47	

0.40

Acid Number (AN)

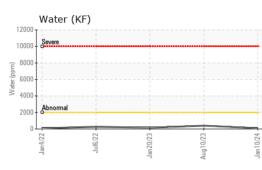
mg KOH/g ASTM D8045 0.25

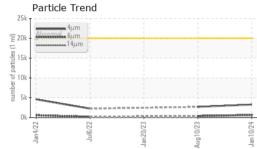
0.47

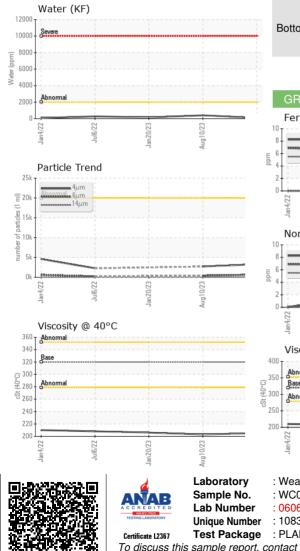
0.43



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	🔺 MODER
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	LIGHT
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	205	203	206
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				•		
Bottom						

Bottom

