

## **OIL ANALYSIS REPORT**

# North Plant-Purification CS32215C

Component Bearing Lube

### HIGH PERFORMANCE LUBRICANTS TURBINE LIFE 46 (15 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

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



Sample Rating Trend

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0870652	WC0804736	WC0804731
Sample Date		Client Info		10 Jan 2024	14 Sep 2023	23 Jun 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	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1	4	3
Chromium	ppm	ASTM D5185m	>2	<1	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>2	2	0	0
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>7	10	▲ 25	19
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		0	4	7
Calcium	ppm	ASTM D5185m		6	75	78
Phosphorus	ppm	ASTM D5185m		185	72	78
Zinc	ppm	ASTM D5185m		0	22	20
Sulfur	ppm	ASTM D5185m		19319	18559	17896
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	0	<1	1
Sodium	ppm	ASTM D5185m		0	4	4
Potassium	ppm	ASTM D5185m	>20	<1	0	2
Water	%	ASTM D6304	>0.1	0.003	0.004	0.005
ppm Water	ppm	ASTM D6304	>1000	33	44.7	58.4
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	796	1164	544
Particles >6µm		ASTM D7647	>2500	215	530	171
Particles >14µm		ASTM D7647	>160	17	72	11
Particles >21µm		ASTM D7647	>40	5	21	2
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	17/15/11	17/16/13	16/15/11
FLUID DEGRADA	TION	method	limit/base	current	history1	history2

0.56

Acid Number (AN)

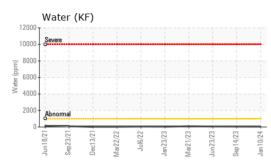
mg KOH/g ASTM D8045 0.19

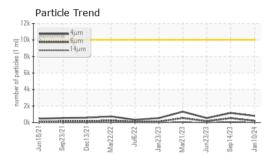
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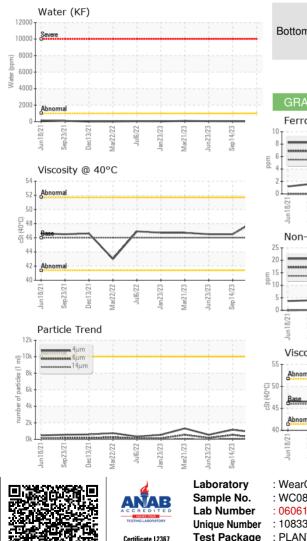
0.33



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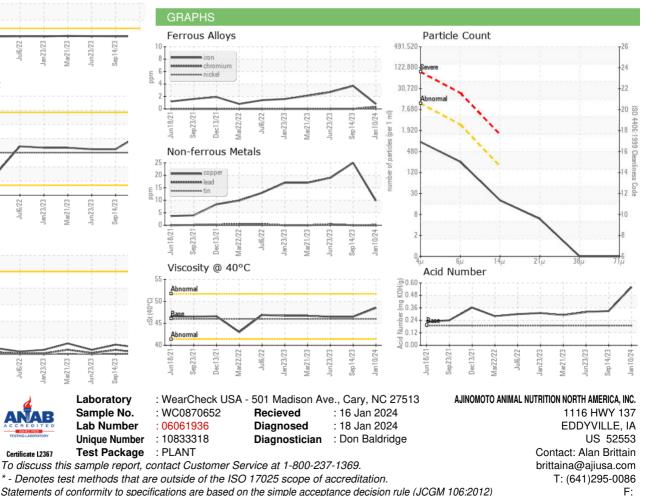




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	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	46	48.5	46.5	46.5
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

Bottom

Color



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