

OIL ANALYSIS REPORT

Area OIL Machine Id GN-4020B (S/N SOLAR B) Component

Turbine

CASTROL PERFECTO XPG 32 (1000 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 fluid. 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 fluid is suitable for further service.



12019 Feb2020 Aug2020 Sep2021 Mar2022 Aug2022 Jan2023 Jun2023

Sample Rating Trend

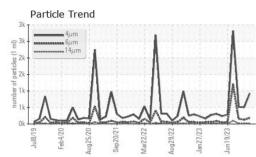
SAMPLE INFORM	JATION	method	limit/base	current	history1	history2
		Client Info		HLC0002863	HLC0002842	HLC0002759
Sample Number		Client Info		HLC0002863 09 Nov 2023		
Sample Date	la va				10 Oct 2023	01 Sep 2023
Machine Age	hrs	Client Info		22252	0	0
Oil Age	hrs	Client Info		0		÷
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.03	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>15	0	0	<1
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>5	0	<1	0
Tin	ppm	ASTM D5185m	>5	0	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	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	0	0	0	<1
Calcium	ppm	ASTM D5185m	0	0	2	4
Phosphorus	ppm	ASTM D5185m	25	26	8	9
Zinc	ppm	ASTM D5185m	0	0	2	7
Sulfur	ppm	ASTM D5185m	1500	194	302	386
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	1	2	1
Sodium	ppm	ASTM D5185m		20	22	21
Potassium	ppm	ASTM D5185m	>20	0	<1	1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		925	505	516
Particles >6µm		ASTM D7647	>1300	180	130	160
Particles >14µm		ASTM D7647	>160	11	13	15
Particles >21µm		ASTM D7647		3	5	4
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647		0	0	0
Oil Cleanliness		ISO 4406 (c)	>/17/14	17/15/11	16/14/11	16/14/11
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Asid Number (ANI)						
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	0.093	0.093	0.18

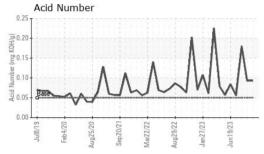
Report Id: BPENOR [WUSCAR] 06011461 (Generated: 11/21/2023 12:06:27) Rev: 1

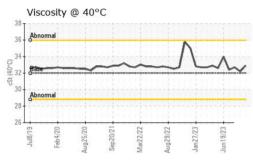
Contact/Location: PERRY NEEL - BPENOR

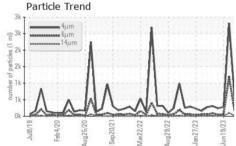


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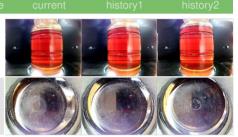




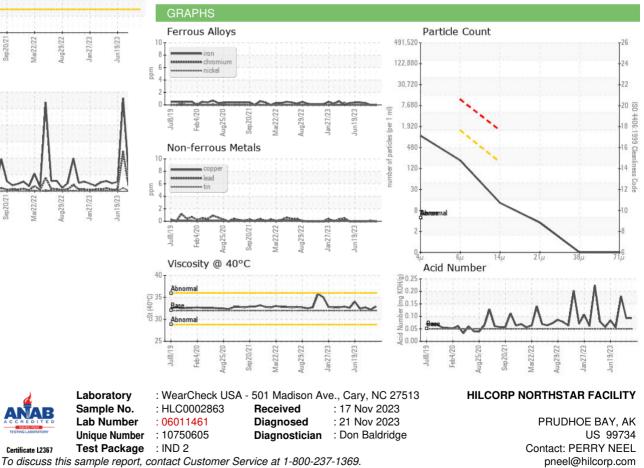




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.03	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
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FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.0	32.9	32.2	32.7
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						



Bottom



* - 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)

Certificate L2367

Contact/Location: PERRY NEEL - BPENOR

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