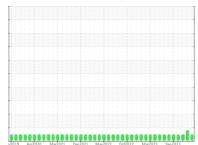


OIL ANALYSIS REPORT

Sample Rating Trend









DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Moar

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HLC0003128	HLC0002854	HLC0002861
Sample Date		Client Info		07 Jan 2024	03 Dec 2023	09 Nov 2023
Machine Age	hrs	Client Info		30455	29612	28920
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ATTENTION	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.6	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	0
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	1	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>40	<1	<1	<1
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		12	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	<1	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		28	0	0
Phosphorus	ppm	ASTM D5185m		32	10	4
Zinc	ppm	ASTM D5185m		16	0	0
Sulfur	ppm	ASTM D5185m		832	828	705
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	0	<1	0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		305	15533	107
Particles >6µm		ASTM D7647	>2500	93	▲ 3134	44
Particles >14µm		ASTM D7647	>320	16	30	6
Particles >21µm		ASTM D7647	>80	5	6	2
Particles >38μm		ASTM D7647	>20	1	0	0
Particles >71μm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>/18/15	15/14/11	1 21/19/12	14/13/10
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
				0.000		

Acid Number (AN)

mg KOH/g ASTM D8045

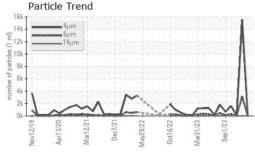
0.092

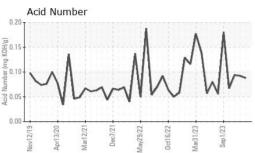
0.088

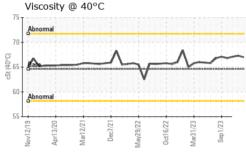
0.094

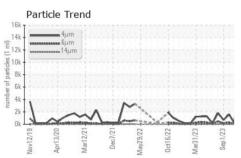


OIL ANALYSIS REPORT









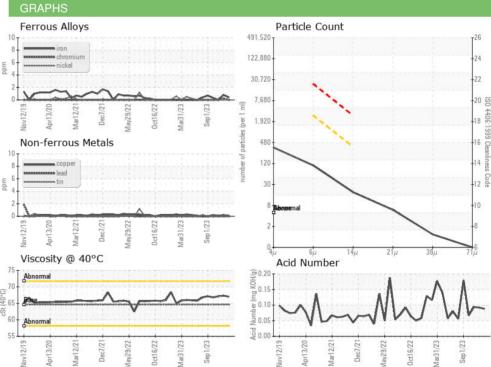
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.6	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

I LOID I HOI LITTILO							
Visc @ 40°C	cSt	ASTM D445	64.6	67.0	67.3	67.1	

SAMPLE IMAGES	metnoa

Color

Bottom







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: 10832397

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : HLC0003128 : 06061015

Recieved Diagnosed

: 16 Jan 2024 : 18 Jan 2024 : Angela Borella Diagnostician

Test Package : IND 2 (Additional Tests: PrtCount) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

HILCORP NORTHSTAR FACILITY

PRUDHOE BAY, AK US 99734 Contact: PERRY NEEL pneel@hilcorp.com T: (907)670-3514 F: (907)659-5377