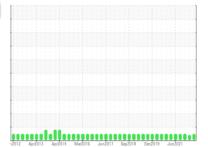


# **OIL ANALYSIS REPORT**

### Sample Rating Trend



**NORMAL** 



Machine Id

# **GTRB-1510B Main Gas Compressor**

Tank Sealing System

PHILLIPS 66 Diamond Class® Turbine Oil AW 32 (--- GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

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.

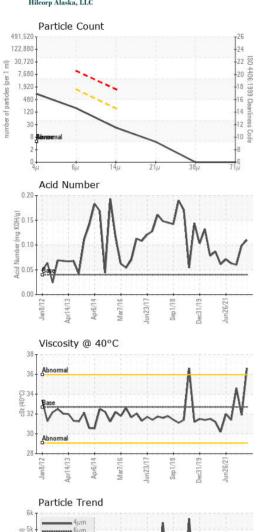
#### **Fluid Condition**

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

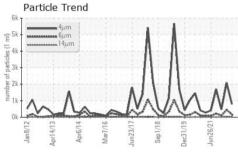
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HLC0001610	HLC0001655	HLC0001417
Sample Date		Client Info		02 Mar 2022	09 Jan 2022	08 Dec 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	MARGINAL	NORMAL
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		0	0	0
Chromium	ppm	ASTM D5185m		0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m		<1	0	0
Lead	ppm	ASTM D5185m		0	0	<1
Copper	ppm	ASTM D5185m		0	0	0
Tin	ppm	ASTM D5185m		<1	0	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 <1
Boron	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	0	0	<1
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	limit/base	0 0	0	<1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0	0 0 <1	<1 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0	0 0 <1 0	<1 0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0	0 0 <1 0	<1 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0 0	0 0 <1 0 0 <1	<1 0 0 0 0 0 0 0 28
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0 0 0 0 27	0 0 <1 0 0 <1 21	<1 0 0 0 0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 0 0 0 0 27	0 0 <1 0 0 <1 21	<1 0 0 0 0 0 0 0 28
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m		0 0 0 0 0 0 0 27 0 316 current	0 0 <1 0 0 <1 21 0 374 history1	<1 0 0 0 0 0 0 0 28 0 369
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	0 0 0 0 0 0 0 27 0 316 current	0 0 <1 0 0 <1 21 0 374 history1	<1 0 0 0 0 0 0 28 0 369
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	0 0 0 0 0 0 0 27 0 316 current	0 0 <1 0 0 <1 21 0 374 history1	<1 0 0 0 0 0 0 28 0 369 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m	limit/base	0 0 0 0 0 0 0 27 0 316 current	0 0 <1 0 0 <1 21 0 374 history1	<1 0 0 0 0 0 0 28 0 369 history2 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m  method ASTM D5185m	limit/base	0 0 0 0 0 0 27 0 316 current <1 0	0 0 <1 0 0 <1 21 0 374 history1 0	<1 0 0 0 0 0 0 28 0 369 history2 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm	ppm	ASTM D5185m	limit/base	0 0 0 0 0 0 0 27 0 316 current <1 0	0 0 <1 0 0 <1 0 0 <1 21 0 374 history1 0 history1	<1 0 0 0 0 0 0 28 0 369 history2 <1 0 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm	ppm	ASTM D5185m  method ASTM D5185m	limit/base	0 0 0 0 0 0 0 27 0 316 current <1 0 0 current 788 164 19	0 0	<1 0 0 0 0 0 0 28 0 369 history2 <1 0 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm	ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base	0 0 0 0 0 0 0 27 0 316 current <1 0 0 current 788 164	0 0 <1 0 0 <1 0 0 <1 21 0 374 history1 0 0 history1 2077 453	<1 0 0 0 0 0 0 28 0 369 history2 <1 0 history2 475 99
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Ptulio CLEANLINE Particles >4µm Particles >6µm Particles >14µm	ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	limit/base	0 0 0 0 0 0 0 27 0 316 current <1 0 0 current 788 164 19	0 0	<1 0 0 0 0 0 0 0 28 0 369 history2 <1 0 0 history2 475 99 15
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 limit/base >1300 >160 >40 >10	0 0 0 0 0 0 0 27 0 316 current <1 0 0 current 788 164 19	0 0	<1 0 0 0 0 0 0 28 0 369 history2 <1 0 0 history2 475 99 15 6



# **OIL ANALYSIS REPORT**



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.04	0.11	0.099	0.060
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
<b>Emulsified Water</b>	scalar	*Visual		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	32.7	36.6	31.9	34.6
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color						
Bottom						
MPC				no image	130	no image





Certificate 12367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : HLC0001610 Lab Number : 05491145

Unique Number : 9890365

**Tested** Diagnosed

Received

Test Package : IND 2 ( Additional Tests: PrtCount )

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

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.

: 19 Mar 2022 - Doug Bogart

: 14 Mar 2022

: 19 Mar 2022

PRUDHOE BAY, AK US 99734 Contact: SEAN LOWTHER slowther@hilcorp.com T: (907)659-6800

604 WAREHOUSE ENDICOTT

**HILCORP ALASKA LLC - ENDICOTT** 

Report Id: BPEEND [WUSCAR] 05491145 (Generated: 04/29/2024 11:54:28) Rev: 1

Contact/Location: SEAN LOWTHER - BPEEND

F: