



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
ASRI-TRL-HTR-0009 ASRI-TRL-HTR-0009
Component
Circulating System
Fluid
SAE 0W30 (12 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.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		HLC0002263	---	---
Sample Date	Client Info		21 Jan 2024	---	---
Machine Age	hrs	Client Info	80575	---	---
Oil Age	hrs	Client Info	3187	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	10	---	---
Chromium	ppm	ASTM D5185m	1	---	---
Nickel	ppm	ASTM D5185m	<1	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m	<1	---	---
Aluminum	ppm	ASTM D5185m	3	---	---
Lead	ppm	ASTM D5185m	2	---	---
Copper	ppm	ASTM D5185m	2	---	---
Tin	ppm	ASTM D5185m	1	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	94	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	3	---	---
Manganese	ppm	ASTM D5185m	2	---	---
Magnesium	ppm	ASTM D5185m	730	---	---
Calcium	ppm	ASTM D5185m	1322	---	---
Phosphorus	ppm	ASTM D5185m	761	---	---
Zinc	ppm	ASTM D5185m	873	---	---
Sulfur	ppm	ASTM D5185m	2956	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	11	---	---
Sodium	ppm	ASTM D5185m	>12	---	---
Potassium	ppm	ASTM D5185m	>20	---	---

INFRA-RED

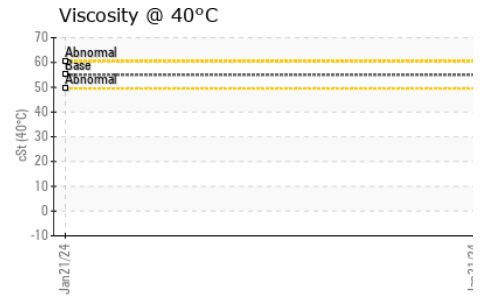
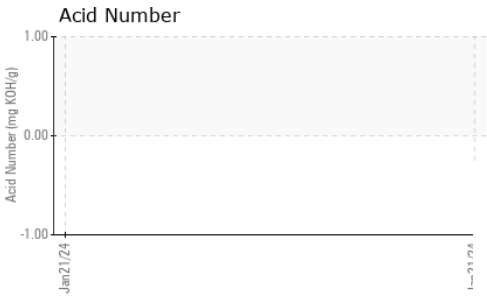
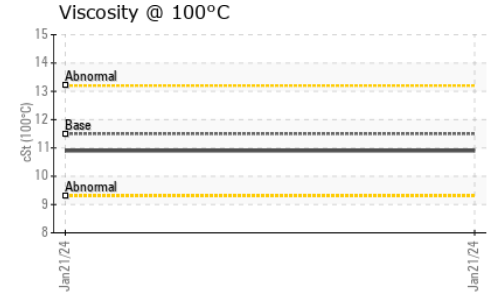
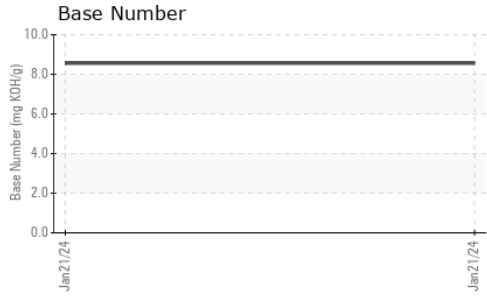
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	8.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	17.2	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	13.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.56	---	---



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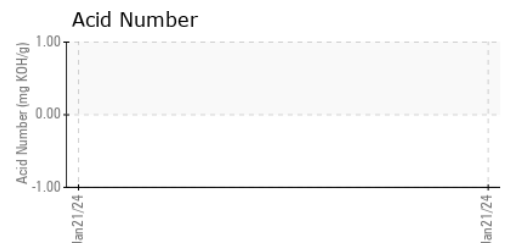
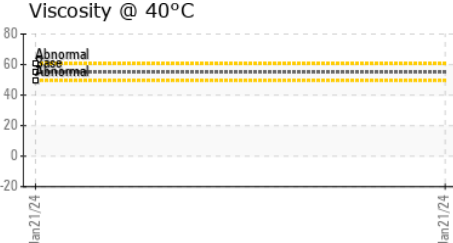
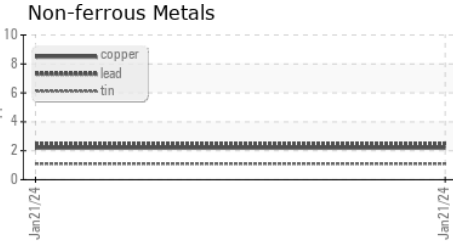
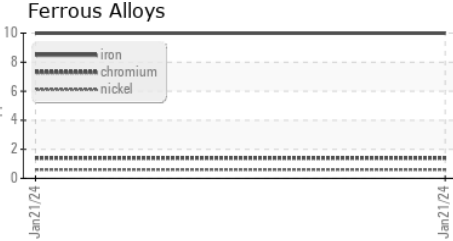
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual		NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	11.5	10.9	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HLC0002263 **Received** : 01 Feb 2024
Lab Number : 06077800 **Tested** : 05 Feb 2024
Unique Number : 10859891 **Diagnosed** : 05 Feb 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: FT-IR, KV100, PrtCount, TBN)

HILCORP EXPLORATION ALASKA - MILNE POINT
 1000 MILNE POINT RD
 PRUDOE BAY, AK
 US 99734
 Contact: Jerrod Rose
 jrose@hilcorp.com

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)

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F: