



OIL ANALYSIS REPORT

Sample Rating Trend

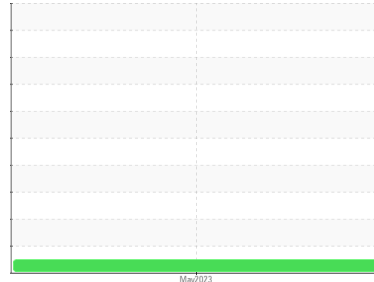
NORMAL



Machine Id
10568404

Component
Unknown Component

Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)



DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. This is a baseline read-out on the submitted sample. Please specify the component make and model with your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Contamination

Insufficient sample was received to conduct all the routine laboratory tests.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0769861	---	---
Sample Date	Client Info		09 May 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
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 D5185(m)	7	---	---
Chromium	ppm	ASTM D5185(m)	0	---	---
Nickel	ppm	ASTM D5185(m)	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m)	<1	---	---
Lead	ppm	ASTM D5185(m)	<1	---	---
Copper	ppm	ASTM D5185(m)	0	---	---
Tin	ppm	ASTM D5185(m)	0	---	---
Antimony	ppm	ASTM D5185(m)	<1	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 60	20	---	---
Barium	ppm	ASTM D5185(m) 0	<1	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m) 0	<1	---	---
Magnesium	ppm	ASTM D5185(m) 0	1	---	---
Calcium	ppm	ASTM D5185(m) 0	<1	---	---
Phosphorus	ppm	ASTM D5185(m) 270	440	---	---
Zinc	ppm	ASTM D5185(m) 0	8	---	---
Sulfur	ppm	ASTM D5185(m) 11200	4993	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS


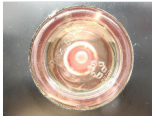
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	10	---	---
Sodium	ppm	ASTM D5185(m)	<1	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---

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	---	---



OIL ANALYSIS REPORT

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0769861
Lab Number : 02557679
Unique Number : 5578719
Test Package : TEST (Additional Tests: ICP)

Vale - Copper Cliff Smelter
 COPPER CLIFF SMELTER WAREHOUSE, 155 BALSAM ST.
 COPPER CLIFF, ON
 CA P0M 1N0
 Contact: Jacynthe Gelinas
 jacynthegelinas@vale.com
 T: (705)682-5980
 F: (705)682-6535

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.