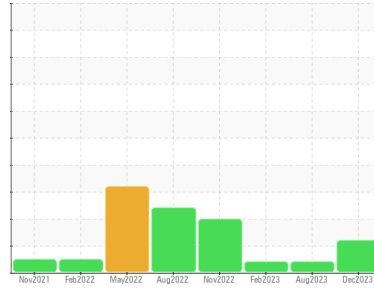


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
Roll Shop
 Machine Id
[Roll Shop] #1 Grinder-BIG GRINDER CALIPER CARRIAGE
 Component
Circulating System
 Fluid
PETRO CANADA ACCUFLO TK 68 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0107742	PCA0101463	PCA0089494
Sample Date	Client Info	27 Dec 2023	14 Aug 2023	01 Feb 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	Not Changd
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	5	8	6
Chromium	ppm	ASTM D5185m	0	0	0
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m	0	0	<1
Lead	ppm	ASTM D5185m	0	0	<1
Copper	ppm	ASTM D5185m	0	0	<1
Tin	ppm	ASTM D5185m	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	<1	0	0	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	<1	
Manganese	ppm	ASTM D5185m	<1	<1	<1	
Magnesium	ppm	ASTM D5185m	3	4	6	
Calcium	ppm	ASTM D5185m	73	85	102	
Phosphorus	ppm	ASTM D5185m	73	32	67	66
Zinc	ppm	ASTM D5185m	24	29	34	
Sulfur	ppm	ASTM D5185m	3600	1724	2101	1929

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	11	11	9	
Sodium	ppm	ASTM D5185m	3	5	2	
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water	%	ASTM D6304	NEG	NEG	NEG	

FLUID CLEANLINESS

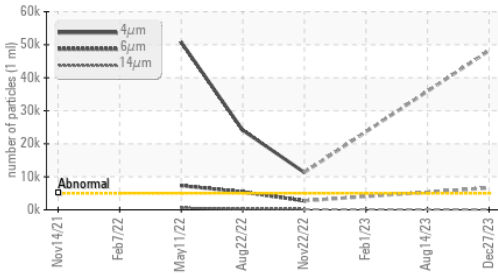
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	▲ 48186	---	---
Particles >6µm	ASTM D7647	>1300	▲ 6638	---	---
Particles >14µm	ASTM D7647	>160	102	---	---
Particles >21µm	ASTM D7647	>40	20	---	---
Particles >38µm	ASTM D7647	>10	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 23/20/14	---	---

FLUID DEGRADATION

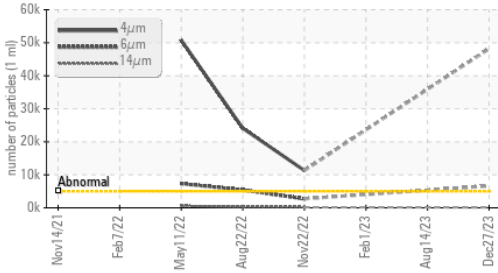
method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.65	0.07	0.07	0.11

OIL ANALYSIS REPORT

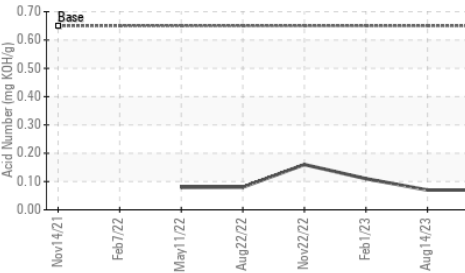
▲ Particle Trend



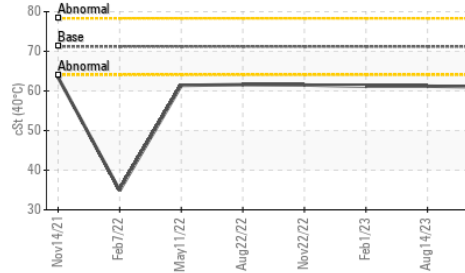
▲ Particle Trend



Acid Number



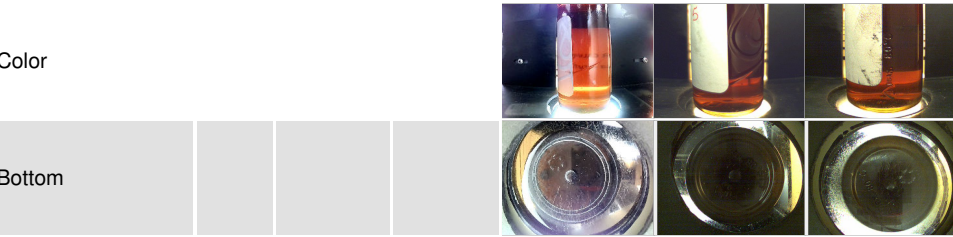
Viscosity @ 40°C



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

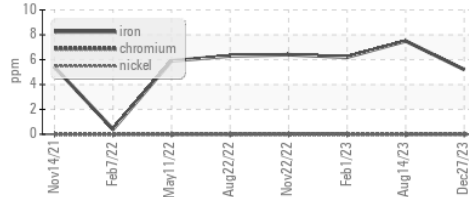
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	71.2	61.0	61.2

SAMPLE IMAGES

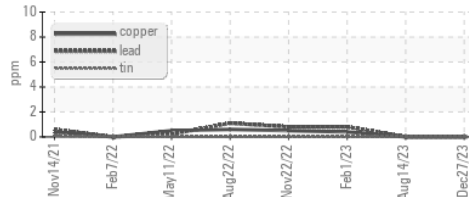


GRAPHS

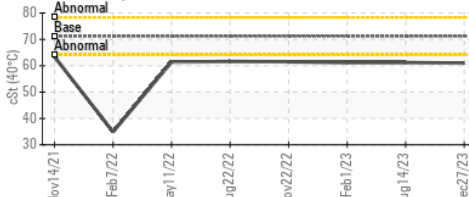
Ferrous Alloys



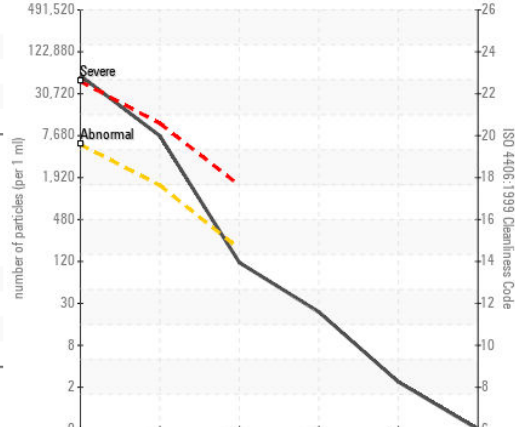
Non-ferrous Metals



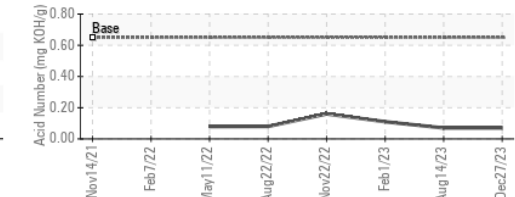
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : PCA0107742
 Lab Number : 06046307
 Unique Number : 10806915
 Test Package : PLANT

SDI - Steel Dynamics Inc. - Heartland
 455 West Industrial Drive
 Terre Haute, IN
 US 47802
 Contact: BRAD ELLIS
 brad.ellis@steeldynamics.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)

T:
F: