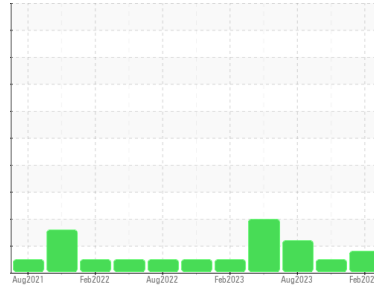


OIL ANALYSIS REPORT

Sample Rating Trend



Area
Pickle Line
Machine Id
[Pickle Line] 585175-DLVRY EDGE GUIDE
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (--- GAL)

DIAGNOSIS

- Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
All component wear rates are normal.
- Contamination**
There is a moderate 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 acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0113011	PCA0107657	PCA0101439
Sample Date	Client Info	12 Feb 2024	26 Nov 2023	22 Aug 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	NORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	0
Chromium	ppm	ASTM D5185m >20	0	0
Nickel	ppm	ASTM D5185m >20	0	<1
Titanium	ppm	ASTM D5185m	<1	0
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >20	0	<1
Lead	ppm	ASTM D5185m >20	0	<1
Copper	ppm	ASTM D5185m >20	4	3
Tin	ppm	ASTM D5185m >20	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0
Barium	ppm	ASTM D5185m 0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0
Manganese	ppm	ASTM D5185m 0	<1	0
Magnesium	ppm	ASTM D5185m 0	2	5
Calcium	ppm	ASTM D5185m 50	51	53
Phosphorus	ppm	ASTM D5185m 330	275	319
Zinc	ppm	ASTM D5185m 430	405	420
Sulfur	ppm	ASTM D5185m 760	1046	1092

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	<1
Sodium	ppm	ASTM D5185m	<1	0
Potassium	ppm	ASTM D5185m >20	2	2
Water	%	ASTM D6304 >0.05	NEG	NEG

FLUID CLEANLINESS

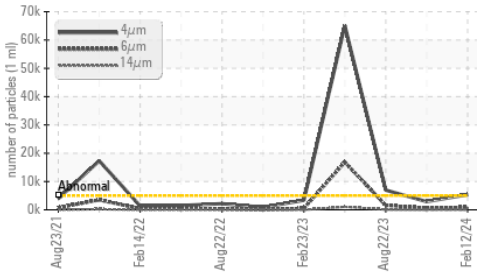
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 5370	2896	▲ 6956
Particles >6µm	ASTM D7647 >1300	893	562	▲ 1580
Particles >14µm	ASTM D7647 >160	25	20	79
Particles >21µm	ASTM D7647 >40	5	3	17
Particles >38µm	ASTM D7647 >10	1	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/12	19/16/11	▲ 20/18/13

FLUID DEGRADATION

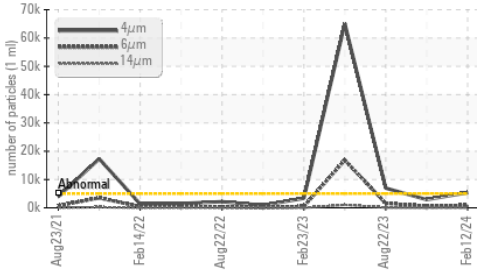
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.70	0.33	0.31

OIL ANALYSIS REPORT

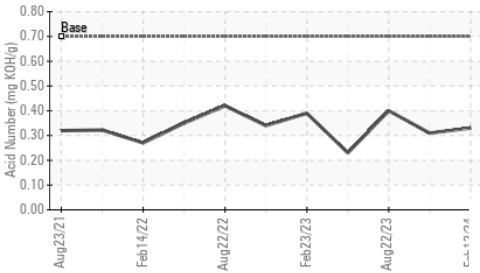
▲ Particle Trend



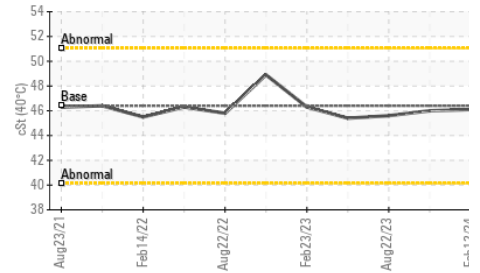
▲ Particle Trend



Acid Number



Viscosity @ 40°C



VISUAL	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	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

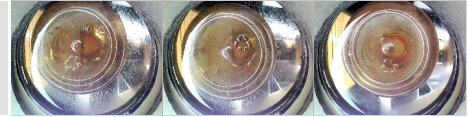
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.4	46.1	46.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

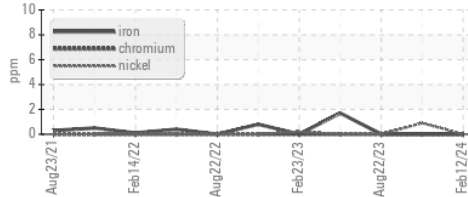


Bottom

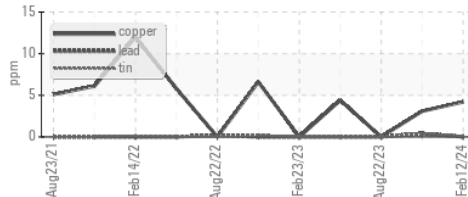


GRAPHS

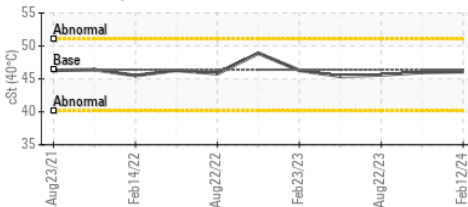
Ferrous Alloys



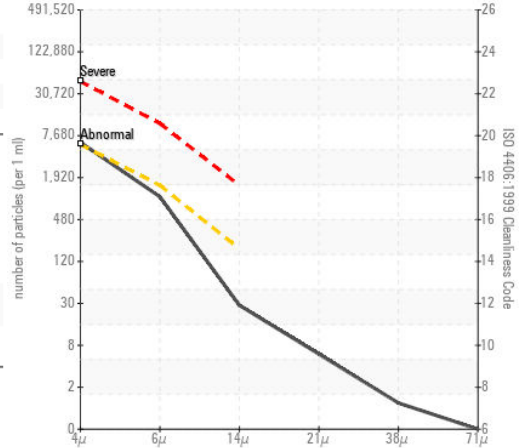
Non-ferrous Metals



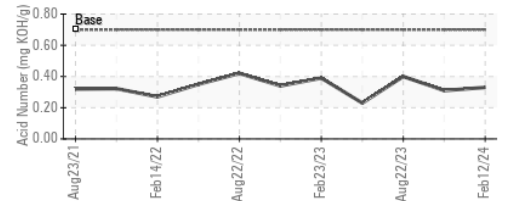
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0113011
Lab Number : 06088138
Unique Number : 10875583
Test Package : PLANT

Received : 13 Feb 2024
Tested : 15 Feb 2024
Diagnosed : 15 Feb 2024 - Don Baldrige

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: