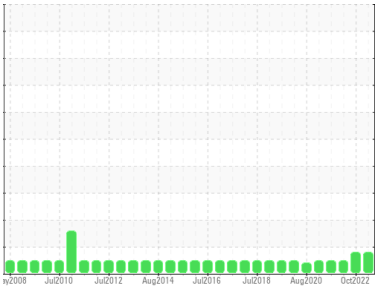
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
Press 5
Machine Id
SMS EVMVCO PRESS #5 HANDLING SYSTEM
Component
Pump Hydraulic System
Fluid
PETRO CANADA HYDREX AW 46 (650 LTR)

DIAGNOSIS

Recommendation
We recommend an early resample to monitor this condition.

Wear
Aluminum ppm levels are abnormal. Oil cooler core leaching or motor piston wear is indicated.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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		**WC0796114**	WC0748839	WC0609124
Sample Date		Client Info		**16 May 2023**	03 Oct 2022	25 Feb 2022
Machine Age	mths	Client Info		**1**	1	1
Oil Age	mths	Client Info		**1**	1	1
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	MARGINAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>30	**3**	3	2
Chromium	ppm	ASTM D5185(m)	>2	**0**	0	<1
Nickel	ppm	ASTM D5185(m)	>2	**<1**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>2	▲ **4**	▲ 3	2
Lead	ppm	ASTM D5185(m)	>10	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>25	**6**	6	6
Tin	ppm	ASTM D5185(m)	>20	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**<1**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

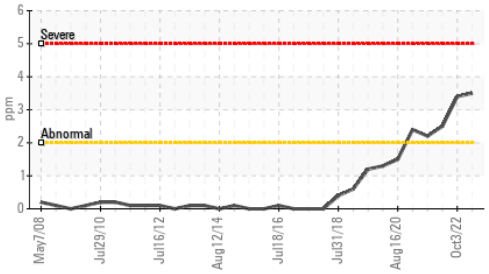
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**1**	1	1
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0	**<1**	0	<1
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	0	**4**	3	3
Calcium	ppm	ASTM D5185(m)	50	**81**	78	76
Phosphorus	ppm	ASTM D5185(m)	330	**370**	367	341
Zinc	ppm	ASTM D5185(m)	430	**413**	420	410
Sulfur	ppm	ASTM D5185(m)	760	**1330**	1357	1349
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**<1**	<1	0
Sodium	ppm	ASTM D5185(m)		**2**	3	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1

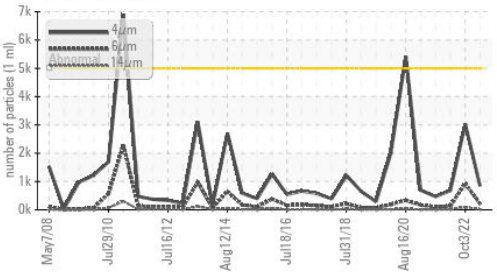
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**844**	3033	679
Particles >6µm		ASTM D7647	>1300	**212**	926	132
Particles >14µm		ASTM D7647	>160	**17**	93	14
Particles >21µm		ASTM D7647	>40	**5**	26	3
Particles >38µm		ASTM D7647	>10	**0**	1	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**17/15/11**	19/17/14	17/14/11

OIL ANALYSIS REPORT

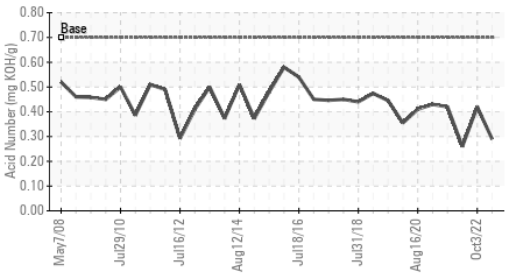
Aluminum (ppm)



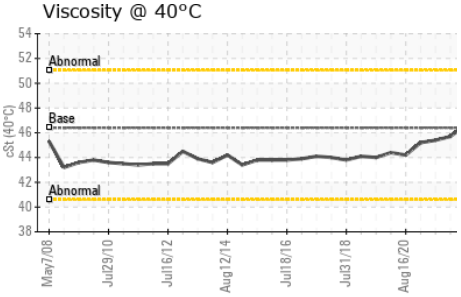
Particle Trend



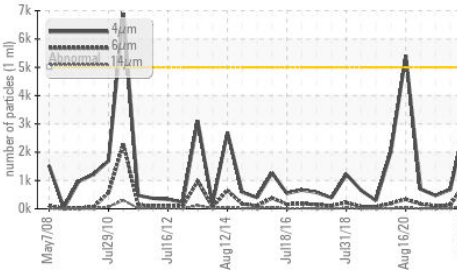
Acid Number



Viscosity @ 40°C



Particle Trend

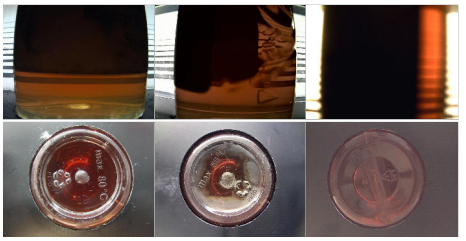


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	**0.29**	0.42	0.26

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
Emulsified Water	scalar	Visual*	>0.05	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

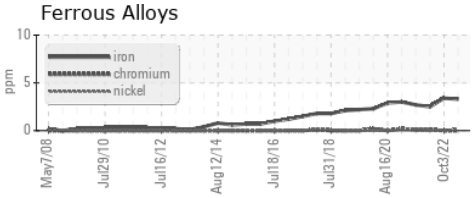
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	**46.3**	46.6	45.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

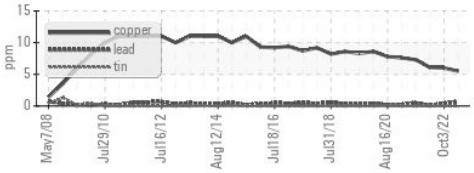


GRAPHS

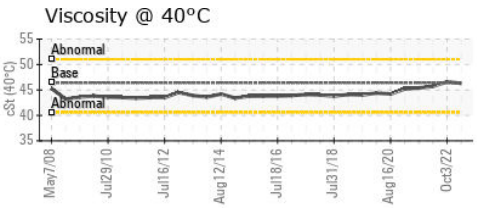
Ferrous Alloys



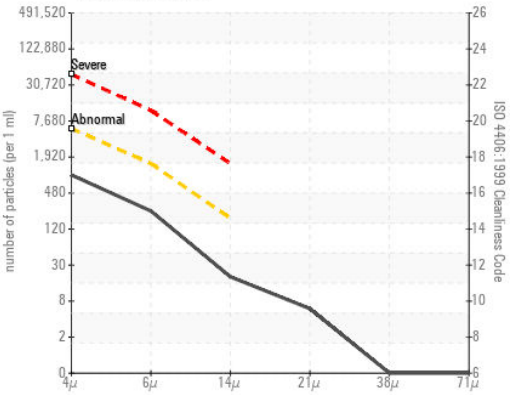
Non-ferrous Metals



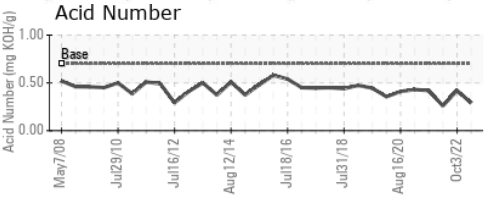
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CAN ART ALUMINUM EXTRUSION INC**
Sample No. : WC0796114 **Recieved** : 17 May 2023 428 JUTRAS DRIVE SOUTH
Lab Number : 02558075 **Diagnosed** : 18 May 2023 TECUMSEH, ON
Unique Number : 5579115 **Diagnostician** : Kevin Marson CA N8N 5C5
Test Package : IND 2 Contact: Angelo Bertoia

To discuss this sample report, contact Customer Service at 1-800-268-2131. angelo@canart.com
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (519)727-4399
Validity of results and interpretation are based on the sample and information as supplied. F: (519)727-6434