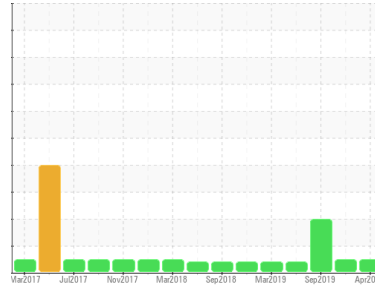




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Wide Cold Mill/Pickline Line
 Machine Id
PICKLER EXIT HYD (WCM028) (S/N 1000004916)
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (350 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

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	history 1	history 2
Sample Number	Client Info		WC0419651	WC0344660	WC0361770
Sample Date	Client Info		20 Apr 2020	11 Dec 2019	12 Sep 2019
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Not Chngd	N/A
Sample Status			NORMAL	NORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>20	0	0
Chromium	ppm	ASTM D5185(m)	>20	0	<1
Nickel	ppm	ASTM D5185(m)	>20	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	<1
Silver	ppm	ASTM D5185(m)		0	<1
Aluminum	ppm	ASTM D5185(m)	>20	0	0
Lead	ppm	ASTM D5185(m)	>20	0	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0
Antimony	ppm	ASTM D5185(m)		<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)	5	<1	<1
Barium	ppm	ASTM D5185(m)	5	0	0
Molybdenum	ppm	ASTM D5185(m)	5	0	0
Manganese	ppm	ASTM D5185(m)		0	0
Magnesium	ppm	ASTM D5185(m)	25	<1	0
Calcium	ppm	ASTM D5185(m)	200	38	37
Phosphorus	ppm	ASTM D5185(m)	300	282	269
Zinc	ppm	ASTM D5185(m)	370	333	320
Sulfur	ppm	ASTM D5185(m)	2500	652	618
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>15	0	0
Sodium	ppm	ASTM D5185(m)		0	0
Potassium	ppm	ASTM D5185(m)	>20	0	<1

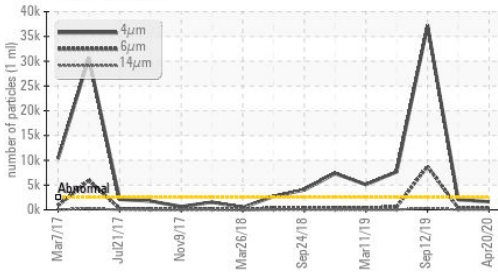
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>2500	1622	2038	37208
Particles >6µm	ASTM D7647	>1300	273	326	8761
Particles >14µm	ASTM D7647	>160	13	15	353
Particles >21µm	ASTM D7647	>40	3	5	88
Particles >38µm	ASTM D7647	>10	0	0	2
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/17/14	18/15/11	18/16/11	22/20/16

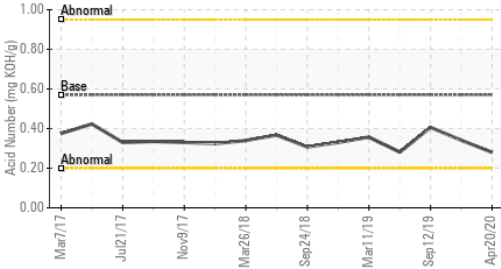
FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.57	0.28	0.341	0.406

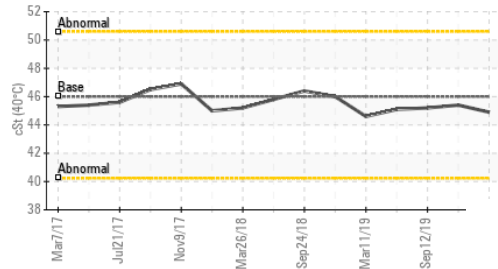
Particle Trend



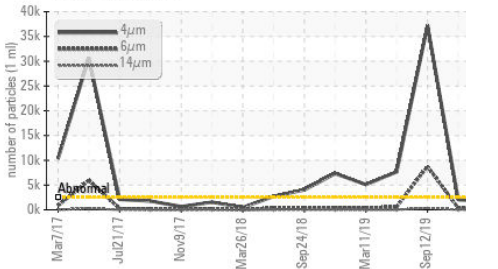
Acid Number



Viscosity @ 40°C



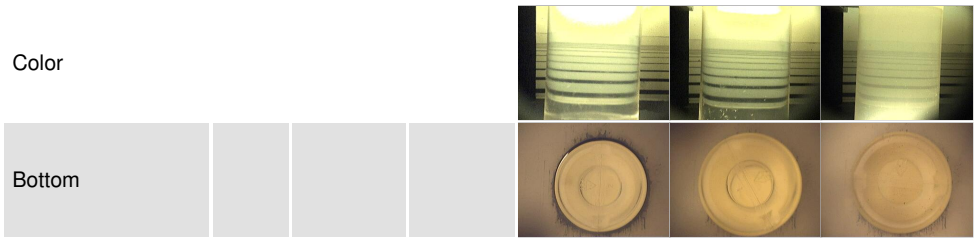
Particle Trend



VISUAL	method	limit/base	current	history 1	history 2
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	NONE	LIGHT
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

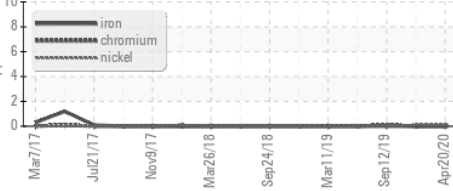
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	46	44.9	45.4

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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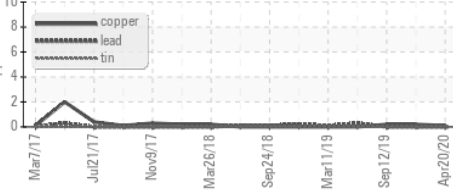


GRAPHS

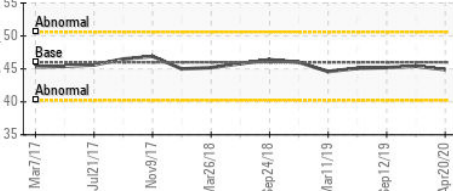
Ferrous Alloys



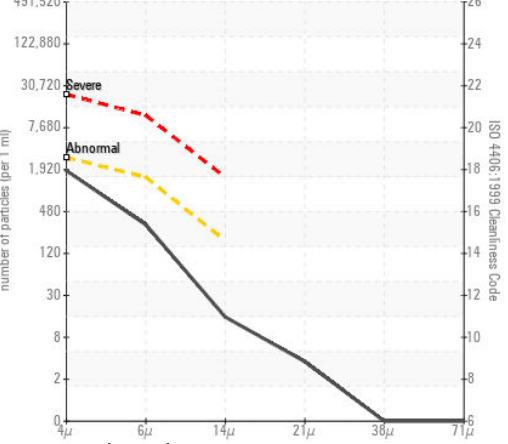
Non-ferrous Metals



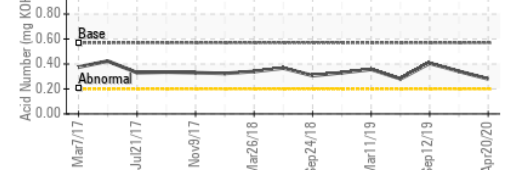
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0419651 **Received** : 22 Apr 2020
Lab Number : 02350024 **Diagnosed** : 23 Apr 2020
Unique Number : 5033453 **Diagnostician** : Wes Davis
Test Package : IND 2

301 WALLACE TERRACE
 SAULT STE MARIE, ON
 CA P6C 1K8
 Contact: Algoma Reliability
 algomareliability@algoma.com
 T: (705)206-1059
 F: (705)945-3585

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.