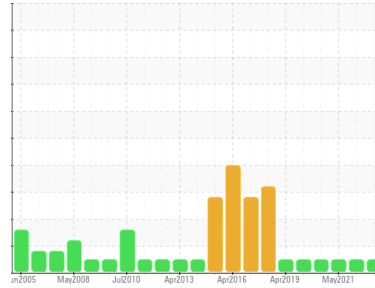




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id GRT PT LUBE SYSTEM

Component
Circulating Lube System
Fluid
IRVING D & E ISO 32 (3280 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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	history1	history2
Sample Number	Client Info	WC0328064	WC971599	WC925473
Sample Date	Client Info	08 Jun 2023	28 Apr 2022	28 May 2021
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	Not Chngd	Not Chngd
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >20	<1	<1	<1
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >20	<1	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	<1	0	0
Lead	ppm	ASTM D5185(m) >20	<1	0	0
Copper	ppm	ASTM D5185(m) >20	0	0	<1
Tin	ppm	ASTM D5185(m) >20	<1	0	<1
Antimony	ppm	ASTM D5185(m)	0	<1	<1
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) 0.0	<1	0	<1
Barium	ppm	ASTM D5185(m) 0.2	0	0	0
Molybdenum	ppm	ASTM D5185(m) 0.0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m) 0.3	0	0	0
Calcium	ppm	ASTM D5185(m) 2.0	0	<1	<1
Phosphorus	ppm	ASTM D5185(m) 4.6	10	6	6
Zinc	ppm	ASTM D5185(m) 7.4	2	2	2
Sulfur	ppm	ASTM D5185(m)	2175	2121	2055
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >15	2	2	2
Sodium	ppm	ASTM D5185(m)	<1	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1

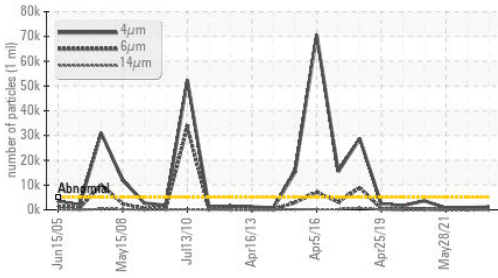
FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	1119	899	699
Particles >6µm	ASTM D7647	>1300	242	158	97
Particles >14µm	ASTM D7647	>160	31	18	11
Particles >21µm	ASTM D7647	>40	11	5	3
Particles >38µm	ASTM D7647	>10	1	1	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	17/15/12	17/14/11	17/14/11

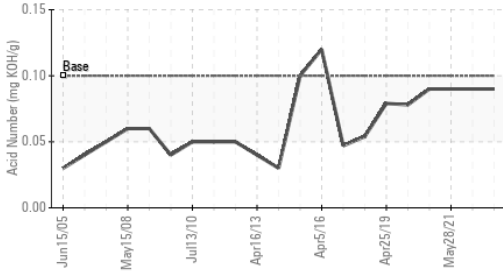
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974* 0.10	0.09	0.09	0.09

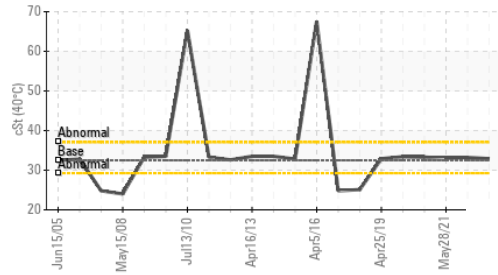
Particle Trend



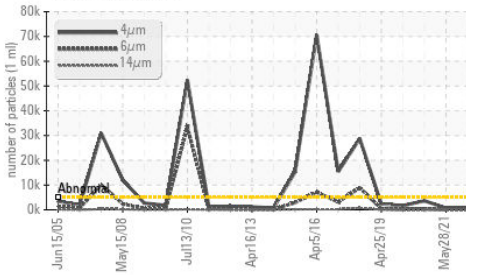
Acid Number



Viscosity @ 40°C



Particle Trend

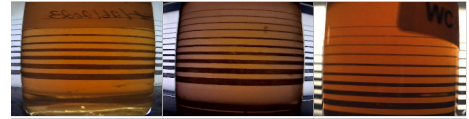


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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 D7279(m)	32.5	32.9	33.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color

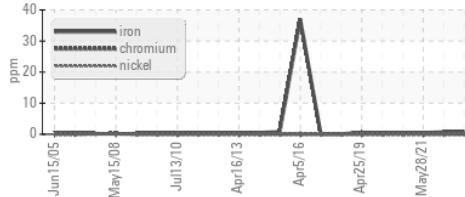


Bottom

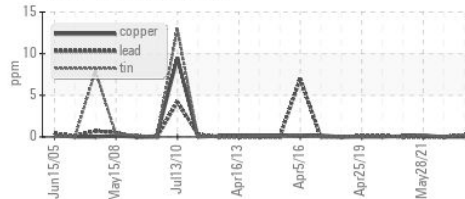


GRAPHS

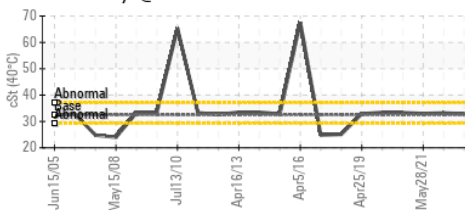
Ferrous Alloys



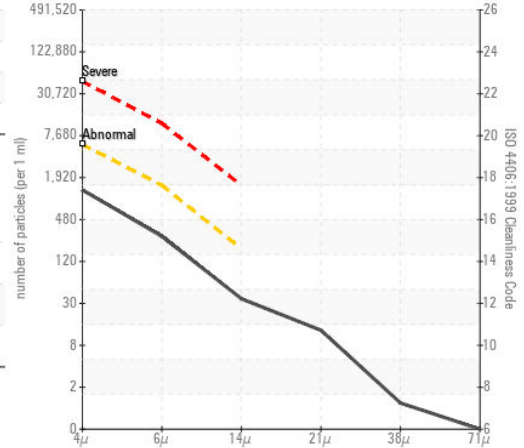
Non-ferrous Metals



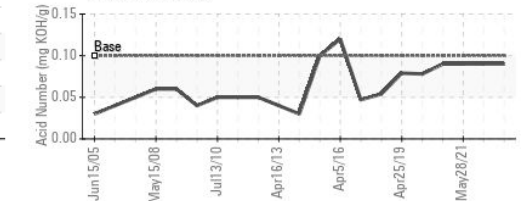
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0328064 Received : 09 Jun 2023
 Lab Number : 02563134 Diagnosed : 12 Jun 2023
 Unique Number : 5592175 Diagnostician : Wes Davis
 Test Package : IND 2 (Additional Tests: TAN Man)

NEWFOUNDLAND POWER INC.
 50 DUFFY PLACE, PO BOX 8910
 ST. JOHNS, NL
 CA A1B 3P6
 Contact: Paul Martin
 pmartin@newfoundlandpower.com
 T:
 F: (709)737-2926

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.