



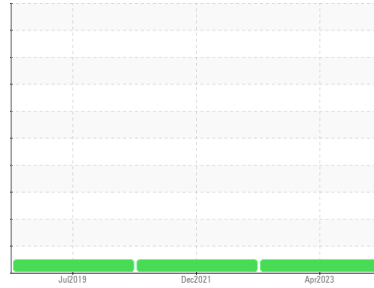
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[13854078]
 Machine Id
Q-1705C TROLLEY (S/N 10414057)
 Component
Gearbox
 Fluid
IRVING HDH SAE 75W90 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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		WC0764269	WC0371106	WC0371090
Sample Date	Client Info		09 Apr 2023	16 Dec 2021	31 Jul 2019
Machine Age	yrs	Client Info	1	0	0
Oil Age	yrs	Client Info	1	0	0
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	0	12
Iron	ppm	ASTM D5185(m) >200	5	13	18
Chromium	ppm	ASTM D5185(m) >15	0	0	0
Nickel	ppm	ASTM D5185(m) >15	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	1	0	<1
Aluminum	ppm	ASTM D5185(m) >25	0	<1	<1
Lead	ppm	ASTM D5185(m) >100	0	<1	0
Copper	ppm	ASTM D5185(m) >200	0	<1	<1
Tin	ppm	ASTM D5185(m) >25	0	<1	0
Antimony	ppm	ASTM D5185(m) >5	4	5	3
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)	150	146	157
Barium	ppm	ASTM D5185(m)	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	<1
Magnesium	ppm	ASTM D5185(m)	<1	0	<1
Calcium	ppm	ASTM D5185(m)	2	8	6
Phosphorus	ppm	ASTM D5185(m)	1122	1039	1071
Zinc	ppm	ASTM D5185(m)	3	15	9
Sulfur	ppm	ASTM D5185(m)	22916	22535	23372
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

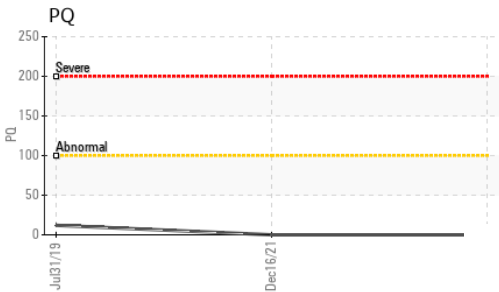
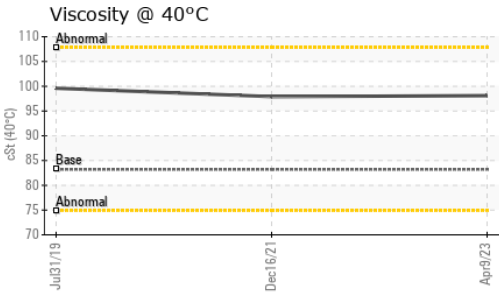
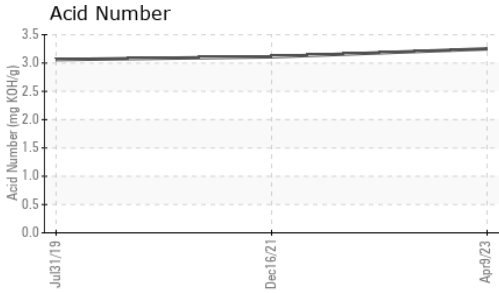
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<1	<1	1
Sodium	ppm	ASTM D5185(m)	1	<1	0
Potassium	ppm	ASTM D5185(m) >20	<1	1	1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	3.25	3.11	3.06



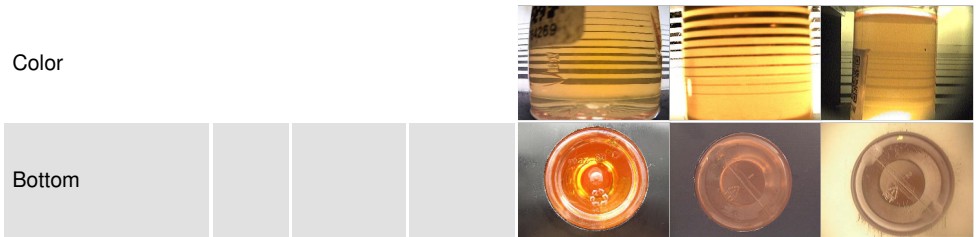
OIL ANALYSIS REPORT



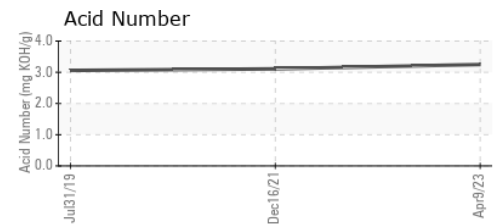
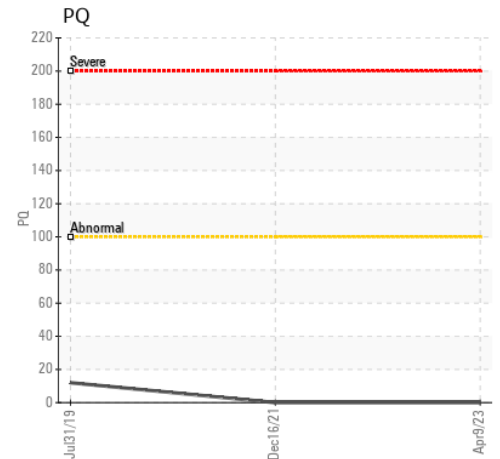
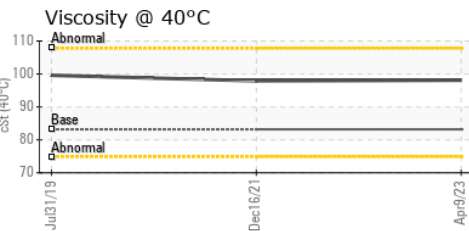
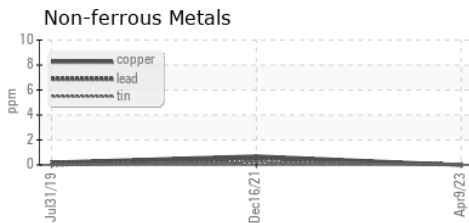
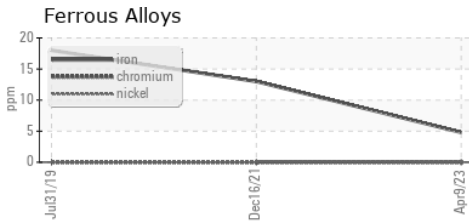
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	83.2	98.1	97.9

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



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0764269 **Received** : 10 May 2023
Lab Number : 02556683 **Diagnosed** : 11 May 2023
Unique Number : 5577723 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: TAN Man)

Parker Wellbore
 215 Water Street, Suite 802, PO Box 74
 St. John's, NL
 CA A1C 6C9
 Contact: HMDC Material Control Coordinator
 hmdc.material.control.coordinator@exxonmobil.com

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.

T:
F: