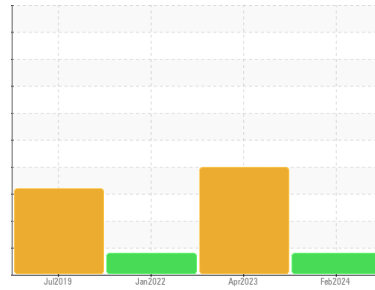




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
Q-1705C NORTH BRIDGE (S/N 10414057)

Component
Drive
Fluid
IRVING HDH SAE 75W90 (1 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Iron ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. All other 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		WC0764322	WC0764270	WC0371110
Sample Date	Client Info		10 Feb 2024	09 Apr 2023	16 Jan 2022
Machine Age	yrs	Client Info	0	1	0
Oil Age	yrs	Client Info	0	1	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			ATTENTION	ABNORMAL	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		0	18	0
Iron	ppm	ASTM D5185(m) >150	250	130	217
Chromium	ppm	ASTM D5185(m) >10	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >10	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	<1	0
Silver	ppm	ASTM D5185(m)	0	2	0
Aluminum	ppm	ASTM D5185(m) >25	<1	2	2
Lead	ppm	ASTM D5185(m) >100	5	11	33
Copper	ppm	ASTM D5185(m) >50	17	17	53
Tin	ppm	ASTM D5185(m) >10	<1	1	3
Antimony	ppm	ASTM D5185(m) >5	2	3	3
Vanadium	ppm	ASTM D5185(m)	0	<1	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	80	55	53
Barium	ppm	ASTM D5185(m)	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0
Manganese	ppm	ASTM D5185(m)	<1	3	4
Magnesium	ppm	ASTM D5185(m)	<1	2	<1
Calcium	ppm	ASTM D5185(m)	4	10	9
Phosphorus	ppm	ASTM D5185(m)	1012	1064	1053
Zinc	ppm	ASTM D5185(m)	20	57	63
Sulfur	ppm	ASTM D5185(m)	21793	22167	22152
Lithium	ppm	ASTM D5185(m)	1	1	1

CONTAMINANTS

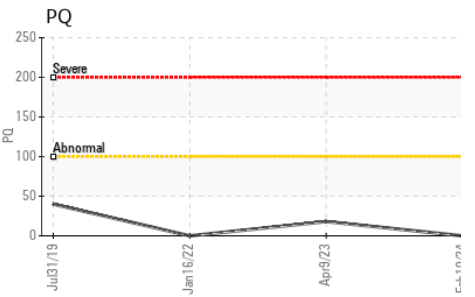
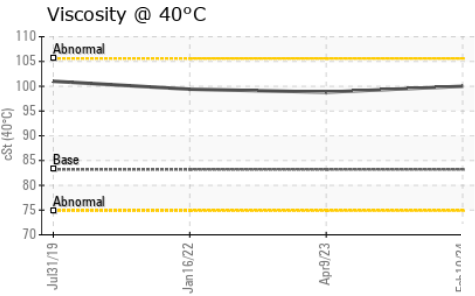
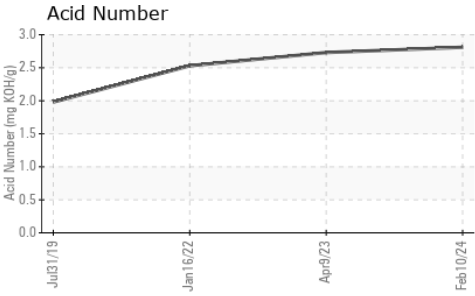
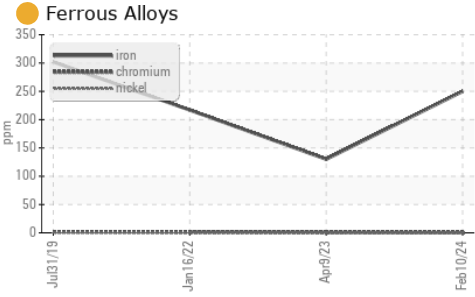
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	2	6	6
Sodium	ppm	ASTM D5185(m)	8	4	4
Potassium	ppm	ASTM D5185(m) >20	15	<1	2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	2.81	2.73	2.53



OIL ANALYSIS REPORT

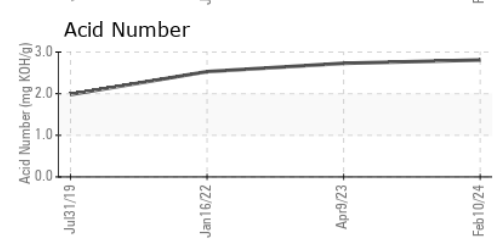
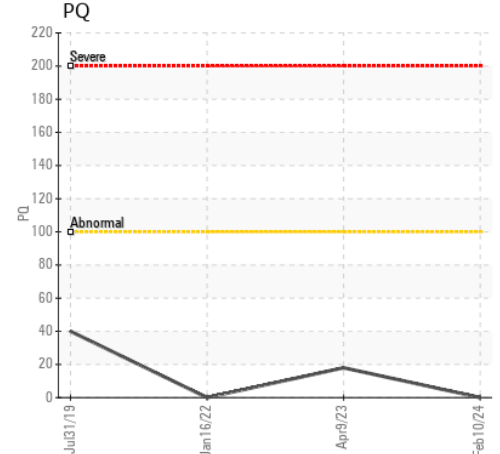
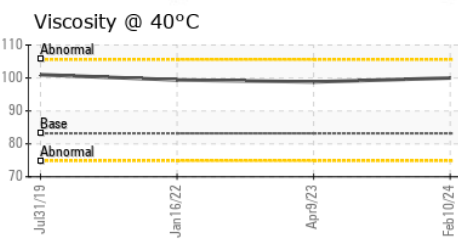
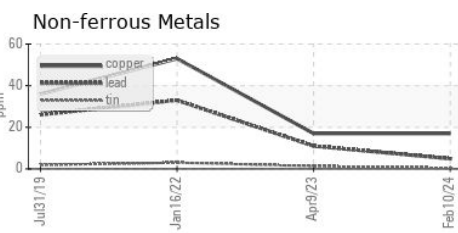
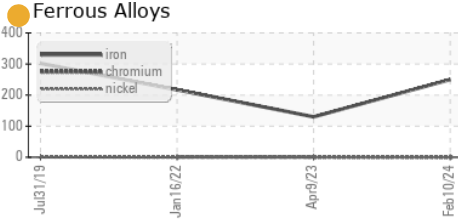


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	▲ WGOIL
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	▲ .2%
Free Water	scalar	Visual*		NEG	▲ 1%

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	83.2	100	98.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0764322
Lab Number : 02625460
Unique Number : 5750579
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

Received : 28 Mar 2024
 Tested : 01 Apr 2024
 Diagnosed : 01 Apr 2024 - Kevin Marson
 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.