



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
System 37 - Crude Loading
 Machine Id
G-3701C Pump / Motor Lubricating Oil
 Component
Pump
 Fluid
IRVING HYDRAULIC OIL LP 32 (1190 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0774311	WC0861474	PP
Sample Date		Client Info		04 Apr 2024	13 Dec 2023	16 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	0	<1	<1
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)		0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	0
Lead	ppm	ASTM D5185(m)	>10	0	<1	<1
Copper	ppm	ASTM D5185(m)	>15	<1	2	2
Tin	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

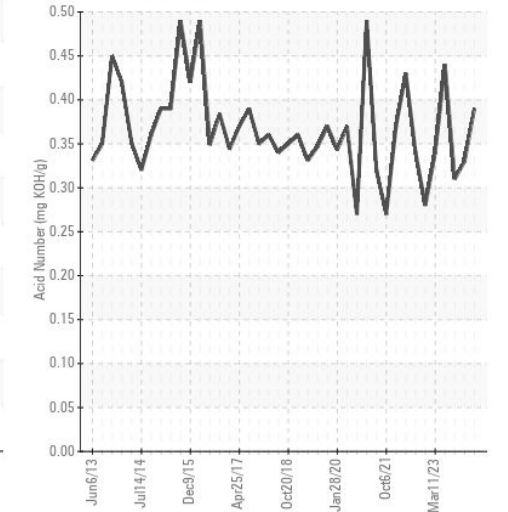
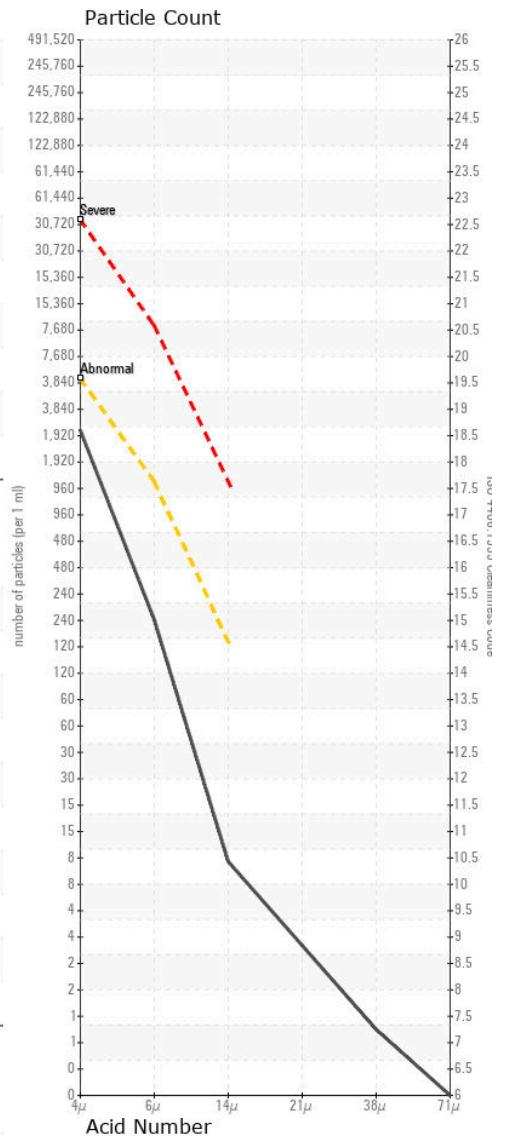
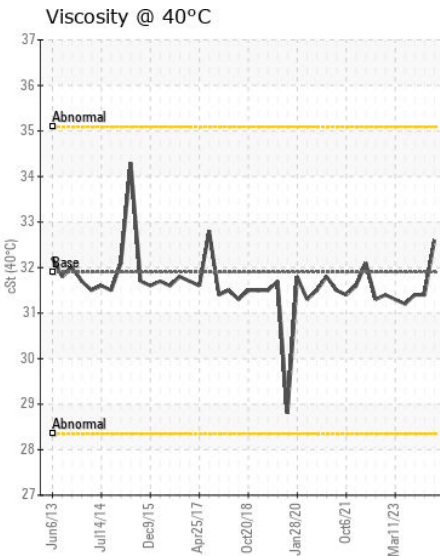
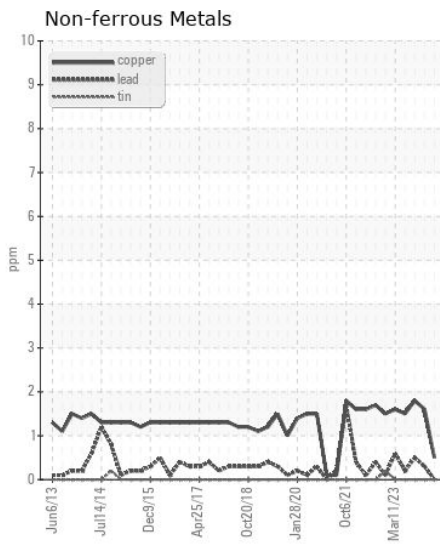
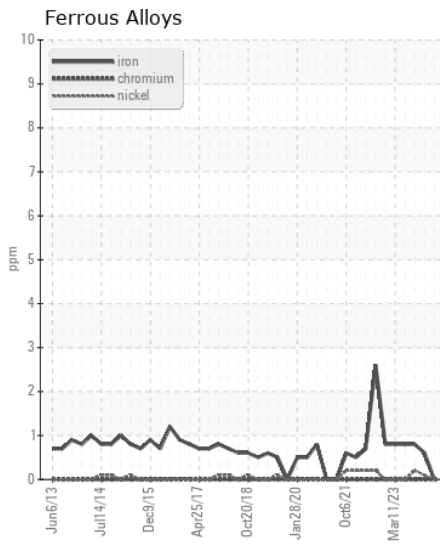
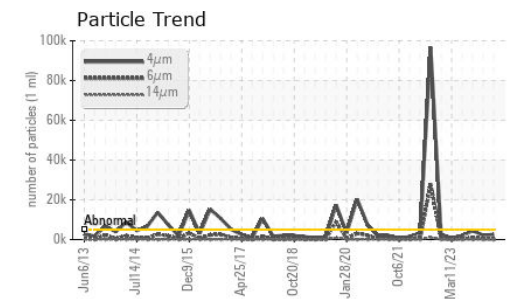
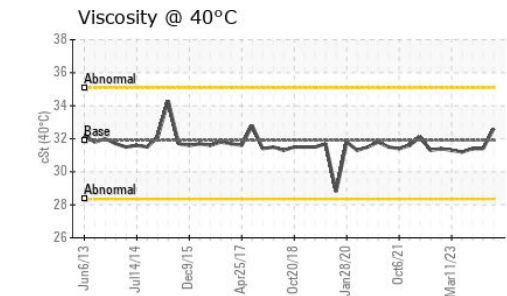
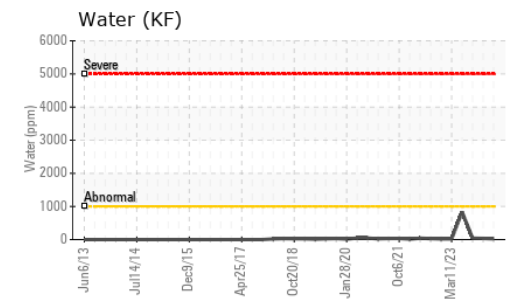
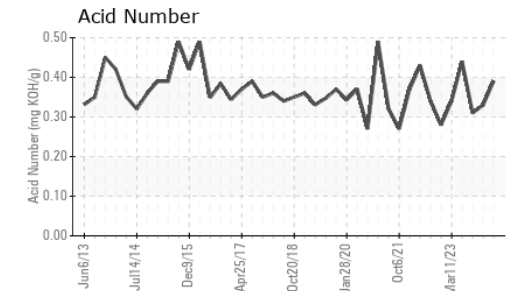
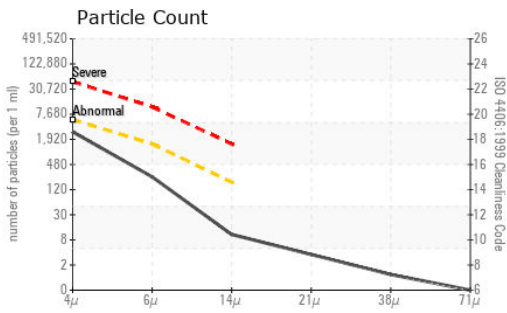
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>20	0	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	13	<1
Water	%	ASTM D6304*	>.1	0.002	0.003	0.004
ppm Water	ppm	ASTM D6304*	>1000	22	35	41.9
Particles >4µm		ASTM D7647	>5000	2546	2213	4397
Particles >6µm		ASTM D7647	>1300	213	569	721
Particles >14µm		ASTM D7647	>160	9	34	18
Particles >21µm		ASTM D7647	>40	3	5	2
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/15/10	18/16/12	19/17/11
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<1	<1	1
Boron	ppm	ASTM D5185(m)		0	0	<1
Barium	ppm	ASTM D5185(m)		<1	<1	1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		1	4	3
Calcium	ppm	ASTM D5185(m)		43	22	23
Phosphorus	ppm	ASTM D5185(m)		306	275	274
Zinc	ppm	ASTM D5185(m)	400	385	298	311
Sulfur	ppm	ASTM D5185(m)		1646	3692	3610
Acid Number (AN)	mg KOH/g	ASTM D974*		0.39	0.33	0.31
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	32.6	31.4	31.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0774311
Lab Number : 02627007
Unique Number : 5760139
Test Package : MAR 2 (Additional Tests: KF)
Received : 05 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 08 Apr 2024 - Wes Davis

HIBERNIA MGMT & DEVELOPMENT CO. LTD
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 ST. JOHNS, NL
 CA A1C 6K3
 Contact: Sam Nash
 samantha.m.nash@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.

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