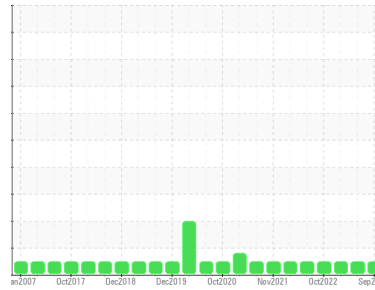




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
System 65 - Hydraulic Power
 Machine Id
Z-6501 PACKAGE, HYDRAULIC POWER

Component
Hydraulic System
 Fluid
IRVING HYDRAULIC OIL LP 32 (1200 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 water content is negligible. 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	PP	PP	PP
Sample Date	Client Info	24 Sep 2023	16 Apr 2023	12 Jan 2023
Machine Age	hrs Client Info	0	0	0
Oil Age	hrs Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	0	<1	<1
Chromium	ppm ASTM D5185(m) >10	0	0	0
Nickel	ppm ASTM D5185(m) >10	0	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	<1	0	0
Aluminum	ppm ASTM D5185(m) >10	<1	0	0
Lead	ppm ASTM D5185(m) >20	<1	0	0
Copper	ppm ASTM D5185(m) >20	<1	0	0
Tin	ppm ASTM D5185(m) >10	0	0	0
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)	<1	<1	<1
Barium	ppm ASTM D5185(m)	17	6	5
Molybdenum	ppm ASTM D5185(m)	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m)	0	0	<1
Calcium	ppm ASTM D5185(m)	54	57	55
Phosphorus	ppm ASTM D5185(m)	338	366	362
Zinc	ppm ASTM D5185(m) 400	423	423	422
Sulfur	ppm ASTM D5185(m)	1784	2354	2141
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

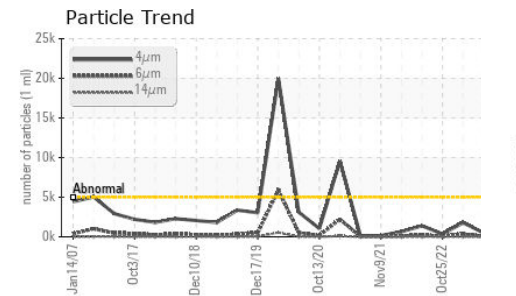
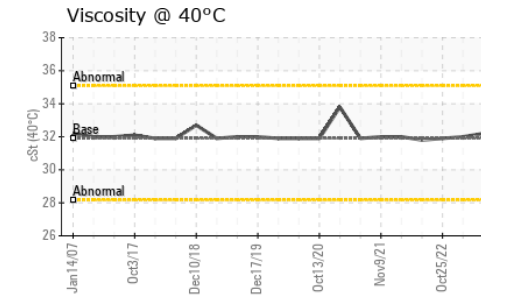
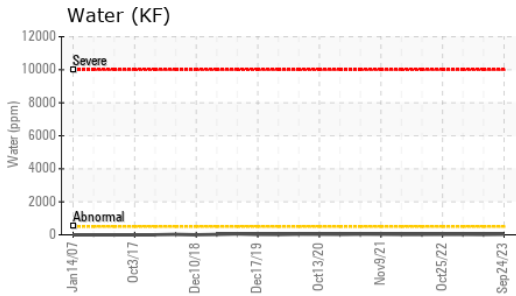
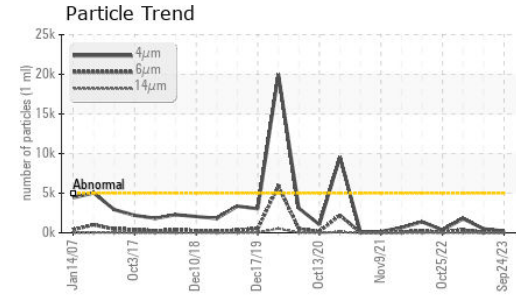
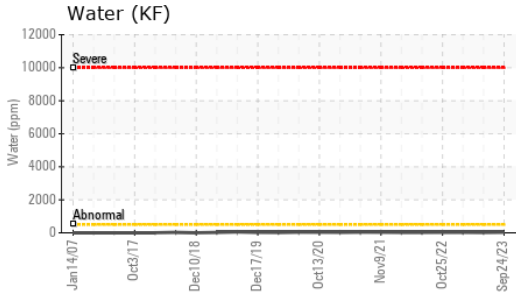
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<1	<1	0
Sodium	ppm ASTM D5185(m)	<1	<1	<1
Potassium	ppm ASTM D5185(m) >20	0	0	0
Water	% ASTM D6304* >0.05	0.003	0.002	0.003
ppm Water	ppm ASTM D6304* >500	34.0	16.7	30.0

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	218	503	1784
Particles >6µm	ASTM D7647 >1300	58	70	359
Particles >14µm	ASTM D7647 >160	6	3	20
Particles >21µm	ASTM D7647 >40	2	1	6
Particles >38µm	ASTM D7647 >10	0	0	1
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	15/13/10	16/13/9	18/16/11



OIL ANALYSIS REPORT

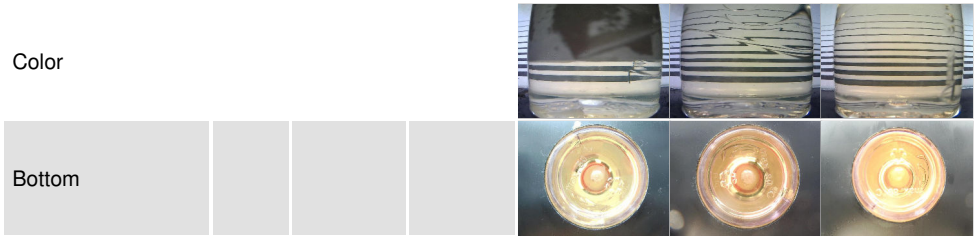


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.63	0.50	0.49

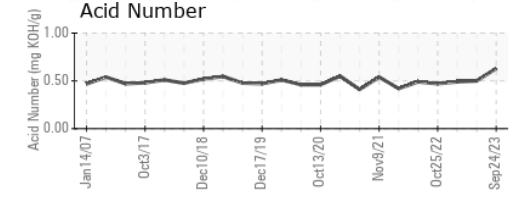
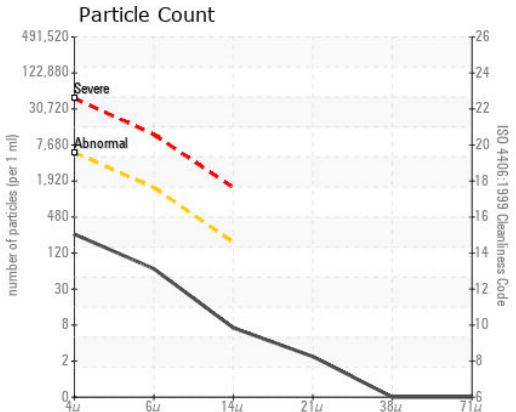
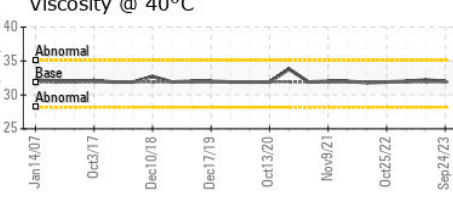
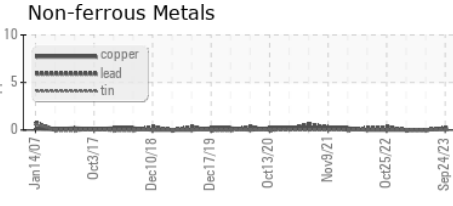
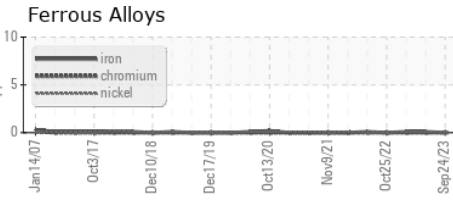
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	32.0	32.2	32.0

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HIBERNIA MGMT & DEVELOPMENT CO. LTD**
Sample No. : PP **Received** : 16 Oct 2023 **SUITE 1000,, 100 NEW GOWER STREET**
Lab Number : 02589290 **Diagnosed** : 17 Oct 2023 **ST.JOHNS, NL**
Unique Number : 5658356 **Diagnostician** : Wes Davis **CA A1C 6K3**
Test Package : MAR 2 (Additional Tests: KF, TAN Man) **Contact: Christopher Michelau**
 To discuss this sample report, contact Customer Service at 1-800-268-2131. **christopher.j.michelau@exxonmobil.com**
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. **T:**
 Validity of results and interpretation are based on the sample and information as supplied. **F: (709)722-3766**