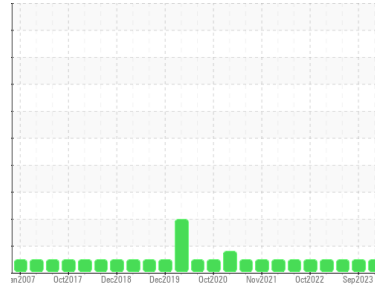




# OIL ANALYSIS REPORT

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	<b>PP</b>	PP	PP
Sample Date	Client Info	<b>29 Oct 2023</b>	24 Sep 2023	16 Apr 2023
Machine Age	hrs Client Info	<b>0</b>	0	0
Oil Age	hrs Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	<b>0</b>	0	<1
Chromium	ppm ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >10	<b>&lt;1</b>	0	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	0
Aluminum	ppm ASTM D5185(m) >10	<b>0</b>	<1	0
Lead	ppm ASTM D5185(m) >20	<b>0</b>	<1	0
Copper	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Tin	ppm ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Barium	ppm ASTM D5185(m)	<b>16</b>	17	6
Molybdenum	ppm ASTM D5185(m)	<b>0</b>	0	0
Manganese	ppm ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m)	<b>&lt;1</b>	0	0
Calcium	ppm ASTM D5185(m)	<b>55</b>	54	57
Phosphorus	ppm ASTM D5185(m)	<b>329</b>	338	366
Zinc	ppm ASTM D5185(m) 400	<b>426</b>	423	423
Sulfur	ppm ASTM D5185(m)	<b>1810</b>	1784	2354
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

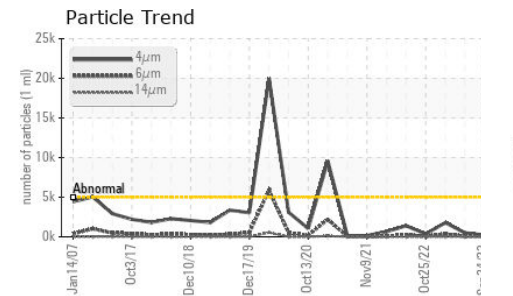
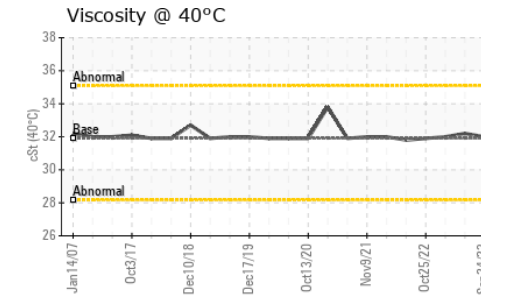
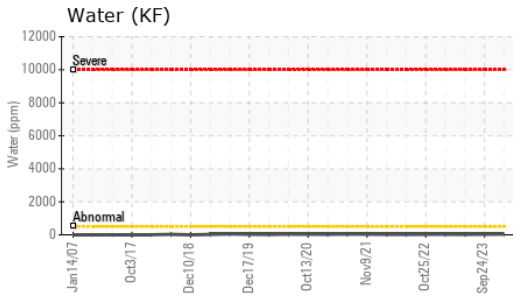
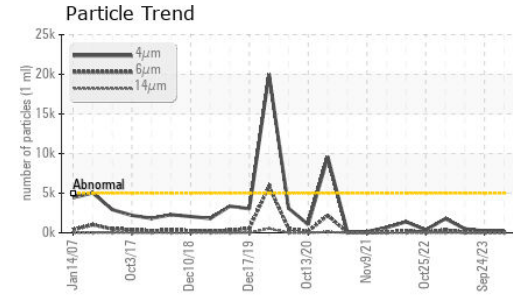
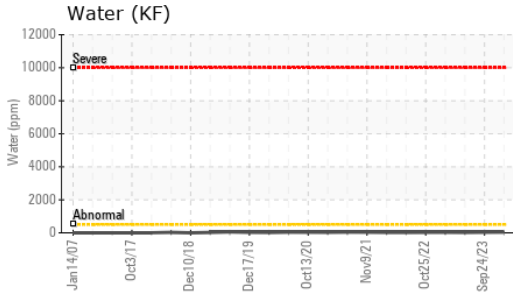
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<b>0</b>	<1	<1
Sodium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	0	0
Water	% ASTM D6304* >0.05	<b>0.004</b>	0.003	0.002
ppm Water	ppm ASTM D6304* >500	<b>41.5</b>	34.0	16.7

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>241</b>	218	503
Particles >6µm	ASTM D7647 >1300	<b>54</b>	58	70
Particles >14µm	ASTM D7647 >160	<b>7</b>	6	3
Particles >21µm	ASTM D7647 >40	<b>2</b>	2	1
Particles >38µm	ASTM D7647 >10	<b>1</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>15/13/10</b>	15/13/10	16/13/9



# OIL ANALYSIS REPORT

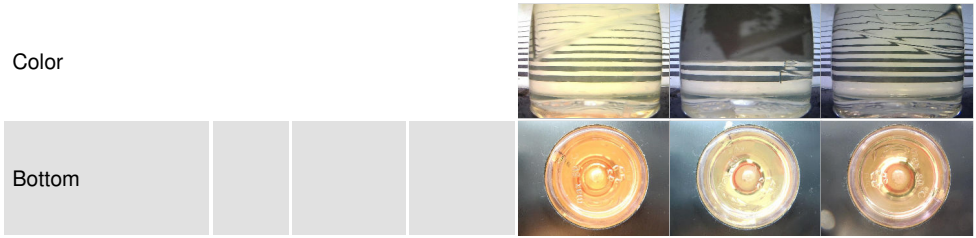


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.45</b>	0.63	0.50

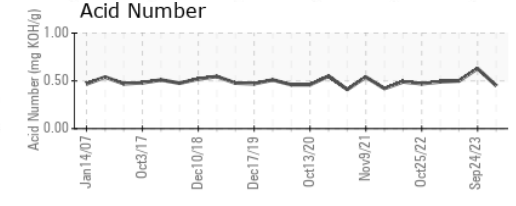
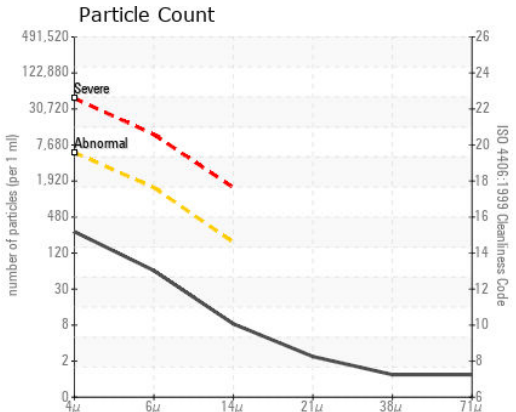
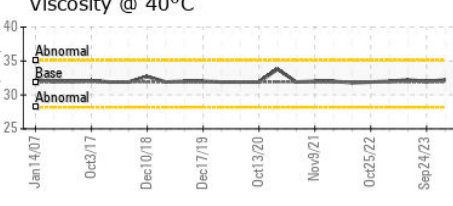
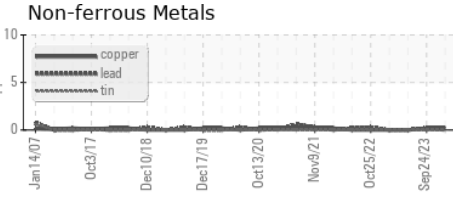
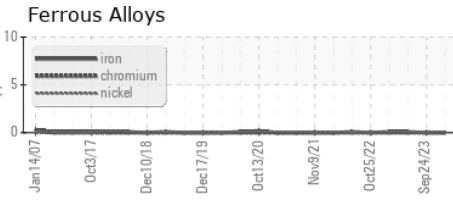
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>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

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

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HIBERNIA MGMT & DEVELOPMENT CO. LTD**  
**Sample No.** : PP **Received** : 30 Oct 2023 **SUITE 1000,, 100 NEW GOWER STREET**  
**Lab Number** : 02592671 **Diagnosed** : 31 Oct 2023 **ST. JOHNS, NL**  
**Unique Number** : 5669750 **Diagnostician** : Wes Davis **CA A1C 6K3**  
**Test Package** : MAR 2 ( Additional Tests: KF ) **Contact: Christopher Michelau**  
**christopher.j.michelau@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.