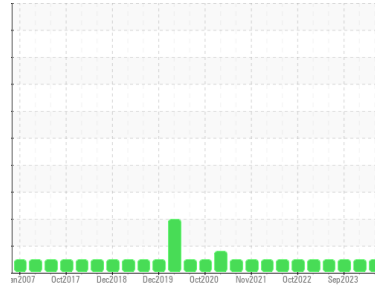


Area  
**System 65 - Hydraulic Power**  
Machine Id  
**Z-6501 PACKAGE, HYDRAULIC POWER**  
Component  
**Hydraulic System**  
Fluid  
**IRVING HYDRAULIC OIL LP 32 (1200 LTR)**



**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>PC</b>	PP	PP
Sample Date	Client Info		<b>24 Jan 2024</b>	29 Oct 2023	24 Sep 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
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0
Copper	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>0</b>	<1
Barium	ppm	ASTM D5185(m)		<b>15</b>	16
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1
Calcium	ppm	ASTM D5185(m)		<b>55</b>	55
Phosphorus	ppm	ASTM D5185(m)		<b>334</b>	329
Zinc	ppm	ASTM D5185(m)	400	<b>414</b>	426
Sulfur	ppm	ASTM D5185(m)		<b>1937</b>	1810
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1

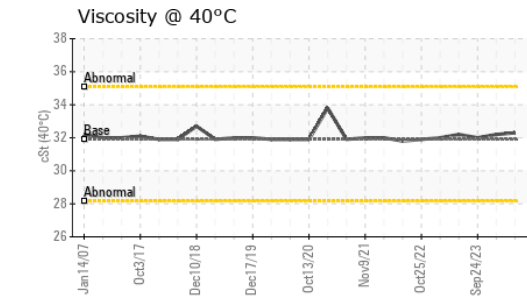
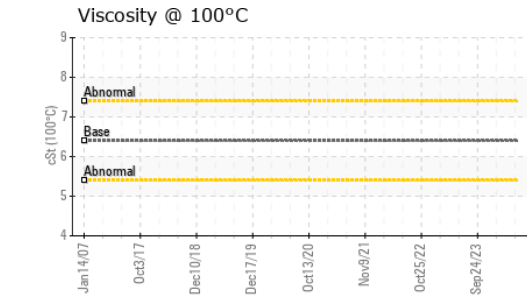
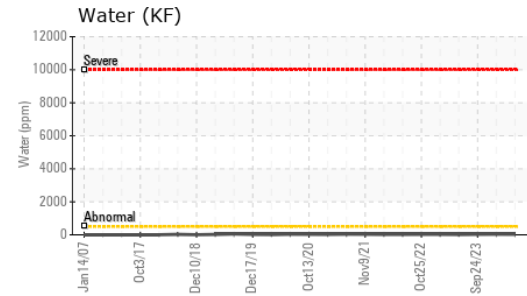
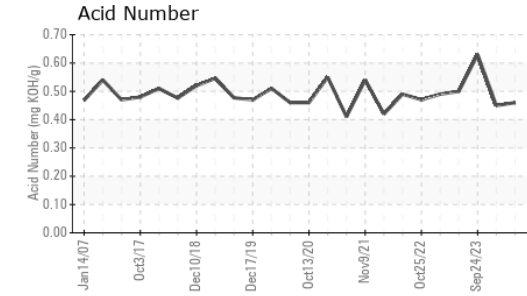
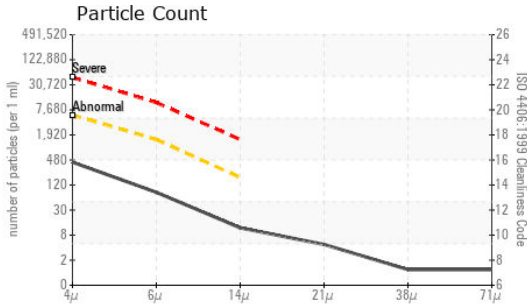
**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	0
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0
Water	%	ASTM D6304*	>0.05	<b>0.003</b>	0.004
ppm Water	ppm	ASTM D6304*	>500	<b>35</b>	41.5

**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>374</b>	241	218
Particles >6µm	ASTM D7647	>1300	<b>71</b>	54	58
Particles >14µm	ASTM D7647	>160	<b>10</b>	7	6
Particles >21µm	ASTM D7647	>40	<b>4</b>	2	2
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/13/10</b>	15/13/10	15/13/10

# OIL ANALYSIS REPORT

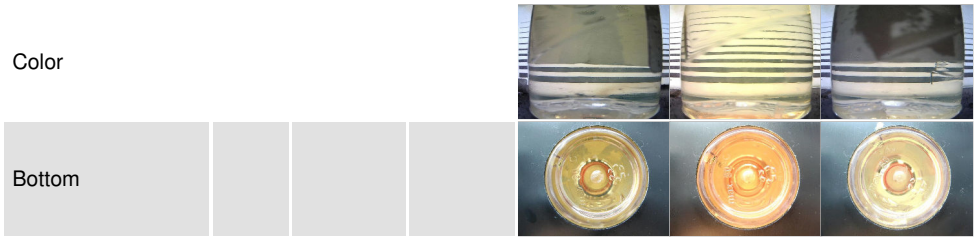


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.46</b>	0.45	0.63

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>32.3</b>	32.2	32.0
Visc @ 100°C	cSt	ASTM D7279(m)	6.4	<b>6.4</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	151	<b>154</b>	---	---

## SAMPLE IMAGES



Color

Bottom



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **HIBERNIA MGMT & DEVELOPMENT CO. LTD**  
**Sample No.** : PC **Received** : 25 Jan 2024 SUITE 1000,, 100 NEW GOWER STREET  
**Lab Number** : **02611117** **Diagnosed** : 26 Jan 2024 ST.JOHNS, NL  
**Unique Number** : 5720212 **Diagnostician** : Wes Davis CA A1C 6K3  
**Test Package** : MAR 2 ( Additional Tests: KF, KV100, VI )  
 Contact: Christopher Michelau  
 christopher.j.michelau@exxonmobil.com  
 T: (709)722-3766  
 F: (709)722-3766

*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.*