



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	ABNORMAL

System 71 - Main Power Generation [13992704]

Z-7101B Hydraulic Start Oil Train B

Hydraulic System

IRVING HYDRAULIC OIL LP 32 (290 LTR)

RECOMMENDATION

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

FLUID CONDITION

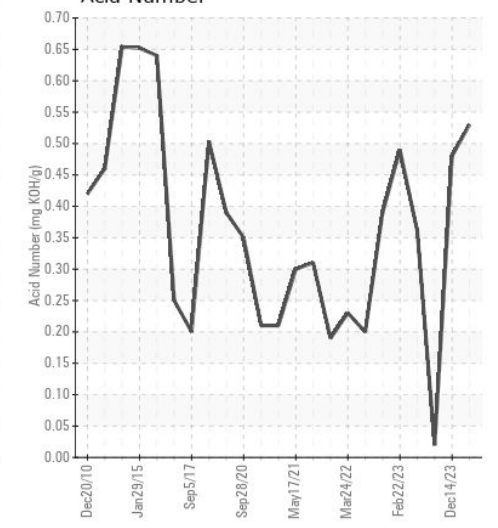
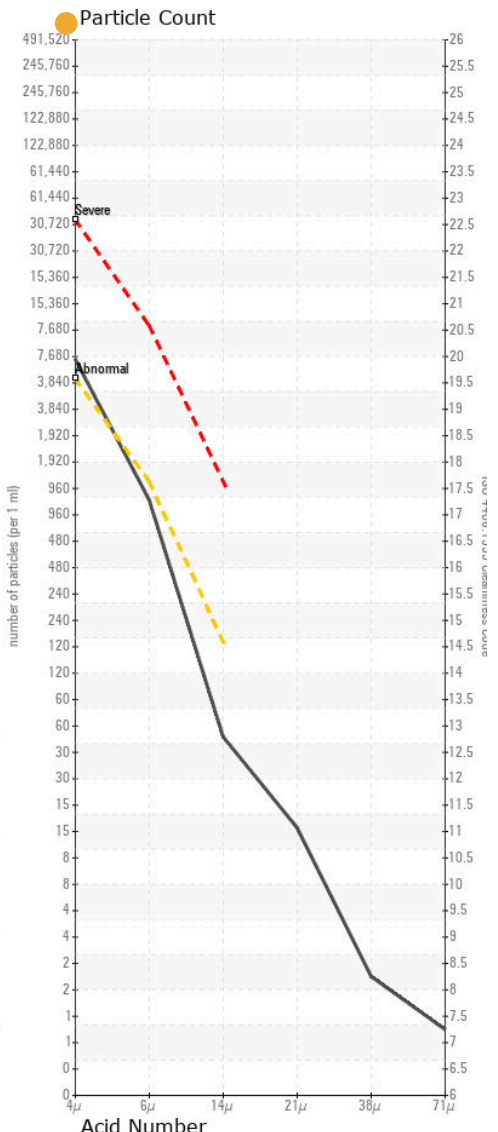
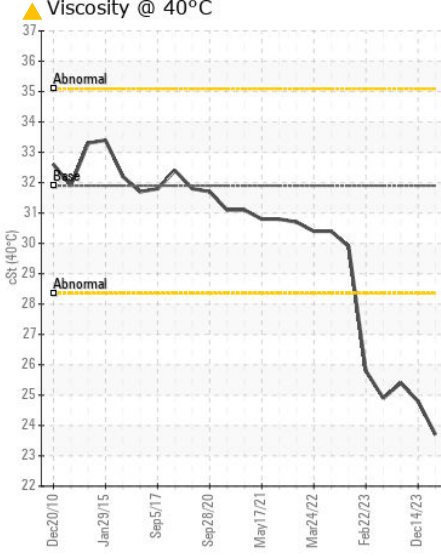
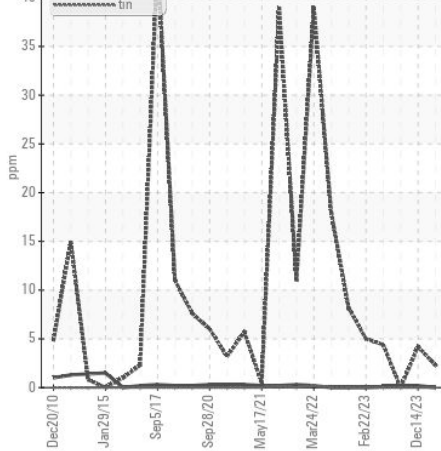
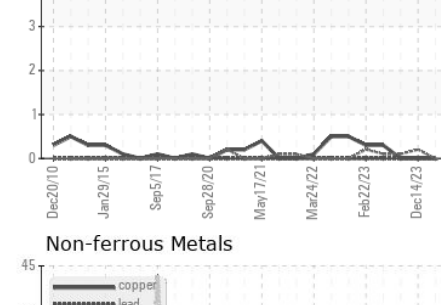
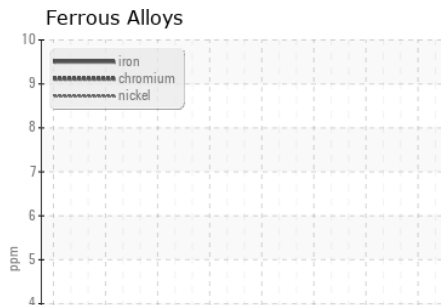
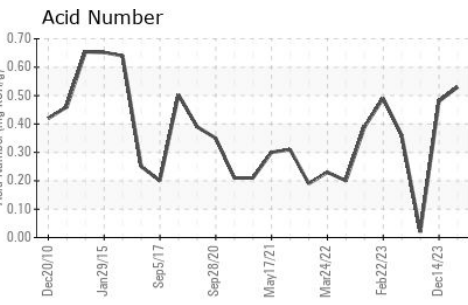
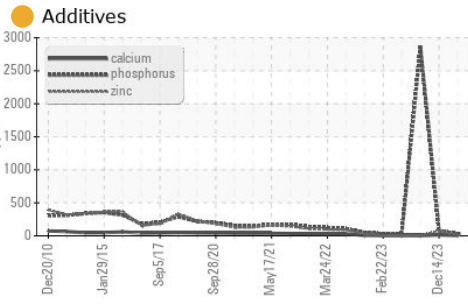
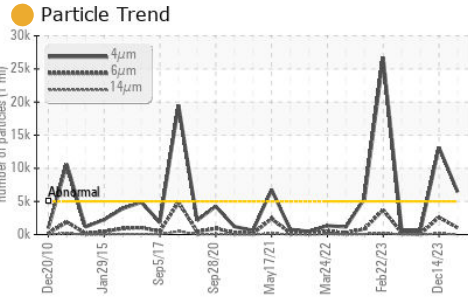
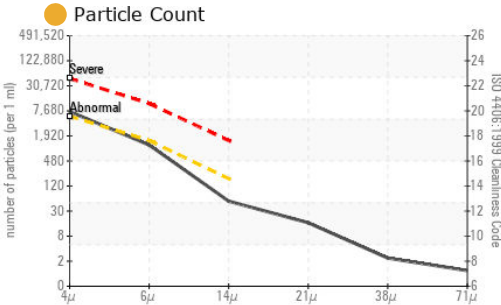
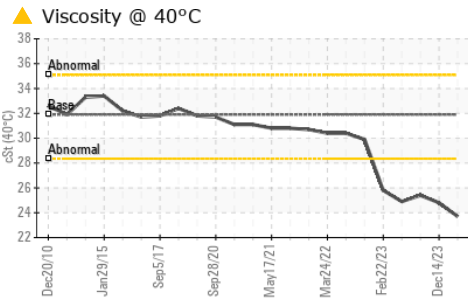
Viscosity of sample indicates oil is within ISO 22 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PP	PP	PP
Sample Date		Client Info		13 Apr 2024	14 Dec 2023	31 Aug 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				ABNORMAL	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185(m)	>20	0	0	0
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)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	0	0	<1
Lead	ppm	ASTM D5185(m)	>20	2	4	0
Copper	ppm	ASTM D5185(m)	>20	0	<1	<1
Tin	ppm	ASTM D5185(m)	>10	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

Silicon	ppm	ASTM D5185(m)	>15	0	1	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Water	%	ASTM D6304*	>0.05	0.002	0.003	0.100
ppm Water	ppm	ASTM D6304*	>500	25	35	1003.1
Particles >4µm		ASTM D7647	>5000	6441	13163	581
Particles >6µm		ASTM D7647	>1300	1020	2600	97
Particles >14µm		ASTM D7647	>160	46	121	7
Particles >21µm		ASTM D7647	>40	14	32	2
Particles >38µm		ASTM D7647	>10	2	3	0
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/17/13	21/19/14	16/14/10
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	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*	>0.05	NEG	NEG	NEG

Sodium	ppm	ASTM D5185(m)		0	<1	<1
Boron	ppm	ASTM D5185(m)		<1	<1	0
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	0	0
Calcium	ppm	ASTM D5185(m)		1	14	<1
Phosphorus	ppm	ASTM D5185(m)		31	75	2862
Zinc	ppm	ASTM D5185(m)	400	13	73	2
Sulfur	ppm	ASTM D5185(m)		1904	1932	2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.53	0.48	0.02
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	23.7	24.8	25.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP **Received** : 26 Apr 2024
Lab Number : 02631651 **Tested** : 29 Apr 2024
Unique Number : 5772804 **Diagnosed** : 29 Apr 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: KF)

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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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