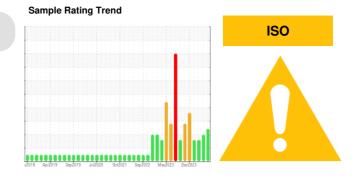


OIL ANALYSIS REPORT

Caster/Hydraulics D - Strand 2-2 Hydraulic Tank

Hydraulic System

FORSYTHE NO FIRE WG 200R (5000 LTR)



DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

Wear

Component wear rates appear to be normal (unconfirmed).

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

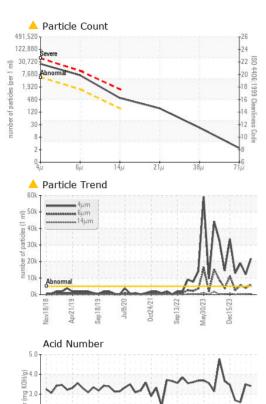
Fluid Condition

The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

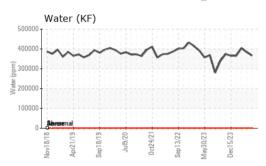
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0934092	WC0926491	WC0910453
Sample Date		Client Info		15 Apr 2024	22 Mar 2024	16 Feb 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*	>99999	0	1	0
Iron	ppm	ASTM D5185(m)	>20	0	0	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	0	0	0
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	0	0	0
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<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	0	<1
Barium	ppm	ASTM D5185(m)		1	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	<1
Calcium	ppm	ASTM D5185(m)		<1	0	8
Phosphorus	ppm	ASTM D5185(m)		1	0	<1
Zinc	ppm	ASTM D5185(m)		0	0	0
Sulfur	ppm	ASTM D5185(m)		44	55	57
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)		163	163	191
Potassium	ppm	ASTM D5185(m)	>20	19	10	17
Water	%	ASTM D6304*		36.6	38.4	40.4
ppm Water	ppm	ASTM D6304*	>10%	366000	384000	404000
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	21675	<u> </u>	<u></u> 18921
Particles >6µm		ASTM D7647	>1300	<u></u> ▲ 6103	▲ 4027	<u></u> 5578
Particles >14µm		ASTM D7647	>160	497	280	181
Particles >21µm		ASTM D7647	>40	<u> </u>	66	37
Particles >38µm		ASTM D7647	>10	1 9	3	0
Particles >71µm		ASTM D7647	>3	2	0	0
Oil Cleanliness		ICO 4406 (a)	. 10/17/14	A 00/00/40	A 01/10/1F	A 04/00/4F
6:34:32) Hev: 2		ISO 4406 (c)	>19/17/14	22/20/16	21/19/15	21/20/15 v: Bob Melanson

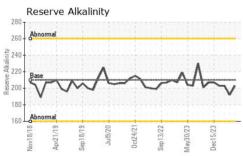


OIL ANALYSIS REPORT



FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		3.41	3.50	2.59
Alkiline Reserve (Oils)	ml KOH/g	ASTM D1121*	210	203	192	203
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	FRGLY	NORML	FRGLY
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*		>10%	NEG	>10%
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
рН	Scale 0-14	ASTM D1287*		9.64	9.68	9.69
Visc @ 40°C	cSt	ASTM D7279(m)	43	43.2	42.8	46.3
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
Color						
Bottom						







CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02629391

: WC0934092

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 16 Apr 2024

Tested : 17 Apr 2024 Diagnosed : 17 Apr 2024 - Kevin Marson

Unique Number : 5762523 Test Package : IND 2 (Additional Tests: KF, pH, PQ, ReserveAlk, TAN Man) 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.

STELCO - BOSC - Basic Oxygen Slab Caster

2330 Regional Road #3, Door: BOSC8 NANTICOKE, ON CA NOA 1L0 Contact: Tom Walden

> Thomas.Walden@stelco.com T: (519)587-4541

F: (519)587-7702

Submitted By: Bob Melanson