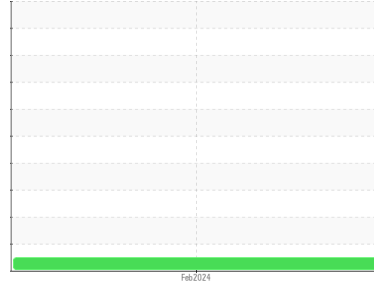


Area
SUNCOR SPAIN [300285800]
Machine Id
PA-71001A
Component
Lube System
Fluid
{not provided} (--- LTR)



DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample. NOTE: Sample received comprised of metal particles in our sample bottle.

Wear
The most likely alloy matches are Low alloy steel 92XX (92XX) and Low alloy steel 40XX (40XX).

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	PC	---	---
Sample Date	Client Info	18 Feb 2024	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

CONTAMINATION method limit/base current history1 history2

Water	WC Method	>0.05	NEG	---	---
-------	-----------	-------	------------	-----	-----

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>20	76	---	---
Chromium	ppm	ASTM D5185(m)	>10	<1	---	---

ADDITIVES method limit/base current history1 history2

Manganese	ppm	ASTM D5185(m)		<1	---	---
-----------	-----	---------------	--	--------------	-----	-----

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>15	2	---	---
---------	-----	---------------	-----	----------	-----	-----

VISUAL method limit/base current history1 history2

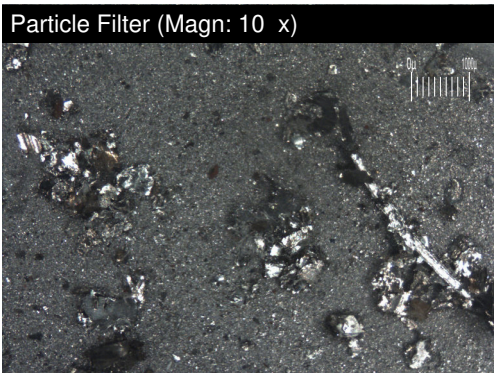
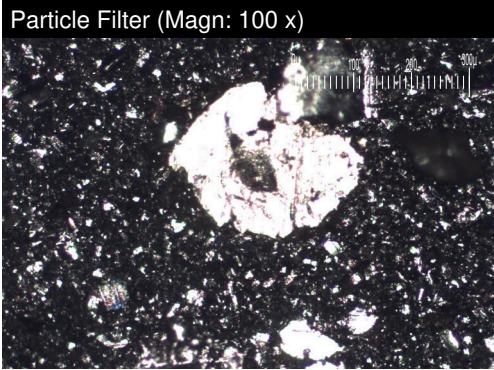
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---

SAMPLE IMAGES method limit/base current history1 history2

Color					no image	no image
Bottom					no image	no image
PrtFilter					no image	no image

PARTICLE FILTER REPORT

Area
SUNCOR SPAIN [300285800]
Machine Id
PA-71001A
Component
Lube System
Fluid
{not provided} (--- LTR)



FERROGRAPHY			method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*					
Ferrous Sliding	Scale 0-10	ASTM D7684*					
Ferrous Cutting	Scale 0-10	ASTM D7684*					
Ferrous Rolling	Scale 0-10	ASTM D7684*					
Ferrous Break-in	Scale 0-10	ASTM D7684*					
Ferrous Spheres	Scale 0-10	ASTM D7684*					
Ferrous Black Oxides	Scale 0-10	ASTM D7684*					
Ferrous Red Oxides	Scale 0-10	ASTM D7684*					
Ferrous Corrosive	Scale 0-10	ASTM D7684*					
Ferrous Other	Scale 0-10	ASTM D7684*					
Nonferrous Rubbing	Scale 0-10	ASTM D7684*					
Nonferrous Sliding	Scale 0-10	ASTM D7684*					
Nonferrous Cutting	Scale 0-10	ASTM D7684*					
Nonferrous Rolling	Scale 0-10	ASTM D7684*					
Nonferrous Other	Scale 0-10	ASTM D7684*					
Carbonaceous Material	Scale 0-10	ASTM D7684*					
Lubricant Degradation	Scale 0-10	ASTM D7684*					
Sand/Dirt	Scale 0-10	ASTM D7684*					
Fibres	Scale 0-10	ASTM D7684*					
Spheres	Scale 0-10	ASTM D7684*					
Other	Scale 0-10	ASTM D7684*					

WEAR

The most likely alloy matches are Low alloy steel 92XX (92XX) and Low alloy steel 40XX (40XX).