James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
ATLAS COPCO XAS185 AC-2 (S/N HOP042532)
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

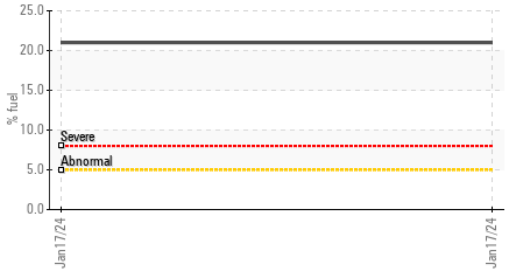
There is a high amount of fuel present in the oil. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

FLUID CONDITION

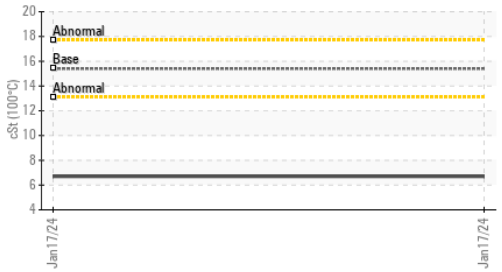
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196382	---	---
Sample Date		Client Info		17 Jan 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	80	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>4	3	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	7	---	---
Lead	ppm	ASTM D5185m	>40	2	---	---
Copper	ppm	ASTM D5185m	>330	24	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	⬢ 160	---	---
Potassium	ppm	ASTM D5185m	>20	17	---	---
Fuel	%	ASTM D3524	>5	⬢ 21.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	11.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.8	---	---
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	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m		68	---	---
Barium	ppm	ASTM D5185m		10	---	---
Molybdenum	ppm	ASTM D5185m		161	---	---
Manganese	ppm	ASTM D5185m		15	---	---
Magnesium	ppm	ASTM D5185m		622	---	---
Calcium	ppm	ASTM D5185m		1030	---	---
Phosphorus	ppm	ASTM D5185m		671	---	---
Zinc	ppm	ASTM D5185m		772	---	---
Sulfur	ppm	ASTM D5185m		2515	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	4.4	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	⬢ 6.7	---	---

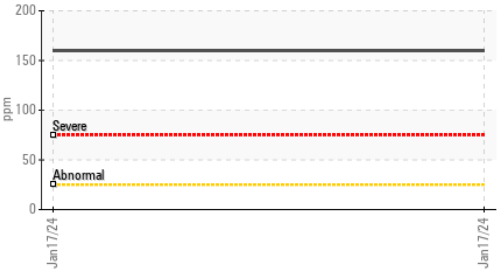
Fuel Dilution



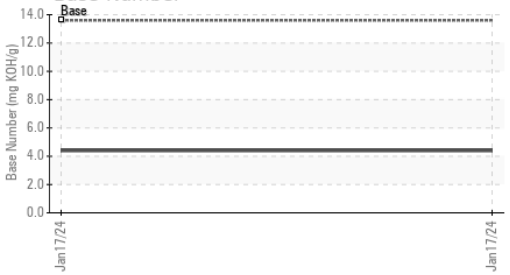
Viscosity @ 100°C



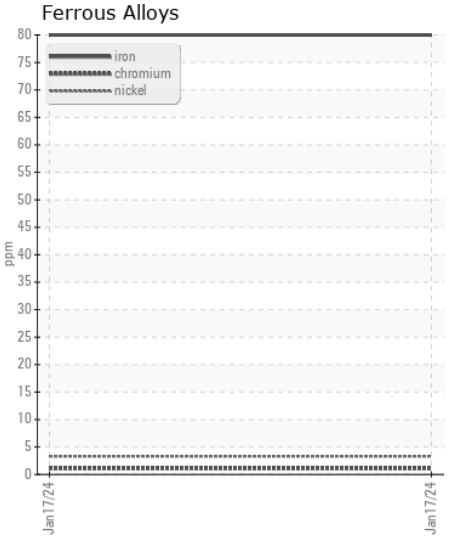
Silicon (ppm)



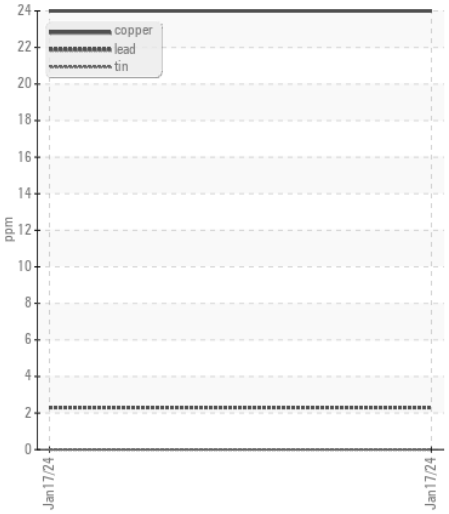
Base Number



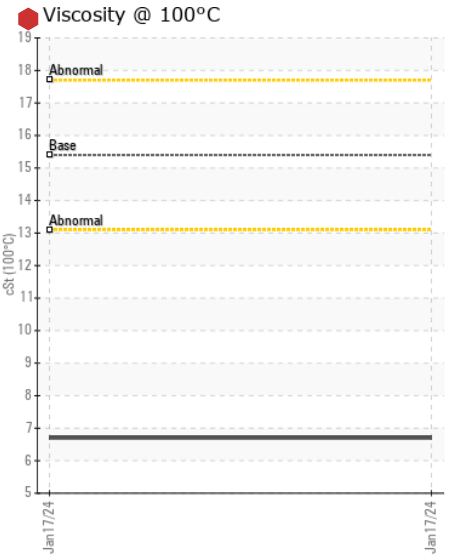
Ferrous Alloys



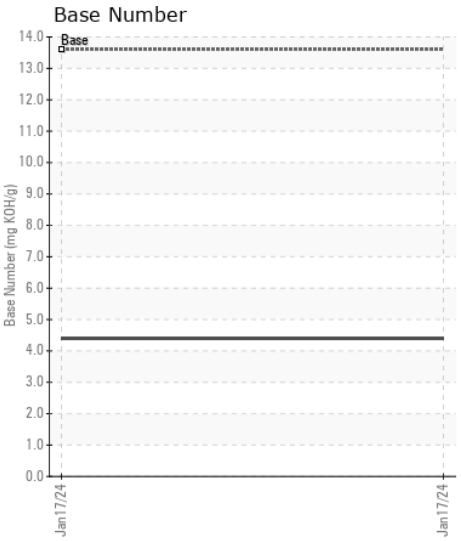
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196382 **Recieved** : 18 Jan 2024
Lab Number : 06064059 **Diagnosed** : 24 Jan 2024
Unique Number : 10835441 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

DIVERSIFIED BIO-MASS
606 SUNYDALE DR
WILMINGTON, NC
US 28412
Contact: CHRIS DAWSON
chris@tubgrinding.com
T: (914)279-6817
F: (910)793-6227