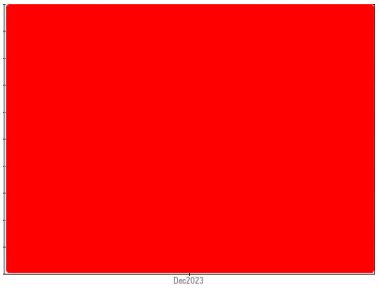
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
JACK RUNNER JR400-180 S-15 (S/N 892)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Piston, ring and cylinder wear is indicated. Valve wear is indicated.

Contamination

Sodium and/or potassium levels are high. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0107009	---	---
Sample Date		Client Info		05 Dec 2023	---	---
Machine Age	hrs	Client Info		1605	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	● 528	---	---
Chromium	ppm	ASTM D5185m	>20	● 67	---	---
Nickel	ppm	ASTM D5185m	>4	▲ 8	---	---
Titanium	ppm	ASTM D5185m		26	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	▲ 515	---	---
Lead	ppm	ASTM D5185m	>40	1	---	---
Copper	ppm	ASTM D5185m	>330	18	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
Cadmium	ppm	ASTM D5185m		<1	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	3	---	---
Barium	ppm	ASTM D5185m	10	10	---	---
Molybdenum	ppm	ASTM D5185m	100	57	---	---
Manganese	ppm	ASTM D5185m		12	---	---
Magnesium	ppm	ASTM D5185m	450	991	---	---
Calcium	ppm	ASTM D5185m	3000	1245	---	---
Phosphorus	ppm	ASTM D5185m	1150	1064	---	---
Zinc	ppm	ASTM D5185m	1350	1224	---	---
Sulfur	ppm	ASTM D5185m	4250	3411	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	● 1262	---	---
Sodium	ppm	ASTM D5185m	>158	▲ 96	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 87	---	---
Glycol	%	*ASTM D2982		NEG	---	---

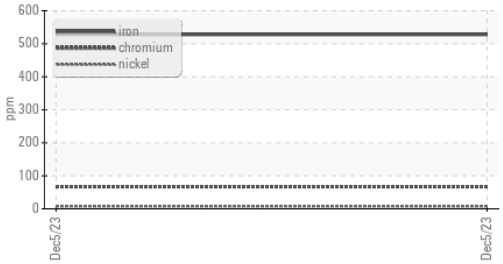
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	11.95	---	---

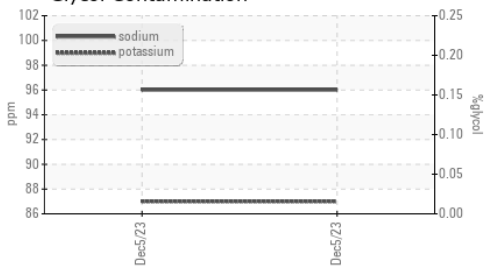
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

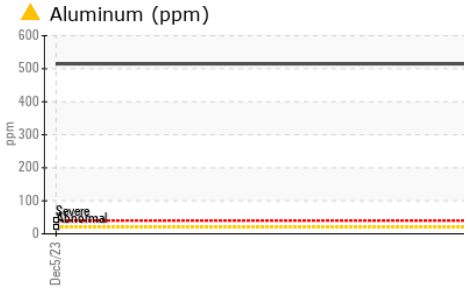
Ferrous Alloys



Glycol Contamination

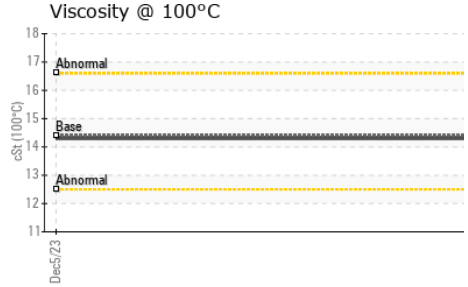


Aluminum (ppm)



Base Number

Viscosity @ 100°C

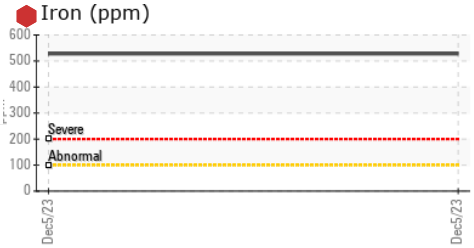


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

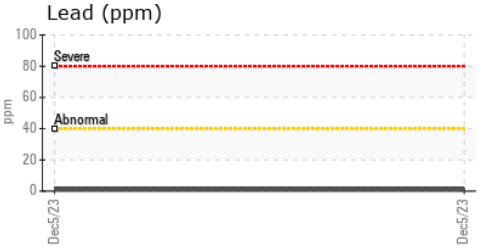
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	**14.3**	---	---

GRAPHS

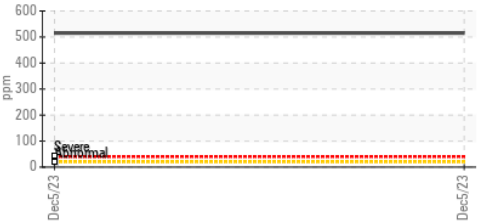
Iron (ppm)



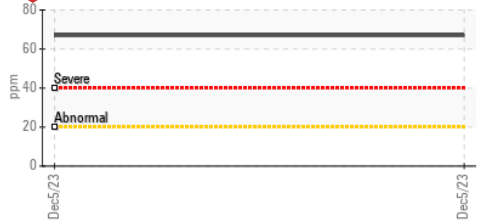
Lead (ppm)



Aluminum (ppm)

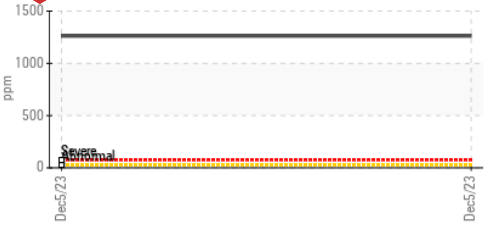


Chromium (ppm)



Copper (ppm)

Silicon (ppm)



Viscosity @ 100°C

Base Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0107009 **Recieved** : 18 Dec 2023
Lab Number : 06038017 **Diagnosed** : 20 Dec 2023
Unique Number : 10793246 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: Glycol)

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)

TRINITAS FARMING
45499 W PANOCHE RD
FIREBAUGH, CA
US 93622
Contact: SPENCER COOPER
spencer.cooper@trinitasfarming.com
T: (209)493-2999
F: