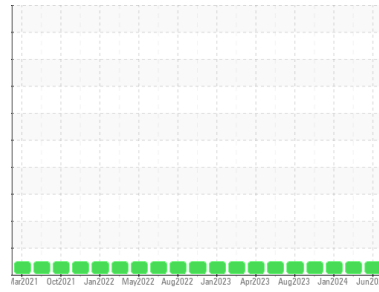




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Pillen Family Farms

Machine Id
MILTK44

Component
Diesel Engine

Fluid
MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	SBP0006858	SBP0005320	SBP0006181
Sample Date	Client Info	13 Jun 2024	21 Feb 2024	12 Jan 2024
Machine Age	hrs Client Info	350	350	350
Oil Age	hrs Client Info	0	0	350
Oil Changed	Client Info	Not Changed	Not Changed	Not Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	17	13	6
Chromium	ppm ASTM D5185m >20	1	1	<1
Nickel	ppm ASTM D5185m >4	<1	<1	0
Titanium	ppm ASTM D5185m	<1	0	<1
Silver	ppm ASTM D5185m >3	<1	0	0
Aluminum	ppm ASTM D5185m >20	4	3	2
Lead	ppm ASTM D5185m >40	3	<1	2
Copper	ppm ASTM D5185m >330	1	<1	<1
Tin	ppm ASTM D5185m >15	<1	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<1	<1	0
Barium	ppm ASTM D5185m 0	1	0	0
Molybdenum	ppm ASTM D5185m 0	64	67	60
Manganese	ppm ASTM D5185m	<1	0	<1
Magnesium	ppm ASTM D5185m 0	975	1059	913
Calcium	ppm ASTM D5185m	1109	1119	1016
Phosphorus	ppm ASTM D5185m	1086	1089	1013
Zinc	ppm ASTM D5185m	1252	1350	1174
Sulfur	ppm ASTM D5185m	2836	3188	2810

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	5	5	3
Sodium	ppm ASTM D5185m	2	3	3
Potassium	ppm ASTM D5185m >20	6	4	4

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.5	0.4	0.3
Nitration	Abs/cm *ASTM D7624 >20	8.7	8.2	7.3
Sulfation	Abs/.1mm *ASTM D7415 >30	20.6	20.1	19.4

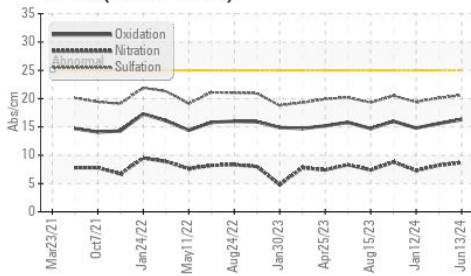
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.3	15.6	14.8
Base Number (BN)	mg KOH/g ASTM D2896 9.4	7.1	7.4	7.9

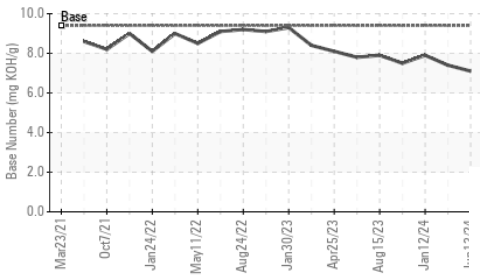


OIL ANALYSIS REPORT

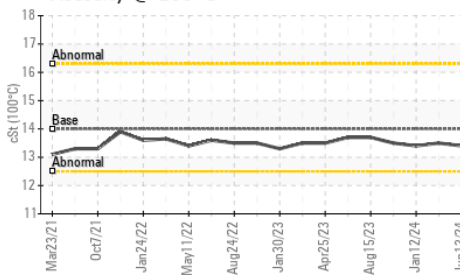
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

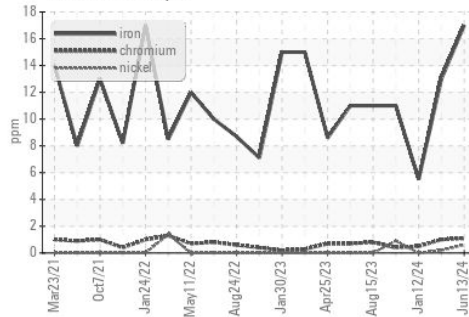


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

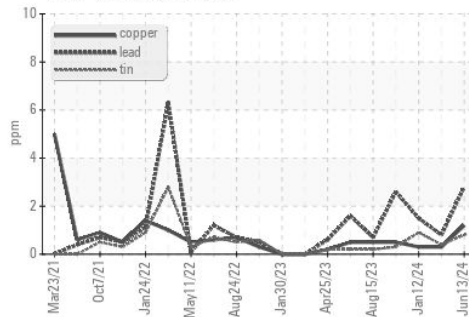
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 14	13.4	13.5	13.4

GRAPHS

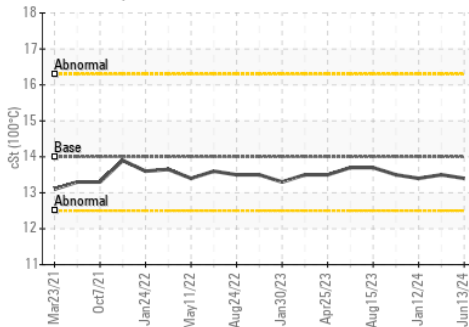
Ferrous Alloys



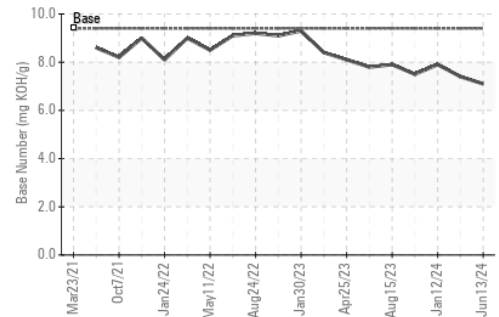
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0006858 **Received** : 24 Jun 2024
Lab Number : 06219201 **Tested** : 25 Jun 2024
Unique Number : 11097398 **Diagnosed** : 26 Jun 2024 - Jonathan Hester
Test Package : FLEET

Pillen Family Farms - 722828
 26741 NE-91
 Humphrey, NE
 US 61357
 Contact: Troy Runge
 troyfr@pillenfamilyfarms.com
 T: (308)390-6733
 F:

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)