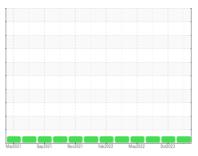


OIL ANALYSIS REPORT

Pillen Family Farms LSTK 51

Component **Diesel Engine**

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)



Sample Rating Trend



Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

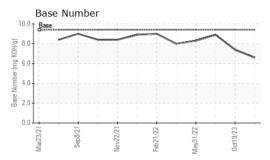
Fluid Condition

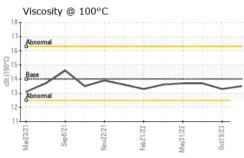
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0006165	SBP0006229	SBP0000995
Sample Date		Client Info		14 Dec 2023	19 Oct 2023	09 Aug 2022
Machine Age	mls	Client Info		0	0	0
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	V	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	13	46	8
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m		2	3	2
Lead	ppm	ASTM D5185m	>40	2	4	1
Copper	ppm	ASTM D5185m		<u>-</u> <1	1	<1
Tin	ppm		>15	1	<1	<1
Vanadium	ppm	ASTM D5185m	710	0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	<1
	le le			•		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES	nnm	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	3
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	0	<1 3	3
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	0 0 61	<1 3 64	3 0 60
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 61 <1	<1 3 64 <1	3 0 60 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	0 0 61 <1 924	<1 3 64 <1 942	3 0 60 <1 871
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 61 <1 924 1028	<1 3 64 <1 942 1259	3 0 60 <1 871 1048
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 61 <1 924 1028 1024	<1 3 64 <1 942 1259 1058	3 0 60 <1 871 1048 953
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 61 <1 924 1028 1024 1197	<1 3 64 <1 942 1259	3 0 60 <1 871 1048
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 61 <1 924 1028 1024 1197 2806	<1 3 64 <1 942 1259 1058 1320 3469	3 0 60 <1 871 1048 953 1208 2838
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	0 0 61 <1 924 1028 1024 1197 2806	<1 3 64 <1 942 1259 1058 1320 3469 history1	3 0 60 <1 871 1048 953 1208 2838 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0	0 0 61 <1 924 1028 1024 1197 2806 current	<1 3 64 <1 942 1259 1058 1320 3469 history1	3 0 60 <1 871 1048 953 1208 2838 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25	0 0 61 <1 924 1028 1024 1197 2806	<1 3 64 <1 942 1259 1058 1320 3469 history1	3 0 60 <1 871 1048 953 1208 2838 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25 >20	0 0 61 <1 924 1028 1024 1197 2806 current 3 3	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6	3 0 60 <1 871 1048 953 1208 2838 history2 4 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >25 >20 limit/base	0 0 61 <1 924 1028 1024 1197 2806 current 3 3 1	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6	3 0 60 <1 871 1048 953 1208 2838 history2 4 2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 limit/base >25 >20 limit/base >3	0 0 61 <1 924 1028 1024 1197 2806 current 3 3 1	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6 history1 0.6	3 0 60 <1 871 1048 953 1208 2838 history2 4 2 3 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20	0 0 61 <1 924 1028 1024 1197 2806 current 3 3 1 current 0.6 9.8	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6 history1 0.6 9.6	3 0 60 <1 871 1048 953 1208 2838 history2 4 2 3 history2 0.4 9.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	0 0 61 <1 924 1028 1024 1197 2806 current 3 3 1 current 0.6 9.8 21.5	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6 history1 0.6 9.6 21.8	3 0 60 <1 871 1048 953 1208 2838 history2 4 2 3 history2 0.4 9.2 21.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m METHOD *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m METHOD *ASTM D7844 *ASTM D7624 *ASTM D7415 METHOD	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30 limit/base	0 0 61 <1 924 1028 1024 1197 2806 current 3 3 1 current 0.6 9.8 21.5	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6 history1 0.6 9.6 21.8 history1	3 0 60 <1 871 1048 953 1208 2838 history2 4 2 3 history2 0.4 9.2 21.8 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 0 0 0 limit/base >25 >20 limit/base >3 >20 >30	0 0 61 <1 924 1028 1024 1197 2806 current 3 3 1 current 0.6 9.8 21.5	<1 3 64 <1 942 1259 1058 1320 3469 history1 4 <1 6 history1 0.6 9.6 21.8	3 0 60 <1 871 1048 953 1208 2838 history2 4 2 3 history2 0.4 9.2 21.8



OIL ANALYSIS REPORT

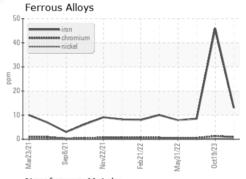


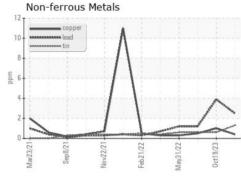


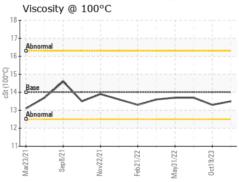
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

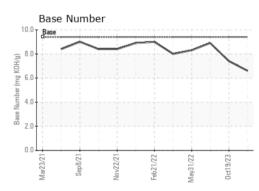
FLUID PROPERTIES		metnoa	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	14	13.5	13.3	13.7

GRAPHS













Laboratory Sample No. Lab Number **Unique Number** Test Package : FLEET

: SBP0006165

: 06077382 : 10859473

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 01 Feb 2024

Diagnosed : 04 Feb 2024 Diagnostician : Don Baldridge

Certificate L2367 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)

Pillen Family Farms - 722828

26741 NE-91 Humphrey, NE US 61357

Contact: Troy Runge troyfr@pillenfamilyfarms.com T: (308)390-6733