

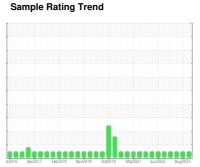
OIL ANALYSIS REPORT



KANSAS/44/EG - DOZER 36.32L [KANSAS^44^EG - DOZER]

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)







DIAGNOSIS

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

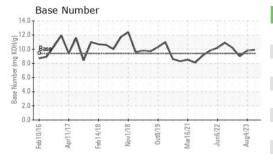
Fluid Condition

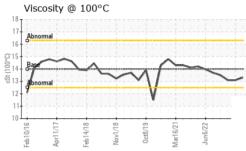
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

•		b2016 Apr2	017 Feb2018 Nov2018	0ct2019 Mar2021 Jun202	2 Aug2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0833819	WC0712129	WC0789802
Sample Date		Client Info		23 Oct 2023	04 Aug 2023	02 May 2023
Machine Age	hrs	Client Info		8407	8178	8005
Oil Age	hrs	Client Info		229	173	258
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	18	22	17
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	2
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	39	44	39
Barium	ppm	ACTM DE10Em	0	0	0	0
	ppiii	ASTM D5185m				
Molybdenum	ppm	ASTM D5165III ASTM D5185m	0	41	42	41
			0	41 <1		41 <1
Molybdenum	ppm	ASTM D5185m	0		42	
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		<1	42 <1	<1
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 480	42 <1 551	<1 531
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 480 1686	42 <1 551 1814	<1 531 1812
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 480 1686 839	42 <1 551 1814 805	<1 531 1812 802
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 480 1686 839 893	42 <1 551 1814 805 986	<1 531 1812 802 983
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0	<1 480 1686 839 893 2396	42 <1 551 1814 805 986 3209	<1 531 1812 802 983 3117
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 limit/base	<1 480 1686 839 893 2396	42 <1 551 1814 805 986 3209 history1	<1 531 1812 802 983 3117 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	0 limit/base	<1 480 1686 839 893 2396 current	42 <1 551 1814 805 986 3209 history1	<1 531 1812 802 983 3117 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 limit/base >25	<1 480 1686 839 893 2396 current 5	42 <1 551 1814 805 986 3209 history1 6	<1 531 1812 802 983 3117 history2 5
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0	<1 480 1686 839 893 2396 current 5 10 1	42 <1 551 1814 805 986 3209 history1 6 7	<1 531 1812 802 983 3117 history2 5 11
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 limit/base >25 >20 limit/base >3	<1 480 1686 839 893 2396 current 5 10 1 current	42 <1 551 1814 805 986 3209 history1 6 7 2	<1 531 1812 802 983 3117 history2 5 11 2
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	0 limit/base >25 >20 limit/base >3	<1 480 1686 839 893 2396 current 5 10 1 current 0.3	42 <1 551 1814 805 986 3209 history1 6 7 2 history1 0.2	<1 531 1812 802 983 3117 history2 5 11 2 history2
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	limit/base >25 >20 limit/base >3 >20	<1 480 1686 839 893 2396 current 5 10 1 current 0.3 7.1	42 <1 551 1814 805 986 3209 history1 6 7 2 history1 0.2 6.6	<1 531 1812 802 983 3117 history2 5 11 2 history2 0.2 7.1
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 limit/base >25 >20 limit/base >3 >20 >30	<1 480 1686 839 893 2396 current 5 10 1 current 0.3 7.1 22.3	42 <1 551 1814 805 986 3209 history1 6 7 2 history1 0.2 6.6 21.1	<1 531 1812 802 983 3117 history2 5 11 2 history2 0.2 7.1 20.3
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 Method *ASTM D7844 *ASTM D7624 *ASTM D76145 Method *ASTM D7415	limit/base >25 >20 limit/base >3 >20 >30 limit/base	<1 480 1686 839 893 2396 current 5 10 1 current 0.3 7.1 22.3 current	42 <1 551 1814 805 986 3209 history1 6 7 2 history1 0.2 6.6 21.1 history1	<1 531 1812 802 983 3117 history2 5 11 2 history2 0.2 7.1 20.3 history2



OIL ANALYSIS REPORT

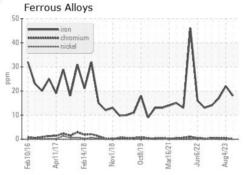


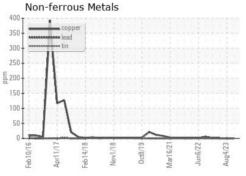


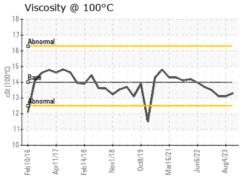
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

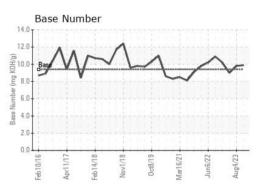
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	14	13.3	13.1	13.1

GRAPHS













Laboratory Sample No. Lab Number Unique Number : 10722430

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0833819 : 05994070

Received

: 31 Oct 2023 Diagnosed

: 31 Oct 2023 Diagnostician : Wes Davis

Test Package : CONST (Additional Tests: 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)

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