

OIL ANALYSIS REPORT



KANSAS/44/EG - OTHER SERVICE 38.80L [KANSAS^44^EG - OTHER SERVICE]

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

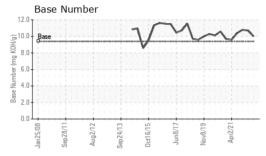
Fluid Condition

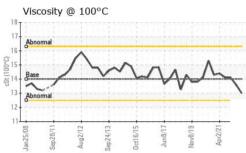
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0781259	WC0598581	WC0606244
Sample Date		Client Info		11 Jul 2023	12 Oct 2021	06 Aug 2021
Machine Age	hrs	Client Info		24029	7583	7405
Oil Age	hrs	Client Info		31	250	342
Oil Changed		Client Info		N/A	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	>86	20	11	18
Chromium	ppm	ASTM D5185m	>3	<1	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	<1	2
Lead	ppm	ASTM D5185m	>16	<1	<1	3
Copper	ppm	ASTM D5185m	>250	3	3	5
Tin	ppm	ASTM D5185m	>2	0	<1	0
Antimony	ppm	ASTM D5185m			0	4
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 61	history1	history2 45
	ppm		0			The state of the s
Boron		ASTM D5185m	0	61	50	45
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	61 0	50 0	45 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	61 0 40	50 0 29	45 0 31
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 40 <1	50 0 29 <1	45 0 31 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 40 <1 574	50 0 29 <1 520	45 0 31 <1 642 1807 757
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 40 <1 574 1860	50 0 29 <1 520 1441	45 0 31 <1 642 1807 757 868
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 40 <1 574 1860 807	50 0 29 <1 520 1441 683	45 0 31 <1 642 1807 757
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	61 0 40 <1 574 1860 807 985	50 0 29 <1 520 1441 683 805	45 0 31 <1 642 1807 757 868
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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	61 0 40 <1 574 1860 807 985 3166	50 0 29 <1 520 1441 683 805 2170	45 0 31 <1 642 1807 757 868 2458
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0	61 0 40 <1 574 1860 807 985 3166 current 5	50 0 29 <1 520 1441 683 805 2170 history1	45 0 31 <1 642 1807 757 868 2458 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	61 0 40 <1 574 1860 807 985 3166 current	50 0 29 <1 520 1441 683 805 2170 history1	45 0 31 <1 642 1807 757 868 2458 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 Iimit/base	61 0 40 <1 574 1860 807 985 3166 current 5	50 0 29 <1 520 1441 683 805 2170 history1 2	45 0 31 <1 642 1807 757 868 2458 history2 5 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >35 >20	61 0 40 <1 574 1860 807 985 3166 current 5 2	50 0 29 <1 520 1441 683 805 2170 history1 2 0 history1 0.9	45 0 31 <1 642 1807 757 868 2458 history2 5 2 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 0 0 limit/base >35 >20 limit/base	61 0 40 <1 574 1860 807 985 3166 current 5 2 0	50 0 29 <1 520 1441 683 805 2170 history1 2 0 history1	45 0 31 <1 642 1807 757 868 2458 history2 5 2 1
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 >35 >20 limit/base >3	61 0 40 <1 574 1860 807 985 3166 current 5 2 0 current 0.9	50 0 29 <1 520 1441 683 805 2170 history1 2 0 history1 0.9	45 0 31 <1 642 1807 757 868 2458 history2 5 2 1 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 ASTM D5185m	0 0 0 0 0 limit/base >35 >20 limit/base >3 >20	61 0 40 <1 574 1860 807 985 3166 current 5 2 0 current 0.9 7.9	50 0 29 <1 520 1441 683 805 2170 history1 2 2 0 history1 0.9 7.8	45 0 31 <1 642 1807 757 868 2458 history2 5 2 1 history2 1 9.4
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 D5185m ASTM D5185m *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7624 *ASTM D7624 *ASTM D7415	0 0 0 0 0 limit/base >35 >20 limit/base >3 >20 >30	61 0 40 <1 574 1860 807 985 3166 current 5 2 0 current 0.9 7.9 23.0	50 0 29 <1 520 1441 683 805 2170 history1 2 2 0 history1 0.9 7.8 22.8	45 0 31 <1 642 1807 757 868 2458 history2 5 2 1 history2 1 9.4 28.6
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 METHOD *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 >35 >20 limit/base >3 >20 >30 limit/base	61 0 40 <1 574 1860 807 985 3166 current 5 2 0 current 0.9 7.9 23.0 current	50 0 29 <1 520 1441 683 805 2170 history1 2 2 0 history1 0.9 7.8 22.8 history1	45 0 31 <1 642 1807 757 868 2458 history2 5 2 1 history2 1 9.4 28.6 history2



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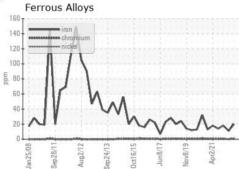


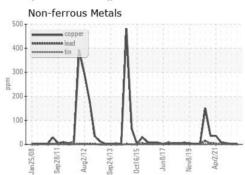


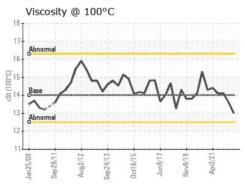
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

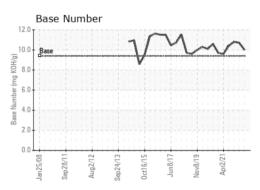
FLUID PROPERT	IES	method				history2
Visc @ 100°C	cSt	ASTM D445	14	13.0	13.6	14.1

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10565539

: WC0781259 : 05904183

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 21 Jul 2023

Diagnosed : 21 Jul 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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