

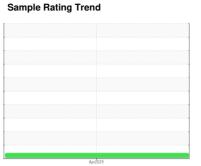
OIL ANALYSIS REPORT



KANSAS/44/EG - EXCAVATOR 20.210L [KANSAS^44^EG - EXCAVATOR]

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

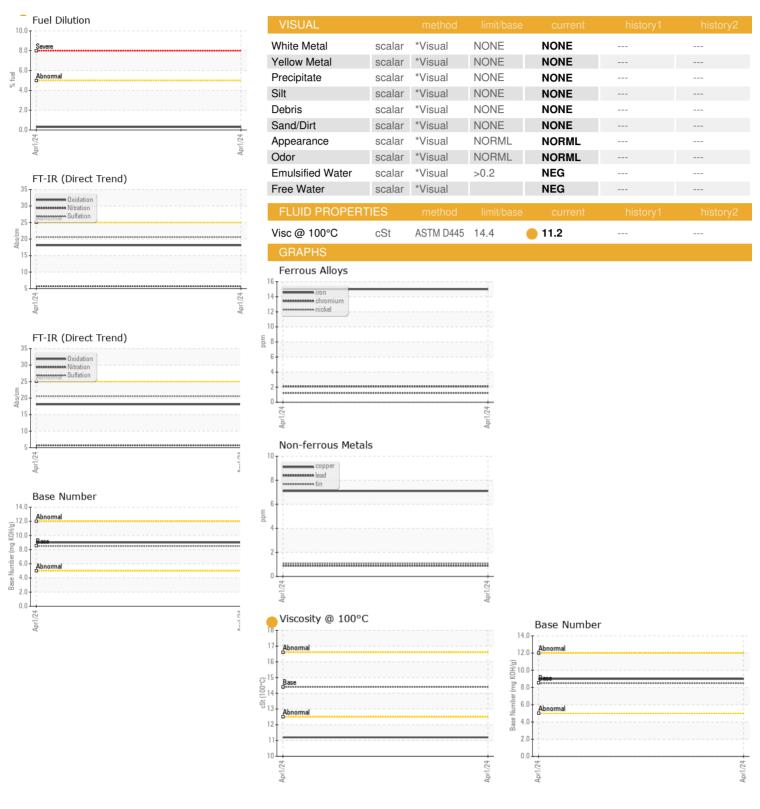
Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0918407		
Sample Date		Client Info		01 Apr 2024		
Machine Age	hrs	Client Info		9		
Oil Age	hrs	Client Info		9		
Oil Changed		Client Info		Not Changd		
Sample Status				ATTENTION		
CONTAMINATIO	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	15		
Chromium	ppm		>20	2		
Nickel	ppm	ASTM D5185m	>2	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m		10		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m		7		
Tin	ppm	ASTM D5185m	>15	1		
	ppm	ASTM D5185m	>10	<1		
Cadmium	ppm	ASTM D5185m	limit/base	<1		
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	<1 current	history1	history2
Cadmium ADDITIVES Boron	ppm	ASTM D5185m method ASTM D5185m	250	<1 current	history1	history2
Cadmium ADDITIVES Boron Barium	ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	250 10	<1 current 82 4	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	250	<1 current 82 4 46	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	<1 current 82 4 46 10	history 1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	<1 current 82 4 46 10 541	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000	<1 current 82 4 46 10 541 1878	history 1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150	<1 current 82 4 46 10 541 1878 1190	 history1 	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350	<1 current 82 4 46 10 541 1878 1190 1326	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150	<1 current 82 4 46 10 541 1878 1190	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350	<1 current 82 4 46 10 541 1878 1190 1326	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base	<1 current 82 4 46 10 541 1878 1190 1326 4333	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	MSTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base	<1 current 82 4 46 10 541 1878 1190 1326 4333 current	history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Iimit/base >25	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25	history1 history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5	history1 history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	MSTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5 3	history1 history1 history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5 3 0.3	history1 history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5 3 0.3 current	history1 history1	history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m method ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5 3 0.3 current	history1 history1 history1 history1	history2 history2 history2 history2
Cadmium ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm	ASTM D5185m method ASTM D5185m METHOD ASTM D5185m ASTM D7624	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5 3 0.3 current 0.1 5.7	history1 history1 history1 history1	history2 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30	<1 current 82 4 46 10 541 1878 1190 1326 4333 current 25 5 3 0.3 current 0.1 5.7 20.6	history1 history1 history1 history1	history2 history2 history2 history2



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06142852

: WC0918407 Unique Number : 10967660

Received : 09 Apr 2024 **Tested**

: 11 Apr 2024 Diagnosed Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

: 11 Apr 2024 - Don Baldridge

3219 WEST MAY ST WICHITA, KS US 67213 Contact: BILL ORCUTT

william.orcutt@wildcat.net

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)

SHERWOOD CONSTRUCTION CO INC

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