

# **OIL ANALYSIS REPORT**

# Machine Id KUBOTA SSV65C 13166

Diesel Engine Fluid TRC MOLY XL PROSPEC III 15W40 (2 GAL)

### DIAGNOSIS

#### Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## Wear

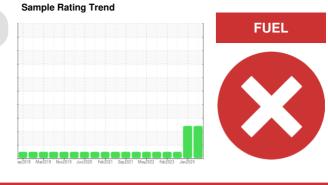
All component wear rates are normal.

#### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

#### Fluid Condition

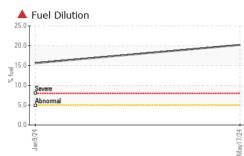
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

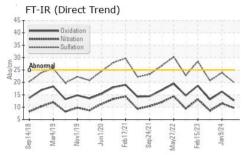


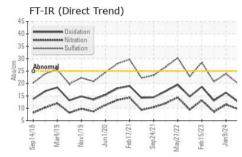
SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		TR06196889	TR06067890	TR05959225
Sample Date		Client Info		17 May 2024	09 Jan 2024	15 Sep 2023
Machine Age	hrs	Client Info		6652	6232	5905
Oil Age	hrs	Client Info		1013	593	266
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
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	38	43	25
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	3
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	2	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
			11 1. 11			
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	Method ASTM D5185m	limit/base	current 154	history1 124	history2 210
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	154	124	210
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	154 2	124 0	210 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	154 2 185	124 0 173	210 0 202
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	154 2 185 <1	124 0 173 <1	210 0 202 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		154 2 185 <1 331	124 0 173 <1 349	210 0 202 <1 383
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		154 2 185 <1 331 3370	124 0 173 <1 349 2961	210 0 202 <1 383 3567
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	4500	154 2 185 <1 331 3370 843	124 0 173 <1 349 2961 731	210 0 202 <1 383 3567 841
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	4500	154 2 185 <1 331 3370 843 884	124 0 173 <1 349 2961 731 845	210 0 202 <1 383 3567 841 1037
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	4500 1400	154 2 185 <1 331 3370 843 884 3652	124 0 173 <1 349 2961 731 845 3038	210 0 202 <1 383 3567 841 1037 4084
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	4500 1400 limit/base	154 2 185 <1 331 3370 843 884 3652 current	124 0 173 <1 349 2961 731 845 3038 history1	210 0 202 <1 383 3567 841 1037 4084 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	4500 1400 limit/base	154 2 185 <1 331 3370 843 884 3652 current 8	124 0 173 <1 349 2961 731 845 3038 history1 9	210 0 202 <1 383 3567 841 1037 4084 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	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 ASTM D5185m	4500 1400 limit/base >25	154 2 185 <1 331 3370 843 884 3652 <u>Current</u> 8 1	124 0 173 <1 349 2961 731 845 3038 history1 9 3	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 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 ASTM D5185m	4500 1400 limit/base >25 >20	154 2 185 <1 331 3370 843 884 3652 <u>Current</u> 8 1 6	124 0 173 <1 349 2961 731 845 3038 history1 9 3 0	210 0 202 <1 383 3567 841 1037 4084 history2 8 2 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	4500 1400 limit/base >25 >20 >5	154 2 185 <1 331 3370 843 884 3652 Current 8 1 6 20.2	124 0 173 <1 349 2961 731 845 3038 history1 9 3 0 ▲ 15.6	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 2 2 2 2 <1.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	4500 1400 limit/base >25 >20 >5 limit/base	154 2 185 <1 331 3370 843 884 3652 Current 8 1 6 20.2 Current	124 0 173 <1 349 2961 731 845 3038 history1 9 3 0 0 ▲ 15.6	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 2 2 2 <1.0 <b>history2</b>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	4500 1400 limit/base >25 >20 >5 20 >5 limit/base >3	154 2 185 <1 331 3370 843 884 3652 Current 8 1 6 20.2 Current 0.4	124 0 173 <1 349 2961 731 845 3038 history1 9 3 0 4 15.6 history1 1.6	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 2 2 2 <1.0 <b>history2</b> 0.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 <b>method</b>	4500 1400 225 >20 >5 20 >5 20 20 20 25 20 25	154 2 185 <1 331 3370 843 884 3652 Current 8 1 6 20.2 Current 0.4 9.7	124 0 173 <1 349 2961 731 845 3038 history1 9 3 0 ↓ 15.6 history1 1.6 1.6 11.5	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 2 2 2 <1.0 <b>history2</b> 0.8 8.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Solicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	4500 1400 225 >25 >20 >5 Imit/base >3 >20 >30 >30	154 2 185 <1 331 3370 843 884 3652 Current 8 1 6 20.2 Current 0.4 9.7 20.0 Current	124 0 173 <1 349 2961 731 845 3038 <b>history1</b> 9 3 0 ↓ 15.6 <b>history1</b> 1.6 11.5 23.9	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 2 2 2 <1.0 <b>history2</b> 0.8 8.6 20.7 <b>history2</b>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	4500 1400 1400 225 >225 >20 >5 20 >5 20 >5 20 >3 >20 20 >3 >20 20 >3	154 2 185 <1 331 3370 843 884 3652 Current 8 1 6 ▲ 20.2 Current 0.4 9.7 20.0	124 0 173 <1 349 2961 731 845 3038 <b>history1</b> 9 3 0 <b>1</b> 5.6 <b>history1</b> 1.6 11.5 23.9	210 0 202 <1 383 3567 841 1037 4084 <b>history2</b> 8 2 2 <1.0 <b>history2</b> 0.8 8.6 20.7

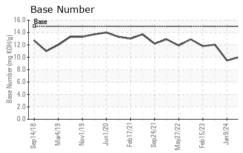


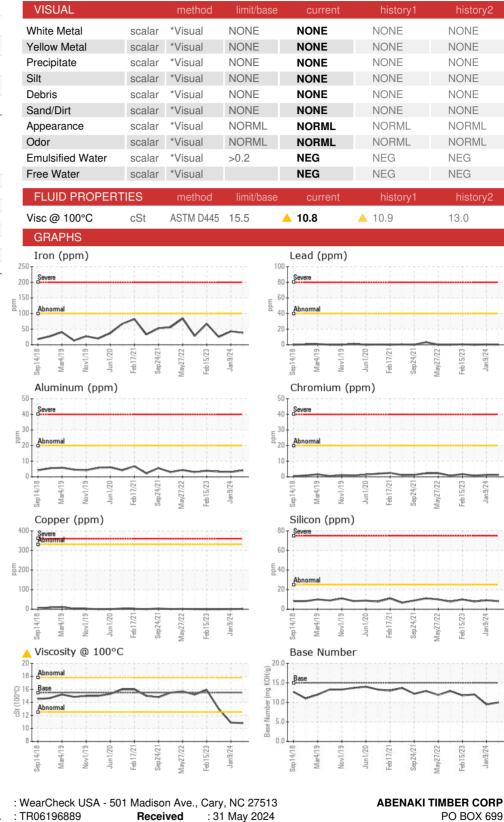
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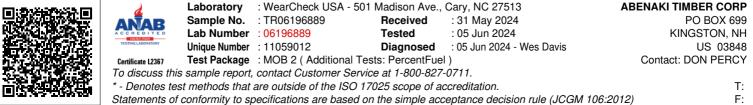












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