

OIL ANALYSIS REPORT

Area SHARP BUS LINES Machine Id INTERNATIONAL 1219 Component

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

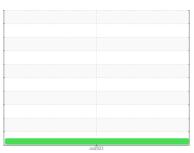
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.



Sample Rating Trend



NORMAL

				Jul2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0081336		
Sample Date		Client Info		31 Jul 2023		
Machine Age	kms	Client Info		233301		
Oil Age	kms	Client Info		1401		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	NC	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0		
WEAR METALS	;	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	27		
	ppm	ASTM D5185(m)	>20	<1		
	ppm	ASTM D5185(m)	>4	<1		
	ppm	ASTM D5185(m)		0		
	ppm	ASTM D5185(m)	>3	0		
	ppm	ASTM D5185(m)	>20	6		
	ppm	ASTM D5185(m)	>40	2		
	ppm	ASTM D5185(m)	>330	- <1		
	ppm	ASTM D5185(m)	>15	0		
	ppm	ASTM D5185(m)	210	0		
	ppm	ASTM D5185(m)		0		
	ppm	ASTM D5185(m)		0		
	ppm	ASTM D5185(m)		0		
oddiniani	pp			•		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES	ppm	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	4		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	250 10	4 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250	4 0 59		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100	4 0 59 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450	4 0 59 <1 926		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000	4 0 59 <1 926 981	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150	4 0 59 <1 926 981 1036	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350	4 0 59 <1 926 981 1036 1120	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150	4 0 59 <1 926 981 1036 1120 2519	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250	4 0 59 <1 926 981 1036 1120 2519 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 imit/base	4 0 59 <1 926 981 1036 1120 2519 <1 current	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >25	4 0 59 <1 926 981 1036 1120 2519 <1 2519 <1 2519 3		
Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 binit/base >25 >158	4 0 59 <1 926 981 1036 1120 2519 <1 current 3 333	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm S ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >25	4 0 59 <1 926 981 1036 1120 2519 <1 current 3 33 22	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm S ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 binit/base >25 >158	4 0 59 <1 926 981 1036 1120 2519 <1 current 3 333	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm S ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 binit/base >25 >158	4 0 59 <1 926 981 1036 1120 2519 <1 current 3 33 22	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm S ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20	4 0 59 <1 926 981 1036 1120 2519 <1 current 3 33 22 0.0	 history1 	 history2
Boron Barium Anganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 Imit/base >25 >158 >20 Imit/base	4 0 59 <1 926 981 1036 1120 2519 <1 <i>current</i> 3 33 22 0.0 <i>current</i> 1.9	 history1 history1	 history2 history2
Boron Barium Anyanese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	250 10 100 450 3000 1150 1350 4250 i mit/base >25 >158 >20 i mit/base >3	4 0 59 <1 926 981 1036 1120 2519 <1 current 3 33 22 0.0	 history1 history1 	 history2 history2
Boron Barium Any Anganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7922* ASTM D7924 ASTM D7844* ASTM D7844*	250 10 100 450 3000 1150 1350 4250 imit/base >25 >158 >20 imit/base >3 >20 >3 >20	4 0 59 <1 926 981 1036 1120 2519 <1 <i>current</i> 3 3 33 22 0.0 <i>current</i> 1.9 8.6 23.1	 history1 history1 history1 	 history2 history2 history2
Boron Barium Aolybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANT Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7844*	250 10 100 450 3000 1150 1350 4250 imit/base >25 >158 >20 imit/base >3 >3	4 0 59 <1 926 981 1036 1120 2519 <1 <i>current</i> 3 33 22 0.0 <i>current</i> 1.9 8.6	 history1 history1 history1	 history2 history2

Contact/Location: Doug Hall - ICSB902



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