

OIL ANALYSIS REPORT

Area CONSTRUCTORS, INC Machine Id CUMMINS C8.3-275 01-0025 Component

Front Diesel Engine

MOBIL DELVAC 1300 SUPER 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

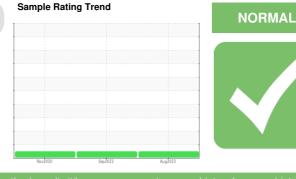
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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



SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0004672	SBP0001396	SBP38220018
Sample Date		Client Info		16 Aug 2023	09 Sep 2022	27 Nov 2020
Machine Age	hrs	Client Info		15254	14701	14356
Oil Age	hrs	Client Info		553	345	444
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	0.0
WEAR METALS		method	limit/base	current	history1	history2
Iron	nnm	ASTM D5185m	>90	8	5	7
Chromium	ppm ppm	ASTM D5185m	>20	2	1	2
Nickel	ppm	ASTM D5185m	>20	2 <1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver		ASTM D5185m	>2	0	<1	0
Aluminum	ppm ppm	ASTM D5185m	>2	3	2	2
Lead		ASTM D5185m	>20	ہ <1	<1	2
	ppm	ASTM D5185m		<1		0
Copper	ppm		>330		<1	
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m ASTM D5185m		0	0	
Cadmium	ppm	ASTM DS185m		0	0	0
			limit/base			history2
ADDITIVES		method	IIIIII/Dase	current	history1	
Boron	ppm	ASTM D5185m	IIIIII/Dase	26	77	45
Boron Barium	ppm ppm		inni/base		77 0	
Boron		ASTM D5185m	IIIII/Dase	26 0 50	77	45 0 35
Boron Barium	ppm	ASTM D5185m ASTM D5185m	IIIII/Dase	26 0	77 0	45 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		26 0 50	77 0 29	45 0 35
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		26 0 50 <1	77 0 29 <1	45 0 35 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		26 0 50 <1 715	77 0 29 <1 492	45 0 35 0 448
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		26 0 50 <1 715 1366	77 0 29 <1 492 1476	45 0 35 0 448 1438
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		26 0 50 <1 715 1366 897	77 0 29 <1 492 1476 668	45 0 35 0 448 1438 737
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	limit/base	26 0 50 <1 715 1366 897 1093	77 0 29 <1 492 1476 668 830	45 0 35 0 448 1438 737 774
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	limit/base	26 0 50 <1 715 1366 897 1093 3024	77 0 29 <1 492 1476 668 830 2373	45 0 35 0 448 1438 737 774
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	limit/base	26 0 50 <1 715 1366 897 1093 3024 current	77 0 29 <1 492 1476 668 830 2373 history1	45 0 35 0 448 1438 737 774 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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	limit/base	26 0 50 <1 715 1366 897 1093 3024 current 2	77 0 29 <1 492 1476 668 830 2373 history1 5	45 0 35 0 448 1438 737 774 history2 5
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	limit/base >25	26 0 50 <1 715 1366 897 1093 3024 current 2 0	77 0 29 <1 492 1476 668 830 2373 history1 5 4	45 0 35 0 448 1438 737 774 history2 5 4
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	limit/base >25	26 0 50 <1 715 1366 897 1093 3024 current 2 0 1	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1	45 0 35 0 448 1438 737 774 history2 5 4 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	26 0 50 <1 715 1366 897 1093 3024 current 2 0 1 1	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1 	45 0 35 0 448 1438 737 774 history2 5 4 2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >6	26 0 50 <1 715 1366 897 1093 3024 <i>current</i> 2 0 1 1 <i>current</i> 0.1	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1 history1	45 0 35 0 448 1438 737 774 history2 5 4 2 2 0 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >6	26 0 50 <1 715 1366 897 1093 3024 <i>current</i> 2 0 1 1 	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1 history1 0.1	45 0 35 0 448 1438 737 774 history2 5 4 2 0 0 history2 0.25
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >6 >20	26 0 50 <1 715 1366 897 1093 3024 <i>current</i> 2 0 1 1 <i>current</i> 0.1 7.2	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1 history1 0.1 7.8	45 0 35 0 448 1438 737 774 history2 5 4 2 0 0 history2 0.25
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >6 >20 >30 limit/base	26 0 50 <1 715 1366 897 1093 3024 <i>current</i> 2 0 1 1 <i>current</i> 0.1 7.2 19.1 <i>current</i>	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1 history1 0.1 7.8 21.8 history1	45 0 35 0 448 1438 737 774 history2 5 4 2 0 0 history2 0.25 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >20 limit/base >30 limit/base >25	26 0 50 <1 715 1366 897 1093 3024 <i>current</i> 2 0 1 1 <i>current</i> 0.1 7.2 19.1	77 0 29 <1 492 1476 668 830 2373 history1 5 4 <1 history1 0.1 7.8 21.8	45 0 35 0 448 1438 737 774 history2 5 4 2 0 0 history2 0.25



10 Abnorma

Nov27/20

OIL ANALYSIS REPORT

Base Number 12.0 Base Number (mg KOH/g) 0.9 0.9 0.1 1.2 1. Base 0.0 Sep9/22. Nov27/20 Viscosity @ 100°C 15 14 Abnorma 13 cSt (100°C) 11 Base

	VISUAL		method				history2	
	White Metal	scalar	*Visual	NONE	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE		
Sep 9/22 -	Appearance Odor	scalar	*Visual	NORML	NORML	NORML		
Sel	Odor Odor	scalar	*Visual	NORML	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG		
	Free Water	scalar	*Visual		NEG	NEG		
	FLUID PROPER	TIES	method	limit/base	current	history1	history	
	Visc @ 100°C	cSt	ASTM D445	11.9	10.9	11.1	11.2	
	GRAPHS							
1	Ferrous Alloys							
	10 T							
Sep9/22	8+							
S.	ansanan nickel		_					
	6-							
	변 선							
	2 -		a Contraton (Contraton (Contra	ala a da				
	0			Character and Ch				
	7/20	Sep 9/22 -		6/23 -				
	0Z/LZvoN	Sep		Aug16/23				
	Non-ferrous Meta	als						
	10 copper							
	8 - Real lead							
	energy tin							
	6 -							
	특 현							
	2 -							
	0							
	7/20	Sep 9/22 .		6/23 .				
	0Z/LZvoN	Sep		Aug16/23				
	Viscosity @ 100°	С			Base Number			
	14 - Abnormal			12.	Base			
	13-	J		10. ©	0			
				8 KOH	0			
	G 12 - Base			(B/HOX Base Number 1971)	0 -			
				quinn 4	0			
	10 - Abnormal			ase B				
	9-			2.	0			
	84	2		0.				
	02/720	Sep9/22		Aug 16/23	Nov27/20	Sep 9/22		
	No	60		Au	Na	60		
J Labo	ratory : WearCheck USA -	501 Madis	son Ave Ca	ry, NC 2751	3	Constructor	s Inc 6036	
	ple No. : SBP0004672	Received	leceived : 21 Aug 2023			1815 Y Str		
Lab	Number : 05929357	Diagnose	ed : 22 /	Aug 2023			Lincoln, I	
STING LABORATORY	ue Number : 10609304	Diagnost	tician : We	s Davis		0	US 685	
	est Package : FLEET					Contact: Jack Linh		
tificate L2367 Test	ble report, contact Customer Serv	vice at 1 0	00-227-1260	2		jackl@construc		