

OIL ANALYSIS REPORT

Sample Rating Trend





MINING ME-79 CATERPILLAR D6K DHA01341 Diesel Engine

SCHAEFFER SUPREME 7000 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Area

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		WC0920479		
Sample Date		Client Info		24 Apr 2024		
Machine Age	hrs	Client Info		10549		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
					This to fy f	THStory2
Iron	ppm	ASTM D5185m	>100	26		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	>2	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>25	4		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	22		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 46	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	46		
Boron Barium	ppm	ASTM D5185m ASTM D5185m		46 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		46 0 72		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50	46 0 72 2		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000	46 0 72 2 29		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 1000 1400	46 0 72 2 29 2372	 	
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	50 1000 1400 985	46 0 72 2 29 2372 1027	 	
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	50 1000 1400 985 1060	46 0 72 2 29 2372 1027 1291	 	
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	50 1000 1400 985 1060 4000	46 0 72 2 29 2372 1027 1291 5142		
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	50 1000 1400 985 1060 4000	46 0 72 2 29 2372 1027 1291 5142 current	 history1	 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 method	50 1000 1400 985 1060 4000	46 0 72 2 29 2372 1027 1291 5142 current 6	 history1 	 history2
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 method ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25	46 0 72 2 29 2372 1027 1291 5142 current 6 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25 >20	46 0 72 2 29 2372 1027 1291 5142 current 6 3 0	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25 -20 limit/base	46 0 72 2 29 2372 1027 1291 5142 current 6 3 0 0	 history1 history1	 history2 history2
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 ASTM D5185m	50 1000 1400 985 1060 4000 limit/base >25 >20 limit/base >3	46 0 72 2 29 2372 1027 1291 5142 <i>current</i> 6 3 0 <i>current</i> 0.9	 history1 history1	 history2 history2 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 ASTM D5185m	50 50 1400 985 1060 4000 imit/base >25 >20 imit/base >3 >20	46 0 72 2 29 2372 1027 1291 5142 <i>current</i> 6 3 0 <i>current</i> 0.9 10.2	 history1 history1 history1	history2 history2 history2
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 ASTM D7844 *ASTM D7624	50 50 1400 985 1060 4000 imit/base >25 20 imit/base >3 >20 >30	46 0 72 2 9 2372 1027 1291 5142 <i>current</i> 6 3 0 <i>current</i> 0.9 10.2 21.2 <i>current</i>	 history1 history1 history1	 history2 history2 history2
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 ASTM D5185m	50 1000 1400 985 1060 4000 imit/base >25 imit/base >20 imit/base >3 >20	46 0 72 2 29 2372 1027 1291 5142 <i>current</i> 6 3 0 <i>current</i> 0.9 10.2 21.2		 history2 history2 history2 history2 history2



OIL ANALYSIS REPORT

FT-IR (Direct Trend)		VISUAL		method	limit/base	current	history1	history2
30 - Witation		White Metal	scalar	*Visual	NONE	NONE		
suffation		Yellow Metal	scalar	*Visual	NONE	NONE		
25 - 6 ^{Annoma}	-	Precipitate	scalar	*Visual	NONE	NONE		
20 -		Silt	scalar	*Visual	NONE	NONE		
15		Debris	scalar	*Visual	NONE	NONE		
10		Sand/Dirt	scalar	*Visual	NONE	NONE		
Apr24/24	Apr24/24	Appearance	scalar	*Visual	NORML	NORML		
Ар	Ap	Odor	scalar	*Visual	NORML	NORML		
Base Number		Emulsified Water	scalar	*Visual	>0.2	NEG		
2.0 Base		Free Water	scalar	*Visual		NEG		
0.0 - Base 8.0 - 6.0 - 4.0 -		FLUID PROPER	TIES	method	limit/base	current	history1	history2
6.0		Visc @ 100°C	cSt	ASTM D445	15	15.1		
4.0		GRAPHS						
2.0		Ferrous Alloys						
54	V C.	iron						
Apr24/24	VC~V	nickel						
Visco situ @ 1000C		20-						
Viscosity @ 100°C		틆 15						
Abnormal		10-						
1/		5						
16 - Base 15 - Base 14 -								
10		Apr24/24			Apr24/24			
13 Abnormal		Apri			Apri			
11	5	Non-ferrous Meta	ls					
Apr24/24	C 11 C	copper						
4	<	20 tin						
		15-						
		Edd						
		10-						
		5-						
		0						
		pr24/24			pr24/24			
		Apr2			Apr2			
		Viscosity @ 100°C	2			Base Number	-	
		19			12.0			
		Abnormal			10.0	Base		
	-				HOX 8.0			
	1000	016 0015 315 314			Bu 60			
	i de	3 ₁₄			8.0 6.0 8ase Number 4.0			
		13 Abnormal			- 4.0			
		12-			2.0	•		
		11				42		
		Apr24/24			Apr24/24	Apr24/24		
		C.			4	4		<
		WearCheck USA - 50				C	OVIA - JUNCTI	
	mple No. :	: WC0920479	Rece	ved : 13	3 May 2024		1333 S/	ANDPIT ROA
Lal	o Number : que Number :	: 06176720	Teste Diagr	d :14	4 May 2024 May 2024 - W	les Davis		MAUK, G. US 3105

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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