

OIL ANALYSIS REPORT

Sample Rating Trend



5₉₇/273



Machine Id **PETERBILT 007** Component **Diesel Engine** Fluid

NOT GIVEN (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

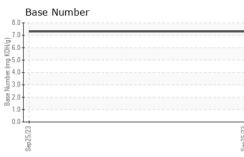
Fluid Condition

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

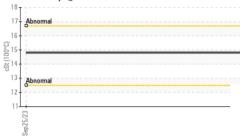
SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0838323		
Sample Date		Client Info		25 Sep 2023		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method	>0	<1.0 NEG		
-				NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	13		
Chromium	ppm	ASTM D5185m	>4	<1		
Nickel	ppm	ASTM D5185m	>2	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>25	4		
Lead	ppm	ASTM D5185m	>45	5		
Copper	ppm	ASTM D5185m	>85	2		
Tin	ppm	ASTM D5185m	>4	1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method				history2
ADDITIVES Boron	ppm	Method ASTM D5185m	limit/base	current 39	history1	history2
	ppm ppm		limit/base			
Boron Barium		ASTM D5185m	limit/base	39		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	39 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	39 0 45		
Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	39 0 45 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	39 0 45 <1 522		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	39 0 45 <1 522 1427	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	39 0 45 <1 522 1427 777	 	
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	39 0 45 <1 522 1427 777 936	 	
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	39 0 45 <1 522 1427 777 936 2749		
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 method	limit/base	39 0 45 <1 522 1427 777 936 2749 current 18	 history1	 history2
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	limit/base	39 0 45 <1 522 1427 777 936 2749 current	 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	limit/base >30 >20	39 0 45 <1 522 1427 777 936 2749 <u>current</u> 18 5 3	 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	ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base	39 0 45 <1 522 1427 777 936 2749 current 18 5 3 3	 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	ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base >3	39 0 45 <1 522 1427 777 936 2749 current 18 5 3 3 current 0.2	 history1 history1 	 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	limit/base >30 >20 limit/base >3 >20	39 0 45 <1 522 1427 777 936 2749 <u>current</u> 18 5 3 <u>current</u> 0.2 8.3	 history1 history1 	 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	limit/base >30 >20 limit/base >3	39 0 45 <1 522 1427 777 936 2749 current 18 5 3 3 current 0.2	 history1 history1 	 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	limit/base >30 >20 limit/base >3 >20	39 0 45 <1 522 1427 777 936 2749 <u>current</u> 18 5 3 <u>current</u> 0.2 8.3	 history1 history1 	 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	Imit/base >30 >20 Imit/base >30 >20 >30 >20 >30 >30 >20	39 0 45 <1 522 1427 777 936 2749 current 18 5 3 3 current 0.2 8.3 21.8	 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 D7844 *ASTM D7844	limit/base >30 >20 limit/base >3 >20 >30 >30 >30	39 0 45 <1 522 1427 777 936 2749 current 18 5 3 current 0.2 8.3 21.8 current	 history1 history1 history1 history1	 history2 history2 history2 history2



OIL ANALYSIS REPORT



Viscosity @ 100°C



VISUAL		method	limit/base	current	history1	hisi
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPER	TIES	method	limit/base	current	history1	his
Visc @ 100°C	cSt	ASTM D445		14.8		
GRAPHS						
Ferrous Alloys						
14 iron						
12 - chromium						
10-						
8						
6						
b+						
4-						
4						
4						
o						
o			25/23			
			Sep25/23			
Sep 25/23	ls		Sep25/23			
Non-ferrous Meta	ls		Sep25/23			
Non-ferrous Meta	ls		Sep25/23			
Non-ferrous Meta	ls		52529			
Non-ferrous Meta	ls		Sep25/23			
Non-ferrous Meta	ls		Sep25/23			
Non-ferrous Meta	ls		Sep25/23			
Non-ferrous Meta	ls		Sep25/23			
Non-ferrous Meta	ls		Sep255/23			
Non-ferrous Meta	ls		Sep25523			
Non-ferrous Meta	ls					
Non-ferrous Meta	ls					
Non-ferrous Meta			Sep25/23		_	
Non-ferrous Meta				Base Numbe	r	
Non-ferrous Meta			5222 ^{2deg}	T	r	
Non-ferrous Meta			E22/32688 8.0		r	
Non-ferrous Meta			E22/32688 8.0		r	
Non-ferrous Meta			E22/32688 8.0		r	
Non-ferrous Meta			E22/32688 8.0		r	
Non-ferrous Meta			6.0 52/52 deg 6/10(X) fb(1) 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0		r	
Non-ferrous Meta			E22/32688 8.0		r	
Non-ferrous Meta			6.0 52/52 deg 6/10(X) fb(1) 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0		r	
Non-ferrous Meta			8.0 7.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9		r	
Non-ferrous Meta			8.0 7.0 (b)HOX Buy HOX		r	



Test Package : FLEET Contact: Service Manager Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. redlandfarmstruckingllc@gmail.com * - 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)

Diagnosed

Diagnostician : Wes Davis

: 16 Oct 2023

: 05978816

Lab Number

Unique Number : 10696111

JONESBORO, LA

US 71251

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