

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# PETERBILT 005

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

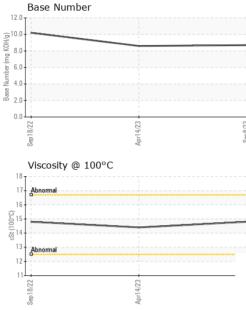
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Say2022 Apr2023 Say2023											
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2					
Sample Number		Client Info		WC0838324	WC0724739	WC0724813					
Sample Date		Client Info		08 Sep 2023	14 Apr 2023	18 Sep 2022					
Machine Age	mls	Client Info		0	1093368	1024780					
Oil Age	mls	Client Info		0	0	0					
Oil Changed		Client Info		N/A	N/A	N/A					
Sample Status				NORMAL	NORMAL	NORMAL					
CONTAMINATION	J	method	limit/base	current	history1	history2					
Fuel		WC Method	>5	<1.0	<1.0	<1.0					
Glycol		WC Method		NEG	NEG	NEG					
WEAR METALS		method	limit/base	current	history1	history2					
Iron	ppm	ASTM D5185m	>100	3	6	6					
Chromium	ppm	ASTM D5185m	>20	<1	1	<1					
Nickel	ppm	ASTM D5185m	>4	<1	0	0					
Titanium	ppm	ASTM D5185m		<1	0	0					
Silver	ppm	ASTM D5185m	>3	0	0	0					
Aluminum	ppm	ASTM D5185m	>20	1	<1	1					
Lead	ppm	ASTM D5185m	>40	0	0	1					
Copper	ppm	ASTM D5185m	>330	<1	<1	<1					
Tin	ppm	ASTM D5185m	>15	<1	<1	<1					
Vanadium	ppm	ASTM D5185m		<1	0	0					
Cadmium	ppm	ASTM D5185m		0	0	0					
ADDITIVES		method	limit/base	current	history1	history2					
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 67	history1 63	history2 44					
	ppm ppm		limit/base								
Boron		ASTM D5185m	limit/base	67	63	44					
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	67 12	63 0	44 0					
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	67 12 43	63 0 41	44 0 40					
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	67 12 43 <1	63 0 41 <1	44 0 40 <1					
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	67 12 43 <1 478	63 0 41 <1 478	44 0 40 <1 458					
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	67 12 43 <1 478 1443	63 0 41 <1 478 1617	44 0 40 <1 458 1560					
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	limit/base	67 12 43 <1 478 1443 680	63 0 41 <1 478 1617 762	44 0 40 <1 458 1560 690					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	67 12 43 <1 478 1443 680 839	63 0 41 <1 478 1617 762 914	44 0 40 <1 458 1560 690 850					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		67 12 43 <1 478 1443 680 839 2650	63 0 41 <1 478 1617 762 914 3000	44 0 40 <1 458 1560 690 850 2935					
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	67 12 43 <1 478 1443 680 839 2650 current	63 0 41 <1 478 1617 762 914 3000 history1	44 0 40 <1 458 1560 690 850 2935 history2					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	limit/base	67 12 43 <1 478 1443 680 839 2650 current 7	63 0 41 <1 478 1617 762 914 3000 history1 5	44 0 40 <1 458 1560 690 850 2935 history2 6					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base	67 12 43 <1 478 1443 680 839 2650 current 7 2	63 0 41 <1 478 1617 762 914 3000 history1 5 3	44 0 40 <1 458 1560 690 850 2935 history2 6 2					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	67 12 43 <1 478 1443 680 839 2650 current 7 2 3	63 0 41 <1 478 1617 762 914 3000 history1 5 3 3 <1	44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	67 12 43 <1 478 1443 680 839 2650 current 7 2 3 3	63 0 41 <71 478 1617 762 914 3000 history1 5 3 <1 history1	44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2					
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	67 12 43 <1 478 1443 680 839 2650 <u>current</u> 7 2 3 3 <u>current</u> 0	63 0 41 <1 478 1617 762 914 3000 history1 5 3 <1 5 3 <1 bistory1 0	44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 0.1					
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 >25 >20 limit/base >3 >20	67 12 43 <1 478 1443 680 839 2650 <i>current</i> 7 2 3 <i>current</i> 0 6.4	63 0 41 <1 478 1617 762 914 3000 history1 5 3 3 <1 history1 0 7.0	44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 0.1 7.5					
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 >25 >20 Imit/base >3 >20 >30	67 12 43 <1 478 1443 680 839 2650 <u>current</u> 7 2 3 <u>current</u> 0 6.4 20.7	63 0 41 <78 1617 762 914 3000 history1 5 3 <1 5 3 <1 history1 0 7.0 21.1	44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 0.1 7.5 23.6					
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 >25 >20 limit/base >3 >20 >30 >30	67 12 43 <1 478 1443 680 839 2650 Current 7 2 3 Current 0 6.4 20.7 Current	63 0 41 <1 478 1617 762 914 3000 history1 5 3 3 <1 history1 0 7.0 21.1 history1	44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 history2 0.1 7.5 23.6 history2					



## **OIL ANALYSIS REPORT**

VISUAL



	Laboratory Sample No. Lab Number Unique Number Test Package	: WC : <mark>059</mark> : 106	0838324 1 <mark>78784</mark> 96079	Received Diagnos	01 Madison Ave., Cary, NC 27513 eceived : 13 Oct 2023 iagnosed : 16 Oct 2023 iagnostician : Wes Davis re at 1-800-237-1369. 025 scope of accreditation.			REDLAND FARMS TRUCKING LLC 653 DAVE DUCK RD JONESBORO, LA US 71251 Contact: Service Manager redlandfarmstruckingllc@gmail.com T:		
		Sep18/22		Apr14/23		.2 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0		Apr14/23	0 20 20 20 20 20 20 20 20 20 20 20 20 20	
		12-001) ts 14 13- Ab	normal			Base Number 4.	0			
		17- Ab	normal			12. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	0			
			scosity @ 100			See	Base Number			
		Sep18/22	Annales of the second statement of	Apr14/23		Sep 8/23				
		4								
		8-	in the second se							
			on-ferrous Met							
		Sep18/22		Apr14/23		Sep 8/23				
		4 2				<b>\</b>				
Apr14/23		6-	nickel							
			rrous Alloys							
			: @ 100℃ RAPHS	cSt	ASTM D445		14.8	14.4	14.8	
			UID PROPER		method	limit/base	current	history1	history2	
			ulsified Water e Water	scalar scalar	*Visual *Visual	>0.2	NEG NEG	NEG NEG	NEG NEG	
Apr14/23	Sep 8/23	App Odo	earance or	scalar scalar	*Visual *Visual	NORML NORML	NORML NORML	NORML NORML	NORML NORML	
		Deb San	oris d/Dirt	scalar scalar	*Visual *Visual	NONE	NONE NONE	NONE	NONE NONE	
		Silt	cipitate	scalar scalar		NONE	NONE NONE	NONE	NONE	
		Prec	rinitate						NONE	

Contact/Location: Service Manager - REDJON