

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 926069 PETERBILT 320 Component

TIER ONE 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.

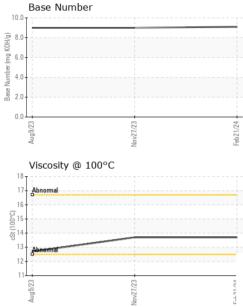
Fluid Condition

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0061425	GFL0102210	GFL0061456
Sample Date		Client Info		21 Feb 2024	27 Nov 2023	09 Aug 2023
Machine Age	hrs	Client Info		19007	18530	17822
Oil Age	hrs	Client Info		551	600	600
Oil Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	12	15	16
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	2
Lead	ppm	ASTM D5185m	>45	0	<1	0
Copper	ppm	ASTM D5185m	>85	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	0 history2
	ppm ppm		limit/base		-	-
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 12	history1 15	history2 9
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 12 0	history1 15 0	history2 9 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 12 0 54	history1 15 0 52	history2 9 0 58
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 12 0 54 <1	history1 15 0 52 0	history2 9 0 58 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 12 0 54 <1 807	history1 15 0 52 0 865	history2 9 0 58 <1 885
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 12 0 54 <1 807 1024	history1 15 0 52 0 865 1082	history2 9 0 58 <1 885 1123
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 12 0 54 <1 807 1024 927	history1 15 0 52 0 865 1082 1006	history2 9 0 58 <1 885 1123 1030
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	Current 12 0 54 <1 807 1024 927 992	history1 15 0 52 0 865 1082 1006 1199	history2 9 0 58 <1 885 1123 1030 1249
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		Current 12 0 54 <1 807 1024 927 992 2944	history1 15 0 52 0 865 1082 1006 1199 2769	history2 9 0 58 <1 885 1123 1030 1249 3739
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 12 0 54 <1 807 1024 927 992 2944 Current	history1 15 0 52 0 865 1082 1006 1199 2769 history1	history2 9 0 58 <1 885 1123 1030 1249 3739 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 12 0 54 <1 807 1024 927 992 2944 current 4	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >30	current 12 0 54 <1 807 1024 927 992 2944 current 4 1	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4 2	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >30 >20	Current 12 0 54 <11 807 1024 927 992 2944 Current 4 1 0	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4 2 0	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4 2 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >30 >20 limit/base	Current 12 0 54 <1 807 1024 927 992 2944 Current 4 1 0 Current	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4 2 0 history1	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4 2 2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >30 >20 limit/base >3	Current 12 0 54 <1 807 1024 927 992 2944 current 4 1 0 current 0.5	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4 2 0 history1 1.1	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4 2 2 history2 0.5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base >3 >20	Current 12 0 54 <1 807 1024 927 992 2944 current 4 1 0 current 0.5 5.8	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4 2 0 history1 1.1 6.7	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4 2 4 2 history2 0.5 7.5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base >3 >20 >3 >20	12 0 54 <1 807 1024 927 992 2944 current 4 1 0 current 0.5 5.8 18.6	history1 15 0 52 0 865 1082 1006 1199 2769 history1 4 2 0 history1 1.1 6.7 20.0	history2 9 0 58 <1 885 1123 1030 1249 3739 history2 4 2 history2 0.5 7.5 19.1



OIL ANALYSIS REPORT



150AEC (7025		: WearCheck USA - 50 : GFL0061425 : 06098261 : 10896491 : FL FET	01 Madiso Recei Teste Diagn	ved : 23 d : 26	, NC 27513 5 Feb 2024 5 Feb 2024 Feb 2024 - W	4 5826 Alden Nash Ave 4 Lowell,			
		Aug9/23	Nov27/23 +		0.0	Aug9/23	Nov27/23 +		
		2 15 00 14 13 12			6.0 Bundary Base Base Base 2.0	-			
		17- Abnormal 16- 8 15-			0.8 (D/HO) 0.0 But	-			
		Viscosity @ 100°	2	2 4			Number		
		Aug9/23	lov27/23		eb21/24				
		4 							
		8							
		Non-ferrous Meta	-		₽ 				
		2 0 - 2	Vov27/23		Feb21/24				
		E 8							
Nov27/23 -	104 104	14 - iron 12 - nickel							
		GRAPHS Ferrous Alloys							
		Visc @ 100°C	cSt	ASTM D445		13.7	13.7	12.7	
		FLUID PROPE	ERTIES	method	limit/base	current	history1	history2	
		Emulsified Water Free Water	scalar scalar	*Visual *Visual	>0.2	NEG NEG	NEG NEG	NEG NEG	
Nová	Feb2	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
Nov27/23 -	Feb21/24 -	Appearance	scalar scalar	*Visual	NORML	NORML	NORML	NORML	
		Debris Sand/Dirt	scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE	NONE NONE	
		Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	
		White Metal Yellow Metal	scalar scalar	*Visual *Visual	NONE	NONE NONE	NONE	NONE NONE	

Submitted By: BRITTANY FLINN

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