

OIL ANALYSIS REPORT

Action Newark PETERBILT 6679

Component

Diesel Engine

Fluid

Sample Rating Trend

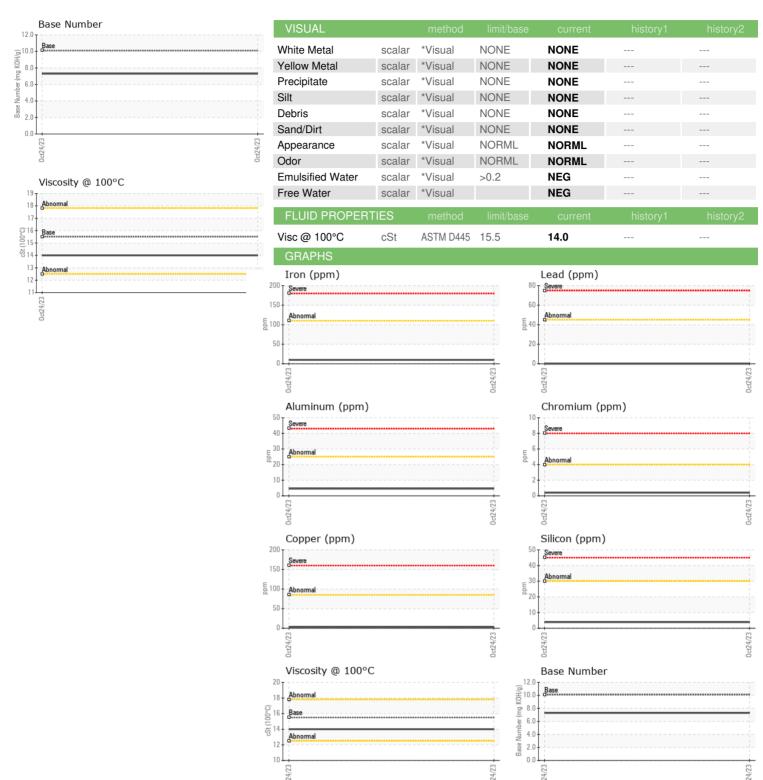


GIBRALTAR 15W/40 SUPER S-3 LX (11)						
GIDNALIAN 13W/40 SOFLN 3-3 EX (11)		Oct/2023				
DIAGNOSIS	SAMPLE INFORM	MATION	method	limit/base	current	his
Recommendation	Sample Number		Client Info		WC0863175	
Resample at the next service interval to monitor. Wear All component wear rates are normal. Contamination 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 Date		Client Info		24 Oct 2023	
	Machine Age	hrs	Client Info		0	
	Oil Age	hrs	Client Info		0	
	Oil Changed		Client Info		N/A	
	Sample Status				NORMAL	
	CONTAMINATIO	٧	method	limit/base	current	his
	Fuel		WC Method	>5	<1.0	
	Glycol		WC Method		NEG	
	WEAR METALS		method	limit/base	current	his
	Iron	ppm	ASTM D5185m	>110	10	
	Chromium	ppm	ASTM D5185m	>4	<1	

Machine Age hrs Client Info 0	Sample Number		Client Info		WC0863175		
Oil Age hrs Client Info N/A	Sample Date		Client Info		24 Oct 2023		
Oil Changed Sample Status Client Info N/A <t< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th></th><th></th></t<>	Machine Age	hrs	Client Info		0		
CONTAMINATION	Oil Age	hrs	Client Info		0		
CONTAMINATION	Oil Changed		Client Info		N/A		
CONTAMINATION	-				NORMAL		
Fuel	·	V	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >110 10 Ohromium ppm ASTM D5185m >4 <1			WC Method	>5	<1.0		
Iron	Glycol						
Chromium ppm ASTM D5185m >4 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>110	10		
Description	Chromium	ppm	ASTM D5185m	>4	<1		
Silver	Nickel	ppm	ASTM D5185m	>2	0		
Silver	Titanium	ppm	ASTM D5185m		0		
Aluminum	Silver		ASTM D5185m	>2	0		
Lead	Aluminum			>25			
Copper ppm ASTM D5185m >85 3 Tin ppm ASTM D5185m >4 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 9 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1000 760 Magnesium ppm ASTM D5185m 1050 1351 Phosphorus ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 3572 CONTAMINANTS	Lead		ASTM D5185m	>45			
Tin							
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 9 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 1000 760 Calcium ppm ASTM D5185m 1050 1351 Phosphorus ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m >30 4 Solicon	• •						
Cadmium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 9 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 1000 760 Magnesium ppm ASTM D5185m 1050 1351 Calcium ppm ASTM D5185m 1050 1351 Phosphorus ppm ASTM D5185m 1270 1256 Zinc ppm ASTM D5185m 3572 Sulfur ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0							
ADDITIVES					-		
Boron		ррпп			<u> </u>		
Barium				limit/base		history1	history2
Molybdenum ppm ASTM D5185m 66 69 Manganese ppm ASTM D5185m 1000 760 Magnesium ppm ASTM D5185m 1050 1351 Calcium ppm ASTM D5185m 1150 929 Phosphorus ppm ASTM D5185m 1270 1256 Zinc ppm ASTM D5185m 3572 Sulfur ppm ASTM D5185m 30 4 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 0.5							
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 1000 760 Calcium ppm ASTM D5185m 1050 1351 Phosphorus ppm ASTM D5185m 1150 929 Zinc ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 3572 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m >0 Potassium ppm ASTM D5185m >0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m 1000 760 Calcium ppm ASTM D5185m 1050 1351 Phosphorus ppm ASTM D5185m 1150 929 Zinc ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 3572 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 </td <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>66</td> <th>69</th> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185m	66	69		
Calcium ppm ASTM D5185m 1050 1351 Phosphorus ppm ASTM D5185m 1150 929 Zinc ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 3572 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m >0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8	Manganese	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 1150 929 Zinc ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 3572 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 1	Magnesium	ppm	ASTM D5185m	1000	760		
Zinc ppm ASTM D5185m 1270 1256 Sulfur ppm ASTM D5185m 3572 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 <t< td=""><td>Calcium</td><td>ppm</td><td>ASTM D5185m</td><td>1050</td><th>1351</th><td></td><td></td></t<>	Calcium	ppm	ASTM D5185m	1050	1351		
Sulfur ppm ASTM D5185m 3572 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Phosphorus	ppm	ASTM D5185m	1150	929		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Zinc	ppm	ASTM D5185m	1270	1256		
Silicon ppm ASTM D5185m >30 4 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Sulfur	ppm	ASTM D5185m		3572		
Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Silicon	ppm	ASTM D5185m	>30	4		
INFRA-RED	Sodium	ppm	ASTM D5185m		0		
Soot % *ASTM D7844 >3 0.5 Nitration Abs/cm *ASTM D7624 >20 8.2 Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Potassium	ppm	ASTM D5185m	>20	11		
Nitration Abs/cm *ASTM D7624 > 20 8.2 Sulfation Abs/.1mm *ASTM D7415 > 30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 > 25 15.0	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 19.8 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Soot %	%	*ASTM D7844	>3	0.5		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 15.0	Nitration	Abs/cm	*ASTM D7624	>20	8.2		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8		
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 10.1 7.3	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.0		
	Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.3		



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Lab Number

Sample No. **Unique Number**

: WC0863175 : 05997298 : 10725658

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 02 Nov 2023 Diagnosed : 03 Nov 2023 Diagnostician : Wes Davis

Test Package : MOB 1 (Additional Tests: TBN)

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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