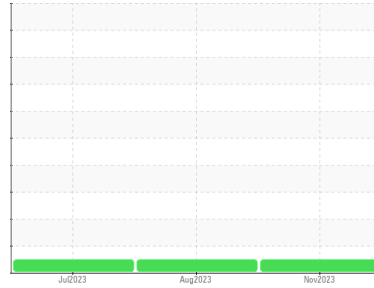




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Bernardsville
 Machine Id
PETERBILT 1321

Component
Diesel Engine
 Fluid
GIBRALTAR 15W/40 SUPER S-3 LX (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0875360	WC0831065	WC0831061
Sample Date	Client Info		09 Nov 2023	18 Aug 2023	27 Jul 2023
Machine Age	mls	Client Info	44628	662054	659738
Oil Age	mls	Client Info	0	44422	0
Oil Changed	Client Info		Not Chngd	Not Chngd	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	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 METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>110	68	10	13
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	6	2	<1
Lead	ppm	ASTM D5185m	>45	<1	0	3
Copper	ppm	ASTM D5185m	>85	3	2	4
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		59	22	17
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m	66	50	68	77
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	1000	504	869	929
Calcium	ppm	ASTM D5185m	1050	1596	1391	1449
Phosphorus	ppm	ASTM D5185m	1150	774	1060	1147
Zinc	ppm	ASTM D5185m	1270	914	1280	1364
Sulfur	ppm	ASTM D5185m		2624	3788	3639

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	49	4	3
Sodium	ppm	ASTM D5185m		2	3	0
Potassium	ppm	ASTM D5185m	>20	<1	0	1

INFRA-RED

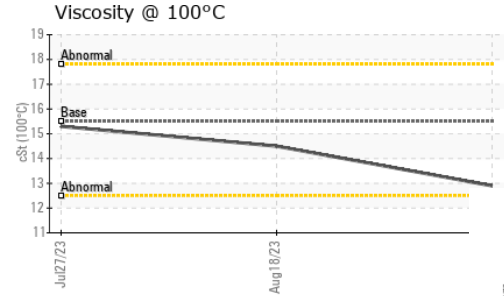
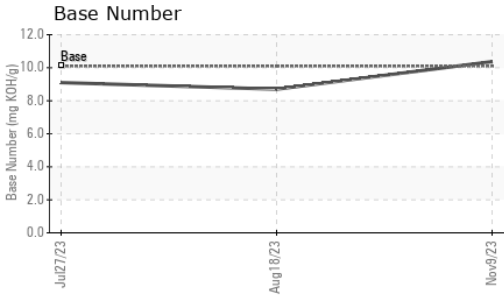
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.0	8.5	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	20.6	21.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	16.9	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	10.37	8.7	9.1



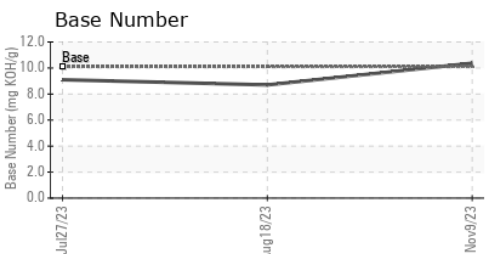
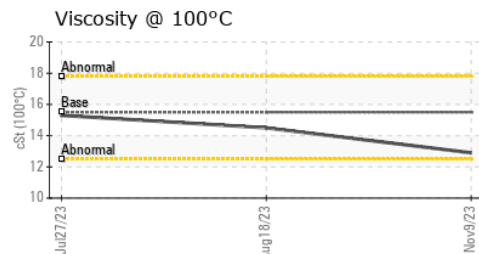
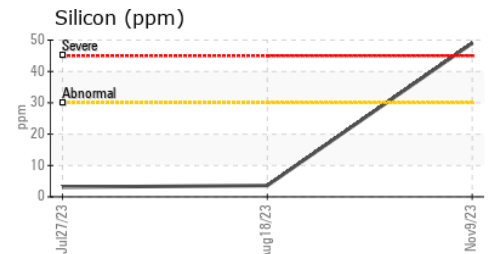
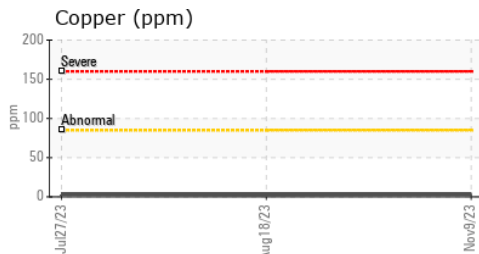
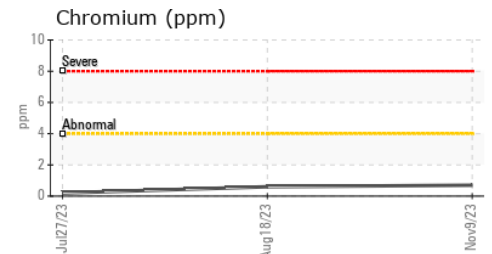
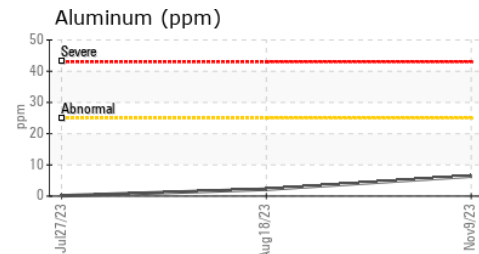
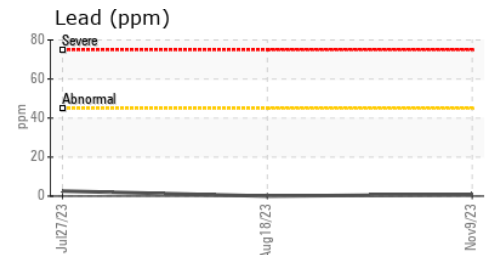
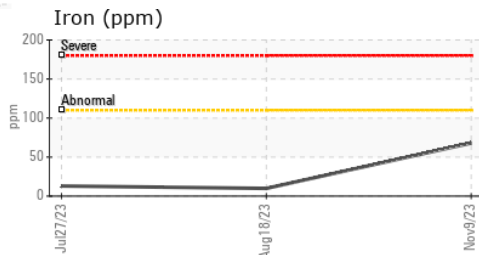
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	12.9	14.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0875360 **Received** : 21 Nov 2023
Lab Number : 06014184 **Diagnosed** : 22 Nov 2023
Unique Number : 10753328 **Diagnostician** : Wes Davis
Test Package : MOB 2

INTERSTATE WASTE-BERNARDSVILLE
 33 OLD QUARRY ROAD
 BERNARDSVILLE, NJ
 US 07924
 Contact: Pablo Chardon
 PChardon@interstatewaste.com

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)