

Machine Id  
**214111**  
Component  
**Diesel Engine**  
Fluid  
**{not provided} (--- QTS)**

### RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 20 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. Please specify the component make and model with your next sample.

### WEAR

Metal levels are typical for a new component breaking in.

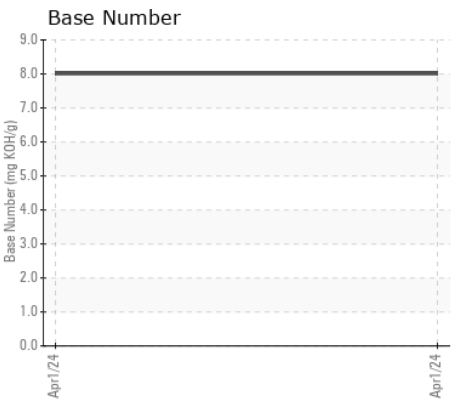
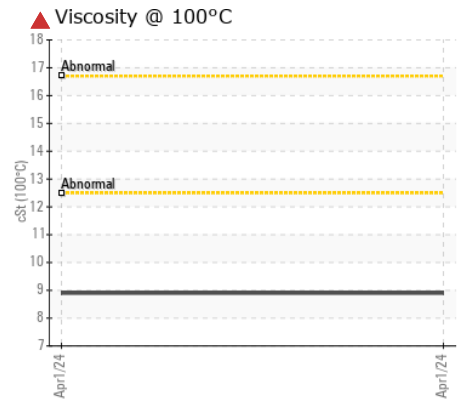
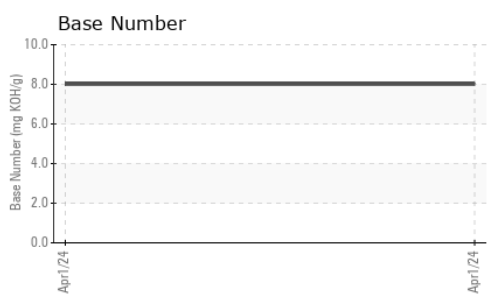
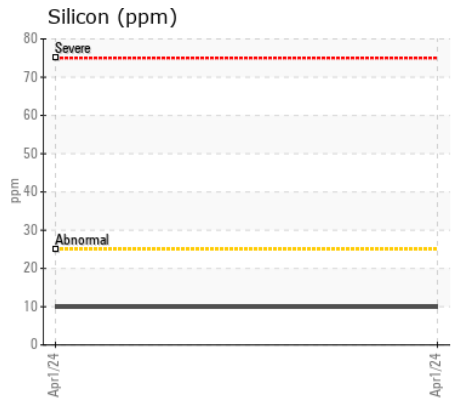
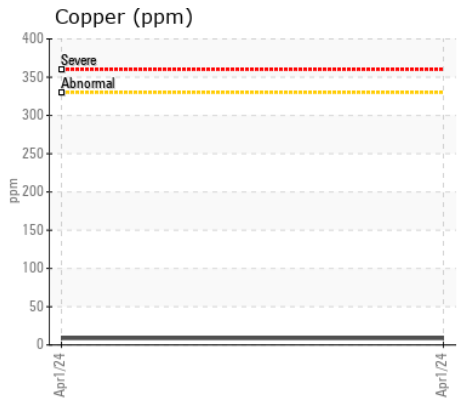
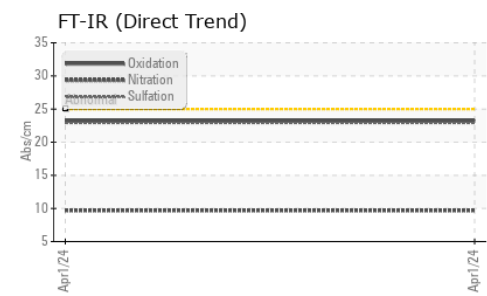
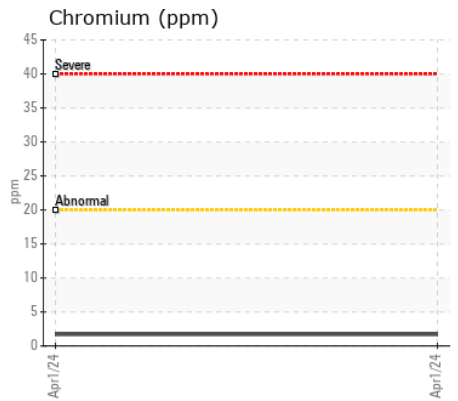
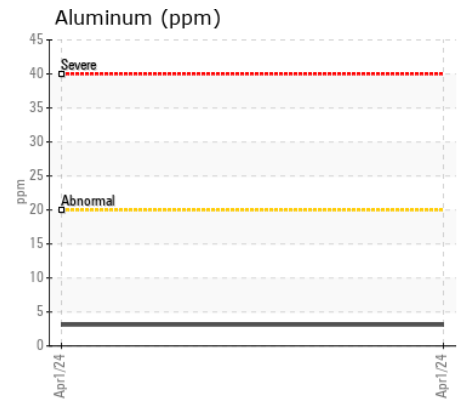
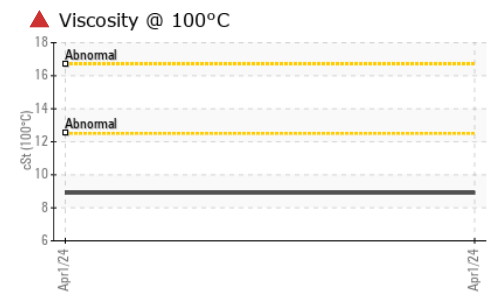
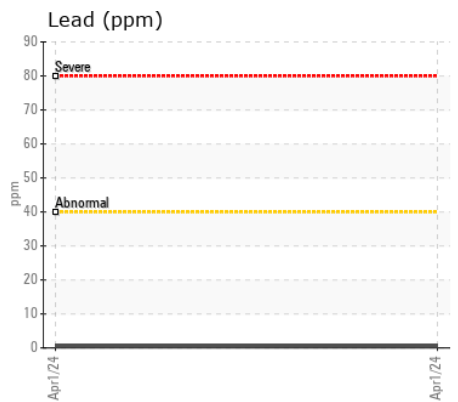
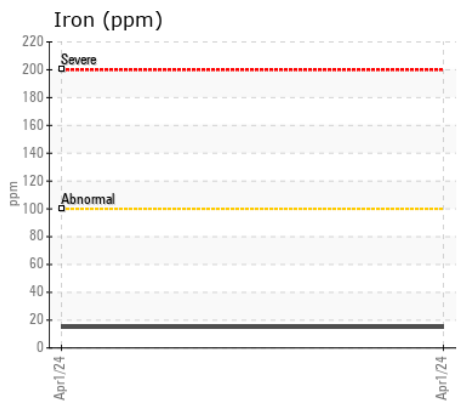
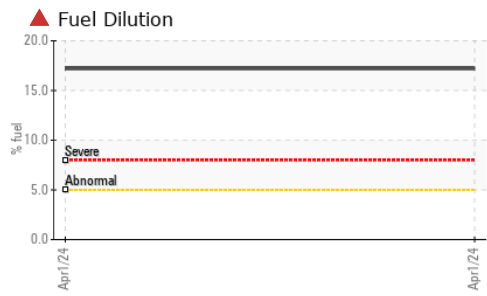
### CONTAMINATION

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0057339	---	---
Sample Date		Client Info		01 Apr 2024	---	---
Machine Age	mls	Client Info		14128	---	---
Oil Age	mls	Client Info		5215	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	15	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	3	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	9	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	10	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Fuel	%	ASTM D3524	>5	▲ 17.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	---	---
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	---	---
Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		43	---	---
Barium	ppm	ASTM D5185m		18	---	---
Molybdenum	ppm	ASTM D5185m		82	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		171	---	---
Calcium	ppm	ASTM D5185m		1896	---	---
Phosphorus	ppm	ASTM D5185m		1136	---	---
Zinc	ppm	ASTM D5185m		1140	---	---
Sulfur	ppm	ASTM D5185m		4087	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.01	---	---
Visc @ 100°C	cSt	ASTM D445		▲ 8.9	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0057339 **Received** : 13 May 2024  
**Lab Number** : 06177390 **Tested** : 16 May 2024  
**Unique Number** : 11023443 **Diagnosed** : 16 May 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

**VALLEY PACIFIC PETROLEUM SERVICES**  
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 STOCKTON, CA  
 US 95206  
 Contact: FRANCISCO JIMENEZ  
 francisco.jimenez@vpps.net  
 T: (209)948-9412  
 F:

Certificate L2367  
 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)