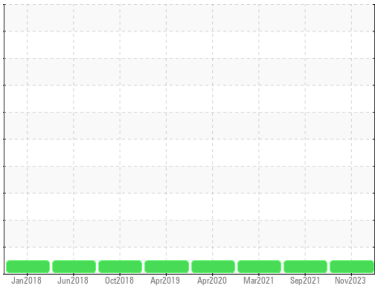
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
GM Seattle Off Raod Shop
Machine Id
[GM Seattle Off Raod Shop] 28-427
Component
Hydraulic System
Fluid
CAT HYDO (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. (Customer Sample Comment:
Top Up Amount: 5 gallons)

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PE0002294**	PE12291146	PE12291368
Sample Date		Client Info		**20 Nov 2023**	07 Sep 2021	29 Mar 2021
Machine Age	hrs	Client Info		**15923**	11933	10882
Oil Age	hrs	Client Info		**2407**	3265	2214
Oil Changed		Client Info		**Oil Added**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**10**	---	---
Iron	ppm	ASTM D5185m	>20	**4**	6	7
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>10	**1**	0	2
Lead	ppm	ASTM D5185m	>10	**0**	0	1
Copper	ppm	ASTM D5185m	>75	**4**	4	7
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	0	2
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	1
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m		**1**	0	2
Calcium	ppm	ASTM D5185m		**81**	204	108
Phosphorus	ppm	ASTM D5185m	1100	**377**	439	458
Zinc	ppm	ASTM D5185m	1210	**444**	564	583
Sulfur	ppm	ASTM D5185m		**931**	---	---

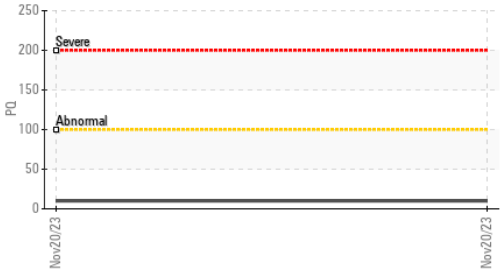
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**5**	2	5
Sodium	ppm	ASTM D5185m		**<1**	0	3
Potassium	ppm	ASTM D5185m	>20	**0**	0	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**1570**	---	---
Particles >6µm		ASTM D7647	>1300	**383**	---	---
Particles >14µm		ASTM D7647	>160	**47**	---	---
Particles >21µm		ASTM D7647	>40	**16**	---	---
Particles >38µm		ASTM D7647	>10	**0**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**18/16/13**	20/14/11	24/20/11

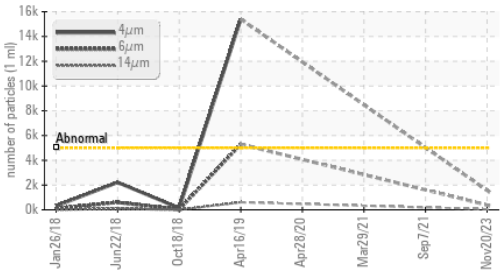
OIL ANALYSIS REPORT

PetroCard MORE THAN JUST FUEL.

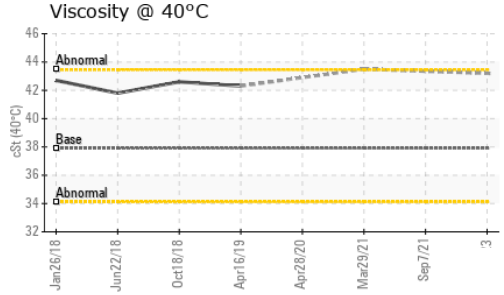
PQ



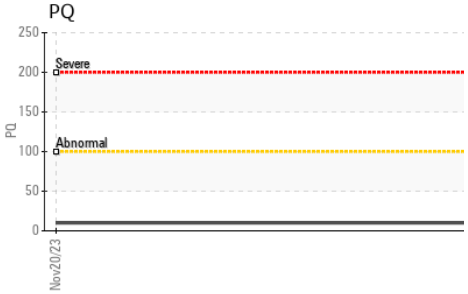
Particle Trend



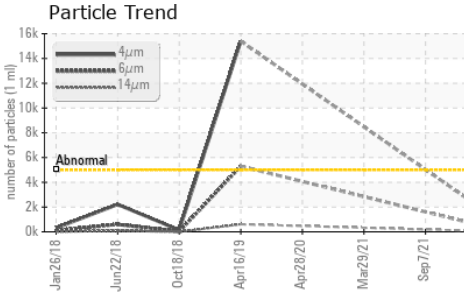
Viscosity @ 40°C



PQ



Particle Trend



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.50**	0.84	0.67

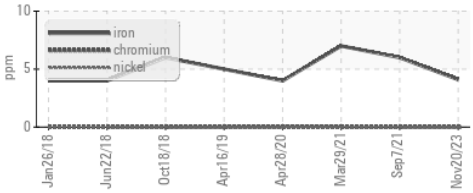
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.1	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	37.9	**43.2**	---	43.5

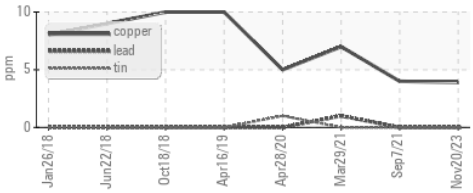
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

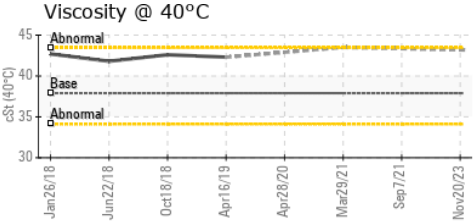
Ferrous Alloys



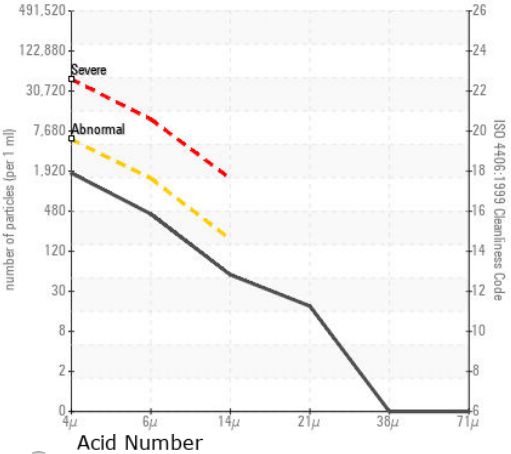
Non-ferrous Metals



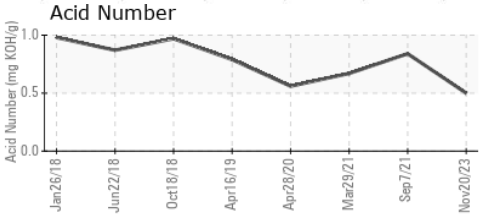
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002294
Lab Number : 06026299
Unique Number : 10776090
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

Received : 06 Dec 2023
Diagnosed : 07 Dec 2023
Diagnostician : Don Baldridge

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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