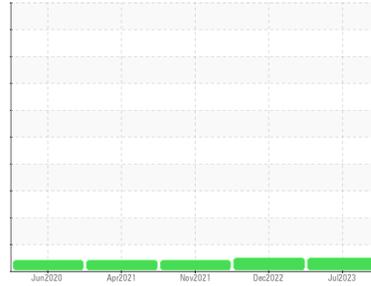




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Stoneway Concrete Renton**  
 Machine Id  
**[Stoneway Concrete Renton] 10-529**  
 Component  
**Hydraulic System**  
 Fluid  
**CASTROL DUAL RANGE HV HYD OIL ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### 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		<b>PE0001155</b>	PE0000339	PE12292696
Sample Date	Client Info		<b>27 Jul 2023</b>	14 Dec 2022	16 Nov 2021
Machine Age	hrs	Client Info	<b>6537</b>	5222	3821
Oil Age	hrs	Client Info	<b>6537</b>	5222	0
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	MARGINAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>9</b>	7	---
Iron	ppm	ASTM D5185m >20	<b>4</b>	4	4
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>1</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >75	<b>8</b>	7	7
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	2	0
Calcium	ppm	ASTM D5185m	<b>34</b>	54	37
Phosphorus	ppm	ASTM D5185m	<b>320</b>	304	309
Zinc	ppm	ASTM D5185m	<b>397</b>	412	437
Sulfur	ppm	ASTM D5185m	<b>938</b>	937	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>1</b>	1	1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	1

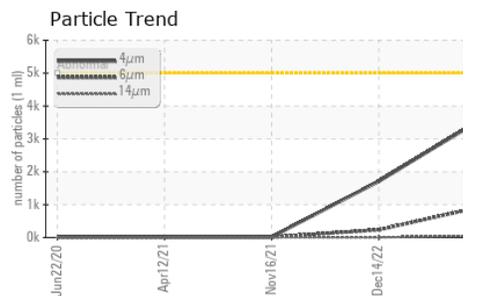
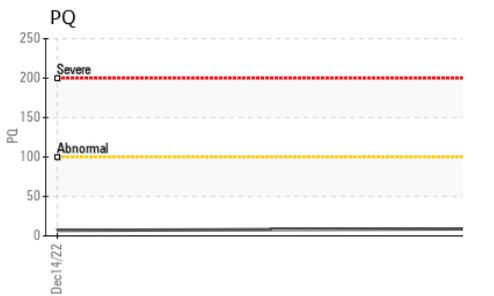
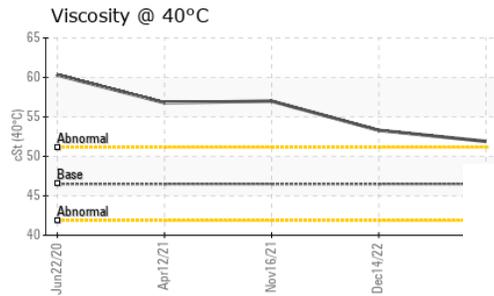
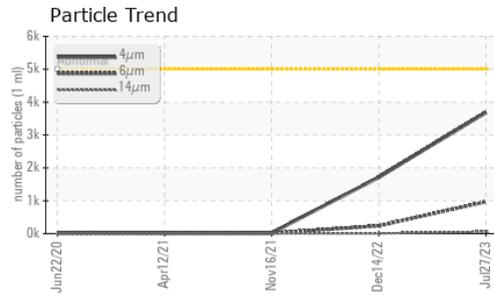
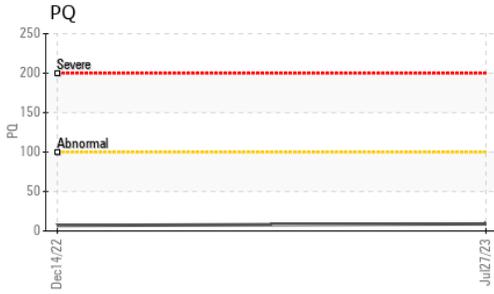
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>3680</b>	1708	18
Particles >6µm	ASTM D7647	>1300	<b>968</b>	234	15
Particles >14µm	ASTM D7647	>160	<b>59</b>	7	11
Particles >21µm	ASTM D7647	>40	<b>15</b>	1	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>19/17/13</b>	18/15/10	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.40</b>	0.51	0.67

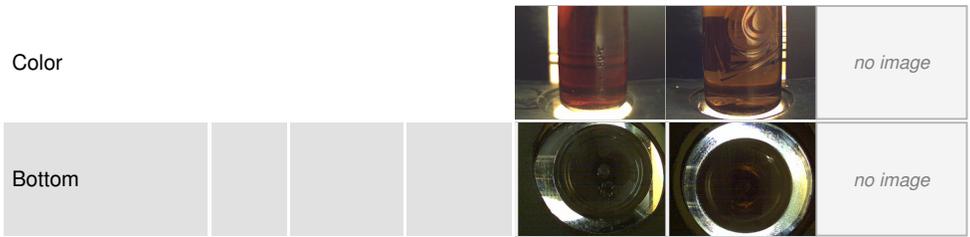
# OIL ANALYSIS REPORT



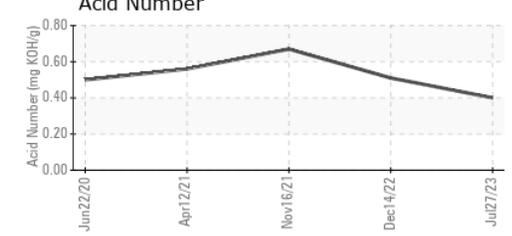
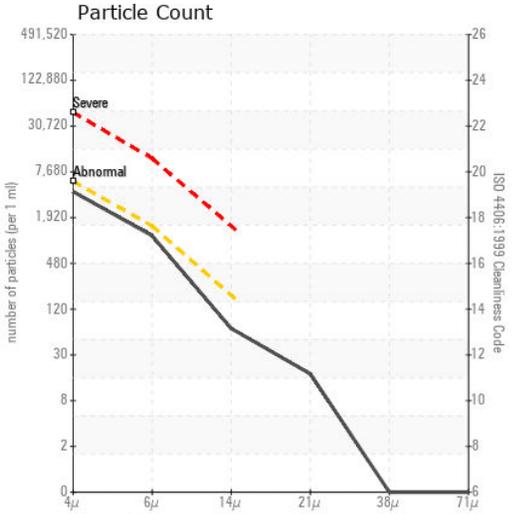
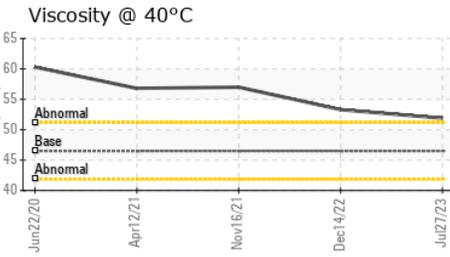
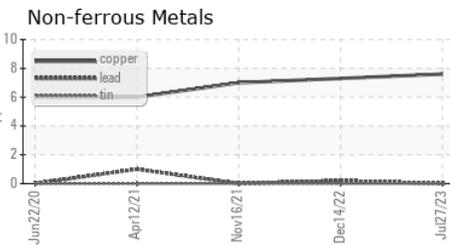
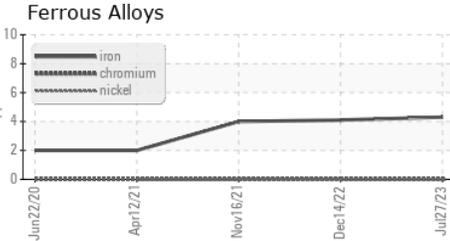
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46.5	<b>51.9</b>	53.3	▲ 57.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0001155 **Received** : 11 Aug 2023  
**Lab Number** : **05922796** **Diagnosed** : 14 Aug 2023  
**Unique Number** : 10602743 **Diagnostician** : Doug Bogart  
**Test Package** : CONST ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN )

**Gary Merlino Construction - Off Road Shop**  
 9125 10TH AVE SOUTH  
 SEATTLE, WA  
 US 98108  
 Contact: Tony  
 oilsamples@gmccinc.com

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)