

# **OIL ANALYSIS REPORT**

## Stoneway Concrete Renton [Stoneway Concrete Renton] 10-513 Component

**Diesel Engine** 

CASTROL Vecton LD 10W30 (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

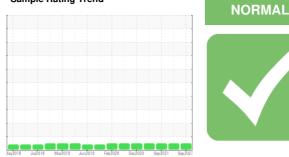
All component wear rates are normal.

#### 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.



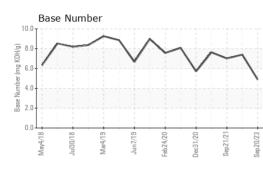
Sample Rating Trend

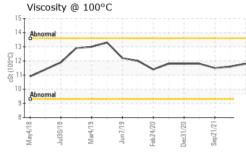


SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0002024	PE0000325	PE12292752
Sample Date		Client Info		20 Sep 2023	16 Nov 2022	21 Sep 2021
Machine Age	hrs	Client Info		9346	7899	6314
Oil Age	hrs	Client Info		1447	1586	1400
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8	13	12
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	<1	3	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	1	1
Tin	ppm	ASTM D5185m	>15	0	0	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
<b>A</b> 1 1						
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	 history2
	ppm ppm		limit/base			
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 49	history1 27	history2 30
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 49 0	history1 27 2	history2 30 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 49 0 4	history1 27 2 55	history2 30 0 64
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 49 0 4 0	history1 27 2 55 <1	history2 30 0 64 
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 49 0 4 0 38	history1 27 2 55 <1 852	history2 30 0 64  1084
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 49 0 4 0 38 2328 1043 1286	history1 27 2 55 <1 852 1158	history2 30 0 64  1084 1102
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           49           0           4           0           38           2328           1043	history1 27 2 55 <1 852 1158 988	history2 30 0 64  1084 1102 1104
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 49 0 4 0 38 2328 1043 1286	history1 27 2 55 <1 852 1158 988 1212	history2 30 0 64  1084 1102 1104
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		Current 49 0 4 0 38 2328 1043 1286 4572	history1 27 2 55 <1 852 1158 988 1212 3405	history2 30 0 64  1084 1102 1104 1335 
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           49           0           4           0           38           2328           1043           1286           4572           current	history1 27 2 55 <1 852 1158 988 1212 3405 history1	history2 30 0 64  1084 1102 1104 1335  history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base	current           49           0           4           0           38           2328           1043           1286           4572           current           3	history1           27           2           55           <1           852           1158           988           1212           3405           history1           3	history2         30         0         64            1084         1102         1104         1335            history2         4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base	current           49           0           4           0           38           2328           1043           1286           4572           current           3           3           3	history1           27           2           55           <1           852           1158           988           1212           3405           history1           3           <1	history2         30         0         64            1084         1102         1104         1335            history2         4         3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >25 >20	current           49           0           4           0           38           2328           1043           1286           4572           current           3           5	history1         27         2         55         <1         852         1158         988         1212         3405         history1         3         <1         7	history2         30         0         64            1084         1102         1104         1335            history2         4         3         6
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >25 >20 limit/base >3	current           49           0           4           0           38           2328           1043           1286           4572           current           3           5           current	history1         27         2         55         <1         852         1158         988         1212         3405         history1         3         <1         7         history1	history2         30         0         64            1084         1102         1104         1335            history2         4         3         6         history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >25 >20 limit/base >3	current           49           0           4           0           38           2328           1043           1286           4572           current           3           5           current           0.4	history1         27         2         55         <1         852         1158         988         1212         3405         history1         3         <1         7         history1         0.4	history2         30         0         64            1084         1102         1104         1335            history2         4         3         6         history2         0.2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >25 >20 limit/base >3 >20	current           49           0           4           0           38           2328           1043           1286           4572           current           3           5           current           0.4           9.7	history1         27         2         55         <1         852         1158         988         1212         3405         history1         3         <1         7         history1         0.4         11.6	history2         30         0         64            1084         1102         1104         1335            history2         4         3         6         history2         0.2         12
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D5185m	limit/base >25 >20 limit/base >3 >20 >30	current           49           0           4           0           38           2328           1043           1286           4572           current           3           5           current           0.4           9.7           24.0	history1         27         2         55         <1         852         1158         988         1212         3405         history1         3         <1         7         history1         0.4         11.6         24.2	history2         30         0         64            1084         1102         1104         1335            history2         4         3         6         history2         0.2         12

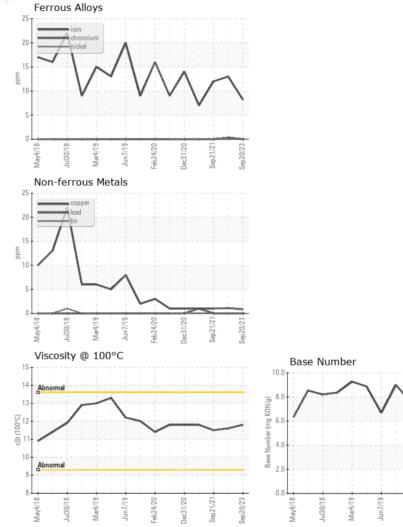


# **OIL ANALYSIS REPORT**





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 PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		11.8	11.6	11.5
GRAPHS						







Feb24/20

 Certificate 12367
 Test Package
 : CONST (Additional Tests: FT-IR, ICP, KV100, SCREEN, 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)

: PE0002024

: 05960482

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: 25 Sep 2023

: 27 Sep 2023

Diagnostician : Don Baldridge

Received

Diagnosed

Laboratory

Sample No.

Lab Number

Unique Number : 10661695

Sep21/21

Dec31/20

Sep 20/23