

OIL ANALYSIS REPORT

Stoneway Concrete Renton [Stoneway Concrete Renton] 10-503 Component

Diesel Engine

CASTROL Vecton LD 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

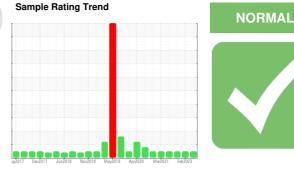
All component wear rates are normal.

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.



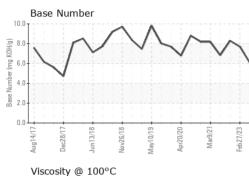


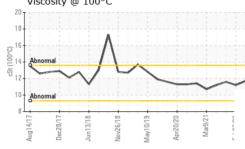
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0001160	PE0001283	PE12292680
Sample Date		Client Info		27 Jul 2023	27 Feb 2023	18 Nov 2021
Machine Age	hrs	Client Info		9335	8681	8060
Oil Age	hrs	Client Info		654	1249	628
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	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	7	26	8
Chromium	ppm	ASTM D5185m		، <1	1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	~ 7	0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	8	4
Lead	ppm	ASTM D5185m	>40	- <1	0	0
Copper	ppm	ASTM D5185m		<1	2	2
Tin	ppm	ASTM D5185m	>15	<1	0	0
Antimony	ppm	ASTM D5185m	210			0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		-	0	
	ppill	AGTIVI DJI OJIII		0	0	
ADDITIVES	ppin	method	limit/base	current		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 88	history1 26	history2 49
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 88 0	history1 26 0	history2 49 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 88 0 8	history1 26 0 64	history2 49 0 67
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 88 0 8 <1	history1 26 0 64 1	history2 49 0 67
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 88 0 8 <1 107	history1 26 0 64 1 1081	history2 49 0 67 1102
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 88 0 8 <1 107 2087	history1 26 0 64 1 1081 1027	history2 49 0 67 1102 987
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 88 0 8 <1 107 2087 982	history1 26 0 64 1 1081 1027 1014	history2 49 0 67 1102 987 1083
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 88 0 8 <1 107 2087	history1 26 0 64 1 1081 1027	history2 49 0 67 1102 987
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 88 0 8 <1 107 2087 982 1196	history1 26 0 64 1 1081 1027 1014 1303	history2 49 0 67 1102 987 1083 1274
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 88 0 8 <1 107 2087 982 1196 4197 current	history1 26 0 64 1 1081 1027 1014 1303 3694 history1	history2 49 0 67 1102 987 1083 1274 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		current 88 0 8 <1 107 2087 982 1196 4197 current 10	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5	history2 49 0 67 1102 987 1083 1274 history2 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm 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 88 0 8 <1 107 2087 982 1196 4197 current	history1 26 0 64 1 1081 1027 1014 1303 3694 history1	history2 49 0 67 1102 987 1083 1274 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >20	current 88 0 8 <1 107 2087 982 1196 4197 current 10 4	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13	history2 49 0 67 1102 987 1083 1274 history2 4 9 5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25 >20 limit/base	current 88 0 8 <1 107 2087 982 1196 4197 current 10 4 6 current	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13 history1	history2 49 0 67 1102 987 1083 1274 history2 4 9 5 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	method ASTM D5185m	limit/base >25 >20 limit/base >3	current 88 0 8 <1 107 2087 982 1196 4197 current 10 4 6 current 0.3	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13 history1 0.4	history2 49 0 67 1102 987 1083 1274 history2 4 9 5 history2 0 0.1
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 88 0 8 <1 107 2087 982 1196 4197 current 10 4 6 current 0.3 8.6	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13 history1 0.4 10.0	history2 49 0 67 1102 987 1083 1274 history2 4 9 5 history2
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 88 0 8 <1 107 2087 982 1196 4197 current 10 4 6 current 0.3 8.6 22.1	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13 history1 0.4 10.0 20.3	history2 49 0 67 1102 987 1083 1274 history2 4 9 5 history2 0.1 9
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 D78144 *ASTM D7624 *ASTM D7415 method	limit/base >25 >20 limit/base >3 >20 >30 limit/base	current 88 0 8 <1 107 2087 982 1196 4197 current 10 4 6 current 0.3 8.6 22.1	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13 history1 0.4 10.0 20.3 history1	history2 49 0 67 1102 987 1083 1274 history2 4 9 5 history2 0.1 9 history2
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 88 0 8 <1 107 2087 982 1196 4197 current 10 4 6 current 0.3 8.6 22.1	history1 26 0 64 1 1081 1027 1014 1303 3694 history1 5 29 13 history1 0.4 10.0 20.3	history2 49 0 67 1102 987 1083 1274 history2 4 9 5 history2 0.1 9



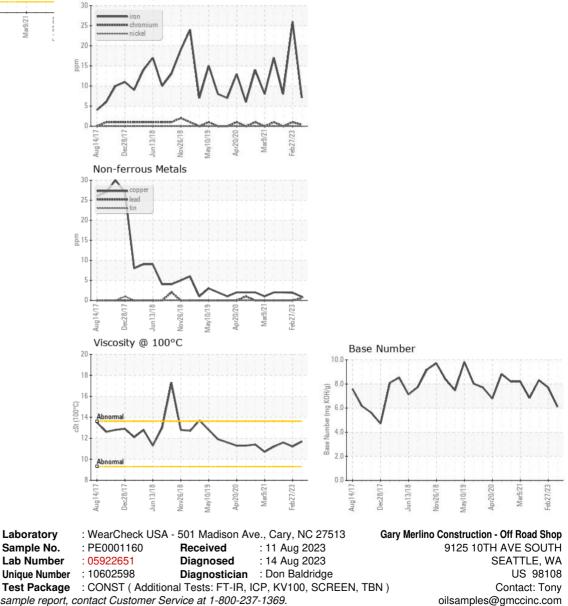
OIL ANALYSIS REPORT

Ferrous Alloys





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		11.7	11.2	11.6
GRAPHS						





 Certificate L2367
 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)

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