

OIL ANALYSIS REPORT

Sample Rating Trend

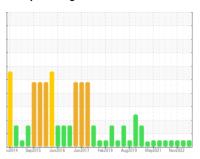
NORMAL



KEMP QUARRIES / RIVER VALLEY BACKBONE Machine Id WL088

Component **Hydraulic System**

MOBIL DELVAC 1300 SUPER15W40 (--- 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

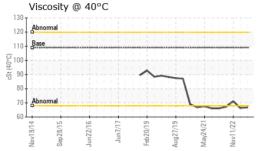
Fluid Condition

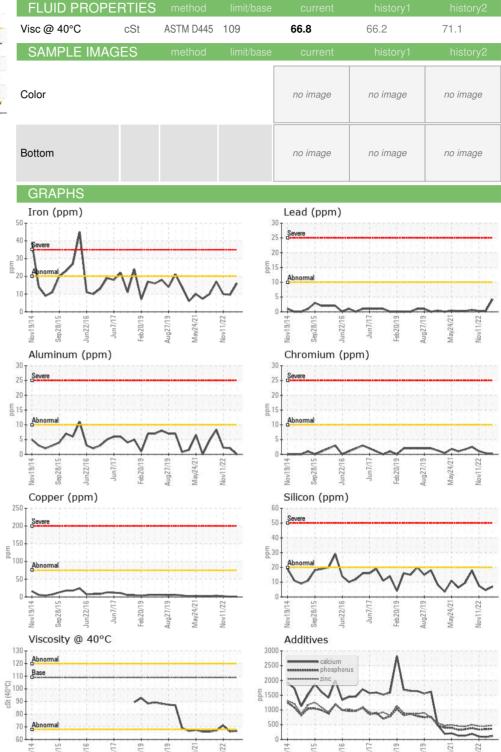
The condition of the oil is acceptable for the time in service.

UPER15W40 (,	rv2014 Sep20	713 00112010 00112017	Feb2019 Aug2019 May2021	NOVZUZZ	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0084895	PCA0085862	PCA0070233
Sample Date		Client Info		02 Oct 2023	09 Aug 2023	11 Nov 2022
Machine Age	hrs	Client Info		36443	6146	5802
Oil Age	hrs	Client Info		600	300	5802
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	16	10	10
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	2	2
Lead	ppm	ASTM D5185m	>10	4	<1	<1
Copper	ppm	ASTM D5185m	>75	1	<1	2
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	0	2
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	3	1	3
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	36	10	16
Calcium	ppm	ASTM D5185m		118	80	105
Phosphorus						
	ppm	ASTM D5185m		365	347	335
Zinc		ASTM D5185m ASTM D5185m		365 478	347 452	335 452
Zinc Sulfur	ppm ppm					
-	ppm	ASTM D5185m	limit/base	478	452	452
Sulfur	ppm	ASTM D5185m ASTM D5185m	limit/base >20	478 1015	452 897	452 990
Sulfur CONTAMINAN	ppm ppm	ASTM D5185m ASTM D5185m method		478 1015 current	452 897 history1	452 990 history2
Sulfur CONTAMINAN Silicon	ppm ppm TS	ASTM D5185m ASTM D5185m method ASTM D5185m	>20	478 1015 current	452 897 history1	452 990 history2
Sulfur CONTAMINAN Silicon Sodium	ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>20	478 1015 current 7 0	452 897 history1 5 0	452 990 history2 8 0
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>20 >20 limit/base NONE	478 1015 current 7 0 1 current NONE	452 897 history1 5 0 <1 history1 NONE	452 990 history2 8 0 1 history2 NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm TS ppm ppm ppm scalar scalar	ASTM D5185m Method ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m Method *Visual	>20 >20 limit/base NONE NONE	478 1015 current 7 0 1 current NONE NONE	452 897 history1 5 0 <1 history1 NONE	452 990 history2 8 0 1 history2 NONE NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE	478 1015 current 7 0 1 current NONE NONE	452 897 history1 5 0 <1 history1 NONE NONE	452 990 history2 8 0 1 history2 NONE NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm TS ppm ppm ppm scalar scalar	ASTM D5185m Method ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m Method *Visual	>20 >20 limit/base NONE NONE	478 1015 current 7 0 1 current NONE NONE	452 897 history1 5 0 <1 history1 NONE	452 990 history2 8 0 1 history2 NONE NONE NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE	478 1015 current 7 0 1 current NONE NONE NONE LIGHT NONE	452 897 history1 5 0 <1 history1 NONE NONE	452 990 history2 8 0 1 history2 NONE NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	478 1015 current 7 0 1 current NONE NONE NONE LIGHT	452 897 history1 5 0 <1 history1 NONE NONE NONE	452 990 history2 8 0 1 history2 NONE NONE NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	>20 simit/base NONE NONE NONE NONE NONE NONE NONE	478 1015 current 7 0 1 current NONE NONE NONE LIGHT NONE	452 897 history1 5 0 <1 history1 NONE NONE NONE NONE	452 990 history2 8 0 1 history2 NONE NONE NONE NONE NONE NONE
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m wethod *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	478 1015 current 7 0 1 current NONE NONE NONE LIGHT NONE NONE	452 897 history1 5 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	452 990 history2 8 0 1 history2 NONE NONE NONE NONE NONE NONE NONE NON
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual	>20 limit/base NONE NONE	478 1015 current 7 0 1 current NONE NONE NONE NONE LIGHT NONE NONE NONE NONE NONE NONE	452 897 history1 5 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	452 990 history2 8 0 1 history2 NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT









Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : MOB 1

: PCA0084895 : 05976662 : 10688612

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 11 Oct 2023 Diagnosed : 13 Oct 2023 Diagnostician

: Don Baldridge

Kemp Quarries - River Valley - Backbone 5600 S Hwy 253

Huntington, AR US 72940

Contact:

T:

F:

backbone@rivervalleyquarries.com

* - 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)