

OIL ANALYSIS REPORT

Sample Rating Trend

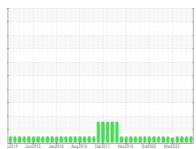
NORMAL



KEMP QUARRIES / RIVER VALLEY ARKOMA Machine Id WL062

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.

SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0084240	PCA0070340	PCA0070391
Sample Date		Client Info		04 Aug 2023	21 Apr 2023	03 Jan 2023
Machine Age	hrs	Client Info		25405	24885	24267
Oil Age	hrs	Client Info		1500	48315	21965
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	10	7	5
Chromium	ppm	ASTM D5185m	>10	2	3	3
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m	>10	0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum		ASTM D5185m	<10	1	0	<1
Lead	ppm			1	<1	0
	ppm	ASTM D5185m	>10	14		
Copper	ppm	ASTM D5185m			8 <1	3
Tin	ppm	ASTM D5185m	>10	<1		<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	5	5	8
Calcium	ppm	ASTM D5185m		67	56	82
Phosphorus	ppm	ASTM D5185m		384	337	340
Zinc	ppm	ASTM D5185m		454	456	420
Sulfur	ppm	ASTM D5185m		1106	994	1019
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon		ASTM D5185m	>20	3	4	2
Sodium	ppm	ASTM D5185m	>20	<1	<1	1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
VISUAL	рріп			Olive ont		
		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
	- 0:	4 OTH 1 D 4 4 F	100	05.0	05.0	00.0

Visc @ 40°C

cSt

ASTM D445 109

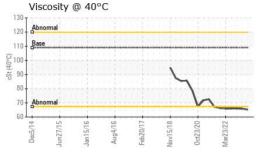
65.2

65.8

66.0



OIL ANALYSIS REPORT





	GRAPI									l o	ad (n	n m)						
40 T	Iron (ppm)							Lead (ppm)										
35 - 30 -		1						N.		25 - 30	vere	***********						•
25 - E 20 -	Abnormal	4					+++444			E 15								
15 - 10 -	1	1	14	\							normal							
5 - 0 -	1	,	,	~	V	1	~			5	\sim				^	^^_		
	Dec5/14 Jun27/15	Jan 15/16	Aug4/16	Feb20/17	Nov15/18	Oct23/20	Mar23/22			Dec5/14	Jun27/15	Jan 15/16	Aug4/16	Feb20/17	Nov15/18	Oct23/20	Mar23/22	
	Aluminum (ppm)							Chromium (ppm)										
30 25	Severe							1		30 T	vere							
20 -										20								
ᇤ 15-	Abnormal									E 15	normal							
10 - 5 -					٨					10 - 6								
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	Dec5/14 Jun27/15	Jan15/16	Aug4/16	Feb20/17	Nov15/18	Oct23/20	Mar23/22			Dec5/14	Jun27/15	Jan15/16	Aug4/16	Feb20/17	Nov15/18	0ct23/20	Mar23/22	
250 T	Copper (ppm)									Si 60 T	licon ((ppm)		ccepti				
200 -	Severe									50 - Se	vere							
150 - E										40 E 30								
100	Abnormal							-			normal							
50-										10	~	_~	~~	~~	21	~	~~	
01	Dec5/14	Jan15/16	Aug4/16	Feb20/17	Nov15/18	0ct23/20	Mar23/22 -	_		Dec5/14	Jun27/15	Jan15/16	Aug4/16	Feb20/17	Nov15/18	0ct23/20	Mar23/22	_
	□ ∃ Viscosity	-		굔	No	ő	Ma				Iditiv∈		A	굔	No	ő	Ma	
130	1,7000000000000000000000000000000000000									2500		calcium						
110	Base	*********					I NEW THE PERSON			2000		phosphoru zinc	s	_	2	1		
St (40°C)					1				mdo	1500	A		~	~		1		
80 70	Abnormal				iiiii	1				500				Land		1	h	
60		91	191	-71	80	- 02	22-			0 1	15	91	91	17-	90	-02	722	_
	Dec5/14 Jun27/15	Jan15/16	Aug4/16	Feb20/17	Nov15/18	0ct23/20	Mar23/22			Dec5/14	Jun27/15	Jan 15/16	Aug4/16	Feb20/17	Nov15/18	0ct23/20	Mar23/22	



Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10592391 Test Package : MOB 1

: 05920477

: PCA0084240

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 Aug 2023 Diagnosed : 10 Aug 2023

Diagnostician : Sean Felton

Kemp Quarries - River Valley - Arkoma

12971 HWY 9a Shawnee, OK US 74804

Contact:

arkomashop@kempquarries.net

T:

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)

Report Id: KEMSHA [WUSCAR] 05920477 (Generated: 08/10/2023 16:31:13) Rev: 1

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