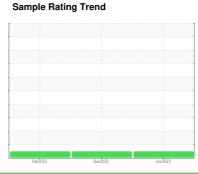


OIL ANALYSIS REPORT

KEMP QUARRIES / BCS - STILLWELL **WL090**

Component **Hydraulic System**

NOT GIVEN (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-2 changed filters)

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

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

		Fel	2022	Dec2022 Jun20	23	
SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		PCA0086382	PCA0061842	PCA0048898
Sample Date		Client Info		30 Jun 2023	02 Dec 2022	19 Feb 2022
Machine Age	hrs	Client Info		22640	22251	21599
Oil Age	hrs	Client Info		22640	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS	S	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>20	4	5	2
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	3	2	3
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		<1	3	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		13	49	51
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		191	761	679
Calcium	ppm	ASTM D5185m		2217	1336	933
Phosphorus	ppm	ASTM D5185m		951	1030	863
Zinc	ppm	ASTM D5185m		1158	1193	1143
Sulfur	ppm	ASTM D5185m		4517	3908	1759
CONTAMINAN	TS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>20	4	6	3
Sodium	ppm	ASTM D5185m	720	<1	<1	0
Potassium	ppm	ASTM D5185m	>20	1	<1	0
VISUAL		method	limit/base	current	history 1	history 2
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	ZU. 1	NEG	NEG	NEG
			11 - 14 /5			
FLUID PROPE	RITES	method	limit/base	current	history 1	history 2
\!' \(\tag{4000}	- 01	AOTAL DALL		00.4	00.4	0 - 0

Visc @ 40°C

cSt

ASTM D445

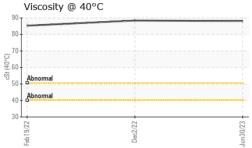
88.1

88.4

85.3



OIL ANALYSIS REPORT





GRAPHS			1 1 /	`	
Iron (ppm)			Lead (ppm	1) 	
30 +			25 Severe		
Abnormal			E 15		
15			10 - Abnormal		
5			0		
Feb19/22	Dec2/22	Jun30/23	Feb 19/22	Dec2/22	Jun30/23
Aluminum (ppm		ゔ	Chromium		7
30 Severe			Severe		
20			20		
10 Abnormal			E 15 Abnormal		
5			5-		
- Feb 19/22 v-	Dec2/22	Jun30/23 +	Feb 19/22	Dec2/22 •	Jun30/23
	Dec	Jun3			Jun3
Copper (ppm)			Silicon (pp	m)	
200 Severe			50 Severe		
150			Ē 30		
Abnormal 50			20 - Abnormal		
0			10		
Feb19/22	Dec2/22 -	Jun30/23	Feb 19/22	Dec2/22 -	Jun30/23
Viscosity @ 40°	С	,	Additives		,
80			2200 - calciu	ım phorus	
70 (3-0+) 60 Abnomal			2000 - 18		
Abnormal			1400		
40 Abnormal	1 1 1 1		1200		***********************
30 T-+	Dec2/22 +	Jun30/23 🛨	Feb 19/22	Dec2/22 +	Jun30/23 +
Feb 1	Dec	Jun3	Feb 1	Dec	Jun3



Certificate L2367

Laboratory Sample No.

Lab Number

: 05894734 Unique Number : 10550544 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0086382 Received : 10 Jul 2023 Diagnosed : 12 Jul 2023

Diagnostician : Don Baldridge

Kemp Quarries - Benton County Stone - Stillwell

463917 Highway 100 Bunch, OK US 74931

Contact:

F:

stilwell@bentoncountystone.com

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)