

OIL ANALYSIS REPORT

Sample Rating Trend

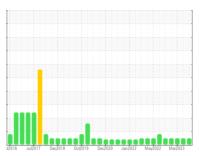
NORMAL



KEMP QUARRIES / RIVER VALLEY OZARK Machine Id WL112

Component **Hydraulic System**

PETRO CANADA HYDREX AW 68 (--- 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 fluid.

Fluid Condition

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

SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2	
Sample Number		Client Info		PCA0069768	PCA0084576	PCA008463	
Sample Date		Client Info		05 Jul 2023	10 May 2023	27 Mar 2023	
Machine Age	hrs	Client Info		34304	33945	33634	
Oil Age	hrs	Client Info		31552	31552	31552	
Oil Changed		Client Info		N/A	N/A	N/A	
Sample Status				NORMAL	NORMAL	NORMAL	
WEAR METAL	S	method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m	>20	12	10	8	
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	10	7	6	
Lead	ppm	ASTM D5185m	>10	0	0	0	
Copper	ppm	ASTM D5185m	>75	3	3	2	
Tin	ppm	ASTM D5185m	>10	0	0	0	
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	0	4	2	3	
Barium	ppm	ASTM D5185m	0	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	6	5	6	
Manganese	ppm	ASTM D5185m	0	<1	0	<1	
Magnesium	ppm	ASTM D5185m	0	52	9	51	
Calcium	ppm	ASTM D5185m	50	400	370	382	
Phosphorus	ppm	ASTM D5185m	330	453	406	428	
Zinc	ppm	ASTM D5185m	430	566	481	535	
Sulfur	ppm	ASTM D5185m	760	1614	1035	1490	
CONTAMINAN	TS	method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m	>20	17	18	14	
Sodium	ppm	ASTM D5185m		<1	1	0	
Potassium	ppm	ASTM D5185m	>20	5	2	<1	
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		NEG	NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history 1	history 2	
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65.8

Visc @ 40°C

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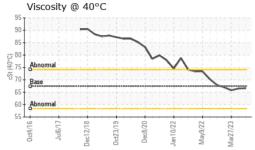
ASTM D445 67.4

66.6

66.5



OIL ANALYSIS REPORT



SAMPLE IMAGES	method	limit/base	current	history 1	history 2	
Color			no image	no image	no image	
Bottom			no image	no image	no image	
ODADUC						

_	Dottom				no mag			nago			ago
	GRAPHS										
	Iron (ppm)				Lead (pp	m)					
	Severe			30	C						
	30		+	20							
mdd	20 Abnormal			돌15	5						
	15 ~~/	1		10	Abnormal					-	
	5	~ ~	/~~	1							
	Oct4/16 - Jul6/17 - Jul6/17 - Oct23/19 -	Dec8/20 -	Jan 10/22	1/23	Oct4/16	Dec12/18	0ct23/19	Dec8/20	Jan 10/22	May9/22	Mar27/23
		Dec	Jan1 May	Mar27/23				Dec	Jan1	Мау	Mar2
	Aluminum (ppm)			30	Chromiu	m (p	om)				
	Severe Severe			25	0			-	-		
	20		+	20							
mdd	Abadasal			E 19	Ab						
		^		10							
		~	~~			_	-				
	Oct4/16 Jul6/17 Dec12/18	Dec8/20	Jan 10/22 May9/22	Mar27/23	Oct4/16	Dec12/18	0ct23/19	Dec8/20	Jan 10/22	May9/22	Mar27/23
	Copper (ppm)		Ja M	×	Silicon (p		ŏ		Jai	Σ	M
2			THITT	60	, I manana	PIII)					
2	OO Severe			50			11111				-
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1	Abnormal			20	About and all						-
ļ	50-			10			~	7		~/	
	0 9 6	20 -	22	23	19 1	- 8	19	20	22	22	23
	Oct4/16- Jul6/17- Dec12/18-	Dec8/20	Jan 10/22 May9/22	Mar27/23	Oct4/16 Jul6/17	Dec12/18	Oct23/19	Dec8/20	Jan 10/22	May9/22	Mar27/23
	Viscosity @ 40°C				Additives	i					
	95			2500	cal	citim					
85				2000	accessors ZIII	osphoru: c	1	~	11		
cSt (40°C)	Abnormal	~	V	1500 E					V		
	70 Base			1000	Service of the servic	D	No. of Persons		N	7	
	60 - Abnormal			500						-	Separate Sep
	Oct4/16 - 100ct4/16 - 100ct2/18 - 100ct2/19 - 100ct2/1	Dec8/20 -	Jan 10/22 -	Mar27/23	Oct4/16 -	Dec12/18 -	0ct23/19 -	Dec8/20 -	Jan10/22 -	May9/22 -	Mar27/23 -
	Or Ju Deci	Ö	Jan	Mari	00 T	Dec	Oct	De	Jan	Ma	Mar





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10550539

Test Package : MOB 1

: PCA0069768 : 05894729

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

: 12 Jul 2023 Diagnostician : Don Baldridge Kemp Quarries - River Valley - Ozark

9446 N Hwy 309 Ozark, AR US 72949

Contact:

ozark@rivervalleyquarries.com

T: F:

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: KEMOZA [WUSCAR] 05894729 (Generated: 07/12/2023 14:53:10) Rev: 1