

OIL ANALYSIS REPORT

KEMP QUARRIES / RIVER VALLEY OZARK

Sample Rating Trend



Fluid PETRO

Component Hydraulic System

WL053

PETRO CANADA HYDREX AW 68 (--- GAL)

SAMPLE INFOF	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0069736	PCA0084582	PCA004830
Sample Date		Client Info		12 Oct 2023	03 Mar 2023	18 Mar 2022
Machine Age	hrs	Client Info		38230	37915	37414
Oil Age	hrs	Client Info		37414	284	36919
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METAL	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	7	4	5
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	3	1	0
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	4	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	6	5	13
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	0	65	39	172
Calcium	ppm	ASTM D5185m	50	166	135	262
Phosphorus	ppm	ASTM D5185m	330	382	354	445
Zinc	ppm	ASTM D5185m	430	488	440	528
Sulfur	ppm	ASTM D5185m	760	1076	1128	1042
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	3	2	<1
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	2	<1	0
VISUAL		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

DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

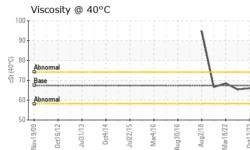
There is no indication of any contamination in the oil.

Fluid Condition

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



OIL ANALYSIS REPORT



1	FLUID PROP Visc @ 40°C	ERTIES cSt	method ASTM D445	limit/base 67.4	current 66.0	history1 65.4	history2 68.5				
1	SAMPLE IMA	GES	method	limit/base	current	history1	history2				
22	Color				no image	no image	no image				
Aug2/10 Mar18/22 Oct12/23	Bottom				no image	no image	no image				
	GRAPHS										
	Iron (ppm) Lead (ppm)										
	30 -			25	Courses						
	20 - Abnormal			20 E 10							
			$\wedge \wedge$	톱 15 10							
	10-	\sim	VL	-							
	Nov19/09 0ct16/12 Jul31/13	Jul22/15	Aug30/16 - Aug2/18 - Mar18/72 -	0ct12/23	Nov19/09	0ct4/14	Aug30/16 - Aug2/18 - Mar18/22 - 0cr12/23 -				
			Aug3 Aug Mar1	Oct1	-		Aug3 Aug Mar1 Oct1				
	Aluminum (ppm)		Chromium (p	pm)						
	25 - Severe			- 25							
	20			20 ਛ_15							
	10 - Abnormal			10	Abaamaal						
	5										
	Nov19/09 Oct16/12	Jul22/15 - Mar4/16 -	Aug30/16 - Aug2/18 -	0ct12/23	Nov19/09 - Oct16/12 - Jul31/13 -	0ct4/14 - Jul22/15 - Mar4/16 -	Aug30/16 - Aug2/18 - Mar18/22 - 0ct12/23 -				
	≥ S S S	η A	Au A	õ	≗ ँ ¬ Silicon (ppm)		Au Ma				
	250 T			60	C						
	200 - Severe			50							
Mad	150			<u></u> 30	Abnormal						
	Abnormal			20							
	3	6	8	(6					
	Nov19/09 Oct16/12 Jul31/13 Oct4/14	Jul22/15 Mar4/16	Aug30/16 Aug2/18 Mar18/22	0ct12/23	Nov19/09 Oct16/12 Jul31/13	0ct4/14 . Jul22/15 . Mar4/16 .	Aug30/16 - Aug2/18 - Mar18/22 - 0ct12/23 -				
	Viscosity @ 40°	2	4		Additives		4 1				
	90			3000	calcium/						
0				2000		ha					
cSt (40°C)	Abnormal 70 - Base			토 1500	and the second s		\simeq				
	60 - Abnormal			500							
	20 + 60/ - + 61/ - + 61/	/15	V16 V18	0		V15	/16				
	Nov19/09 Oct16/12 Jul31/13 Oct4/14	Jul22/15 Mar4/16	Aug30/16 Aug2/18	0ct12/23	Nov19/09 Oct16/12 Jul31/13	0ct4/14 Jul22/15 Mar4/16	Aug30/16 - Aug2/18 - Mar18/22 - 0ct12/23 -				
ooratory mple No. o Number que Number st Package	: WearCheck USA : PCA0069736 : 05985935 : 10708597 : MOB 1	501 Madi Receive Diagnos Diagnos	d : 20 ed : 23	ary, NC 27513 Oct 2023 Oct 2023 s Davis	3 Kemp (er Valley - Ozark 9446 N Hwy 309 Ozark, AF US 72949 Contact:				
	contact Customer Se	rvice at 1-8	300-237-136	9.		ozark@riverva	alleyquarries.com				

