WEAR CONTAMINATION FLUID CONDITION

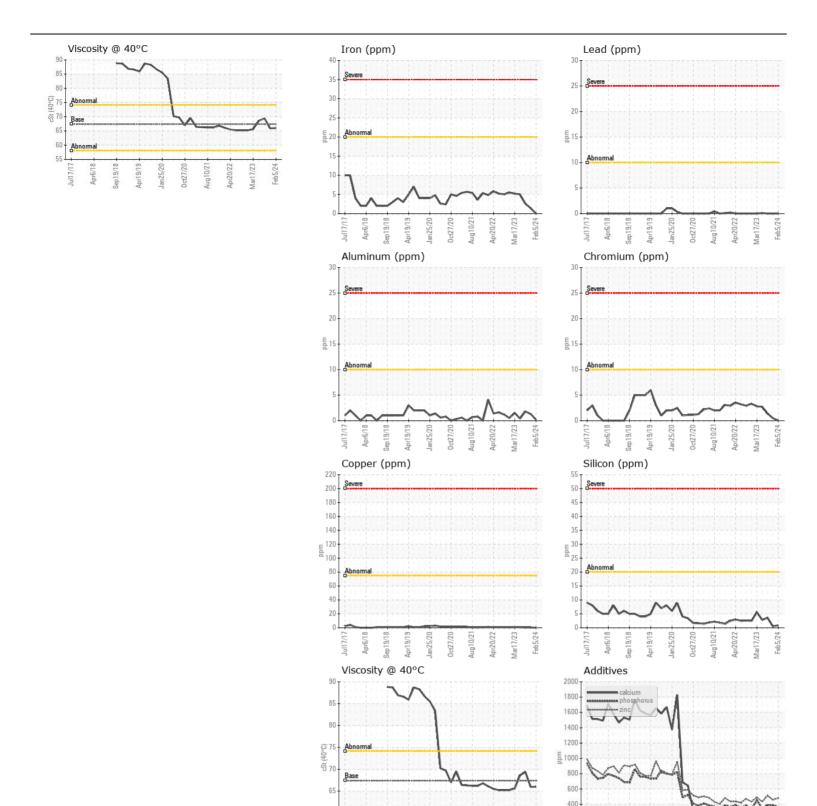
NORMAL NORMAL NORMAL

KEMP QUARRIES / MUSKOGEE SAND [68593]

WL109

Component Hydraulic System

PETRO CANADA HYDREX AW	68 (GAL))					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. (Customer Sample Comment: PM-2 changed filters)	Sample Number		Client Info		PCA0086516		PCA0086471
	Sample Date		Client Info		05 Feb 2024	22 Nov 2023	11 Sep 2023
	Machine Age	hrs	Client Info		50702	50215	49706
	Oil Age	hrs	Client Info		50702	50215	49706
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	Changed
	Filter Changed		Client Info		Changed	N/A	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>20	0	1	3
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	0	<1	1
	Nickel	ppm	ASTM D5185m	>10	<1	0	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>10	<1	1	2
	Lead	ppm	ASTM D5185m	>10	0	0	0
	Copper	ppm	ASTM D5185m	>75	0	<1	<1
	Tin	ppm	ASTM D5185m	>10	0	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	<1	<1	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	1	1
	Water		WC Method	>0.1	NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	0	0
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	0	0	0	0
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	0	1	5
	Manganese	ppm	ASTM D5185m		0	0	0
	Magnesium	ppm	ASTM D5185m		12	17	67
	Calcium	ppm	ASTM D5185m	50	64	75	141
	Phosphorus	ppm	ASTM D5185m		364	385	390
	Zinc	ppm	ASTM D5185m		480	457	512
	Sulfur	ppm	ASTM D5185m		917	904	1069
	Visc @ 40°C	cSt	ASTM D445	67.4	66.0	65.9	69.4







Certificate L2367

Laboratory Sample No.

Lab Number : 06088455 Unique Number : 10875900

: PCA0086516

Jul17/17

Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 Feb 2024 **Tested** : 14 Feb 2024

> : 15 Feb 2024 - Don Baldridge Diagnosed

Mar17/23

Kemp Quarries - Muskogee Sand

3395 W 50th St N Porter, OK US 74454

Contact:

T:

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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)