

## **OIL ANALYSIS REPORT**

### Area KEMP QUARRIES / PRYOR STONE [67632] WL130

Component Hydraulic System Fluid PETRO CANADA HYDREX AW 68 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment:  $\mbox{Pm1}$  )

### Wear

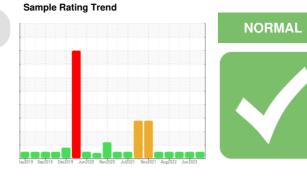
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

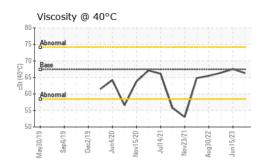
The condition of the oil is acceptable for the time in service.



- SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108520	PCA0086364	PCA0086014
Sample Date		Client Info		11 Apr 2024	15 Jun 2023	17 Mar 2023
Machine Age	hrs	Client Info		25095	4087	3977
Oil Age	hrs	Client Info		21008	4087	3977
Oil Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	5	7
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	2
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	0	<1	1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	2	2	8
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	4	3
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	0	13	55	29
maynesium	ppin					
Calcium	ppm	ASTM D5185m	50	182	164	182
0			50 330	182 400	164 417	182 489
Calcium	ppm	ASTM D5185m				
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	330	400	417	489
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	330 430	400 491	417 525	489 534
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	330 430 760 limit/base	400 491 1128	417 525 1651	489 534 1753
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	330 430 760 limit/base	400 491 1128 current	417 525 1651 history1	489 534 1753 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm JTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	330 430 760 limit/base >20	400 491 1128 current 2	417 525 1651 history1 3	489 534 1753 history2 8
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	330 430 760 limit/base >20	400 491 1128 current 2 <1	417 525 1651 history1 3 0	489 534 1753 history2 8 <1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm VTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	330 430 760 limit/base >20 >20	400 491 1128 current 2 <1 0	417 525 1651 history1 3 0 2	489 534 1753 history2 8 <1 1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm JTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	330 430 760 Iimit/base >20 >20 Iimit/base	400 491 1128 current 2 <1 0 current	417 525 1651 history1 3 0 2 kistory1	489 534 1753 history2 8 <1 1 1 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm JTS ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XFM D5185m	330 430 760 imit/base >20 >20 limit/base NONE	400 491 1128 current 2 <1 0 current NONE	417 525 1651 3 0 2 history1 NONE	489 534 1753 history2 8 <1 1 1 history2 NONE
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm VTS ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *Visual	330 430 760 <b>iimit/base</b> >20 >20 <b>iimit/base</b> NONE NONE	400 491 1128 current 2 <1 0 current NONE NONE	417 525 1651 3 0 2 history1 NONE NONE	489 534 1753 history2 8 <1 1 1 history2 NONE NONE
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm VTS ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	330 430 760 <b>imit/base</b> >20 >20 <b>imit/base</b> NONE NONE NONE NONE	400 491 1128 2 <1 0 current NONE NONE NONE	417 525 1651 3 0 2 history1 NONE NONE NONE	489 534 1753 history2 8 <1 1 1 history2 NONE NONE NONE
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm VTS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	330 430 760 <b>imit/base</b> >20 20 <b>imit/base</b> NONE NONE NONE NONE	400 491 1128 current 2 <1 0 current NONE NONE NONE NONE NONE	417 525 1651 3 0 2 <u>history1</u> NONE NONE NONE NONE NONE	489 534 1753 history2 8 <1 1 1 history2 NONE NONE NONE NONE NONE
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm yTTS ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	330 430 760 20 >20 20 20 1 imit/base NONE NONE NONE NONE NONE NONE	400 491 1128 2 <1 0 current NONE NONE NONE NONE NONE NONE	417 525 1651 3 0 2 <u>history1</u> NONE NONE NONE NONE NONE NONE	489 534 1753 history2 8 <1 1 1 history2 NONE NONE NONE NONE NONE NONE
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm yTTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	330 430 760 220 >20 1 20 1 20 1 20 1 20 1 20 20 20 20 20 20 20 20 20 20 20 20 20	400 491 1128 2 <1 0 current NONE NONE NONE NONE NONE NONE NONE	417 525 1651 3 0 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	489 534 1753 history2 8 <1 1 1 history2 NONE NONE NONE NONE NONE NONE NONE NON
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm yTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	330 430 760 20 >20 20 1imit/base >20 1imit/base NONE NONE NONE NONE NONE NONE NONE NON	400 491 1128 2 <1 0 	417 525 1651 3 0 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	489 534 1753 history2 8 <1 1 1 history2 NONE NONE NONE NONE NONE NONE NONE NON
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	330 430 760 20 >20 >20 <u>limit/base</u> >20 <u>limit/base</u> NONE NONE NONE NONE NONE NONE NONE NON	400 491 1128 2 <1 0 current NONE NONE NONE NONE NONE NONE NONE NON	417 525 1651 3 0 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	489 534 1753 history2 8 <11 1 history2 NONE NONE NONE NONE NONE NONE NONE NON



# **OIL ANALYSIS REPORT**



FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	66.3	67.5	66.4
SAMPLE IMAC	GES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						
Iron (ppm)				Lead (ppm)		
50 40 Severe				25 - Severe		
and Abnormal			u dd	15		
				5		
0 6 1 6 1 6 1 6 1 0 0 0	20	22	123		/20 /20	/21
May30/19 - Sep6/19 - Dec2/19 -	Nov15/20 Jul14/21	Nov23/21 Aug30/22	Jun15/23	May30/19	Jun4/20 Nov15/20 Jul14/21	Nov23/21 Aug30/22 Jun15/23
Aluminum (ppm)				Chromium (p	pm)	
25 - Severe				25 - Severe		-
20- Ē 15-			ud d	20		
10 - Abnormal				10 - Abnormal		
			-	5		
May30/19 Sep.6/19 Dec.2/19	Nov15/20 Jul14/21	Nov23/21 Aug30/22	Jun 15/23	May30/19 Sep6/19 Dec2/19	Jun4/20 Nov15/20 Jul14/21	Nov23/21 Aug30/22 Jun15/23
Ecopper (ppm)	N	Au	Ju	≤ Silicon (ppm)	Z	N Au
250				Severe		
150				10 -		
100 - Abnormal			udd	Abnormal		
50 -					~ /	
0 6U 6U 6U	/20	/21	/23		20+12/	23
May30/19 Sep6/19 Dec2/19 Jun4/20	Nov15/20 Jul14/21	Nov23/21 Aug30/22	Jun15/23	May30/19 - Sep6/19 - Dec2/19 -	Jun4/20 Nov15/20 Jul14/21	Nov23/21 Aug30/22 Jun15/23
Viscosity @ 40°C			400	Additives		
75 - Abnormal			300	calcium	IS	1
0 70 Base 65 60 Abnomal	5		<u>ل</u> 200	zinc	$-\Lambda = 1$	
8 60 - Abnormal		$\backslash /$	10			al
55		V		0		Meetin strangeringer
May30/19 - Sep6/19 - Dec2/19 - Jun4/20 -	Nov15/20 - Jul14/21-	Nov23/21- Aug30/22 -	Jun15/23 -	May30/19 - Sep6/19 - Dec2/19 -	Jun4/20 - Nov15/20 - Jul14/21-	Nov23/21- Aug30/22 - Jun15/23 -
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: WearCheck USA - 50				Kemp	Quarries - Pryc	or Stone - Pryor
: PCA0108520 : 06178000	Rece Teste		3 May 2024 4 May 2024			1050 E 520 Rd Pryor, OK
: 11029326 : MOB 1			5 May 2024 - S	ean Felton		US 74361 Contact:
contact Customer Serv		300-237-136			pryor@	pryorstone.com

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: KEMPRY [WUSCAR] 06178000 (Generated: 05/15/2024 16:03:20) Rev: 1

Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package

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