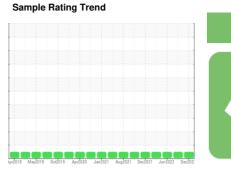


OIL ANALYSIS REPORT





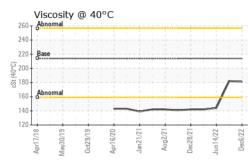


Area KEMP QUARRIES / BCS - GRAVETTE WL123 Component Rear Differential PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

AGNOSIS	SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
ommendation	Sample Number		Client Info		PCA0062092	PCA0062436	PCA0061907
ample at the next service interval to monitor. (Sample Date		Client Info		06 Dec 2022	29 Aug 2022	14 Jun 2022
tomer Sample Comment: PM-2 sampled fluid)	Machine Age	hrs	Client Info		27962	27399	26988
ır	Oil Age	hrs	Client Info		27962	27399	26988
omponent wear rates are normal.	Oil Changed		Client Info		N/A	N/A	Changed
tamination	Sample Status				NORMAL	NORMAL	NORMAL
re is no indication of any contamination in the	CONTAMINA	TION	method	limit/base	current	history1	history2
d Condition	Water		WC Method	>.2	NEG	NEG	NEG
The condition of the oil is acceptable for the time in service.	WEAR META	LS	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>500	24	17	88
	Chromium	ppm	ASTM D5185m	>3	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>3	0	<1	<1
	Titanium	ppm	ASTM D5185m	>2	0	<1	0
	Silver	ppm	ASTM D5185m	>2	0	<1	1
	Aluminum	ppm	ASTM D5185m		2	2	4
	Lead	ppm	ASTM D5185m		- <1	- <1	<1
	Copper	ppm	ASTM D5185m		6	5	37
	Tin	ppm	ASTM D5185m		<1	<1	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	Cadmium	ppm	ASTM D5185m		0	<1	0
	ADDITIVES	I - I -	method	limit/base	-	history1	history2
	Boron	ppm	ASTM D5185m		43	50	124
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		2	1	4
	Manganese	ppm	ASTM D5185m		<1	<1	-7
	Magnesium		ASTM D5185m		18	18	7
	Calcium	ppm	ASTM D5185m		2974	2881	454
	Phosphorus	ppm	ASTM D5185m		2974 976	957	926
	Zinc	ppm				1090	200
		ppm	ASTM D5185m		1101		
	Sulfur	ppm	ASTM D5185m	7086	6859	5501	20248
	CONTAMINA	NTS	method	limit/base		history1	history2
	Silicon	ppm	ASTM D5185m	>100	13	14	13
	Sodium	ppm	ASTM D5185m		1	0	1
	Potassium	ppm	ASTM D5185m	>20	0	0	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	>.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG Submitted By



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		FLUID PROPER	RTIES met	hod limit/base	current	history1	history2
		Visc @ 40°C	cSt ASTN	D445 213.9	181	182	144
		SAMPLE IMAGI	ES met	hod limit/base	current	history1	history2
(21	Dec28/21 un14,22 Dec6/22	Color			no image	no image	no image
Jan2/21/21 Aug2/21 Dex28/21		Bottom			no image	no image	no image
		GRAPHS					
		Iron (ppm)			Lead (ppm)		
		800 - Abnormal					
		Apri 17/18 May30/19 Occ29/19 Apri 16/20	Jan21/21+		Apr17/18 0 5 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Apr16/20	Jec28/21
		81/11/14 Bull Bull Bull Bull Bull Bull Bull Bull	Jan21/21 Aug2/21 Dec28/21	Jun 14/2 Dec6/22	Chromium (p		Dec28/21
		50 40 <u>5</u> 30 - Abnormal			6 - Severe 5 - 4 3 - Abnormal		
			21	22		21	21
		Copper (ppm)	Jan 21/21 Aug 2/21 Dec 28/21		Silicon (ppm)	Apr16/20 Jan21/21 Aug2/21	Dec28/21 Jun14/22
		200 Severe			50 Severe		
		E 100-			00 - Abnormal		
		50		_	50		
		Apr17/18	Jan21/21+ Aug2/21+	Jun14/22	Apr17/18	Apr16/20 +	Dec28/21
		Viscosity @ 40°C			00 - calcium	15	Г
		200 180 160 140		E ²⁰ 15	00	Tydess Grant Ballinger College Martin	
		Apri 17/18 May30/19 0ct29/19 Apri 6/20	Jan 21/21 Aug 2/21 Dec 28/21	Jun 14/22 +	Apri 7/18	Apr16/20 - Jan21/21 -	Dec28/21 +
LAGONATORY	Laboratory Sample No. Lab Number Unique Number Test Package	: 10260585	Received Tested Diagnosed	: 19 Dec 2022 : 20 Dec 2022 : 20 Dec 2022 - An	gela Borella		5100 N Hwy 5 nur Springs, A US 7276 Contac

Report Id: KEMSUL [WUSCAR] 05721009 (Generated: 06/17/2024 08:53:20) Rev: 1