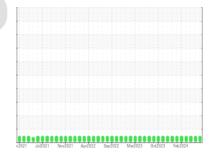


OIL ANALYSIS REPORT

Area Speedway [Speedway] Oil - Port Reduction Gear

Port Reduction Gear **SAE 30W (85 GAL)**



Sample Rating Trend



Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Jd Ridout)

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

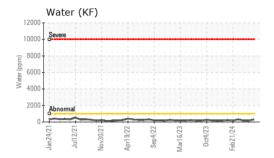
Fluid Condition

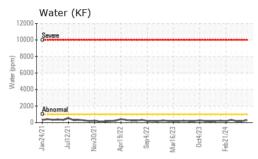
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

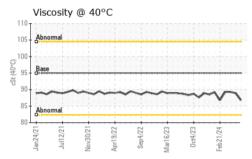
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number	,,, (11011	Client Info	mmusacc	WC0845792	WC0860100	WC0860103
Sample Date		Client Info		11 Jun 2024	15 May 2024	10 Apr 2024
Machine Age	hrs	Client Info		40936	40564	40020
Oil Age	hrs	Client Info		18685	18314	17493
Oil Changed	1110	Client Info		Filtered	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	16	42	36
Chromium	ppm	ASTM D5185m		<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
Lead	ppm	ASTM D5185m	>100	0	<1	0
Copper	ppm	ASTM D5185m	>50	7	13	11
Tin	ppm	ASTM D5185m	>10	0	<1	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	<1
				•		
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base			
ADDITIVES			limit/base	current	history1	history2
ADDITIVES Boron	ppm	ASTM D5185m	limit/base	current 26	history1	history2
ADDITIVES Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	current 26 0	history1 45	history2 44 0
ADDITIVES Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 26 0 33	history1 45 0 25	history2 44 0 23 <1 336
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 26 0 33 <1 486 1384	history1 45 0 25 <1 332 2104	history2 44 0 23 <1 336 1932
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 26 0 33 <1 486 1384 809	history1 45 0 25 <1 332 2104 869	history2 44 0 23 <1 336 1932 843
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 26 0 33 <1 486 1384 809 843	history1 45 0 25 <1 332 2104 869 910	history2 44 0 23 <1 336 1932 843 893
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 26 0 33 <1 486 1384 809	history1 45 0 25 <1 332 2104 869	history2 44 0 23 <1 336 1932 843
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 26 0 33 <1 486 1384 809 843	history1 45 0 25 <1 332 2104 869 910	history2 44 0 23 <1 336 1932 843 893
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		current 26 0 33 <1 486 1384 809 843 5207	history1 45 0 25 <1 332 2104 869 910 7776	history2 44 0 23 <1 336 1932 843 893 7721
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	current 26 0 33 <1 486 1384 809 843 5207 current	history1 45 0 25 <1 332 2104 869 910 7776 history1	history2 44 0 23 <1 336 1932 843 893 7721 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	current 26 0 33 <1 486 1384 809 843 5207 current 3	history1 45 0 25 <1 332 2104 869 910 7776 history1 4	history2 44 0 23 <1 336 1932 843 893 7721 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50	current 26 0 33 <1 486 1384 809 843 5207 current 3 3	history1 45 0 25 <1 332 2104 869 910 7776 history1 4 3	history2 44 0 23 <1 336 1932 843 893 7721 history2 5 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20	current 26 0 33 <1 486 1384 809 843 5207 current 3 0	history1 45 0 25 <1 332 2104 869 910 7776 history1 4 3 <1	history2 44 0 23 <1 336 1932 843 893 7721 history2 5 2 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >50 >20 >0.1	current 26 0 33 <1 486 1384 809 843 5207 current 3 0 0.029	history1 45 0 25 <1 332 2104 869 910 7776 history1 4 3 <1 0.014	history2 44 0 23 <1 336 1932 843 893 7721 history2 5 2 0 0.017



OIL ANALYSIS REPORT







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

FLUID PROPER	THES	method			riistory i	HISTORYZ
Visc @ 40°C	cSt	ASTM D445	95.0	86.8	88.9	89.3

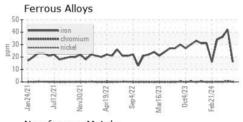
SAMPLE IMAGES

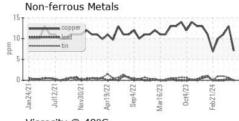
Color

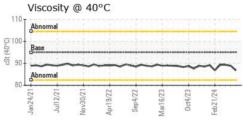
Bottom

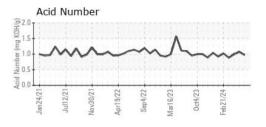
















Certificate 12367

Laboratory Sample No.

: WC0845792 Lab Number : 06211766 Unique Number : 11084630

Test Package : IND 2 (Additional Tests: KF)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received **Tested** Diagnosed

: 17 Jun 2024 : 18 Jun 2024

: 18 Jun 2024 - Don Baldridge

MARATHON PETROLEUM CO. 101 12TH ST CATLETTSBURG, KY US 41169

Contact: CORY GUMBERT cagumbert@marathonpetroleum.com T: (606)585-3950

* - 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)

F: x: