

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Area [20492] Machine Id 30-69

### Component Hydraulic System

CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

# Fluid Condition

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

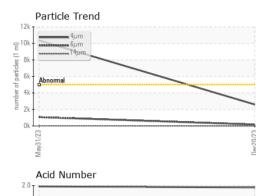
SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0836228	WC0802428	
Sample Date		Client Info		20 Dec 2023	31 May 2023	
Machine Age	hrs	Client Info		3896	3634	
Oil Age	hrs	Client Info		1896	3634	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				NORMAL	ABNORMAL	
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	4	5	
Chromium	ppm	ASTM D5185m	>10	0	<1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>10	<1	4	
Lead	ppm	ASTM D5185m	>10	1	<1	
Copper	ppm	ASTM D5185m	>75	9	6	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	85	108	111	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		13	10	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m	350	559	629	
Calcium	ppm	ASTM D5185m	1800	1647	1734	
Phosphorus	ppm	ASTM D5185m	1000	1127	1095	
	ppin		1000		1000	
	ppm		1100	1109	1261	
Zinc						
Zinc	ppm	ASTM D5185m	1100	1109	1261	
Zinc Sulfur CONTAMINANTS	ppm	ASTM D5185m ASTM D5185m method	1100 3500	1109 3881	1261 5217	
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm	ASTM D5185m ASTM D5185m method	1100 3500 limit/base	1109 3881 current	1261 5217 history1	  history2
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm	ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	1100 3500 limit/base >20	1109 3881 current 6	1261 5217 history1 6	  history2
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1100 3500 limit/base >20	1109 3881 current 6 3	1261 5217 history1 6 3	 history2 
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1100 3500 limit/base >20 >20	1109 3881 current 6 3 1	1261 5217 history1 6 3 1	 history2  
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1100 3500 imit/base >20 >20 imit/base >5000	1109 3881 current 6 3 1 1 current	1261 5217 history1 6 3 1 1 history1	 history2   history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D7647	1100 3500 imit/base >20 >20 imit/base >5000	1109 3881 current 6 3 1 1 current 2608	1261 5217 history1 6 3 1 1 history1 ▲ 10358	 history2   history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647	1100 3500 20 >20 >20 >20 imit/base >20 >20 >20 >20 >1300 >160	1109 3881 current 6 3 1 1 current 2608 175	1261 5217 6 3 1 history1 6 3 1 1 0358 1072	 history2   history2  history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >14µm Particles >14µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	1100 3500 20 >20 >20 >20 imit/base >20 >20 >20 >20 >1300 >160	1109 3881 current 6 3 1 1 current 2608 175 9	1261 5217 6 3 1 history1 1 0 10358 1072 27	 history2   history2  
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	1100 3500 >20 >20 >20 <b>Imit/base</b> >5000 >1300 >160 >40 >10	1109 3881 current 6 3 1 1 current 2608 175 9 3	1261 5217 history1 6 3 1 1 history1 ▲ 10358 1072 27 7	 history2   history2   
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	1100 3500 >20 >20 >20 <b>Imit/base</b> >5000 >1300 >160 >40 >10	1109 3881 current 6 3 1 1 current 2608 175 9 3 0	1261 5217 history1 6 3 1 1 history1 ▲ 10358 1072 27 7 7 0	 history2   history2   
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm SS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	1100 3500 20 >20 >20 <b>imit/base</b> >5000 >1300 >160 >40 >10 >3	1109 3881 current 6 3 1 1 current 2608 175 9 3 0 0 0	1261 5217 history1 6 3 1 1 history1 ▲ 10358 1072 27 7 0 0 0	 history2   history2    
Zinc Sulfur Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >4µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness FLUID DEGRADAT	ppm ppm ppm ppm ppm SS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	1100 3500 >20 >20 >20 >20 <b>Imit/base</b> >5000 >1300 >160 >40 >10 >3 >19/17/14	1109 3881 current 6 3 1 1 current 2608 175 9 3 0 0 0 19/15/10	1261 5217 history1 6 3 1 1 history1 ▲ 10358 1072 27 7 0 0 0 0 0 21/17/12	 history2   history2  history2   

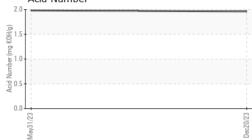
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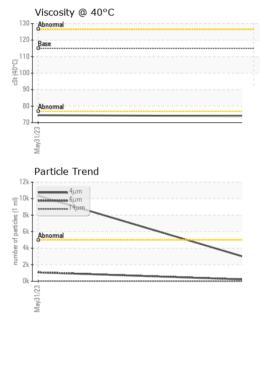
Submitted By: JAMES STEELMON



# **OIL ANALYSIS REPORT**







VISUAL		mothed	limit/booo	ourropt	history	bictory?
		method	limit/base	current	history1	history2
Vhite Metal	scalar	*Visual	NONE	NONE	NONE	
ellow Metal	scalar	*Visual	NONE	NONE	NONE	
recipitate	scalar	*Visual	NONE	NONE	NONE	
ilt	scalar	*Visual	NONE	NONE	NONE	
ebris	scalar	*Visual	NONE	NONE	NONE	
and/Dirt	scalar	*Visual	NONE	NONE	NONE	
opearance	scalar	*Visual	NORML	NORML	NORML	
dor	scalar	*Visual	NORML	NORML	NORML	
mulsified Water	scalar	*Visual	>0.1	NEG	NEG	
ree Water	scalar	*Visual		NEG	NEG	
FLUID PROPER	TIES	method	limit/base	current	history1	history2
sc @ 40°C	cSt	ASTM D445	115	74.0	74.5	
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
olor					1. 70	no imago
						no image
			2			
					10h	
ottom				( · · · ) / )		no image
GRAPHS						
Ferrous Alloys				Particle Coun	t	
			491,520		-	T <sup>26</sup>
iron chromium			122,880			-24
nickel			122,000	Severe		
			30,720			-22
			7,680	Abnormal		-20
1/23				· ·		
May31/23			Dec20/23 s (per 1 m		•	-18
– Non-ferrous Meta	ls					-16
conner_i			rofp		<b>`</b>	
copper lead			Dec20/23 1000 1 ml) 1200 1 ml) 1200 1 ml)			-14
second tin			30		<b>`</b>	-12
					1	-10
						10
1/23			2 0/23	•		-8
May31/			Dec20/23			
Viscosity @ 40°C			<u> </u>	ہوں۔ Acid Number	14μ 21μ	38µ 71µ
Abnormal			<u>,</u> 2.0			
Base			(6)HOX Bundar Variation Bundar Variation Varia	1		
			E 10			
			en un per construction de la con			
Abnormal			2 U.5			
/23+				/23		
May31/23			Dec20/23	May31/23		
Z				M		
VearCheck USA -	501 Madi			MAN	HATTAN ROAD	AND BRIDG
VC0836228	Recieve		Jan 2024		5601 S	122ND E AV
6055867	Diagnos		Jan 2024			TULSA, O
0821816 CONST	Diagnos	ucian : we	s Davis		Contact: PE	US 7414 N CALDWEL
act Customer Serv	vice at 1-9	300-237-1369	9		kevin.marson@w	
uteido of the ISO						(019)729 574

**Test Package** 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)

Certificate L2367

國

Laboratory

Sample No.

Lab Number **Unique Number** 

F:

T: (918)728-5749