

CONTAMINATION OIL CONDITION WEAR ABNORMAL NORMAL

132064 - Diesel Engine

Unit Make : CUMMINS

Unit Model: RED10PSerial No: {n/a}Date Rec'd: Feb 4, 2015Comp Make: FREIGHTLINERCust. Ref No.: {n/a}Sample Date: Jan 24, 2015Comp Model: {n/a}Stub No.: KL-M2313047Diagnostician: Jonathan Hester

DE	CO	1/1	/FND	ATION
Kr			4 F/NI)	AIIUN

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Sample Date		Current	UOM
Time on Unit		1059000	mls
Time on Oil		10000	mls
Time on Fltr		10000	mls
Oil Maint.		n/a	
Filter Maint.		n/a	

## **CONTAMINATION**

Elemental level of silicon (Si) above normal indicating ingress of seal material. The amount and size of particulates present in the system is acceptable.

Titter Maint.		11/ a	
Sample Date		Current	Abn
Silicon		27	25
Fuel (%)		<2.0	5
Glycol			0.06
Water (%)		<0.1	0.2
Soot (%)		0.5	3
>4µm(c)		589	
>6\mu(c)		321	
$>14\mu m(c)$		54	
$>21\mu m(c)$		18	
$>38\mu m(c)$		2	
$>70\mu m(c)$		0	
ISO 4406(c)		16/13	

## **OIL CONDITION**

Oil Type: 10 GAL of CERMA

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

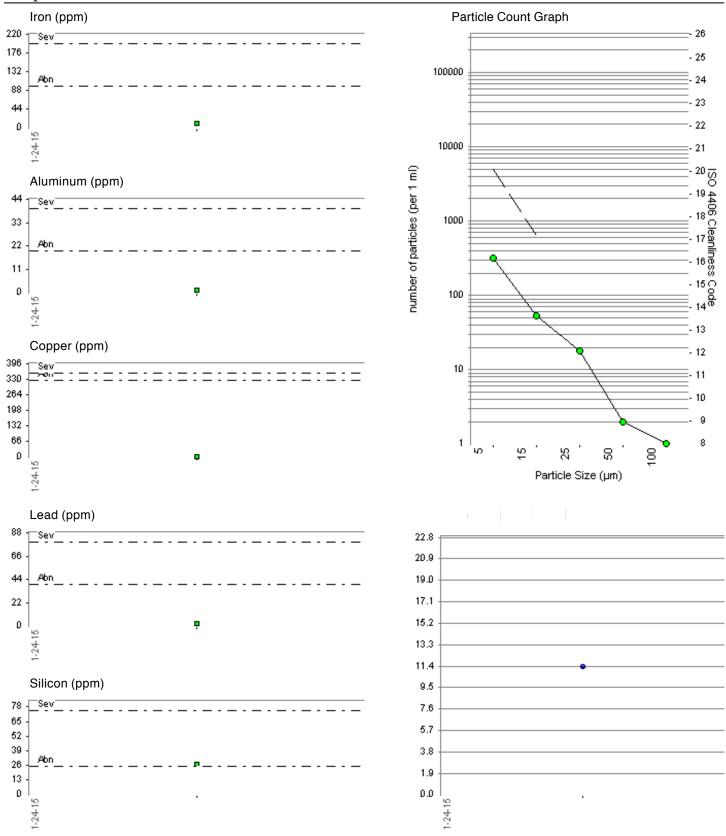
150 : 100(5)			
Sample Date		Current	Base
Potassium		0.7	
Boron		1.4	
Barium		0.0	
Calcium		3772	
Magnesium		6.1	
Molybdenum		79	
Sodium		0.7	
Phosphorus		852	
Sulfur		1902	
Zinc		988	
Visc 100°C (cSt)		12.5	
BN (mg/KOH/g)		11.4	

## **WEAR**

All component wear rates are normal.

Sample Date	Current	Abn
PQ		
Iron	11	100
Nickel	0.0	2
Chromium	1.0	20
Titanium	0.0	2
Copper	1.1	330
Aluminum	1.4	20
Tin	0.5	15
Lead	2.5	40

## Graphs



If you have any questions concerning this sample report (reference work order no 03677508)



ATTN: DEAN WICKER
D & D OIL SOLUTIONS
11401 SOUTH MERIDIAN AVE.
OKLAHOMA CITY, OK 73173
(405)388-5644