Review Reports

MOB 2 Sample Report

Test kit used

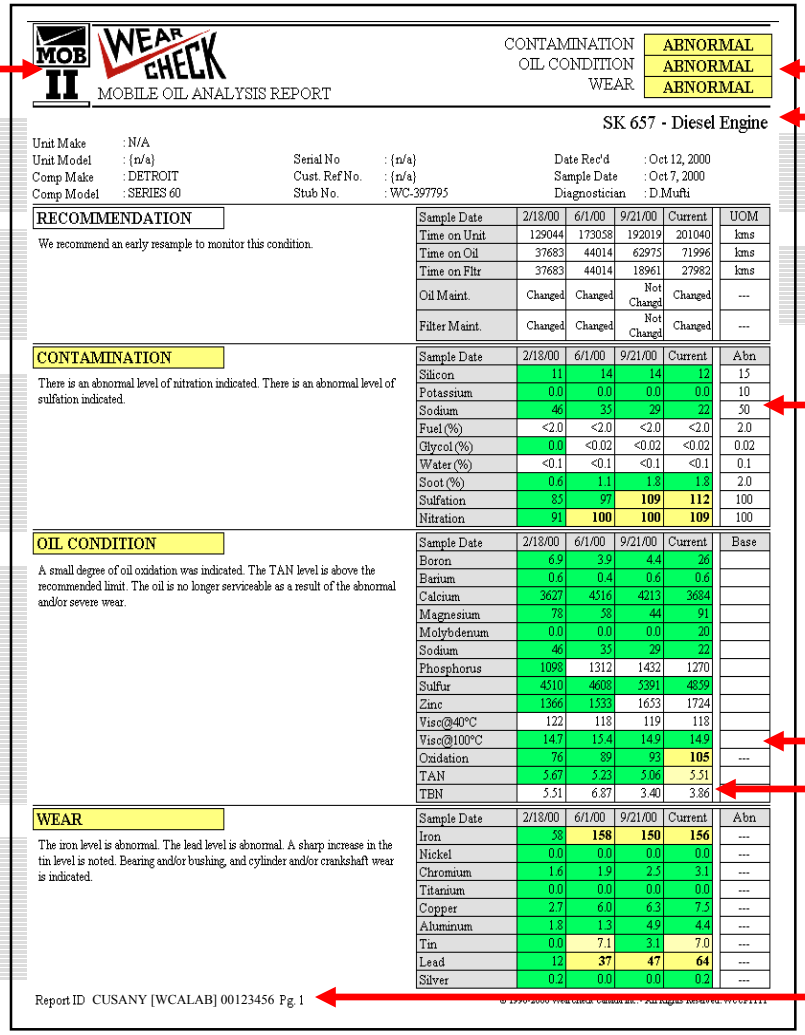
Unit Information
Including make, model, s/n

Recommendation
Summary and any necessary corrective actions required.

Contamination
Dirt, Water, Soot, Fuel, Glycol, IR data
Identifies any abnormal contaminants present in the oil.

Oil Condition
Oil additive levels in ppm
Viscosity @ 100°C
**On MOB 2 Total Base Number (BN)*
Determines if oil is suitable for continued use.

Wear
Wear metals in parts per million (ppm)
Determines if equipment is wearing Abnormally.



MOB II — WEAR CHECK — MOBILE OIL ANALYSIS REPORT

CONTAMINATION: ABNORMAL
OIL CONDITION: ABNORMAL
WEAR: ABNORMAL

SK 657 - Diesel Engine

Unit Make	: N/A				
Unit Model	: {n/a}	Serial No	: {n/a}	Date Rec'd	: Oct 12, 2000
Comp Make	: DETROIT	Cust. Ref No.	: {n/a}	Sample Date	: Oct 7, 2000
Comp Model	: SERIES 60	Stub No.	: WC-397795	Diagnostician	: D.Mufti

RECOMMENDATION

We recommend an early resample to monitor this condition.

Sample Date	2/18/00	6/1/00	9/21/00	Current	UOM
Time on Unit	129044	173058	192019	201040	kms
Time on Oil	37683	44014	62975	71996	kms
Time on Fltr	37683	44014	18961	27982	kms
Oil Maint.	Changed	Changed	Not Changd	Changed	---
Filter Maint.	Changed	Changed	Not Changd	Changed	---

CONTAMINATION

There is an abnormal level of nitration indicated. There is an abnormal level of sulfation indicated.

Sample Date	2/18/00	6/1/00	9/21/00	Current	Abn
Silicon	11	14	14	12	15
Potassium	0.0	0.0	0.0	0.0	10
Sodium	46	35	29	22	50
Fuel (%)	<2.0	<2.0	<2.0	<2.0	2.0
Glycol (%)	0.0	<0.02	<0.02	<0.02	0.02
Water (%)	<0.1	<0.1	<0.1	<0.1	0.1
Soot (%)	0.6	1.1	1.8	1.8	2.0
Sulfation	85	97	**109**	**112**	100
Nitration	91	**100**	**100**	**109**	100

OIL CONDITION

A small degree of oil oxidation was indicated. The TAN level is above the recommended limit. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sample Date	2/18/00	6/1/00	9/21/00	Current	Base
Boron	6.9	3.9	4.4	26	
Barium	0.6	0.4	0.6	0.6	
Calcium	3627	4516	4213	3684	
Magnesium	78	58	44	91	
Molybdenum	0.0	0.0	0.0	20	
Sodium	46	35	29	22	
Phosphorus	1098	1312	1432	1270	
Sulfur	4510	4608	5391	4859	
Zinc	1366	1533	1653	1724	
Visc@40°C	122	118	119	118	
Visc@100°C	14.7	15.4	14.9	14.9	
Oxidation	76	89	93	**105**	---
TAN	5.67	5.23	5.06	5.51	
TBN	5.51	6.87	3.40	3.86	

WEAR

The iron level is abnormal. The lead level is abnormal. A sharp increase in the tin level is noted. Bearing and/or bushing, and cylinder and/or crankshaft wear is indicated.

Sample Date	2/18/00	6/1/00	9/21/00	Current	Abn
Iron	58	**158**	**150**	**156**	---
Nickel	0.0	0.0	0.0	0.0	---
Chromium	1.6	1.9	2.5	3.1	---
Titanium	0.0	0.0	0.0	0.0	---
Copper	2.7	6.0	6.3	7.5	---
Aluminum	1.8	1.3	4.9	4.4	---
Tin	0.0	7.1	3.1	7.0	---
Lead	12	**37**	**47**	**64**	---
Silver	0.2	0.0	0.0	0.2	---

Report ID CUSANY [WCALAB] 00123456 Pg. 1

Quick Sample Status

Unit Identification

Sample Information
Sample, Recieved Date
Sample Number

Maintenance Info
Time on oil,filter,component
Maintenance actions

Abnormal Limits

New oil baseline

Base and Acid numbers

Report Identification

Review Reports

MOB 2 Sample Report (back)

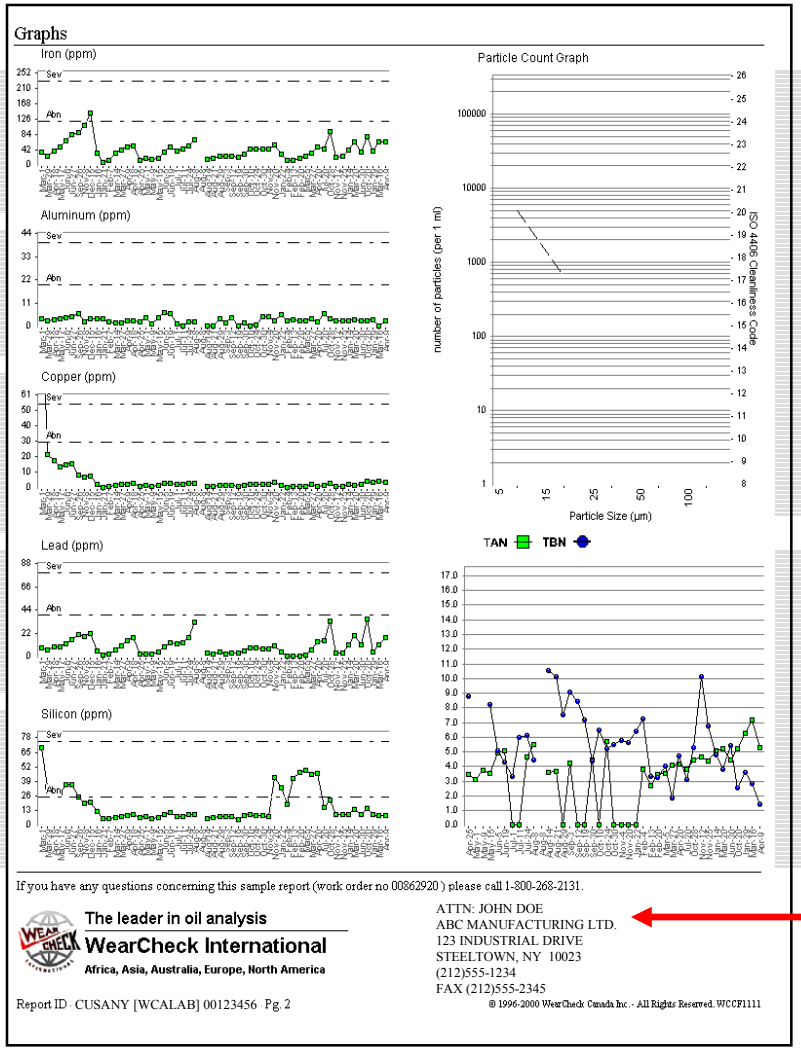
Iron Graph
Trend of the iron level of the component showing both the abnormal and severe limits.

Aluminum Graph
Trend of the aluminum level of the component showing both the abnormal and severe limits.

Copper Graph
Trend of the copper level of the component showing both the abnormal and severe limits.

Lead Graph
Trend of the lead level of the component showing both the abnormal and severe limits.

Silicon Graph
Trend of the silicon level of the component showing both the abnormal and severe limits.



Particle Count Graph
A chart of the current particle levels in an easy to read format showing the current particle levels against the ISO level. The chart also shows the target level.

Base and Acid Number Graph
Showing the trend of AN and BN versus the baseline values.

Customer contact info