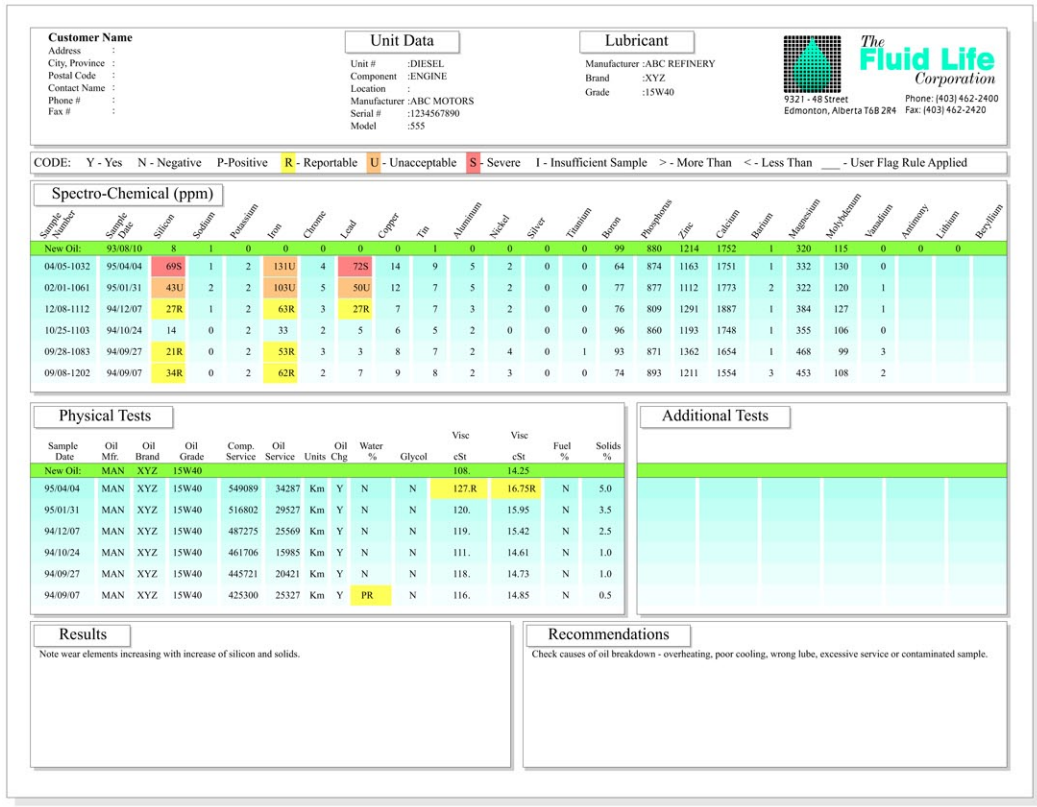
Old Report:



Customer Name
Address :
City, Province :
Postal Code :
Contact Name :
Phone # :
Fax # :

Unit Data
Unit # :DIESEL
Component :ENGINE
Location :
Manufacturer :ABC MOTORS
Serial # :1234567890
Model :555

Lubricant
Manufacturer :ABC REFINERY
Brand :XYZ
Grade :15W40

The Fluid Life Corporation
9321 - 48 Street
Edmonton, Alberta T6B 2R4
Phone: (403) 462-2400
Fax: (403) 462-2420

CODE: Y - Yes N - Negative P-Positive R - Reportable U - Unacceptable S - Severe I - Insufficient Sample > - More Than < - Less Than ___ - User Flag Rule Applied

Spectro-Chemical (ppm)

Sample Number	Sample Date	Silicon	Sodium	Potassium	Iron	Chrome	Lead	Copper	Tin	Aluminum	Nickel	Silver	Titanium	Boron	Phosphorus	Zinc	Calcium	Barium	Magnesium	Molybdenum	Vanadium	Antimony	Lithium	Beryllium
New Oil:	93/08/10	8	1	0	0	0	0	0	1	0	0	0	0	99	880	1214	1752	1	320	115	0	0	0	
04/05-1032	95/04/04	69S	1	2	131U	4	72S	14	9	5	2	0	0	64	874	1163	1751	1	332	130	0			
02/01-1061	95/01/31	43U	2	2	103U	5	50U	12	7	5	2	0	0	77	877	1112	1773	2	322	120	1			
12/08-1112	94/12/07	27R	1	2	63R	3	27R	7	7	3	2	0	0	76	809	1291	1887	1	384	127	1			
10/25-1103	94/10/24	14	0	2	33	2	5	6	5	2	0	0	0	96	860	1193	1748	1	355	106	0			
09/28-1083	94/09/27	21R	0	2	53R	3	3	8	7	2	4	0	1	93	871	1362	1654	1	468	99	3			
09/08-1202	94/09/07	34R	0	2	62R	2	7	9	8	2	3	0	0	74	893	1211	1554	3	453	108	2			

Physical Tests

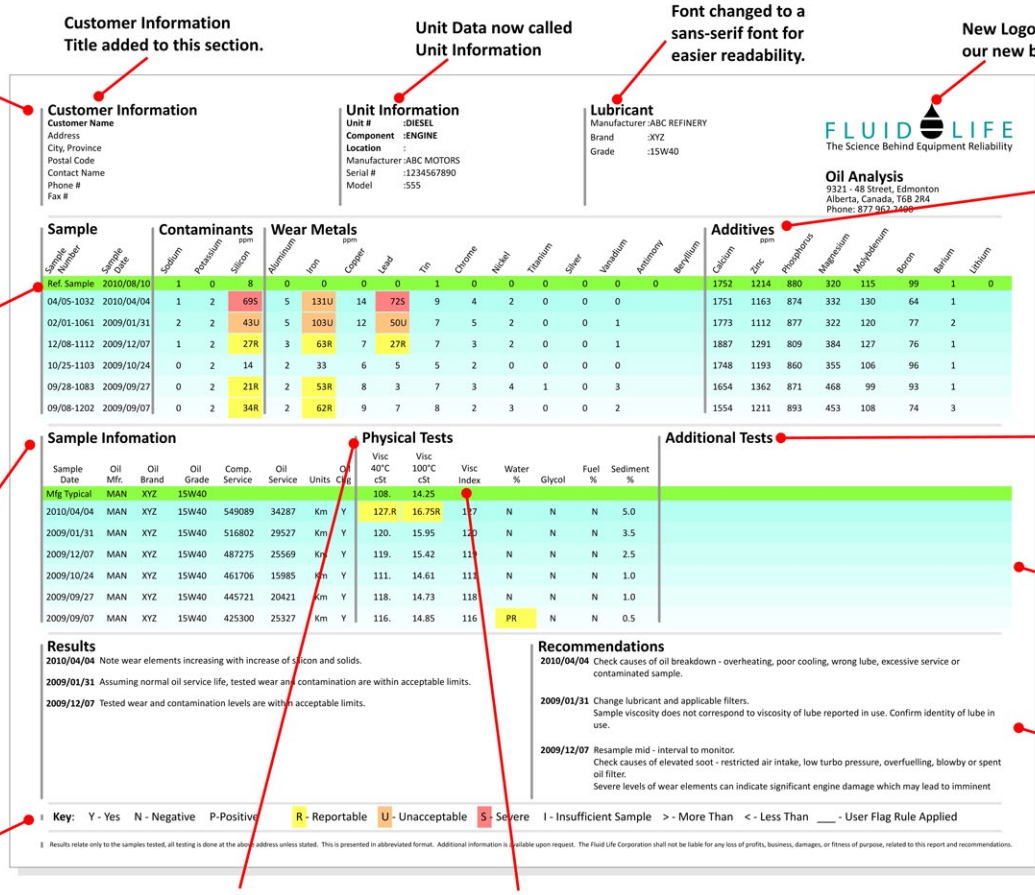
Sample Date	Oil Mfr.	Oil Brand	Oil Grade	Comp. Service	Oil Service	Units	Oil Chg	Water %	Glycol	Visc cSt	Visc cSt	Fuel %	Solids %
New Oil:	MAN	XYZ	15W40							108.	14.25		
95/04/04	MAN	XYZ	15W40	549089	34287	Km	Y	N	N	127.R	16.75R	N	5.0
95/01/31	MAN	XYZ	15W40	516802	29527	Km	Y	N	N	120.	15.95	N	3.5
94/12/07	MAN	XYZ	15W40	487275	25569	Km	Y	N	N	119.	15.42	N	2.5
94/10/24	MAN	XYZ	15W40	461706	15985	Km	Y	N	N	111.	14.61	N	1.0
94/09/27	MAN	XYZ	15W40	445721	20421	Km	Y	N	N	118.	14.73	N	1.0
94/09/07	MAN	XYZ	15W40	425300	25327	Km	Y	PR	N	116.	14.85	N	0.5

Additional Tests

Results
Note wear elements increasing with increase of silicon and solids.

Recommendations
Check causes of oil breakdown - overheating, poor cooling, wrong lube, excessive service or contaminated sample.

New Report:



Customer Information
Customer Name
Address
City, Province
Postal Code
Contact Name
Phone #
Fax #

Unit Information
Unit # :DIESEL
Component :ENGINE
Location :
Manufacturer :ABC MOTORS
Serial # :1234567890
Model :555

Lubricant
Manufacturer :ABC REFINERY
Brand :XYZ
Grade :15W40

FLUID LIFE
The Science Behind Equipment Reliability

Oil Analysis
9321 - 48 Street, Edmonton
Alberta, Canada, T6B 2R4
Phone: 877.963.3400

Sample / Contaminants (ppm) / Wear Metals (ppm) / Additives (ppm)

Sample Number	Sample Date	Sodium	Potassium	Silicon	Aluminum	Iron	Copper	Lead	Tin	Chrome	Nickel	Titanium	Silver	Vanadium	Antimony	Beryllium	Calcium	Zinc	Phosphorus	Magnesium	Molybdenum	Boron	Barium	Lithium
Ref. Sample	2010/08/10	1	0	8	0	0	0	0	1	0	0	0	0	0	0		1752	1214	880	320	115	99	1	0
04/05-1032	2010/04/04	1	2	69S	5	131U	14	72S	9	4	2	0	0	0			1751	1163	874	332	130	64	1	
02/01-1061	2009/01/31	2	2	43U	5	103U	12	50U	7	5	2	0	0	1			1773	1112	877	322	120	77	2	
12/08-1112	2009/12/07	1	2	27R	3	63R	7	27R	7	3	2	0	0	1			1887	1291	809	384	127	76	1	
10/25-1103	2009/10/24	0	2	14	2	33	6	5	5	2	0	0	0	0			1748	1193	860	355	106	96	1	
09/28-1083	2009/09/27	0	2	21R	2	53R	8	3	7	3	4	1	0	3			1654	1362	871	468	99	93	1	
09/08-1202	2009/09/07	0	2	34R	2	62R	9	7	8	2	3	0	0	2			1554	1211	893	453	108	74	3	

Sample Infomation / Physical Tests / Additional Tests

Sample Date	Oil Mfr.	Oil Brand	Oil Grade	Comp. Service	Oil Service	Units	Oil Chg	Visc 40°C cSt	Visc 100°C cSt	Visc Index	Water %	Glycol	Fuel %	Sediment %
Mfg Typical	MAN	XYZ	15W40					108.	14.25					
2010/04/04	MAN	XYZ	15W40	549089	34287	Km	Y	127.R	16.75R	117	N	N	N	5.0
2009/01/31	MAN	XYZ	15W40	516802	29527	Km	Y	120.	15.95	120	N	N	N	3.5
2009/12/07	MAN	XYZ	15W40	487275	25569	Km	Y	119.	15.42	119	N	N	N	2.5
2009/10/24	MAN	XYZ	15W40	461706	15985	Km	Y	111.	14.61	113	N	N	N	1.0
2009/09/27	MAN	XYZ	15W40	445721	20421	Km	Y	118.	14.73	118	N	N	N	1.0
2009/09/07	MAN	XYZ	15W40	425300	25327	Km	Y	116.	14.85	116	PR	N	N	0.5

Results
2010/04/04 Note wear elements increasing with increase of silicon and solids.
2009/01/31 Assuming normal oil service life, tested wear and contamination are within acceptable limits.
2009/12/07 Tested wear and contamination levels are within acceptable limits.

Recommendations
2010/04/04 Check causes of oil breakdown - overheating, poor cooling, wrong lube, excessive service or contaminated sample.
2009/01/31 Change lubricant and applicable filters.
Sample viscosity does not correspond to viscosity of lube reported in use. Confirm identity of lube in use.
2009/12/07 Resample mid - interval to monitor.
Check causes of elevated soot - restricted air intake, low turbo pressure, overfuelling, blowby or spent oil filter.
Severe levels of wear elements can indicate significant engine damage which may lead to imminent

Key: Y - Yes N - Negative P-Positive R - Reportable U - Unacceptable S - Severe I - Insufficient Sample > - More Than < - Less Than ___ - User Flag Rule Applied

Results relate only to the samples tested, all testing is done at the above address unless stated. This is presented in abbreviated format. Additional information is available upon request. The Fluid Life Corporation shall not be liable for any loss of profits, business, damages, or fitness of purpose, related to this report and recommendations.

Minimal markings to visually separate data areas without being distracting allowing the eye to notice the information first.

Customer Information Title added to this section.

Unit Data now called Unit Information

Font changed to a sans-serif font for easier readability.

New Logo for our new branding

Elements reordered to put elements in categories and put related elements together, such as Si and Al, Pb and Sn, Cr and Ni. Elements are now also roughly ordered by how common they are in results.

New oil line now shows the reference sample (shown as Ref. Sample) if available and falls back on the oil manufacture's specification average (shown as Mfg Typical). Reference sample date will be colored yellow if older than one year.

Additional test area is able to be moved on the fly to show different sets of series 1 tests in the physical test area instead of as additional tests such as Ox/Nox.

Sample information section separated from physical tests and labeled.

Our classic color fade, new oil line and flag colors have been kept. The white dividing line between columns has been dropped.

Results and recommendations now shows the six previous comments by date and cuts off older comments once full.

Description of flag meanings now called a key and moved to the bottom of the report.

Physical Tests have been reordered to put most common tests first and to show the actual tests in series 1 done.

Addition of viscosity index clearly identifies mixing and the use of single versus multi-grade oils.