

# SpectroTrack

INFORMATION MANAGEMENT SYSTEM

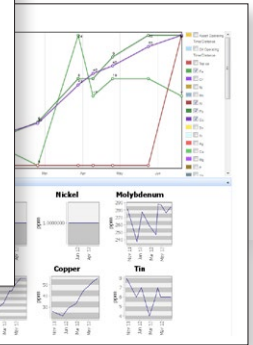
New Expanded Energy

Unit ID: Demo-GeoBox 1234  
Model: Inc. GeoBox  
Manufacturer: Manual Intervention

Very high wear metals levels. The presence of iron and chromium, nickel and molybdenum may indicate a wear process on high-stress wear parts (pistons, bearings) chemical and physical oxidation. Concentration codes (SD, RAD) is very high for this type of machine, due to metallic particle contamination (see attached Microscopy report).  
We suggest to increase a complete oil change, with careful cleaning, to remove the contaminants. We suggest to check trends of wear metals by retesting after 5000 km.

Hg. Matteo Campanelli, 19/09/2019

DI: EAGLE ATF UNIVERSAL	Sample ID	300208 (DEACT)	300209 (DEACT)	300210 (DEACT)	300211 (DEACT)
Unit	ppm	320	37	41	481
Chromium	ppm	4	<1	<1	3
Nickel	ppm	4	<1	<1	<1
Molybdenum	ppm	2	3	3	20
ATF UNIVERSAL	ppm	46	13	1	12
WEAR METALS	ppm	36	<1	2	3
Copper	ppm	230	17	3	2
Iron	ppm	18	<1	<1	<1
Aluminum	ppm	2	<1	<1	<1
Titanium	ppm	2	<1	<1	<1
ANTIOXIDANT	ppm	95	24	9	29
Carbon	ppm	94	25	2	15
CONTAMINANTS	ppm	10	11	1	11
Calcium	ppm	780	457	5	50
Magnesium	ppm	630	6	1	4
Phosphorus	ppm	1300	190	280	1234
SEMI-METALS	ppm	200	137	160	1140
Barium	ppm	3	99	93	780
Zinc	ppm	430	143	1	1
Operating	Acc. G. Limit	0.00	0.00	0.02	0.12
Normal	Acc. G. Limit	<0.01	<0.01	<0.01	0.04
Equipment	Acc. G. Limit	8	15	15	16
Oilgrade	ppm	<0.1	<0.1	<0.1	<0.1
Optical	%	1.1	<0.1	<0.1	<0.1
Water	%	0.4	<0.1	<0.1	<0.1
NEW ENERGIE	ppm	30	10	10	10
SD-MS-Code	ppm	21.02011	10.10.15	2.120108	7.0101
SD-MS-Code	ppm	13	12	12	12
CONTAMINANTS	mg/l	<0.5	3.0	20.1	33.0



SpectroTrack is an information management system (IMS) optimized for machine condition monitoring. The browser-based system is the ideal tool for accessing historical and trend information about an organization's high-value assets. The system provides a single end-to-end view of a sample lifecycle from sample submission and receipt to results entry. The software also provides all trending, imaging, numerical and textual asset data in one secure location. Clients and laboratory personnel can see a comprehensive, historical view of fluid condition for an engine, department or an entire fleet.

## Benefits of SpectroTrack IMS

### Efficient Data Collection = Greater Expandability

SpectroTrack offers a streamlined process for accepting oil analysis data from a variety of analytical instruments. Users have the flexibility to add new classes of analysis and additional parameters as needed, including trend analysis.

### Browser-based System = Easy Accessibility

The system can be viewed on any browser-based device eliminating the need for installation on each workstation. Customers can access and view online interactive sample results anywhere and at any time to support them in making equipment maintenance decisions.

### Data Consolidation = Improved Accuracy and Consistency

SpectroTrack brings information together with centralization of all oil analysis data as well as images from both Spectro Inc.'s and other vendor's instrumentation.

### Simple System Deployment and Maintenance = Improved Productivity

Once SpectroTrack is installed, operators only need browser access to begin using the software. With a zero footprint on the client machine and remote access support, the SpectroTrack minimizes the need for costly IT support and maintenance while giving the operator the information necessary to maintain the health of high-value assets.

### Multi-lab Module = Enterprise-level Support with a Single Point of Contact

SpectroTrack's multi-lab function integrates the workflow of multiple testing labs and enables each lab to view samples and support each other. Clients with assets deployed globally have visibility to all assets and conditions. Critical oil analysis test information is easily shared by all.

### Sample Management and Workflow = Removal of Gap Between Operator and Lab

SpectroTrack facilitates the workflow between the equipment maintainer and the lab by managing the sample lifecycle. The system gives both customers and on-site labs the information critical to assess sample results, and ultimately, machine condition.



## Feature Overview

- Self-contained installation on one server
- Automatically retrieves data from all Spectro Inc. instruments
- Designed specifically for oil analysis programs – dedicated or contract testing
- Supports customer (private label) branding

## Remote Login

- Laboratory customer (interactive report viewers) can access defined data
- Remote portals can be connected to the Internet

## Accounts

- Laboratory user accounts and client accounts password protected
- Multi user accounts for distributor sales or corporate reliability grouping

## Equipment

- Assigned to accounts and can be searched, created, removed and reactivated with ease
- Detail includes manufacturer, application and components
- Maintenance feedback and notes visible to all stakeholders

## Components

- Rich customer component detail, complete with assigned test package
- Can be easily transferred to other equipment (engine change)

## Scheduling

- Schedule maintenance activities and analysis intervals
- Automatic reminders sent via email
- Customer bottle labels printed prior to submittal

## Sample Login

- Auto-fill and drop-down selection

## Data Entry

- Bar code tracking bottle labels
- Shows status of each batch as it moves through the laboratory
- Automatic data collection from Spectro instruments –Expandable with other vendor-supplied instruments
- Laboratory dashboard for easy workflow management

## Diagnostic Analysis

- User defined limits for each test
- Data rated as Notable, Abnormal, and Severe for both “Hi” and “Lo” limits
- Default and customizable diagnostic recommendations with historical trending
- Alarm Limits specific to Component Type, Manufacturer, Model, and Application

## Evaluation

- Results color-coded with severity level
- Evaluator assigns overall sample severity and comments

## Reports

- Multi-language support
- Printed or emailed to assigned recipient or accessed by the web
- Test results, graphs, comments, and particle images
- Interactive portal reports

## SpectroTrack Ordering Information

### PART NUMBERS AND ADDITIONAL CONFIGURATION OPTIONS

M90035	Base Product
M90038	Additional Laboratory User License (each)
M90036	SpectroTrack Custom Device Interface Import driver interface for lab instruments (Spectro products included in base product)
M90037	Client Portal Access Pack (101-500 Clients)
M90042	Multi Lab Option – Resides on Main server Allows multiple labs to share and access SpectroTrack on main server. All laboratory users with rights can access and diagnose oil samples from all labs. Each lab must have P/N M90035

### ACCESSORIES

M90039	SpectroTrack Customer Reference Guide (Print )
M90041	SpectroTrack Laboratory Reference Guide (Print)
P-10885	SpectroTrack Labelwriter
P-10886	SpectroTrack Lab Barcode Labels (750/roll)
P-10887	SpectroTrack Customer Labels (300/roll)
I&T	Installation & Training

### RECOMMENDED HARDWARE

Server Processor	x64 Processor: AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support x86 Processor: Pentium III-compatible processor or faster
RAM	4 GB
Hard Drive	500 GB
Operating systems	Windows XP, Windows Server 2008 R2 Standard, Windows 7 Professional Edition or Higher, Windows Vista Professional Edition or Higher