

## CONDITION MONITORING AND MAINTENANCE MANAGEMENT SYSTEM

### PURPOSES



Lower equipment maintenance and operating costs

- Transition from reactive to proactive maintenance. Reduction of emergency repairs and downtime
- Improved quality of planned maintenance execution
- Minimized number of equipment abuse cases
- Receiving telemetry data from any equipment from any third-party systems
- Remote condition monitoring
- Custom alerts notifications for any desired parameters change. Notifications can be sent by email, to the company's corporate system, or to a messenger
- Single digital environment for all systems connected to AUXIL



## FORMS

### Configuring OEMs event processing

Map

Routes

Forms

Reports

GeoWlan

Speed

Processes

Drills

Loading

Teeth Control

Help center

MA

Interfaces - Events

REFRESH

Interface

Level

KOMTRAX Plus J1939

All (3)

ID	Name	Level...	Description	Notify role	Process
A000N1	Engine Over Speed	1	None	Not selected	<input checked="" type="checkbox"/> EDIT
B@ADMC	Central lubrication system Failure	2	Inform service and then press cancel button.	Not selected	<input checked="" type="checkbox"/> EDIT
B@ADPQ	Central lubrication system grease level too low	2	Inform service and then press cancel button.	Not selected	<input checked="" type="checkbox"/> EDIT

### Configuring custom events based on the correlation of machine parameters

Map

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MA

Custom events

ADD RECORD

REFRESH

ID	Name	Description	Message	Level	Notify role	Process	Model	Equipment...
3	Idle 5min CAT				Not selected	<input type="checkbox"/>	CAT 785C	All (14)

EDIT

## EXCEPTIONS WINDOW WITH A VEHICLE TECHNICAL CONDITION EVENT

Messages **Exceptions(3)**



2025-10-01 10:01:55: 57-100 Engine oil pressure below normal; current readings over the last 10 minutes are 24 psi versus the normal 25 psi.

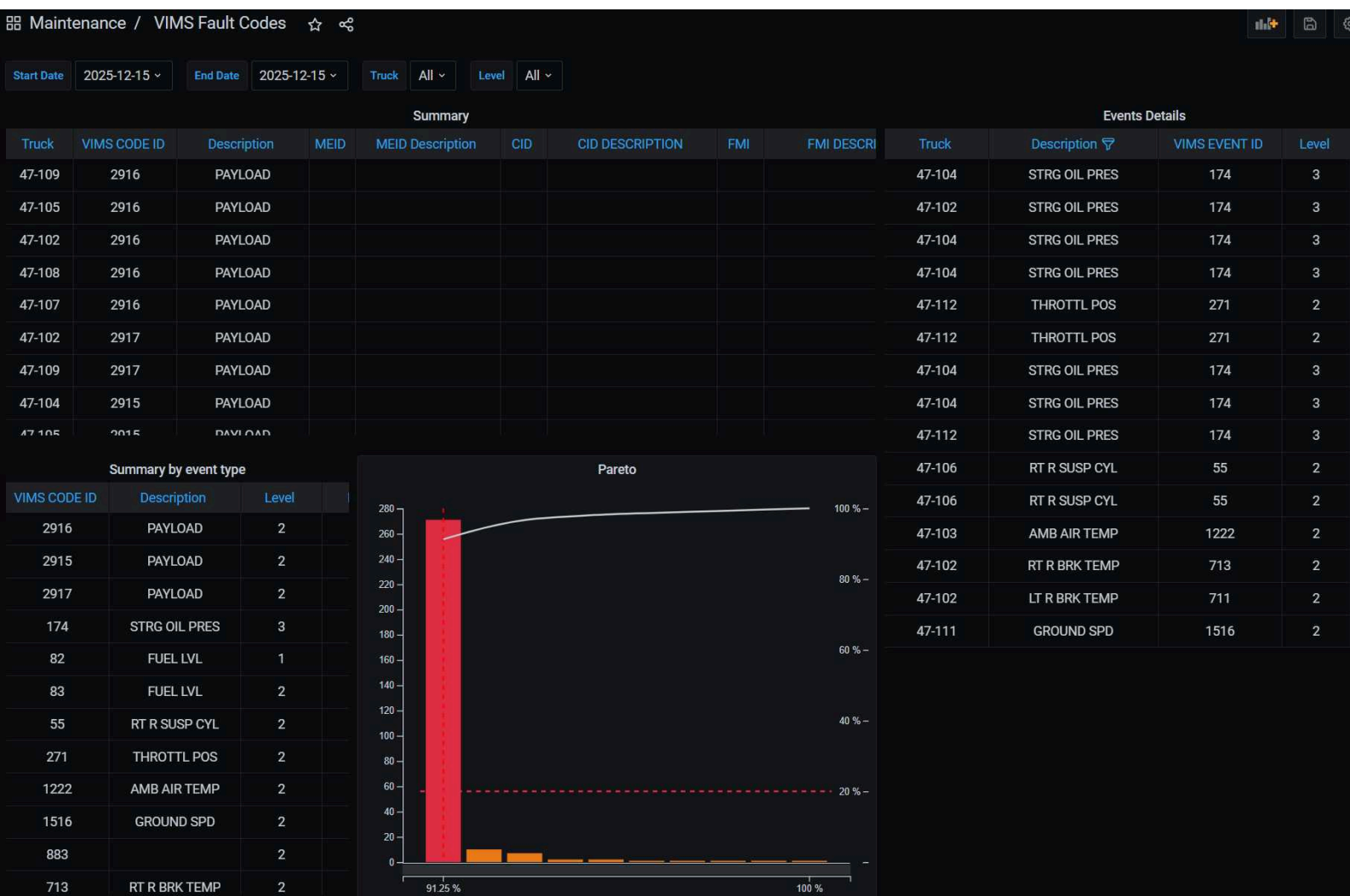
Accept

Reject

## EXAMPLE OF A TRUCK TIRE PRESSURE DASHBOARD



## EXAMPLE OF A REPORT WITH DATA FROM THE VIMS CONTROLLER



## EXAMPLE OF A REPORT WITH GRAPHS OF ENGINE PARAMETERS FOR MACHINE 1



	Min	Max	Mean
Body Seating, -	1	1	1
Brake Oil Pressure Left/Front, MPa	13.4	20.1	15.5
Brake Oil Pressure Right/Rear, MPa	13.4	20	15.5
Engine 1 Accelerator Pedal Position 1, %	0	38.8	9.13
Engine 1 Coolant Temperature, C	66	68	66.9
Engine 1 Exhaust Gas Port 1 Temperature, C	969	969	969
Engine 1 Exhaust Gas Port 2 Temperature, C	969	969	969
Engine 1 Exhaust Gas Port 3 Temperature, C	101	231	170
Engine 1 Exhaust Gas Port 4 Temperature, C	100	220	165
Engine 1 Fuel Rate, L/h	0	33.7	9.51
Engine 1 Oil Pressure, kPa	56	372	212
Engine 1 Oil Temperature 1, C	75	82	79.1
Engine 1 Speed, rpm	656	1531	887
Engine 1 Turbocharger Boost Pressure, kPa	2	4	2.83
Foot Brake Position, -	0	1	0.0833
High Resolution Total Vehicle Distance, m	415403840	415404095	415404009
Live Weight, ton	0	1	0.375
Pitch/Inclinometer, deg	0.797	1.40	1.16
Retarder Oil Temperature Front, C	75	87	78.9
Retarder Oil Temperature Rear Right, C	70	81	74.3
Retarder Position, %	0	32	15.4
Torque Converter Lockup Engaged, -	0	1	0.333
Transmission Current Range, ASCII	12366	12614	12469
Transmission Oil Temperature 1, C	67	75	70
Wheel-Based Vehicle Speed, km/h	0	7.69	2.41

- Additional parameters can be added to the chart, and custom notifications can be configured when specific criteria are reached
- Notifications could be configured with special instructions for mechanics



## EXAMPLE OF A REPORT WITH GRAPHS OF ENGINE PARAMETERS FOR MACHINE 2



	Min	Max	Mean
Body Seating, -	0	1	0.985
Brake Oil Pressure Left/Front, MPa	13.4	22.2	17.0
Brake Oil Pressure Right/Rear, MPa	13.3	22.2	17.0
Engine 1 Accelerator Pedal Position 1, %	0	100	52.6
Engine 1 Coolant Temperature, C	61	82	71.0
Engine 1 Exhaust Gas Port 1 Temperature, C	969	969	969
Engine 1 Exhaust Gas Port 2 Temperature, C	969	969	969
Engine 1 Exhaust Gas Port 3 Temperature, C	100	666	402
Engine 1 Exhaust Gas Port 4 Temperature, C	100	676	404
Engine 1 Fuel Rate, L/h	0	230	99.6
Engine 1 Oil Pressure, kPa	24	456	336
Engine 1 Oil Temperature 1, C	70	102	86.4
Engine 1 Speed, rpm	604	2439	1656
Engine 1 Turbocharger Boost Pressure, kPa	0	150	64.5
Foot Brake Position, -	0	1	0.0110
High Resolution Total Vehicle Distance, m	414898045	414963520	414932144
Live Weight, ton	0	109	62.4
Pitch/Inclinometer, deg	0	10.3	5.42
Retarder Oil Temperature Front, C	68	98	77.5
Retarder Oil Temperature Rear Right, C	65	90	73.2
Retarder Position, %	0	100	4.17
Torque Converter Lockup Engaged, -	0	1	0.782
Transmission Current Range, ASCII	12366	13894	12950
Transmission Oil Temperature 1, C	62	79	70.3
Wheel-Based Vehicle Speed, km/h	0	44.9	14.4
speed (right y-axis)	0.0430	47.7	14.1

It is possible to work with data from different machine interfaces in one place

## COMPONENTS

- High-resolution video cameras, LED lights, mounting elements.
  - Software for the server and the onboard devices.
  - Onboard computer with AI module.
  - AUXIL system equipment with standard or high-precision positioning.
  - Wi-Fi, LTE, 5G support.
  - Integration with onboard systems of excavators for reading the telemetry and performance indicators.
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## MINING ART

- **Availability** - We use hardware in our solutions that are openly available on the market, which reduces the overall project cost and simplifies subsequent maintenance.
- **Reliability** - All equipment comes with a manufacturer's 1-2 years warranty. Our software meets 99.9% SLA requirements.
- **Flexibility** - Our software is open to modifications tailored to your business needs. You can make adjustments independently.
- **Transparency** - Forget about subscription fees for technical support and services. You pay for the provided services only.
- **Experience** - Since 2015, we have been developing and implementing our own software solutions for the mining industry.

