PT. MUSTIKA PETROTECH INDONESIA

COMPANY PROFILE

MUSTIKA PETROTECH
INDONESIA

“PROFESSIONAL PARTNER FOR SUPERIOR AND SUSTAINABLE OIL AND GAS DRILLING SOLUTIONS”

Phone: +62 21-2522-837

Email: marketing@mustikapetrotech.com

Website : mustikapetrotech.com

MUSTIKA PETROTECH
INDONESIA

PT. MUSTIKA PETROTECH INDONESIA

PT Mustika Petrotech Indonesia was established in Jakarta on June 15, 2007, as a tangible contribution to supporting the oil and gas industry in Indonesia. Since its inception, the company has focused on providing oil and gas drilling support services, prioritizing professionalism, quality service, and high safety standards.

With over a decade of experience, PT Mustika Petrotech Indonesia continues to grow and innovate, becoming a strategic partner for various national and international energy companies. Its commitment to excellence and sustainability makes the company a trusted service provider supporting efficient, safe, and reliable drilling operations.

PT. MUSTIKA PETROTECH INDONESIA

VISION

To become a professional and trusted well service company in supporting oil and gas drilling activities in a superior and sustainable manner, through the implementation of the highest standards in professionalism, occupational safety, and technological innovation.

PT. MUSTIKA PETROTECH INDONESIA

MISSION

- Provide safe, efficient, and high-quality oil and gas drilling maintenance services.
- Make occupational safety and regulatory compliance an integral part of the company culture.
- Sustainably develop human resource competencies to support operational excellence.
- Build mutually beneficial partnership strategies to drive business growth.
- Encourage innovation in processes and services to enhance the company's competitiveness in the energy industry.

OUR CORE VALUES

- Integrity – We uphold honesty and ethical business practices.
- Innovation – Continuously evolving with the latest technological advancements.
- Safety – Prioritizing the well-being of our team and clients.
- Excellence – Committed to delivering superior quality in all operations.
- Sustainability – Focused on environmentally friendly and responsible solutions.

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ISO 9001
www.tsicertification.com

ISO 14001
www.tsicertification.com

ISO 45001
www.tsicertification.com

KAN
Komite Akreditasi Nasional
LSSM-056-IDN

Certificate No : QMS 241235, EMS 240512, OHSMS 240438

HSE

We strive to implement appropriate risk management to ensure a safe working environment. By instilling HSE cultural principles, we are committed to creating a safe and healthy working environment for all employees, clients, and contractors involved, as well as for the preservation of the surrounding environment.

We are committed to complying with all HSE-related standards, both national (SMK3) and international, such as the Integrated Management System ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, and continuously strive for improvement.

MUSTIKA PETROTECH
INDONESIA

Highlight

PT. MUSTIKA PETROTECH INDONESIA

15+

Years of Experience

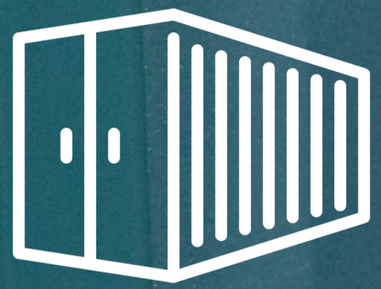
650+

Total Projects

National &
International Partners

TexCal Energy
PERTAMINA EP
elnusa
PERTAMINA DRILLING
CITIC Seram Energy Limited

PT. MUSTIKA PETROTECH INDONESIA



MUD LOGGING

Drilling monitoring with DNV 2.7.1 & 2.7.2 standard tools

Mustika Petrotech Indonesia provides Mud Logging services in the Drilling industry for all operations starting from the Spud in (Tajak), Drilling, Tripping, RIH Casing, Cementing to Well Testing phases. Our team consists of Mudloggers who are part of the "wet end", namely taking, preparing and checking drill cuttings for drilling Cutting analysis based on samples and Gas Analysis then Data Engineers who concentrate on monitoring equipment and operations. Data Engineers concentrate on monitoring equipment and drilling well operations and focus more on drilling techniques, drilling hydraulics, observing torque, other anomalies, D-Exponent analysis and Formation Evaluation.

MUD LOGGING

PT. MUSTIKA PETROTECH INDONESIA

DNV 2.7-1 & 2.7-2 Standard Units & Infrastructure

All our units meet DNV (Det Norske Veritas) standards from Norway, ensuring that each unit complies with global safety and security standards both onshore and offshore.

Advantages:

- Structure and materials designed for marine conditions and high-risk areas with complete certification (WPS, PQR, Welder, etc.).
- Pressurized & safe ventilation system – Maintains pressure and air quality inside the unit, protecting against hazardous gases (Potential H2S Gas).
- Designed according to DNV 2.7-2 standards for safe and stable operations.
- Comprehensive safety systems – HVAC, Fire suppression, gas detection within the unit, ESD.

MUD LOGGING

PT. MUSTIKA PETROTECH INDONESIA

GAS MONITORING AND DRILLING

We use Gas Chromatograph technology with CMS 4.0 system, supporting WITS level 0 and integration with DAQ (Data Acquisition System).

Functions:

· Real-time gas monitoring for early hazard detection

· Fast & secure data transmission

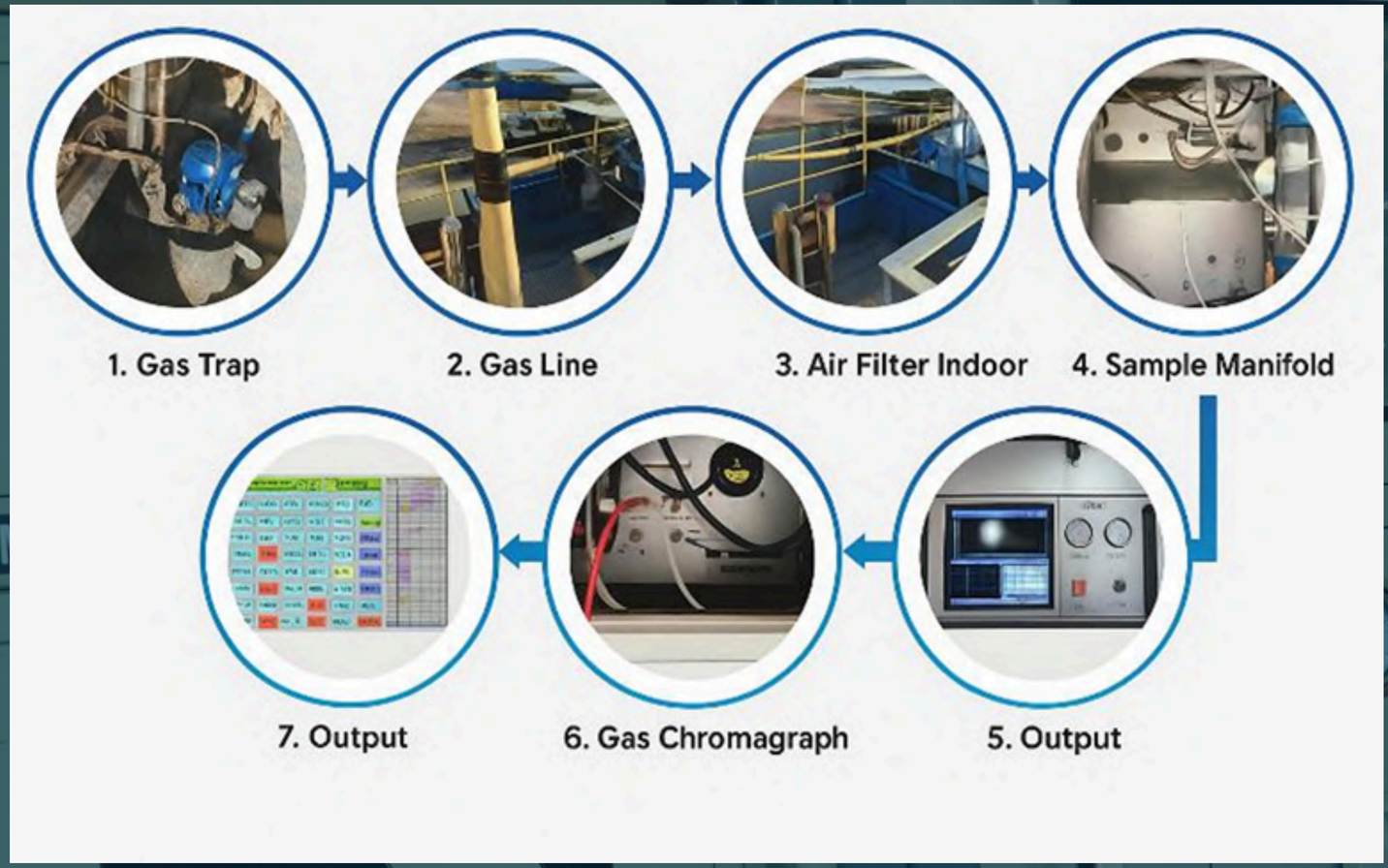
· Accurate gas analysis during drilling operations

SK-3Q04 FID Chromatograph

- Total Gas measured continuously
- Measurement cycle C1-C5: 30s/90s (Option with one button and back flushing system)
- Separation ratio of Methane and Ethane concentration, 100:1 (10% C1: 01%c2), achieved perfectly
- Separation degree not less than 0.95
- Measurement:
  - C1-C5: 5ppm-100%,
  - Total Gas: 10ppm-100%.

MUD LOGGING

PT. MUSTIKA PETROTECH INDONESIA



GAS READING SYSTEM

MUD LOGGING

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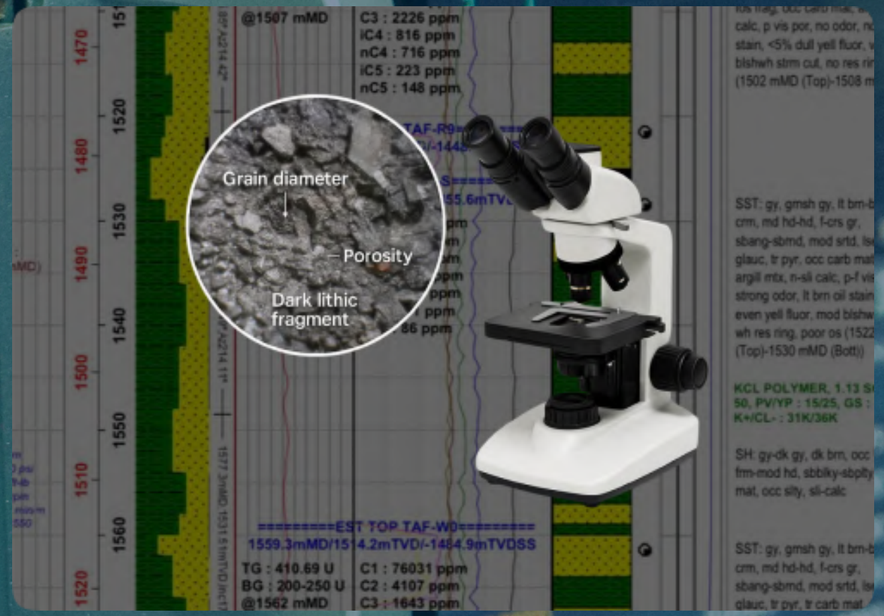


CUTTING & FORMATION EVALUATION

We provide accurate and real-time analysis and interpretation of drilling lithology by experienced experts, equipped with calibrated gas readings to precisely determine productive well zones.

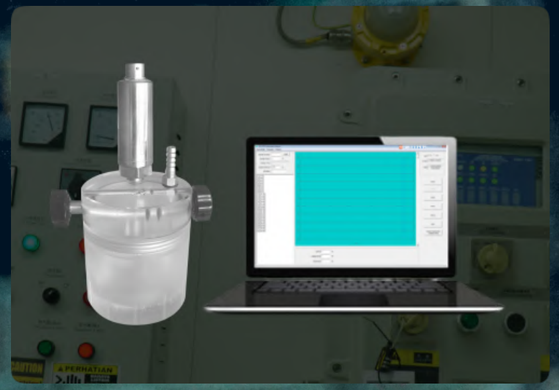
Activities:

- Lithology description & hydrocarbon fluorescence tests
- Lag time & depth measurements
- Data reporting & direct coordination with Company Man and Well Site Geologist

MUD LOGGING

PT. MUSTIKA PETROTECH INDONESIA

GEOLOGICAL SUPPORT EQUIPMENT



1. SK-2T05 Carbonate Analyzer: Calorimetry used to assist in determining lithology, especially the content of Calcite ($CaCO_3$) and Dolomite ($CaMg(CO_3)_2$).

2. SK-2N01G Shale Density Meter: Shale Density is equipment used to measure the specific gravity of drilling rock samples, especially the specific gravity of shale. By measuring the density of shale rock, changes in pressure of the drilled layers can be detected and the possibility of formations under abnormal pressure can be predicted. Abnormal pore pressure in formations is very dangerous for oil wells and can cause well kicks, well blowouts, well loss, diameter shrinkage of the borehole, stuck pipes, and so on.

MUD LOGGING

PT. MUSTIKA PETROTECH INDONESIA

GEOLOGICAL SUPPORT EQUIPMENT

3. X-Ray Diffraction (XRD) and X-Ray Fluorescence (XRF): These are newly introduced and continuously developing geochemical mudlogging techniques in recent years. Based on the principles of X-ray diffraction and X-ray fluorescence spectrometry, and using drill cuttings and core samples as analysis objects, this device can measure up to 30 chemical elements, from magnesium (atomic number 12) to uranium (atomic number 92), and determine the mineralogical composition of rocks. This methodology not only allows for the identification of lithology types that are difficult to recognize with conventional logging methods for various reasons but can also be applied for petrophysical interpretation, stratigraphic division, formation boundary determination, and horizon correlation, evaluation of shale brittleness in shale gas/oil reservoirs, as well as assisting in geosteering activities as an additional approach. In fact, this method also has the potential to be used as an indicator of sedimentary environmental conditions and sedimentary facies research, although its application is still in the development and exploration stage.

MUD LOGGING

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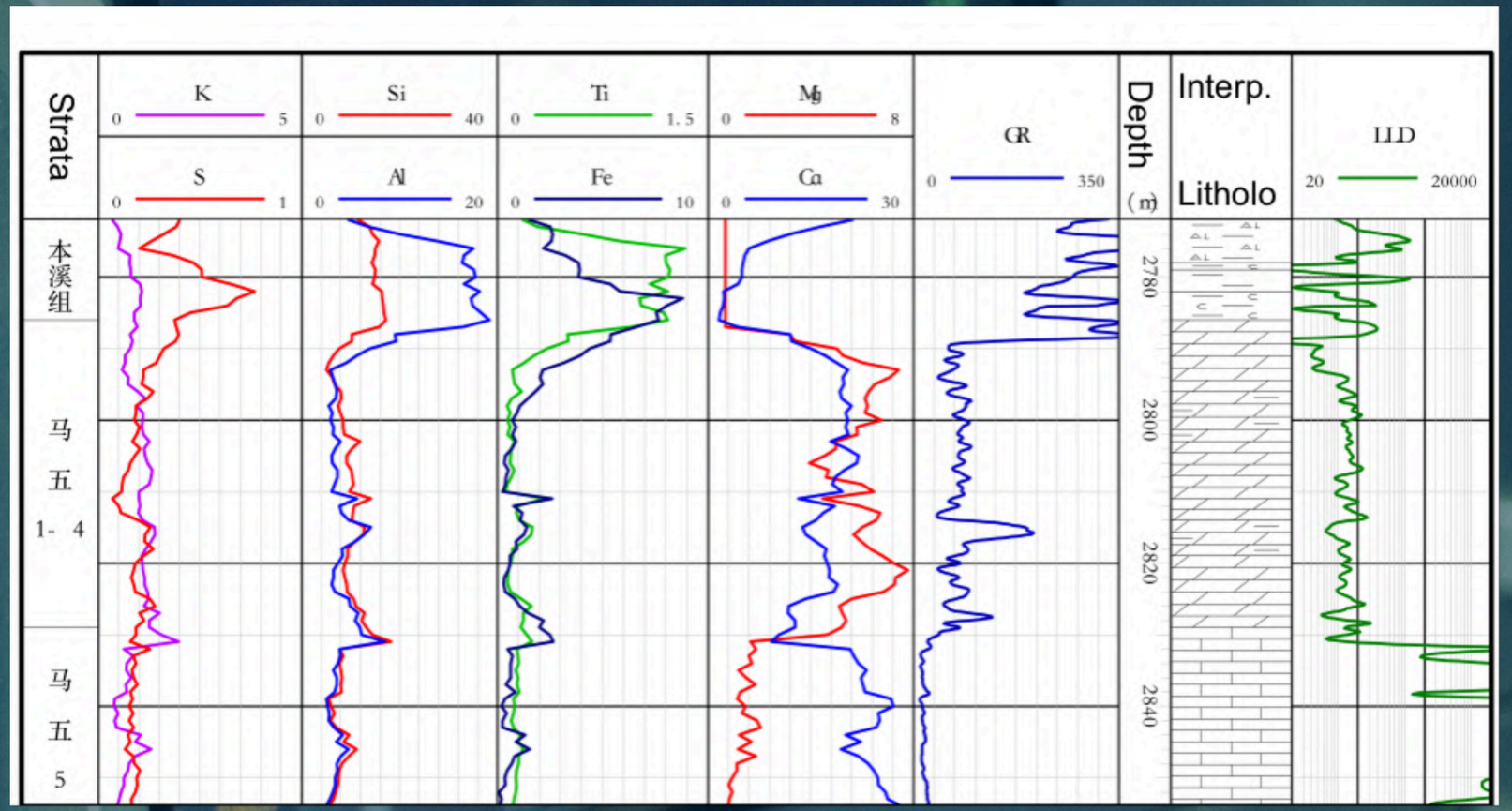
LITHOLOGICAL INTERPRETATION LIMESTONE / DOLOMITE



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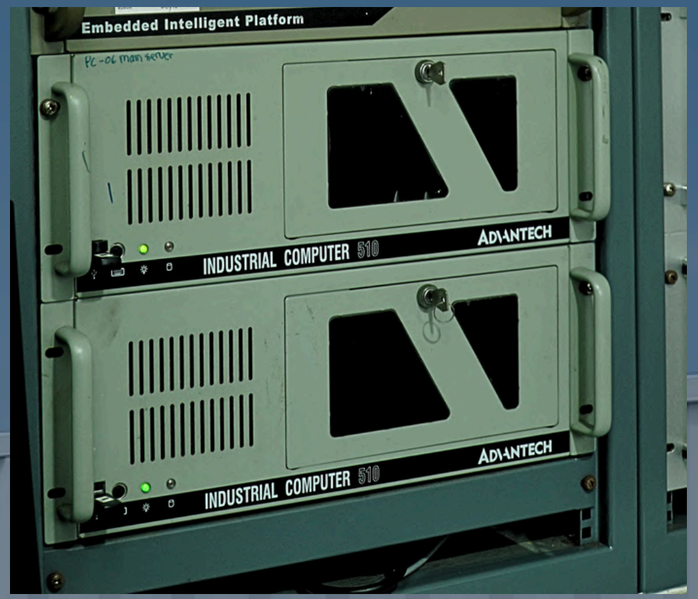
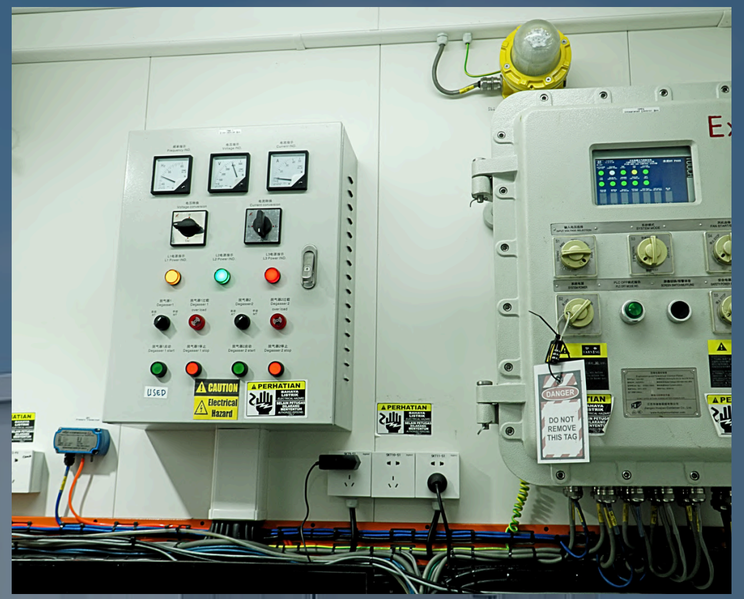
Mud Logging Unit

MUD LOGGING

INSTRUMENTS AND EQUIPMENT

Mud Logging Unit





MUD LOGGING

INSTRUMENTS AND EQUIPMENT

Mud Logging Unit

Depth Sensor

Sensor Type : Drawworks Encoder,
Principle Of Operation : Encoder counts on turns of Drawwork Drum,
Mounting : Pipe fittings thread in line with drum clutch quick release,
Accuracy : 8 count or 20 count / Revolution available,
Operating : Temperature -15ºF to 160ºF (-26ºC to 71ºC),
Humidity : 99% RH without condensation,
Signal Output : Logic low and high, 0 and 5 VDC

Pit Level Sensor

Model : Sonic,
Sensor Type : Potentiometer,
Range : 0 – 2.8 m,
Sensitivity : ±1 %,
Operating Temperature Range : -40ºF to +167ºF, -40ºC to +75ºC,
Operating Humidity Range : 15-100% RH non-condensing,
Input Voltage : 24 VDC,
Power Consumption : 25 mA max,
Quantity : 4 (Fourth)

Pump Stroke Counter

Sensor Type : Proximity switch,
Range : 0 – 400 SPM,
Accuracy / Resolution : 1 SPM,
Operating Temperature Range : -40F to +167F, -40C to +75C,
Operating Humidity Range : 15-100% RH non-condensing,
Outputs : Linear 4-20 mA DC,
Input Voltage : 11.5 – 28 VDC,
Power Consumption : <2 watts @ 24 VDC,
Degree of protection : IEC 60529 IP67 (Pre-wired),
Models : JEM standard IP67g (water proof,oil-proof),
Quantity : 4 (Fourth)

Choke Pressure Sensor

Sensor Type : Pressure Transmitter,
Range : 0 – 10000 psi,
Accuracy / Resolution : 0.5 % / 0.1 % of full scale,
Operating TemperatureRange : -40F to +167F, -40C to +75C,
Operating HumidityRange : 15-100% RH non-condensing,
Outputs : Linear 4-20 mA DC,
Input Voltage : 11.5 – 28 VDC,
Power Consumption : <2 watts @ 24 VDC,
Electrical Classification : **FM Explosion** : roof Class I, II, III , Division I, II ,GroupsA, B, C, D, E, F, G

Hook Load/WOB Sensor

Sensor Type : Pressure Transmitter,
Range : 0 – 750 psi / 0 – 1200 psi,
Accuracy / Resolution : 0.5 % / 0.1 % of full scale,
Operating TemperatureRange : -40F to +167F, -40C to +75C,
Operating HumidityRange : 15-100% RH non-condensing,
Outputs : Linear 4-20 mA DC,
Input Voltage : 11.5 – 28 VDC,
Power Consumption : <2 watts @ 24 VDC,
Electrical Classification : **FM Explosion** : Proof Class I, II, III,Division I, II,GroupsA, B, C, D, E, F, G

Mud Flow Out Sensor

Dimensions : Height 12in (30cm) Depth 12in (30cm) Width 6in (15cm),
Mounting : Saddle on Flow Line,
Principle Of Operation : Paddle senses level of fluid, proximity measurement,
Accuracy : ±1% full scale,
Repeatability : ±1%,
Operating Temperature : -40ºF to +260ºF (-40ºC to +126ºC),
Oprating Humidity : 95% RH without condensation,
Signal Output : 1 – 10VDC

Rotary Table Speed Sensor

Sensor Type : Proximity switch,
Range : 0 – 500 RPM,
Accuracy / Resolution : 1 RPM,
Operating Temperature Range : -40F to +167F, -40C to +75C,
Operating Humidity Range : 15-100% RH non-condensing,
Outputs : Linear 4-20 mA DC,
Input Voltage : 11.5 – 28 VDC,
Power Consumption : <2 watts @ 24 VDC,
Degree of protection : IEC 60529 IP67 (Pre-wired),
Models : JEM standard IP67g (water proof,oil-proof)

Mud Weight Sensor

Sensor Type : Differential PressureTransmitter,
Range : 6.67 – 20 PPG (0.8 – 2.4 SG),
Accuracy / Resolution : ±0.01 SG / 0.03 SG,
Operating Temperature Range : 10C to +80C,
Outputs : Linear 4-20 mA DC,
Input Voltage : 11.5 – 28 VDC,
Power Consumption : 17 mA max,
Degree of protection : IEC 60529 IP67 (Pre-wired),
Models : JEM standard IP67g (water proof, oil-proof)

PT. MUSTIKA PETROTECH INDONESIA

CEMENTING SERVICE

Our Cementing Service provides a cementing unit that pumps special cement (cement slurry) and displacement fluid during the oil and gas well cementing process. The cementing unit is a crucial part of the surface cementing equipment and consists of several key components, including a cement tank, mixing system, and pump unit.

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SOFTWARE RTO & ARCGIS

Digital, real-time monitoring of drilling data from a monitoring center. and a software platform developed for various geographic needs.

PT. MUSTIKA PETROTECH INDONESIA

SOFTWARE
RTO & ARCGIS

SOFTWARE RTO

Real-Time Operation (RTO) is a web-based drilling monitoring system that provides real-time data, dynamic graphs, and 24-hour CCTV monitoring.

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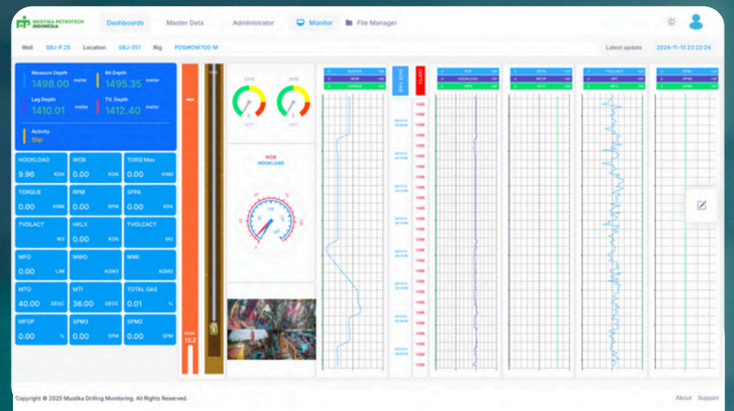
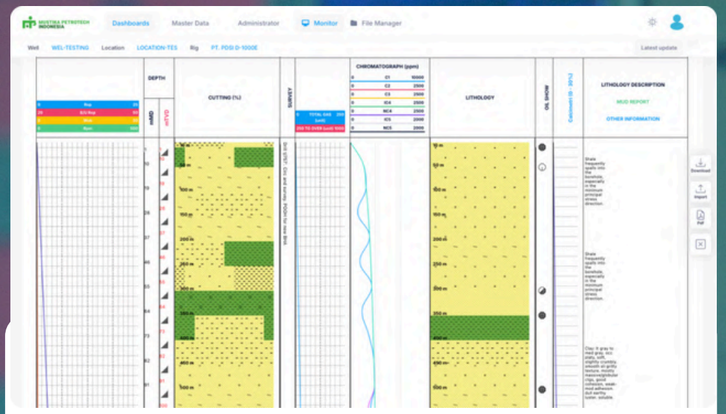
SOFTWARE RTO

RTO's Featured Features



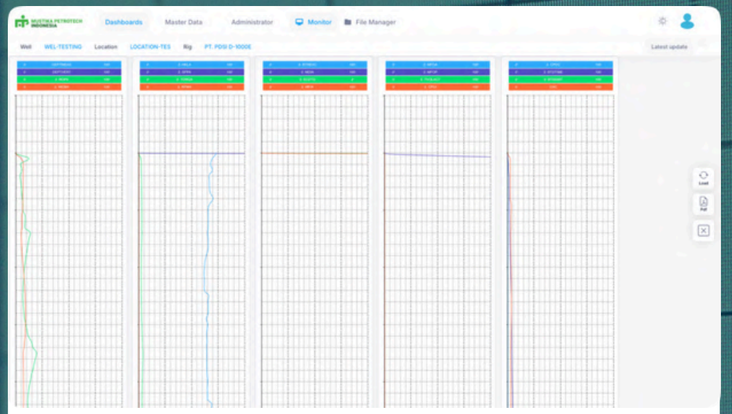
DRILLING PARAMETERS DASHBOARD

- Displays real-time drilling data (WOB, RPM, SPP, Torque, Depth)
- Integrated CCTV
- Access from rig to head office



MUDLOG ONLINE & INTERPRETASI CUTTING

- Real-time rock cuttings analysis from the rig
- More accurate evaluation of prospect zones and lithology
- Integrated with drilling and depth data



HISTORY DATA BY DEPTH AND TIME

- Drill down into data by time or depth
- Automatically export to PDF for professional reporting
- Ideal for audits and project performance evaluations

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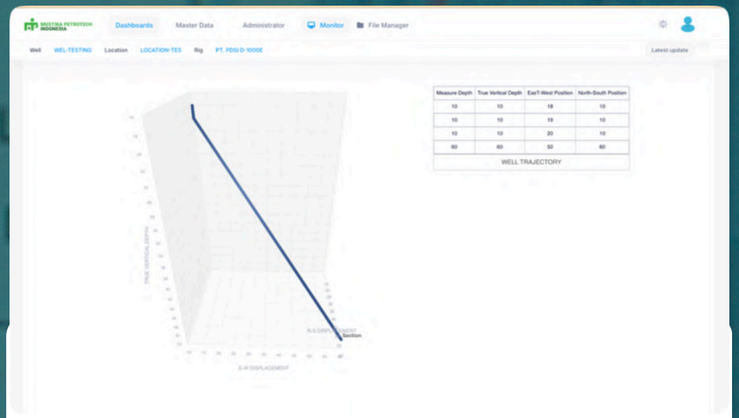
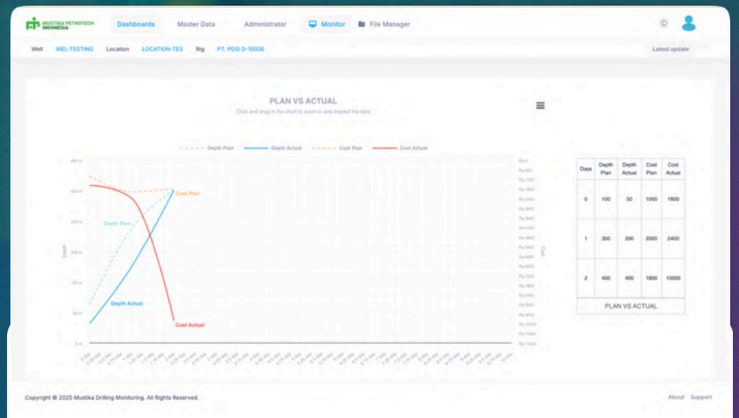
SOFTWARE RTO

RTO's Featured Features



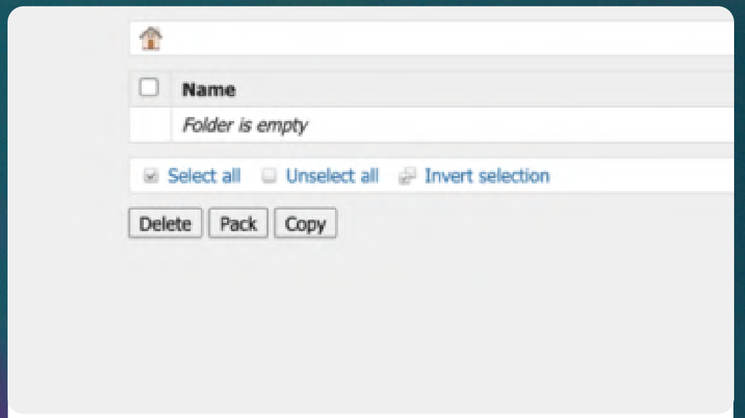
3D WELL TRAJECTORY

- 3D well trajectory visualization (MD, INC, AZI)
- Compare multiple wells simultaneously
- Connect with formation and cuttings data



GRAFIK PLAN VS ACTUAL

- Compare planned and actual drilling (Time, Cost, Depth)
- Detect deviations and cost overruns faster
- Effective tool for daily meetings and project evaluations



SHARING CENTER

- Securely and centrally share data (real-time & historical)
- Access rights based on user roles
- High security: encryption, automatic tokens, and audit logs

SOFTWARE RTO & ARCGIS

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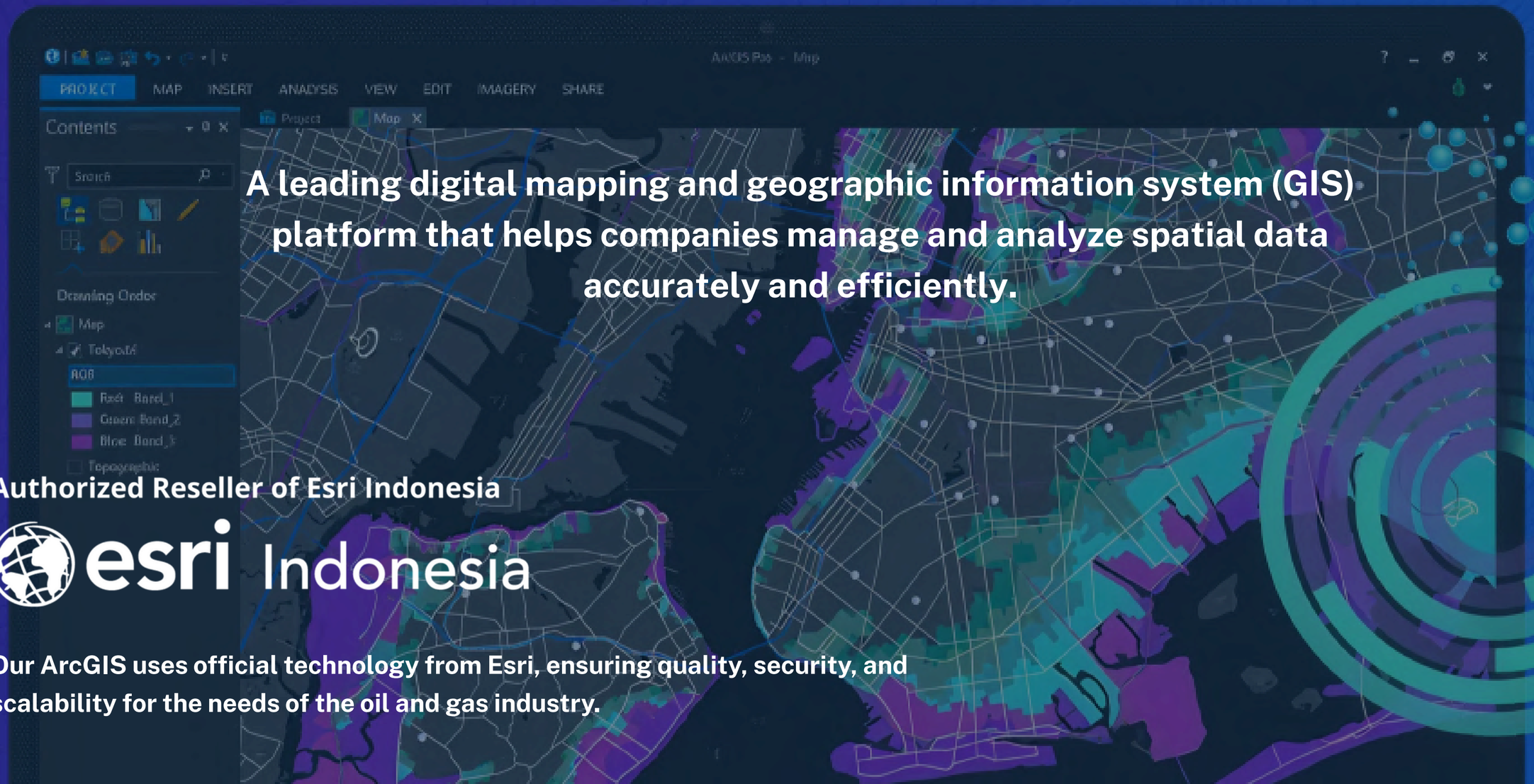

A leading digital mapping and geographic information system (GIS) platform that helps companies manage and analyze spatial data accurately and efficiently.

Authorized Reseller of Esri Indonesia

esri Indonesia

Our ArcGIS uses official technology from Esri, ensuring quality, security, and scalability for the needs of the oil and gas industry.

PT. MUSTIKA PETROTECH INDONESIA

GALLERY PROYEK & KEGIATAN

MUSTIKA PETROTECH
INDONESIA

PT. MUSTIKA PETROTECH INDONESIA

HEAD OFFICE

Gedung Intiland Lt. 6, Jln. Jend. Sudirman Kav. 32
Kel. Karet Tengsin, Kec. Tanah Abang,
Jakarta Pusat 10220

WAREHOUSE

Jakarta

Jln. Iskandar Muda No. 77 JG, Pergudangan Rajawali Blok GBE,
Kel. Neglasari, Kec. Neglasari, Tangerang

Balikpapan

Griya Permata Asri Jln. Tondano No. 137, Kel. Gunung Bahagia, Kecamatan Balikpapan Selatan, Kota Balikpapan Kalimantan Timur

Prabumulih

Jln. Tower Gunung Ibul, GG Sungai Gambir 3 RT 06 RW 03 No 41,
Kel. Gunung Ibul Kota Prabumulih.

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