

M A R I S E R V I C E S D I V I S I O N

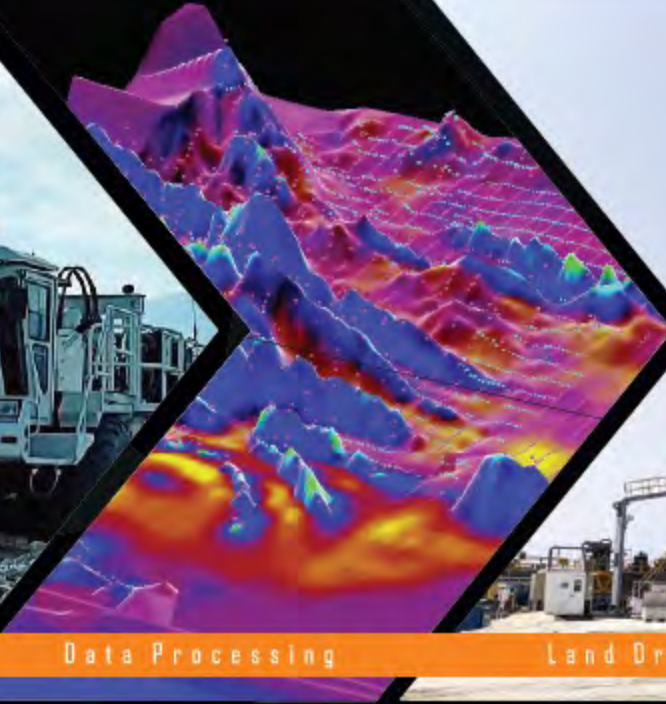
Performance with Purpose



Gravity & Magnetic



Seismic Acquisition



Data Processing



Land Drilling



Mud Logging

Commitment to Health, Safety, Environment & Quality

MPCL while conducting business & operational activities is committed to promote & pursue excellence in the Health & Safety of everyone impacted by our activities. We will take all necessary measures to protect the environment in our surrounding areas with key focus on the development & welfare of communities in our operational areas. Establish accountability & responsibility for HSE within line management for equal importance as all other business processes.

Faheem Haider
MD/CEO MPCL



- 01 ✓ Client Focused HSE Management
- 02 ✓ Capacity Building of Local Contractors
- 03 ✓ Frontline Supervision
- 04 ✓ Revamping of HSE Management System
- 05 ✓ Safety Leadership Program- Phase II
- 06 ✓ Road Transport Safety Management
- 07 ✓ Environmental Legal Compliance

HSEQ Focused Areas

The same people who bring their passion and commitment to their everyday work help to set us apart as an emerging leader in the Services Industry of Pakistan.

Our relentless pursuit towards continuous improvement ensures that every MSD employee keeps safety and customer satisfaction at the forefront of what they do.





Imran Qureshi
Director Mari Services Division

Holds a Master's degree in Petroleum Engineering with Project Management from Heriot Watt University (UK) & a Bachelor's degree in Electrical Engineering from UET, Lahore. He has over 30 years experience of Oilfield Services in Middle East & Europe.



Saqib Niaz
Seismic
Operations



Sajjad Khan
Rig
Operations



Khurram Shahzad
Data Processing



Sufian Ahmed
Business
Development



The Management Team

**Colonel Fahim
Imtiaz Abbasi,
SI (M), (Retd)**
Admin &
Security



Qaiser Mehmood
HSE



Eram Anwar
Supply Chain



Farrukh Saif
Finance



Hamza Shakeel
Human Resource





Mari Drilling Unit (MDU)

With Five Land based Drilling Rigs in our fleet, MDU has provided a field-proven portfolio of Drilling services that have helped our customers achieve unmatched safety and cost savings for a decade and counting.

Our MDU continues to deliver value for our customers in all terrains, ranging from automated to intelligent, our offerings help operators enhance safety, lower well-construction costs, reduce well-control risks, and increase production



Efficient and Cost effective land Drilling Operations



Rig Mari 1

1500 HP Honghua
2007 Manufacture
ZJ 50 DB
4500 m Depth Rating
TDS NOV 11 SA
3 Mud Pumps
3 x Derrick Hyperpool
4 x 3512 B CAT



Rig Mari 3

2500 HP BOMCO
2014 Manufacture
ZJ 80 DB3
7000 m Depth Rating
TDS NOV 8S GB
3 Mud Pumps
3 x Derrick Hyperpool
4 x 3512 B CAT



Rig Mari 4

2000 HP BOMCO
2007 Manufacture
ZJ 70 DB
6000 m Depth Rating
TDS NOV 11 SA
3 Mud Pumps F 1600
3x MI SWACO Mongoose
4 x 3512 B CAT



Rig Mari 5

2000 HP BOMCO
2007 Manufacture
ZJ 70 DB
6000 m Depth Rating
TDS NOV 11 SA
3 Mud Pumps F 1600
3x MI SWACO Mongoose
4 x 3512 B CAT



Rig Mari 6

750 HP SJ PETRO
2024 Manufacture
ZJ 30 DBT
2500 m Depth Rating
TDS Tianyi
2x F-800 Triplex
2x Brightway BWZS103
3x CUMMINS KTA50-GS8

Mari Seismic Unit (MSU)

Mari Seismic Unit provides globally acclaimed technology for land Seismic Data Acquisition, which has been tried and tested under diverse environmental and geological challenges.

Established in 2013, MSU is committed to achieve excellence and remains in quest to acquire the latest gadgetry/equipment as seeking technological advancements as a business priority



Global Technology with Local Advantage



Crows and Camp

3 x Dedicated Crews
Owned HTV LTV Fleet
Ambulance
Tractors
Mobile Workshop
25 Ton Crane



Survey Equipment

Trimble R12
GNSS RTK
TSC3 Controller
TDL 450H
GARMIN GPS MAP 64S
Trimble Business Centre
Survey Advanced



Source Equipment

EMCI Man portable Rigs
Tractor Mounted Rigs
Atlas Copco Compressor
CobraCombi Jack
Hammers
ShotPro HD SGDS
NOMAD 65 Vib
Flush Drilling Units



Acquisition System

3 x Sercel 508 XT
1 x Sercel 428 XL
SG10 Land Geophones
SG-10 Marsh-Phone
FDUs 508-XT



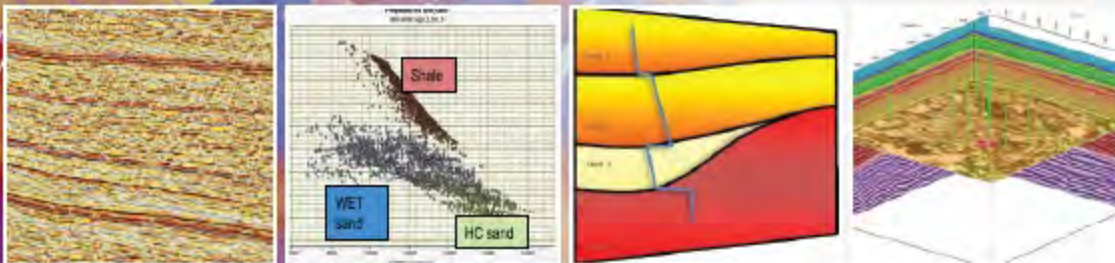
Uphole Equipment

G8 DrillMec Italy
StrataVisor NZXP
SeisImager/2D Refraction
Analysis
SeisImager Down Hole
Software
Omega2/Omni/Mesa

Mari Seismic Processing Center (MSPC)

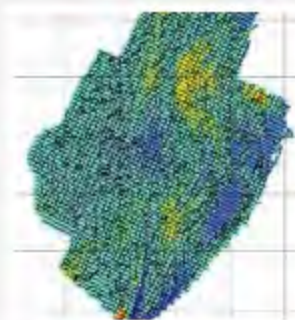
MPCL's 2D/3D Seismic Data Processing Center is powered by CGG's Geovation Software Suite, which brings together the latest geophysical technology across the full spectrum of seismic processing and imaging to provide results that are best in class.

Established in January 2014, with the objective to undertake processing of newly acquired data as well as reprocessing/QC of 2D/3D seismic data, in addition to undertaking hotshot/parallel processing of key 2D seismic lines and priority 3D cubes. The purpose confirmed processing results of other lithology/depth of reservoir and structural features. Moreover, readily available in-house processing capabilities provide quick processing of newly acquired seismic data up to PSTM level during the ongoing seismic acquisition program.

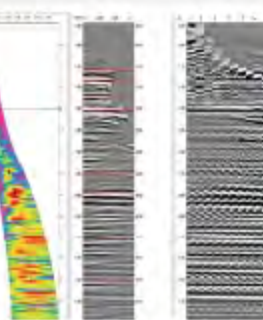


Benchmark Software, Exceptional Results

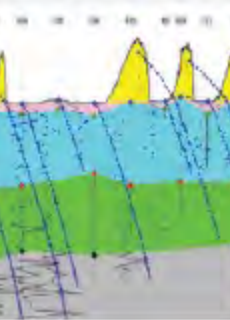
Attributes Mapping & Seismic DATA



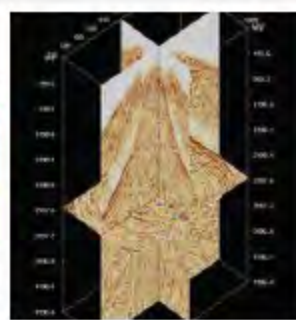
Velocity Analysis 2D / 3D



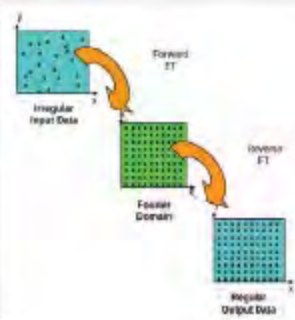
Near Surface Modelling



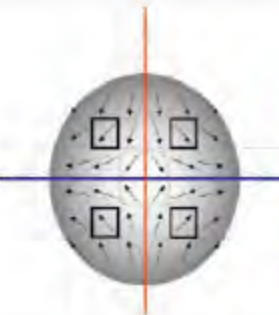
Noise Attenuation (Surface Waves)



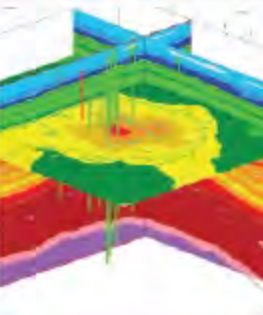
Regularization & Interpolation



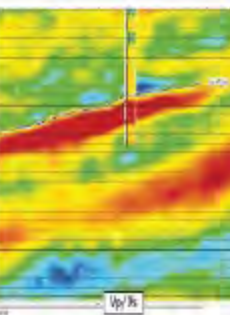
Migration in COV Domain



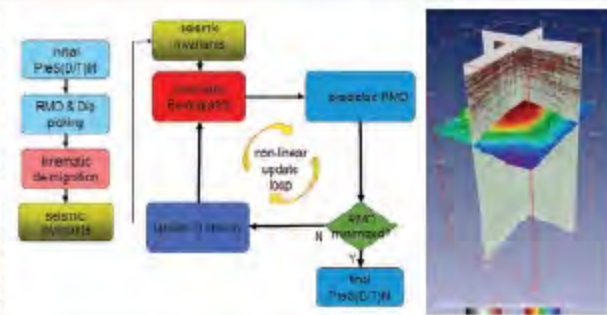
Depth Velocity Model Update & Migration



Seismic AVO Inversion



Time & Depth Tomography



Improving real time performance and reducing costs

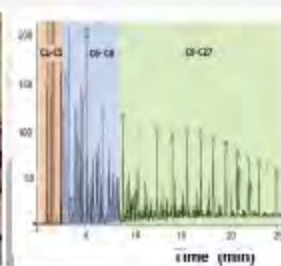
Mari Mud Logging Unit (MMLU)

As part of the Mari Services Division (MSD), the Mari Mud Logging Unit (MMLU) monitors drilling activities from spud till completion with critical mud logging data to enhance the drilling efficiency.

By utilizing top-notch equipment from Geolog Italy, MMLU strives to provide necessary support during core drilling operations.

The Mud Logging unit is certified for DNV 2.7-1 (Det Norske Veritas), Magnetoscopic Test MPI 100 for all structural weld joints, and Container Safety Convention (CSC).

The unit under class A – 60 is approved to sustain the average temperature of 140 degrees above the actual temperature for 60 minutes and is certified for STANAG 3542 Edition 5.



Hardware Configuration of MMLU

Advanced Mud Logging Unit – 25 feet

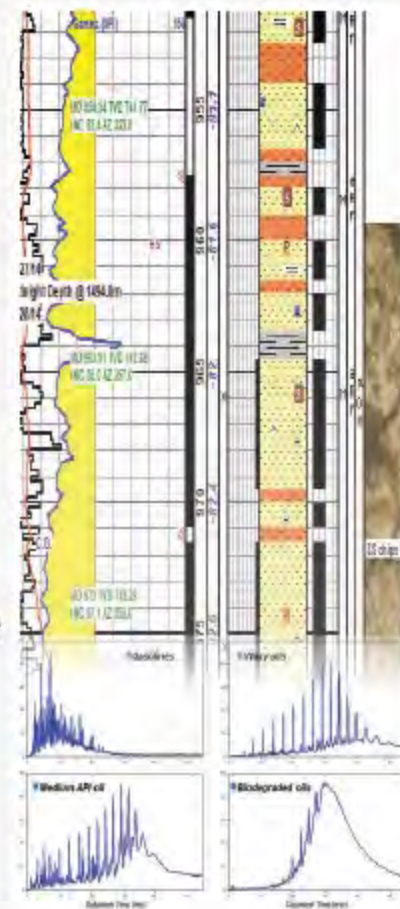
- DNV 2.7-1 (A60) Pressurized ML Unit 25 feet -Slings
- Signal/Data Acquisition system (Hardware) equipped with N.2 UPS
- Signal/Data Acquisition system

Software Equipment and Sensors

- Integrated Barrier System (IBS)
- Emergency Alarms System and Schematic
- Acquisition System
- Total Gas Detector (TGD)
- Dual FID Gas Chromatograph

Software Configuration

- **SAERT (System of Acquisition and Elaboration in Real Time) Architecture:**
- Integration of CompacRio for analog and digital slots with faster real time data treatment and more acquisition channel system with large amount of smart sensors in a single segment. Saert Virtual Machine consists of the following database programs.
- LGIMAS
- CATALOG
- GeoDesk
- GWM (Geolog Well Manager)
- Log Viewer
- DDE (Depth Data Editor)
- Virtual Printer
- GSR (Geolog Snap Recovery)
- Geolog Server.

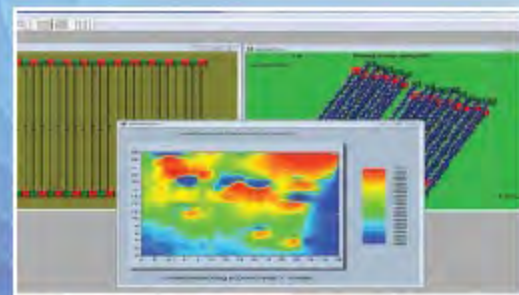


Mari Gravity & Magnetic Survey Unit (MGMS)

As part of the Mari Services Division (MSD), the Mari Gravity & Magnetic Unit is the latest addition to the Services Portfolio of MSD.

We utilize the latest Gravimeters to determine the location of a salt dome in which oil or gas could be present. Measuring the density change in an oil reservoir can assist in the oil and gas recovery process. Moreover, Gravity can be used to complement the results of geological mapping, and impact basins.

We utilize Magnetometers for mineral exploration, geological mapping, archaeological investigations and environmental and geotechnical applications

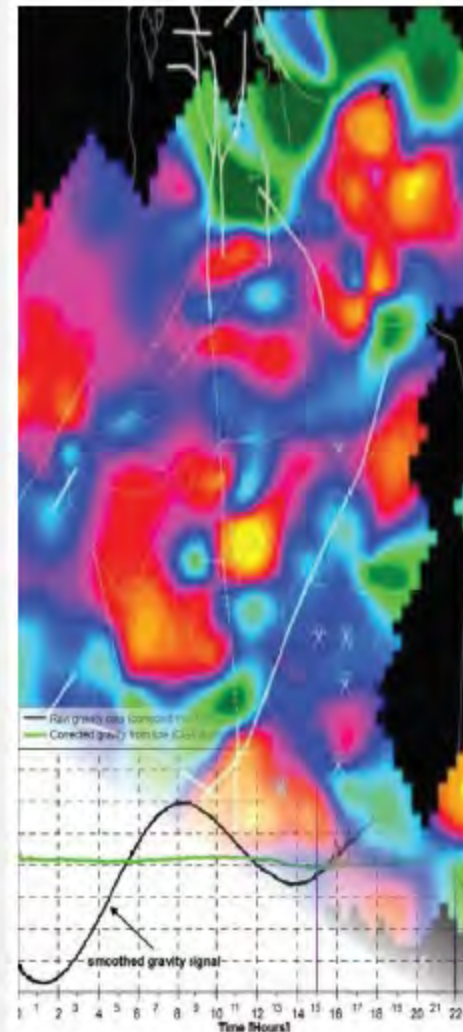


SURVEY GRAVITYMETER SPECIFICATIONS

- Reduced Stabilization Time Between Readings
- All-Weather Operation (-40 to +45 °C)
- Dust-Proof, Water Resistant Meter
- Intuitive Survey-Driven Interface, Backlit Inclined Display
- Robust Fused-Quartz Sensor, No Clamping Required
- On-Board GPS Receiver, Bluetooth Connectivity
- Simplified Leveling Interface, On-Board Mass Storage (4 GB)
- Hot-Swappable Dual High-Capacity Batteries (24 hr at 25 °C)
- 5 microGal Repeatability
- Tares Under 5 microGal for up to 20 g Shocks
- Low Drift Sensor (Uncorrected: < 200 microGal/day)
- Low Residual Drift (< 20 microGal/day)
- Automated Corrections (Tides, Tilts, Drift, Temperature)

SURVEY MAGNETOMETER SPECIFICATIONS

- Sensor: Self-oscillating split-beam Caesium Vapour (non-radioactive)
- Operating Range: 20,000 nT to 100,000 nT
- Sensitivity: < 0.004 nT/Hz rms
- Absolute Accuracy: < 3 nT throughout range
- Data Output: Serial logger, removable USB memory stick
- Data Format: ASCII, MS Windows PC compatible, FAT32 file format
- Data storage: 22 days while recording magnetometer at 10 Hz and GPS at 1 Hz.
- Weatherproof: O-ring sealed for operation in the rain and/or 100% humidity
- Power: 10 to 36 VDC, 30 Watt or 110-220VAC (50-60Hz)



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Health Safety Environment



Certified Organization for ISO Standards & Guidelines

