Del Mar Energy Inc.

FIELD DEVELOPMENT

Direction: Oil and Gas

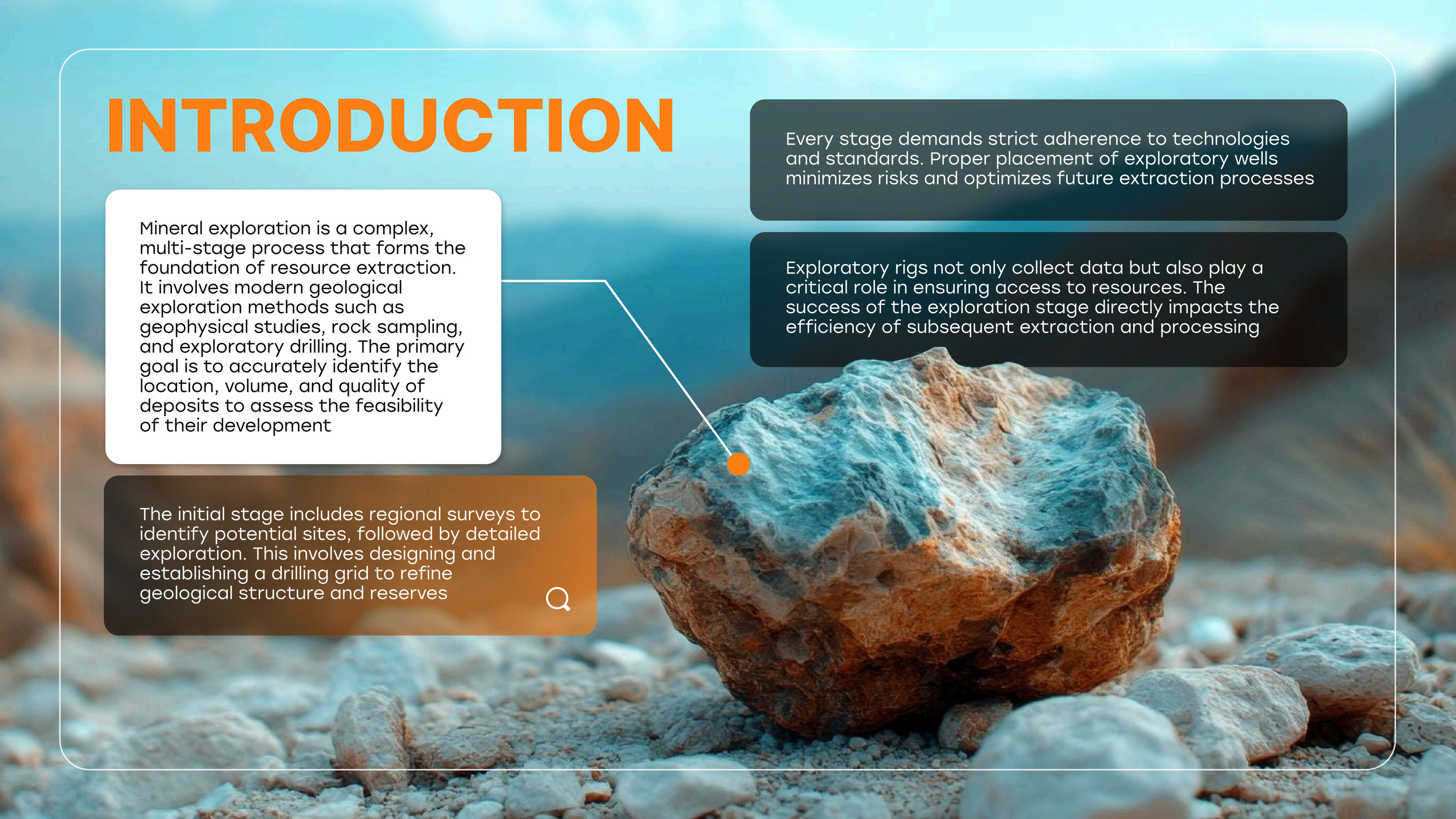
INTRODUCTION

Mineral exploration is a complex, multi-stage process that forms the foundation of resource extraction. It involves modern geological exploration methods such as geophysical studies, rock sampling, and exploratory drilling. The primary goal is to accurately identify the location, volume, and quality of deposits to assess the feasibility of their development

The initial stage includes regional surveys to identify potential sites, followed by detailed exploration. This involves designing and establishing a drilling grid to refine geological structure and reserves

Every stage demands strict adherence to technologies and standards. Proper placement of exploratory wells minimizes risks and optimizes future extraction processes

Exploratory rigs not only collect data but also play a critical role in ensuring access to resources. The success of the exploration stage directly impacts the efficiency of subsequent extraction and processing



WELL GRID PLANNING FOR EFFECTIVE EXPLORATION

Proper planning and design of exploratory well grids are key to successful mineral exploration. The spacing between wells must align with the area’s geological and morphological characteristics, resource depth, and other critical factors. This spacing is determined through meticulous analysis to maximize exploration efficiency and minimize costs

The triangulation method is often used to design the grid. This triangular structure accommodates more wells within a given area, enhancing deposit evaluation accuracy. This approach is particularly important for complex geological formations with multi-layered deposits

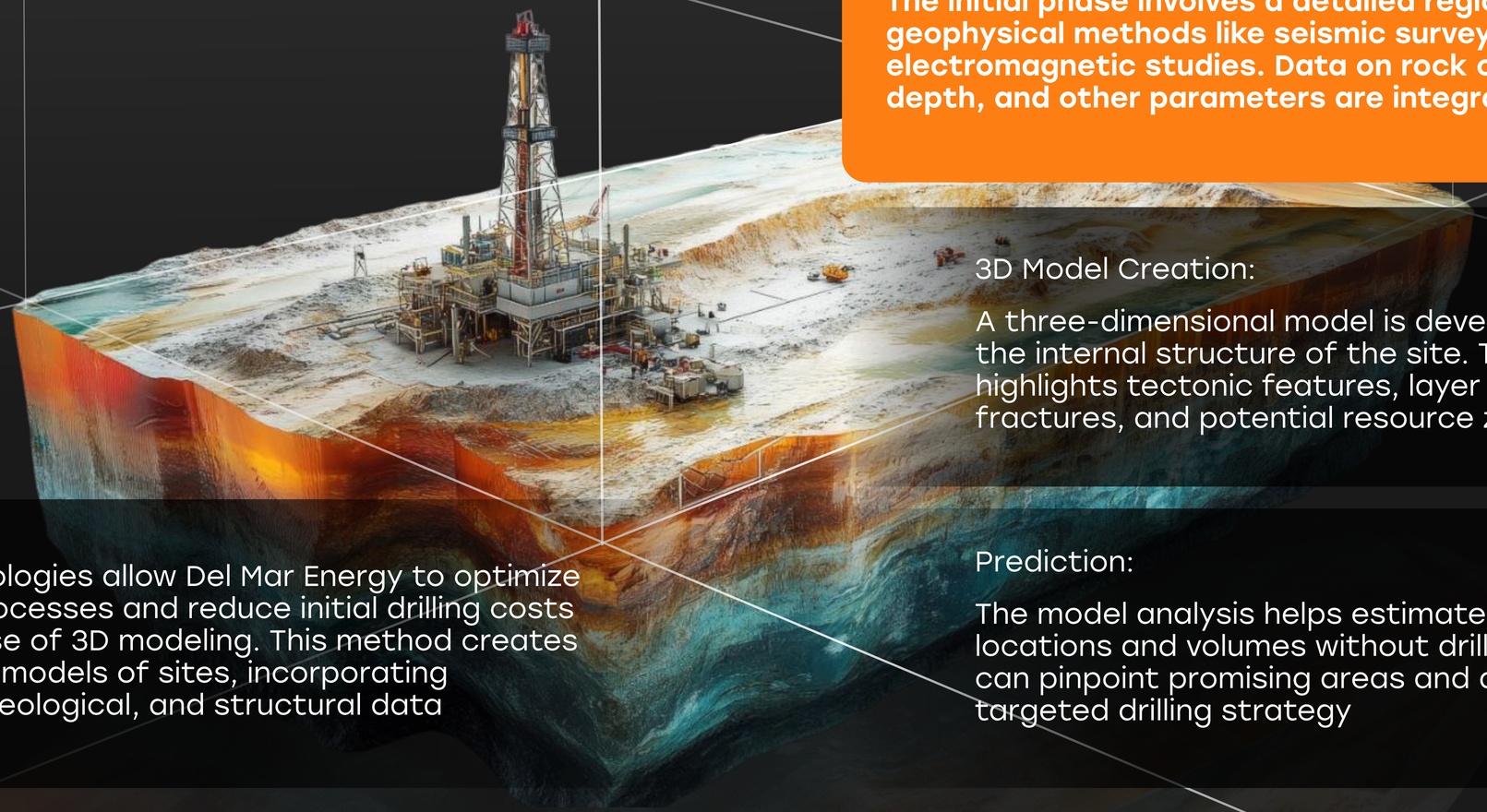
KEY FACTORS FOR SUCCESSFUL GRID DESIGN:

- **Geological and physical characteristics** of the area, including rock type, tectonic features, and resource depth
- **Development methods and equipment** to be used during extraction
- **Resource composition and properties**, including chemical and physical parameters and interaction with aquifers
- **Reservoir conditions** (oil, gas, or other resources), which influence operational methods
- **Component percentages** in the extracted mixture, critical for selecting processing technologies

For fields with multi-layered deposits, grid design is particularly challenging. Interactions between layers must be considered to avoid resource loss and ensure process safety

Strategically placed exploratory wells during this stage lay the groundwork for efficient resource extraction, reducing errors and improving project profitability

3D MODELING: THE FUTURE OF EXPLORATION



Modern technologies allow Del Mar Energy to optimize exploration processes and reduce initial drilling costs through the use of 3D modeling. This method creates precise digital models of sites, incorporating geophysical, geological, and structural data

HOW IT WORKS:

Data Collection: 01

The initial phase involves a detailed regional analysis using geophysical methods like seismic surveys, gravimetry, and electromagnetic studies. Data on rock characteristics, depth, and other parameters are integrated into the model

3D Model Creation: 02

A three-dimensional model is developed, visualizing the internal structure of the site. The model highlights tectonic features, layer locations, fractures, and potential resource zones

Prediction: 03

The model analysis helps estimate deposit locations and volumes without drilling. Specialists can pinpoint promising areas and devise a targeted drilling strategy

ADVANTAGES OF 3D MODELING

Cost Reduction:

Eliminates “blind” drilling, reducing preparation expenses and potential failures

Risk Minimization:

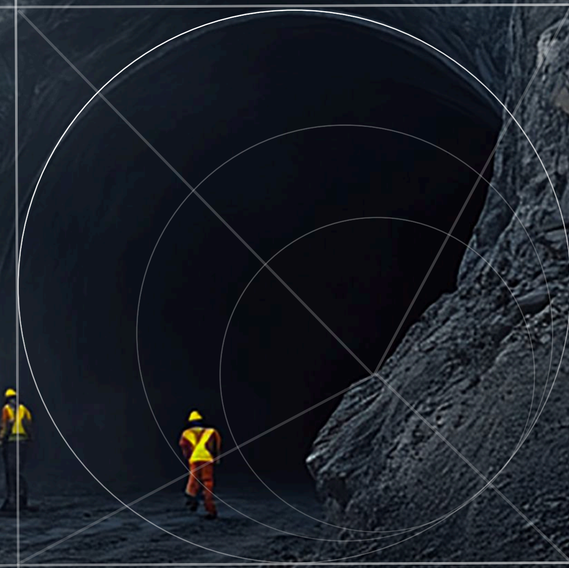
Enhances precision in selecting exploratory well locations, avoiding unproductive drilling

Environmental Safety:

Fewer wells mean less environmental impact

Development Optimization:

Accurate geological data enables efficient well grid planning and shorter exploration timelines

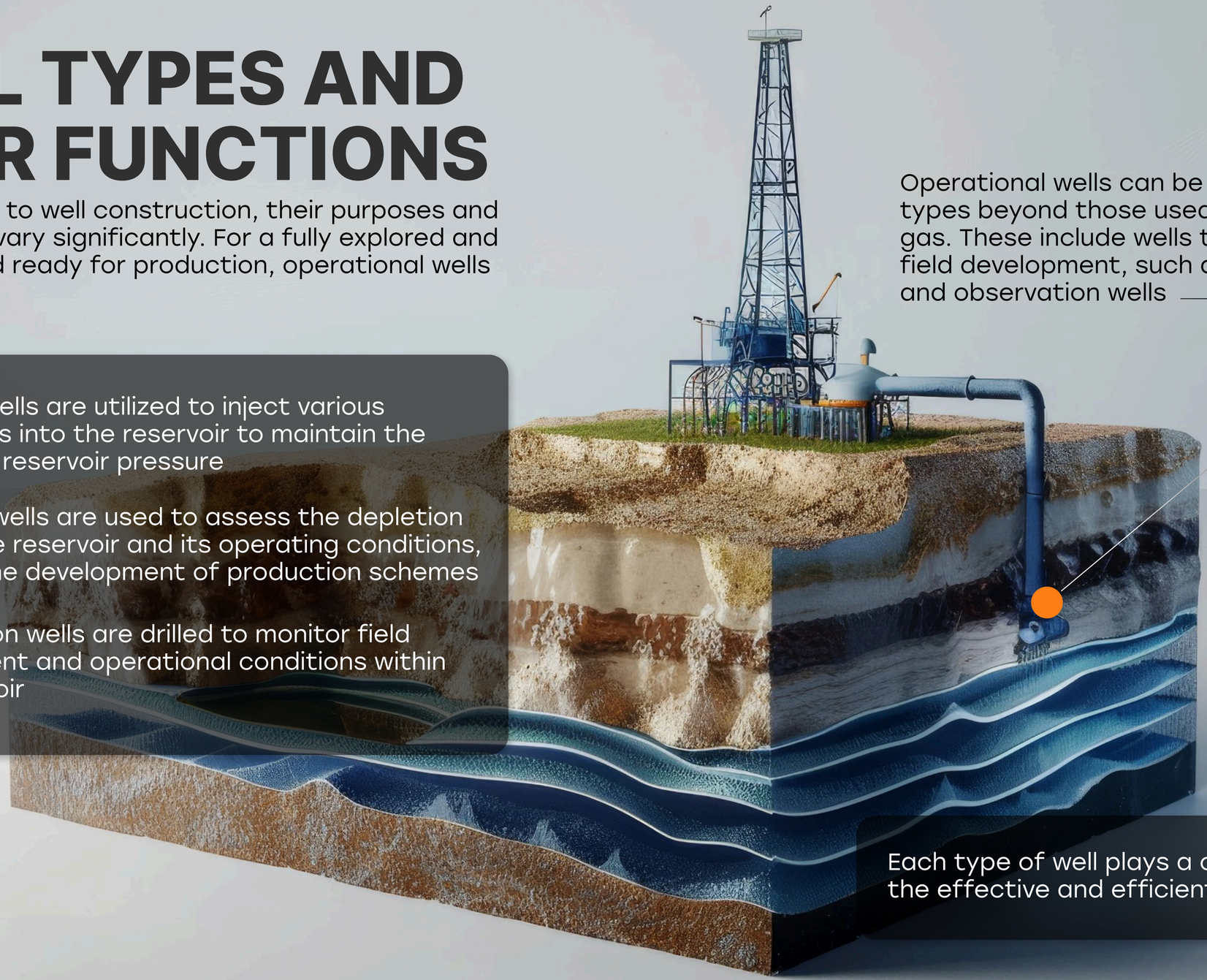


3D modeling has become an essential tool for industrial companies aiming to cut costs and boost profitability. It allows a focus on the most promising deposits, saving resources during initial stages

WELL TYPES AND THEIR FUNCTIONS

When it comes to well construction, their purposes and functions can vary significantly. For a fully explored and developed field ready for production, operational wells are drilled

- Injection wells are utilized to inject various substances into the reservoir to maintain the necessary reservoir pressure
- Appraisal wells are used to assess the depletion level of the reservoir and its operating conditions, aiding in the development of production schemes
- Observation wells are drilled to monitor field development and operational conditions within the reservoir



Operational wells can be divided into several types beyond those used for extracting oil and gas. These include wells that ensure efficient field development, such as injection, appraisal, and observation wells

Each type of well plays a crucial role in ensuring the effective and efficient development of a field

- Overall, the geology and exploration of oil and gas fields, as well as production operations, do not rely on a single well. Even when considering the design of a production facility of this type, its structure is largely determined by the number of additional wells and the number of casing strings lowered into the well during drilling and subsequently cemented

- It is extremely rare to see single-string wells equipped only with a production casing. A well with one production casing and one intermediate casing is referred to as a two-string well, and so on

- Exploration, construction, and operation of wells are far from simple tasks. These processes require a high level of professionalism and a comprehensive understanding of all aspects involved

WELL DESIGN AND PROFESSIONAL OPERATIONS

PROPERTIES OF GAS CONDENSATE

- Gas condensate is a mixture of propane, propylene, isobutane, and butylenes that transitions from a gaseous state to a liquid under pressure. It forms during oil well development or serves as an independent raw material extracted from resource-rich areas

KEY CHARACTERISTICS OF GAS CONDENSATE:

- Low density
- High boiling point (up to 250°C)
- Molecules contain at least 5 carbon atoms (C_5H_{12} and higher)
- Gas factor: 1,400–12,500 m^3/m^3
- Specific gravity in the atmosphere: 0.74–0.78 g/m^3
- Possible additional components: N_2, CO_2, H_2S, He, Ar

GAS CONDENSATE APPLICATIONS AND EXTRACTION

After processing, gas condensate is used as motor fuel and in the chemical industry

FEATURES OF NATURAL “GASOLINE” EXTRACTION:

To maintain reservoir pressure, methods such as water injection or closed-loop cycles are used. During the exploration stage, field development planning accounts for the optimal number of injection and production wells

It is crucial to consider the risks of condensate drop-out in the reservoir or wellbore when pressure and temperature decrease, as well as the multicomponent composition of emulsions. Advanced technologies are required to separate the so-called “white oil”

KEY STAGES OF OIL AND GAS FIELD DEVELOPMENT

Developing oil and gas fields involves a series of activities to prepare and operate new sites for hydrocarbon extraction. Crude oil undergoes primary processing immediately after extraction

KEY STAGES OF FIELD DEVELOPMENT:

- Designing pilot exploitation projects and technological development plans
- Defining operating conditions, field structure, and the physical and chemical properties of fluids
- Conducting studies and evaluating potential development options to select the best solution

FIELD DEVELOPMENT SYSTEMS

THE FIELD DEVELOPMENT SYSTEM INCLUDES:

Extraction methods and technical-economic justification, such as investment costs and oil recovery factors

KEY FEATURES:

Efficiency of development technologies. Technologies can vary regardless of the development system

TECHNOLOGICAL ASPECTS OF THE PROCESS:

Current and cumulative extraction volumes

Field development rate

Water and impurity content

Reservoir pressure and temperature

FACTORS AFFECTING OIL RECOVERY

FACTORS INFLUENCING OIL EXTRACTION EFFICIENCY:

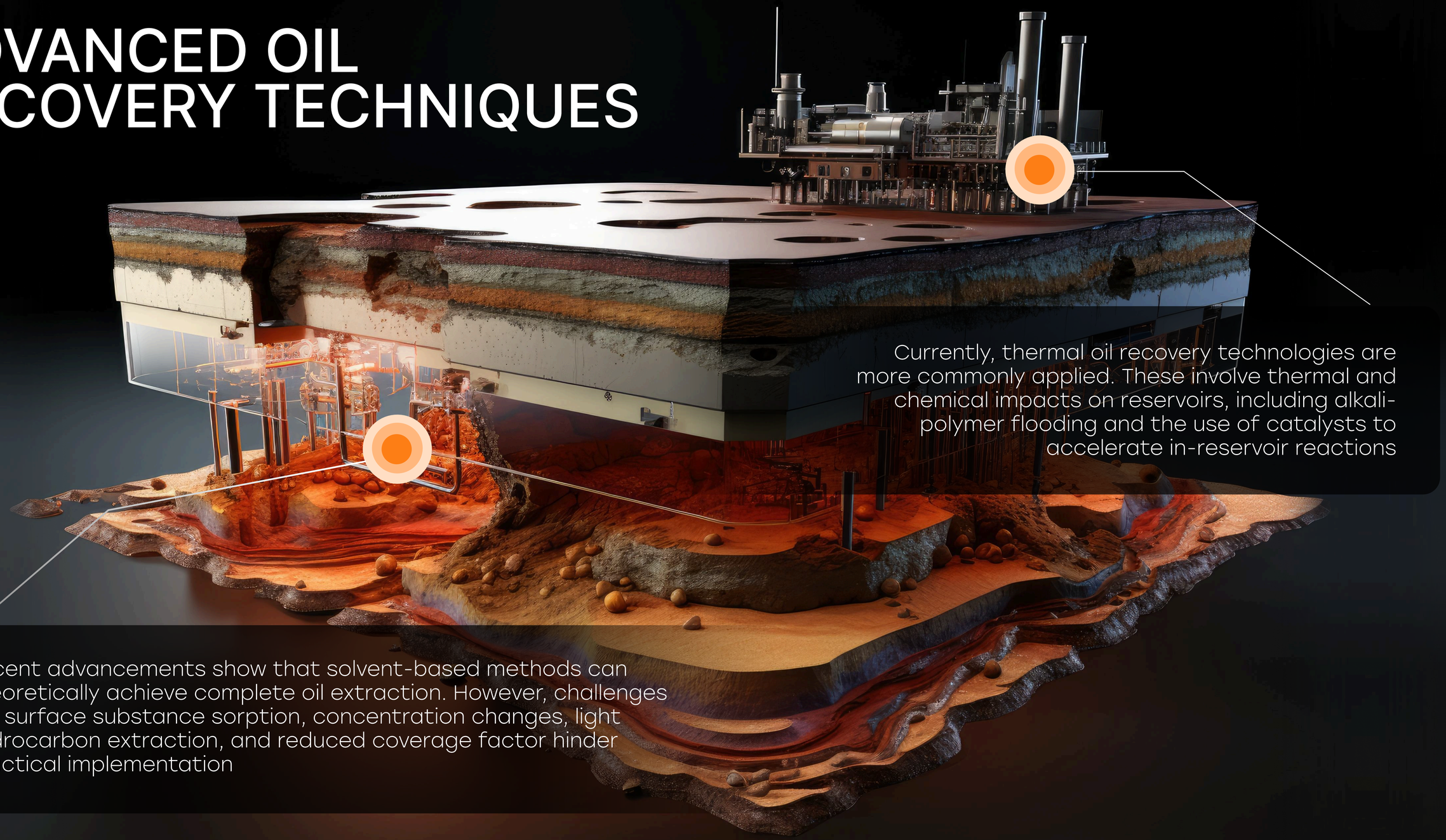
- Oil viscosity
- Reservoir permeability

Long-term field development under elastic mode is not feasible due to declining reservoir pressure

Water injection technology is widely used to enhance oil recovery, increasing it by up to 0.6 units. However, this method is only effective with low-viscosity materials

Physical-chemical approaches such as solvent or gas injection, polymer solutions, improve oil mobility, reduce viscosity, and lower oil-water adhesion. These methods can increase oil recovery by 5–20%, depending on the chosen approach

ADVANCED OIL RECOVERY TECHNIQUES



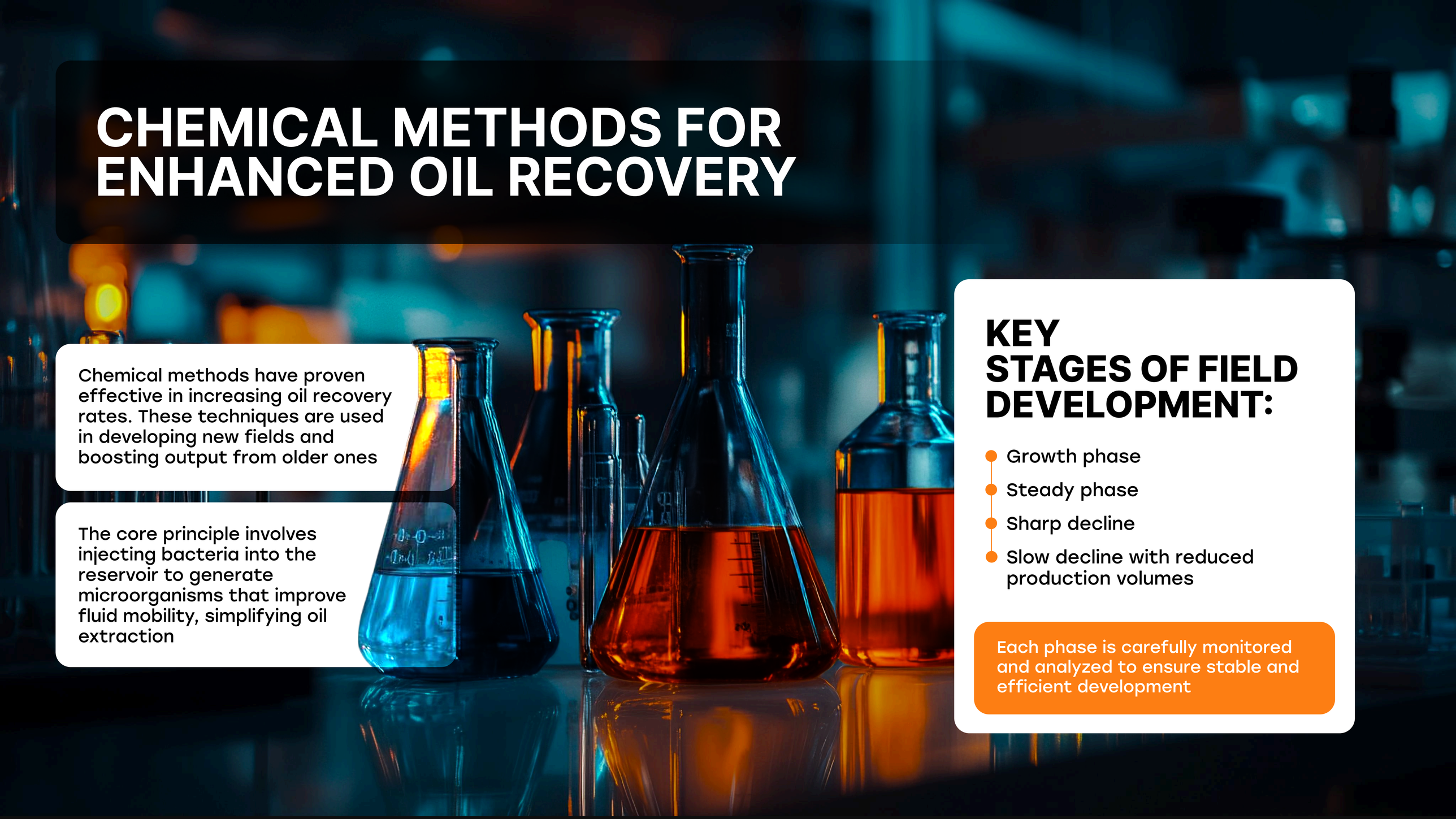
Currently, thermal oil recovery technologies are more commonly applied. These involve thermal and chemical impacts on reservoirs, including alkali-polymer flooding and the use of catalysts to accelerate in-reservoir reactions

Recent advancements show that solvent-based methods can theoretically achieve complete oil extraction. However, challenges like surface substance sorption, concentration changes, light hydrocarbon extraction, and reduced coverage factor hinder practical implementation

CHEMICAL METHODS FOR ENHANCED OIL RECOVERY

Chemical methods have proven effective in increasing oil recovery rates. These techniques are used in developing new fields and boosting output from older ones

The core principle involves injecting bacteria into the reservoir to generate microorganisms that improve fluid mobility, simplifying oil extraction



KEY STAGES OF FIELD DEVELOPMENT:

- Growth phase
- Steady phase
- Sharp decline
- Slow decline with reduced production volumes

Each phase is carefully monitored and analyzed to ensure stable and efficient development

EQUIPMENT

Del Mar Energy Inc produces both welded and modular equipment. Upon request, individual components such as distillation cubes, grates, and other parts can be manufactured. Column equipment can also be supplied with spare partsor serviced by company specialists under contract agreements

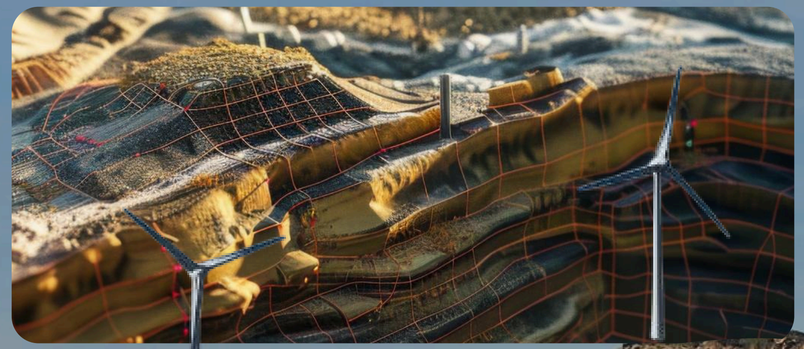
MATERIALS USED:

We use only high-quality steels and alloys, including ST3SP, ST20, 09G2S, 12X18H10T, 08X1858H2T, AISI 304, AISI 314, AISI 316, and heat-resistant chromium-molybdenum steels 12XM and 15XM. Products are manufactured in an H_2S 20YUCH environment to enhance durability and reliability

MANUFACTURING

RESPONSIBLE RESOURCE DEVELOPMENT FOR A SUSTAINABLE FUTURE

Field development is the foundation of the energy sector and a critical driver of stable economic growth



Del Mar Energy Inc. is committed to efficient and environmentally responsible resource development, combining advanced technologies, innovative approaches, and exceptional professionalism

We believe that field development is not just about resource extraction but also a contribution to building a sustainable energy future. Together with our partners, we continue to design and implement solutions that meet the long-term needs of the economy and society

GLOBAL OIL DEMAND FORECAST

- Our analysts predict that global oil demand will rise to 110 million barrels per day by around 2045. By this time, oil is expected to maintain a 29% share of the global energy mix

- With the expansion of the global economy, the demand for oil and gas is unlikely to decline

PROVEN SUCCESS IN GLOBAL PROJECTS

Our holding has completed over 300 projects in more than 40 countries, ranging from project documentation to refinery construction

INVESTMENT OPPORTUNITY EXAMPLE:

- **Minimum deposit:** $20,000
- **Deposit term:** 223 days
- **Balance after 223 days:** $53,074
- **ROI:** 265.37%

ABOUT THE COMPANY

Del Mar Energy Inc. is an American company specializing in the extraction, processing, and sale of oil. Additionally, the company is engaged in:

- Production and distribution of electricity
- Manufacturing, repair, and rental of electromechanical equipment
- Design and construction of wind, solar, and geothermal power plants
- Coal and gas mining
- Design and construction of oil and gas facilities

Founded in 2002 with just a few oil rigs, the company began developing its own technologies and implementing them in production by 2012. Today, 91% of our products are exported to over 40 countries worldwide

LEADERSHIP TEAM

MICHAEL LATHAM

Founder/CEO

Michael Latham is the founder and CEO of Del Mar Energy. He established the holding company in 2002 in Texas, successfully building and growing industrial sectors

NICK KAUFMAN

COO (Chief Operating Officer)

Nick has served as COO since 2018. A Texas native and graduate of the University of Massachusetts, Nick initially worked in law. He first encountered Del Mar Energy in 2013 and officially became a partner in 2018. Nick introduced many of the modernized technologies now used in production

STEFAN RUSSO

CIO (Chief Information Officer)

Stefan started his internship at Del Mar Energy in 2016. In less than five years, he advanced from intern to company director

THOMAS LIEBERMAN

CMO (Chief Marketing Officer)

Born in 1984 in Nevada, Thomas studied at a local university before moving to New York in 2006 to work in marketing and public relations. He began collaborating with Del Mar Energy in 2011. Prior to joining the company, Thomas worked on promoting brands such as P&G, Gillette, and General Motors