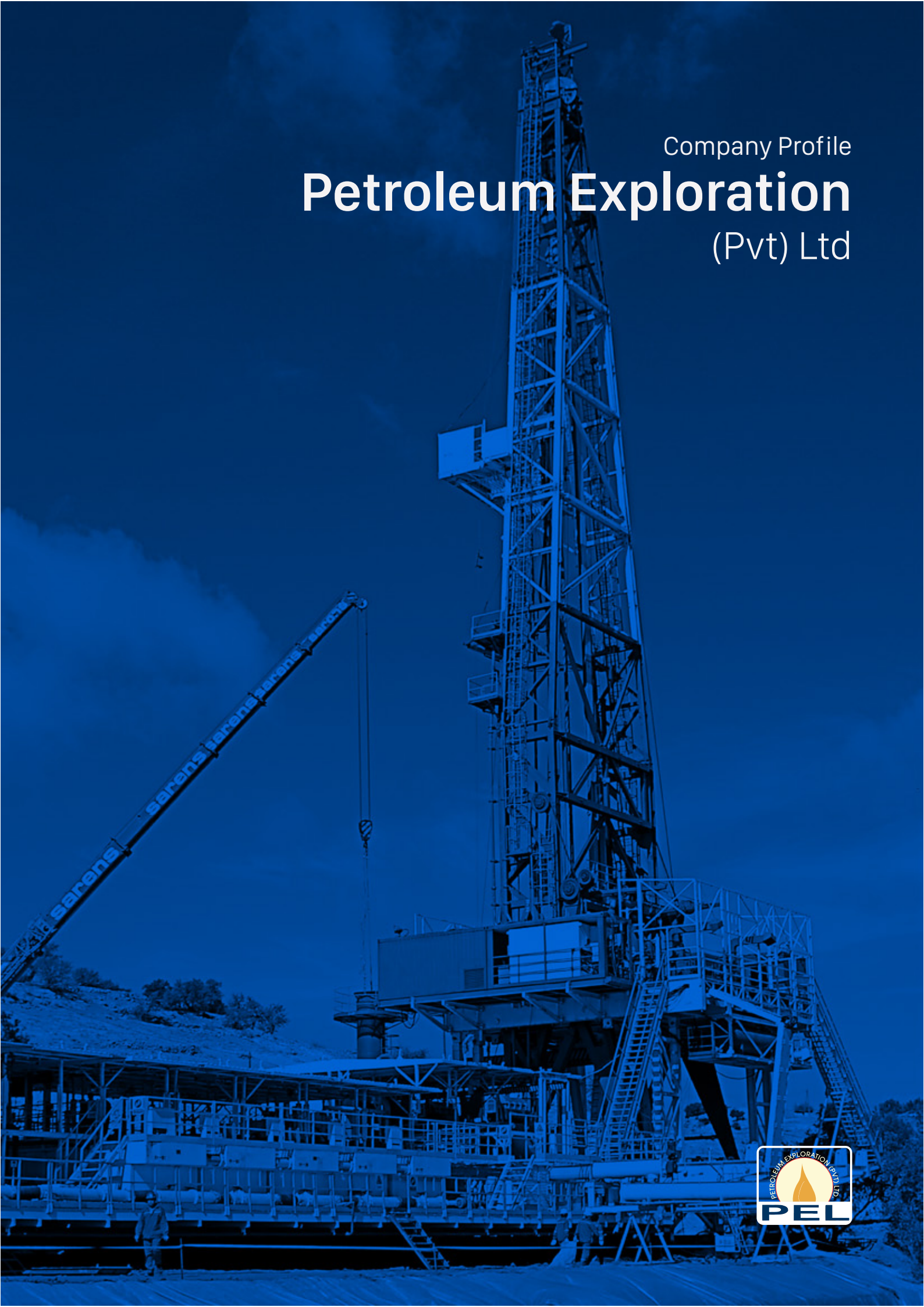


Company Profile

# Petroleum Exploration

(Pvt) Ltd



Petroleum Exploration (Pvt) Ltd

# Exploring the World, Discovering Energy

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# SHAHZAD INTERNATIONAL GROUP OF COMPANIES

SI Group of Companies is a conglomerate, headquartered in Islamabad, Pakistan. The Group is engaged in diverse business pursuits with emphasis on onshore & offshore oil & gas exploration, development and production, mineral development and power generation. The Group not only operates in Pakistan but has also expanded its sphere of business activities to overseas. With its sound financial position, the Group's companies are in business individually as well as in collaboration with foreign partners since 1980. The Group consists of eleven wholly owned companies



## Petroleum Exploration (Pvt) Ltd

PEL has the largest petroleum exploration acreage among the private E&P companies in Pakistan.

The company currently owns nine Development & Production/Mining Leases, nine Onshore Licenses, and One Offshore Exploration License.



## Kandra Power Company (KPC)

KPC will set up a 120 MW power plant in the Sindh Province of Pakistan.

The plant will utilize low BTU gas from PEL's Kandra Gas Field, which has 3.36 Trillion Cubic Feet (TCF) Initial Gas in Place (IGIP).

The Government of Pakistan has already issued the Letter of Intent (LOI) to KPC for this project.



## Shahzad Sky

Shahzad Sky is the only DTH license holder in Pakistan. The company is part of the Shahzad International Group of Companies, a reputable business house with oil & gas E&P as its core business.

Our aim is to provide premium content in Pakistan. This will improve the TV viewership experience in the country by offering high quality content and service at an affordable price.

We, at Shahzad Sky, are passionate about our core social values and these will be the foundation for our future. Through our operations, we will endeavor to create new sustainable business and employment opportunities in Pakistan.



## Gas Ocean (Pvt) Ltd

Gas Ocean (Pvt) Ltd. provides a complete solution for transmission and distribution of oil and gas products through pipelines.



### Nortech Surveys Pakistan

Nortech Surveys Pakistan uses state of the art technology for provision of project management solutions to construction companies, manufacturing companies and other corporate entities.



### Flash Security Services

Flash Security Services (Pvt) Ltd. is a security company licensed by the Federal and all Provincial Governments, operating across Pakistan.

The company has emerged as a credible security provider and is committed to providing complete and realistic security solutions.



### Shahzad Travels

Shahzad Travels is an IATA approved travel agent associated with all major domestic and international airlines.

The company has online reservation systems like Galileo, Amadeus and Abacus, and is completely equipped to cater to the traveling needs of our clients.



### Global Mining Company (GMC)

Global Mining Company (GMC) was established in 2000.

The company obtained licenses in 2004 and 2005 for exploration of gemstones and gold in Gilgit - Baltistan.



### Shahzad Processing Solutions (Pvt) Ltd

SPS (Pvt) Ltd is engaged in providing Hydrocarbon Processing and Storage solutions and equipment to different sectors of Pakistan, including but not limited to, Gas processing facilities (Amine Plant & Dehydration Plant), Condensate storage tanks, Separators, HCDP and other related equipment.



### Shahzad Oil & Gas Company

Shahzad Oil & Gas Company (SOGC) is newly formed wholly owned subsidiary of Shahzad International Group of Companies. The core business of SOGC is Exploration & Production of hydrocarbons and it holds non-operating working interest in Salam Block in Pakistan.



### Shahzad LNG (Private) Limited

Shahzad LNG (Pvt) Ltd (SLNG) is a newly incorporated energy company focused on mid and downstream with an aim to import, process, store, fill, market and distribute Liquefied Natural Gas across Pakistan. It intends to construct and operate LNG Terminal along with vertically & horizontally integrated LNG Facilities including but not limited to storage, processing and testing facilities.

# FOUNDER CHAIRMAN



## Zaheer-ud-Din (Late)

The late Mr. Zaheer-ud-Din was the Founder Chairman and Chief Executive of the Group. He was the driving force behind the success and growth of PEL and other companies of Shahzad International Group.

Mr. Zaheer-ud-Din's vision and his commitment to fair business practices ensured the growth and development of PEL from a small family-run business to a major Oil & Gas Exploration and Production company. In recognition of his services to the energy sector, the Government of Pakistan awarded him with 'Tamgha-e-Imtiaz' (Medal of Distinction).

He passed away on May 23, 2019.

## Founder Chairman's Message

" A century ago, petroleum was just an obscure commodity but today it is essential to human development.

Energy is the pillar of a nation's economy and there can be no meaningful economic development without adequate and assured supply of energy.

Our business knows no frontier; we are prepared and equipped to take on the most difficult challenges, thanks to our expertise, our trained and highly experienced work force and our strong finances.

While we remain focused on upstream oil and gas exploration and production, we have expanded into other sectors, such as Electronic Media and Information Services, Power Generation, Mining and Security Services.

We uphold the highest standards of transparency, accountability and good governance in all our ventures.

I am convinced that our business acumen as well as the technical expertise of our dedicated team of professionals and use of cutting edge technology are the factors which have contributed much of our success.

PEL strives to contribute to the global energy industry while promoting employment opportunities, both at home and abroad. PEL takes its social responsibilities most seriously while consistently striving to leave a positive footprint in communities where it is engaged in the search for hydrocarbons. "

A handwritten signature in black ink, appearing to be 'Zaheer-ud-Din'. The signature is stylized and cursive.

Zaheer-ud-Din

## RECOGNITION OF SERVICES

The Founder / Chairman of the Group, the late Mr. Zaheeruddin receiving the Tamgha-e-Imtiaz (Medal of Distinction) from Lt. Gen. (R) Khalid Maqbool, the Governor of Punjab, on behalf of the President of Pakistan.





## CHAIRMAN & CE



### Shahzad Zaheer

Mr. Zaheeruddin's eldest son, Mr. Shahzad Zaheer is the current Chairman and Chief Executive of Shahzad International Group of Companies.

Earlier, as a Director he was heading the Finance, JV, Legal & Commercial departments of PEL and its affiliates for over 15 years in which capacity he was integral to the expansion and diversification of the Group's business operations.

The Chairman and CEO, Mr. Shahzad Zaheer is following the legacy of his father and remains committed to further growth and development of the Group's business ventures.

### Chairman's Message

Our Group is the realization of one man's dream, to create a company dedicated to the development of an indigenous energy company that could compete on the world stage. Late Mr. Zaheer Uddin believed in people. His belief was that if you train your people to work hard, to always hold the ethical and moral high ground, then you cannot but succeed.

Today we strive to adhere to the same basic principles that he enunciated. We have become a recognized name in the oil and gas industry and we will continue to grow through development and diversification.

Our diversification strategy has been both geographic and structural. Geographically, we have expanded our operations to include the Kingdom of Morocco, the first Pakistani E&P Company to do so. Our structural diversification strategy has included branching out into the media industry where we now hold the only license for satellite based DTH distribution in Pakistan.

A handwritten signature in black ink, appearing to read 'Shahzad Zaheer'.

CHAIRMAN & CE  
Petroleum Exploration (Pvt) Ltd



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## Petroleum Exploration (Pvt) Ltd (PEL)

PEL, a Pakistani Exploration and Production company with an international presence, was incorporated in 1994 under the Companies Ordinance 1984. It is the core business of the Shahzad International Group of Companies.

Petroleum Exploration (Pvt) Ltd operates onshore and offshore acreages nationally and internationally. At home it is engaged in the Oil and Gas exploration of one offshore and nine onshore blocks along with nine production and mining leases. The Company is also operating three overseas exploration blocks in Morocco along with ONHYM, the Moroccan state owned Oil & Gas Company.

---





## Vision

To play a major role in enabling Pakistan to become self-sufficient in its energy needs, while enhancing the Company's footprint beyond Pakistan's frontiers and thereby, transforming ourselves into a global business entity that brings satisfaction to its employees and pride to the people of Pakistan.

---

## Mission

To explore and expand the country's hydrocarbon potential and to develop synergetic partnerships with credible energy houses, while ensuring adherence to good business practices and respect for the environment.

---

## Core Values

Ethics

Drive to Succeed

Reliability & Commitment

Innovation & Implementation Putting the Company First

---

# BOARD OF DIRECTORS



**Shahzad Zaheer**

Chairman / CE



**Shahbaz Zaheer**

Director



**Moeen-ud-Din**

Director

## EXECUTIVE MANAGEMENT



**Bilal Kausar**

Sr. Executive



**Hina Zaheer**

Sr. Executive



**Faisal Zafar**

Sr. Executive



**Abdullah Zafar**

Sr. Executive

# ADVISORS / VICE PRESIDENT



**Azhar-ul-Islam**  
Advisor



**Col (R) Shujaat Ghumman**  
Senior Executive / VP



**Shahid Ahmad**  
Advisor

## Senior Management



**Shamim Bhatti**  
Sr. GM Operations



**Brig. (R) M Saleem**  
GM Coordination



**Mohammad Maroof**  
GM Geophysics



**Azam Malik**  
GM Exploration



**M. A. Shahid**  
Advisor



**Syed Zahid Anwar**  
Advisor



**Naveed Akram**  
GM Reservoir Management



**M. Jamil**  
GM Drilling

## Senior Management



**Babar Majid**

GM Business Development



**Amir Hameed**

GM Taxation



**Air Cdre. (R) Yousaf TI (M)**

DGM Finance



**Haider Ali Shah**

Sr Mgr. Exploration



**M Maas Siddiqui**

Sr Mgr. Exploration



**Talha Waheed**

Country Manager, Morocco



**Kamran Shuja**

Sr. Manager Commercial & legal



**Assad Saeed**

Manager Finance



**Zulfiqar Ali Khalid**

Manager Process

# VALUING OUR PEOPLE

## OUR MOST IMPORTANT ASSET

We believe that our most important assets are our people. Our experienced and professional team includes project managers, engineers, supervisors, health, safety and environment officers, and surveyors, backed by a dedicated management and administration team.

With various project locations in Pakistan and Morocco, our employees have the flexibility to travel and develop their skills and knowledge on a variety of projects.

Our experienced team members mentor our new employees to develop and guide them ensuring their growth and delivering projects that meet Quality, Safety and Environmental Standards.

## TRAINING AND DEVELOPMENT

Being a leader in the industry is easy when you harness the drive and commitment of a talented team of people.

We always encourage further training and development of our employees wishing to increase their skills, knowledge and expertise allowing progression through the company.

We offer our employees the chance to learn from some of the strongest and most experienced team and professionals in the industry and to apply their skills and shine in their chosen field.

## EDUCATION

PEL encourages employees to further enhance their expertise in areas such as Reservoir, Production, Process, Electrical & Mechanical, Surveying, Procurement, Logistics, Accounting, Finance, Legal & Commercial, Business Development, HR and Marketing.





# OIL AND GAS EXPLORATION & PRODUCTION

## OUR CORE BUSINESS

PEL is engaged in an extensive range of exploration and production projects with the ability to manage complex operations.

Our highly experienced management and engineering teams work in close collaboration with the Government and joint venture partners from the preliminary design phase to completion.



Since 2014, PEL has made four onshore discoveries of natural gas and condensate in Pakistan. Three discoveries are in Badin IV South (Ayesha-1, Ayesha North-1, and Aminah-1) whereas one discovery is in Badin IV North.

- ✓ In the testing phase, Ayesha-1 well produced 13 MMCFD gas, having a calorific value of 967 BTU / scf. The well also produced 113 BPD of condensate.
- ✓ In the testing phase, Aminah-1 well produced 18.89 MMCFD gas, having a calorific value of 995 BTU / scf. The well also produced 64.73 BPD of condensate.
- ✓ In the testing phase, Ayesha North-1 well produced 8.48 MMCFD gas, having a calorific value of 967 BTU / scf. The well also produced 67 BPD of condensate.
- ✓ In the testing phase, Zainab-1 well at Badin North produced 24 MMCFD gas, having a calorific value of 1204 BTU / scf. The well also produced 765 BPD of condensate.

Accordingly, PEL has successfully developed three of its fields in Badin IV South with central processing facilities where DHU and Amine based gas sweetening unit along with allied auxiliaries have been installed and commissioned utilizing in-house expertise of technical teams, and started injecting 23 MMSCFD of processed Gas into the National Gas grid of SSGCL network since February 5, 2020. To maintain the production plateau of the field, PEL is committed to drill a well in Badin IV South Block, for which all Long Lead Items (LLIs) have already been arranged.

PEL is looking to develop the Zainab Gas Field in Badin IV North for which all the arrangements are in hand to control HCDP through Mechanical Refrigeration Unit (MRU) and stabilized condensate through CSU along with allied auxiliaries for supply of processed to specification gas to SSGCL network besides development of the processing facilities, more wells have also been planned in the Badin IV North to explore more fields, accordingly the arrangements for LLIs are already in place. PEL being the fastest growing companies is simultaneously working on other blocks in hand and is looking forward to expedite its drilling campaign and drill wells in other Blocks as well.

Our knowledgeable and skilled professionals enriched with National and International experiences in Oil & Gas sector allow us to undertake diversified exploration and production projects not only in Pakistan but also abroad.

PEL is the first private Pakistani company to operate in the Kingdom of Morocco in North Africa and has signed a Petroleum Agreement and Association Contract for exploration of hydrocarbons in three blocks in the Kingdom of Morocco as follows:

1. HaHa Nord
2. HaHa Centre
3. HaHa Sud



# OUR OPERATIONS

Our most significant investment is in our human resources with which we conduct our E&P activities. To preserve this asset we ensure that our people are fully trained in all aspects of safety.



"We have grown to be a leader in our field because we build and nurture strong relationships with our stakeholders"



# Joint Venture Partners



**GPXP**



**ONHYM**

المكتب الوطني للهيدروكاربورات والمعادن  
 Εθνικό Ινστιτούτο Ηidrocarburos, Οξεία + Λ Σησ4\*  
 OFFICE NATIONAL DES HYDROCARBURES ET DES MINES

**ForpAtro**

BEIJING FORPETRO SINO-RIG CO.,LTD

**JURA ENERGY CORPORATION**



**Spud Energy (Pty) Ltd**

**PYRAMID ENERGY INTERNATIONAL INC**

**FRONTIER HOLDINGS LIMITED**  
 A SUBSIDIARY OF JURA ENERGY CORP

## Domestic Joint Venture Partners

Oil and Gas Development Company Limited (OGDCL)  
 Pakistan Petroleum Limited (PPL)  
 Government Holding Private Limited (GHPL)  
 Oil and Gas Investments Limited (OGIL)

## Foreign Joint Venture Partners

Frontier Holdings Limited (FHL), Canada  
 Pyramid Energy, Canada  
 Spud Energy, Australia  
 GPXP Limited  
 ONHYM, Morocco  
 Forpetro, China



# Types of Exploration & Production Rights

## Reconnaissance Permit

Non-exclusive right for geophysical, geochemical & geological operations, including the drilling of stratigraphic wells. No rights to negotiate or convert into onshore License or offshore PSA.

## Exploration License - Onshore

Exclusive right for exploration, including drilling and production testing, on the terms specified in the license, Rules and related Petroleum Concession Agreement (PCA).

## Petroleum Exploration License – Offshore

Exclusive right for exploration, including drilling and production testing on the terms specified in the license, Rules and related PSA.

## Development & Production Lease

Exclusive right to develop and produce hydrocarbons from within a designated portion of an Exploration License, granted under the Rules.

# Fiscal Regime of Pakistan - Upstream

## Pricing of Crude Oil

The Producer Policy Price for crude oil delivered at the nearest refinery gate shall be equal to C&F price of a comparable crude oil or a basket of Arabian/Persian Gulf crude oils (Reference Crude or RC) plus or minus a quality differential between the RC and the local crude oil. No other adjustment or discount will apply other than Windfall Levy. C&F price will be arrived at on the basis of FOB price of imported crude oils into Pakistan plus freight on AFRA, which is deemed chartered rate.

## Pricing of Condensate

The Producer Policy Price for condensate will be the FOB price of internationally quoted comparable condensate delivered at the nearest refinery gate plus or minus a quality yield differential, based on the value in the Arabian Gulf spot products market of the crude oil/ condensate. No other adjustment or discount will apply other than Windfall Levy.

Windfall Levy (WLO) will be applicable on crude oil and condensate using the following formula:  $WLO = 0.5 \times (M-R) \times (P-B)$

Where:

WLO - Windfall Levy on crude oil and condensate;

M - Net production (petroleum produced & saved); R - Royalty;

P - Market Price of crude oil and condensate

B - Base Price, which will be as under:

a) The base price for crude oil and condensate will be USD 30 per bbl.

b) This base price for crude and condensate will escalate each calendar year by USD 0.25 per barrel starting from the date of first commercial production in contract area.

Notwithstanding above, in the event Market Price of Crude Oil/Condensate exceeds USD 100/barrel, the 100% benefit of Windfall Levy will pass on to the Government. The ceiling would be reviewed as and when pricing dynamics significantly change in the international market.

## Pricing of Natural Gas in Pakistan

The multi-stage pricing mechanism with the addition of slabs up to US\$ 110/bbl price of basket of crude oil.

The floor set at US\$ 10/bbl and ceiling at US\$ 110/bbl

US\$/BBL	Applicable % of C&F Price
0 to 30	100%
Above 30 to 50	Plus 50% of Incremental Increase
Above 50 to 70	Plus 30% of Incremental Increase
Above 70 to 110	Plus 20% of Incremental Increase

### Plus applicable discounts for Zones:

- Zone-0: 73.88% (Offshore Shallow)
- Zone-0: 84.44% (Offshore Deep)
- Zone-0: 95.00% (Offshore Ultra Deep)
- Zone-I : 69.66% (Onshore)
- Zone-II: 66.5% (Onshore)
- Zone-III: 63.33% (Onshore)

Windfall levy on natural gas will only be applicable if it is sold to a 3rd party at a price which is more the policy price; there will be no windfall levy if the natural gas is sold to the Government of Pakistan.

### Extended Well Testing (EWT)

The price discount during EWT phase – 5% for on-spec gas & 10% for off-spec gas on the applicable zonal gas price.

### Royalty

Royalty will be payable at the rate of 12.5% of the value of petroleum at the field gate.

### Corporate Tax Rate

Tax on income will be payable at the rate of 40% of profit or gains in accordance with the Fifth Schedule of the Income Tax Ordinance, 2001. Royalties will be treated as an expense for the purpose of determination of income tax liability.



# Pricing of Hydrocarbons in Morocco

## Crude Oil

Article 6.2 of Petroleum Agreement states;

“The Market Price for Crude Oil shall be determined each Quarter for each of the Parties, as follows:

**(a)** Except in the case of sales of Crude Oil which do not meet the conditions set out below in Article 6.2 (b) or which are excluded by Article 6.5 of the Petroleum Agreement, the Market Price shall be the actual price received by the Party in question for sales of Crude Oil in the relevant period. Market Price shall be determined separately for each type of Crude Oil or Crude Oil blend and for each place of loading. Such actual prices shall be adjusted to the price per Barrel, F.O.B. place of loading in Morocco.

**(b)** Actual prices shall only be used if they are obtained from customers who generally purchase on a regular basis pursuant to purchase contracts contemplating liftings over a period of at least ninety (90) days or from spot sales under arms length transactions, including contracts notified under Article 6.2 (c).

**(c)** If Crude Oil is to be sold by a Party under a long term contract with its Affiliate at a price based on the published prices of Crude Oil on the international market, adjusted in particular to account for differences in quality and transport, then such Party shall submit a copy of the contract to the appropriate department of the STATE.”

## Natural Gas

Market Price for Natural Gas shall be determined by applying, when applicable, the same general principles as those enumerated above for the determination of the Market Price of Crude Oil, in respect of export sales of Natural Gas. In the case of domestic sales, the Market Price shall be the price received.

# E&P Assets

## Exploration Licenses - Onshore Pakistan

1. Mirpur Mathelo Block (2769-9)
2. Salam Block (2769-13)
3. Badin IV North Block (2468-6)
4. Badin IV South Block (2468-5)
5. New Larkana Block (2768-10)
6. Jhangara Block (2567-5)
7. Mirpur Khas West Block (2568-16)
8. Sanghar East Block (2669-5)
9. Kaloī Block (2468-8)
10. Hamza Discovery – Block 22 (2768-3)

## Exploration License - Offshore Pakistan

Block J (2266-4)

## Development and Production / Mining Leases - Onshore Pakistan

1. Badar Mining Lease
2. Block-22 (2768-3) Hassan D&P Lease
3. Block-22 (2768-3) Sadiq D&P Lease
4. Block-22 (2768-3) Khanpur D&P Lease
5. Kandra (2768-6) D&P Lease
6. Badin IV South (2468-5) Ayesha D&P Lease
7. Badin IV South (2468-5) Aminah D&P Lease
8. Badin IV South(2468-5) Ayesha North D&P Lease
9. Badin IV North Block (2468-6) Zainab D&P Lease

## Exploration Permit - Onshore Morocco

Haha Onshore

1. Haha Nord
2. Haha Centre
3. Haha Sud

## Reconnaissance License - Morocco

Oualidia



# Exploration Licenses - Onshore Pakistan

## Mirpur Mathelo Block (2769-9)



License No.  
**304/PAK/2002**



Location/Districts  
**Sukkur & Ghotki**



Date of Grant  
**03-06-2002**



Area (Sq.Km)  
**1030.68**



Policy  
**1997**  
**(to be converted to 2012 Policy)**



Rules  
**1986**

## Petroleum System

### Source:

Sembar, Lower Goru (early Cretaceous) Shales



### Reservoir:

Lower Goru (early Cretaceous) Sands and Pab (late Cretaceous) Carbonates Sui Main Lst, Sui Upper Lst and Habib Rahi Lst (Eocene) and Pirkoh Lst (Eocene)

### Seal:

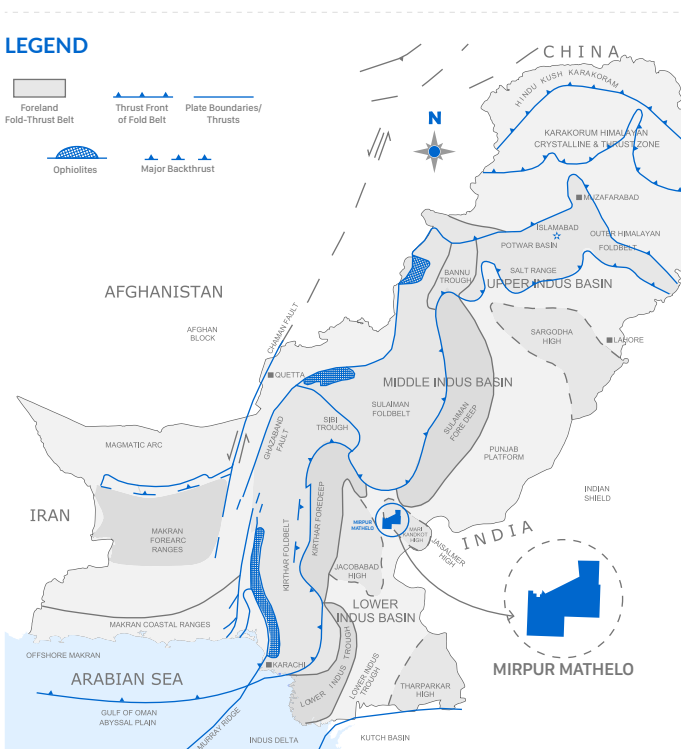
Upper Goru (late Cretaceous), Ghazij Shales & Lower Goru Inter-bedded Shales

## Working Interest:

	<b>95%</b>
	<b>5%</b>

## Milestones Achieved and Key Features:

- ✓ Ready to drill Sui Main Limestone Prospect (MPM-1)
- ✓ Stratigraphic Play in form of a detached sand body at the level of Sembar Formation with potential reserve exposure of over 900 BCF
- ✓ Acquired 253 lkm 2D seismic
- ✓ Interpreted 2313 lkm 2D seismic and 2 wells data
- ✓ Drilled 1 exploratory well
- ✓ Block is surrounded by multiple gas fields which include Mari 8.2 TCF, Qadirpur 5.5 TCF, Sawan 1.5 TCF, Badar 134.5 BCF, Rehmat 114 BCF and Miano 542 BCF
- ✓ Presence of a well developed gas infrastructure in the block
- ✓ Potential of discovering good-quality gas, having around 800-900 BTU/SCF



# Salam Block (2769-13)



License No.  
**327/PAK/2003**



Location/Districts  
**Kashmor & Ghotki**



Date of Grant  
**20-12-2003**



Area (Sq.Km)  
**200.22**



Policy  
**2001**  
**(to be converted to 2012 Policy)**



Rules  
**2001**

## Petroleum System

### Source:

Sembar & Lower Goru (early Cretaceous) Shales

### Reservoir:

Sui Main Limestone & Sui Upper Limestone Carbonates

### Seal:

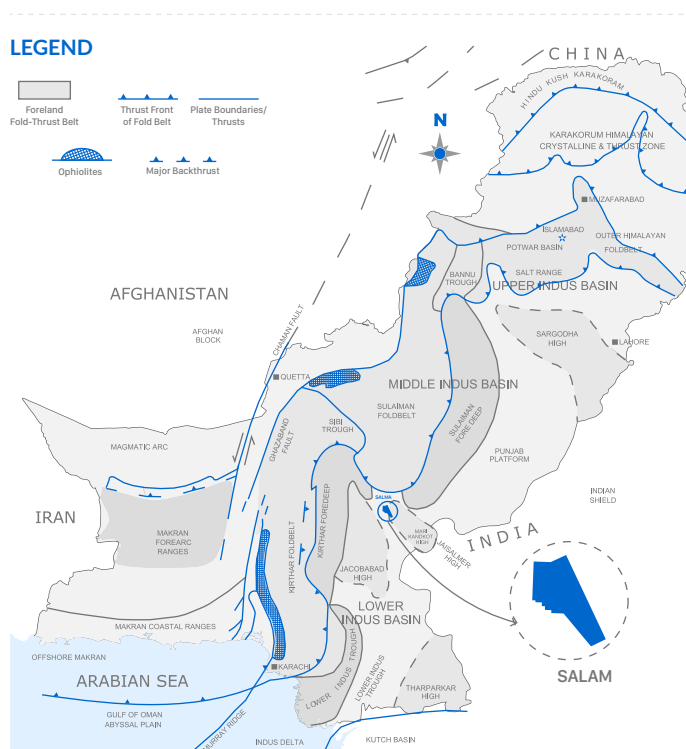
Ghazij (Eocene) & Shales

## Working Interest:

	<b>80% (Operator)</b>
<b>SOGC</b>	<b>20%</b>

## Milestones Achieved and Key Features:

- ✓ Estimated reserves of 100 BCF
- ✓ Acquired 134 lkm 2D seismic
- ✓ Reprocessed 354 lkm 2D seismic data
- ✓ Interpreted 654 lkm 2D seismic and 3 wells data
- ✓ Block is surrounded by multiple gas fields which include Qadirpur 5.5 TCF, Khandkhot 1.6 TCF and Badar 134.5 BCF
- ✓ A well developed gas infrastructure near the block
- ✓ Potential of discovering good-quality gas, having 800-900 BTU/SCF
- ✓ Ibrahim-1 exploratory well was drilled down to 1505 m in SML Formation. Well tested 5 mmscfd of good quality gas.



# Badin IV North Block (2468-6)



License No.  
**363/PAK2005**



Location/Districts  
**Hyderabad,  
Tando Allahyar,  
Tando M.Khan, Badin &  
Sujawal**



Date of Grant  
**5-01-2006**



Area (Sq.Km)  
**877.14**



Policy  
**2001  
(converted to  
2012 Policy)**





Rules  
**2001**

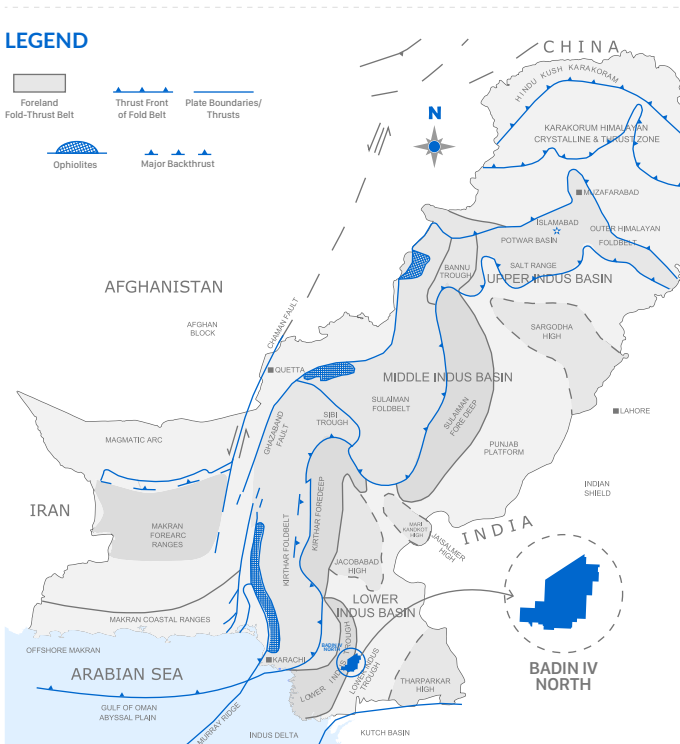
## Milestones Achieved and Key Features:

- ✓ Block is located in the Sembar Goru fairway, with proven petroleum system
- ✓ Oil/gas is already being produced in the surrounding fields
- ✓ Excellent gas pipeline infrastructure
- ✓ A significant gas condensate has been discovered from Zainab-1 Well in the Lower Goru formation
- ✓ Early production is possible through Extended Well Testing (EWT)
- ✓ Low cost and low risk
- ✓ No high pressure or temperature related problems with drilling
- ✓ Multiple ready-to-drill prospects of 3-5 TCF gas discovery are available based on a good-quality 3D seismic

## Working Interest:

	<b>47.50% (Operator)</b>
	<b>27.50%</b>
<b>GPXP</b>	<b>25%</b>

Planning to drill Wasu-1 exploratory well in 1st Quarter of 2023



## Badin IV South Block (2468-5)



License No.  
**366/PAK/2005**



Location/Districts  
**Tando Muhammad Khan,  
Badin, Sujawal**



Date of Grant  
**05-01-2006**



Area (Sq.Km)  
**864.41**



Policy  
**2001  
(converted to  
2012 Policy)**



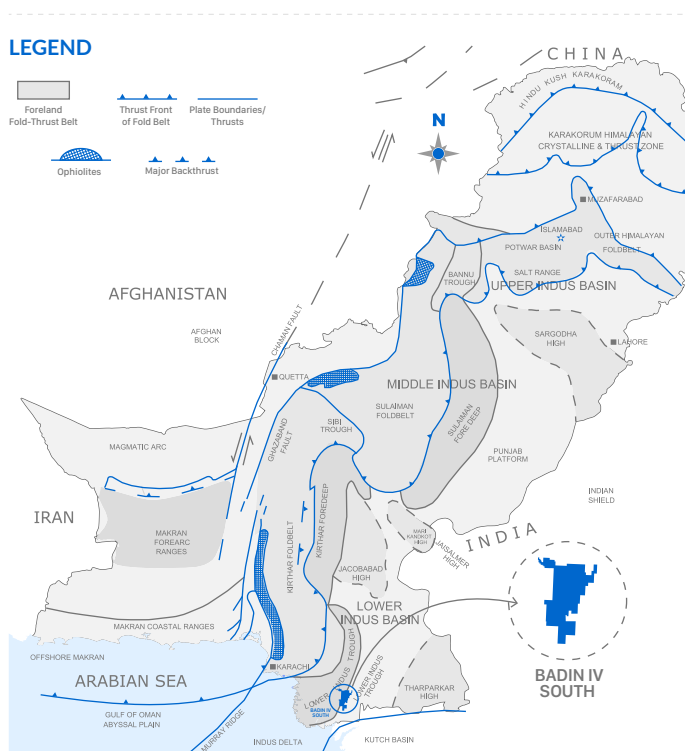
Rules  
**2001**

### Working Interest:

	<b>47.50% (Operator)</b>
	<b>27.50%</b>
<b>GPXP</b>	<b>25%</b>

### Milestones Achieved and Key Features:

- ✓ Block is located in highly prospective Lower Indus Rift Basin with proven petroleum system comprising Sembar/Lower-Goru formation
- ✓ 3 gas/condensate discoveries have been made and the field has been developed for production. The Government has approved the fields as Marginal as per Marginal Guidelines 2013
- ✓ 18 km of gas collection network has been developed
- ✓ 30 MMCFD Gas Processing Facility has been installed
- ✓ SSGC has completed 25-28 km pipeline from Field get to tie-in point
- ✓ First Gas Delivery Date was achieved on February 5th 2020
- ✓ Multiple ready-to-drill prospects of 3-5 TCF gas discovery are available based on a good quality 3D seismic
- ✓ Oil/gas is already being produced in the surrounding fields
- ✓ Excellent gas infrastructure
- ✓ Good quality sweet gas around 1000 BTU/SCF
- ✓ No high pressure and temperature problems while drilling
- ✓ Production from Badin IV South fields started in February 2020. Currently Badin IV South fields are producing about 10-12 MMCF/D of good quality gas
- ✓ Planning to drill Zahrah North-1 exploratory well in the 1st quarter of 2023



# New Larkana Block (2768-10)



License No.  
**352/PAK/2005**



Location/Districts  
**Larkana, Shikarpur, Jacobabad, Kambar, Shahdadt, Khairpur (Sindh) & Jhatpat (Balochistan)**



Date of Grant  
**03-06-2005**



Area (Sq.Km)  
**2425.96**



Policy  
**2001 (converted to 2012 Policy)**



Rules  
**2001**

## Petroleum System

### Source:

Shales–Sembar & Lower Goru (early Cretaceous) Shales

### Reservoir:

Sui Main Limestone & Sui Upper Limestone Carbonates

### Seal:

Ghazij Shales

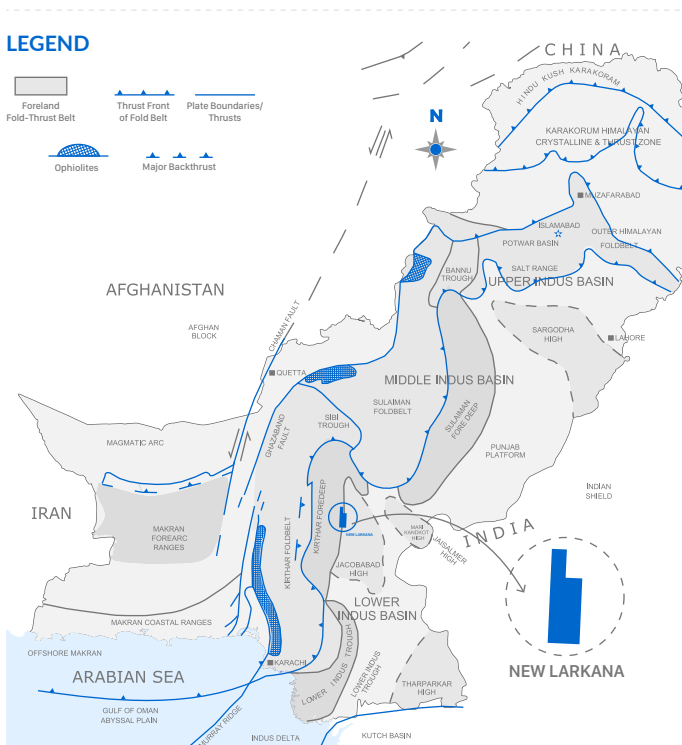
## Working Interest:



**100% (Operator)**

## Milestones Achieved and Key Features:

- ✓ Seismic Data Interpretation results showed a sizeable lead A at SML level
- ✓ Four other leads B,C,D and E were also identified
- ✓ Expected reserve exposure of 500 BCF
- ✓ Interpreted 1190 lkm 2D seismic and 2 well data
- ✓ Block surrounded by gas fields: Mehar 434 BCF, Mazarani 183 BCF, Haseeb 200 BCF, Kandra 2.86 TCF and Block 22 Fields 150 BCF
- ✓ A well developed gas infrastructure in the block
- ✓ Good quality SML reservoir with porosity in the range of 20–22% is expected i New Larkana Block, based on nearby discoveries
- ✓ Potential of discovering good-quality gas, having 800–900 BTU/SCF
- ✓ Low-risk and low-cost block



# Jhangara Block (2567-5)



License No.  
**344/PAK/2005**



Location/Districts  
**Jamshoro**



Date of Grant  
**27-04-2005**



Area (Sq.Km)  
**357.19**



Policy  
**2001**  
**(to be converted to 2012 Policy)**



Rules  
**2001**

## Petroleum System

### Source:

Sembar & Lower Goru (early Cretaceous) Shales

### Reservoir:

Mughal Kot and Pab Sandstone (late Cretaceous)

### Seal:

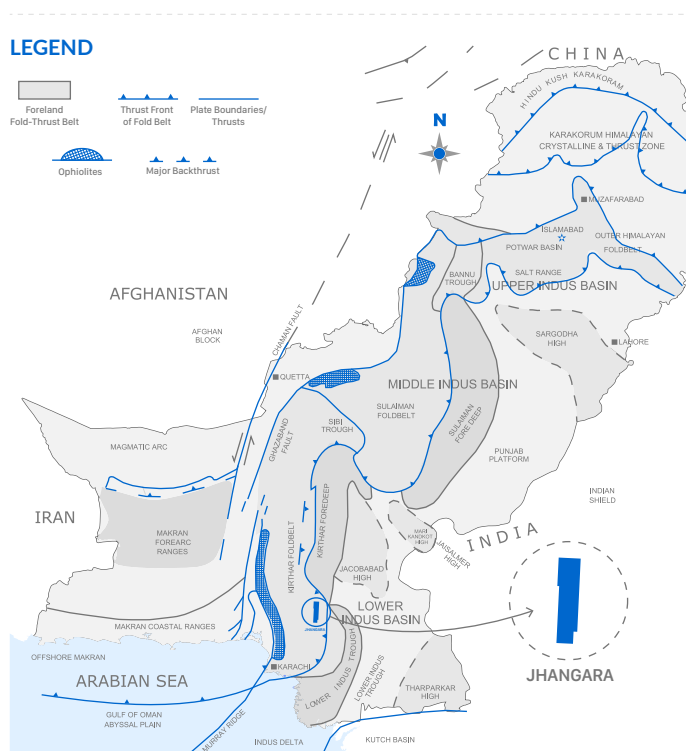
Intra formational shales for Mughal Kot sands (late Cretaceous) and Lower Ranikot shales (Paleocene) for Pab Sandstone (late Cretaceous)

## Working Interest:

	<b>40% (Operator)</b>
	<b>60%</b>

## Milestones Achieved and Key Features:

- ✓ Block is located in the prospective Kirthar Thrust and Fold Belt
- ✓ Significant gas discoveries have been made at Zamzama (2.32 TCF Gas + 11.68 MMBBL Condensate), Bhadra and Bhit (1.6 TCF Gas) in the area surrounding the block
- ✓ Block is located within the reservoirs fairway of Cretaceous-Paleocene
- ✓ Two ready to drill prospects (La'al and Maliri) are available
- ✓ Estimated Reserve Exposure of ~ 1 TCF
- ✓ Reprocessing of 216.3 Line km vintage 2D seismic dataset has been carried out by M/s TBI Canada. As a result data quality has been improved considerably due to which confidence has enhanced in the mapping of La'al Prospect.
- ✓ A detailed Geological Survey was carried out in the block in order to thoroughly analyze prospectivity of the block in terms of both stratigraphic and structural. Proper understanding has been developed in terms of petroleum system which includes source, seal and reservoir pairs and risk mitigation.
- ✓ A well developed gas infrastructure is available in the area
- ✓ Potential of discovering good quality of sweet gas having the heating value of 800-900 BTU/SCF





# Mirpur Khas West Block (2568-16)



License No.  
**393/PAK/2007**



Location/Districts  
**Hyderabad,  
Matiari &  
Jamshoro**



Date of Grant  
**25-09-2007**



Area (Sq.Km)  
**199.26**



Policy  
**2001  
(converted  
to 2012 Policy)**



Rules  
**2001**

## Petroleum System

### Source:

Sembar & Lower Goru (early Cretaceous) Shales

### Reservoir:

Lower Goru (early Cretaceous) Sands

### Seal:

Upper Goru (late Cretaceous) - Lower Goru (early Cretaceous) Shales

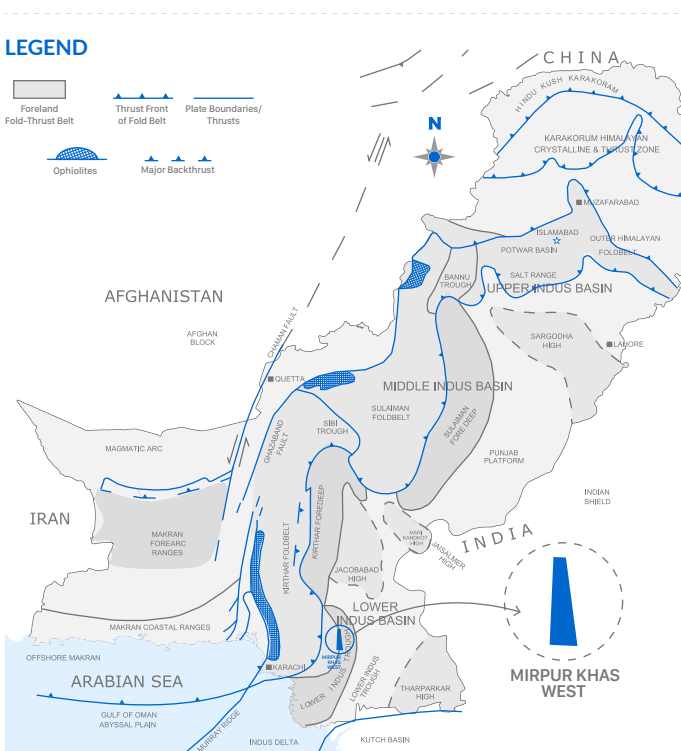
## Working Interest:



**100% (Operator)**

## Milestones Achieved and Key Features:

- ✓ Acquired 176 lkm 2D seismic
- ✓ Interpreted 660 lkm 2D seismic and 10 wells data
- ✓ Mapped 3 prospective structures & 3 leads
- ✓ Matiari prospect: 21 sq.km , 12% porosity, recoverable P-50 reserves 107 BCF
- ✓ Matiari West prospect: 9 sq.km , 11% porosity, recoverable P-50 reserves 67 BCF
- ✓ Maachi prospect: 8.8 sq.km, 9% porosity recoverable P-50 reserves 33MMBO
- ✓ Estimated TD of Matiari-1 well is 3860m. Block
- ✓ Estimated TD of Matiari West-1 well is 3995m.
- ✓ Estimated TD of Maachi-1 well is 2750m.
- ✓ A well developed gas infrastructure is available in the area surrounding the block
- ✓ Potential of discovering good quality of sweet gas having the heating value of 800-900 BTU/SCF



## Sanghar East Block (2669-5)



License No.  
**394/PAK/2007**



Location/Districts  
**Sanghar,  
Khairpur**



Date of Grant  
**25-09-2007**



Area (Sq.Km)  
**2493.13**



Policy  
**2001  
(converted  
to 2012 Policy)**



Rules  
**2001**

### Working Interest:



**100% (Operator)**

### Milestones Achieved and Key Features:

- ✓ Block is located in the Sembar Goru fairway
- ✓ Gas infrastructure is in-place
- ✓ No high pressure and temperature problems

## Kaloi Block (2468-8)



License No.  
**392/PAK/2007**



Location/Districts  
**Mirpur Khas  
West, Badin,  
Mithi, Umerkot**



Date of Grant  
**25-09-2007**



Area (Sq.Km)  
**2485.14**



Policy  
**2001  
(converted  
to 2012 Policy)**



Rules  
**2001**

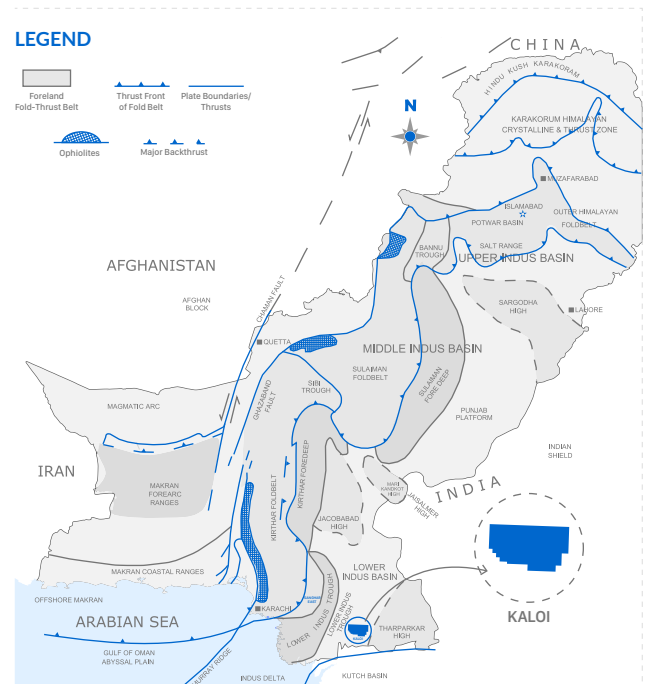
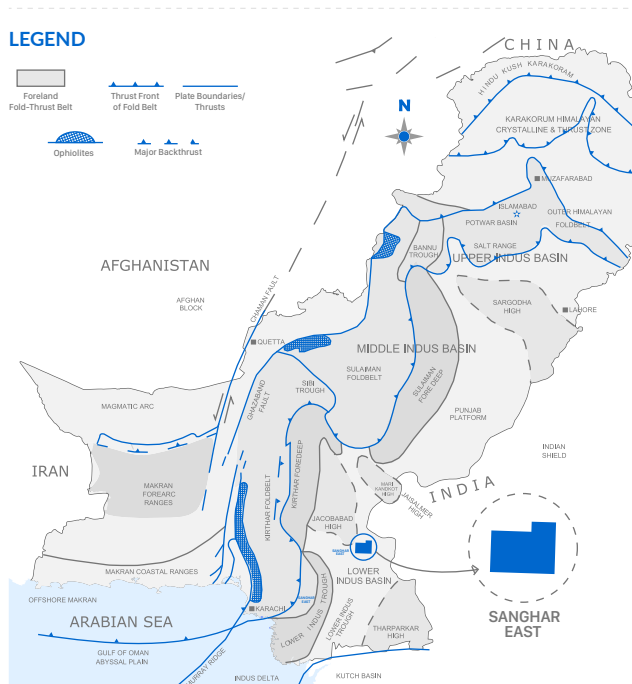
### Working Interest:



**100% (Operator)**

### Milestones Achieved and Key Features:

- ✓ Block is located in the Sembar Goru fairway
- ✓ Gas infrastructure is in-place
- ✓ No high pressure and temperature problems



# Block 22 (2768-3) - Hamza Discovery



License No.  
**171/PAK/1994**



Location/Districts  
**Shikarpur, Jacobabad,  
Kashmor**



Date of Grant  
**16-11-1994**



Area (Sq.Km)  
**65.09**



Policy  
**1994**



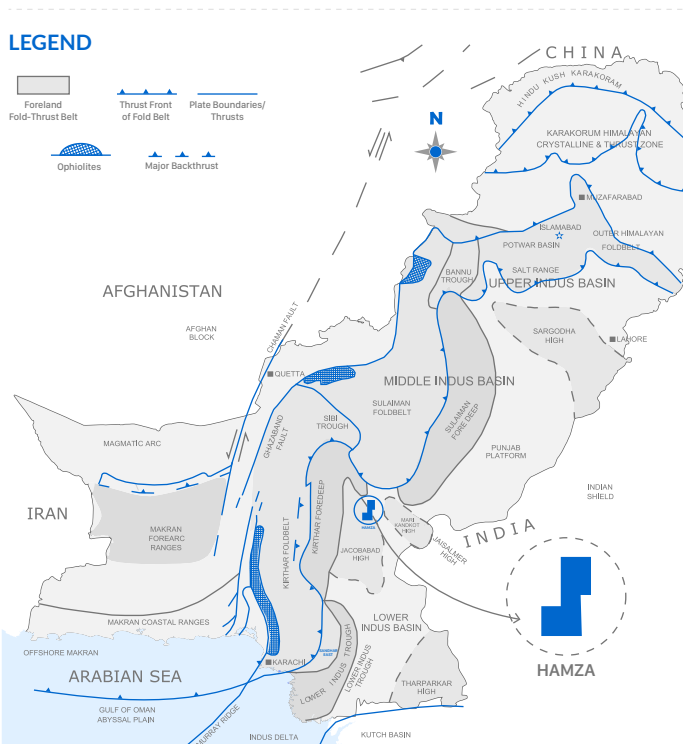
Rules  
**1986**

## Milestones Achieved and Key Features:

- ✓ Block is located in the Central Indus Basin
- ✓ Petroleum System comprises Sember/ Lower-Goru / Sui Main Limestone
- ✓ Excellent gas infrastructure is in-place
- ✓ Good quality of gas discovered from SML
- ✓ Government of Pakistan has approved the status of the field as a marginal field
- ✓ Low cost and low risk prospect
- ✓ No high pressure and temperature problems

## Working Interest:

	<b>30% (Operator)</b>
	<b>45%</b>
	<b>20%</b>
	<b>5%</b>



# Exploration License - Offshore Pakistan

## Block J (2266-4)



License No.  
**6/PAK/2005**



Location/Districts  
**Indus offshore**



Date of Grant  
**29-09-2006**



Area (Sq.Km)  
**2436.30**



Policy  
**2001**



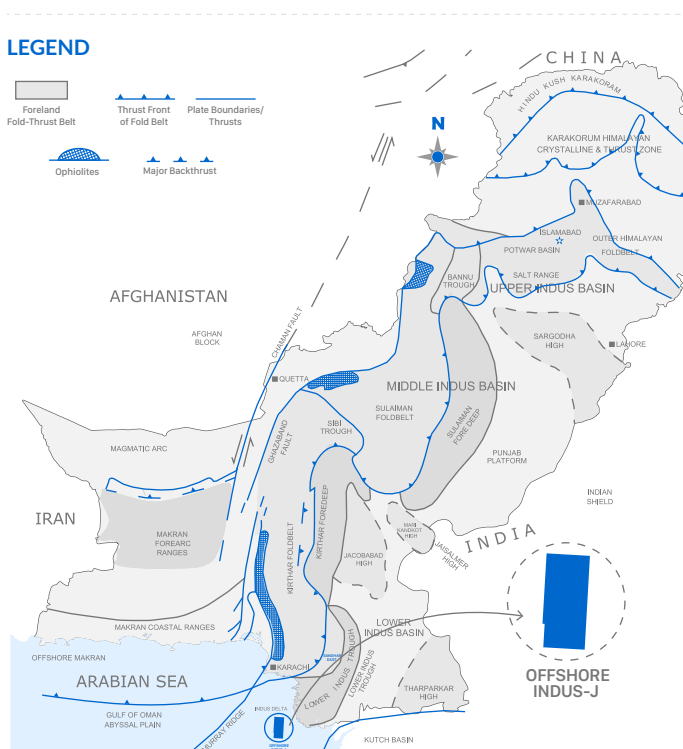
Rules  
**2003**

### Milestones Achieved and Key Features:

- ✓ Acquired 936 lkm 2D (93.6 WU) and 550 sq.km (550 WU) 3D seismic data
- ✓ Processed 550 sq.km 3D cube to PSDM level
- ✓ Interpreted 936 lkm 2D and 550 sq.km 3D seismic and 13 wells data including PakCan-1
- ✓ Mapped 2 prospects on 3D seismic data
- ✓ Carried out framework mapping of 20 horizons, and generated amplitude and depth structure maps at key horizons
- ✓ The mapped prospective structures have reserve exposure of over 22 TCF gas
- ✓ Performed reservoir modeling
- ✓ Carried out the evaluation of Petroleum System using the Basin Modeling techniques

### Working Interest:

**100% (Operator)**



# Development & Production / Mining Leases

## Badar Mining Lease



Lease No.  
**151/PAK/2002**



Location/Districts  
**Ghotki, Sukkur,  
Kashmor**



Date of Grant  
**13-03-2002**



Area (Sq.Km)  
**129.65**





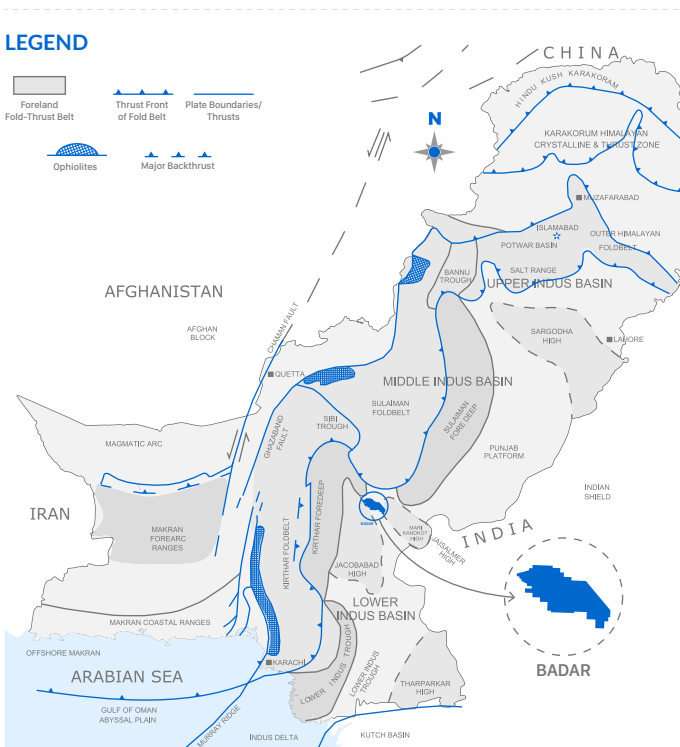
Rules  
**1949**

### Milestones Achieved and Key Features:

- ✓ Petroleum System is fairly present in the region
- ✓ Recoverable reserves of 124 BCF in Sui Main Limestone
- ✓ Badar-1 was drilled in 1994. Currently the well is producing around 9.5 MMSCFD
- ✓ Badar-1 is on production since 2006 and has produced 69.76 BCF till April 2021
- ✓ Badar-2 was drilled in 2014 and currently producing at the rate of 5.5 MMSCFD.
- ✓ Badar -3 well is planned
- ✓ Up-dip potential in Sui Upper Limestone
- ✓ A Gas Collection Network of around 24.5 km has been established
- ✓ Dehydration Plant at Badar Gas Field has been installed and commissioned

### Working Interest:

	<b>42.11% (Operator)</b>
	<b>50%</b>
	<b>7.89%</b>



## Block-22 (2768-3) Hassan D&P Lease



Lease No.  
**157/PAK/2003**



Location/Districts  
**Shikarpur, Sukkur,  
Kashmor,  
Jacobabad**



Date of Grant  
**03-04-2003**



Area (Sq.Km)  
**37.5**



Policy  
**1994**






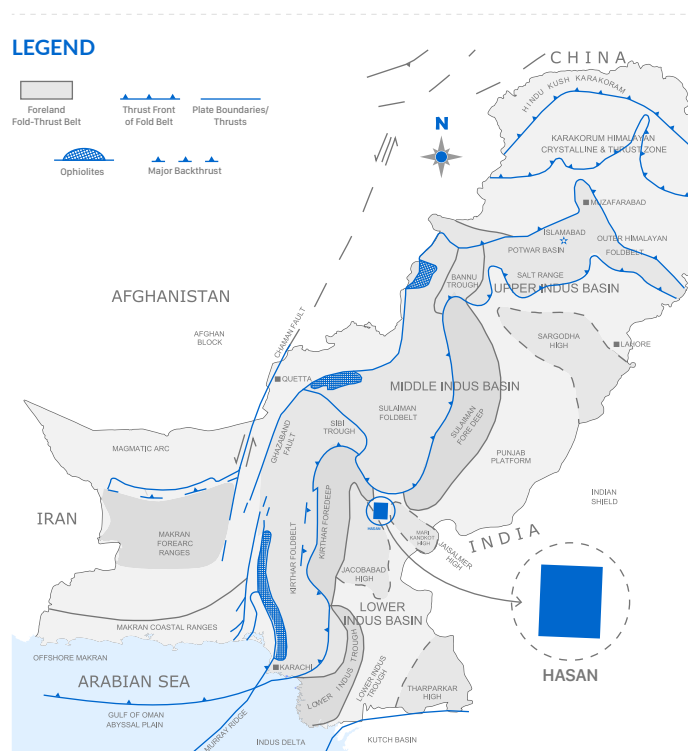
Rules  
**1986**

### Milestones Achieved and Key Features:

- ✓ An additional well (Hasan-4) was successfully completed and put into production phase in 2014
- ✓ Provisional Incentive Gas Price for incremental gas supply from Block-22 was notified by OGRA on February 23, 2016.
- ✓ A Gas Collection Network of around 42.5 km has been established
- ✓ Gas is being processed at a facility comprising of an Amine & dehydration unit
- ✓ Gas is being injected into the national grid of SNGPL
- ✓ Water Disposal well for managing water production from Block-22 field

### Working Interest:

	<b>26.18% (Operator)</b>
	<b>35.53%</b>
	<b>22.5%</b>
 PYRAMID ENERGY INTERNATIONAL INC	<b>15.79%</b>



## Block-22 (2768-3) Sadiq D&P Lease



Lease No.  
**155/PAK/2003**



Location/Districts  
**Shikarpur, Sukkur**



Date of Grant  
**03-04-2003**



Area (Sq.Km)  
**40.72**



Policy  
**1994**



Rules  
**1986**

## Block-22 (2768-3) Khanpur D&P Lease



Lease No.  
**156/PAK/2003**



Location/Districts  
**Shikarpur**



Date of Grant  
**03-04-2003**



Area (Sq.Km)  
**41.78**



Policy  
**1994**



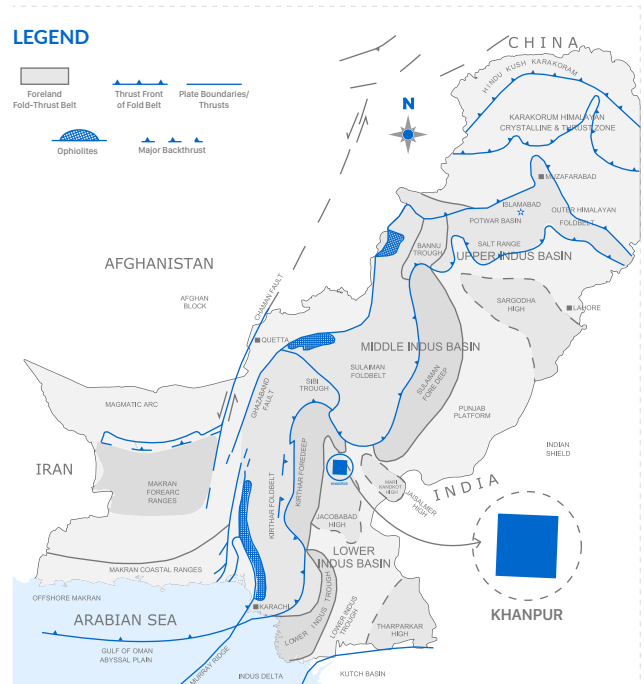
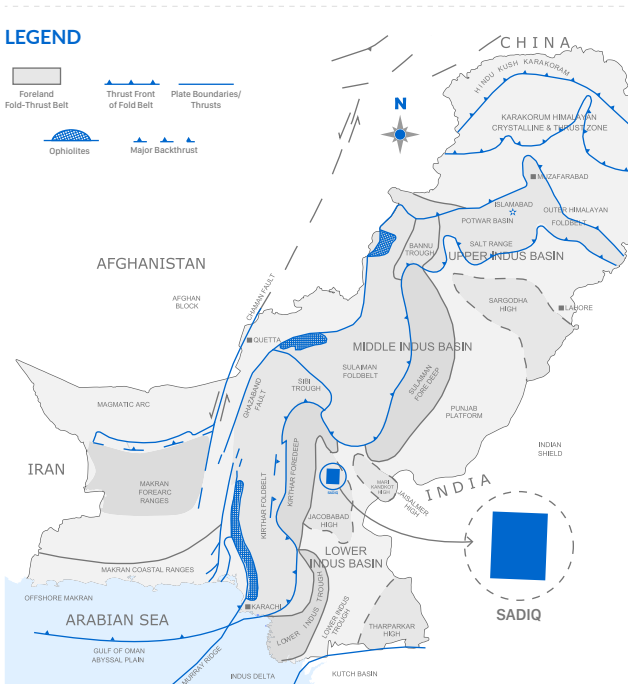
Rules  
**1986**

### Working Interest:

	<b>26.18% (Operator)</b>
	<b>35.53%</b>
	<b>22.50%</b>
	<b>15.79%</b>

### Working Interest:

	<b>26.18% (Operator)</b>
	<b>35.53%</b>
	<b>22.50%</b>
	<b>15.79%</b>



## Kandra (2768-6) D&P Lease



Lease No.  
**171/PAK/2006**



Location/Districts  
**Khairpur, Sukkur**



Date of Grant  
**05-01-2006**



Area (Sq.Km)  
**314.43**



Policy  
**1997**  
**(opted for Low BTU Gas Pricing Policy, 2012)**






Rules  
**1986**

### Milestones Achieved and Key Features:



- ✓ Petroleum System is fairly established in the region
- ✓ Recoverable reserves of 2.86 TCF in Sui Main Limestone
- ✓ Additional potential at Chiltan and deeper formations
- ✓ Kandra-4 deep tested 800+ BTU in Chiltan Limestone
- ✓ Initial Gas In Place 3.36 TCF

### Working Interest:

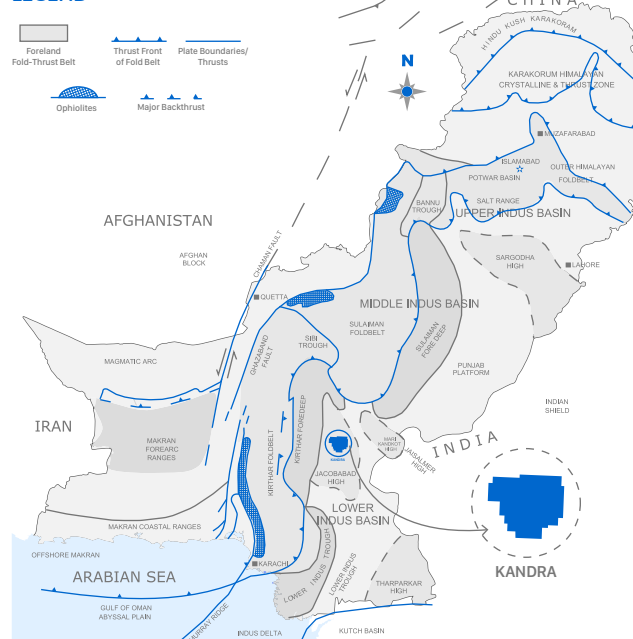
#### Exploration

	<b>35% (Operator)</b>
	<b>35%</b>
<b>GPXP</b>	<b>25%</b>
	<b>5%</b>

#### Development (SML)

	<b>75% (Operator)</b>
	<b>25%</b>

#### LEGEND





## Badin IV South (2468-5) Ayesha D&P Lease



Lease No.  
**212/PAK/2014**



Location/Districts  
**Badin**



Date of Grant  
**16-09-2014**



Area (Sq.Km)  
**19.71**



Policy  
**2001**  
(converted to 2012 Policy)



Rules  
**2001**

### Working Interest:

	<b>47.50% (Operator)</b>
	<b>27.50%</b>
<b>GPXP</b>	<b>25%</b>

## Badin IV South (2468-5) Aminah D&P Lease



Lease No.  
**236/PAK/2017**



Location/Districts  
**Sujawal**



Date of Grant  
**21-02-2017**



Area (Sq.Km)  
**18.50**





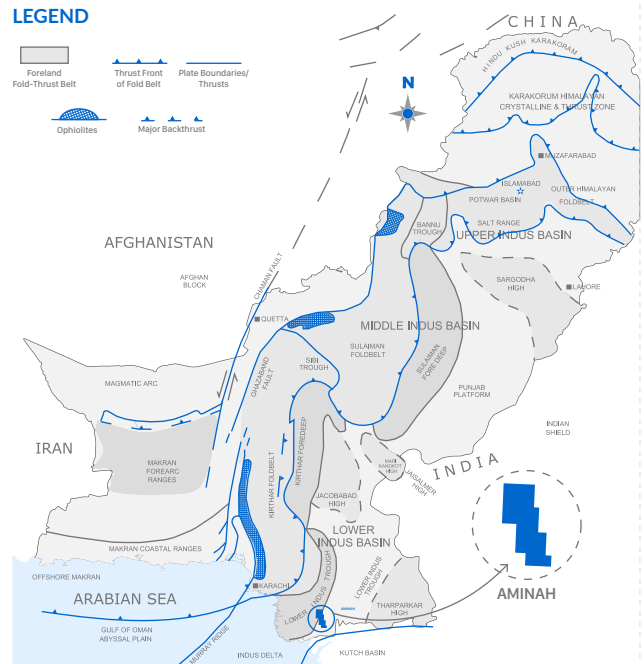
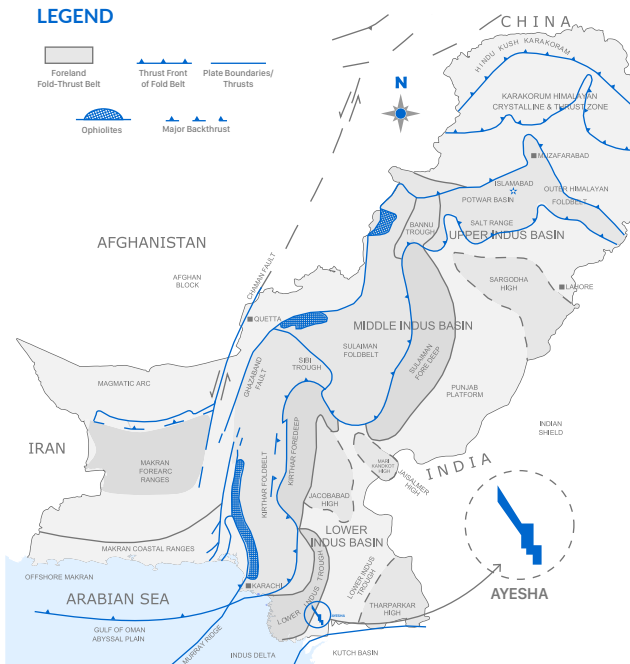
Policy  
**2001**  
(converted to 2012 Policy)



Rules  
**2001**

### Working Interest:

	<b>47.50% (Operator)</b>
	<b>27.50%</b>
<b>GPXP</b>	<b>25%</b>



## Badin IV South (2468-5) Ayesha North D&P Lease



Lease No.  
**237/PAK/2017**



Location/Districts  
**Badin**



Date of Grant  
**21-02-2017**



Area (Sq.Km)  
**11.97**



Policy  
**2001**  
(converted to 2012 Policy)



Rules  
**2001**

## Badin IV North (2468) Zainab D&P Lease



Lease No.  
**265/PAK/2020**



Location/Districts  
**Tando Muhammad Khan**



Date of Grant  
**18-01-2018**



Area (Sq.Km)  
**13.72 Sq.Km**





Policy  
**2001**  
(converted to 2012 Policy)





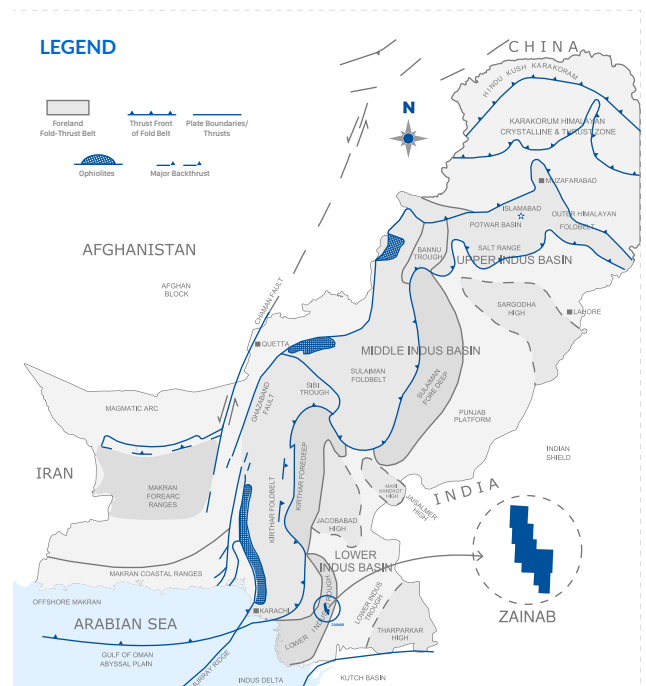
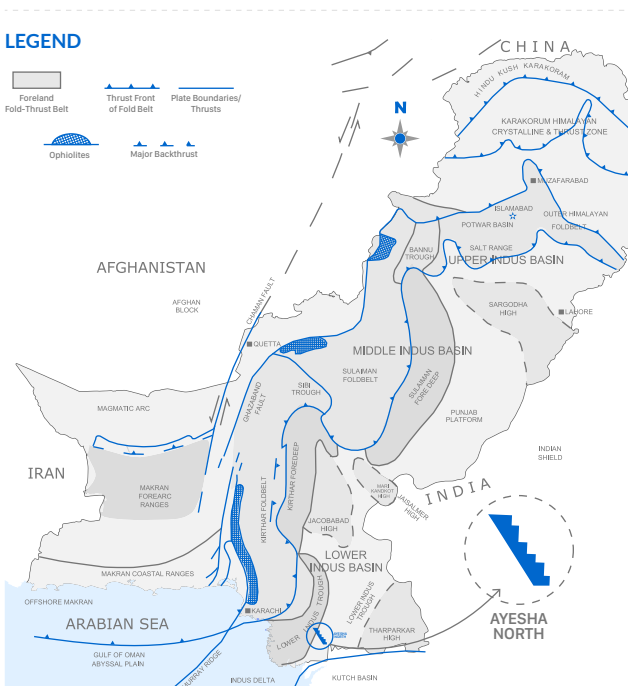
Rules  
**2001**

### Working Interest:

	<b>47.50% (Operator)</b>
	<b>27.50%</b>
<b>GPXP</b>	<b>25%</b>

### Working Interest:

	<b>47.50% (Operator)</b>
	<b>27.50%</b>
<b>GPXP</b>	<b>25%</b>



# Exploration Permit - Onshore Morocco

## Haha Onshore - Essaouira Basin



Area (Sq.Km)  
**4919**



Expected Hydrocarbons  
**Gas, Oil and Condensate**






Award Date  
**20-6-2007**



Permit Renewal  
**01-9-2015**

### Working Interest:

	<b>37% (Operator)</b>
	<b>38%</b>
	<b>25% (Carried)</b>

### Milestones Achieved and Key Features:

- ✓ Seven oil and gas fields present about 60 km to the north of Haha Permit with 500 BCF and 50 MMbbls Oil/Condensate in Triassic & Jurassic sands and carbonates
- ✓ First ever 3D seismic survey in Haha Permits
- ✓ 3D seismic acquisition of 140 Sq. Km was done by PGS, an internationally reputed seismic acquisition contractor
- ✓ A highly satisfactory seismic acquisition; Mr. Bernard Fournier / Fourier (an ex-Total professional), was hired for quality control.
- ✓ Successful drilling of 2 exploratory wells, Tamarar-1 and Tamarar-2
- ✓ At least 9 surface structures have been identified, and several more could be unraveled through G&G studies
- ✓ 8 TCF Gas and 900 MMBOE Oil



# Reconnaissance License - Morocco

## Qualidia



Area (Sq.Km)  
**4673.35**



Expected Hydrocarbons  
**Gas Condensate**



Award Date  
**17-10-2016**



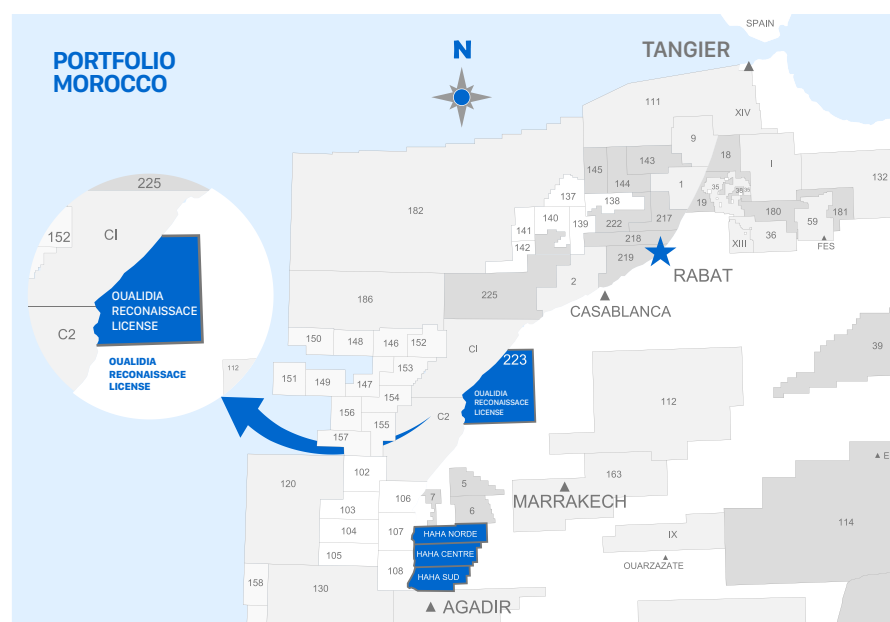
License Renewal  
**16-7-2021**

### Milestones Achieved and Key Features:

- ✓ 7 oil and gas fields are present in the south of Qualidia License with 500 BCF gas and 50 MMB oil/ condensate in Triassic & Jurassic sands and carbonates
- ✓ Abda Doukkala Basin is an under-explored area
- ✓ 4,343 LKM old acquisition (1962–1989)
- ✓ 418 LKM acquired by ENI (2008-2009)
- ✓ 1,454 LKM reprocessed by ENI (2008-2009)
- ✓ 132 LKM 2D seismic data reprocessed by OLYMPUS (2018-19)

### Working Interest:

<b>Olympus Energy International. Inc</b>	<b>100% (Operator)</b>
--	------------------------



# Exploration in Morocco

## Salient Features

- ✓ A politically stable & progressive country
- ✓ Investment friendly fiscal regime
- ✓ Royalty of 10% on oil and 5% on gas
- ✓ No surface rent and petroleum duty
- ✓ No currency control & VAT on goods and services
- ✓ World Bank Group Report 2017 ranks Morocco, a number one country in North Africa in terms of ease of doing business
- ✓ Corporate tax holiday for initial ten years during regular production



# AYESHA GAS COMPLEX



PEL has made four discoveries of natural gas in onshore Pakistan. Brief statistics of all the four discoveries are:

- ✓ Ayesha-1 produced 13 MMSCFD gas with a calorific value of 967 BTU / scf at Choke size 36/64" and 113 BPD of condensate.
- ✓ Aminah-1 produced 18.89 MMSCFD of good quality gas with a calorific value of 995 BTU / scf at Choke size 48/64" and 64.73 BPD of condensate.
- ✓ Ayesha North-1 produced 8.48 MMSCFD of good quality gas with a calorific value of 967 BTU / scf and 67 barrels of condensate at 48/64" Choke size. The flow rate is likely to increase after acidization.
- ✓ Zainab-1, Badin North produced 24 MMSCFD of gas with a calorific value of 1204 BTU / scf and 765 BPD of condensate.

PEL has completely developed 3 of its fields in the Badin South Concession and is supplying gas from these fields, uninterrupted, to the Government nominated Buyer – SSGCL, since February 5th 2020.

PEL is already producing 2.52 MMSCFD gas from Badar Gas field, 2.51 MMSCFD gas from Block-22 and 11.26 MMSCFD gas and 69.87 BBLSD of condensate from Ayesha Gas Complex.





# KANDRA GAS FIELD & POWER DEVELOPMENT

The field development at Kandra is aimed at producing low BTU gas for power generation. The field has proven gas reserves of 2.86 TCF.

Kandra Power Company (KPC), a sister concern of PEL is going to set up a 120 MW power plant utilizing the gas produced by the Kandra Gas Field from 12-14 wells.

This gas field development and power project costs are estimated to be USD 110 million and USD 180 million respectively. The field has Initial Gas In Place of 3.36 TCF.





# KPC PROJECT: FACT SHEET

<b>Project Name</b>	Kandra Field Development & Kandra power Project
<b>Project Sponsor</b>	Petroleum Exploration (Private) Limited
<b>Project Location</b>	Proposed KPC CCGT Thermal Power Complex will be located near the Kandra Gas Field in Sindh Province, Pakistan
<b>Project Brief</b>	60 MW/120 MW Combined Cycle Power Project ("CCPP") on Build-Own-Operate ("BOO") Basis utilizing low Btu processed natural gas from Kandra gas field. The gas will be obtained after processing raw Kandra gas using membrane technology to augment the calorific value from 150 Btu/SCF to 430 Btu/SCF.
<b>Plant Configuration</b>	The gas will be used in a Combined Cycle mode where the exhaust from the gas turbine will be used in a Heat Recovery Steam Generator to produce steam. The steam will power the steam turbine.
<b>Plant Thermal Efficiency</b>	The KPC Power Plant will have thermal efficiency in combined cycle mode of approximately 47%.
<b>Plant Land And Water Requirement</b>	An area of approx. 15 acres is being acquired for the project. Water for the power plant will be taken from the subsoil water aquifer and from a nearby perennial canal on the Indus River. Power will be supplied to National Transmission and Dispatch Company.
<b>Commercial Operation Date ("COD")</b>	The COD will be granted in 28 months from the grant of a Letter of Support by PPIB (Private Power & Infrastructure Board), Ministry of water and power, Government of Pakistan and 18 months after achieving Financial Close.
<b>Gas Pricing</b>	Gas price will be in accordance with the "Low Btu Gas Pricing Policy 2012" i.e., US\$ 8.75/MMBtu.
<b>Gas Reservoir Capacity</b>	Initial Gas in Place: 3.365 TCF (With recoverable reserves of 2.865 TCF; enough to supply gas to KPC for next 25 to 30 years).
<b>Internal Rate of Return ("IRR")</b>	17% indexed, dollar based IRR (Tax exempt). The IRR is denominated in US Dollars and exchange rate variations are borne by the off-taker.
<b>Power Purchaser (Power Off-taker)</b>	National Transmission and Dispatch Company will purchase electricity in accordance with a Power Purchase Agreement, to be negotiated with Kandra Power Company, where the tariff will be notified by NEPRA.

# KPC PROJECT: VALUE PROPOSITION

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## Indigenous Fuel

The project is based on Indigenous fuel i.e. processed Kandra Gas and therefore supported by the GOP policy as well as by multilaterals, in line with their strategy to reduce Pakistan's import bill which is attributable to a great extent, to the import of furnace oil.

## Priority on Merit Order of Dispatch

Since the fuel cost is low when compared to any furnace oil based project, Kandra would appear high on Merit order of dispatch and is therefore on the priority of payments as well.

## Base Load Plant (Must Run)

Since the project is based on a dedicated gas field, the Must Run status i.e. Non stoppage of the project is ensured under the Power Purchase Agreement. This means the Power Purchaser will be obliged to run the plant even if the fuel cost becomes higher as compared to other fuel that nullifies dispatch risk.

## Two Part Tariff (Ensured Capacity Payments)

The tariff structure under the Power Purchase Agreement provides that the capacity payments i.e. payments related to the fixed obligations, are ensured whether or not the electricity from the project is dispatched. Hence, the Return on Equity as well as the Debt obligations and fixed O&M are ensured without any risk.

## Established Contractual Structure

The project will be developed under the Power Policy 2002. Under this policy, 15 projects financed by local commercial banks as well as international lenders such as IFC, ADB etc., have been established and are operating successfully. Kandra will be based on this tried and tested contractual structure which has established its resilience towards various risks.

## Gas Availability

Currently, Kandra is the last gas based power project in Pakistan which signifies its importance and its priority among other Power Projects in the pipeline.

## Implementation Agreement (IA) Backed by Sovereign Guarantee

Government of Pakistan will provide sovereign guarantee as per the Implementation Agreement ("IA"). Private Power and Infrastructure Board ("PPIB") will execute the IA on behalf of the Government of Pakistan.

# KPC PROJECT: STUDIES & APPROVALS

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## Feasibility Study

**Conducted by:**  
M/S OMS (PVT.) LTD.  
251-CCA, Block FF, Phase IV, DHA,  
Lahore, Pakistan.

## Feasibility Approval

**Feasibility Approval in- place**  
Issued by: Private Power and Infrastructure Board  
(Ministry of Water and Power, Government of Pakistan)

## Grid Interconnection, System Stability and Load Flow Study

**Conducted by:**  
National Power and Dispatch Company  
WAPDA House,  
Lahore, Pakistan.

## Grid Interconnection Approval

**Grid Interconnection approval in-place**  
Issued by: National Transmission & Dispatch Company NTDC

## Environmental Impact Assessment Report (EIA)

**Conducted by:**  
Shahzad International (SI)  
No. 15, Main Nazaimuddin Road, Sector F-10/4,  
Islamabad, Pakistan.

## Environmental Approval

**Sindh EPA No Objection Certificate ("NOC") in-place**  
Issued by: Sindh Environmental Protection Agency (SEPA)

## Gas Availability/ Reservoir Study

**Conducted by:**  
McDaniel and Associates  
5th Avenue S.W., Bow Valley Square, Calgary,  
Alberta, Canada.

## Reservoir Study Verification

**Reservoir Evaluation Assessment in-place**  
Issued by: McDaniel and Associates

## Site Selection & Procurement

**Site finalized by NTDC:**  
Approximately 20 kilometers from Sukkur Grid Station  
Adjacent to Kandra Gas field  
Sindh, Pakistan.

## Site Approval

**Pre-Approved vide NTDC Grid study approval**  
Issued by: National Transmission and Dispatch Company.

# INTERNATIONAL CONFERENCES

First Caspian Economic Forum, Turkmenistan



ADIPEC, Abu Dhabi

Global Petroleum Show, Canada



PEL

# HEALTH AND SAFETY

OUR COMMITMENT TO SAFETY



# OUR COMMITMENT TO SAFETY

We take safety very seriously and are constantly improving our policies and procedures to ensure a safe work environment.

We employ safety officers to ensure that all policies and procedures are adhered to and that our zero harm targets will be met. Safety is our first priority at every stage throughout our projects from the design and planning stages through to completion.

## OUR TARGET IS ZERO-HARM

At every level our workforce is making zero harm safety our main objective. Our commitment is to provide a safe work environment for our employees and for everyone who visits our exploration and production sites.

Our senior management team has a commitment to ensuring that our employees, the public and the environment are safe at all times. Our ultimate goal, which is reflected in our mission statement as well, is to reach zero harm in our workplace.

## SAFETY STRATEGIES

- ✓ Ongoing supervision and training
- ✓ Incident reporting and investigation
- ✓ Daily Site Safety Meetings



# ENVIRONMENT & COMMUNITY

## ACTIVE COMMUNITY INVOLVEMENT

Our group is a family company with strong community values. It acknowledges that as a good corporate citizen, the company should be actively involved in the community, its interests and activities.

We actively involve ourselves in supporting charity hospitals and emergency relief works, as well as becoming a lead financier of the social welfare projects in Pakistan conducted by True Worth Foundation (TWF).

We also support communities by providing employment to local residents in the region where we explore and produce hydrocarbons.

PEL not only make frequent donations to Al-Wadood Hospital but also finances education and health awareness projects conducted by domestic NGOs, like True Worth Foundation (TWF).



PEL contributed significantly towards the establishment and construction of AL-Wadood Hospital, a trust hospital in Islamabad.



A Cricket Match organized by PEL for the Promising Young Talent!



As part of our commitment to developing and nurturing the community of emerging young talent, PEL hosted and organized a Cricket Match for these young players.

## ENVIRONMENTAL EXCELLENCE

We recognise that caring for our environment is vital and we are committed to the principles of environmental excellence and sustainable development.

Our group is taking measures to minimize impacts on global warming through greenhouse gas emission controls and monitoring; we remove CO2 from gas before feeding it to the pipelines.



PEL made a significant contribution of US\$ 29,750 to the construction of eight classrooms at HMB Trust's Institute of Science & Technology in Shikarpur, Sindh. The company also undertook the installation of electric water coolers at several schools, colleges, libraries and parks at a cost of US\$ 33,688.



## Clean and Green Pakistan

PEL is committed to making Pakistan Clean and Green by planting saplings today for the generation of tomorrow.



## COVID- 19

PEL enforced collective measures in arresting the spread of COVID-19. Use of face mask, maintaining social distance, frequent use of sanitizer, and washing hands with soap are some of the important precautions widely practiced by PEL. The guidelines assisted in the development of Standard Operating Procedures (SOPs) related to Fieldwork to ensure the appropriate COVID-19 health and safety considerations for the protection of all our workforce at PEL.



We focused on implementing controlled measures to eliminate or reduce the spread of COVID-19.

- ✓ Standard Guidelines for Fieldwork
- ✓ Face Coverings and Masks
- ✓ Physical Distancing while Working and Traveling
- ✓ Screening and Tracking
- ✓ Fumigation of Work Premises
- ✓ Hygiene



PEL joined the global community in creating awareness about the disastrous effects of COVID-19 and its variants. It had gone to great lengths to ensure safety by launching awareness campaigns and taking necessary precautions.

PEL is now a 100% vaccinated corporate entity. We are committed to providing a safe and healthy work environment to our employees.



# FLOOD RELIEF PROGRAM

PEL prides itself in continuously playing its part in helping flood victims in several districts of Sindh.

PEL and True Worth Foundation joined hands to help the flood victims return to their normal life; the relief work comprised of the installation of a water filtration plant in Dadu to provide the displaced people access to drinkable water, setting-up of a medical camp, and distribution of dry food rations, health care, and emergency supplies including hygiene kits, mosquito nets and medicines.

The relief team also distributed water containers, toiletry, plastic floor mats and kitchen kits among the displaced families in Ghotki.



PEL Ambulance



PEL Flood Relief Team



PEL Flood Relief Team



Joint Efforts with Forces in Flood Relief, Sindh

# PETROLEUM TECHNICAL TRAINING INSTITUTE

As part of a project for enhancing the skills and technical expertise of the existing work force of local E&P companies, PEL sponsored and built the Petroleum Technical Training Institute (PTTI). The company contributed nearly US\$ 0.5 million to this project.

The facility is located at Kandra (Khairpur) in Sindh and consists of air conditioned classrooms, library, seminar hall, networked computer laboratory with access to the internet via a high speed DSL connection, instrumentation and control lab, drilling and production lab and oil and gas testing lab.

PTTI was established to train and build a capable workforce of oil & gas personnel and this is reflected, both in its planning and its curriculum.

It has been established in the premises of Government College of Technology Khairpur. It is under the administrative control of the Sindh Technical Education and Vocational Training Authority (STEVTA)



# FAMINE RELIEF PROGRAM

More than 175,000 lives got affected by the extreme famine that hit Thar, Pakistan in 2014. Both public and private organizations stepped forward to help the victims; PEL partnered with Ms. Shazia Marri, a Member National Assembly (MNA), to procure and distribute 300 flour bags among the victims.







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