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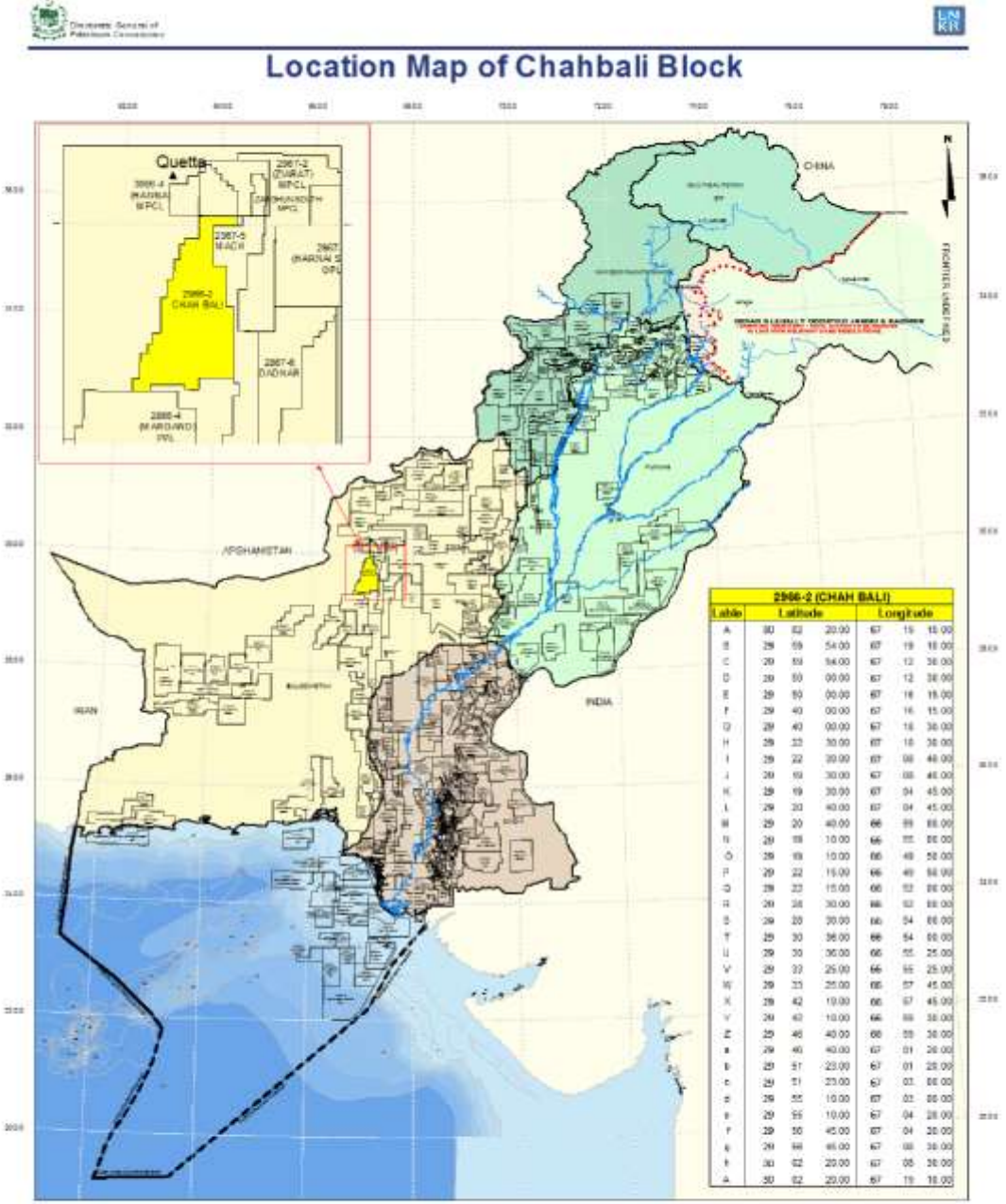
BLOCK: CHAH BALI

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Chah Bali Block covers an area of 2169.30 sq km
- Location: Mach, Mastung and Kalat district, Balochistan, Pakistan.
- Geological Basin: Sulaiman Fold Belt, Balochistan, Pakistan.

- The block falls in Zone II
- Estimated Resources of the Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet
- PPL & OGDCL acquired some 2D surrounding blocks within the years 2009, 2011, 2014, 2018, 2020 and
- The Block is surrounded by Mach (East), Zarghun West (West), (North) and Margand (South).
- The wells drilled in the near vicinity
  - Zarghun South 01, 02, 03, 04
  - Bannh 01
  - Bolan East 01
- Major discoveries in the is from Zarghun South 01 (lies in Bolan East 01 (lies in east).



2966-2 (CHAH BALI)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	II	2D Seismic (L.Kms)	NA	2,169.30	471.74	21.75	Mach
Grid Area	29.12	3D Seismic (Sq.Kms)	NA		1102.11	50.80	Mastung
Province	Balochistan	No. Wells	NA		595.45	27.45	Kalat

Prospectivity

Balochistan

data in 1993, 1994, 2021

and Ziarat Hanna

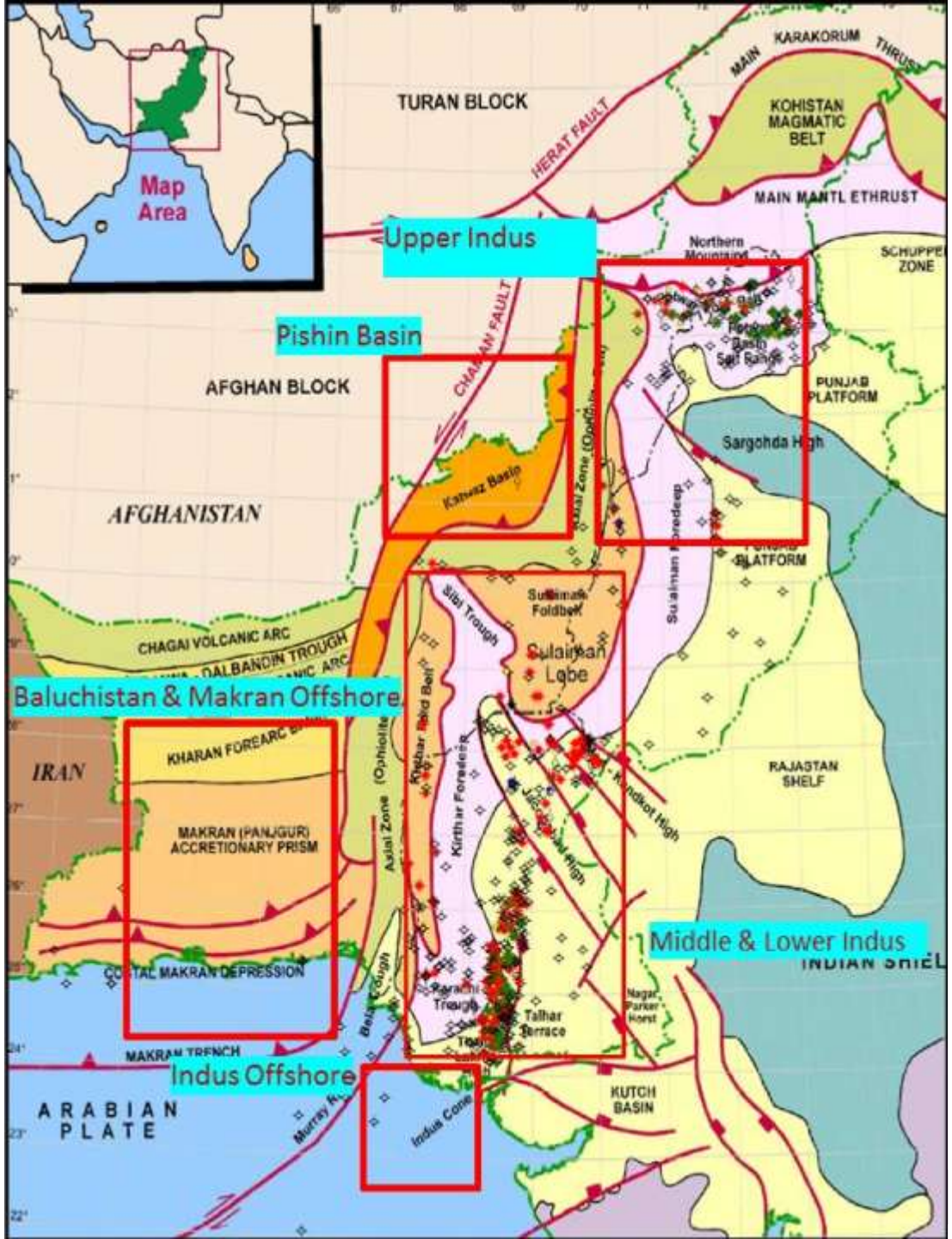
are:

surrounding the north),

*Riaz Ahmed 1998, Hydrocarbon Resource Base Hydrobarbon Research, Vol 10, 1-10

Geological Map

- Chah Bali block lies in the part of the low laying Raskoh
- At surface, the Raskoh Range topographically elevated
- It is structurally controlled by and folding of Cretaceous to strata.
- In the north this range is by an intervening low (Dalbandin Trough) from the
- In the south by the Usman/Kukab transpressional dips northwest in direction Kharan Trough.



of Pakistan, Pakistan Journal of

western Range.

is a feature

thrusting Oligocene

separated

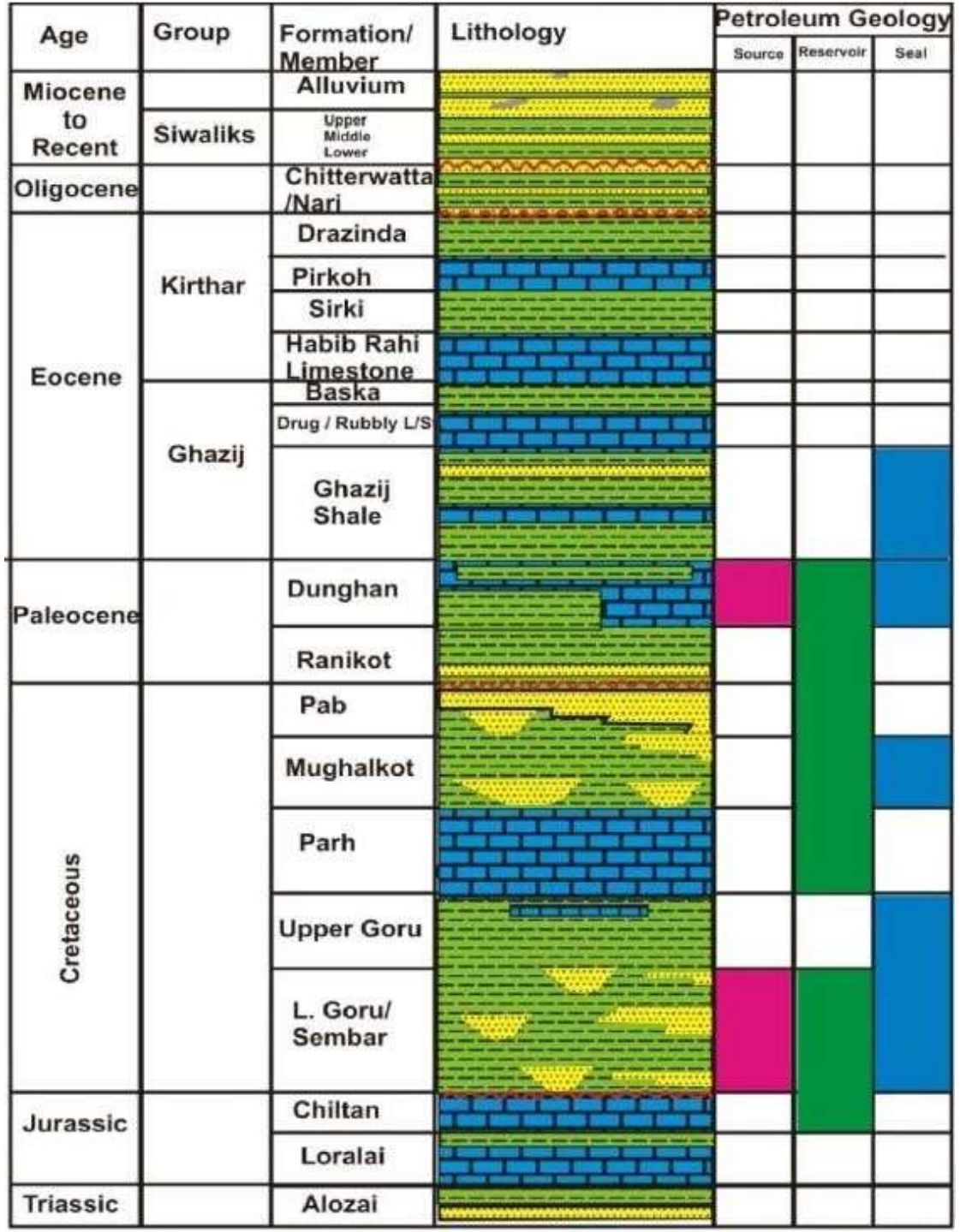
Chagai Arc

fault, which from

Petroleum System

- A petroleum system exist in Jurassic to Eocene sedimentary packages.
- Potential source rocks in the include the Lower Goru/Sembar (Cretaceous), Formation (Paleocene).
- The potential reservoir rocks include the

sic), L.Goru/Sembar, Parh, Mughalkot,
Pab
(Cretaceous)



the

area

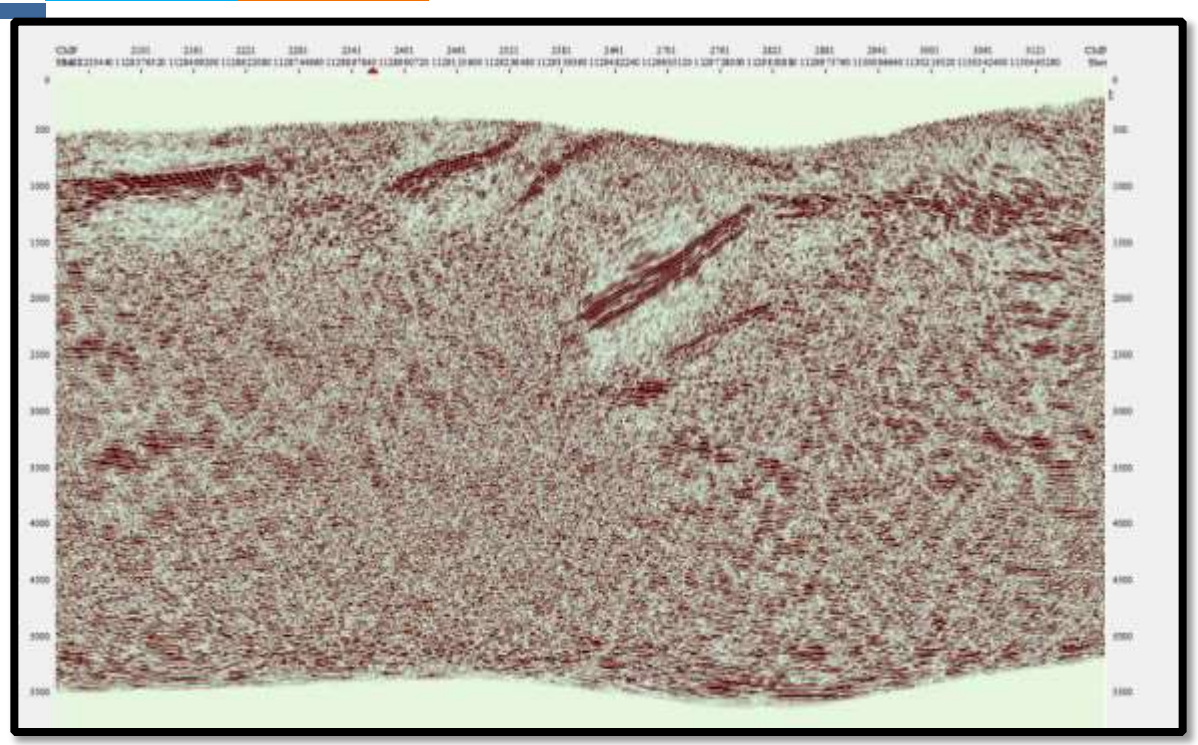
Dunghan

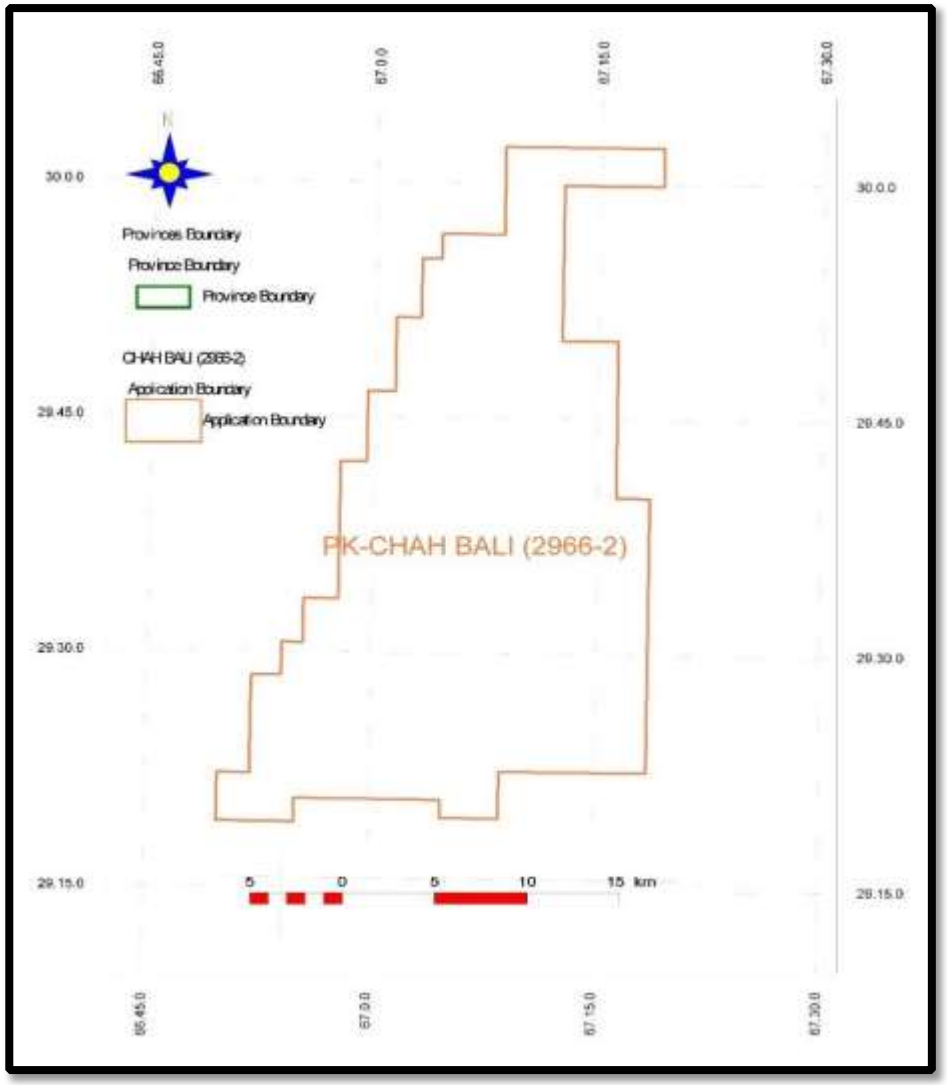
in the area

- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity

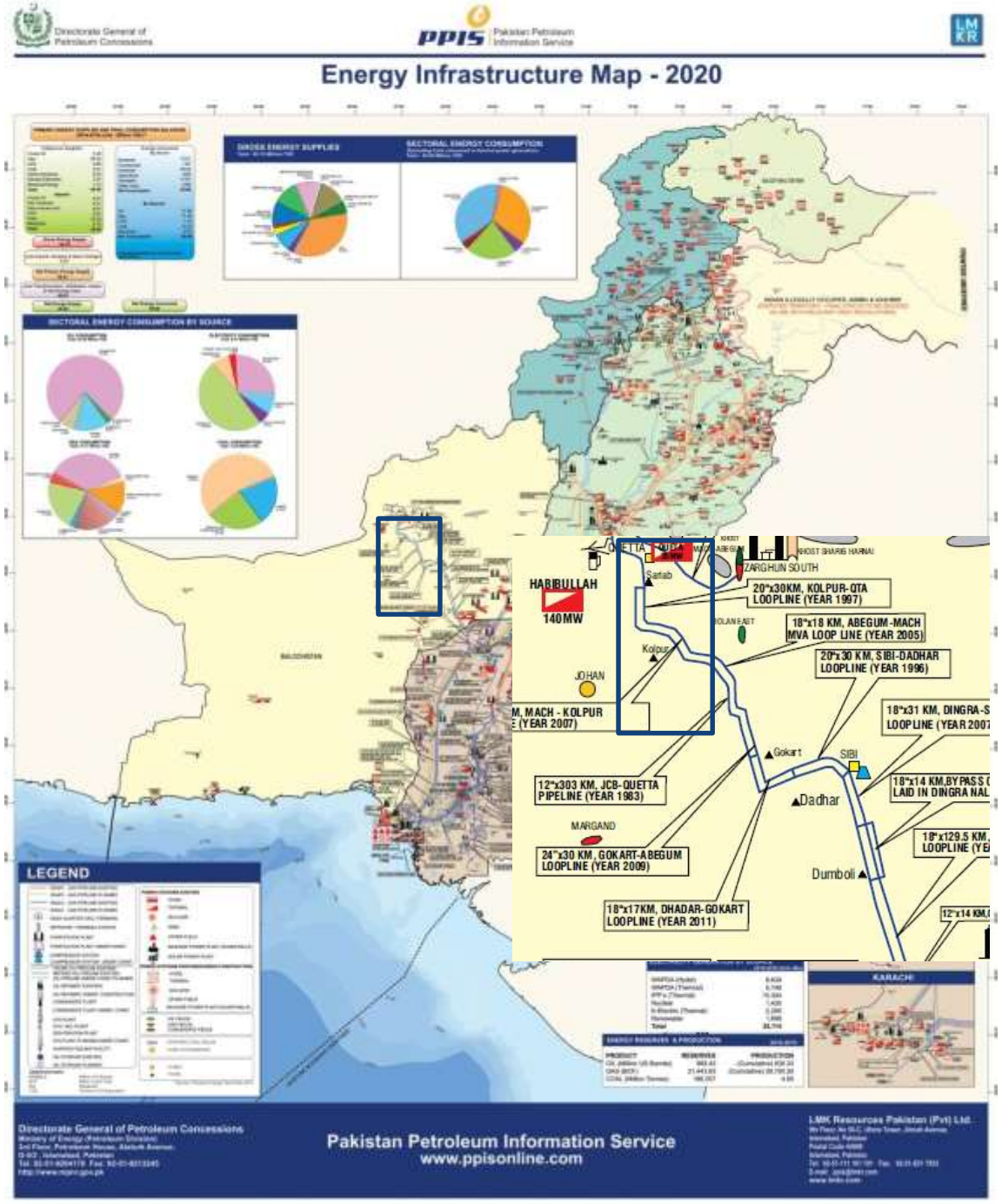




- The main trapping mechanism in this area is considered to be thrust related anticlines
- In recent past, nearby blocks have successful Oil & Gas discoveries.
- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available South-West of the block.
- 18-24” gas pipeline infrastructures are present in the region.
- Bolan East oil field and Margand gas field lies close to the block.
- Towards south of the block, a pipeline connecting Jhal Magsi is planned
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will guarantee to buy the gas or oil discovered ■Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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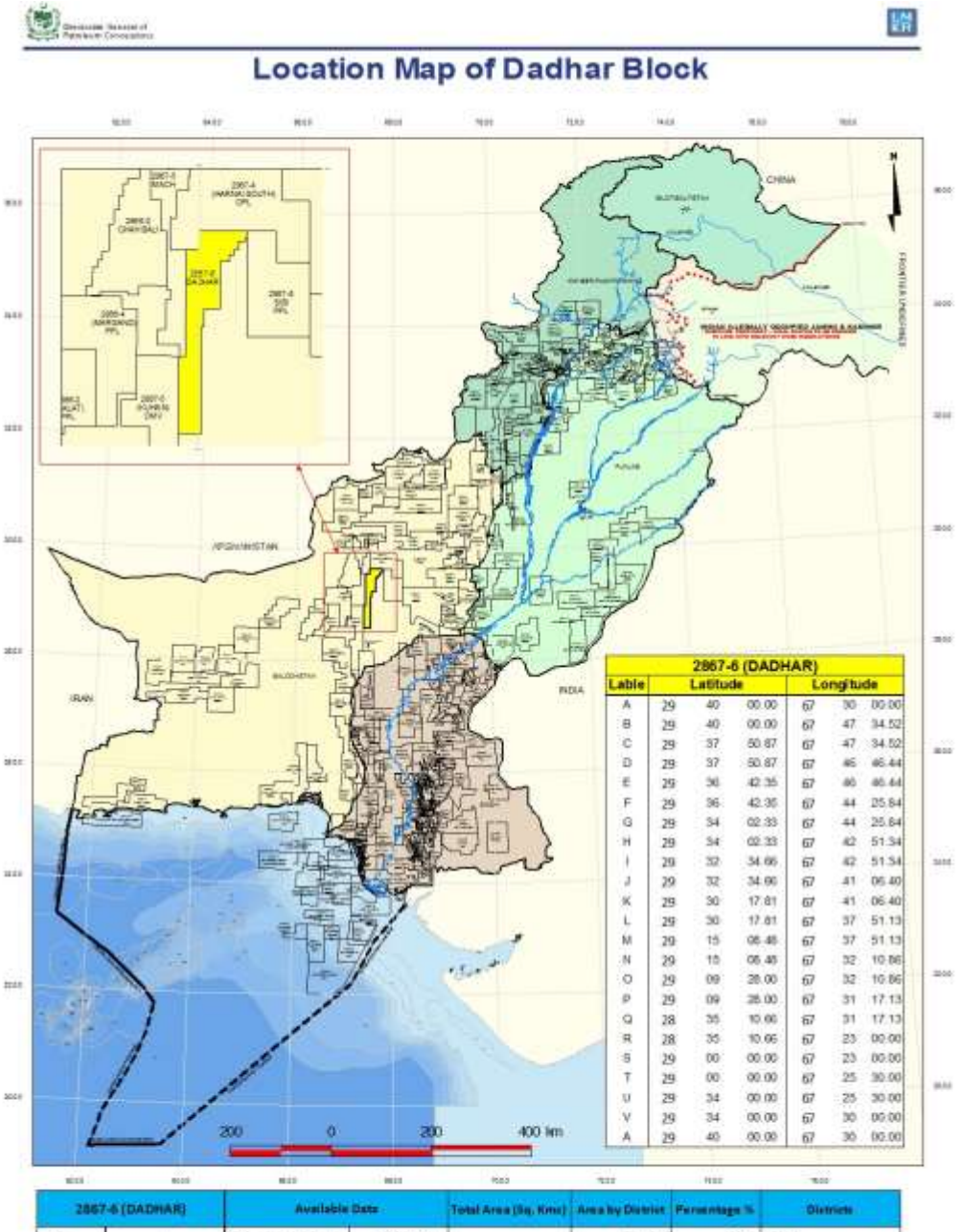
BLOCK: DADHAR

DGPC BLOCK BIDDING ROUND 2021

Introduction

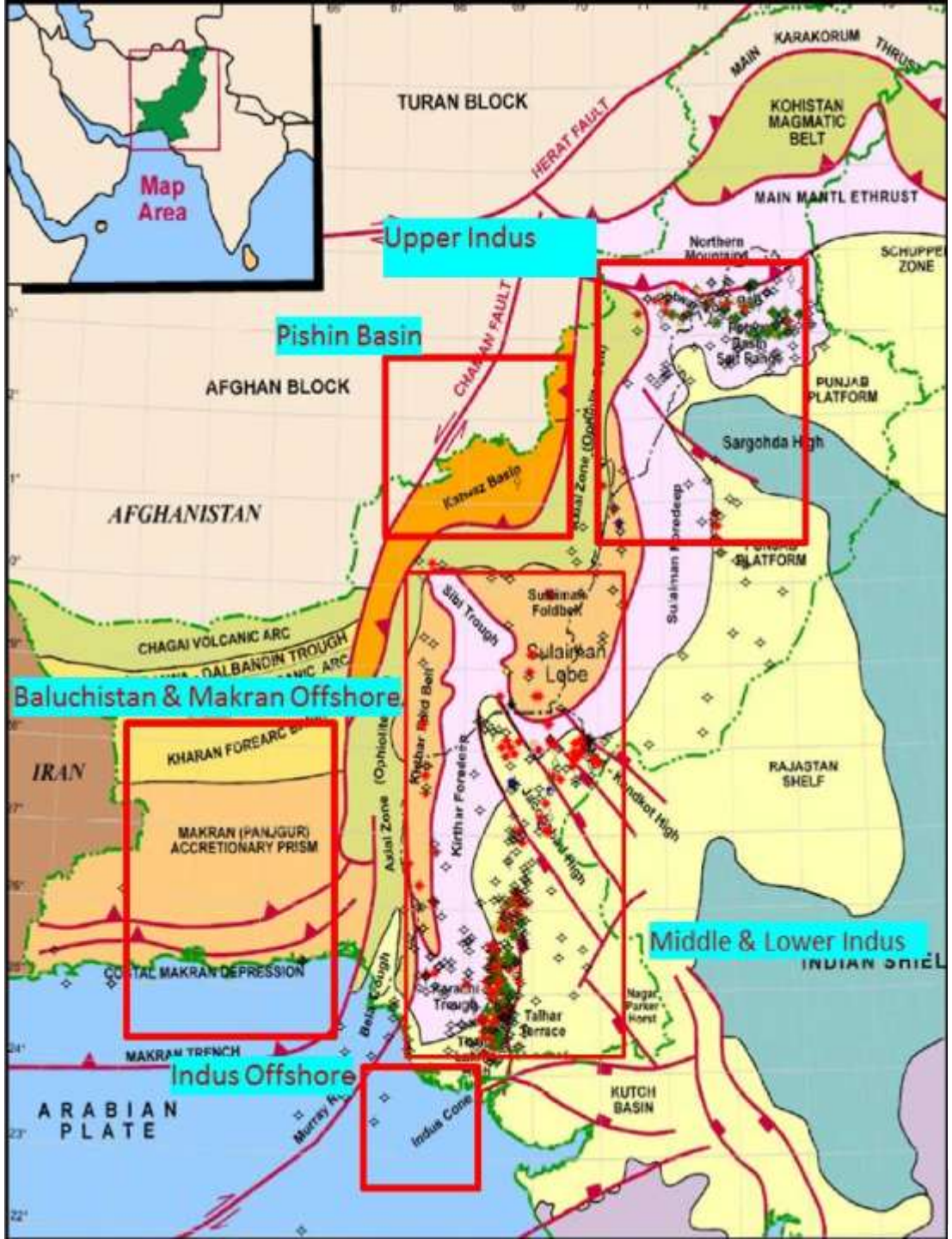


- Dadhar Block covers an area of 19122.73 sq km.
- Location: Mach, Sibi, Bolan, Kalat and Jhal Magsi district of Balochistan Pakistan.
- Geological Basin: Sulaiman Fold Belt, Balochistan, Pakistan.
- The block falls in Prospectivity Zone II.
- Estimated Resources of the Balochistan Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet
- OMV, AMOCO, BP, PPL, Premier Oil Acquired some 2D data in the block within the years 1975, 1976, 1992, 1998, 1982 and 2004.
- The Block is surrounded by Sibi and Chhalgari (East), Mach (West), Harnai and Ziarat (North) and Kotra East (South)
- The wells drilled in the near vicinity are:
  - Bannh-01
  - Tangna Pusht X-01
  - Sanni-01
- Major discoveries in the surrounding is from Zarghun South 01 (north) Jhal Magsi South 01 and Jhal Magsi South 02 (south) and Morgandh X-01(west) .

**Riaz Ahmed 1998, Hydrocarbon Resource Base of Pakistan, Pakistan Journal of Hydrobarbon Research, Vol 10, 1-10*

Geological Map

- Dadhar block lies in the part of the low laying Range.
- At surface, the Raskoh topographically elevated
- It is structurally controlled and folding of Cretaceous Oligocene strata.
- In the north this range is by an intervening low Trough) from the Chagai
- In the south by the Usman/Kukab transpressional fault,



western Raskoh

Range is a feature

by thrusting to

separated (Dalbandin Arc

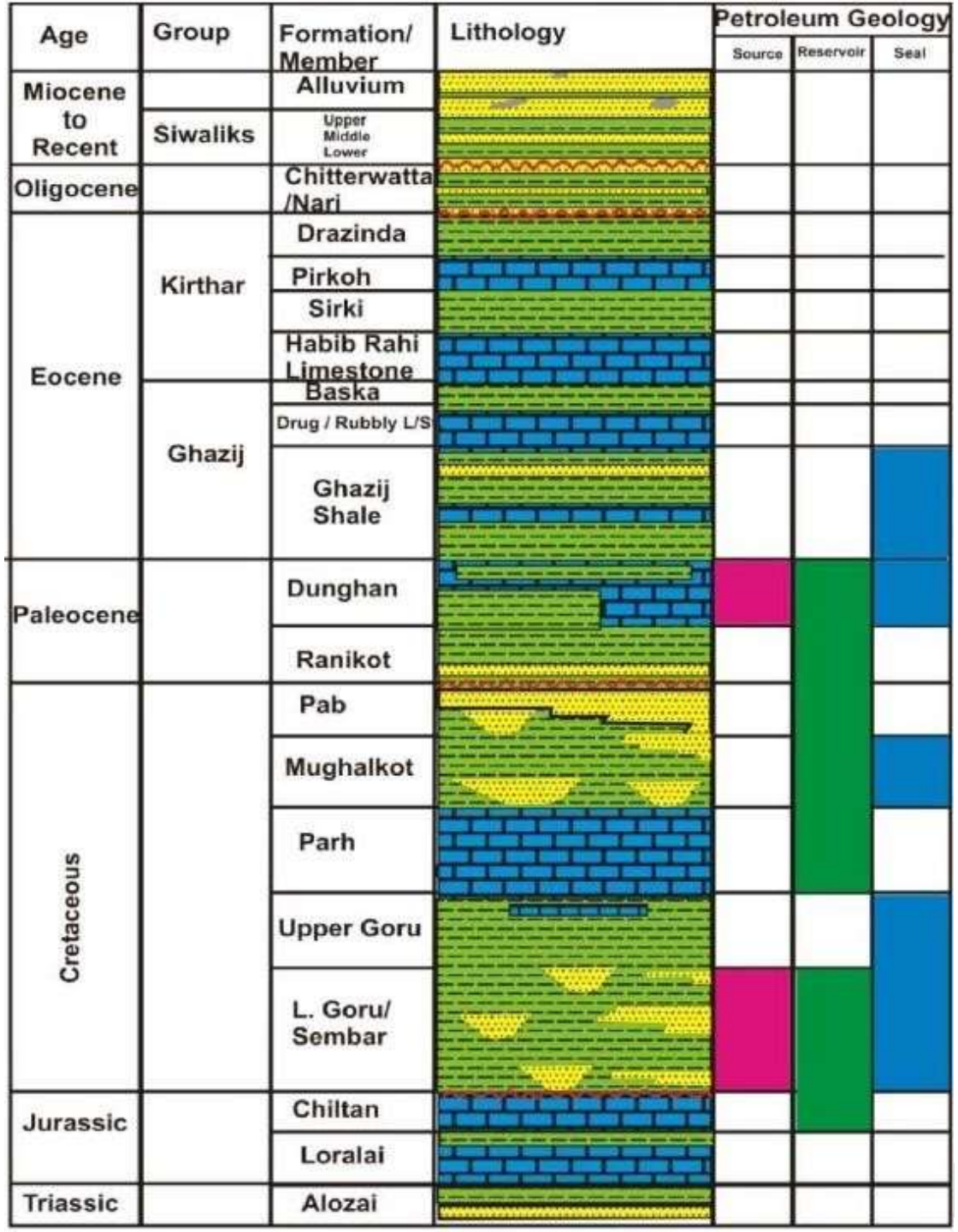
which dips

northwest in direction from Trough.

Petroleum System

- A petroleum system exist Jurassic to Eocene sedimentary packages.
- Potential source rocks in include the Lower Goru/Sembar (Cretaceous), Dunghan (Paleocene).
- The potential reservoir area include the

sic), L.Goru/Sembar, Parh, Mughalkot, Pab (Cretaceous)



Kharan

in the

the area

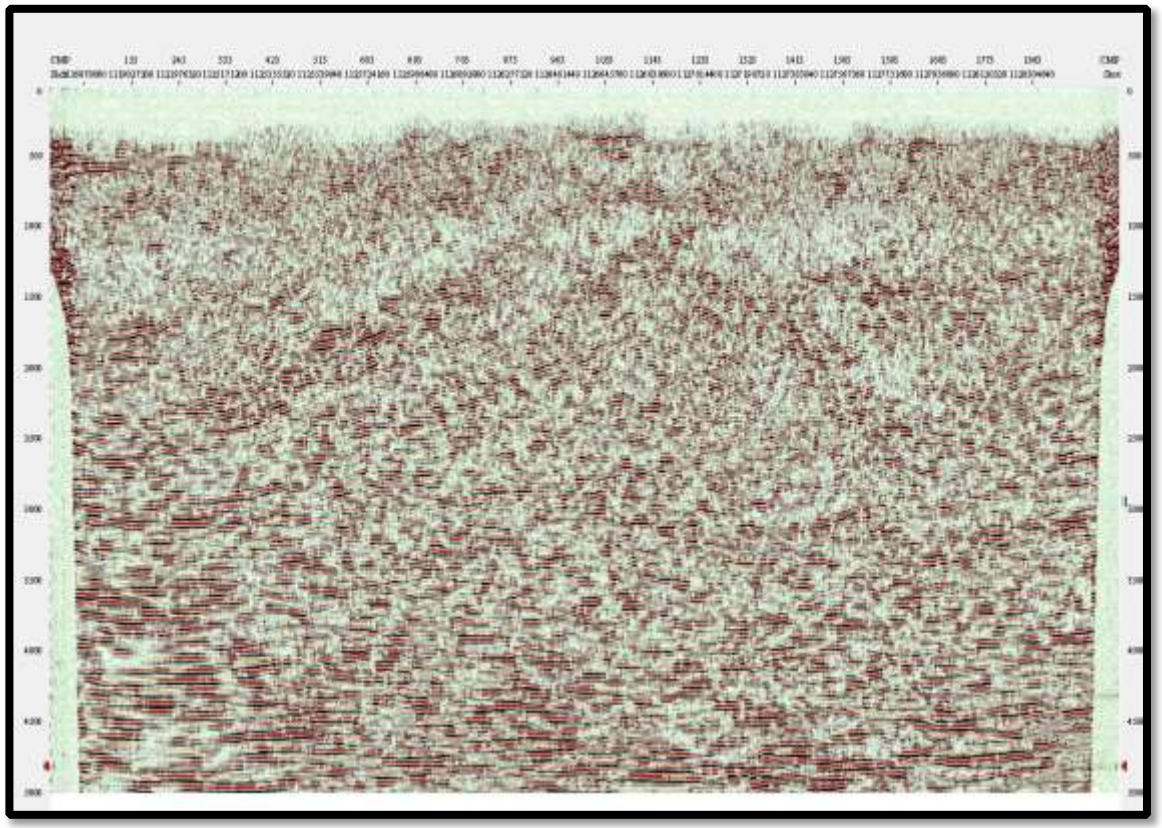
Formation

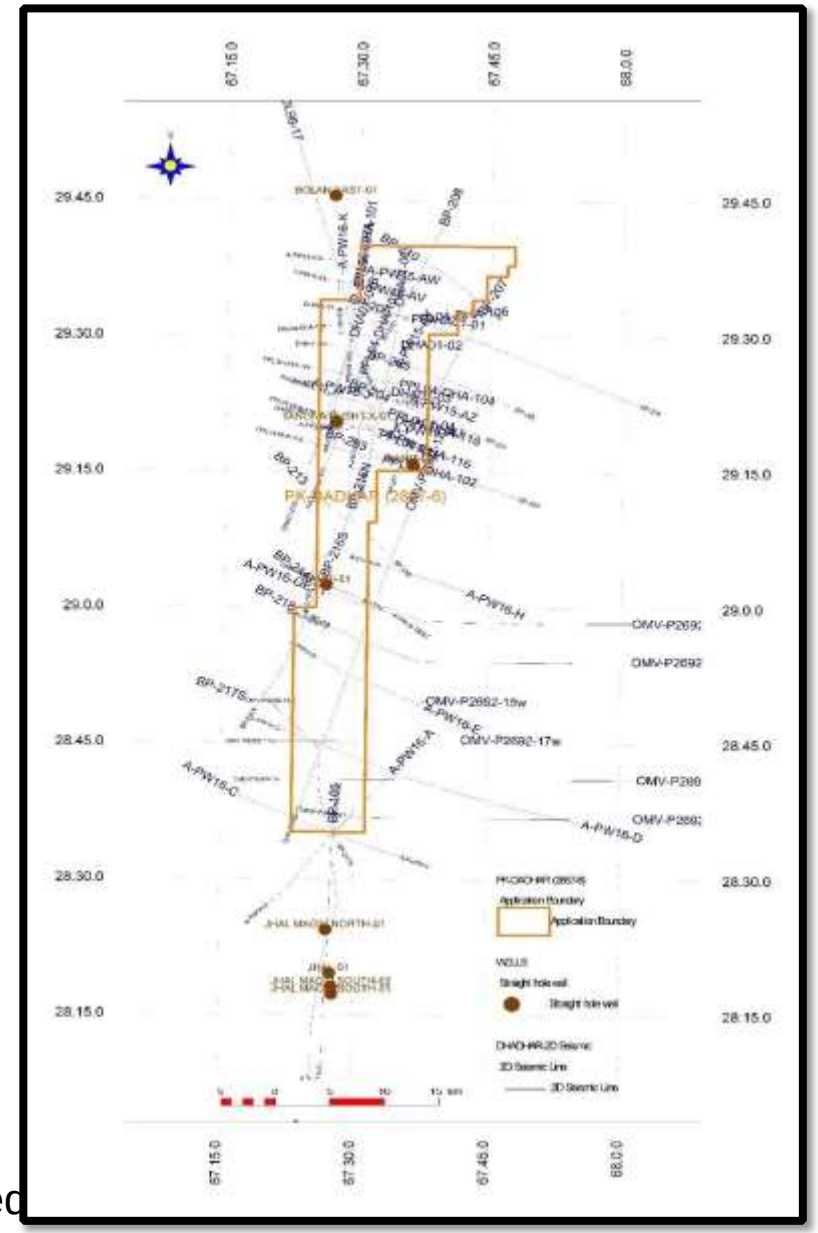
rocks in the

- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity





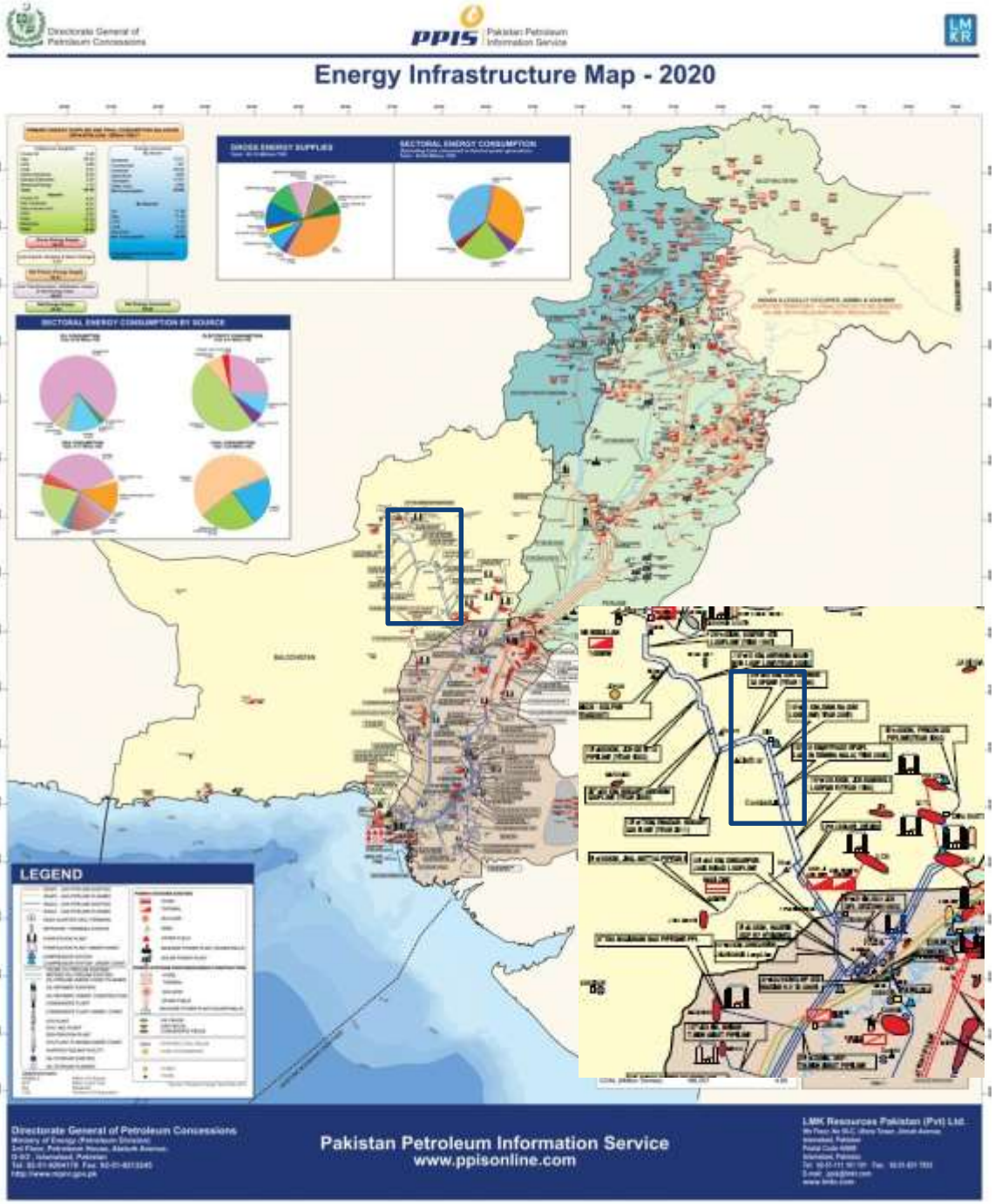
- The main trapping mechanism in this area is considered to be thrust related

anticlines

- In recent past, nearby blocks have successful gas discoveries.
- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available near the block.
- Bolan East oil field and Margand gas field lies close to the block.
- Towards south of the block, a pipeline connecting Jhal Magsi is planned



- Government support to companies for infrastructure development

Investment Benefits

- High risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas and the oil discovered.
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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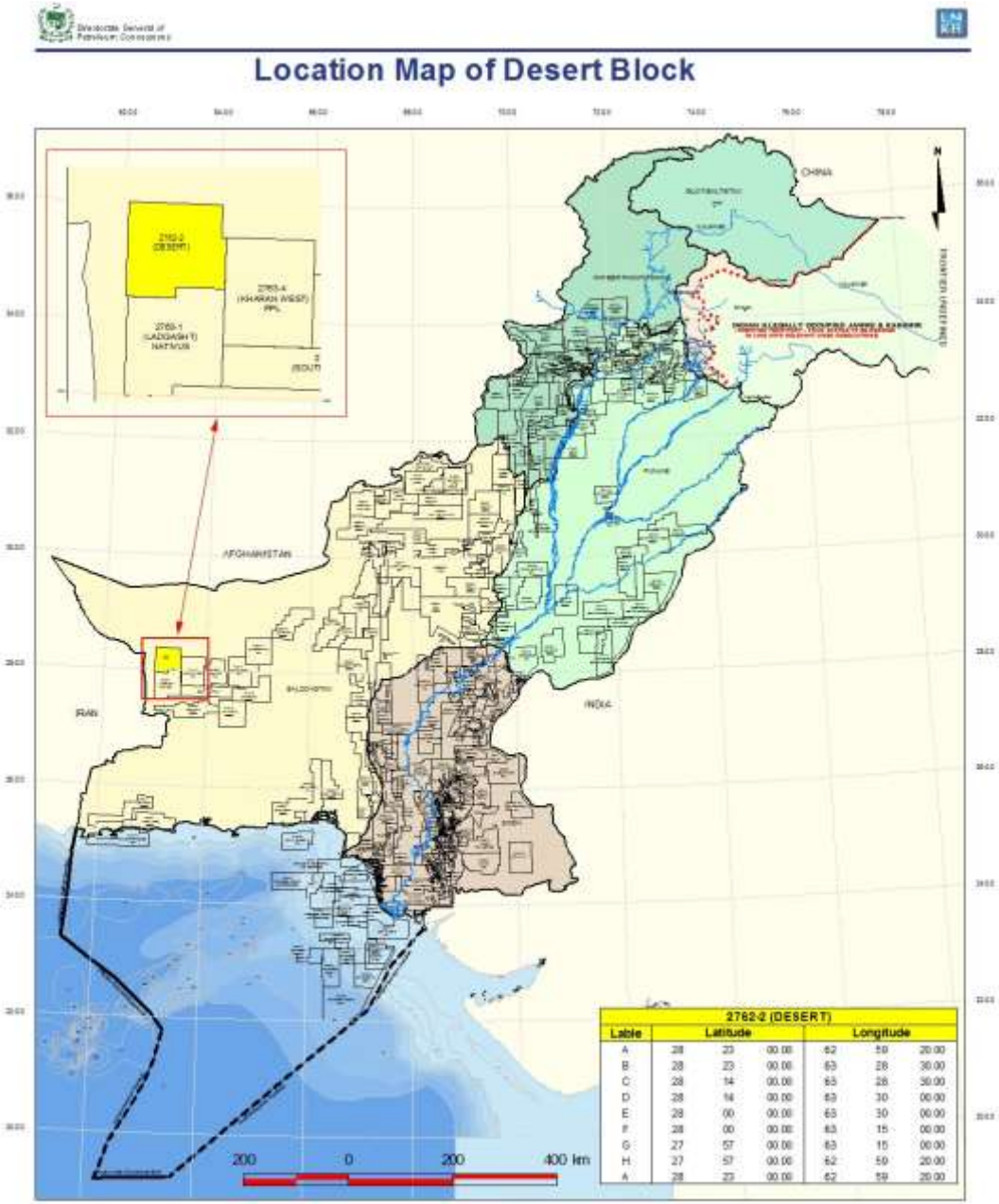
BLOCK: DESERT

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Desert Block covers an area of 2231.30 sq km
- Location: Chaghai and Washuk district, Balochistan, Pakistan.
- Geological Basin: Balochistan, Basin Pakistan.
- The block falls in Prospectivity Zone I(F)
- Estimated Resources of the Balochistan Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet
- PPL acquired some 2D data in the block within the years 2012.
- The Block is surrounded by Kharan West (East) and Ladgasht (South).
- The wells drilled in the near vicinity is Kharan X-01.



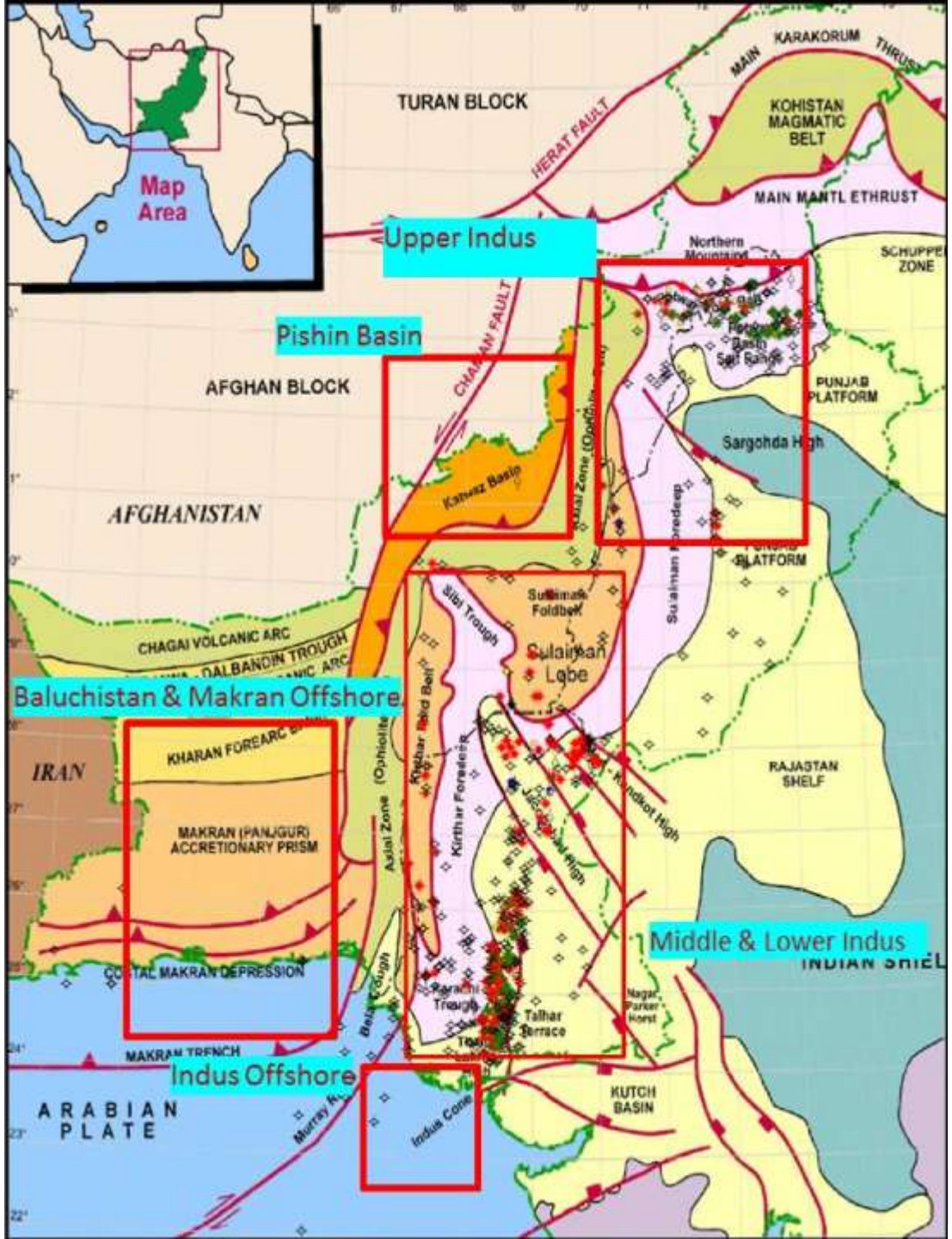
2762-2 (DESERT)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	I (F)	2D Seismic (L.Kms)	NA	2231.30	992.94	44.50	Chaghai
Grid Area	29.55	3D Seismic (Sq.Kms)	NA		1238.36	55.50	Washuk
Province	Balochistan	No. Wells	NA				

- Major discovery in the basin is from Morgandh X-01.

*Riaz Ahmed 1998, Hydrocarbon Resource Base of Pakistan, Pakistan Journal of Hydrobarbon Research, Vol 10, 1-10

Geological Map

- Desert block lies in the part of the low laying Range.
- At surface, the Raskoh topographically elevated
- It is structurally controlled and folding of Cretaceous Oligocene strata.
- In the north this range is by an intervening low (Dalbandin Trough) from the
- In the south by the Usman/Kukab transpressional fault, which



western Raskoh

Range is a feature

by thrusting to

separated

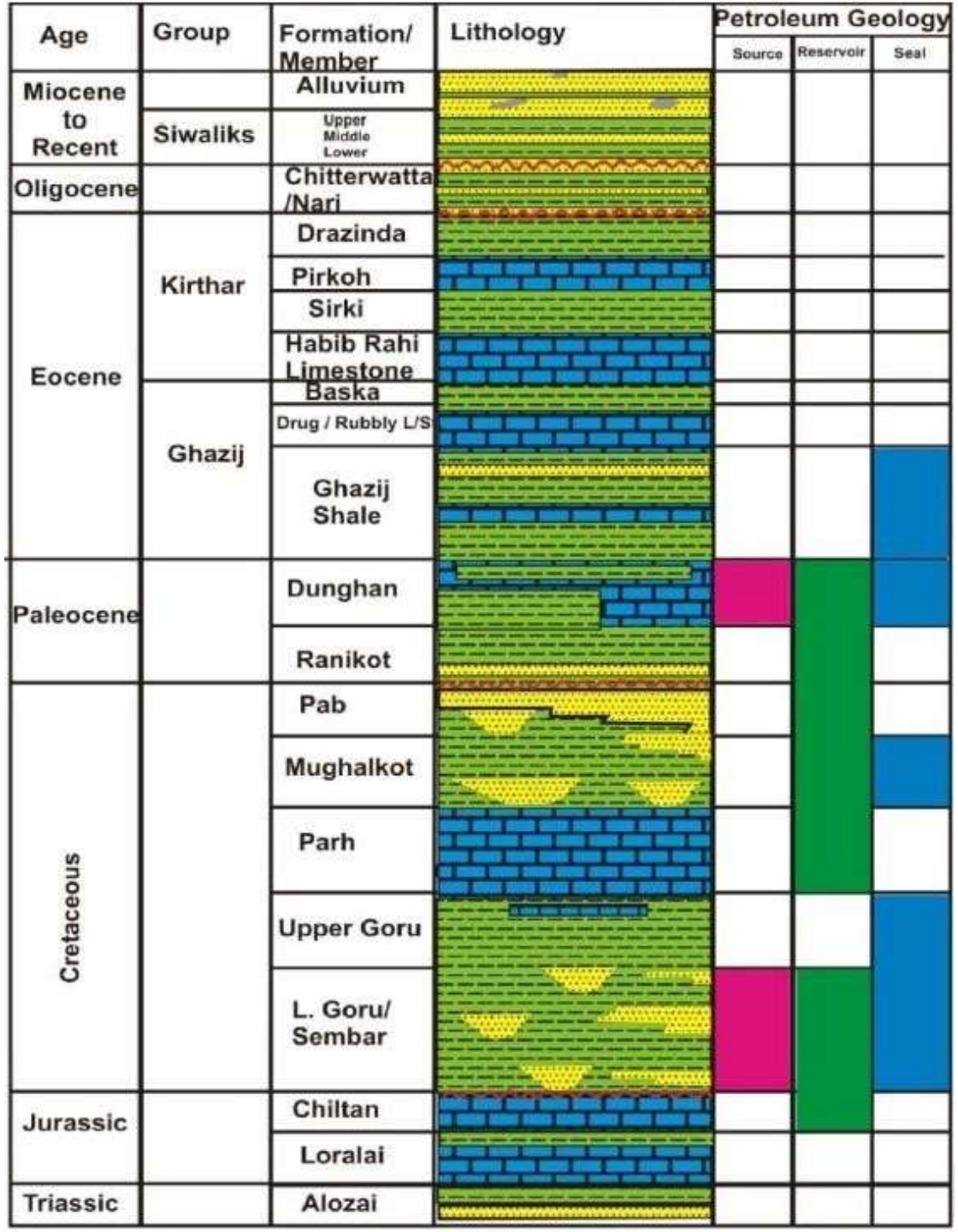
Chagai Arc

dips

northwest in direction from Kharan Trough.

Petroleum System

- A petroleum system exist in the Jurassic to Eocene sedimentary packages.
- Potential source rocks in the area include the Lower Goru/Sembar (Cretaceous), Dunghan (Paleocene).
- The potential reservoir rocks in the area include the Parh Formation (Paleocene), L.Goru/Sembar, Parh, Mughalkot, Pab (Cretaceous)



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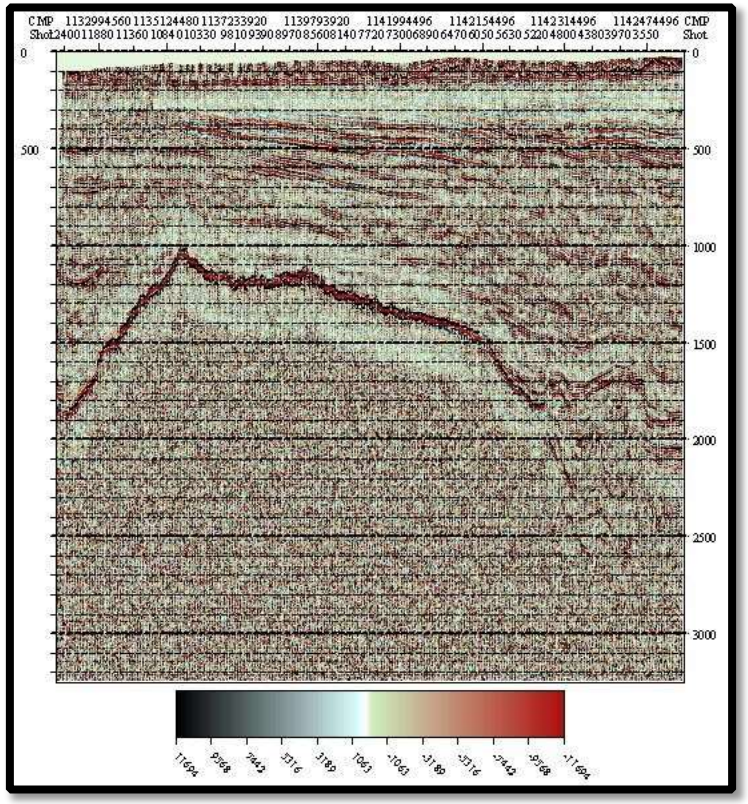
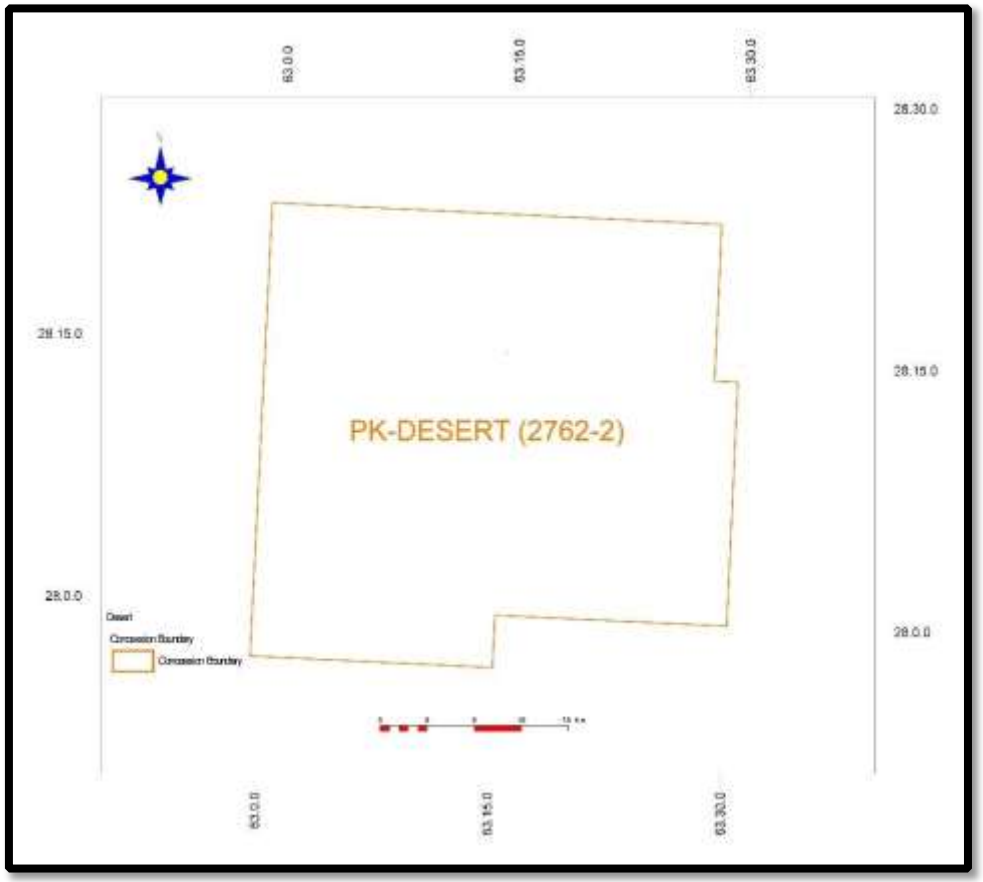
Prospectivity

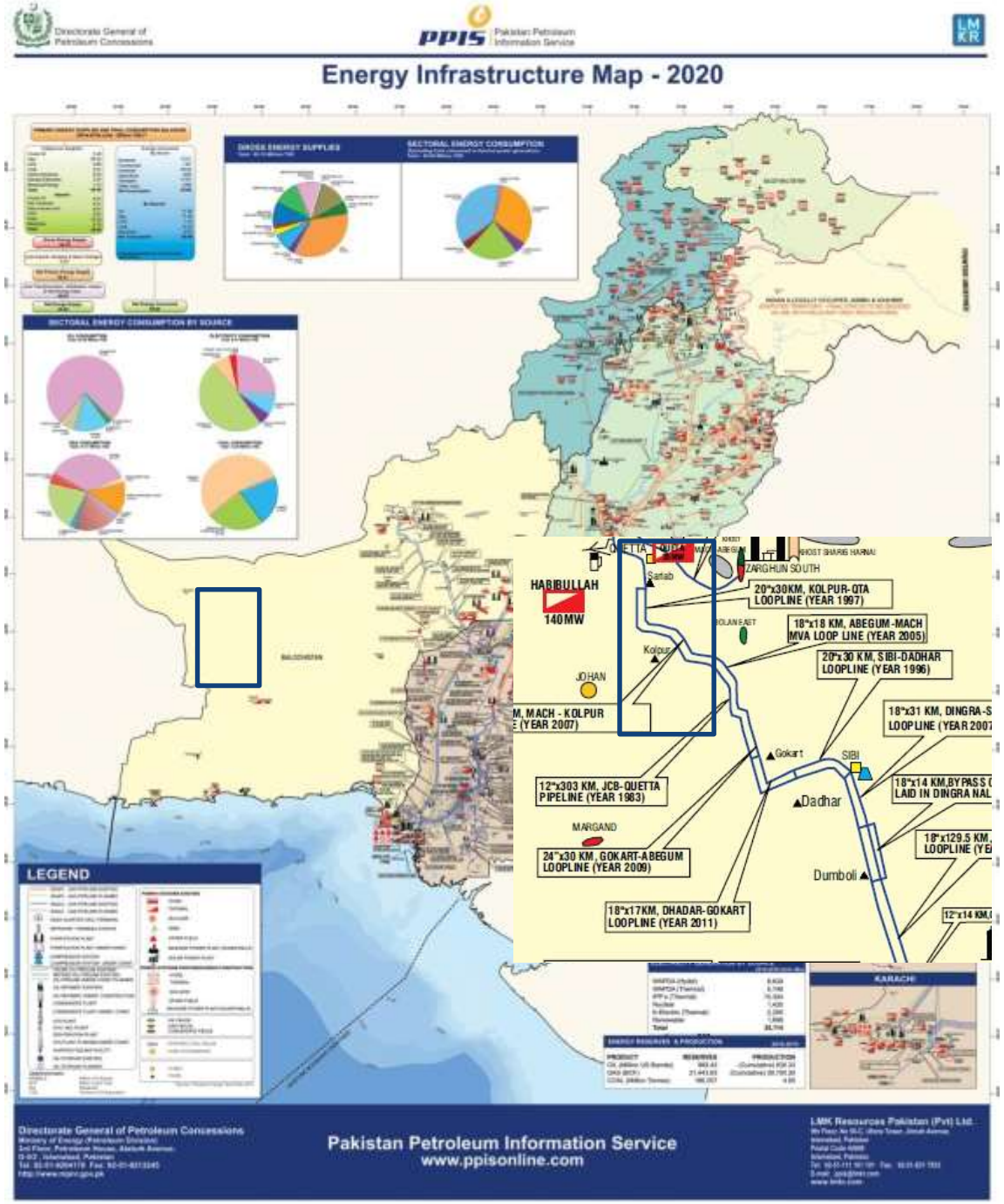




- No seismic data acquired within the block. The image above is from a nearby block.
- The main trapping mechanism in this area is considered to be thrust related anticlines
- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Government support to companies for infrastructure development in the area
- Power production plant in southern part of the block.



Investment Benefits

- High risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will guarantee to buy the gas or oil discovered ■Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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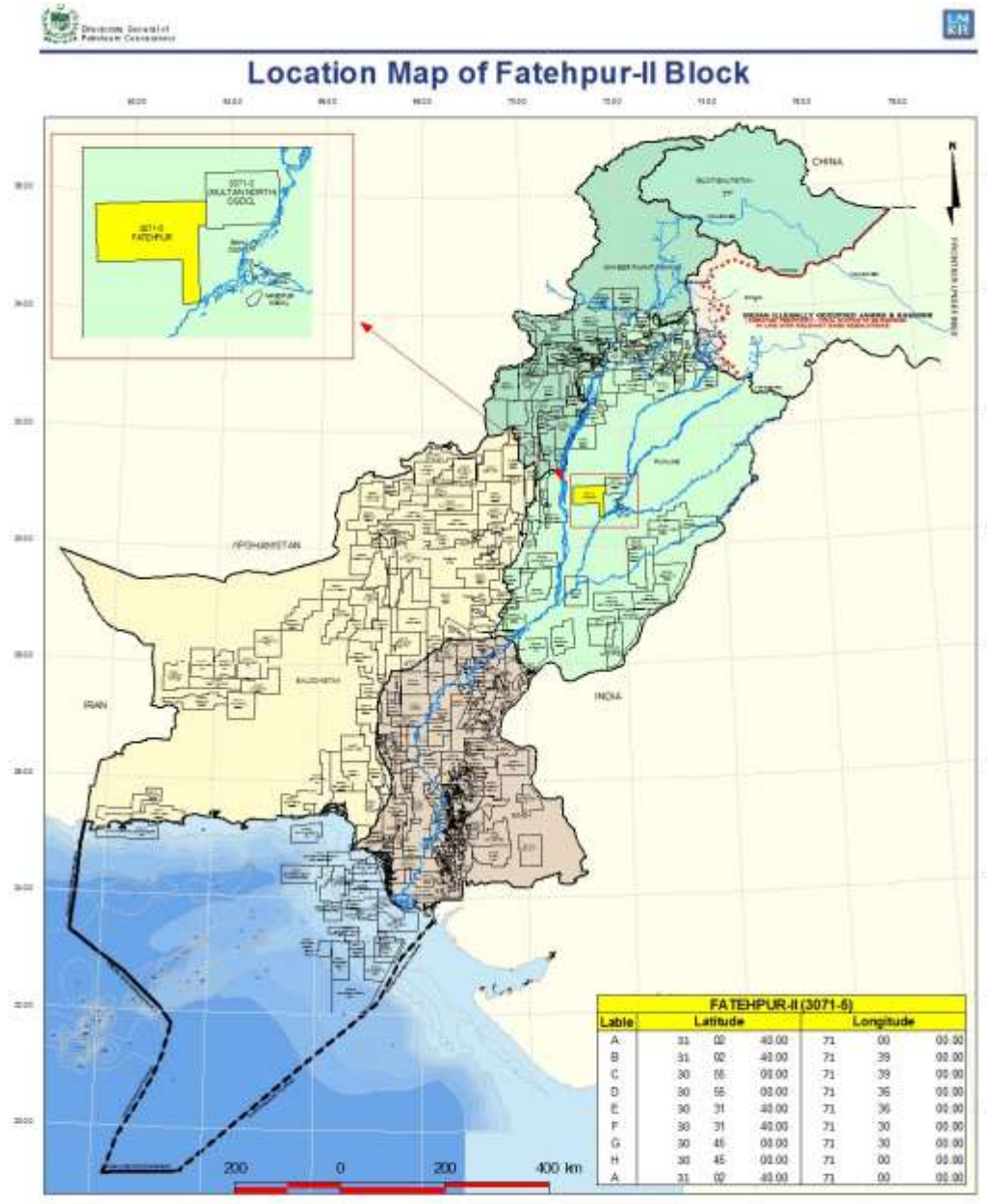
BLOCK: FATEHPUR-II

DGPC BLOCK BIDDING ROUND 2021

Introduction



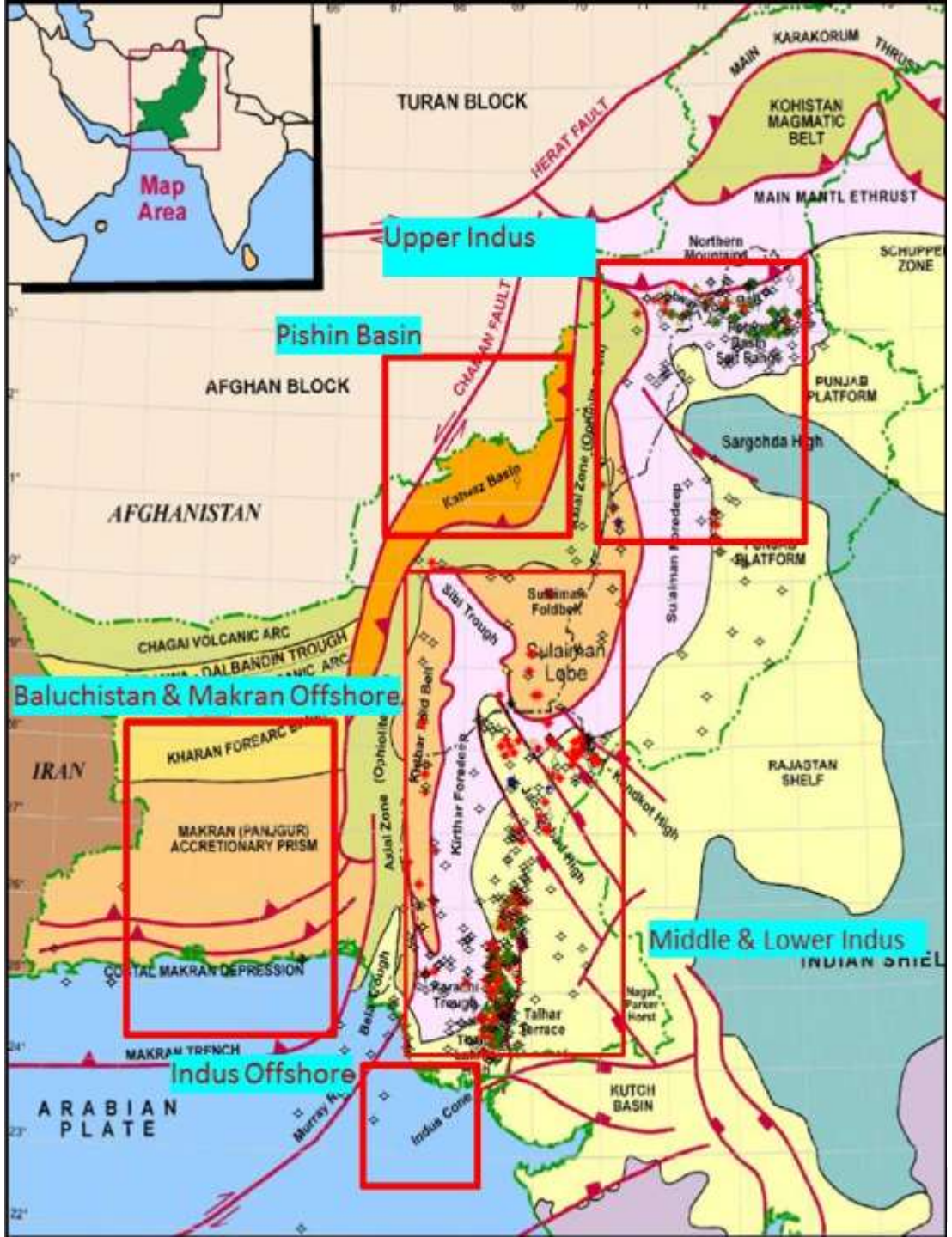
3071-5 (Fatehpur-II)	Available Data	Total Area	Area by District	Percentage %	Districts

- Fatehpur II Block covers an area of 2187.41 sq km
- Location: Leiah and Muzaffargarh district, Punjab, Pakistan.
- Geological Basin: Central Indus Basin of Pakistan.
- The block falls in Prospectivity Zone II.
- Fugro Robertson (an international renowned Consultant) has highlighted that Punjab has the following yet to find reserves:
  - Gas: 5,600 billion cubic feet
  - Oil: 520 million barrels
- OGDCL, Amoco and PPL acquired some 2D data in the block within the years 1995 – 2015.
- The Block is surrounded by Multan North (North East), Safed Koh (West), Hetu (North) and Yazman (South).
- Total number of wells have been drilled in the near vicinity are:
  - Multan North 1, Sohniwala 01, Barkat Wala 01, Ahmedpur 01
- Major discoveries near the block are from Nandpur, Panjhpir and Bahu.

https://energy.punjab.gov.pk/OilnGas

Geological Map

- Fatehpur II block lies in the Indus Platform Basin (CIPB), broad monocline dipping westward and merges in Foredeep.
- Tectonically, the effect of compression is minimum in During the Precambrian, late and Cretaceous, an activity occurred.
- The uplifts provide the this tectonism accompanying fragmentation of Gondwana.



Central which is a gently Sulaiman

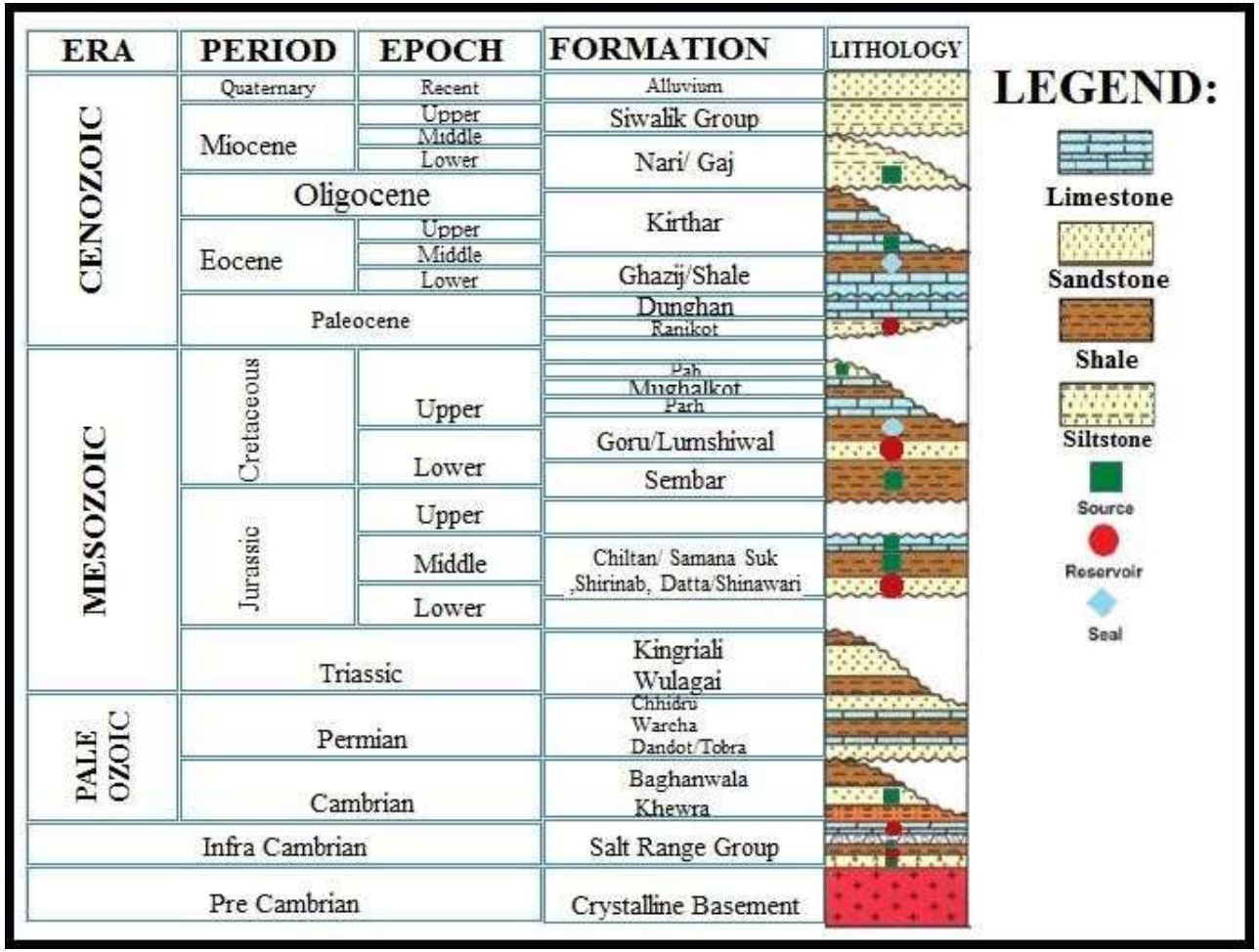
this area. Jurassic extensional

evidence of the

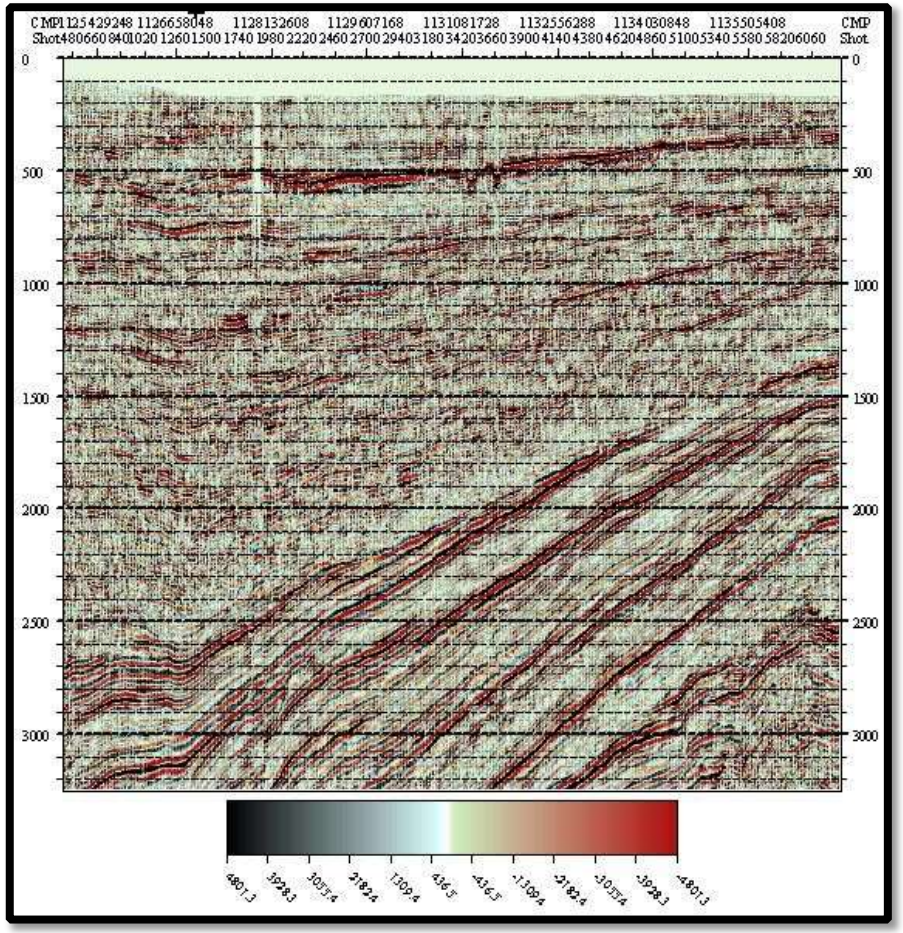
- The area is categorized by extensional faults, cutting Paleozoic strata.

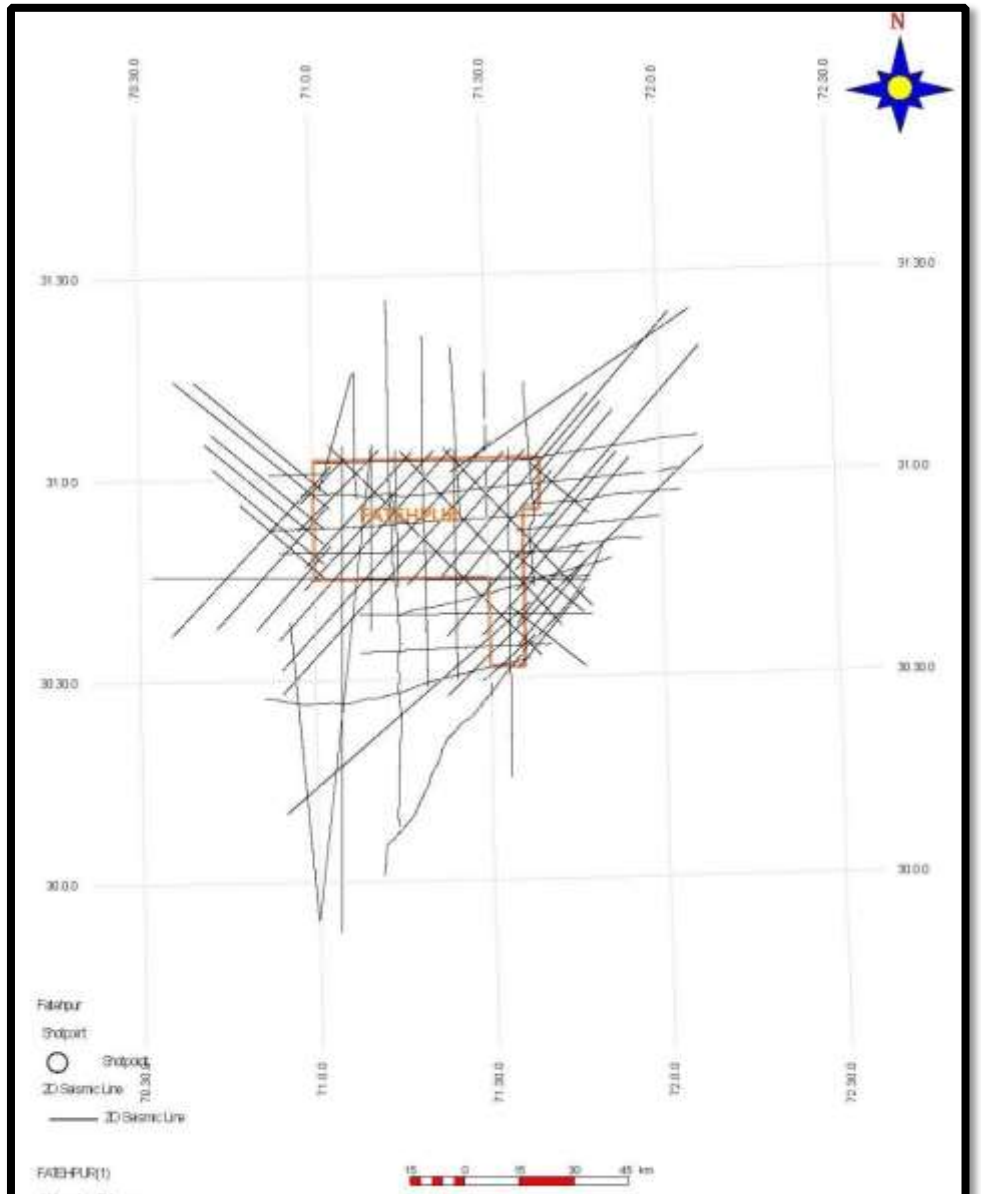
Petroleum System

- The block is located in the Punjab Platform, west of oil producing fields in India, which confirms that a dynamic petroleum system containing all the necessary elements for the generation and accumulation of hydrocarbons is present in the area.
- The expected source rock having potential to generate hydrocarbons in this block includes Salt Range Formation (InfraCambrian), Tobra and Dandot formations (Permian). These sediments have gas and oil generation characteristics with fair to good organic richness.
- Infra-Cambrian to Jurassic sequence have potential reservoirs. Carbonates of Shinwari and Samana Suk formations (Jurassic), and clastics of Lumshiwal Formation (Cretaceous) are proven reservoirs in the gas fields of this surrounding area. Salt Range Formation (Infra Cambrian) is producing heavy oil in the east in India.
- The potential seals for underlying reservoirs include the intraformational shales and mudstones of Infra Cambrian, Paleozoic, and Mesozoic rocks.



Prospectivity

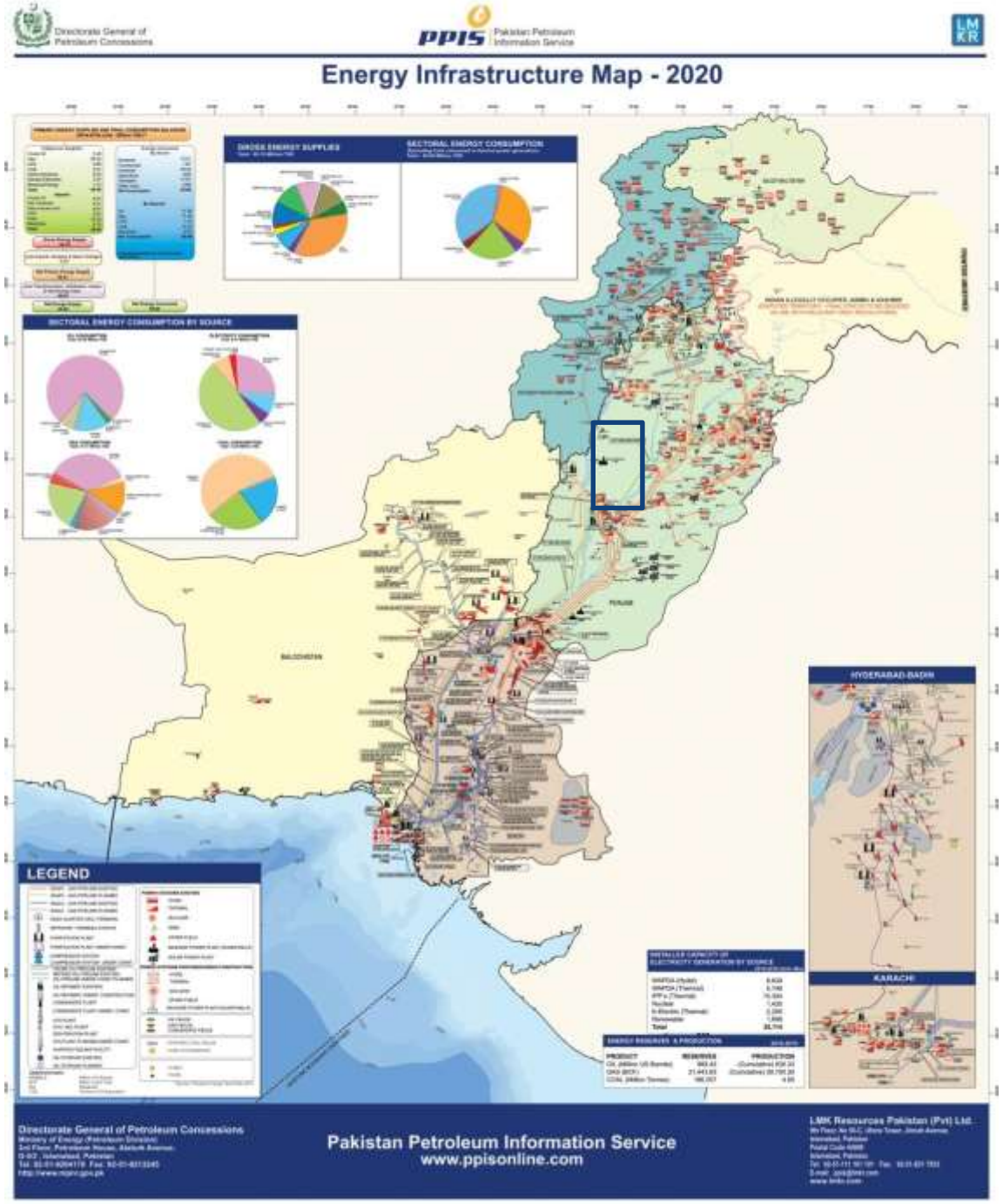




- The block area consists of fault bounded three-way dip structures.
- The important feature for trapping mechanism can be provided by the truncations of Jurassic to Eocene strata.

Infrastructure Map

- Nearest infrastructure gas pipeline is available near the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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BLOCK: ISLAMGARH

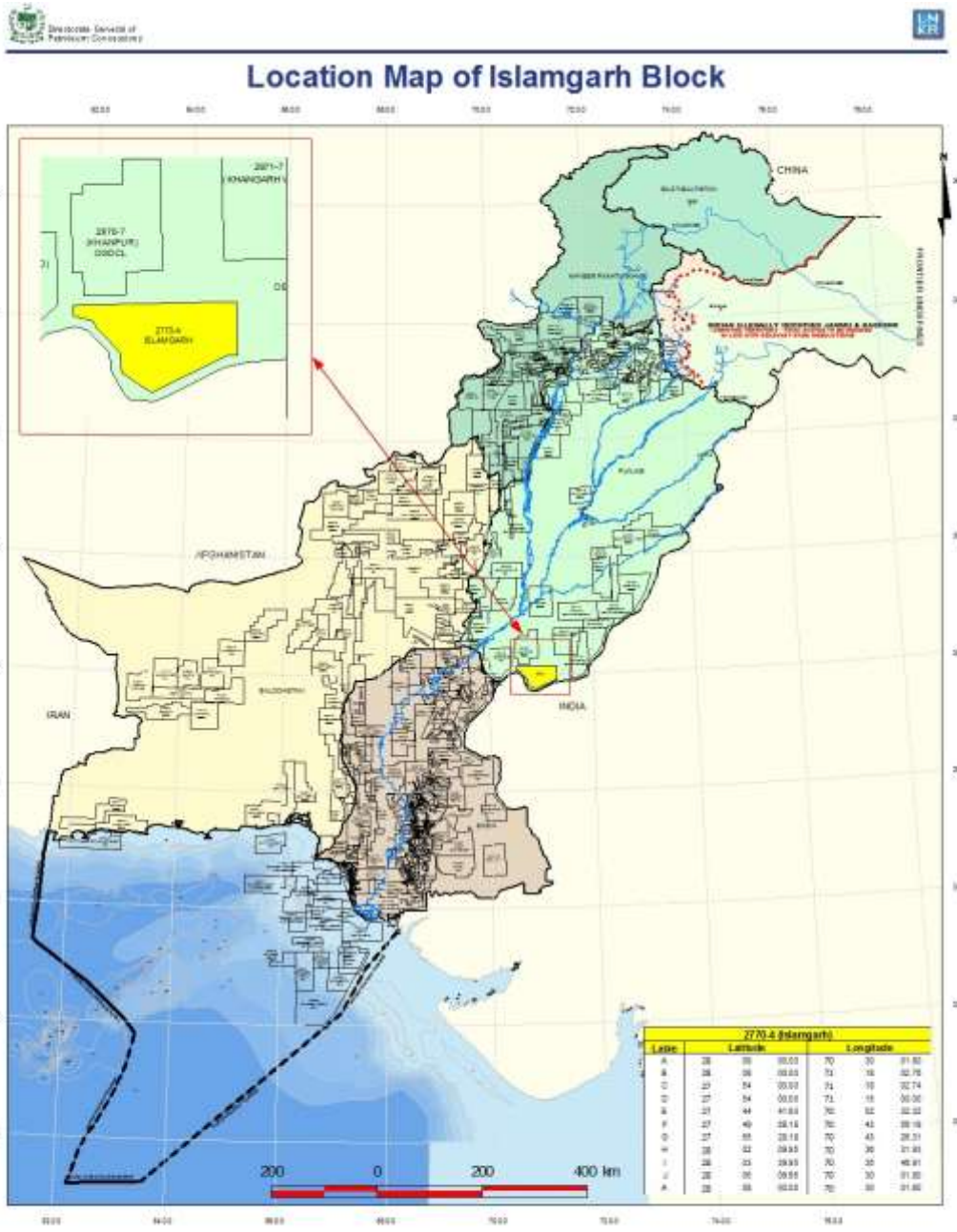
DGPC BLOCK BIDDING ROUND 2021

Introduction

- Islamgarh Block covers an area of 2224.49 sq km
- Location: Rahimyar Khan and Bahawalpur district, Punjab, Pakistan.
- Geological Basin: Central Indus Basin of Pakistan.
- The block falls in Prospectivity Zone III.
- Fugro Robertson (an international renowned Consultant) has highlighted that Punjab has the following yet to find reserves:
  - Gas: 5,600 billion cubic feet
  - Oil: 520 million barrels

- POL, SHELL, OGDCL and block within the years 1976 – 2007.
- The Block is surrounded by
- The wells drilled in the near vicinity
  - Sheikhan Bhutta 01
  - Bijnot 01
  - Suji 01
- Major heavy oil discoveries across Baghiwala 01 and Tavriwala 01.

https://energy.punjab.gov.pk/OilnGas



2770-4 (ISLAMGARH)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	III	2D Seismic(L.Kms)	1948.24	2224.49	1595.03	71.70	Rahimyar Khan
Grid Area	29.38	3D Seismic(Sq.Kms)	NA		629.46	28.30	Bahawalpur
Province	Punjab	No. Wells	NA				

AMOCO acquired seismic data in the

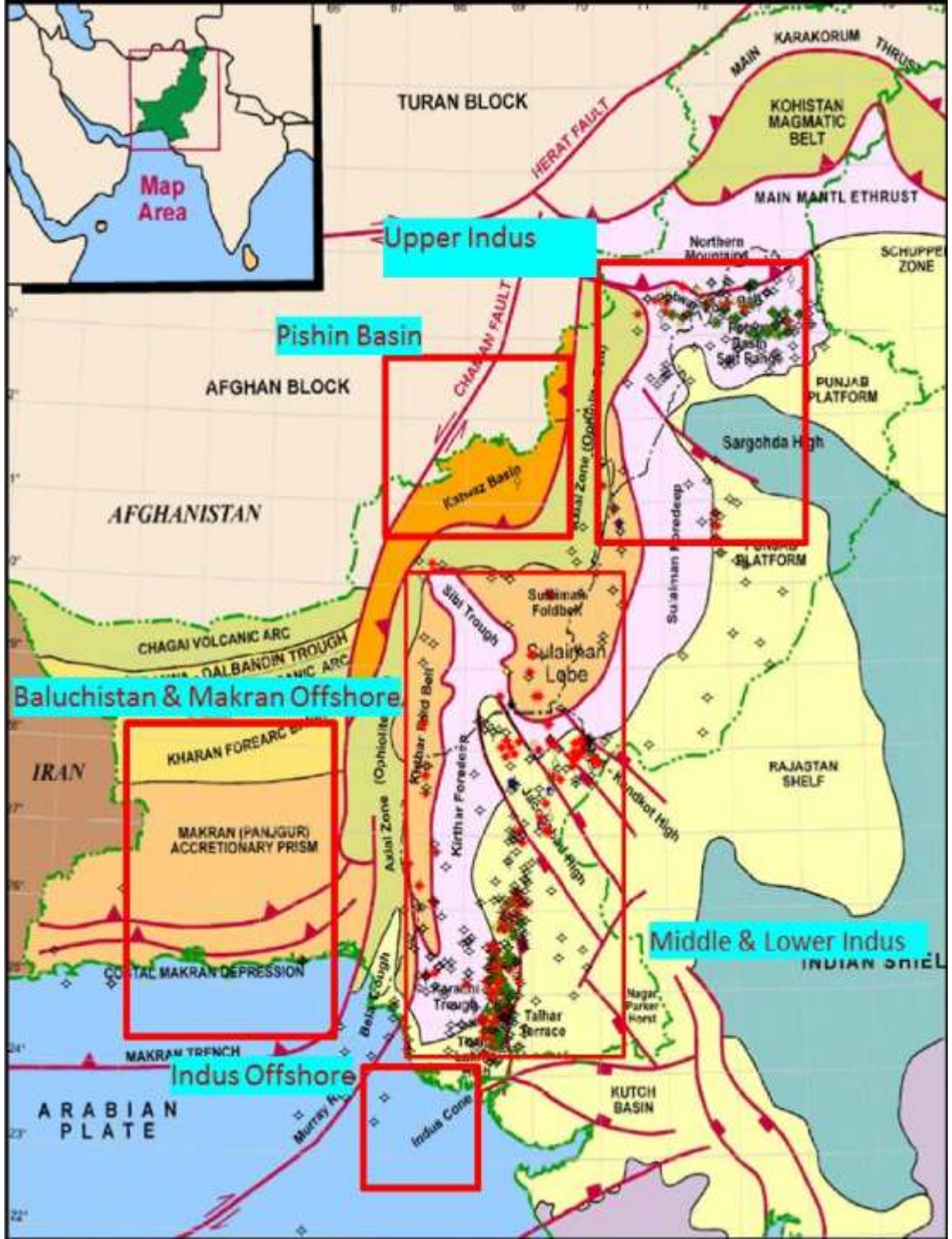
Khanpur (East) and Sara West (West).

are:

the border in India are present in

Geological Map

- Islamgarh block lies in the Indus Platform Basin which is a broad monocline gently westward and Sulaiman Foredeep.
- Tectonically, the effect of is minimum in this area. Precambrian, late Jurassic Cretaceous, an extensional occurred.
- The uplifts provide the this tectonism accompanying the fragmentation of



Central (CIPB), dipping merges in

compression During the and activity

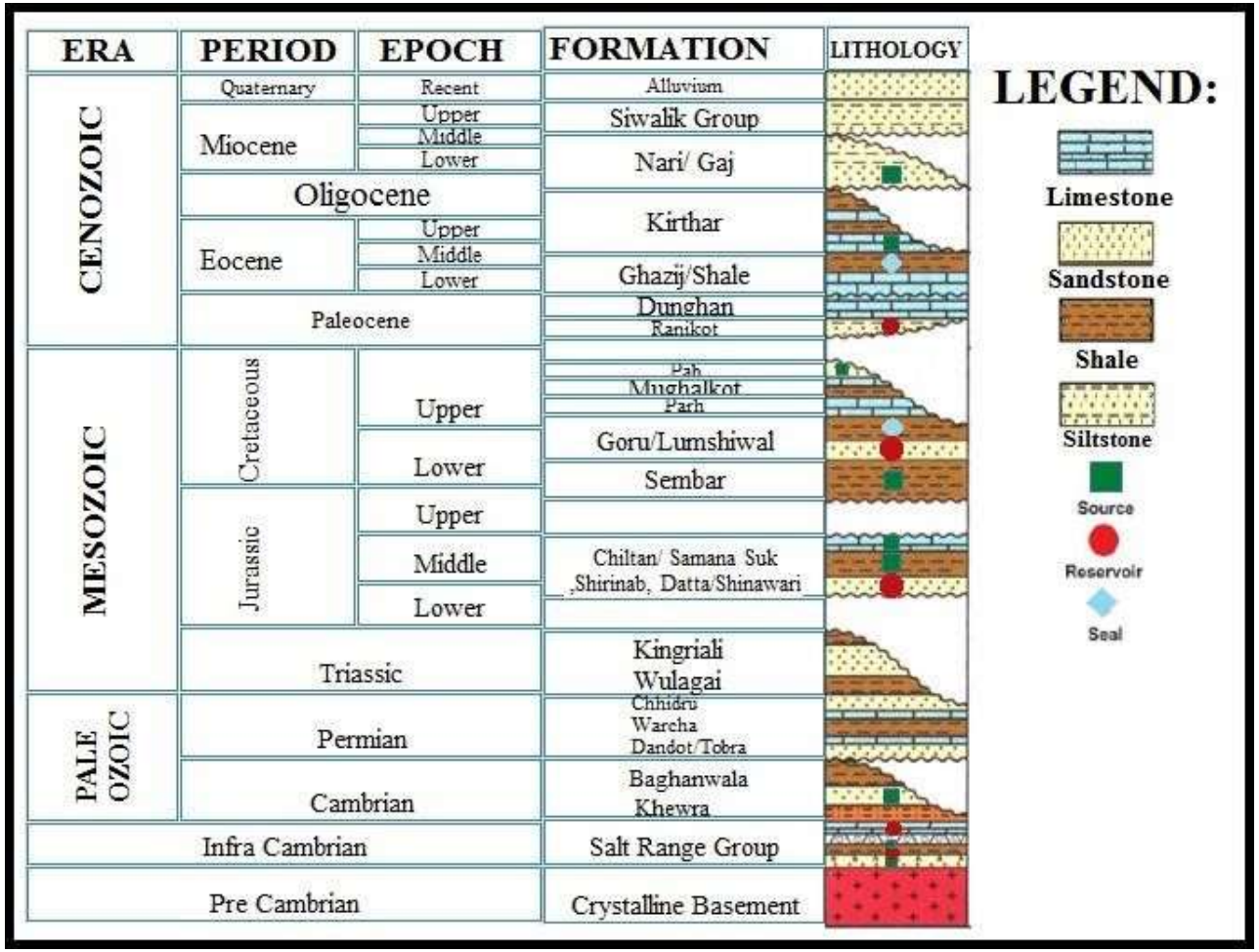
evidence of

Gondwana.

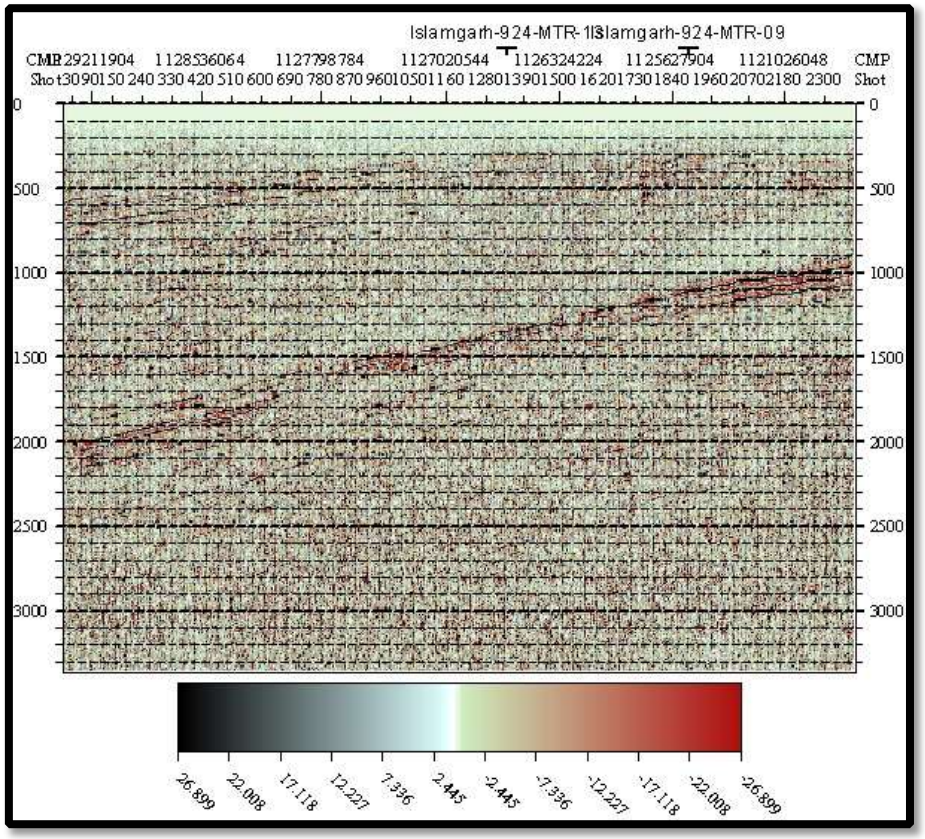
- The area is categorized by extensional faults, cutting Paleozoic strata.

Petroleum System

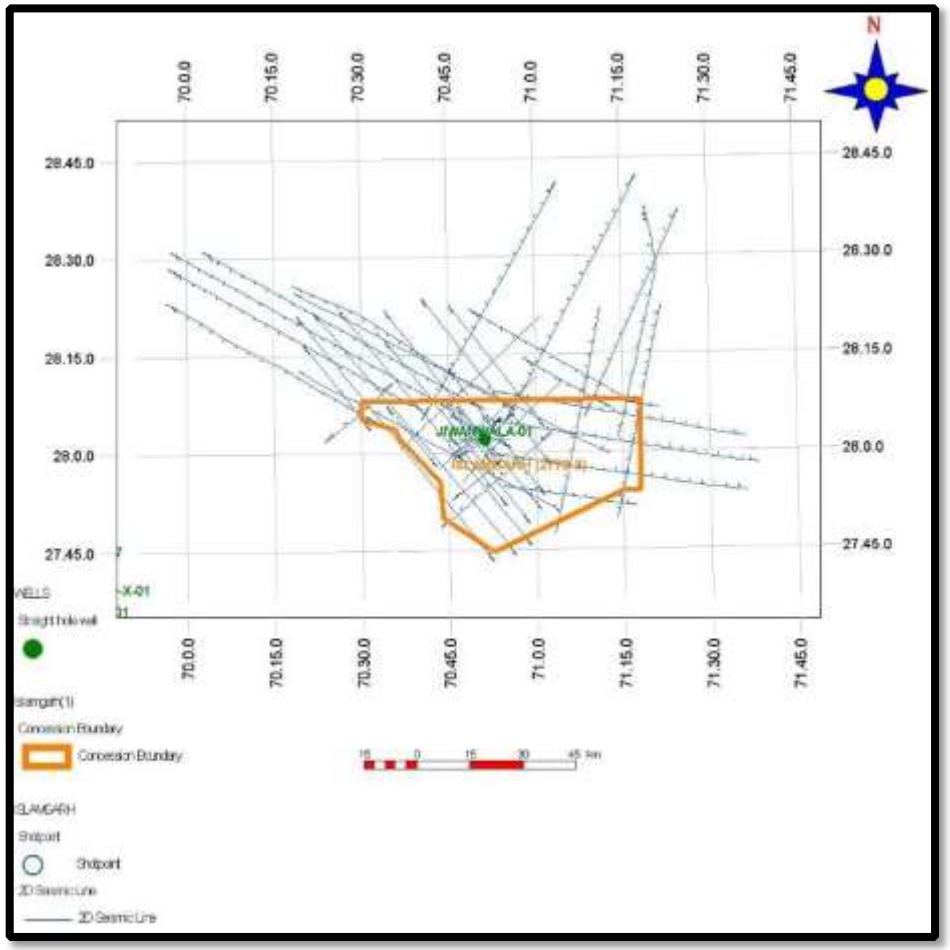
- The block is located in the Punjab Platform, west of oil producing fields in India, which confirms that a dynamic petroleum system containing all the necessary elements for the generation and accumulation of hydrocarbons is present in the area.
- The expected source rock having potential to generate hydrocarbons in this block includes Salt Range Formation (InfraCambrian), Tobra and Dandot formations (Permian). These sediments have gas and oil generation characteristics with fair to good organic richness.
- Infra-Cambrian to Jurassic sequence have potential reservoirs. Carbonates of Shinwari and Samana Suk formations (Jurassic), and clastics of Lumshiwal Formation (Cretaceous) are proven reservoirs in the gas fields of this surrounding area. Salt Range Formation (Infra Cambrian) is producing heavy oil in the east in India.
- The potential seals for underlying reservoirs include the intraformational shales and mudstones of Infra Cambrian, Paleozoic, and Mesozoic rocks.



Prospectivity



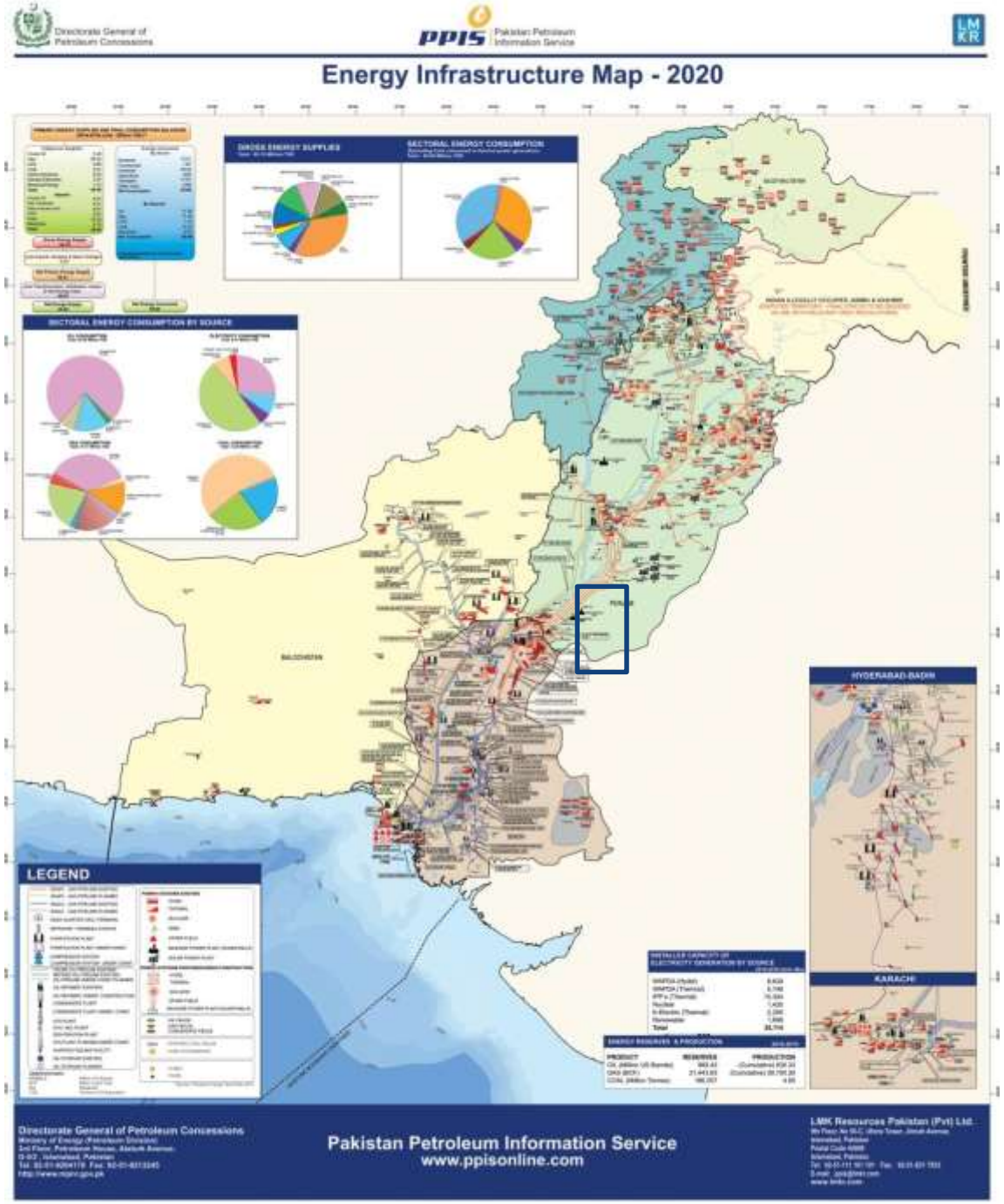
- The important feature for trapping mechanism can be provided by the truncations of Jurassic to Eocene strata.



- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available North-West and South-West of the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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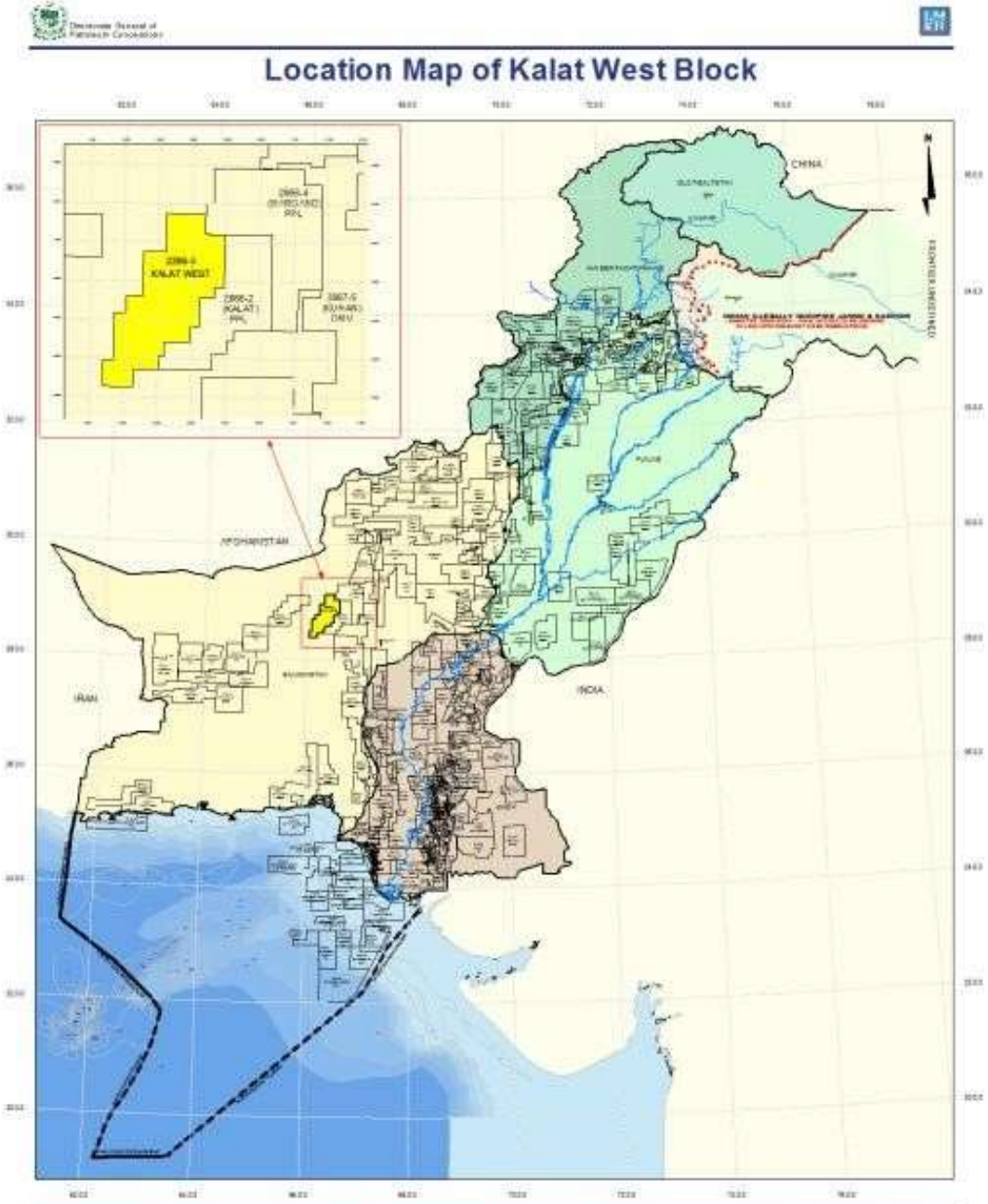
BLOCK: KALAT WEST

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Kalat west Block covers an area of 2494.30 sq km
- Location: Kalat district, Balochistan, Pakistan.
- Geological Basin: Balochistan Basin, Pakistan.
- The block falls in Prospectivity Zone II
- Estimated Resources of the Balochistan Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet

- PPL & OGDCL Acquired some 2D data in surrounding blocks within the years 1



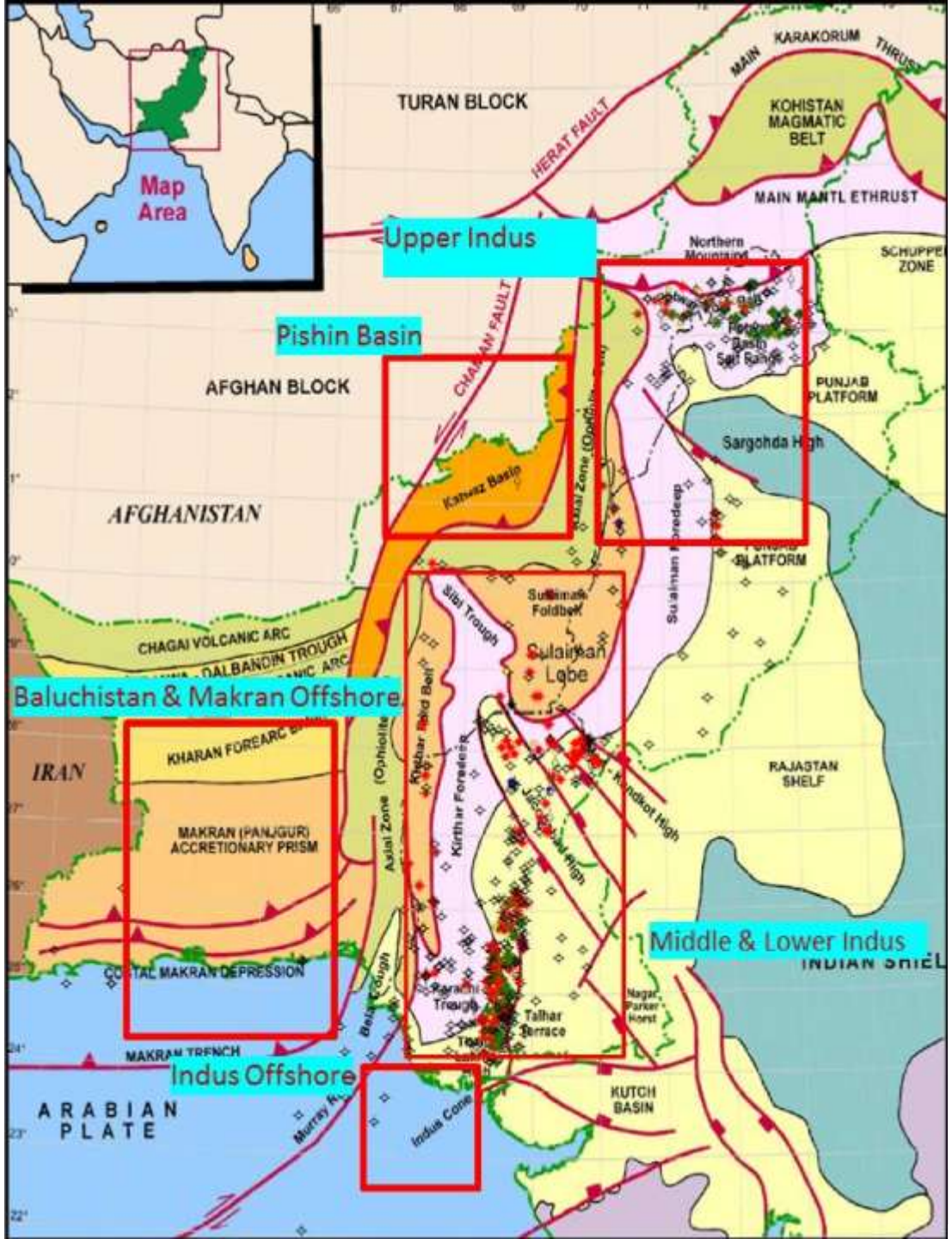
2866-5 (KALAT WEST)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	II	2D Seismic (L.Kms)	88.00	2,494.30	2494.30	100.00	Kalat
Grid Area	33.18	3D Seismic (Sq.Kms)	NA				
Province	Balochistan	No. Wells	NA				

- The Block is surrounded by Kalat (Eastern side), Margand (Northeast), Khuzdar North (Southeast) Kharan 3 (Western side)
- Total number of wells have been drilled in the near vicinity are:
  - Kalat X-01
  - Pandrani X-01
  - Morgandh X-01
- Major discoveries in the surrounding is from Morgandh X-01, and Jhal Magsi

**Riaz Ahmed 1998, Hydrocarbon Resource Base of Pakistan, Pakistan Journal of Hydrobarbon Research, Vol 10, 1-10*

Geological Map

- Kalatwest block lies in the part of the low laying Range.
- At surface, the Raskoh topographically elevated
- It is structurally controlled and folding of Cretaceous Oligocene strata.
- In the north this range is by an intervening low (Dalbandin Trough) from the
- In the south by the Usman/Kukab transpressional fault,



western Raskoh

Range is a feature

by thrusting to

separated

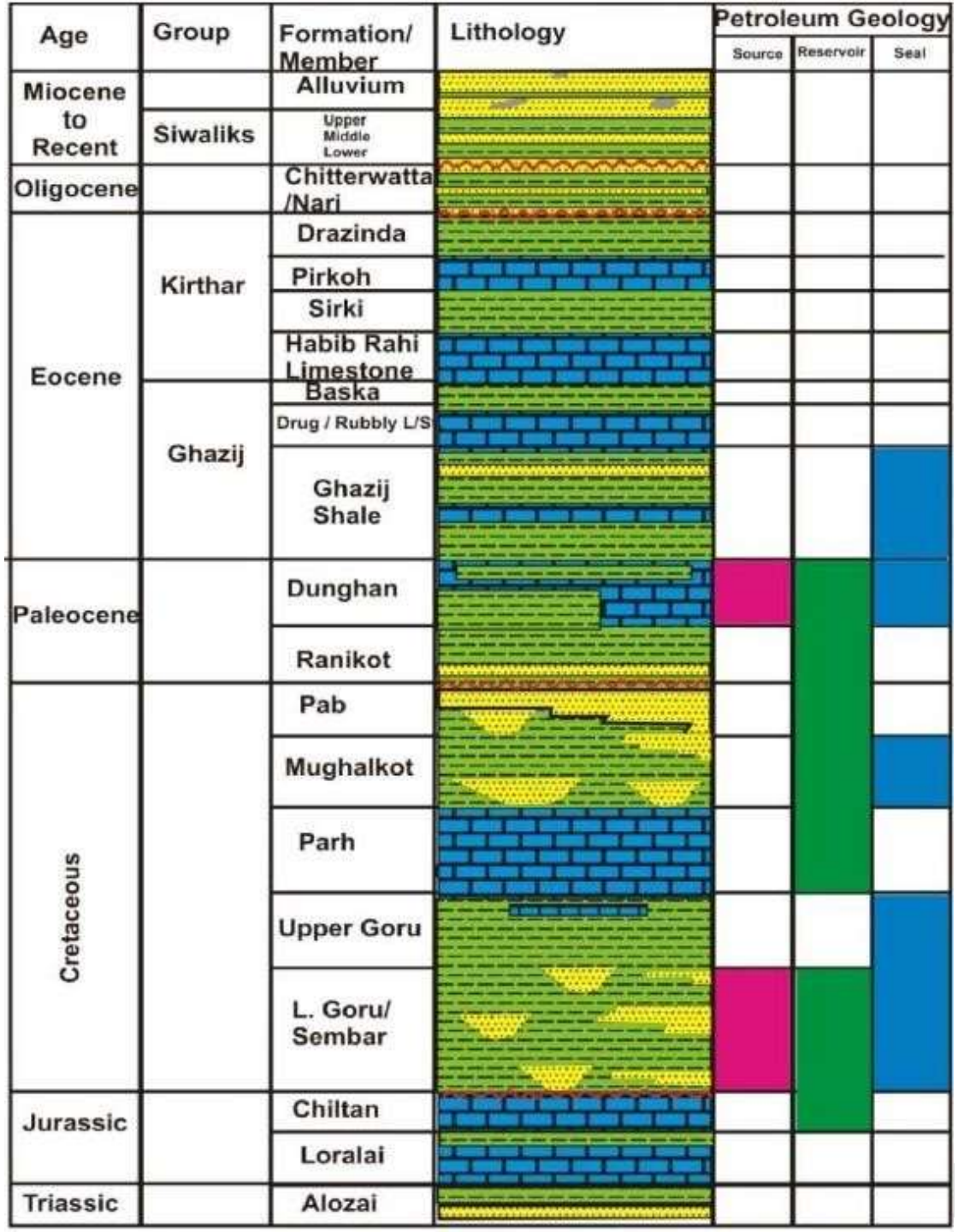
Chagai Arc

which dips

northwest in direction from Kharan Trough.

Petroleum System

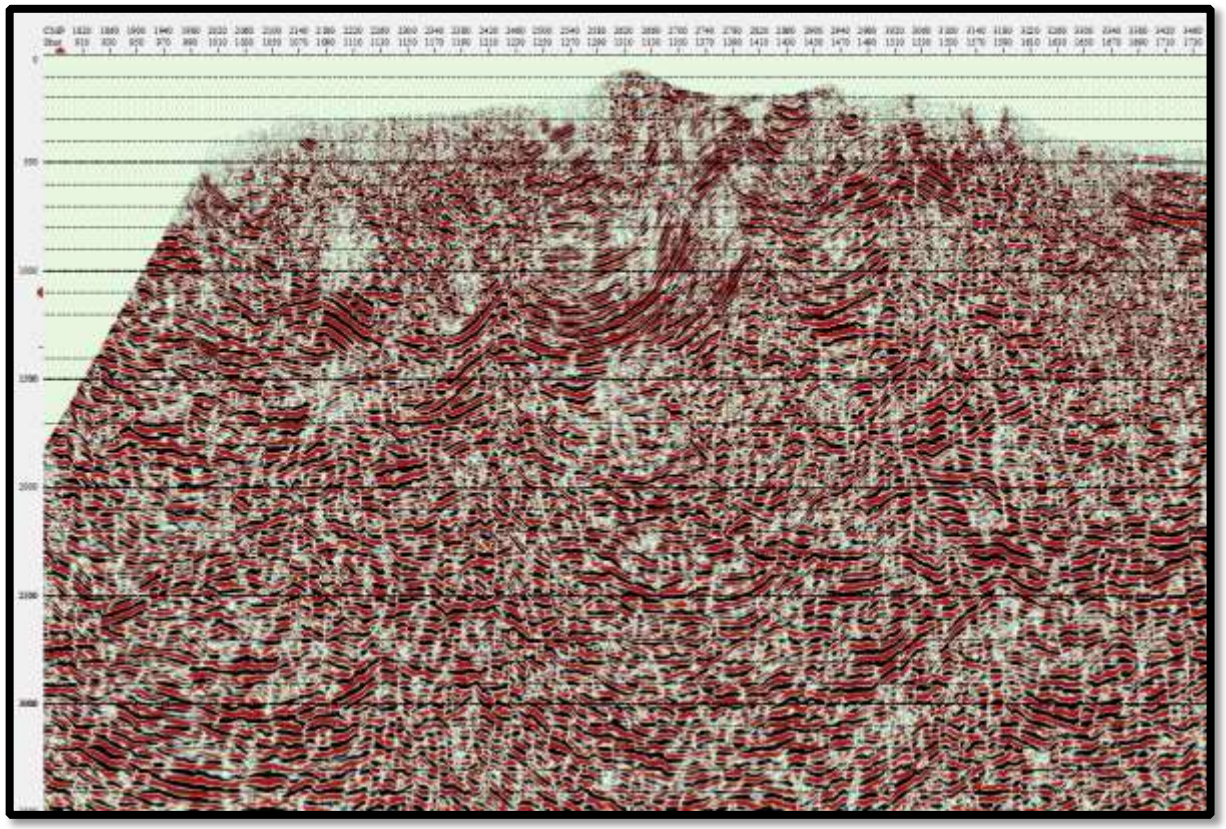
- A petroleum system exist in the Jurassic to Eocene sedimentary packages.
- Potential source rocks in the area include the Lower Goru/Sembar (Cretaceous), Dunghan (Paleocene).
- The potential reservoir rocks in the area include the Parh, Mughalkot, Pab (Cretaceous), L.Goru/Sembar, (Jurassic)

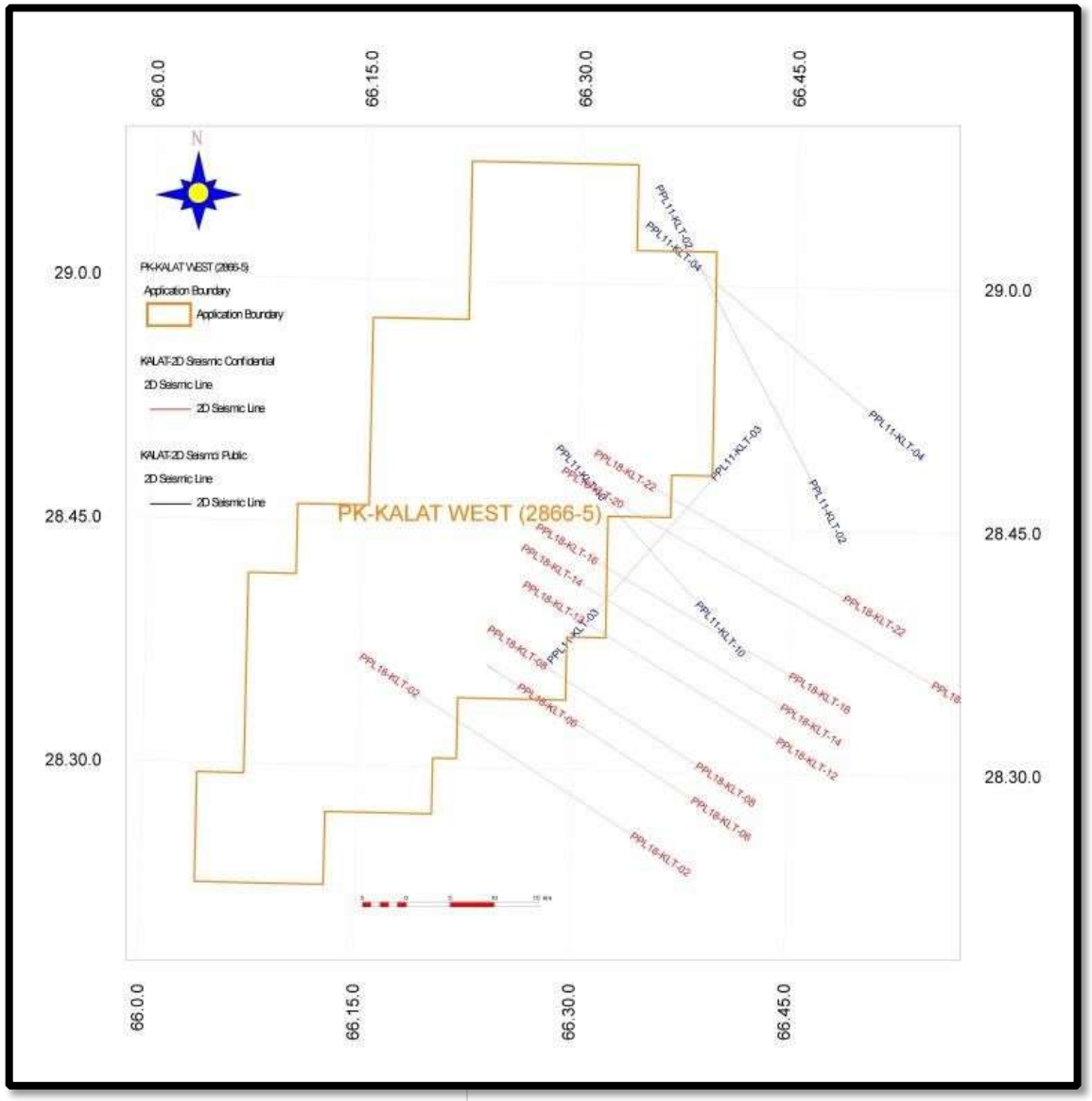


- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity



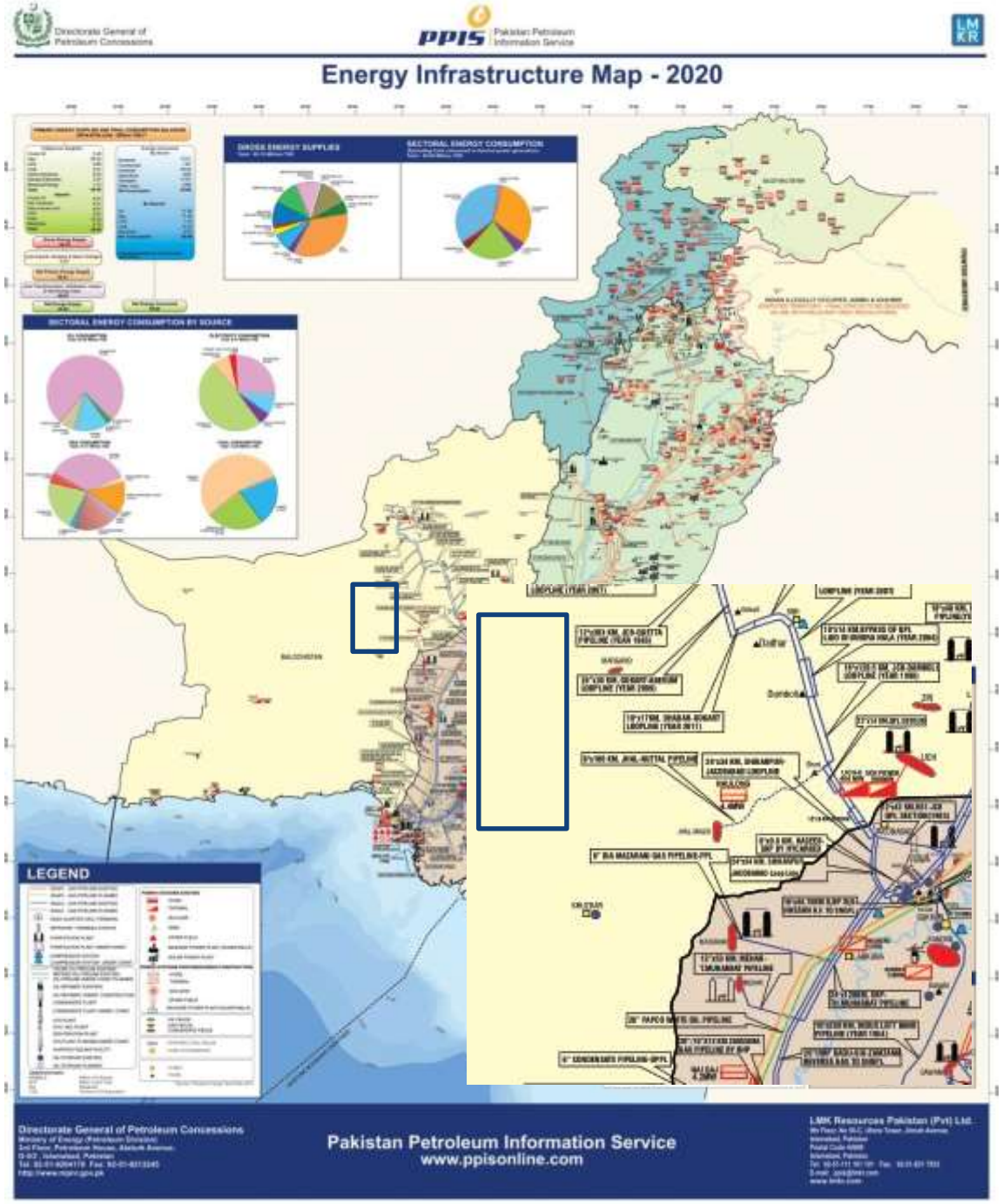


- The main trapping mechanism in this area is considered to be thrust related anticlines
- In recent past, nearby blocks have successful gas discoveries.

- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available North-East of the block.
- 18-24” gas pipeline infrastructures are present in the region.
- Towards south of the block, a pipeline connecting Jhal Magsi is planned
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas.
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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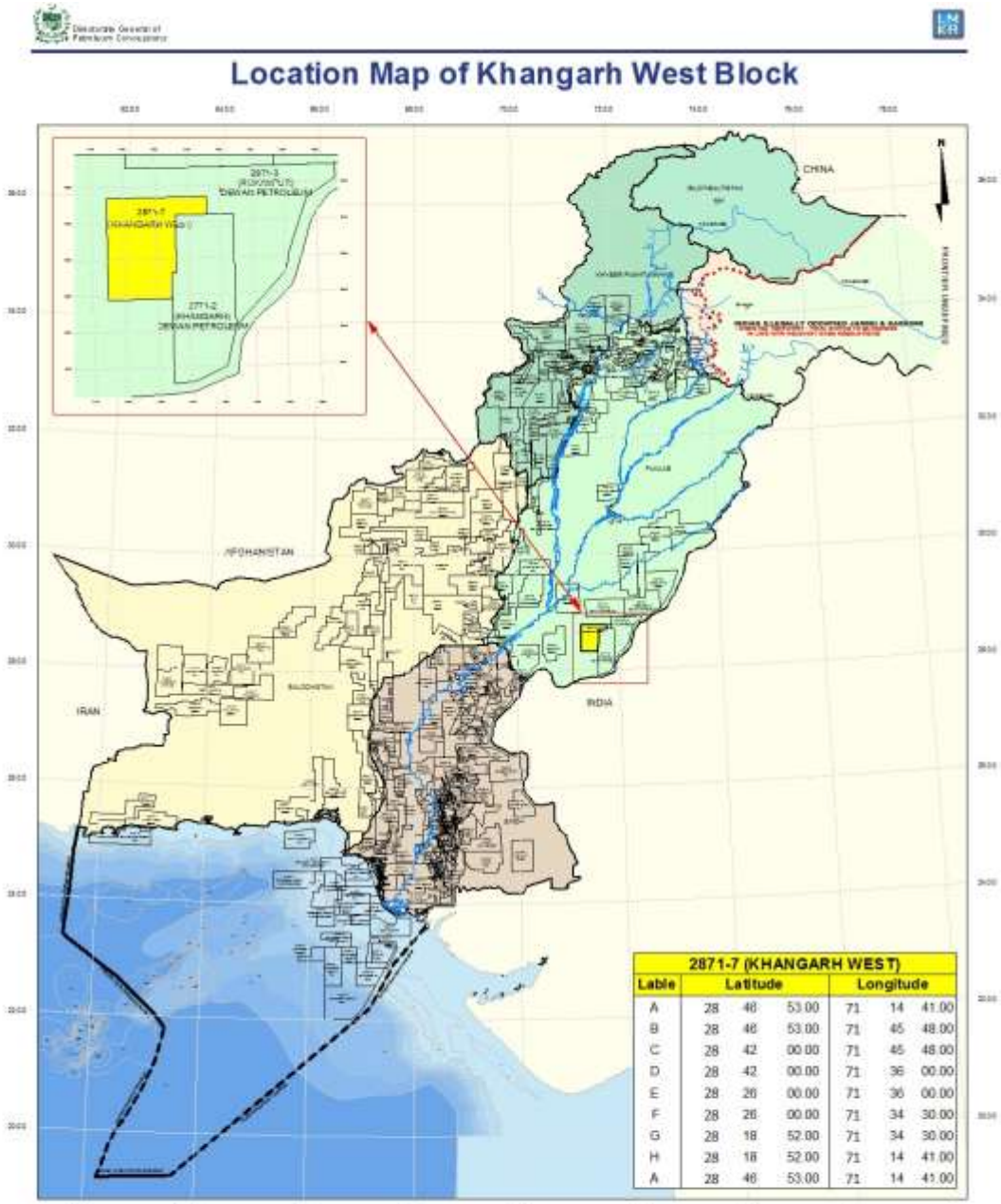
BLOCK: KHANGARH WEST

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Khangarh West Block covers an area of 1913.49 sq km ■ Location: Bahawalpur district, Punjab, Pakistan.
- Geological Basin: Central Indus Basin of Pakistan.
- The block falls in Prospectivity Zone II.
- Fugro Robertson (an international renowned Consultant) has highlighted that Punjab has the following yet to find reserves:
  - Gas: 5,600 billion cubic feet
  - Oil: 520 million barrels



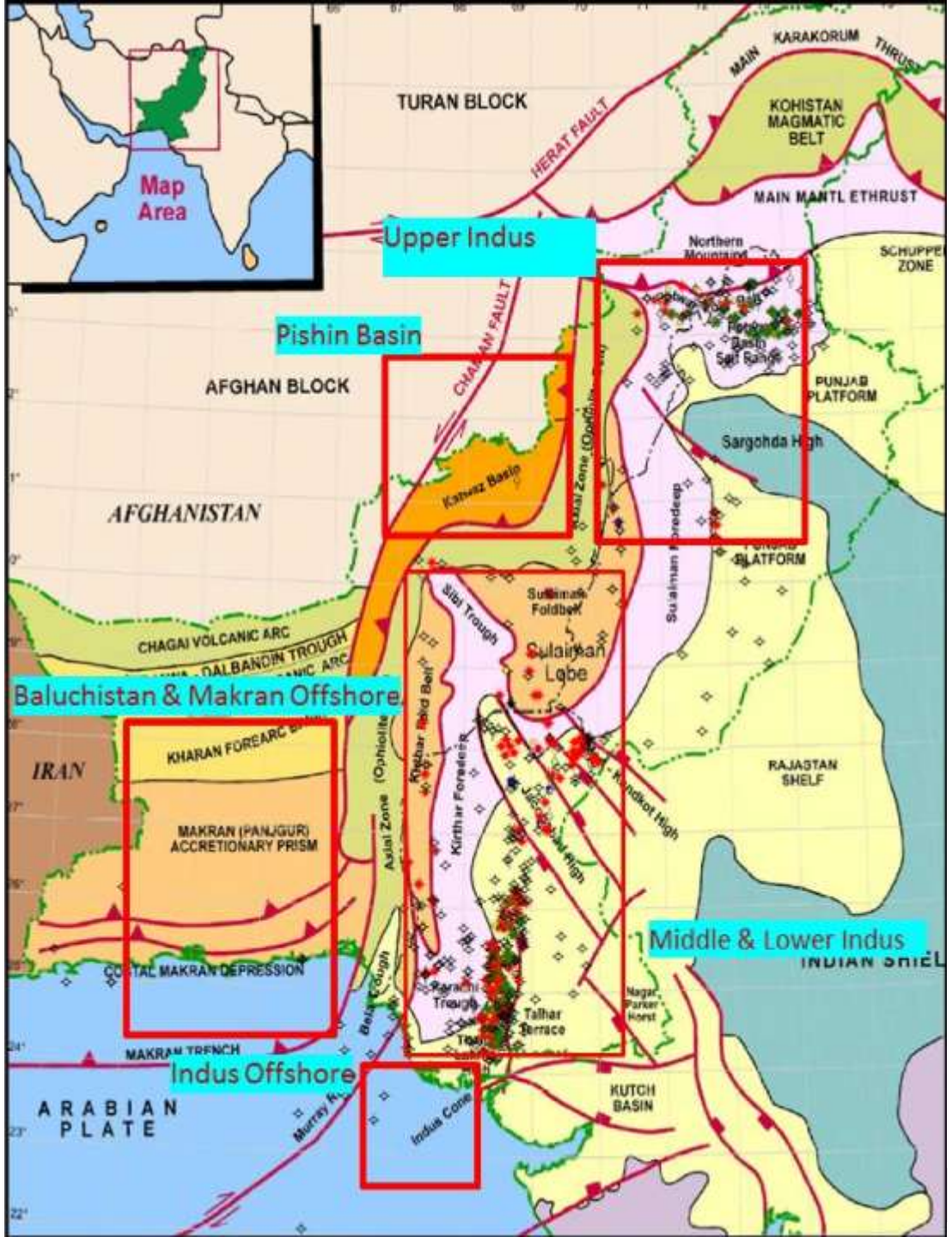
2871-7 (KHANGARH WEST)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	II	2D Seismic (L.Kms)	1230.00	1,913.49	1913.49	100.00	Bahawalpur
Geid Area	25.42	3D Seismic (Sq.Kms)	NA				
Province	Punjab	No. Wells	NA				

- POL, SHELL, OGDCL, AMOCO, OMV acquired some 2D data in the block within the years 1976 to 2007.
- The Block is surrounded by Khangarh (East), Khanpur (West), Yazman (North) and Islamgarh (South).
- Total number of wells have been drilled in the near vicinity are:
  - Suji 01
  - Bijnot 01
  - Ahmad Pur 01
- Major heavy oil discoveries across the border in India are present in Baghewala 01 and Tavriwala 01.

https://energy.punjab.gov.pk/OilnGas

Geological Map

- Khangarh West block lies in Indus Platform Basin (CIPB), broad monocline dipping westward and merges in Foredeep.
- Tectonically, the effect of is minimum in this area. Precambrian, late Jurassic Cretaceous, an extensional occurred.
- The uplifts provide the this tectonism accompanying fragmentation of Gondwana.



the Central which is a gently Sulaiman

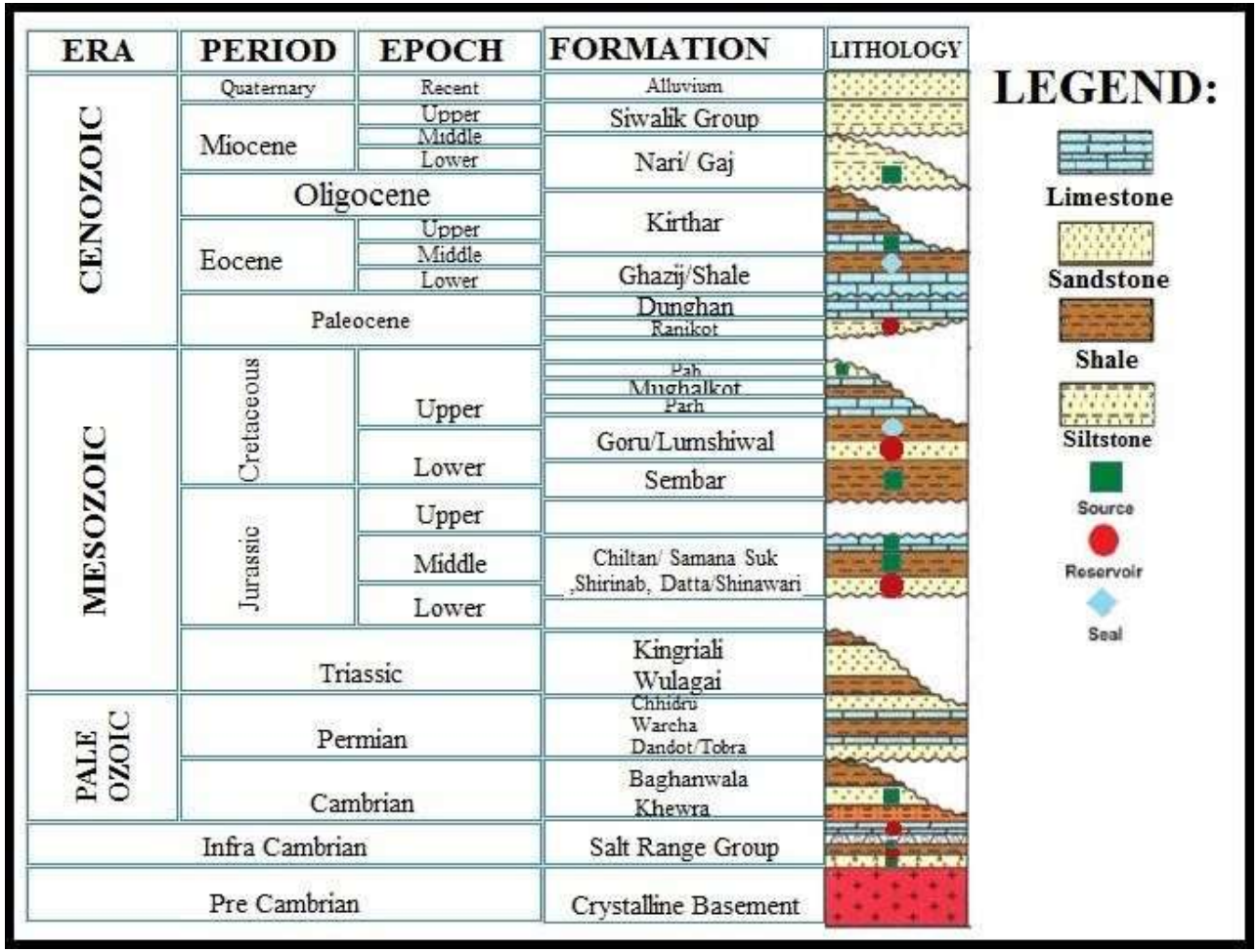
compression During the and activity

evidence of the

- The area is categorized by extensional faults, cutting Paleozoic strata.

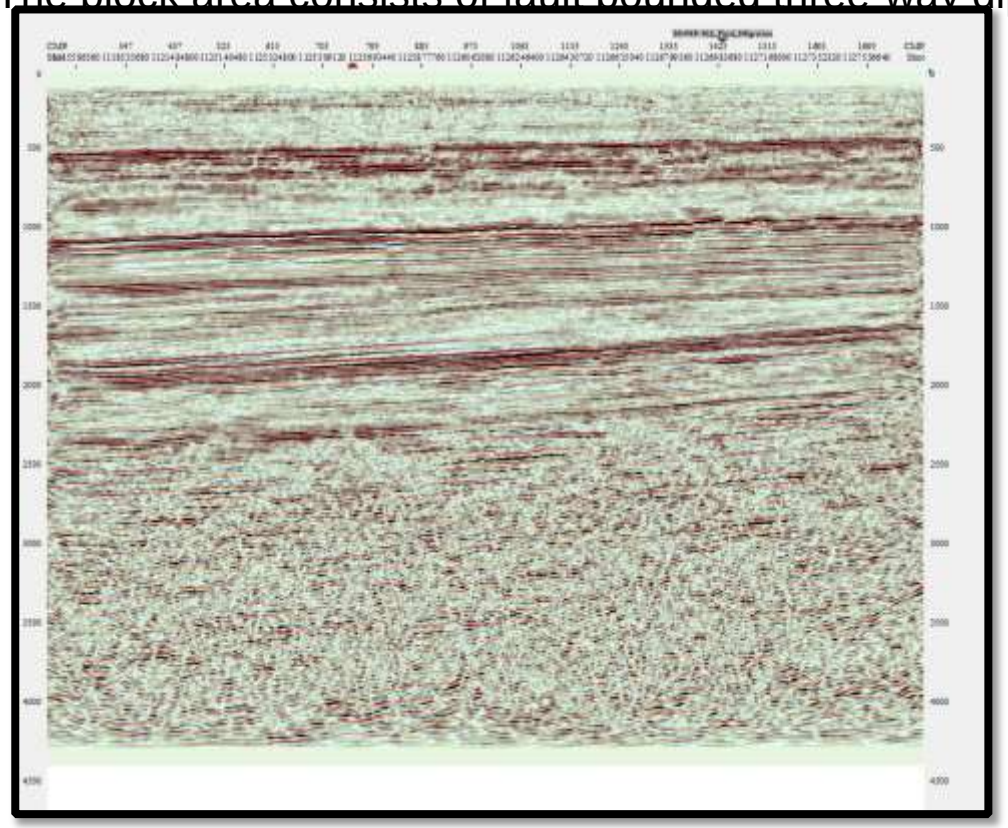
Petroleum System

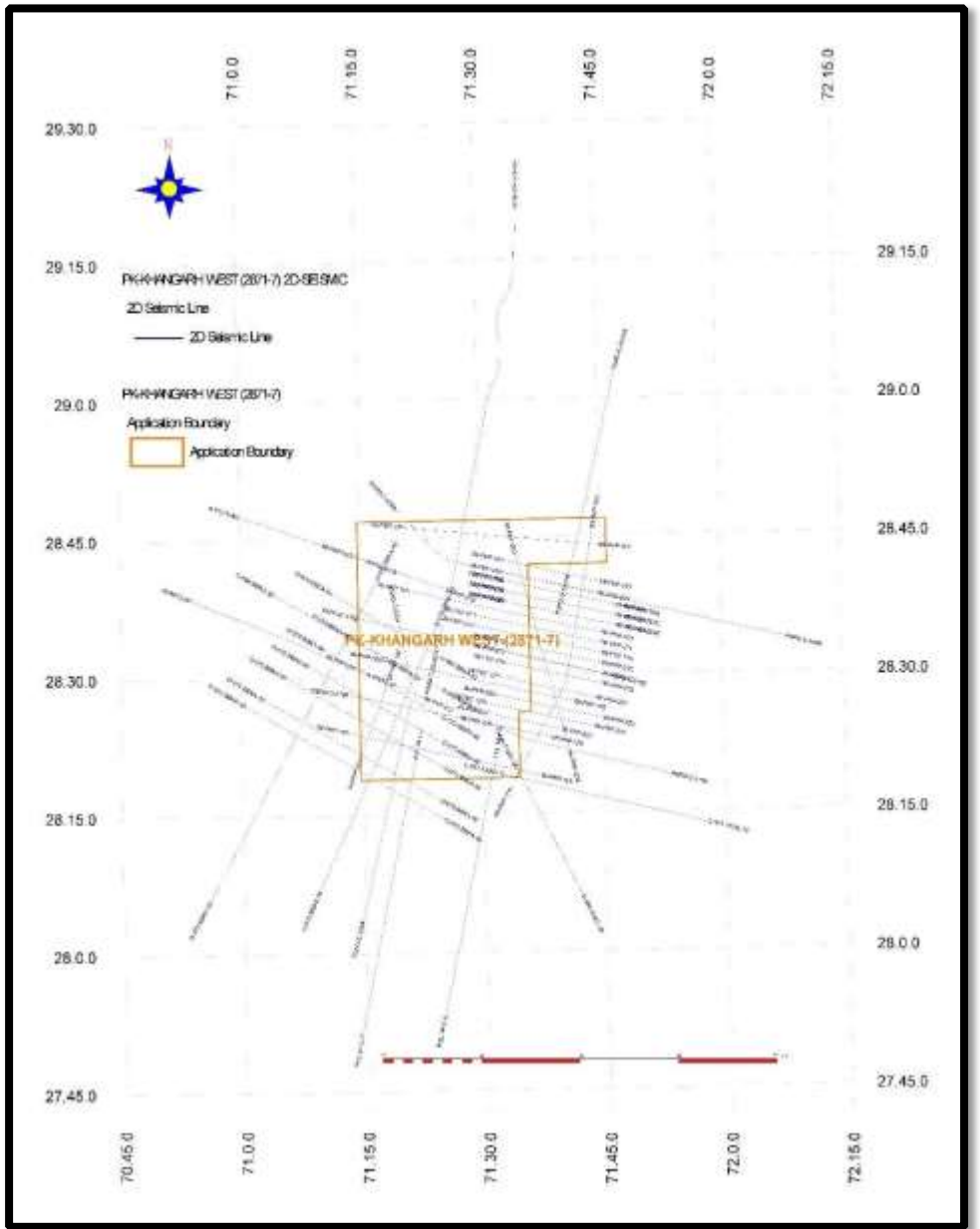
- The block is located in the Punjab Platform, west of oil producing fields in India, which confirms that a dynamic petroleum system containing all the necessary elements for the generation and accumulation of hydrocarbons is present in the area.
- The expected source rock having potential to generate hydrocarbons in this block includes Salt Range Formation (InfraCambrian), Tobra and Dandot formations (Permian). These sediments have gas and oil generation characteristics with fair to good organic richness.
- Infra-Cambrian to Jurassic sequence have potential reservoirs. Carbonates of Shinwari and Samana Suk formations (Jurassic), and clastics of Lumshiwal Formation (Cretaceous) are proven reservoirs in the gas fields of this surrounding area. Salt Range Formation (Infra Cambrian) is producing heavy oil in the east in India.
- The potential seals for underlying reservoirs include the intraformational shales and mudstones of Infra Cambrian, Paleozoic, and Mesozoic rocks.



Prospectivity

- The block area consists of fault bounded three-way dip structures.

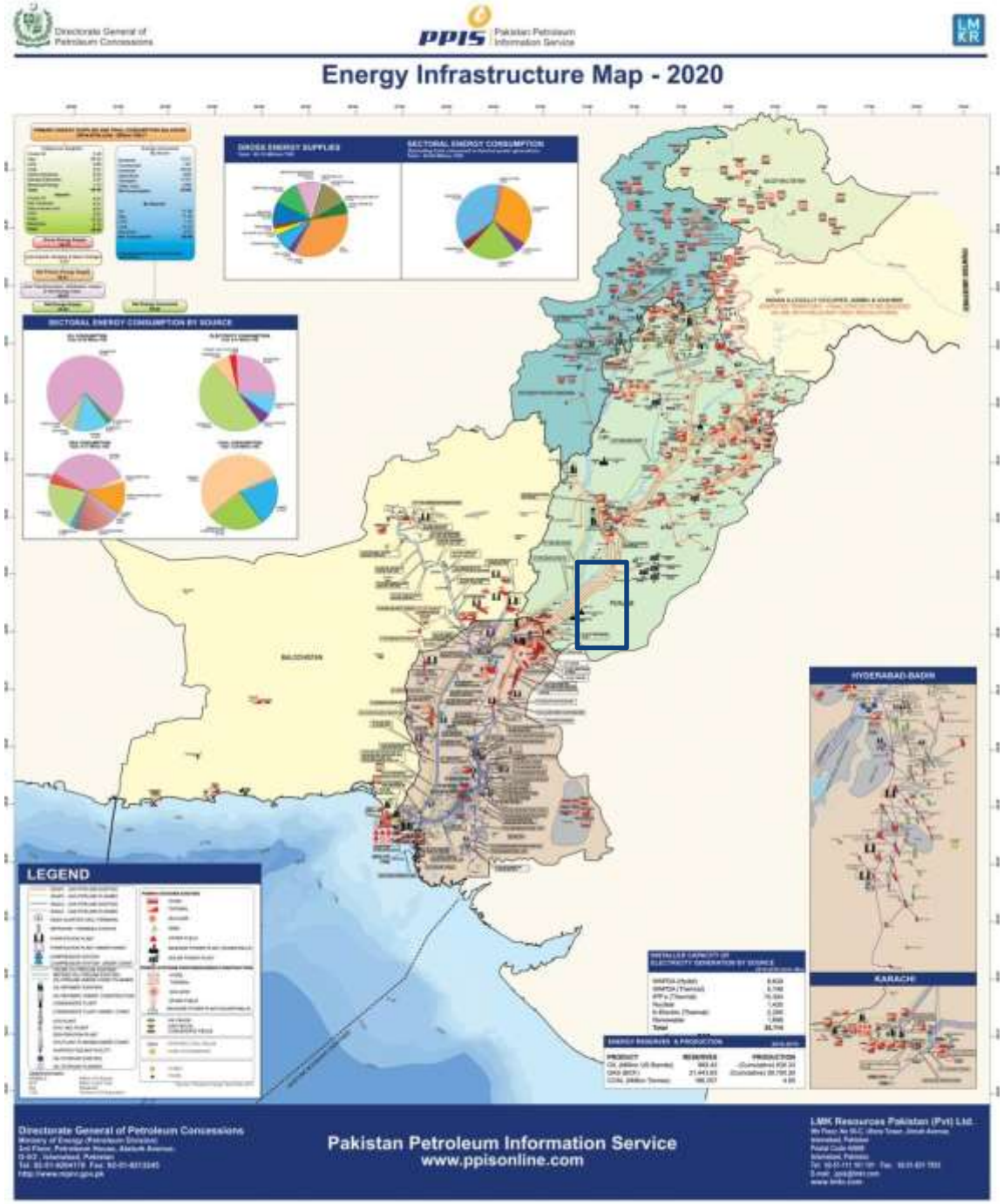




- The important feature for trapping mechanism can be provided by the truncations of Jurassic to Eocene strata.

Infrastructure Map

- Nearest infrastructure gas pipeline is available North-West and South-West of the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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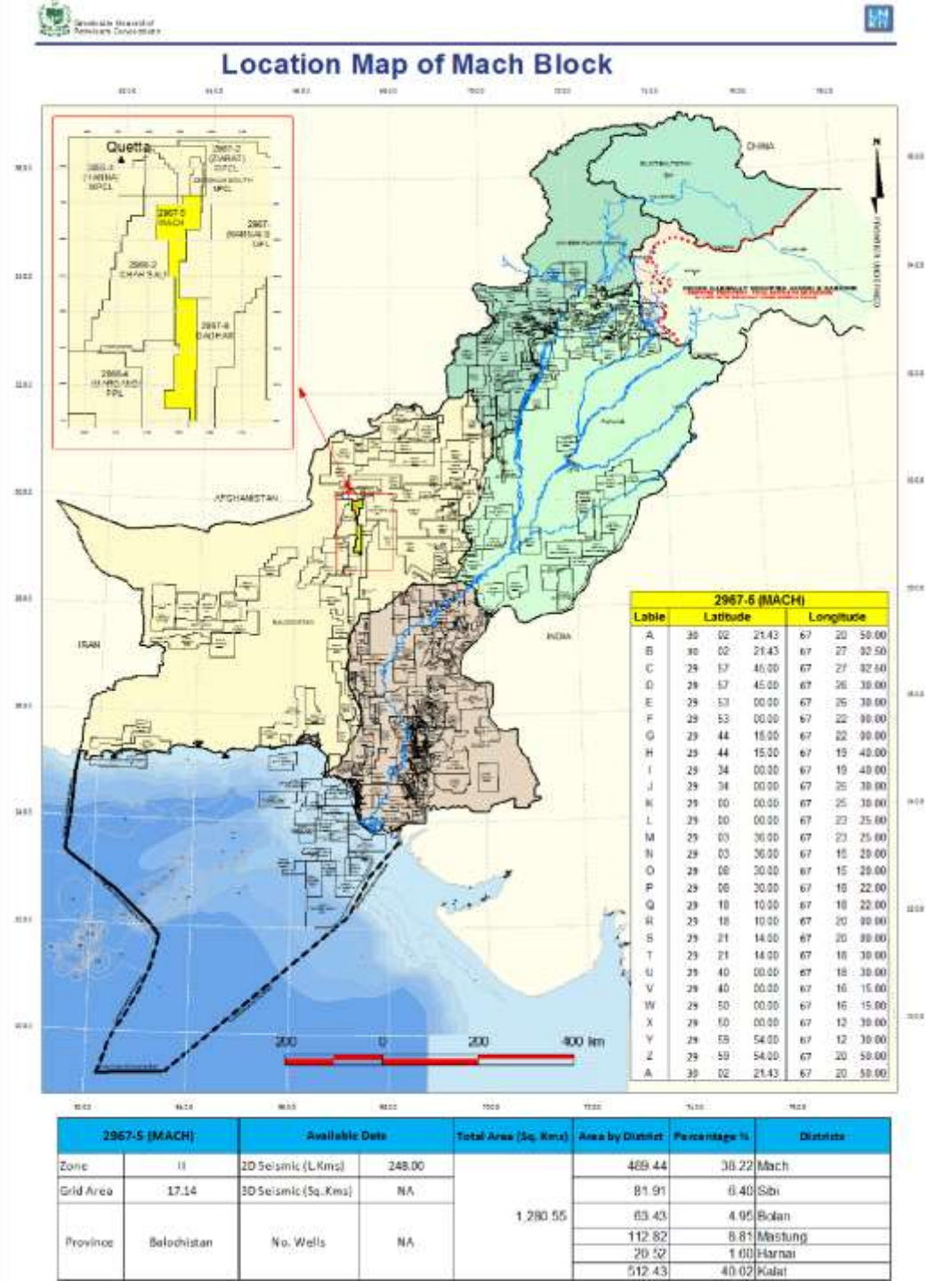
BLOCK: MACH

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Mach Block covers an area of 1280.55 sq km
- Location: Mach, Sibi, Bolan, Mastung, Harnai and Kalat district, Balochistan Pakistan.
- Geological Basin: Sulaiman Fold Belt, Balochistan, Pakistan.
- The block falls in Prospectivity Zone II
- Estimated Resources of the Balochistan Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet
- PPL & OGDCL Acquired some 2D data in the block within the years 1982 to 2015.



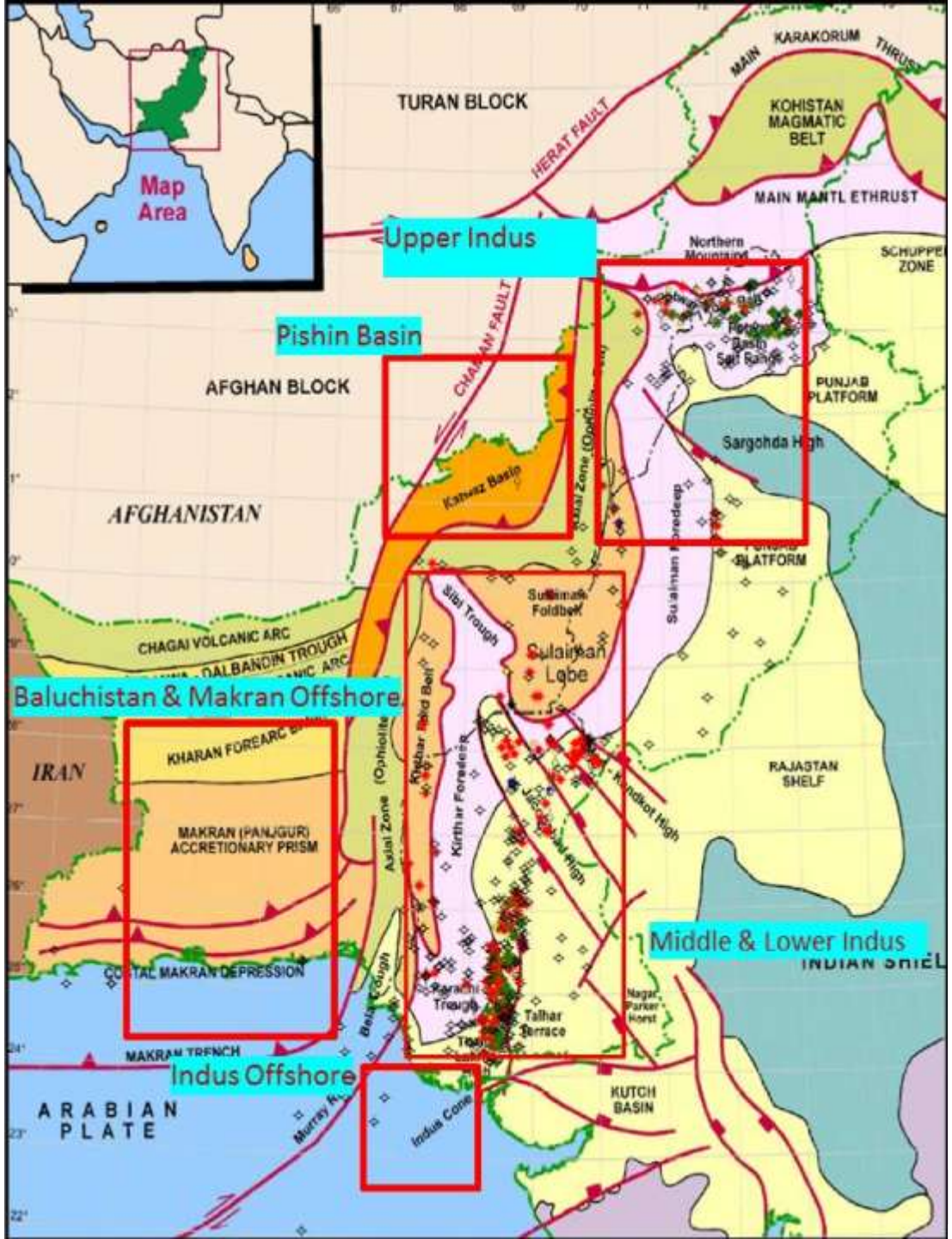
2967-5 (MACH)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	II	2D Seismic (L.Kms)	248.00	1,280.55	489.44	38.22	Mach
Grid Area	17.14	3D Seismic (Sq.Kms)	NA		81.91	6.40	Sibi
Province	Balochistan	No. Wells	NA		63.43	4.95	Bolan
					112.82	8.81	Mastung
					20.52	1.60	Harnai
					512.43	40.02	Kalat

- The Block is surrounded by Ziarat and Dadhar (East), Chah Bali (West), Zarghun South (North) and Dadhar and Kuhan (South).
- The wells drilled in the near vicinity are:
  - Zarghun South 01,02, 03,04
  - Bannh 01
  - Bolan East 01
- Major discoveries in the surrounding is from Zarghun South 01, Bolan East 01 and Khost.

**Riaz Ahmed 1998, Hydrocarbon Resource Base of Pakistan, Pakistan Journal of Hydrobarbon Research, Vol 10, 1-10*

Geological Map

- Mach block lies in the part of the low laying Range.
- At surface, the Raskoh topographically elevated
- It is structurally controlled and folding of Cretaceous Oligocene strata.
- In the north this range is by an intervening low Trough) from the Chagai
- In the south by the Usman/Kukab transpressional fault,



western Raskoh

Range is a feature

by thrusting to

separated (Dalbandin Arc

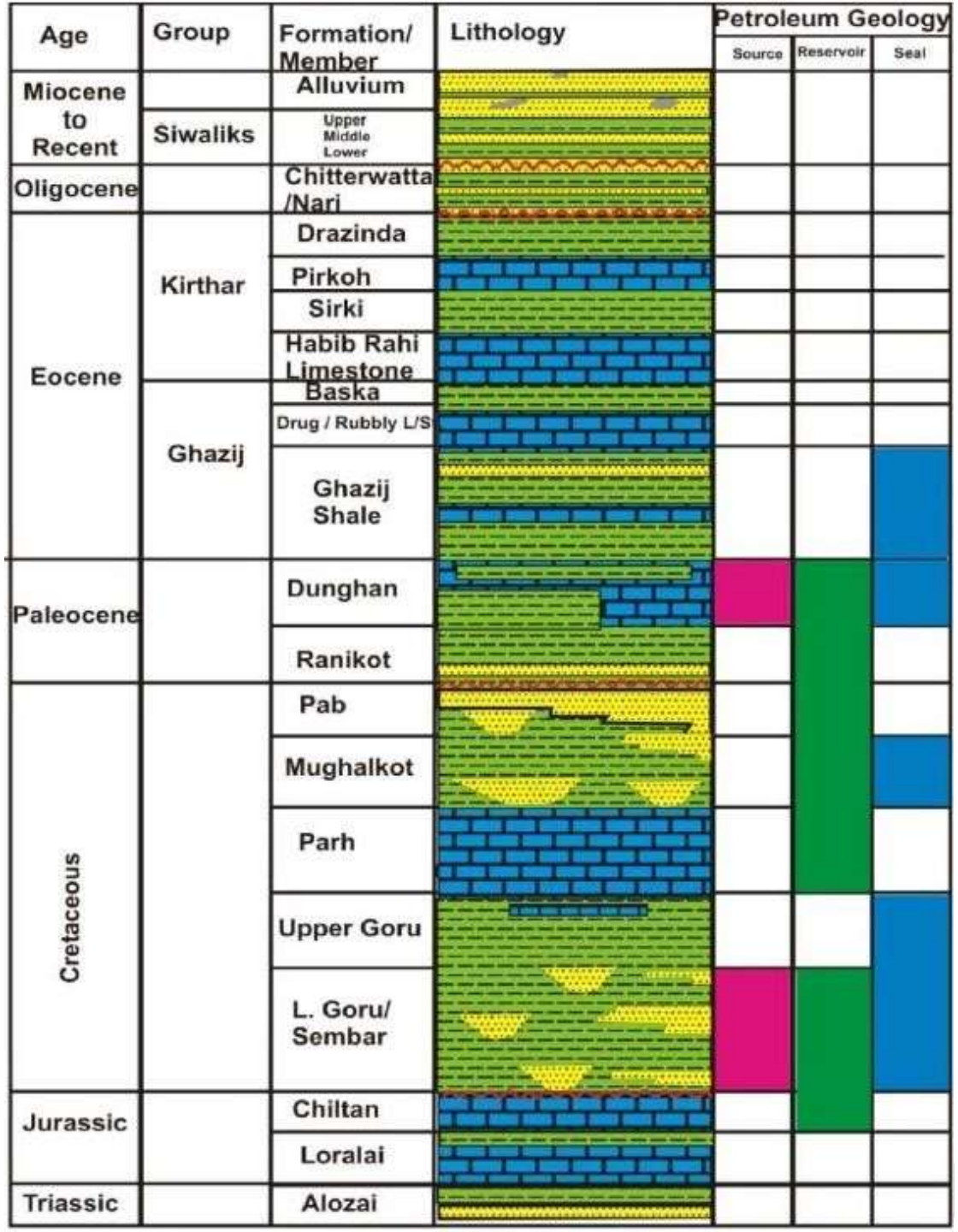
which dips

northwest in direction from Trough.

Petroleum System

- A petroleum system exist Jurassic to Eocene sedimentary packages.
- Potential source rocks in include the Lower Goru/Sembar (Cretaceous), Dunghan (Paleocene).
- The potential reservoir area include the

sic), L.Goru/Sembar, Parh, Mughalkot, Pab (Cretaceous)



Kharan

in the

the area

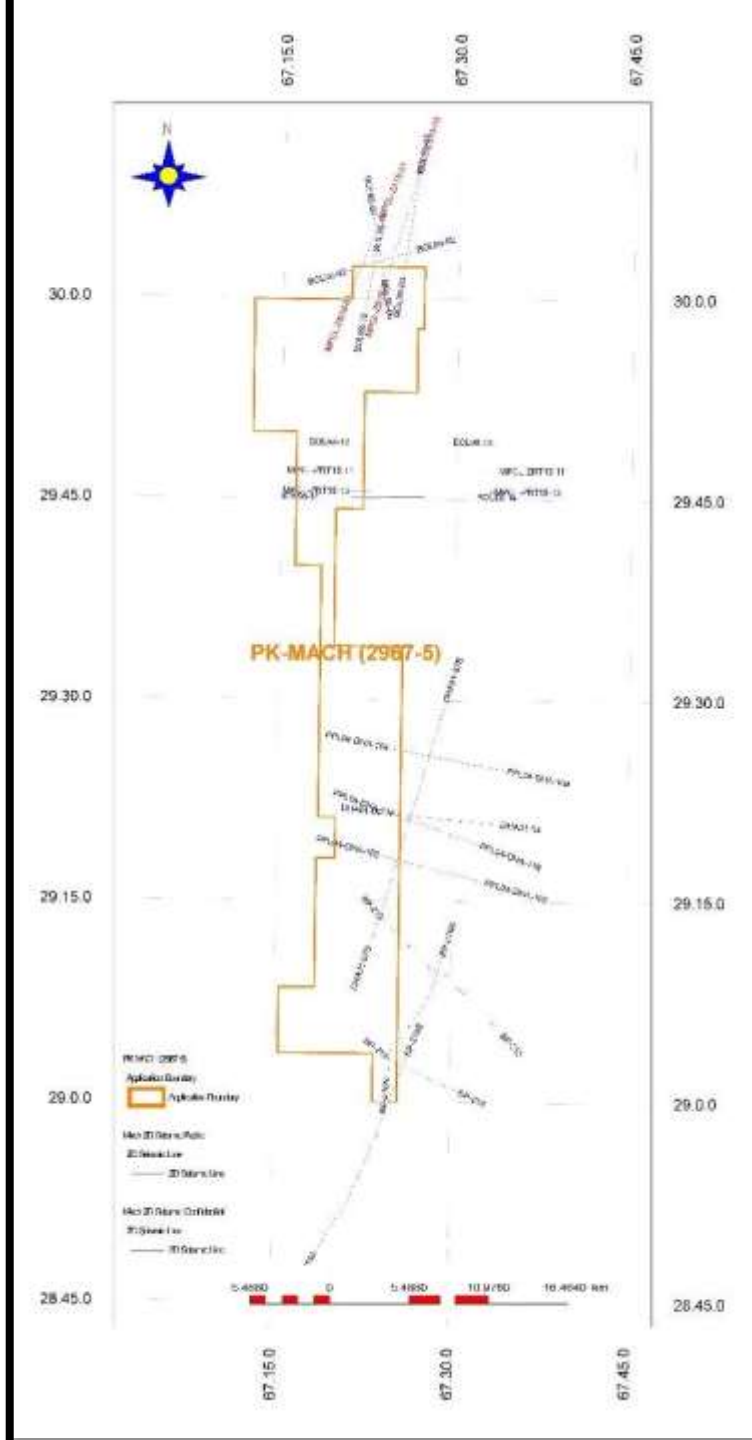
Formation

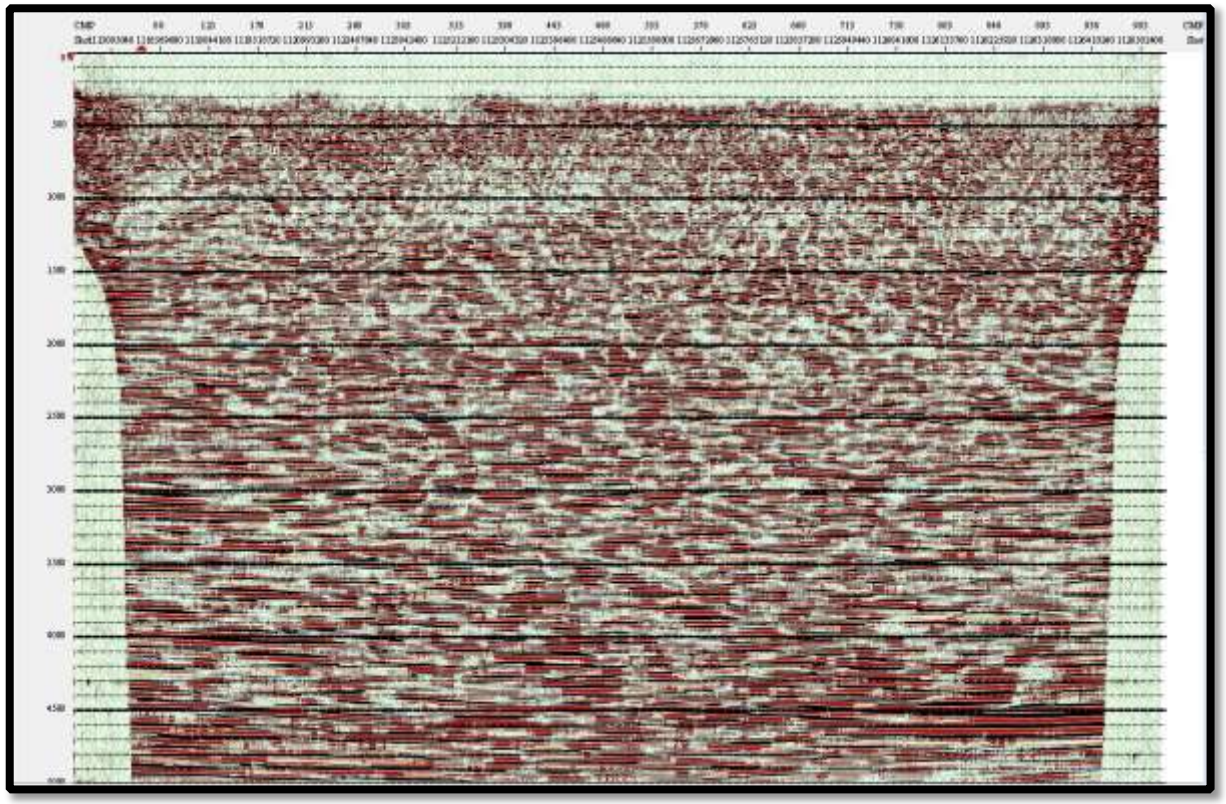
rocks in the

- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity



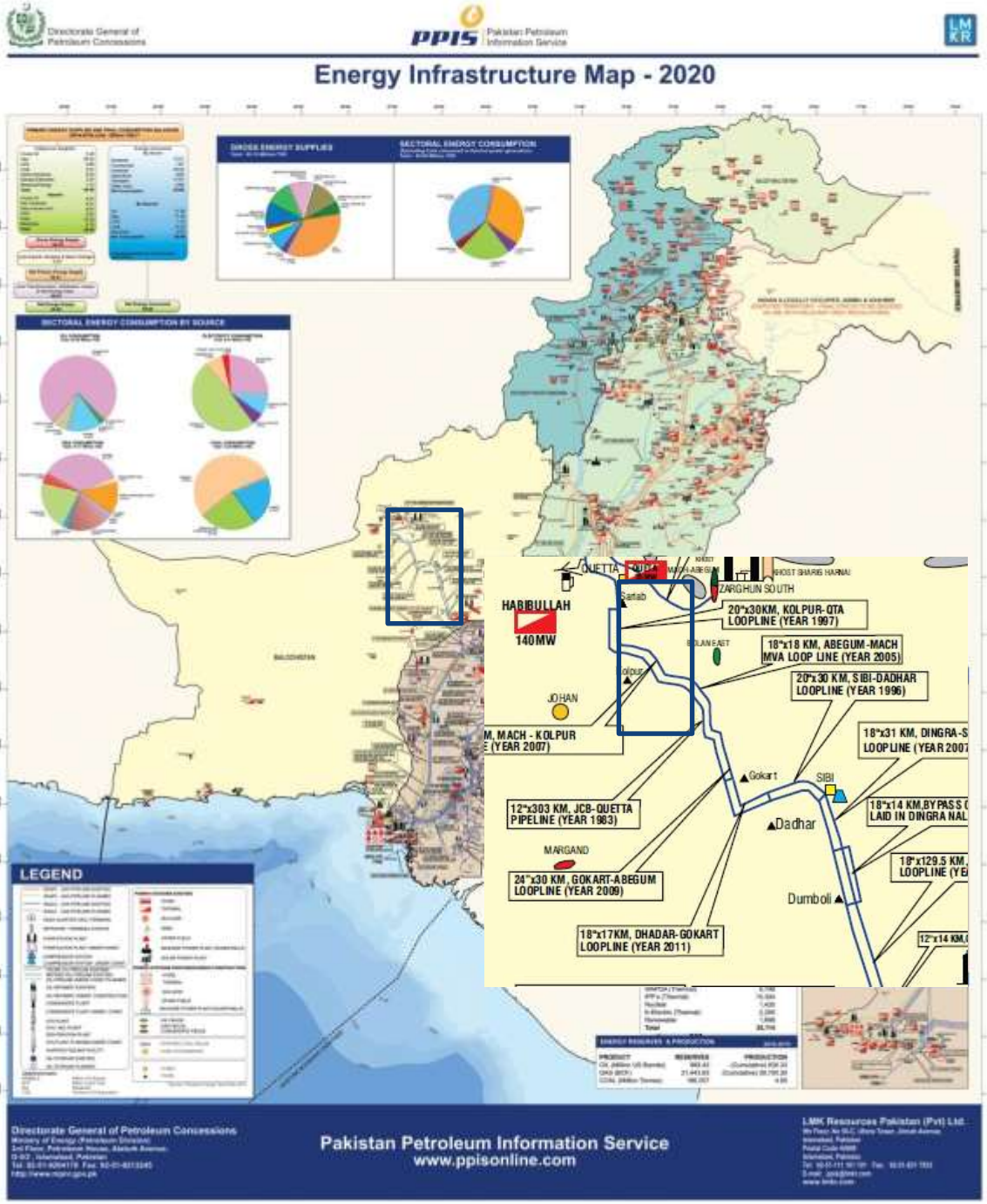


- The main trapping mechanism in this area is considered to be thrust related anticlines
- In recent past, nearby blocks have successful oil and gas discoveries.
- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available North-East of the block.
- Bolan East oil field and Margand gas field lies close to the block.
- Towards south of the block, a pipeline connecting Jhal Magsi is planned
- Government support to companies for infrastructure development

Investment Benefits



- High risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will guarantee to buy the gas or oil discovery.
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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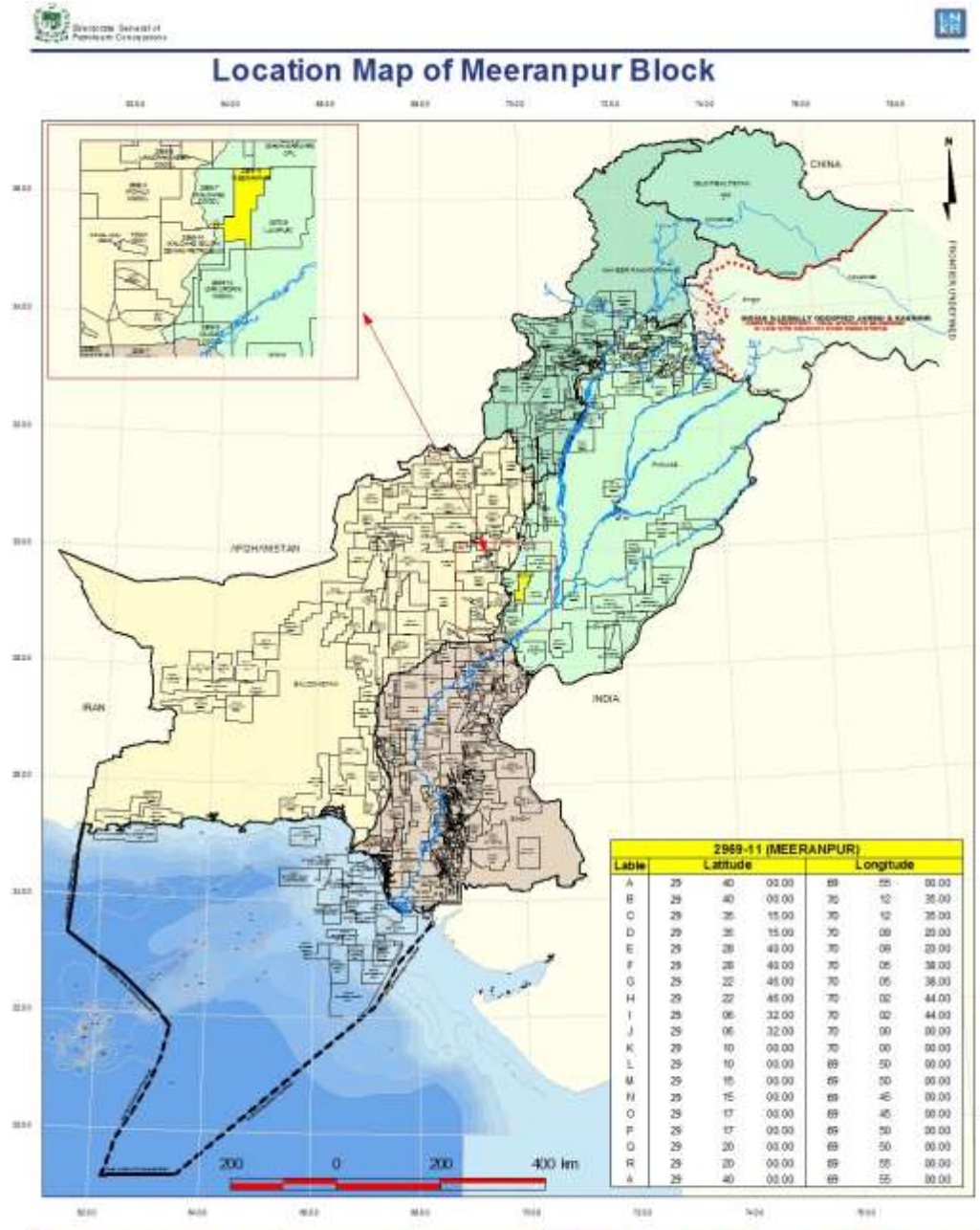
BLOCK: MEERANPUR

DGPC BLOCK BIDDING ROUND 2021

Introduction



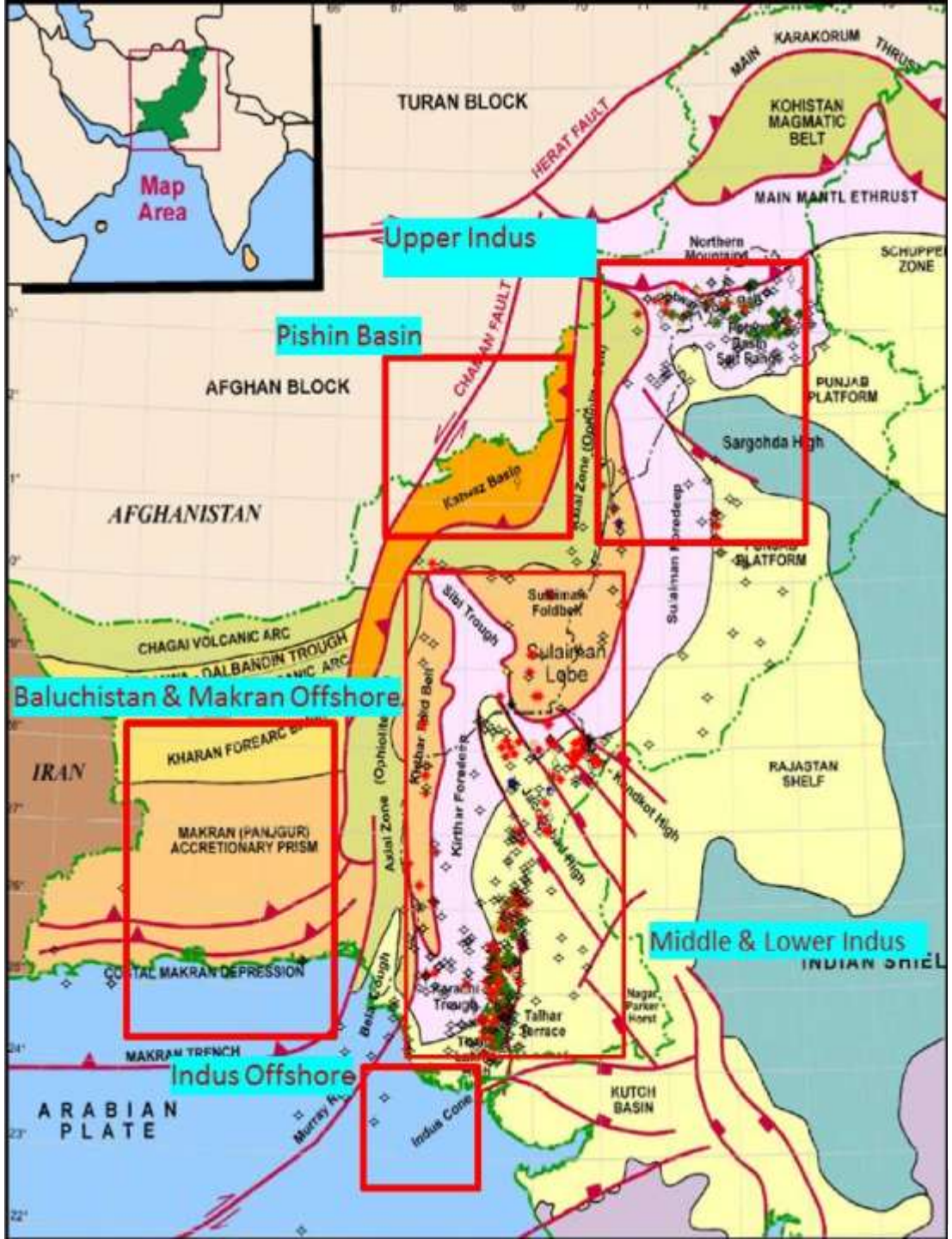
- Meeranpur Block covers an area of 1222.72 sq km

- Location: Rajanpur and Dera Bugti district, Punjab, Pakistan.
- Geological Basin: Central Indus Basin of Pakistan.
- The block falls in Prospectivity Zone II.
- Fugro Robertson (an international renowned Consultant) has highlighted that Punjab has the following yet to find reserves:
  - Gas: 5,600 billion cubic feet
  - Oil: 520 million barrels
- OGDCL, POL and PPL acquired some 2D data in the block within the years 1975 – 2019.
- The Block is surrounded by Jampur and Zamurdan (East), Kalchas, Kalchas South and Loti (West), Sakhi Sarwar and DG Khan(North) and Sui and Guddu (South).
- Total number of wells have been drilled in the near vicinity are:
  - Loti 01, Loti Deep 01, Loti 01-20
  - Pirkoh Deep 01, Pirkoh East 01, Pirkoh 01, 02, 02A .
  - Sui Deep 01, Sui wells
- Major discoveries near the block are from Sui, Loti and Pirkoh.

https://energy.punjab.gov.pk/OilnGas

Geological Map

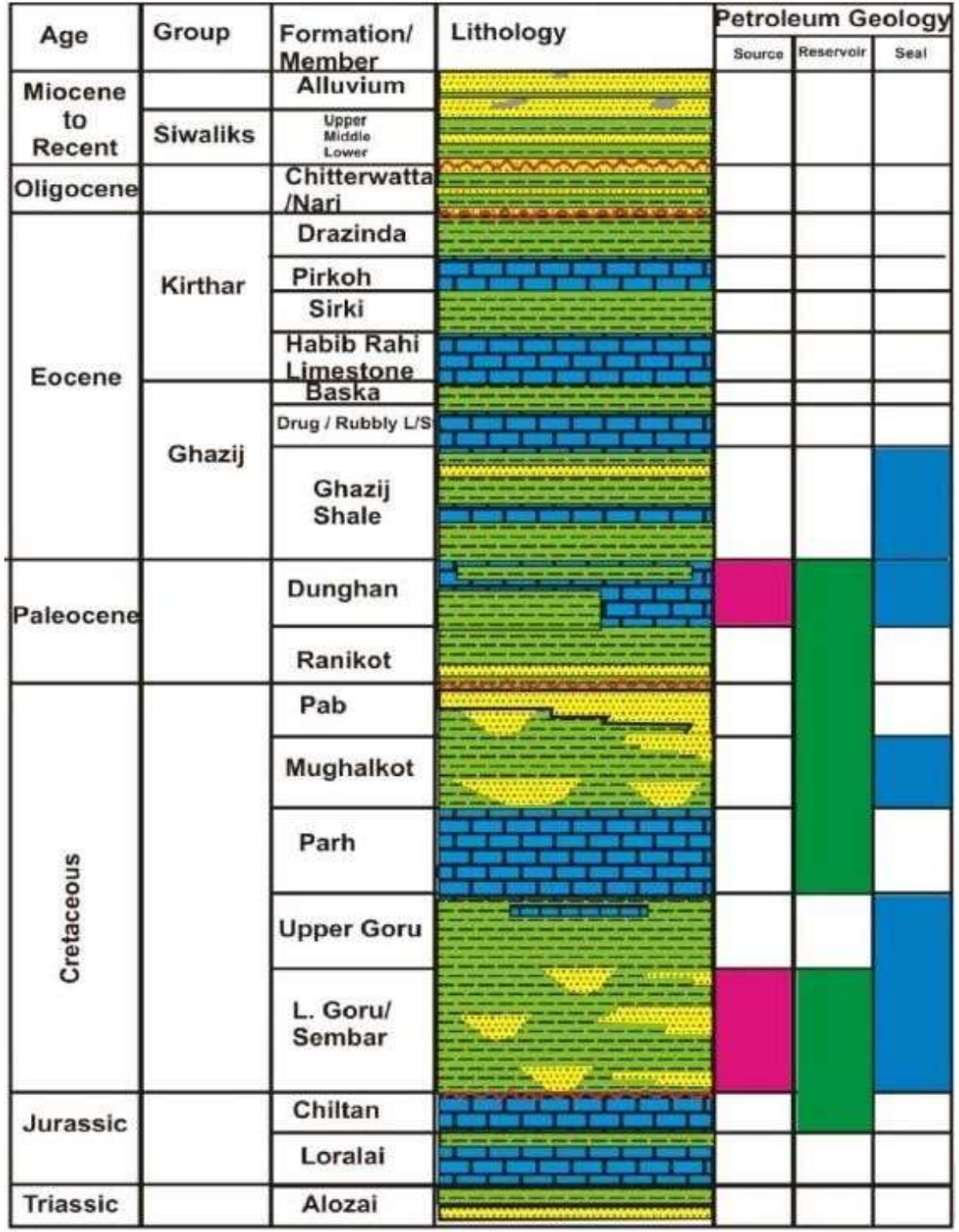
- Meeranpur block lies in the Central Indus Platform Basin (CIPB), which is a broad monocline dipping gently westward and merges in Sulaiman Foredeep.
- Tectonically, the effect of this area. compression is minimum in During the Precambrian, late Jurassic and Cretaceous, an extensional activity occurred.
- The uplifts provide the evidence of this tectonism accompanying the fragmentation of Gondwana.



- The area is categorized by extensional faults, cutting Paleozoic strata.

Petroleum System

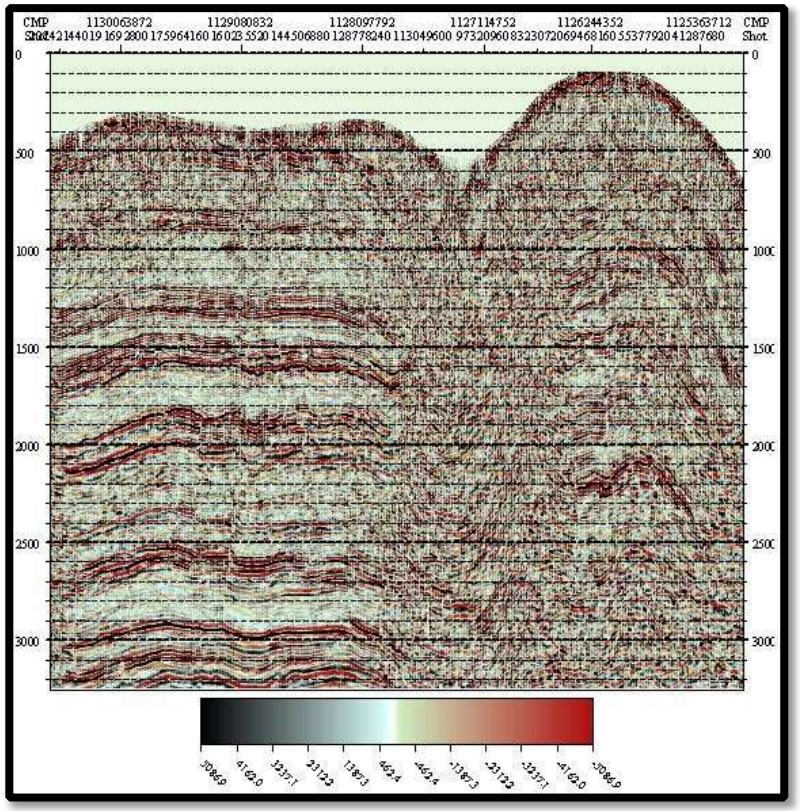
- A petroleum system exist in the Jurassic to Eocene sedimentary packages.
- Potential source rocks in the area include the Lower Goru/Sembar (Cretaceous), Dunghan Formation (Paleocene).
- The potential reservoir rocks in the area include the Pab (Cretaceous), L.Goru/Sembar, Parh, Mughalkot, Dunghan (Paleocene).

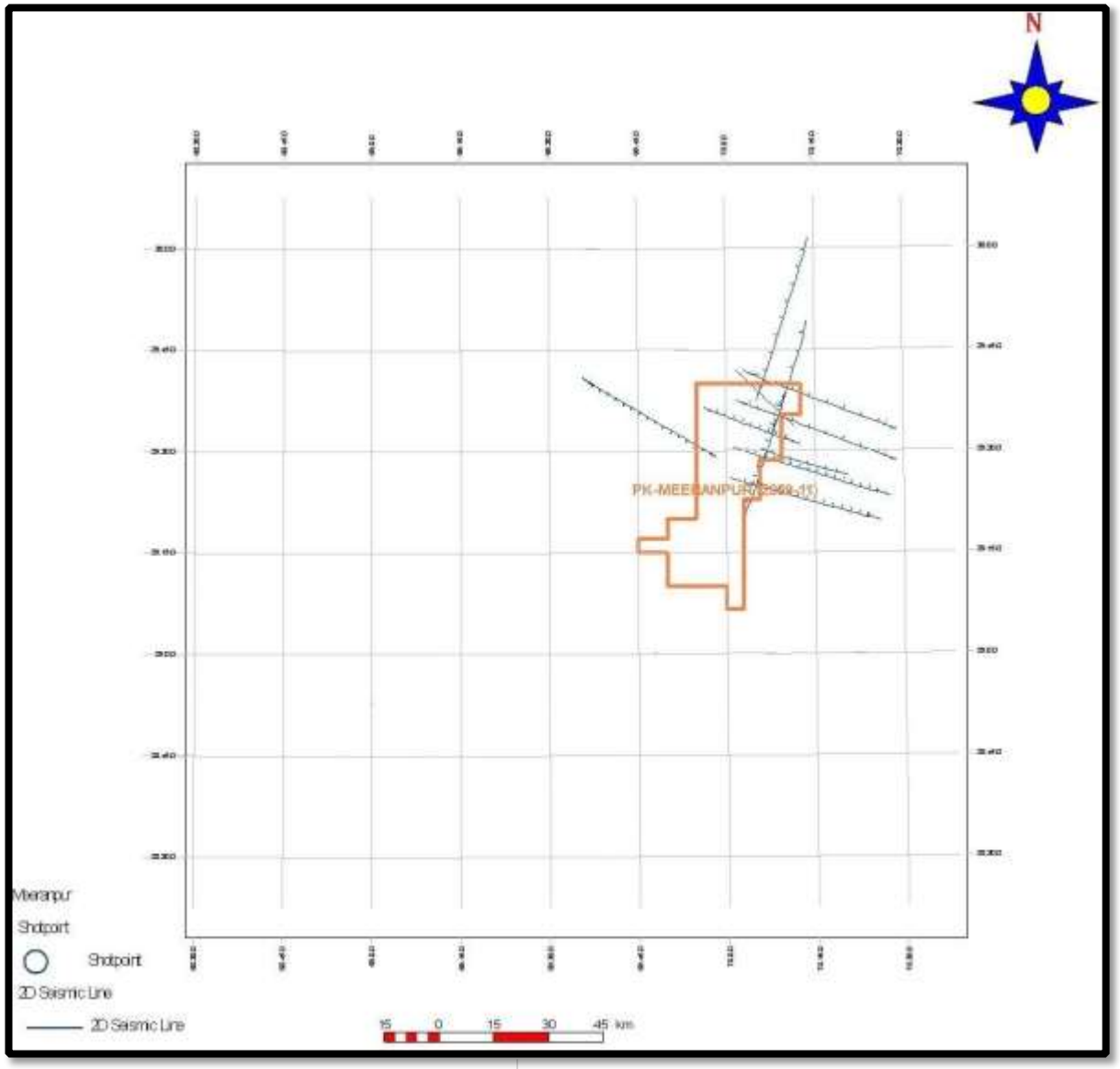


- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity



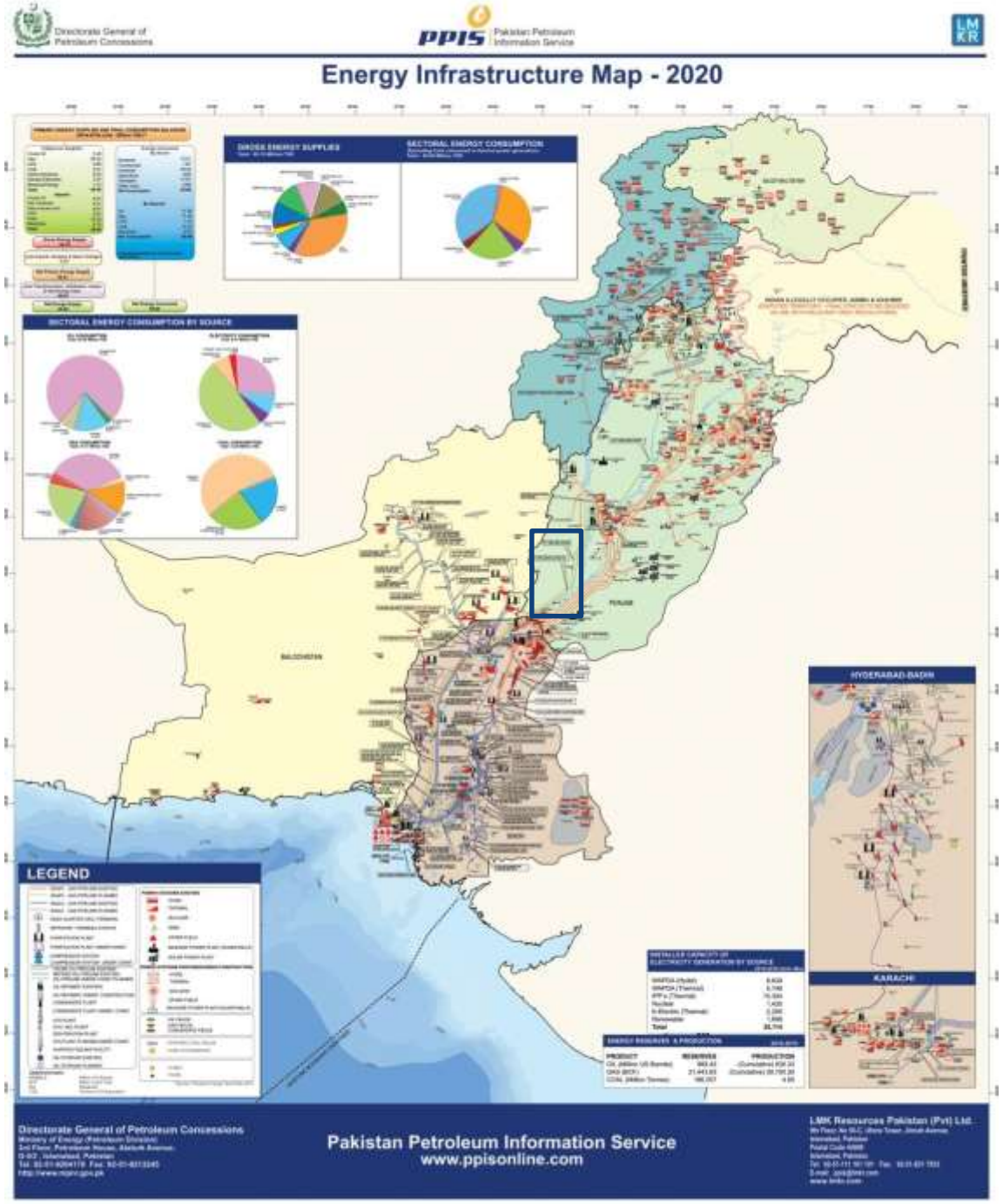


- The block area consists of broad anticlinal structures
- In recent past, nearby blocks have successful Oil & Gas discoveries.

- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available near the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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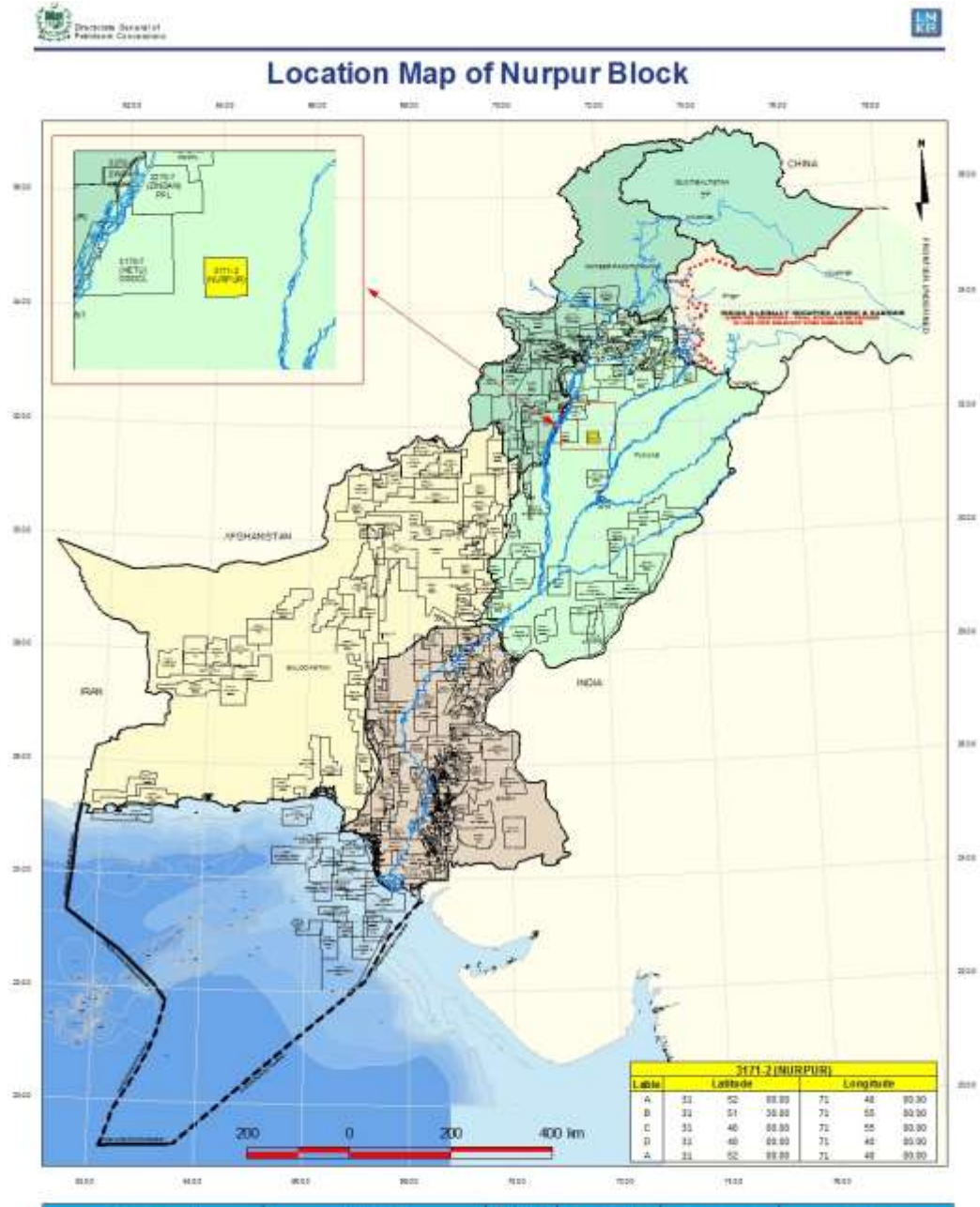
BLOCK: NURPUR

DGPC BLOCK BIDDING ROUND 2021

Introduction



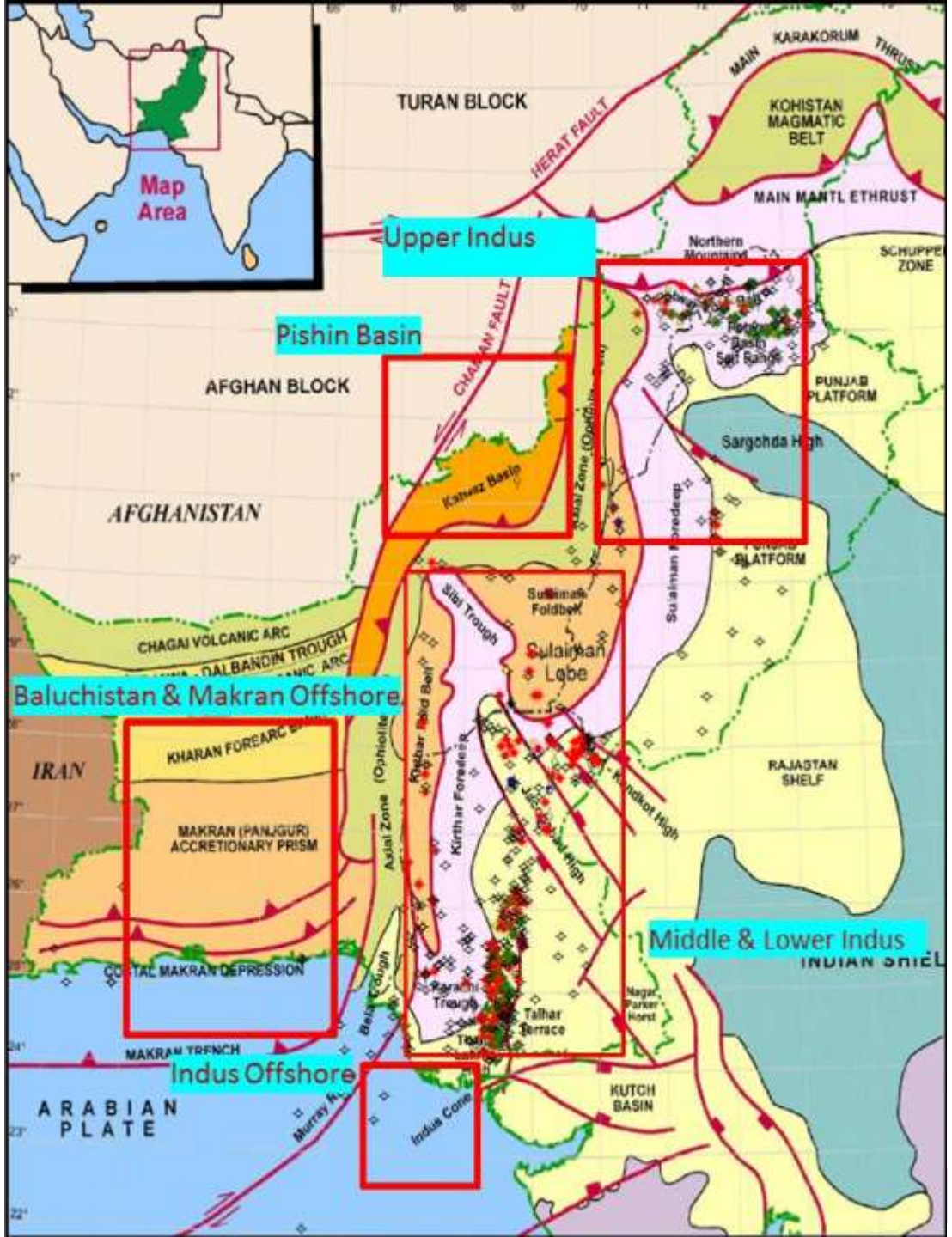
Nurpur Block covers an area of 528.19 sq km

- Location: Toba Tek Singh and Bhakkar district, Punjab, Pakistan.
- Geological Basin: Central Indus Basin of Pakistan.
- The block falls in Prospectivity Zone II.
- Fugro Robertson (an international renowned Consultant) has highlighted that Punjab has the following yet to find reserves:
  - Gas: 5,600 billion cubic feet
  - Oil: 520 million barrels
- OGDCL, and AMOCO acquired some 2D data in the block within the years 1973,1980,1984 and 2015.
- The Block is surrounded by Hetu (West) and Multan North (South).
- Total number of wells have been drilled in the near vicinity are:
  - Barkat Wala 01
  - Darbula 01
  - Saro 01
- Major discoveries are Nandpur and Panjpir near the block.

https://energy.punjab.gov.pk/OilnGas

Geological Map

- Nurpur block lies in the Indus Platform Basin which is a broad monocline gently westward and Sulaiman Foredeep.
- Tectonically, the effect of is minimum in this area. Precambrian, late Jurassic Cretaceous, an extensional occurred.
- The uplifts provide the this tectonism accompanying the fragmentation of



Central (CIPB), dipping merges in

compression During the and activity

evidence of

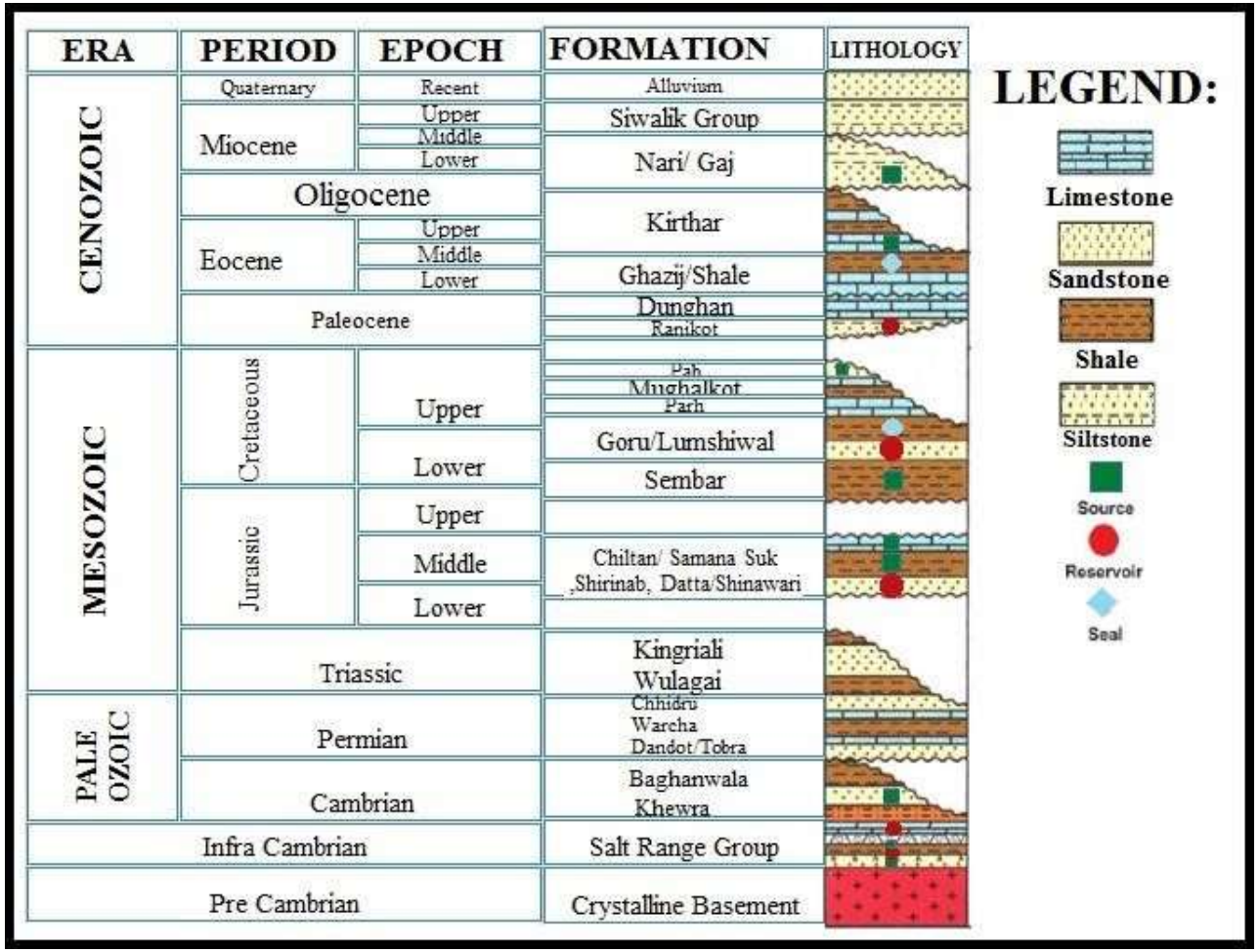
Gondwana.

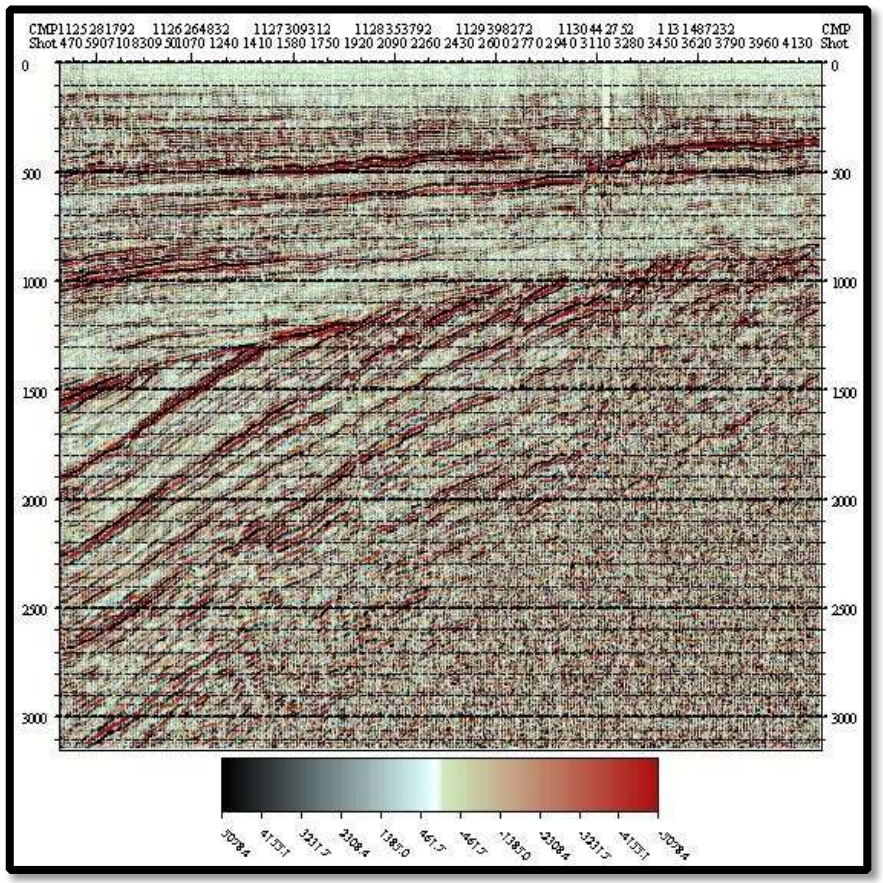
- The area is categorized by extensional faults, cutting Paleozoic strata.

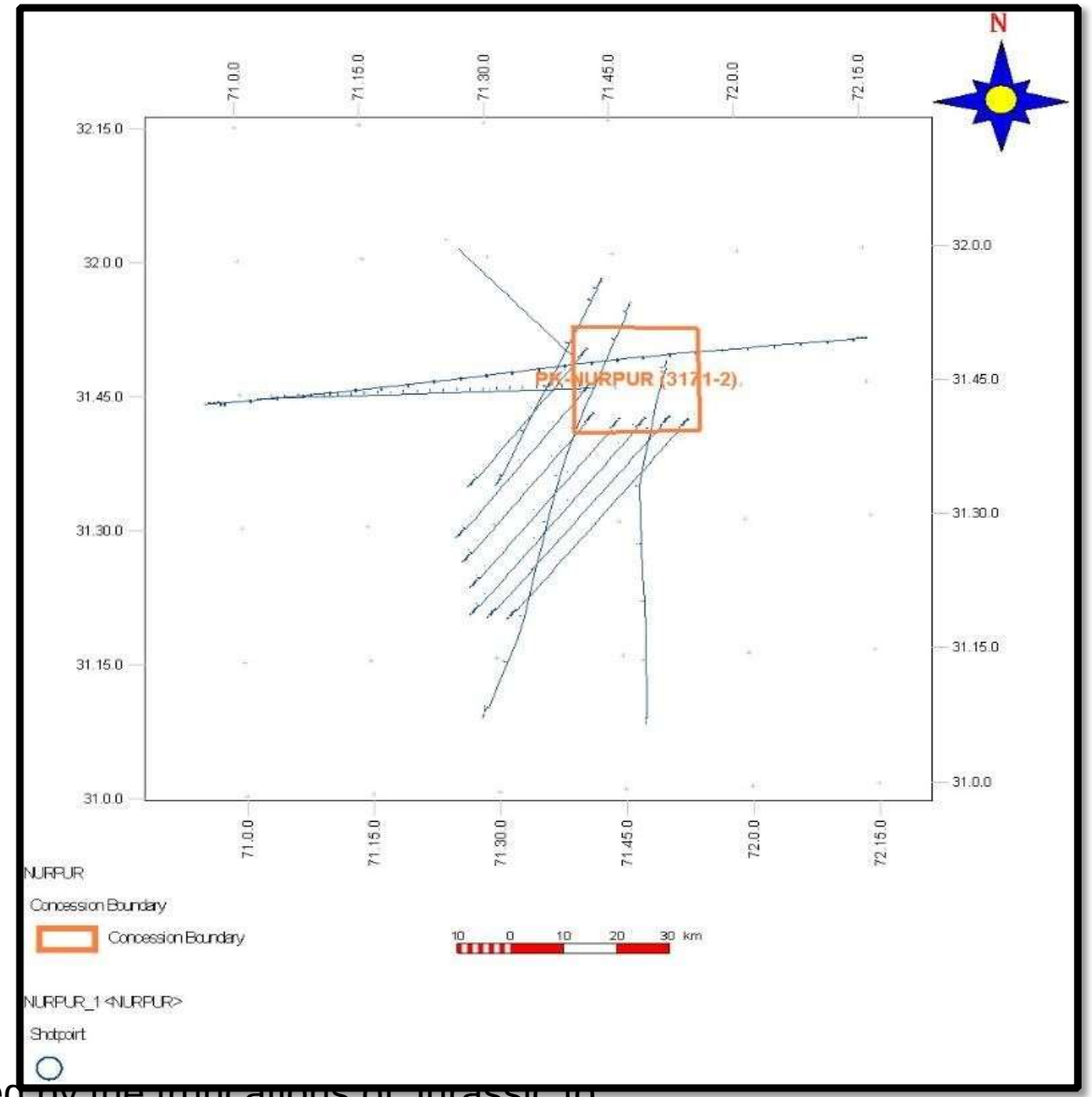
Petroleum System

Prospectivity

- The block is located in the Punjab Platform, west of oil producing fields in India, which confirms that a dynamic petroleum system containing all the necessary elements for the generation and accumulation of hydrocarbons is present in the area.
- The expected source rock having potential to generate hydrocarbons in this block includes Salt Range Formation (InfraCambrian), Tobra and Dandot formations (Permian). These sediments have gas and oil generation characteristics with fair to good organic richness.
- Infra-Cambrian to Jurassic sequence have potential reservoirs. Carbonates of Shinwari and Samana Suk formations (Jurassic), and clastics of Lumshiwal Formation (Cretaceous) are proven reservoirs in the gas fields of this surrounding area. Salt Range Formation (Infra Cambrian) is producing heavy oil in the east in India.
- The potential seals for underlying reservoirs include the intraformational shales and mudstones of Infra Cambrian, Paleozoic, and Mesozoic rocks.







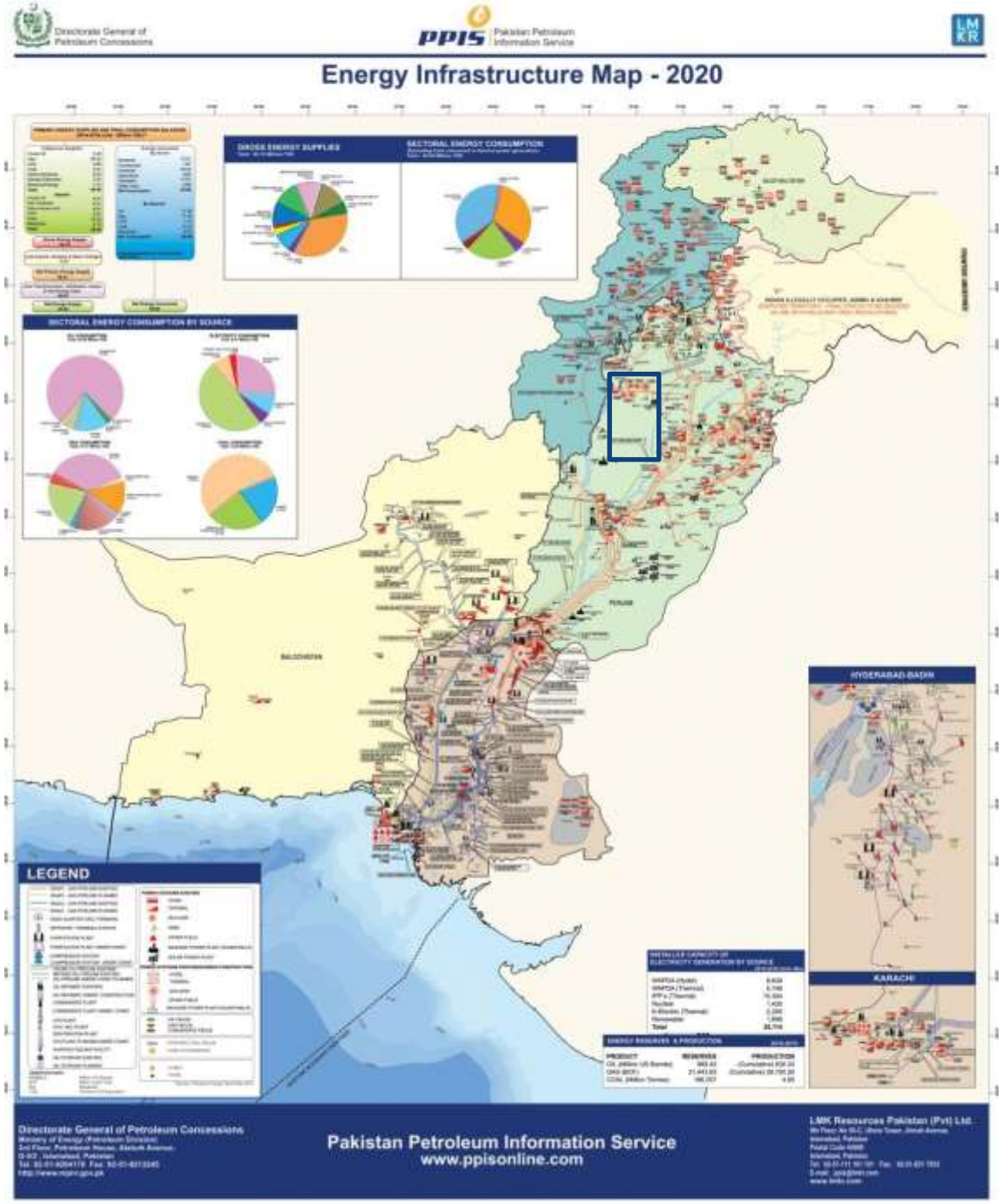
- The block area consists of fault bounded three-way dip structures.

- The important feature for trapping mechanism can be provided by the truncations of Jurassic to

Eocene strata.

Infrastructure Map

- Nearest infrastructure gas pipeline is available North-East and South-East of the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery ■Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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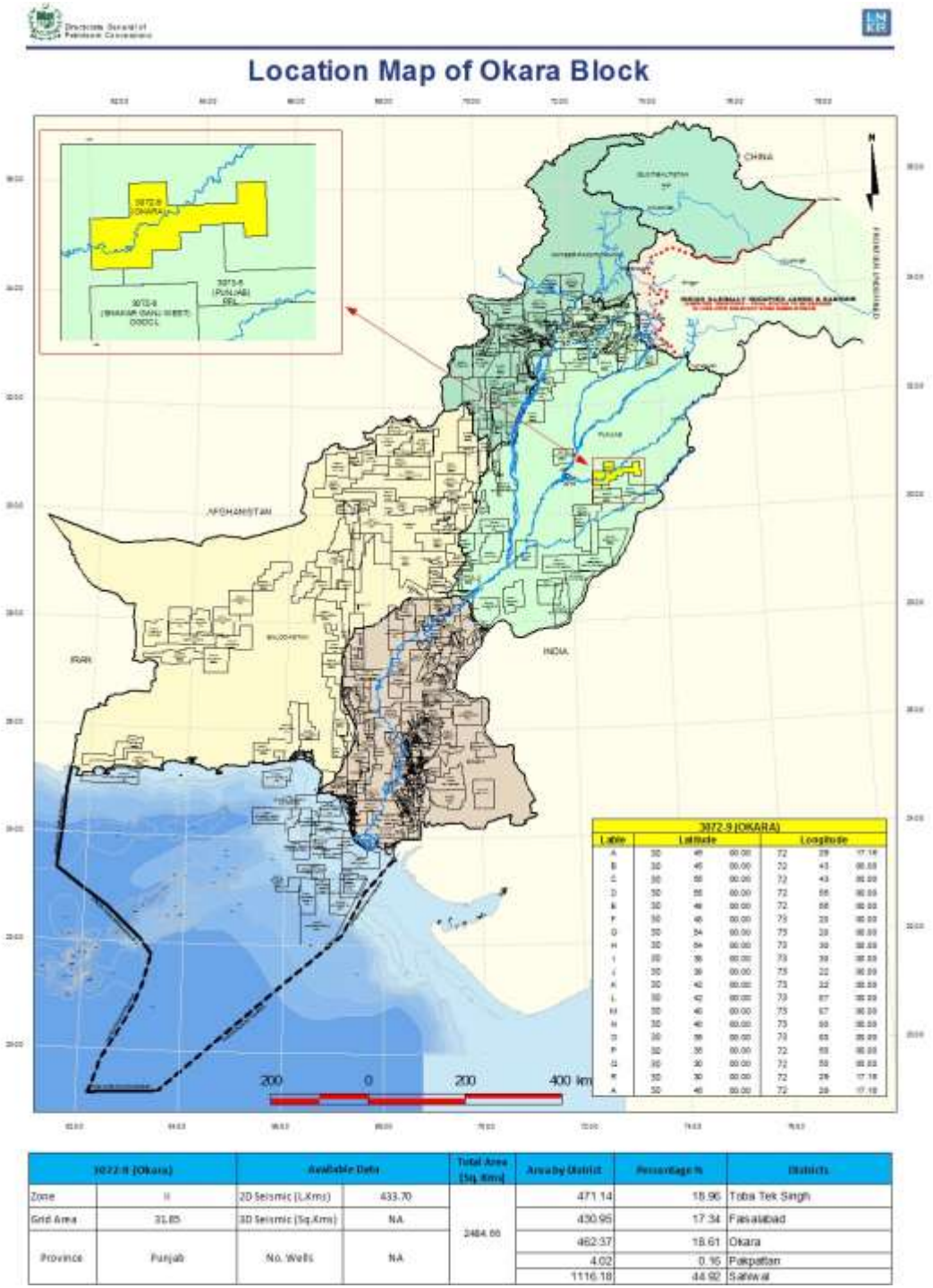
BLOCK: OKARA

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Okara Block covers an area of 2484.66 sq km
- Location: Toba Tek Singh, Sahiwal district, Punjab, Pakistan. Faisalabad, Okara, Pakpattan and
- Geological Basin: Central Indus Basin of Pakistan.
- The block falls in Prospectivity Zone II.
- Fugro Robertson (an international that Punjab has the following yet to renowned Consultant) has highlighted find reserves:
  - Gas: 5,600 billion cubic feet
  - Oil: 520 million barrels
- SHELL and OGDCL acquired some 2D data in the block within the years 1980 and 1985.

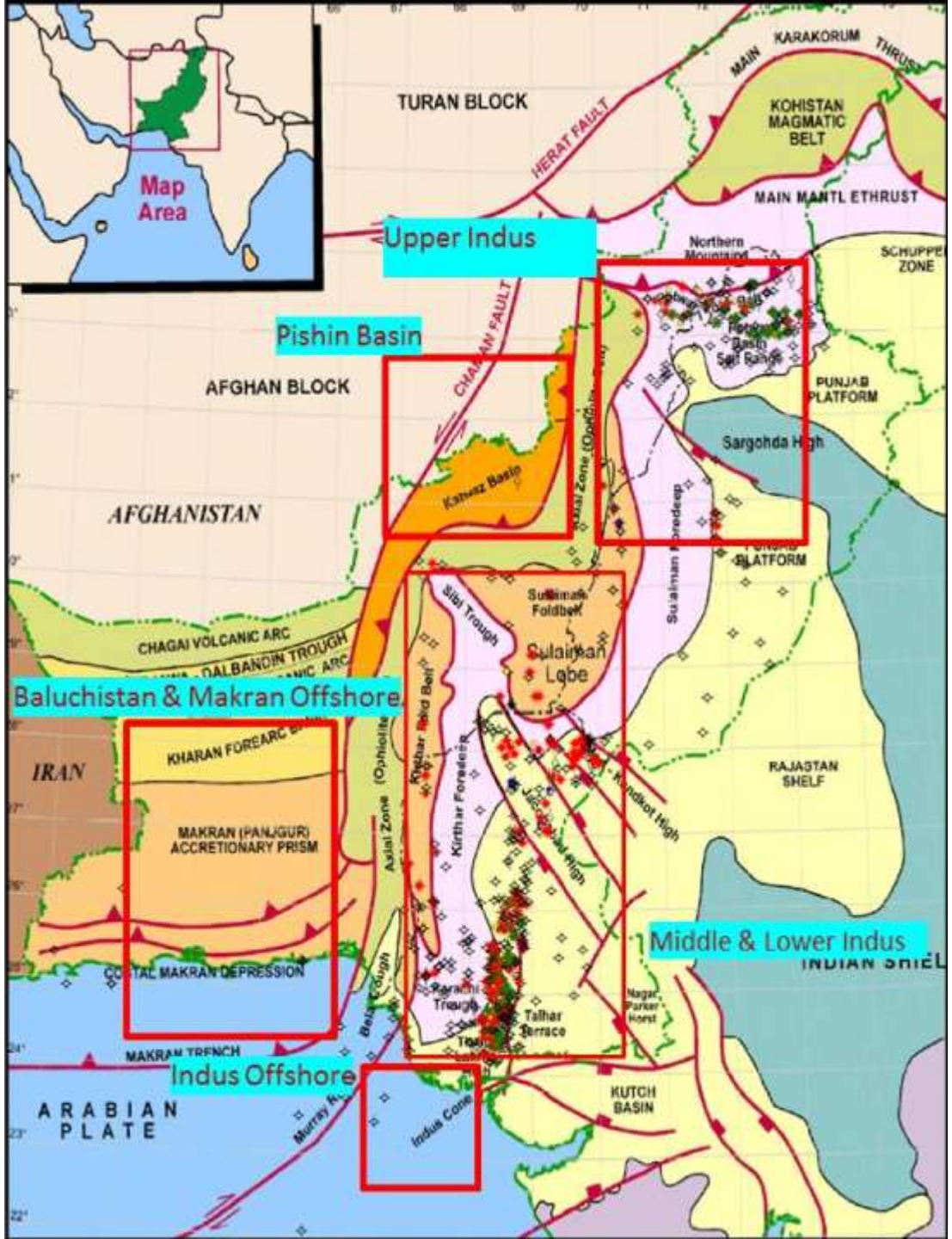


- The Block is surrounded by Punjab Block (South).
- Total number of wells have been drilled in the near vicinity are:
  - Bagh X 01
  - Bangala 01
  - Tola 01
- Major discoveries are Nandpur and Panjpir near the block.

https://energy.punjab.gov.pk/OilnGas

Geological Map

- Okara block lies in the Indus Platform Basin which is a broad monocline gently westward and Sulaiman Foredeep.
- Tectonically, the effect of is minimum in this area. Precambrian, late Jurassic Cretaceous, an extensional occurred.
- The uplifts provide the this tectonism accompanying the fragmentation of



Central (CIPB), dipping merges in

compression During the and activity

evidence of

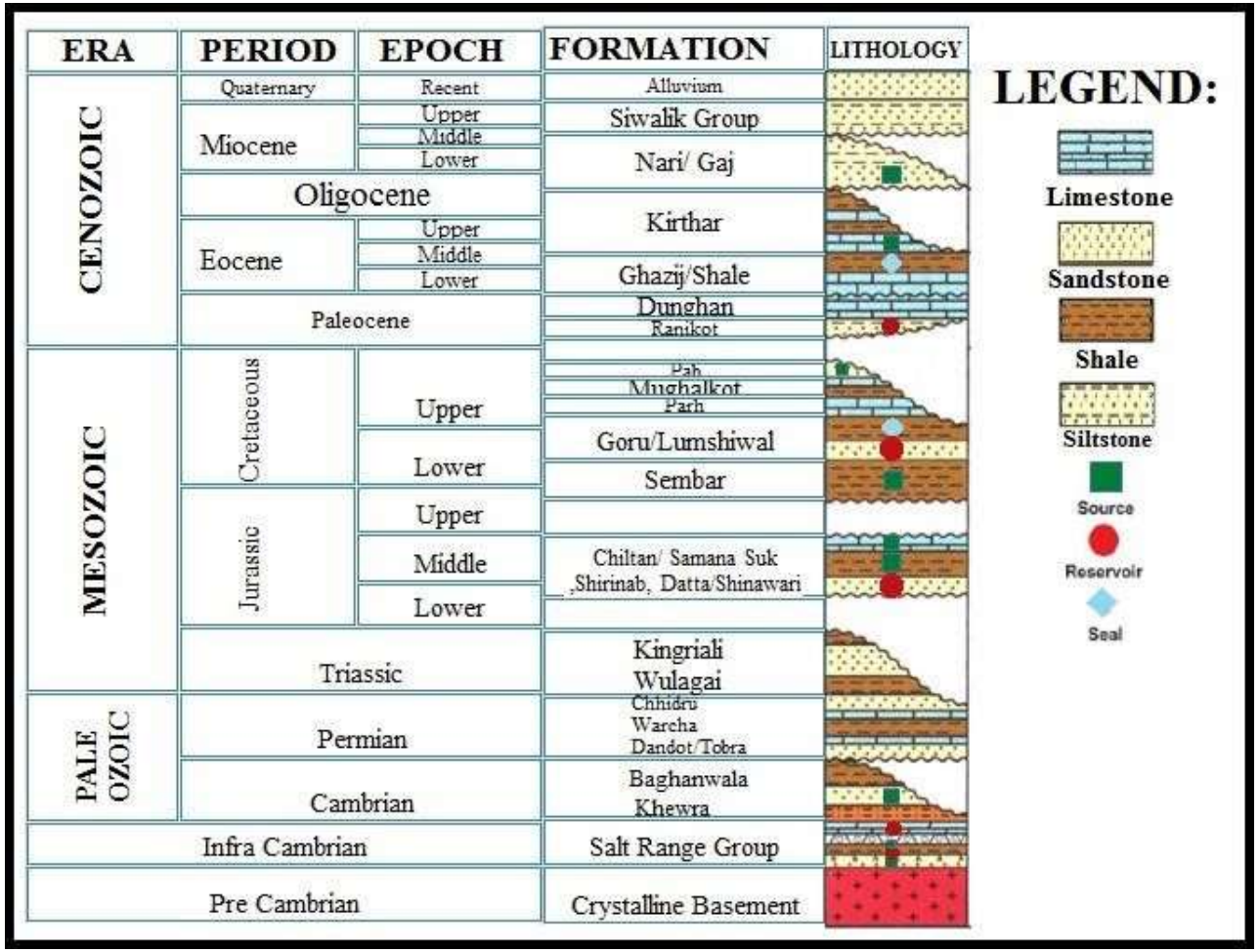
Gondwana.

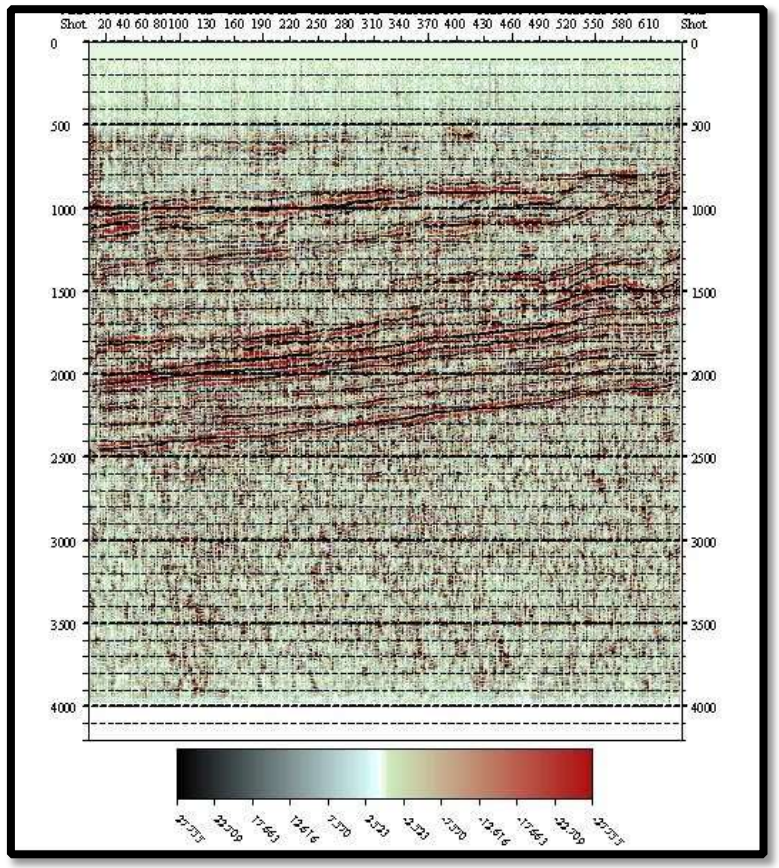
- The area is categorized by extensional faults, cutting Paleozoic strata.

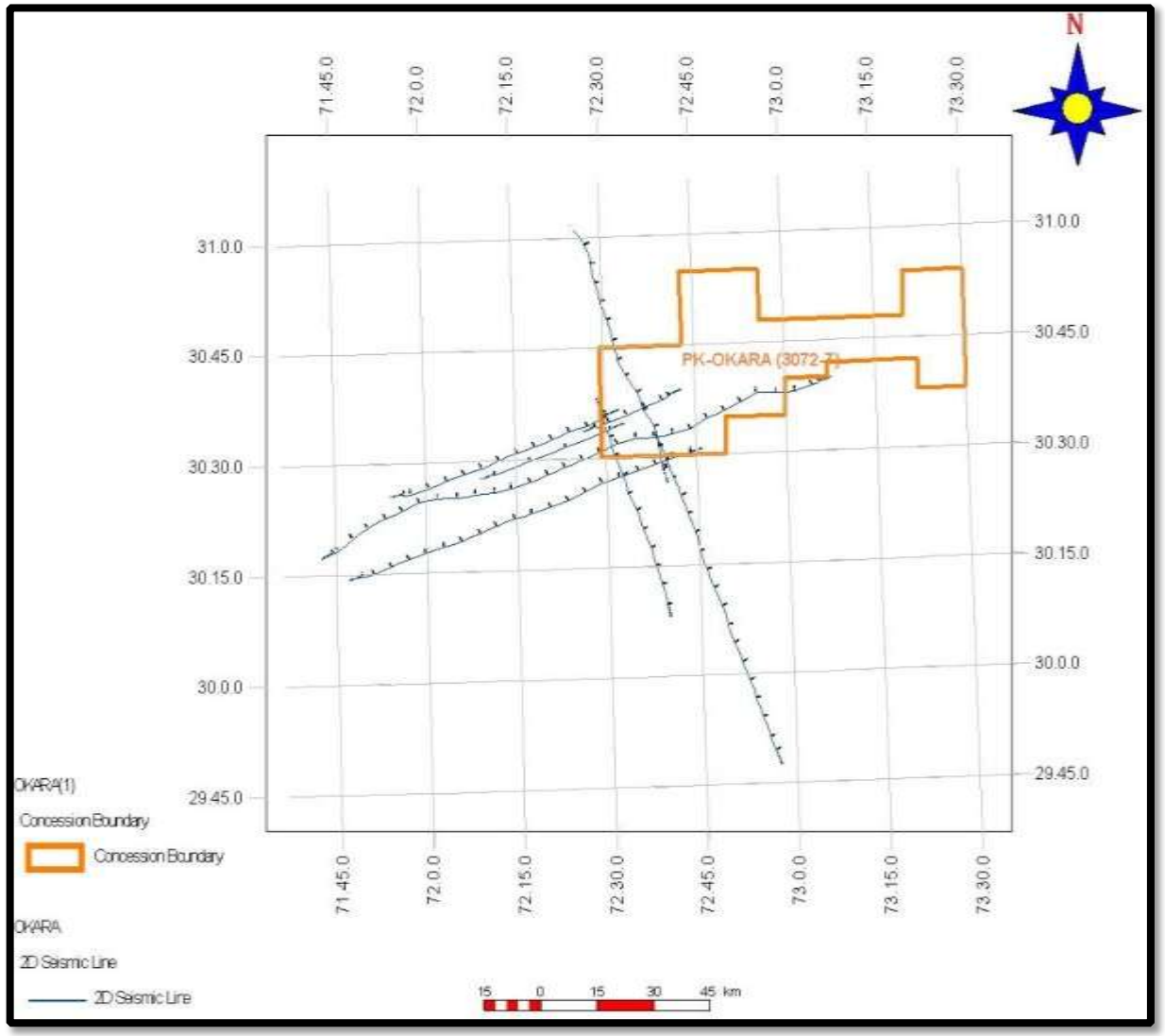
Petroleum System

Prospectivity

- The block is located in the Punjab Platform, west of oil producing fields in India, which confirms that a dynamic petroleum system containing all the necessary elements for the generation and accumulation of hydrocarbons is present in the area.
- The expected source rock having potential to generate hydrocarbons in this block includes Salt Range Formation (InfraCambrian), Tobra and Dandot formations (Permian). These sediments have gas and oil generation characteristics with fair to good organic richness.
- Infra-Cambrian to Jurassic sequence have potential reservoirs. Carbonates of Shinwari and Samana Suk formations (Jurassic), and clastics of Lumshiwal Formation (Cretaceous) are proven reservoirs in the gas fields of this surrounding area. Salt Range Formation (Infra Cambrian) is producing heavy oil in the east in India.
- The potential seals for underlying reservoirs include the intraformational shales and mudstones of Infra Cambrian, Paleozoic, and Mesozoic rocks.





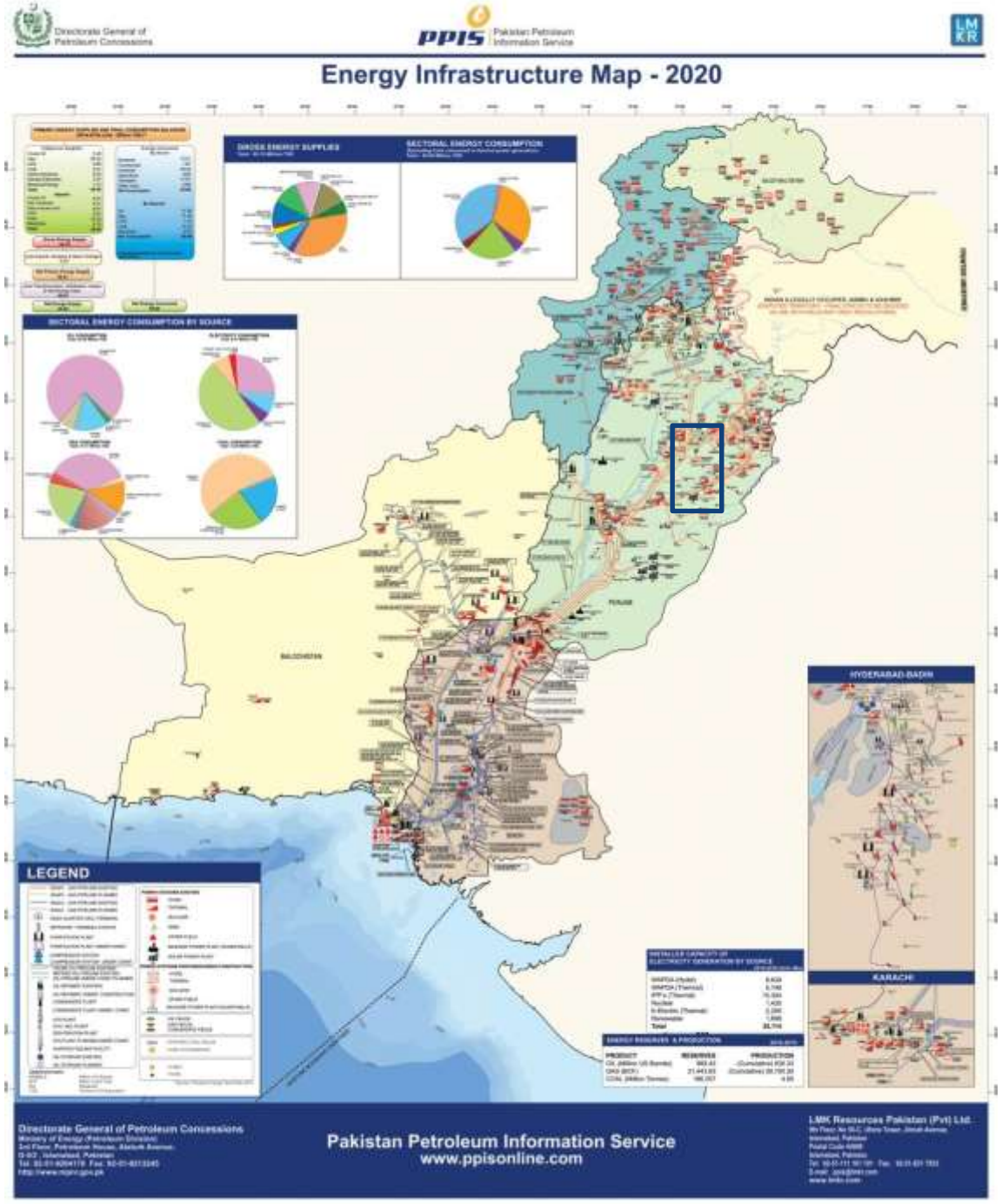


- The block area consists of fault bounded three-way dip structures.
- The important feature for trapping mechanism can be

provided by the truncations of Jurassic to Eocene strata.

Infrastructure Map

- Nearest infrastructure gas pipeline is available North-West and South-West of the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery ■Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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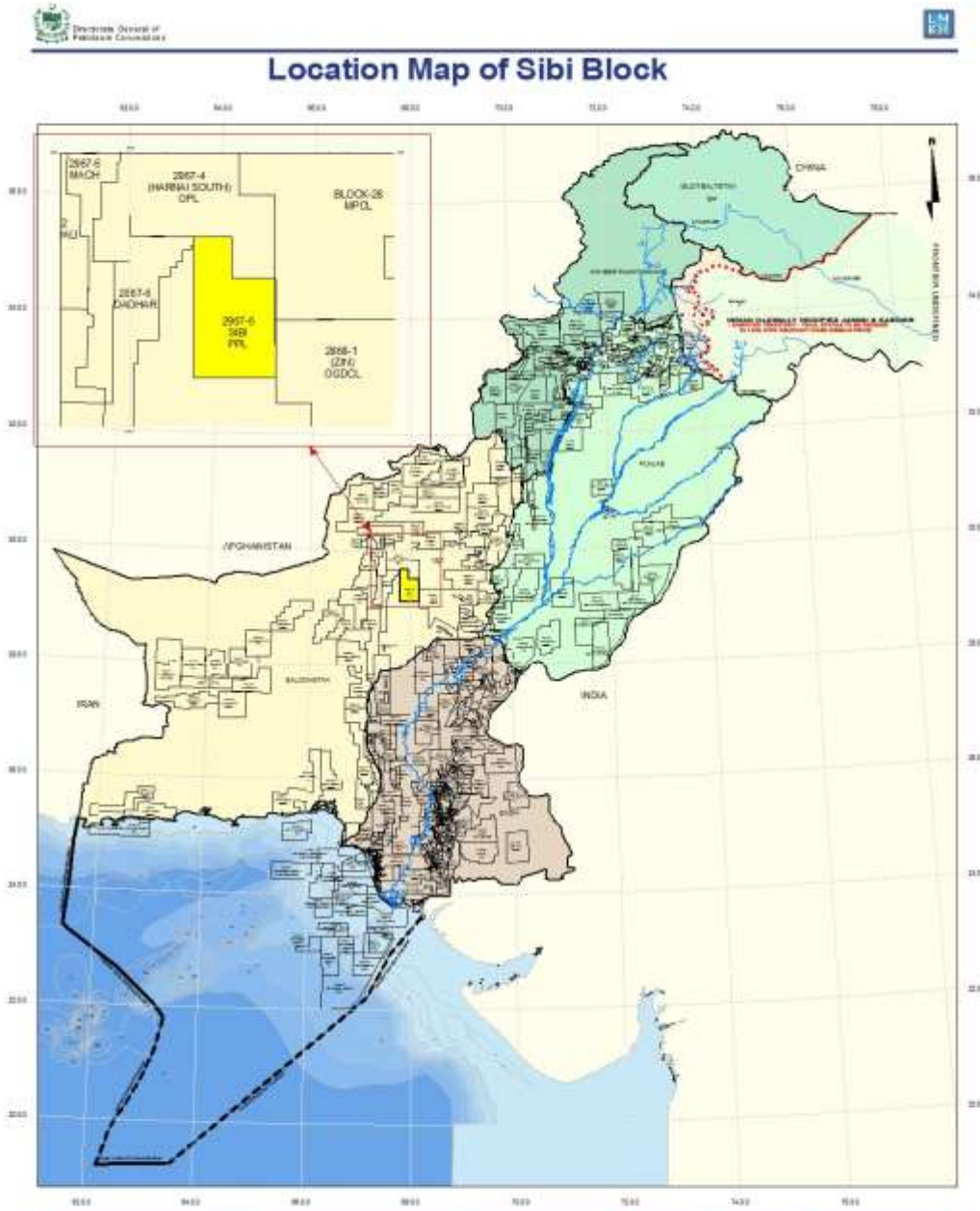
BLOCK: SIBI

DGPC BLOCK BIDDING ROUND 2021

Introduction



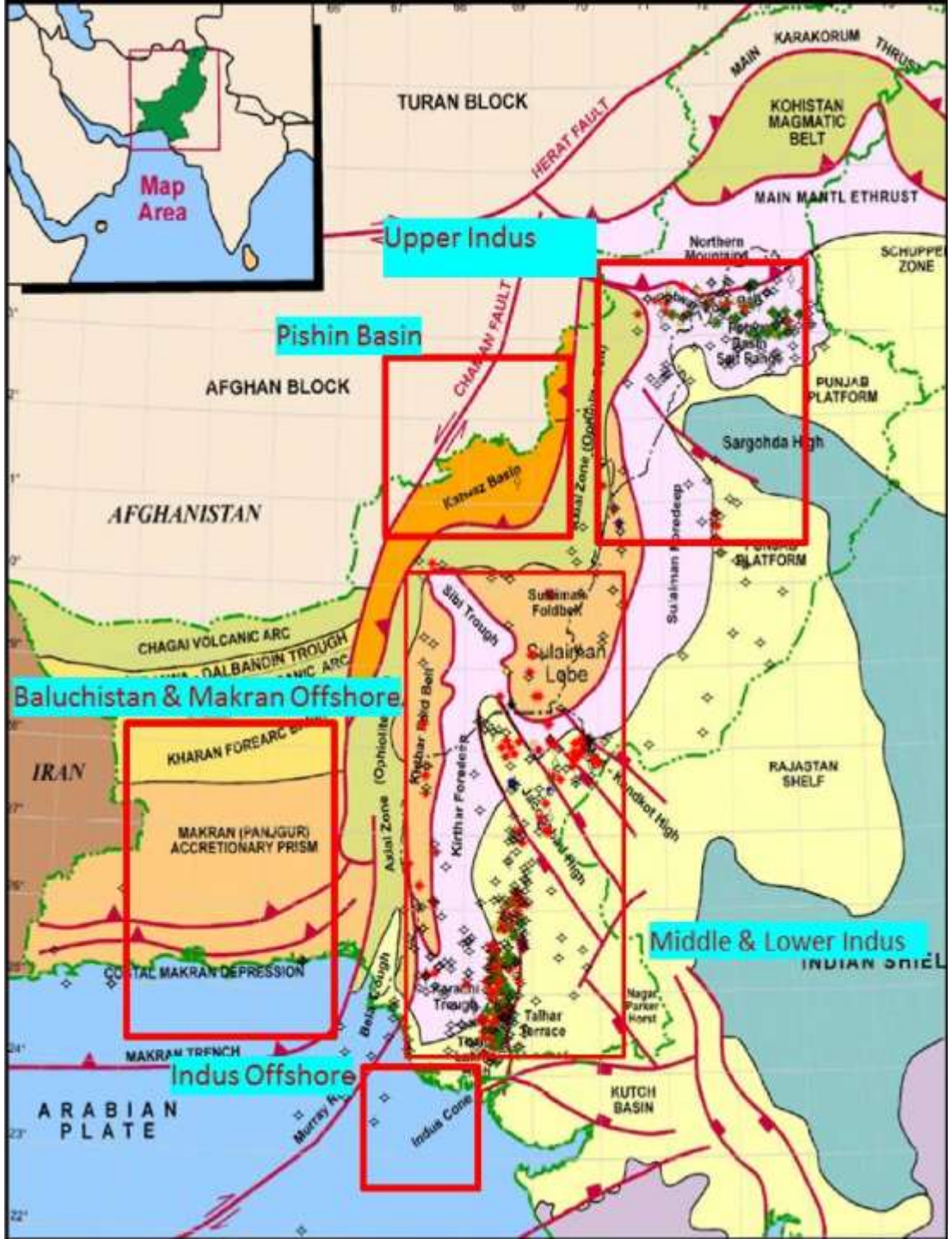
2967-6 (SIBI)	Available Data	Total Area (Sq. Kms)	Area by District	Percentage %	Districts

- Sibi Block covers an area of 1911.63 sq km.
- Location: Sibi, Bolan and Kohlu district, Balochistan, Pakistan.
- Geological Basin: Suleiman Fold Belt, Balochistan, Pakistan.
- The block falls in Prospectivity Zone II.
- Estimated Resources of the Balochistan Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet
- BP Acquired some 2D data in the block within the year 1982.
- The Block is surrounded by Zin and Block 28 (East), Dadhar (West), Harnai South (North) and Chhalgari (South).
- The wells drilled in the near vicinity are:
  - Zarghun South 01,02, 03,04
  - Bannh 01
  - Banni 01
- Major discoveries in the surrounding is from Zarghun South 01, Bolan East 01 (lies in west).

**Riaz Ahmed 1998, Hydrocarbon Resource Base of Pakistan, Pakistan Journal of Hydrobarbon Research, Vol 10, 1-10*

Geological Map

- Sibi block lies in the part of the low laying Range.
- At surface, the Raskoh topographically elevated
- It is structurally controlled and folding of Cretaceous Oligocene strata.
- In the north this range is by an intervening low Trough) from the Chagai
- In the south by the Usman/Kukab transpressional fault,



western Raskoh

Range is a feature

by thrusting to

separated (Dalbandin Arc

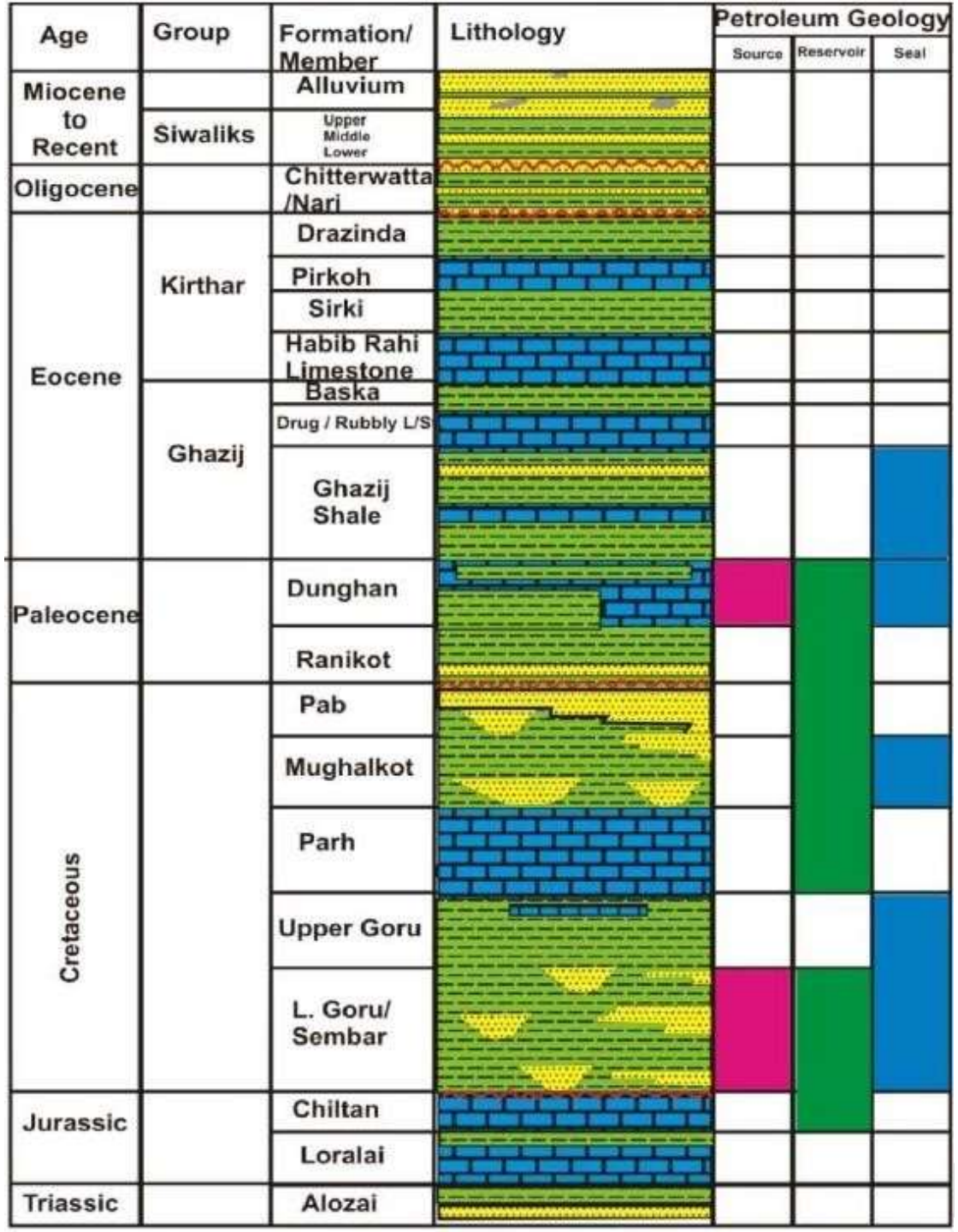
which dips

northwest in direction from Trough.

Petroleum System

- A petroleum system exist Jurassic to Eocene sedimentary packages.
- Potential source rocks in include the Lower Goru/Sembar (Cretaceous), Dunghan (Paleocene).
- The potential reservoir area include the

sic), L.Goru/Sembar, Parh, Mughalkot, Pab (Cretaceous)



Kharan

in the

the area

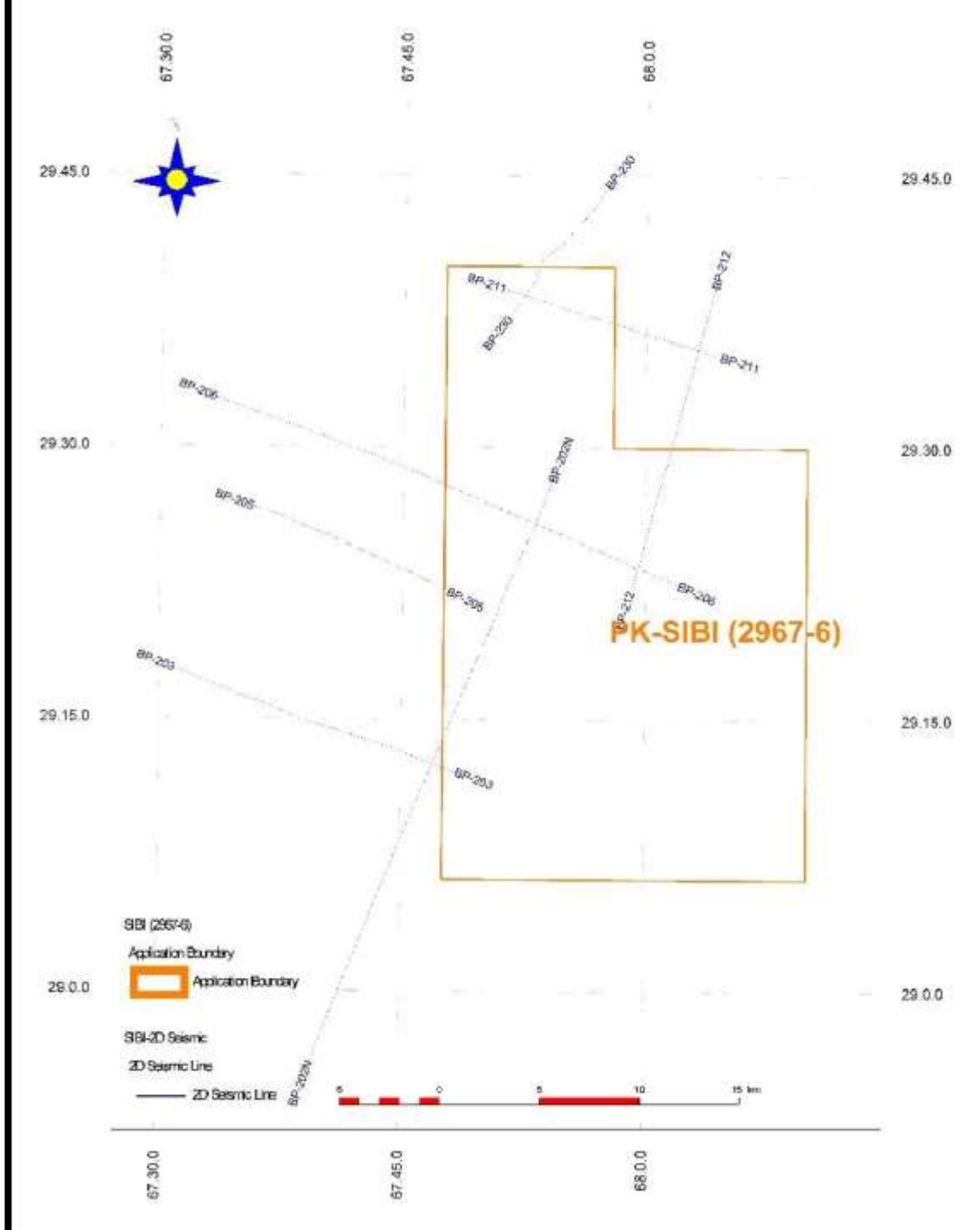
Formation

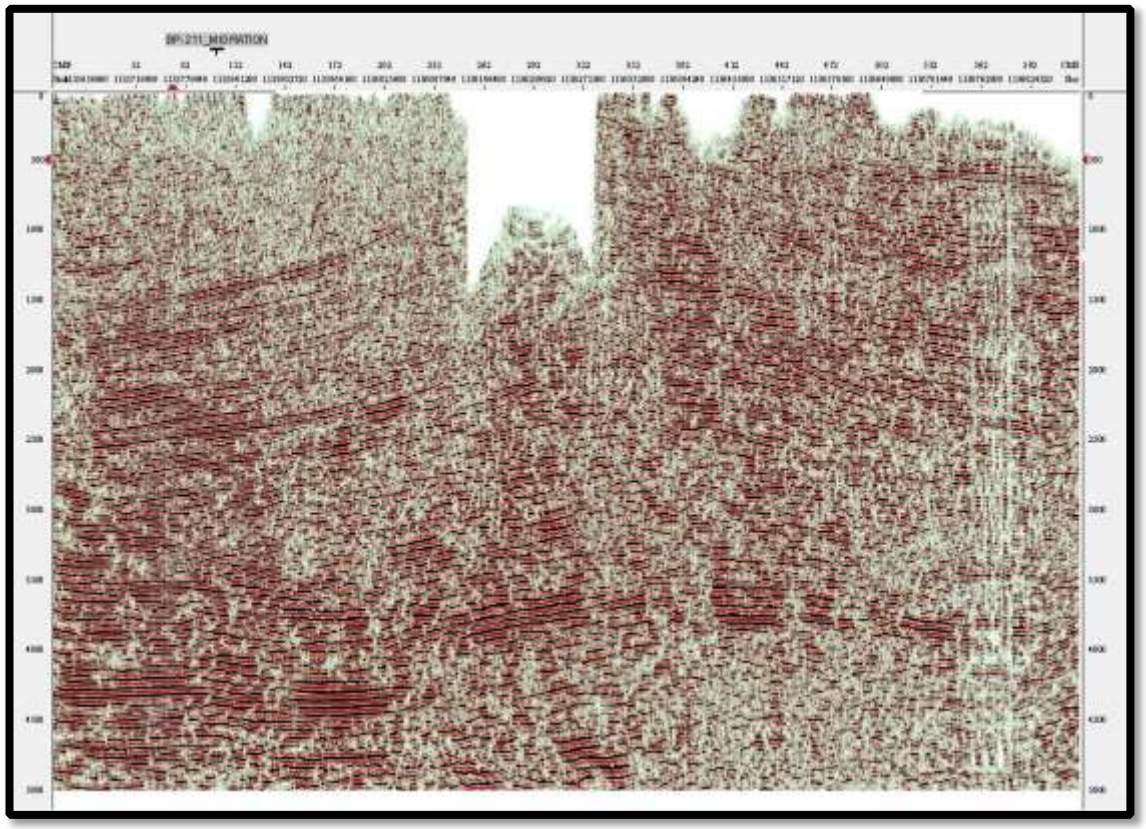
rocks in the

- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity

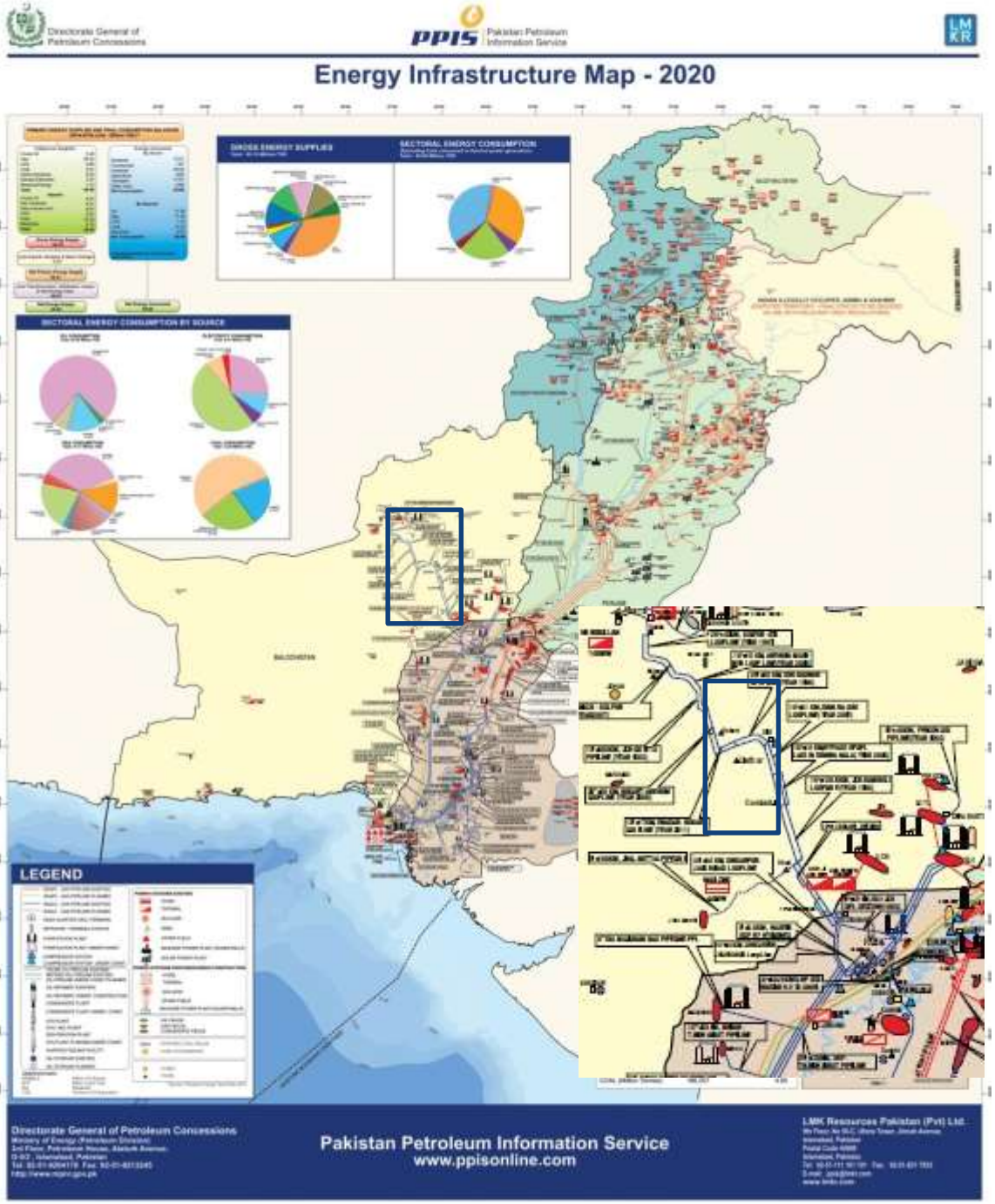




- The main trapping mechanism in this area is considered to be thrust related anticlines
- In recent past, nearby blocks have successful gas discoveries.
- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Nearest infrastructure gas pipeline is available near the block.
- Bolan East oil field and Margand gas field lies close to the block.
- Towards south of the block, a pipeline connecting Jhal Magsi is planned
- Government support to companies for infrastructure development



Investment Benefits

- Moderate risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery ■Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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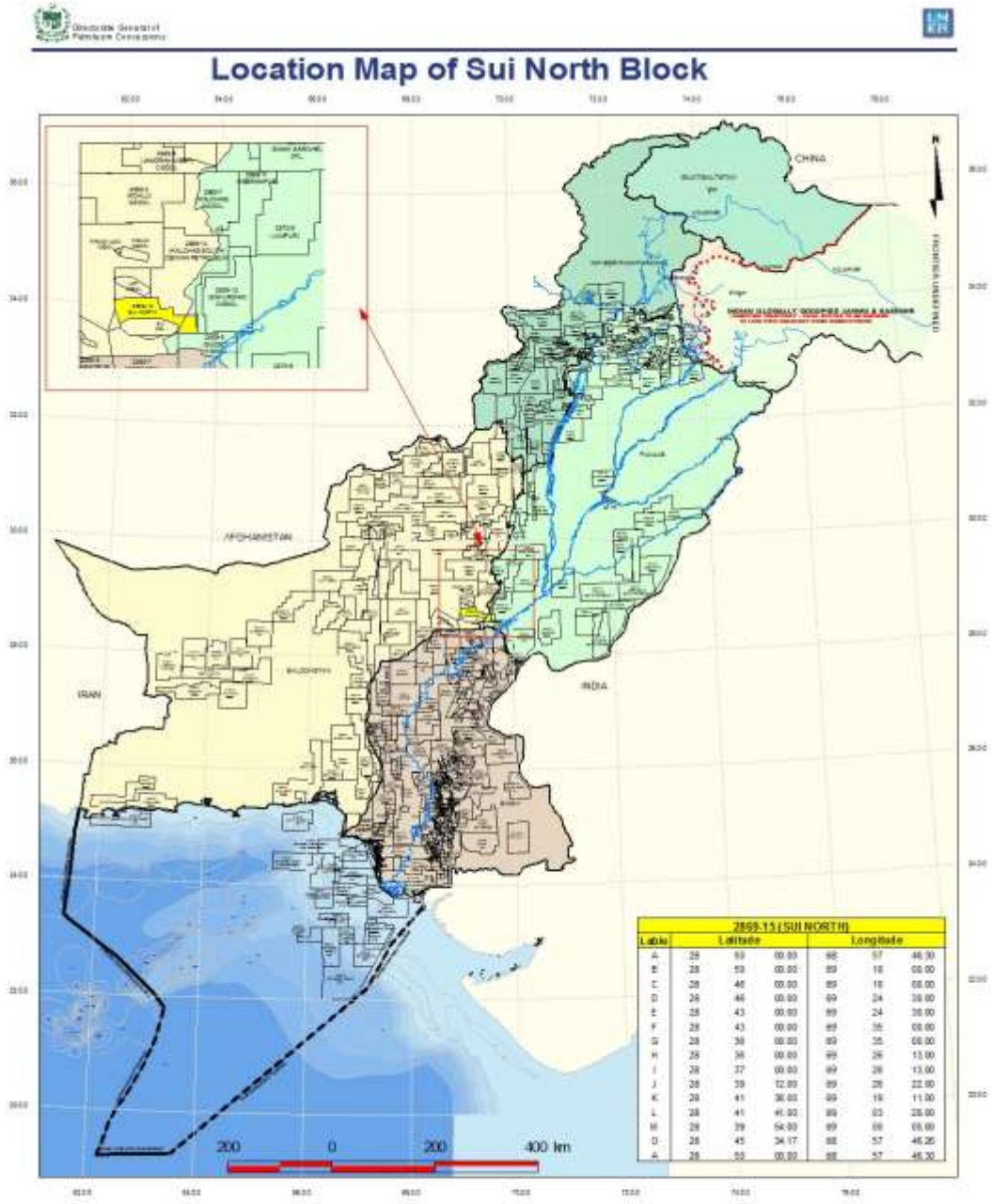
BLOCK: SUI NORTH

DGPC BLOCK BIDDING ROUND 2021

Introduction

- Sui North Block covers an area of 811.73 sq km
- Location: Rajanpur and Dera Bugti district, Balochistan, and Punjab Pakistan.
- Geological Basin:, Balochistan, Basin Pakistan.
- The block falls in Prospectivity Zone II
- Estimated Resources of the Balochistan Basin*:
  - Oil: 8,676 million barrels
  - Gas: 78 trillion cubic feet



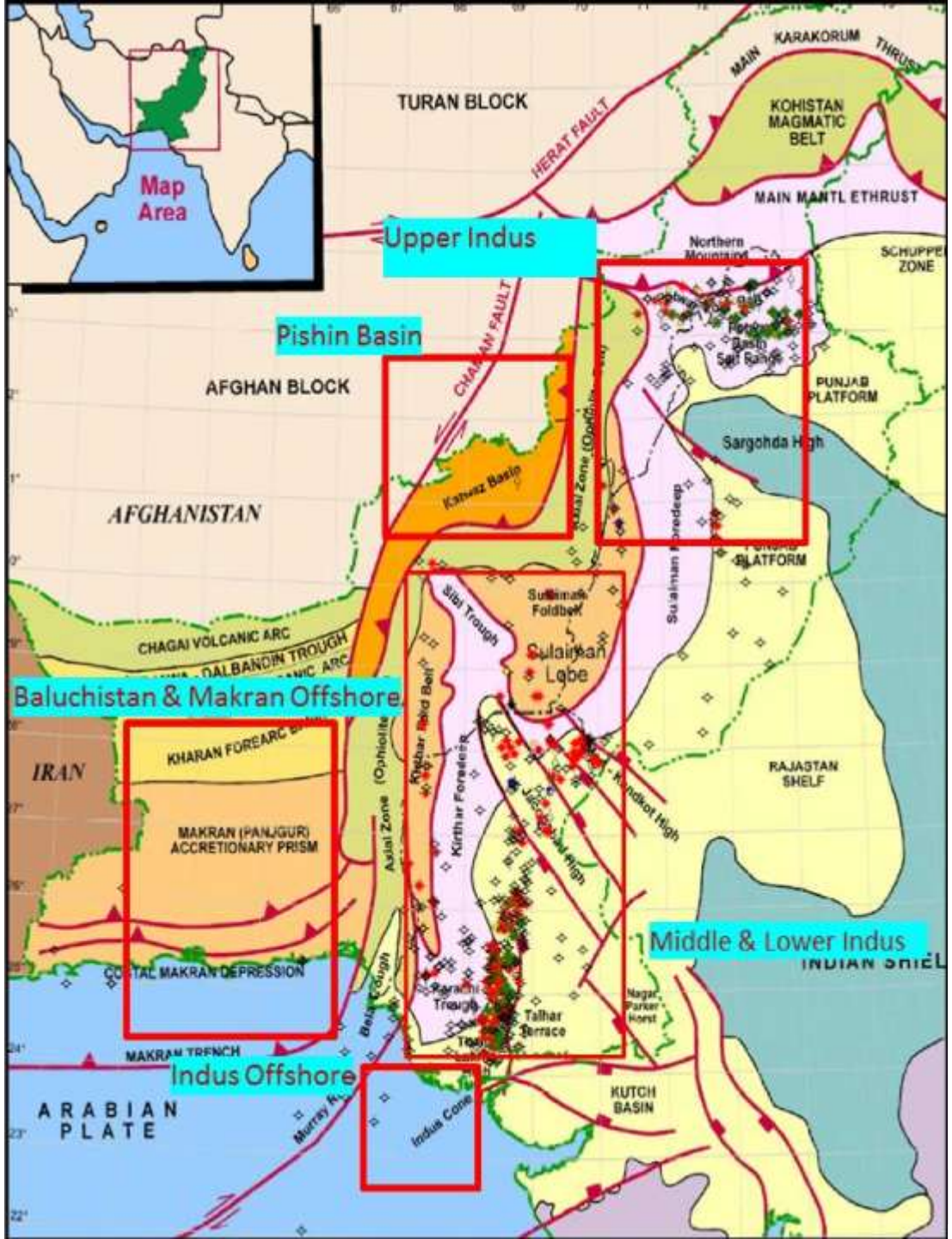
2869-15 (Sui North)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	II	2D Seismic (L.Kms)	536.70	811.73	149.90	18.47	Rajanpur
Grid Area	16.34	3D Seismic (Sq.Kms)	NA		661.83	81.53	Dera Bugti
Province	Balochistan\Punjab	No. Wells	NA				

- OGDCL and PPL acquired some 2D data in the block within the years 1981 – 2005.
- The Block is surrounded by Loti (North), Sui (South), Zamurdan (East) and Uch (West).
- The wells drilled in the near vicinity is Loti, Sui, Uch and Pirkoh.
- Major discovery in the surrounding is from Sui, Loti and Pirkoh.

**Riaz Ahmed 1998, Hydrocarbon Resource Base of Pakistan, Pakistan Journal of Hydrobarbon Research, Vol 10, 1-10*

Geological Map

- Sui North block lies in the part of the low laying Range.
- At surface, the Raskoh topographically elevated
- It is structurally controlled and folding of Cretaceous Oligocene strata.
- In the north this range is by an intervening low (Dalbandin Trough) from the
- In the south by the Usman/Kukab transpressional fault, which



western Raskoh

Range is a feature

by thrusting to

separated

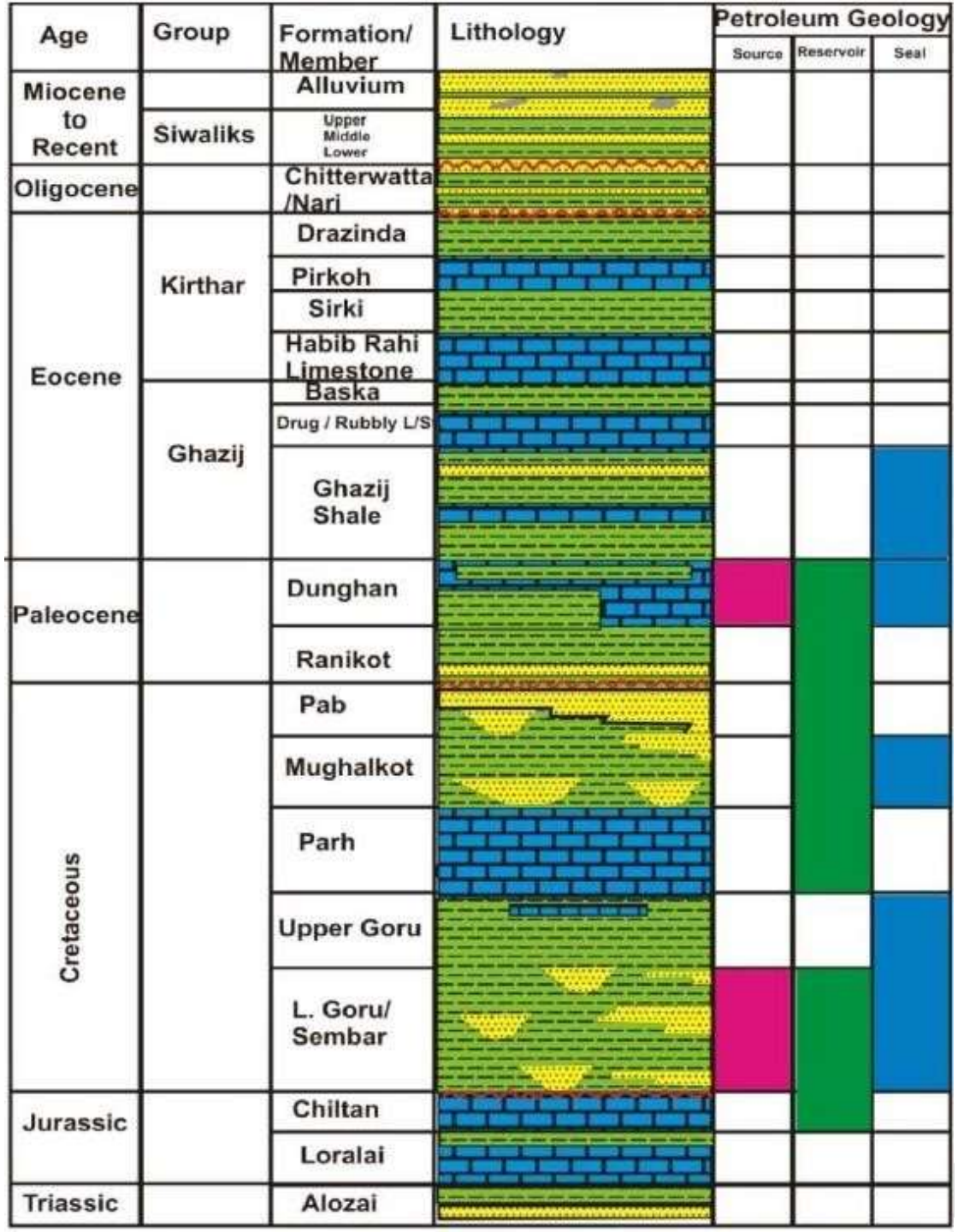
Chagai Arc

dips

northwest in direction from Kharan Trough.

Petroleum System

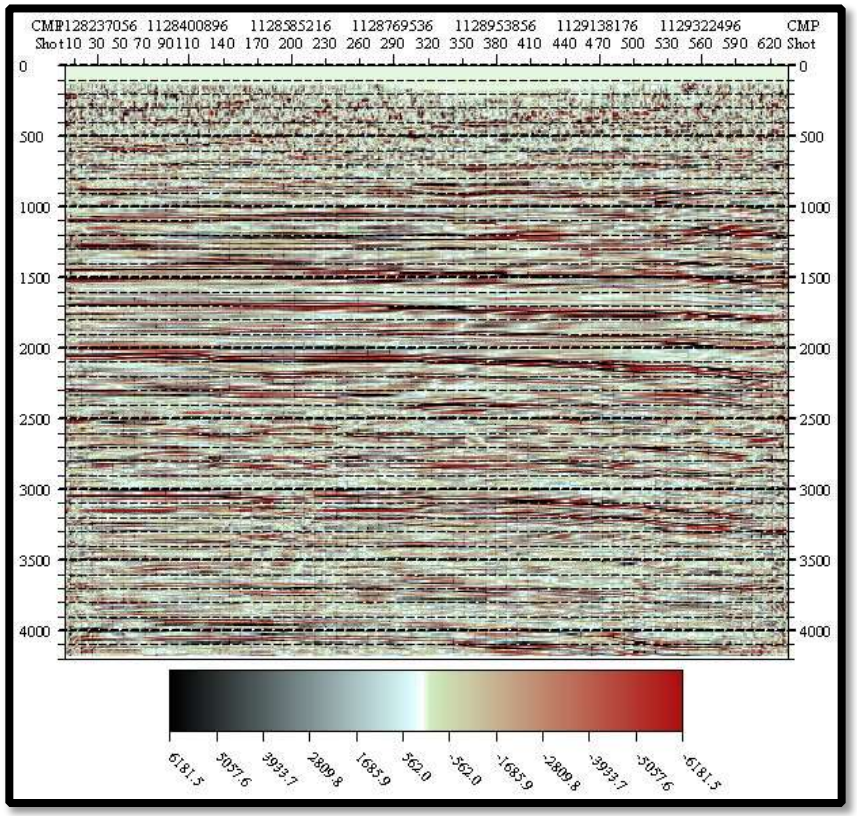
- A petroleum system exist in the Jurassic to Eocene sedimentary packages.
- Potential source rocks in the area include the Lower Goru/Sembar (Cretaceous), Dunghan (Paleocene).
- The potential reservoir rocks in the area include the Parh, Mughalkot, Pab (Cretaceous), L.Goru/Sembar, (Jurassic)



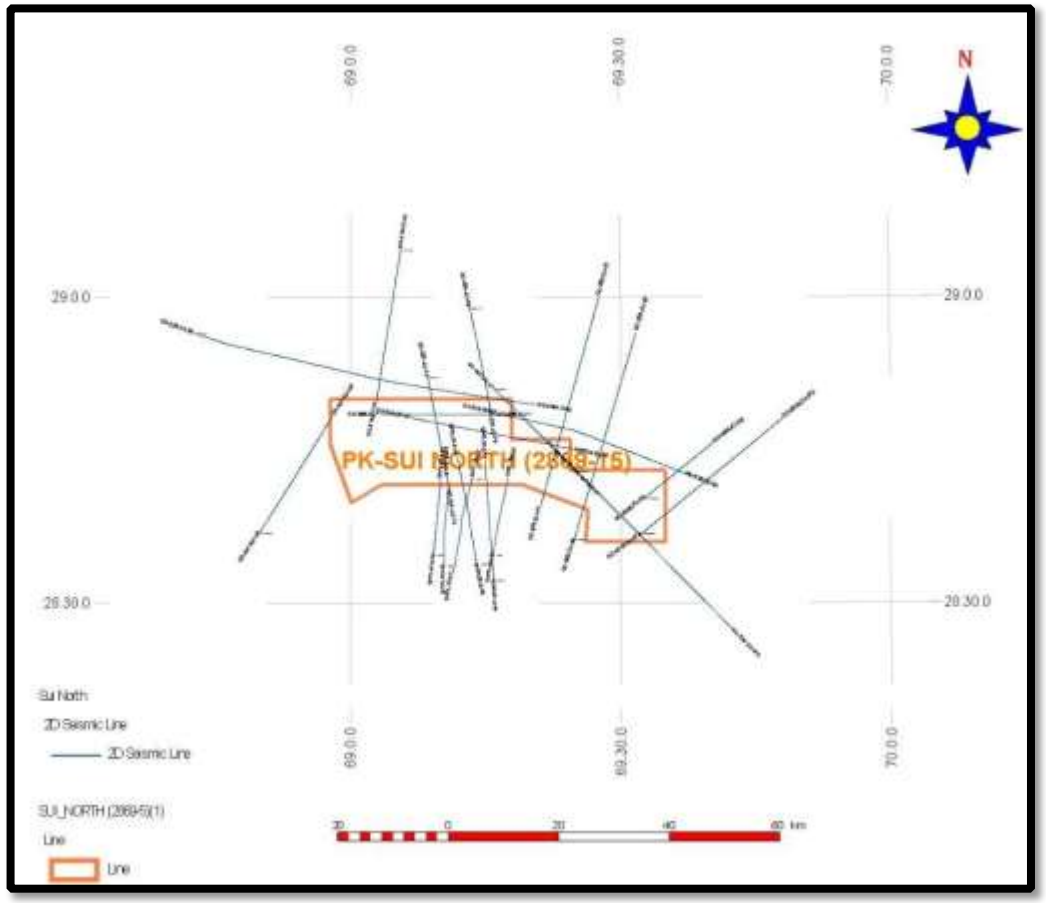
- The effective sealing mechanism can be offered by the intra-formational shale sequences from Cretaceous to Eocene aged formations.

**Muhammad Iqbal, Adeel Nazeer, Hayat Ahmad, and Ghulam Murtaza, 2012, Hydrocarbon Exploration Perspective in Middle Jurassic-Early Cretaceous Reservoirs in the Sulaiman Fold Belt, Pakistan, Search and Discovery Article 10394*

Prospectivity



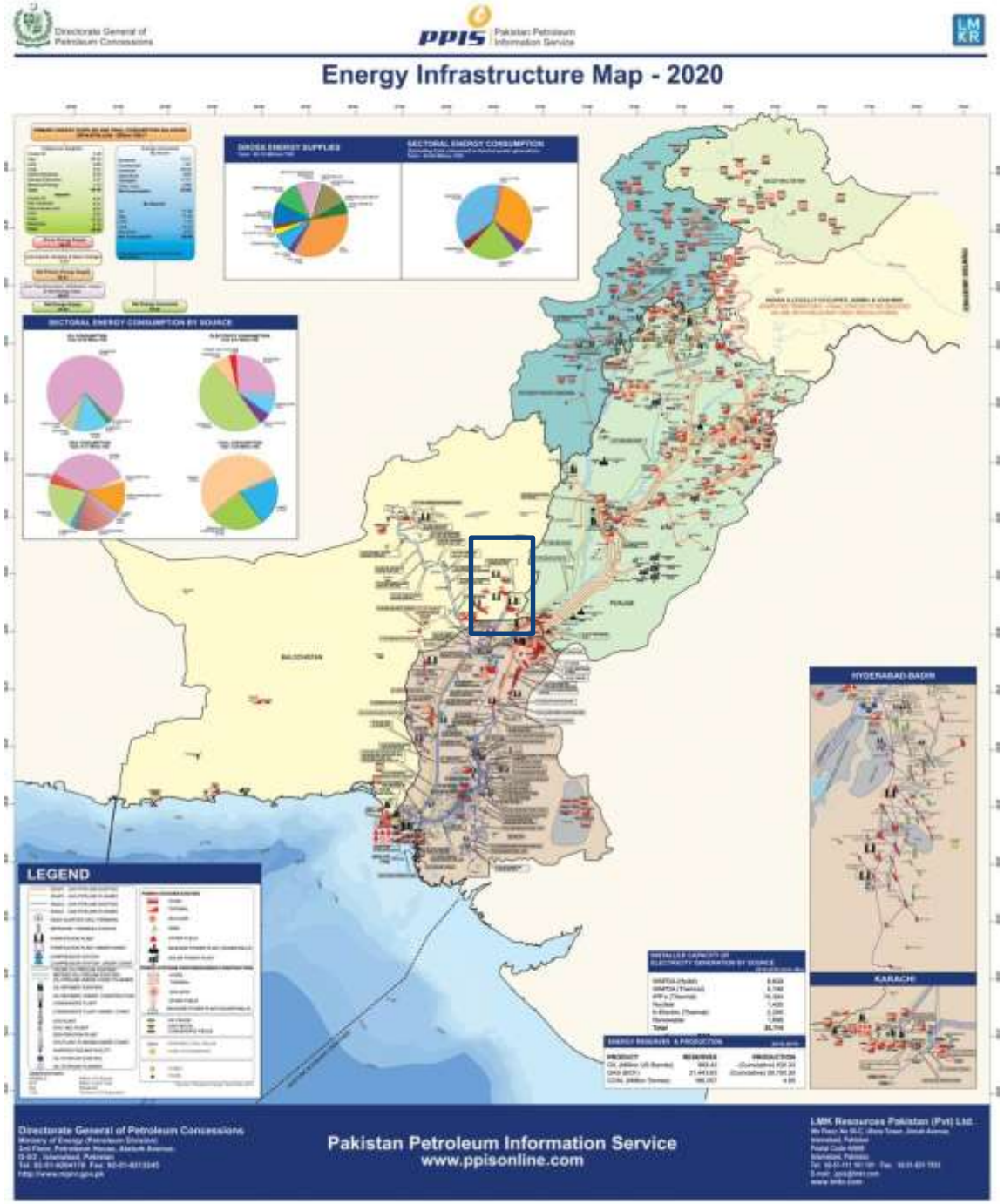
- The main trapping mechanism in this area is considered to be thrust related anticlines



- In recent past, nearby blocks have successful Oil & Gas discoveries.
- High resolution seismic data can allow to delineate true potential of the block

Infrastructure Map

- Sui, Loti and Pirkoh discovery lies close to the block.
- Government support to companies for infrastructure development



Investment Benefits

- Moderate risk, high reward
- Largest gas discovery in the geographic province
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will guarantee to buy the gas or oil discovered ■Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

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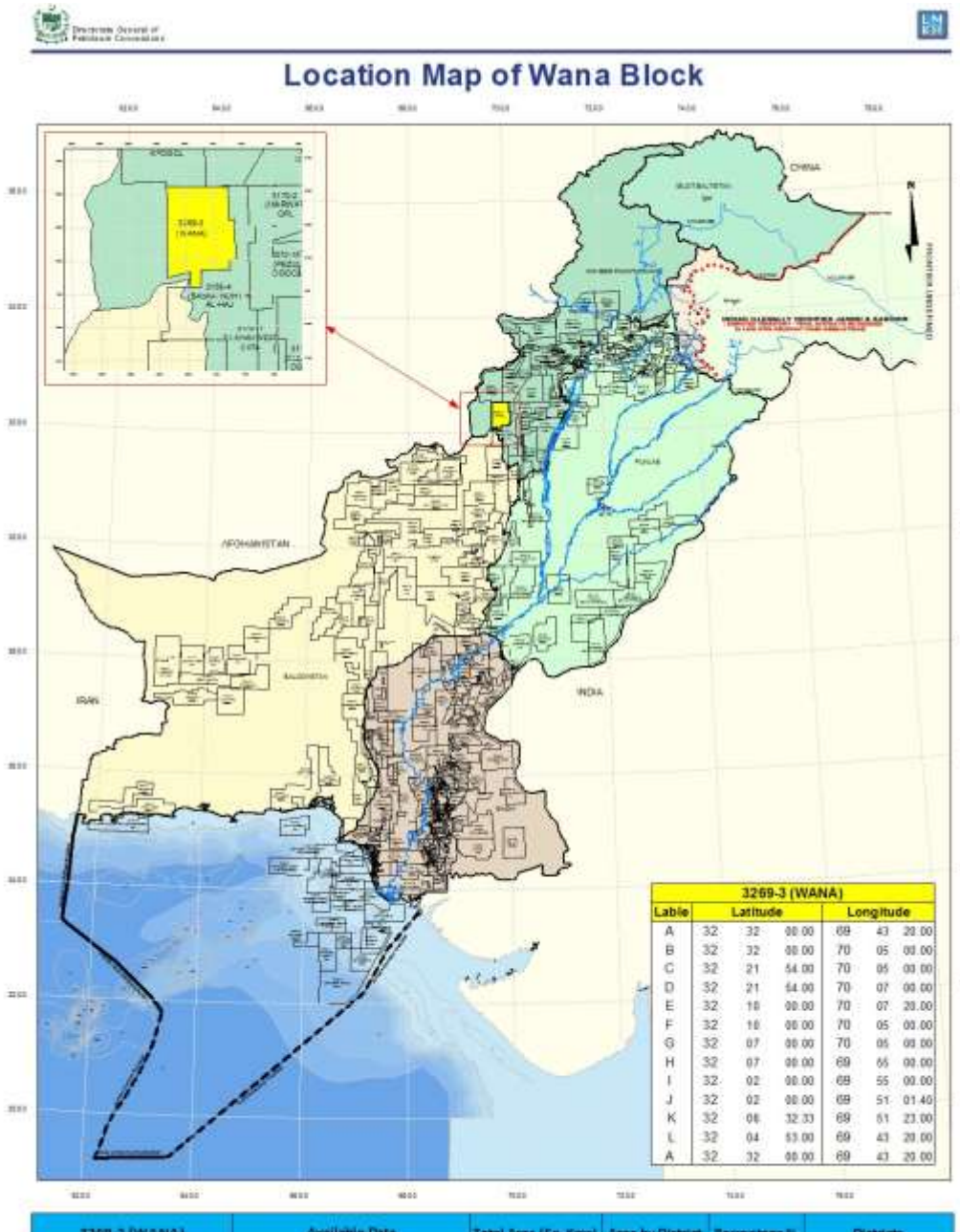
BLOCK: WANA

DGPC BLOCK BIDDING ROUND 2021

Introduction

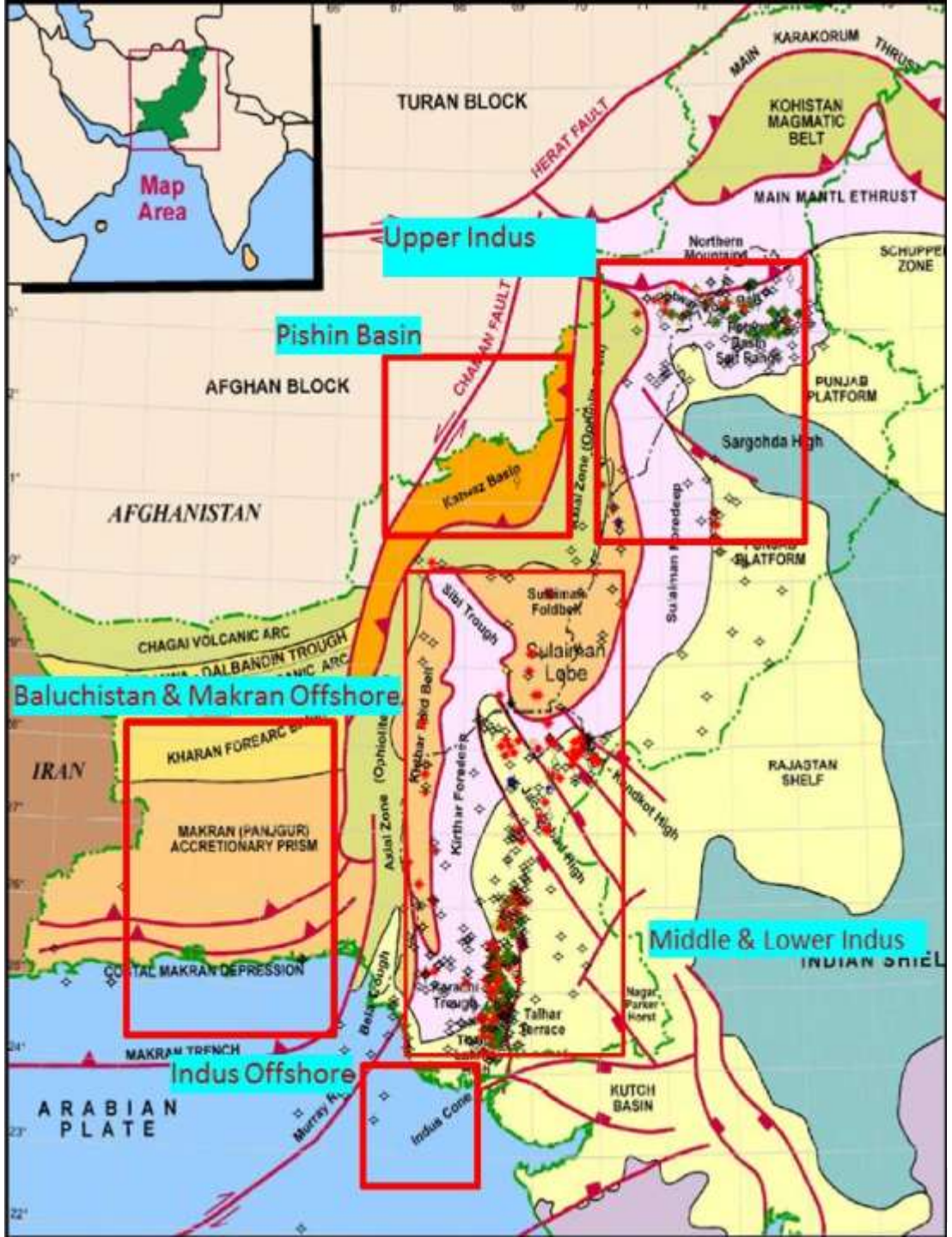


- Wana Block covers an area of 1748.03 sq km.
- Location: South Waziristan, F.R Tank and Tank district, Khyber Pakhtunkhwa (KPK), Pakistan.
- Geological Basin: Upper Indus Basin, Pakistan.
- The block falls in Prospectivity Zone I(F).
- Estimated Recoverable Potential of KPK*:
  - Oil: 2.2 billion barrels
  - Gas: 46 trillion cubic feet
- Amoco Acquired some 2D data in surrounding blocks within the year 1992.
- The Block is surrounded by Baska North(East), Wali West and Razmak (North) and Baska North(South).
- The wells drilled in the near vicinity are:
  - Pezu 01
  - Wali 01
- Major discoveries in the surrounding is from Wali-01.

https://kpogcl.com.pk/messages/

Geological Map

- Pakistan possesses the boundary of the Indian plate.
- The underthrusting of Indo-Plate beneath the Eurasian producing compressional thin-tectonic features since Eocene northern and northwestern IndoPakistani Plate.
- The continued underthrusting of Pakistani Plate since produced the spectacular ranges of the Himalaya and a foreland fold-and-thrust belts as sediments thrust over the Indian (Kemal, 1991).
- Foreland fold-and-thrust belts world are conspicuous features convergent plate tectonic



northwestern lithospheric

Pakistani Plate is skinned time on the fringes of the

the Indo-Cretaceous mountain chain of thick sheets of Craton

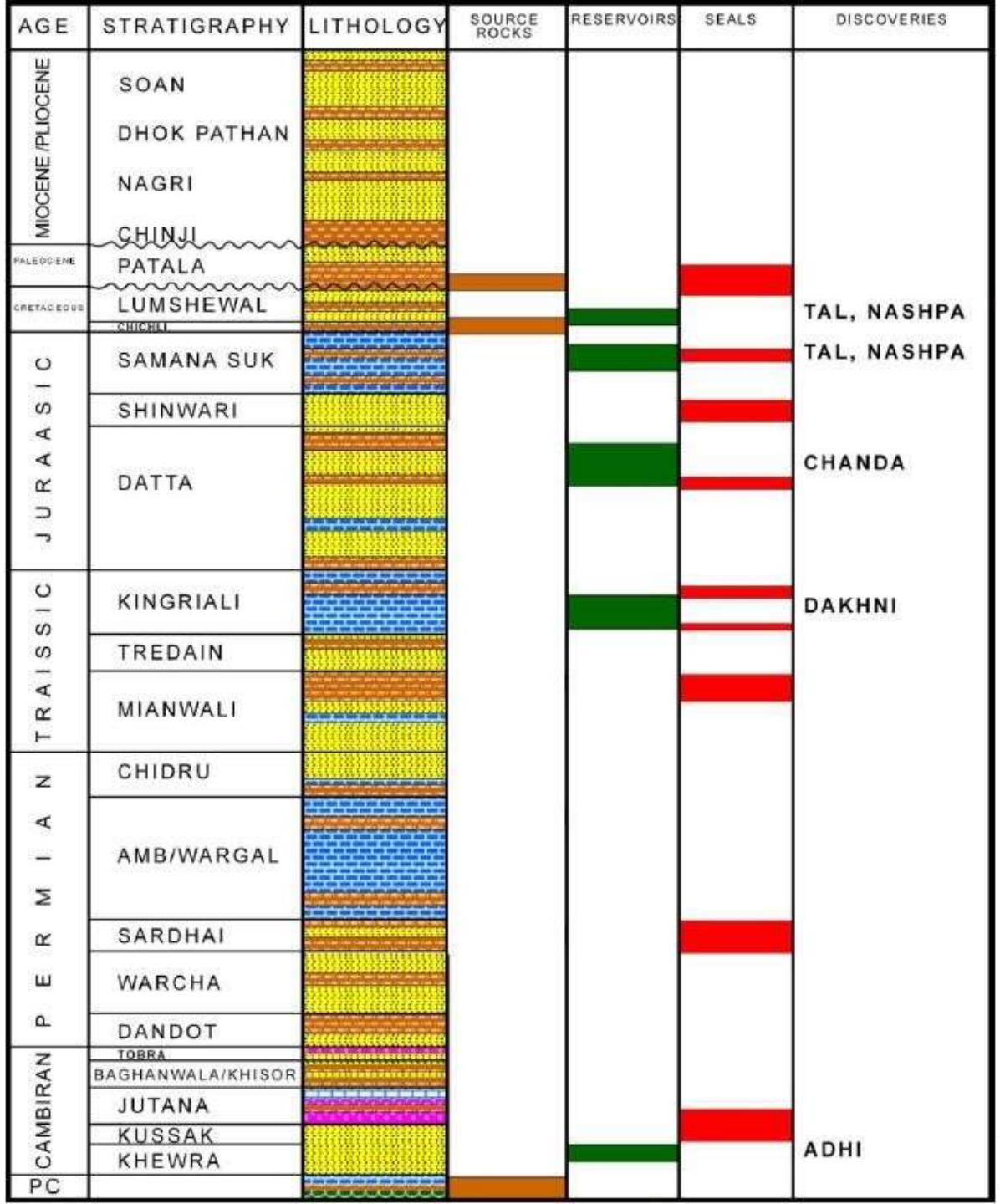
throughout the of the habitat.

- The Kohat- Potwar fold and thrust belt along with its frontal ranges of the northwestern Himalayas is one of these. The Salt and Trans-Indus ranges constitute the mobile flank of the Kohat and Potwar fold and thrust belt and is mostly characterized by decollement thrust-fold assemblages.
- Thrusting along with associated folding is certainly the main method of accommodating shortening within these orogenic belts. The TransIndus ranges represent the leading deformational front of the Kohat fold and thrust belt and Bannu Basin in North Pakistan.

Petroleum System

- The block is located in the Bannu Sub Basin of the Upper Indus Basin, Pakistan.
- The expected source rock having potential to generate hydrocarbons in this block includes Lumshiwal Shales (Cretaceous) and Patala (Paleocene). These sediments have gas and oil generation characteristics with fair to good organic richness.

- Cambrian to Cretaceous have potential reservoirs includes Kussak Kingriali, Datta, Samana Lumshiwal
- The potential seals for reservoirs range from Paleocene which include and Jutana, Sardhai, Patala etc.

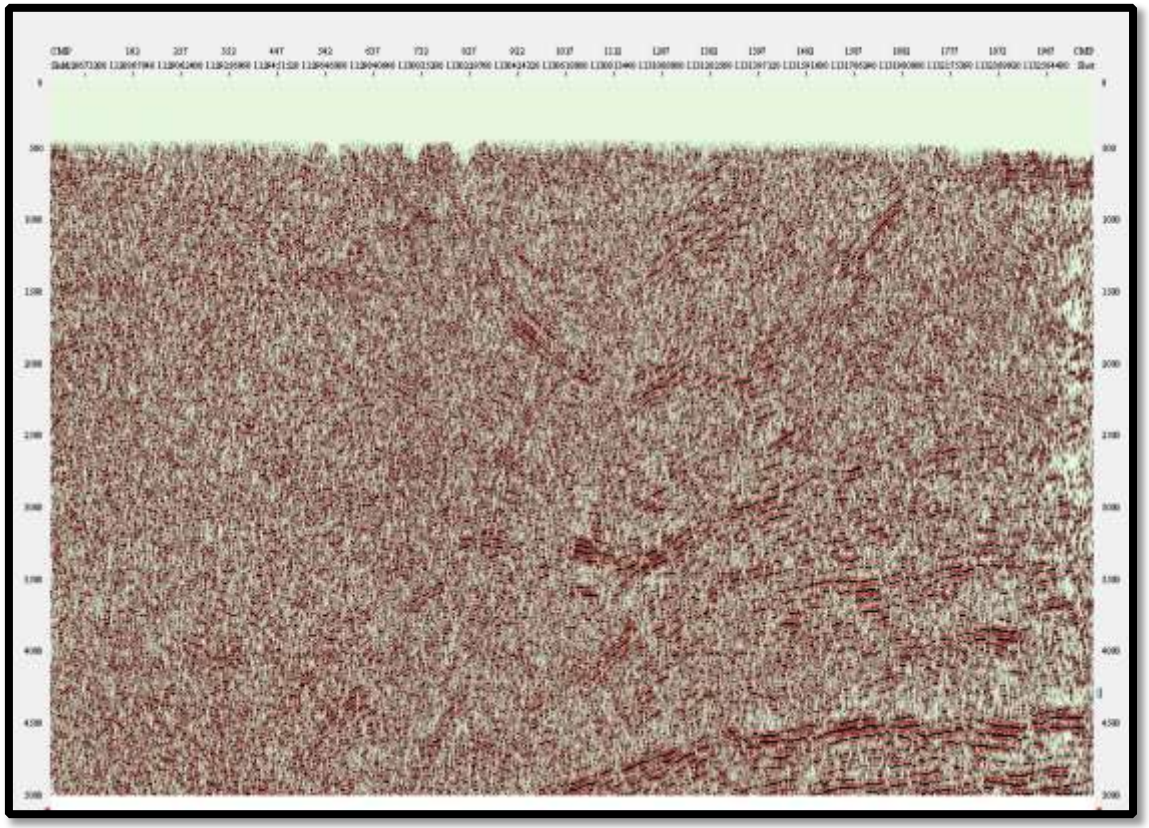


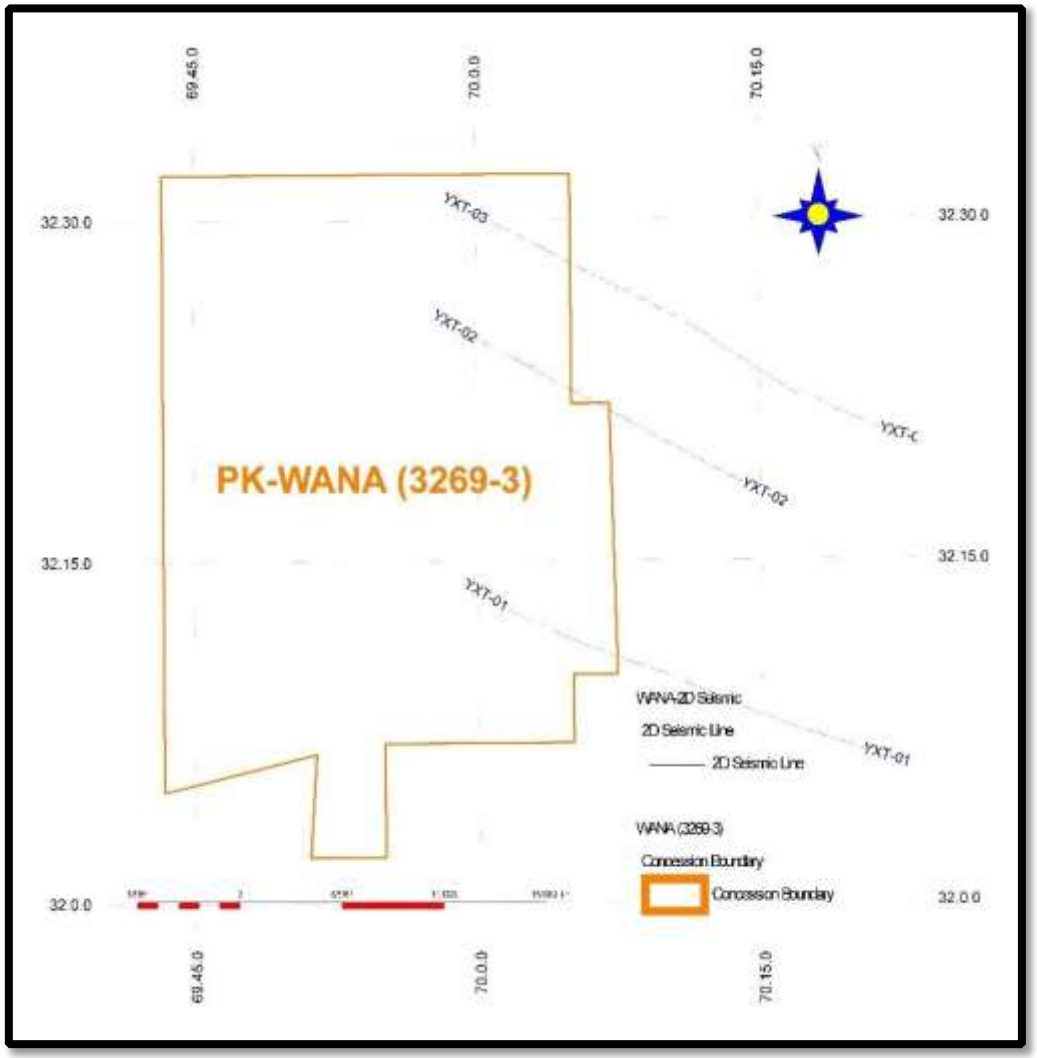
sequence which formation, Suk, and

underlying Cambrian till the Kussak Terdian,

Stratigraphic Column: Moin Raza Khan, Mudassar Z. Khan, and Ali Raza, 2016, Hydrocarbon Exploration Challenges in Fold and Thrust Belts—Bhittani Range, Trans Indus Range, Pakistan, AAPG/SEG International Conference & Exhibition, Melbourne, Australia

Prospectivity

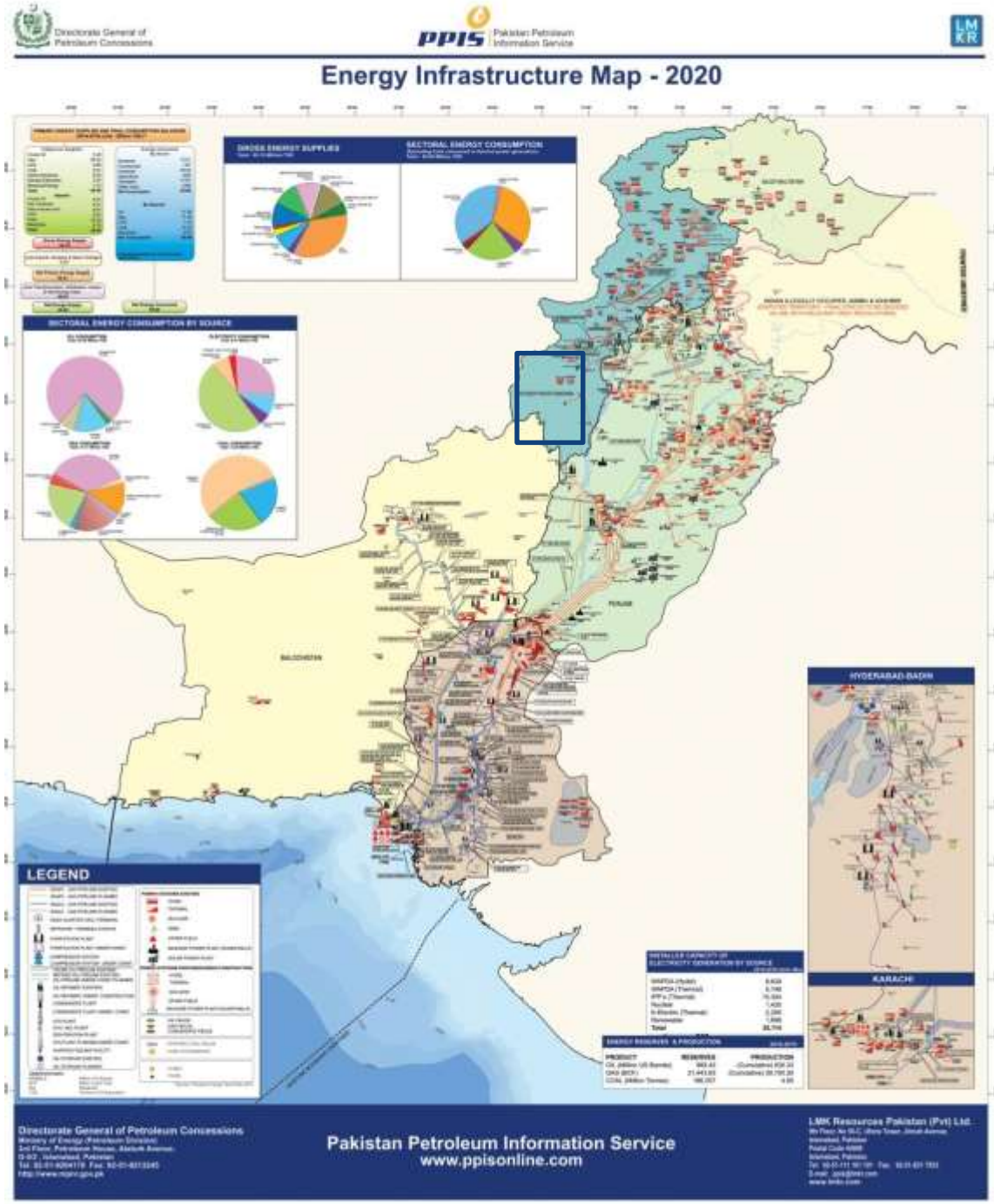




- The block area consists of fault bounded three-way dip structures.
- The important feature for trapping mechanism can be provided by the truncations of Jurassic to Eocene strata.

Infrastructure Map

- Nearest infrastructure gas pipeline is available near the block.
- Government support to companies for infrastructure development



Investment Benefits

- High risk, high reward
- Low cost on infrastructure development within limited timeframe
- Return on Investment within 3 years
- Attractive government policies for foreign investors
- Excellent purchase rate set by the Government against the discovered commodity
- Government will Guarantee to buy the gas or oil discovery
- Attractive price in case of tight gas discovery.

Block Summary

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator

THANK YOU

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