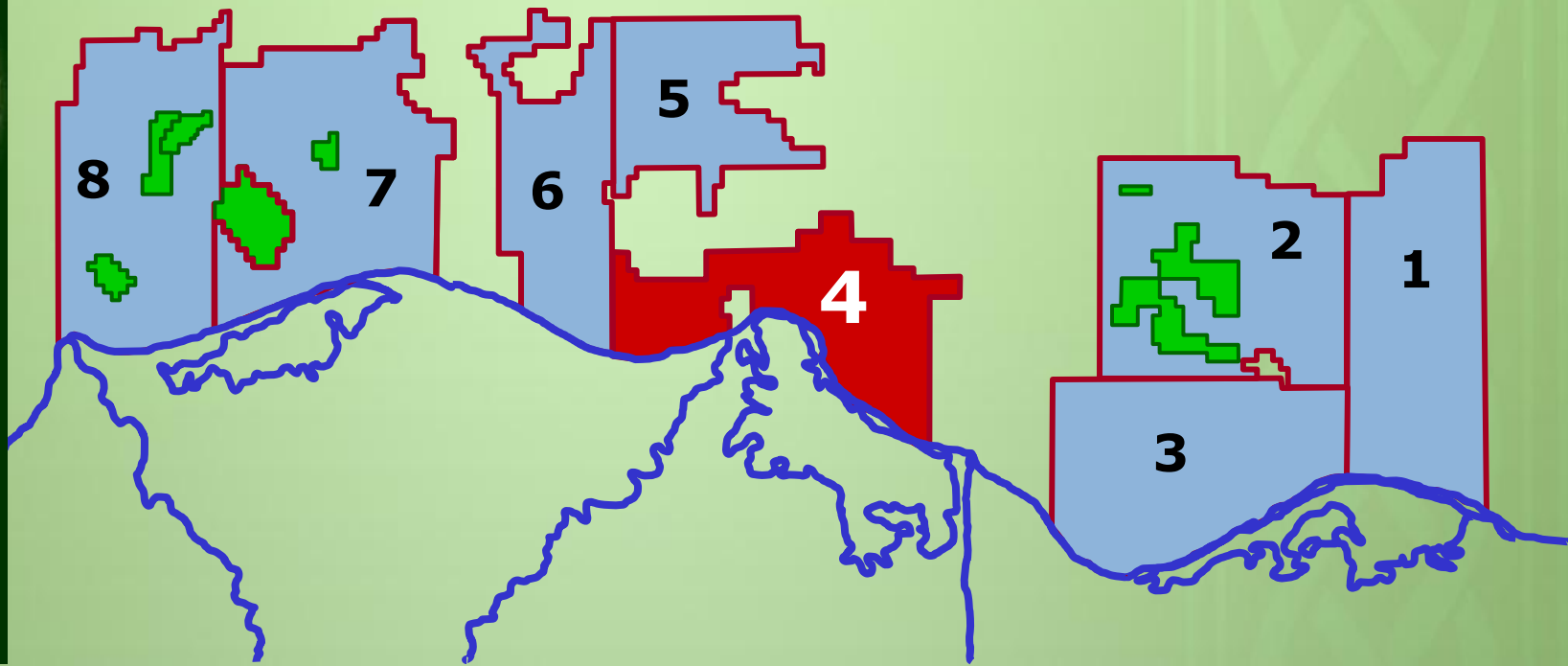
EGAS

Ministry of Petroleum and Mineral Resources

Block 4
North Ras El Esh Offshore

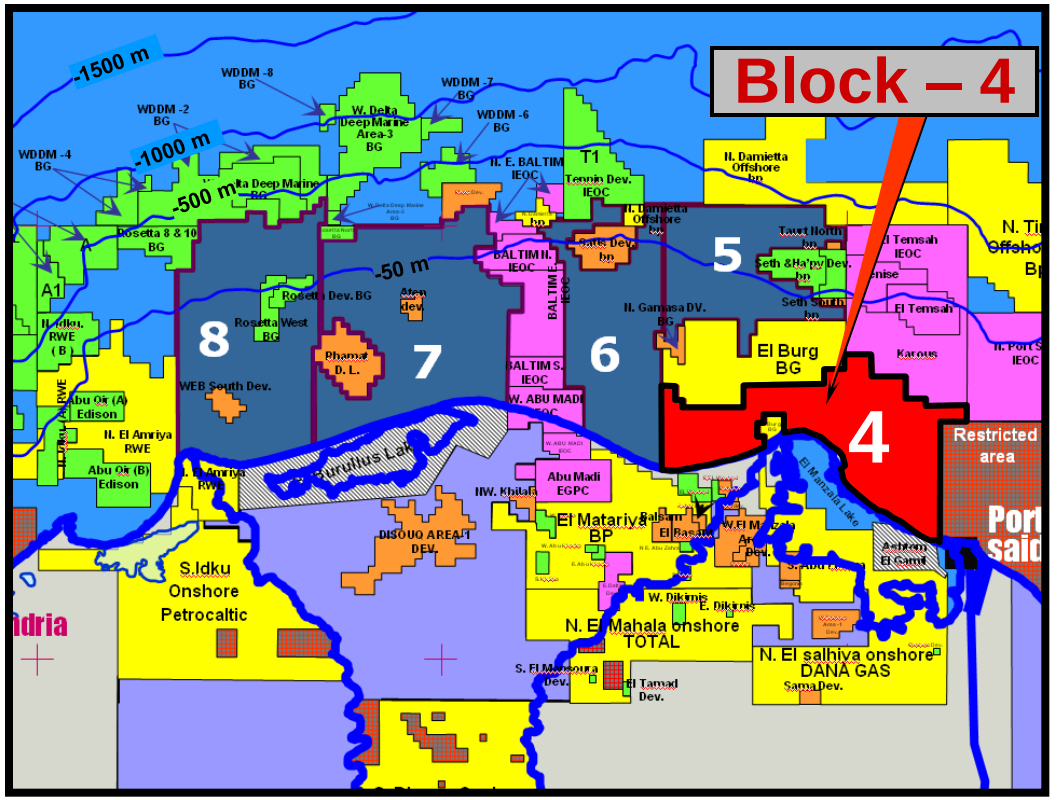
BID 2015



Block Summary

Location:

North Ras El Esh Offshore Block is located in the shallow waters of the Mediterranean Sea, at the outlet of Damietta Branch of the River Nile. The southern boundary of the block is formed by the Mediterranean shoreline with its southeastern corner lying directly to the northwest of Port Said city. The northern boundary of the block extends sea-ward for additional 17-37 km attaining a maximum water depth of 30 m. The block is situated in an area with well-established infrastructure for gas-condensate production/transportation.



Total Area: 1389 Km^2

Water Depth: 0 - 30 m

Previous Concessionaire: Mobil & BG

Nearby Fields & Discoveries:

North Ras El Esh Offshore Block lies to the southwest of numerous fields of the Temsah-Akhen Trend with gas-condensate production, mainly from Miocene sandstone reservoirs. This is in addition to BG's Abu Madi Harmattan Deep gas-condensate discovery, at the southern boundary of the block, and the Oligocene Notus-1 gas-condensate discovery, located to the north of the western part of the block.

Two development lease proposals for the Harmattan and Notus discoveries were submitted to EGAS by BG.

Block Coordinates & Drilled Wells

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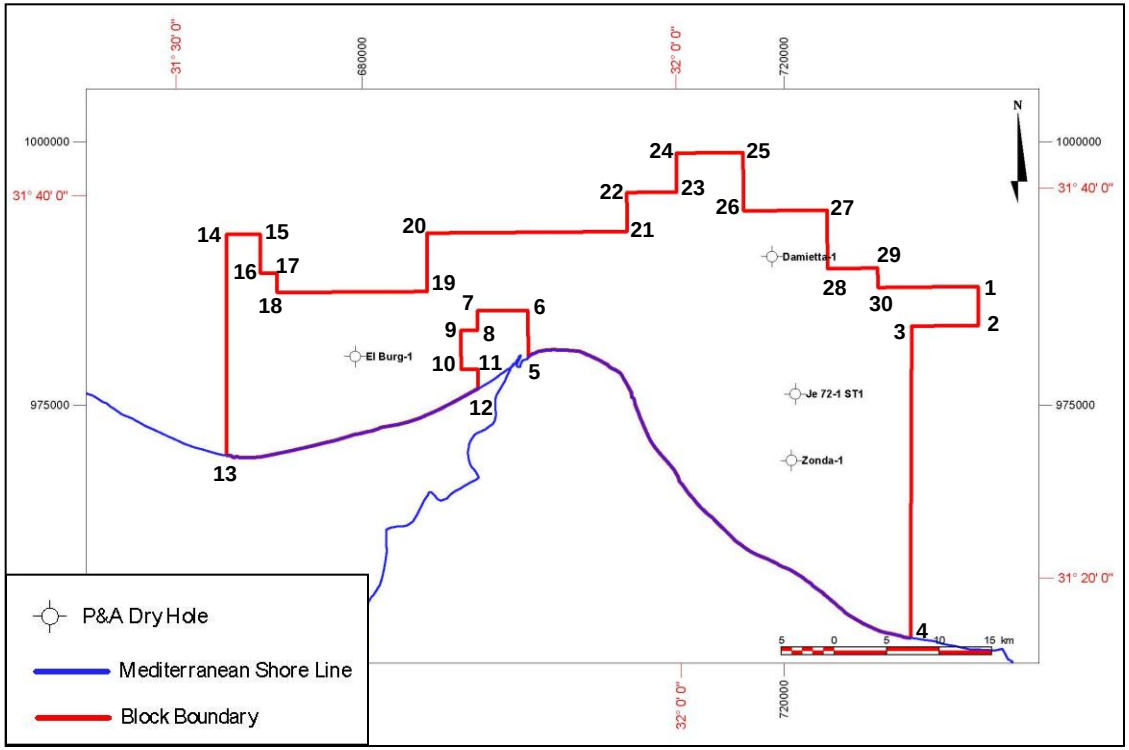
Block 4: North Ras El Esh Offshore

Block 4
North Ras El Esh Offshore

NO.	Lat.	Long.
1	31° 35' 00''	32° 18' 00''
2	31° 33' 00''	32° 18' 00''
3	31° 33' 00''	32° 14' 00''
4	Intersection of Long. 32° 14' 00'' with Shore Line	32° 14' 00''
5	Intersection of Long. 31° 51' 00'' with Shore Line	31° 51' 00''
6	31 ° 34' 00''	31° 51' 00''
7	31 ° 34' 00''	31° 48' 00''
8	31 ° 33' 00''	31° 48' 00''
9	31 ° 33' 00''	31° 47' 00''
10	31 ° 31' 00''	31° 47' 00''
11	31 ° 31' 00''	31° 48' 00''
12	Intersection of Long. 31° 48' 00" with Shore Line	31° 48' 00''
13	Intersection of Long. 31° 33' 00" with Shore Line	31° 33' 00''
14	31° 38' 00"	31° 33' 00''
15	31° 38' 00"	31° 35' 00''
16	31° 36' 00"	31° 35' 00''
17	31° 36' 00"	31° 36' 00''
18	31° 35' 00"	31° 36' 00''
19	31° 35' 00"	31° 45' 00''
20	31° 38' 00"	31° 45' 00''
21	31° 38' 00"	31° 57' 00''
22	31° 40' 00"	31° 57' 00''
23	31° 40' 00"	32° 00' 00''
24	31° 42' 00"	32° 00' 00''
25	31° 42' 00"	32° 04' 00''
26	31° 39' 00"	32° 04' 00''
27	31° 39' 00"	32° 09' 00''
28	31° 36' 00"	32° 09' 00''
29	31° 36' 00"	32° 12' 00''
30	31° 35' 00"	32° 12' 00''

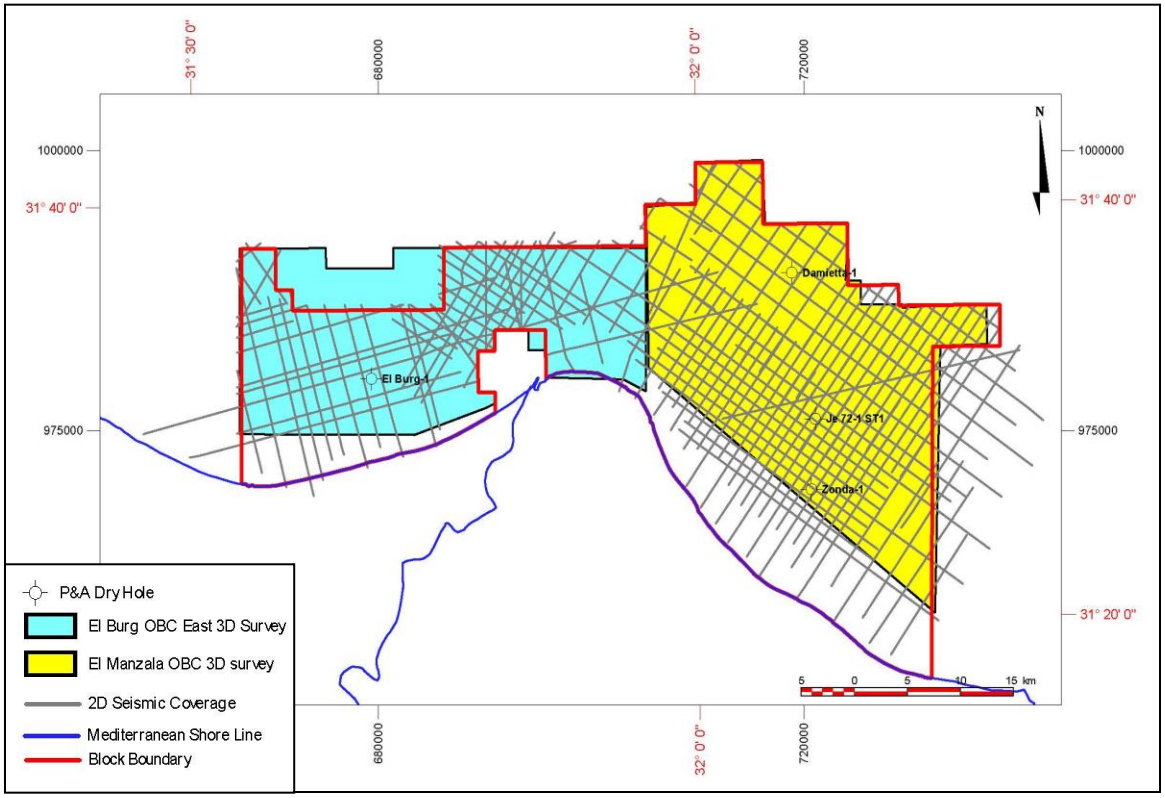


Well Name/ Company	Spud Date/ Compl. Date	TD/ FM. @ TD	Lat./ Long	Status
Damietta-1 Mobil	23-Aug-75 12-Sep-75	2582 M M. Miocene	31° 36' 38.346'' 32° 05' 40.582''	P&A Dry Hole
Je 72-1 ST1 BG	21-May-08 25-Sep-08	3307 M Sidi Salem (Miocene)	31° 29' 34.971" 32° 06' 59.239"	P&A Dry Hole
El Burg-1 BG	09-Jun-08 07-Aug-08	3032 M Wakar (Miocene)	31° 31' 41.26" 31° 40' 37.495"	P&A Dry Hole
Zonda-1 BG	20-Aug-11 12-Sep-11	2240 M K. El Sheikh (Pliocene)	31° 26' 10.518" 32° 06' 43.074"	P&A Dry Hole

2D & 3D Seismic Coverage

2D Seismic Surveys (Segy Standard Format)		
Survey Name	**Line-Km**	**No. of Seismic Lines**
9207	14	3
9208	341	21
9406	233	14
9703	488	36
9505	696	39
9607	118	12
Bp_NDD 1&5	20	2
GND	11	1
Others	131	9
Total	2052	137

3D Seismic Data (Segy Standard Format)	
Survey Name	**Area (Sq. Km)**
El Burg OBC East	520
El Manzala OBC	651



Block – 4 Prospectivity Examples

North Ras El Esh Offshore Block is located in the southeastern part of the Central Nile Delta Offshore area. The northeastern border of the block lies directly to the west of the NW-SE Misfaq-Bardawil (Temsah) fault which hosts to the east, along its trend, numerous gas-condensate fields with stratigraphic/structural combination traps involving Pliocene and Miocene sandstone reservoirs. The block is situated at approximately 30 km to the east of the NNW-SSE Abu Madi Trend of gas-condensate fields which comprise stratigraphic/structural traps, mainly with Miocene sandstone reservoirs. North Ras El Esh Block also lies between BG's recent gas-condensate discoveries of the Abu Madi Harmattan Deep (to the south) and the Oligocene Notus-1 (to the north).

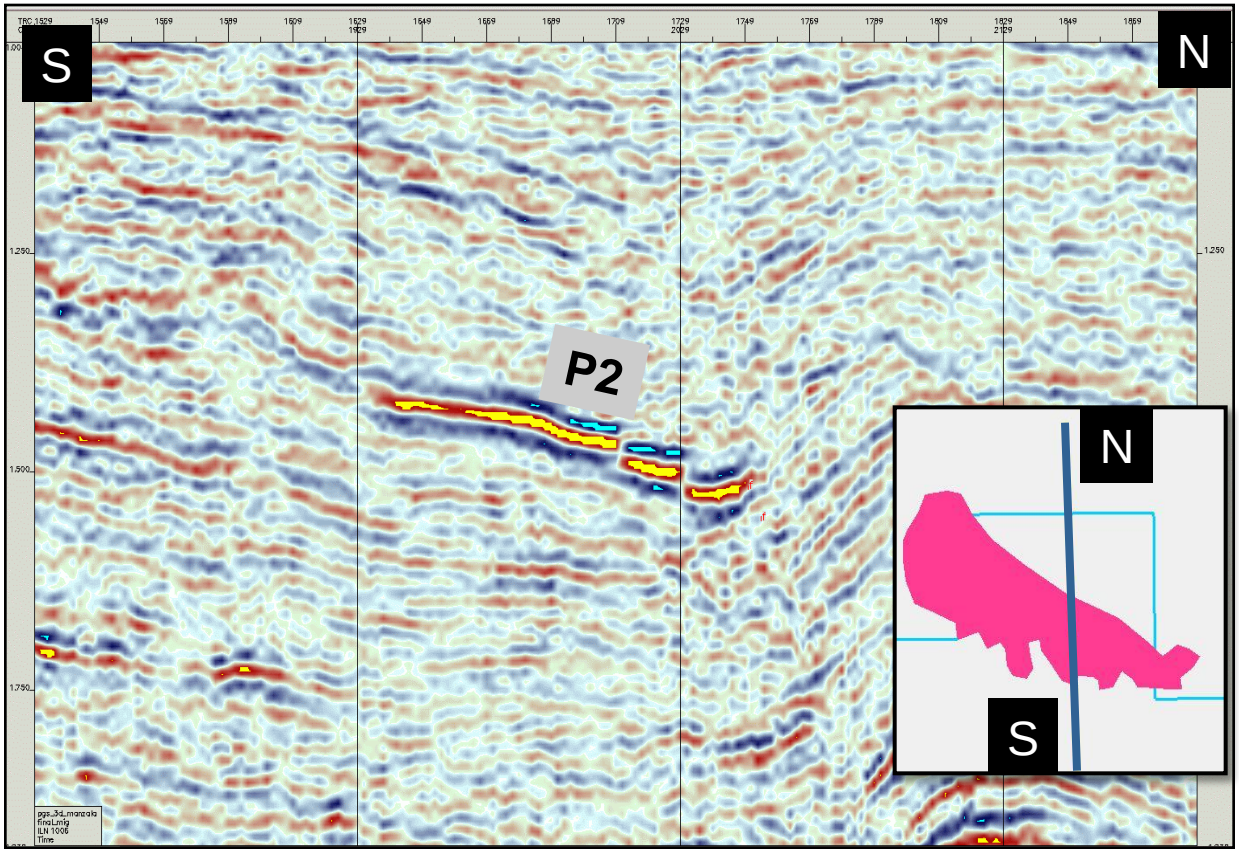
Pliocene Play Concept:

Source: Massive shales of Kafr El Sheikh Fm.

Reservoir: Mainly represented by massive to laminated sands of Kafr El Sheikh Fm.

Seal: Intra-formational shales of Kafr El Sheikh Fm.

Trapping: Combined structural / stratigraphic trap.



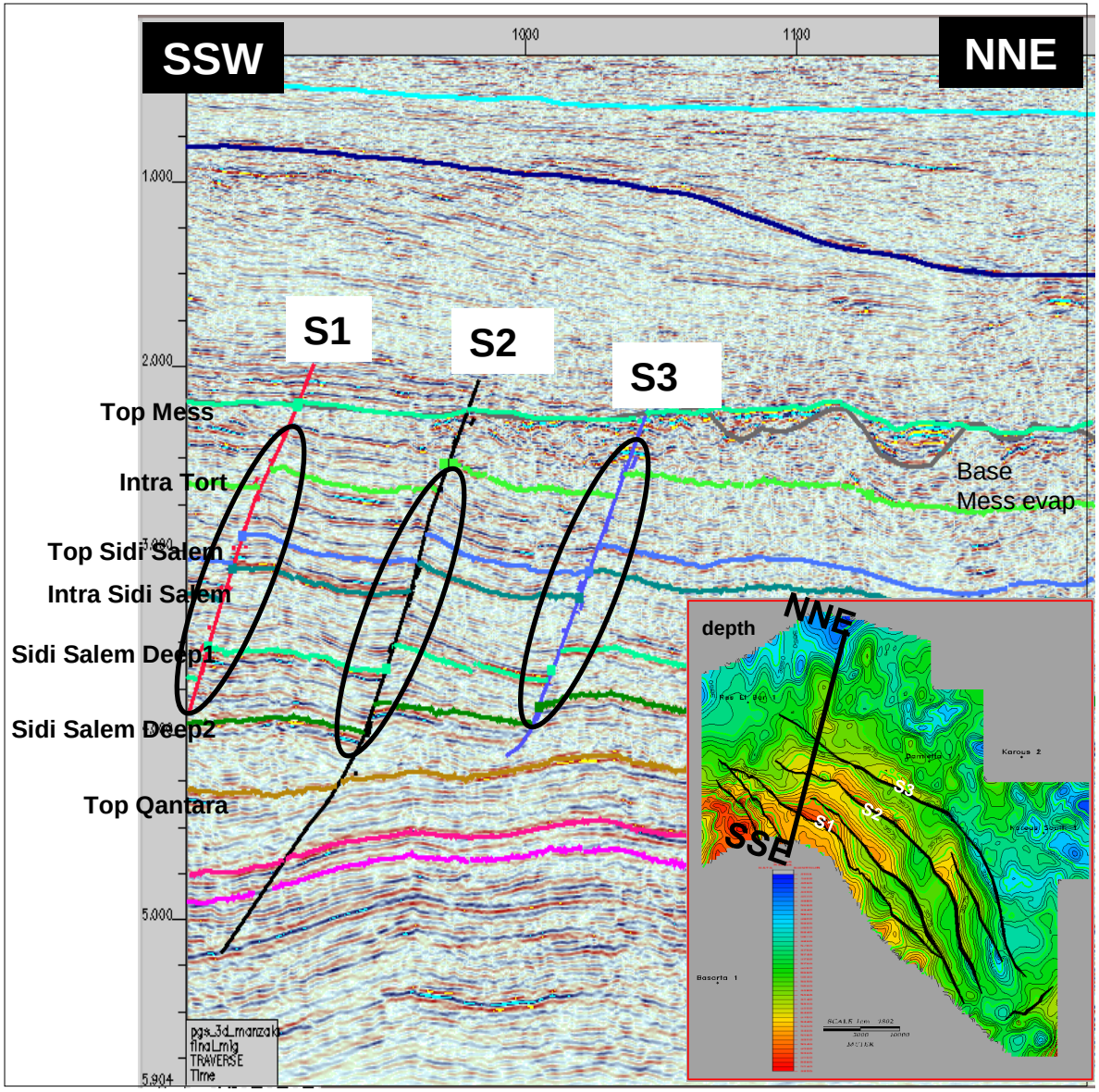
Messinian Play Concept:

Source: Several source rock UNITS are anticipated within the Lower Miocene, Oligocene and possibly upper Cretaceous and Jurassic

Reservoir: Channel and sheet sands of outer shelf to slope environments.

Seal: Top seal is provided by intra-formational shales and lateral seal is attained through sand-shale juxtaposition along sealing faults.

Trapping: 3-way dip closure against NW-SE Trending normal faults.



Oligocene Play Concept:

Source: The Oligocene shale is expected to be the dominant source (self sourcing) in addition to migration from the Mesozoic, Jurassic to Cretaceous which is anticipated through proximal deep seated faults.

Reservoir: Oligocene sand channels within Tineh Fm.

Seal: The top and lateral sealing lithologies are essentially provided by the intra-formational shales.

Trapping: Combined structural – stratigraphic trap.