PL692 Relinquishment Report

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1 Key License History

PL692 was originally awarded as a part of the APA 2012, on the 8th of February 2013. Repsol Exploration Norge AS, now renamed Repsol Norge AS, was appointed operator of the license with 40% share. The remaining partnership was Skagen44 AS and Edison International Norway Branch, now renamed Edison Norge AS, with a share of 30% each. Effectiv from 29th of February 2016, Repsol Norge AS acquired Skagen44 AS's share in the licence, and the new distribution of the license became Repsol Norge AS with a 70% share and Edison Norge AS as the only partner with the remaining 30% shares. This partnership remained unchanged until the Drill or Drop decision.
The initial date for Drill or Drop decision was the 8th of February 2015, but after the initial license period was extended with 1,5 years allowing for seismic reprocessing, a new Drill or Drop decision needed to be taken within 8th of August 2016.

Initial work obligations and work periods

Within 2 years or before 08/02/2015
- Buying existing 3D seismic (part of ST10013 that covers Bombardier prospect)
- Conduct relevant geological and geophysical studies
- Drill or Drop decision before 08/02/2015

Within 4 years or before 08/02/2017
- Take a "concretization decision" (BOK - Beslutning Om Konkretisering) based on feasibility studies

Within 6 years or before 08/02/2019
- Decide on commerciality and start preparation for a plan for development (BOV - Beslutning Om Videreføring)

Within 7 years or before 08/02/2020
- Decide to submit a plan for development and operation to MPE

Any applications and grants for extension of deadlines

After analysing the initial prospectivity in the license and finding it too risky, Repsol Norge AS asked for 1,5 years extension to have time to repsocess the seismic and analyse the deeper targets in the license. Only Edison Norge AS supported the license extension. Repsol Norge AS acquired Skagen44 AS's share in the license and a 1,5 years extension was granted by the government 6th of March 2015.

Overview of meetings held

- License Kick off Meeting: 5th of April 2013
- EC/MC Meeting: 7th of November 2013
- EC/MC Meeting: 21th of February 2014
- Work meeting: 24th of April 2014

- Extraordinary EC/MC Meeting: 27th of May 2014
- EC Video Conference: 5th of September 2014
- EC/MC Meeting: 26th of November 2014
- EC/MC Meeting: 26th of November 2015
- EC/MC Meeting: 2nd of March 2016

Reason for Relinquishment

A thorough job has been done in the license to first derisk the main objective which was in the Early-Middle Jurassic section, and later analyse the deeper Permo-Triassic potentials. The initial work program was completed by bying the parts of the 3D seismic ST10013 covering the main prospect Bombarier, performing seismic interpretation, cunducting AGI seafloor geochemical study, performing basin modelling and PSDM fesability study. After the extension, parts of the 3D survey was reprocessed by Repsol's internal processing center in Huston. The seismic was then reinterpreted with focus on the deeper targets and a study was carried out to characterize the presense and quality of the potential Permo-Triassic reservoirs.

The partnership in PL692 has put a considerable effort into the evaluation of prospectivity in the license. However, the estimated resources together with the lack of data and techniques to further de-risk the prospects, it was not economically viable to commit to an exploration well and enter into the second exploration phase. The license was relinquished with a relinquishment letter dated 27th of July 2016.

Figure 1.1 shows a base map with the location of PL692.

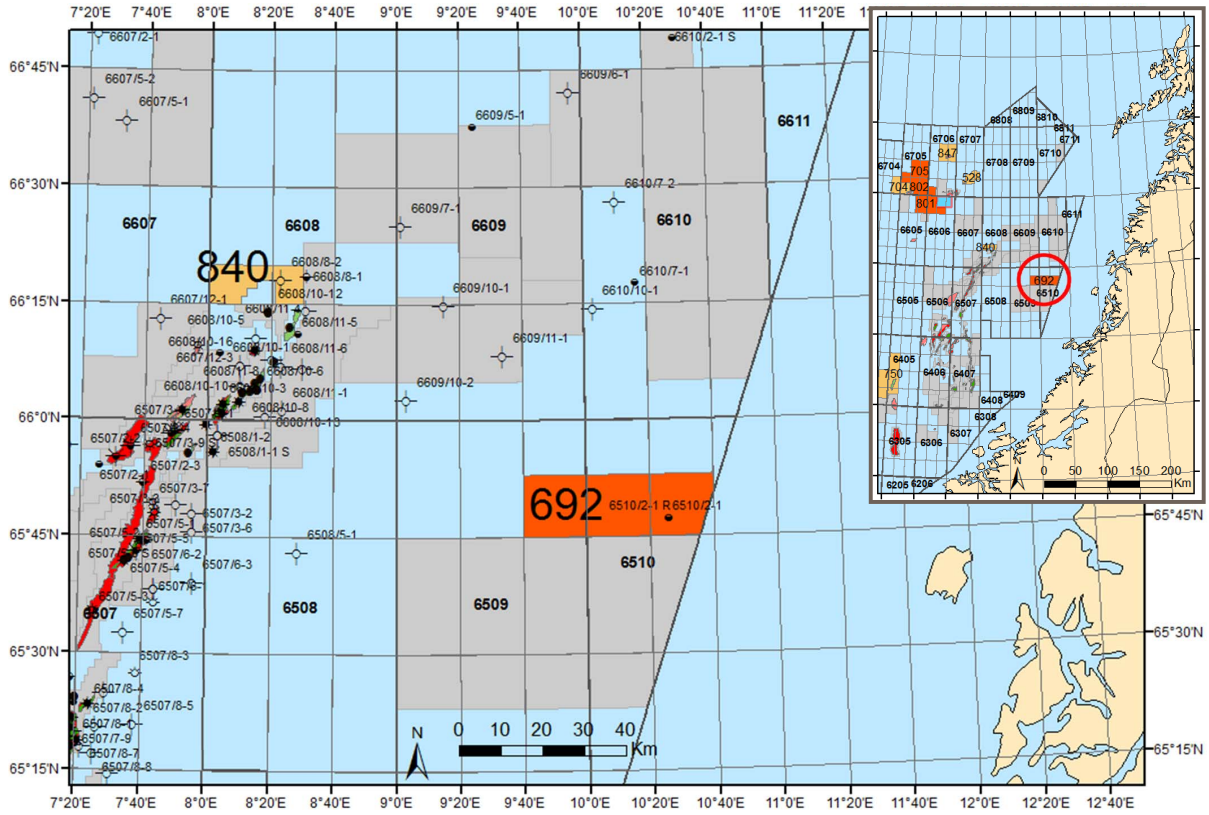

Figure 1.1 Base map showing location of PL692

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2 Database

Well Database

The well database is a selection of wells in the Helgeland Basin. All wells were publically available at the time of license award, except well 6610/10-1 which was included after the well was released, to aid in the Permo-Triassic study. The wells were included in the petrophysical analysis, used for reservoir correlation and conditions, basin modelling and the Permo-Triassic study. Well 6510/2-1 R was a key well for the seismic tie of 3D survey ST10013 and the correlation of stratigraphic tops into the area of interest. Table 2.1 lists the wells used in the license.

Table 2.1 Well database for PL692

Well	Operator / Drilling year	TD depth [mMD] and age	Results	Well used for
6408/4-1	Conoco Norway Inc.; 1988	2725; Late Triassic	Dry	Basin modelling
6507/12-2	Saga Petroleum; 1981	5008; Middle Triassic	Shows	Basin modelling
6610/7-2	Det Norske; 1984	4215; Early Triassic	Dry	Well Correlation, Permo-Triassic Study, petrophysics, basin modelling
6609/10-1	Saga Petroleum; 1983	2167; Late Triassic	Dry	Well Correlation, Permo-Triassic Study, petrophysics, basin modelling
6610/7-1	Statoil; 1983	3333; Late Triassic	Shows	Well Correlation, Permo-Triassic Study, petrophysics, basin modelling, seismic well tie
6610/10-1	Statoil; 2013	3006; Late Triassic	Shows	Permo-Triassic Study, petrophysics
6609/11-1	Norsk Hydro; 1983	3068; Early Jurassic	Dry	Well Correlation, Permo-Triassic Study, petrophysics, basin modelling
6609/10-2	Det Norske	2528; Late Triassic	Dry	Well Correlation, Permo-Triassic Study, petrophysics
6508/5-1	AS Norske Shell; 1987	2586; Late Triassic	Dry	Petrophysics, basin modelling
6510/2-1	AS Norske Shell; 1997	3102; Late Triassic	Shows	Well Correlation, Permo-Triassic Study, petrophysics
6510/2-1 R	AS Norske Shell; 1997	4707; Late Triassic	Shows	Well Correlation, Permo-Triassic Study, seismic well tie, petrophysics
6611/9-U-01	IKU; 1992	558; Late Permian	Research	Well Correlation, Permo-Triassic Study,
6611/9-U-02	IKU; 1992	280; Lower Triassic	Research	Permo-Triassic Study,

Seismic Database

The seismic database consists of publically available 2D seisimic within and in the vicinity of PL692 in addition to purchased 370km^2 cut of 3D survey ST10013. A 340km^2 area of 3D seismic ST10013 was reprocessed by the license group. Table 2.2 and Figure 2.1 lists and ilustrates the seismic datasets used in the license.

Table 2.2 Seismic Database for PL692

2D Seismic	3D Seismic
MN9205, MNT-92	ST10013
NH8102, NH8301	ST10013 (reprocessed)
NRGS-84	
SH9601, ST8608	
ST8704, ST8708	
ST8808, VH94	
VIWT93	

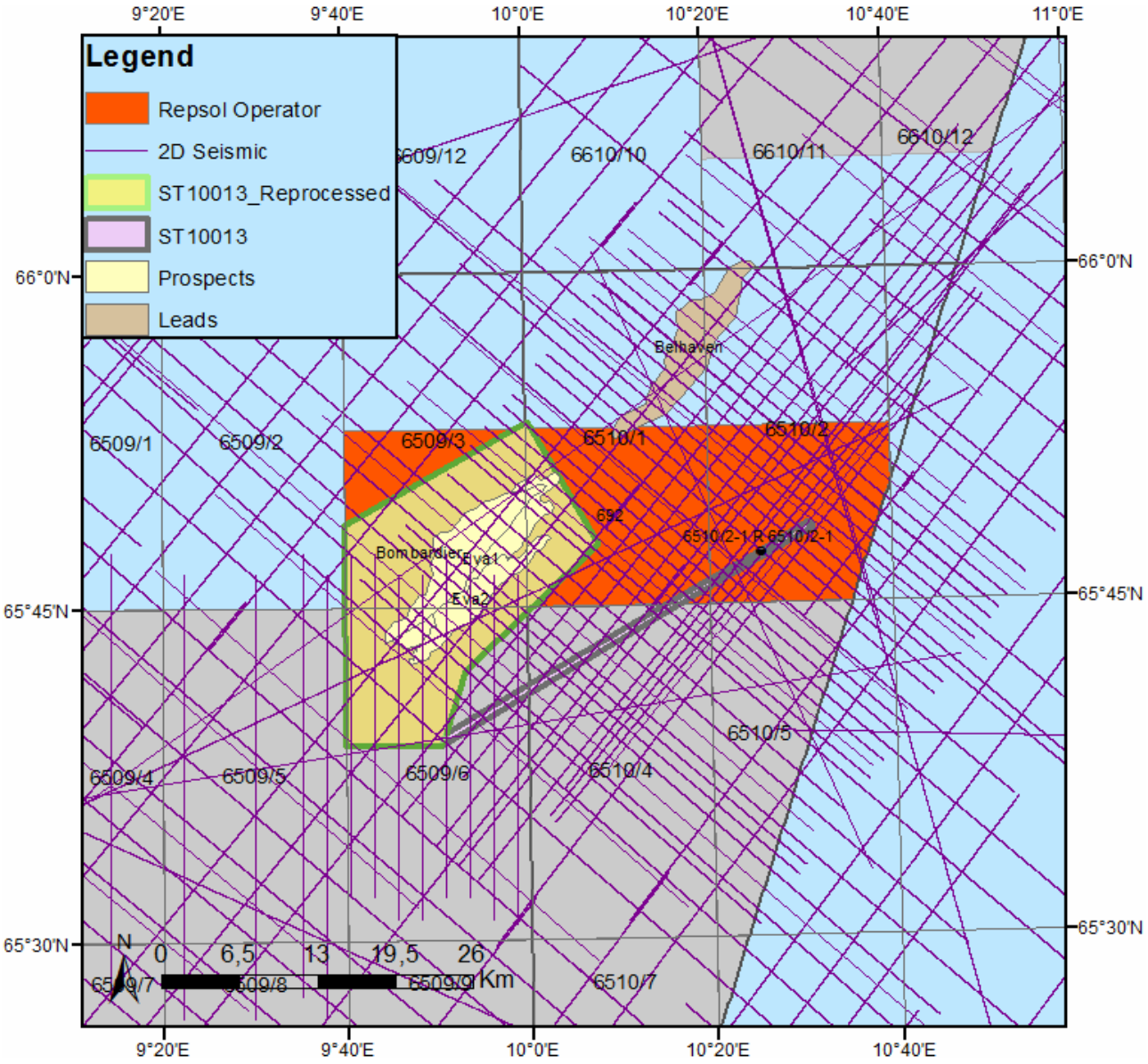

Figure 2.1 Seismic Database for PL692

3 Review of Geological Framework

Studies Performed

The studies performed to develop the prospectivity in the license are summarize in the Table 3.1.

Table 3.1 Studies performed in PL692 to develop and mature the prospectivity in PL692

Study Name	Year	Author
Petrophysical interpretation of offset wells	2013-2015	REPSOL
Seismic Interpretation	2013-2016	REPSOL
Regional Basin Modelling	2014	REPSOL
Offshore Geochemical Sampling Program Norwegian Sea Block PL692	2013	Amplified Geochemical Imaging LLC (AGI)
PSDM Fesability Study	2015	REPSOL
Reservoir prospectivity of the Permo-Triassic in the Helgeland Basin	2016	REPSOL

Results of block evaluation

The work carried out during the initial exploration phase in the license was mainly focused to better define, mature and de-risk the main prospect Bombardier and the Belhaven lead identified in the aplication. The Early-Middle Jurassic potential was studied, but basin modeling showed that very high risk needed to be considered for the source components in the area. After an evaluation of potential volumes and risks the license group found it not economically viable to further pursue the Early-Middle Jurassic play. Following the decision on Early-Middle Jurassic the initial periode was extended by 1,5 years. The license group changed composition from three to two partners and changed the exploration focus to the Permo-Triassic potential in the area. PSDM reprocessing of the 3D seismic ST10013 was performed to better image the deeper targets and a comprehensive geological study of the Permo-Triassic reservoir in the Helgeland Basin was carried out internally by the operator's specialist team on stratigraphy, petrography and diagenesis. The operator has been evaluating the possibility of running additional studies in order to decrease the risk of the potential deep targets. However, with the current data no possible de-risking study has been identified for any of the main risks: Reservoir Quality/distribution and Source Rock presence/maturity.

4 Prospect Update

The PL692 lies in the Helgeland Basin in the Norwegian Sea with the main prospect Bombardier located approximately 85km west of the iland Vega. The work carried out during the license period focused on the evaluation of the exploration potential of the Early-Middle Jurassic and the deeper Permo-Triassic, sub-salt targets. Figure 4.1 shows the identified prospects within the license, one in the Early-Midldle Jurassic, and two in the Permo-Triassic deep target. Table 4.1 summarizes the main characteristics of each prospect.

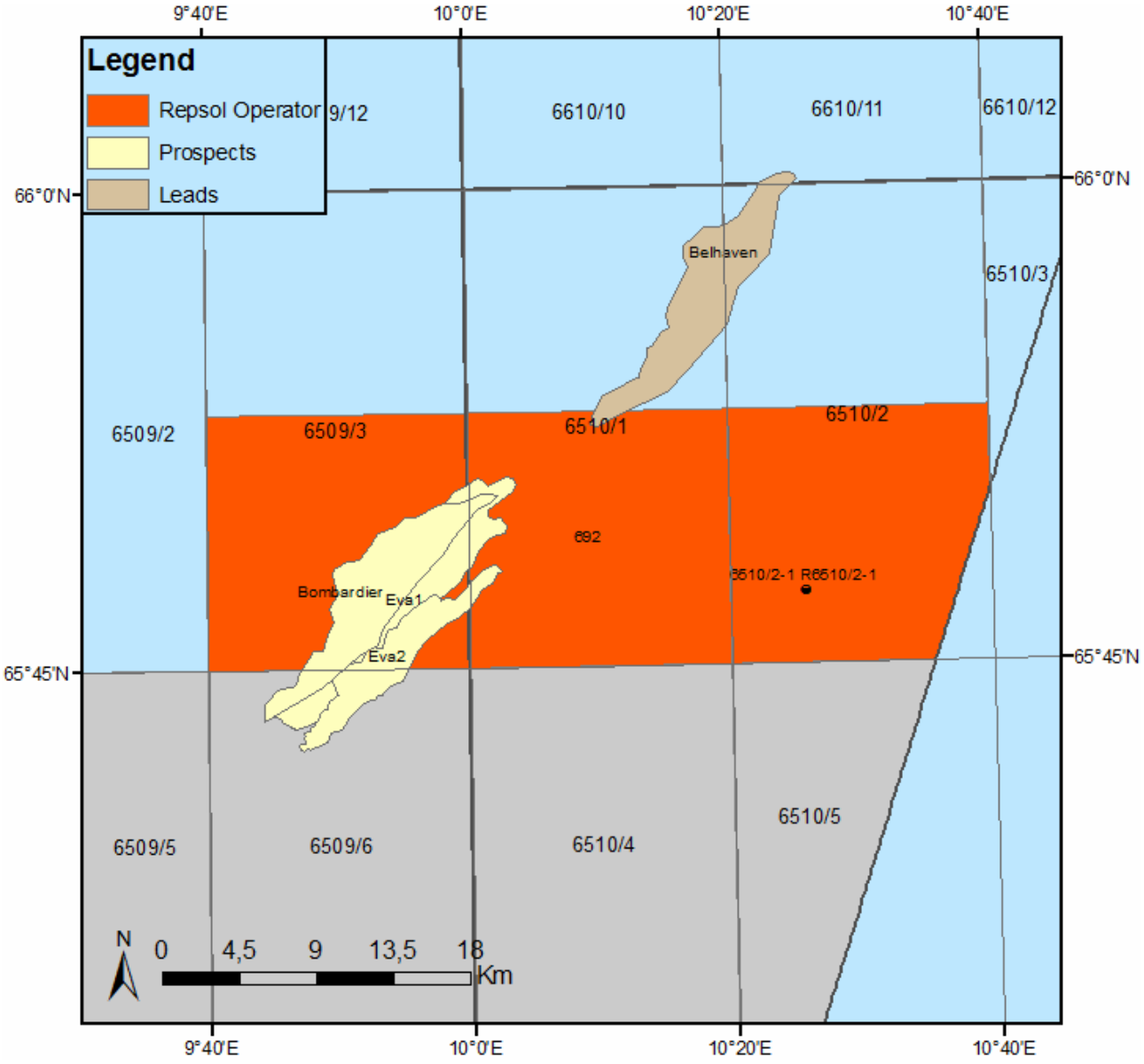

Figure 4.1 Identified prospects and leads within PL692

Table 4.1 Summary of the prospects identified in PL692

Name	Prospect / Lead	Age of Reservoir	Reservoir Depth [mMSL]	Geological Chance of Success ∈ [0.00-1.00]	Expected Fluid	P90-P_{mean}-P10 Recoverable Volumes [10^6 Sm^3 Oil Equivalents]
Bombardier	Prospect	Lower-Middle Jurassic	1702	13,6%	65% oil / 35% gas	4,74-20,22-44,33
Eva1	Prospect	Carnian	3275	7%	65% oil / 35% gas	1,38-6,49-14.89
Eva2	Prospect	Anisian	4225	7%	65% oil / 35% gas	1,39-6,01-13,48

Bombardier Prospect

Bombardier was initially the main prospect in the license. The prospect is defined as a 3-way dip closure against a SW-NE trending normal fault. This fault juxtaposes Early-Middle Jurassic reservoirs against the Late-Jurassic Spekk and Melke Fm providing the lateral seal for the prospect. Top seal is provided by the Melke FM shales and the intra Båt and Fangst Gp shales and mudstones. The reservoir consists of a stacked sucession of the Fangst and Båt Gp reservoirs, the Tilje/Åre Fm as costal plain, delta plain and tidally influenced sandstones, Ile Fm as shallow marine, shoreface sandstones and the Garn Fm as progradational deltaic and shoreface sandstones. Source is expected to be the Late Jurassic Spekk Fm with a secondary source in the coal beds in the Åre Fm. The main risk in Bombardier is the maturity and quantity of the sources. Basin modeling shows that Spekk Fm. most certainly is immature in the Helgeland Basin, and the Åre coal beds are por oil sources and immature for gas. The final change of success for the Bombardier prospect is 13,6%. Top Garn Fm. structural depth map and geosection through the Bombardier prospect are showed in Figure 4.2.

Permo-Triassic Prospects

Two prospects have been identified at sub-salt Permo-Triassic level, one in the Carnian and one in the Anisian. Both prospects are defined as 3-way dip closure against SW-NE trending normal faults. The source rock for both of the Permo-Triassic prospects is expected to be organic rich Late Permian shales.

Carnian Prospect, Eva1
Top seals for the Carnian prospects is provided by the Carnian salt section. Lateral seal is provided by the fault juxtaposes the reservoir sandstones to the Carnian salt section and Late Triassic mudstones. The reservoir consist of argillaceous sandflat/sabkha to playa lake deposits all deposited in a arid to semi-arid climate. High risk is associated to the reservoir present and quality. The final chance of success for the Carnian Eva1 prospect is 7%.

Anisian Prospect, Eva2
Top seal for the Anisian prospect is provided by the Landinian and Anisian mudstones. Lateral seal is provided by the fault juxtaposes the reservoir sandstones to the Triassic shales. The reservoirs consist of ephemeral channel, sheetflood and argillaceous sandflat/sabkha to playa lake deposits all deposited in a semi-arid, subsiding basin across the Helgeland basin. The reservoirs will be effectively characterised by low to, a best, moderate NTG and, on the

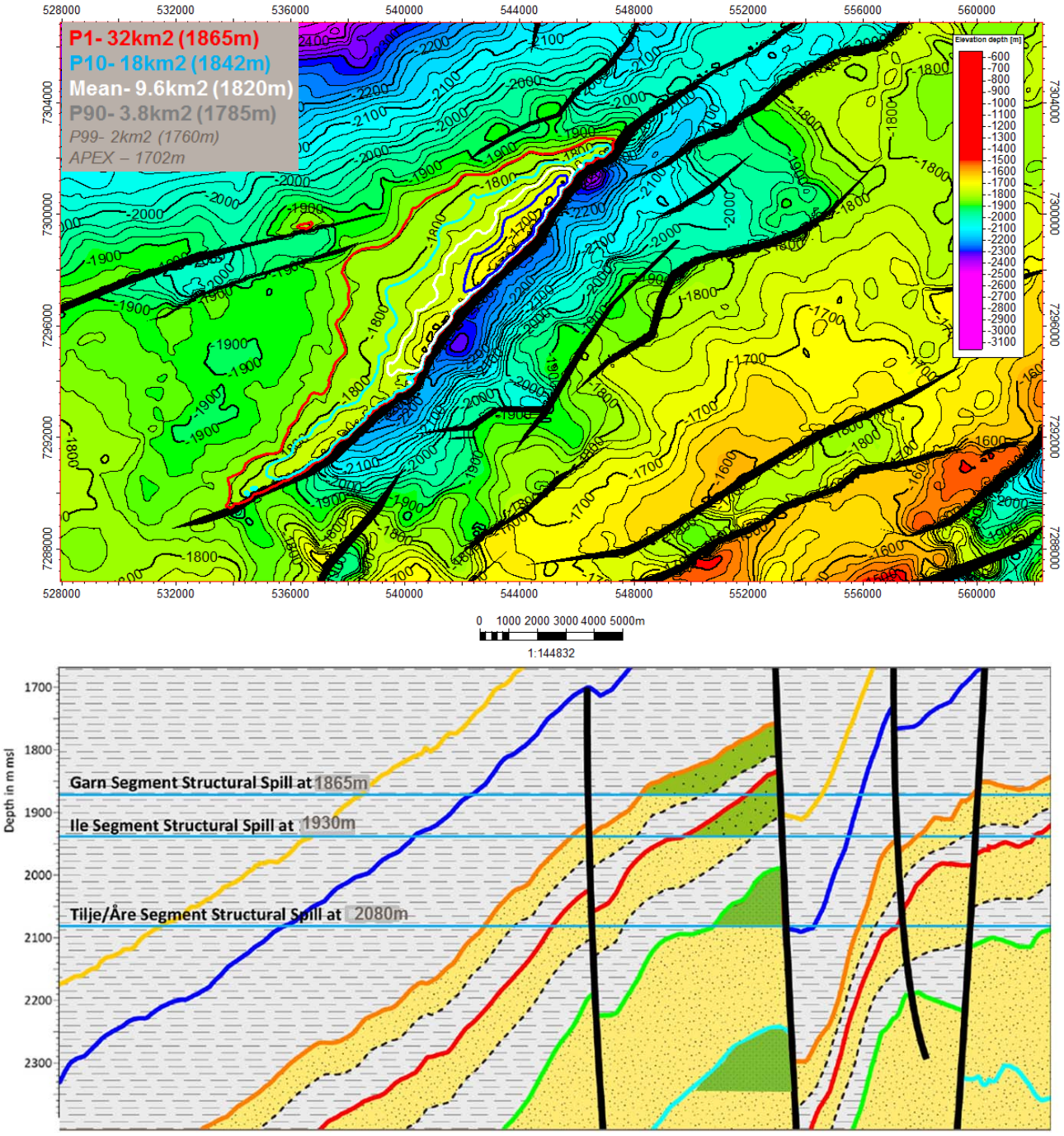

Figure 4.2 Top Garn Fm structural depth map and geosection through the Bombardier prospect

basis of CCA data from well 6510/2-1R a very poor reservoir quality reflecting pervasive and extensive compaction of an unstable grain pack dominated by common feldspars and micas. The final chance of success for the Anisian Eva2 prospect is 7,0% with reservoir quality as the main risk.

5 Technical Evaluations

Due to the results of the geological and geophysical work a full technical evaluation and economic analysis has not been carried out by the license group in PL692. Technological assumptions and development plan in the time of application based a possible development on a dedicated FPSO with processing facilities, living quarters and oil storage of 70000 m3.

6 Conclusions

Three prospects were identified in PL692, one in the Early-Midldle Jurassic, and two in the Permo-Triassic deep target. Based on technical work the license group concluded that too high risk is associated to the maturnity and quantity of the Jurassic source rocks and the exploration potential in the deeper Permo-Triassic section was evaluated. The evaluation showed potential for ephemeral channel, sheetflood and argillaceous sandflat/sabkha to playa lake deposits all deposited in a semi-arid, subsiding basin across the Helgeland basin, but with high risk on reservoir quality and source quality and quantity. The mean recoverable resources of the main Permo-Triassic prospect is 6,5 10^6 Sm^3 oil equivalents with a geological chance of success of 7,0%.

The operator in PL692 has put a considerable effort into the evaluation of prospectivity in the license. However, the estimated resources together with the lack of techniques to further de-risk the prospects, it was not economically viable to commit to an exploration well and enter into the second exploration phase and the license had to be relinquished.