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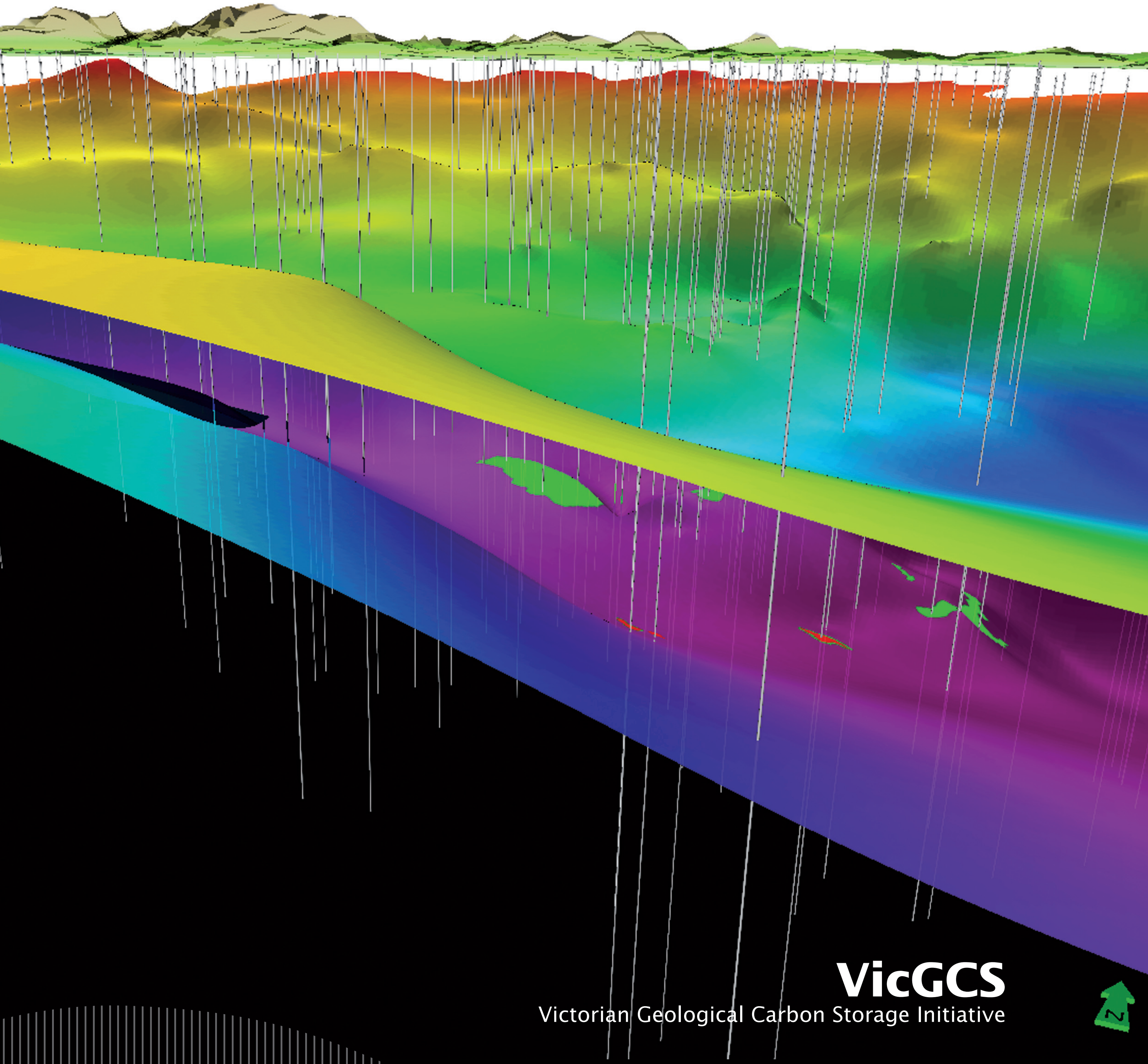

VicGCS
Victorian Geological Carbon Storage Initiative

Geological Carbon Storage in the Gippsland Basin, Australia

Containment potential

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Geological Carbon Storage in the Gippsland Basin, Australia: Containment Potential

L.M. Goldie Divko, G. W. O'Brien, P.R. Tingate & M.L. Harrison

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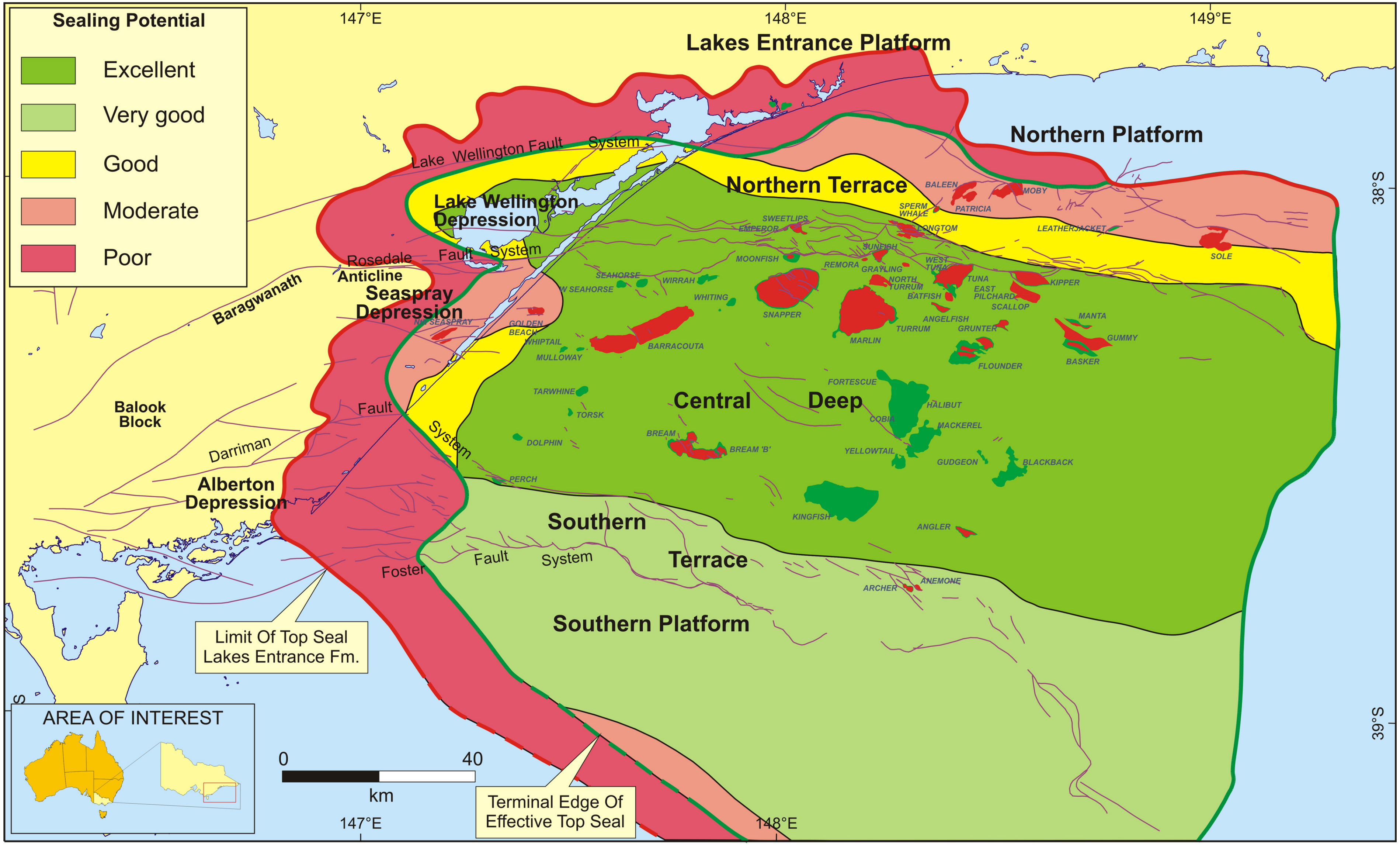
Cover Image:
This image is a three-dimensional diagrammatic representation of the top surface of the Latrobe Group showing oil (green) and gas (red) accumulations, and the overlying regional top seal: the Lakes Entrance Formation. The view is from the sub-surface offshore Gippsland Basin looking towards the northwest onshore section of the basin and the Strzelecki Ranges in the distance.

Contents

List of figures

List of tables



An interpretation of top seal potential at a basin scale, Gippsland Basin.

Executive Summary

The Gippsland Basin is widely viewed as the prime site for the development of a large-scale geological CO_2 storage industry in Victoria. To facilitate this, GeoScience Victoria's Victorian Geological Carbon Storage project is providing a detailed geological assessment of the basin's suitability for geological carbon storage. In this study, the top seal potential of the Lakes Entrance Formation in the Gippsland Basin has been evaluated to provide a basin-scale understanding of the region's potential for CO_2 containment.

Thickness, distribution, facies and Mercury Injection Capillary Pressure data from the Lakes Entrance Formation suggest that the base of the unit within the Central Deep, western Northern Terrace and the onshore Lake Wellington Depression has excellent containment characteristics, with the capacity to withhold a vertical column of CO_2 hundreds of metres high. The sealing potential of the Lakes Entrance Formation on the Southern Terrace and Southern Platform is very good. The formation is thick and seal capacity results from Groper-1 (246 m of CO_2) indicate that the seal has the potential to contain significant column heights of CO_2. The Seaspray Depression and Northern Terrace have good to moderate sealing potential. In these locations, the seal thickness and the depth to the base of the formation is variable. Seal capacity results are also variable but generally much lower than those recorded in the Central Deep. The offshore Northern Platform and the onshore Lakes Entrance Platform, Baragwanath Anticline and Alberton Depression offer very little containment potential for injected CO_2.

The results of the present study, when integrated with the results from other VicGCS investigations, will provide a basin-scale understanding of the Gippsland Basin's CO_2 geological storage potential.

1 Introduction

Victoria's brown coal resources in the Latrobe Valley are currently used principally for low-cost electricity generation, which is a key component for Victoria's manufacturing and industrial base. In addition, the potential exists to significantly expand the utilization of brown coal and to develop new value-added industries, such as coal-to-liquids. The pressing need to reduce carbon emissions means, however, that the usage of the coal resources in the future, will probably be contingent on reducing the coal industry's greenhouse footprint over the next 10 to 20 years.

Geological carbon storage (GCS) is a key enabling technology, which could allow the ongoing and potentially expanded exploitation of Victoria's massive brown coal resources. GCS involves the capture of CO_2 from sources such as power stations, coal-to-liquids plants and gas production from high-CO_2 gas fields, the transport of the captured CO_2 and finally, its injection in the sub-surface. Prior to transport and injection, the captured CO_2 is pressurised into a "super-critical" state (essentially a fluid somewhat less dense than water). Provided that the supercritical CO_2 is injected into geological formations deeper than approximately 800 m, the CO_2 will remain supercritical. Eventually, over thousands of years, the majority of the CO_2 will dissolve into the formation waters or be trapped in crystallizing mineral phases. However, if the injected CO_2 should migrate to depths shallower than 800 m, the supercritical CO_2 phase transitions into a gas phase which has very different characteristics. This CO_2 gas phase can migrate much more quickly than supercritical CO_2 and it is also more difficult to contain under regional sealing units.

The most obvious site for the geological carbon storage of CO_2 generated in the Latrobe Valley is the Gippsland Basin. The Gippsland Basin has high quality Late Cretaceous and Cenozoic siliciclastic reservoirs, and has been the site of active petroleum exploration and production for over nearly forty years. Many of the oil fields within the basin are now near the end of their production lives, and hence the opportunity exists to develop areas previously used for petroleum production for GCS. However, such a process would effectively turn the basin's pore space into a multiple use zone, at least in the short to medium term. Management of potential conflicts between incumbent and future hydrocarbon producers and explorers within the basin and the needs of CO_2 emitters, and the wider society, to reduce emissions to meet mandated targets, will provide significant challenges into the future.

VicGCS (Victorian Geological Carbon Storage) is a four-year (2008-2013), $5.2 million multi-disciplinary initiative that will characterise the geosequestration potential of the offshore and onshore Gippsland Basin. The program will be delivered by GeoScience Victoria in partnership with key external organisations. A key goal of the VicGCS Project is to develop a sufficient geological knowledge of the onshore and offshore Gippsland Basin to allow the development and management of the region as a key GCS hub. Management of the region as a genuine multiple use zone will be an essential component – and challenge – of the project. The VicGCS project will assess the GCS potential of the Gippsland Basin under three technical themes, namely containment (sealing potential), injectivity-capacity (reservoir character and distribution) and impacts (migration characteristics).

This report specifically addresses the containment theme for the Gippsland Basin. The containment theme deals principally with key aspects of the integrity of the regional top-seal, the Lakes Entrance Formation, which spans the offshore and parts of the onshore basin. The key objective of this work is to determine where the Lakes Entrance Formation provides an effective top-seal for oil, gas and any injected CO_2 and where it does not. From a GCS viewpoint, the simple question is: 'If the CO_2 is put in, will it stay in?'

Investigations of the thickness, geometry and seal capacity of the Lakes Entrance Formation are presented, as is an interpretative sedimentary facies framework. Results include Mercury Injection Capillary Pressure (MICP) data from 37 wells in the Gippsland Basin, which have allowed a regional quantitative assessment of the sealing capacity of the Lakes Entrance Formation to be made. In addition, a secondary part of the containment theme is a brief consideration of the importance of intra-Latrobe sealing units within the basin, as well as subsidiary units which also act as top seals, such as the Gurnard Formation. Existing leakage and seepage data have been integrated with seal capacity results to produce a qualitative assessment of the seal potential of the Gippsland Basin.

This study focuses on the capillary properties of the seal. There is no evidence that, at a first-order, faulting or mechanical reactivation of the top sealing unit is an important control on seal potential in the Gippsland Basin. This aspect will, however, be further investigated in other VicGCS modules.

This report initially provides an overview of the regional geology of the Gippsland Basin. This is followed by a detailed evaluation of the sealing characteristics of the regional seal - the Lakes Entrance Formation, a subsidiary top seal - the Gurnard Formation and various intra-formational seals. These data are then combined into a new interpretative framework which presents a map-based evaluation of the top seal potential at a basin-scale.

2 Regional Geology

The Gippsland Basin, one of Australia's most prolific hydrocarbon provinces, is situated in south-eastern Australia and is located about 200 km east of the city of Melbourne, Victoria.

The basin, which has both onshore and offshore elements, is a world-class hydrocarbon province and contains several giant oil and gas fields. The vast majority of the discoveries are reservoired within the siliciclastics of the Late Cretaceous to Paleogene Latrobe Group and almost all of the currently producing fields are located offshore in shallow water.

The details of the basin's tectonic evolution and its stratigraphic fill are provided in the following sections.

2.1 Tectonic Evolution of the Gippsland Basin

The east-west trending Gippsland Basin was formed during the break-up of Gondwana (Rahmanian *et al.*, 1990; Willcox *et al.*, 1992; Willcox *et al.*, 2001; Norvick & Smith, 2001; Norvick *et al.*, 2001) and the basin evolution is recorded by several depositional sequences that range from Early Cretaceous to Recent in age. The profound tectonic control on sedimentary systems in the basin is exemplified by several basin-wide angular unconformities that are easily recognised on seismic sections. Other time-breaks are only recognised using biostratigraphic age determinations delineating missing sections. This is of particular relevance in the context of the upper Latrobe Group, where extensive channel incision and subsequent infill processes resulted in complex sedimentary sequences that developed at slightly different time intervals, the extent of which cannot be resolved by seismic mapping alone.

As part of the Early Cretaceous rift system between Antarctica and Australia, the Gippsland Basin architecture initially featured a rift valley complex composed of multiple E-W trending half-grabens. Continued rifting into the Late Cretaceous generated a classic extensional geometry comprising a depocentre (the Central Deep) flanked by platforms and terraces. These are defined by the Rosedale and Lake Wellington Fault systems on the northern basin margin and by the Darriman and Foster Fault systems on the southern margin (Figure 2.1). The Central Deep is characterised by rapidly increasing water depths to the east that exceed 3,000 m in the Bass Canyon (Hill *et al.*, 1998). The Cape Everard Fault System, a prominent NNE-striking basement high evident on total magnetic intensity imagery (Moore & Wong, 2001), defines the eastern boundary of the basin. The western onshore extent of the basin is traditionally placed at the Mornington High, but for the units described in this report it is essentially represented by outcrops of Early Cretaceous Strzelecki Group sediments (Hocking, 1988).

Initial rifting in the Early Cretaceous resulted in 30% crustal extension (Power *et al.*, 2001) and created a complex system of grabens and half-grabens. A compressional phase accompanied by uplift between 100 and 95 Ma, which has been linked to the separation of Australia from Antarctica (Duddy & Green, 1992), produced a new basin configuration and provided the accommodation space for large volumes of basement-derived sediments. Renewed extension during the Late Cretaceous, associated with the opening of the Tasman Sea, established the Central Deep as the main depocentre. Late Santonian sediments in the eastern part of the basin record the first marine incursion (Partridge, 1999). Many of the earlier generated faults were reactivated during this tectonic phase.

A margin-sag basin, characterised by rapid subsidence, followed the crustal rifting. Extensional tectonism prevailed until the early Eocene and produced pervasive NW-SE trending normal faults. By the middle Eocene, sea-floor spreading had ceased in the Tasman Sea and a compressional period began to affect the Gippsland Basin initiating a series of NE to ENE-trending anticlines (Smith, 1988). Compression and structural growth peaked in the middle Miocene and resulted in basin inversion. All the major fold structures at the top of the Latrobe Group which became the hosts for the large oil and gas accumulations, such as Barracouta, Tuna, Kingfish, Snapper and Halibut, are related to this tectonic episode.

Tectonism has continued to overprint the basin as documented by localised uplift during the late Pliocene to Pleistocene. This is also reflected in the uplift of Pliocene sediments on the Barracouta, Snapper and Marlin anticlines as well as around Lakes Entrance. Ongoing episodical tectonic activity is recorded by seismic events around the major basin bounding faults.

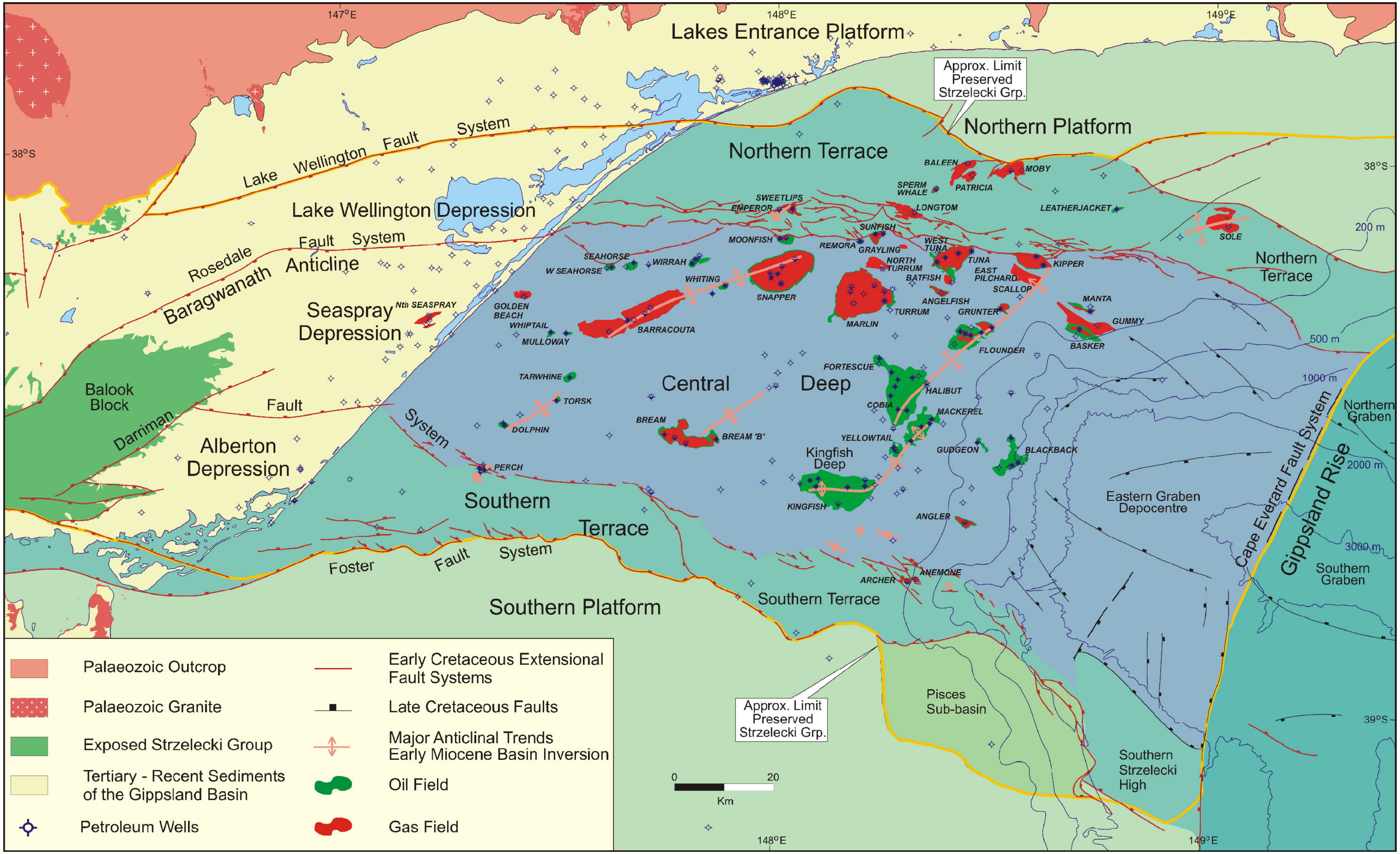


***Figure 2.1** Structural elements map of Gippsland Basin, showing distribution of oil and gas fields.*

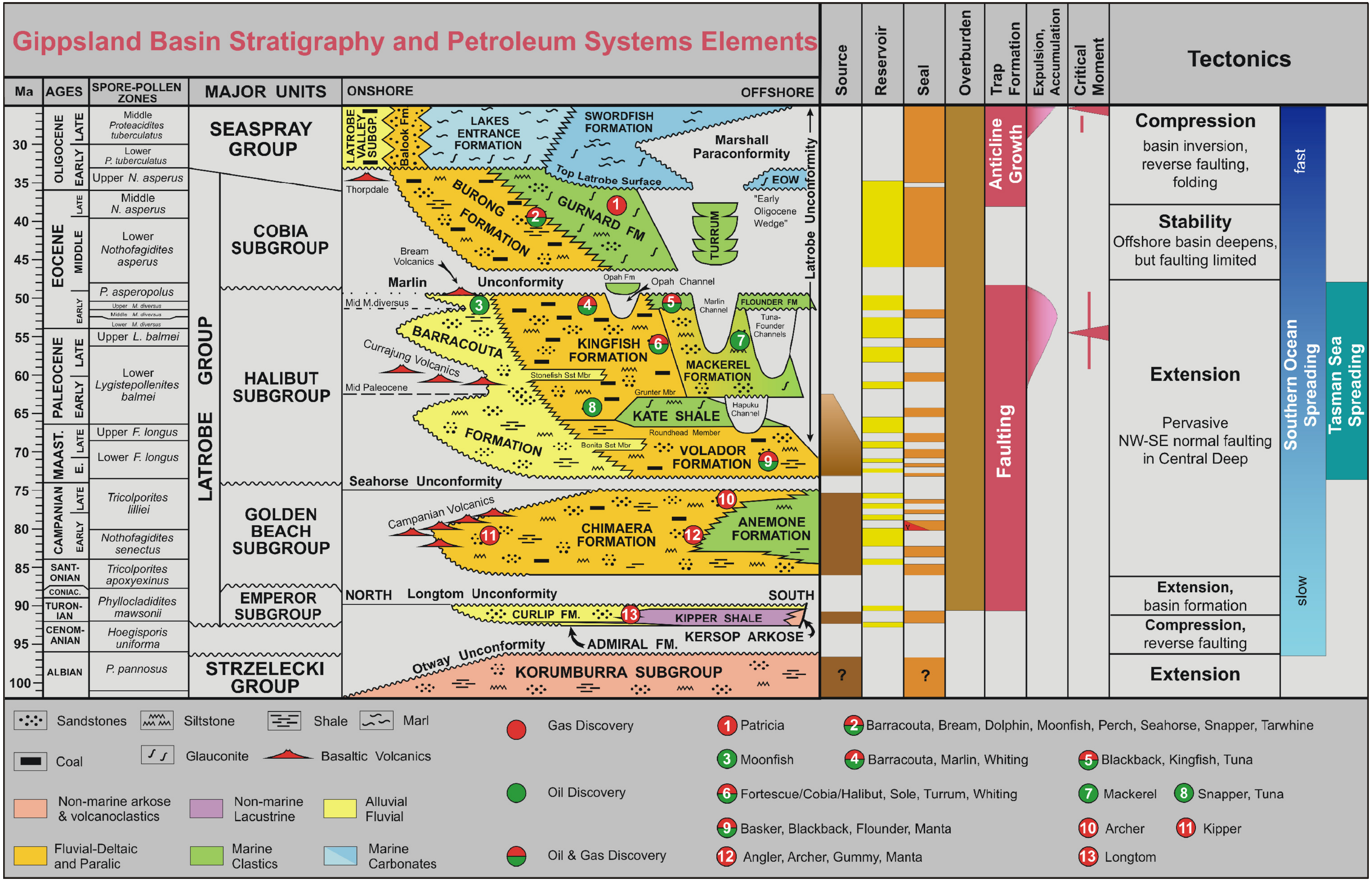


Figure 2.2 *Stratigraphic column for the Gippsland Basin, showing petroleum system elements and tectonic evolution (after Bernecker & Partridge, 2001).*

2.2 Stratigraphy and Depositional History

Based on lithological variations, three broad stratigraphic successions are recognised in the Gippsland Basin (Figure 2.2). These stratigraphic groups comprise a) the Strzelecki Group, a thick sequence of non-marine, volcanoclastic-rich sediments; b) the Latrobe Group, a sequence of marine and non-marine siliciclastics that host all the known hydrocarbon occurrences in the offshore; and c) the Seaspray Group, a carbonate-dominated sequence that is the regional seal to the top-Latrobe Group oil and gas accumulations.

Strzelecki Group

The Strzelecki Group represents syn-rift sedimentation and unconformably overlies Palaeozoic igneous and folded sedimentary rocks. The group consists dominantly of interbedded lithic, volcanoclastic sandstones and mudstones, including several coal-rich horizons. The sediments accumulated in a non-marine environment under a fluvial depositional regime. The Strzelecki Group has strong affinities with the Otway Group in the Otway Basin (Duddy & Green, 1992). The group is regarded by the industry as 'economic basement', although considered to have potential for hydrocarbon generation and accumulation, in particular in the western part of the basin (Mehin & Bock, 1998). In fact, onshore the gas accumulations of the North Seaspray and Gangell fields are reservoired in the Strzelecki Group. The total thickness of the Strzelecki Group is ill-defined, but is likely to exceed 1500 m (Gilbert & Hill, 1994).

Latrobe Group

The Latrobe Group hosts all currently known hydrocarbons in the offshore. Four subgroups are discriminated, each of which is bound by basin-wide unconformities and each consists of formations that are distinguished according to their main depositional facies assemblages.

Emperor Subgroup

The Emperor Subgroup (Bernecker & Partridge, 2001) has only been intersected around the basin margins in the vicinity of the bounding faults of the Northern and Southern terraces. Seismic data suggests that a thick section of the subgroup exists below depths of 4 to 6 km in the Central Deep (Bernecker & Partridge, 2001). The Otway Unconformity, separating the subgroup from the underlying Strzelecki Group, developed in response to uplift along the basin margins. Large amounts of erosional material were delivered to the evolving rift-valley in which one or several deep lakes emerged as the depocentre.

The Emperor Subgroup comprises coarse-grained alluvial fan/plain as well as lacustrine facies associations that are characteristic of rift-valley deposition prior to continental break-up. The Kersop Arkose (Bernecker & Partridge, 2001), a coarse-grained to conglomeritic quartz and feldspathic sandstone, was derived from erosion of uplifted granites beyond the faults bounding the Central Deep. The Admiral Formation (Bernecker & Partridge, 2001) overlies but may also be laterally equivalent to the Kersop Arkose. It is characterised by quartz-dominated lithic arenites that were derived from Palaeozoic sedimentary and metamorphic terrains as well as from newly uplifted early Cretaceous sediments. The Kipper Shale (Lowry & Longley, 1991) represents lacustrine deposition and is dominated by mudstones with intercalated fine- to medium-grained sandstones (Marshall & Partridge, 1986; Marshall, 1989; Lowry & Longley, 1991). The palaeolake, or lakes, presumably occupied most of the Turonian rift-valley and received detrital sediments from the basin margins as distribution of the formation is widespread (Bernecker & Partridge, 2001). The Curlip Formation (Bernecker & Partridge, 2001) consists of sandstones and conglomerates that are interbedded with thin shales and minor coals. The formation overlies and interfingers with the Kipper Shale; the top marked by the basin-wide Longtom Unconformity that terminates Emperor Subgroup deposition. Prior to its recognition (Partridge, 1999), this unconformity was previously merged or confused with the Seahorse Unconformity at the top of the Golden Beach Subgroup. Accordingly, numerous well intervals were erroneously assigned to the former Golden Beach Group. The hiatus between the Emperor and Golden Beach subgroups separates non-marine freshwater lacustrine sediments from marine sediments and correlates with the opening of the adjacent Tasman Sea.

Golden Beach Subgroup

The Golden Beach Subgroup (formerly Golden Beach Group of Lowry & Longley, 1991) is essentially confined to the Central Deep, reflecting tectonic movement along the basin margins where conglomerates accumulated. Finer material was transported by fluvial systems that continued to migrate across a gradually widening lower coastal plain and terminated as deltaic bodies in a shallow sea. Alternation between marine and non-marine influence persisted throughout the remainder of deposition of the Latrobe Group and had great control on the distribution of petroleum system elements. Two formations are distinguished within the Golden Beach Subgroup: the marine Anemone Formation and the fluvial/paralic Chimaera Formation. The Anemone Formation consists predominantly of mudstones (shales) and fine-grained siliciclastics representing shallow to open marine deposition that prevailed in the eastern part of the basin (Bernecker & Partridge, 2001). The Chimaera Formation (formerly the Chimaera Sandstone of Lowry & Longley, 1991) is a non-marine succession that comprises coarse-grained alluvial/fluvial sediments as well as fine-grained floodplain deposits including some coals (Bernecker & Partridge, 2001). The formation has been intersected in wells near the Rosedale Fault System but is absent from the Northern Platform and Northern Terrace: the formation is found as far south as Omeo-1, -2A and Perch-1.

The Golden Beach Subgroup also contains several volcanic horizons that have been identified as Campanian. These volcanics, most prominently developed in the Kipper Field and in the Basker/Manta/Gummy area, terminate the Golden Beach Subgroup and signal another depositional hiatus represented by the Seahorse Unconformity. The time gap recorded by the Seahorse Unconformity is longest in Golden Beach West-1, where the Upper F. longus biozone directly overlies N. senectus sediments. Closer to the Rosedale Fault System, F. longus sediments overlie the Campanian volcanics (Bernecker & Partridge, 2001).

Halibut Subgroup

The Halibut Subgroup hosts the bulk of the hydrocarbons in the Gippsland Basin and comprises five formations that are distinguished according to their dominant depositional facies regimes. These formations document the changes from non-marine to marine environments in a west-east or onshore-offshore direction. The Barracouta Formation (revised and formalised by Hocking, 1976a) is characterised by fluvial claystones, siltstones and sandstones and minor coals and was deposited on an upper coastal plain. The Volador and Kingfish formations comprise the typical lower coastal plain coal-rich sediments and are separated by the Kate Shale (Partridge, 1999). The Kate Shale is a marine interval recognised at the Cretaceous/Cenozoic boundary. It is intersected in wells in the eastern portion of the offshore basin and is regarded as a good sealing lithology. The Mackerel Formation consists of nearshore marine sandstones, commonly typified by excellent reservoir qualities, with intercalated marine shales.

Sea-level fall in the early Eocene, driven by basin inversion, initiated a period of major canyon cutting during which parts of the lower coastal plain and the shelf were eroded. The array of submarine channels that developed has added a considerable complexity to seismic mapping, given that the major channels cut down hundreds of metres into the underlying strata. During subsequent transgression, the channels were filled with marine sediments (e.g. Flounder Formation) leading to the generation of potential stratigraphic hydrocarbon traps (Johnstone *et al*., 2001). The Marlin Unconformity highlights the major erosional event associated with channel incision, terminating deposition of the Halibut Subgroup.

Cobia Subgroup

The middle Eocene to early Oligocene Cobia Subgroup (formerly the Cobia Group of Thompson, 1986) comprises the coal-bearing lower coastal plain facies of the Burong Formation (Partridge, 1999) and the shallow to open marine Gurnard Formation (James & Evans, 1971). The Gurnard Formation is a condensed section composed of fine- to medium-grained glauconitic siliciclastics. Also included in the subgroup is the Turrum Formation (James & Evans, 1971) that consists of mid-Eocene marine channel-fill sediments. Deposition of the Cobia Subgroup ceased during the early Oligocene, as a consequence of a marked decline in sediment supply. Large areas of the central basin were left with starved or condensed sections, which led to the development of what is traditionally known as the 'Latrobe Unconformity' (Partridge, 1999). On seismic sections, this surface is expressed by a prominent reflector marking the boundary between siliciclastic and calcareous rocks. This reflector is commonly interpreted as a time-line, however, biostratigraphic data clearly indicates that the Latrobe Unconformity should be considered a composite of several, separate erosional events (Partridge, 1999).

Seaspray Group

The Seaspray Group consists of calcareous sediments that unconformably overlie the siliciclastics of the Latrobe Group. Subsequent to a change in ocean circulation along the southern Australian margin, the accumulation of marls and limestones began in the middle Eocene in the Eucla Basin, extended to the Otway Basin during the late Eocene, reaching the Gippsland Basin during the early Oligocene (Holdgate & Gallagher, 1997). Since then, cool-water carbonate production resulted in progradation of the shelf edge. In petroleum geological terms, the Seaspray Group, in particular the Lakes Entrance Formation, is considered a basin-wide, high quality regional top seal to the oil and gas accumulations at the top-Latrobe Group reservoirs.

Lakes Entrance Formation

The Lakes Entrance Formation is the lowermost unit of the Seaspray Group and is composed predominantly of calcareous mudstones, with some variation in composition across the basin. The recognition of major lateral facies changes has allowed the formation to be subdivided into separate onshore and offshore components.

Onshore, the Cunningham Greenstone Member, Giffard Sandstone Member, Colquhoun Sandstone Member, Seacombe Marl and the Metung Marl are identified as constituent units of the Lakes Entrance Formation (Hocking 1976a). The constituent formations of the onshore Seaspray Group have been divided into nine sequence stratigraphic units based on microfossil evidence (Holdgate & Gallagher, 1997). Offshore, four distinct units within the Seaspray Group are identified (Bernecker *et al.*, 1997) according to well-log character, lithological composition and depositional facies. 'Unit I', a hemipelagic fossiliferous mudstone, is equivalent to the onshore marly Lakes Entrance Formation (Bernecker *et al.*, 1997) and part of the offshore Lakes Entrance Formation (T. Bernecker pers. comm. Geoscience Australia, 2007). 'Unit I' of the Seaspray Group was formalised by establishing a new formation name, the Swordfish Formation (Partridge, 1999). The Swordfish Formation was identified by Partridge (1999) in a small number of wells in the Central Deep. For the purpose of this containment study, no attempt has been made to differentiate between the Lakes Entrance Formation and the Swordfish Formation. Perhaps that differentiation might be required for more detailed studies in the future.

Gippsland Limestone

The Gippsland Limestone is a thick sequence of marine carbonates comprised of fossiliferous limestones, marly limestones and marls which overlie the Lakes Entrance Formation in the offshore and onshore Gippsland Basin (Gallagher & Holdgate, 1996). There is a major increase in carbonate content from the Lakes Entrance Formation to the Gippsland Limestone (Holdgate & Gallagher, 2003). Onshore, the Gippsland Limestone is divided into members (Hocking, 1976b) that outcrop locally around the Baragwanath Anticline. The formation thickness onshore exceeds 500m (Gallagher & Holdgate, 1996), whilst offshore, may attain a thickness of more than 1500m (James & Evans, 1971). The Gippsland Limestone is early to middle Miocene in age (e.g. Hocking, 1976a). Marine carbonate trangressive and highstand systems tracts have been identified in the onshore Lake Wellington Depression through the integration of seismic, wireline log and micropalaeontological data (Gallagher & Holdgate, 1996; Holdgate & Gallagher, 1997).

Onshore, in the Lake Wellington and Seaspray Depressions, a marine sequence of middle Miocene to Pliocene aged sediments rests unconformably on the Gippsland Limestone. This sequence is comprised of the Wuk Wuk Marl, Bairnsdale Limestone, Tambo River Formation and Jemmys Point Formation.

3 Seal Analysis

The Lakes Entrance Formation provides the primary regional top seal for the majority of the hydrocarbon resources at the top of the Latrobe Group in the Gippsland Basin. The focus of this report study is on determining the Lakes Entrance Formation's seal potential at a basin scale; sealing potential is derived in part from an understanding of its characteristics (distribution, lithology, sedimentary facies, thickness, capillary properties) across the basin.

At the basin margins, particularly onshore where the Lakes Entrance Formation is absent, it is worthwhile investigating whether or not the overlying Gippsland Limestone may provide an adequate top seal. Although a complete analysis of the Gippsland Limestone is not yet completed, some initial results are presented in this report. As yet, there has been no attempt to map the distribution of the Gippsland Limestone, especially onshore, although the distribution of the Seaspray Group has been mapped previously (Gallagher & Holdgate, 1996).

A brief overview of Latrobe Group sealing units is included in this report as these units may contribute to the overall seal potential of the basin. Latrobe Group top seals: the Gurnard, Burong and Turum formations of the Cobia Subgroup and intraformational seals of the Halibut, Golden Beach and Emperor subgroups may act as important barriers or baffles to increase the length of the flow-path of injected supercritical CO_2. The lateral extent of most Latrobe Group seals is likely to be restricted and their containment potential is therefore probably poor at a regional scale. However, more widespread marine units such as the Kate Shale (Halibut Subgroup) are more likely to contribute to the overall sealing potential of the offshore Gippsland Basin.

3.1 Previous Work

Data relevant to the assessment of sealing process in the Gippsland Basin have been collected over the last forty years as part of petroleum exploration activity. In recent years, these investigations have focussed on evaluating the Lakes Entrance Formation for top seal potential and local Latrobe Group intra-formational seals as possible barriers/baffles to the flow of injected supercritical CO_2 in the Gippsland Basin.

Daniel (2005) completed a seal capacity study of the Gippsland Basin as part of the CO2CRC Latrobe Valley CO_2 Storage Assessment Program. A seal capacity study was produced to complement reservoir and other technical evaluations of the Gippsland Basin for the purpose of geological CO_2

storage (e.g. Root *et al.*, 2004; Gibson-Poole *et al.*, 2005; Gibson-Poole *et al.*, 2008).

Daniel (2005) determined column retention heights for CO_2 from Mercury Injection Capillary Pressure (MICP) analysis of 31 sealing lithology core samples from wells in the Central Deep of the Gippsland Basin. Top seal and intraformational sealing facies from the Latrobe Group were analysed. Core samples from the Lakes Entrance Formation regional top seal had CO_2 retention capacities ranging from 17 m for transgressive inner shelf facies to 1070 m for high-stand, outer shelf facies. Local top seals from the Cobia Subgroup had variable sealing capacities: the Gurnard Formation could retain only 0.2 m of CO_2 in Bream-2 but up to 723 m in Kingfish-9; the Turrum Formation in Wrasse-1, could retain a 670 m column of CO_2. Seal capacity values associated with the Latrobe Group intraformational seals of the Halibut Subgroup ranged from 52 m in the Kingfish Formation to 961 m in the Mackerel Formation. The areal extent of these seals is largely unknown, with the estimates based on the likely extent of the facies which the seals represented.

In 2008, GeoScience Victoria carried out an initial assessment of containment potential for the purpose of carbon capture and storage as part of a wider study of the petroleum systems in the Gippsland Basin (O'Brien *et al.*, 2008). Hydrocarbon and CO_2 column retention heights were determined for the Lakes Entrance Formation from 16 core samples taken from wells in both the onshore and offshore portions of the basin. The thickness, geometry and a simple facies map of the Lakes Entrance Formation regional top seal were used to infer seal capacity across the basin at, or as close as possible to, the base of the formation.

From thickness, distribution and MICP capacity data for the Lakes Entrance Formation O'Brien *et al.* (2008) determined the base top seal within the Central Deep to have excellent containment characteristics, with the capacity to withhold hundreds of metres of gas or CO_2. The flanking Northern and Southern terraces were found to have lesser, but still adequate containment, with the potential to withhold 50-100 m gas being proven on parts of the Northern Terrace. In contrast, the Northern and Southern platforms were considered to have very poor sealing characteristics; with sealing capacity decreasing to only 5 m of gas and 13 m of CO_2 at Groper-2. Onshore, within the Lake Wellington and Seaspray depressions the relatively thick top seal was considered to offer good containment. However, outside these areas, the Lakes Entrance Formation onshore was found to have generally poor MICP characteristics and therefore, inadequate containment.

In the early 1990s, Petrofina conducted, as part of their petroleum exploration program in the eastern offshore Gippsland Basin, an evaluation of Latrobe Group intra-formational sealing lithologies. An assessment of the Late Cretaceous Golden Beach Subgroup and the Volador Formation of the Halibut Subgroup aimed to quantify seal capacity through MICP analysis of core and cuttings samples from six wells (Martin, 1992). In a separate report, the most effective sealing lithologies and facies were identified in an effort to better understand the occurrence of hydrocarbons in the eastern offshore Gippsland Basin (Jalfin, 1994). Offshore shale facies were found to have very high sealing capacities, with the ability to retain hydrocarbon columns of around 1300 m. Lower shoreface facies had lesser capacities of 110 m, perhaps due to associated textural variations (Jalfin, 1994). The offshore shale facies were found to be much thicker and widely distributed than paludal and floodplain facies. Ductility tests revealed that the interstratified brittle and ductile rocks of lagoon/paludal facies could prove to be a major risk to seal integrity (Jalfin, 1994).

Over the last three decades, numerous airborne and ground surveys were conducted to detect hydrocarbon leakage or seepage in the offshore and onshore Gippsland Basin. The results obtained from these surveys are relevant to the assessment of containment potential as hydrocarbon seeps are unequivocal indicators of a failing top seal.

3.2 Seal Thickness and Geometry

Lakes Entrance Formation

Initially, a review of Lakes Entrance Formation tops was completed in order to ascertain formation thicknesses (see Appendix 1). A previous GeoScience Victoria compilation of formation tops from 155 wells in the offshore Gippsland Basin provided the basis for this review. The top of the Lakes Entrance Formation was refined in 43 of these wells. Some were reviewed because well tops and formation thicknesses in adjacent wells where inconsistent although structural data and well completion report information suggested no reason for large differences. In other wells, channel bases were erroneously identified as the top of the Lakes Entrance Formation, and in some, formation thicknesses were unreasonable [i.e. too thick for average accumulation rates (see Bernecker *et al*, 1997)]. The top of the Lakes Entrance Formation was then identified or compiled for an additional 111 wells. Well completion report lithology descriptions and wireline logs were used to determine the presence/absence of the formation onshore. In some areas onshore, the base of the Lakes Entrance Formation is considered a reservoir rather than a seal (e.g. the Lakes Entrance Platform). In this area, it is therefore likely that true seal thickness may be less than the formation thickness and that further review may be warranted.

In general, the thickness of the regional seal increases from the onshore to the offshore portion of the Gippsland Basin (Figure 3.1). Onshore, the thickness of the Lakes Entrance Formation ranges between 19 and 176 m; it is thickest in the Lake Wellington and Seaspray depressions. Relative to the onshore, the average thickness of the Lakes Entrance Formation is increased nearshore and on the southern and northern platforms offshore. The formation attains its greatest thickness in the offshore Central Deep, reaching a maximum of 430 m; it is thinner on the flanking Southern and Northern terraces. In general, the Lakes Entrance Formation is between 100 to 200 m thick over the north-western gas fields (i.e. Barracouta, Snapper and Turrum) and 200 to 300 m thick over the eastern fields (i.e. Tuna, East Pilchard, Basker and Gummy) and the south-eastern oil fields (i.e. Kingfish, Fortescue, Cobia, Halibut and Blackback).

The depth to the base of the Lakes Entrance Formation increases from the onshore to the offshore (see Figure 3.1 for top Latrobe Group structure map and Figure 3.2 for base Lakes Entrance Formation contours). In the Central Deep, the base of the Lakes Entrance Formation occurs at approximately 2,000 to 3,500 m sub-sea, whereas towards the margin of the Gippsland Basin, depths of 500-1,000 m are typical. Onshore, where the Lakes Entrance Formation is thinnest, the depths decrease to less than 400 m. The depth to the base of the regional top seal is considered significant as it is regarded that for CO_2 to remain in supercritical phase, it is necessary to inject at depths greater than 800m (e.g. van der Meer, 1992; Holloway & Savage, 1993). However, Bachu (2003), for example, notes that the depth at which supercritical conditions are met may vary significantly depending on surface temperature and geothermal gradients.

In the current study, the marine facies present at the level of the basal Lakes Entrance Formation were identified from well completion reports. A simple representation of the basal Lakes Entrance Formation facies is presented in Figure 3.2. Overall, these facies are broadly similar to those proposed by Bernecker *et al*. (1997) and Gibson-Poole & Svendsen (2005).

Latrobe Group

Gurnard Formation

The Gurnard Formation underlies the Lakes Entrance Formation in some areas of the Gippsland Basin and acts as a top seal for several giant fields in the Central Deep. The thickness and distribution of the Gurnard Formation are highly variable. Partridge (1999) noted that ‘The (Gurnard) Formation is generally not present or very thin over most of the eroded topographic highs of Blackback/Terakihi, Kingfish, Mackerel, Halibut/Cobia/Fortescue and Marlin’. The western limit of the Gurnard Formation is roughly aligned with the current day shoreline in an arc to the west of the Barracouta field. Partridge (1999) reported a minimum thickness of 7m in Moray-1 and a maximum of 78m in Bullseye-1.

Intra-formational seals

There are several intra-formational sealing units within the deeper Latrobe Group, which include floodplain sediments deposited in upper and lower coastal plain environments, as well as lagoonal to offshore marine shales. These local seals are commonly thin and mostly occur within stacked sandstone/mudstone successions. Other effective seals are formed by several distinct volcanic horizons of Campanian to Paleocene age; these are often less than 50 metres thick, although they are known to exceed 100 m at the Kipper field. Excellent Latrobe Group intra-formational seals include the Turonian Kipper Shale and the late Maastrichtian to early Paleocene Kate Shale (Bernecker & Partridge, 2001). The Kipper Shale accumulated in shallow to deep-water lacustrine environments and is widespread in its distribution. It covers the offshore portion of the basin between the basin-bounding faults and its thickness exceeds 500 m in Kipper-1 (Bernecker & Partridge, 2001). In contrast, the shelfal marine Kate Shale is limited in extent (Figure 3.3), with its principal depocentre located around the Halibut and Flounder fields (Bernecker & Partridge, 2005). The Kate Shale reaches its maximum thickness around and underneath the oil fields, which dominate the Central Deep. The thickest intersection of the sequence is 120 m at Trumpeter-1.

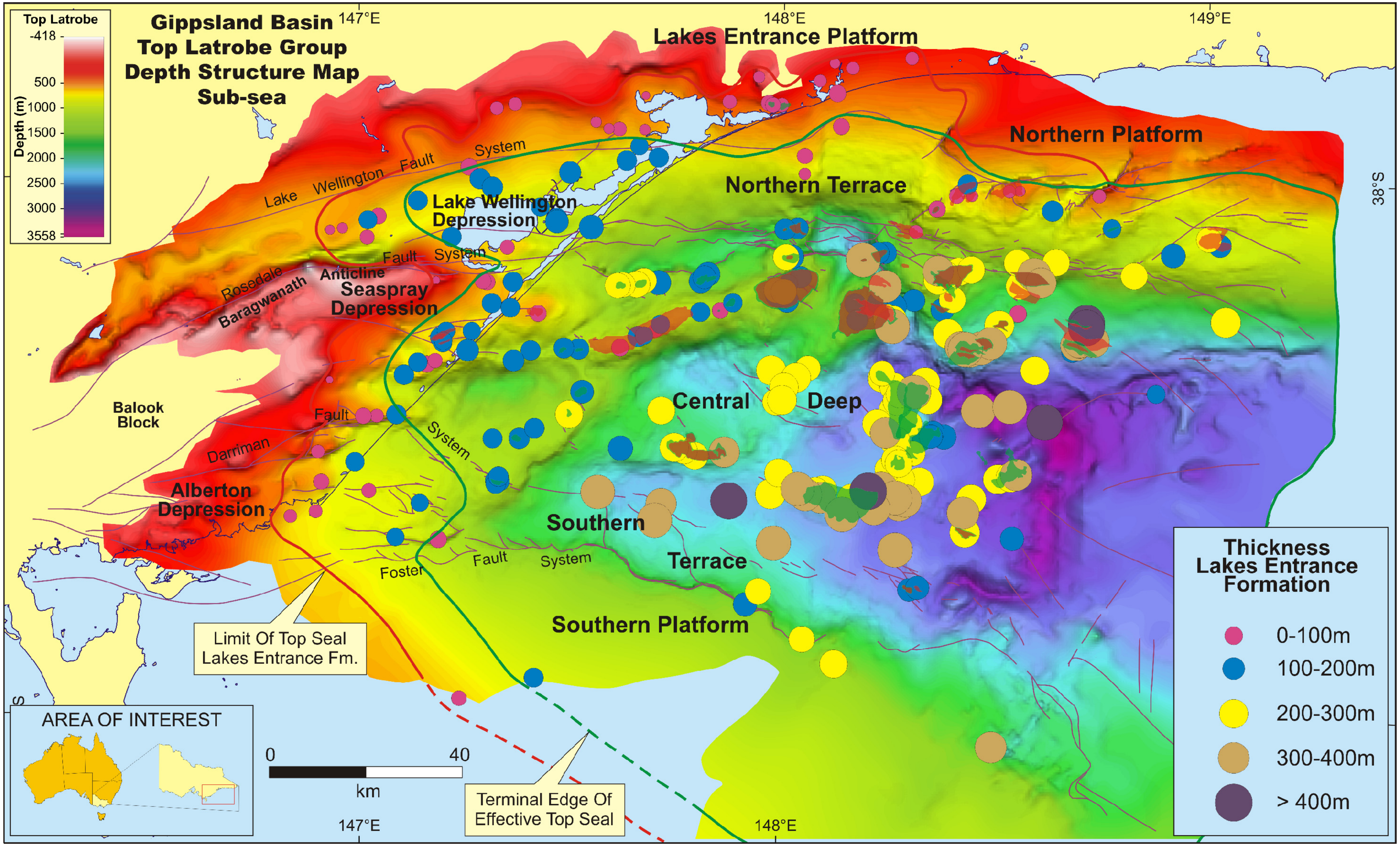


Figure 3.1 *Lakes Entrance Formation thickness and top of Latrobe Group depth structure map.*

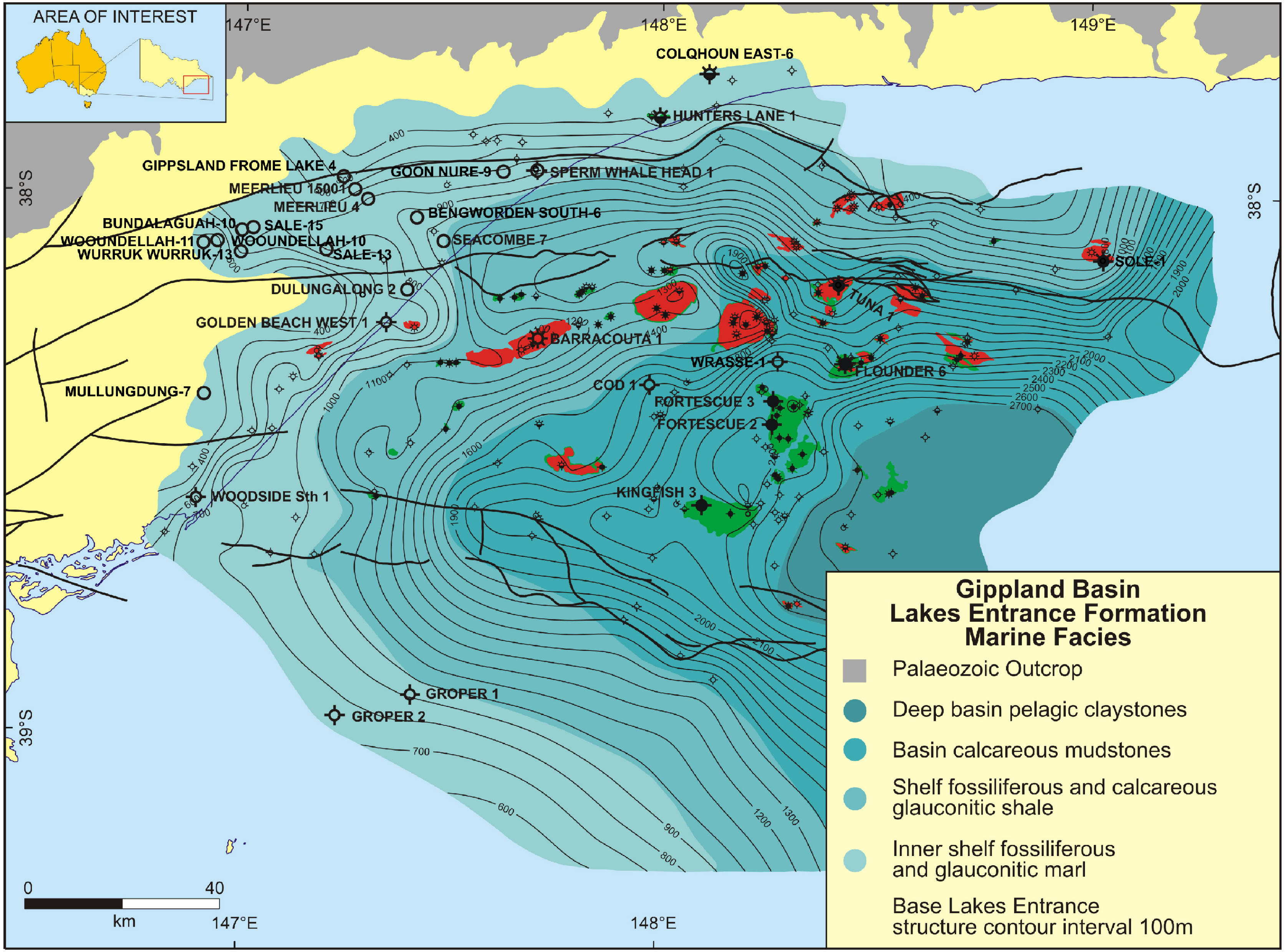


Figure 3.2 *Sedimentary facies identified at the base of the marine Lakes Entrance Formation.*

3.3 Mercury Injection Capillary Pressure (MICP) Analysis

Maximum column retention capacities for oil, gas and CO_2 are routinely derived from Mercury Injection Capillary Pressure (MICP) analysis of sealing lithologies. The maximum column height that can be contained by a seal is called the seal capacity and is an important factor in the evaluation of seal potential for the geosequestration of carbon dioxide (Kaldi & Atkinson, 1997). As part of the present study, 37 samples were submitted to ACS Laboratories in Perth for MICP analysis (see Appendix 2 for threshold pressure data tables and charts). Maximum column retention capacities for oil and gas were determined using standard ACS methodologies. CO_2 retention capacities were determined after the method outlined in Daniel (2005). See Appendix 3 for the table of values used for CO_2 column height calculation. As it is not routine for exploration companies to acquire conventional cores within sealing lithologies such as the Lakes Entrance Formation, the number of suitable core samples was limited. Samples were chosen close to the base of the formation; otherwise, samples were selected as near as possible to the base of the available cored interval. In onshore locations where suitable lithologies within the Lakes Entrance Formation were not available, samples from the Gippsland Limestone were chosen.

Early in 2008, MICP data from 16 core samples were analysed and interpreted (O'Brien *et al.*, 2008). An additional 21 samples were acquired subsequently, significantly increasing the database of MICP values available for the onshore and offshore Gippsland Basin. In Table 3.1, newly acquired results are highlighted. In total, 31 samples of the Lakes Entrance Formation were taken from 26 wells, 2 samples from the underlying Gurnard Formation, and 4 samples from the overlying Gippsland Limestone.

3.4 Seal Capacity Results

The seal capacity results for the Lakes Entrance Formation, Gurnard Formation and Gippsland Limestone are best summarised in Figures 3.4, 3.5 and 3.6. The seal capacity in the offshore Central Deep is excellent. Column heights for gas in this area range from 185 m in Tuna-1 to 751 m in Wrasse-1. For CO_2, column heights range from 250 m in Barracouta-1 to 947 m in Wrasse-1. Sealing capacity on the offshore Southern Platform was previously reported as poor, based on MICP results from the base of the Lakes Entrance Formation in Groper-1 and Groper-2 (O'Brien *et al.*, 2008). A new result from further up-section in Groper-1 (287 m of gas and 246 m of CO_2) elevates the potential of the regional seal on the southern flank. In the onshore Lake Wellington Depression, the seal capacity varies from excellent (377 m of gas and 306 m of CO_2) where the Lakes Entrance Formation is thickest in the central portion of the depression, to poor (5 m of gas and 4 m of CO_2) at the margin near the terminal edge of the seal. Moderately effective seal capacity is characteristic of the onshore Seaspray Depression and the offshore Northern Terrace. The Alberton Depression appears to have poor sealing capacity (3 m of gas and 6 m of CO_2 in Woodside South-1). The Lakes Entrance Platform also has poor sealing capacity, although one result from Colquhoun East-6 of 123 m of gas and 164 m of CO_2 is an exception. Sealing capacity results are discussed in more detail in Section 4 of this report.

Lakes Entrance Formation

Seal capacity values for the Lakes Entrance Formation are greatest in the Central Deep, where the formation generally attains its maximum thickness and is at its greatest down-hole depths. The relationships between MICP capacity of the Lakes Entrance Formation and its thickness, and MICP capacity and the depth of the Lakes Entrance Formation are presented in Figures 3.7 and 3.8 respectively. There is a strong positive relationship between potential column height and the thickness of the regional seal. Offshore, where the seal is thicker, its retention capacity is high. In contrast, in marginal parts of the basin the thickness of the Lakes Entrance Formation decreases and retention capacity tends to decrease (Figure 3.7). The positive relationship between depth and retention capacity (Figure 3.8) is probably due to the fact that the Lakes Entrance Formation was deposited in an early post-rift setting, where it progressively filled the palaeo-topographic lows. The strong relationship between the thickness of the Lakes Entrance Formation and the depth of the top Latrobe Group surface is evident from Figure 3.1.

Gippsland Limestone

Samples of the Gippsland Limestone were selected for MICP analysis where no suitable samples of the Lakes Entrance Formation were available or where the regional seal was absent. The four samples tested to date were all from wells in the western Lake Wellington Depression. Seal capacities for hydrocarbons and CO_2 from Wooundellah-10 and Wooundellah-11 at a depth of 389 m are poor (see Table 1). Retention capacities of the Gippsland Limestone at greater depths, 599 m in Bundalaguah-10 and 628 m in Sale-15 are moderate, with respective column heights for CO_2 of 41 m and 53 m. A more complete assessment of the sealing capacity of the Gippsland Limestone may be possible, as a limited selection of core samples from onshore and offshore wells remain available for analysis.

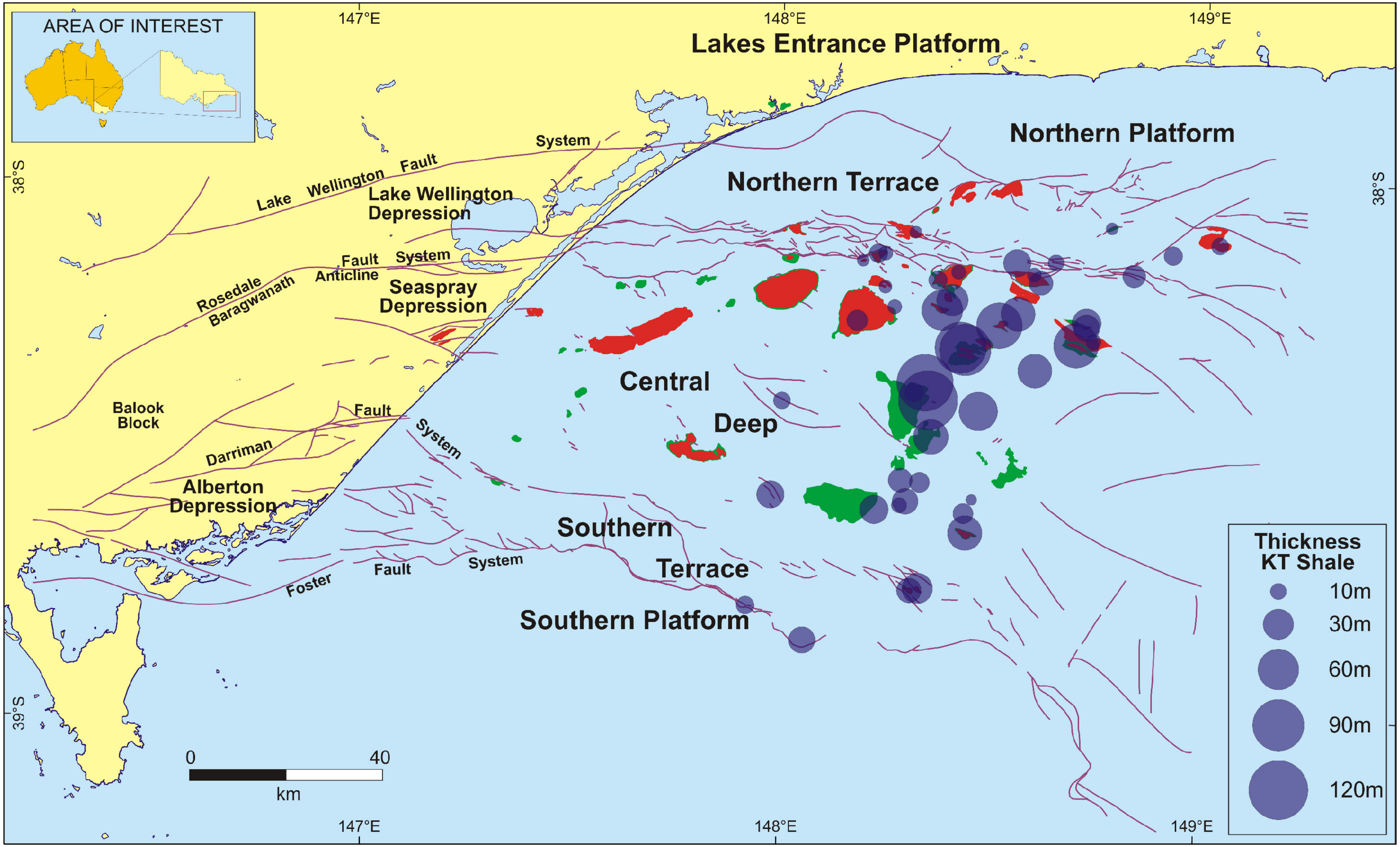


Figure 3.3 *Thickness of the Kate Shale (as derived from well data).*

Table 3.1 *Supportable column heights for Gippsland Basin samples, based upon MICP results. The majority of samples were taken from Lakes Entrance Formation intervals with the following exceptions: *Gurnard Formation **Gippsland Limestone. Shaded samples from O'Brien et al., 2008.*

WELL	SAMPLE DEPTH (m)	LEF THICKNESS (m)	LOCATION	FACIES	LITHOLOGY	COMMENT	COLUMN HEIGHT (m)		
							GAS	OIL	CO_2
Barracouta-1	1021.95	114	Central Deep	Shelf	Calcareous shale, fossiliferous, glauconitic, indurated	33m above gas column	207	334	250
Bengworden South-6	914.9	157	Lake Wellington Depression	Inner Shelf	Fossiliferous marl, silty, soft	52m above base of LEF	302	486	282
Bundalaguah-10**	599.8	134	Lake Wellington Depression	-	Fossiliferous marl, indurated	Gippsland Limestone 40m above top LEF	10	16	41
Cod-1	1711.89	285	Central Deep	Basin	Fossiliferous calcareous shale, fissile and brittle	171m above base of LEF	433	696	683
Colquhoun East-6	180.7	35	Lakes Entrance Platform	Inner Shelf	Calcareous siltstone, glauconitic, well indurated	Base of the Metung Marl Member	123	198	164
Dulungalong-2	478.1	85	Seaspray Depression	Inner Shelf	Fossiliferous marl, friable to indurated	47m above base of LEF	69	110	78
Flounder-6	1929.38	394	Central Deep	Basin	Calcareous mudstone, indurated	3m above gas	207	334	460
Fortescue-2	2420	252	Central Deep	Basin	Calcareous mudstone, well indurated	Base of LEF	328	311	425
Fortescue-2*	2430	-	Central Deep	-	Glauconitic calcareous mudstone, well indurated	Gurnard Formation 10m below base of LEF	193	528	303
Fortescue-3	2411.50	252	Central Deep	Basin	Calcareous mudstone, well indurated	1m above base of LEF	437	702	641
Gippsland Frome Lakes-4	503.5	95	Lake Wellington Depression	Inner Shelf	Marl, silty and glauconitic, friable	23m above base of LEF	17	28	18
Gippsland Frome Lakes-4	506.6	95	Lake Wellington Depression	Inner Shelf	Marl, glauconitic, friable	20m above base of LEF	93	150	120
Golden Beach West-1	667.68	119	Seaspray Depression	Inner Shelf	Fossiliferous silty marl, slightly glauconitic, friable to indurated	27m above base of LEF	22	35	87
Goon Nure-9	726.3	129	Lake Wellington Depression	Inner Shelf	Marl, indurated	21m above base of LEF	251	404	213
Groper-1	909.15	123	Southern Platform	Inner Shelf	Calcareous mudstone, indurated	22m above base of LEF	287	461	246
Groper-1	926.10	123	Southern Platform	Inner Shelf	Glauconitic mudstone, calcareous, fossiliferous, friable	5m above base LEF	30	49	29
Groper-1*	932.00	-	Southern Platform	-	Glauconitic sandstone, indurated	Gurnard Formation 1m below base LEF	19	30	24
Groper-2	747.86	73	Southern Platform	Inner Shelf	Glauconitic mudstone, calcareous, fossiliferous, friable to indurated	13m above base of LEF	5	8	13
Hunters Lane-1	377.00	76	Lakes Entrance Platform	Inner Shelf	Fossiliferous bioturbated mudstone, glauconitic, micaceous, friable	34m above granodiorite basement	6	10	18

WELL	SAMPLE DEPTH (m)	LEF THICKNESS (m)	LOCATION	FACIES	LITHOLOGY	COMMENT	COLUMN HEIGHT (m)		
							GAS	OIL	CO_2
Kingfish-3	2143.05	264	Central Deep	Basin	Calcareous mudstone, indurated	101m above base of LEF	207	334	463
Meerlieu-4	722	141	Lake Wellington Depression	Inner Shelf	Fossiliferous silty marl, slightly glauconitic, friable to indurated	38m below top of LEF	222	358	186
Meerlieu-4	769	141	Lake Wellington Depression	Inner Shelf	Marl, friable to indurated	56m above base of LEF	331	532	301
Meerlieu-15001	699.9	140	Lake Wellington Depression	Inner Shelf	Fossiliferous silty marl, slightly glauconitic, friable to indurated	20m above base of LEF	74	119	95
Mullungdung-7	363	17	Seaspray Depression	Inner Shelf	Marl, fossiliferous, glauconitic, silty, friable	2m above base of LEF	5	9	12
Sale-13	748.1	125	Lake Wellington Depression	Inner Shelf	Marl, slightly fossiliferous and glauconitic, indurated	64m above base of LEF	174	279	172
Sale-13	795.6	125	Lake Wellington Depression	Inner Shelf	Glauconitic marl, indurated	16m above base of LEF	214	343	170
Sale-15**	628.6	85	Lake Wellington Depression	-	Fossiliferous marl, friable	Gippsland Limestone 31m above top of LEF	57	91	53
Seacombe-7	947.6	176	Lake Wellington Depression	Inner Shelf	Marl, friable to indurated	91m above base of LEF	377	607	306
Sole-1	805.9	170	Northern Terrace	Shelf	Fossiliferous marl, glauconitic, sandy	4m above gas column	32	52	54
Sperm Whale Head-1	653.8	127	Lake Wellington Depression	Inner Shelf	Marl, friable to indurated	11m below top of LEF	230	370	196
Sperm Whale Head-1	718.1	127	Lake Wellington Depression	Inner Shelf	Marl, friable to indurated	51m above base of LEF	316	509	285
Tuna-1	1160.00	259	Central Deep	Basin	Calcareous mudstone, indurated	151m above gas column	185	298	289
Woodside South-1	522.12	80	Alberton Depression	Inner Shelf	Fossiliferous marl, soft and friable	70m above base of LEF; 10m from top of LEF	3	5	6
Wooundellah-10**	389.3	-	Lake Wellington Depression	-	Fossiliferous silty marl, soft and friable	Gippsland Limestone	5	8	4
Wooundellah-11**	389	-	Lake Wellington Depression	-	Marl, fossiliferous, glauconitic, silty, friable	Gippsland Limestone	8	12	11
Wrasse-1	2589.89	249	Central Deep	Basin	Calcareous mudstone, indurated	140m above base of LEF	751	1207	947
Wurruk Wurruk-13	584.9	137	Lake Wellington Depression	Inner Shelf	Marl, fossiliferous, glauconitic, silty, friable	40m below top of LEF	19	30	21

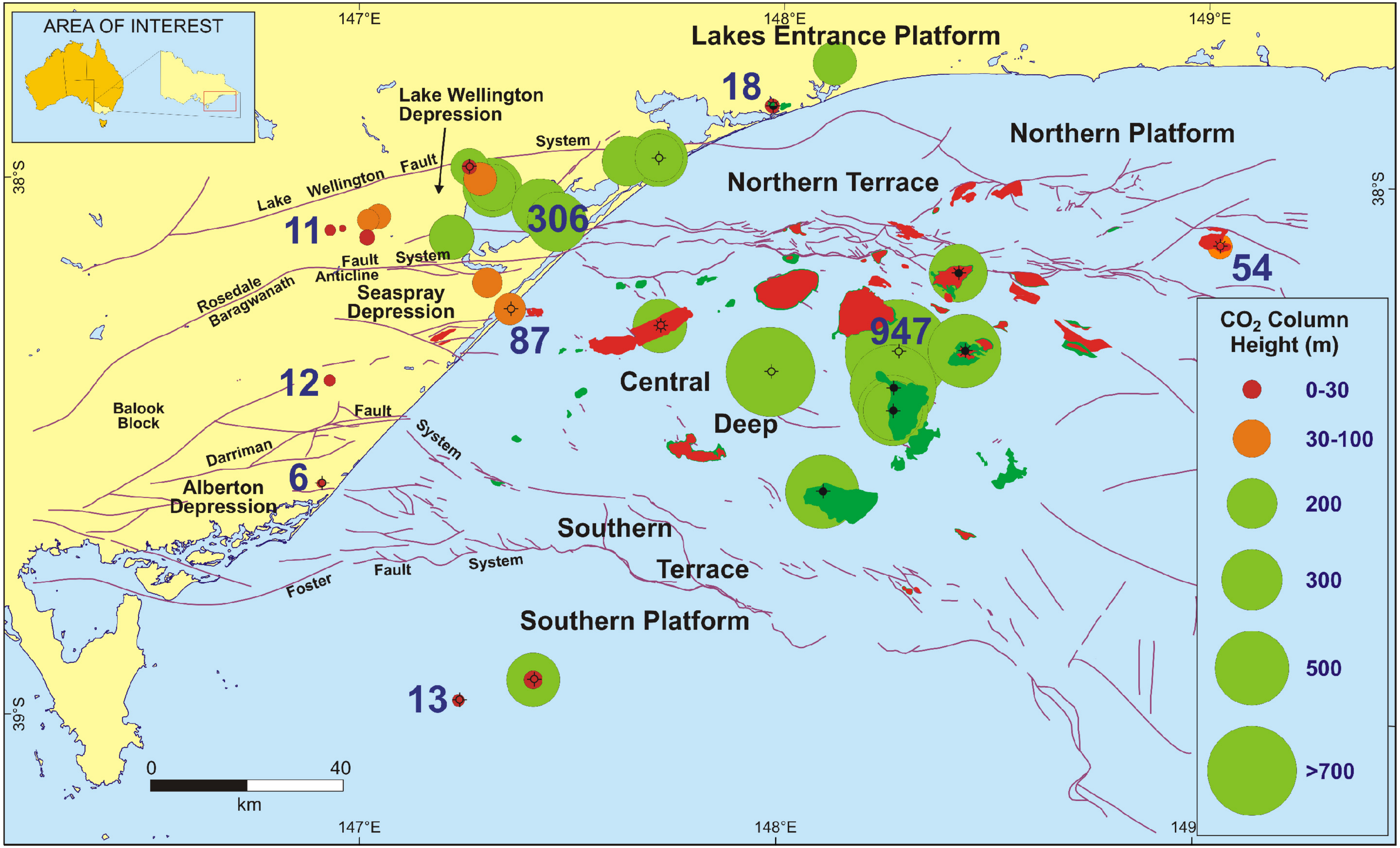


Figure 3.4 Retention capacities for CO_2: Combined results from the Gurnard Formation, Lakes Entrance Formation and Gippsland Limestone.

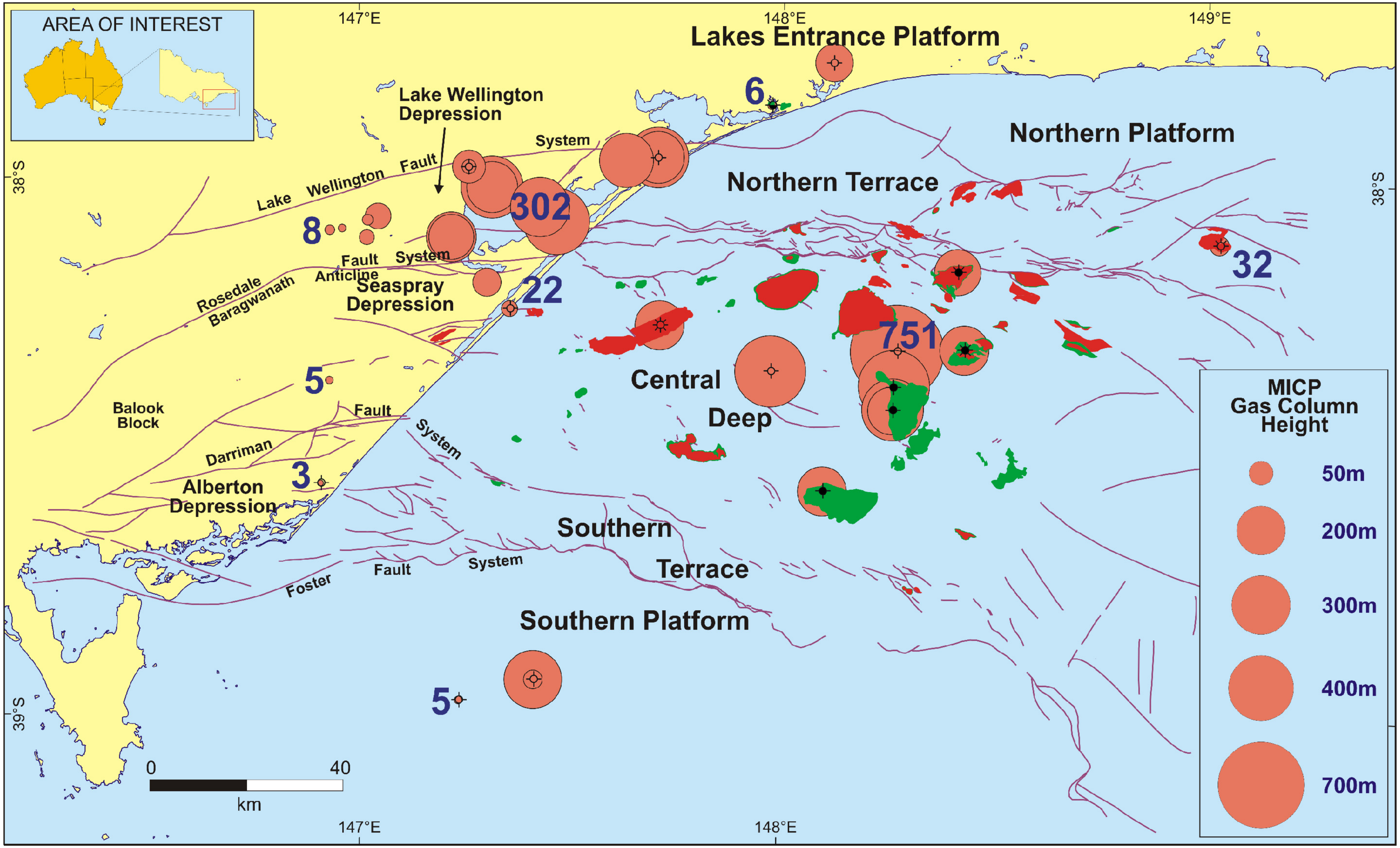


Figure 3.5 *Retention capacities for gas: Combined results from the Gurnard Formation, Lakes Entrance Formation and Gippsland Limestone.*

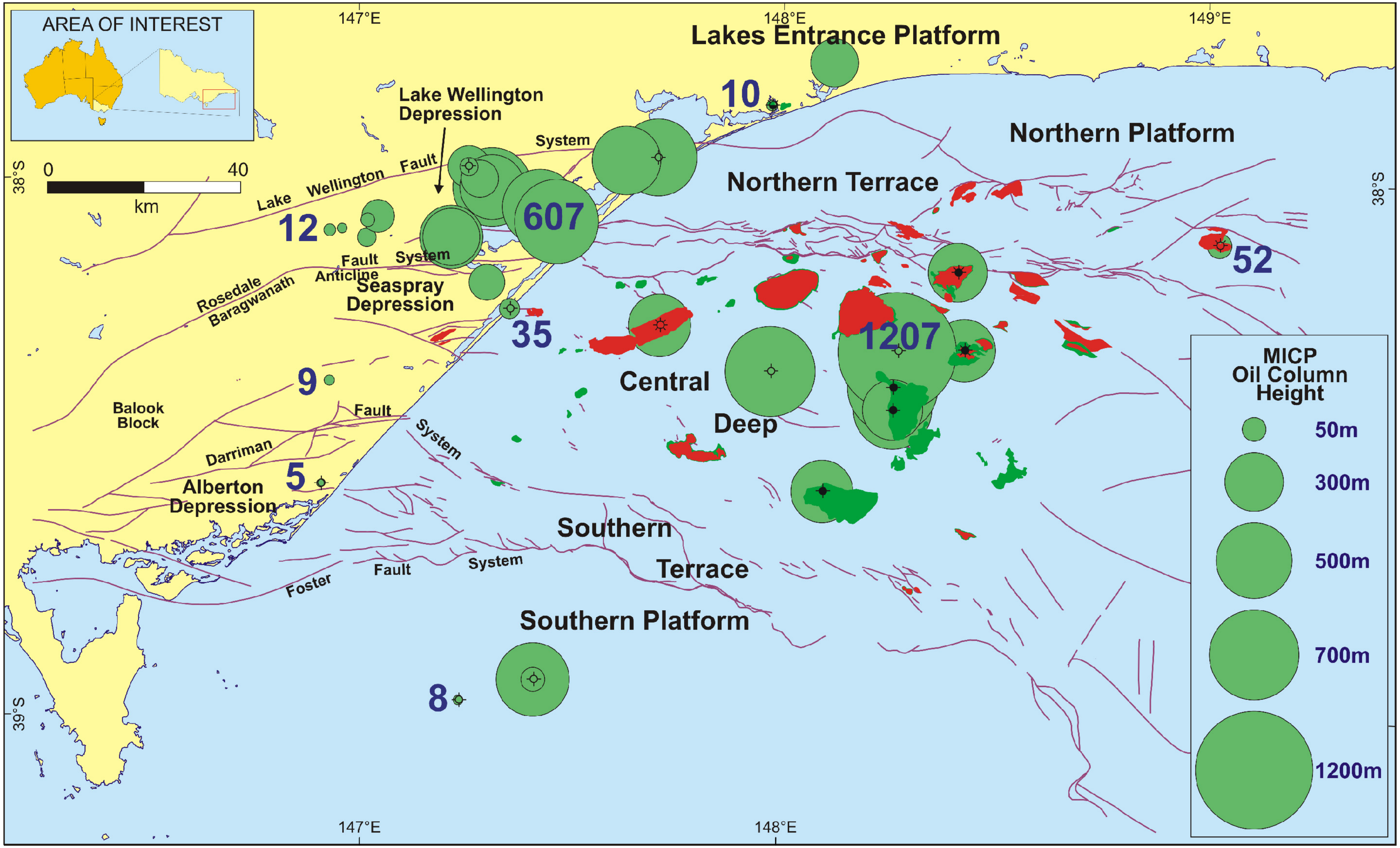


Figure 3.6 *Retention capacities for oil: Combined results from the Gurnard Formation, Lakes Entrance Formation and Gippsland Limestone.*

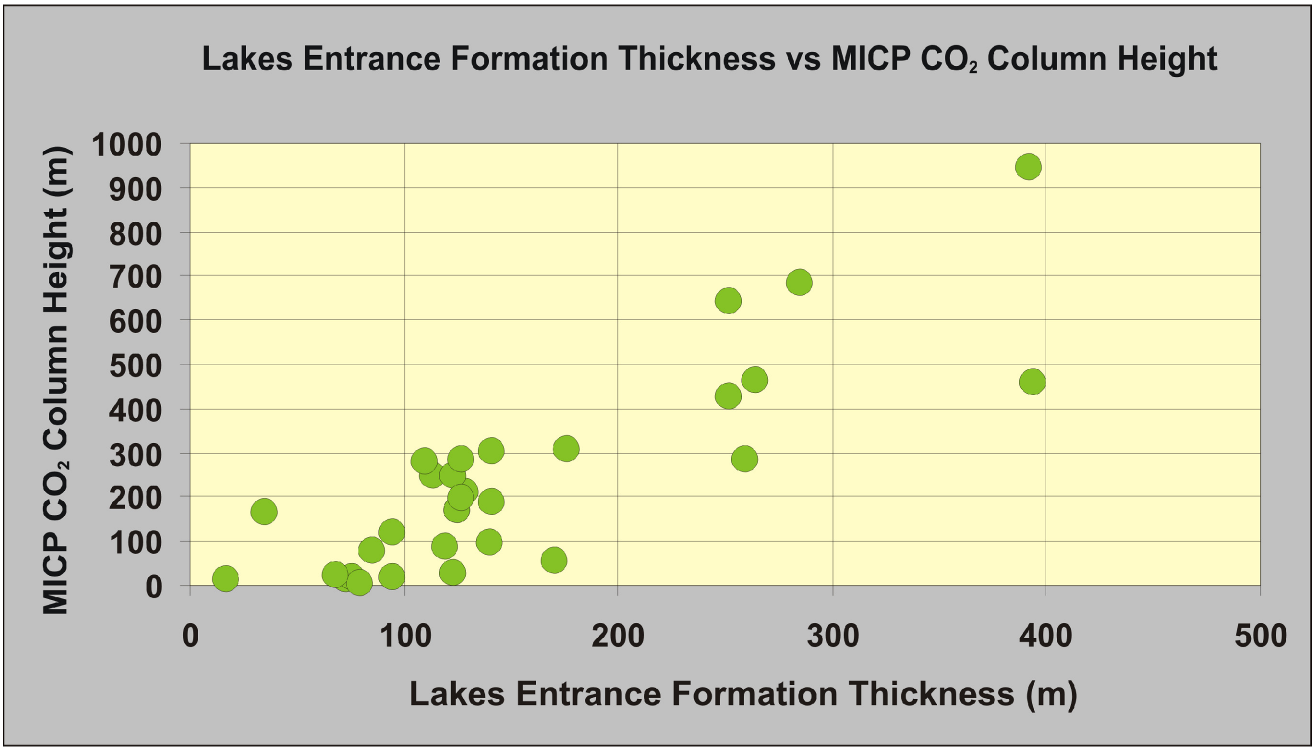


Figure 3.7 *Relationship between the thickness of the Lakes Entrance Formation and its MICP retention capacity.*

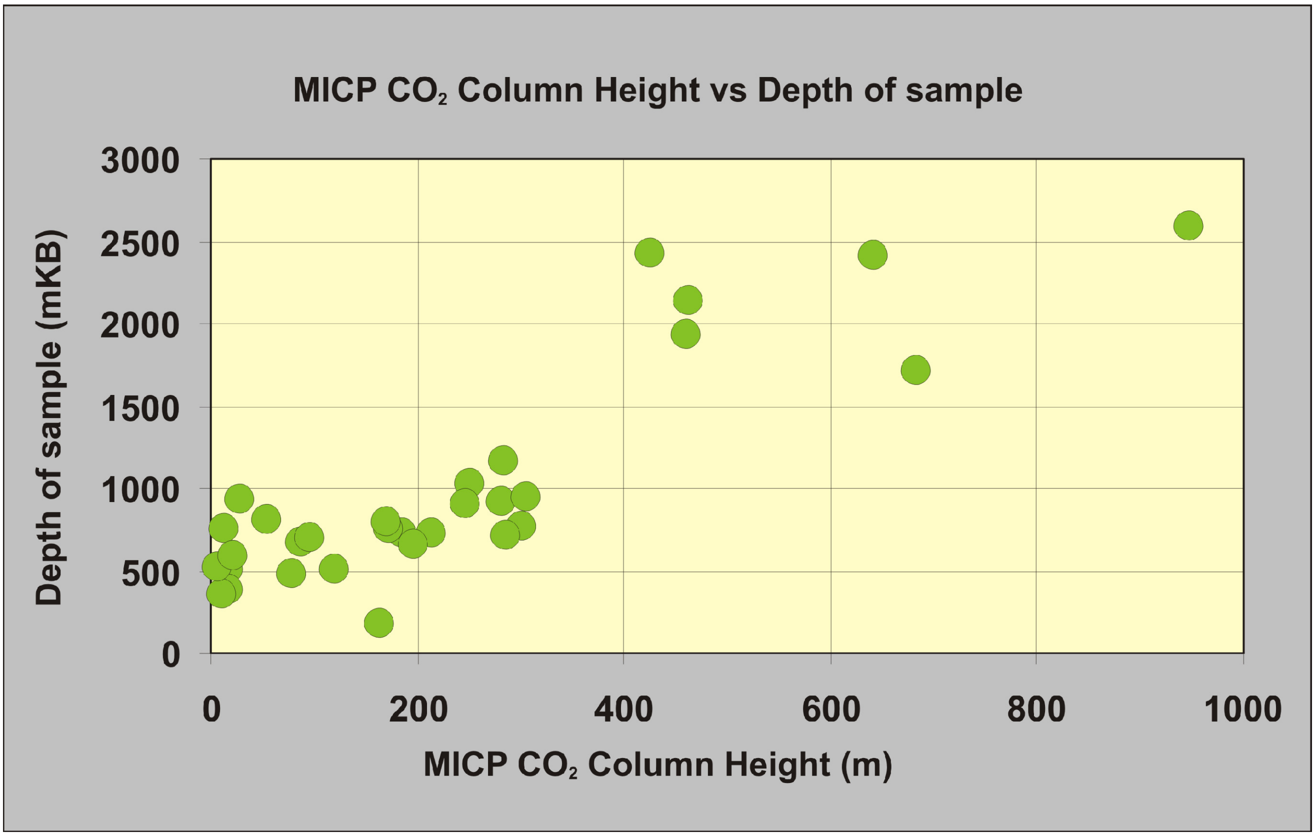


Figure 3.8 *Relationship between the depth of the Lakes Entrance Formation and its MICP retention capacity.*

Latrobe Group

Gurnard Formation

Previously, MICP results measured by Daniel (2005) illustrate the variability of the seal capacity of the Gurnard Formation (from a retention column height of 723 m CO_2 in Kingfish-9 to 0.19 m and 40 m respectively in Bream-2 and Fortescue-2). A result from further up-sequence in Fortescue-2 at 2430m (see Table 1) of a retention capacity of 193 m for gas and 303 m for CO_2 suggests that seal capacity increases up the vertical succession. However, a low CO_2 retention column height (24 m) is recorded at the top of the Gurnard Formation in Groper-1 (see Table 3.1), on the Southern Platform.

Intra-formational seals

Daniel (2005) and Gibson-Poole *et al*. (2008) have demonstrated that intra-formational seals can locally hold back hundreds of metres of CO_2 (see Figure 3.9). However, whilst their seal capacities can be high, the laterally discontinuous nature of these intra-Latrobe seals probably produces a substantial decrease in their seal potential at a regional scale. If MICP results below 100 m capacity are discounted in Figure 3.9, the overall trend is for the CO_2 column heights to increase as the depth decreases, (i.e. the capacities of the Latrobe Group seals are better at shallower depths); possible facies variations may control this trend.

The predominance of hydrocarbon discoveries at the base of the regional seal testifies to the overall ineffectiveness of the intra-Latrobe sealing system at a basin scale. Similarly, the combination of the variation in the seal capacity and the patchy geographic distribution of the Gurnard Formation suggest that the Lakes Entrance Formation will provide the ultimate regional barrier to the migration of hydrocarbons or injected fluids such as CO_2.

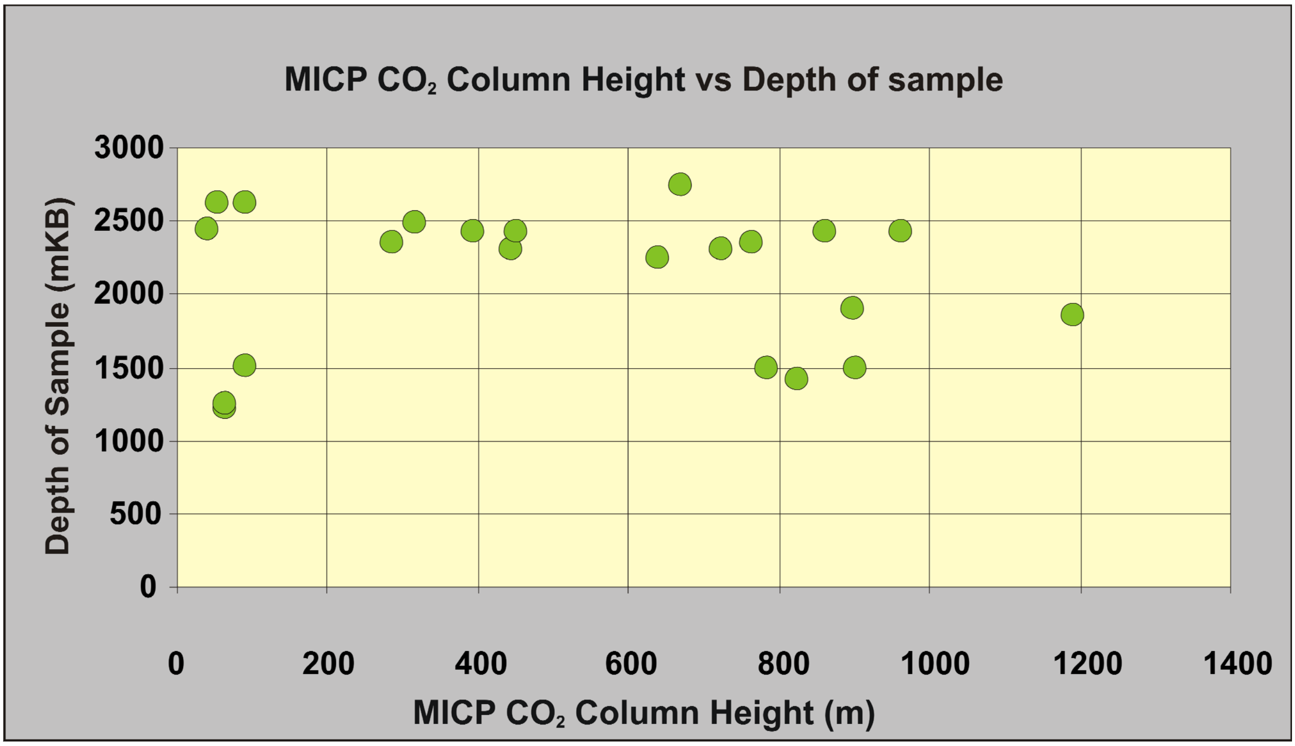


Figure 3.9 *Relationship between the depth of Latrobe Group seals and their MICP retention capacity.*

4 Containment Evaluation

The interpreted effective seal potential of the regional top seal in the Gippsland Basin is summarised in Figure 4.1.

The seal potential appears to be excellent over the offshore Central Deep, the western Northern Terrace and the onshore Lake Wellington Depression. The sealing capacities for CO_2 and gas recorded from 22 wells in these areas is high (i.e. column heights of greater than 150 m) and the depth to the top seal is 800 m or greater. The number of samples available for analysis is greatest in these two areas of the basin. Sealing potential on the Southern Terrace and most of the Southern Platform appears to be very good. Although few seal capacity results are available, values from Groper-1 indicate excellent capacity. The depth to the top seal is again greater than 800 m. The evaluation of this area cannot however be regarded as excellent because the spread of available data is insufficient to make such an assessment. Seal potential is regarded as good where the capacity of the Lakes Entrance Formation is likely to be effective yet is variable (i.e. 50-200 m column heights), and the base of the seal is intersected around 800 m. The seal is considered moderately effective in the Seaspray Depression and a small portion of the offshore Central Deep over the Golden Beach field and surrounds. In this area the base of the seal is intersected above 800 m and the sealing capacity column heights are less than 100 m. The seal is either absent or has poor sealing potential on the offshore Northern Platform and the onshore Lakes Entrance Platform; and the Baragwanath Anticline onshore between the Lake Wellington and Seaspray depressions. The western-most Seaspray Depression, Alberton Depression and the southern margin of the offshore Southern Platform are also considered to have poor sealing potential due to low capacities and shallow top seal depths. In general, seal capacity decreases towards the basin margin and the limit that is currently the best estimate of the terminal edge of effective top seal.

4.1 Offshore Gippsland Basin

Central Deep

In terms of both the thickness and capacity of the regional top seal, containment characteristics for both hydrocarbons and CO_2 within the Central Deep appear to be excellent. However, the formation thins towards the onshore so that at Golden Beach-1 the thickness of the regional seal is reduced to less than 100 m thick. Between the Barracouta and Golden Beach fields, the depth at the base of the Lakes Entrance Formation shallows to less than 800 m. A possible explanation for the reduction in seal potential at the western extremity of the offshore Central Deep is discussed here with reference to palaeocharge histories, a migration model, seismic imagery and trap closure/hydrocarbon column heights.

The Lakes Entrance Formation within the Central Deep has a retention capacity of several hundred metres of oil and CO_2 and approximately 200 - 750 m of gas (see Figures 3.4, 3.5 and 3.6). Samples taken from near the base of the Lakes Entrance Formation in Wrasse-1, Flounder-6 and Fortescue-3 have large hydrocarbon and CO_2 column retention heights, as do samples analysed from slightly shallower depths within the Lakes Entrance Formation in Barracouta-1, Cod-1, Kingfish-3 and Tuna-1. These results are consistent with those of Daniel (2005). There are, however, variations in the retention capacities within the Central Deep that could be due to subtle variations in facies and lithologies. In addition, at a greater depth the Lakes Entrance Formation can withhold greater column heights. For example, the deepest sample from 2,589 m in Wrasse-1 in the Central Deep can contain 947 m of CO_2 and 751 m of gas, whereas 250 m of CO_2 and 204 m of gas can be contained at a depth of 1021 m in Barracouta-1.
The MICP results indicate that the top seal capacity of the Lakes Entrance formation is excellent in the Central Deep. Moreover, the fact that numerous large gas and oil accumulations occur at top-Latrobe Group level, immediately beneath the regional top seal, also suggests that the Lakes Entrance Formation is an effective top seal, as confirmed by the MICP data.

This interpretation is supported by a general lack of leakage and seepage indicators in the region and by recent charge history work. Two AGSO (Geoscience Australia) water column geochemical sniffer surveys that traversed the Kingfish field failed to detect any anomalous zones. Furthermore, QGF and QGF-E analysis of the Kingfish oilfield has revealed that the charge history of this trap is relatively simple and that there is no evidence that Kingfish wells have ever had a palaeo-gas cap (Figure 4.2). It appears, therefore, that the Kingfish field was filled with an oil charge that has remained in place until the present day. The combination of the oil-prone charge history for Kingfish and the very high top seal capacities described here suggest that the reason that the central oil fields are in fact oil-filled and not gas-charged is simply due to the inherent nature of the charge into the traps. This rules-out the active seepage of gas from Kingfish through the regional seal, unless this occurred when the Lakes Entrance Formation was still unconsolidated (and there is no evidence to support this). A single gas chimney has been reported on seismic data near the Kingfish field by Cowley & O'Brien (2000), although it appears that the hydrocarbons associated with this leakage are not from the field itself.

The results of other palaeocharge history analysis (O'Brien *et al*, 2008) also confirm that all the large oil fields within the Central Deep have never had a gas cap, an observation entirely consistent with the large retention capacities obtained from the Lakes Entrance Formation over these traps.

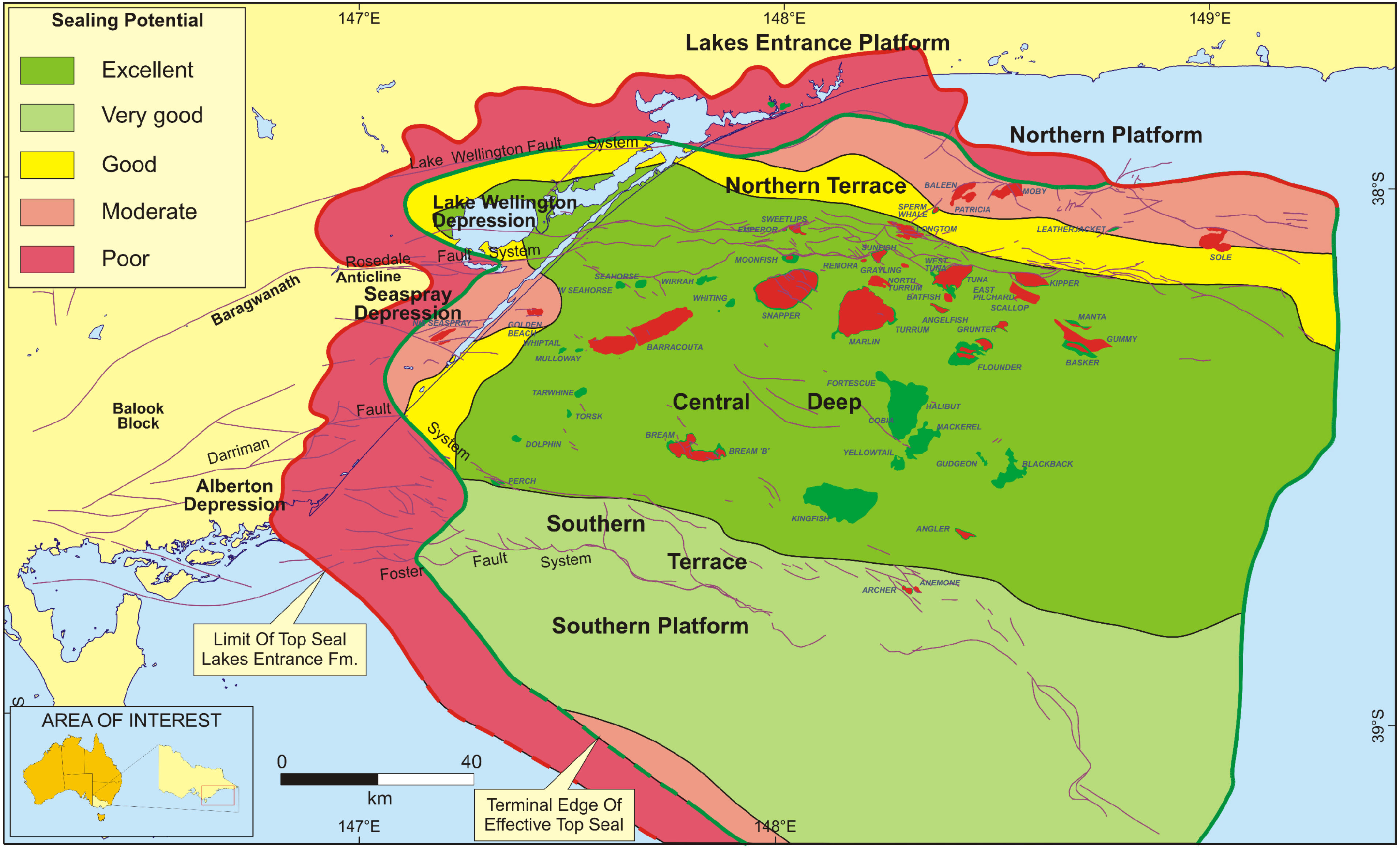


Figure 4.1 *An interpretation of top seal potential at a basin scale, Gippsland Basin.*

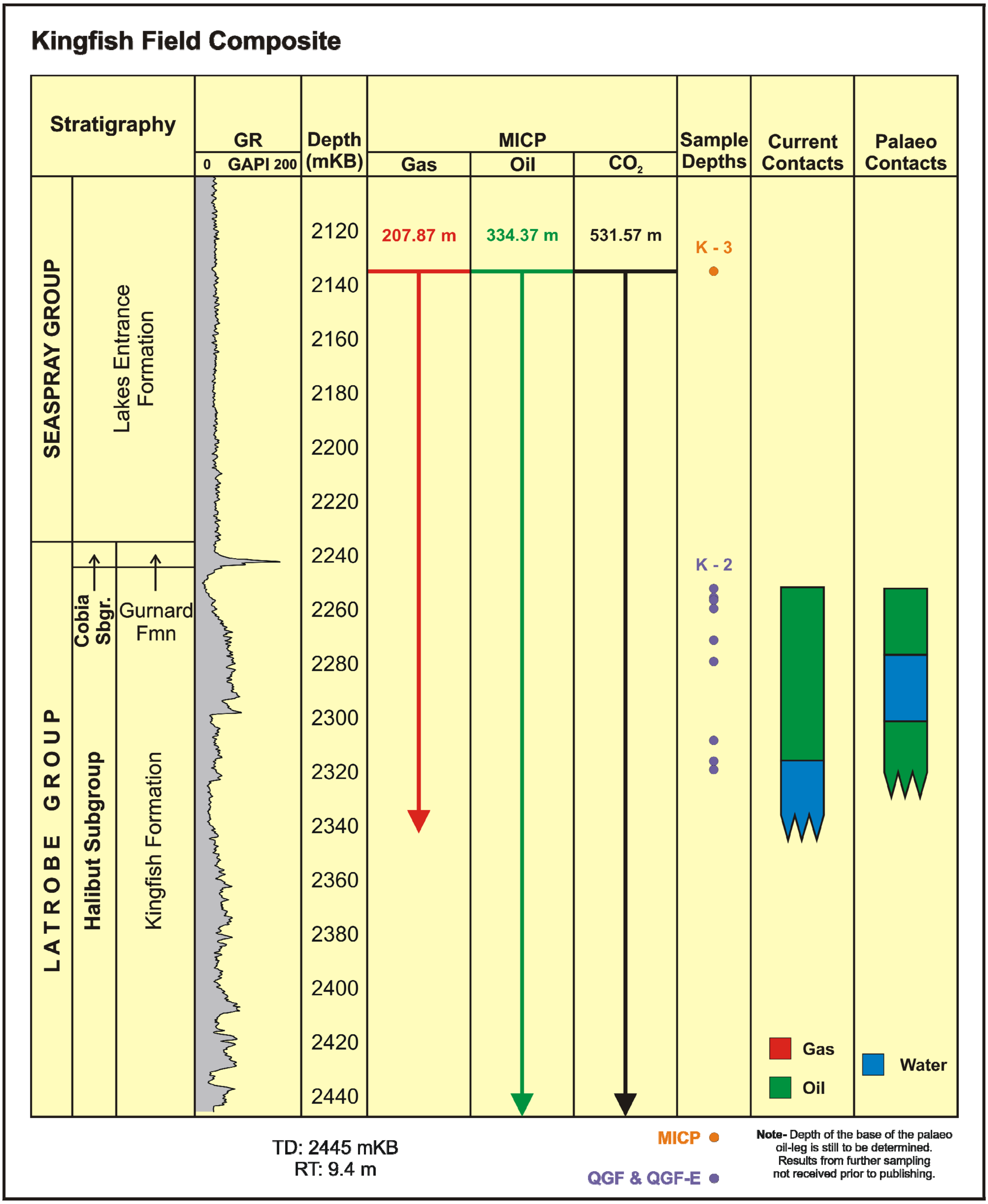


Figure 4.2 *Composite well summary of the Kingfish Field. The Gamma Ray (GR) Log shown here is from the Kingfish-2 well. MICP Analysis was conducted on core from the Lakes Entrance Formation in the Kingfish-3 well at a depth of 2143.05 m, which correlates with a depth of approximately 2135 m at Kingfish-2. Nine reservoir samples were collected from within the Kingfish Formation over a depth range 2252.47 m – 2319.22 m in the Kingfish-2 well.*

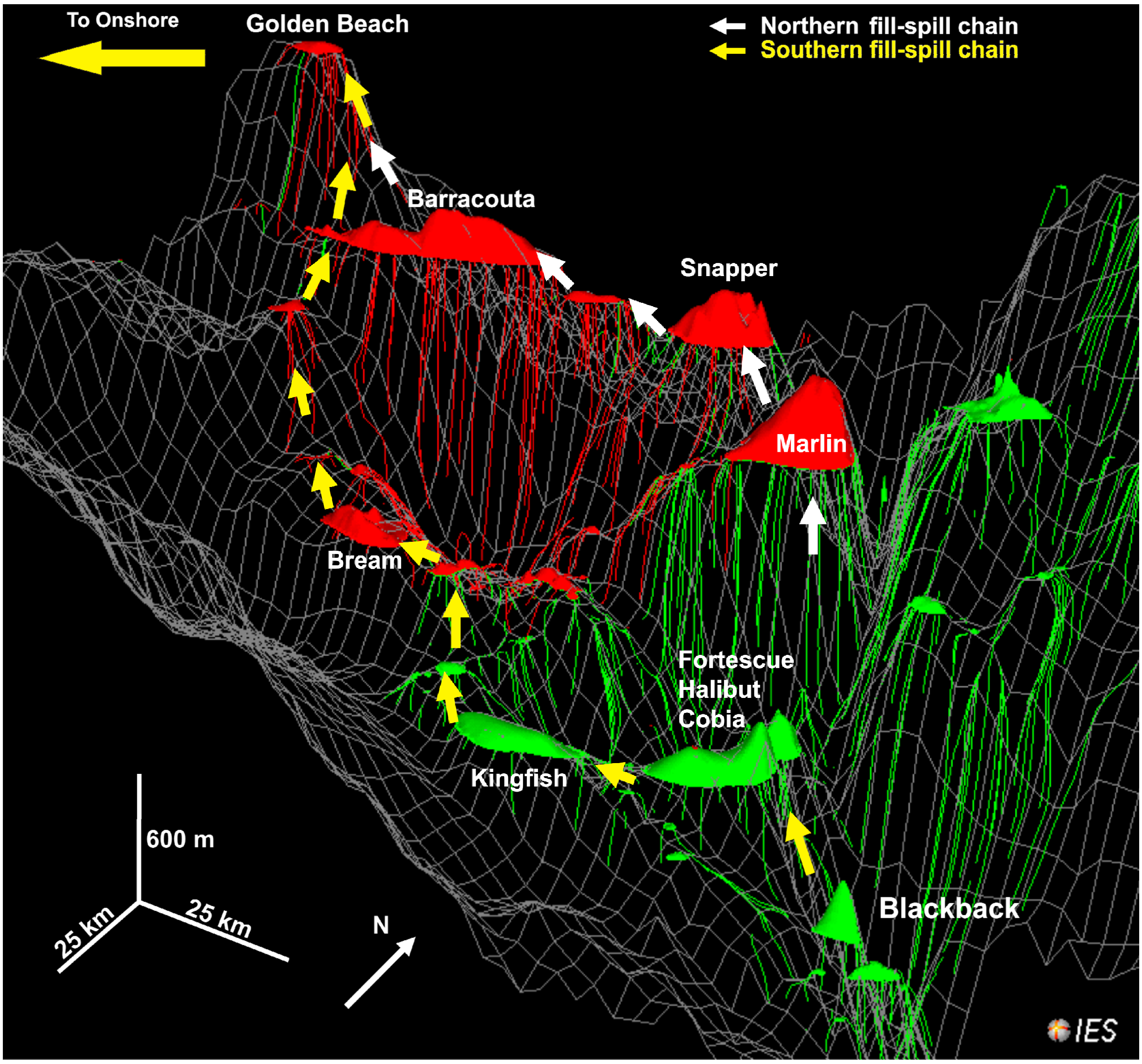


Figure 4.3 *Petromod 10 output showing predicted present day accumulations at Top Latrobe horizon, Gippsland Basin. Note the potential for fill-spill between Halibut/Fortescue/Cobia, Kingfish, Bream and Barracouta fields and Marlin, Snapper and Barracouta fields. It is emphasised that large volumes of hydrocarbons generated over millions of years cannot be compared directly with limited volumes of* CO_2.

Palaeocharge histories from oil and gas fields in the Gippsland Basin (O'Brien *et al.*, 2008) provide information on the type of hydrocarbons produced by the kitchens, as well as trap integrity through time. By constraining hydrocarbon kitchens, the data can be used to infer migration pathways through the basin. A very simple migration model of the petroleum systems in the Gippsland basin, produced in Petromod 10 (Figure 4.3) shows the linked nature of the traps along southern and northern spill-fill chains (consistent with Gibson-Poole *et al.*, 2008).

The modelled fill-spill chain at top Latrobe Group level, extending from the offshore Barracouta gas field, continues through the Golden Beach gas field and onshore to the Seaspray Depression (Figure 4.3). With the Golden Beach field on the main fill-spill pathway from the offshore, it is highly likely the structure would be filled-to-spill. However, only a 19 m live gas column is present in a total mapped closure of 40 m, suggesting that there is a very good chance that the structure is not filled-to-spill because of leakage by means of capillary failure of the seal (Figure 4.4)

Seismic reflection data over the Golden Beach gas field indicates the presence of a small fault cutting the top Latrobe Group horizon (Figure 4.5). Although there is no apparent gas chimney associated with this fault, there are various anomalous amplitudes close-by at shallow depth, which may indicate the presence of shallow hydrocarbons. Seal capacity and leakage and seepage data from the onshore Seaspray Depression and Baragwanath Anticline further support the trend of reduction of containment further onshore. It is therefore likely that fluids migrating through this point in the fill-spill chain towards the onshore Seaspray Depression and Baragwanath Anticline will not be contained as depicted in Figure 4.4.

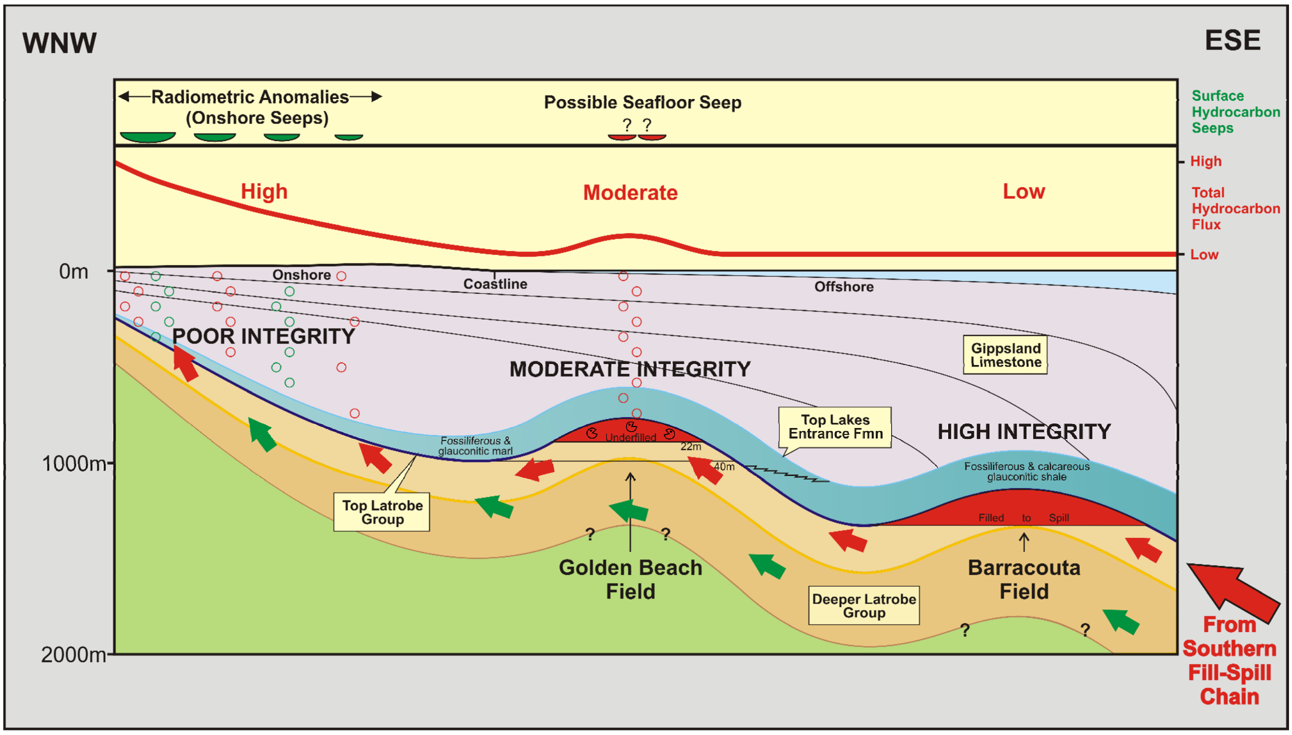


Figure 4.4 *Schematic cross-section extending from the Barracouta gas field to the onshore showing evidence of hydrocarbon seepage through the regional top seal.*

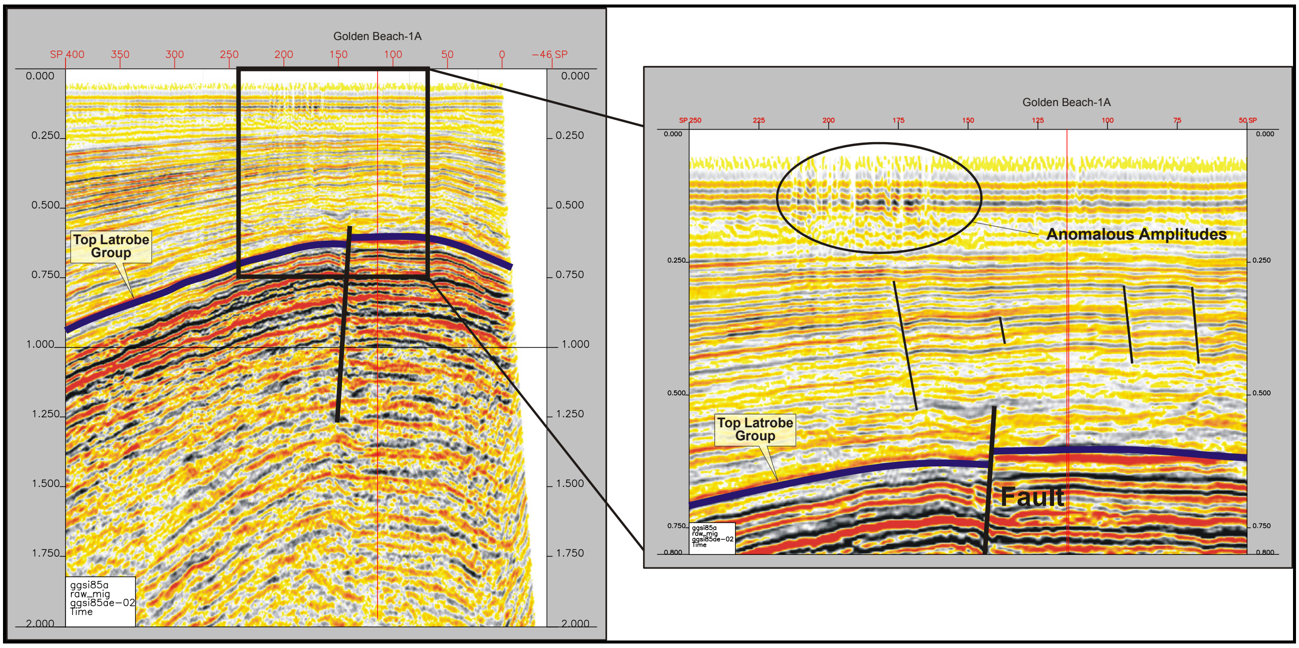


Figure 4.5 *Seismic data over the Golden Beach gas field revealing evidence of possible hydrocarbon seepage.*

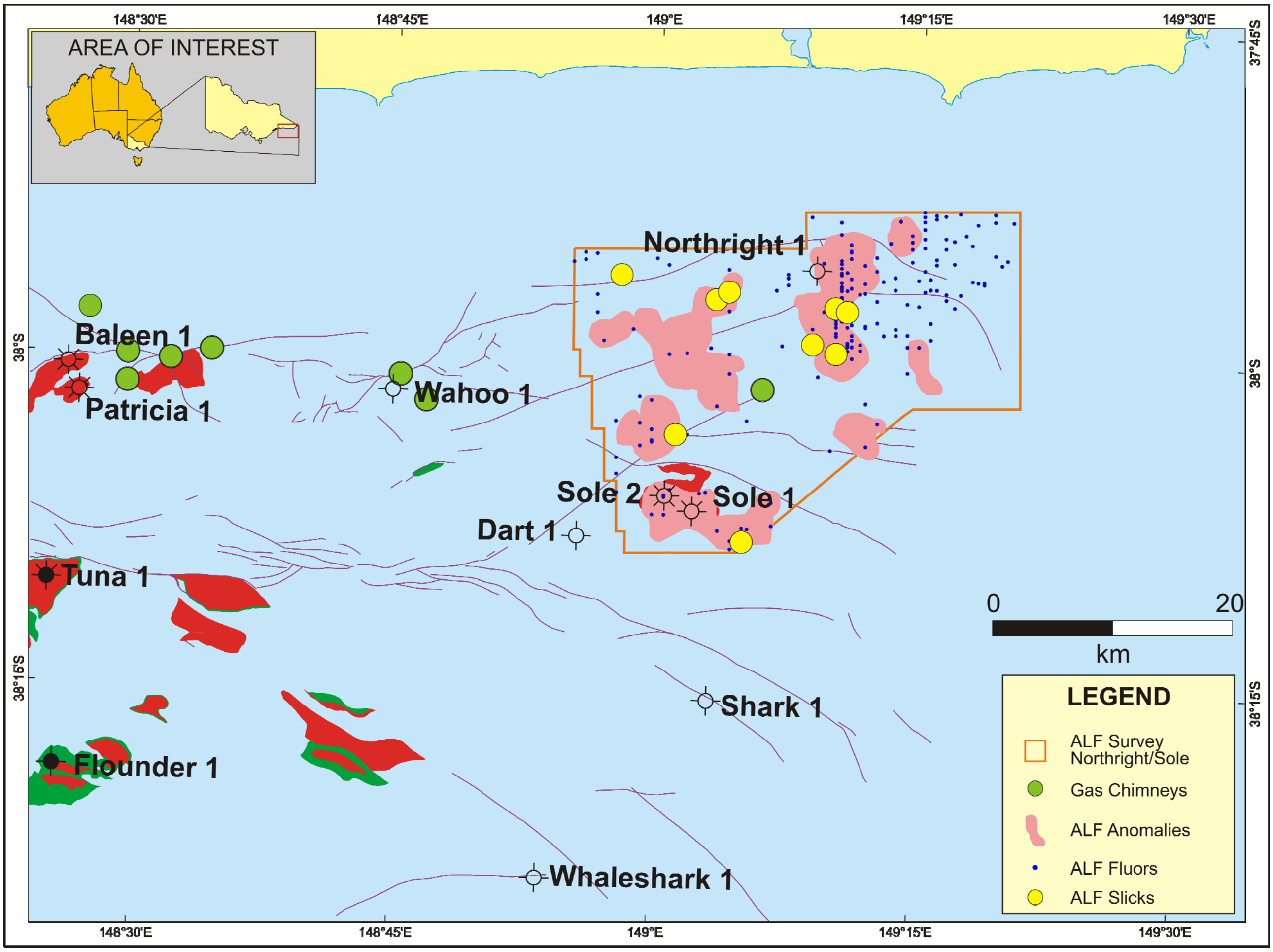


Figure 4.6 *ALF Survey on the Northern Terrace between the Sole gas field and Northright-1, including visible oil slicks, anomalies, fluors and gas chimneys.*

Northern Terrace

The containment potential of the Northern Terrace is best described as variable (see Figure 4.1). At the eastern extremity of the Northern Terrace, containment is lost somewhere between the Sole gas field and Northright-1 on the Northern Platform where the regional seal is absent. This is supported by remote and direct sensing survey leakage and seepage data that indicates the presence of active seepage in this area (i.e. the seal is failing). Further to the west, hydrocarbons reservoired at the top of the Latrobe Group, under the regional seal indicate that the seal is effective. Even further westward, near shore, few wells have been drilled on the Northern Terrace; it is therefore only possible to speculate on the effectiveness of the seal in this location. However, the sealing ability of the Lakes Entrance Formation in Cuttlefish-1 was noted to be very good (Irwin, 1999). In addition, there is no evidence of gas chimneys or anomalous amplitudes in the 2-D seismic images from this area.

Hydrocarbons are reservoired at the top of the Latrobe Group under the regional seal in several oil and gas fields in the 'central to eastern' Northern Terrace: Sole, Leatherjacket, Patricia-Baleen and Sperm Whale. Gas columns contained in the Patricia-Baleen Field and Sole-2 reach heights of 50 m and 75 m respectively, apparently without attendant top seal failure. Both the Patricia-Baleen and Sole fields are filled-to-spill suggesting that the regional seal across this part of the Northern Terrace can withhold gas columns with heights over 50 m. An MICP analysis of a sidewall core sample from the Lakes Entrance Formation in Sole-1 shows that the seal here can contain 32 m of gas and 54 m of CO_2, suggesting that the seal is effective across this area. Therefore, the seal potential across the Northern Terrace appears to be adequate for the retention of modest gas columns.

Numerous remote and direct sensing surveys conducted in the north of the basin have detected apparent leak points in discrete locations on the Northern Terrace. For instance, between the Sole gas field and Northright-1, anomalies detected during an Airbourne Laser Fluorescence (ALF) Survey (Figure 4.6) provide some evidence for seal failure in this area. The fluor pattern and presence of slicks from the survey were interpreted as oil migrating dominantly to the northeast, towards the vicinity of Northright (Messent, 2000).

Also, several apparent gas chimneys (Figure 4.6) near Flathead-1 (Figure 4.7), Moby-1 and Wahoo-1 may relate to migration of hydrocarbons from filled-to-spill structures, potentially defining the effective edge of the seal for gas in this part of the basin. Indeed, the chimney near Flathead-1 is currently active and hydrocarbon anomalies detected during AGSO 1989 and 1991 "sniffer" surveys are present in the water column directly above the chimney (see O'Brien *et al*, 2008). A seafloor sampling survey conducted by AGSO in 1988 also indicated the presence of possible hydrocarbons in seafloor sediments near Wahoo-1, perhaps strengthening the notion of active hydrocarbon seepage in this area. This is consistent with the review of the seal geometry, that the Lakes Entrance Formation is absent from the margin of the Northern Terrace around Northright-1.

AGSO sniffer surveys also traversed part of the Rosedale Fault System and detected anomalies between the Sunfish and Tuna fields, perhaps indicating seepage along parts the fault system due to top seal failure. However, if the source of hydrocarbons on the Northern Terrace is from the Central Deep, with migration occurring at the top of the Latrobe Group then the presence of gas and oil fields north of the Rosedale Fault System indicates that the top seal is, at least partly effective along portions of the fault system.

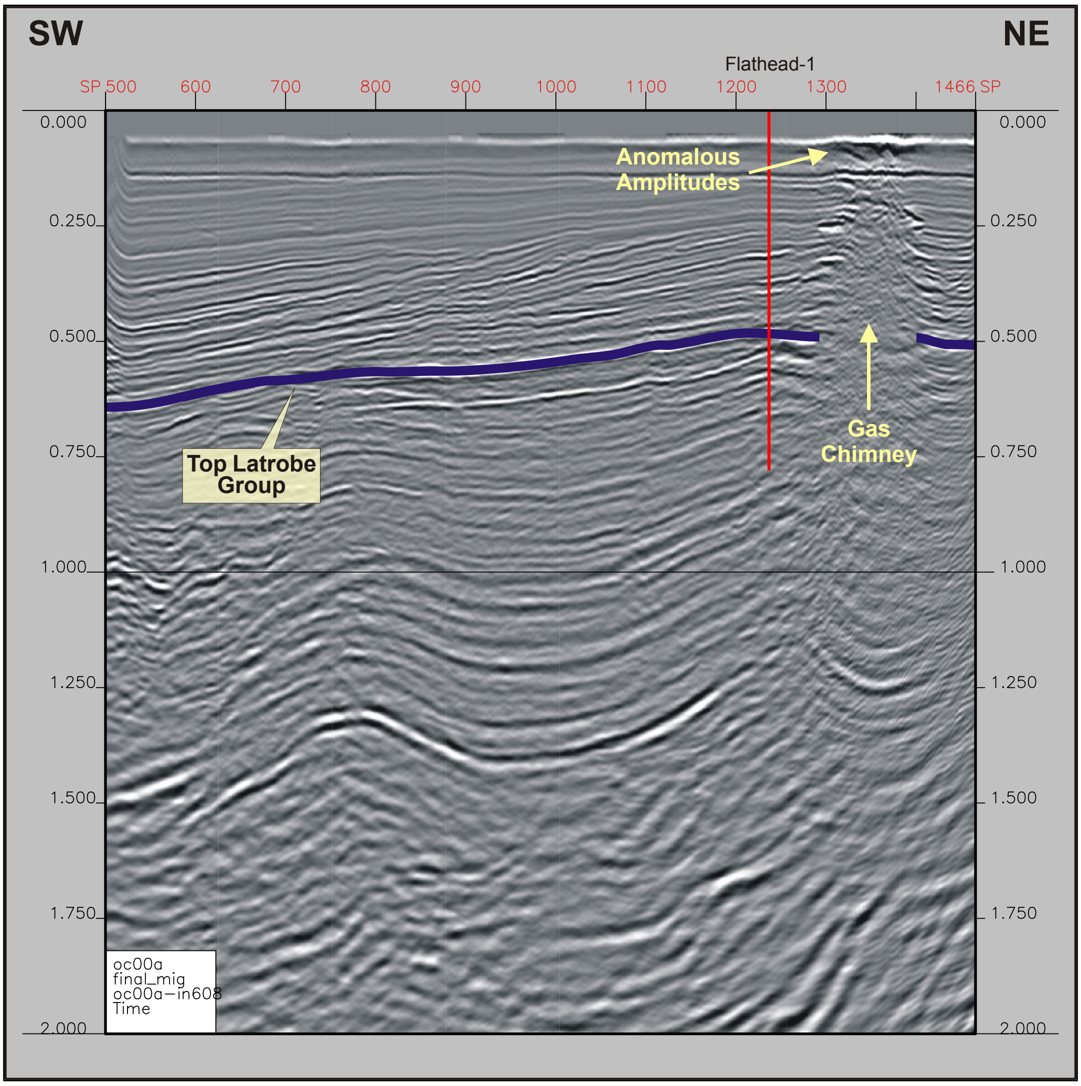


Figure 4.7 *Offshore gas chimney near Flathead-1 on the Northern Terrace.*

Southern Terrace

On the Southern Terrace, seal potential is interpreted to be very good. However, only a qualitative estimate is possible as there are no Lakes Entrance Formation core samples available for MICP analysis and there is currently no remote sensing evidence to identify points of seal failure. However, the thickness and depth of the base of the formation in this location (e.g. 388 m at 2140 m in Tarra-1) are similar to those of the Central Deep, suggesting that excellent seal capacity could be expected across the Southern Terrace. The trend for seal capacity to reduce with decreased formation thicknesses and depth near-shore in the Central Deep may also apply to the Southern Terrace. Given that the seal capacity further to the south on the Southern Platform in Groper-1 at 909 m is 246 m for CO_2, it is likely that an estimate of very good potential is a conservative one.

Northern Platform

The Northern Platform has poor sealing characteristics. The seal is present but not necessarily effective on the western Northern Platform, offshore from the Lakes Entrance Township (see Figure 4.1 for top seal limits). In the nearshore area close to Lakes Entrance, it is likely that seal capacity is further reduced. The regional seal is lost over the eastern Northern Platform, to the south of the Lakes Entrance and Marlo Townships (i.e. there is no seal present to the east of Marlo on the offshore Northern Platform). Only one well, Northright-1, has been drilled on the Northern Platform (where there is no seal present). Therefore, no core was available for MICP analysis of the Lakes Entrance Formation from the Northern Platform, and so seal potential can only be estimated, where it is present. Anomalies, flours and slicks from likely oil seepage to the northeast, towards Northright-1 were detected during an ALF survey on the eastern extremity of the Northern Platform (Messent, 2000). These observations are consistent with the likely absence of top seal across the eastern part of the Northern Platform.

Southern Platform

There are few wells drilled on the Southern Platform. However, from seal capacity data gained from MICP analysis of core samples from Groper-1 and Groper-2, some evaluation of the seal potential of the Southern Platform is possible. The thickness of the regional seal decreases both towards the shore and towards the margin of the basin on the Southern Platform. The Lakes Entrance Formation is relatively thin at Groper-1 and Groper-2 with thicknesses of 123 m and 73 m respectively. However, MICP analysis of a core sample from 909 m in Groper-1 has demonstrated that the seal is capable of holding 287 m of gas or 246 m of CO_2. This additional Lakes Entrance Formation core was sampled further up-hole than those previously analysed. This data implies that the seal in this location is just as effective as it is in parts of the Central Deep, the potential of which is considered excellent. This assessment differs from a previous evaluation of the Southern Platform (i.e. O'Brien *et al.*, 2008) where the sealing capacity of the Lakes Entrance Formation on the Southern Platform was considered poor to moderate, based on initial MICP results from Groper-1 (30 m of gas) and Groper-2 (5 m of gas).

4.2 Onshore Gippsland Basin

Lake Wellington Depression

Onshore, in the Lake Wellington Depression, the Lakes Entrance Formation is relatively thick (greater than 100 m) and the sealing capacity appears to be effective. In the nearshore area of the Lake Wellington Depression, the seal capacity is excellent but is reduced further to the west where the Lakes Entrance Formation thins significantly. Seventeen core samples from the Lake Wellington Depression yielded significantly greater retention heights than for any other onshore area. MICP data from friable to indurated marls indicates that the seal through this area can retain a maximum gas column height of 377 m and a CO_2 column of 306 m in Seacombe-7. These seal capacity results are as good as or better than some MICP values obtained across the Central Deep. Moving from east to west, further onshore, and north and south towards the bounding faults of the Lake Wellington Depression, retention capacities decrease to values of less than 20-metre column heights.

Murray (1997) and Summons *et al.* (1998) detected possible thermogenically-derived petroleum in sediments from the floor of Lake Wellington. This oil was interpreted to be geochemically similar to that in the offshore Turrum Field (Murray, 1997). However, Summons *et al.* (1998) suggested that the results did not constitute absolute proof of natural petroleum seepage into the Gippsland Lakes from the offshore basin. If this seepage were to be confirmed, migration from the northern spill-fill-chain across the Rosedale Fault and into the Lake Wellington Depression could have significant implications for assessing the seal potential at the southern margin of the depression.

Based on sealing capacities alone, in the onshore Gippsland Basin, the regional seal in the Lake Wellington Depression has the greatest potential to retain hydrocarbons and CO_2.

Seaspray Depression

The sealing capacity in the Seaspray Depression appears to be adequate but decreases towards the margins. In the Seaspray Depression, adjacent to the current day coastline, the Lakes Entrance Formation is generally around 100 m thick. The regional top seal attains a maximum thickness of 159 m in Lake Reeve-1 on the coast about 16 km to the northwest of the Golden Beach gas field. The depth to the base of the regional seal is greater than 800 m at Lake Reeve-1 but reduces to less than 800 m further onshore to the west and towards both the Baragwanath Anticline to the north and the Alberton Depression to the southwest.

The regional top seal at Golden Beach West-1 can potentially contain 87 m of CO_2, 35 m of oil and 22 m of gas. Dulungalong-2, located 2 km from Golden Beach West-1, can potentially contain 78 m of CO_2, similar to that seen at Golden Beach West-1. Close to the terminal edge of the seal in Mullungdung-7, only 5 m of gas or a 12 m column of CO_2 could be contained. Whilst still representing an effective seal, at least for CO_2, the retention capacities in the Seaspray Depression appear to be significantly less than those present in the Central Deep and the adjacent Lake Wellington Depression.

There are no known hydrocarbon accumulations under the base of the regional seal in the Seaspray Depression. The gas accumulations in fields such as North Seaspray and Gangell are found within Strzelecki Group sands rather than at the top of the Latrobe Group. Whether the lack of accumulations is due to an absence of effective seal over the Latrobe Group in the Seaspray Depression or inadequate migration pathways into the top Latrobe Group structures is unknown. Although not proven, a lack of effective seal, especially toward the depression margins, is most likely and would be consistent with the sealing capacity results.

Numerous gas chimneys, shallow anomalous amplitudes and possible Hydrocarbon-Related Diagenetic Zones (HRDZs) are present on seismic reflection data in the nearshore and within the Seaspray Depression, implying active hydrocarbon migration, leakage and seepage. Most of the mapped onshore gas chimneys also correlate strongly with mapped soil geochemistry anomalies.

Alberton Depression

Onshore to the south of the Darriman Fault, in the Alberton Depression, the regional seal is very thin (less than 20 m) where it is present, close to the present day coast. The top seal capacity is poor: for example, at Woodside South-1 retention capacities of 3 m for gas and 6 m for CO_2 suggest that the friable fossiliferous marl at this location is more characteristic of a reservoir than a seal. The Alberton Depression therefore has very little, if any, potential for sealing hydrocarbons or CO_2.

Lakes Entrance Platform

The seal potential of the Lakes Entrance Platform is poor. There is no effective seal in this part of the onshore Gippsland Basin as that limit is found further to the south offshore (see Figure 4.1). Numerous wells have been drilled onshore on the Lakes Entrance Platform, with the only discovery being the Lakes Entrance Oil field. The oil rests stratigraphically in the basal greensand of the Lakes Entrance Formation. No other discoveries or shows have been made onshore to indicate the presence of hydrocarbons.

Of the wells located on the Lakes Entrance Platform only two samples were available for MICP analysis (Hunters Lane-1 and Colquhoun East-6). The Lakes Entrance Formation sample from Hunters Lane-1 yielded very low column retention heights (gas column height of only 6 m and a CO_2 column height of 18 m). The sample was a friable fossiliferous glauconitic marl. In Colquhoun East-6, a stratigraphically higher sample at the shallow depth of 180 metres down-hole, yielded column heights of 123 m of gas and 164 m of CO_2. This sample was an indurated calcareous and glauconitic siltstone. It is unknown whether the cementation displayed in this sample is widespread in lateral and vertical extent or whether it is a local diagenetic feature. In any case, the shallow depth of the formation at this location suggests that containment of supercritical CO_2 would not be possible.

Baragwanath Anticline

The Lakes Entrance Formation top seal is absent over the Baragwanath Anticline (between the Lake Wellington and Seaspray depressions) and top seal containment has been lost east of the anticline. Cover across the top of the Latrobe horizon on the anticline is thin (see Thomas & Baragwanath, 1949 and Hocking, 1988). For example, in Deadman Hill-1 the top of the Latrobe Group is intersected at around 100 m down-hole with only a 19 m cover of Lakes Entrance Formation with overlying Gippsland Limestone and Haunted Hill Formation.

Lakes Oil N.L. tested for oil shows in the vicinity of a seep approximately 10 km southeast of Sale (Mulready, 2002). The location of this seep is consistent with an anomaly present on the radiometrics data from Geoscience Australia's 1999 airborne survey and possible gas chimneys in this area (Figure 4.8). All data suggests that an active hydrocarbon seep occurs along the fill-spill chain at top-Latrobe Group level, up-dip from the Golden Beach and Barracouta gas fields, through the Seaspray Depression and on to the Baragwanath Anticline. From the radiometrics image (Figure 4.8), the uranium counts peak in and around the seep, which is located 1-2.5 km north or northeast of the mapped fill-spill chain. Whether this seep, or seepage chain, is principally the result of seepage up the Rosedale Fault or seepage along the fill-spill chain, is currently uncertain. Nearby, seal capacity results from Dulungalong-2 in the Seaspray Depression, do indicate a reduction in the effective containment relative to the nearshore Central Deep and the Wellington Depression to the north.

Seismic reflection data located over the interpreted seepage chain reveal two possible gas chimneys above two separate faults (Figure 4.9), part of the Rosedale Fault System and have a strong association with high uranium concentrations (Figure 4.8), providing further evidence for poor sealing potential both on the anticline and on immediately adjacent areas.

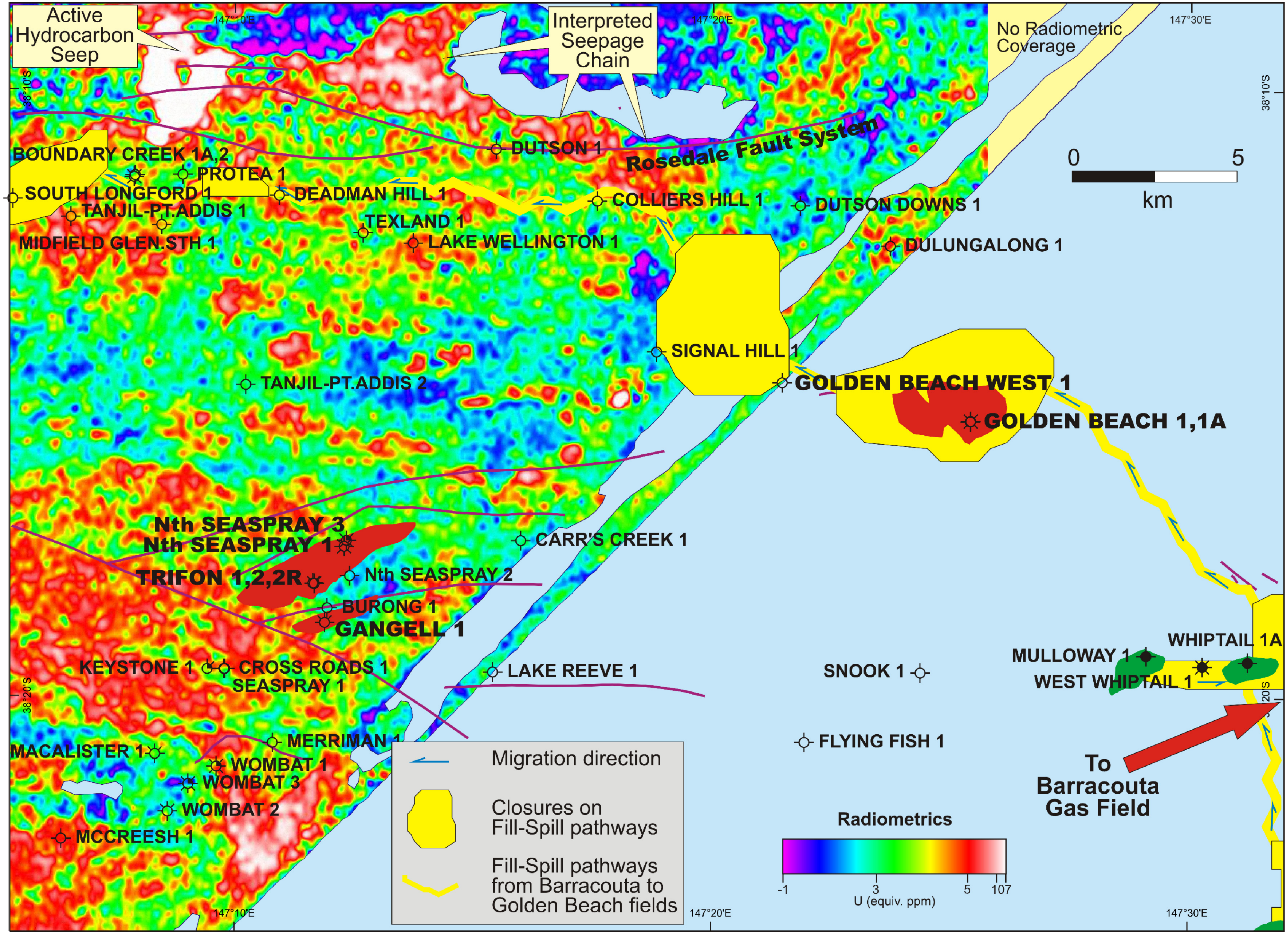


***Figure 4.8** Radiometrics data for the onshore Gippsland Basin, along with modelled fill-spill chain from the Barracouta gas field. Known and interpreted hydrocarbon seeps correspond to a broadly east-southeast trending zone exhibiting strongly anomalous radiometrics response.*

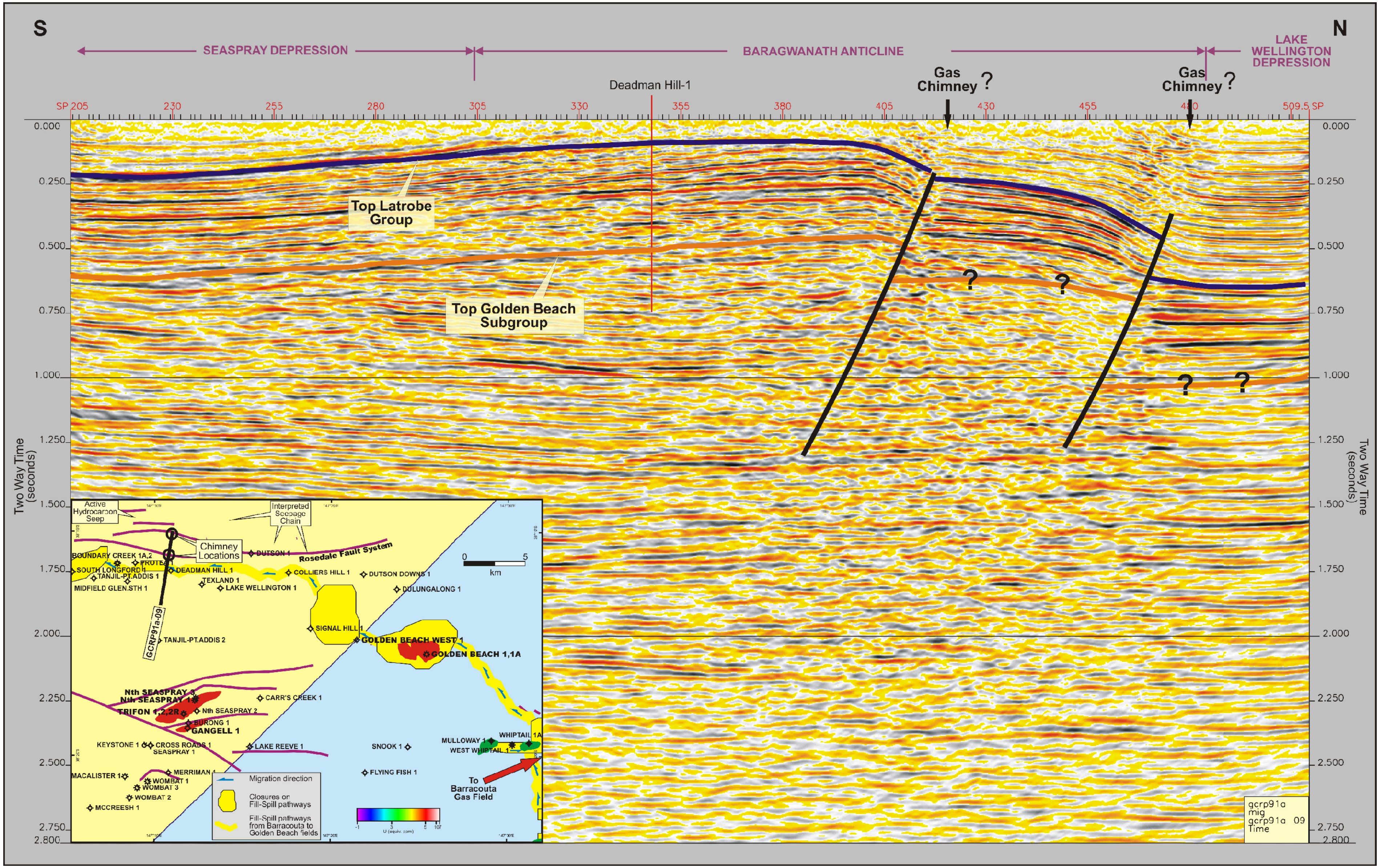


Figure 4.9 *Seismic reflection line GCRP91a-09 showing possible gas chimneys above high-angle reverse faults of the Rosedale Fault System (RFS).*

5 Conclusions and Future Directions

The conclusions drawn from this study are as follows.

The Lakes Entrance Formation currently acts as the primary top seal for hydrocarbons in the Gippsland Basin and will act as an effective regional barrier for the containment of CO_2 over large parts of the basin.

- The Lakes Entrance Formation consists of thick calcareous mudstones and shales in the Central Deep and where the formation thins toward the basin margin, fossiliferous and glauconitic marls. The Lakes Entrance Formation is thickest in the Central Deep, where the base is also deepest (2,000 to 3,500 m sub-sea). At the basin margins, the regional seal thins and the formation base occurs at depths of around 500 to 1,000 m sub-sea.

- The seal capacity of the Lakes Entrance Formation is greatest in the offshore Central Deep, the western Northern Terrace and the onshore Lake Wellington Depression (250 m to 947 m for CO_2). These areas therefore have the best potential to contain injected CO_2 in the Gippsland Basin.

- On the Southern Terrace and Southern Platform, the sealing potential of the Lakes Entrance Formation is very good. The formation is thick and seal capacity results (246 m of CO_2) from Groper-1 indicate that the seal has the potential to contain significant column heights of CO_2.

- The Seaspray Depression and Northern Terrace have good to moderate sealing potential. In these locations, the seal thickness and depths are variable. Seal capacity results are also variable but generally much lower than those recorded in the Central Deep, Lake Wellington Depression and Southern Platform.

- The offshore Northern Platform and the onshore Lakes Entrance Platform, Baragwanath Anticline and Alberton Depression, offer very little containment potential for injected CO_2.

- Locally, Latrobe Group intraformational seals have high seal capacities but values are variable. The generally thin nature and limited lateral extent of these seal leads to regionally low seal potential, as evidenced by the hydrocarbon accumulation patterns in the basin.

As part of the VICGCS program, further studies to investigate and understand the containment potential in the Gippsland Basin are underway.

- A QEMSCAN analysis of samples from the Lakes Entrance Formation and Gippsland Limestone used in this study is in progress. The QEMSCAN analysis will allow investigation of mineralogical controls on seal integrity and correlation with wireline log signatures.

- Further MICP analysis of the Seaspray Group (Lakes Entrance Formation and Gippsland Limestone) and intraformational Latrobe Group seals will be undertaken and the geometry of a major intraformational Latrobe Group seal, the Kate Shale, will be investigated. The seal potential of the onshore Lake Wellington Depression will be examined further by identifying and assessing Latrobe Group intraformational seals.

- Further work is planned on the mechanical properties of the regional seal and assessing the geomechanical stability of faults within the seal.

- The work in this report has concentrated on issues concerning top-seal. Further work is planned on issues relating to fault-seal within the Lakes Entrance Formation.

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Appendix 1

Lakes Entrance Formation tops and thicknesses identified in onshore and offshore wells, Gippsland Basin

Well Name	Longitude	Latitude	KB	LEF thickness	LEF top	LEF base	LEF top (msl)	LEF base (msl)
Admiral 1	148 38 55.23E	38 09 06.62S	21	238	998	1236	977	1215
Albacore 1	148 19 58.61E	38 33 54.46S	30	269	2250	2519	2220	2489
Albatross 1	148 03 05.59E	37 57 34.36S	10	79	628	707	618	697
Amberjack 1	147 18 59.71E	38 29 27.94S	21	123	1136	1259	1115	1238
Anemone 1A	148 19 53.25E	38 45 46.92S	27	180	2401	2581	2374	2554
Angelfish 1	148 22 53.40E	38 14 37.38S	21	171	1477	1648	1456	1627
Angler 1	148 26 33.71E	38 39 29.86S	27	290	2477	2767	2450	2740
Archer 1	148 18 41.52E	38 46 01.56S	28	169	2390	2559	2362	2531
Athene 1	148 27 24.78E	38 35 46.60S	23	285	2475	2760	2452	2737
Avon 1	147 08 17.61E	38 02 49.50S	9	125	610	735	601	726
Ayu 1	148 17 07.27E	38 36 29.48S	28	350	2140	2490	2112	2462
Baleen 1	148 26 12.97E	38 00 31.08S	9	126	512	638	503	629
Baleen 2	148 24 42.12E	38 01 50.21S	26	75	647	722	621	696
Banjo 1A	148 28 06.96E	37 46 04.67S	70	0				
Barracouta 1	147 42 49.63E	38 16 35.48S	10	114	940	1054	930	1044
Barracouta 2	147 40 30.63E	38 17 52.48S	9	104	916	1020	907	1011
Barracouta 3	147 37 07.63E	38 19 13.48S	9	98	996	1094	987	1085
Barracouta 4	147 42 07.81E	38 17 15.27S	25	65	976	1041	951	1016
Barracouta 5	147 39 40.67E	38 17 58.01S	21	139	1044	1183	1023	1162
Basker 1	148 41 57.77E	38 18 20.94S	25	313	1807	2120	1782	2095
Basker 2	148 42 30.94E	38 17 58.81S	22	333	1755	2088	1733	2066
Basker 5	148 42 23.80E	38 17 59.35S	22	317	1786	2103	1764	2081
Basker South 1	148 41 26.13E	38 19 05.84S	25	143	2067	2210	2042	2185
Batfish 1	148 24 17.58E	38 13 28.48S	10	229	1225	1454	1215	1444
Baudin 1	147 52 23.60E	37 51 35.47S	42	64	304	368	262	326
Beardie 1	147 48 29.26E	38 15 10.69S	25	124	1176	1195	1151	1170
Bengworden South 6	147 25 40.04E	38 03 31.18S	2	110	849	959	847	957
Bignose 1	148 36 10.07E	38 21 15.86S	25	263	2260	2523	2235	2498
Billfish 1	148 33 19.23E	38 40 07.45S	31	182	2705	2887	2674	2856
Blackback 1	148 33 46.72E	38 32 57.98S	21	327	2570	2897	2549	2876
Blackback 2	148 32 40.69E	38 33 22.70S	22	236	2543	2779	2521	2757
Blackback 3	148 31 10.10E	38 33 29.30S	25	281	2540	2821	2515	2796
Blenny 1	147 24 56.69E	38 28 18.15S	23	130	1100	1230	1077	1207
Bonita 1A	148 17 14.31E	38 33 41.86S	30	278	2162	2440	2132	2410
Bream 2	147 47 50.73E	38 31 16.19S	9	242	1560	1802	1551	1793
Bream 3	147 46 19.64E	38 30 41.48S	28	232	1615	1847	1587	1819
Bream 4A	147 44 55.60E	38 30 21.28S	21	268	1590	1858	1569	1837
Bream 5	147 52 03.58E	38 30 49.51S	21	304	1560	1864	1539	1843
Broadbill 1	147 01 22.09E	38 35 19.79S	32	68	782	850	750	818
Bullseye 1	147 34 04.12E	38 35 23.84S	10	375	1697	2072	1687	2062
Bundalaguah 10	147 01 14.38E	38 04 59.50S	7	110	640	750	633	743
Burong 1	147 11 56.27E	38 18 33.35S	39	103	552	655	513	616
Carrs Creek 1	147 15 59.59E	38 17 26.48S	27	102	584	686	557	659
Chimaera 1	148 43 23.73E	38 15 50.81S	25	430	1493	1923	1468	1898
Cobia 1	148 17 05.88E	38 27 21.21S	10	151	2232	2383	2222	2373
Cobia 2	148 18 20.94E	38 27 25.95S	25	228	2152	2380	2127	2355
Cod 1	147 58 37.62E	38 21 37.47S	10	285	1597	1882	1587	1872
Colliers Hill 1	147 17 34.65E	38 11 50.48S	17	85	451	536	435	520
Colquhoun East 6	148 07 11.56E	37 47 09.46S	40	35	144	179	104	139
Colquhoun North 1	147 56 30.56E	37 48 46.47S	30	44	134	178	104	148
Comley 1	147 33 31.75E	37 53 58.21S	52	38	438	476	386	424
Conger 1	148 03 50.94E	38 21 22.22S	21	209	1605	1814	1584	1793
Cuttlefish 1	148 03 06.89E	37 59 35.26S	26	47	792	839	766	813
Darriman 1	147 00 34.61E	38 26 58.49S	36	85	452	537	416	501
Dart 1	148 55 32.78E	38 08 06.40S	10	191	731	922	721	912
Deadman Hill 1	147 10 55.30E	38 11 45.42S	59	19	82	101	23	42
Denison 53	146 53 50.31E	38 06 24.03S	17	0				
Devilfish 1	147 55 15.19E	38 47 52.69S	28	184	1461	1645	1433	1617
Dolphin 1	147 22 47.66E	38 29 26.49S	10	142	1050	1192	1040	1182

Well Name	Longitude	Latitude	KB	LEF thickness	LEF top	LEF base	LEF top (msl)	LEF base (msl)
Dome Frome 1	148 01 02.54E	37 47 29.45S	39	0				
Dome Frome 2	148 02 34.56E	37 46 33.46S	15	0				
Dome Frome 3	148 07 40.56E	37 46 00.46S	6	0				
Dome Frome 4	148 05 08.57E	37 49 08.46S	43	52	304	356	261	313
Drummer 1	148 15 02.94E	38 28 28.46S	21	305	2127	2432	2106	2411
Duck Bay 1	147 39 40.69E	37 56 39.18S	24	103	579	682	555	658
Dulungalong 2	147 18 09.88E	38 11 57.89S	8	85	440	525	432	517
Dutson Downs 1	147 21 49.58E	38 11 54.51S	5	130	578	708	573	703
East End 1	148 21 18.52E	37 47 58.45S	3	0				
East Halibut 1	148 21 03.13E	38 24 28.96S		225	2170	2395	2149	2374
East Kingfish 1	148 12 41.34E	38 35 01.84S	21	444	2046	2490	2025	2469
East Lake Tyers 1	148 07 37.66E	37 50 32.16S	5	97	296	393	291	388
East Nowa 1	148 09 46.64E	37 47 41.15S	62	54	221	275	160	214
East Pilchard 1	148 33 47.39E	38 11 48.62S	25	239	1405	1644	1380	1619
East Reeve 1	147 32 55.57E	38 05 44.47S	4	193	989	1182	985	1178
Edina 1	147 52 46.59E	38 36 17.02S	31	430	1848	2278	1817	2247
Emperor 1	148 00 24.60E	38 05 48.46S	9	145	1372	1517	1363	1508
Fairhope 1	147 35 21.07E	37 54 42.52S	43	37	496	533	453	490
Flathead 1	148 32 08.56E	38 01 15.44S	9	52	395	447	386	438
Flounder 1	148 25 33.59E	38 18 46.45S	28	316	1613	1929	1585	1901
Flounder 2	148 26 57.67E	38 19 11.14S	30	341	1628	1969	1598	1939
Flounder 3	148 28 27.68E	38 18 52.14S	30	362	1634	1996	1604	1966
Flounder 4	148 29 51.51E	38 18 18.02S	10	335	1595	1930	1585	1920
Flounder 5	142 00 23.61E	38 12 28.49S	9	322	1590	1912	1581	1903
Flounder 6	148 26 13.75E	38 19 01.53S	25	394	1538	1932	1513	1907
Flying Fish 1	147 21 56.85E	38 20 45.09S	10	148	946	1094	936	1084
Fortescue 1	148 14 23.99E	38 22 22.76S	25	251	2164	2415	2139	2390
Fortescue 2	148 16 03.74E	38 25 51.42S	31	252	2168	2420	2137	2389
Fortescue 3	148 16 06.90E	38 23 17.57S	31	252	2160	2412	2129	2381
Fortescue 4	148 16 40.08E	38 24 52.34S	25	270	2138	2408	2113	2383
Frome Lakes 4	147 15 34.59E	37 59 02.51S	38	95	432	527	394	489
Gangell 1	147 11 53.14E	38 18 47.85S	40	108	568	676	528	636
Gannet 1	148 08 13.12E	37 54 15.01S	10	89	586	675	576	665
Golden Beach 1A	147 25 24.77E	38 15 27.11S	12	89	556	645	544	633
Golden Beach West 1	147 21 27.58E	38 14 49.48S	12	119	585	704	573	692
Goon Nure 9	147 37 53.97E	37 58 16.23S	29	129	618	747	589	718
Great White 1	148 37 42.45E	38 27 01.68S	31	417	2805	3222	2774	3191
Groper 1	147 25 00.69E	38 56 14.50S	10	123	808	931	798	921
Groper 2	147 14 17.53E	38 58 34.44S	10	73	687	760	677	750
Grunter 1	148 31 00.83E	38 16 15.74S	21	283	1570	1853	1549	1832
Gummy 1	148 44 25.85E	38 17 54.00S	28	326	1755	2081	1727	2053
Gurnard 1	147 58 42.63E	38 35 27.47S	10	295	1890	2185	1880	2175
Halibut 1	148 19 01.60E	38 23 52.46S	10	372	1910	2282	1900	2272
Halibut 2	148 19 52.58E	38 23 39.98S	25	291	2040	2331	2015	2306
Hammerhead 1	148 50 03.79E	38 10 28.66S	22	233	1058	1291	1036	1269
Hapuku 1	148 33 00.88E	38 33 14.51S	9	283	2527	2810	2518	2801
Harlequin 1	147 42 32.68E	38 11 54.42S	21	195	1213	1408	1192	1387
Helios 1	148 16 38.68E	38 41 34.91S	23	394	2180	2574	2157	2551
Hermes 1	148 17 58.89E	38 36 02.48S	23	348	2160	2508	2137	2485
Hunters Lane 1	147 58 30.00E	37 51 54.21S	50	76	318	394	268	344
Investigator 1	147 36 50.69E	37 54 44.17S	35	66	510	576	476	542
Judith 1	148 33 24.68E	38 09 12.91S	21	228	1223	1451	1202	1430
Kahawai 1	148 22 12.75E	38 10 15.30S	21	304	1086	1390	1065	1369
Kingfish 1	148 12 39.62E	38 35 44.47S	10	279	1971	2250	1961	2240
Kingfish 2	148 10 17.73E	38 35 51.16S	9	269	1975	2244	1966	2235
Kingfish 3	148 06 11.72E	38 34 57.16S	9	264	1980	2244	1971	2235
Kingfish 4	148 05 53.42E	38 35 49.38S	10	315	1922	2237	1912	2227
Kingfish 5	148 14 34.24E	38 34 39.67S	10	337	1990	2327	1980	2317
Kingfish 6	148 14 05.55E	38 35 34.19S	9	283	2011	2294	2002	2285

Well Name	Longitude	Latitude	KB	LEF thickness	LEF top	LEF base	LEF top (msl)	LEF base (msl)
Kingfish 7	148 05 04.13E	38 35 08.18S	25	266	1993	2259	1968	2234
Kingfish 8	148 03 42.57E	38 35 30.30S	23	348	1923	2271	1900	2248
Kingfish 9	148 08 59.72E	38 37 39.77S	23	392	1912	2304	1889	2281
Kipper 1	148 35 51.35E	38 10 30.30S	21	356	1064	1420	1043	1399
Kipper 2	148 36 49.77E	38 11 26.03S	22	304	1235	1539	1213	1517
Kyarra 1A	147 11 16.97E	38 40 47.04S	31	94	919	1013	888	982
Lake Reeve 1	147 15 24.60E	38 19 36.50S	5	159	749	908	744	903
Lakes Entrance 1	147 59 46.69E	37 51 54.15S	52	64	324	388	272	336
Leatherjacket 1	148 46 46.38E	38 05 11.29S	21	110	635	745	614	724
Longtom 1	148 18 58.79E	38 05 54.77S	25	61	1184	1245	1159	1220
Luderick 1	147 43 02.49E	38 26 15.10S	21	248	1529	1777	1508	1756
Macalister 1	147 08 19.92E	38 20 57.32S	20	117	675	792	655	772
Mackerel 1	148 21 30.60E	38 28 48.46S	30	182	2224	2406	2194	2376
Mackerel 2	148 20 22.44E	38 29 08.46S	10	144	2166	2310	2156	2300
Mackerel 3	148 21 48.87E	38 28 19.97S	10	165	2214	2379	2204	2369
Mackerel 4	148 18 58.12E	38 30 44.38S	10	201	2164	2365	2154	2355
Manta 1	148 43 24.26E	38 16 21.75S	25	422	1534	1956	1509	1931
Marlin 1	148 13 37.68E	38 13 57.17S	10	135	1244	1379	1234	1369
Marlin 2	148 10 49.60E	38 15 53.46S	10	144	1298	1442	1288	1432
Marlin 3	148 10 20.71E	38 14 38.15S	10	100	1340	1440	1330	1430
Marlin 4	148 16 07.19E	38 14 18.91S	10	185	1643	1828	1633	1818
Mccreesh 1	147 06 21.75E	38 22 21.21S	31	130	670	800	639	769
Meerlieu 4	147 18 52.11E	38 01 18.85S	20	141	684	825	664	805
Meerlieu 15001	147 17 07.23E	38 00 22.92S	33	140	580	720	547	687
Megamouth 1	148 16 31.85E	38 35 44.23S	22	378	2087	2465	2065	2443
Melville 1	147 59 13.13E	38 40 57.15S	25	388	1830	2218	1805	2193
Merriman 1	147 10 47.59E	38 20 46.51S	24	70	625	695	601	671
Moonfish 1	148 00 35.21E	38 08 54.95S	23	220	1385	1605	1362	1582
Moonfish 2	148 01 23.53E	38 08 52.16S	31	189	1370	1559	1339	1528
Moray 1	148 03 25.25E	38 51 42.58S	10	218	1422	1640	1412	1630
Morwong 1	148 18 49.91E	38 13 37.08S	10	160	1493	1653	1483	1643
Mudskipper 1	148 08 02.84E	38 54 26.07S	27	255	1220	1475	1193	1448
Mullet 1	147 51 26.68E	39 12 56.49S	10	70	620	690	610	680
Mulloway 1	147 29 06.43E	38 19 18.75S	21	137	990	1127	969	1106
Mullungdung 7	146 55 46.63E	38 22 55.09S	85	17	348	365	263	280
Mullungdung 8	146 53 27.94E	38 23 14.87S	131	0				
Nannygai 1	147 59 50.63E	38 33 05.47S	10	260	1932	2192	1922	2182
Nindoo 2	147 19 26.90E	37 52 27.71S	75	58	292	350	217	275
Northright 1	149 09 03.41E	37 55 52.46S	25	0				
North Seaspray 3	147 12 20.46E	38 17 26.60S	24	105	470	575	446	551
Oilco 1	147 57 56.57E	37 51 42.48S	42	83	321	404	279	362
Omeo 1	147 43 06.90E	38 36 39.50S	31	306	1882	2188	1851	2157
Omeo 2A	147 42 43.01E	38 36 16.35S	22	300	1882	2182	1860	2160
Opah 1	148 16 47.17E	38 31 38.87S	25	253	2152	2405	2127	2380
Orange Roughy 1	148 02 35.61E	38 34 51.59S	25	365	1910	2275	1885	2250
Palmer 1	147 19 51.52E	38 33 43.83S	21	131	1055	1186	1034	1165
Patricia 1	148 26 51.83E	38 01 47.44S	22	45	655	700	633	678
Patrobus 1	148 33 18.85E	37 47 44.13S	21	0				
Patties Pies 1	147 40 32.11E	37 50 58.46S	5	23	250	273	245	268
Paynesville 1	147 40 25.89E	37 54 47.18S	30	39	530	569	500	539
Perch 1	147 19 28.67E	38 34 31.50S	10	131	975	1106	965	1096
Perch 2	147 20 02.28E	38 34 17.61S	21	118	1000	1118	979	1097
Perch 3	147 19 21.42E	38 34 09.47S	42	122	974	1096	932	1054
Petro Tech 1	147 59 39.67E	37 24 49.48S	49	80	301	381	252	332
Pike 1	147 57 05.37E	38 46 23.53S	10	217	1611	1828	1601	1818
Pilotfish 1A	148 28 13.13E	38 25 52.90S	21	380	2535	2915	2514	2894
Pisces 1	148 30 47.19E	39 03 30.38S	22	321	1475	1796	1453	1774
Protea 1	147 08 53.98E	38 11 24.82S	51	0				
Remora 1	148 11 33.80E	38 09 08.53S	22	384	1700	2084	1678	2062

Well Name	Longitude	Latitude	KB	LEF thickness	LEF top	LEF base	LEF top (msl)	LEF base (msl)
Rockling 1	148 13 50.38E	38 27 29.08S	31	277	2215	2492	2184	2461
Roundhead 1	148 13 32.70E	38 36 59.85S	21	346	2032	2378	2011	2357
Sale 13	147 13 05.71E	38 06 53.64S	1	125	687	812	686	811
Sale 15	147 02 43.03E	38 04 34.17S	12	85	660	745	648	733
Salmon 1	147 59 19.62E	38 25 09.47S	30	229	1760	1989	1730	1959
Salt Lake 1	147 05 16.67E	38 26 47.50S	23	127	650	777	627	754
Sawbelly 1	148 02 10.52E	38 22 25.47S	21	284	1700	1984	1679	1963
Seacombe 7	147 28 01.58E	38 05 08.17S	9	176	862	1038	853	1029
Seacombe South 1	151 39 07.95E	85 17 12.95S	2	121	960	1081	958	1079
Seahorse 1	147 40 26.95E	38 11 42.43S	25	209	1180	1389	1155	1364
Seahorse 2	147 39 24.79E	38 12 07.76S	21	233	1160	1393	1139	1372
Selene 1	148 26 15.95E	38 37 19.62S	23	336	2486	2822	2463	2799
Shark 1	149 03 12.05E	38 15 28.73S	28	290	1526	1816	1498	1788
Signal Hill 1	147 18 49.59E	38 14 19.50S	28	126	555	681	527	653
Smiler 1	148 23 21.71E	38 28 49.64S	25	199	2308	2507	2283	2482
Snapper 1	148 00 54.63E	38 11 57.47S	10	125	1088	1213	1078	1203
Snapper 2	148 02 41.71E	38 11 10.17S	10	153	1047	1200	1037	1190
Snapper 3	147 59 15.70E	38 12 39.17S	10	205	1067	1272	1057	1262
Snapper 4	148 00 18.62E	38 12 48.85S	21	214	1046	1260	1025	1239
Snapper 5	147 59 27.08E	38 13 12.13S	21	190	1102	1292	1081	1271
Snapper 6	148 00 46.61E	38 13 50.03S	21	177	1155	1332	1134	1311
Snook 1	147 24 22.52E	38 19 35.95S	21	127	1000	1127	979	1106
Sole 1	149 02 08.94E	38 06 53.92S	10	170	640	810	630	800
Sole 2	149 00 33.55E	38 06 13.08S	25	205	570	775	545	750
South West Bairnsdale 1	147 22 02.60E	37 52 00.48S	72	59	315	374	243	302
Speke 1	147 37 16.39E	38 30 29.13S	22	198	1622	1820	1600	1798
Sperm Whale 1	148 21 56.24E	38 03 20.32S	9	93	708	801	699	792
Sperm Whale Head 1	147 42 24.68E	37 57 54.18S	9	127	642	769	633	760
Spoon Bay 1	147 28 01.88E	38 04 50.68S	9	147	875	1022	866	1013
St Margaret Island 1	146 50 09.83E	38 38 10.21S	8	56	548	604	540	596
Stonefish 1	148 33 39.36E	38 14 56.64S	10	95	1708	1803	1698	1793
Stringy Bark 1	146 54 06.56E	38 30 56.52S	39	58	320	378	281	339
Sunfish 1	148 13 42.17E	38 08 20.29S	10	151	1531	1682	1521	1672
Sunfish 2	148 14 44.89E	38 08 17.94S	21	152	1458	1610	1437	1589
Sweep 1	148 38 17.54E	38 03 21.17S	25	141	615	756	590	731
Sweetlips 1	148 02 13.26E	38 05 41.76S	21	144	1361	1505	1340	1484
Swordfish 1	148 00 28.63E	38 23 30.53S	25	269	1730	1999	1705	1974
Tailor 1	148 16 29.61E	38 29 26.46S	10	288	2118	2406	2108	2396
Tarra 1	147 42 12.86E	38 38 31.64S	31	388	1752	2140	1721	2109
Tarwhine 1	147 31 45.93E	38 24 11.84S	21	175	1170	1345	1149	1324
Teraglin 1	148 20 34.73E	38 22 45.45S	21	286	2135	2421	2114	2400
Terakihi 1	148 32 47.78E	38 30 15.13S	21	300	2537	2837	2516	2816
Threadfin 1	148 15 27.07E	38 32 32.17S	25	219	2178	2397	2153	2379
Tildesley East 3	148 18 06.65E	37 46 31.16S	40	56	152	208	112	168
Tommyruff 1	147 08 38.38E	38 36 41.91S	21	101	796	897	775	876
Torsk 1	147 29 54.66E	38 26 43.45S	21	253	1078	1331	1057	1310
Trevally 1	148 23 44.59E	38 17 17.45S	10	284	1650	1934	1640	1924
Trifon 1	147 11 34.43E	38 18 10.05S	30	140	546	686	516	656
Trumpeter 1	148 21 02.01E	38 24 42.99S	21	263	2185	2448	2164	2427
Tuna 1	148 25 07.58E	38 10 19.45S	10	259	1052	1311	1042	1301
Tuna 2	148 23 18.65E	38 10 46.16S	10	260	1070	1330	1060	1320
Tuna 3	148 26 54.67E	38 10 04.13S	10	240	1085	1325	1075	1315
Tuna 4	148 22 12.68E	38 11 15.45S	21	270	1100	1370	1079	1349
Turrum 1	148 14 45.60E	38 12 04.46S	30	342	1600	1942	1570	1912
Turrum 2	148 15 01.02E	38 14 33.60S	10	173	1373	1546	1363	1536
Turrum 3	148 15 03.57E	38 15 35.50S	21	248	1323	1571	1302	1550
Turrum 4	148 15 48.75E	38 16 34.04S	23	391	1528	1919	1505	1896
Turrum 5	148 12 08.68E	38 14 50.00S	25	94	1292	1386	1267	1361
Turrum 6	148 10 29.56E	38 14 05.55S	25	146	1314	1460	1289	1435

Well Name	Longitude	Latitude	KB	LEF thickness	LEF top	LEF base	LEF top (msl)	LEF base (msl)
Turrum 7	148 15 53.91E	38 15 46.42S	26	244	1520	1764	1494	1738
Veilfin 1	148 00 13.00E	38 24 56.90S	21	278	1708	1986	1687	1965
Volador 1	148 32 41.35E	38 25 22.71S	25	375	2563	2938	2538	2913
Wahoo 1	148 44 52.55E	38 01 36.43S	9	60	369	429	360	420
Wellington Park 2	147 20 59.63E	38 08 02.48S	5	67	624	691	619	686
West Fortescue 1	148 14 28.34E	38 21 50.79S	21	205	2216	2421	2195	2400
West Halibut 1	148 17 01.47E	38 24 07.73S	25	247	2127	2374	2102	2349
West Seahorse 1	147 37 26.33E	38 12 11.65S	9	210	1170	1380	1161	1371
West Seahorse 2	147 36 43.16E	38 12 16.32S	9	212	1193	1405	1184	1396
Whale 1	148 33 38.73E	38 01 11.62S	9	35	404	439	395	430
Whaleshark 1	148 53 30.64E	38 23 39.52S	22	110	2612	2722	2590	2700
Whiptail 1A	147 31 14.23E	38 19 24.84S	21	140	985	1125	964	1104
Whiting 1	147 53 05.55E	38 14 06.24S	21	118	1164	1282	1143	1261
Whiting 2	147 51 19.16E	38 14 59.15S	21	86	1177	1263	1156	1242
Wirrah 1	147 49 01.74E	38 11 16.80S	21	174	1291	1465	1270	1444
Wirrah 2	147 49 31.21E	38 10 55.41S	21	191	1297	1488	1276	1467
Wirrah 3	147 48 31.91E	38 11 43.87S	21	183	1306	1489	1285	1468
Wrixondale 1	147 29 52.80E	37 59 37.00S	26	154	629	783	603	757
Wombat 1	147 09 37.19E	38 21 09.71S	15	90	603	693	588	678
Wonga Binda 1	147 02 30.50E	38 26 57.04S	30	60	530	590	500	560
Woodside 2	146 53 46.66E	38 37 37.53S	9	58	701	759	692	750
Woodside 12	146 59 23.36E	38 32 05.64S	4	116	752	868	748	864
Woodside South 1	146 54 34.80E	38 34 19.21S	14	80	512	592	498	578
Wooundellah 10	146 57 36.83E	38 05 54.97S	29	38	362	400	333	371
Wooundellah 11	146 55 51.67E	38 06 06.63S	30	31	372	403	342	373
Wrixondale 1	147 29 52.68E	37 59 37.29S	26	141	629	770	603	744
Wurruk Wurruk 13	147 01 06.69E	38 06 56.11S	21	68	585	653	564	632
Wyrallah 1	147 05 09.59E	38 40 31.31S	21	103	771	874	750	853
Yellowtail 1	148 16 31.34E	38 31 28.97S	21	254	2151	2405	2130	2384
Yellowtail 2	148 16 59.55E	38 31 54.14S	21	245	2163	2408	2142	2387

Appendix 2

ACS Laboratories (A) Interpreted Capillary Pressure charts, (B) Capillary Pressure plots and (C) Pore Size Distribution plots from Mercury Injection Capillary Pressure analysis of 37 core samples.

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Well Barracouta-1
Sample Depth 1021.95 m

Client Geoscience Victoria
Well Barracouta-1

Test Method Air/Mercury Capillary Pressure Drainage

Sample Barracouta-1 **Ambient Permeability**
Depth 1021.95 m **Ambient Porosity**

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

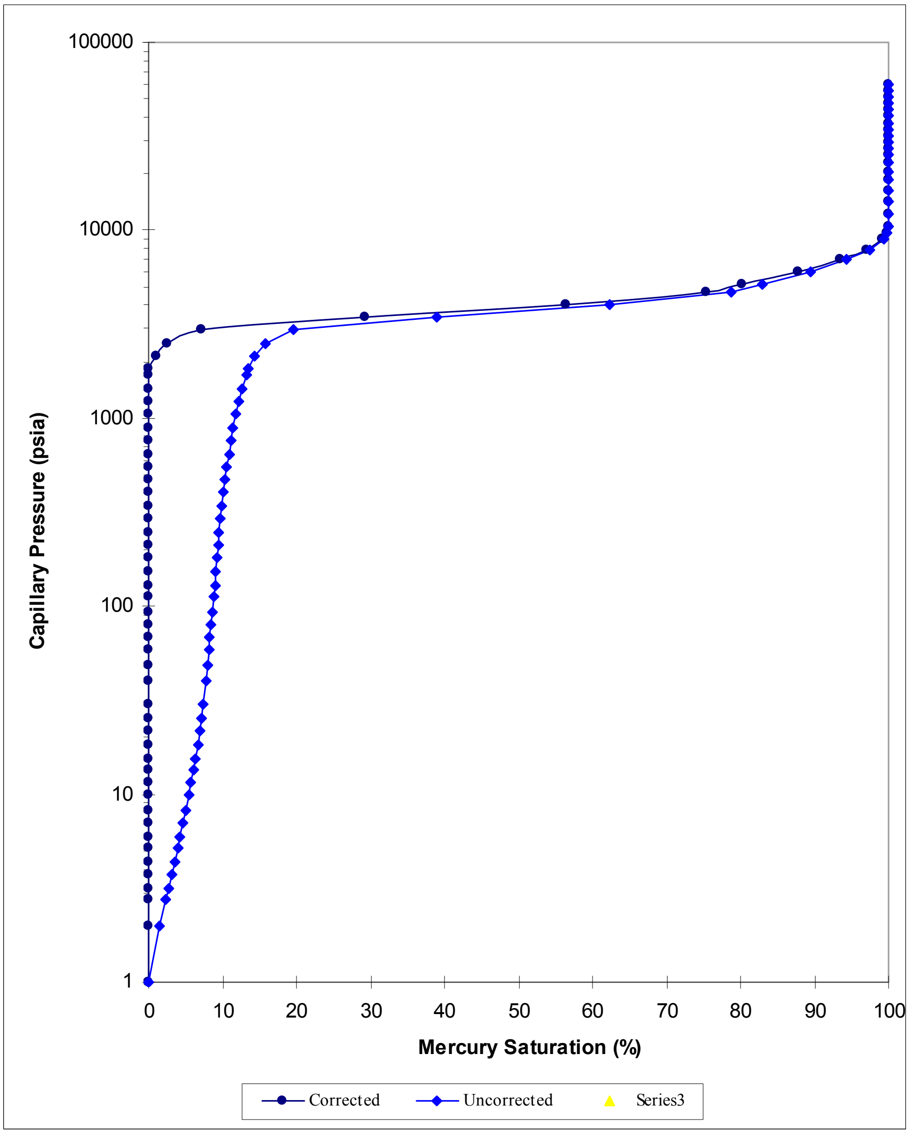
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.063						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	1703	-	2800	-	3001	-
G-W	334.1	232.0	549.3	381.5	588.8	408.9
O-W	111.4	120.6	183.1	198.4	196.3	212.6

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

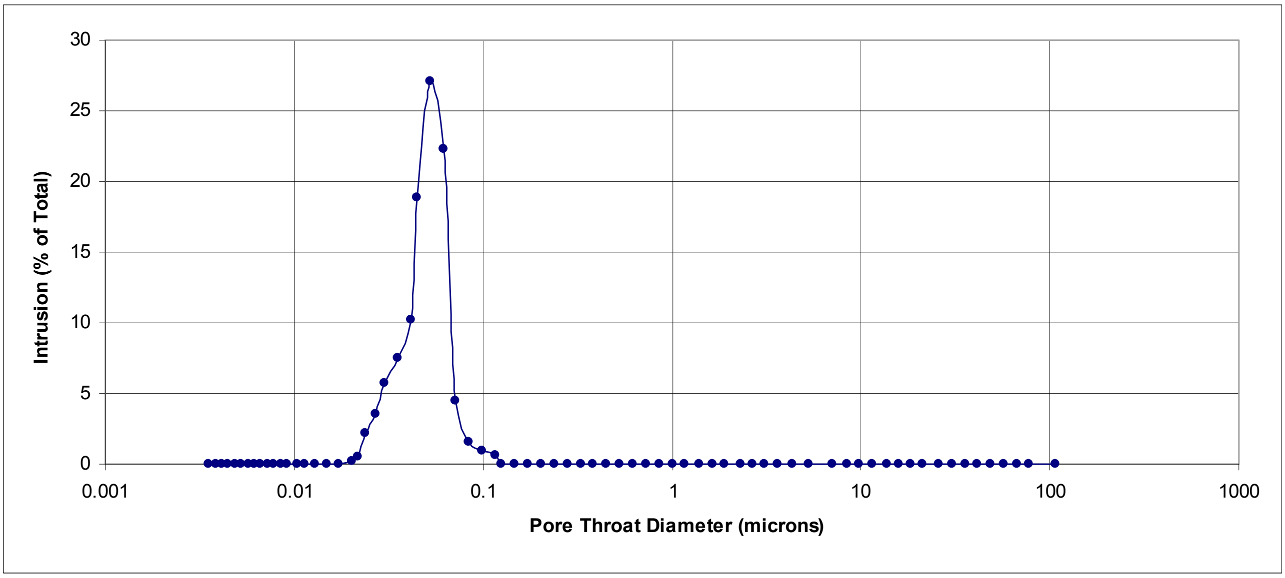
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.00	0.0	0.0	213	0.20	0.14	0.11	0.07	0.64	0.40
1.00	0.0	0.0	213	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.76	1.09
3.18	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.18	0.0	0.0	40.9	1.0	0.71	0.59	0.37	3.34	2.07
5.98	0.0	0.0	35.5	1.2	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.49	2.79
8.27	0.0	0.0	25.6	1.6	1.1	0.95	0.59	5.33	3.31
9.97	0.0	0.0	21.3	2.0	1.4	1.1	0.71	6.42	3.99
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.1	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
39.9	0.0	0.0	5.32	7.8	5.4	4.6	2.8	25.70	15.98
48.5	0.0	0.0	4.38	9.5	6.6	5.6	3.4	31.24	19.42
58.9	0.0	0.0	3.60	12	8.0	6.7	4.2	37.93	23.59
68.8	0.0	0.0	3.08	13	9.4	7.9	4.9	44.31	27.55
79.7	0.0	0.0	2.66	16	11	9.1	5.6	51.33	31.92
92.5	0.0	0.0	2.29	18	13	11	6.6	59.57	37.05
112	0.0	0.0	1.89	22	15	13	7.9	72.13	44.85
130	0.0	0.0	1.63	25	18	15	9.2	83.73	52.06
152	0.0	0.0	1.39	30	21	17	11	97.89	60.87
181	0.0	0.0	1.17	35	25	21	13	116.6	72.49
211	0.0	0.0	1.00	41	29	24	15	135.9	84.50
247	0.0	0.0	0.858	48	34	28	17	159.1	98.92
290	0.0	0.0	0.730	57	39	33	21	186.8	116.1
342	0.0	0.0	0.620	67	47	39	24	220.3	137.0
402	0.0	0.0	0.527	79	55	46	28	258.9	161.0
473	0.0	0.0	0.448	93	64	54	34	304.6	189.4
554	0.0	0.0	0.383	109	75	63	39	356.8	221.9
647	0.0	0.0	0.327	127	88	74	46	416.7	259.1
757	0.0	0.0	0.280	148	103	87	54	487.5	303.2
889	0.0	0.0	0.239	174	121	102	63	572.6	356.0
1048	0.0	0.0	0.202	205	143	120	74	675.0	419.7
1228	0.0	0.0	0.173	241	167	141	87	790.9	491.8
1436	0.0	0.0	0.148	282	196	164	102	924.8	575.1
1687	0.0	0.0	0.126	331	230	193	120	1086	675.6
1828	0.6	0.0	0.116	358	249	209	130	1177	732.1
2143	1.0	1.0	0.0989	420	292	245	152	1380	858.2
2507	1.6	2.6	0.0846	492	341	287	178	1615	1004
2944	4.5	7.1	0.0720	577	401	337	209	1896	1179
3447	22.3	29.3	0.0615	676	469	394	244	2220	1380
4038	27.1	56.4	0.0525	792	550	462	286	2601	1617
4732	18.9	75.3	0.0448	928	644	542	335	3048	1895
5117	10.3	80.2	0.0414	1003	697	586	363	3296	2049
6004	7.5	87.8	0.0353	1177	818	687	425	3867	2405
7032	5.7	93.5	0.0301	1379	958	805	498	4529	2816
7896	3.6	97.0	0.0268	1548	1075	904	559	5085	3162
8927	2.2	99.2	0.0237	1750	1216	1022	632	5749	3575
9662	0.6	99.8	0.0219	1895	1316	1106	685	6223	3870
10459	0.2	100.0	0.0203	2051	1424	1197	741	6736	4189
12283	0.0	100.0	0.0173	2408	1673	1406	870	7911	4919
14332	0.0	100.0	0.0148	2810	1952	1640	1015	9230	5740
16382	0.0	100.0	0.0129	3212	2231	1875	1161	10551	6561
18480	0.0	100.0	0.0115	3624	2516	2115	1309	11902	7401
20484	0.0	100.0	0.0103	4016	2789	2344	1451	13193	8204
23149	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25065	0.0	100.0	0.0085	4915	3413	2868	1776	16143	10038
27136	0.0	100.0	0.0078	5321	3695	3105	1922	17477	10868
29378	0.0	100.0	0.0072	5760	4000	3362	2081	18921	11766
31805	0.0	100.0	0.0067	6236	4331	3640	2253	20484	12737
34422	0.0	100.0	0.0062	6749	4687	3939	2439	22169	13786
37194	0.0	100.0	0.0057	7293	5065	4257	2635	23955	14896
40343	0.0	100.0	0.0053	7910	5493	4617	2858	25983	16157
43592	0.0	100.0	0.0049	8547	5936	4989	3088	28075	17458
47293	0.0	100.0	0.0045	9273	6440	5412	3350	30459	18940
51171	0.0	100.0	0.0041	10034	6968	5856	3625	32956	20493
55384	0.0	100.0	0.0038	10860	7541	6338	3924	35670	22181
59879	0.0	100.0	0.0035	11741	8153	6853	4242	38565	23981

(A) Interpreted Capillary Pressure Chart

Well	Barracouta-1
Sample Depth	1021.95 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Bengworden South-6
Sample Depth 914.9 m

Client Geoscience A Victoria
Well Bengworden South-6

Test Method Air/Mercury Capillary Pressure

Sample BS6
Depth 914.90 m

Pore radius (µm) 0.043

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.237

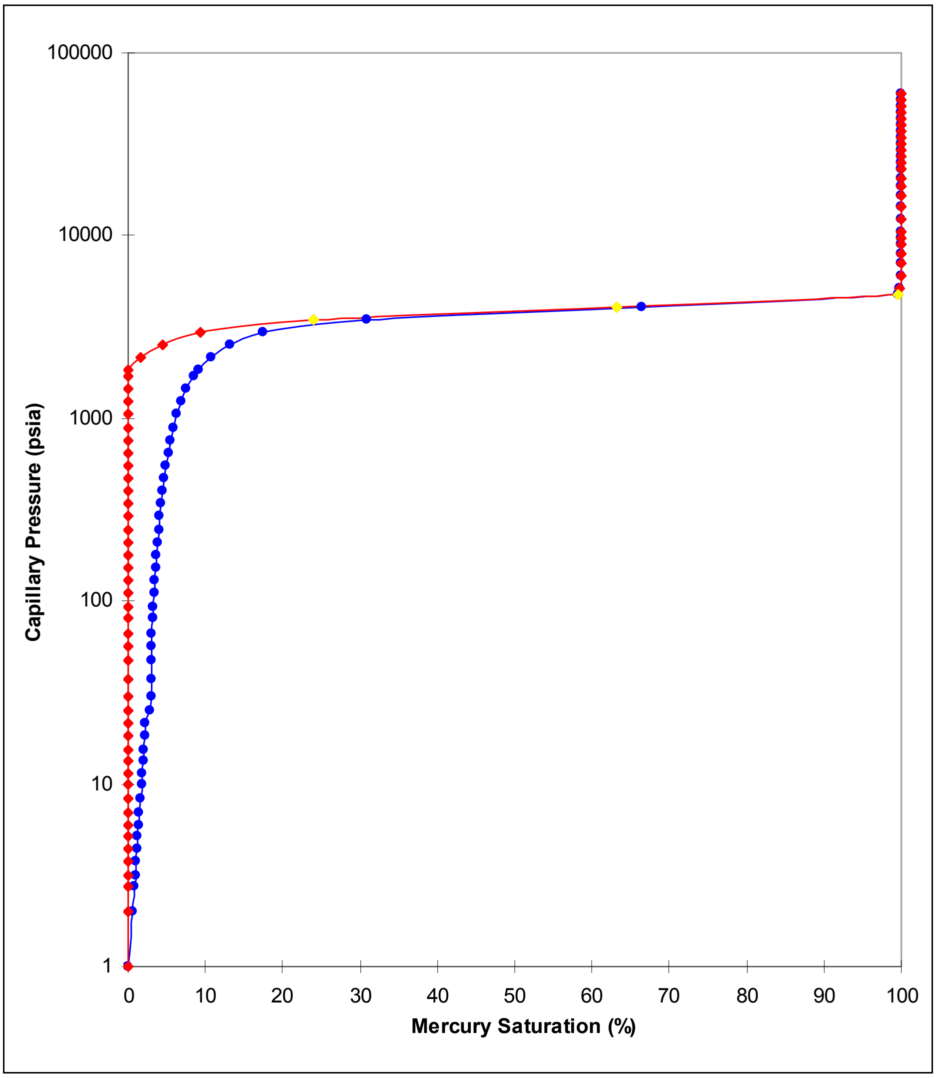
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	2477	-	3115	-	3248	-
G-W	993	486	337	611	424	637	442
O-W	1595	162	175	204	221	212	230
CO_2-W	531	486	175	611	221	637	230

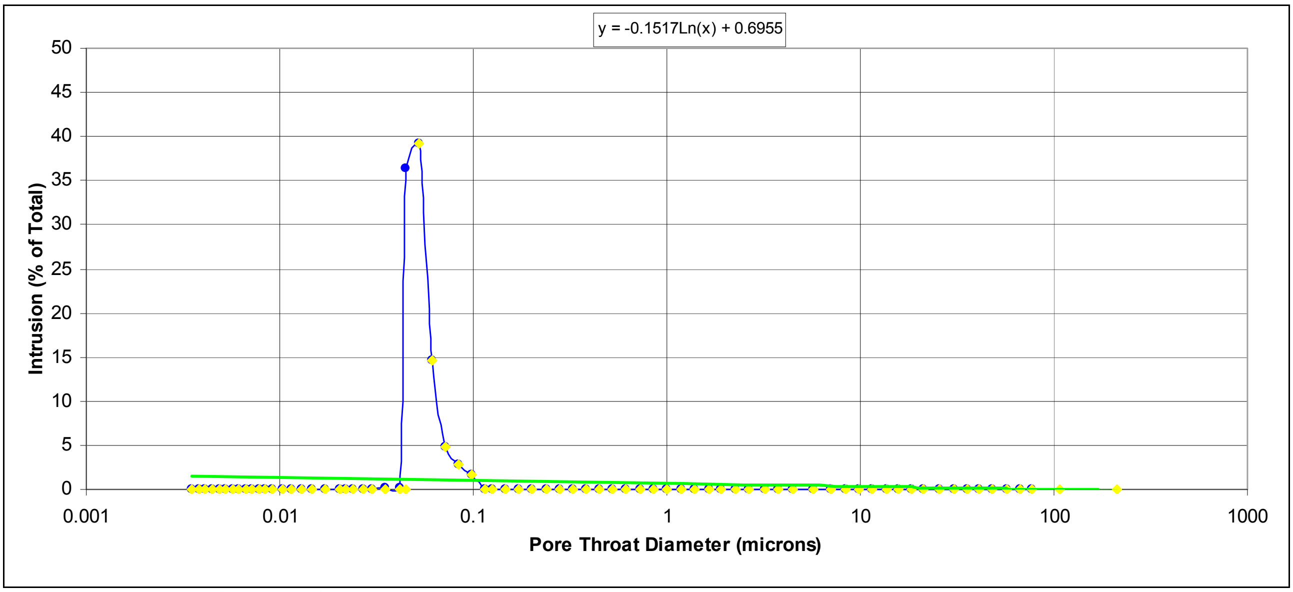
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.6	0.6	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	0.8	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	1.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.1	1.1	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.1	1.2	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.1	1.3	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.1	1.4	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.1	1.5	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.1	1.6	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.1	1.7	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.1	1.8	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.1	2.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	2.1	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.1	2.2	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.1	2.3	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.5	2.8	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.2	3.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.0	3.0	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.0	3.0	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.0	3.0	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.0	3.1	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	3.2	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	3.3	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.1	3.4	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.1	3.5	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.1	3.6	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.1	3.7	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.1	3.8	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.2	4.0	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.2	4.1	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.2	4.3	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.2	4.5	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.2	4.7	0.0	0.0	0.449	92.5	64.2	54.0	33.4	304	189
553	0.2	5.0	0.0	0.0	0.383	108	75.0	63.3	39.2	356	221
647	0.3	5.2	0.0	0.0	0.328	127	88.2	74.0	45.8	416	259
757	0.3	5.5	0.0	0.0	0.280	148	103	86.6	53.6	487	303
887	0.4	5.9	0.0	0.0	0.239	174	121	102	63.1	574	356
1048	0.5	6.4	0.0	0.0	0.202	205	142	120	74.3	675	418
1227	0.5	6.9	0.0	0.0	0.173	241	167	140	86.7	788	491
1439	0.7	7.6	0.0	0.0	0.147	282	196	165	102	927	576
1688	0.9	8.5	0.0	0.0	0.126	331	230	193	119	1082	676
1828	0.6	9.1	0.0	0.0	0.116	358	249	209	129	1173	732
2142	1.6	10.7	1.7	1.7	0.0990	420	292	245	152	1382	859
2510	2.6	13.3	2.8	4.5	0.0845	492	342	287	178	1618	1006
2945	4.3	17.6	4.8	9.3	0.0720	577	401	337	209	1900	1179
3449	13.3	30.9	14.7	24.0	0.0615	676	469	395	245	2227	1379
4040	35.6	66.5	39.2	63.2	0.0525	792	550	462	286	2600	1618
4728	33.1	99.6	36.4	99.6	0.0448	927	644	541	335	3045	1894
5114	0.1	99.7	0.2	99.7	0.0415	1003	697	585	362	3291	2050
6002	0.2	99.9	0.2	99.9	0.0353	1177	817	687	425	3864	2403
7033	0.1	100.0	0.1	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Bengworden South-6
Sample Depth	914.9 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Bundalaguah-10
Sample Depth 599.8 m

Client Geoscience A Victoria
Well Bundalaguah-10
Test Method Air/Mercury Capillary Pressure
Sample B10
Depth 599.80 m
Pore radius (µm) 1.33

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.155

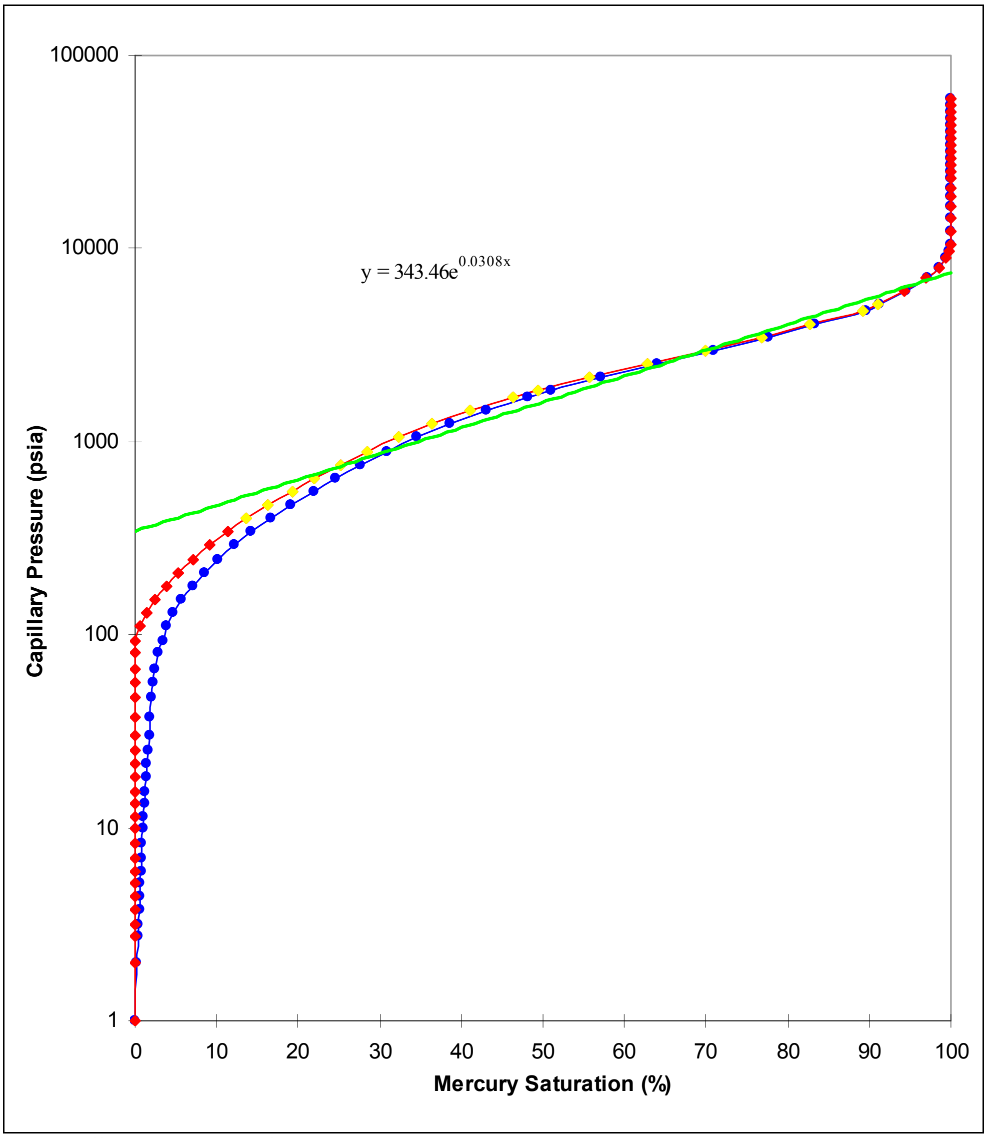
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	79.9	-	343	-	467	-
G-W	32	15.7	10.9	67.4	46.8	91.7	63.7
O-W	51	5.23	5.66	22.5	24.3	30.6	33.1
CO_2-W	15	15.7	5.66	67.4	24.3	91.7	33.1

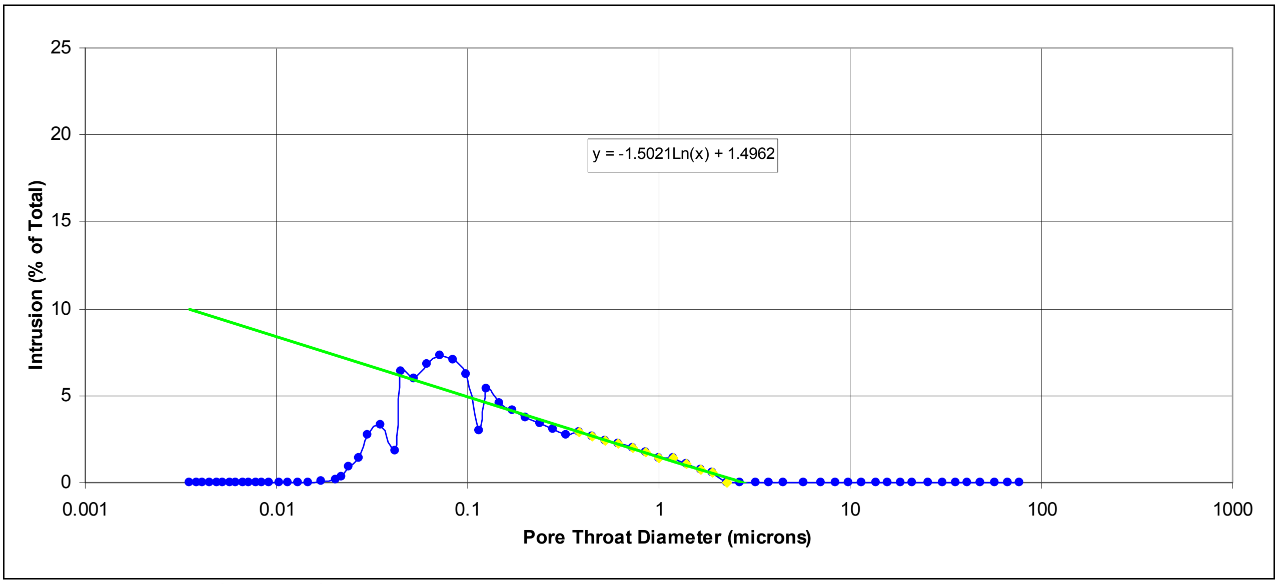
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.3	0.3	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.1	0.4	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	0.5	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.1	0.5	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.1	0.6	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.1	0.7	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.1	0.8	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.1	0.8	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.1	0.9	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.1	1.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.1	1.1	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.1	1.2	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	1.3	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.1	1.4	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.1	1.5	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.1	1.6	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.2	1.8	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	1.9	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	2.0	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.2	2.2	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.2	2.4	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.4	2.8	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.6	3.4	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.6	3.9	0.6	0.6	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.7	4.7	0.8	1.4	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	1.1	5.7	1.1	2.5	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	1.4	7.1	1.4	3.9	1.18	35.1	24.4	20.5	12.7	115	71.8
210	1.4	8.5	1.4	5.3	1.01	41.2	28.6	24.0	14.9	135	84.1
247	1.7	10.2	1.8	7.1	0.860	48.4	33.6	28.3	17.5	159	98.8
292	2.0	12.2	2.0	9.1	0.726	57.3	39.8	33.4	20.7	188	117
343	2.1	14.3	2.2	11.3	0.619	67.3	46.7	39.3	24.3	221	137
401	2.3	16.6	2.4	13.7	0.528	78.6	54.6	45.9	28.4	258	161
472	2.5	19.2	2.6	16.3	0.449	92.5	64.2	54.0	33.4	304	189
553	2.8	22.0	2.9	19.3	0.383	108	75.0	63.3	39.2	356	221
647	2.6	24.6	2.7	22.0	0.328	127	88.2	74.0	45.8	416	259
757	3.0	27.6	3.1	25.1	0.280	148	103	86.6	53.6	487	303
887	3.3	30.9	3.4	28.5	0.239	174	121	102	63.1	574	356
1048	3.6	34.5	3.8	32.3	0.202	205	142	120	74.3	675	418
1227	4.0	38.6	4.2	36.4	0.173	241	167	140	86.7	788	491
1439	4.5	43.0	4.6	41.0	0.147	282	196	165	102	927	576
1688	5.2	48.2	5.4	46.4	0.126	331	230	193	119	1082	676
1828	2.9	51.1	3.0	49.4	0.116	358	249	209	129	1173	732
2142	6.0	57.2	6.3	55.7	0.0990	420	292	245	152	1382	859
2510	6.8	64.0	7.0	62.7	0.0845	492	342	287	178	1618	1006
2945	7.0	71.0	7.3	70.0	0.0720	577	401	337	209	1900	1179
3449	6.6	77.6	6.8	76.8	0.0615	676	469	395	245	2227	1379
4040	5.8	83.3	6.0	82.8	0.0525	792	550	462	286	2600	1618
4728	6.2	89.6	6.4	89.2	0.0448	927	644	541	335	3045	1894
5114	1.7	91.3	1.8	91.0	0.0415	1003	697	585	362	3291	2050
6002	3.2	94.5	3.3	94.3	0.0353	1177	817	687	425	3864	2403
7033	2.6	97.1	2.7	97.0	0.0301	1379	958	805	498	4527	2818
7895	1.4	98.6	1.5	98.5	0.0269	1548	1075	904	560	5091	3162
8920	0.9	99.4	0.9	99.4	0.0238	1749	1215	1021	632	5745	3574
9649	0.3	99.7	0.3	99.7	0.0220	1892	1314	1104	683	6209	3865
10452	0.2	99.9	0.2	99.9	0.0203	2049	1423	1196	740	6727	4185
12283	0.1	100.0	0.1	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Bundalaguah-10
Sample Depth	599.8 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Cod-1
Sample Depth 1771.89 m

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Client	Geoscience Victoria		
Well	Cod-1		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Cod-1	**Ambient Permeability**	
Depth	1711.89 m	**Ambient Porosity**	

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

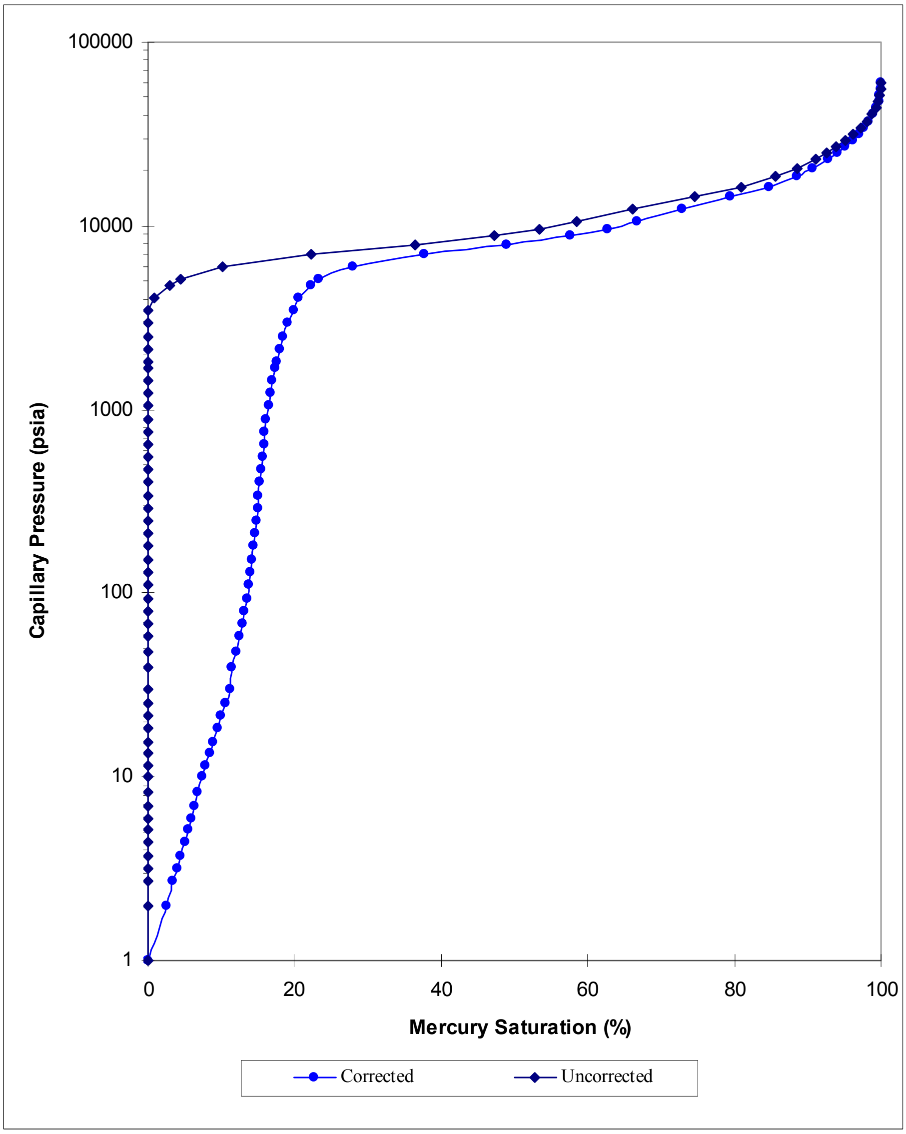
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.030						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	3547.7	-	5070	-	5787	-
G-W	696.0	483.3	994.7	690.7	1135.3	788.4
O-W	232.0	251.3	331.6	359.2	378.4	410.0

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

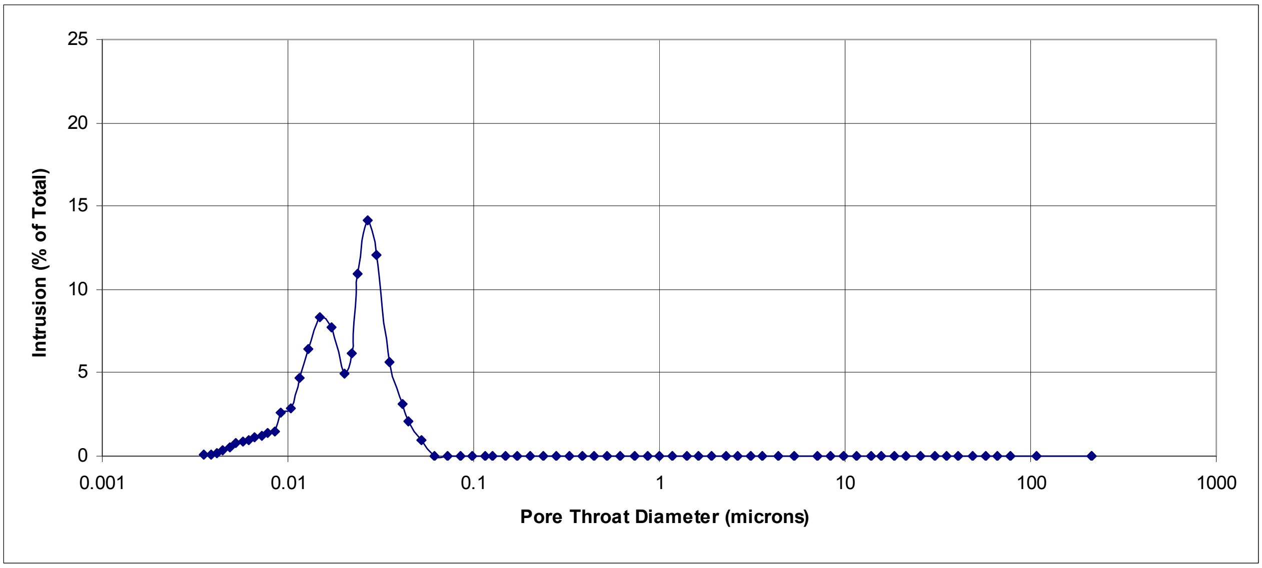
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.00	0.0	0.0	213	0.20	0.14	0.11	0.07	0.64	0.40
1.00	0.0	0.0	213	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.76	1.09
3.18	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.18	0.0	0.0	40.9	1.0	0.71	0.59	0.37	3.34	2.07
5.98	0.0	0.0	35.5	1.2	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.49	2.79
8.27	0.0	0.0	25.6	1.6	1.1	0.95	0.59	5.33	3.31
9.97	0.0	0.0	21.3	2.0	1.4	1.1	0.71	6.42	3.99
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.1	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
39.7	0.0	0.0	5.33	7.8	5.4	4.5	2.8	25.57	15.90
48.3	0.0	0.0	4.39	9.5	6.6	5.5	3.4	31.11	19.34
58.7	0.0	0.0	3.61	12	8.0	6.7	4.2	37.81	23.51
68.6	0.0	0.0	3.09	13	9.3	7.9	4.9	44.18	27.47
79.6	0.0	0.0	2.66	16	11	9.1	5.6	51.27	31.88
92.3	0.0	0.0	2.30	18	13	11	6.5	59.45	36.96
112	0.0	0.0	1.90	22	15	13	7.9	72.13	44.85
130	0.0	0.0	1.64	25	18	15	9.2	83.73	52.06
152	0.0	0.0	1.40	30	21	17	11	97.89	60.87
181	0.0	0.0	1.17	35	25	21	13	116.6	72.49
211	0.0	0.0	1.00	41	29	24	15	135.9	84.50
247	0.0	0.0	0.859	48	34	28	17	159.1	98.92
290	0.0	0.0	0.731	57	39	33	21	186.8	116.1
342	0.0	0.0	0.621	67	47	39	24	220.3	137.0
402	0.0	0.0	0.527	79	55	46	28	258.9	161.0
473	0.0	0.0	0.448	93	64	54	34	304.6	189.4
554	0.0	0.0	0.383	109	75	63	39	356.8	221.9
647	0.0	0.0	0.328	127	88	74	46	416.7	259.1
757	0.0	0.0	0.280	148	103	87	54	487.5	303.2
889	0.0	0.0	0.239	174	121	102	63	572.6	356.0
1048	0.0	0.0	0.202	205	143	120	74	675.0	419.7
1228	0.0	0.0	0.173	241	167	141	87	790.9	491.8
1436	0.0	0.0	0.148	282	196	164	102	924.8	575.1
1687	0.0	0.0	0.126	331	230	193	120	1086	675.6
1828	0.0	0.0	0.116	358	249	209	130	1177	732.1
2143	0.0	0.0	0.0989	420	292	245	152	1380	858.2
2507	0.0	0.0	0.0846	492	341	287	178	1615	1004
2944	0.0	0.0	0.0720	577	401	337	209	1896	1179
3448	0.0	0.0	0.0615	676	469	395	244	2221	1381
4040	0.9	0.9	0.0525	792	550	462	286	2602	1618
4735	2.1	3.0	0.0448	928	645	542	335	3050	1896
5120	3.2	4.5	0.0414	1004	697	586	363	3297	2050
6007	5.7	10.1	0.0353	1178	818	687	426	3869	2406
7035	12.1	22.2	0.0301	1379	958	805	498	4531	2817
7898	14.1	36.3	0.0268	1549	1075	904	560	5087	3163
8929	10.9	47.3	0.0237	1751	1216	1022	633	5751	3576
9664	6.2	53.4	0.0219	1895	1316	1106	685	6224	3870
10461	5.0	58.4	0.0203	2051	1424	1197	741	6737	4189
12285	7.8	66.2	0.0173	2409	1673	1406	870	7912	4920
14333	8.3	74.5	0.0148	2810	1952	1640	1015	9231	5740
16383	6.4	80.9	0.0129	3212	2231	1875	1161	10551	6561
18481	4.7	85.6	0.0115	3624	2516	2115	1309	11903	7401
20484	2.8	88.5	0.0103	4016	2789	2344	1451	13193	8204
23149	2.6	91.1	0.0092	4539	3152	2649	1640	14909	9271
25066	1.5	92.5	0.0085	4915	3413	2869	1776	16144	10039
27136	1.4	93.9	0.0078	5321	3695	3105	1922	17477	10868
29378	1.2	95.1	0.0072	5760	4000	3362	2081	18921	11766
31805	1.1	96.2	0.0067	6236	4331	3640	2253	20484	12737
34423	1.0	97.2	0.0062	6750	4687	3939	2439	22170	13786
37194	0.8	98.0	0.0057	7293	5065	4257	2635	23955	14896
40343	0.7	98.8	0.0053	7910	5493	4617	2858	25983	16157
43592	0.5	99.3	0.0049	8547	5936	4989	3088	28075	17458
47294	0.4	99.6	0.0045	9273	6440	5412	3351	30459	18941
51171	0.2	99.8	0.0041	10034	6968	5856	3625	32956	20493
55385	0.1	99.9	0.0038	10860	7542	6338	3924	35670	22181
59879	0.1	100.0	0.0035	11741	8153	6853	4242	38565	23981

(A) Interpreted Capillary Pressure Chart

Well	Cod-1
Sample Depth	1771.89 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Colquhoun East-6
Sample Depth 180.7 m

Client Geoscience A Victoria
Well Colquhoun East-6
Test Method Air/Mercury Capillary Pressure
Sample CE6
Depth 180.70 m
Pore radius (µm) 0.105

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.035

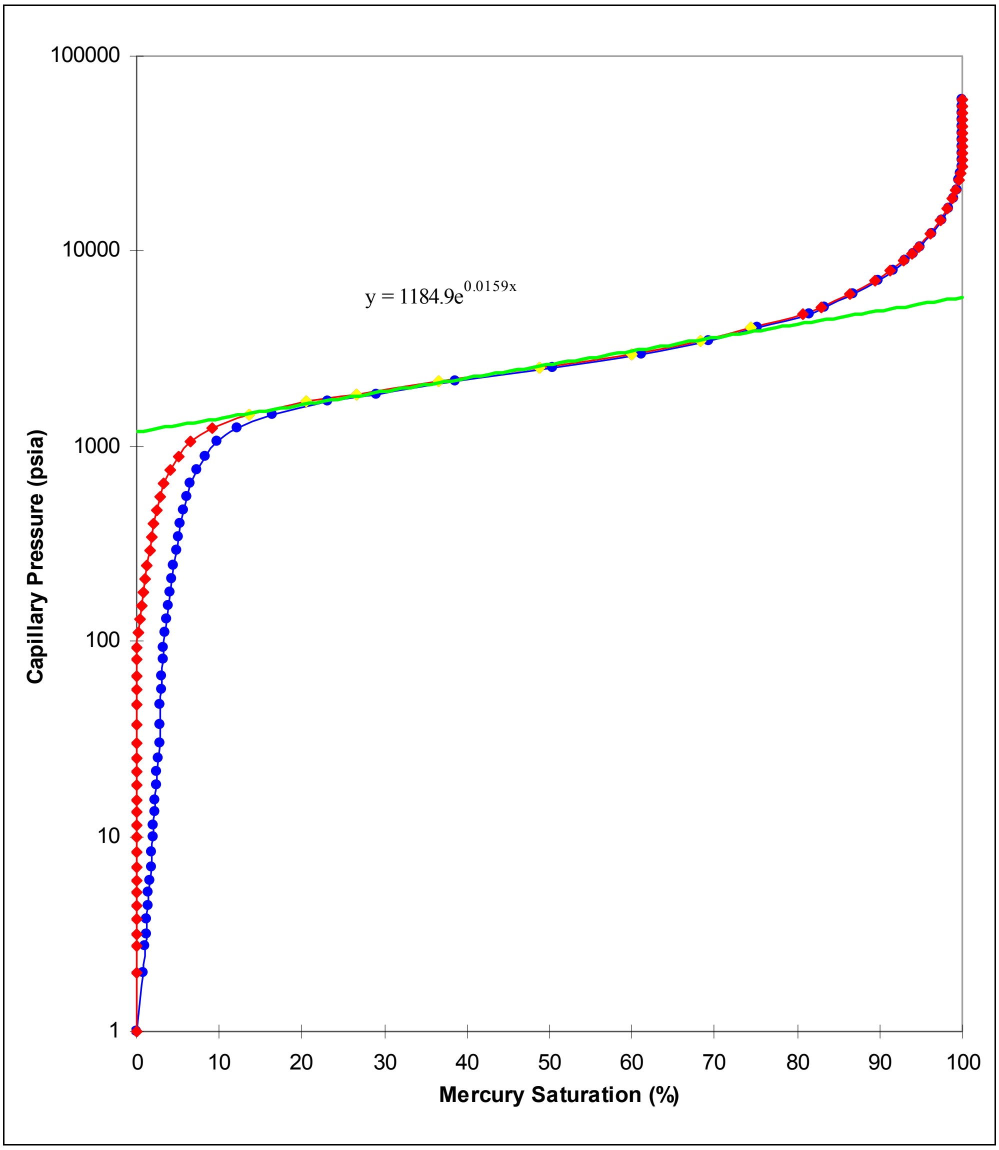
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	1011	-	1185	-	1389	-
G-W	405	198	138	232	161	272	189
O-W	651	66.1	71.6	77.5	83.9	90.8	98.4
CO_2-W	171	198	71.6	232	83.9	272	98.4

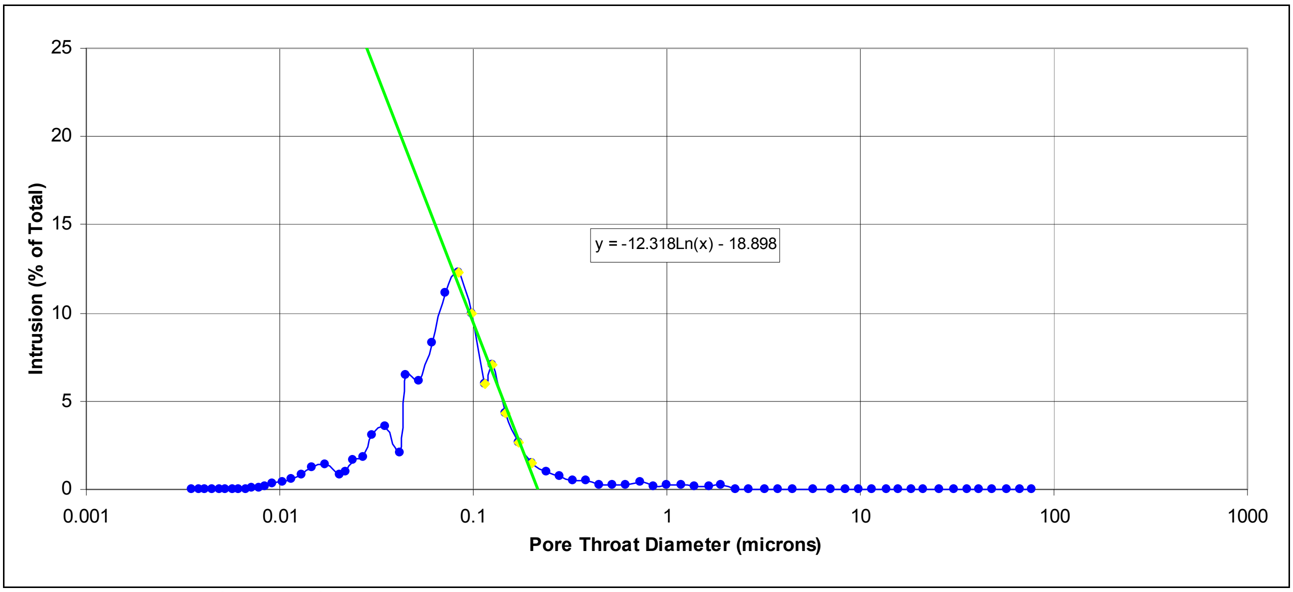
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.7	0.7	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	1.1	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	1.2	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.1	1.3	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.2	1.5	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.1	1.5	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.2	1.7	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.1	1.8	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.1	1.8	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.2	2.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.1	2.1	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.2	2.3	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	2.3	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.1	2.4	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	2.4	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.3	2.7	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.1	2.8	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	2.9	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	2.9	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.0	3.0	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	3.1	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	3.2	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	3.3	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.2	3.5	0.2	0.2	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.1	3.7	0.1	0.3	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	3.8	0.2	0.5	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	4.0	0.2	0.7	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.2	4.3	0.2	1.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.2	4.5	0.2	1.2	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.4	4.8	0.4	1.5	0.726	57.3	39.8	33.4	20.7	188	117
343	0.3	5.1	0.3	1.8	0.619	67.3	46.7	39.3	24.3	221	137
401	0.3	5.3	0.3	2.1	0.528	78.6	54.6	45.9	28.4	258	161
472	0.3	5.6	0.3	2.4	0.449	92.5	64.2	54.0	33.4	304	189
553	0.4	6.1	0.5	2.8	0.383	108	75.0	63.3	39.2	356	221
647	0.5	6.5	0.5	3.3	0.328	127	88.2	74.0	45.8	416	259
757	0.7	7.3	0.8	4.1	0.280	148	103	86.6	53.6	487	303
887	1.0	8.3	1.0	5.1	0.239	174	121	102	63.1	574	356
1048	1.4	9.7	1.5	6.6	0.202	205	142	120	74.3	675	418
1227	2.6	12.3	2.6	9.2	0.173	241	167	140	86.7	788	491
1439	4.2	16.4	4.3	13.5	0.147	282	196	165	102	927	576
1688	6.8	23.2	7.0	20.6	0.126	331	230	193	119	1082	676
1828	5.8	29.0	6.0	26.5	0.116	358	249	209	129	1173	732
2142	9.6	38.6	10.0	36.5	0.0990	420	292	245	152	1382	859
2510	11.8	50.5	12.3	48.8	0.0845	492	342	287	178	1618	1006
2945	10.7	61.2	11.1	59.9	0.0720	577	401	337	209	1900	1179
3449	8.1	69.3	8.3	68.2	0.0615	676	469	395	245	2227	1379
4040	5.9	75.2	6.1	74.3	0.0525	792	550	462	286	2600	1618
4728	6.2	81.4	6.5	80.8	0.0448	927	644	541	335	3045	1894
5114	2.0	83.4	2.1	82.9	0.0415	1003	697	585	362	3291	2050
6002	3.4	86.8	3.5	86.4	0.0353	1177	817	687	425	3864	2403
7033	3.0	89.8	3.1	89.5	0.0301	1379	958	805	498	4527	2818
7895	1.7	91.6	1.8	91.3	0.0269	1548	1075	904	560	5091	3162
8920	1.6	93.2	1.7	93.0	0.0238	1749	1215	1021	632	5745	3574
9649	1.0	94.1	1.0	93.9	0.0220	1892	1314	1104	683	6209	3865
10452	0.8	95.0	0.8	94.8	0.0203	2049	1423	1196	740	6727	4185
12283	1.3	96.3	1.4	96.2	0.0173	2408	1672	1406	870	7909	4918
14333	1.2	97.5	1.2	97.4	0.0148	2810	1951	1640	1015	9227	5738
16381	0.8	98.3	0.9	98.2	0.0129	3212	2231	1875	1161	10555	6562
18481	0.6	98.9	0.6	98.8	0.0115	3624	2517	2115	1309	11900	7403
20481	0.4	99.3	0.4	99.3	0.0104	4016	2789	2344	1451	13191	8203
23149	0.3	99.6	0.4	99.6	0.0092	4539	3152	2649	1640	14909	9271
25064	0.2	99.8	0.2	99.8	0.0085	4915	3413	2868	1775	16136	10038
27135	0.1	99.9	0.1	99.9	0.0078	5321	3695	3105	1922	17473	10868
29376	0.1	100.0	0.1	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Colquhoun East-6
Sample Depth	180.7 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Dulungalong-2
Sample Depth 478.1 m

Client	Geoscience Victoria
Well	Dulungalong-2
Test Method	Air/Mercury Capillary Pressure
Sample Depth	478.10 m
Ambient Permeability	
Ambient Porosity	
pore radius (μm)	0.190

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.107

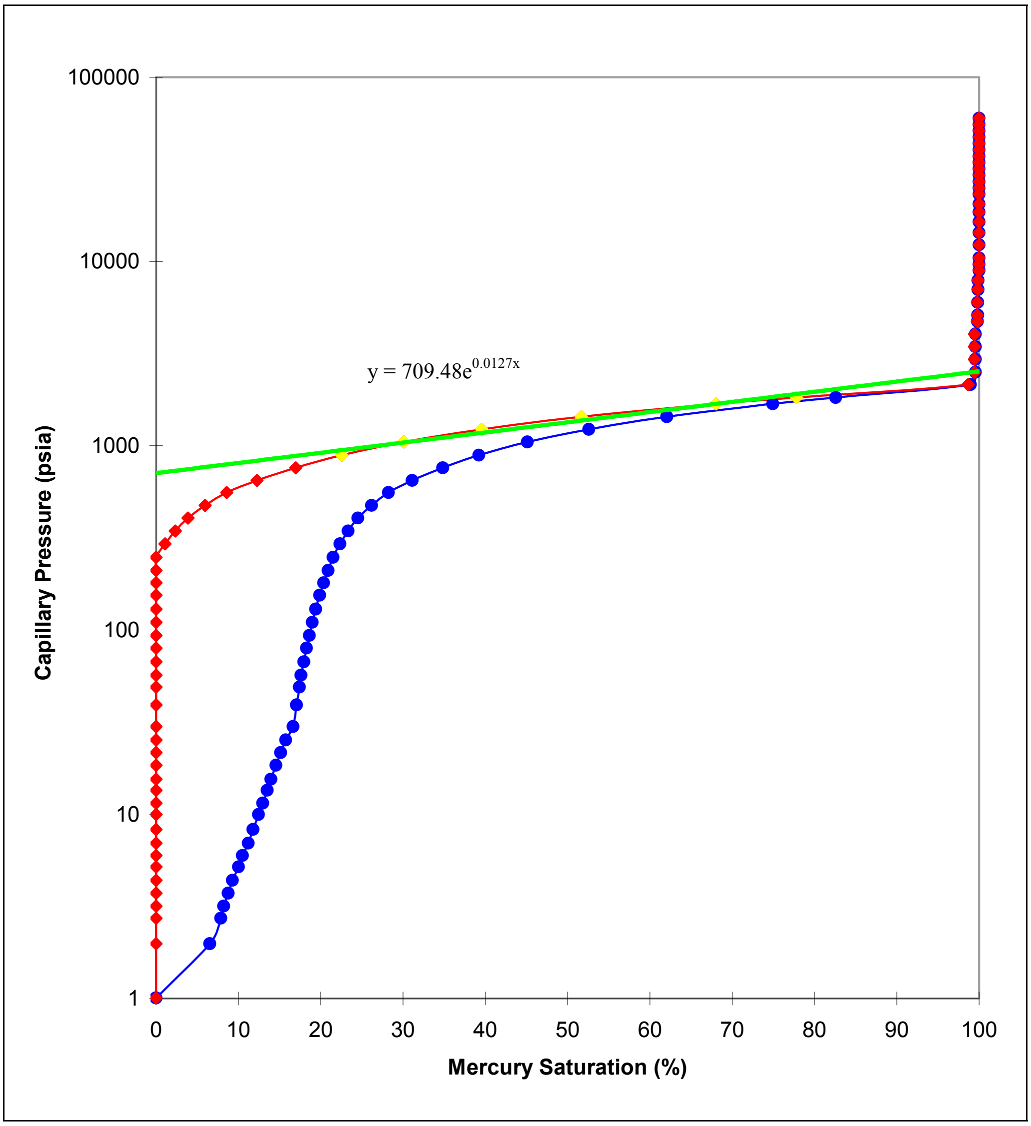
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	561	-	709	-	806	-
G-W	225	110	76.5	139	96.7	158	110
O-W	361	36.7	39.8	46.4	50.3	52.7	57.1
CO_2-W	103	110	39.8	139	50.3	158	57.1

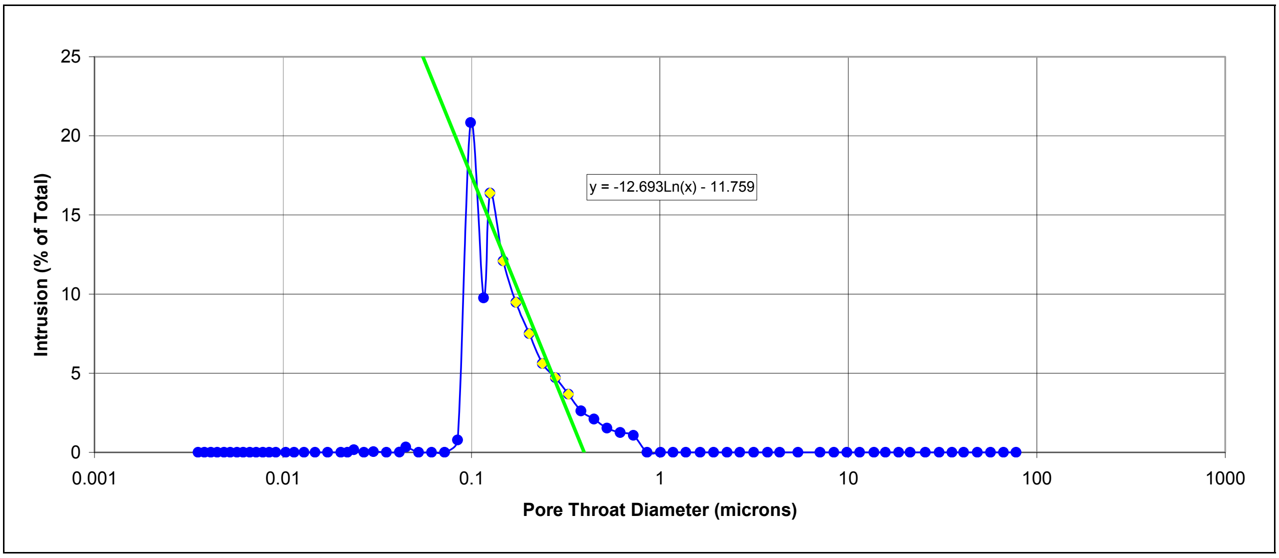
Pressure (psia)	Raw Data Intrusion (percent)	Raw Data Saturation (percent)	Conformance Corrected Intrusion (percent)	Conformance Corrected Saturation (percent)	Pore Diameter (μm)	Equivalent Air/Brine Lab (psi)	Injection Pressures Air/Brine Res Con (psi)	Oil/Brine Lab Conditions (psi)	Oil/Brine Reservoir Conditions (psi)	Height Above Free Water Oil-Water (feet)	Height Above Free Water Gas-Water (feet)
1.01	0.0	0.0	0.0	0.0	211	0.20	0.14	0.12	0.07	0.65	0.41
1.98	6.5	6.5	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	1.3	7.9	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.4	8.2	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.5	8.8	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.5	9.3	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.7	10.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.97	0.5	10.5	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.7	11.2	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.6	11.8	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.7	12.4	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.5	13.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.5	13.5	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.5	14.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.6	14.6	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.6	15.1	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.6	15.8	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.9	16.7	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
39.2	0.4	17.1	0.0	0.0	5.41	7.69	5.34	4.49	2.78	25.3	15.7
49.0	0.4	17.4	0.0	0.0	4.33	9.61	6.67	5.61	3.47	31.5	19.6
56.8	0.2	17.6	0.0	0.0	3.73	11.1	7.71	6.50	4.02	36.5	22.7
67.3	0.3	18.0	0.0	0.0	3.15	13.2	9.17	7.70	4.77	43.4	27.0
79.7	0.3	18.3	0.0	0.0	2.66	15.6	10.8	9.12	5.65	51.4	31.8
93.3	0.4	18.6	0.0	0.0	2.27	18.3	12.7	10.7	6.62	60.2	37.4
110	0.4	19.0	0.0	0.0	1.93	21.6	15.0	12.6	7.80	70.9	44.1
130	0.4	19.4	0.0	0.0	1.64	25.5	17.7	14.9	9.22	83.8	52.1
154	0.5	19.9	0.0	0.0	1.37	30.2	21.0	17.6	10.9	99.1	61.8
180	0.5	20.4	0.0	0.0	1.18	35.3	24.5	20.6	12.8	116	72.1
211	0.5	20.9	0.0	0.0	1.01	41.4	28.8	24.1	14.9	135	84.7
248	0.6	21.5	0.0	0.0	0.855	48.6	33.8	28.4	17.6	160	99.4
293	0.8	22.3	1.1	1.1	0.723	57.5	39.9	33.5	20.7	188	117
344	1.0	23.3	1.3	2.3	0.616	67.5	46.9	39.4	24.4	222	138
404	1.2	24.5	1.5	3.9	0.524	79.2	55.0	46.2	28.6	260	162
474	1.7	26.2	2.1	6.0	0.447	92.9	64.5	54.2	33.6	305	190
556	2.0	28.2	2.6	8.6	0.381	109	75.7	63.6	39.4	358	223
649	2.9	31.1	3.7	12.3	0.327	127	88.2	74.3	46.0	418	259
759	3.7	34.8	4.7	17.0	0.279	149	103	86.9	53.8	489	303
889	4.4	39.2	5.6	22.6	0.238	174	121	102	63.1	574	356
1048	5.9	45.1	7.5	30.1	0.202	205	142	120	74.3	675	418
1228	7.4	52.6	9.5	39.6	0.173	241	167	141	87.3	794	491
1438	9.5	62.1	12.1	51.7	0.147	282	196	165	102	927	576
1689	12.9	74.9	16.4	68.1	0.126	331	230	193	119	1082	676
1828	7.7	82.6	9.8	77.8	0.116	358	249	209	129	1173	732
2142	16.4	98.9	20.8	98.7	0.0990	420	292	245	152	1382	859
2507	0.6	99.6	0.8	99.4	0.0846	492	342	287	178	1618	1006
2941	0.0	99.6	0.0	99.4	0.0721	577	401	337	209	1900	1179
3445	0.0	99.6	0.0	99.4	0.0615	675	469	394	244	2218	1379
4040	0.0	99.6	0.0	99.4	0.0525	792	550	462	286	2600	1618
4726	0.3	99.8	0.3	99.8	0.0449	927	644	541	335	3045	1894
5104	0.0	99.8	0.0	99.8	0.0415	1001	695	584	362	3291	2044
5994	0.0	99.8	0.0	99.8	0.0354	1175	816	686	425	3864	2400
7022	0.0	99.9	0.0	99.8	0.0302	1377	956	804	498	4527	2812
7886	0.0	99.9	0.0	99.8	0.0269	1546	1074	902	558	5073	3159
8916	0.1	100.0	0.2	100.0	0.0238	1748	1214	1020	631	5736	3571
9648	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12285	0.0	100.0	0.0	100.0	0.0173	2409	1673	1406	870	7909	4921
14332	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18479	0.0	100.0	0.0	100.0	0.0115	3623	2516	2115	1309	11900	7400
20480	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23148	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25065	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27137	0.0	100.0	0.0	100.0	0.0078	5321	3695	3106	1923	17482	10868
29377	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31803	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34423	0.0	100.0	0.0	100.0	0.0062	6750	4688	3939	2438	22164	13788
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40342	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43592	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47295	0.0	100.0	0.0	100.0	0.0045	9274	6440	5413	3351	30464	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55386	0.0	100.0	0.0	100.0	0.0038	10860	7542	6338	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Dulungalong-2
Sample Depth	478.1 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Flounder-6
Sample Depth 1929.38 m

Client	Geoscience Victoria		
Well	Flounder-6		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Flounder-6	**Ambient Permeability**	
Depth	1929.38 m	**Ambient Porosity**	

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

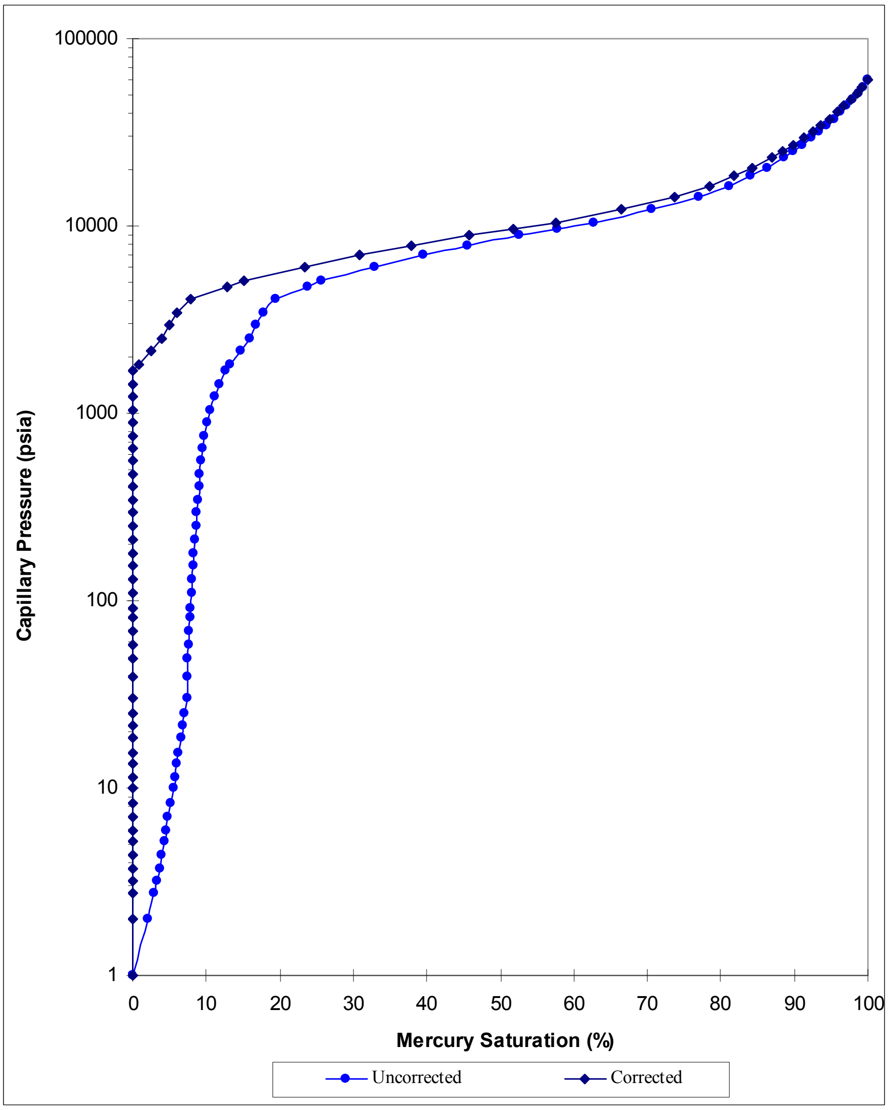
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.063						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	1703	-	3833	-	4223.0	-
G-W	334.1	232.0	752.0	522.2	828.5	575.3
O-W	111.4	120.6	250.7	271.5	276.2	299.2

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

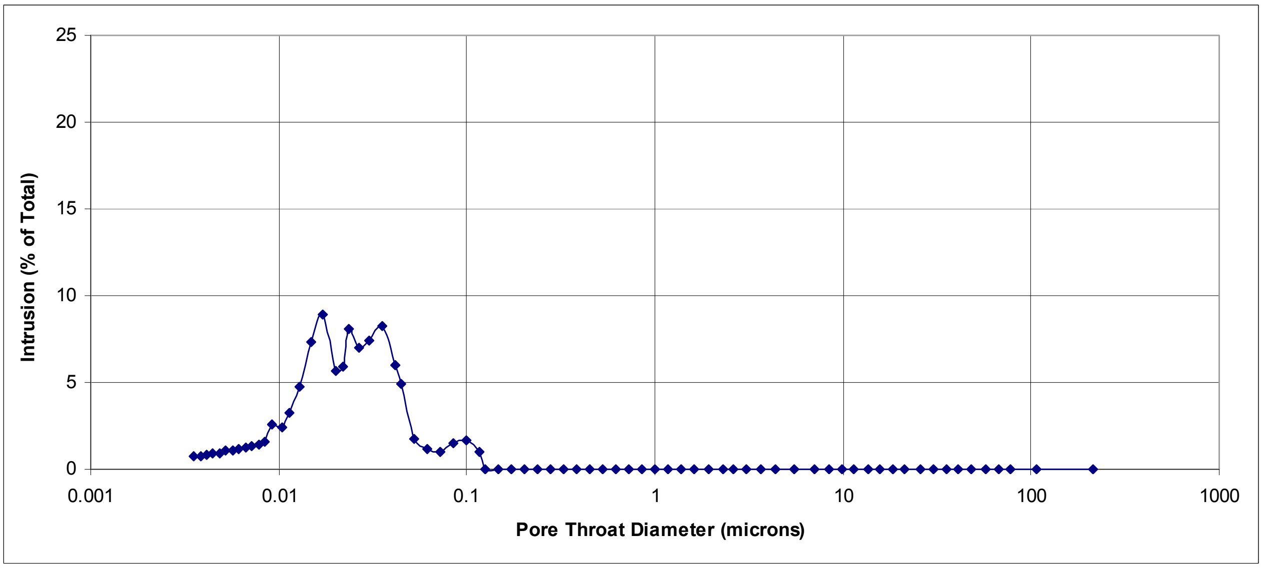
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.00	0.0	0.0	213	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.76	1.09
3.18	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.18	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.07
5.98	0.0	0.0	35.5	1.2	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.49	2.79
8.27	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.31
9.97	0.0	0.0	21.3	2.0	1.4	1.14	0.71	6.42	3.99
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
38.9	0.0	0.0	5.45	7.6	5.3	4.5	2.8	25.05	15.58
48.9	0.0	0.0	4.33	9.6	6.7	5.6	3.5	31.49	19.58
58.2	0.0	0.0	3.64	11.4	7.9	6.7	4.1	37.48	23.31
69.2	0.0	0.0	3.06	14	9.4	7.9	4.9	44.57	27.71
80.8	0.0	0.0	2.62	16	11.0	9.2	5.7	52.04	32.36
91.4	0.0	0.0	2.32	18	12	10.5	6.5	58.87	36.60
110	0.0	0.0	1.92	22	15	13	7.8	70.84	44.05
131	0.0	0.0	1.62	26	18	15	9.3	84.37	52.46
154	0.0	0.0	1.38	30	21	18	10.9	99.18	61.67
179	0.0	0.0	1.18	35	24	20	13	115.28	71.69
211	0.0	0.0	1.00	41	29	24	15	135.9	84.50
249	0.0	0.0	0.853	49	34	28	18	160.4	99.72
294	0.0	0.0	0.722	58	40	34	21	189.3	117.74
345	0.0	0.0	0.614	68	47	39	24	222.2	138.2
403	0.0	0.0	0.525	79	55	46	29	259.5	161.4
473	0.0	0.0	0.448	93	64	54	34	304.6	189.4
556	0.0	0.0	0.381	109	76	64	39	358.1	222.7
651	0.0	0.0	0.326	128	89	75	46	419.3	260.7
757	0.0	0.0	0.280	148	103	87	54	487.5	303.2
889	0.0	0.0	0.239	174	121	102	63	572.6	356.0
1048	0.0	0.0	0.202	205	143	120	74	675.0	419.7
1228	0.0	0.0	0.173	241	167	141	87	790.9	491.8
1439	0.0	0.0	0.147	282	196	165	102	926.8	576.3
1692	0.0	0.0	0.125	332	230	194	120	1089.7	677.6
1828	1.0	0.7	0.116	358	249	209	130	1177	732.1
2143	1.7	2.4	0.0989	420	292	245	152	1380	858.2
2511	1.5	3.9	0.0844	492	342	287	178	1617	1005.6
2947	1.0	4.9	0.0719	578	401	337	209	1898	1180
3449	1.1	6.0	0.0615	676	470	395	244	2221	1381
4041	1.8	7.8	0.0525	792	550	462	286	2603	1618
4735	4.9	12.8	0.0448	928	645	542	335	3050	1896
5112	6.0	15.1	0.0415	1002	696	585	362	3292	2047
6006	8.3	23.3	0.0353	1178	818	687	425	3868	2405
7025	7.4	30.8	0.0302	1377	957	804	498	4524	2813
7888	7.0	37.8	0.0269	1547	1074	903	559	5080	3159
8919	8.1	45.9	0.0238	1749	1214	1021	632	5744	3572
9650	5.9	51.8	0.0220	1892	1314	1104	684	6215	3865
10451	5.7	57.5	0.0203	2049	1423	1196	740	6731	4185
12286	9.0	66.4	0.0173	2409	1673	1406	870	7913	4920
14335	7.4	73.8	0.0148	2811	1952	1641	1016	9232	5741
16380	4.8	78.6	0.0129	3212	2230	1875	1160	10549	6560
18483	3.3	81.8	0.0115	3624	2517	2115	1309	11904	7402
20484	2.4	84.3	0.0103	4016	2789	2344	1451	13193	8204
23149	2.6	86.9	0.0092	4539	3152	2649	1640	14909	9271
25066	1.5	88.4	0.0085	4915	3413	2869	1776	16144	10039
27137	1.5	89.9	0.0078	5321	3695	3106	1923	17477	10868
29378	1.3	91.2	0.0072	5760	4000	3362	2081	18921	11766
31805	1.3	92.5	0.0067	6236	4331	3640	2253	20484	12737
34424	1.2	93.7	0.0062	6750	4687	3940	2439	22171	13786
37194	1.1	94.8	0.0057	7293	5065	4257	2635	23955	14896
40342	1.1	95.8	0.0053	7910	5493	4617	2858	25982	16156
43593	0.9	96.7	0.0049	8548	5936	4989	3088	28076	17458
47294	0.9	97.7	0.0045	9273	6440	5412	3351	30459	18941
51170	0.8	98.5	0.0041	10033	6968	5856	3625	32956	20493
55385	0.8	99.3	0.0038	10860	7542	6338	3924	35670	22181
59879	0.7	100.0	0.0035	11741	8153	6853	4242	38565	23981

(A) Interpreted Capillary Pressure Chart

Well	Flounder-6
Sample Depth	1929.38 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Fortescue-2
Sample Depth 2420 m

Client	Geoscience A Victoria
Well	Fortescue-2
Test Method	Air/Mercury Capillary Pressure
Sample	F2-1
Depth	2420.00 m
Pore radius (µm)	0.040

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.556

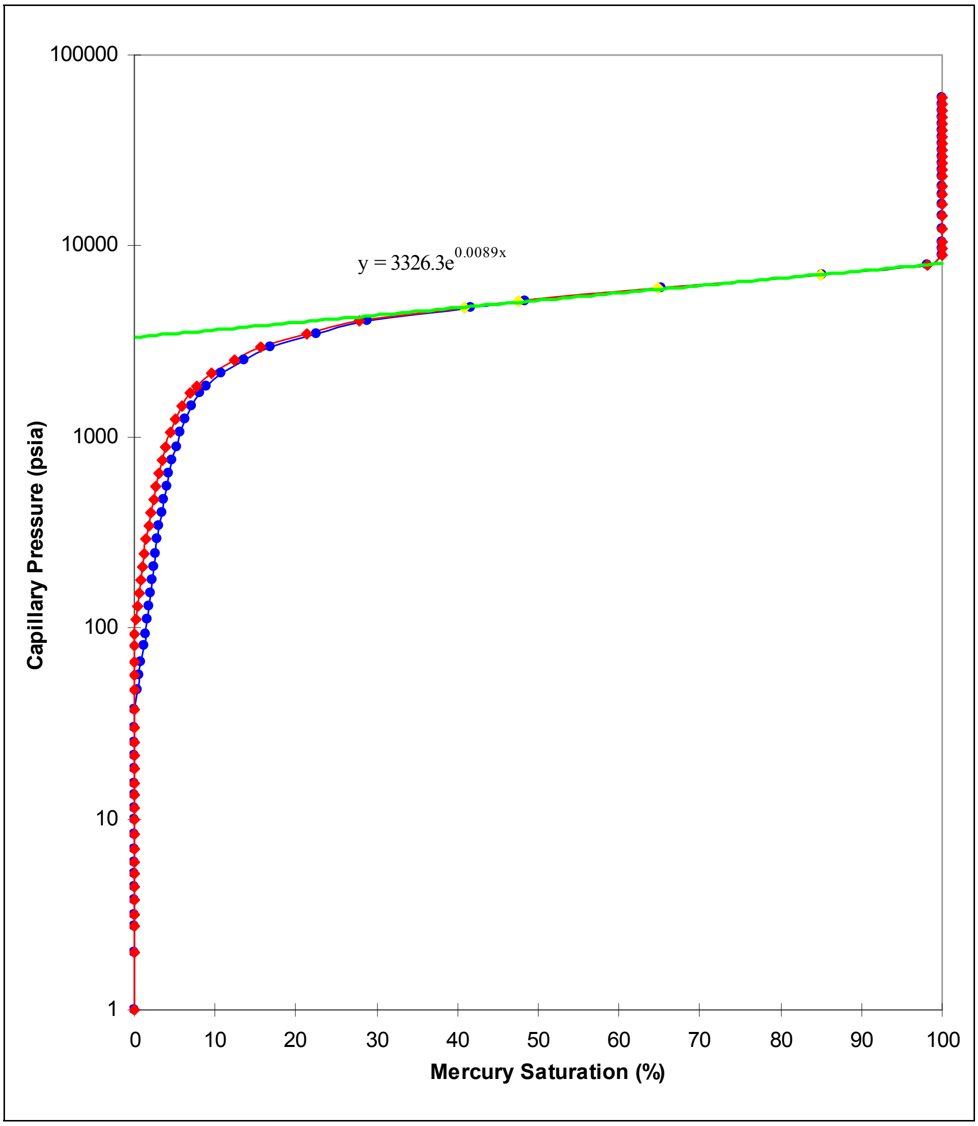
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	2691	-	3326	-	3636	-
G-W	1078	528	367	653	453	713	495
O-W	1733	176	191	218	236	238	258
CO_2-W	992	528	191	653	236	713	258

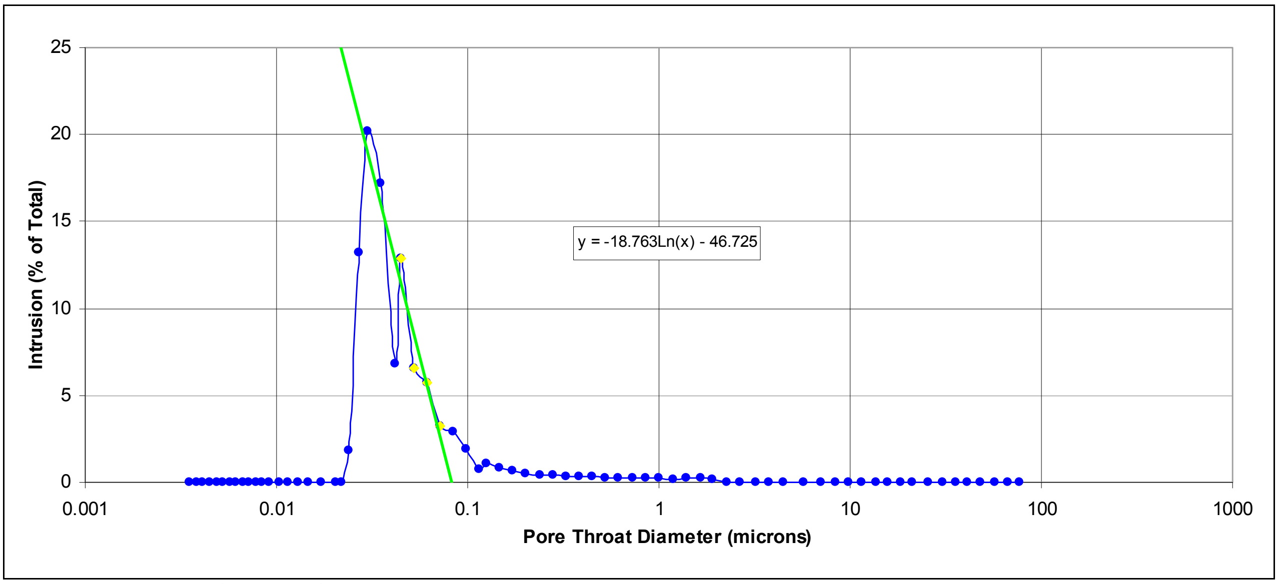
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.0	0.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.0	0.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.0	0.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.0	0.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.0	0.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.0	0.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.0	0.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.0	0.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	0.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.0	0.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.0	0.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	0.1	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.4	0.5	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.2	0.7	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.2	0.9	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.3	1.2	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.2	1.4	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.2	1.6	0.2	0.2	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.2	1.8	0.2	0.4	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	2.0	0.3	0.6	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	2.2	0.2	0.8	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.2	2.5	0.2	1.1	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.2	2.7	0.2	1.3	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.2	2.9	0.2	1.5	0.726	57.3	39.8	33.4	20.7	188	117
343	0.3	3.2	0.3	1.8	0.619	67.3	46.7	39.3	24.3	221	137
401	0.3	3.4	0.3	2.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.3	3.7	0.3	2.3	0.449	92.5	64.2	54.0	33.4	304	189
553	0.3	4.0	0.3	2.7	0.383	108	75.0	63.3	39.2	356	221
647	0.3	4.4	0.3	3.0	0.328	127	88.2	74.0	45.8	416	259
757	0.4	4.8	0.4	3.4	0.280	148	103	86.6	53.6	487	303
887	0.4	5.2	0.5	3.9	0.239	174	121	102	63.1	574	356
1048	0.5	5.7	0.5	4.4	0.202	205	142	120	74.3	675	418
1227	0.6	6.3	0.6	5.0	0.173	241	167	140	86.7	788	491
1439	0.8	7.1	0.8	5.8	0.147	282	196	165	102	927	576
1688	1.1	8.2	1.1	6.9	0.126	331	230	193	119	1082	676
1828	0.7	8.9	0.8	7.6	0.116	358	249	209	129	1173	732
2142	1.9	10.8	1.9	9.5	0.0990	420	292	245	152	1382	859
2510	2.9	13.7	2.9	12.4	0.0845	492	342	287	178	1618	1006
2945	3.2	16.8	3.2	15.6	0.0720	577	401	337	209	1900	1179
3449	5.7	22.5	5.8	21.4	0.0615	676	469	395	245	2227	1379
4040	6.4	28.9	6.5	27.9	0.0525	792	550	462	286	2600	1618
4728	12.7	41.6	12.8	40.8	0.0448	927	644	541	335	3045	1894
5114	6.7	48.3	6.8	47.6	0.0415	1003	697	585	362	3291	2050
6002	17.0	65.3	17.2	64.8	0.0353	1177	817	687	425	3864	2403
7033	19.9	85.2	20.2	85.0	0.0301	1379	958	805	498	4527	2818
7895	13.0	98.2	13.2	98.2	0.0269	1548	1075	904	560	5091	3162
8920	1.8	100.0	1.8	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Fortescue-2
Sample Depth	2420 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Fortescue-2
Sample Depth 2430 m

Client	Geoscience A Victoria
Well	Fortescue-2
Test Method	Air/Mercury Capillary Pressure
Sample	F2-2
Depth	2430.00 m
Pore radius (µm)	0.067

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.558

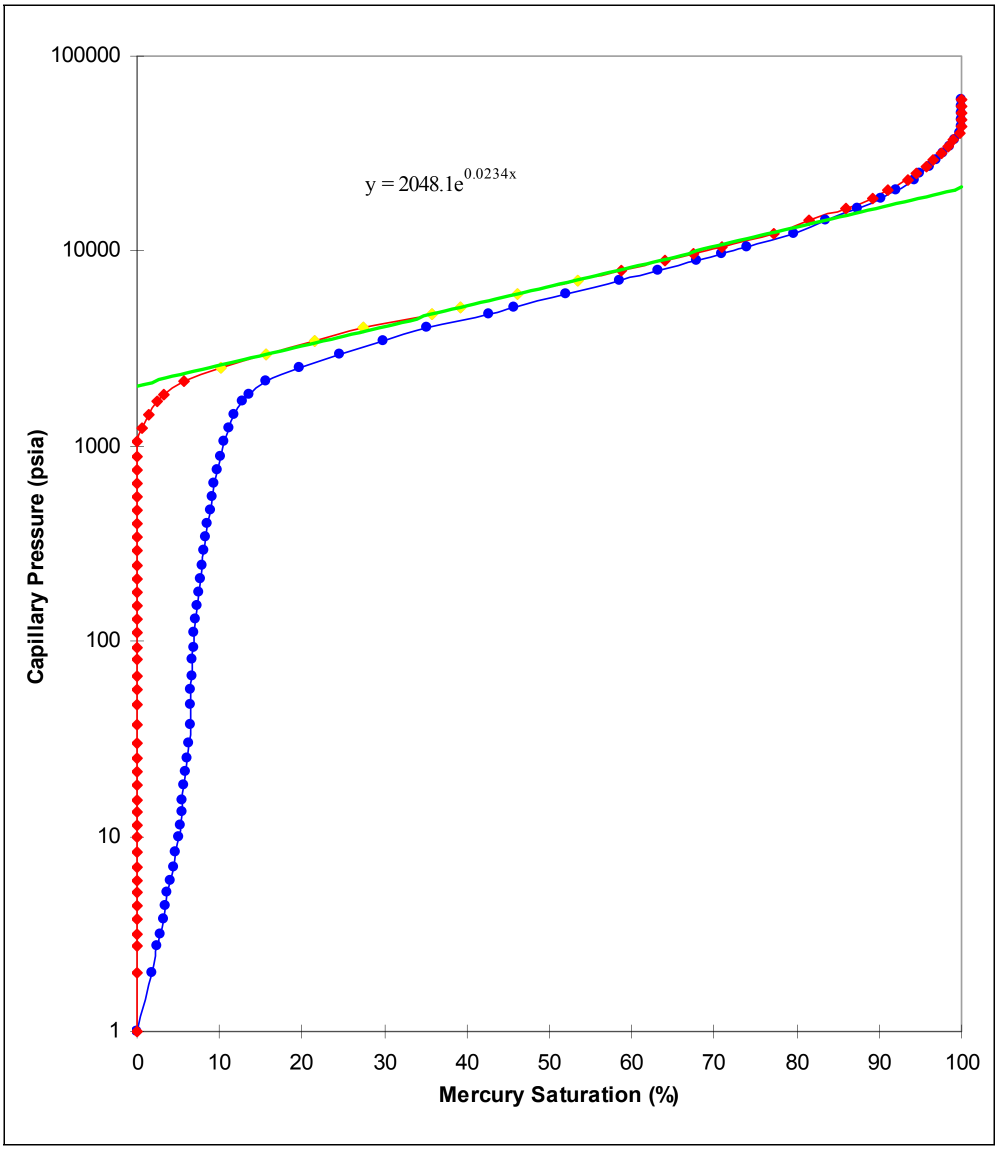
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

System	**Estimated Column Height (feet)**	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
		Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	1585	-	2048	-	2587	-
G-W	635	311	216	402	279	508	352
O-W	1021	104	112	134	145	169	183
CO_2-W	587	311	112	402	145	508	183

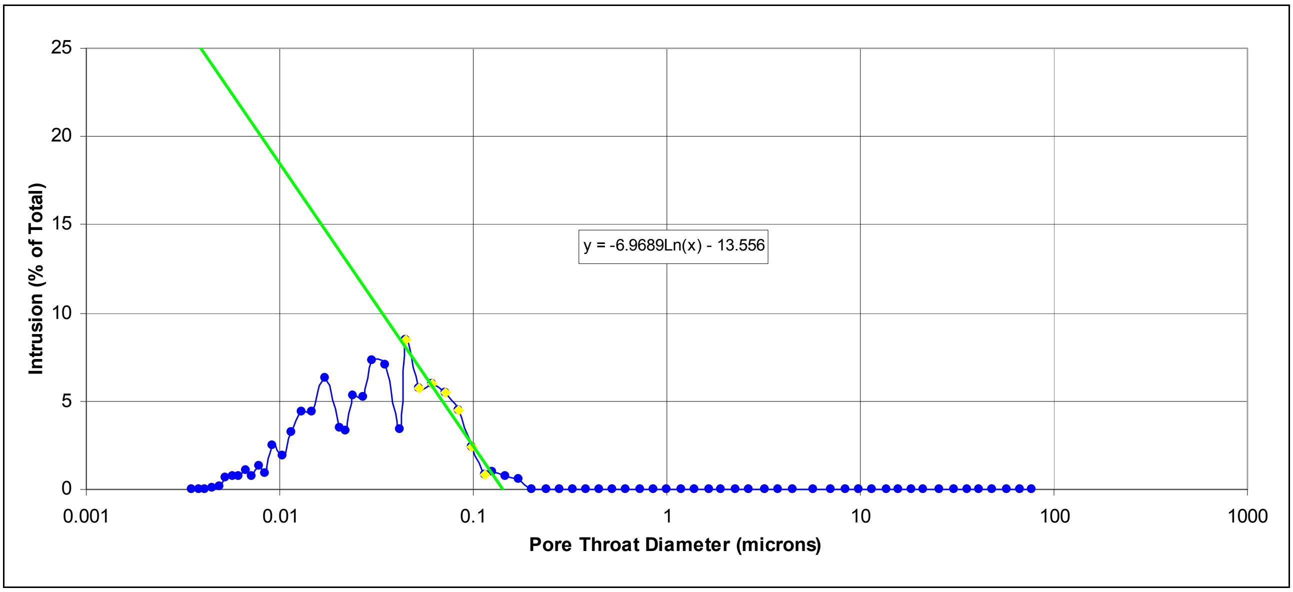
Pressure (psia)	Raw Data Intrusion (percent)	Raw Data Saturation (percent)	Conformance Corrected Intrusion (percent)	Conformance Corrected Saturation (percent)	Pore Diameter (µm)	Equivalent Air/Brine Lab (psi)	Injection Pressures Air/Brine Res Con (psi)	Oil/Brine Lab Conditions (psi)	Oil/Brine Reservoir Conditions (psi)	Height Above Free Water Oil-Water (feet)	Height Above Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	1.8	1.8	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.7	2.4	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.4	2.8	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.4	3.2	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.2	3.4	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.3	3.8	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.3	4.1	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.3	4.4	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.3	4.7	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.3	5.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.2	5.2	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.2	5.4	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	5.6	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.2	5.8	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.2	6.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.1	6.1	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.2	6.4	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.0	6.4	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	6.5	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	6.5	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	6.6	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	6.7	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	6.8	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.1	7.0	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.1	7.1	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	7.3	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	7.4	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.2	7.6	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.2	7.8	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.2	8.1	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.3	8.3	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.3	8.6	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.3	8.9	0.0	0.0	0.449	92.5	64.2	54.0	33.4	304	189
553	0.3	9.2	0.0	0.0	0.383	108	75.0	63.3	39.2	356	221
647	0.3	9.4	0.0	0.0	0.328	127	88.2	74.0	45.8	416	259
757	0.3	9.8	0.0	0.0	0.280	148	103	86.6	53.6	487	303
887	0.4	10.2	0.0	0.0	0.239	174	121	102	63.1	574	356
1048	0.5	10.6	0.0	0.0	0.202	205	142	120	74.3	675	418
1227	0.5	11.2	0.6	0.6	0.173	241	167	140	86.7	788	491
1439	0.7	11.9	0.8	1.4	0.147	282	196	165	102	927	576
1688	0.9	12.8	1.0	2.4	0.126	331	230	193	119	1082	676
1828	0.8	13.5	0.8	3.2	0.116	358	249	209	129	1173	732
2142	2.2	15.7	2.4	5.6	0.0990	420	292	245	152	1382	859
2510	4.0	19.7	4.5	10.1	0.0845	492	342	287	178	1618	1006
2945	4.9	24.6	5.5	15.6	0.0720	577	401	337	209	1900	1179
3449	5.4	30.0	6.0	21.6	0.0615	676	469	395	245	2227	1379
4040	5.1	35.1	5.7	27.3	0.0525	792	550	462	286	2600	1618
4728	7.6	42.6	8.5	35.8	0.0448	927	644	541	335	3045	1894
5114	3.0	45.6	3.4	39.2	0.0415	1003	697	585	362	3291	2050
6002	6.3	51.9	7.0	46.2	0.0353	1177	817	687	425	3864	2403
7033	6.6	58.5	7.3	53.5	0.0301	1379	958	805	498	4527	2818
7895	4.6	63.1	5.2	58.7	0.0269	1548	1075	904	560	5091	3162
8920	4.8	67.9	5.3	64.1	0.0238	1749	1215	1021	632	5745	3574
9649	3.0	70.9	3.3	67.4	0.0220	1892	1314	1104	683	6209	3865
10452	3.1	74.0	3.5	70.9	0.0203	2049	1423	1196	740	6727	4185
12283	5.6	79.6	6.3	77.2	0.0173	2408	1672	1406	870	7909	4918
14333	3.9	83.5	4.4	81.5	0.0148	2810	1951	1640	1015	9227	5738
16381	3.9	87.4	4.4	85.9	0.0129	3212	2231	1875	1161	10555	6562
18481	2.9	90.3	3.2	89.1	0.0115	3624	2517	2115	1309	11900	7403
20481	1.7	92.0	1.9	91.1	0.0104	4016	2789	2344	1451	13191	8203
23149	2.2	94.2	2.5	93.6	0.0092	4539	3152	2649	1640	14909	9271
25064	0.8	95.0	0.9	94.4	0.0085	4915	3413	2868	1775	16136	10038
27135	1.2	96.2	1.4	95.8	0.0078	5321	3695	3105	1922	17473	10868
29376	0.6	96.9	0.7	96.5	0.0072	5760	4000	3362	2081	18918	11765
31804	0.9	97.8	1.1	97.6	0.0067	6236	4331	3640	2253	20482	12738
34421	0.7	98.5	0.7	98.3	0.0062	6749	4687	3939	2438	22164	13785
37192	0.7	99.2	0.8	99.1	0.0057	7293	5065	4256	2635	23955	14897
40343	0.6	99.8	0.7	99.8	0.0053	7910	5493	4617	2858	25982	16156
43591	0.2	99.9	0.2	99.9	0.0049	8547	5935	4989	3088	28073	17456
47291	0.1	100.0	0.1	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Fortescue-2
Sample Depth	2430 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well	Fortescue-3
Sample Depth	2411.50 m

Client	Geoscience Victoria		
Well	Fortescue-3		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Fortescue-3	**Ambient Permeability**	
Depth	2411.50 m	**Ambient Porosity**	

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

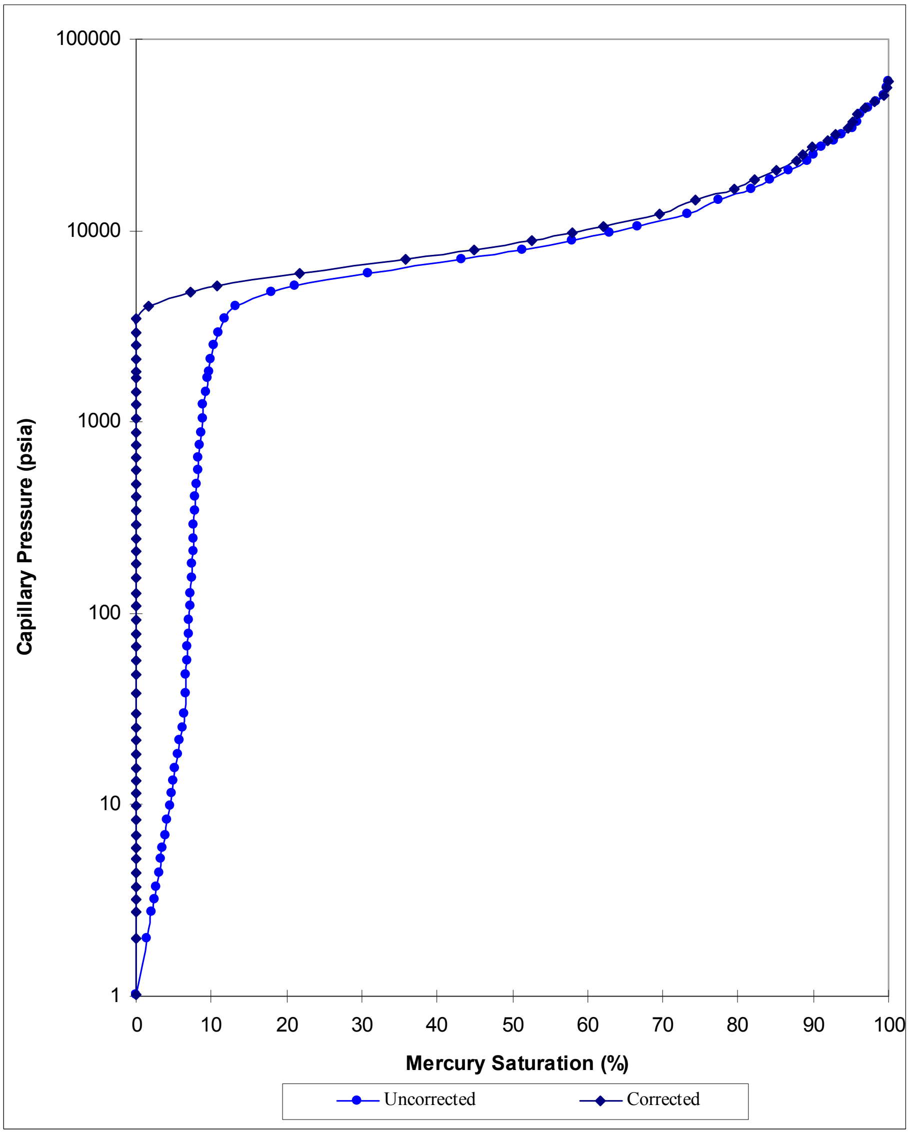
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.030						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	3577	-	4404	-	5634	-
G-W	701.8	487.4	864.0	600.0	1105.3	767.6
O-W	233.9	253.4	288.0	312.0	368.4	399.1

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

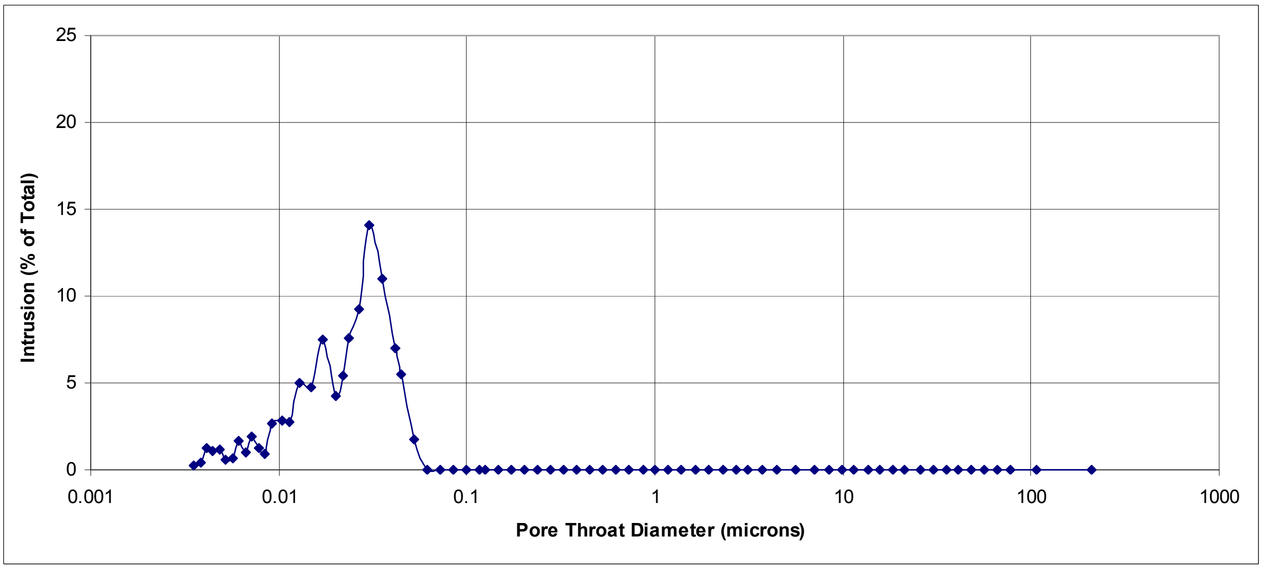
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	210	0.86	0.60	0.50	0.31	2.82	1.75
1.99	0.0	0.0	107	1.02	0.71	0.59	0.37	3.34	2.07
2.74	0.0	0.0	77.5	1.17	0.81	0.68	0.42	3.85	2.39
3.19	0.0	0.0	66.5	1.37	0.95	0.80	0.49	4.50	2.80
3.74	0.0	0.0	56.7	1.62	1.13	0.95	0.59	5.33	3.32
4.38	0.0	0.0	48.4	1.96	1.36	1.14	0.71	6.43	4.00
5.18	0.0	0.0	40.9	2.25	1.57	1.32	0.81	7.41	4.61
5.98	0.0	0.0	35.4	2.6	1.84	1.54	0.96	8.69	5.41
6.98	0.0	0.0	30.4	3.0	2.11	1.77	1.10	9.98	6.21
8.28	0.0	0.0	25.6	3.6	2.52	2.12	1.31	11.91	7.41
9.98	0.0	0.0	21.2	4.2	2.9	2.47	1.53	13.91	8.65
11.5	0.0	0.0	18.5	5.0	3.4	2.9	1.79	16.29	10.13
13.5	0.0	0.0	15.7	5.9	4.1	3.4	2.13	19.32	12.01
15.5	0.0	0.0	13.7	7.4	5.2	4.3	2.69	24.41	15.18
18.5	0.0	0.0	11.5	9.4	6.5	5.5	3.4	30.98	19.26
21.6	0.0	0.0	9.83	11.1	7.7	6.5	4.0	36.45	22.67
25.3	0.0	0.0	8.39	13.2	9.2	7.7	4.8	43.47	27.03
30.0	0.0	0.0	7.08	15.4	10.7	9.0	5.6	50.49	31.40
37.9	0.0	0.0	5.59	18.0	12.5	10.5	6.5	59.25	36.84
48.1	0.0	0.0	4.41	21.6	15.0	12.6	7.8	70.84	44.05
56.6	0.0	0.0	3.75	25.1	17.4	14.6	9.1	82.44	51.26
67.5	0.0	0.0	3.14	30	20.8	17.5	10.8	98.54	61.27
78.4	0.0	0.0	2.70	35	24.6	20.7	12.8	116.57	72.49
92.0	0.0	0.0	2.30	41	29	24.0	14.9	135.25	84.10
110	0.0	0.0	1.93	48	33	28	17.4	158.43	98.52
128	0.0	0.0	1.65	57	39	33	20.5	186.13	115.74
153	0.0	0.0	1.38	67	47	39	24.4	221.55	137.77
181	0.0	0.0	1.17	79	55	46	29	260.19	161.80
210	0.0	0.0	1.01	93	64	54	33	304.0	189.03
246	0.0	0.0	0.862	109	76	64	39	358.1	222.67
289	0.0	0.0	0.732	127	88	74	46	416.7	259.12
344	0.0	0.0	0.617	149	103	87	54	488.2	303.6
404	0.0	0.0	0.525	174	121	102	63	571.9	355.6
472	0.0	0.0	0.450	205	143	120	74	675.0	419.7
556	0.0	0.0	0.381	241	167	141	87	790.9	491.8
647	0.0	0.0	0.328	282	196	165	102	926.8	576.3
758	0.0	0.0	0.280	331	230	193	120	1086.5	675.6
888	0.0	0.0	0.239	358	249	209	129	1176.0	731.3
1048	0.0	0.0	0.202	420	292	245	152	1378.9	857.4
1228	0.0	0.0	0.173	492	341	287	178	1614.6	1004.0
1439	0.0	0.0	0.147	577	401	337	208	1895.4	1178.6
1687	0.0	0.0	0.126	676	469	394	244	2220.0	1380.5
1826	0.0	0.0	0.116	793	550	463	286	2603	1618.8
2141	0.0	0.0	0.0990	928	644	541	335	3047	1894.7
2507	0.0	0.0	0.0846	1003	697	586	363	3296	2049.3
2943	0.0	0.0	0.0720	1177	818	687	425	3867	2405
3447	0.0	0.0	0.0615	1379	958	805	498	4530	2817
4042	1.7	1.7	0.0524	1548	1075	904	559	5086	3163
4731	5.5	7.2	0.0448	1750	1216	1022	632	5749	3575
5117	7.0	10.7	0.0414	1895	1316	1106	685	6223	3870
6005	11.0	21.6	0.0353	2052	1425	1198	741	6739	4191
7034	14.1	35.7	0.0301	2411	1674	1407	871	7919	4924
7897	9.2	45.0	0.0268	2813	1953	1642	1016	9239	5745
8927	7.5	52.5	0.0237	3214	2232	1876	1161	10558	6565
9663	5.5	58.0	0.0219	3627	2519	2117	1310	11913	7408
10464	4.2	62.2	0.0203	4019	2791	2345	1452	13200	8208
12296	7.5	69.7	0.0172	4540	3153	2650	1640	14913	9274
14346	4.8	74.4	0.0148	4916	3414	2869	1776	16146	10040
16393	5.0	79.4	0.0129	5322	3696	3106	1923	17480	10870
18497	2.8	82.2	0.0115	5761	4001	3363	2082	18923	11767
20495	2.8	85.1	0.0103	6237	4331	3640	2253	20485	12738
23156	2.6	87.7	0.0092	6750	4688	3940	2439	22172	13788
25070	1.0	88.7	0.0085	7293	5065	4257	2635	23955	14896
27141	1.3	89.9	0.0078	7911	5494	4617	2858	25984	16158
29382	1.9	91.9	0.0072	8548	5936	4989	3089	28078	17460
31807	1.0	92.9	0.0067	9274	6440	5413	3351	30461	18942
34427	1.7	94.6	0.0062	10034	6968	5857	3625	32959	20495
37194	0.6	95.2	0.0057	10860	7541	6338	3924	35670	22181
40345	0.6	95.8	0.0053	11740	8153	6852	4242	38561	23979
43596	1.2	97.0	0.0049	0	0	0	0	0	0
47297	1.1	98.1	0.0045	0	0	0	0	0	0
51175	1.2	99.3	0.0041	0	0	0	0	0	0
55384	0.4	99.7	0.0038	0	0	0	0	0	0
59874	0.3	100.0	0.0035	0	0	0	0	0	0

(A) Interpreted Capillary Pressure Chart

Well	Fortescue-3
Sample Depth	2411.50 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Gippsland Frome Lakes-4
Sample Depth	503.5 m

Client	Geoscience A Victoria
Well	Gippsland Frome Lakes-4
Test Method	Air/Mercury Capillary Pressure
Sample	GFL4-1
Depth	503.50 m
Pore radius (µm)	0.743

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.109

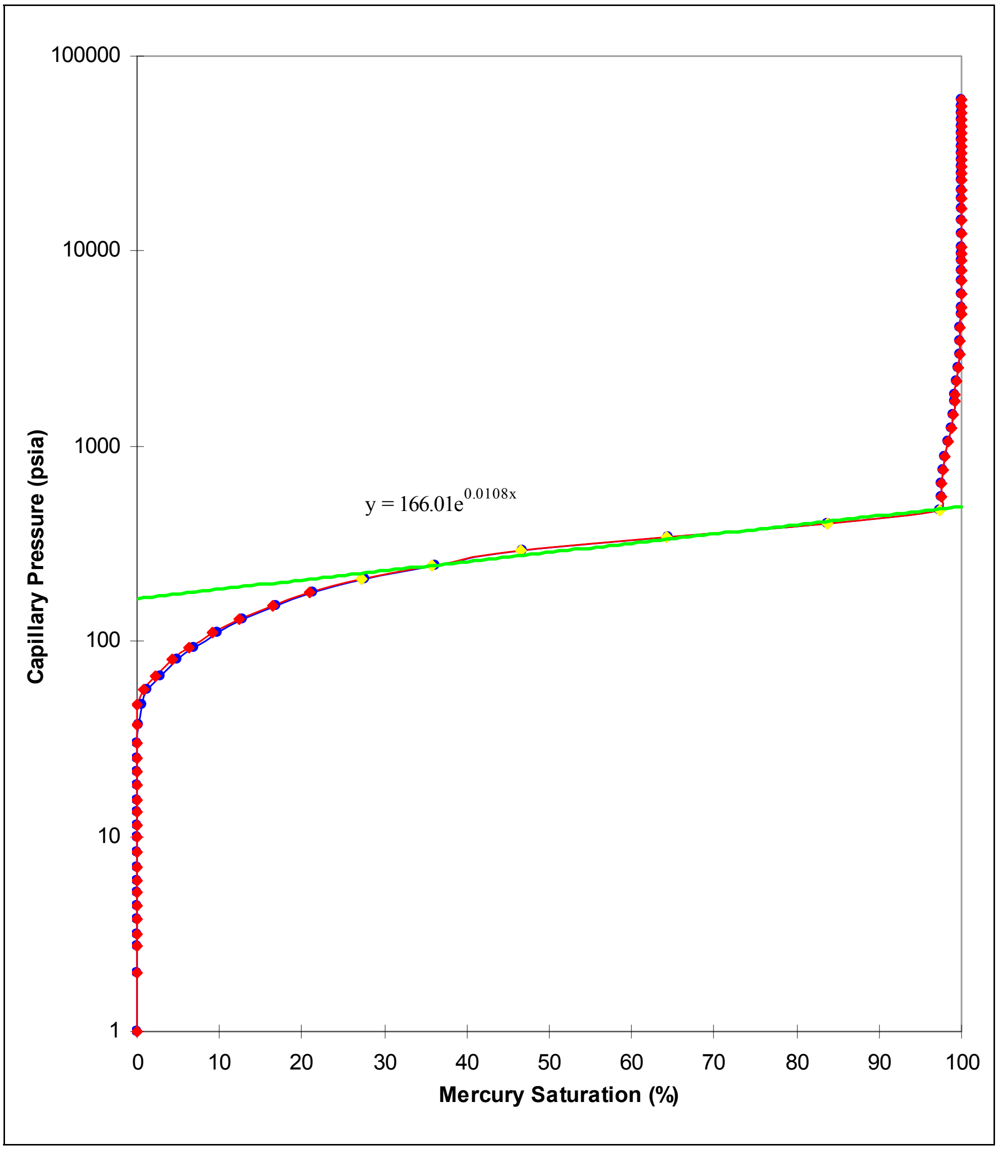
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	143	-	166	-	185	-
G-W	57	28.1	19.5	32.6	22.6	36.3	25.2
O-W	92	9.36	10.1	10.9	11.8	12.1	13.1
CO_2-W	26	28.1	10.1	32.6	11.8	36.3	13.1

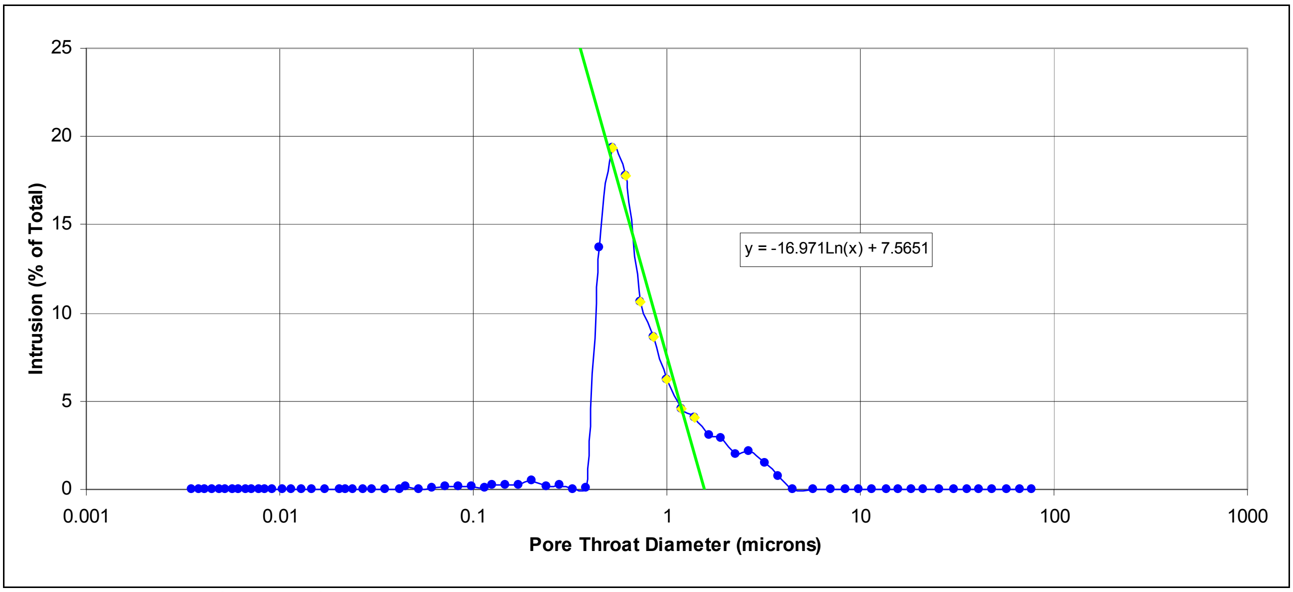
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.0	0.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.0	0.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.0	0.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.0	0.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.0	0.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.0	0.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.0	0.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.0	0.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	0.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.0	0.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.0	0.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.2	0.2	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.4	0.6	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.7	1.3	0.7	0.7	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	1.5	2.8	1.5	2.2	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	2.1	4.9	2.1	4.4	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	2.0	6.9	2.0	6.3	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	2.9	9.8	2.9	9.2	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	3.1	12.8	3.1	12.3	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	4.0	16.9	4.1	16.4	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	4.6	21.4	4.6	21.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	6.2	27.6	6.2	27.2	1.01	41.2	28.6	24.0	14.9	135	84.1
247	8.6	36.2	8.7	35.8	0.860	48.4	33.6	28.3	17.5	159	98.8
292	10.6	46.8	10.7	46.5	0.726	57.3	39.8	33.4	20.7	188	117
343	17.7	64.5	17.8	64.3	0.619	67.3	46.7	39.3	24.3	221	137
401	19.3	83.8	19.4	83.7	0.528	78.6	54.6	45.9	28.4	258	161
472	13.7	97.4	13.7	97.4	0.449	92.5	64.2	54.0	33.4	304	189
553	0.1	97.5	0.1	97.5	0.383	108	75.0	63.3	39.2	356	221
647	0.0	97.5	0.0	97.5	0.328	127	88.2	74.0	45.8	416	259
757	0.3	97.8	0.3	97.8	0.280	148	103	86.6	53.6	487	303
887	0.2	98.0	0.2	98.0	0.239	174	121	102	63.1	574	356
1048	0.5	98.5	0.5	98.5	0.202	205	142	120	74.3	675	418
1227	0.2	98.7	0.2	98.7	0.173	241	167	140	86.7	788	491
1439	0.2	98.9	0.2	98.9	0.147	282	196	165	102	927	576
1688	0.2	99.1	0.2	99.1	0.126	331	230	193	119	1082	676
1828	0.1	99.3	0.1	99.3	0.116	358	249	209	129	1173	732
2142	0.1	99.4	0.2	99.4	0.0990	420	292	245	152	1382	859
2510	0.1	99.6	0.1	99.5	0.0845	492	342	287	178	1618	1006
2945	0.2	99.7	0.2	99.7	0.0720	577	401	337	209	1900	1179
3449	0.1	99.8	0.1	99.8	0.0615	676	469	395	245	2227	1379
4040	0.0	99.8	0.0	99.8	0.0525	792	550	462	286	2600	1618
4728	0.2	100.0	0.2	100.0	0.0448	927	644	541	335	3045	1894
5114	0.0	100.0	0.0	100.0	0.0415	1003	697	585	362	3291	2050
6002	0.0	100.0	0.0	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Gippsland Frome Lakes-4
Sample Depth	503.5 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Gippsland Frome Lakes-4
Sample Depth 506.6 m

Client	Geoscience A Victoria
Well	Gippsland Frome Lakes-4
Test Method	Air/Mercury Capillary Pressure
Sample	GFL4-2
Depth	506.60 m
Pore radius (µm)	0.139

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.110

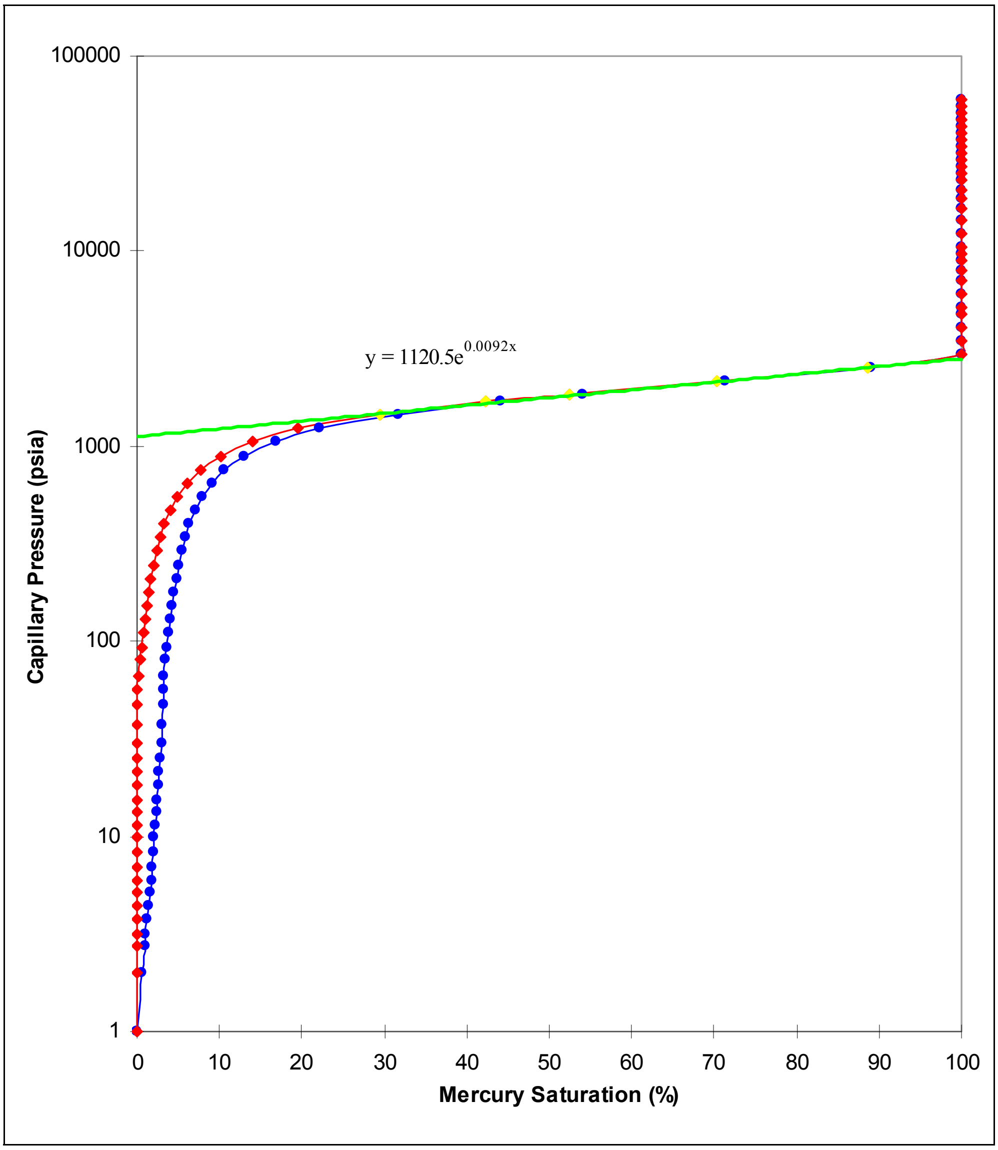
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	766	-	1120	-	1228	-
G-W	307	150	104	220	153	241	167
O-W	493	50.1	54.3	73.3	79.4	80.3	87.0
CO_2-W	141	150	54.3	220	79.4	241	87.0

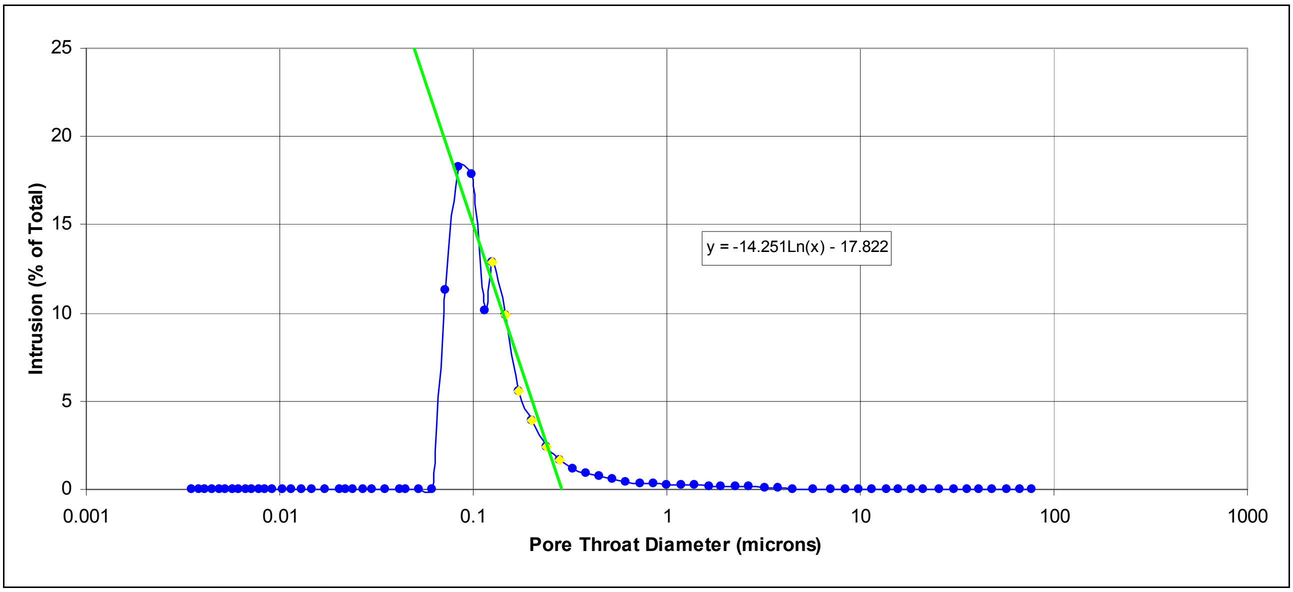
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.7	0.7	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	1.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	1.1	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.1	1.2	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.3	1.5	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.1	1.6	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.1	1.7	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.1	1.9	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.1	2.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.1	2.1	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.1	2.2	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.2	2.4	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	2.5	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.1	2.6	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.1	2.7	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.2	2.9	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.1	3.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.0	3.1	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	3.2	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	3.2	0.1	0.1	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	3.3	0.1	0.2	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.2	3.5	0.2	0.4	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.2	3.7	0.2	0.5	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.2	3.9	0.2	0.7	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.2	4.1	0.2	0.9	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	4.3	0.2	1.2	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	4.5	0.2	1.4	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.3	4.8	0.3	1.7	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.3	5.1	0.3	2.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.3	5.4	0.3	2.3	0.726	57.3	39.8	33.4	20.7	188	117
343	0.4	5.9	0.4	2.8	0.619	67.3	46.7	39.3	24.3	221	137
401	0.5	6.4	0.6	3.3	0.528	78.6	54.6	45.9	28.4	258	161
472	0.7	7.1	0.7	4.1	0.449	92.5	64.2	54.0	33.4	304	189
553	0.8	7.9	0.9	4.9	0.383	108	75.0	63.3	39.2	356	221
647	1.1	9.1	1.2	6.1	0.328	127	88.2	74.0	45.8	416	259
757	1.6	10.6	1.6	7.7	0.280	148	103	86.6	53.6	487	303
887	2.4	13.0	2.4	10.1	0.239	174	121	102	63.1	574	356
1048	3.8	16.8	3.9	14.1	0.202	205	142	120	74.3	675	418
1227	5.4	22.1	5.5	19.6	0.173	241	167	140	86.7	788	491
1439	9.6	31.7	9.9	29.5	0.147	282	196	165	102	927	576
1688	12.5	44.2	12.9	42.3	0.126	331	230	193	119	1082	676
1828	9.8	54.0	10.2	52.5	0.116	358	249	209	129	1173	732
2142	17.3	71.3	17.9	70.4	0.0990	420	292	245	152	1382	859
2510	17.7	89.0	18.3	88.6	0.0845	492	342	287	178	1618	1006
2945	10.9	99.9	11.3	99.9	0.0720	577	401	337	209	1900	1179
3449	0.0	100.0	0.0	100.0	0.0615	676	469	395	245	2227	1379
4040	0.0	100.0	0.0	100.0	0.0525	792	550	462	286	2600	1618
4728	0.0	100.0	0.0	100.0	0.0448	927	644	541	335	3045	1894
5114	0.0	100.0	0.0	100.0	0.0415	1003	697	585	362	3291	2050
6002	0.0	100.0	0.0	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Gippsland Frome Lakes-4
Sample Depth	506.6 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Golden Beach West-1
Sample Depth 667.68 m

Client	Geoscience Victoria		
Well	Golden Beach West-1		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Golden Beach West-1	**Ambient Permeability**	
Depth	667.68 m	**Ambient Porosity**	

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

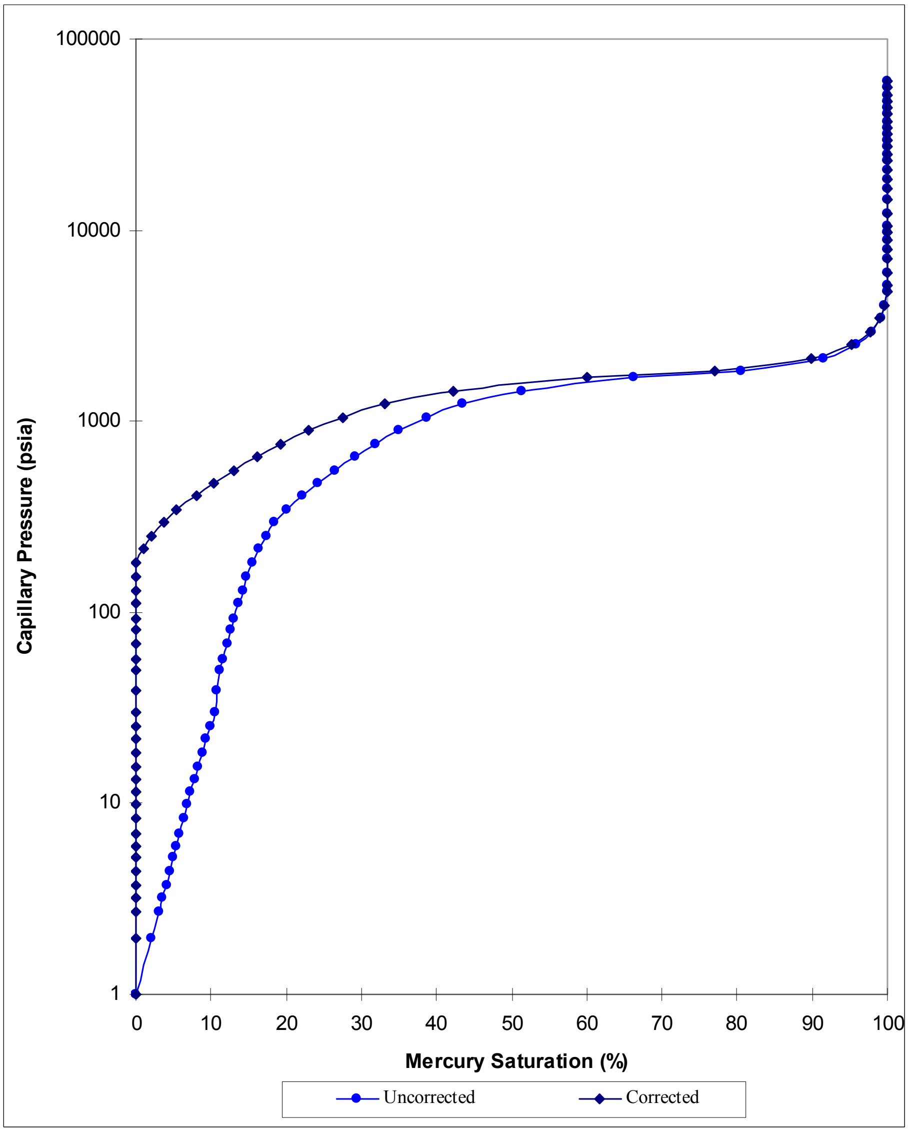
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.585						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	181.9	-	849.1	-	1138	-
G-W	35.7	24.8	166.6	115.7	223.3	155.0
O-W	11.9	12.9	55.5	60.2	74.4	80.6

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

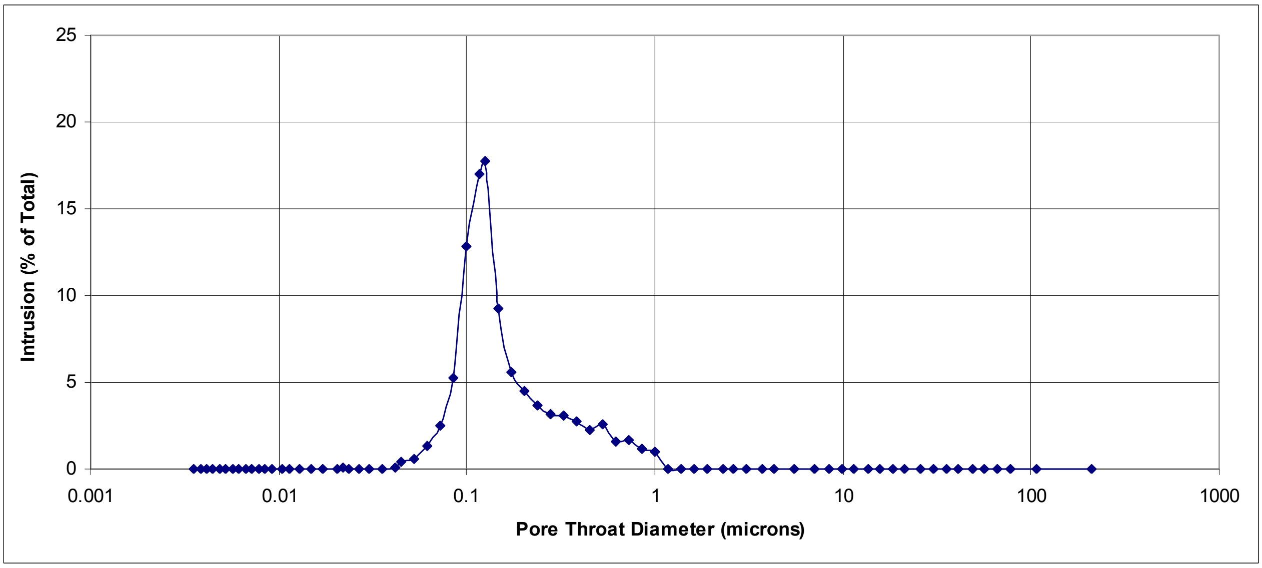
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	211	0.20	0.14	0.12	0.07	0.65	0.40
1.98	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.76	1.09
3.18	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	56.8	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.18	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.07
5.98	0.0	0.0	35.5	1.2	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.49	2.79
8.27	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.31
9.97	0.0	0.0	21.3	2.0	1.4	1.14	0.71	6.42	3.99
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
38.7	0.0	0.0	5.48	7.6	5.3	4.4	2.7	24.92	15.50
49.8	0.0	0.0	4.26	9.8	6.8	5.7	3.5	32.07	19.94
56.9	0.0	0.0	3.73	11.2	7.7	6.5	4.0	36.65	22.79
68.7	0.0	0.0	3.09	13	9.4	7.9	4.9	44.25	27.51
81.7	0.0	0.0	2.59	16	11.1	9.3	5.8	52.62	32.72
92.7	0.0	0.0	2.29	18	13	10.6	6.6	59.70	37.13
111	0.0	0.0	1.90	22	15	13	7.9	71.49	44.45
131	0.0	0.0	1.62	26	18	15	9.3	84.37	52.46
153	0.0	0.0	1.39	30	21	18	10.8	98.54	61.27
182	0.0	0.0	1.17	36	25	21	13	117.22	72.89
213	1.0	1.0	0.994	42	29	24	15	137.2	85.30
249	1.1	2.2	0.852	49	34	28	18	160.4	99.72
293	1.6	3.8	0.723	57	40	34	21	188.7	117.34
345	1.6	5.4	0.614	68	47	39	24	222.2	138.2
404	2.6	8.0	0.524	79	55	46	29	260.2	161.8
474	2.3	10.3	0.448	93	65	54	34	305.3	189.8
555	2.8	13.1	0.382	109	76	64	39	357.4	222.3
648	3.1	16.2	0.327	127	88	74	46	417.3	259.5
760	3.2	19.4	0.279	149	103	87	54	489.5	304.4
890	3.7	23.0	0.238	175	121	102	63	573.2	356.4
1049	4.5	27.5	0.202	206	143	120	74	675.6	420.1
1228	5.5	33.1	0.173	241	167	141	87	790.9	491.8
1437	9.2	42.3	0.148	282	196	164	102	925.5	575.5
1689	17.8	60.1	0.126	331	230	193	120	1087.8	676.4
1830	17.0	77.1	0.116	359	249	209	130	1179	732.9
2144	12.9	90.0	0.0989	420	292	245	152	1381	858.6
2508	5.2	95.2	0.0845	492	342	287	178	1615	1004.4
2940	2.5	97.7	0.0721	576	400	336	208	1893	1177
3449	1.3	99.0	0.0615	676	470	395	244	2221	1381
4044	0.5	99.5	0.0524	793	551	463	286	2605	1620
4731	0.4	99.9	0.0448	928	644	541	335	3047	1895
5102	0.1	100.0	0.0415	1000	695	584	361	3286	2043
5993	0.0	100.0	0.0354	1175	816	686	425	3860	2400
7020	0.0	100.0	0.0302	1376	956	803	497	4521	2811
7884	0.0	100.0	0.0269	1546	1074	902	559	5078	3157
8914	0.0	100.0	0.0238	1748	1214	1020	632	5741	3570
9656	0.0	100.0	0.0220	1893	1315	1105	684	6219	3867
10448	0.0	100.0	0.0203	2049	1423	1196	740	6729	4184
12283	0.0	100.0	0.0173	2408	1673	1406	870	7911	4919
14329	0.0	100.0	0.0148	2810	1951	1640	1015	9228	5739
16379	0.0	100.0	0.0129	3212	2230	1874	1160	10549	6560
18478	0.0	100.0	0.0115	3623	2516	2115	1309	11901	7400
20480	0.0	100.0	0.0104	4016	2789	2344	1451	13190	8202
23148	0.0	100.0	0.0092	4539	3152	2649	1640	14908	9270
25065	0.0	100.0	0.0085	4915	3413	2868	1776	16143	10038
27136	0.0	100.0	0.0078	5321	3695	3105	1922	17477	10868
29376	0.0	100.0	0.0072	5760	4000	3362	2081	18919	11765
31801	0.0	100.0	0.0067	6235	4330	3639	2253	20481	12736
34422	0.0	100.0	0.0062	6749	4687	3939	2439	22169	13786
37192	0.0	100.0	0.0057	7293	5064	4256	2635	23953	14895
40339	0.0	100.0	0.0053	7910	5493	4616	2858	25980	16155
43589	0.0	100.0	0.0049	8547	5935	4988	3088	28073	17457
47294	0.0	100.0	0.0045	9273	6440	5412	3351	30459	18941
51169	0.0	100.0	0.0041	10033	6967	5856	3625	32955	20493
55385	0.0	100.0	0.0038	10860	7542	6338	3924	35670	22181
59880	0.0	100.0	0.0035	11741	8154	6853	4242	38565	23981

(A) Interpreted Capillary Pressure Chart

Well	Golden Beach West-1
Sample Depth	667.68 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Goon Nure-9
Sample Depth 726.3 m

Client Geoscience A Victoria
Well Goon Nure-9
Test Method Air/Mercury Capillary Pressure
Sample GN9
Depth 726.30 m
Pore radius (µm) 0.052

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.230

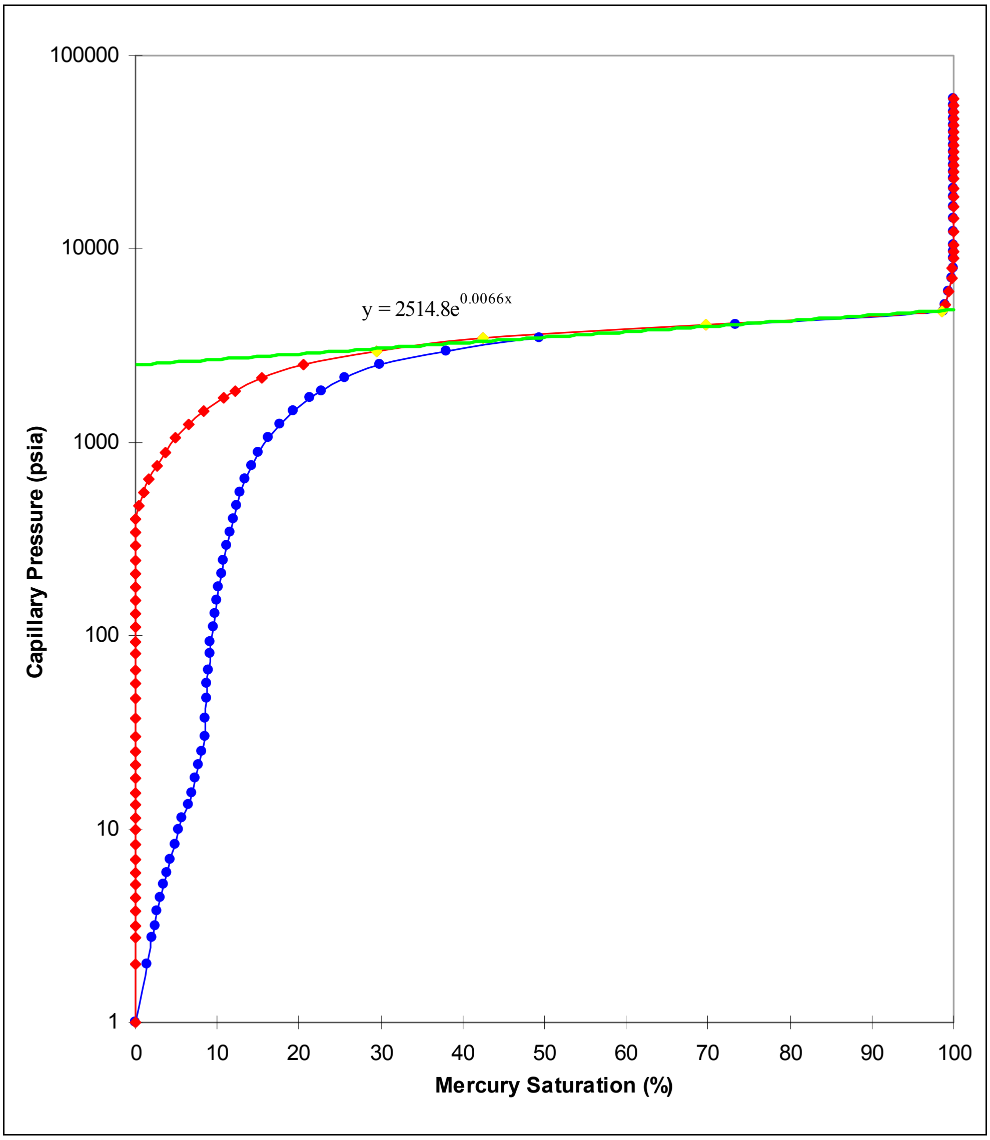
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	2057	-	2515	-	2686	-
G-W	824	404	280	493	343	527	366
O-W	1325	135	146	164	178	176	190
CO_2-W	437	404	146	493	178	527	190

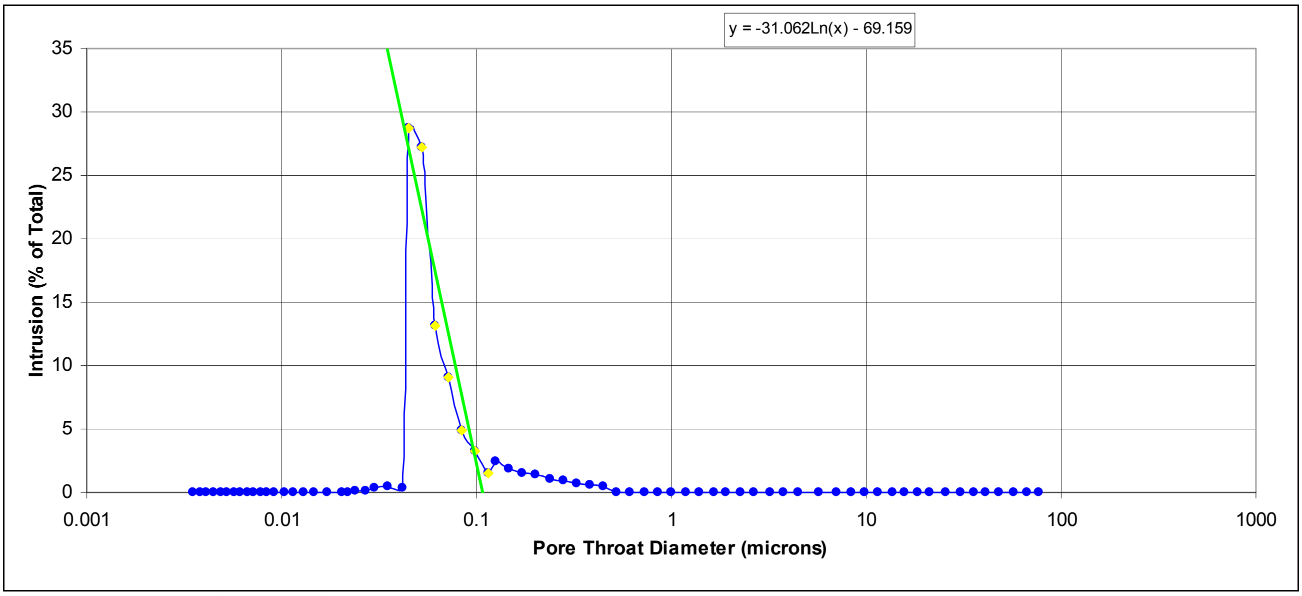
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	1.3	1.3	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.7	2.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.3	2.3	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.4	2.7	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.4	3.1	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.4	3.5	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.3	3.8	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.5	4.3	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.5	4.8	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.5	5.3	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.4	5.7	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.8	6.5	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.4	6.9	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.5	7.4	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.4	7.7	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.4	8.1	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.4	8.5	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.0	8.6	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	8.6	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	8.7	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	8.9	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.2	9.1	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.2	9.2	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.2	9.5	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.2	9.7	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.3	9.9	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	10.2	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.3	10.5	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.3	10.8	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.3	11.1	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.4	11.5	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.5	12.0	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.4	12.4	0.5	0.5	0.449	92.5	64.2	54.0	33.4	304	189
553	0.5	12.9	0.5	1.0	0.383	108	75.0	63.3	39.2	356	221
647	0.6	13.5	0.7	1.7	0.328	127	88.2	74.0	45.8	416	259
757	0.8	14.3	0.9	2.6	0.280	148	103	86.6	53.6	487	303
887	0.9	15.1	1.0	3.6	0.239	174	121	102	63.1	574	356
1048	1.2	16.3	1.4	5.0	0.202	205	142	120	74.3	675	418
1227	1.3	17.6	1.5	6.5	0.173	241	167	140	86.7	788	491
1439	1.6	19.3	1.8	8.3	0.147	282	196	165	102	927	576
1688	2.2	21.4	2.5	10.8	0.126	331	230	193	119	1082	676
1828	1.3	22.7	1.5	12.2	0.116	358	249	209	129	1173	732
2142	2.9	25.6	3.3	15.5	0.0990	420	292	245	152	1382	859
2510	4.3	30.0	4.9	20.4	0.0845	492	342	287	178	1618	1006
2945	7.9	37.9	9.0	29.5	0.0720	577	401	337	209	1900	1179
3449	11.5	49.4	13.1	42.6	0.0615	676	469	395	245	2227	1379
4040	24.0	73.4	27.3	69.8	0.0525	792	550	462	286	2600	1618
4728	25.3	98.7	28.7	98.5	0.0448	927	644	541	335	3045	1894
5114	0.3	99.0	0.4	98.9	0.0415	1003	697	585	362	3291	2050
6002	0.5	99.5	0.5	99.4	0.0353	1177	817	687	425	3864	2403
7033	0.3	99.8	0.4	99.8	0.0301	1379	958	805	498	4527	2818
7895	0.1	99.9	0.1	99.9	0.0269	1548	1075	904	560	5091	3162
8920	0.1	100.0	0.1	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Goon Nure-9
Sample Depth	726.3 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Groper-1
Sample Depth 909.15 m

Client Geoscience A Victoria
Well Groper-1

Test Method Air/Mercury Capillary Pressure

Sample G1
Depth 909.15 m

Pore radius (µm) 0.045

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.235

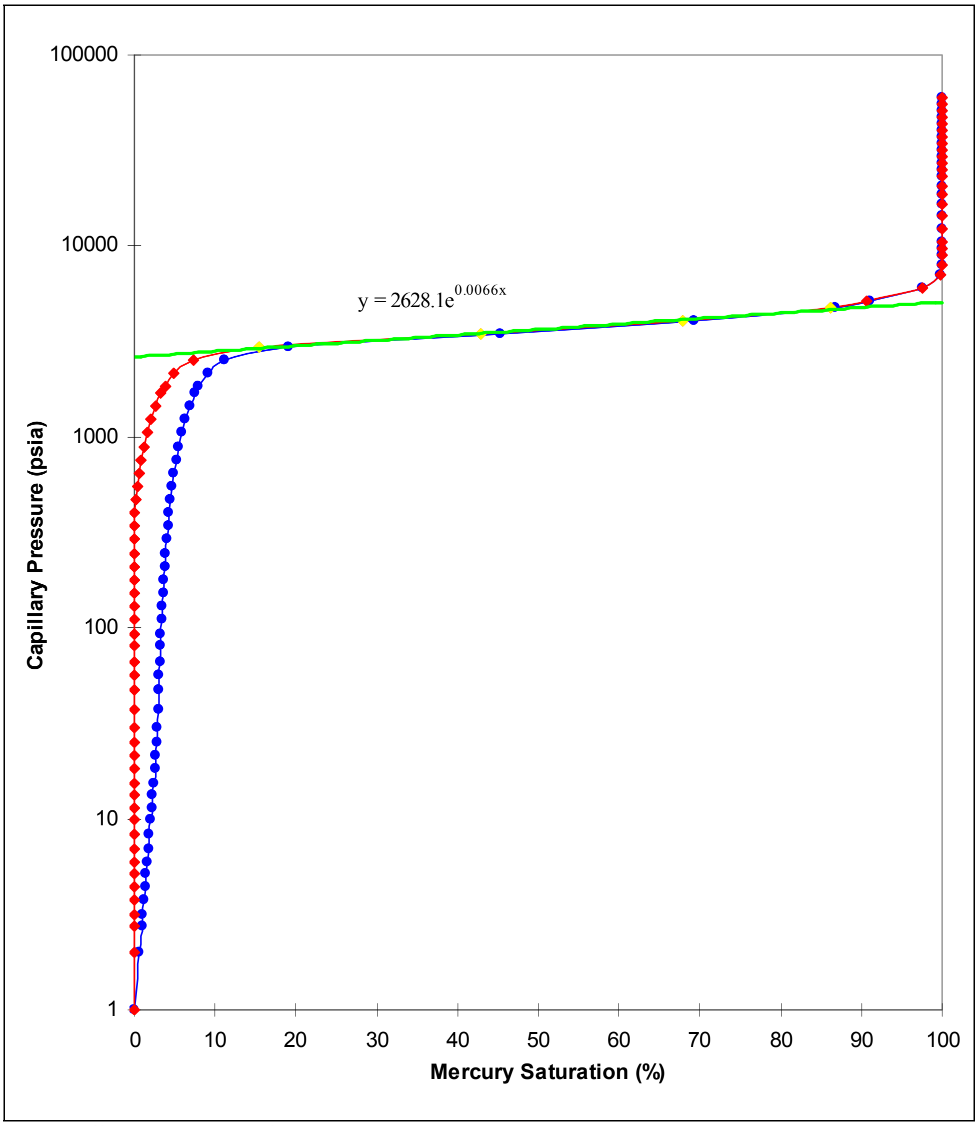
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	2352	-	2628	-	2807	-
G-W	943	461	320	516	358	551	382
O-W	1515	154	167	172	186	184	199
CO_2-W	503	461	167	516	186	551	199

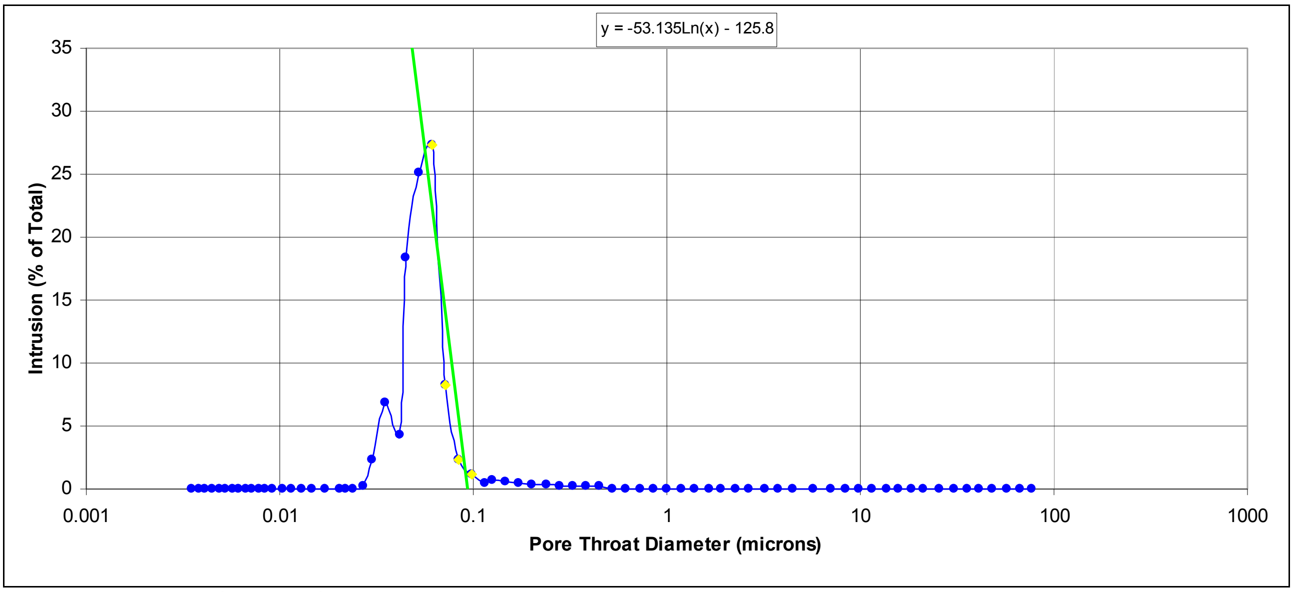
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.7	0.7	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	1.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	1.1	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.1	1.2	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.1	1.4	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.1	1.5	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.1	1.6	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.1	1.8	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.1	1.9	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.2	2.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.1	2.2	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.1	2.3	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	2.4	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.1	2.6	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.1	2.7	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.1	2.8	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.1	2.9	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	3.0	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	3.0	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	3.1	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	3.2	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	3.2	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	3.3	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.1	3.4	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.1	3.5	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.1	3.6	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.1	3.7	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.1	3.8	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.1	3.9	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.1	4.1	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.1	4.2	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.2	4.3	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.2	4.5	0.2	0.2	0.449	92.5	64.2	54.0	33.4	304	189
553	0.2	4.7	0.2	0.4	0.383	108	75.0	63.3	39.2	356	221
647	0.2	5.0	0.2	0.6	0.328	127	88.2	74.0	45.8	416	259
757	0.3	5.2	0.3	0.9	0.280	148	103	86.6	53.6	487	303
887	0.3	5.5	0.3	1.2	0.239	174	121	102	63.1	574	356
1048	0.4	5.9	0.4	1.6	0.202	205	142	120	74.3	675	418
1227	0.4	6.3	0.5	2.1	0.173	241	167	140	86.7	788	491
1439	0.5	6.9	0.5	2.6	0.147	282	196	165	102	927	576
1688	0.7	7.5	0.7	3.3	0.126	331	230	193	119	1082	676
1828	0.4	8.0	0.5	3.8	0.116	358	249	209	129	1173	732
2142	1.1	9.1	1.1	4.9	0.0990	420	292	245	152	1382	859
2510	2.2	11.3	2.3	7.2	0.0845	492	342	287	178	1618	1006
2945	7.9	19.2	8.3	15.5	0.0720	577	401	337	209	1900	1179
3449	26.1	45.3	27.3	42.8	0.0615	676	469	395	245	2227	1379
4040	24.1	69.3	25.2	68.0	0.0525	792	550	462	286	2600	1618
4728	17.5	86.9	18.3	86.3	0.0448	927	644	541	335	3045	1894
5114	4.1	91.0	4.3	90.6	0.0415	1003	697	585	362	3291	2050
6002	6.6	97.6	6.9	97.5	0.0353	1177	817	687	425	3864	2403
7033	2.2	99.8	2.3	99.8	0.0301	1379	958	805	498	4527	2818
7895	0.2	100.0	0.2	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Groper-1
Sample Depth	909.15 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Groper-1
Sample Depth 926.1 m

Client	Geoscience Victoria		
Well	Groper-1		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Groper-1	**Ambient Permeability**	
Depth	926.10 m	**Ambient Porosity**	

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

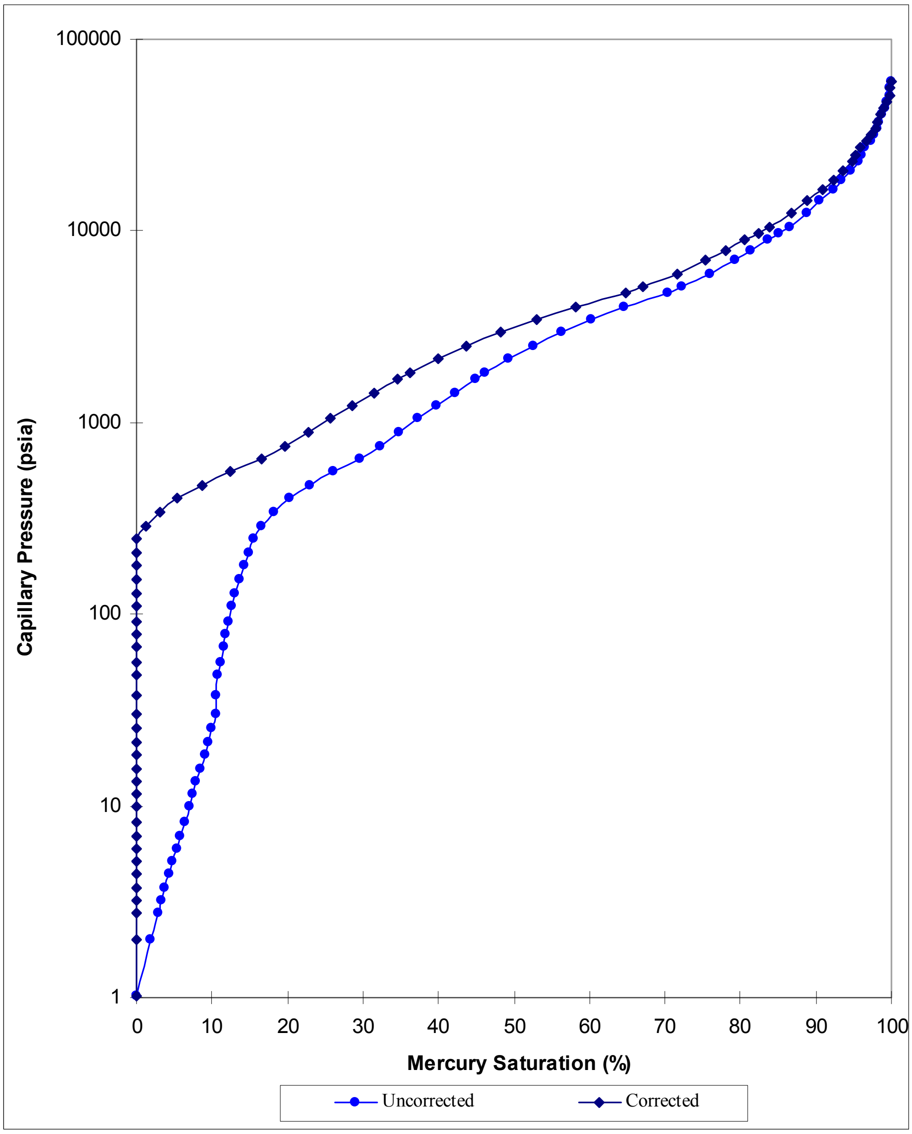
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.425						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	250.4	-	293.5	-	347.9	-
G-W	49.1	34.1	57.6	40.0	68.3	47.4
O-W	16.4	17.7	19.2	20.8	22.8	24.6

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

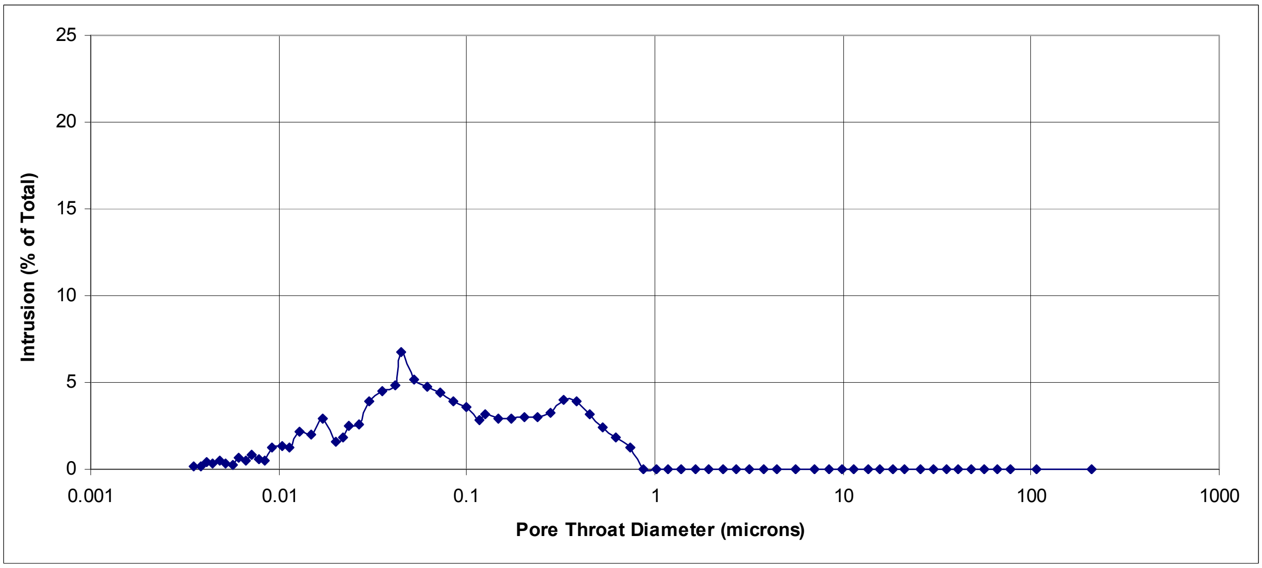
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	210	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.5	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.18	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.07
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
37.7	0.0	0.0	5.63	7.4	5.1	4.3	2.7	24.28	15.10
47.8	0.0	0.0	4.43	9.4	6.5	5.5	3.4	30.79	19.14
56.3	0.0	0.0	3.76	11.0	7.7	6.4	4.0	36.26	22.55
67.2	0.0	0.0	3.15	13	9.2	7.7	4.8	43.28	26.91
78.2	0.0	0.0	2.71	15	10.6	8.9	5.5	50.36	31.32
91.7	0.0	0.0	2.31	18	12	10.5	6.5	59.06	36.72
110	0.0	0.0	1.94	22	15	13	7.8	70.84	44.05
128	0.0	0.0	1.66	25	17	15	9.1	82.44	51.26
153	0.0	0.0	1.39	30	21	18	10.8	98.54	61.27
180	0.0	0.0	1.18	35	25	21	13	115.93	72.09
210	0.0	0.0	1.01	41	29	24	15	135.2	84.10
246	0.0	0.0	0.863	48	33	28	17	158.4	98.52
289	1.2	1.2	0.733	57	39	33	20	186.1	115.74
343	1.8	3.0	0.617	67	47	39	24	220.9	137.4
403	2.4	5.5	0.526	79	55	46	29	259.5	161.4
471	3.2	8.6	0.450	92	64	54	33	303.3	188.6
555	3.9	12.5	0.382	109	76	64	39	357.4	222.3
646	4.0	16.5	0.328	127	88	74	46	416.1	258.7
757	3.2	19.7	0.280	148	103	87	54	487.5	303.2
887	3.0	22.7	0.239	174	121	102	63	571.3	355.2
1047	3.0	25.7	0.203	205	143	120	74	674.3	419.3
1227	2.9	28.6	0.173	241	167	140	87	790.2	491.4
1438	2.9	31.5	0.147	282	196	165	102	926.1	575.9
1686	3.2	34.7	0.126	331	230	193	119	1085.9	675.2
1825	2.8	36.3	0.116	358	249	209	129	1175	730.9
2140	3.6	39.9	0.0991	420	291	245	152	1378	857.0
2505	3.9	43.8	0.0846	491	341	287	177	1613	1003.2
2941	4.4	48.2	0.0721	577	400	337	208	1894	1178
3445	4.7	52.9	0.0615	675	469	394	244	2219	1380
4040	5.2	58.1	0.0525	792	550	462	286	2602	1618
4729	6.8	64.9	0.0448	927	644	541	335	3046	1894
5115	4.8	67.1	0.0414	1003	696	585	362	3294	2048
6002	4.5	71.5	0.0353	1177	817	687	425	3866	2404
7032	3.9	75.4	0.0301	1379	958	805	498	4529	2816
7895	2.6	78.0	0.0269	1548	1075	904	559	5085	3162
8925	2.5	80.5	0.0238	1750	1215	1021	632	5748	3574
9661	1.9	82.4	0.0219	1894	1315	1106	684	6222	3869
10463	1.6	83.9	0.0203	2052	1425	1197	741	6739	4190
12295	2.9	86.8	0.0172	2411	1674	1407	871	7919	4924
14344	2.0	88.8	0.0148	2813	1953	1642	1016	9238	5745
16392	2.1	91.0	0.0129	3214	2232	1876	1161	10557	6565
18495	1.3	92.3	0.0115	3626	2518	2117	1310	11912	7407
20493	1.3	93.6	0.0103	4018	2790	2345	1452	13198	8207
23154	1.2	94.8	0.0092	4540	3153	2650	1640	14912	9273
25068	0.5	95.3	0.0085	4915	3413	2869	1776	16145	10039
27139	0.6	95.9	0.0078	5321	3695	3106	1923	17479	10869
29380	0.8	96.7	0.0072	5761	4001	3362	2081	18922	11766
31806	0.5	97.2	0.0067	6236	4331	3640	2253	20484	12738
34426	0.7	97.9	0.0062	6750	4688	3940	2439	22172	13787
37193	0.2	98.1	0.0057	7293	5064	4256	2635	23954	14895
40344	0.4	98.5	0.0053	7911	5493	4617	2858	25983	16157
43594	0.5	99.0	0.0049	8548	5936	4989	3088	28076	17459
47295	0.4	99.4	0.0045	9274	6440	5413	3351	30460	18941
51173	0.4	99.7	0.0041	10034	6968	5856	3625	32958	20494
55383	0.1	99.9	0.0038	10859	7541	6338	3924	35669	22180
59872	0.1	100.0	0.0035	11740	8153	6852	4242	38560	23978

(A) Interpreted Capillary Pressure Chart

Well	Groper-1
Sample Depth	926.1 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Groper-1
Sample Depth 932.00 m

Client	Geoscience Victoria		
Well	Groper-1		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Groper-1 A	**Ambient Permeability**	
Depth	932.00 m	**Ambient Porosity**	

Conversion Parameters

	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.680						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	156.5	-	151.3	-	285.0	-
G-W	30.7	21.3	29.7	20.6	55.9	38.8
O-W	10.2	11.1	9.9	10.7	18.6	20.2

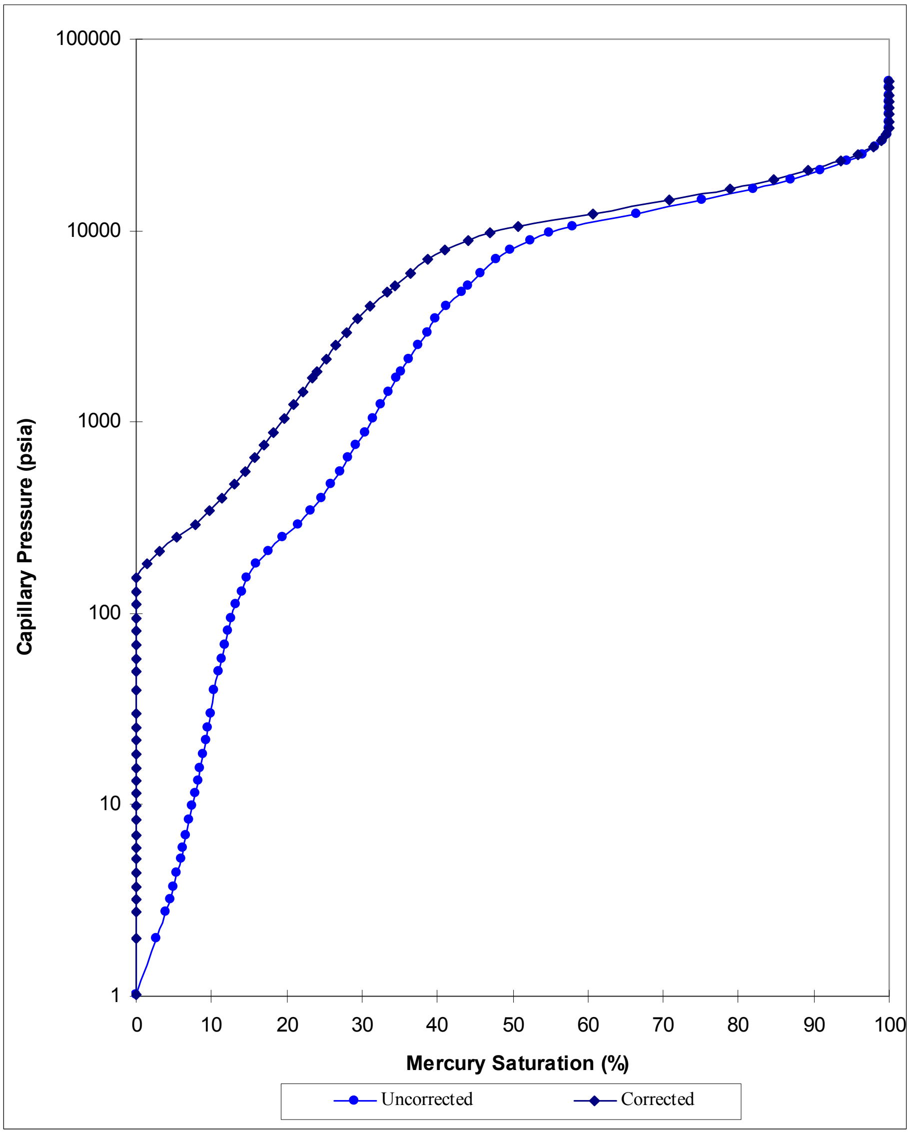
Density Gradients, psi/foot

	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

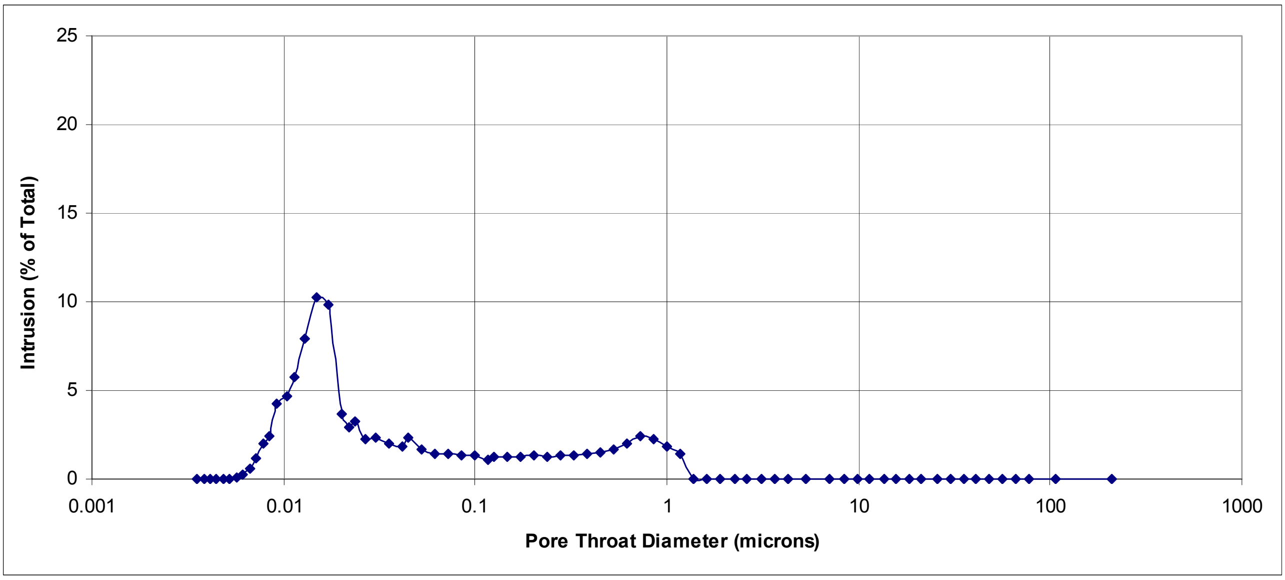
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	210	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.5	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.18	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.07
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
40.1	0.0	0.0	5.29	7.9	5.5	4.6	2.8	25.83	16.06
49.6	0.0	0.0	4.27	9.7	6.8	5.7	3.5	31.94	19.86
58.2	0.0	0.0	3.64	11.4	7.9	6.7	4.1	37.48	23.31
68.4	0.0	0.0	3.10	13	9.3	7.8	4.8	44.05	27.39
81.4	0.0	0.0	2.61	16	11.1	9.3	5.8	52.43	32.60
94.3	0.0	0.0	2.25	18	13	10.8	6.7	60.73	37.77
112	0.0	0.0	1.90	22	15	13	7.9	72.13	44.85
130	0.0	0.0	1.63	25	18	15	9.2	83.73	52.06
154	0.0	0.0	1.38	30	21	18	10.9	99.18	61.67
182	1.4	1.4	1.17	36	25	21	13	117.22	72.89
213	1.8	3.2	0.995	42	29	24	15	137.2	85.30
248	2.2	5.4	0.855	49	34	28	18	159.7	99.32
292	2.4	7.8	0.725	57	40	33	21	188.1	116.94
344	2.0	9.8	0.616	67	47	39	24	221.6	137.8
403	1.7	11.5	0.526	79	55	46	29	259.5	161.4
473	1.5	13.0	0.448	93	64	54	34	304.6	189.4
555	1.4	14.4	0.382	109	76	64	39	357.4	222.3
648	1.3	15.7	0.327	127	88	74	46	417.3	259.5
759	1.3	17.0	0.279	149	103	87	54	488.8	304.0
888	1.3	18.3	0.239	174	121	102	63	571.9	355.6
1048	1.3	19.6	0.202	205	143	120	74	675.0	419.7
1230	1.3	20.8	0.172	241	167	141	87	792.2	492.6
1437	1.2	22.1	0.148	282	196	164	102	925.5	575.5
1689	1.3	23.3	0.126	331	230	193	120	1087.8	676.4
1829	1.1	23.9	0.116	359	249	209	130	1178	732.5
2143	1.3	25.2	0.0989	420	292	245	152	1380	858.2
2510	1.3	26.6	0.0845	492	342	287	178	1617	1005.2
2944	1.4	28.0	0.0720	577	401	337	209	1896	1179
3448	1.4	29.4	0.0615	676	469	395	244	2221	1381
4043	1.6	31.0	0.0524	793	551	463	286	2604	1619
4732	2.3	33.4	0.0448	928	644	542	335	3048	1895
5116	1.8	34.3	0.0414	1003	697	585	362	3295	2049
6004	2.0	36.4	0.0353	1177	818	687	425	3867	2405
7032	2.4	38.7	0.0301	1379	958	805	498	4529	2816
7896	2.2	40.9	0.0268	1548	1075	904	559	5085	3162
8926	3.2	44.2	0.0238	1750	1215	1022	632	5749	3575
9663	2.9	47.1	0.0219	1895	1316	1106	685	6223	3870
10465	3.7	50.8	0.0203	2052	1425	1198	741	6740	4191
12296	9.9	60.6	0.0172	2411	1674	1407	871	7919	4924
14347	10.2	70.9	0.0148	2813	1954	1642	1016	9240	5746
16395	7.9	78.8	0.0129	3215	2232	1876	1161	10559	6566
18496	5.8	84.6	0.0115	3627	2519	2117	1310	11912	7407
20495	4.6	89.2	0.0103	4019	2791	2345	1452	13200	8208
23155	4.3	93.5	0.0092	4540	3153	2650	1640	14913	9273
25069	2.4	95.9	0.0085	4915	3414	2869	1776	16146	10040
27139	2.0	97.9	0.0078	5321	3695	3106	1923	17479	10869
29380	1.2	99.1	0.0072	5761	4001	3362	2081	18922	11766
31807	0.6	99.7	0.0067	6237	4331	3640	2253	20485	12738
34425	0.3	99.9	0.0062	6750	4688	3940	2439	22171	13787
37194	0.1	100.0	0.0057	7293	5065	4257	2635	23955	14896
40342	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43593	0.0	100.0	0.0049	8548	5936	4989	3088	28076	17458
47294	0.0	100.0	0.0045	9273	6440	5412	3351	30459	18941
51166	0.0	100.0	0.0041	10033	6967	5856	3625	32953	20491
55381	0.0	100.0	0.0038	10859	7541	6338	3923	35668	22179
59876	0.0	100.0	0.0035	11740	8153	6852	4242	38563	23980

(A) Interpreted Capillary Pressure Chart

Well	Groper-1
Sample Depth	932.00 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Groper-2
Sample Depth 747.86 m

Client	Geoscience Victoria		
Well	Groper-2		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Groper-2	**Ambient Permeability**	
Depth	747.86 m	**Ambient Porosity**	

Conversion Parameters

	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
2.550						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	41.7	-	54.7	-	151	-
G-W	8.2	5.7	10.7	7.5	29.6	20.6
O-W	2.7	3.0	3.6	3.9	9.9	10.7

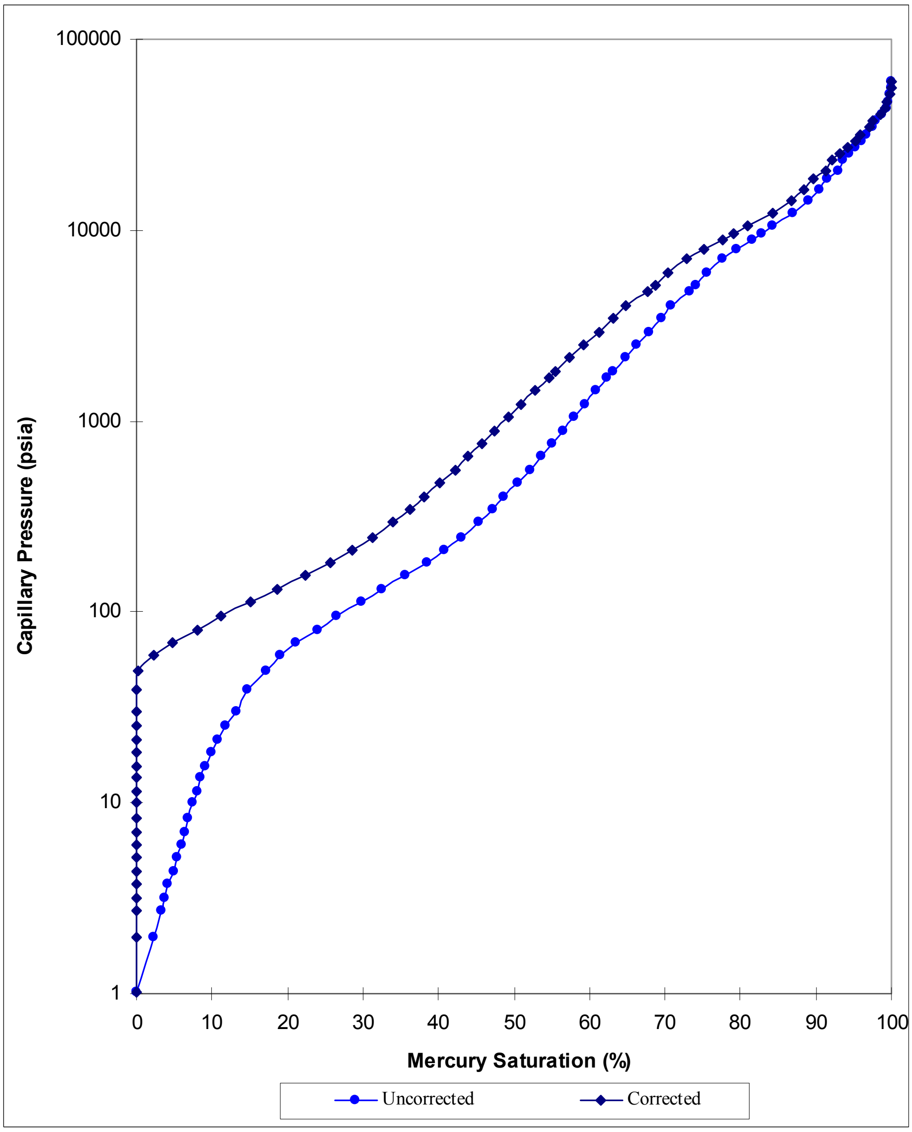
Density Gradients, psi/foot

	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

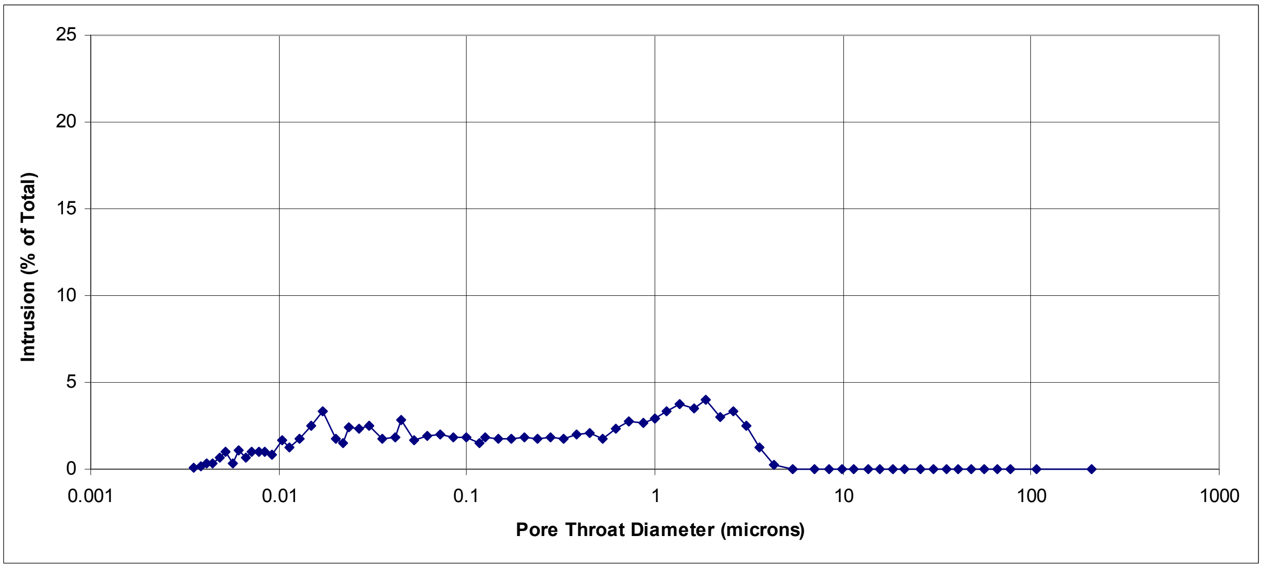
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	209	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.4	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.39	0.0	0.0	48.3	0.86	0.60	0.50	0.31	2.83	1.76
5.19	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
39.5	0.0	0.0	5.37	7.7	5.4	4.5	2.8	25.44	15.82
49.5	0.3	0.3	4.29	9.7	6.7	5.7	3.5	31.88	19.82
59.4	1.2	2.2	3.57	11.6	8.1	6.8	4.2	38.26	23.79
69.2	2.5	4.7	3.07	14	9.4	7.9	4.9	44.57	27.71
80.8	3.4	8.1	2.62	16	11.0	9.2	5.7	52.04	32.36
94.7	3.0	11.1	2.24	19	13	10.8	6.7	60.99	37.93
113	4.0	15.1	1.87	22	15	13	8.0	72.78	45.26
132	3.5	18.6	1.61	26	18	15	9.4	85.01	52.86
156	3.7	22.3	1.36	31	21	18	11.1	100.47	62.48
183	3.4	25.7	1.16	36	25	21	13	117.86	73.29
212	2.9	28.6	0.999	42	29	24	15	136.5	84.90
246	2.6	31.2	0.861	48	33	28	17	158.4	98.52
293	2.8	34.0	0.723	57	40	34	21	188.7	117.34
345	2.3	36.3	0.615	68	47	39	24	222.2	138.2
403	1.8	38.1	0.527	79	55	46	29	259.5	161.4
473	2.1	40.2	0.448	93	64	54	34	304.6	189.4
556	2.0	42.2	0.381	109	76	64	39	358.1	222.7
649	1.8	43.9	0.327	127	88	74	46	418.0	259.9
758	1.8	45.7	0.280	149	103	87	54	488.2	303.6
888	1.8	47.5	0.239	174	121	102	63	571.9	355.6
1048	1.8	49.3	0.202	205	143	120	74	675.0	419.7
1228	1.7	51.0	0.173	241	167	141	87	790.9	491.8
1437	1.7	52.7	0.148	282	196	164	102	925.5	575.5
1688	1.9	54.6	0.126	331	230	193	120	1087.1	676.0
1827	1.5	55.5	0.116	358	249	209	129	1177	731.7
2143	1.8	57.4	0.0989	420	292	245	152	1380	858.2
2508	1.9	59.2	0.0845	492	342	287	178	1615	1004.4
2943	2.0	61.2	0.0720	577	401	337	208	1895	1179
3449	1.9	63.1	0.0615	676	470	395	244	2221	1381
4043	1.7	64.8	0.0524	793	551	463	286	2604	1619
4734	2.8	67.7	0.0448	928	645	542	335	3049	1896
5117	1.8	68.7	0.0414	1003	697	586	363	3296	2049
6002	1.7	70.4	0.0353	1177	817	687	425	3866	2404
7032	2.5	72.9	0.0301	1379	958	805	498	4529	2816
7896	2.3	75.2	0.0268	1548	1075	904	559	5085	3162
8927	2.4	77.6	0.0237	1750	1216	1022	632	5749	3575
9662	1.5	79.2	0.0219	1895	1316	1106	685	6223	3870
10465	1.8	80.9	0.0203	2052	1425	1198	741	6740	4191
12296	3.3	84.2	0.0172	2411	1674	1407	871	7919	4924
14346	2.5	86.7	0.0148	2813	1953	1642	1016	9239	5745
16396	1.8	88.5	0.0129	3215	2233	1876	1162	10560	6566
18495	1.2	89.7	0.0115	3626	2518	2117	1310	11912	7407
20497	1.7	91.4	0.0103	4019	2791	2346	1452	13201	8209
23154	0.8	92.2	0.0092	4540	3153	2650	1640	14912	9273
25069	1.0	93.2	0.0085	4915	3414	2869	1776	16146	10040
27137	1.0	94.2	0.0078	5321	3695	3106	1923	17477	10868
29382	1.0	95.3	0.0072	5761	4001	3363	2082	18923	11767
31806	0.7	96.0	0.0067	6236	4331	3640	2253	20484	12738
34427	1.1	97.1	0.0062	6750	4688	3940	2439	22172	13788
37195	0.4	97.4	0.0057	7293	5065	4257	2635	23955	14896
40346	1.0	98.5	0.0053	7911	5494	4617	2858	25985	16158
43595	0.7	99.1	0.0049	8548	5936	4989	3088	28077	17459
47295	0.3	99.4	0.0045	9274	6440	5413	3351	30460	18941
51173	0.3	99.8	0.0041	10034	6968	5856	3625	32958	20494
55384	0.2	99.9	0.0038	10860	7541	6338	3924	35670	22181
59893	0.1	100.0	0.0035	11744	8155	6854	4243	38574	23986

(A) Interpreted Capillary Pressure Chart

Well	Groper-2
Sample Depth	747.86 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Hunters Lane-1
Sample Depth	377.00 m

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Client	Geoscience Victoria		
Well	Hunters Lane-1		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Hunters Lane -1	**Ambient Permeability**	
Depth	377.00 m	**Ambient Porosity**	

Conversion Parameters	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

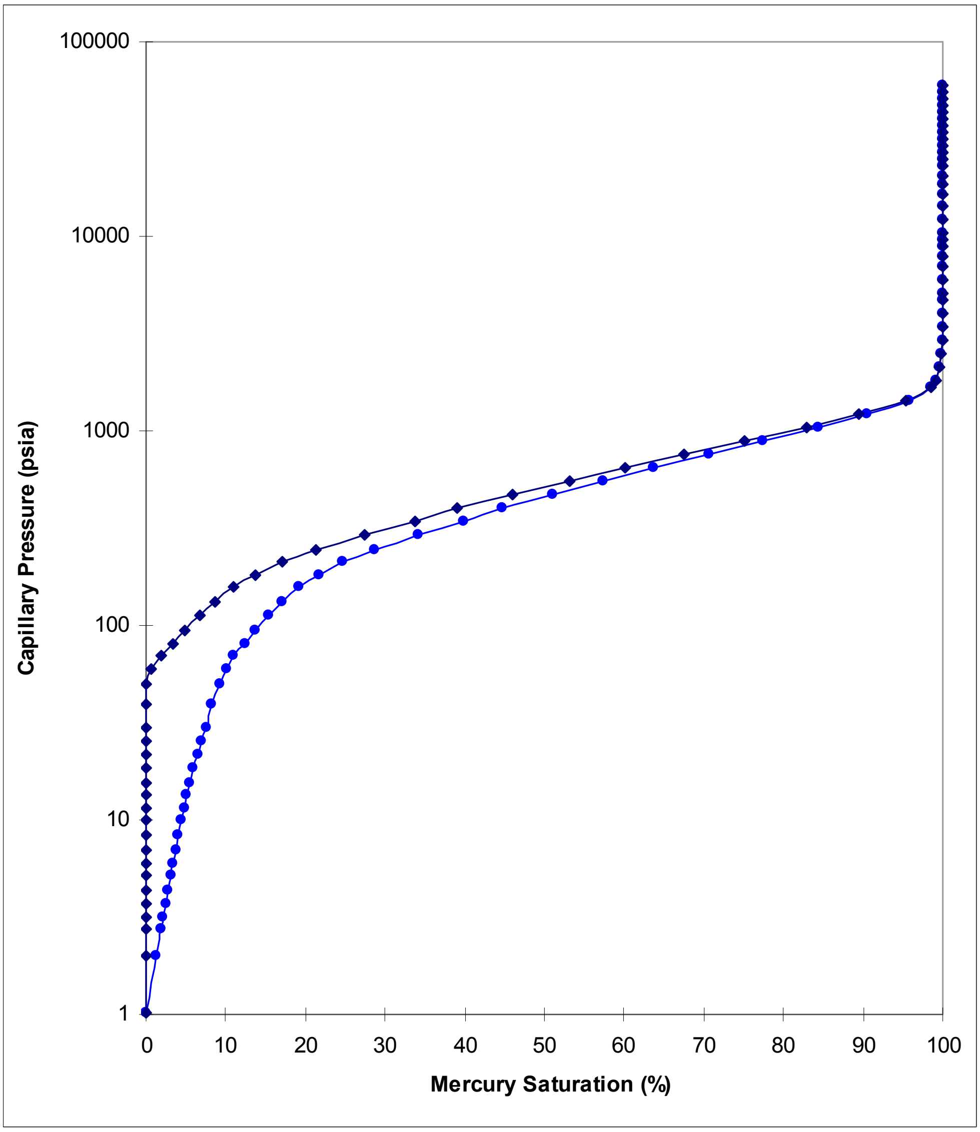
pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
2.000						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	58.2	-	142.6	-	182.1	-
G-W	10.4	7.3	25.6	17.8	32.7	22.7
O-W	3.5	3.8	8.5	9.2	10.9	11.8

Density Gradients, psi/foot	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

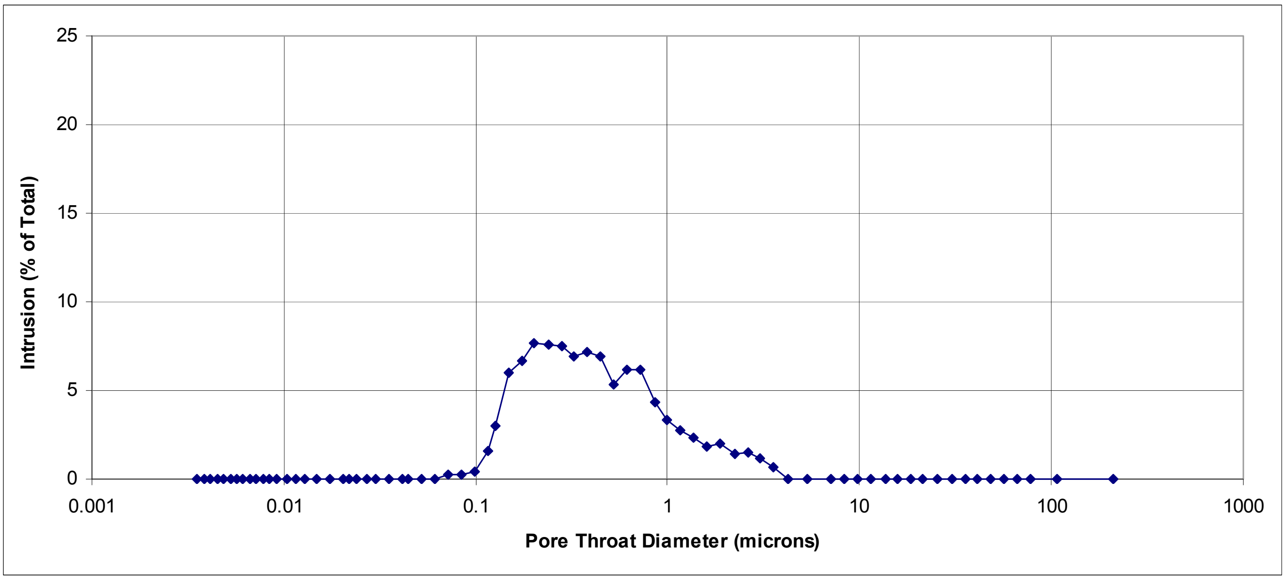
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	209	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.4	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.39	0.0	0.0	48.3	0.86	0.60	0.50	0.31	2.83	1.76
5.19	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
39.7	0.0	0.0	5.34	7.8	5.4	4.5	2.8	25.57	15.90
49.7	0.0	0.0	4.27	9.7	6.8	5.7	3.5	32.01	19.90
59.6	0.7	0.7	3.55	11.7	8.1	6.8	4.2	38.38	23.87
69.5	1.2	1.9	3.05	14	9.5	8.0	4.9	44.76	27.83
81.2	1.5	3.4	2.61	16	11.1	9.3	5.8	52.30	32.52
95.0	1.4	4.8	2.23	19	13	10.9	6.7	61.18	38.05
114	2.0	6.8	1.86	22	16	13	8.1	73.42	45.66
132	1.8	8.6	1.60	26	18	15	9.4	85.01	52.86
156	2.3	11.0	1.35	31	21	18	11.1	100.47	62.48
183	2.8	13.7	1.16	36	25	21	13	117.86	73.29
213	3.3	17.0	0.997	42	29	24	15	137.2	85.30
247	4.3	21.4	0.860	48	34	28	17	159.1	98.92
294	6.1	27.5	0.722	58	40	34	21	189.3	117.74
345	6.2	33.7	0.615	68	47	39	24	222.2	138.2
403	5.3	39.0	0.527	79	55	46	29	259.5	161.4
473	6.9	46.0	0.449	93	64	54	34	304.6	189.4
555	7.2	53.1	0.382	109	76	64	39	357.4	222.3
648	6.9	60.1	0.327	127	88	74	46	417.3	259.5
757	7.5	67.6	0.280	148	103	87	54	487.5	303.2
887	7.6	75.2	0.239	174	121	102	63	571.3	355.2
1047	7.6	82.8	0.203	205	143	120	74	674.3	419.3
1227	6.7	89.5	0.173	241	167	140	87	790.2	491.4
1435	6.0	95.5	0.148	281	195	164	102	924.2	574.7
1686	3.0	98.5	0.126	331	230	193	119	1085.9	675.2
1825	1.6	99.1	0.116	358	249	209	129	1175	730.9
2141	0.4	99.5	0.0990	420	292	245	152	1379	857.4
2506	0.3	99.7	0.0846	491	341	287	178	1614	1003.6
2941	0.3	100.0	0.0721	577	400	337	208	1894	1178
3447	0.0	100.0	0.0615	676	469	394	244	2220	1380
4041	0.0	100.0	0.0525	792	550	462	286	2603	1618
4732	0.0	100.0	0.0448	928	644	542	335	3048	1895
5115	0.0	100.0	0.0414	1003	696	585	362	3294	2048
6000	0.0	100.0	0.0353	1176	817	687	425	3864	2403
7031	0.0	100.0	0.0302	1379	957	805	498	4528	2816
7895	0.0	100.0	0.0269	1548	1075	904	559	5085	3162
8926	0.0	100.0	0.0238	1750	1215	1022	632	5749	3575
9661	0.0	100.0	0.0219	1894	1315	1106	684	6222	3869
10463	0.0	100.0	0.0203	2052	1425	1197	741	6739	4190
12295	0.0	100.0	0.0172	2411	1674	1407	871	7919	4924
14345	0.0	100.0	0.0148	2813	1953	1642	1016	9239	5745
16395	0.0	100.0	0.0129	3215	2232	1876	1161	10559	6566
18494	0.0	100.0	0.0115	3626	2518	2116	1310	11911	7407
20496	0.0	100.0	0.0103	4019	2791	2346	1452	13200	8208
23153	0.0	100.0	0.0092	4540	3153	2650	1640	14912	9272
25068	0.0	100.0	0.0085	4915	3413	2869	1776	16145	10039
27136	0.0	100.0	0.0078	5321	3695	3105	1922	17477	10868
29381	0.0	100.0	0.0072	5761	4001	3362	2081	18923	11767
31805	0.0	100.0	0.0067	6236	4331	3640	2253	20484	12737
34426	0.0	100.0	0.0062	6750	4688	3940	2439	22172	13787
37195	0.0	100.0	0.0057	7293	5065	4257	2635	23955	14896
40346	0.0	100.0	0.0053	7911	5494	4617	2858	25985	16158
43594	0.0	100.0	0.0049	8548	5936	4989	3088	28076	17459
47295	0.0	100.0	0.0045	9274	6440	5413	3351	30460	18941
51172	0.0	100.0	0.0041	10034	6968	5856	3625	32957	20494
55384	0.0	100.0	0.0038	10860	7541	6338	3924	35670	22181
59893	0.0	100.0	0.0035	11744	8155	6854	4243	38574	23986

(A) Interpreted Capillary Pressure Chart

Well	Hunters Lane-1
Sample Depth	377.00 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Kingfish-3
Sample Depth 2143.05 m

Client Geoscience Victoria
Well Kingfish-3

Test Method Air/Mercury Capillary Pressure Drainage

Sample Kingfish-3 **Ambient Permeability**
Depth 2143.05 m **Ambient Porosity**

pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
0.063						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	1703	-	2866	-	3730	-
G-W	334.1	232.0	562.3	390.5	731.8	508.2
O-W	111.4	120.6	187.4	203.0	243.9	264.3

Conversion Parameters

	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

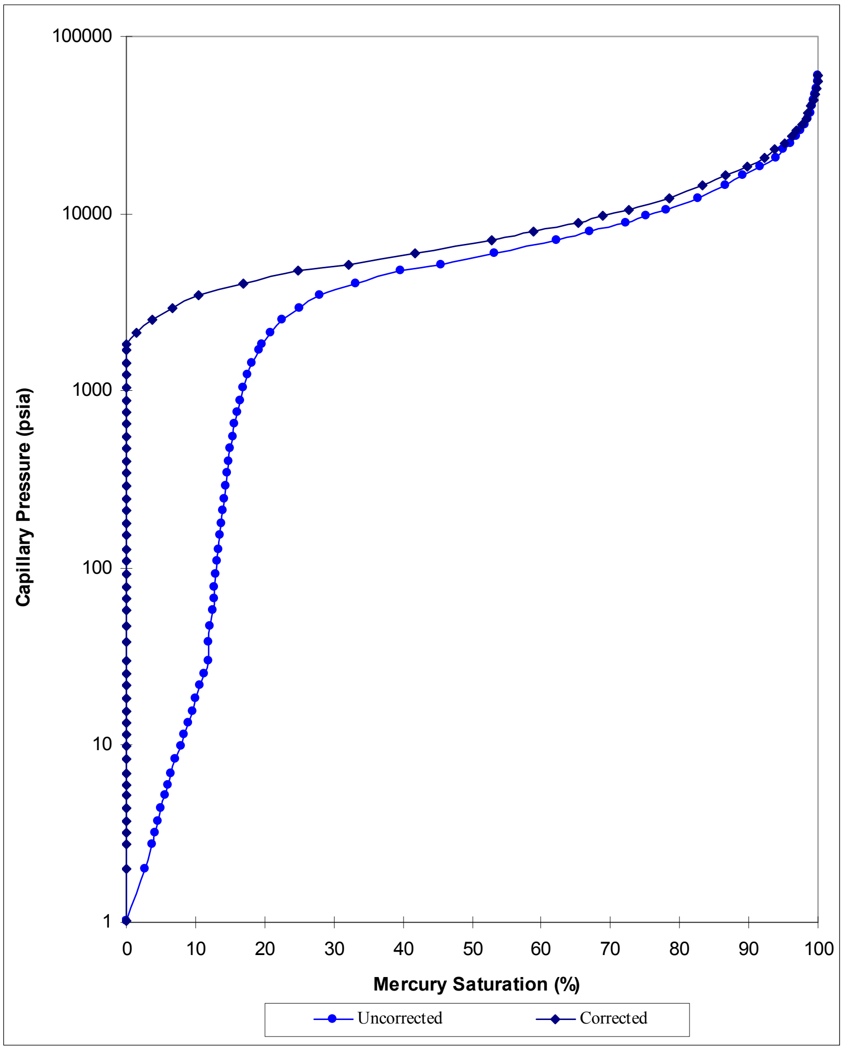
Density Gradients, psi/foot

	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

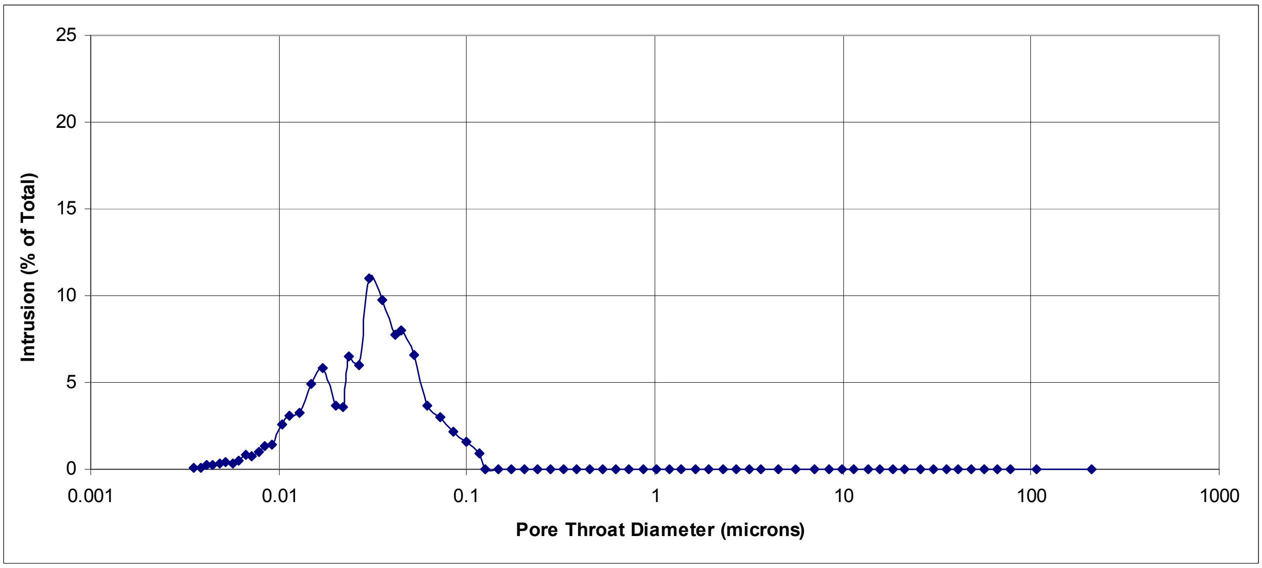
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	209	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.4	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.39	0.0	0.0	48.3	0.86	0.60	0.50	0.31	2.83	1.76
5.19	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
37.9	0.0	0.0	5.60	7.4	5.2	4.3	2.7	24.41	15.18
46.6	0.0	0.0	4.55	9.1	6.3	5.3	3.3	30.01	18.66
57.6	0.0	0.0	3.68	11.3	7.8	6.6	4.1	37.10	23.07
67.2	0.0	0.0	3.15	13	9.2	7.7	4.8	43.28	26.91
77.9	0.0	0.0	2.72	15	10.6	8.9	5.5	50.17	31.20
92.2	0.0	0.0	2.30	18	13	10.6	6.5	59.38	36.92
110	0.0	0.0	1.93	22	15	13	7.8	70.84	44.05
128	0.0	0.0	1.65	25	17	15	9.1	82.44	51.26
153	0.0	0.0	1.38	30	21	18	10.8	98.54	61.27
178	0.0	0.0	1.19	35	24	20	13	114.64	71.29
210	0.0	0.0	1.01	41	29	24	15	135.2	84.10
246	0.0	0.0	0.861	48	33	28	17	158.4	98.52
290	0.0	0.0	0.731	57	39	33	21	186.8	116.14
343	0.0	0.0	0.617	67	47	39	24	220.9	137.4
401	0.0	0.0	0.529	79	55	46	28	258.3	160.6
472	0.0	0.0	0.449	93	64	54	33	304.0	189.0
554	0.0	0.0	0.382	109	75	63	39	356.8	221.9
648	0.0	0.0	0.327	127	88	74	46	417.3	259.5
757	0.0	0.0	0.280	148	103	87	54	487.5	303.2
887	0.0	0.0	0.239	174	121	102	63	571.3	355.2
1048	0.0	0.0	0.202	205	143	120	74	675.0	419.7
1227	0.0	0.0	0.173	241	167	140	87	790.2	491.4
1438	0.0	0.0	0.147	282	196	165	102	926.1	575.9
1689	0.0	0.0	0.126	331	230	193	120	1087.8	676.4
1828	0.9	0.0	0.116	358	249	209	130	1177	732.1
2143	1.6	1.6	0.0989	420	292	245	152	1380	858.2
2509	2.2	3.7	0.0845	492	342	287	178	1616	1004.8
2944	3.0	6.7	0.0720	577	401	337	209	1896	1179
3448	3.6	10.4	0.0615	676	469	395	244	2221	1381
4043	6.6	16.9	0.0524	793	551	463	286	2604	1619
4731	8.0	24.9	0.0448	928	644	541	335	3047	1895
5116	7.7	32.1	0.0414	1003	697	585	362	3295	2049
6004	9.7	41.8	0.0353	1177	818	687	425	3867	2405
7032	11.0	52.9	0.0301	1379	958	805	498	4529	2816
7897	6.0	58.9	0.0268	1548	1075	904	559	5086	3163
8926	6.5	65.4	0.0237	1750	1215	1022	632	5749	3575
9662	3.6	69.0	0.0219	1895	1316	1106	685	6223	3870
10464	3.6	72.6	0.0203	2052	1425	1198	741	6739	4191
12296	5.8	78.5	0.0172	2411	1674	1407	871	7919	4924
14346	4.9	83.4	0.0148	2813	1953	1642	1016	9239	5745
16397	3.2	86.6	0.0129	3215	2233	1876	1162	10560	6567
18494	3.1	89.7	0.0115	3626	2518	2116	1310	11911	7407
20497	2.6	92.3	0.0103	4019	2791	2346	1452	13201	8209
23152	1.4	93.8	0.0092	4540	3153	2650	1640	14911	9272
25069	1.3	95.1	0.0085	4915	3414	2869	1776	16146	10040
27136	1.0	96.2	0.0078	5321	3695	3105	1922	17477	10868
29380	0.8	96.9	0.0072	5761	4001	3362	2081	18922	11766
31806	0.8	97.8	0.0067	6236	4331	3640	2253	20484	12738
34429	0.5	98.2	0.0062	6751	4688	3940	2439	22174	13788
37197	0.4	98.6	0.0057	7294	5065	4257	2635	23956	14897
40347	0.4	99.0	0.0053	7911	5494	4617	2858	25985	16158
43595	0.3	99.3	0.0049	8548	5936	4989	3088	28077	17459
47293	0.2	99.6	0.0045	9273	6440	5412	3350	30459	18940
51174	0.3	99.9	0.0041	10034	6968	5856	3625	32958	20495
55386	0.0	99.9	0.0038	10860	7542	6338	3924	35671	22181
59892	0.1	100.0	0.0035	11744	8155	6854	4243	38573	23986

(A) Interpreted Capillary Pressure Chart

Well	Kingfish-3
Sample Depth	2143.05 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Merrlieu-4
Sample Depth 722.00 m

Client	Geoscience A Victoria
Well	Meerlieu-4
Test Method	Air/Mercury Capillary Pressure
Sample	M4-1
Depth	722.00 m
Pore radius (µm)	0.058

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.183

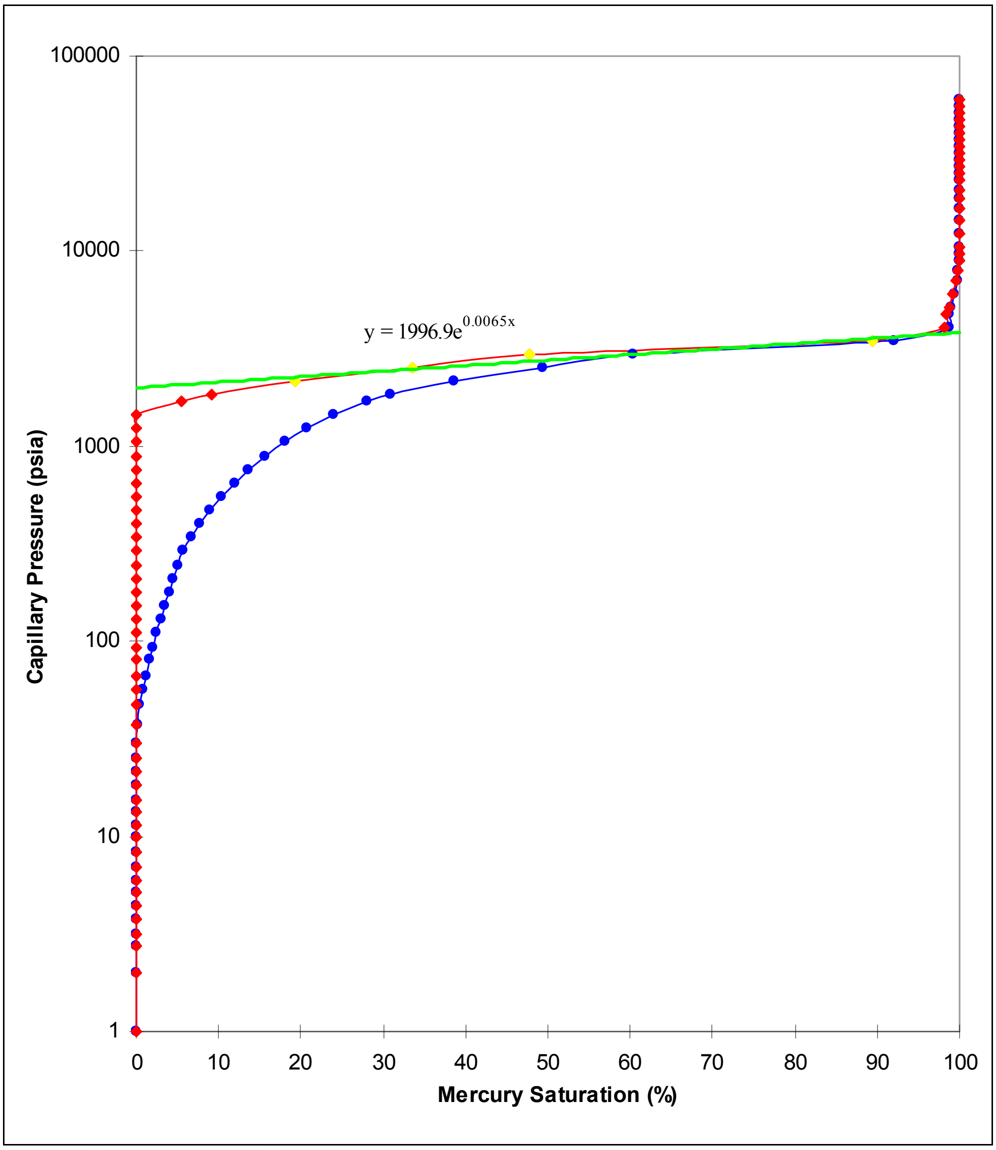
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	Height (feet)	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	1825	-	1997	-	2131	-
G-W	731	358	249	392	272	418	290
O-W	1176	119	129	131	141	139	151
CO_2-W	365	358	129	392	141	418	151

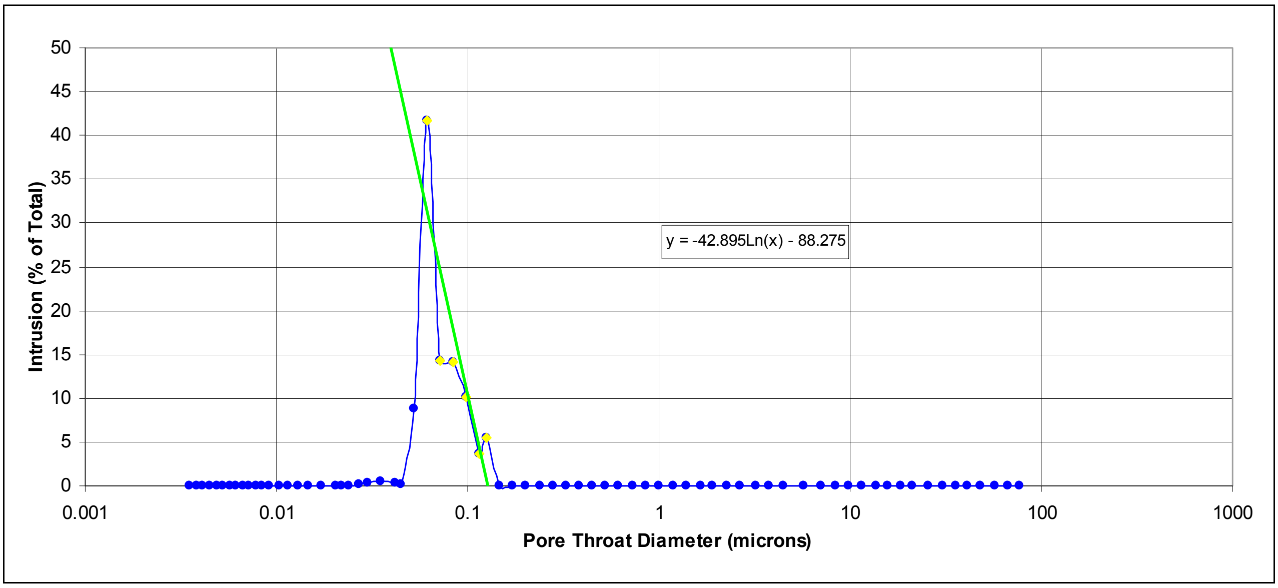
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.0	0.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.0	0.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.0	0.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.0	0.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.0	0.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.0	0.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.0	0.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.0	0.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	0.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.0	0.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.0	0.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.2	0.2	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.3	0.5	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.3	0.8	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.4	1.2	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.5	1.6	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.4	2.0	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.5	2.5	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.5	3.0	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.5	3.4	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.5	4.0	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.5	4.5	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.6	5.1	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.6	5.7	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	1.0	6.8	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	1.0	7.7	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	1.3	9.0	0.0	0.0	0.449	92.5	64.2	54.0	33.4	304	189
553	1.4	10.4	0.0	0.0	0.383	108	75.0	63.3	39.2	356	221
647	1.5	11.9	0.0	0.0	0.328	127	88.2	74.0	45.8	416	259
757	1.8	13.7	0.0	0.0	0.280	148	103	86.6	53.6	487	303
887	2.0	15.7	0.0	0.0	0.239	174	121	102	63.1	574	356
1048	2.4	18.1	0.0	0.0	0.202	205	142	120	74.3	675	418
1227	2.7	20.8	0.0	0.0	0.173	241	167	140	86.7	788	491
1439	3.1	23.9	0.0	0.0	0.147	282	196	165	102	927	576
1688	4.2	28.1	5.5	5.5	0.126	331	230	193	119	1082	676
1828	2.8	30.9	3.7	9.2	0.116	358	249	209	129	1173	732
2142	7.8	38.6	10.2	19.4	0.0990	420	292	245	152	1382	859
2510	10.8	49.4	14.2	33.5	0.0845	492	342	287	178	1618	1006
2945	10.9	60.3	14.3	47.8	0.0720	577	401	337	209	1900	1179
3449	31.7	92.0	41.7	89.5	0.0615	676	469	395	245	2227	1379
4040	6.7	98.7	8.8	98.3	0.0525	792	550	462	286	2600	1618
4728	0.1	98.8	0.1	98.4	0.0448	927	644	541	335	3045	1894
5114	0.3	99.1	0.4	98.8	0.0415	1003	697	585	362	3291	2050
6002	0.4	99.4	0.5	99.3	0.0353	1177	817	687	425	3864	2403
7033	0.3	99.7	0.4	99.6	0.0301	1379	958	805	498	4527	2818
7895	0.2	99.9	0.2	99.9	0.0269	1548	1075	904	560	5091	3162
8920	0.1	100.0	0.1	99.9	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Merrlieu-4
Sample Depth	722.00 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Merrlieu-4
Sample Depth	769.00 m

Client	Geoscience Victoria
Well	Meerlieu-4
Test Method	Air/Mercury Capillary Pressure
Sample	2
Depth	769.00 m
Ambient Permeability	
Ambient Porosity	
pore radius (µm)	0.039

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.215

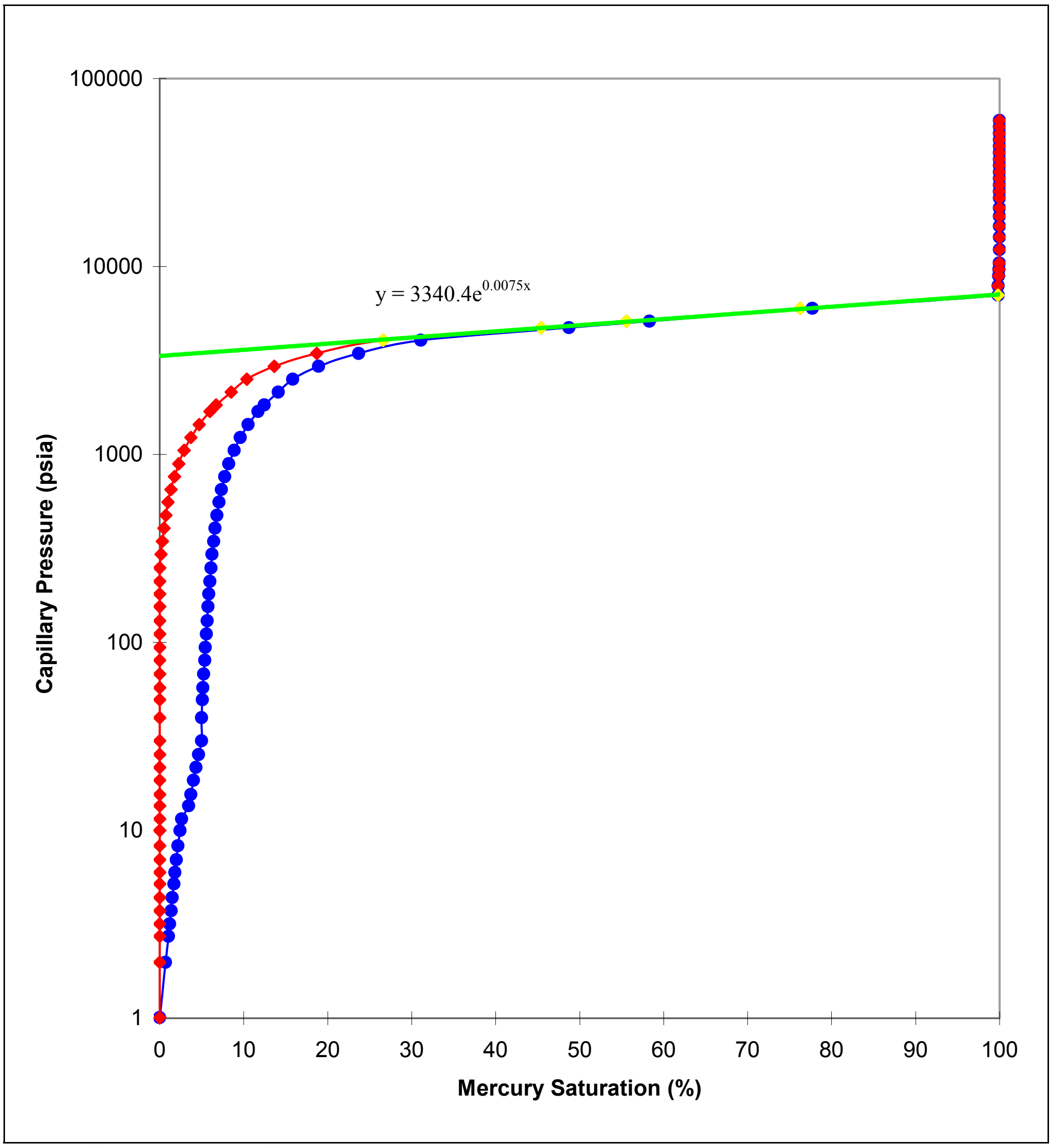
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	2709	-	3340	-	3602	-
G-W	1086	532	369	655	455	707	491
O-W	1745	177	192	218	237	236	255
CO_2-W	565	532	192	655	237	707	255

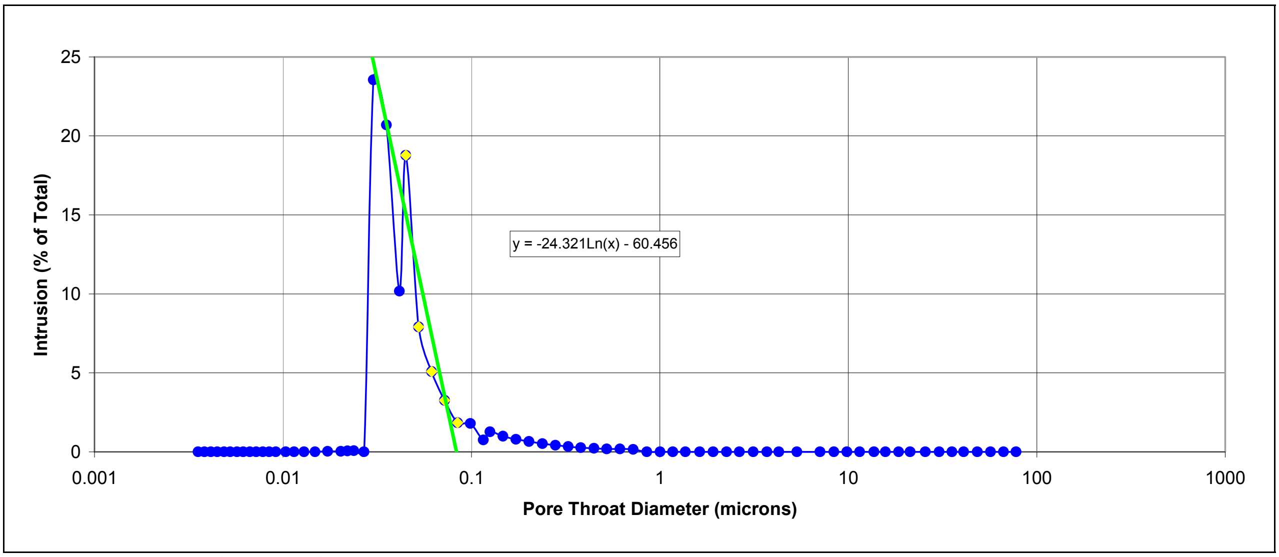
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.01	0.0	0.0	0.0	0.0	211	0.20	0.14	0.12	0.07	0.65	0.41
1.98	0.7	0.7	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	1.1	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	1.2	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.2	1.4	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.2	1.5	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.2	1.7	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.97	0.1	1.8	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.2	2.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.2	2.2	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.2	2.4	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.2	2.6	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.8	3.5	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.3	3.7	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.3	4.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.3	4.3	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.3	4.6	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.4	5.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
39.7	0.0	5.0	0.0	0.0	5.34	7.78	5.40	4.54	2.81	25.5	15.9
49.5	0.1	5.1	0.0	0.0	4.28	9.71	6.74	5.66	3.50	31.8	19.8
57.3	0.0	5.1	0.0	0.0	3.70	11.2	7.78	6.56	4.06	36.9	22.9
67.8	0.1	5.3	0.0	0.0	3.13	13.3	9.24	7.76	4.80	43.6	27.2
80.3	0.1	5.4	0.0	0.0	2.64	15.7	10.9	9.19	5.69	51.7	32.1
93.9	0.1	5.5	0.0	0.0	2.26	18.4	12.8	10.7	6.62	60.2	37.6
111	0.1	5.6	0.0	0.0	1.92	21.8	15.1	12.7	7.86	71.5	44.4
130	0.1	5.7	0.0	0.0	1.63	25.5	17.7	14.9	9.22	83.8	52.1
155	0.1	5.8	0.0	0.0	1.37	30.4	21.1	17.7	11.0	100	62.1
181	0.1	5.9	0.0	0.0	1.17	35.5	24.7	20.7	12.8	116	72.6
211	0.1	6.0	0.0	0.0	1.00	41.4	28.8	24.1	14.9	135	84.7
248	0.1	6.1	0.0	0.0	0.853	48.6	33.8	28.4	17.6	160	99.4
294	0.1	6.3	0.1	0.1	0.722	57.6	40.0	33.6	20.8	189	118
345	0.2	6.4	0.2	0.3	0.615	67.6	46.9	39.5	24.5	223	138
405	0.2	6.6	0.2	0.5	0.523	79.4	55.1	46.3	28.7	261	162
475	0.2	6.8	0.2	0.7	0.447	93.1	64.7	54.4	33.7	306	190
557	0.3	7.1	0.3	1.0	0.381	109	75.7	63.7	39.4	358	223
650	0.3	7.4	0.3	1.3	0.326	127	88.2	74.4	46.1	419	259
760	0.4	7.8	0.4	1.7	0.279	149	103	87.0	53.9	490	303
890	0.5	8.2	0.5	2.3	0.238	175	122	102	63.1	574	359
1049	0.6	8.9	0.7	2.9	0.202	206	143	120	74.3	675	421
1230	0.8	9.6	0.8	3.7	0.172	241	167	141	87.3	794	491
1440	0.9	10.5	1.0	4.7	0.147	282	196	165	102	927	576
1692	1.2	11.7	1.3	6.0	0.125	332	231	194	120	1091	679
1831	0.7	12.4	0.8	6.7	0.116	359	249	210	130	1182	732
2146	1.7	14.1	1.8	8.5	0.0988	421	292	246	152	1382	859
2511	1.7	15.8	1.8	10.4	0.0844	492	342	287	178	1618	1006
2945	3.1	18.9	3.3	13.6	0.0720	577	401	337	209	1900	1179
3449	4.8	23.7	5.1	18.7	0.0615	676	469	395	245	2227	1379
4042	7.4	31.1	7.9	26.6	0.0524	793	551	463	287	2609	1621
4728	17.6	48.7	18.8	45.4	0.0448	927	644	541	335	3045	1894
5106	9.6	58.3	10.2	55.6	0.0415	1001	695	584	362	3291	2044
5995	19.4	77.7	20.7	76.3	0.0354	1175	816	686	425	3864	2400
7022	22.1	99.8	23.5	99.8	0.0302	1377	956	804	498	4527	2812
7886	0.0	99.8	0.0	99.8	0.0269	1546	1074	902	558	5073	3159
8916	0.1	99.9	0.1	99.9	0.0238	1748	1214	1020	631	5736	3571
9648	0.1	99.9	0.1	99.9	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12284	0.0	100.0	0.0	100.0	0.0173	2409	1673	1406	870	7909	4921
14331	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18479	0.0	100.0	0.0	100.0	0.0115	3623	2516	2115	1309	11900	7400
20480	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23148	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25065	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27137	0.0	100.0	0.0	100.0	0.0078	5321	3695	3106	1923	17482	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31803	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34423	0.0	100.0	0.0	100.0	0.0062	6750	4688	3939	2438	22164	13788
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40342	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47294	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55385	0.0	100.0	0.0	100.0	0.0038	10860	7542	6338	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Merrlieu-4
Sample Depth	769.00 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Meerlieu-15001
Sample Depth	699.9 m

Client	Geoscience A VIctoria
Well	Meerlieu-15001
Test Method	Air/Mercury Capillary Pressure
Sample	M15001
Depth	699.90 m
Pore radius (µm)	0.176

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.161

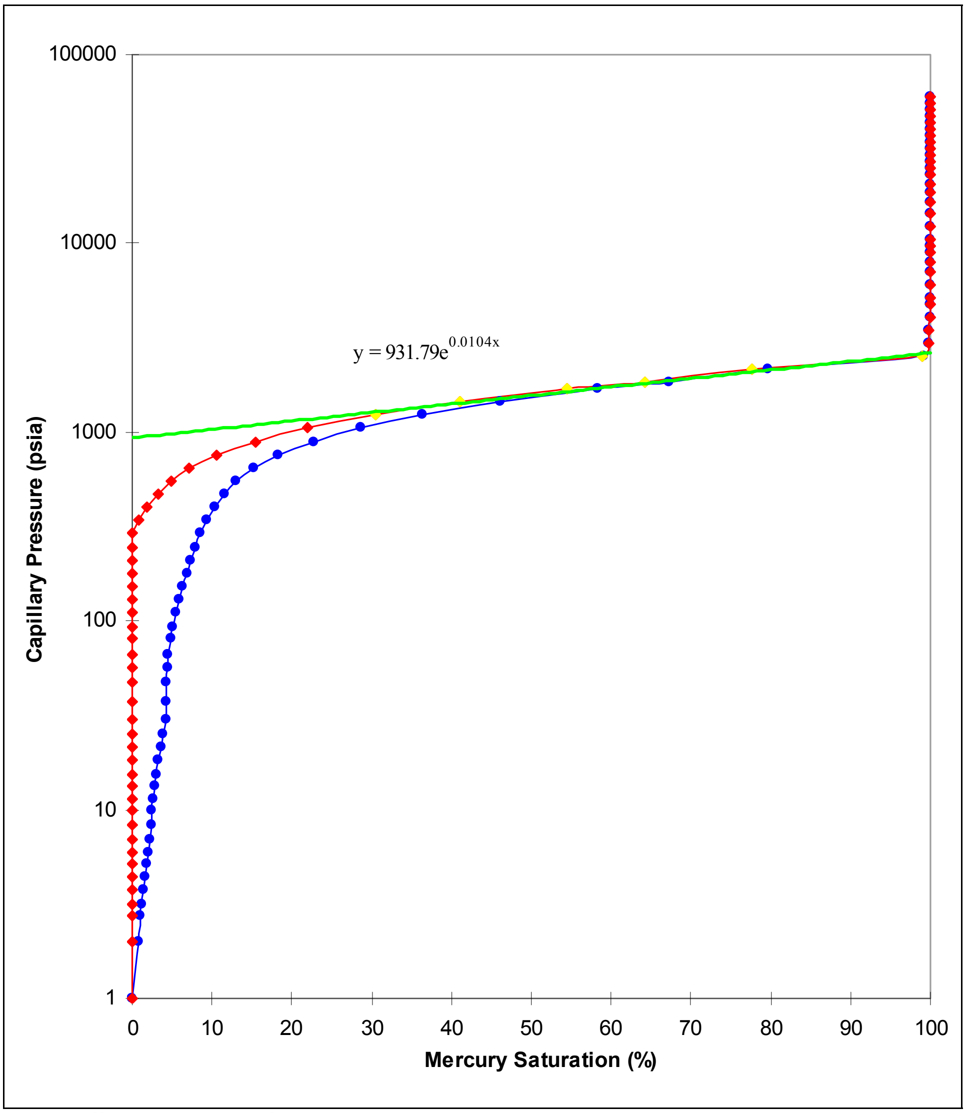
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	605	-	932	-	1033	-
G-W	242	119	82.4	183	127	203	141
O-W	390	39.6	42.9	60.9	66.0	67.6	73.2
CO_2-W	118	119	42.9	183	66.0	203	73.2

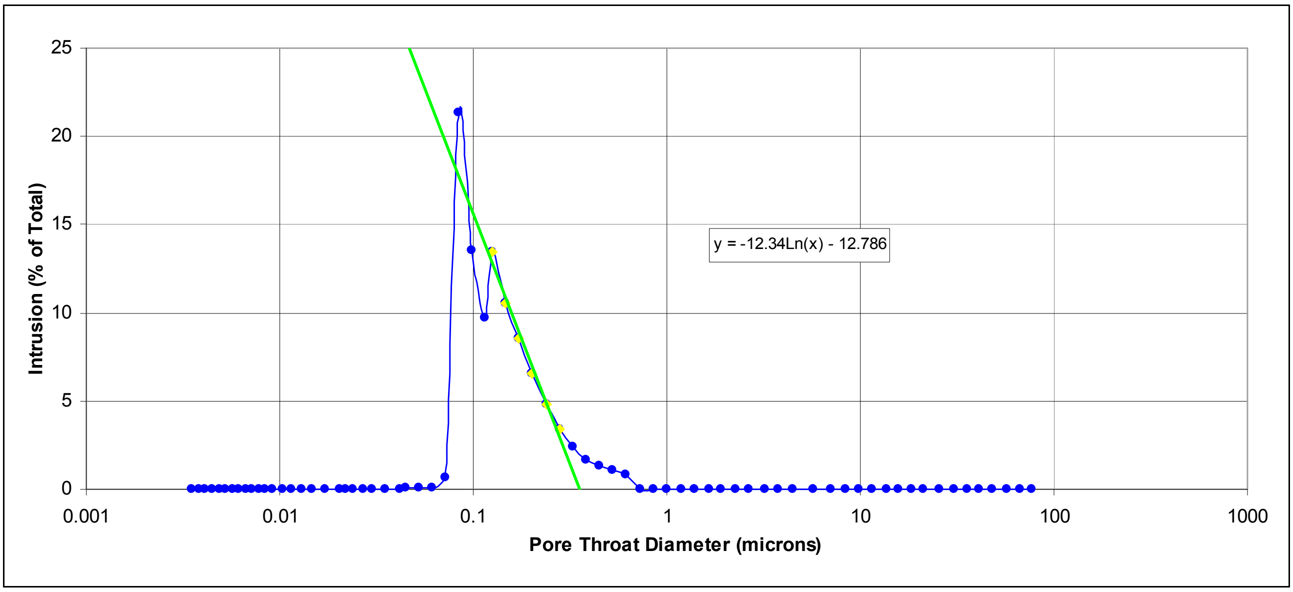
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.8	0.8	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	1.1	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.2	1.3	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.2	1.5	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.2	1.7	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.2	1.9	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.1	2.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.2	2.2	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.2	2.4	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.1	2.5	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.2	2.6	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.2	2.9	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.2	3.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.3	3.3	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.3	3.6	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.3	3.9	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.3	4.2	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	4.2	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	4.3	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	4.4	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	4.5	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.3	4.8	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.3	5.1	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.4	5.5	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.3	5.8	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.5	6.3	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.5	6.8	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.5	7.4	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.6	7.9	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.7	8.6	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.8	9.4	0.8	0.8	0.619	67.3	46.7	39.3	24.3	221	137
401	1.0	10.3	1.0	1.9	0.528	78.6	54.6	45.9	28.4	258	161
472	1.2	11.5	1.3	3.2	0.449	92.5	64.2	54.0	33.4	304	189
553	1.5	13.0	1.7	4.8	0.383	108	75.0	63.3	39.2	356	221
647	2.2	15.2	2.4	7.2	0.328	127	88.2	74.0	45.8	416	259
757	3.1	18.3	3.4	10.6	0.280	148	103	86.6	53.6	487	303
887	4.4	22.7	4.8	15.4	0.239	174	121	102	63.1	574	356
1048	6.0	28.7	6.5	22.0	0.202	205	142	120	74.3	675	418
1227	7.8	36.5	8.5	30.5	0.173	241	167	140	86.7	788	491
1439	9.7	46.1	10.6	41.1	0.147	282	196	165	102	927	576
1688	12.3	58.4	13.4	54.5	0.126	331	230	193	119	1082	676
1828	8.9	67.3	9.7	64.2	0.116	358	249	209	129	1173	732
2142	12.4	79.6	13.6	77.7	0.0990	420	292	245	152	1382	859
2510	19.5	99.1	21.3	99.1	0.0845	492	342	287	178	1618	1006
2945	0.6	99.7	0.7	99.7	0.0720	577	401	337	209	1900	1179
3449	0.1	99.8	0.1	99.8	0.0615	676	469	395	245	2227	1379
4040	0.1	99.9	0.1	99.9	0.0525	792	550	462	286	2600	1618
4728	0.0	100.0	0.0	100.0	0.0448	927	644	541	335	3045	1894
5114	0.0	100.0	0.0	100.0	0.0415	1003	697	585	362	3291	2050
6002	0.0	100.0	0.0	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Meerlieu-15001
Sample Depth	699.9 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Mullungdung-7
Sample Depth	363.00 m

Client	Geoscience A Victoria
Well	Mullungdung-7
Test Method	Air/Mercury Capillary Pressure
Sample	M7
Depth	363.00 m
Pore radius (µm)	2.34

Density Gradients (psi/foot)	
	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.083

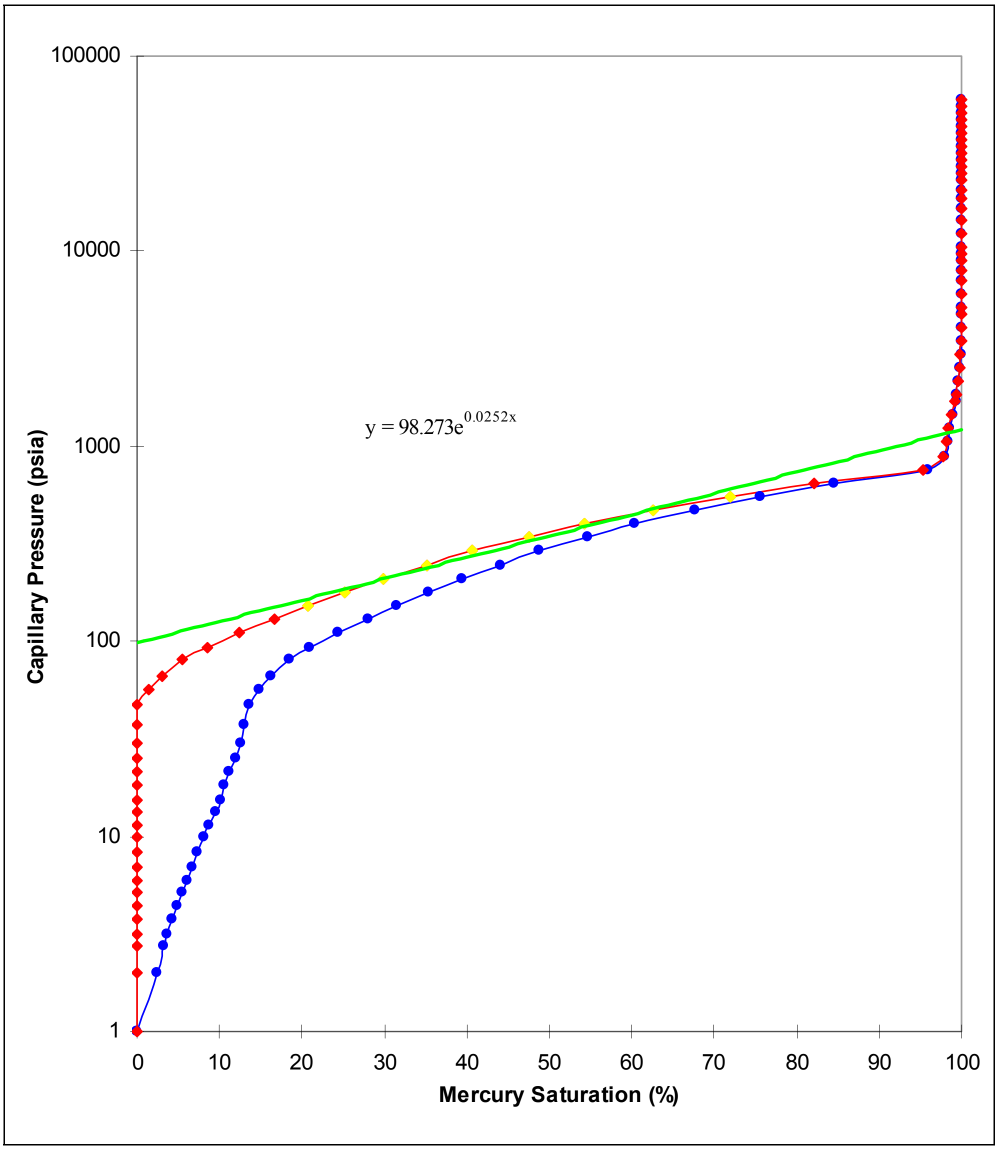
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	45.5	-	98.3	-	126	-
G-W	18	8.92	6.19	19.3	13.4	24.8	17.2
O-W	29	2.97	3.22	6.43	6.96	8.27	8.96
CO_2-W	8	8.92	3.22	19.3	6.96	24.8	8.96

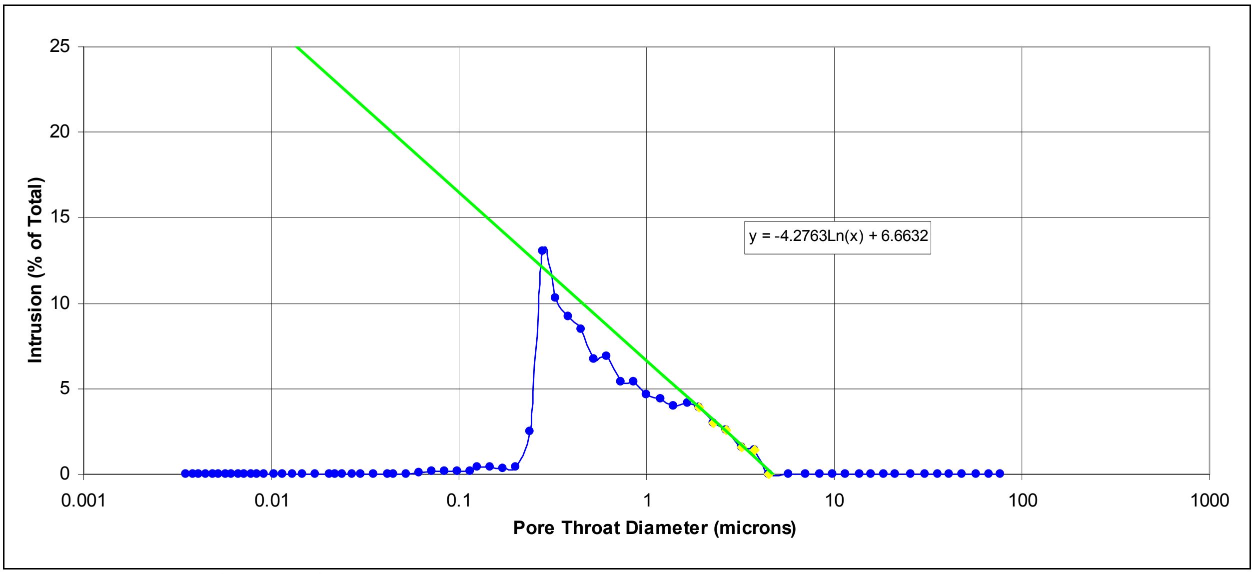
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	2.4	2.4	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	1.0	3.3	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.4	3.7	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.5	4.3	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.6	4.8	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.7	5.5	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.6	6.1	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.7	6.8	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.6	7.3	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.8	8.2	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.6	8.7	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.8	9.5	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.6	10.1	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.6	10.6	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.6	11.2	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.8	12.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.6	12.6	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.4	12.9	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.7	13.6	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	1.2	14.8	1.4	1.4	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	1.4	16.2	1.6	3.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	2.2	18.4	2.6	5.6	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	2.6	21.0	3.0	8.6	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	3.4	24.4	3.9	12.5	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	3.6	28.0	4.2	16.7	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	3.4	31.5	4.0	20.7	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	3.8	35.3	4.4	25.1	1.18	35.1	24.4	20.5	12.7	115	71.8
210	4.1	39.4	4.7	29.8	1.01	41.2	28.6	24.0	14.9	135	84.1
247	4.7	44.0	5.4	35.2	0.860	48.4	33.6	28.3	17.5	159	98.8
292	4.7	48.7	5.4	40.6	0.726	57.3	39.8	33.4	20.7	188	117
343	6.0	54.7	6.9	47.5	0.619	67.3	46.7	39.3	24.3	221	137
401	5.8	60.5	6.7	54.2	0.528	78.6	54.6	45.9	28.4	258	161
472	7.3	67.8	8.5	62.7	0.449	92.5	64.2	54.0	33.4	304	189
553	7.9	75.7	9.2	71.9	0.383	108	75.0	63.3	39.2	356	221
647	8.9	84.6	10.3	82.2	0.328	127	88.2	74.0	45.8	416	259
757	11.3	95.9	13.1	95.3	0.280	148	103	86.6	53.6	487	303
887	2.1	98.0	2.5	97.7	0.239	174	121	102	63.1	574	356
1048	0.3	98.4	0.4	98.1	0.202	205	142	120	74.3	675	418
1227	0.3	98.7	0.3	98.4	0.173	241	167	140	86.7	788	491
1439	0.3	99.0	0.4	98.8	0.147	282	196	165	102	927	576
1688	0.4	99.4	0.4	99.3	0.126	331	230	193	119	1082	676
1828	0.1	99.5	0.1	99.4	0.116	358	249	209	129	1173	732
2142	0.2	99.7	0.2	99.6	0.0990	420	292	245	152	1382	859
2510	0.1	99.8	0.1	99.7	0.0845	492	342	287	178	1618	1006
2945	0.1	99.9	0.1	99.9	0.0720	577	401	337	209	1900	1179
3449	0.1	100.0	0.1	100.0	0.0615	676	469	395	245	2227	1379
4040	0.0	100.0	0.0	100.0	0.0525	792	550	462	286	2600	1618
4728	0.0	100.0	0.0	100.0	0.0448	927	644	541	335	3045	1894
5114	0.0	100.0	0.0	100.0	0.0415	1003	697	585	362	3291	2050
6002	0.0	100.0	0.0	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Mullungdung-7
Sample Depth	363.00 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Sale-13
Sample Depth	748.1 m

Client	Geoscience A Victoria
Well	Sale-13
Test Method	Air/Mercury Capillary Pressure
Sample	S13-1
Depth	748.10 m
Pore radius (µm)	0.061

Density Gradients (psi/foot)	
	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.180

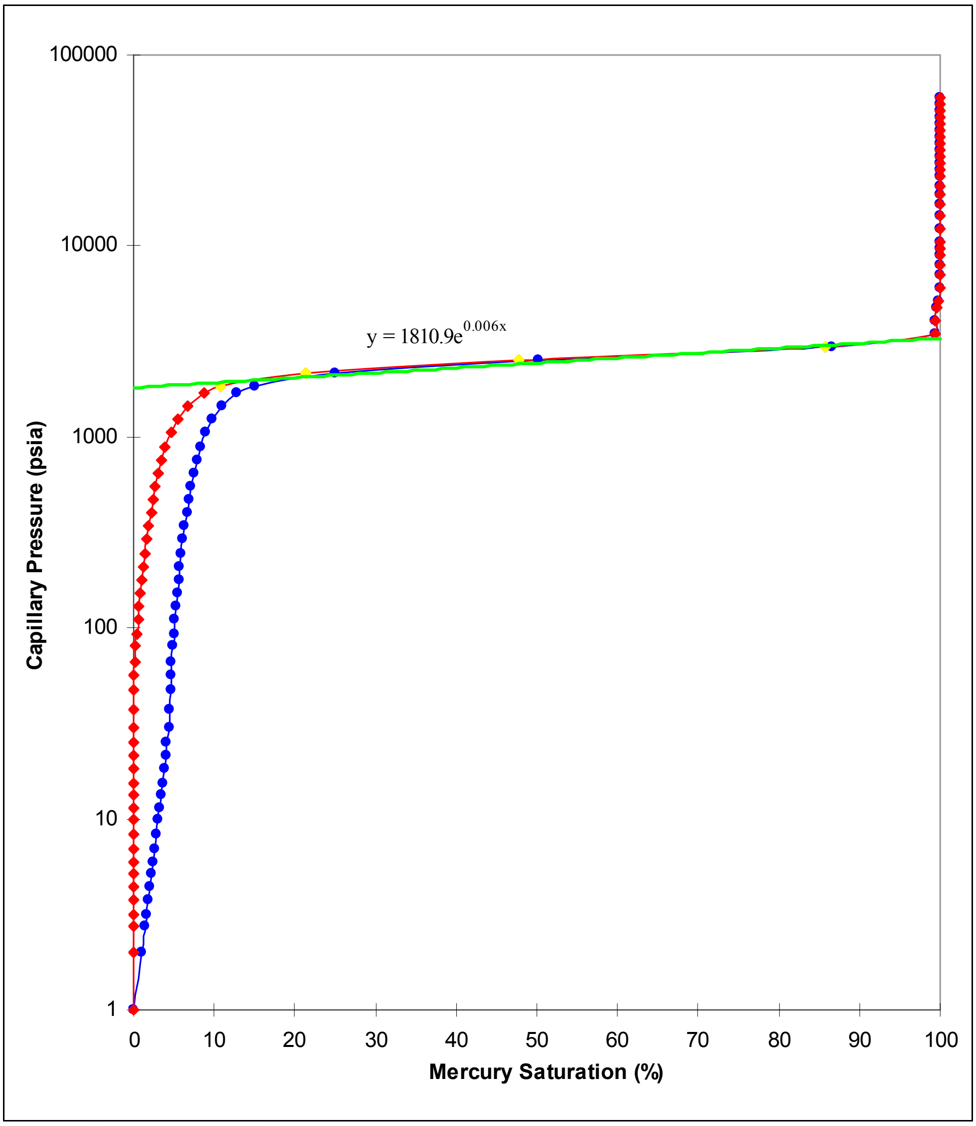
Conversion Parameters (dynes/cm)				
	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	1749	-	1811	-	1922	-
G-W	701	343	238	355	247	377	262
O-W	1126	114	124	118	128	126	136
CO_2-W	349	343	124	355	128	377	136

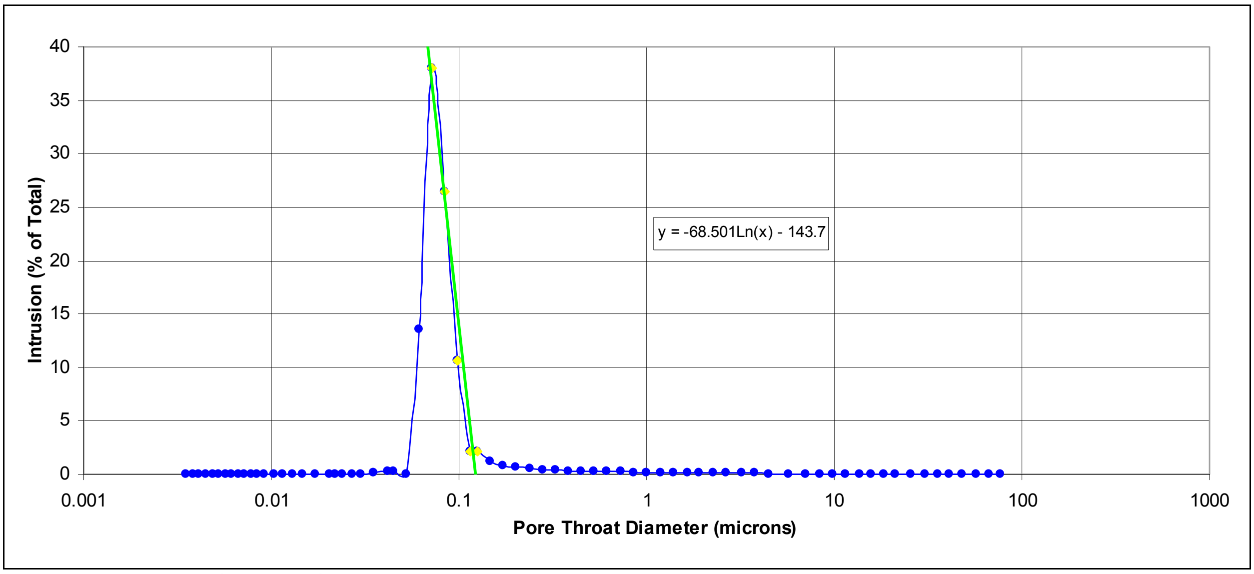
	Raw Data		Conformance Corrected								
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent Air/Brine Lab (psi)	Injection Pressures Air/Brine Res Con (psi)	Oil/Brine Lab Conditions (psi)	Oil/Brine Reservoir Conditions (psi)	Height Above Free Water Oil-Water (feet)	Height Above Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	1.0	1.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.4	1.4	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.2	1.6	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.2	1.8	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.2	2.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.2	2.2	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.2	2.4	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.2	2.5	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.2	2.8	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.3	3.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.2	3.2	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.2	3.4	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.2	3.6	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.2	3.8	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.2	4.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.2	4.2	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.3	4.5	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	4.5	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	4.6	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	4.7	0.1	0.1	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	4.8	0.1	0.2	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	4.9	0.1	0.3	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	5.0	0.1	0.4	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.1	5.1	0.2	0.6	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.1	5.3	0.1	0.7	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	5.4	0.2	0.9	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	5.6	0.2	1.1	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.2	5.8	0.2	1.2	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.2	6.0	0.2	1.4	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.2	6.2	0.2	1.6	0.726	57.3	39.8	33.4	20.7	188	117
343	0.2	6.4	0.2	1.9	0.619	67.3	46.7	39.3	24.3	221	137
401	0.3	6.7	0.3	2.1	0.528	78.6	54.6	45.9	28.4	258	161
472	0.3	6.9	0.3	2.4	0.449	92.5	64.2	54.0	33.4	304	189
553	0.3	7.2	0.3	2.7	0.383	108	75.0	63.3	39.2	356	221
647	0.3	7.5	0.3	3.1	0.328	127	88.2	74.0	45.8	416	259
757	0.4	7.9	0.4	3.5	0.280	148	103	86.6	53.6	487	303
887	0.5	8.4	0.5	4.0	0.239	174	121	102	63.1	574	356
1048	0.6	9.0	0.6	4.6	0.202	205	142	120	74.3	675	418
1227	0.8	9.8	0.8	5.4	0.173	241	167	140	86.7	788	491
1439	1.1	10.9	1.2	6.6	0.147	282	196	165	102	927	576
1688	2.0	12.9	2.1	8.7	0.126	331	230	193	119	1082	676
1828	2.1	15.0	2.2	10.9	0.116	358	249	209	129	1173	732
2142	10.1	25.1	10.6	21.4	0.0990	420	292	245	152	1382	859
2510	25.2	50.2	26.4	47.8	0.0845	492	342	287	178	1618	1006
2945	36.3	86.5	38.0	85.8	0.0720	577	401	337	209	1900	1179
3449	13.0	99.5	13.6	99.4	0.0615	676	469	395	245	2227	1379
4040	0.0	99.5	0.0	99.4	0.0525	792	550	462	286	2600	1618
4728	0.2	99.7	0.2	99.6	0.0448	927	644	541	335	3045	1894
5114	0.2	99.9	0.2	99.9	0.0415	1003	697	585	362	3291	2050
6002	0.1	100.0	0.1	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well Sale-13
Sample Depth 748.1 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Sale-13
Sample Depth 795.6 m

Client Geoscience Victoria
Well Sale-13

Test Method Air/Mercury Capillary Pressure

Sample S13-2
Depth 795.60 m

Pore radius (µm) 0.075

Density Gradients (psi/foot)	
	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.205

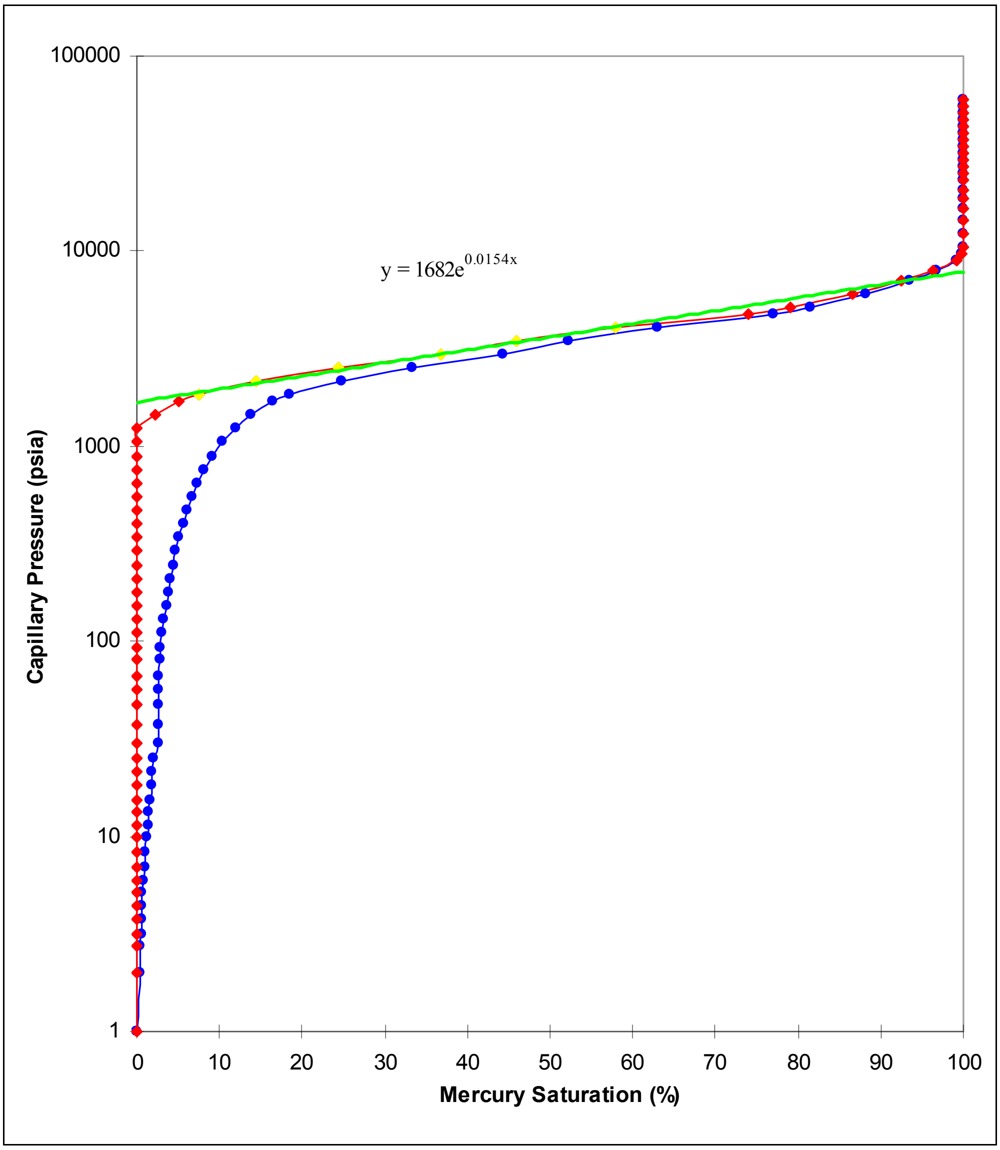
Conversion Parameters (dynes/cm)				
	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	1421	-	1682	-	1962	-
G-W	570	279	194	330	229	385	267
O-W	915	92.9	101	110	119	128	139
CO_2-W	293	279	101	330	119	385	139

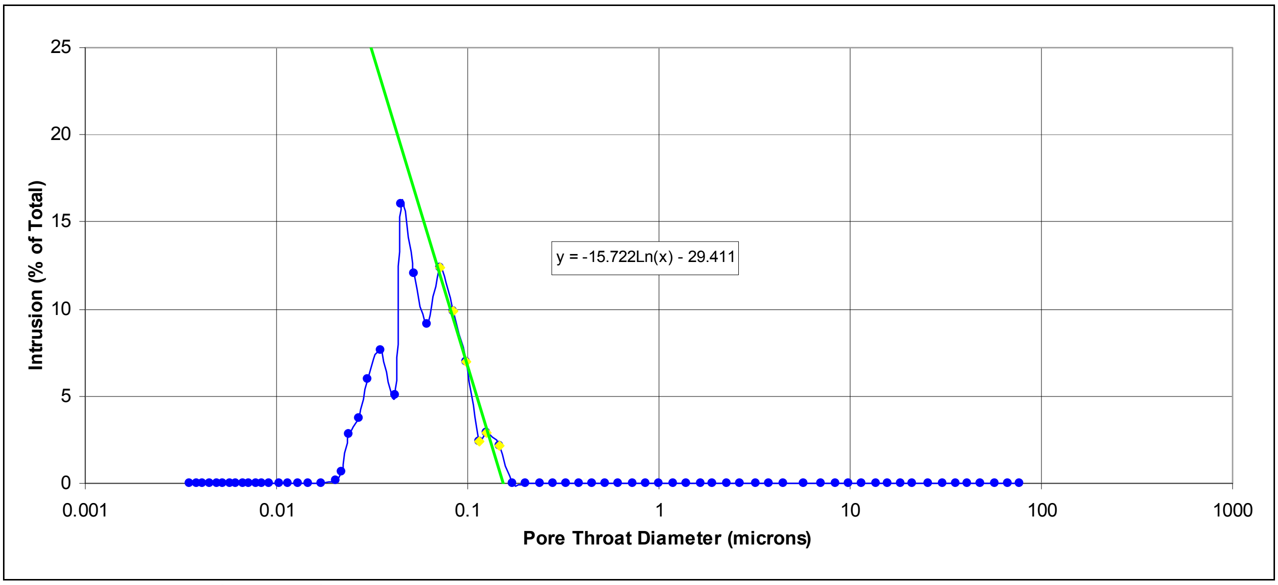
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.3	0.3	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.1	0.5	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	0.5	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.1	0.6	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.1	0.6	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.1	0.7	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.2	0.9	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.1	1.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.1	1.1	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.1	1.2	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.3	1.4	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.1	1.5	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.1	1.6	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.1	1.7	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.1	1.8	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.1	2.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.6	2.6	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.0	2.6	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.0	2.6	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.0	2.6	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.0	2.7	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	2.8	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	2.8	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.2	3.0	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.2	3.3	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.3	3.6	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.3	3.8	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.3	4.1	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.3	4.4	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.4	4.7	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.4	5.1	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.5	5.7	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.5	6.1	0.0	0.0	0.449	92.5	64.2	54.0	33.4	304	189
553	0.6	6.7	0.0	0.0	0.383	108	75.0	63.3	39.2	356	221
647	0.7	7.4	0.0	0.0	0.328	127	88.2	74.0	45.8	416	259
757	0.8	8.2	0.0	0.0	0.280	148	103	86.6	53.6	487	303
887	1.0	9.2	0.0	0.0	0.239	174	121	102	63.1	574	356
1048	1.2	10.4	0.0	0.0	0.202	205	142	120	74.3	675	418
1227	1.5	11.9	0.0	0.0	0.173	241	167	140	86.7	788	491
1439	1.9	13.8	2.1	2.1	0.147	282	196	165	102	927	576
1688	2.6	16.4	2.9	5.1	0.126	331	230	193	119	1082	676
1828	2.1	18.5	2.4	7.5	0.116	358	249	209	129	1173	732
2142	6.2	24.7	7.0	14.5	0.0990	420	292	245	152	1382	859
2510	8.7	33.4	9.8	24.4	0.0845	492	342	287	178	1618	1006
2945	10.9	44.3	12.4	36.7	0.0720	577	401	337	209	1900	1179
3449	8.0	52.3	9.1	45.8	0.0615	676	469	395	245	2227	1379
4040	10.6	62.9	12.0	57.9	0.0525	792	550	462	286	2600	1618
4728	14.1	77.0	16.0	73.9	0.0448	927	644	541	335	3045	1894
5114	4.5	81.5	5.1	79.0	0.0415	1003	697	585	362	3291	2050
6002	6.7	88.2	7.6	86.6	0.0353	1177	817	687	425	3864	2403
7033	5.2	93.5	6.0	92.6	0.0301	1379	958	805	498	4527	2818
7895	3.3	96.8	3.8	96.3	0.0269	1548	1075	904	560	5091	3162
8920	2.5	99.3	2.8	99.2	0.0238	1749	1215	1021	632	5745	3574
9649	0.6	99.9	0.7	99.8	0.0220	1892	1314	1104	683	6209	3865
10452	0.1	100.0	0.2	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Sale-13
Sample Depth	795.6 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Sale-15
Sample Depth 628.6 m

Client Geoscience A Victoria
Well Sale-15
Test Method Air/Mercury Capillary Pressure
Sample S15
Depth 628.60 m
Pore radius (µm) 0.229

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.166

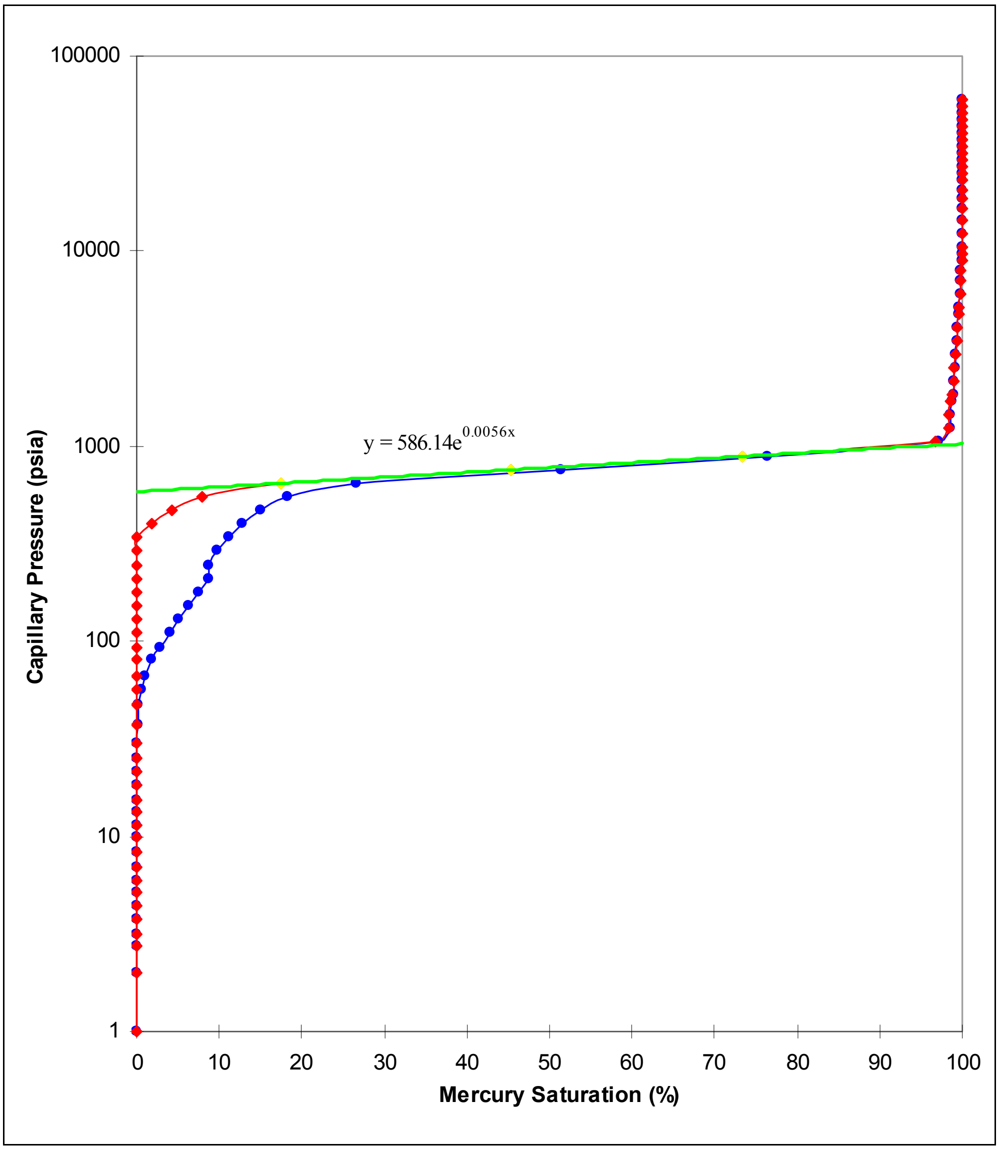
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

System	Estimated Column Height (feet)	Entry Pressure (psia) Lab	Entry Pressure (psia) Res Con	Displacement Pressure (psia) Lab	Displacement Pressure (psia) Resv	Threshold Pressure (psia) Lab	Threshold Pressure (psia) Resv
A-Hg	na	465	-	586	-	620	-
G-W	186	91.2	63.4	115	79.9	122	84.5
O-W	299	30.4	32.9	38.3	41.5	40.6	43.9
CO_2-W	91	91.2	32.9	115	41.5	122	43.9

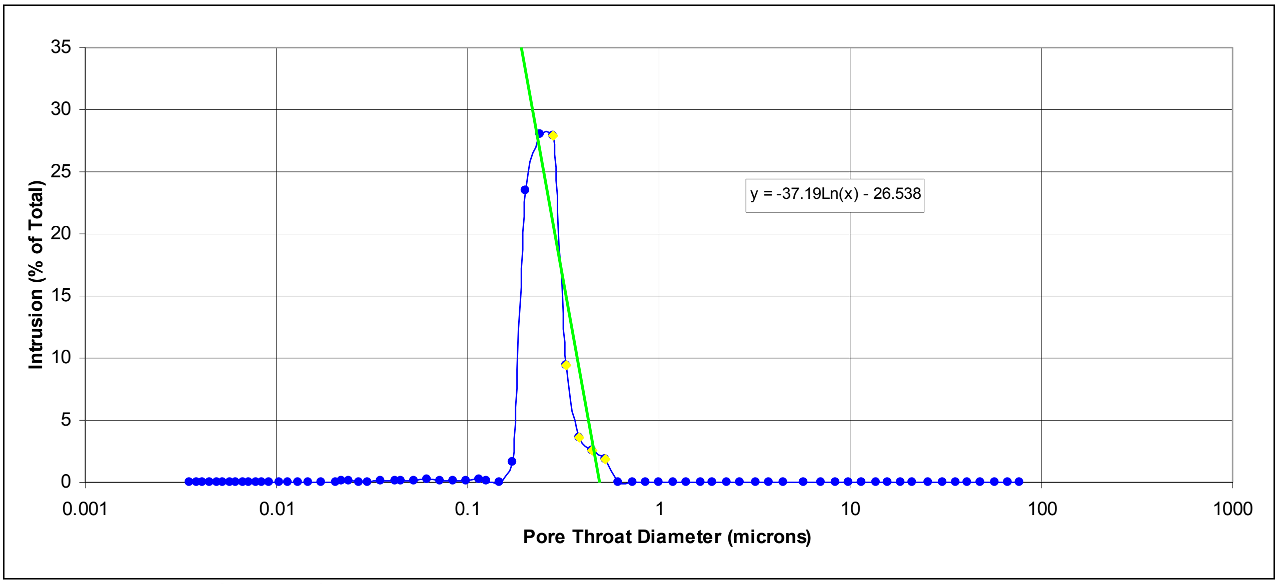
Pressure (psia)	Raw Data Intrusion (percent)	Raw Data Saturation (percent)	Conformance Corrected Intrusion (percent)	Conformance Corrected Saturation (percent)	Pore Diameter (µm)	Equivalent Air/Brine Lab (psi)	Injection Pressures Air/Brine Res Con (psi)	Oil/Brine Lab Conditions (psi)	Oil/Brine Reservoir Conditions (psi)	Height Above Free Water Oil-Water (feet)	Height Above Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.0	0.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.0	0.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.0	0.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.0	0.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.0	0.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.0	0.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.0	0.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.0	0.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	0.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.0	0.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.0	0.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	0.1	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.2	0.3	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.3	0.5	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.4	0.9	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	1.0	1.9	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	1.0	2.9	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	1.1	4.0	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	1.1	5.1	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	1.2	6.3	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	1.2	7.5	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	1.2	8.7	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.0	8.7	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	1.1	9.8	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	1.5	11.3	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	1.6	12.9	1.8	1.8	0.528	78.6	54.6	45.9	28.4	258	161
472	2.2	15.1	2.5	4.3	0.449	92.5	64.2	54.0	33.4	304	189
553	3.2	18.3	3.6	8.0	0.383	108	75.0	63.3	39.2	356	221
647	8.4	26.7	9.4	17.4	0.328	127	88.2	74.0	45.8	416	259
757	24.8	51.5	27.9	45.3	0.280	148	103	86.6	53.6	487	303
887	24.9	76.3	28.0	73.3	0.239	174	121	102	63.1	574	356
1048	20.9	97.2	23.5	96.8	0.202	205	142	120	74.3	675	418
1227	1.4	98.6	1.6	98.5	0.173	241	167	140	86.7	788	491
1439	0.0	98.6	0.0	98.5	0.147	282	196	165	102	927	576
1688	0.1	98.8	0.1	98.6	0.126	331	230	193	119	1082	676
1828	0.2	98.9	0.2	98.8	0.116	358	249	209	129	1173	732
2142	0.1	99.1	0.2	99.0	0.0990	420	292	245	152	1382	859
2510	0.1	99.2	0.1	99.1	0.0845	492	342	287	178	1618	1006
2945	0.1	99.2	0.1	99.1	0.0720	577	401	337	209	1900	1179
3449	0.2	99.4	0.2	99.3	0.0615	676	469	395	245	2227	1379
4040	0.1	99.5	0.1	99.4	0.0525	792	550	462	286	2600	1618
4728	0.1	99.6	0.1	99.5	0.0448	927	644	541	335	3045	1894
5114	0.1	99.6	0.1	99.6	0.0415	1003	697	585	362	3291	2050
6002	0.1	99.8	0.1	99.7	0.0353	1177	817	687	425	3864	2403
7033	0.0	99.8	0.1	99.8	0.0301	1379	958	805	498	4527	2818
7895	0.0	99.8	0.0	99.8	0.0269	1548	1075	904	560	5091	3162
8920	0.1	99.9	0.1	99.9	0.0238	1749	1215	1021	632	5745	3574
9649	0.1	100.0	0.1	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Sale-15
Sample Depth	628.6 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Seacombe-7
Sample Depth 947.60 m

Client	Geoscience Victoria
Well	Seacombe-7
Test Method	Air/Mercury Capillary Pressure
Sample Depth	947.60 m
Ambient Permeability	
Ambient Porosity	
pore radius (µm)	0.034

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.246

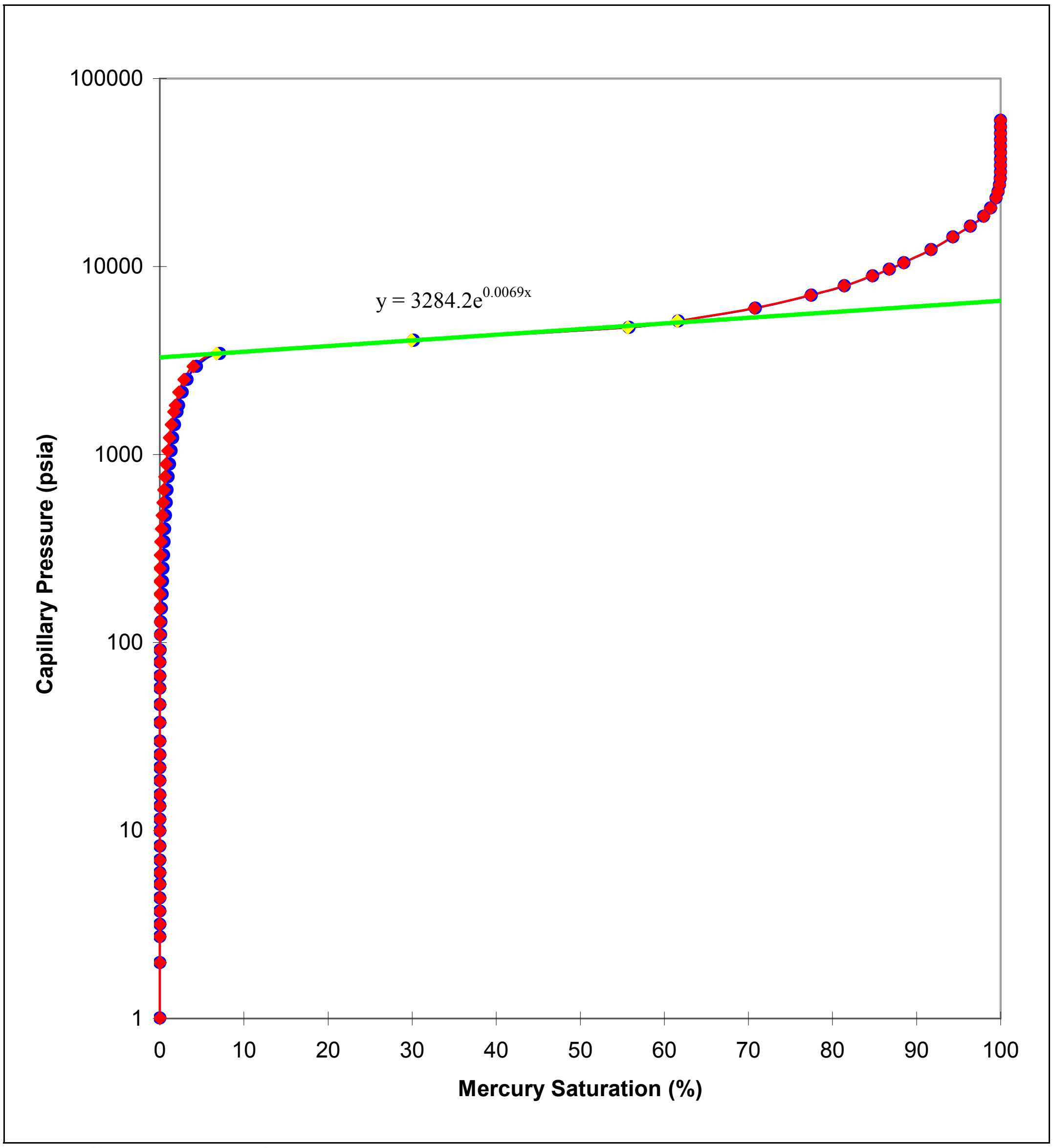
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	3091	-	3284	-	3520	-
G-W	1238	606	421	644	447	691	480
O-W	1991	202	219	215	233	230	249
CO_2-W	671	606	219	644	233	691	249

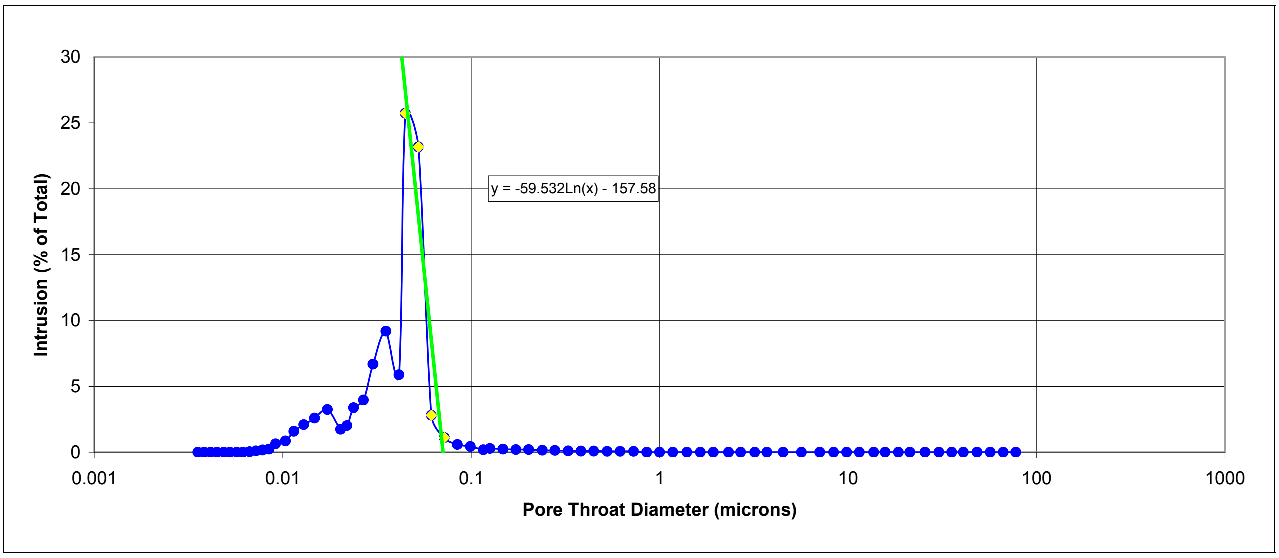
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.01	0.0	0.0	0.0	0.0	211	0.20	0.14	0.12	0.07	0.65	0.41
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.0	0.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.0	0.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.97	0.0	0.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.0	0.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.0	0.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.0	0.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.0	0.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.0	0.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.0	0.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	0.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.0	0.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.0	0.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.5	0.0	0.0	0.0	0.0	5.66	7.35	5.10	4.29	2.66	24.2	15.0
46.8	0.0	0.0	0.0	0.0	4.53	9.18	6.38	5.36	3.32	30.2	18.8
57.1	0.0	0.0	0.0	0.0	3.71	11.2	7.78	6.53	4.04	36.7	22.9
66.2	0.0	0.0	0.0	0.0	3.20	13.0	9.03	7.58	4.69	42.6	26.6
78.6	0.0	0.0	0.0	0.0	2.70	15.4	10.7	9.00	5.57	50.6	31.5
91.2	0.0	0.0	0.0	0.0	2.33	17.9	12.4	10.4	6.44	58.5	36.5
110	0.0	0.1	0.0	0.0	1.93	21.6	15.0	12.6	7.80	70.9	44.1
129	0.1	0.1	0.0	0.0	1.64	25.3	17.6	14.8	9.16	83.3	51.8
152	0.1	0.2	0.0	0.0	1.40	29.8	20.7	17.4	10.8	98.2	60.9
180	0.1	0.3	0.0	0.0	1.17	35.3	24.5	20.6	12.8	116	72.1
212	0.1	0.3	0.0	0.0	1.00	41.6	28.9	24.3	15.0	136	85.0
248	0.1	0.4	0.0	0.0	0.854	48.6	33.8	28.4	17.6	160	99.4
291	0.1	0.5	0.1	0.1	0.729	57.1	39.7	33.3	20.6	187	117
344	0.1	0.5	0.1	0.1	0.617	67.5	46.9	39.4	24.4	222	138
402	0.1	0.6	0.1	0.2	0.527	78.8	54.7	46.0	28.5	259	161
474	0.1	0.7	0.1	0.3	0.447	92.9	64.5	54.2	33.6	305	190
555	0.1	0.8	0.1	0.4	0.382	109	75.7	63.5	39.3	357	223
648	0.1	0.9	0.1	0.5	0.327	127	88.2	74.2	45.9	417	259
761	0.1	1.0	0.1	0.6	0.279	149	103	87.1	53.9	490	303
888	0.1	1.1	0.1	0.7	0.239	174	121	102	63.1	574	356
1049	0.2	1.3	0.2	0.9	0.202	206	143	120	74.3	675	421
1228	0.2	1.5	0.2	1.1	0.173	241	167	141	87.3	794	491
1439	0.2	1.8	0.2	1.4	0.147	282	196	165	102	927	576
1687	0.3	2.0	0.3	1.7	0.126	331	230	193	119	1082	676
1828	0.2	2.2	0.2	1.8	0.116	358	249	209	129	1173	732
2142	0.4	2.7	0.4	2.3	0.0990	420	292	245	152	1382	859
2508	0.6	3.2	0.6	2.9	0.0845	492	342	287	178	1618	1006
2944	1.1	4.3	1.1	4.0	0.0720	577	401	337	209	1900	1179
3448	2.8	7.1	2.8	6.8	0.0615	676	469	395	245	2227	1379
4045	23.1	30.2	23.2	29.9	0.0524	793	551	463	287	2609	1621
4734	25.6	55.8	25.7	55.7	0.0448	928	644	542	336	3055	1894
5122	5.9	61.7	5.9	61.5	0.0414	1004	697	586	363	3300	2050
6004	9.1	70.8	9.2	70.7	0.0353	1177	817	687	425	3864	2403
7033	6.7	77.5	6.7	77.4	0.0301	1379	958	805	498	4527	2818
7897	3.9	81.4	4.0	81.4	0.0268	1548	1075	904	560	5091	3162
8927	3.4	84.8	3.4	84.7	0.0237	1750	1215	1022	633	5755	3574
9662	2.0	86.8	2.0	86.7	0.0219	1895	1316	1106	685	6227	3871
10465	1.7	88.5	1.7	88.5	0.0203	2052	1425	1198	742	6745	4191
12296	3.2	91.7	3.2	91.7	0.0172	2411	1674	1407	871	7918	4924
14346	2.6	94.3	2.6	94.3	0.0148	2813	1953	1642	1016	9236	5744
16397	2.1	96.4	2.1	96.4	0.0129	3215	2233	1876	1161	10555	6568
18496	1.6	98.0	1.6	98.0	0.0115	3627	2519	2117	1311	11918	7409
20495	0.8	98.8	0.8	98.8	0.0103	4019	2791	2345	1452	13200	8209
23155	0.6	99.5	0.6	99.5	0.0092	4540	3153	2650	1640	14909	9274
25069	0.2	99.7	0.2	99.7	0.0085	4915	3413	2869	1776	16145	10038
27141	0.2	99.9	0.2	99.9	0.0078	5322	3696	3106	1923	17482	10871
29379	0.1	100.0	0.1	100.0	0.0072	5761	4001	3362	2081	18918	11768
31806	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34424	0.0	100.0	0.0	100.0	0.0062	6750	4688	3940	2439	22173	13788
37194	0.0	100.0	0.0	100.0	0.0057	7293	5065	4257	2635	23955	14897
40344	0.0	100.0	0.0	100.0	0.0053	7911	5494	4617	2858	25982	16159
43596	0.0	100.0	0.0	100.0	0.0049	8548	5936	4989	3088	28073	17459
47294	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51169	0.0	100.0	0.0	100.0	0.0041	10033	6967	5856	3625	32955	20491
55385	0.0	100.0	0.0	100.0	0.0038	10860	7542	6338	3924	35673	22182
59876	0.0	100.0	0.0	100.0	0.0035	11740	8153	6852	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Seacombe-7
Sample Depth	947.60 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Sole-1
Sample Depth 805.9 m

Client	Geoscience A Victoria
Well	Sole-1
Test Method	Air/Mercury Capillary Pressure
Sample	S1
Depth	805.90 m
Pore radius (µm)	0.405

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.259

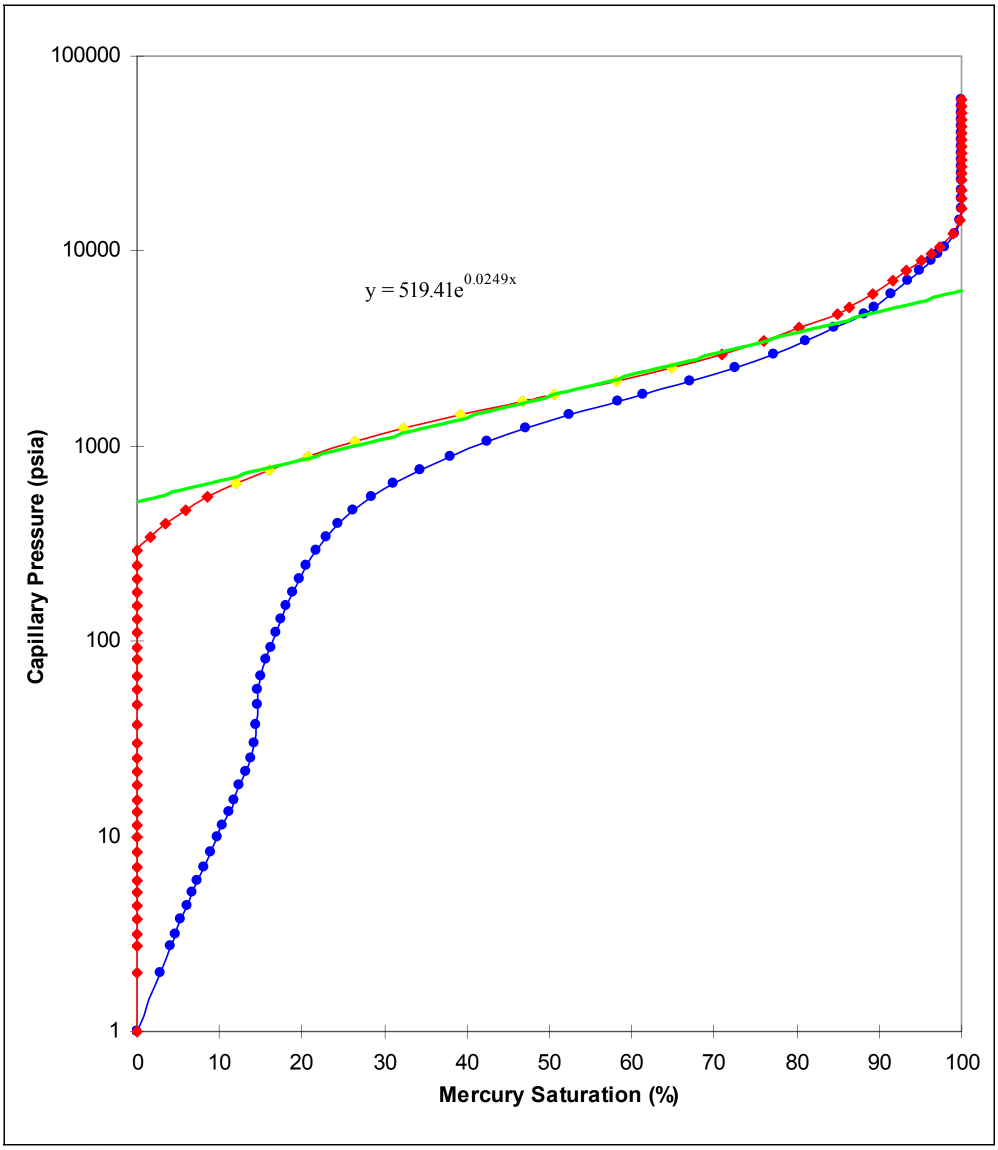
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	263	-	519	-	666	-
G-W	105	51.6	35.8	102	70.8	131	90.8
O-W	169	17.2	18.6	34.0	36.8	43.6	47.2
CO_2-W	58	51.6	18.6	102	36.8	131	47.2

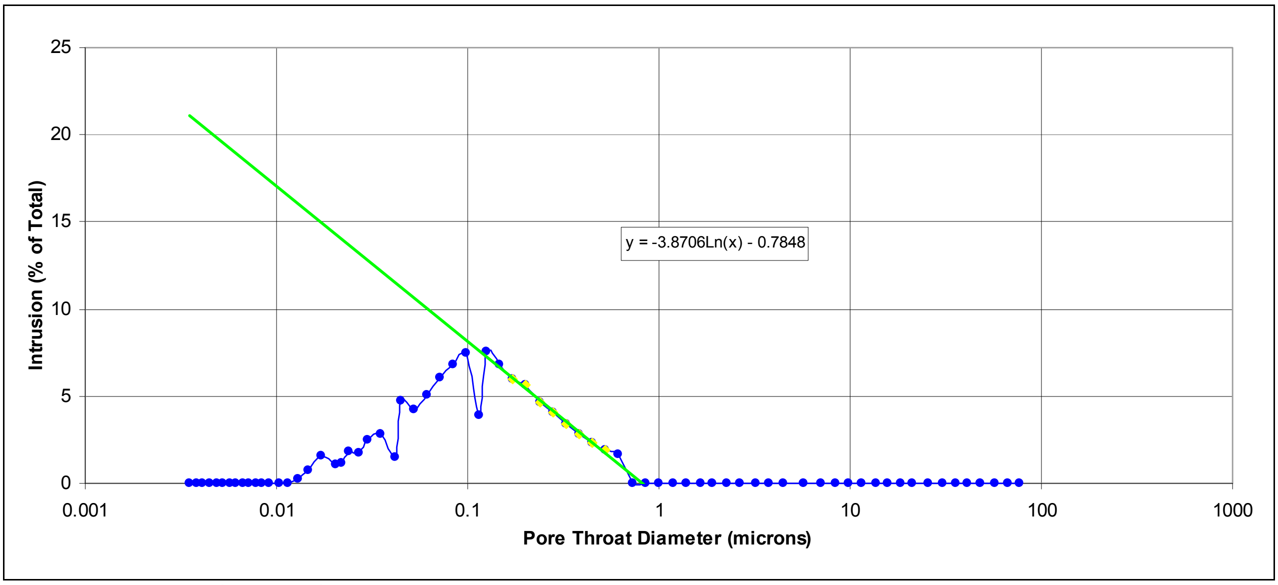
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	2.7	2.7	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	1.3	4.1	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.6	4.6	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.7	5.4	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.7	6.1	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.7	6.7	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.6	7.3	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.8	8.1	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.9	9.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.8	9.8	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.5	10.3	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.8	11.1	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.6	11.7	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.8	12.5	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.8	13.3	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.6	13.8	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.4	14.3	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.1	14.4	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.2	14.5	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.2	14.7	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.4	15.1	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.6	15.7	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.6	16.3	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.6	16.9	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.6	17.5	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.7	18.2	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.8	18.9	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.8	19.7	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.9	20.6	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	1.1	21.7	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	1.3	23.0	1.6	1.6	0.619	67.3	46.7	39.3	24.3	221	137
401	1.5	24.5	1.9	3.5	0.528	78.6	54.6	45.9	28.4	258	161
472	1.8	26.3	2.3	5.8	0.449	92.5	64.2	54.0	33.4	304	189
553	2.2	28.4	2.8	8.6	0.383	108	75.0	63.3	39.2	356	221
647	2.7	31.1	3.4	12.0	0.328	127	88.2	74.0	45.8	416	259
757	3.2	34.3	4.1	16.1	0.280	148	103	86.6	53.6	487	303
887	3.7	38.0	4.7	20.8	0.239	174	121	102	63.1	574	356
1048	4.4	42.4	5.6	26.4	0.202	205	142	120	74.3	675	418
1227	4.7	47.1	6.0	32.4	0.173	241	167	140	86.7	788	491
1439	5.3	52.4	6.8	39.2	0.147	282	196	165	102	927	576
1688	5.9	58.3	7.5	46.7	0.126	331	230	193	119	1082	676
1828	3.0	61.3	3.9	50.6	0.116	358	249	209	129	1173	732
2142	5.8	67.2	7.5	58.0	0.0990	420	292	245	152	1382	859
2510	5.4	72.5	6.8	64.9	0.0845	492	342	287	178	1618	1006
2945	4.7	77.2	6.0	70.9	0.0720	577	401	337	209	1900	1179
3449	3.9	81.2	5.0	76.0	0.0615	676	469	395	245	2227	1379
4040	3.3	84.5	4.2	80.2	0.0525	792	550	462	286	2600	1618
4728	3.7	88.2	4.7	84.9	0.0448	927	644	541	335	3045	1894
5114	1.2	89.4	1.5	86.4	0.0415	1003	697	585	362	3291	2050
6002	2.2	91.5	2.8	89.2	0.0353	1177	817	687	425	3864	2403
7033	1.9	93.5	2.5	91.7	0.0301	1379	958	805	498	4527	2818
7895	1.4	94.8	1.7	93.4	0.0269	1548	1075	904	560	5091	3162
8920	1.4	96.2	1.8	95.2	0.0238	1749	1215	1021	632	5745	3574
9649	0.9	97.1	1.1	96.3	0.0220	1892	1314	1104	683	6209	3865
10452	0.9	98.0	1.1	97.4	0.0203	2049	1423	1196	740	6727	4185
12283	1.2	99.2	1.6	99.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.6	99.8	0.8	99.7	0.0148	2810	1951	1640	1015	9227	5738
16381	0.2	100.0	0.3	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Sole-1
Sample Depth	805.9 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Sperm Whale Head-1
Sample Depth 653.8 m

Client	Geoscience A Victoria
Well	Sperm Whale Head-1
Test Method	Air/Mercury Capillary Pressure
Sample	SWH1-1
Depth	653.80 m
Pore radius (µm)	0.056

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.165

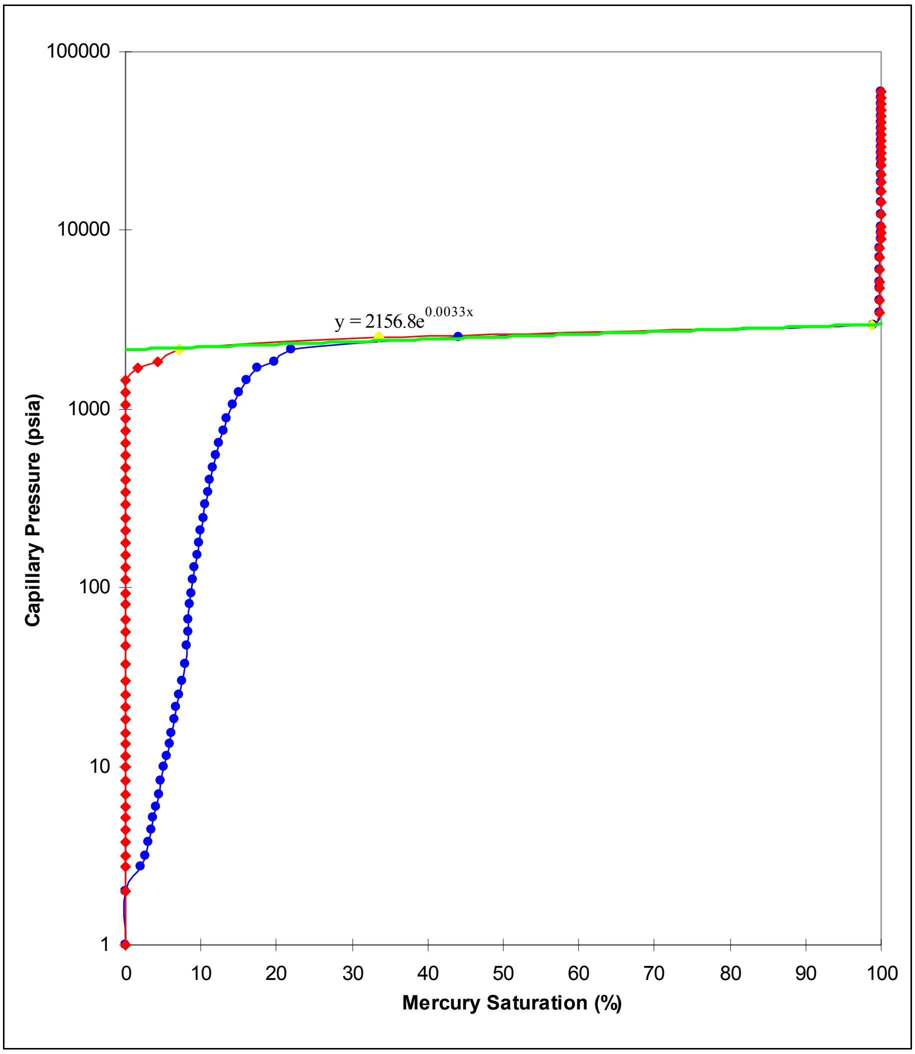
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	1886	-	2157	-	2229	-
G-W	756	370	257	423	294	437	304
O-W	1215	123	134	141	153	146	158
CO_2-W	370	370	134	423	153	437	158

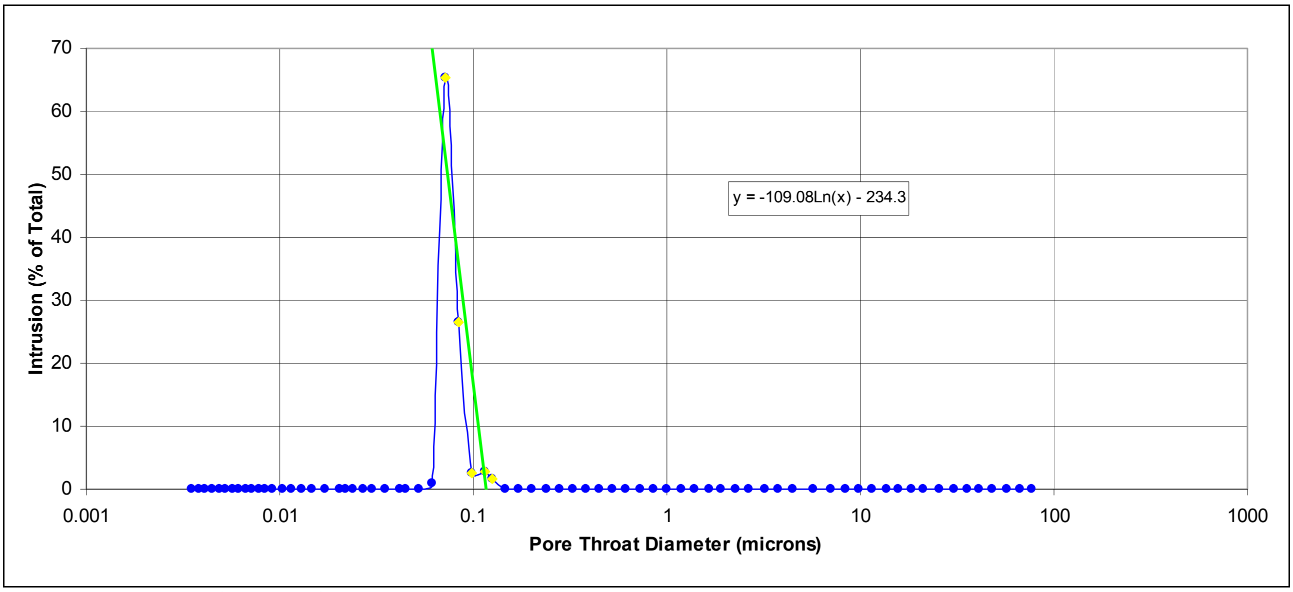
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	2.0	2.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.7	2.6	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.3	3.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.4	3.4	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.4	3.8	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.3	4.1	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.3	4.4	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.3	4.7	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.3	5.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.5	5.5	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.3	5.8	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.3	6.1	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.3	6.4	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.4	6.8	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.3	7.1	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.4	7.5	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.5	8.0	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	8.1	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	8.2	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	8.4	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.2	8.5	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.2	8.8	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.2	9.0	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.2	9.2	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.3	9.5	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.3	9.7	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.3	10.0	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.3	10.3	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.3	10.6	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.3	10.9	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.4	11.3	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.4	11.6	0.0	0.0	0.449	92.5	64.2	54.0	33.4	304	189
553	0.4	12.0	0.0	0.0	0.383	108	75.0	63.3	39.2	356	221
647	0.4	12.4	0.0	0.0	0.328	127	88.2	74.0	45.8	416	259
757	0.5	12.9	0.0	0.0	0.280	148	103	86.6	53.6	487	303
887	0.6	13.5	0.0	0.0	0.239	174	121	102	63.1	574	356
1048	0.7	14.2	0.0	0.0	0.202	205	142	120	74.3	675	418
1227	0.9	15.0	0.0	0.0	0.173	241	167	140	86.7	788	491
1439	1.0	16.1	0.0	0.0	0.147	282	196	165	102	927	576
1688	1.4	17.4	1.6	1.6	0.126	331	230	193	119	1082	676
1828	2.3	19.7	2.7	4.4	0.116	358	249	209	129	1173	732
2142	2.2	22.0	2.7	7.0	0.0990	420	292	245	152	1382	859
2510	22.2	44.2	26.5	33.5	0.0845	492	342	287	178	1618	1006
2945	54.8	99.0	65.3	98.8	0.0720	577	401	337	209	1900	1179
3449	0.8	99.8	0.9	99.7	0.0615	676	469	395	245	2227	1379
4040	0.0	99.8	0.0	99.7	0.0525	792	550	462	286	2600	1618
4728	0.0	99.8	0.0	99.7	0.0448	927	644	541	335	3045	1894
5114	0.0	99.8	0.0	99.7	0.0415	1003	697	585	362	3291	2050
6002	0.0	99.8	0.0	99.7	0.0353	1177	817	687	425	3864	2403
7033	0.0	99.8	0.1	99.8	0.0301	1379	958	805	498	4527	2818
7895	0.0	99.8	0.0	99.8	0.0269	1548	1075	904	560	5091	3162
8920	0.1	99.9	0.1	99.9	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	99.9	0.0	99.9	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Sperm Whale Head-1
Sample Depth	653.8 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well	Sperm Whale Head-1
Sample Depth	718.10 m

Client	Geoscience Victoria
Well	Sperm Whale Head-1
Test Method	Air/Mercury Capillary Pressure
Sample	2
Depth	718.10 m
Ambient Permeability	
Ambient Porosity	
pore radius (µm)	0.041

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.188

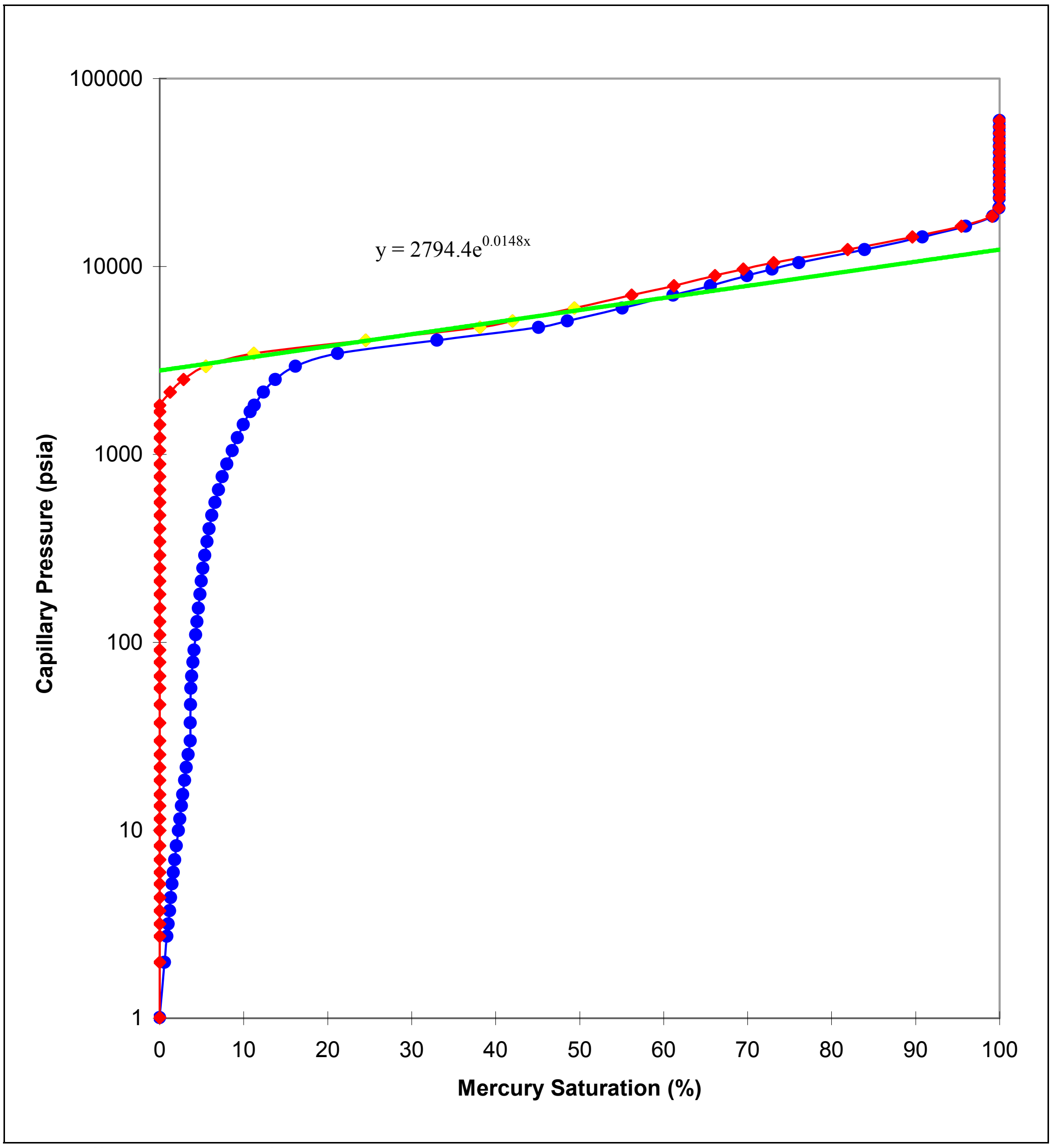
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	2591	-	2794	-	3241	-
G-W	1038	508	353	548	381	636	442
O-W	1669	169	184	183	198	212	230
CO_2-W	522	508	184	548	198	636	230

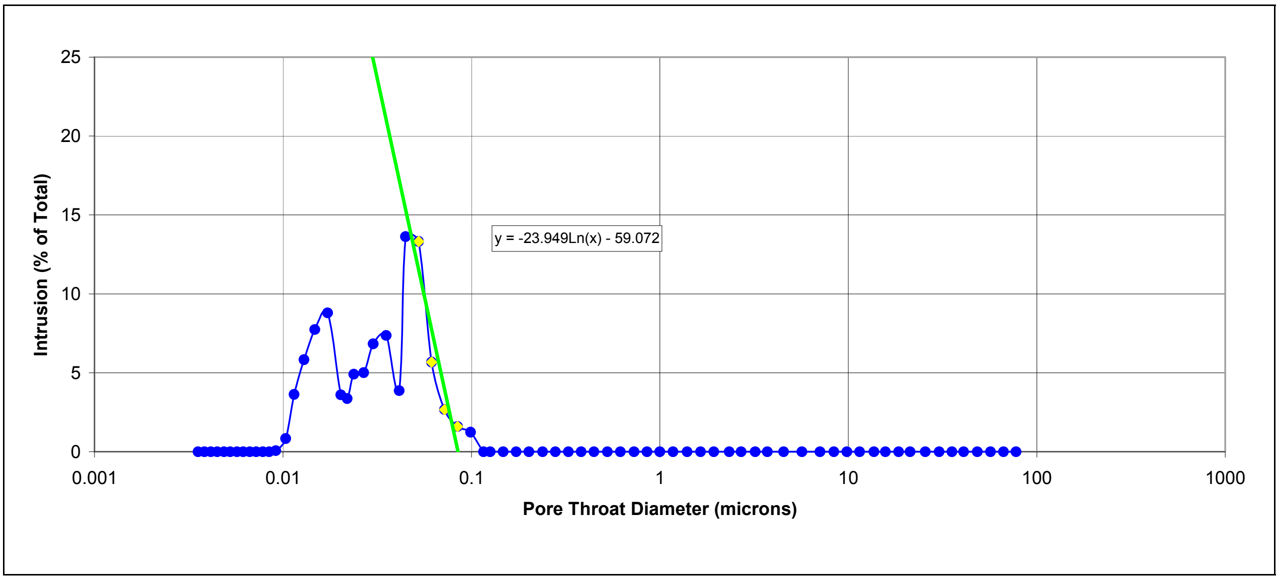
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.01	0.0	0.0	0.0	0.0	211	0.20	0.14	0.12	0.07	0.65	0.41
1.98	0.6	0.6	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.3	0.9	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.1	1.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.2	1.2	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.1	1.3	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.2	1.5	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.97	0.1	1.6	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.2	1.8	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.2	2.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.2	2.2	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.2	2.4	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.2	2.6	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.2	2.8	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.2	3.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.2	3.2	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.2	3.4	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.3	3.6	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.3	0.0	3.7	0.0	0.0	5.68	7.31	5.08	4.27	2.64	24.0	14.9
46.7	0.0	3.7	0.0	0.0	4.54	9.16	6.36	5.34	3.31	30.1	18.7
56.9	0.0	3.7	0.0	0.0	3.72	11.2	7.78	6.51	4.03	36.6	22.9
66.1	0.1	3.8	0.0	0.0	3.21	13.0	9.03	7.56	4.68	42.5	26.6
78.5	0.1	4.0	0.0	0.0	2.70	15.4	10.7	8.98	5.56	50.5	31.5
90.9	0.2	4.1	0.0	0.0	2.33	17.8	12.4	10.4	6.44	58.5	36.5
110	0.2	4.3	0.0	0.0	1.93	21.6	15.0	12.6	7.80	70.9	44.1
129	0.2	4.4	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	4.6	0.0	0.0	1.40	29.8	20.7	17.4	10.8	98.2	60.9
180	0.2	4.8	0.0	0.0	1.18	35.3	24.5	20.6	12.8	116	72.1
212	0.2	5.0	0.0	0.0	1.00	41.6	28.9	24.3	15.0	136	85.0
248	0.2	5.2	0.0	0.0	0.855	48.6	33.8	28.4	17.6	160	99.4
291	0.2	5.4	0.0	0.0	0.729	57.1	39.7	33.3	20.6	187	117
343	0.2	5.6	0.0	0.0	0.618	67.3	46.7	39.3	24.3	221	137
402	0.3	5.9	0.0	0.0	0.527	78.8	54.7	46.0	28.5	259	161
474	0.3	6.2	0.0	0.0	0.448	92.9	64.5	54.2	33.6	305	190
554	0.4	6.6	0.0	0.0	0.382	109	75.7	63.4	39.2	356	223
648	0.4	7.0	0.0	0.0	0.327	127	88.2	74.2	45.9	417	259
760	0.5	7.5	0.0	0.0	0.279	149	103	87.0	53.9	490	303
888	0.5	8.0	0.0	0.0	0.239	174	121	102	63.1	574	356
1049	0.6	8.6	0.0	0.0	0.202	206	143	120	74.3	675	421
1228	0.6	9.3	0.0	0.0	0.173	241	167	141	87.3	794	491
1439	0.7	10.0	0.0	0.0	0.147	282	196	165	102	927	576
1687	0.8	10.8	0.0	0.0	0.126	331	230	193	119	1082	676
1828	0.5	11.3	0.0	0.0	0.116	358	249	209	129	1173	732
2142	1.1	12.4	1.2	1.2	0.0990	420	292	245	152	1382	859
2507	1.4	13.8	1.6	2.8	0.0846	492	342	287	178	1618	1006
2944	2.4	16.2	2.7	5.5	0.0720	577	401	337	209	1900	1179
3448	5.0	21.2	5.7	11.2	0.0615	676	469	395	245	2227	1379
4044	11.8	33.0	13.3	24.5	0.0524	793	551	463	287	2609	1621
4734	12.1	45.1	13.6	38.1	0.0448	928	644	542	336	3055	1894
5122	3.4	48.5	3.9	42.0	0.0414	1004	697	586	363	3300	2050
6005	6.5	55.1	7.4	49.4	0.0353	1177	817	687	425	3864	2403
7034	6.1	61.1	6.8	56.2	0.0301	1379	958	805	498	4527	2818
7897	4.5	65.6	5.0	61.2	0.0268	1548	1075	904	560	5091	3162
8927	4.4	69.9	4.9	66.1	0.0237	1750	1215	1022	633	5755	3574
9663	3.0	72.9	3.4	69.5	0.0219	1895	1316	1106	685	6227	3871
10465	3.2	76.1	3.6	73.1	0.0203	2052	1425	1198	742	6745	4191
12297	7.8	83.9	8.8	81.9	0.0172	2411	1674	1407	871	7918	4924
14346	6.9	90.8	7.7	89.6	0.0148	2813	1953	1642	1016	9236	5744
16397	5.2	96.0	5.8	95.5	0.0129	3215	2233	1876	1161	10555	6568
18496	3.2	99.2	3.6	99.1	0.0115	3627	2519	2117	1311	11918	7409
20495	0.7	99.9	0.8	99.9	0.0103	4019	2791	2345	1452	13200	8209
23155	0.1	100.0	0.1	100.0	0.0092	4540	3153	2650	1640	14909	9274
25069	0.0	100.0	0.0	100.0	0.0085	4915	3413	2869	1776	16145	10038
27141	0.0	100.0	0.0	100.0	0.0078	5322	3696	3106	1923	17482	10871
29379	0.0	100.0	0.0	100.0	0.0072	5761	4001	3362	2081	18918	11768
31805	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34424	0.0	100.0	0.0	100.0	0.0062	6750	4688	3940	2439	22173	13788
37194	0.0	100.0	0.0	100.0	0.0057	7293	5065	4257	2635	23955	14897
40344	0.0	100.0	0.0	100.0	0.0053	7911	5494	4617	2858	25982	16159
43596	0.0	100.0	0.0	100.0	0.0049	8548	5936	4989	3088	28073	17459
47294	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51169	0.0	100.0	0.0	100.0	0.0041	10033	6967	5856	3625	32955	20491
55385	0.0	100.0	0.0	100.0	0.0038	10860	7542	6338	3924	35673	22182
59876	0.0	100.0	0.0	100.0	0.0035	11740	8153	6852	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Sperm Whale Head-1
Sample Depth	718.10 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Tuna-1
Sample Depth 1160.00 m

Client	Geoscience Victoria		
Well	Kingfish-3		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Tuna-1	**Ambient Permeability**	
Depth	1160.00 m	**Ambient Porosity**	

pore radius (µm)						
0.070	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	1520	-	2951	-	3192	-
G-W	298.3	207.1	578.9	402.0	626.2	434.9
O-W	99.4	107.7	193.0	209.1	208.7	226.1

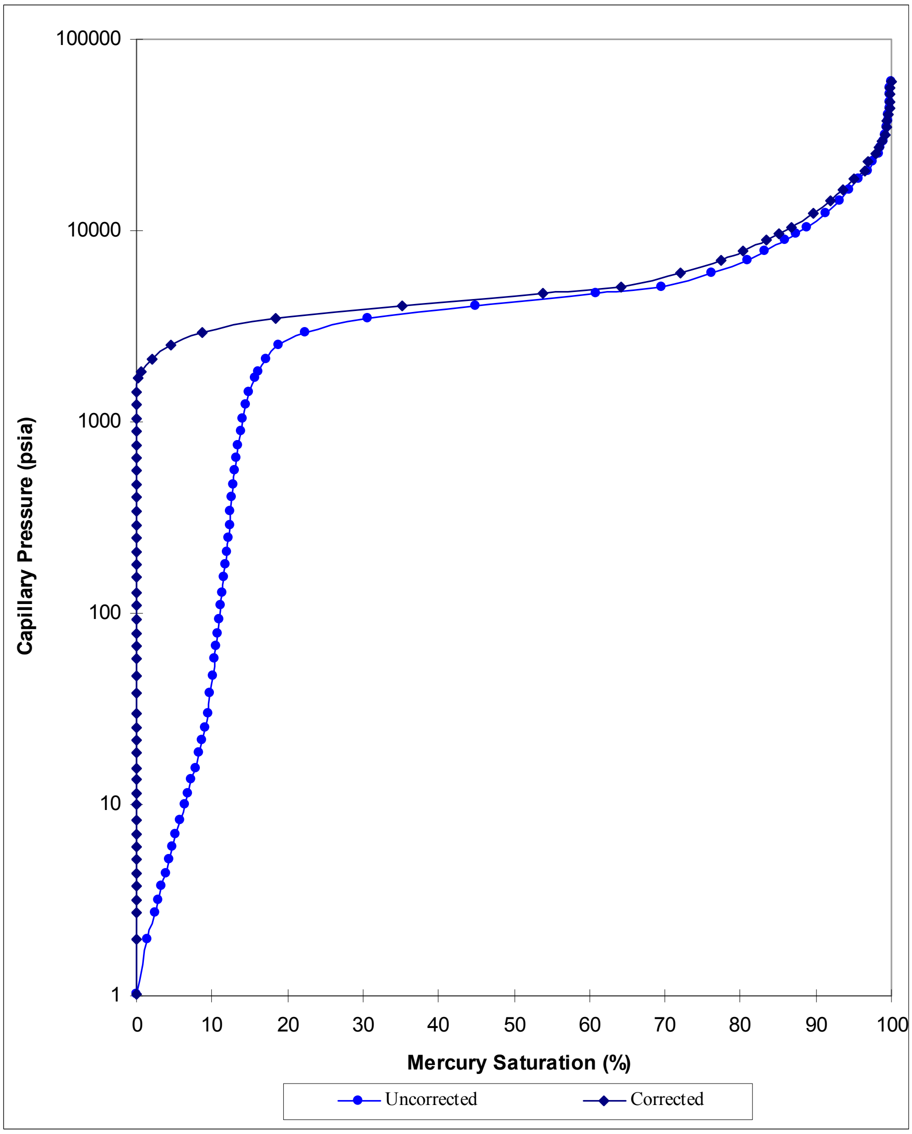
Conversion Parameters			
	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

Density Gradients, psi/foot	
	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

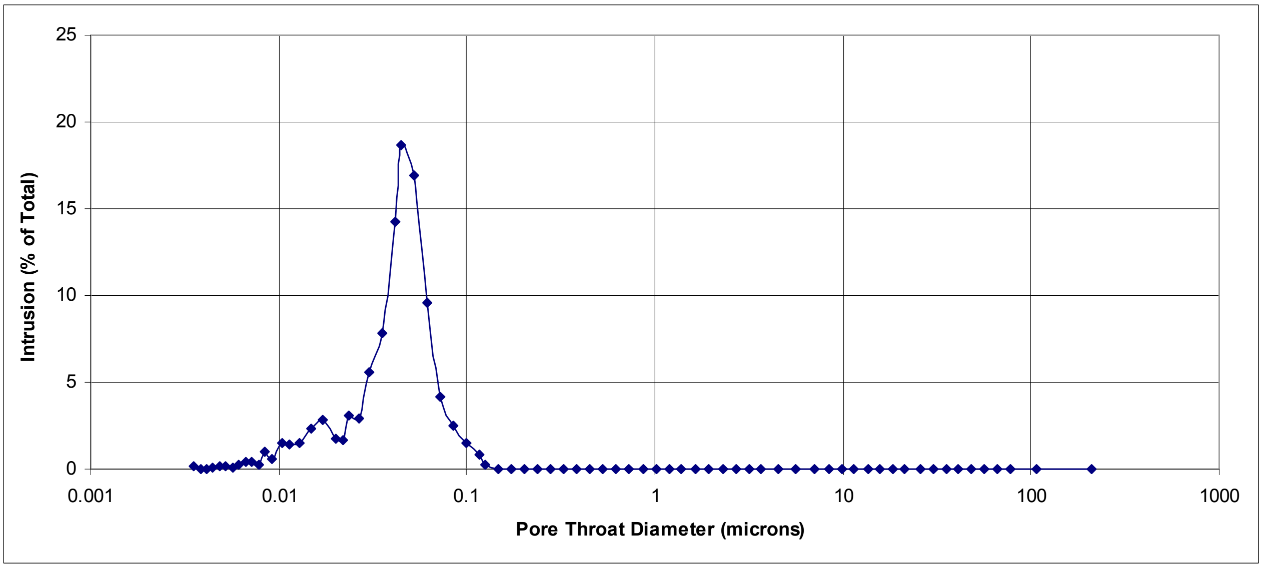
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	209	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.4	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.39	0.0	0.0	48.3	0.86	0.60	0.50	0.31	2.83	1.76
5.19	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.0	0.0	7.08	5.9	4.1	3.4	2.1	19.32	12.01
37.9	0.0	0.0	5.60	7.4	5.2	4.3	2.7	24.41	15.18
46.6	0.0	0.0	4.55	9.1	6.3	5.3	3.3	30.01	18.66
57.6	0.0	0.0	3.68	11.3	7.8	6.6	4.1	37.10	23.07
67.2	0.0	0.0	3.16	13	9.2	7.7	4.8	43.28	26.91
77.9	0.0	0.0	2.72	15	10.6	8.9	5.5	50.17	31.20
92.1	0.0	0.0	2.30	18	13	10.5	6.5	59.32	36.88
110	0.0	0.0	1.94	22	15	13	7.8	70.84	44.05
128	0.0	0.0	1.65	25	17	15	9.1	82.44	51.26
153	0.0	0.0	1.39	30	21	18	10.8	98.54	61.27
178	0.0	0.0	1.19	35	24	20	13	114.64	71.29
210	0.0	0.0	1.01	41	29	24	15	135.2	84.10
246	0.0	0.0	0.862	48	33	28	17	158.4	98.52
290	0.0	0.0	0.731	57	39	33	21	186.8	116.14
343	0.0	0.0	0.617	67	47	39	24	220.9	137.4
401	0.0	0.0	0.529	79	55	46	28	258.3	160.6
472	0.0	0.0	0.449	93	64	54	33	304.0	189.0
554	0.0	0.0	0.383	109	75	63	39	356.8	221.9
648	0.0	0.0	0.327	127	88	74	46	417.3	259.5
757	0.0	0.0	0.280	148	103	87	54	487.5	303.2
887	0.0	0.0	0.239	174	121	102	63	571.3	355.2
1048	0.0	0.0	0.202	205	143	120	74	675.0	419.7
1227	0.0	0.0	0.173	241	167	140	87	790.2	491.4
1438	0.0	0.0	0.147	282	196	165	102	926.1	575.9
1689	0.3	0.3	0.126	331	230	193	120	1087.8	676.4
1828	0.8	0.5	0.116	358	249	209	130	1177	732.1
2143	1.5	2.1	0.0989	420	292	245	152	1380	858.2
2509	2.5	4.6	0.0845	492	342	287	178	1616	1004.8
2944	4.2	8.8	0.0720	577	401	337	209	1896	1179
3448	9.6	18.4	0.0615	676	469	395	244	2221	1381
4042	16.9	35.2	0.0524	793	550	463	286	2603	1619
4730	18.6	53.9	0.0448	927	644	541	335	3046	1894
5115	14.2	64.1	0.0414	1003	696	585	362	3294	2048
6003	7.9	71.9	0.0353	1177	817	687	425	3866	2404
7032	5.6	77.5	0.0301	1379	958	805	498	4529	2816
7896	2.9	80.4	0.0268	1548	1075	904	559	5085	3162
8926	3.1	83.4	0.0238	1750	1215	1022	632	5749	3575
9662	1.7	85.1	0.0219	1895	1316	1106	685	6223	3870
10463	1.7	86.8	0.0203	2052	1425	1197	741	6739	4190
12296	2.8	89.7	0.0172	2411	1674	1407	871	7919	4924
14345	2.3	92.0	0.0148	2813	1953	1642	1016	9239	5745
16397	1.5	93.5	0.0129	3215	2233	1876	1162	10560	6567
18493	1.4	95.0	0.0115	3626	2518	2116	1310	11910	7406
20496	1.5	96.4	0.0103	4019	2791	2346	1452	13200	8208
23151	0.6	97.0	0.0092	4539	3152	2649	1640	14910	9272
25068	1.0	98.0	0.0085	4915	3413	2869	1776	16145	10039
27135	0.2	98.3	0.0078	5321	3695	3105	1922	17476	10867
29379	0.4	98.7	0.0072	5761	4000	3362	2081	18921	11766
31805	0.4	99.1	0.0067	6236	4331	3640	2253	20484	12737
34428	0.3	99.4	0.0062	6751	4688	3940	2439	22173	13788
37197	0.1	99.5	0.0057	7294	5065	4257	2635	23956	14897
40346	0.1	99.6	0.0053	7911	5494	4617	2858	25985	16158
43595	0.1	99.8	0.0049	8548	5936	4989	3088	28077	17459
47293	0.1	99.8	0.0045	9273	6440	5412	3350	30459	18940
51173	0.0	99.9	0.0041	10034	6968	5856	3625	32958	20494
55386	0.0	99.9	0.0038	10860	7542	6338	3924	35671	22181
59891	0.1	100.0	0.0035	11743	8155	6854	4243	38572	23986

(A) Interpreted Capillary Pressure Chart

Well	Tuna-1
Sample Depth	1160.00 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well	Woodside South-1
Sample Depth	522.12 m

Client	Geoscience Victoria		
Well	Woodside South -1		
Test Method	Air/Mercury Capillary Pressure Drainage		
Sample	Woodside South -1	**Ambient Permeability**	
Depth	522.12 m	**Ambient Porosity**	

Conversion Parameters

	air/water	air/oil	oil/water
Laboratory Theta	0.0	0.0	30.0
Laboratory IFT	72.0	24.0	48.0
Reservoir Theta	0.0		30.0
Reservoir IFT	50.0		30.0
Laboratory TcosTheta	72.0	24.0	42.0
Reservoir TcosTheta	50.0		26.0

pore radius (µm)	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
4.000						
System	Lab	Resv	Lab	Resv	Lab	Resv
A-Hg	26.6	-	46.1	-	65.8	-
G-W	5.2	3.6	9.0	6.3	12.9	9.0
O-W	1.7	1.9	3.0	3.3	4.3	4.7

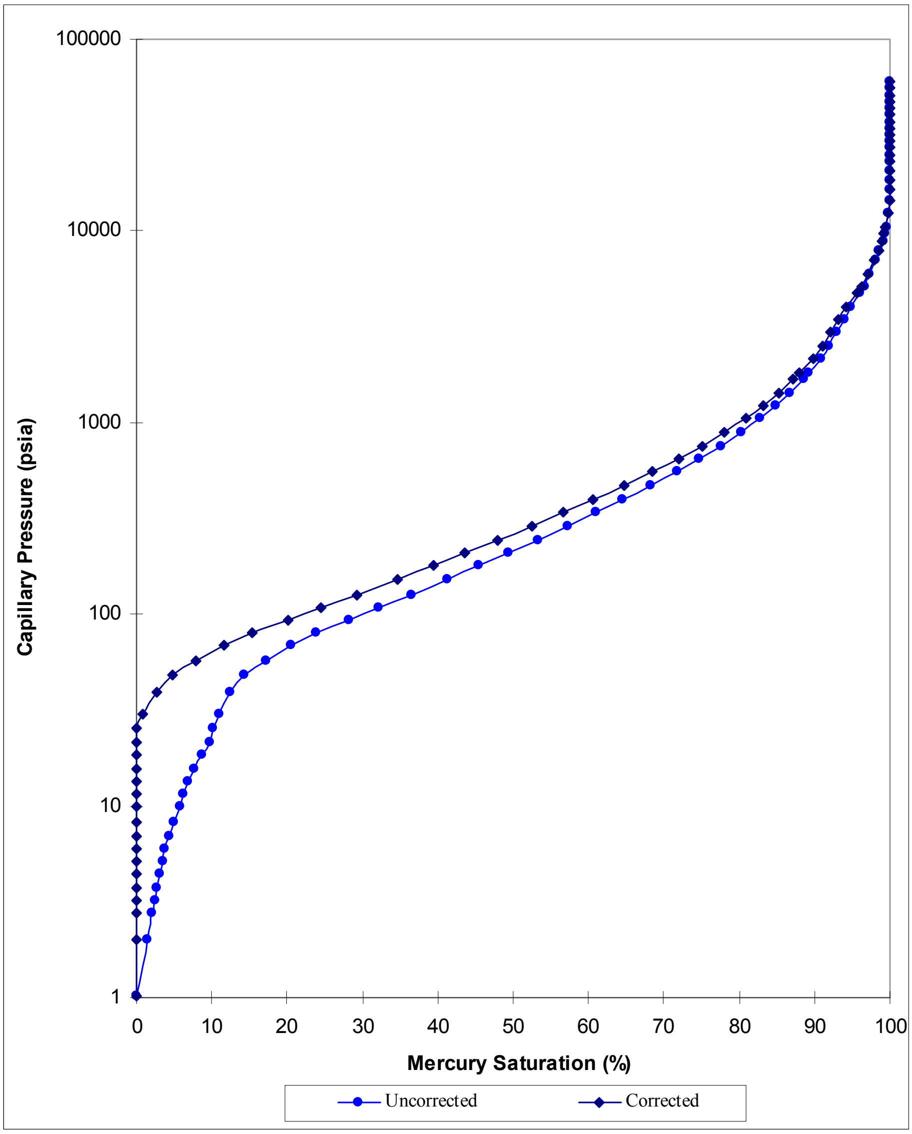
Density Gradients, psi/foot

	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100

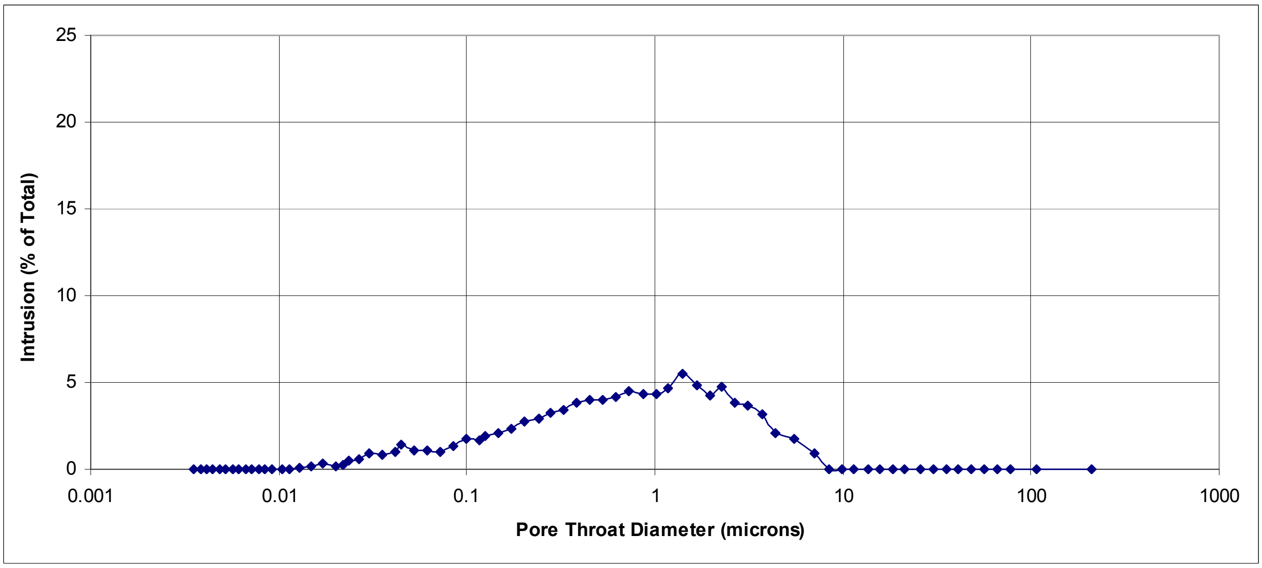
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Equivalent A/B Lab	Injection Pressures A/B Res	O/B Lab	O/B Res	Height Above Free Water (feet) Oil-Water	Height Above Free Water (feet) Gas-Water
1.01	0.0	0.0	209	0.20	0.14	0.12	0.07	0.65	0.40
1.99	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.80
2.74	0.0	0.0	77.4	0.54	0.37	0.31	0.19	1.76	1.10
3.19	0.0	0.0	66.5	0.63	0.43	0.37	0.23	2.05	1.28
3.74	0.0	0.0	56.7	0.73	0.51	0.43	0.26	2.41	1.50
4.38	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.75
5.19	0.0	0.0	40.9	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	35.4	1.2	0.81	0.68	0.42	3.85	2.39
6.98	0.0	0.0	30.4	1.4	0.95	0.80	0.49	4.50	2.80
8.28	0.0	0.0	25.6	1.6	1.13	0.95	0.59	5.33	3.32
9.98	0.0	0.0	21.2	2.0	1.4	1.14	0.71	6.43	4.00
11.5	0.0	0.0	18.5	2.3	1.6	1.3	0.81	7.41	4.61
13.5	0.0	0.0	15.7	2.6	1.8	1.5	0.96	8.69	5.41
15.5	0.0	0.0	13.7	3.0	2.1	1.8	1.10	9.98	6.21
18.5	0.0	0.0	11.5	3.6	2.5	2.1	1.3	11.91	7.41
21.6	0.0	0.0	9.83	4.2	2.9	2.5	1.5	13.91	8.65
25.3	0.0	0.0	8.39	5.0	3.4	2.9	1.8	16.29	10.13
30.0	0.9	0.9	7.08	5.9	4.1	3.4	2.1	19.32	12.01
38.8	1.7	2.6	5.46	7.6	5.3	4.4	2.7	24.99	15.54
48.4	2.1	4.8	4.38	9.5	6.6	5.5	3.4	31.17	19.38
56.9	3.1	7.9	3.73	11.2	7.7	6.5	4.0	36.65	22.79
68.4	3.7	11.6	3.10	13	9.3	7.8	4.8	44.05	27.39
79.8	3.8	15.4	2.66	16	10.9	9.1	5.7	51.39	31.96
93.9	4.8	20.2	2.26	18	13	10.7	6.7	60.48	37.61
108	4.3	24.5	1.97	21	15	12	7.7	69.56	43.25
127	4.8	29.3	1.67	25	17	15	9.0	81.79	50.86
152	5.5	34.7	1.39	30	21	17	10.8	97.89	60.87
180	4.6	39.4	1.18	35	25	21	13	115.93	72.09
209	4.3	43.7	1.01	41	28	24	15	134.6	83.70
245	4.3	48.0	0.865	48	33	28	17	157.8	98.12
290	4.5	52.5	0.732	57	39	33	21	186.8	116.14
341	4.2	56.6	0.621	67	46	39	24	219.6	136.6
400	4.0	60.6	0.531	78	54	46	28	257.6	160.2
470	4.0	64.7	0.451	92	64	54	33	302.7	188.2
553	3.9	68.5	0.383	108	75	63	39	356.2	221.5
645	3.4	71.9	0.329	126	88	74	46	415.4	258.3
757	3.2	75.2	0.280	148	103	87	54	487.5	303.2
885	2.9	78.1	0.240	174	121	101	63	570.0	354.4
1045	2.7	80.8	0.203	205	142	120	74	673.0	418.5
1227	2.4	83.2	0.173	241	167	140	87	790.2	491.4
1435	2.1	85.3	0.148	281	195	164	102	924.2	574.7
1684	1.9	87.2	0.126	330	229	193	119	1084.6	674.4
1826	1.7	88.1	0.116	358	249	209	129	1176	731.3
2144	1.7	89.8	0.0989	420	292	245	152	1381	858.6
2508	1.3	91.1	0.0845	492	342	287	178	1615	1004.4
2941	1.0	92.1	0.0721	577	400	337	208	1894	1178
3445	1.1	93.2	0.0615	675	469	394	244	2219	1380
4038	1.1	94.3	0.0525	792	550	462	286	2601	1617
4732	1.4	95.7	0.0448	928	644	542	335	3048	1895
5117	1.0	96.2	0.0414	1003	697	586	363	3296	2049
5997	0.8	97.1	0.0354	1176	817	686	425	3862	2402
7026	0.9	97.9	0.0302	1378	957	804	498	4525	2814
7883	0.6	98.5	0.0269	1546	1073	902	558	5077	3157
8913	0.5	99.0	0.0238	1748	1214	1020	631	5740	3570
9649	0.2	99.3	0.0220	1892	1314	1104	684	6214	3864
10451	0.2	99.4	0.0203	2049	1423	1196	740	6731	4185
12284	0.3	99.8	0.0173	2409	1673	1406	870	7911	4920
14330	0.2	99.9	0.0148	2810	1951	1640	1015	9229	5739
16385	0.1	100.0	0.0129	3213	2231	1875	1161	10553	6562
18479	0.0	100.0	0.0115	3623	2516	2115	1309	11901	7401
20484	0.0	100.0	0.0103	4016	2789	2344	1451	13193	8204
23148	0.0	100.0	0.0092	4539	3152	2649	1640	14908	9270
25065	0.0	100.0	0.0085	4915	3413	2868	1776	16143	10038
27136	0.0	100.0	0.0078	5321	3695	3105	1922	17477	10868
29378	0.0	100.0	0.0072	5760	4000	3362	2081	18921	11766
31804	0.0	100.0	0.0067	6236	4331	3640	2253	20483	12737
34423	0.0	100.0	0.0062	6750	4687	3939	2439	22170	13786
37194	0.0	100.0	0.0057	7293	5065	4257	2635	23955	14896
40343	0.0	100.0	0.0053	7910	5493	4617	2858	25983	16157
43593	0.0	100.0	0.0049	8548	5936	4989	3088	28076	17458
47295	0.0	100.0	0.0045	9274	6440	5413	3351	30460	18941
51171	0.0	100.0	0.0041	10034	6968	5856	3625	32956	20493
55385	0.0	100.0	0.0038	10860	7542	6338	3924	35670	22181
59880	0.0	100.0	0.0035	11741	8154	6853	4242	38565	23981

(A) Interpreted Capillary Pressure Chart

Well	Woodside South-1
Sample Depth	522.12 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Wooundellah-10
Sample Depth 389.3 m

Client Geoscience Victoria
Well Wooundellah-10

Test Method Air/Mercury Capillary Pressure

Sample W10
Depth 389.30 m

Pore radius (μm) 2.70

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.107

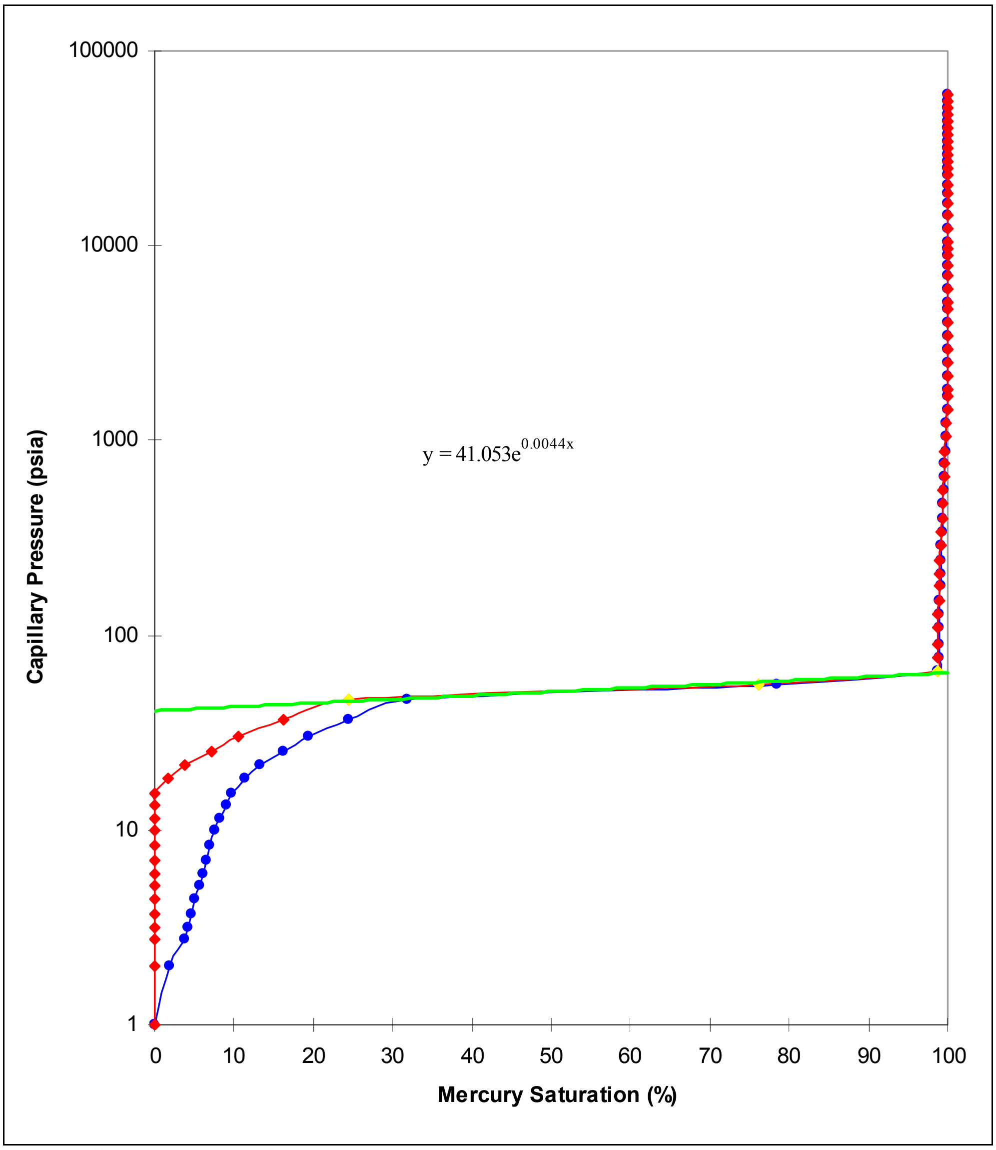
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	39.5	-	41.1	-	42.9	-
G-W	16	7.74	5.38	8.05	5.59	8.42	5.85
O-W	25	2.58	2.80	2.68	2.91	2.81	3.04
CO_2-W	7	7.74	2.80	8.05	2.91	8.42	3.04

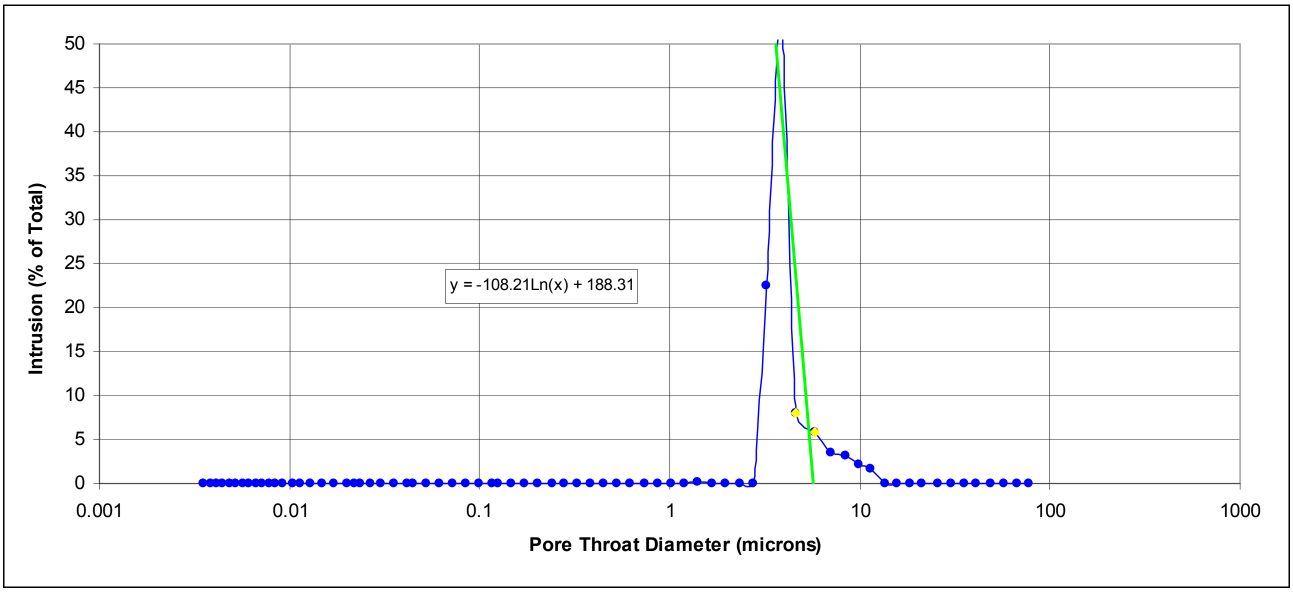
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (μm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	212	0.20	0.14	0.11	0.07	0.64	0.40
1.98	1.8	1.8	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	1.9	3.8	0.0	0.0	77.7	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.5	4.3	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.4	4.7	0.0	0.0	56.8	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.4	5.1	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.5	5.6	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.4	6.1	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.4	6.5	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.6	7.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.6	7.6	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.5	8.2	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.9	9.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.8	9.8	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	1.5	11.3	1.7	1.7	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	2.0	13.3	2.2	3.9	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	2.9	16.2	3.2	7.1	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	3.1	19.3	3.5	10.6	7.08	5.88	4.08	3.43	2.12	19.3	12.0
36.8	5.2	24.5	5.8	16.3	5.76	7.22	5.01	4.21	2.61	23.7	14.7
46.3	7.2	31.8	8.0	24.4	4.58	9.08	6.31	5.30	3.28	29.8	18.6
55.4	46.8	78.6	51.9	76.3	3.83	10.9	7.57	6.34	3.92	35.6	22.3
65.4	20.2	98.8	22.4	98.7	3.24	12.8	8.89	7.48	4.63	42.1	26.1
77.1	0.0	98.8	0.0	98.7	2.75	15.1	10.5	8.82	5.46	49.6	30.9
90.2	0.0	98.9	0.0	98.7	2.35	17.7	12.3	10.3	6.38	58.0	36.2
109	0.1	98.9	0.1	98.8	1.95	21.4	14.9	12.5	7.74	70.4	43.8
127	0.0	98.9	0.0	98.8	1.66	24.9	17.3	14.5	8.98	81.6	50.9
150	0.1	99.0	0.1	98.9	1.41	29.4	20.4	17.2	10.6	96.4	60.0
179	0.0	99.1	0.1	99.0	1.19	35.1	24.4	20.5	12.7	115	71.8
208	0.0	99.1	0.0	99.0	1.02	40.8	28.3	23.8	14.7	134	83.2
244	0.0	99.1	0.0	99.0	0.869	47.8	33.2	27.9	17.3	157	97.6
289	0.1	99.2	0.1	99.1	0.735	56.7	39.4	33.1	20.5	186	116
342	0.1	99.3	0.1	99.2	0.620	67.1	46.6	39.1	24.2	220	137
400	0.1	99.4	0.1	99.3	0.530	78.4	54.4	45.8	28.4	258	160
471	0.1	99.4	0.1	99.4	0.450	92.4	64.2	53.9	33.4	304	189
552	0.1	99.5	0.1	99.4	0.384	108	75.0	63.2	39.1	355	221
647	0.1	99.6	0.1	99.5	0.328	127	88.2	74.0	45.8	416	259
756	0.1	99.6	0.1	99.6	0.280	148	103	86.5	53.5	486	303
885	0.1	99.7	0.1	99.7	0.239	174	121	101	62.5	568	356
1046	0.1	99.8	0.1	99.8	0.203	205	142	120	74.3	675	418
1225	0.1	99.9	0.1	99.8	0.173	240	167	140	86.7	788	491
1436	0.1	99.9	0.1	99.9	0.148	282	196	164	102	927	576
1686	0.1	100.0	0.1	100.0	0.126	331	230	193	119	1082	676
1826	0.0	100.0	0.0	100.0	0.116	358	249	209	129	1173	732
2141	0.0	100.0	0.0	100.0	0.0990	420	292	245	152	1382	859
2509	0.0	100.0	0.0	100.0	0.0845	492	342	287	178	1618	1006
2944	0.0	100.0	0.0	100.0	0.0720	577	401	337	209	1900	1179
3448	0.0	100.0	0.0	100.0	0.0615	676	469	395	245	2227	1379
4045	0.0	100.0	0.0	100.0	0.0524	793	551	463	287	2609	1621
4732	0.0	100.0	0.0	100.0	0.0448	928	644	542	336	3055	1894
5116	0.0	100.0	0.0	100.0	0.0414	1003	697	585	362	3291	2050
5999	0.0	100.0	0.0	100.0	0.0353	1176	817	687	425	3864	2403
7023	0.0	100.0	0.0	100.0	0.0302	1377	956	804	498	4527	2812
7887	0.0	100.0	0.0	100.0	0.0269	1546	1074	903	559	5082	3159
8917	0.0	100.0	0.0	100.0	0.0238	1748	1214	1020	631	5736	3571
9650	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10453	0.0	100.0	0.0	100.0	0.0203	2050	1424	1196	740	6727	4188
12286	0.0	100.0	0.0	100.0	0.0173	2409	1673	1406	870	7909	4921
14336	0.0	100.0	0.0	100.0	0.0148	2811	1952	1641	1016	9236	5741
16385	0.0	100.0	0.0	100.0	0.0129	3213	2231	1875	1161	10555	6562
18482	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20486	0.0	100.0	0.0	100.0	0.0103	4017	2790	2344	1451	13191	8206
23152	0.0	100.0	0.0	100.0	0.0092	4540	3153	2650	1640	14909	9274
25067	0.0	100.0	0.0	100.0	0.0085	4915	3413	2869	1776	16145	10038
27137	0.0	100.0	0.0	100.0	0.0078	5321	3695	3106	1923	17482	10868
29381	0.0	100.0	0.0	100.0	0.0072	5761	4001	3362	2081	18918	11768
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34424	0.0	100.0	0.0	100.0	0.0062	6750	4688	3940	2439	22173	13788
37195	0.0	100.0	0.0	100.0	0.0057	7293	5065	4257	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43593	0.0	100.0	0.0	100.0	0.0049	8548	5936	4989	3088	28073	17459
47293	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51175	0.0	100.0	0.0	100.0	0.0041	10034	6968	5857	3626	32964	20494
55389	0.0	100.0	0.0	100.0	0.0038	10861	7542	6339	3924	35673	22182
59883	0.0	100.0	0.0	100.0	0.0035	11742	8154	6853	4242	38564	23982

(A) Interpreted Capillary Pressure Chart

Well	Wooundellah-10
Sample Depth	389.3 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

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Well Wooundellah-11
Sample Depth 389 m

Client Geoscience A Victoria
Well Wooundellah-11
Test Method Air/Mercury Capillary Pressure
Sample W11
Depth 389.00 m
Pore radius (µm) 1.69

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.081

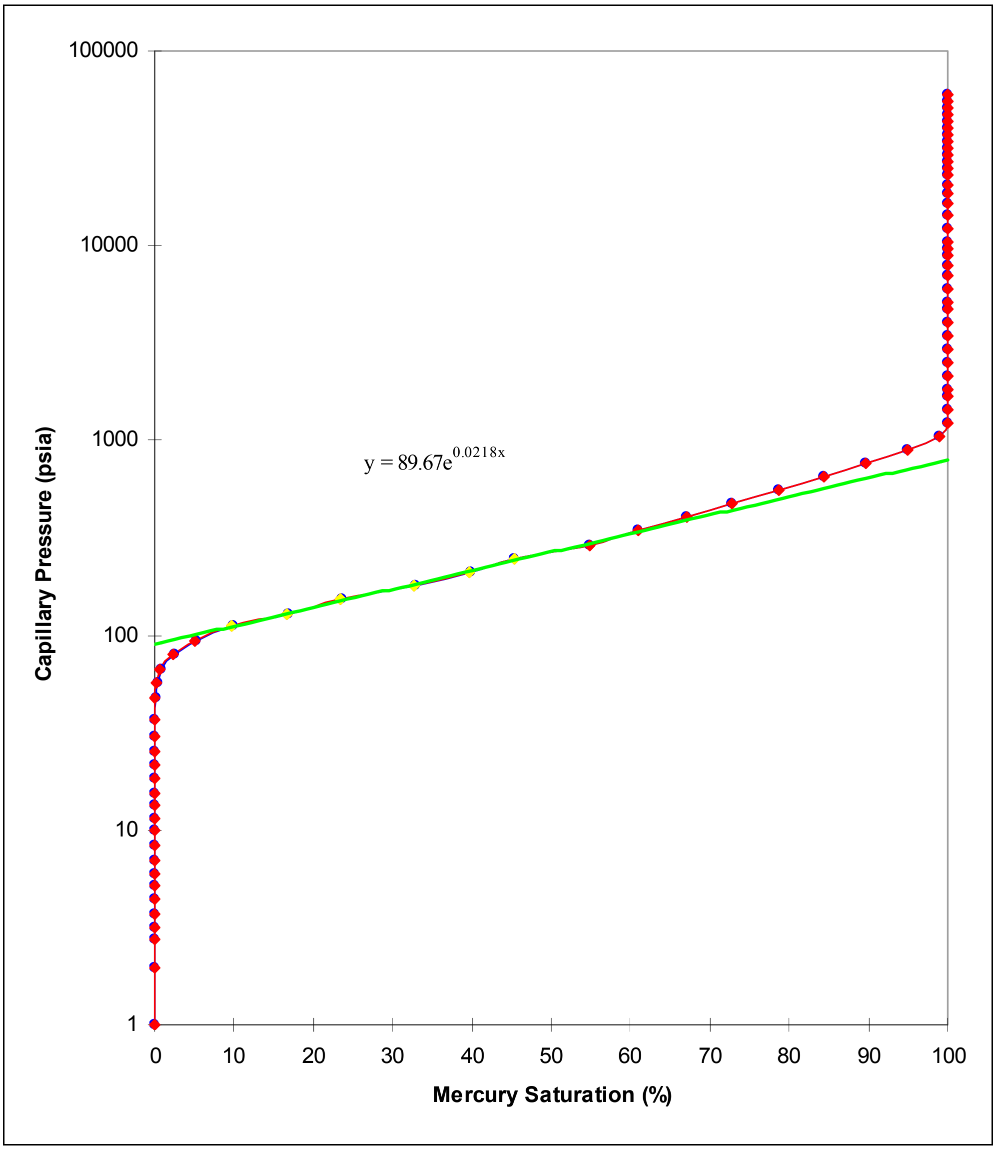
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	62.9	-	89.7	-	112	-
G-W	25	12.3	8.57	17.6	12.2	21.9	15.2
O-W	41	4.12	4.46	5.86	6.35	7.30	7.90
CO_2-W	11	12.3	4.46	17.6	6.35	21.9	7.90

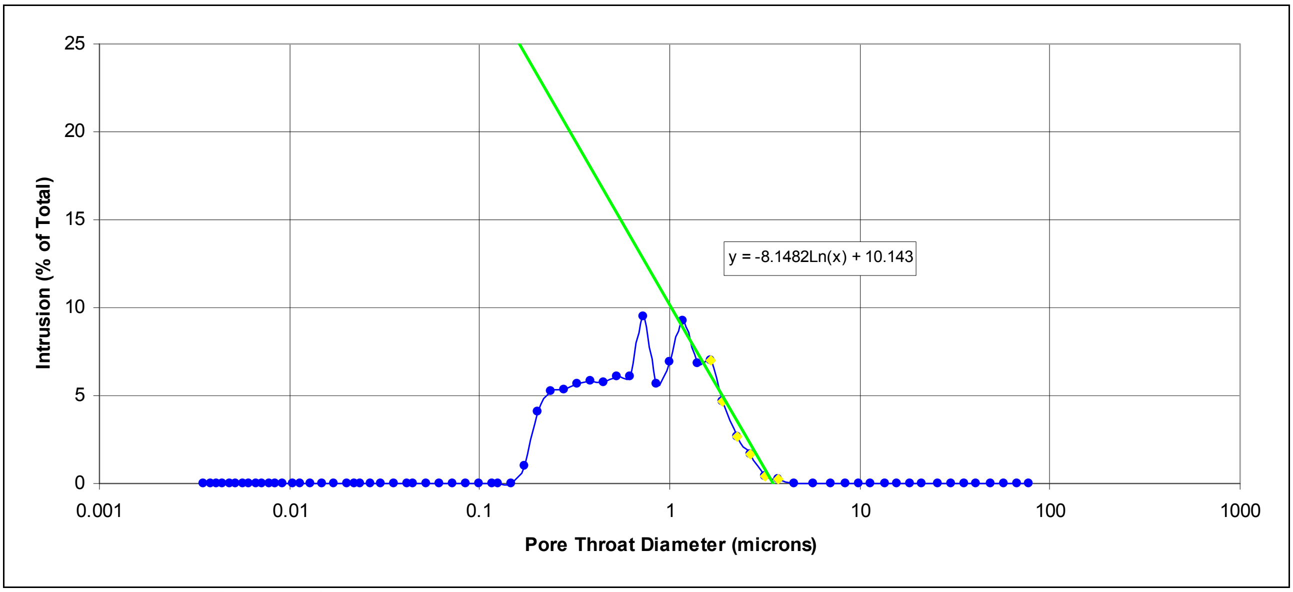
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.0	0.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.0	0.0	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.0	0.0	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.0	0.0	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.0	0.0	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.0	0.0	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.0	0.0	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.0	0.0	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.0	0.0	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.0	0.0	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.0	0.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.0	0.0	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.0	0.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.0	0.0	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.0	0.0	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.0	0.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.0	0.0	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.2	0.2	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.3	0.4	0.3	0.3	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.4	0.8	0.4	0.7	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	1.7	2.5	1.7	2.3	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	2.7	5.2	2.7	5.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	4.6	9.8	4.6	9.7	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	7.0	16.8	7.0	16.7	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	6.8	23.7	6.8	23.5	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	9.2	32.9	9.3	32.8	1.18	35.1	24.4	20.5	12.7	115	71.8
210	6.9	39.8	6.9	39.7	1.01	41.2	28.6	24.0	14.9	135	84.1
247	5.6	45.4	5.7	45.3	0.860	48.4	33.6	28.3	17.5	159	98.8
292	9.5	54.9	9.5	54.8	0.726	57.3	39.8	33.4	20.7	188	117
343	6.1	61.0	6.1	60.9	0.619	67.3	46.7	39.3	24.3	221	137
401	6.1	67.1	6.1	67.0	0.528	78.6	54.6	45.9	28.4	258	161
472	5.7	72.8	5.7	72.8	0.449	92.5	64.2	54.0	33.4	304	189
553	5.9	78.7	5.9	78.7	0.383	108	75.0	63.3	39.2	356	221
647	5.7	84.4	5.7	84.4	0.328	127	88.2	74.0	45.8	416	259
757	5.3	89.7	5.3	89.7	0.280	148	103	86.6	53.6	487	303
887	5.2	94.9	5.3	94.9	0.239	174	121	102	63.1	574	356
1048	4.0	99.0	4.1	99.0	0.202	205	142	120	74.3	675	418
1227	1.0	100.0	1.0	100.0	0.173	241	167	140	86.7	788	491
1439	0.0	100.0	0.0	100.0	0.147	282	196	165	102	927	576
1688	0.0	100.0	0.0	100.0	0.126	331	230	193	119	1082	676
1828	0.0	100.0	0.0	100.0	0.116	358	249	209	129	1173	732
2142	0.0	100.0	0.0	100.0	0.0990	420	292	245	152	1382	859
2510	0.0	100.0	0.0	100.0	0.0845	492	342	287	178	1618	1006
2945	0.0	100.0	0.0	100.0	0.0720	577	401	337	209	1900	1179
3449	0.0	100.0	0.0	100.0	0.0615	676	469	395	245	2227	1379
4040	0.0	100.0	0.0	100.0	0.0525	792	550	462	286	2600	1618
4728	0.0	100.0	0.0	100.0	0.0448	927	644	541	335	3045	1894
5114	0.0	100.0	0.0	100.0	0.0415	1003	697	585	362	3291	2050
6002	0.0	100.0	0.0	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Wooundellah-11
Sample Depth	389 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well	Wrasse-1
Sample Depth	2589.89 m

Client	Geoscience A Victoria
Well	Wrasse-1
Test Method	Air/Mercury Capillary Pressure
Sample	W1
Depth	2589.89 m
Pore radius (µm)	0.017

Density Gradients (psi/foot)	
	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.567

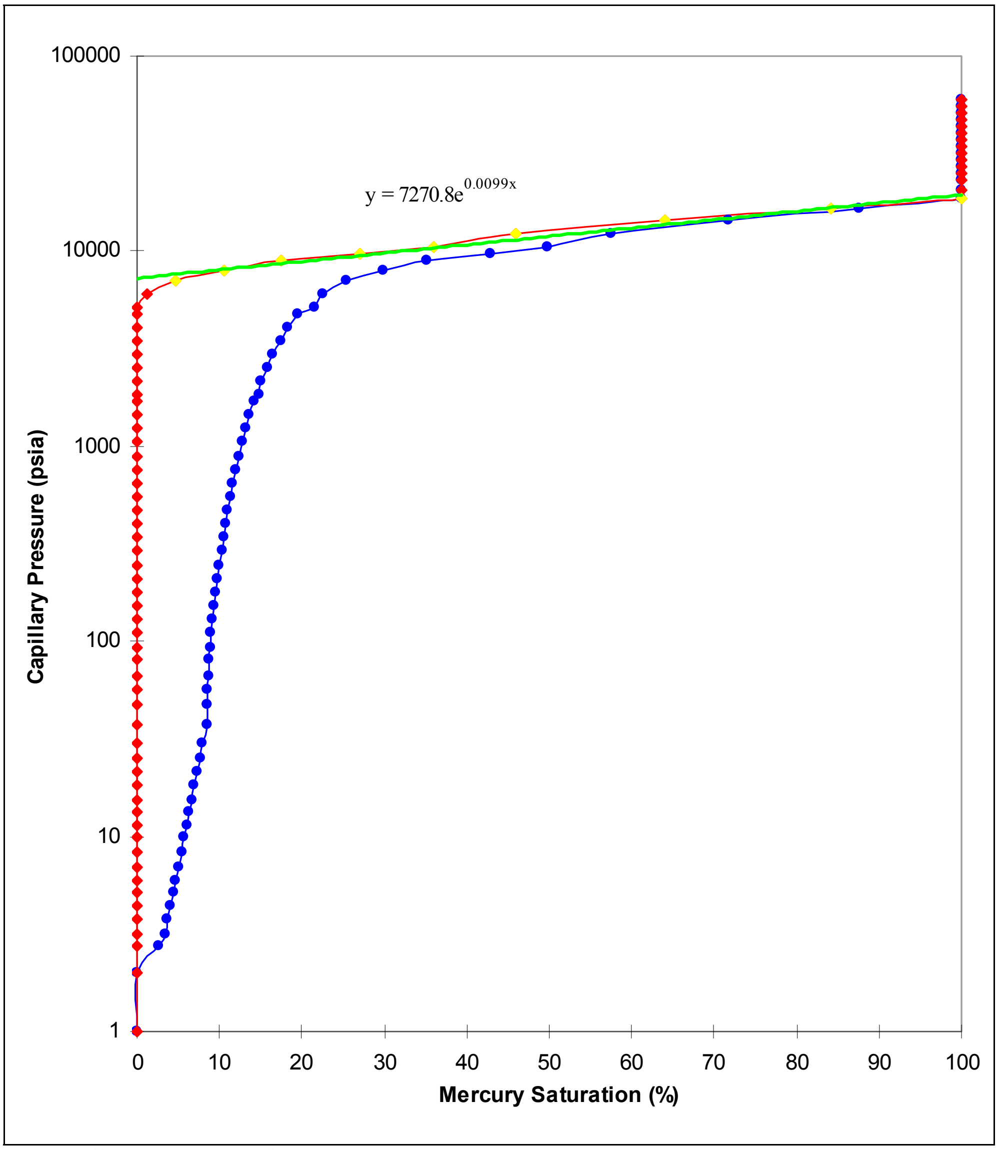
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	6149	-	7271	-	8025	-
G-W	2464	1206	838	1426	991	1574	1093
O-W	3960	402	436	475	515	525	569
CO_2-W	2326	1206	436	1426	515	1574	569

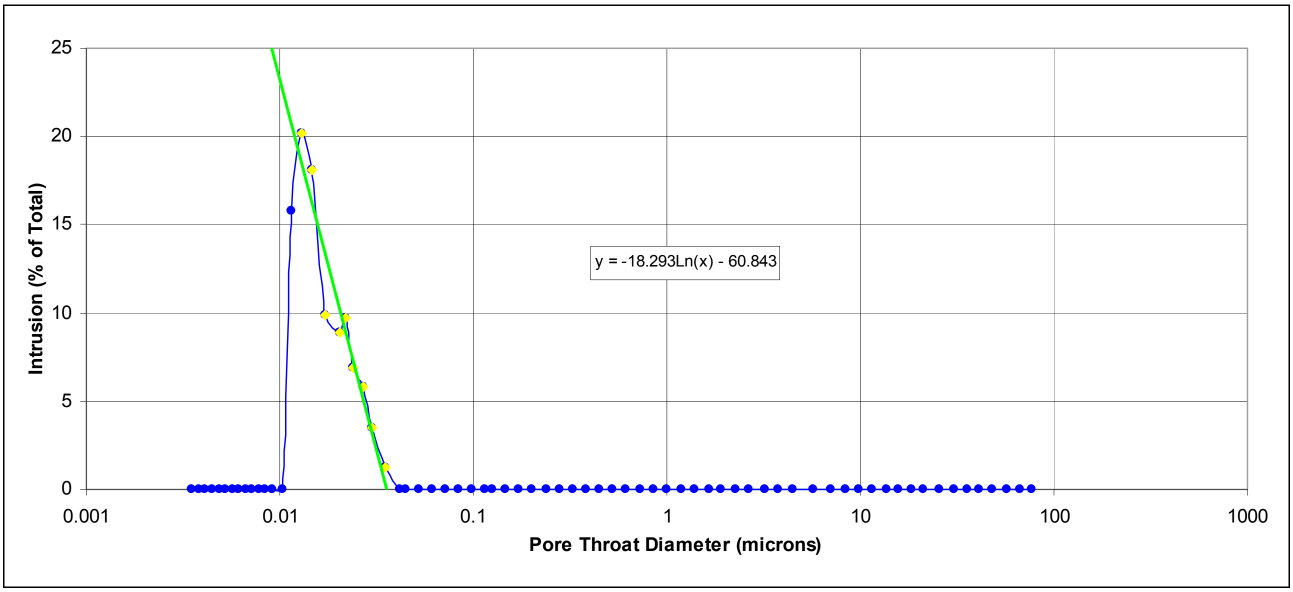
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	0.0	0.0	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	2.7	2.7	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.7	3.4	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.4	3.7	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.4	4.1	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.3	4.4	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.3	4.8	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.3	5.1	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.3	5.4	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.3	5.7	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.4	6.1	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.3	6.4	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.3	6.7	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.3	7.0	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.4	7.3	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.3	7.6	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	0.3	8.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.5	8.4	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.1	8.5	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.1	8.6	0.0	0.0	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.1	8.6	0.0	0.0	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.1	8.8	0.0	0.0	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.1	8.9	0.0	0.0	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	0.1	9.0	0.0	0.0	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	0.2	9.2	0.0	0.0	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	0.2	9.4	0.0	0.0	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	0.2	9.6	0.0	0.0	1.18	35.1	24.4	20.5	12.7	115	71.8
210	0.2	9.8	0.0	0.0	1.01	41.2	28.6	24.0	14.9	135	84.1
247	0.3	10.0	0.0	0.0	0.860	48.4	33.6	28.3	17.5	159	98.8
292	0.2	10.3	0.0	0.0	0.726	57.3	39.8	33.4	20.7	188	117
343	0.3	10.5	0.0	0.0	0.619	67.3	46.7	39.3	24.3	221	137
401	0.3	10.8	0.0	0.0	0.528	78.6	54.6	45.9	28.4	258	161
472	0.3	11.1	0.0	0.0	0.449	92.5	64.2	54.0	33.4	304	189
553	0.3	11.4	0.0	0.0	0.383	108	75.0	63.3	39.2	356	221
647	0.3	11.7	0.0	0.0	0.328	127	88.2	74.0	45.8	416	259
757	0.3	12.0	0.0	0.0	0.280	148	103	86.6	53.6	487	303
887	0.3	12.3	0.0	0.0	0.239	174	121	102	63.1	574	356
1048	0.4	12.7	0.0	0.0	0.202	205	142	120	74.3	675	418
1227	0.5	13.2	0.0	0.0	0.173	241	167	140	86.7	788	491
1439	0.5	13.6	0.0	0.0	0.147	282	196	165	102	927	576
1688	0.5	14.2	0.0	0.0	0.126	331	230	193	119	1082	676
1828	0.6	14.8	0.0	0.0	0.116	358	249	209	129	1173	732
2142	0.3	15.1	0.0	0.0	0.0990	420	292	245	152	1382	859
2510	0.7	15.8	0.0	0.0	0.0845	492	342	287	178	1618	1006
2945	0.8	16.5	0.0	0.0	0.0720	577	401	337	209	1900	1179
3449	0.9	17.4	0.0	0.0	0.0615	676	469	395	245	2227	1379
4040	1.0	18.4	0.0	0.0	0.0525	792	550	462	286	2600	1618
4728	1.2	19.5	0.0	0.0	0.0448	927	644	541	335	3045	1894
5114	2.1	21.6	0.0	0.0	0.0415	1003	697	585	362	3291	2050
6002	1.0	22.6	1.3	1.3	0.0353	1177	817	687	425	3864	2403
7033	2.7	25.3	3.5	4.8	0.0301	1379	958	805	498	4527	2818
7895	4.5	29.9	5.8	10.5	0.0269	1548	1075	904	560	5091	3162
8920	5.4	35.2	6.9	17.4	0.0238	1749	1215	1021	632	5745	3574
9649	7.6	42.9	9.7	27.1	0.0220	1892	1314	1104	683	6209	3865
10452	7.0	49.8	8.9	36.0	0.0203	2049	1423	1196	740	6727	4185
12283	7.7	57.6	9.9	45.9	0.0173	2408	1672	1406	870	7909	4918
14333	14.2	71.8	18.1	64.0	0.0148	2810	1951	1640	1015	9227	5738
16381	15.8	87.6	20.2	84.2	0.0129	3212	2231	1875	1161	10555	6562
18481	12.4	100.0	15.8	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Wrasse-1
Sample Depth	2589.89 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Well Wurruk Wurruk-13
Sample Depth 584.9 m

Client Geoscience A Victoria
Well Wurruk Wurruk-13

Test Method Air/Mercury Capillary Pressure

Sample WW13
Depth 584.90 m

Pore radius (µm) 0.702

Density Gradients (psi/foot)	Typical
Water:	0.440
Oil:	0.330
Gas:	0.100
CO_2 Density	0.145

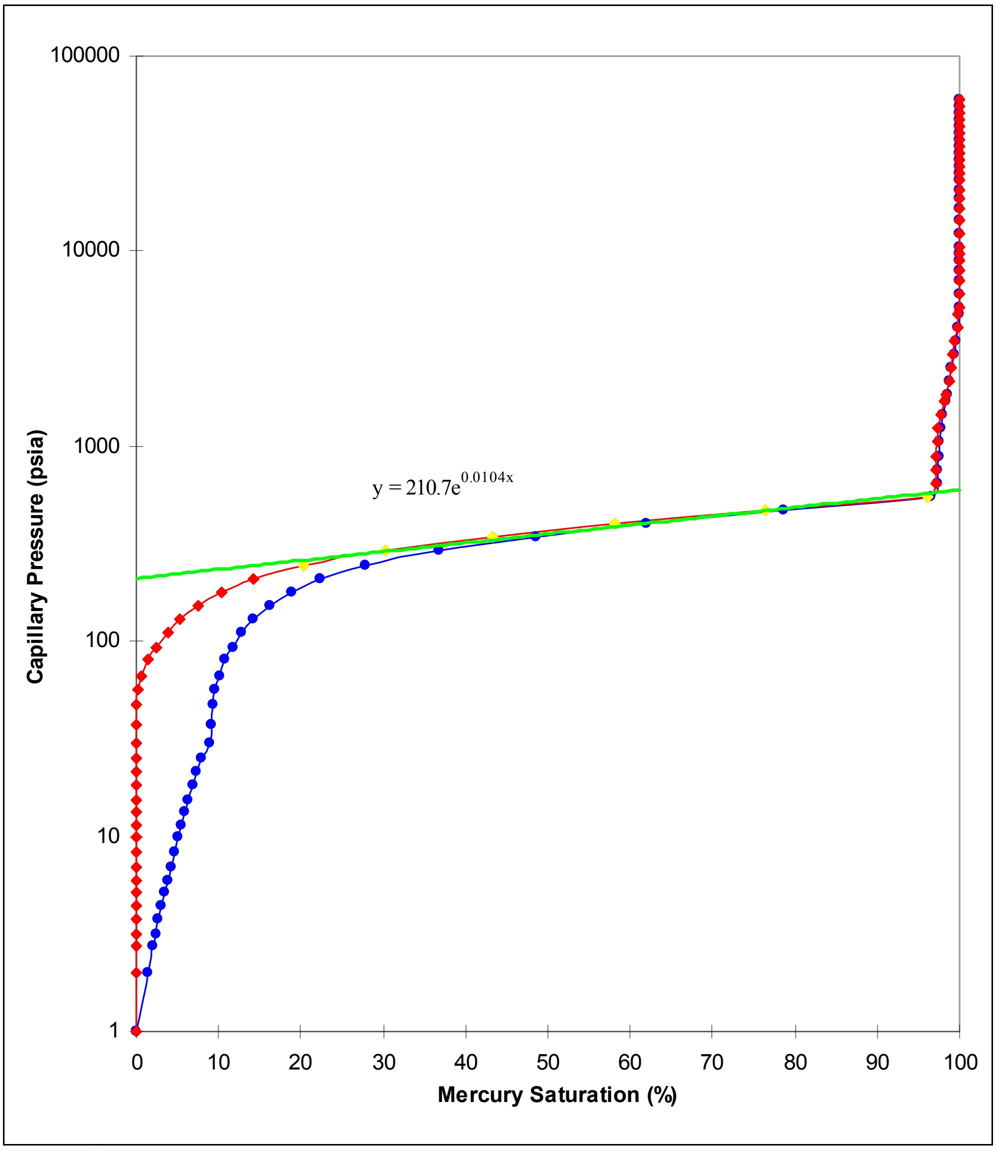
Conversion Parameters (dynes/cm)	air/water	air/oil	oil/water	CO_2/water
Laboratory Theta	0.0	0.0	30.0	0.0
Laboratory IFT	72.0	24.0	48.0	72.0
Reservoir Theta	0.0		30.0	0.0
Reservoir IFT	50.0		30.0	26.0
Laboratory TcosTheta	72.0	24.0	42.0	72.0
Reservoir TcosTheta	50.0		26.0	26.0

	Estimated Column	Entry Pressure (psia)		Displacement Pressure (psia)		Threshold Pressure (psia)	
System	**Height (feet)**	Lab	Res Con	Lab	Resv	Lab	Resv
A-Hg	na	152	-	211	-	234	-
G-W	61	29.8	20.7	41.3	28.7	45.9	31.9
O-W	98	9.92	10.7	13.8	14.9	15.3	16.6
CO_2-W	29	29.8	10.7	41.3	14.9	45.9	16.6

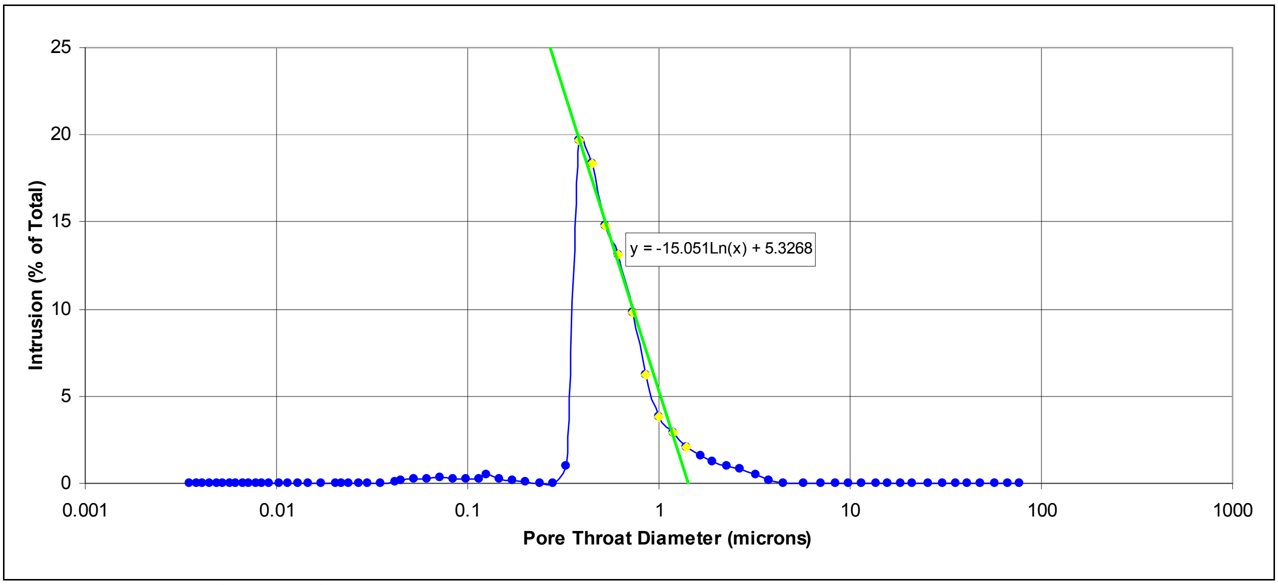
	Raw Data		Conformance Corrected			Equivalent	Injection Pressures	Oil/Brine	Oil/Brine	Height Above	Height Above
Pressure (psia)	Intrusion (percent)	Saturation (percent)	Intrusion (percent)	Saturation (percent)	Pore Diameter (µm)	Air/Brine Lab (psi)	Air/Brine Res Con (psi)	Lab Conditions (psi)	Reservoir Conditions (psi)	Free Water Oil-Water (feet)	Free Water Gas-Water (feet)
1.00	0.0	0.0	0.0	0.0	211	0.20	0.14	0.11	0.07	0.64	0.40
1.98	1.4	1.4	0.0	0.0	107	0.39	0.27	0.23	0.14	1.28	0.79
2.73	0.6	2.0	0.0	0.0	77.6	0.54	0.37	0.31	0.19	1.75	1.09
3.18	0.3	2.3	0.0	0.0	66.7	0.62	0.43	0.36	0.23	2.05	1.27
3.73	0.4	2.7	0.0	0.0	56.9	0.73	0.51	0.43	0.26	2.40	1.49
4.38	0.4	3.1	0.0	0.0	48.4	0.86	0.60	0.50	0.31	2.82	1.76
5.18	0.4	3.5	0.0	0.0	41.0	1.02	0.71	0.59	0.37	3.34	2.08
5.98	0.3	3.8	0.0	0.0	35.5	1.17	0.81	0.68	0.42	3.85	2.39
6.97	0.4	4.2	0.0	0.0	30.4	1.37	0.95	0.80	0.49	4.49	2.80
8.27	0.4	4.6	0.0	0.0	25.6	1.62	1.13	0.95	0.59	5.33	3.32
9.97	0.5	5.2	0.0	0.0	21.3	1.95	1.35	1.14	0.71	6.42	3.97
11.5	0.4	5.5	0.0	0.0	18.5	2.25	1.56	1.32	0.82	7.43	4.59
13.5	0.4	6.0	0.0	0.0	15.7	2.65	1.84	1.54	0.95	8.66	5.41
15.5	0.4	6.3	0.0	0.0	13.7	3.04	2.11	1.77	1.10	10.0	6.21
18.5	0.5	6.9	0.0	0.0	11.5	3.63	2.52	2.12	1.31	11.9	7.41
21.6	0.5	7.3	0.0	0.0	9.83	4.24	2.94	2.47	1.53	13.9	8.65
25.3	0.5	7.9	0.0	0.0	8.39	4.96	3.44	2.90	1.80	16.4	10.1
30.0	1.2	9.0	0.0	0.0	7.08	5.88	4.08	3.43	2.12	19.3	12.0
37.2	0.2	9.2	0.0	0.0	5.70	7.29	5.06	4.26	2.64	24.0	14.9
47.2	0.2	9.4	0.0	0.0	4.49	9.25	6.42	5.40	3.34	30.4	18.9
56.6	0.2	9.6	0.2	0.2	3.75	11.1	7.71	6.48	4.01	36.5	22.7
66.3	0.5	10.1	0.5	0.7	3.20	13.0	9.03	7.59	4.70	42.7	26.6
80.4	0.7	10.8	0.8	1.5	2.64	15.8	11.0	9.20	5.70	51.8	32.4
93.0	0.9	11.7	1.0	2.5	2.28	18.2	12.6	10.6	6.56	59.6	37.1
111	1.1	12.9	1.3	3.8	1.91	21.8	15.1	12.7	7.86	71.5	44.4
129	1.4	14.3	1.6	5.4	1.65	25.3	17.6	14.8	9.16	83.3	51.8
152	1.8	16.2	2.0	7.4	1.39	29.8	20.7	17.4	10.8	98.2	60.9
179	2.7	18.8	2.9	10.4	1.18	35.1	24.4	20.5	12.7	115	71.8
210	3.4	22.3	3.8	14.2	1.01	41.2	28.6	24.0	14.9	135	84.1
247	5.6	27.9	6.2	20.4	0.860	48.4	33.6	28.3	17.5	159	98.8
292	8.9	36.8	9.8	30.2	0.726	57.3	39.8	33.4	20.7	188	117
343	11.9	48.6	13.1	43.3	0.619	67.3	46.7	39.3	24.3	221	137
401	13.4	62.1	14.8	58.1	0.528	78.6	54.6	45.9	28.4	258	161
472	16.6	78.7	18.3	76.5	0.449	92.5	64.2	54.0	33.4	304	189
553	17.8	96.5	19.7	96.1	0.383	108	75.0	63.3	39.2	356	221
647	0.9	97.4	1.0	97.1	0.328	127	88.2	74.0	45.8	416	259
757	0.0	97.4	0.0	97.2	0.280	148	103	86.6	53.6	487	303
887	0.0	97.5	0.0	97.2	0.239	174	121	102	63.1	574	356
1048	0.1	97.5	0.1	97.3	0.202	205	142	120	74.3	675	418
1227	0.2	97.7	0.2	97.4	0.173	241	167	140	86.7	788	491
1439	0.2	97.9	0.3	97.7	0.147	282	196	165	102	927	576
1688	0.4	98.4	0.5	98.2	0.126	331	230	193	119	1082	676
1828	0.2	98.6	0.2	98.4	0.116	358	249	209	129	1173	732
2142	0.2	98.8	0.3	98.7	0.0990	420	292	245	152	1382	859
2510	0.2	99.0	0.3	98.9	0.0845	492	342	287	178	1618	1006
2945	0.3	99.3	0.3	99.2	0.0720	577	401	337	209	1900	1179
3449	0.2	99.5	0.2	99.5	0.0615	676	469	395	245	2227	1379
4040	0.2	99.8	0.3	99.7	0.0525	792	550	462	286	2600	1618
4728	0.1	99.9	0.2	99.9	0.0448	927	644	541	335	3045	1894
5114	0.0	100.0	0.1	100.0	0.0415	1003	697	585	362	3291	2050
6002	0.0	100.0	0.0	100.0	0.0353	1177	817	687	425	3864	2403
7033	0.0	100.0	0.0	100.0	0.0301	1379	958	805	498	4527	2818
7895	0.0	100.0	0.0	100.0	0.0269	1548	1075	904	560	5091	3162
8920	0.0	100.0	0.0	100.0	0.0238	1749	1215	1021	632	5745	3574
9649	0.0	100.0	0.0	100.0	0.0220	1892	1314	1104	683	6209	3865
10452	0.0	100.0	0.0	100.0	0.0203	2049	1423	1196	740	6727	4185
12283	0.0	100.0	0.0	100.0	0.0173	2408	1672	1406	870	7909	4918
14333	0.0	100.0	0.0	100.0	0.0148	2810	1951	1640	1015	9227	5738
16381	0.0	100.0	0.0	100.0	0.0129	3212	2231	1875	1161	10555	6562
18481	0.0	100.0	0.0	100.0	0.0115	3624	2517	2115	1309	11900	7403
20481	0.0	100.0	0.0	100.0	0.0104	4016	2789	2344	1451	13191	8203
23149	0.0	100.0	0.0	100.0	0.0092	4539	3152	2649	1640	14909	9271
25064	0.0	100.0	0.0	100.0	0.0085	4915	3413	2868	1775	16136	10038
27135	0.0	100.0	0.0	100.0	0.0078	5321	3695	3105	1922	17473	10868
29376	0.0	100.0	0.0	100.0	0.0072	5760	4000	3362	2081	18918	11765
31804	0.0	100.0	0.0	100.0	0.0067	6236	4331	3640	2253	20482	12738
34421	0.0	100.0	0.0	100.0	0.0062	6749	4687	3939	2438	22164	13785
37192	0.0	100.0	0.0	100.0	0.0057	7293	5065	4256	2635	23955	14897
40343	0.0	100.0	0.0	100.0	0.0053	7910	5493	4617	2858	25982	16156
43591	0.0	100.0	0.0	100.0	0.0049	8547	5935	4989	3088	28073	17456
47291	0.0	100.0	0.0	100.0	0.0045	9273	6440	5412	3350	30455	18941
51172	0.0	100.0	0.0	100.0	0.0041	10034	6968	5856	3625	32955	20494
55387	0.0	100.0	0.0	100.0	0.0038	10860	7542	6339	3924	35673	22182
59880	0.0	100.0	0.0	100.0	0.0035	11741	8153	6853	4242	38564	23979

(A) Interpreted Capillary Pressure Chart

Well	Wurruk Wurruk-13
Sample Depth	584.9 m



(B) Capillary Pressure Plot



(C) Pore Size Distribution plot

Appendix 3

Values used in the calculation of CO_2 column heights

Well	Sample Depth (m)	Core/SWC	Formation	At sample depth		CO_2 Density (g/cm^3)	Interfacial Tension (mN/m)	Brine Density (g/cm^3)	Threshold Pressure Air-Hg (psi)	CO_2 column height (m)
				Temperature (°C)	Pore pressure (MPa)					
Barracouta-1	1021.95	Core	Lakes Entrance Formation	58.3	10.26	0.3205	30.52	1.0179	3001	250
Bengworden South-6	914.9	Core	Lakes Entrance Formation	59	8.96	0.2372	34.53	0.9978	3248	282
Bundalaguah-10	599.8	Core	Gippsland Limestone	34	5.87	0.1551	38.85	1.0077	467	41
Cod-1	1711.89	Core	Lakes Entrance Formation	71.1	17.25	0.58	26.92	1.0144	5787	683
Colquhoun East-6	180.7	Core	Lakes Entrance Formation	24	1.77	0.0349	59.7	1.0032	1389	164
Dulungalong-2	478.1	Core	Lakes Entrance Formation	36	4.68	0.1065	45.74	1.0048	806	78
Flounder-6	1929.38	SWC	Lakes Entrance Formation	86.6	19.29	0.5319	27.1	1.0053	4223	460
Fortescue-2	2420	Core	Lakes Entrance Formation	104	24.22	0.5561	25.78	0.9781	3636	425
Fortescue-2	2430	Core	Gurnard Formation	104	24.33	0.5582	25.76	0.9781	2587	303
Fortescue-3	2411.5	Core	Lakes Entrance Formation	100.5	24.12	0.5679	25.91	0.9982	5634	641
Gippsland Frome Lakes-4	503.5	Core	Lakes Entrance Formation	42	4.93	0.1092	45.85	1.0022	185	18
Gippsland Frome Lakes-4	506.6	Core	Lakes Entrance Formation	42	4.96	0.1101	45.71	1.0023	1228	120
Golden Beach West-1	667.68	Core	Lakes Entrance Formation	30.6	6.64	0.2133	32.82	1.0288	1138	87
Goon Nure-9	726.3	Core	Lakes Entrance Formation	35	7.11	0.2302	32.25	1.0089	2686	213
Groper-1	909.15	Core	Lakes Entrance Formation	62	9.12	0.2347	34.89	0.9961	2807	246
Groper-1	926.1	Core	Lakes Entrance Formation	63.9	9.29	0.2357	34.94	1.0154	347	29
Groper-1	932	Core	Lakes Entrance Formation	64.2	9.35	0.2385	34.78	1.0154	285	24
Groper-2	747.86	Core	Lakes Entrance Formation	60.7	7.48	0.171	39.69	1.0157	151	13
Hunters Lane-1	377	Core	Lakes Entrance Formation	31.2	3.74	0.0815	49.65	1.0265	182	18
Kingfish-3	2143.05	Core	Lakes Entrance Formation	85.2	21.62	0.6003	26.59	1.0097	3730	463
Meerlieu-4	722	Core	Lakes Entrance Formation	46.6	7.07	0.1828	37.53	1.0028	2131	186
Meerlieu-4	769	Core	Lakes Entrance Formation	44	7.53	0.2152	34.56	1.0048	3602	301
Meerlieu-15001	699.9	Core	Lakes Entrance Formation	53	6.85	0.1611	40.19	0.999	1033	95
Mullungdung-7	363	Core	Lakes Entrance Formation	19	3.55	0.0833	47.72	1.0099	126	12
Sale-13	748.1	Core	Lakes Entrance Formation	53	7.33	0.1795	38.42	0.9995	1922	172
Sale-13	795.6	Core	Lakes Entrance Formation	51	7.79	0.2054	36.06	1.0012	1962	170
Sale-15	628.6	Core	Gippsland Limestone	35.4	6.16	0.1657	37.86	1.0075	620	53
Seacombe-7	947.6	Core	Lakes Entrance Formation	61	9.28	0.2459	34.15	0.9969	3520	306
Sole-1	805.9	SWC	Lakes Entrance Formation	43	8.07	0.2594	31.64	1.0059	666	54
Sperm Whale Head-1	653.8	Core	Lakes Entrance Formation	40.8	6.4	0.1649	38.67	1.005	2229	196
Sperm Whale Head-1	718.1	Core	Lakes Entrance Formation	44	7.03	0.1877	36.8	1.0042	3241	285
Tuna-1	1160	Core	Lakes Entrance Formation	57.8	11.66	0.4326	27.86	1.0207	3192	289
Woodside South-1	522.12	Core	Lakes Entrance Formation	31.2	5.25	0.1329	41.23	1.029	65	6
Wooundellah-10	389.3	Core	Gippsland Limestone	36	3.81	0.0809	50.17	1.0032	43	4
Wooundellah-11	389	Core	Gippsland Limestone	36	3.81	0.0808	50.19	1.0032	112	11
Wrasse-1	2589.89	Core	Lakes Entrance Formation	109	26.05	0.5674	25.16	0.9754	8025	947
Wurruk Wurruk-13	584.9	Core	Lakes Entrance Formation	36	5.73	0.1449	40.34	1.0065	234	21

Corrected temperature gradient from GeoScience Victoria database. Onshore surface temperature =13°C onshore.
Offshore well temperature calculated from database TD gradient (horner plot corrected temperature based on inspection of multiple temperature measurements).
Pore pressure calculation for onshore wells estimated from depth without correction for RT or KB and assuming freshwater pore fluid density. Pressure gradient = 0.433 psi/ft.
Offshore wells depth is corrected for KB elevation and seawater composition is assumed for the pore water density. Pressure gradient = 0.448 psi/ft.
CO_2 density from CO2CRC website calculator. Assumed reservoir entry pressure = 0.28 psi.