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ASX Announcement – Carbonaceous shales identified in coring program

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MCARTHUR BASIN OPERATIONS – 2014

INITIAL RESULTS OF THE EXPLORATION DRILLING PROGRAM

In early September Imperial Oil & Gas Pty Ltd, ('**IOG**') the Company's 100% owned subsidiary completed the drilling of four exploration core holes in the St Vidgeon region of northern EP 184 in the McArthur Basin, Northern Territory.

The shallow exploration core holes were drilled in the NW province of EP184 to prove, whether the shale-bearing formations in the region contain petroleum source rocks of sufficient quality to generate potentially recoverable hydrocarbon reserves. Additional objectives were to constrain the geochemical and drilling characteristics of the rock stratigraphic succession in this previously essentially undrilled region and to understand better the geological structure of the basin to optimise the planning and location of drilling deeper exploration wells in future drilling programs to target the highly petroleum prospective central region of the basin.

KEY OUTCOMES OF DRILLING PROGRAM

- The core drilling program established the presence of a number of important intervals of Palaeo-Proterozoic age organic carbon-rich shale. This result is consistent with the IOG view that the St Vidgeon Formation of the McArthur Basin within EP184 contains organic shales with the potential to contain hydrocarbons.
- As expected in such shallow core holes, given their proximity to the nearby surface outcrops previously mapped by IOG, the drilled formations have suffered varying degrees of weathering. However the lithologies above and below the organic carbon-rich shale intervals are considered capable of providing effective top and base-seals for hydrocarbons should they be entrapped within the shales or in conventional petroleum reservoirs associated with, above or below the organic-rich shale intervals.
- The results of the initial Source Rock Geochemical Analysis undertaken on core demonstrate the presence of organic carbonaceous material within these shales that

display a hydrocarbon signature confirming the presence of a petroleum generating system.

- Wireline Geophysical measurements obtained from the cored wells (as indicated for example in Figure 1) have identified a particular 18.5 metre thick zone of interest that correlates with a distinctive interval of black carbonaceous shale.
- Core samples recovered during the drilling program contain encouraging evidence of possible asphaltic staining. Furthermore the particular GCMS analysis used to identify the presence of generated hydrocarbons, confirm that hydrocarbons have been generated in this region of EP184.

RESULTS & PRELIMINARY IMPLICATIONS FOR IMPERIAL OIL & GAS ACREAGE POTENTIAL

Geochemistry and Petroleum Potential

The emerging results from the Source Rock Analyses of samples collected during the IOG 2014 core drilling program remain preliminary though highly encouraging. The geochemistry of such ancient lithologies (1.64 billion years old) is complex to interpret using the standard techniques that are normally applied to much younger rocks (400 million years or less) that contain familiar types of organic material.

Notwithstanding degradation by nearby surface weathering, the results do confirm the carbonaceous shale interval encountered in IOG well BCF-SC-04 does have organic carbon content with other geochemical parameters suggesting this particular shale sample to have 'fair' potential for the generation of petroleum (Figure 1). The preliminary temperature and maturity data indicate these shales preserve a record of thermal maturation ranging from immature (pre-petroleum generation) through to early and peak maturity with the possibility for both oil and wet gas as the dominant petroleum phases.

While the current results are preliminary, they are consistent with the findings from previous Geochemical and Basin Thermal Modelling studies by IOG that suggest potential not only for gas, but for petroleum liquids to have been generated in the Imperial Oil & Gas acreage. This conclusion is further supported by information released to the market by Armour Energy (with the announcement of the drilling results from the Myrtle Basin 1 well and the Lamont Pass 1 wells drilled in 2013 and reported to the market in that year) that suggests the basin becomes increasingly liquids-prone towards the Imperial Oil & Gas acreage northwards of the Armour Energy southern McArthur Basin tenements.

Information was recently obtained concerning a mineral core hole (DD97WG002). This is located 16km north west of the IOG BCF-SC-04 well (Figure 2 & 3). It reported penetrating organic carbon-rich black shales comparable to those encountered in the IOG drilling program, providing further evidence of the presence of petroleum prospective shale source rocks within the target St Vidgeon Formation. IOG plans to obtain samples of core from the DD97WG002 well for comparative analysis with the results from the recent IOG program. The results of those

comparisons and further interpretation from the 2014 drilling programme will be reported in due course.

Historical data and mineral exploration holes drilled across the region previously predicted that shale beds within the Barney Creek and equivalent formations (such as the St Vidgeon Formation) would comply with a simple depositional model where they are widespread, thick and have been buried deep enough at all locations to generate oil and gas. The recent core drilling by IOG in the St Vidgeon region has confirmed the IOG prediction that lithofacies distribution and thickness within the basin are more complicated than this initial model suggested and that basin margin locations, as expected, are likely to be characterised by thin stratigraphy and display representation of the carbonate facies. The IOG acreage contains substantial large 'basin centre' segments that are remote from such basin margin locations.

Stratigraphic Considerations and 'Sweet Spots'

Tectonic and structural modelling by IOG demonstrates the geology of the St Vidgeon Region to be distinct from and to separate, the north from the south McArthur Basin segments. This conclusion was evident when initial mapping was undertaken by the Northern Territory Geological Survey Geologists.

Basin modelling, stratigraphic correlation and other ongoing geological studies by IOG have demonstrated that the St Vidgeon region comprises a regional, shallow, structural high, and the thrust faults bounding it are likely to have seeded along formerly extensional faults that influenced the gross depositional environments, rock thickness and lithology of the McArthur Basin fill. At the margin of the structural high west of St Vidgeon and close to IOG's 2014 core well locations, the thickness of the Proterozoic basin sequences thin dramatically and crystalline basement is exposed at surface. In such a basin setting it is predictable that the shale lithologies characteristic of the basin centre to the east within the IOG acreage, would have been diluted at the basin margin by coarser clastic and carbonate lithologies more consistent with deposition on a shallow water shelf.

Given that IOG penetrated 18.5 metres of black carbonaceous shale in this zone, with tentative early evidence of petroleum (gas and liquids) is extremely encouraging. Once all the data has been prepared, interpreted and integrated with the regional studies IOG will finalise its future operational plans.

As an understanding of the basin is developed, the ongoing objectives will be to focus on locating the shale petroleum sweet spots forming the candidate areas for future exploration deeper drilling in the basin, remote from the detrimental effects of surface weathering encountered in the field studies and shallow core drilling.

WHERE TO NEXT?

- Complete detailed analysis of core samples from recent drilling program
- Obtain existing core samples from DD97WG002

- Continue the development of the 3D model and integrated Common Risk Segment Model for the basin.
- Continue to meet the work requirements for EP184 as defined by the Department of Mines & Energy. Once results of the recent core drilling program are finalised the Company will complete the next stage of the work programs.

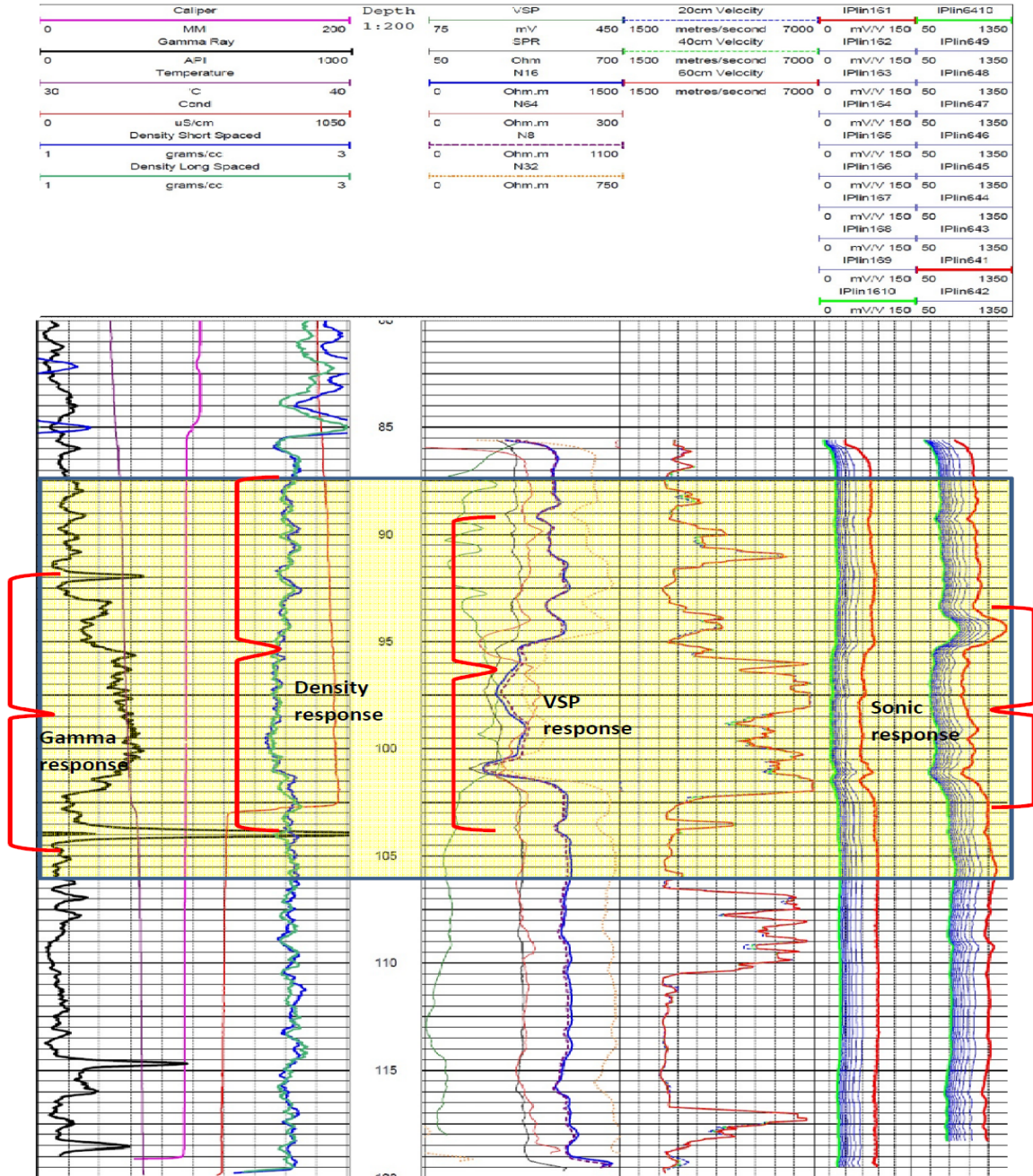


Figure 1: BCF-SC-04 composite wireline log profile typical of the shale formation in this margin basin setting. (NB: all depths are in meters.) The signal response data in this log is consistent with a positive petroleum generation signature. The log shows a high potential carbonaceous shale interval with the positive gamma, density SP and sonic response.

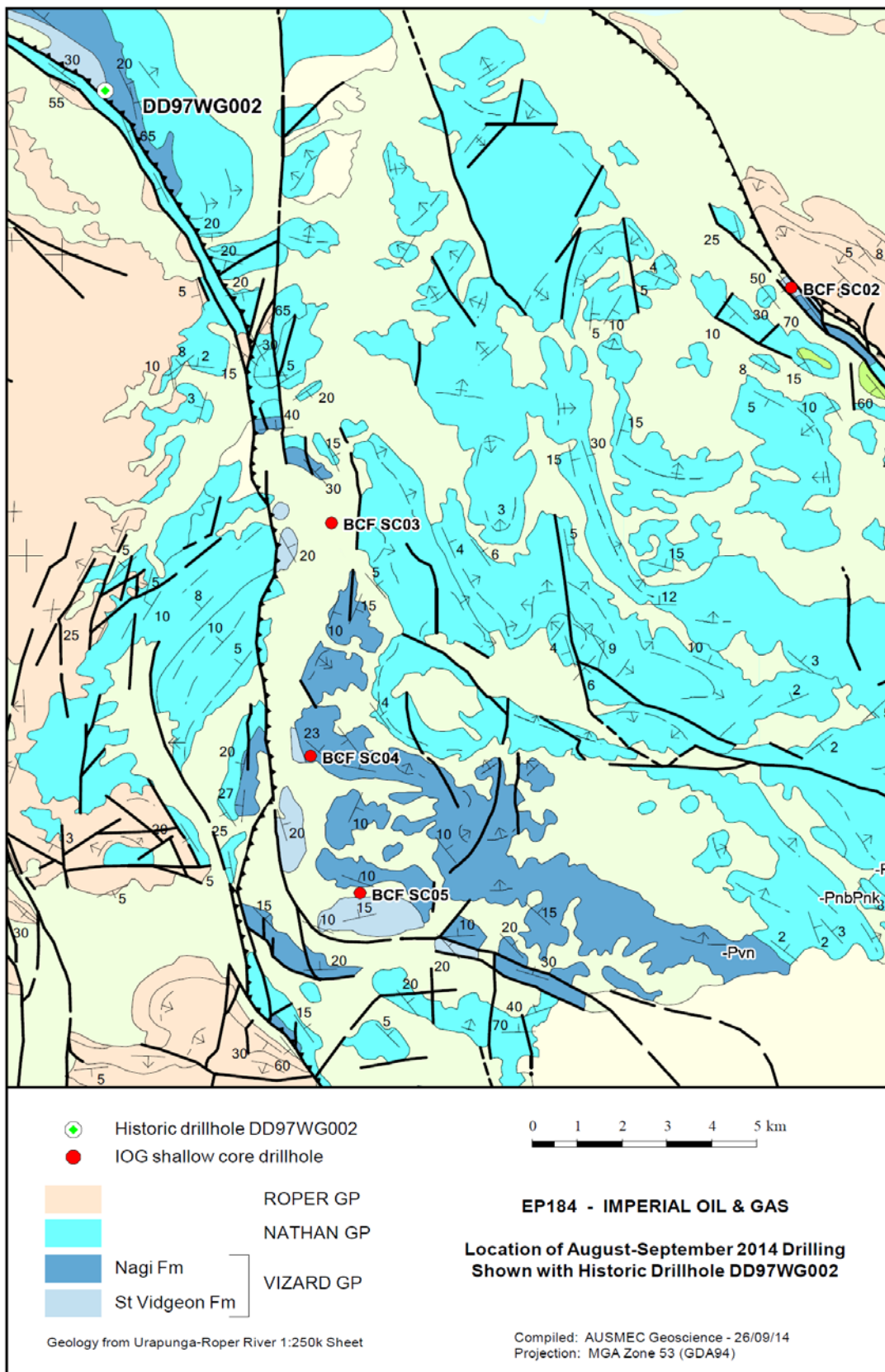


Figure 2: Location map of solid geology of the St Vidgeon region of EP184 showing position of the IOG core holes and historical core hole DD97WG002. (Solid geology is based on the NTGS Urupunga – Roper River 1:250K sheet and displays the major regional tectonic features.)

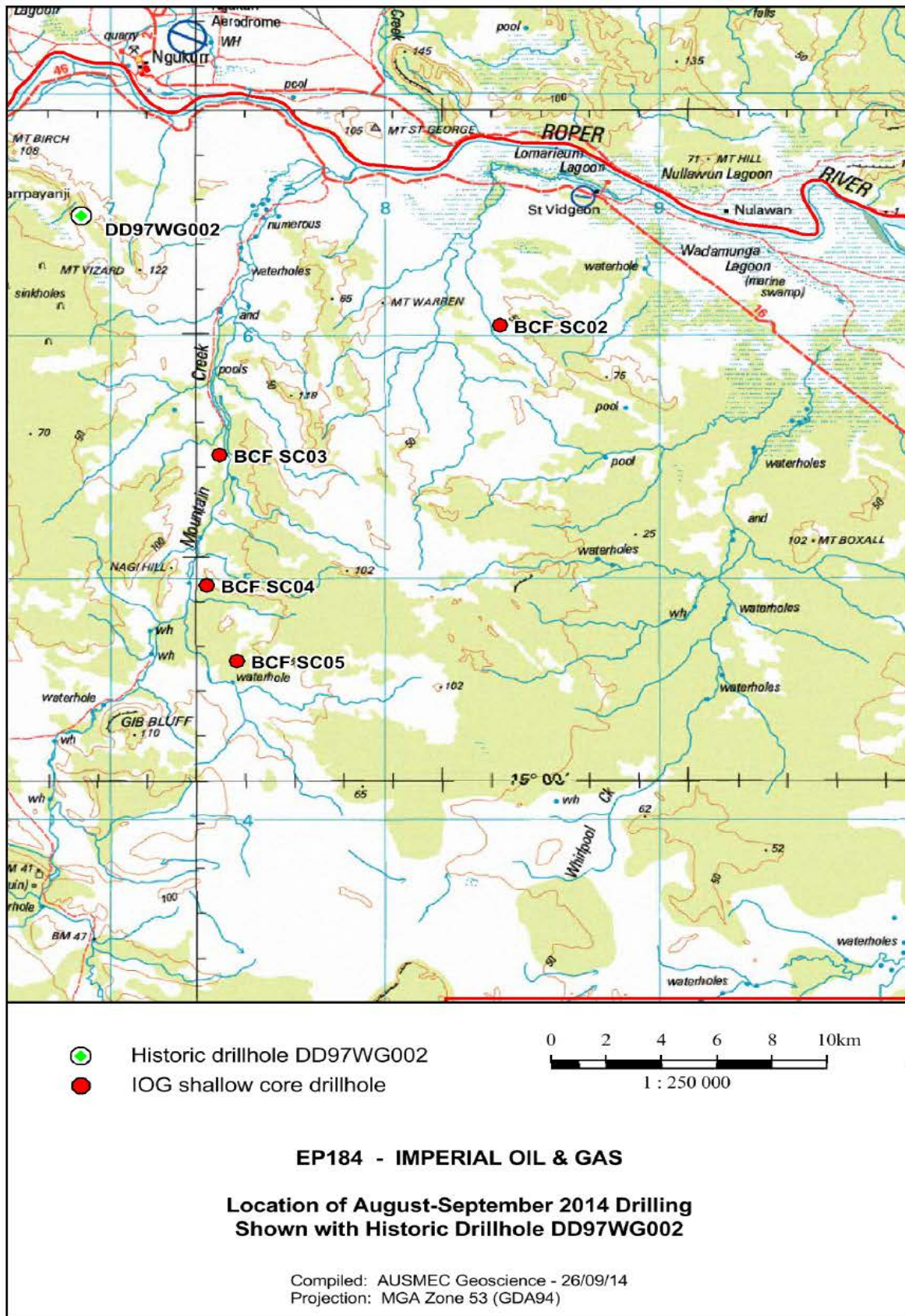


Figure 3: Location map of the St Vidgeon region of EP184 showing IOG core holes and historical core hole DD97WG002.