APPENDIX A

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Consulting
Software
Courseware
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Petrophysical Analysis Report

Beachcomber 1, Peoppels Corner 1, and Thomas 1 Wells Poolawanna and Peera Peera Formations Northern Territory, Australia

Prepared for
Tamboran Resources

Prepared By
E. R. (Ross) Crain, P.Eng. 21 May 2012

~ Oil & Gas Well Petrophysical Log Analysis ~
~ Training, Mentoring, and eLearning ~
~ Forensic Log Analysis and Troubleshooting~
~ Multi-Discipline Integrated Project Management ~

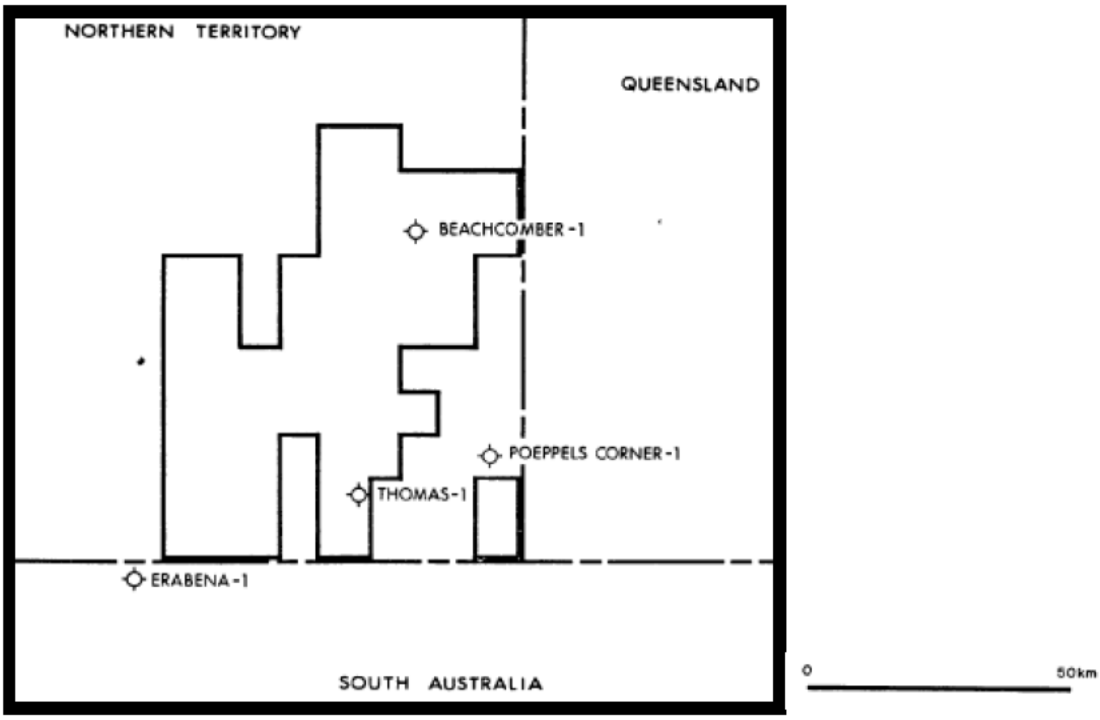
INTRODUCTION

This is an update to our Petrophysical Analysis Report dated 21 May 2012. We were originally requested by Colin Anderson of Tamboran Resources to analyze the log and core data over the Poonawanna and Peera Peera formations in 3 wells in the Erromanga Basin of northern Australia. New TOC data was delivered to us on 15 May 2012 which suggested a recalibration of our earlier TOC calculation would be appropriate. We were further requested to analyze the Thomas 1 well down to total depth and to run an addition set of cutoffs for the net pay estimates on all three wells.

Except for these changes, the balance of this report is identical to the earlier version.

The basic goal of this petrophysical analysis is to estimate total organic carbon (TOC) from well logs, calibrated to laboratory assay data. In addition, the usual calculations for shale volume, porosity, water saturation, and permeability were to be run.

The three wells studied form the corners of a triangle approximately 50 km on a side, as shown on the map below.



Knowledge of the reservoir characteristics was derived from geological reports supplied by the client. The zones of interest were described as sandstone, siltstone, and claystone with moderate to low porosity. Coal and coaly (carbonaceous) intervals were also noted.

AVAILABLE DATA

The wireline log data was provided in digitized format by the client, and included modern resistivity, density, neutron, sonic, PE, GR, and caliper logs.

Conventional core analysis data was available for a few sidewall cores in one well. Sample description logs were provided for each well.

A few TOC assay values were available for each well. A larger sample set was provided for Thomas 1 which has been incorporated into this update.

ANALYSIS PROCEDURE

Digital log and core data were provided by the client. These data were analyzed with our proprietary META/LOG petrophysical analysis script running in the GeoGraphix PRIZM log analysis package.

Shale volume was calculated from GR curves. Individual clean and shale lines were picked for each zone in each well.

Porosity was calculated from the shale corrected density neutron complex lithology model. This model compensates for heavy minerals if any are present, so the result is relatively independent of mineralogy. As a confirmation, the shale corrected sonic log model was also run, using quartz as the matrix mineral. The two models give similar results in these reservoirs.

Log analysis porosity is lower than that from sidewall cores, which is a common occurrence with such samples.

Lithology was calculated in a 2-mineral model using density neutron data, with quartz and dolomite (representing the average properties of typical heavy minerals). The density neutron separation and PE values in the cleaner sands suggest the mineral mix is dominated by quartz with little heavy minerals present. This is confirmed by sample descriptions.

The Simandoux equation was used for water saturation calculations. Standard values of the electrical properties (A=1.0, M = N = 2.0) were used in the saturation equation, as no special core electrical properties were available.

Formation water is described in the geological reports as being fresh meteoric water. However, the apparent water resistivity (RWa) values in obvious water zones in the lower part of the Peera Peera in all wells, and in the Poolawanna in the Thomas 1 well do not confirm this opinion.

Water resistivity was calculated from the resistivity and porosity of the clean, obvious water zones. As a result, water resistivity was selected at 0.62 ohm-m at 25C.

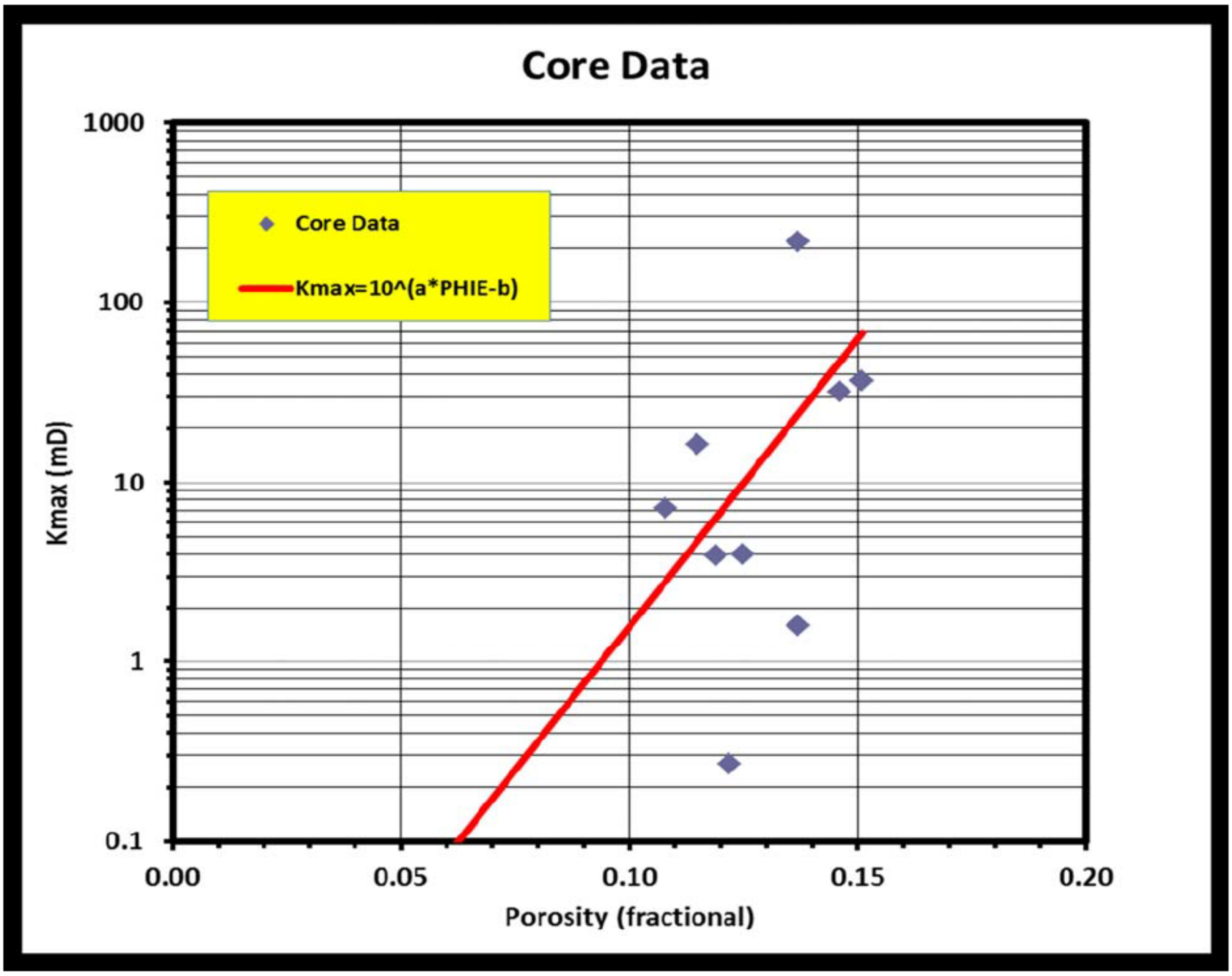
Temperatures from the 3 wells were averaged to give a geothermal gradient of 3.8 C per 100 meters, giving a formation temperature of 120C at 2300 meters KB.

The water saturation calculates as 90 to 100% in the water zones and 45 to 60% wet in potential hydrocarbon zones. These latter saturations are typical of fine grained "tight oil" plays elsewhere in the world. A fresher RW would force water saturation to exceed 100% in the water zones.

It should be noted that the water resistivity in the Algebuckina above the Poolawanna is much higher, probably as high as 2.2 ohm-m at 25C. This is confirmed by the RWa calculation and the much more positive SP deflection here compared to the potential hydrocarbon zones below.

There is limited water resistivity data and limited water saturation control from core analysis data. There is no capillary pressure data and no electrical properties data. As a result, log analysis water saturations are somewhat speculative.

Permeability was derived from the regression of core permeability with core porosity from sidewall cores in Thomas 1. Because of percussive effects on such cores, both porosity and permeability are often higher than equivalent values from conventional cores. The equation found was Perm = 10^(32.0 * PHIe – 3.0) as shown on the graph below.



Total organic carbon (TOC) was calculated with the Issler method using density and resistivity log data, with a scale factor of 0.3. The match to sample assay data is excellent in all three wells, except for some high-value data points, which are presumed to be coal or coaly intervals.

Rock mechanical properties were not calculated as these results were not requested. Such calculations are useful in the design of hydraulic fracturing programs in both vertical and horizontal wells. The calculations are based on a reconstruction of the density and sonic logs, based on the petrophysical analysis results described above, combined with the standard elastic constants equations.

CONCLUSIONS

Petrophysical analysis for porosity and water saturation is believed to be reliable based on conventional petrophysical methods and reasonable parameter assumptions.

There is limited water resistivity data and limited water saturation control from core analysis data. There is no capillary pressure data and no electrical properties data. As a result, water saturations are somewhat speculative.

The reservoir intervals with log analysis hydrocarbon shows have not been produced or tested, and there is no offset production. These shows are not yet proven and may be artifacts of varying water resistivity or other factors.

Cutoffs used to calculate Net Pay are arbitrary and may not predict productive zones accurately due to the data limitations outlined in this report. In any case, massive stimulation and horizontal wells are presumed to be necessary to produce from these low porosity, low permeability rocks.

A modern drilling, sampling, logging, and testing program with a full complement of laboratory measurements would be needed to confirm or deny these results.

Further petrophysical data, such as formation water samples, capillary pressure curves, electrical properties, XRD or thin section mineralogy (especially bulk clay volume) are needed to refine this analysis.

The recommended logging program for new wells would include the usual quad-combo suite with PE and spectral gamma ray curves, plus dipole shear and compressional sonic logs to assist in stimulation design. The nuclear magnetic resonance log may be useful in identifying moveable fluids.

Formation tops and formation names were provided by the client, and were used on our answer and raw data plots for zone identification purposes only. We express no opinion on the correctness of the name designations or associated depths.

Respectfully submitted

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DISCLAIMER

All interpretations expressed in this report, and contained in any attachments thereto, are opinions based on inferences from geophysical well logs and/or laboratory measurements provided by the client.

No economic decisions should be made by anyone based solely on the results or opinions expressed in this report or its attachments. The reader should exercise prudent business practices along with sound geological and engineering judgment before any further actions are undertaken.

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