

Commercial oil production was established on the Newport Banning Ranch in 1943 by Macoil Corporation. Macoil drilled over 100 wells in the three shallowest oil producing horizons (identified from shallowest to deepest as the "A", "B" and "C" Zones). Unfortunately, the high initial production rates proved short lived and by 1951 oil production rates had declined by 75%. In an effort to solve this problem, a number of oil operators had begun testing alternative methods of producing the oil left behind after primary production methods were exhausted. One such operator was G. E. Kadane and Sons (Kadane), who had developed an expertise in secondary recovery methods and was searching for a candidate property in California to apply its methods. Kadane purchased Macoil's interest in the Newport Banning Ranch in 1951. Between 1951 and 1957, Kadane drilled 40 wells to gain additional information on the geology of the "A", "B" and "C" Zones and complex faulting underlying the Newport Banning Ranch. In 1963, Kadane completed a study detailing of its findings from its drilling operations in determining the volume of oil sand present under the Newport Banning Ranch.

Exhibits prepared by Kadane depicting the results reported in its 1963 study are presented below.

As can be seen from the results of the Kadane study, the A Zone oil-in-place is found on the north half of the Newport Banning Ranch, the B Zone oil-in-place is found throughout the Newport Banning Ranch, and C Zone oil-in-place is found on the south half of the Newport Banning Ranch.

In developing its consolidation plan, Applicant located and configured the ORAs to provide access to the oil-in-place in the A, B and C Zones. The A Zone oil-in-place can only be accessed from ORA North, the B Zone oil-in-place can be accessed from both ORA North and ORA South, and the C Zone oil-in-place can only be accessed from ORA South.



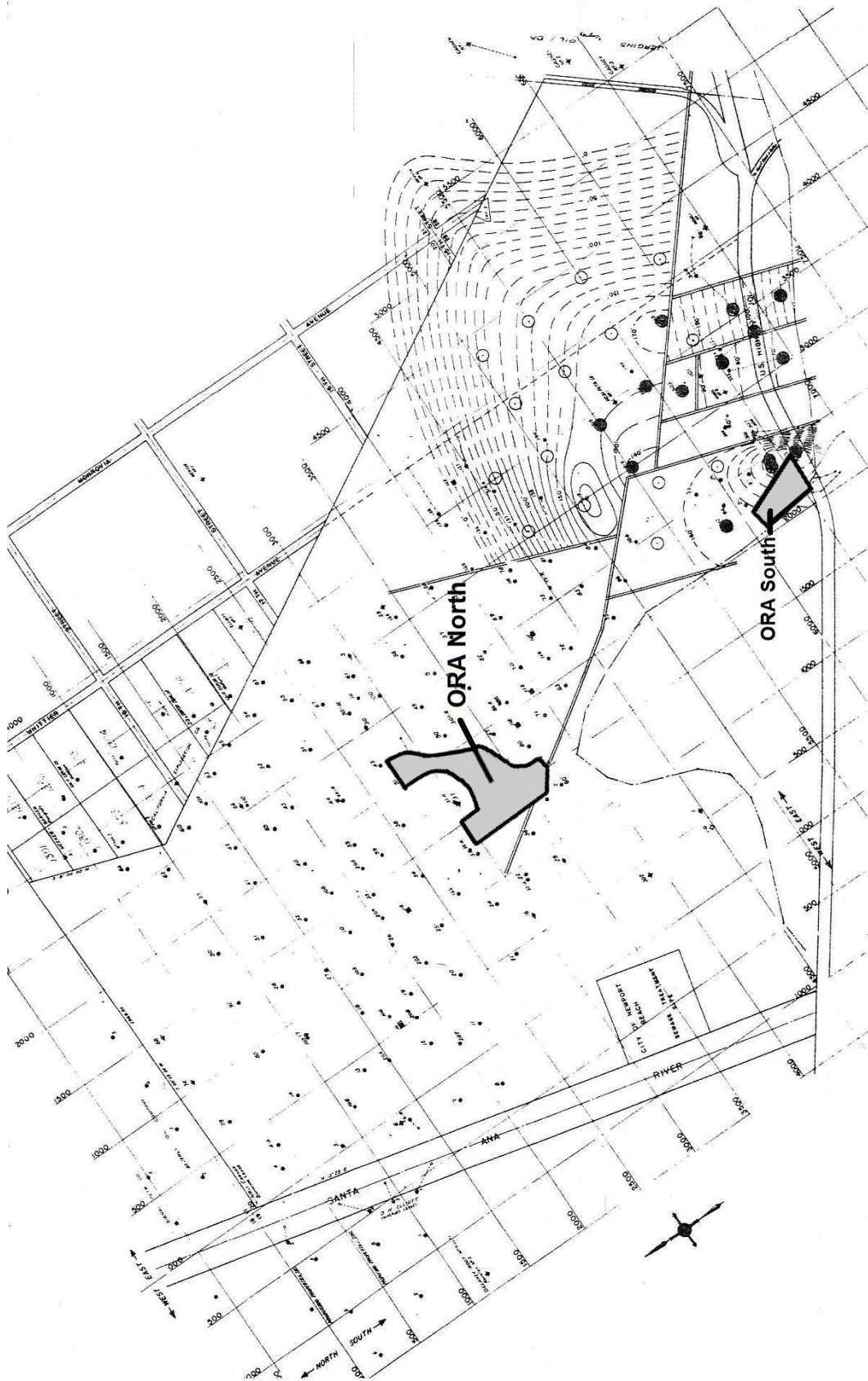
A Zone - "A-1" Net Oil Sand



A Zone - "A-2" Net Oil Sand



B Zone Net Oil Sand



C Zone Net Oil Sand