

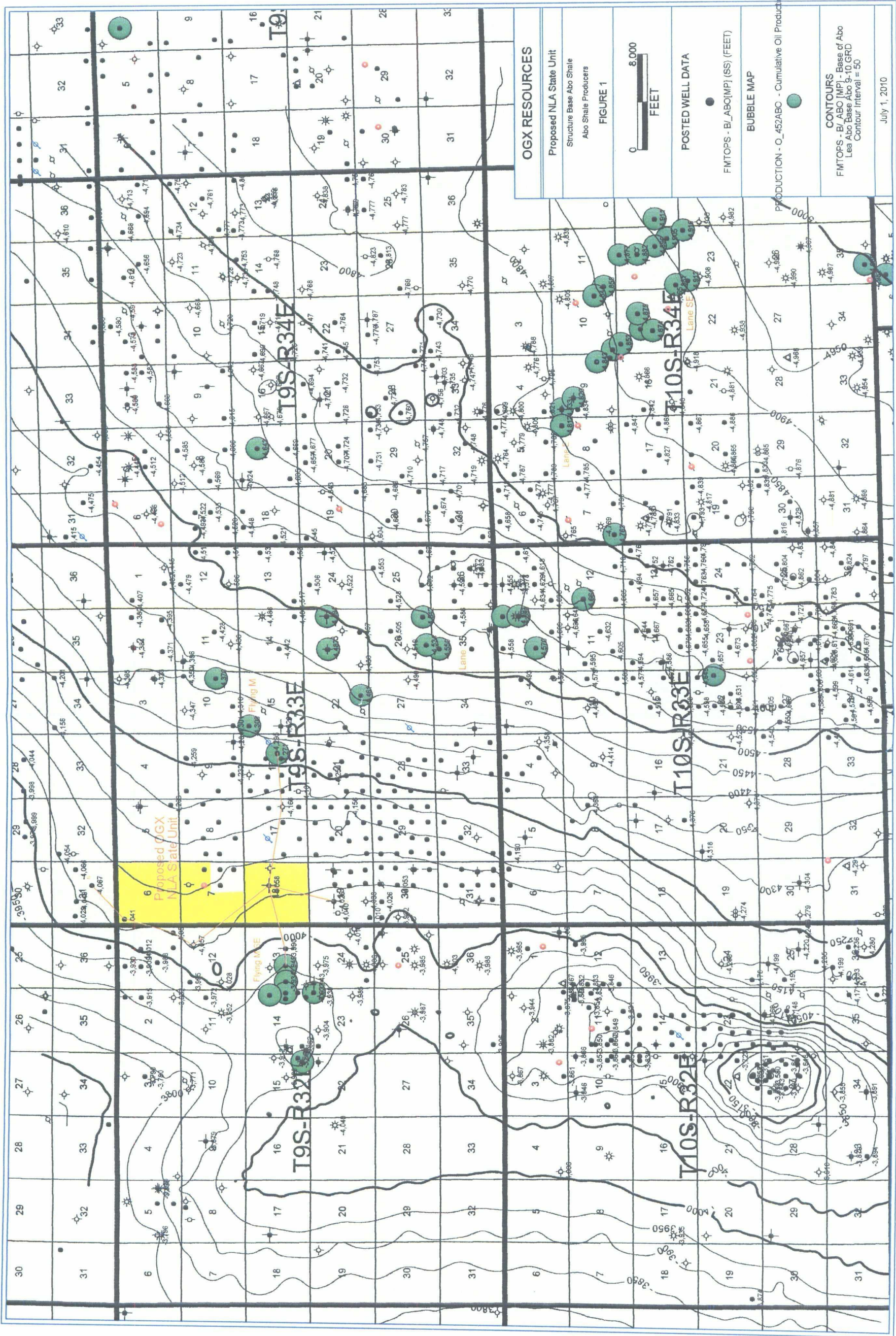
## Geology --

The proposed OGX State Unit is on trend with the Flying M, Flying M SE, Lane, Lane E, and Lane SE Abo fields. A trend of scattered porous lower Abo reservoirs extend in a NW-SE direction in a dip orientation to the current strike of the basin. The fields are isolated from one another and do not have a significant structural component to their trapping mechanism (see Fig. 1). Lower Abo reservoirs occur when dolomite porosity within the section is preserved and filled with hydrocarbons. If the section was never exposed (always submerged), a tight limestone facies is present. If the section was completely exposed to the Sabkha environment, the dolomite porosity is occluded by anhydrite. Production in this area is dominated by vertical completions with some wells having a production life in excess of 45 years. The dolomite porosity in the lower Abo is thin, heterogenous, and hard to predict using a vertical well program. Horizontal wells to the south have proved to be a better method of finding commercial completions in the lower Abo dolomite.

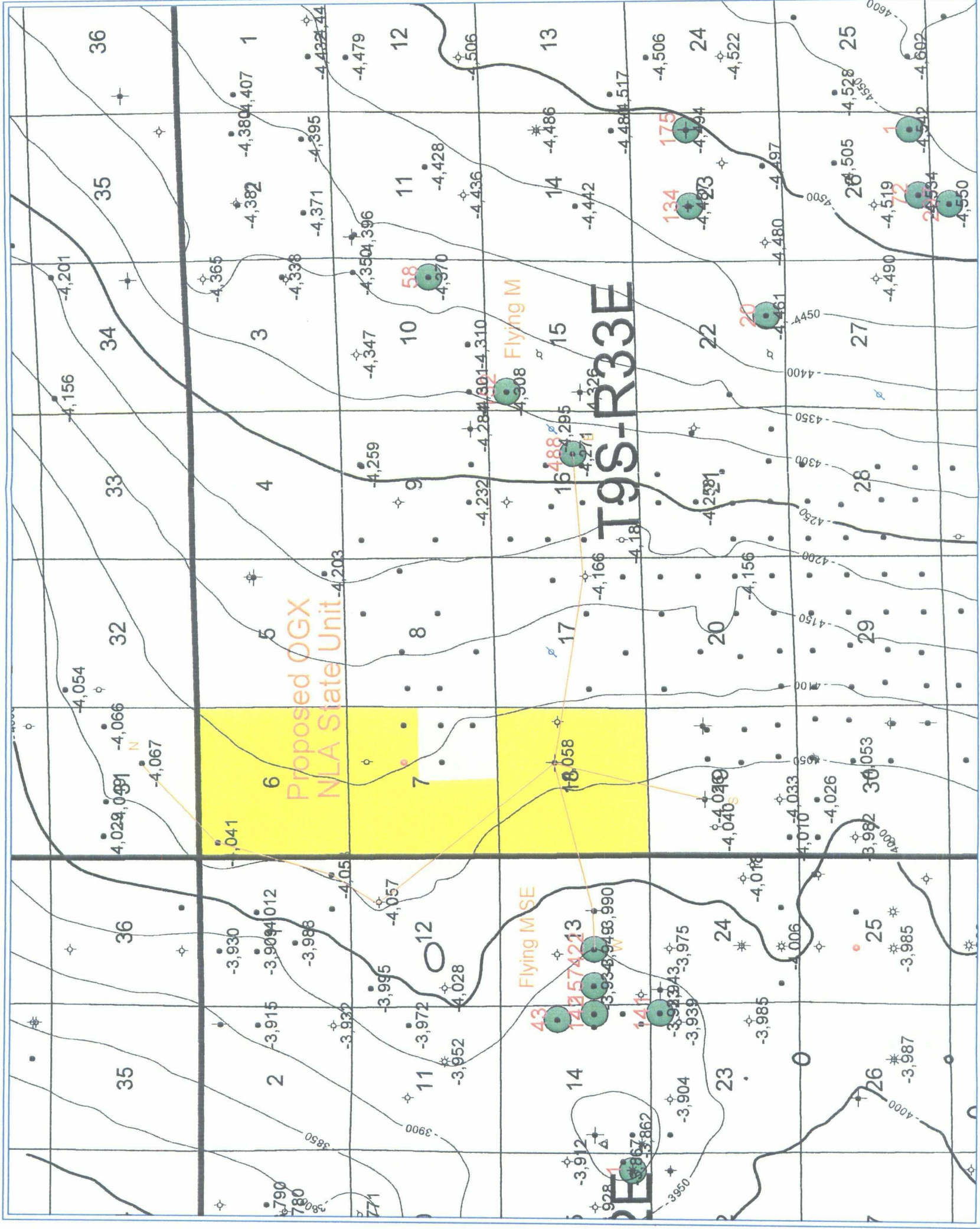
The proposed unit lies between the Flying M and Flying M SE Abo fields. These fields are highlighted by wells that have produced in excess of 400 MBO. The structure map (Fig. 2) shows the productive interval in this area extends from a subsea value of -3950 feet to -4550 feet. Water production rates do not increase in the downdip direction. This indicates these fields are individual reservoirs within a regional trend. The unit outline area contains wells which encountered lower Abo dolomite porosity but were too tight to have commercial production. The W-E cross-section (Fig. 4) shows the porous wells in the two fields to the east and west of the proposed unit. Gross and net Abo porosity values (Fig. 3) exceed 40 feet and 20 feet respectively. Offsets to these wells encountered dolomite, but net porosity values are significantly less than the producers, and the wells were non-commercial in the Abo. The N-S cross-section (Fig. 5) shows the wells in sections 1, 12, 18 and 19 with dolomite facies but net porosity values in the non-commercial range for vertical completions. This unit outline is being proposed in order to drill a horizontal well in the lower Abo dolomite section and encounter and commingle pockets of porosity within the E-W dolomite porosity trend. The proposed unit is bounded to the north and south by wells that have thin gross dolomite values and less than 10 feet of net porosity (see Fig. 3). The proposed unit is bounded to the east and west by Abo production and is in a good location to avoid depletion from these existing wells. The approval of this unit will allow the operator time to evaluate the first horizontal well and determine the best method to prudently develop the area.

Oil Conservation Division  
Case No. \_\_\_\_\_  
Exhibit No. 5









OGX RESOURCES
Proposed NLA State Unit
Structure Base Abo Shale
Abo Shale Producers
FIGURE 2
0 4,000 8,000 FEET
POSTED WELL DATA PRODUCTION - O_452ABO (BBL)
FMTOPS - B/ ABO(MPI) (SS) (FEET)
BUBBLE MAP PRODUCTION - O_452ABO - Cumulative Oil Production
CONTOURS FMTOPS - B/ ABO (MPI) - Base of Abo Lea Abo Base Abo 9-10 GRD Contour Interval = 50
July 1, 2010



