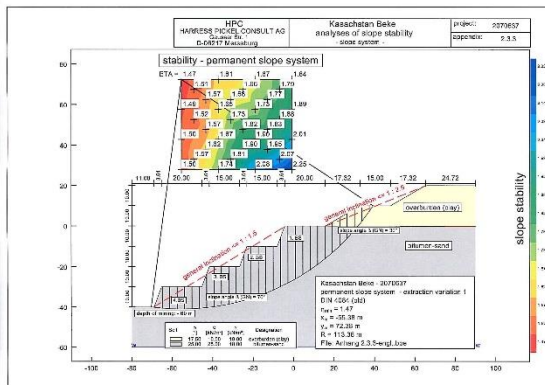


# Beke, Oil Sand Field, Mangystau Region, Republic of Kazakhstan

Client name: FIDE Ltd.

Service area	Contract value	Project duration
Extraction Planning	confidential	2007 - 2011



## Project description:

The oil sand field was known since the ninetieth century and detailed explored in the 1970ies. From this time on oil sand was mined in small scale close to the surface in a small open pit. Until 1991 further exploration was done. The client wants to exploit the oil sand for commercial use. HPC was contracted with several consulting and engineering tasks like the reserves estimation, a Feasibility Study for the oil sand treatment as part of a Bankable Feasibility. Furthermore HPC had to develop a mine plan for a yearly production of 500,000 tons of bitumen.

## Further project data:

- about 10 million t bitumen
- licence area 10 km<sup>2</sup>
- about 300 million m<sup>3</sup> excavated material
- about 2,000 drillings
- about 1 million data

## Purpose:

- development project, mine plan
- Bankable Feasibility Study

## Our services:

- technological planning of all mining activities including recommendations for appropriate equipment for open cast mining
- geotechnical calculations
- calculations of the slopes
- calculation of dewatering
- geohydraulic calculations
- calculations of the tailings
- planning of the Infrastructure
- preliminary planning regarding all related national and international regulations, standards and laws

## Client benefits:

- 3D-Modeling of the mine plan considering all frame conditions as base for a Bankable Feasibility Study

