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Ghawar

The world's biggest oil field

RULES UPDATE



MÜCKE SPIELE

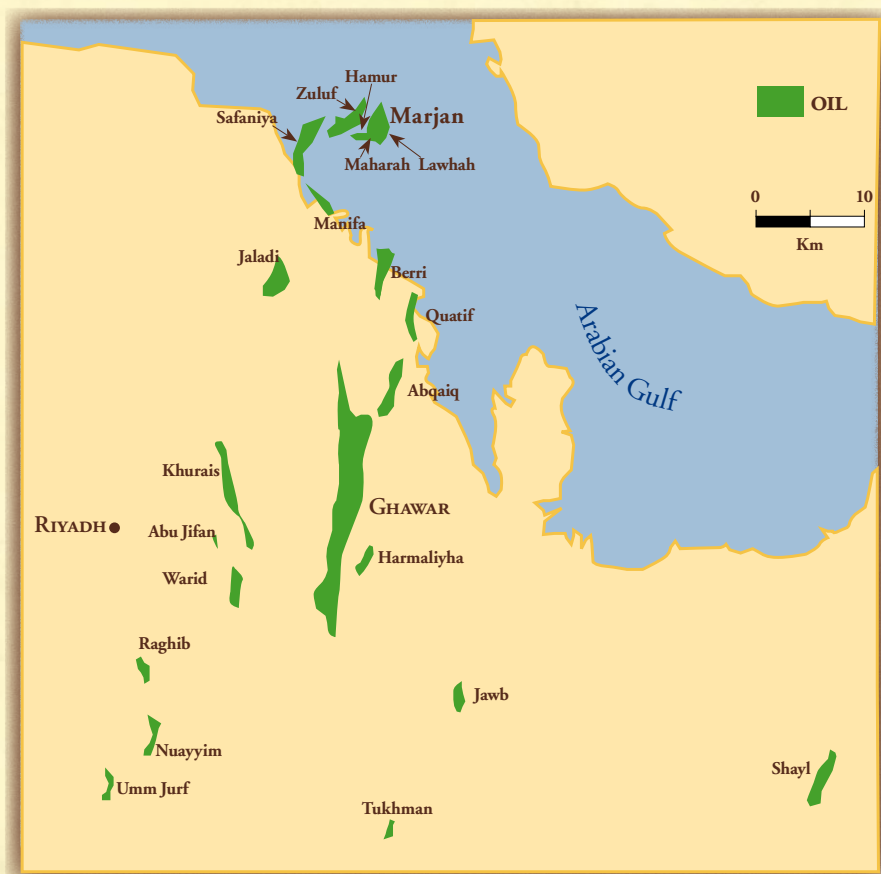
GHAWAR

(ARABIC, رَاوِغَل, AL-GHAWAR) IS THE WORLD'S BIGGEST OIL FIELD.

Ghawar is situated in Saudi-Arabia and has been discovered 1948/49. About 60 to 65% of the total oil production of Saudi-Arabia from 1948 to 2000 derives from this one oil field. The current production is estimated to be about 5 mln. Barrels per day (1 barrel = 159 litres), which equals about 6% of the daily world-wide production (~84 Mio. barrels).

Estimates of the recoverable amount of oil in Ghawar vary between 70-170 gigabarrels. Currently, 8 million barrels of seawater are pumped into the oil field every day to get the oil up. In 2005, discussions came up that the Ghawar oil field had reached its peak. The internet page of "Energy and Capital" in 2006 cited a spokesman of the state oil company Saudi Aramco who reported a decrease in the oldest oil fields (including Ghawar) of 8% per year.

In a book published in 2006, an U.S. oil investment banker described the decline of Ghawar as a sign that the global peak production had already occurred and warned of large economic, political and social tensions to follow. The novelist Andreas Eschbach used this theory as background in his novel "Ausgebrannt".



GAME IDEA

Saudi-Arabia is a kingdom with constitutional monarchy. And the royal family has decided to give concessions to foreign companies in order to improve the extraction of the giant oil reserves in the Ghawar oilfield. Your enterprise too, is one of the fortunates chosen from a huge number of interested applicants. However, because of the expensive “application” fee, you now are forced to extract as many oil as possible. But also the biggest oilfield once will be empty...

CONTENTS

20 oilrigs in 4 different colours

4 trucks in 4 colours

5 trains in 5 colours

60 oil platforms

40 oil stones in 4 qualities

Oil - depending on its chemical composition – is available in different states. In Saudi Arabia, there are varieties of *Arabian Extra Light*, *Arabian Light*, *Arabian Medium*, *Arabian Heavy*. In the game, these different varieties are represented by the different colours of the oil stones.

4 discs in 4 colours

4 pawns in 4 colours

3 barrels

1 game board (two-sided)

1 counting board

2 dice

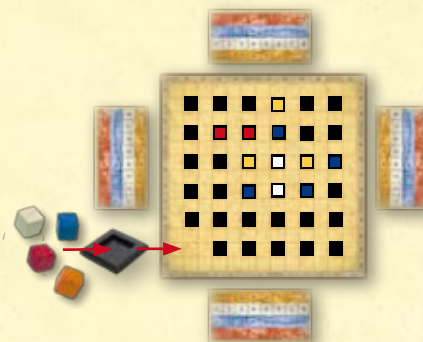
4 store houses



BASIC VERSION

In the basic version, the game is played on the side with the square playing fields. The **36 production platforms are placed on the board** on each spot marked with a sand dune (the wider opening face-up). Each player receives the game pieces of one colour.

The base camp of the players lies on one of the four sides of the game board. Here they store the oil stones and hither they have to transport the game pieces. The remaining 36 oil stones are arranged on the 36 platforms, so in the end, every platform contains one oil stone. The remaining oil stones are not needed in this game.



The counting board is placed beside the game board. In the basic version only the bottom area with the four circles is needed. Here is shown, which type of oil brings in what number of winning points. At the beginning, the four wooden discs are placed randomly on this four circles.

The black train is placed on position 36 of the scoring point track, showing how many oil stones are yet to be recovered. Dices and oil barrels are set aside. Some of the platforms and the four running man are not needed in the basic version of the game.

The remaining trains are used for showing the winning points of each player and thus are placed on position “0” of the track. The player that has last been to a gas station begins the game.



PLAYING THE GAME

The game consists of **two phases**:

1. In the first phase the players place their oil rigs
2. In the second phase the oil is delivered

PHASE I – PLACEMENT OF THE OIL RIGS

The active player rolls the dice. The **result indicates the co-ordinates** of the point where the player can place an oil rig, always seen from his camp (his rim of the game board). The left-most fields corresponds to column “1”, the six fields lying next to the base camp correspond to line “1”.

The player can choose which of the dice he uses for column and which for line, so he usually has **two choices**.

On the chosen point, the player places one of his oil rigs onto the platform, so that the oil stone is covered by the oil rig. If both options of the dice correspond to a platform already are occupied, the player rolls the dice again until he gets the co-ordinates of a free platform.

The other players follow clockwise, until all oil rigs have been placed.



PHASE 2 – DELIVERING THE OIL

In the second phase, trucks are moved on the board to get to the oil rigs in order to deliver the oil stones and transport them to their camps. **Oil stones can only be delivered if an oil rig has been erected over them.**

In this phase, the player can choose between three options, of which he can perform one per round:

- Throw a die to move a truck
- Move oil rigs
- Recovering of platforms

MOVING TRUCKS

As described before, the base camp of the players are located on the four sides of the game board. From there, the vehicles move onto the board. The players can choose at which point of the board they will enter.

The active player throws the die and moves his truck accordingly; each field counts for one point of the die. Vehicles may turn at each intersection. However, it is not allowed to move backwards or back and forth. Trucks are blocking each other, i.e. overtaking is not possible. Thus, one can also block enemy vehicles.

TRUCKS



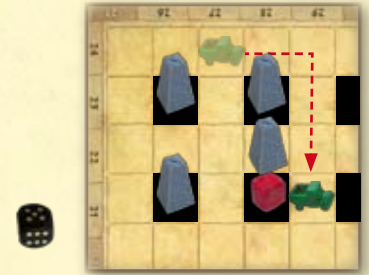
In case a truck reaches a field next to an oil rig, the player can extract the hidden oil stone. If there is no oil stone under the oil rig – which means the player has not observed closely – bad luck. **A good memory is paying off here.** In case the player still has some action points left after the extraction, he can continue his move.

Searching for oil stones under one's own oil rigs is free. If, however, one searches under oil rigs of other players, the owner of that oil rig receives one winning point and places his train one step forward on the scoring track. **A truck can only load one oil stone at a time**, thus the player must move it to his camp to unload. As soon as a truck leaves one of the outer fields in the direction of his camp, the player can unload the oil stone. The oil stone is placed in the player's warehouse in the corresponding row. The warehouse is filled beginning in column 1. After that, the black train is moved one field down - it shows how many oil stones are yet to be discovered.

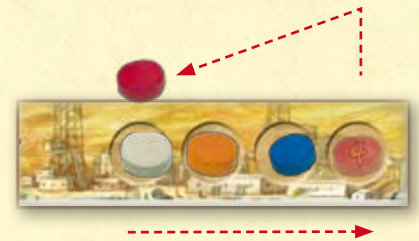
Subsequently, the price list is adjusted. The disc of the recently traded oil quality is set up to position "1" on the price list, the other discs are moved in the existing sequence.

After that, the truck can proceed on the game board, if the player has left some action points. **For the successful delivery, the player receives winning points** according to the counting board and places his train forward accordingly.

Tip: The value of the different oil qualities changes during the game depending on supply and demand (i.e. what oil type is been dealt with). Thus, it is important to remember where what oil type is to be found.



A red oil stone has been delivered; the player scores 4 winning points

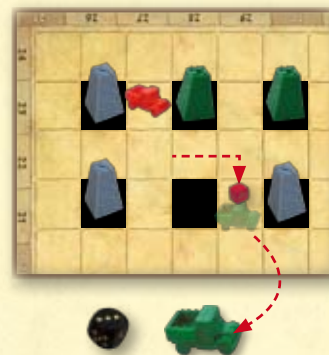


PECULIARITY: RICH OIL FUND



The first three times a player has collected a full set of the four different oil stones, one of the three oil **barrels will be placed in the middle of the game board.**

Once the barrel is placed there and until a player has driven the barrel with his truck into his camp - for which the player will receive winning points - the following rule is applicable: **Each vehicle may eliminate another vehicle from the board** if it precisely ends at the position of that vehicle. The truck kicked-off will be put back into the camp of the opponent (and can be used again from there). If the kicked-off vehicle was a truck with cargo, this cargo remains at the spot where the truck was kicked-off and can be picked-up by any truck moving to or passing this field.



MOVING OIL RIGS

Instead of rolling the die to move a vehicle, a player can also move one of its oil rigs. With that, it becomes possible to deliver oil stones not covered by rigs in the beginning. **An oil rig can be moved horizontally or vertically**, however only on a field with empty platform. One can jump existing oil rigs. Whether a platform contains an oil stone or not, is not relevant.

It is not relevant if a platform contains an oil stone or not. The oil rigs thus is moved on the next available, not occupied platform.



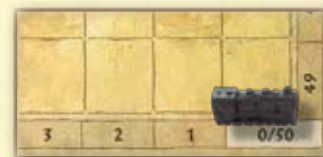
MOVING OIL RIGS

Platforms are expensive tools. Using the **trucks**, players **can collect free, no longer required platforms** (black game-pieces without oil stones and without oil rigs) and transport them into their camp, which will **count for winning points at the end of the game.**

To collect an empty platform, the truck must end his move alongside. The player then can pick-up one platform (not several) using three action points from his throw with the die. It is **not necessary to drive the truck back into the camp**, the platforms can be put directly in the player's camp. The truck thus can move further on from its current position.

END OF THE GAME

The game ends when all oil stones have been delivered, i.e. the black train has reached the position “0” on the scoring track and all oil stones are in the camps of the players. Now, the players receive further points.



In case a player has not collected at least one oil stone of each colour, he has lost the game. For the further consideration of the placement, collected oil stones are no longer relevant

The player who collected the most oil stones of an oil type receives 5 points (in the case of equality, no player receives the points)



The player who collected the least amount of oil stones per type receives 2 minus points (in the case of equality, no player receives the points)



For each barrel the players get 3 points



The player with the most platforms will not get minus points.



The remaining players will receive penalty points equal to the difference to the player with the most accumulated platforms



ALTERNATIVE EVALUATION

Alternatively to the evaluation described before, Ghawar can be played more tactically by **using the counting board**. The rules of the basic version remain as they are, only the following is changed.

SET UP

The game is set up according to the basic rules. The **store houses, however, are not used** this time and can be placed aside.

PLAYING THE GAME

The game turns mostly stay the same. **Collected oil stones**, however, are **not placed in the player's storage, but on the counting board**. Each player there has its own row in his colour.

After the return of his truck, the player places the oil stone on any free space on the counting board, his own row or the row of an opponent. At the end of the game, the players **receive all then still to be read numbers** (not hidden by oil stones) **as scoring points** - black numbers as positive points, red numbers as negative points.

Note: There is a limitation. **In each column**, one number **must stay visible** to the end of the game, that means one player will receive a number of each column as (plus or minus) points. Furthermore, dependent on the number of players, it is to be noted that **not all cubes are placed on the counting board**.

- 4 players: The white cubes are not placed on the counting board.
- 3 players: The white and the orange cubes are not placed on the counting board.
- 2 players: Only the red cubes are placed on the counting board.

For the remaining cubes, players will receive scoring points according to the basic rules, thus according to the prices on the counting board.



MORE RULES

Ghawar can be played in still more ways.

You can find the rules for that under www.muecke-spiele.de/ghawar.

BACKGROUND

“Ghawar” was created as part of the 2008/2009 game author's competition of www.spielmaterial.de. Task was to design a game using a particular set of materials; additional material was allowed. There have been more than 200 participants world-wide. Ghawar made it into the final round of that competition

Author: Johannes Halbig, Editor: Harald Mücke



In “Edition Bohrtürme” also the two winning titles, “Schwarzes Gold” and “Namibia” as well as another finalist, “Global Warming”, have been published.

The games, as well as spare parts and the world's largest assortment of game pieces, dice, counters, cards and other materials for creating board or card games can be found by www.spielmaterial.de.

