

# OIL AND NATURAL GAS

## A Legal Dispute Brewing In the Gulf of Mexico<sup>1</sup>

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**R**ecently, the U.S. press reported that four major international oil corporations, led by the Houston-based giant Shell Oil company, are drilling a prospective commercial well in the Gulf of Mexico at a depth of 7,625 feet.<sup>2</sup> This commercial project, known as the “Baha Project” is situated in the submarine region known as Alaminos Canyon, 200 miles southeast of Corpus Christi, Texas.<sup>3</sup>

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<sup>1</sup> FIRST OF TWO PARTS. This essay is based on Professor Vargas’ article “Mexico’s Legal Regime Over Its Marine Spaces: A Proposal for the Delimitation of the Continental Shelf in the Deepest Part of the Gulf of Mexico,” 26 *Inter-American Law Review* 2, Winter, 1994-95, pp. 189-242.

<sup>2</sup> The four corporations are Shell Oil Co., Amoco, Inc., Texaco, Inc. and Mobil Corp. For additional information, see Nelson Antosh, “Shell, Partners to Reach New Low in Gulf Drilling,” *The Houston Chronicle*, March 12, 1996, p. 1; Rick Hogan, “Four Majors Team Up in Project to Drill Deepest Offshore Well,” *The Oil Daily*, Vol. 46, No. 47, March 12, 1996, p. 1; and, Agis Salpukas, “Four Oil Companies to Drill Well 7,625 Feet Under Gulf of Mexico,” *The New York Times*, March 9, 1996, p. 39.

<sup>3</sup> Shell Offshore, a Shell affiliate based in New Orleans, is the operator of what is



Photos courtesy of PEMEX International Press Office

Four oil giants pooled efforts in the Baha Project to bring up the oil.

Since the existence of this ambitious project was announced in February 1996, “Project Baha” is

being called the “Baha Project.” The name is from the first letter of each company’s lease in that area: Shell’s Branchiosaurus, Amoco’s Anaconda, Mobil’s Hi-C and Texaco’s Alpha Centauri. Each of the four companies holds a 25 percent stake. See Antosh, Note 2, p. 1.

beginning to attract unprecedented attention in industrial, technological and diplomatic circles. This is the first time that four major oil companies decided to pool their technological expertise and know-how to embark upon a joint venture to commercially exploit oil and natural gas located in the Outer

Continental Shelf. The reason is simple. According to recent scientific studies, the Gulf of Mexico basin continues to be a unique geological phenomenon, described as “one of the foremost petroleum provinces of the world.”<sup>4</sup>

Technologically, this project is to become the deepest underwater oil field to be developed in depths as great as 7,865 feet (2,394 meters), beyond the shelf edge, in the Gulf of Mexico. The existence of vast petroleum potential in the deep-water region of this basin, especially in the deep abyssal plain where the water reaches depths of as much as 12,270 feet (3,740 meters), has been known since 1979.<sup>5</sup> However, only recently has the oil industry developed the technology to attempt the commercial exploitation of these deep-water sources.

From a diplomatic viewpoint, the drilling activities of the “Baha Project” appear to be the source of grave concern to the government of Mexico.<sup>6</sup> Two delicate technical questions appear to generate these concerns: first, the deposit Shell Oil Company is targeting in the Alaminos Canyon is just a few miles away from the maritime boundary agreed to by the United



The Gulf of Mexico, one of the world's foremost petroleum regions.

States and Mexico in 1976.<sup>7</sup> In this respect, the crucial legal question consists of determining whether the oil deposit in question extends beyond the international maritime boundary, physically penetrating an underwater area under Mexico's sovereignty. In other words, the fossil fuels in the Alaminos Canyon may include a submarine area which is physically located under the control of both the U.S. and Mexico, a binational submarine area bisected by the international boundary between the two countries.

The second technical question may be even more problematic. Scientific evidence suggests that the Alaminos Canyon deposit may be contiguous to a gigantic source of

oil and natural gas located in the central and deepest part of the Gulf of Mexico. A U.S. Geological Survey Report published in 1981 estimated that in the “maritime boundary region of the Gulf of Mexico [the] undiscovered in-place resources range from 2.24 billion to 21.99 billion barrels of oil (BBO) and from 5.48 trillion to 44.40 trillion cubic feet (TCF) of gas.”<sup>8</sup>

The designated “maritime boundary region” comprises approximately 58,940 square miles (152,660 square kilometers) and is divided into six individual assessment areas

<sup>4</sup> See Richard Nehring, “Oil and Gas Resources,” *The Geology of North America*, Vol. J: *The Gulf of Mexico Basin* 446, Amos Salvador, ed., 1991.

<sup>5</sup> *Idem.*

<sup>6</sup> See Nick Anderson, “Mexico Fears U.S. Drillers Will Siphon Off Its Oil,” *The San Diego Union Tribune*, March 31, 1996, pp. 1-2.

<sup>7</sup> *Exchange of Notes effecting Agreement on the Provisional Maritime Boundary*, Nov. 24, 1976, U.S.-Mexico, 29 U.S.T. 197, T.I.A.S. 8805.

<sup>8</sup> See Richard B. Powers (Ed.) *Geological Framework, Petroleum Potential, Petroleum Resource Estimates, Mineral and Geothermal Resources, Geologic Hazards, and Deep-water Drilling Technology of the Maritime Boundary Region in the Gulf of Mexico*. U.S. Department of the Interior, Geological Survey (Open-File Report 81-265), 1981 at 1 (Summary).

on the basis of their geological characteristics.<sup>9</sup>

The problem is that this gigantic oil and gas deposit, described as the fourth largest in the globe, is situated in a submarine area whose boundaries were not established by the 1976 agreement.<sup>10</sup> Furthermore, as of today, not only has no bilateral agreement been reached

ment to Article 27 of its 1917 Constitution, established a 200 n.m. exclusive economic zone (EEZ) during President Echeverría's administration.<sup>12</sup> The establishment of these maritime zones forced both countries to engage in diplomatic negotiations in order to establish the respective outer boundaries of these zones, especially in areas

*The crucial question is whether the oil deposit extends to an underwater area under Mexican sovereignty.*

regarding the submarine boundary of the continental shelf between the United States and Mexico but, perhaps more challenging, each country has adopted a different position with respect to the legal nature of the submarine area in question.

The legal history of this case should be traced back to 1976, when Mexico and the U.S. adopted a 200 nautical mile maritime zone off their respective coasts. During the Carter administration, the U.S. created a 200 n.m. Fishing Conservation Zone.<sup>11</sup> Mexico, on the other hand, through an amend-

where they overlapped, as in the case of the Gulf of Mexico.<sup>13</sup>

These maritime boundaries were established not only in the Gulf of Mexico but also in the Pacific Ocean by means of an exchange of notes, November 24, 1976.<sup>14</sup> Legally, two sensitive issues derive

1983, the U.S. adopted a 200 n.m. Exclusive Economic Zone. See Proclamation No. 5030, 48 *Federal Register* 10,605, 1983.

<sup>12</sup> In symmetry with the substantive work of the Third United Nations Conference on the Law of the Sea (UNCLOS III) and in anticipation of its resulting 1982 Convention, Mexico was a pioneer in establishing a 200 n.m. EEZ. This was effected by a presidential decree that added a new eighth paragraph to Art. 27 of the Constitution. See *Diario Oficial*, February 6, 1976.

<sup>13</sup> Mexico established the outer boundaries of its 200 n.m. EEZ by a presidential decree published in the *Diario Oficial*, June 7, 1976. On this subject, see Jorge A. Vargas. *La Zona Económica Exclusiva de México*, Mexico, 1980.

<sup>14</sup> For the content of these agreements, see Note 5.

from the content of this agreement: first, that said boundaries were considered to be provisional.<sup>15</sup> And, second, that this boundary did not apply to the continental shelf.

In a diplomatic note that then-Mexican Secretary of Foreign Relations Dr. Alfonso García Robles sent to the U.S. ambassador the same day of the exchange of notes, he said:

I take the liberty of pointing out that our two countries have not yet delimited their respective continental shelves beyond 12 nautical miles seaward from the respective coasts and that the present arrangement with respect to maritime boundaries, based on the Treaty to Resolve Pending Boundary Differences and Maintain the Rio Grande and the Colorado River as the International Boundary, concluded in 1970, only extends the maritime boundary to 12 nautical miles.<sup>16</sup>

It seems that this provisional character of the boundaries moved Mexico two years later to persuade the U.S. government to conclude a definite, more formal type of bilateral agreement for a maritime delimitation. Thus, during the visit to

<sup>15</sup> The title of this Exchange refers to the "Agreement on the *Provisional* Maritime Boundary" (Emphasis added), *Idem*.

<sup>16</sup> Exchange of Notes, see Note 5 at 199 (Emphasis added). In response, U.S. Ambassador Joseph John Jova agreed with the substance of Dr. García Robles' note, thus effecting the bilateral agreement.

<sup>9</sup> *Idem*.

<sup>10</sup> See Note 15.

<sup>11</sup> See *The Fishery Conservation and Management Act of 1976*. Public Law 94-265, 94th Congress, 16 U.S.C. 1801, Section 2. For a Mexican perspective of this zone, see Jorge A. Vargas. *México y la Zona de Pesca de Estados Unidos*, UNAM, Mexico, 1979. By proclamation of President Reagan on March 10,

Mexico City of Secretary of State Cyrus Vance a Treaty on Maritime Boundaries was formally signed at Tlatelolco on May 4, 1978.<sup>17</sup> The boundaries in this treaty were identical to those contained in the exchange of notes of 1976.

Until now, no attempt has been made to explain Mexico's diplomatic strategy to formally "elevate" the

tained in the Gulf of Mexico and considering that the 1976 boundaries were agreed to as only "provisional," decided to formalize a treaty, thinking perhaps that the constitutional formalities<sup>18</sup> associated with this kind of bilateral agreement would offer not only a definite and permanent maritime boundary but would also explicit-

tion" over any riches located in the marine spaces under its sovereignty or control, as provided by the 1982 Convention on the Law of the Sea.

Paradoxically, this attempt to "solidify or strengthen" Mexico's maritime boundaries between 12 and 200 nautical miles seaward led to the current situation caused by the "Baha Project" in the Gulf of Mexico, fraught with not a few concerns. The Mexican Senate approved the Treaty of Maritime Boundaries in a matter of days.<sup>19</sup> From the U.S. side, the treaty's constitutional process was rather disappointing for an expectant Mexico. The Committee on Foreign Relations reported favorably on the treaty in August 1980; however, on September 16, 1980, the U.S. Senate indefinitely postponed consideration of this instrument when questions arose regarding the presence of rich oil and natural gas deposits in the deepest portion of the Gulf of Mexico.<sup>20</sup> Since then, the treaty has been in a state of "legal limbo" collecting dust in the archives of the U.S. Senate for the past 16 years.<sup>21</sup>

Dr. Hollis D. Hedberg, a former executive of the Gulf Oil Corporation and professor emeritus of geology at Princeton University, was the first to call attention to



The area in dispute covers 58,940 square miles.

exchange of notes to a more formal and solemn agreement, such as a treaty. It may be speculated now that Mexico, aware of the enormous mineral riches proven to be con-

ly recognize Mexico's "sovereign rights of exploration and exploita-

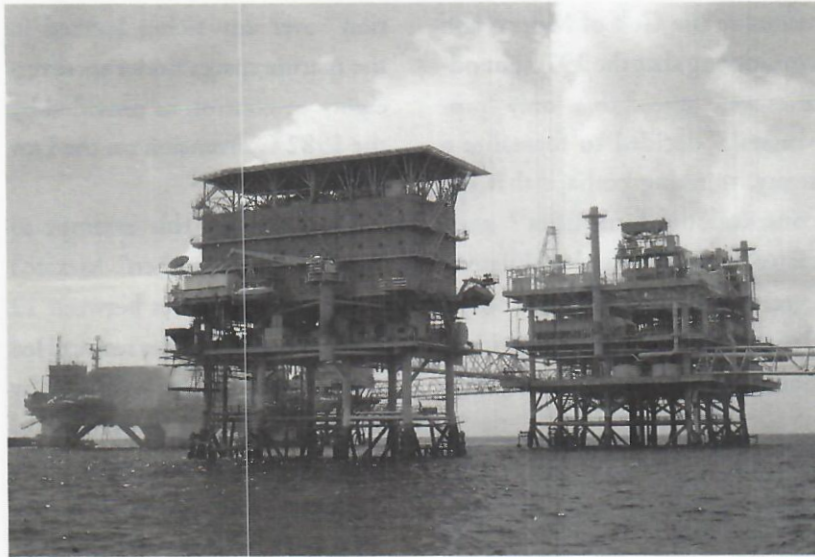
<sup>17</sup> See Treaty on Maritime Boundaries, May 4, 1978, U.S.-Mexico, 17 I.L.M. 1073.

<sup>18</sup> "Treaties" are distinguishable from any other international agreement since they are constitutionally required to obtain some type of approval from the Senate in order to be valid. See Art. 76, paragraph I of Mexico's Constitution and Art. 2, Section 2 of the U.S. Constitution.

<sup>19</sup> See "Decreto por el que se Aprueba el Tratado," *Diario Oficial*, January 22, 1979.

<sup>20</sup> See 126 *Congressional Record*, S.12, 711 at 25,500 (1980).

<sup>21</sup> *Idem*.



The deposits are calculated at 21.9 billion barrels of crude and 44.4 trillion cubic feet of natural gas.

the fact that geological data indicated the presence of:

Some of the most promising, though very deep water, petroleum-prospective acreage off the

U.S. coast anywhere, in an oceanic area located in the central portion of the Gulf of Mexico.<sup>22</sup>

<sup>22</sup> See Hedberg Statement, *Three Treaties Establishing Maritime Boundaries Be-*

As a result of this statement, the U.S. Senate requested the U.S. Geological Survey to conduct a technical assessment of the submarine area in question. This technical agency produced a report in 1981 which clearly confirmed the existence of a gigantic deposit of oil and natural gas in the deepest portion of the Gulf of Mexico.<sup>23</sup> W

*tween the United States and Mexico, Venezuela and Cuba: Hearing on S. Exec. Rep. No. 96-49 before the Committee on Foreign Relations, 96th Cong., 2nd Sess. at 28-33.*

<sup>23</sup> See Richard B. Powers (Ed.), *Geological Report*, Note 8.