
# Energy Monthly News

August, 2020

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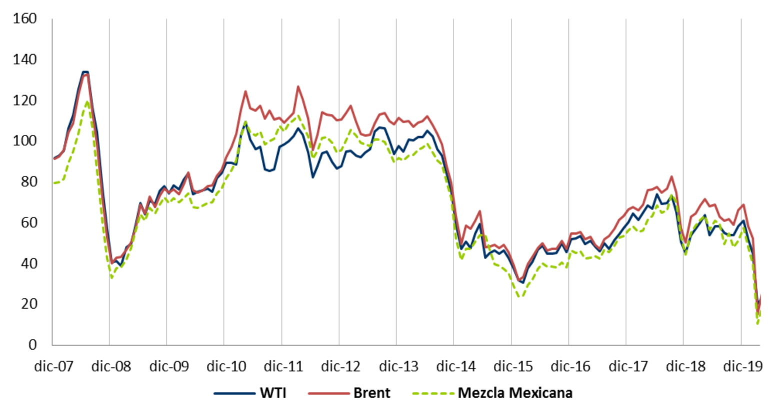
## This month in review

** 26/08/2020* ***26/08/2020*

| | |
|---|---|
| Crude oil price MM US/BD | 41.1 |
| NG price HH* US/MMBTU | 2.6 |
| Mx crude production MMbd - *July* | 1.64 |
| Mx NG production MMpcd - *July* | 4,902 |
| US crude production MMbd - *June* | 10.01 |

| | |
|---|---|
| FX Rate** | 21.92 |

**Crude oil prices**




*Source: EIA. El Reforma, Pemex, Banxico, and CNH*

For daily prices and other news, visit our NEW website www.marcos.com.mx/

## Oil & Gas

### Marcos y Asociados appointed as Regional Representative for the International Association of Drilling Contractors Latin America Chapter "IADC LATAM"

We are pleased to notify that **Marcos y Asociados** has been appointed as the Regional Representative for the International Association of Drilling Contractors Latin America Chapter "IADC Latin America Chapter".
The International Association of Drilling Contractors is the forum for all oil & gas drilling industry stakeholders to connect, share knowledge, tackle common problems, and develop solutions to critical issues and to improve industry performance by ensuring all drilling is undertaken safely, cleanly and efficiently.

The IADC Latin America Chapter promotes and shares best practices towards achieving the highest standards in operational efficiency, environmental protection and safety for the benefit of the upstream oil and gas industry. As IADC, we aspire to be the reliable voice of the LATAM member companies and to be the trusted advisor of the upstream oil and gas industry in Latin America. IADC Latin America geographical reach currently includes, but is not limited to Mexico, Central America, the Caribbean Islands and continental South America (except Brazil).

- **Board**
  - Carlos Ortiz Reguer, Transocean — Chairperson
  - Alejandro Calderón, Seadrill — Vice-President & Vice Chair Offshore
  - Ana Rosique, Parker Drilling — Vice-Chair Onshore
  - Mateo Herrera, H&P — Deputy Vice-Chair Onshore
  - Soraya Carvalho, NOV — Vice-Chair Associates
  - DJ Husted, Pacific — Secretary

- Francisco Soriano, Felco Treasurer

- **Chapter´s Regional Representatives: Marcos y Asociados**
  - Luis Labardini Luis.Labardini@iadc.org
  - Pablo Christlieb Pablo.Christlieb@iadc.org

- **Membership**

IADC welcomes the membership of all types of companies across the industry that share a commitment to improving safety and the environment, advancing drilling technology, striving for reasonable regulation and legislation, and enhancing personnel competence.

The IADC Latin America Chapter offers the following membership categories:

| Membership | 2020 Membership Dues Usd | 2021 Membership Dues Usd | Get 10% Off If Paying 2020 + 2021 Before 30 Sept 2020 |
|---|---|---|---|
| - Offshore Drilling Contractor | $1,500 | $3,000 | $4,050 |
| - Onshore Drilling Contractor | $750 | $1,500 | $2,025 |
| - Associate Company – 1 to 49 employees globally | $250 | $500 | $675 |
| - Associate Company – 50 or > employees globally | $500 | $1,000 | $1,350 |
| - Operator | $500 | $1,000 | $1,350 |
| - Independent Professional | $125 | $250 | $338 |

*To join the Chapter, download the application at the web site: https://www.iadc.org/chapters/latin-america/, complete, and submit to Luis.Labardini@iadc.org / Pablo.Christlieb@iadc.org*

## Pemex agrees to pay contractors USD $4.3 billion – *El Financiero*

Pemex is reportedly paying 100 contractors $95 bn pesos (USD $4.32 billion) for products and services provided in 2019, backing down from negotiations to delay payments.

In early August Pemex was trying to negotiate extensions with its contractors, in some cases delaying payment until 2022. However, Pemex would pay part of the nearly $181 bn pesos it has owed contractors as of June to avoid violation of the US' Sarbanes-Oxley Act and a sanction from securities regulator SEC. Pemex reached the agreements, involving 300 contracts, which enabled it to obtain discounts on products and services for next year.

According to Pemex's internal payment system "COPADE", the company owes $130 bn pesos in total and plans to pay the remaining $35 bn pesos next year. Contractors that benefit from the agreement are Protexa, Bosnor, Cotemar, Perfolat, Halliburton, Schlumberger, Seamex, Opex, Baker Hughes, and Weatherford.

## Pemex wins narrow approval for 3 fracking assignments - *CNH*

CNH approved Pemex's plans to explore three assignments (Xanati, Yuban and Chuyan) in Veracruz State that would entail fracking. 34.3% of the potential reserves that the country has are found in the Tampico-Misantla basin, in particular through the unconventional part. Yuban and Chuyan have prospective reserves of 428Mboe and 415Mboe, respectively, while Xanati may contain 352Mboe. Under an incremental scenario, Pemex could drill 14 wells at Chuyan and Xanata, and 20 wells at Yuban. In this scenario, Pemex estimates to spend $2.43 bn pesos (USD $110 million) on each area for studies and wells.

Although Pemex began limited fracking in 2010, since coming to office in 2018 President AMLO has said that fracking will not be allowed. This is the first occasion where they are going to go in areas.

## Mexico's IHSA wins approval for onshore exploratory well - *CNH*

Iberoamericana de Hidrocarburos "IHSA" has gained regulatory clearance from CNH to drill the Sabinito Sur-101EXP onshore exploratory well with a planned investment USD $4.6 million. Programmed costs include USD $4.3 million to drill the well and USD $300,000 to cap it.

The onshore site is located in the Burgos basin. The well is part of the baseline scenario of the CNH-R02-L03-BG-01/2017 contract evaluation program the regulator approved in December 2018.

In the Sabinito Sur-101EXP well, the operator is projecting resources of 1.9 Bcf of wet gas with a success probability of 16%. To accomplish this, IHSA will drill a vertical well at a programmed total vertical depth of between 3.446 km and 3.500 km. For the well, the company will use a vertical fracturing process, not the horizontal well scheme used for shale deposits, which has been at the center of controversy in recent years, adding that the Sabinito project is not a shale deposit.

## Mexico's Pemex wins approval for Holok deep water area - *Bnamericas*

CNH approved PEP's base-case and incremental exploration plans for the AE-0172, AE-0173, and AE-0174 assignments in the Holok area off the coast of Veracruz state. The planned investment by PEP is between USD $26.2 million and USD $138 million, depending on the use of baseline or incremental plans with each assignment.

- AE-0172

The assignment has a surface area of 1,257 km². The operator presented a baseline scenario for AE-0172 in which three exploratory studies would be carried out in the Holok-Han plays, as well as 3D seismic and seismic processing. The incremental plan includes additional studies looking at the Ayikal play in the assignment. Investment plans through 2023 are USD $8.7 million and USD $15.4 million for the base case and incremental plans, respectively.

- AE-0173

The assignment has an area of 1,979 km² in the southwestern portion of the Holok area. The baseline scenario included three exploratory studies in the Holok-Han plays, with the incremental scenario adding

3D seismic, seismic processing and associated studies, and the drilling of the Holbe-1EXP prospect is contemplated.

The Holbe-1EXP well prospective resource is expected at an average of 224Mboe, with a geological success probability of 18%. The baseline investment would be USD $8.8 million and with the incremental plan including the well, USD $96.2 million.

- AE-0174

The assignment has an area of 1,380 km², located in the northern portion of the area. The baseline plan with investment of USD $8.7 million involves three exploratory studies in the Holok-Han plays. The incremental scenario at USD $26.4 million includes the acquisition of 3D seismic, seismic processing and associated studies.

In addition, CNH has approved 50 of PEP's 64 exploration plans on assignments granted since August 2019, when the round zero areas were reallocated. The prospective resources calculated for the wells to be drilled is probable reserves of 10.5Bboe and 2.77Bboe in possible reserves.

## Talos Energy expects resources over 100MMboe in Xaxamani – *Talos Energy Press Release*

Netherland, Sewell and Associates "NSAI" recently completed an independent resource evaluation of the Xaxamani discovery. NSAI provided a "best estimate" of the gross resources for the asset at over 100MMBoe, with approximately 95% oil. The discovery is located in very shallow waters (approximately 60 feet) and is less than two miles from shore.  Talos holds a 25% participation interest in Block 31. Xaxamani is Talos second major discovery in offshore Mexico.

The first project on Block 31; the Xaxamani-2EXP well, spud in July and reached total depth in early August with encouraging results. It is the first well in the Olmeca project area, which is a shallow oil project set up by the Xaxamani-1 exploratory well drilled in 2003, which logged oil pay in several intervals. PAE expects to perform a drill stem test in the Xaxamani-2EXP before moving to the Tolteca well, which has similar objectives. Talos will provide more details at the conclusion of the program.

## Pemex returns to original strategy with wells in Campeche Bay – *Bnamericas*

CNH approved plans by Pemex Exploración y Producción "PEP" to scale up operations at shallow water blocks in Campeche Bay. At least one exploratory well will be drilled in the AE-0163-Campo Oriente and in the AE-0164-Campo Oriente assignments, which are close to the prodigious Ku-Maloob-Zaap asset. Also, eight wells could be drilled between the two blocks.

- AE-0163

The 695 km² assignment is in the Sureste basin, in water depths of 100-900m. It is about 122 km northwest of Ciudad del Carmen. From 2014-2019, PEP conducted six regional exploratory studies in the area, and it reprocessed seismic data and conducted one study on incorporation of reserves but did not drill. PEP's base plan would see the operator continue with the acquisition and processing of seismic data through 4Q20, followed by well design and identification studies in mid-2021.

In October 2021, it would spud Hach-1, terminating the exploratory well in February 2022. Hach-1 is a play that will see PEP drill to a depth of 4,100 m. It expects to find extra heavy oil, with a 26% geological probability of success. Hach-1 could contain 23Mboe. The base scenario would cost about USD $46.1 million, with 91% of the total (USD $43.1 million) associated with drilling in 2022. An incremental plan would see PEP conduct studies of the pre-salt play, culminating in the drilling of two exploratory wells, Boh-1 in mid-2021 and Chumbesik-1 from December 2022 to March 2023.

Boh-1 is a similar Cretaceous play, with PEP expecting to drill to a depth of 4,250m. The operator seeks 22Mboe, principally of heavy oil. It faces a 35% geological chance of success.

Chumbesik-1 would target a shallower play of 3,870m, though PEP has a 26% geological chance of recovering heavy oil with an estimated recoverable load of 14Mboe. The incremental plan would see costs rise to USD $137 million by 2023, with drilling in 2022-23 accounting for 94% (almost USD $134 million) of total costs.

- AE-0164

Bordering AE-0163 to the east, the AE-0164 assignment covers 1,022 km², with water depths ranging from 90-1,000m. PEP's base scenario would see it continue processing seismic data, then drill exploratory well Tekel-1 from July-November 2021. It has among the highest geological probabilities of success, 48%, with possible recoverable load of 22Mboe, which is expected to be heavy oil. Under an incremental scenario, PEP would drill five exploratory wells from mid-2021 to mid-2023. The most daunting of the five, Tukuul-1, would target a Mid and Lower Jurassic play at 7,800m. Two other exploratory wells are Cretaceous plays, Nuktah-1 (4,600m) and Chaybesaj-1 (3,300m). Likewise, the two wells promise extra heavy oil with a total recoverable base of 24Mboe. Nuktah has a 45% geological chance of recovery, while Chaybesaj's is 31%.

Numol-1 is the smallest prospect. An Upper Cretaceous Breach play, PEP will drill to a depth of 3,500m, where it expects to find extra heavy oil. The operator has a 32% geological chance of success, but forecasts recoverable assets of only 8Mboe.

Ayatsil-1 is also small, promising 11Mboe. Though it has only a 24% geological chance of success, the Ayatsil formation abuts the Maloob formation. Maloob is the northernmost part of Pemex's Ku-Maloob-Zaap asset "KMZ", among the most productive in the NOC's portfolio. In June, KMZ accounted for 24% of Pemex's oil output.  Exploration costs for AE-0164 would rise with the incremental approach, from the 1-well base scenario costing an estimated USD $55 million over the next four years to almost USD $296 million for the 5-well drilling campaign.

## Fieldwood Energy files for bankruptcy – *Fieldwood Energy Press Release*

Fieldwood Energy announced that it has filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code in the Bankruptcy Court for the Southern District of Texas (the "Bankruptcy Court"). The Company will continue to operate its business safely in the normal course during the pendency of the Chapter 11 cases and will continue working with its vendors, co-working interest owners, and employees to support the operations. Fieldwood expects to have access to sufficient liquidity to meet financial obligations during the restructuring, including cash on hand and a debtor-in-possession facility provided by certain of its First Lien Term Loan lenders.

Fieldwood, won the shallow water Block 4 in Round 1.2 that holds an estimated reserve of 455MMb of oil, said it "will continue to operate its business safely in the normal course during the pendency of the Chapter 11 cases and will continue working with its vendors, co-working interest owners and employees to support the operations." The company has the liquidity necessary to meet its obligations during restructuring, according to a statement.  Fieldwood originally defaulted in May as it failed "to make payments on its first and second-lien term loans," S&P Global reported.

## Talos Energy in the crosshairs: how systemic bias hurts private oil companies in Mexico – *Houston Chronicle*

In Mexico, petroleum resources and reserves are the property of the nation and the national oil company, Pemex, is the property of all Mexicans. These seemingly anodyne formulations can have toxic effects. There is a systemic bias that, in a commercial dispute, authorities would favor claims of Pemex over those of a private party regarding the ownership of a lease. The bias would affect the conduct of public servants who would be drawn into technical, regulatory or policy determinations regarding the dispute.

The dispute that we have characterized as the "stress test" of Mexico's energy market design concerns the claims of Pemex to majority ownership of a large oil reservoir that had been discovered by a consortium led by Houston company Talos Energy. The 600-million-barrel discovery, the largest in a generation, was made near the eastern edge of a block, the commercial rights to which the consortium had won in the first lease auction in 2015. It was no surprise to the consortium that data from the discovery well, Zama-1, indicated that the reservoir extended eastward beyond the lease. Pemex was the owner of a block on the other side. Louder than words as the purpose of Mexico's 2014 energy market reforms was to open commercial space for private oil companies to bring new eyes, capital, technology and management to accelerate discovery and production, news that ownership of the reservoir could be disputed by Pemex put senior public officials in an awkward position: Support or oppose Pemex's pretensions. By their inaction, they threw their support.

The discovery, announced in July of 2017, was made on the eastern edge of the Talos consortium's block, with the high probability that the reservoir extended into a block owned by Pemex, Energy Minister Petro Joaquín could have ordered the immediate reconfiguration of the block to cover the entire reservoir. Juan Carlos Zepeda, the then president-commissioner of the National Hydrocarbon Commission, which oversees oil and gas exploration, could have made a case that the soul of energy market reforms required the development of lease blocks to be carried out exclusively by the winners of the auctions. Instead, Hydrocarbon Deputy Secretary Aldo Flores rushed ahead in October with an intrusive framework to combine the claims of Talos and Pemex into a joint venture to develop and operate the oil field, a process known as unitization.

Talos was forced by the rules to enter into an agreement with Pemex on Sept. 18, 2018. In the summer of 2019, Energy Minister Rocío Nahle and National Hydrocarbon Commission President-Commissioner Rogelio Hernández Cázares had another opportunity to correct the situation: As Pemex had not complied with its legal and regulatory obligations — most conspicuously by not drilling a confirmatory well in its block — its rights could have been canceled. Instead, the commission voted to rename and expand the area of Pemex's block and to reissue a lease for 30 years. In May, the National Hydrocarbon Commission produced a study that speculated that there was hydraulic connectivity between the western (Talos) and eastern (Pemex) portions of the reservoir. Such connectivity is shown by conducting a pressure test on both sides of a structure; but, as a Pemex well had not been drilled, the only data used were those supplied by Talos on its side. Nahle on July 7 ordered the parties to reach an agreement within 120 days. Or else. The guidelines provide that when the parties do not agree, the ministry has one year to unilaterally impose the terms by which the ownership and administration of a reservoir will be conducted. Demoralizing outcome how will this story likely play out? History shows that at every turn, public officials favored Pemex's pretensions, indicative of systemic bias. On Jan. 29, the public learned during a press conference with the head of Pemex, Director- General Octavio Romero, that the national oil company was seeking not only majority ownership, but also the right to be the operator of the future field. When it came to the lack of confirmatory data from a well drilled on its side of the lease line, Pemex and the ministry insisted on the validity of "other facts." The discovery by Talos Energy was justly celebrated as evidence that Mexico's energy reforms —and the philosophy behind them— had merit. It would be a demoralizing outcome for all investors if Talos' asset becomes majority-owned and operated by Pemex.

## Pemex to defer contractor payments – *El Universal*

Pemex is reportedly trying to negotiate payment extensions with its service contractors, in some cases delaying payment until 2022. Pemex's upstream division PEP has known since February "that the production of gas and condensates in the Burgos basin was decreasing because of a lack of payments to contractors, for which it decided to initiate modified agreements with companies."

Overall, national gas output – largely driven by activity in the Burgos basin, Mexico's largest gas basin – has declined steadily from January through May. Production increased modestly off the May lows, to 4.74Bcfd in June. Through 1H20, Pemex had accrued over $152bn pesos (USD $6.7bn) in debts to service providers and contractors. Even prior to the oil price crash that began in March, Pemex was rumored to be delaying contractor payments. Since then, Pemex has undertaken a series of moves to stave off additional debts as financial pressure increased. The firm has since canceled orders for seven private vessels. More significantly, in June Pemex reportedly canceled 45 service contracts, amounting to USD $160 million in obligations. Pemex announced during its 2Q20 earnings call plans to stabilize its obligations at USD $105 bn by year-end. That goal would require paying at least USD $2bn of the debt in 2H20.

## Mexican judge orders Pemex unit to pay USD $38mn to Subsea7 – *Oil and Gas Magazine*

A judge in Mexico has reportedly ordered Pemex's E&P division to pay USD $38 million to engineering and construction firm Subsea 7 for cost overruns associated with the construction of oil pipelines in shallow waters of the Gulf of Mexico. The Norwegian-British company had originally requested USD $312 million at the start of the arbitration process for losses taken on two contracts it held with PEP.

The first contract of USD $140 million was awarded in January 2013 for the engineering, manufacturing and installation of a 16 km pipeline offshore in the Gulf of Mexico. The second contract signed in May 2013 for USD $90 million included the engineering, manufacturing, and installation of an 8 km pipeline, related elevators, and two cantilever structures for the Línea 67 pipeline project in the Bay of Campeche. The contractor argued that the cost of the project increased to USD $450 million due to design changes ordered by PEP.

# Power/Renewable Energy

## Progreso Aeolian Park is inaugurated – *Yucatan Times*

With an investment of approximately USD $155 million, Energía Renovable de la Península inaugurated the Progreso Wind Farm, an important project with 90 MW of installed capacity for electricity generation, which will produce more than 303 GW/H per year, with a useful life of approximately 30 years.

During its construction, this great project generated around 339 jobs, and for the operation stage between 13 and 15 permanent jobs. It has 36 machines distributed along 1240 ha, which only occupy 4.5% of this area, allowing the realization of the usual activities, such as agriculture and livestock, while the owners of the land that houses the wind farm of Progreso receive an additional benefit through the usufruct they receive. In the last 24 months, with the implementation of five renewable energy projects, it has also been observed a decrease of about 70% in the cost of local marginal electricity prices in Yucatan, which went from almost 3,000 pesos MWh to just under 800 pesos MWh, thus achieving that the Yucatan companies participating in the Wholesale Electricity Market get, by this alone, be more competitive in domestic and international markets.

## Mexican regulator opposes solar energy communities and storage – *PV Magazine*

The Comisión Reguladora de Energía "CRE" has issued two new deliberations which forbid the establishment of solar energy communities and block solar-plus-storage deployment. The new measures cancel previous provisions which enabled PV system owners to sell excess power to nearby consumers and deploy energy storage, and come on top of rules recently introduced by the government to further hinder the rising share of renewables in the country's energy mix. The authorities have taken an anti-renewables stance with the aim of consolidating the position of state-owned utility the Comisión Federal de Electricidad "CFE". Previous measures included the suspension of renewables auctions and a stop on grid connections for new solar and wind projects.