

The first woman explorationist in AGIP's offshore operations.

By Lucia Lovison-Golob

I worked at AGIP in the late seventies and eighties. Several years ago, someone defined my work as an explorationist as the last gasp of AGIP's golden age of exploration. Maybe it's a bit of an exaggeration, but I am sure that I was the first woman explorationist to work on the perforation platforms in the Mediterranean Sea.

For me, Enrico Mattei and his story is a model I grew up with in Padua, a town in the Veneto region. My father, Albino, looked like Enrico Mattei and made decisions that broke from his family's tradition by pursuing music over all else, dragging my reluctant mother Ines along for the ride. I always felt honored to be a part of AGIP and together with thousands of other professionals, to have the opportunity to contribute to AGIP Mineraria's explorations, Enrico Mattei's "baby."

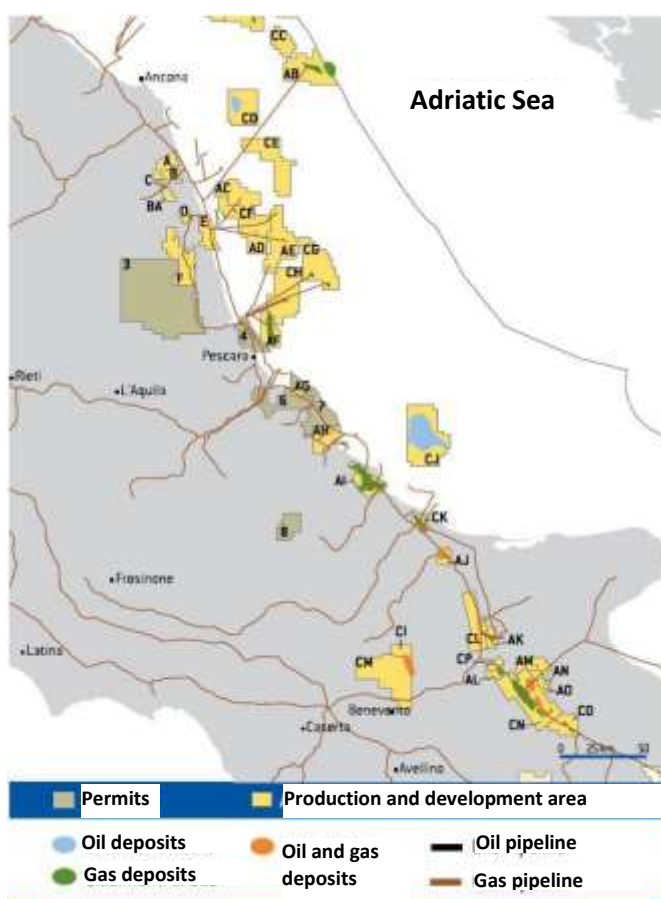
I went to the University of Padua at the dawn of the 1970s. Despite attitudes toward women changing during those years, I was barred from doing an internship in geophysics and mineral deposits because, as a woman, "I would not have been able to withstand the life of a geophysicist" (a well-known professor once spent an entire lecture on the subject of whom a geologist-geophysicist should marry) and that I "would have brought bad luck" to the workers. I remember also being rejected when I wanted to join my male colleagues to write a geological essay on the Süd-Tyroler Alps near the Austrian border because as a woman, I would have done "nothing good" and that all my colleagues' girlfriends were against me. I wound up writing my essay on the Southern Dolomites at Pale di San Lucano with the only male student who didn't have a problem with it (he was very athletic and a black belt in karatè): given that our areas were adjacent to each other, I would have conducted part of his geological survey (he was on the verge of failing to complete his courses on time). This is exactly how it occurred, and I was grateful to him for my entire life. Meanwhile, I was the first student to graduate in my class. I was also lucky because I got two job offers the day after my graduation. You may be asking yourselves why I am digging all this up. This was neither the first nor the last time that I found myself facing the fact that other people would decide on my behalf who I was or was not and what I was able or unable to do. I remember these events because I could not specialize in geophysics at the University of Padua (this changed the following year, even though for me it was too late), but I wound up becoming an explorationist with AGIP, then studying at and graduating from Harvard University, in the United States in geophysics.

In 1978, I was most certainly the first female specializing in geological engineering to be hired by AGIP. This was after spending about a couple years in Friuli Venezia-Giulia in the hill town of San Daniele and the mountain towns of Gemona and Tarcento during the tragic events associated with the 1976 earthquake. Even though I was a young graduate specializing in geotechnology-geological engineering, I proposed the microzonation of the earthquake region. This holistic approach for me was logical given where I came from and studied. I was lucky that there were some people who listened to me, such as the geologist-geophysicists Mario Corsi, Federico Giorgetti, and Rinaldo Nicolich, along with many other administrators and scientists. I had earned a lot of experience since my University of Padua degree: I learned that a terrible tragedy suddenly could descend on and devastate a community, which at that time had almost no protections. I identified destroyed houses and infrastructure, landslides, near and threatened

schools, retirement homes, and other structures in the seismic epicenter. Most of all, I helped advance the earth and environmental scientist's essential role (geologists, engineers, and the like), both in terms of microzonation and later setting up the Department of Civil Protection with the Minister Zamberletti. I also found people who opposed and used me because I was young and a woman. Therefore, I had a rich life experience in which I had the incredible opportunity to be the right person in the right place at the right time, and I was entering AGIP full of hope, with a great desire for new challenges.

Luigi Salvador and I started at AGIP at the same time. We had already worked together in Friuli Venezia Giulia, in the earthquake region. Even though we were different as people, this event brought us together and we developed a sense of camaraderie that marked our relationship, despite his always being "orderly" and I creative, full of ideas and passions, especially for the sciences.

At AGIP, I first worked in the Department of Geodynamics and Environment (GEDA) until 1980, where I focused mostly on geodynamic issues associated with exploration and production of hydrocarbons and renewable energies. Subsequently, I moved on to the Department of Italy Exploration as an explorationist, where I focused on the Mediterranean Sea and hydrocarbons in the central Adriatic Sea.



Central Adriatic Region with licenses and hydrocarbon fields -- from http://www.factbook2011.eni.com/areas/exploration-production/activity-areas/italy.aspx?sc_lang=it-IT

I was the first woman to work on the oil platforms in the Adriatic while still employed at GEDA, AGIP. I first worked under Pier Federico Barnaba, then under Giacomo Balduzzi. It is thanks to Barnaba's trust and vision to give credit to and make space for women, who are not always

perfect but capable and professional, that I could make this step forward. Barnaba, followed by Giancarlo Dossena, made women team members if they were professionals (geologists, engineers, and the like), and many others would follow their lead. Team members were required to produce significant results for the company within a certain deadline. I was able to do my work helping exploration and production operations for oil and gas, as well as in other sectors, such as renewable energies. As mentioned earlier, I claim to be the first of many other women professionals in AGIP and ENI, all equally rich in talents and determination. I remember a colleague, Antonio Veggiani (whom we nicknamed "Tonino"), who said that in the recent past there was a stratigrapher at AGIP focusing on the development of hydrocarbon fields, but at a certain point all trace was lost of her. Years later I met Maria Adelaide Chierici, who told me she had carried out this job. Perhaps Veggiani was referring to her.



Platform similar to the one on which I worked from 1978 to 1983.

Returning to my experience on oil platforms, the ones I worked on were off the coast of Ravenna. I found the environment safe, similar to a large ship (at that time I got a license for navigating sailboats and motorboats beyond 20 nautical miles) buzzing with workers with various experiences and curious about a person like me. It was enough to let them know that I was 29 (it wasn't true, but it always worked: in fact, I've remained a twenty-nine-year-old!) and my private life was such that nobody insisted for too long, returning to their work instead, of which there was enough on board.

As an explorationist, I had two bosses: Dante Jaboli and Lino Albertelli. A few of my colleagues - and I apologize if I missed anyone as it was so long ago - were Antonio Ianniello, Marco Boy, and many others. I had many dear friends, among who were Cipriano Carcano, who often professed his great love for Luigina Vezzoli and geology. I thought he was fun, full of energy, and quite professional in his sector, which involved interpreting profiles of hydrocarbon fields provided by Schlumberger, among others.

At that time, some of my colleagues and administrative personnel seemed curious about my professional and private life, but I never let such forces influence my behavior, even if up to a certain point I understood. However, I must say that I found the environment of exploration generally quite professional and focused on real results, such as the number of drilled wells producing hydrocarbons.

I worked on gathering geological and stratigraphic data, and performing seismic and geophysical analysis of the central Adriatic Sea, which features a foredeep rich with Plio-Pleistocene sediments over a rocky substrate of various geophysical and stratigraphic characteristics. Once the targets were identified, we conducted a subsequent geophysical investigation applying special procedures called seismic migrations to identify the presence of hydrocarbons. In some cases, but not in the sea area where I was working, experts teams would then conduct a 3D seismic investigation (Luigi Salvador often proposed this at that time). Once we identified and nominated the target area where the exploration platform were supposed to drill, experts coming from various sectors of exploration considered all the geological, geophysical, stratigraphic, geochemical and much more data, and identified the exact point where to drill. Upon finishing this selection drilling process, we handed over the geographic coordinates specifying where to place the rig to the Perforation Department.

Remembering the AGIP Department of Italy Exploration in the eighties, I recall the hours and hours spent working on the exploration platforms in the Mediterranean Sea: like the time when Antonio Ianniello, in charge of exploration of the southern Adriatic Sea, said, "Let's start drilling or I'll lose my balls!" Unfortunately, the well turned out to be dry and I presume Antonio is still looking for his balls, but he showed courage in the face of that situation. In fact, we found out that a geophysical horizon belonged to a specific dry rock layer, and this information allowed AGIP to focus on other very promising geophysical horizons nearby. As for me, I helped identify various targets such as the wells of Calpurnia, Cecilia, Calipso, and others.

The name "Calpurnia" means "powerful woman" in Latin. Calpurnia, other than being the name of Julius Caesar's third and last wife, and who I thought was protector of the arts (I discovered later on that this notion is disputed). I got the inspiration for the name from my frequent visits to the Scala in Milan and the Shakespeare's tragedy "Julius Caesar," in which his wife Calpurnia has a premonition of her husband's assassination. I wanted the name of the exploration well/hydrocarbon field to reflect the love and passion for culture present within many AGIP professionals, including myself. Furthermore, I wanted the name to be that of a strong woman, as all women at AGIP needed to be, either as employees or as spouses and girlfriends: Calpurnia represented them. Calpurnia wound up being profitable and a good gas field for the Mediterranean Sea. Now, the Calpurnia field contribute to feed the gas processing plant near Ancona.

The name of the Cecilia hydrocarbon target site is my middle name and refers to Saint Cecilia, patroness of musicians. The name Cecilia is dedicated to my father, who having studied to be a conductor, following the Second World War, was forced to accept any work he could find to support his family after spending all his youth fighting and surviving, as did many others. When it came time to drill the Cecilia well, I remember there was talk of the Treaty of Osimo of November 10, 1975 between Italy and the former Yugoslavia. Even today, I do not understand what impact this Treaty of Osimo has had both on distribution of resources between the nations that grew out of the collapse of Yugoslavia, including Croatia and Italy, and on the population of exiles and the property they abandoned. Apparently, it may be considered still valid the agreement signed between Croatia (at that time Yugoslavia) and Italy with Presidential Decree No. 830 of May 22, 1969 and Law No. 73 of March 14, 1977. I believe Cecilia hydrocarbon field has not been put into operation for various reasons.



Calpurnia production platform



Calipso production platform

From: http://www.factbook2011.eni.com/areas/exploration-production/activity-areas/italy.aspx?sc_lang=it-IT

I also remember the Calipso well, now in operation. The name was chosen to honor the travels of Ulysses described by Homer, in which Calypso was a Nereid or Nymph, Goddess of the Sea, as well as other targets that I helped identify. As mentioned earlier, we were a team of explorationists operating across the Mediterranean Sea and Italian hinterland, and each of us had our own region.

Geophysical surveys and discoveries performed with specialized companies such as the German company Prakla in the southern Adriatic Sea and southern Italy were important for me, not least because I participated. I remember the presence of various specialized firms with experts who knew each other from other exploration places and projects around the world. There was still no talk of fracking, though Schlumberger already talked about chemical hydraulic rock fracturing, a process intended to increase the productivity of hydrocarbon fields. I ask myself if every company now competing for the exploration and production of hydrocarbons in the Mediterranean Sea uses "special personnel" certificated by some authority. In the eighties, the requirement to assess environmental impact (VIA) had not yet become law for the energy exploration and production activities. This requirement was enacted in 1991 with Law No. 9 on "Regulations for Realizing the National Energy Plan (VIA)." I am sure that AGIP always operated responsibly: after all, the GEDA people served this purpose.

I believe the eighties featured improvements in geology knowledge, with the distribution of interpretive models from other locations around the world and applied both in the Po Valley as well as to the Italian offshore, in addition to new exploration technologies that, from the geophysical standpoint coincided with improvements in geochemical and fracturing technologies (promoted by Schlumberger), perforation (horizontal or near-horizontal drilling by various companies), and production technologies (e.g. it became possible to put deposits of condensed hydrocarbons into operation such as the Villafortuna field at Trecate in the Po Valley). In the exploration sector at AGIP there was a burgeoning scientific and technological revolution, and it was very exciting to be a part of it and contribute to it. As for my private life, for years I had a relationship with an American person, Richard Golob, who later on became my husband. Shortly after the hydrocarbon discoveries mentioned above, I left AGIP, even though I always remained a supporter. In my thirties, I was accepted to graduate school at Harvard

University in Cambridge, Massachusetts. The transition for me was traumatic: I left a very practical environment at the Italian Exploration Department which in some way was egalitarian, and I transitioned to a theoretical-based environment, at that time less advanced in certain aspects than the environment in San Donato Milanese. Nevertheless, I was able to adjust and I worked on women's rights and others issues, such as GIS (Geographic Information System), which is basically the computerized evolution of the microzonation that I proposed and carried out in the Friuli Venezia Giulia region. I must thank for this transition both my husband and many other people. It was only many years later that I discovered remote sensing, or making distant observations by satellites and drones, which at one time Faverrani had proposed to me at AGIP, and which I am currently engaged in this sector, having my own company.

Conclusion

What remains of the period I spent at AGIP? First of all, I have wonderful friendships that have endured despite geographic distances since I resettled in the United States and the fact that we all get older. I remained in touch with many people who had worked at AGIP and at ENI. I remember bringing my sons Alessandro and Teodoro to greet my colleagues at AGIP, in the Italian Exploration Department, or else at GEDA, starting with Giancarlo Dossena, Luigi Ceffa, and many others. Furthermore, I'm still proud to have contributed to the development of Italy, my country of origin, as well as to AGIP and ENI. I have always been a big supporter of the responsible role played by AGIP and ENI in Italy and abroad in accordance with Enrico Mattei's principle of "thinking outside the box," balancing development of a resource with considerations on the environment and business ethics.

I remain grateful to everyone who shared my path, at least a portion of it: they all have taught me and gave me something. I didn't get much from just doing what I was supposed to do, nor did I expect anything. From a career perspective, I did not receive a promotion, but I applied and won a sabbatical, which I used to go to the United States. It is especially for my sons, Alexander and Theodore, that I would want them to know their mother did something special, described above, of which I am proud. I also would like to serve as an example for many women who started with and after me: do not let others define who you are, always look ahead, and set your own goals professionally with passion and honesty.



The author, Lucia Lovison, in 1981.



Lucia Lovison-Golob, 2015