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# SOWING SEEDS OF LEADERSHIP:



New Mexico Agricultural Leadership Program Updates

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**Class 17 Southeast New Mexico July 2025**



Our mission is to develop knowledgeable, multicultural leaders for New Mexico's agricultural, food, and natural resource industries.

# EXTRACTING NATURAL RESOURCES FOR FUN AND PROFIT

## BY ANTHONY COLIN

Our third seminar was a whirlwind tour of industry that a 5-year-old, Tonka-truck-owning me would have loved, and that a 28-year-old, note-taking me deeply appreciates. The trip started with an in-depth discussion with NM State Representatives Cathrynn Brown (R-55) and Jonathan Henry (R-54). Nestled in the shadow of the Navajo Oil Refinery, the Artesia Chamber of Commerce graciously hosted our discussion with the representatives. Reps. Brown and Henry touched on the state budgeting process; the economic development that has poured into the Permian Basin as a result of oil and gas exploration; and the concerns they both have regarding renewable energy companies receiving the sorts of governmental investments and incentives that traditional energy companies have historically benefited from. The discussion wrapped up with Rep. Brown asking the class for our thoughts regarding the impacts of current events on agriculture, such as federal spending cuts and the “Make America Healthy Again” movement more generally.

Despite the toe blister it earned me, day two of the seminar saw my favorite visit, trip to the Intrepid Potash Mine (See above/below/left/right). After a safety training and an overview discussion of the mine’s operations and processes, we slipped into our finest complimentary PPE. We walked/drove all the above-ground portions of the mines. We’re talking froth flotation cells, compactors, conveyor belts, cyclonic separators- all your favorite industrial classics. For me, the entire tour was like being dropped into an episode of a show like Modern Marvels or How It’s Made. Except, this time the narrator was a group of leaders with graceful candor and genuine enthusiasm about what it takes to keep an operation that big and complex operating.

Our third and final day in Artesia saw an equally fascinating trip to H.F. Sinclair’s Pre-Treatment and Renewable Diesel Units. For the uninitiated, as I was, these facilities allow H.F. Sinclair to process “waste products” like tallow and seed oils into usable diesel. The visit left the smell of decomposing tallow in my nose for almost a week. What will stick with me much longer, however, is the sense of what incredible coordination and leadership it surely takes to run a facility this expensive and complicated.



Leadership Class participants are shown potassium chloride fresh from the ovens. Mmm, just like mom used to make!





**Top:** A conveyor belt carrying salt byproduct away from the refinement facility. In the background below, a front loader can be seen diligently collecting the salt for sale to the surrounding oil and gas customer base.

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**Right:** A T-shaped tower with the intrepid logo. It houses two hoppers that work in unison to bring raw ore up from the underground mine thousands of feet below.





# EXPLORING ENERGY AND AGRICULTURE

## BY YESENIA PALMA

The innovative landscape of New Mexico's agricultural and industrial sectors becomes evident through recent visits to two exceptional facilities located in Carlsbad and Artesia. The tours unveiled vital infrastructure systems that enable modern agricultural and industrial progress. As we continued exploring New Mexico's agricultural support industries, participants from NMAL embarked on an enlightening journey, visiting Intrepid Potash in Carlsbad and HF Sinclair in Artesia. These tours provided valuable insights into the critical infrastructures that sustain contemporary agriculture, revealing essential information about mineral production and energy refining sectors crucial for agricultural success throughout the state and beyond.

Employees at Intrepid Potash shared information on how the essential fertilizer nutrient potash is mined and distributed. The tour demonstrated how science, technology, and logistical planning ensure the timely delivery of this vital crop production input. Intrepid's leadership team discussed their ongoing commitment to environmental stewardship, land reclamation policies, and safe operational practices, essential for sustainable long-term agricultural productivity.

During our visit to Artesia, we examined the operations of HF Sinclair, a major petroleum refining center in the region. This establishment produces the crucial fuels that power our tractors and facilitate the transportation of agricultural products while supporting rural economic activity. The tour explained the refining process, demonstrating safety protocols and the strategic support the company provides

to agricultural operations. The excursion clearly highlighted the importance of reliable energy access in contemporary agricultural practices.

The tours offered us educational content that also inspired us. Leadership at both facilities exemplified through professionalism and hospitality that agriculture relies on essential resources from partner industries to thrive. Our experiences reinforced NMAL's goal to nurture leaders who fully understand and support all facets that sustain New Mexico agriculture.

### Key Takeaways:

- Agricultural productivity depends on innovative industrial processes
- Strategic leadership drives technological and sustainable advancements
- New Mexico serves as a central center for both industrial development and agricultural progress

Our heartfelt thanks go to the teams at Intrepid Potash and HF Sinclair for their warm reception and generous work-sharing. The leadership and dedication shown by these teams demonstrate the effective cross-sector partnerships that benefit both agricultural sectors and rural communities.



## SOUTHEASTERN NEW MEXICO BY CHERYLIN ATCITTY

Agriculture is often overlooked, with many people not realizing the connection between energy production and the food that ends up on our tables. When we enjoy our meals, we tend to focus more on the conversations or the exciting topics of the day. However, through the third seminar of the New Mexico Agricultural Leadership program (NMAL) in Artesia, located in southeastern New Mexico, I gained a deeper understanding of how energy production and underappreciated resources like potash are critical to food production. Additionally, leadership plays a vital role in ensuring sustainable land and resource management, making fair value essential for the continued success of state operations and guaranteeing that food reaches the table.

We started our visit by meeting Cathrynn Brown (Eddy and Lea District 55, New Mexico House of Representatives), John Henry (Mayor of Artesia), and Wayne Shockey (Eddy County CES Agent) to learn about their leadership roles and land management efforts in the county. I discovered that oil and gas production in New Mexico ranks second in the nation, following Texas. The resources are extracted with careful attention to prevent contamination. While the industry often faces criticism for its environmental impact, the revenues generated from oil and gas production help support agricultural sustainability and conservation initiatives for natural resource management. The industry also contributes to local communities and supports educational

programs across the state.

At the Intrepid Potash mine, we explored how langbeinite, a naturally occurring fertilizer rich in potassium, magnesium, sulfur, and other essential nutrients, supports agricultural production. We met with George Montoya, Billy Mars, and Mike Ramstader, who provided an in-depth overview of the extraction and preparation process. When asked about the most essential aspect of production, they emphasized managing people. Reflecting on this, I realized that while industry knowledge is essential, the individuals behind the process are the most crucial variable in producing a quality product.

Our final visit was to the HF Sinclair Artesia Renewable Diesel Unit. Until this seminar, I was unaware that "Renewable Diesel" and "Biodiesel" are different products. I was impressed by the operations and the staff's challenges in maintaining product consistency in an ever-changing environment. Despite these challenges, they remain committed to developing a clean product, which is a testament to their resilience and dedication.

I am thankful for this opportunity to learn more about operations in southeastern New Mexico.



# POWER AND NATURAL RESOURCES

## BY MICHAEL PURDY

Seminar 3 of the New Mexico Agricultural Leadership program provided Class 17 with profound insights into the various energy and mineral industries that our state relies on. This seminar allowed the class to explore oil, gas, solar, and wind energy production, as well as mining and mineral extraction. The first day of our seminar began with an engaging discussion about the economic, social, and environmental impacts of the oil and gas industry in New Mexico, featuring Representatives Cathrynn Brown and Jon Henry. Both representatives were eager to share their experiences and knowledge about the history of oil and gas and its effects on New Mexico. We learned about the significant benefits the oil and gas industry brings to the state, including increased revenue for school districts and municipalities, reduced energy costs, job creation, housing development, and infrastructure improvements, among others. While we also participated in thoughtful conversations about the environmental impacts of fossil fuel use and the trade-offs associated with renewable energy sources, the class concluded the day with a deeper understanding of the importance of the oil and gas industry and its influence on all our lives.

On day two of our seminar, the class toured the Intrepid mining and processing facilities to learn about potash fertilizer production and its byproducts. Potash is a key component used in agricultural fertilizers and livestock feed supplements, while byproducts from its output, such as potassium and salt, have various industrial applications. The most impressive aspect of this tour was witnessing how the raw ore is mined, processed, and distributed from the same site. The process begins when raw ore is extracted from the underground mine network, where it is crushed into small pieces, cleaned, and subjected to a flotation process that separates the potash from other materials. The potash is then dried, compacted, and pelletized before distribution. The Intrepid mine and processing facilities were impressive, to say the least, and it was incredibly enlightening to see the extensive effort that goes into producing a crucial component of our country's food system.

On the third and final day of the seminar, the group was invited to tour the HF Sinclair oil refinery plant. While HF Sinclair primarily produces conventional fuel and lubricants from crude oil, the tour focused on the HF Sinclair renewable diesel plant. Renewable diesel is created from recycled animal fats obtained from restaurants and supermarkets, along with corn and soybean oils considered unfit for human consumption. Although renewable fuel is still relatively new to the general consumer, the HF Sinclair renewable diesel facility generates over 380 million gallons of renewable diesel each year. While much of the country depends on petroleum-based fuel, HF Sinclair has made significant progress toward increasing the availability of renewable fuel, which emits 50% to 80% less greenhouse gases than petroleum fuel. The primary lesson learned from Seminar 3 was a deeper appreciation for the effort involved in meeting our country's energy and food demands.



# EXPLORING SOUTHEASTERN NEW MEXICO

## BY MARISSA DILES

To begin our third seminar, we met with Representative Cathrynn Brown and Representative Jonathan Henry, who explained the New Mexico legislative process and shared information about the state's sources of revenue, primarily the oil and gas industry. They were both very informative in answering our many questions, and I believe we each left the discussion with a better understanding of how our government processes work.

Our subsequent discussion focused on different types of energy sources. Each of us was assigned an energy source to research and present our findings to the class. We covered wind power by Cherylin, solar power by Anthony, nuclear power by Yesenia, coal by Michael, hydroelectricity by Aaron, and oil by me. We all identified several pros and cons of our energy sources, along with some cost and revenue statistics.



Our first tour of the trip was to the Intrepid Potash mine in Carlsbad. Intrepid is one of the major U.S. producers of potash and langbeinite. During our tour, we visited three of their locations involved in the production process: East Mine, HB Solar Solution Mine, and North Plant. The East Mine uses underground mechanical mining to extract langbeinite and processes and ships the extracted minerals. The HB Solar Solution Mine employs solution mining and solar evaporation to extract potash from its brine pools. At the North Plant, they receive the potash from the HB Mine, subject it to granulation, and ensure quality control before shipping it out to customers.

Our final stop was at HF Sinclair, where we learned about their Renewable Diesel Unit and Pretreatment Unit. The Renewable Diesel Unit produces 9,000 barrels of diesel daily by converting food oils into renewable diesel. This results in a cleaner-burning fuel that helps reduce greenhouse gas emissions. At the Pretreatment Unit, various food oils, including corn oil, tallow, and soybean oil, are processed. This unit prepares the oils for the Renewable Diesel Unit.



# UNDERSTANDING NEW MEXICO'S LEGISLATIVE PROCESS BY AARON ROMERO

The Artesia Chamber of Commerce served as an ideal venue to kick-start seminar three and the group's visit to Eastern New Mexico. State Representatives Jonathan Henry and Cathrynn Brown led an engaging discussion on the impact of oil and natural gas on the New Mexico budget. Additionally, Cathryn Brown elaborated on how the state budget process works and discussed the "ins and outs" that typically occur during this annual process. Specific examples of how the budget process operates were shared, providing valuable insights as we learned more about NM Districts 54 and 55, which cover Eddy, Chaves, Otero, and Lea Counties. Excellent perspectives emerged as Mrs. Brown shared her experiences and emphasized her longer tenure within the roundhouse. It was enlightening to hear Mr. Henry's viewpoint, as he is regarded as a newer member. Of course, the discussion included talks and perspectives on interpreting current political agendas at both the state and national levels.

The Intrepid Mine tour in Carlsbad, NM, was both adventurous and educational. Intrepid operates an underground mine there to extract a natural mineral called langbeinite, which is found in very few locations worldwide. The Intrepid mine sits atop one of the world's largest known reserves.

The property also includes solar evaporation ponds that function as production methods for potash and salt, which are considered environmentally friendly and complement Carlsbad's arid climate. The company is well-known for its all-natural fertilizer, which has a high international demand. The combination of the climate and proximity to rail provides a significant business advantage, contributing to the company's success over many years.

The Intrepid staff conducted a thorough tour of the facility, providing plenty of time for Q&A. From the start, it was evident that one of Intrepid's core values focuses on safety. Most employees work in potentially hazardous areas, and the industrial process facility may even be perceived as an uncomfortable work environment. Typical noise levels are significantly high, making earplugs a daily necessity. The dangers encountered in daily tasks were also noticeable, as many employees regularly climb and descend vertical ladders and stairs.

Team members emphasized a strong focus on the quality of their products, ensuring that production meets or exceeds federal and local regulations as well as customer requirements. Conducting internal audits of the quality control processes and procedures is a common practice due to the stringent regulatory environment in which they operate.





Other duties discussed include operating mining equipment and performing preventative maintenance and cleaning to ensure that all equipment operates safely and efficiently. High levels of stewardship were evident and modeled through the management of the company's assets.

It was wonderful to learn that the company emphasizes excellence and holds its leadership to high standards of integrity, honesty, transparency, and professionalism. Continuous improvement through teamwork and innovation is evident throughout the organization.

The third visit and tour of HF Sinclair was intriguing, as staff members were eager to explain the processes of both their Pre-Treatment Unit (PTU) and Renewable Diesel Unit (RDU). The Navajo refinery, located in Artesia, NM, works in conjunction with a refining facility in Lovington, NM, and processes sweet and sour Permian crude oil.

The size and complexity of this refinery are astonishing. It has a crude oil capacity of 100,000 barrels per day. We learned that the company serves markets in the southwestern United States, including New Mexico, Arizona, and West Texas. The Artesia facility is immaculate, as both the PTU and RDU were recently built in 2022. It is remarkable that the company generates value from waste feedstock such as animal fats and corn oil, producing high-quality petroleum diesel while significantly reducing net greenhouse gas emissions.

We participated in group discussions and talked in depth about renewable diesel and its production process. We learned that renewable diesel is a low-carbon fuel sourced from renewable materials and demonstrates the same performance as conventional petroleum diesel.

My primary interest in producing renewable diesel is utilizing recycled animal fats from restaurants and supermarkets. It's remarkable how these materials are converted into diesel fuel.





# A WORD FROM COLLEGE DRIVE

## BY TINA WILSON

I hope this message finds all of you well and staying cool in the hot weather.

NMAL traveled to Southeastern New Mexico in April, visiting Artesia and Carlsbad. We were fortunate to tour the Intrepid Potash Mine in Carlsbad. After a safety briefing, we put on personal protective equipment, including a hard hat, safety glasses, and a reflective vest. Watching different mining methods was incredible, and the staff at Intrepid was very welcoming. Whenever I wear protective gear, it's always a good day at the "office" because it means I will see something remarkable with a touch of danger.

No trip to Artesia is complete without visiting Representative Cathrynn Brown. This time, she was accompanied by Representative Jonathan Henry. Representative Henry also serves as the mayor of Artesia.

I recently attended a seminar based on the bestseller "Crucial Conversations" by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler. The seminar focused on mastering dialogue when stakes and emotions are high. It provides tools to transform anger and hurt feelings into meaningful, impactful conversations about nearly anything, while remaining persuasive rather than aggressive. I highly recommend adding this book to your summer reading list.

I chose this picture to share with all of you. During our seminars, we always eat meals together. This time gives us a chance to connect informally and reflect on the day's events. It truly is one of my favorite parts of the seminars.



Due to unforeseen circumstances, the July trip to Argentina has been postponed. If you're interested in traveling with us, feel free to contact me, and I'll let you know when registration opens.



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