



THE APACHE DISCOVERY

BLACK GOLD, TEXAS TEA. A West Texas oil find, could very well be the largest oil find in history. Apache has been searching for black gold for over 60 years. The corporation was founded in 1954 in Minneapolis, Minnesota, by Truman Anderson, Raymond Plank and Charles Arnao. The company's name was the sum of the founders' initials – a, p and a – with "che."

The search for 60 years finally paid off, and in a big way. According to the Wall Street Journal, the find could be worth more than \$8 billion USD. In a press release delivered at the Barclays CEO Energy Power Conference, Apache announced that after more than two years of extensive geologic and geophysical work, the company confirmed the discovery that is being called, the "Alpine High."

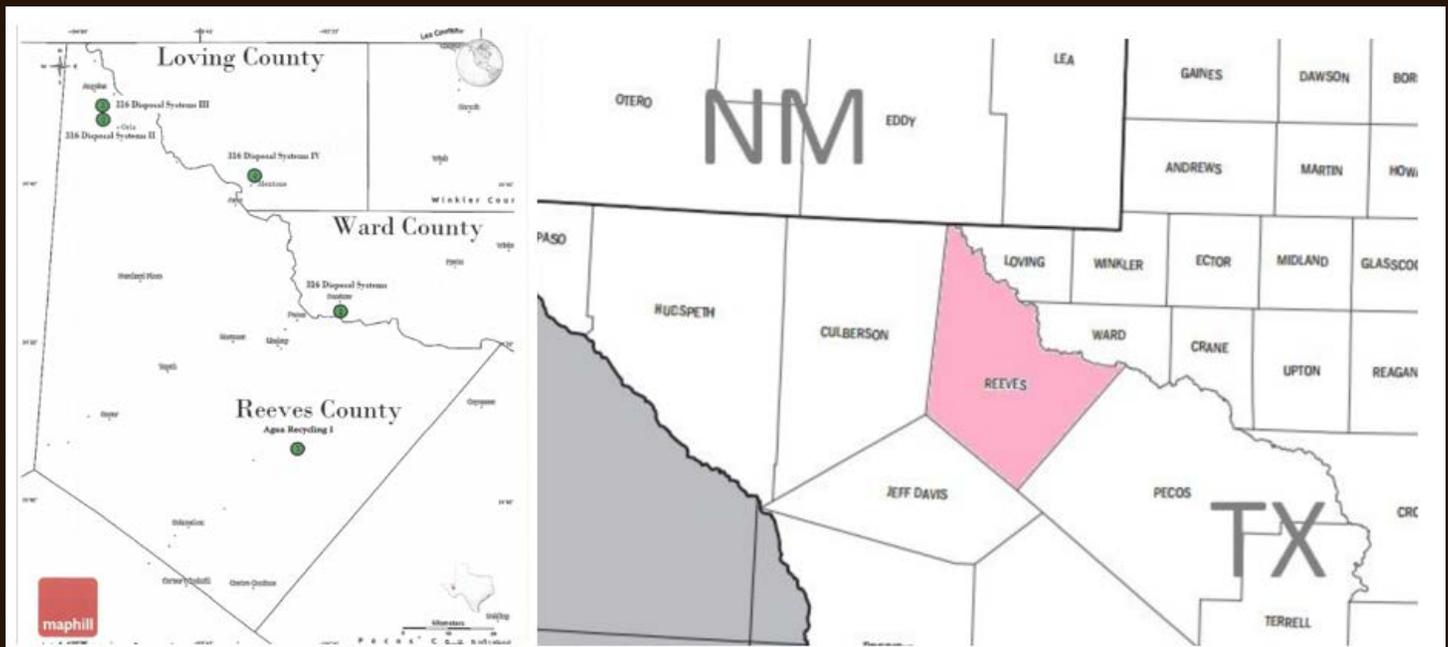
Apache's Alpine High acreage is in the Delaware Basin, primarily in Reeves County, Texas. The company estimates more than three billion barrels of oil in the Barnett and Woodford formations alone. Apache also sees significant oil potential in the shallower Pennsylvanian, Bone Springs and Wolfcamp formations.

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THE APACHE DISCOVERY - CONTINUED



3:16 Disposal Systems Five Locations in relation to the Alpine High Find

KEY HIGHLIGHTS OF THE DISCOVERY:

- Apache has secured 307,000 contiguous net acres at an attractive average cost of approximately \$1,300 per acre.
- Alpine High has 4,000 to 5,000 feet of stacked pay in up to five distinct formations including the Bone Springs, Wolfcamp, Pennsylvanian, Barnett and Woodford.
- 2,000 to more than 3,000 future drilling locations have been identified in the Woodford and Barnett formations alone. These formations are in the wet gas window and are expected to deliver a combination of rich gas and oil. Initial estimates for the Woodford and Barnett zones indicate a pretax, net present value (NPV) range of \$4 million to \$20 million per well, at benchmark oil and natural gas prices of \$50 per barrel and \$3 per thousand cubic feet (Mcf), respectively.
- Apache has drilled 19 wells in the play, with nine currently producing in limited quantities due to infrastructure constraints. This includes six wells in the Woodford, one well in the Barnett and one well each in the shallower Wolfcamp and Bone Springs oil formations.

PERMIAN BASIN PRODUCED WATER DRIVE

A resource often overlooked is the abundance of oilfield Produced water in Texas. "Produced water" is a byproduct of oil and natural gas drilling. Oilpro.com estimates a minimum of 20 million barrels are produced each day in the Permian Basin. The production is equal to the combined net water use in Austin, Dallas, El Paso, Fort Worth, Houston, and San Antonio combined in 2014.

Producers continue to cite reducing water disposal costs as a key objective to cut production costs and remain competitive. Predicting the costs of water disposal is an even greater challenge. Shifting factors such as increases in political pressure to minimize the use of fresh water, advancements in the water treatment technology, and strong desires to avoid legal liabilities, are causing producers to seek alternatives to handling and disposals costs.

If produced water becomes a saleable commodity, this will likely help catalyze the development of a more interconnected oilfield water infrastructure in the Permian Basin. One key issue is the heightened liability risk incurred by moving high-salinity produced water in pipelines, since pipeline ruptures tend to cause large spills.

Producers are likely to have varying risk appetites for moving saline water into large-scale treatment facilities and then re-distributing it out to frac ponds via pipeline, layflat hose, and in some cases, trucks. This creates a logical business space for a water-oriented midstream operator, whose business model generally already contemplates the risk of owning and transporting saline water.

The "Holy Grail" is a large-volume open access produced water gathering and recycling system with significant geographical coverage that can also integrate other alternative water sources such as brackish water and municipal effluent. Sufficiently large and connected infrastructure can serve as a "magnet" for produced water from a range of operators by creating the ability to sell what was formerly an expensive waste product.

PRODUCED WATER ANALYSIS	
Compound name	Approximate concentration, ppm
Cyclohexane acetic acid	25
Cyclopentane propionic acid	25
3-methyl benzoic acid	15
2,4 hexanedienoic acid	10
Octadecanoic acid	10
2,6-Naphthalene dicarboxylic acid	10
Naphthalene acetic acid	10
Phenol	25

Note: Freon and hexane extraction and GC-MS analysis

PHOTO: OGJ.com



PHOTO: PEBlog

REL AND CENTENNIAL IN THE PERMIAN BASIN

In January 2017, Denver-based Centennial Resource Development LLC, (Centennial) contracted surface leases in southern Reeves County, Texas, for three 5 acre pads, allowing Centennial to commence the drilling of 6-8 wells. These leases are located on a 296-acre track owned collectively by 731 Eagle Trucking and Frost Rains Holdings, LLC (Agua Recycling). The development falls on the heels of a new release announcing, Riverstone Energy Limited, (REL)



Construction at our Agua Recycling I, location

signed an agreement to acquire a majority interest in Centennial, from NGP Energy Capital. REL with its headquarters in St. Peter Port, Guernsey, is a closed-ended investment company that invests exclusively in the global energy industry, with a focus on the exploration and production and midstream sectors. Mexico and credit.

To date, REL has made 16 investments in conventional and unconventional oil and gas activities in the Gulf of Mexico, Continental U.S., Western Canada, the U.K. North Sea, the Norwegian Sea.

Denver-based Centennial is focused on unconventional oil and natural gas reserves in the Permian Basin. Its assets are concentrated in the Delaware Basin, with contiguous acreage blocks in Reeves, Ward, and Pecos Counties in West Texas.

In it's NASDAQ IPO summary, the company reported a portfolio consisting of 61 operated producing wells, approximately 77,000 net acreage and a drilling inventory that includes 366 extended lateral locations of either 9,500 or 7,500 lateral feet. Centennial considers the Permian Basin an attractive operating area, due to its high oil content, infrastructure base, significant service provider network, and high drilling success rates. The U.S. Energy Information Administration, the Permian Basin is the most prolific oil producing area in the United States.

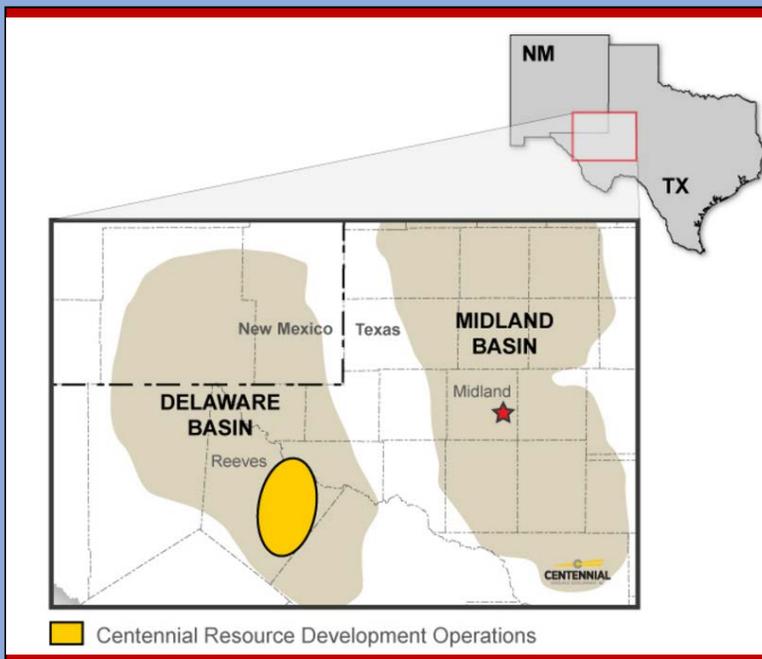


PHOTO: CDEVINC.com

EPIC PERMIAN BASIN PIPELINE



PHOTO: EXPRESSNEWS.COM

The proposed “EPIC” pipeline — which stands for Eagle Ford, Permian, Ingleside and Corpus — plans to transport upward of 440,000 barrels per day of crude oil out of the Permian Basin Shale field. Three companies have raised \$1 billion to build the 730-mile oil pipeline that would span from West Texas to the Gulf of Mexico in Corpus Christi. The pipeline would be the longest pipeline in the State of Texas since at least 2008 and is slated to come online in the first quarter of 2019.

In a news release from TexStar Midstream Logistics, (TexStar) the lead company on the project, the pipeline would transport crude from points in Orla, Pecos, Crane and Midland in West Texas’ Permian Basin and transport it to an affiliate’s terminal in the Port of Corpus Christi and other drop-off points in the area.

Between 2004 and 2006, the midstream business grew largely through acquisitions and was sold to Regency Energy Partners in mid-2006 for \$350 million.

TexStar II was reconstituted in 2008, largely driven by the midstream needs of its sister-company, BlackBrush Oil & Gas, which by 2014 operated over 350,000 gross acres in south Texas. TexStar and BlackBrush were recapitalized by EIG Global Energy Partners in 2011 and, along with Tailwater Capital (f.k.a. HM Capital) funded the build-out of the largest, integrated midstream company exclusively focused in south Texas.

The terminal will have upward of 1 million barrels of storage capacity in addition to a 3 million-barrel storage facility.

AGUA RECYCLING

AGUA RECYCLING SOLUTIONS, LP, was formed on March 3, 2016 to operate as a facilitative partner for the EB-5 Program. Agua Recycling Solutions' focus is to vector EB-5 investments into the creation and operation of saltwater recycling (SWR) facilities, meeting ongoing needs for oil and gas producers in West Texas and creating qualifying local jobs in Targeted Employment Areas.

The Project site is located 10 miles south of Pecos, Texas in Reeves County and will primarily serve oil and gas fields within the western portion of the Permian Basin. The Permian Basin is a sedimentary basin largely contained in the western part of Texas and the southeastern part of New Mexico.

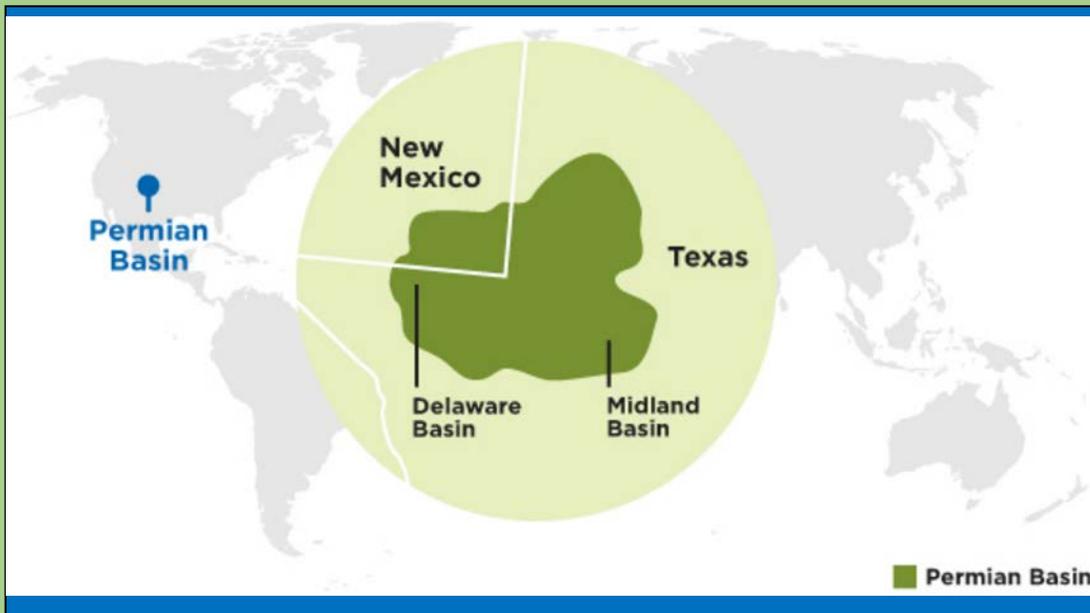


PHOTO: CHEVRON.com

It underlies an area approximately 250 miles wide and 300 miles long and includes the Texas counties of Andrews, Borden, Crane, Dawson, Ector, Gaines, Glasscock, Howard, Loving, Martin, Midland, Reeves, Terrell, Upton, Ward, and Winkler. It was named "Permian" because it has one of the world's thickest deposits of rocks from the Permian geologic period.

As noted in an earlier article, Agua Recycling, I and Centennial have entered into an agreement that allows Centennial to place pads on the Agua location and two pads on land that belongs to our partner, Mr. Lupe Ortega of Eagle 731 Trucking, LLC.

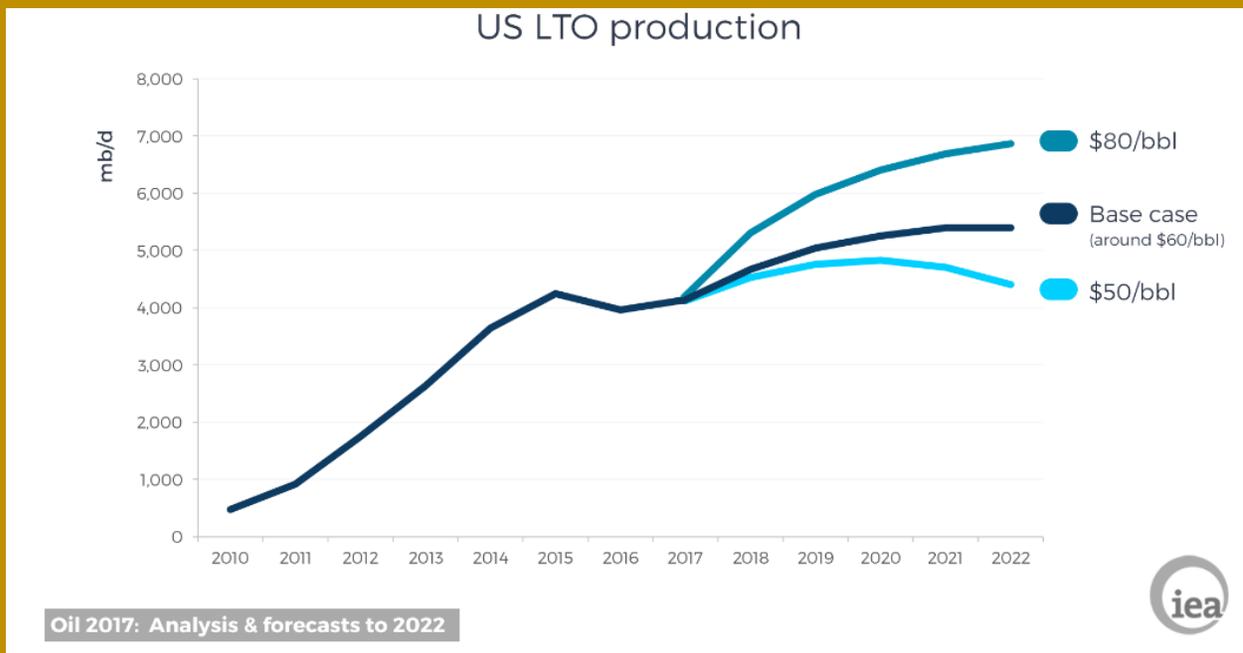
IEA FORECAST SHARP OIL INCREASE BY 2020

The International Energy Agency (IEA) in its new five-year market forecast, predicts a tight global oil market, will result in a sharp rise in oil prices by 2020. Trends show that despite the growing oil supplies in the United States, Canada, and Brazil, the global oil supply may fail to meet with the world's demand in the near future. Mexico is among the top markets with an increasing demand for gasoline and other refined products.

MSEX Resources Corp, (MSEX) headquartered in Austin, Texas, in a recent press release, announced plans to build a \$450 million refinery in the Permian Basin's Pecos County. The proposed refinery aims to process up to 50,000 barrels of

crude oil per day and convert the crude oil into gasoline, diesel, jet fuel, liquefied petroleum gas and other products that will be shipped by rail to meet growing demand in Mexico.

In 2016, companies spent \$450 billion worldwide on upstream projects, about 25% less than they need to meet demand growth. Without projects like the MEXX refinery, targeted to specific growing markets, the global oil production will fall short to reach certain areas. [Oil 2017](#), the IEA's market analysis show the demand and supply trends point to a tight global oil market, with spare production capacity in 2022 falling to a 14-year low. CONTINUED...

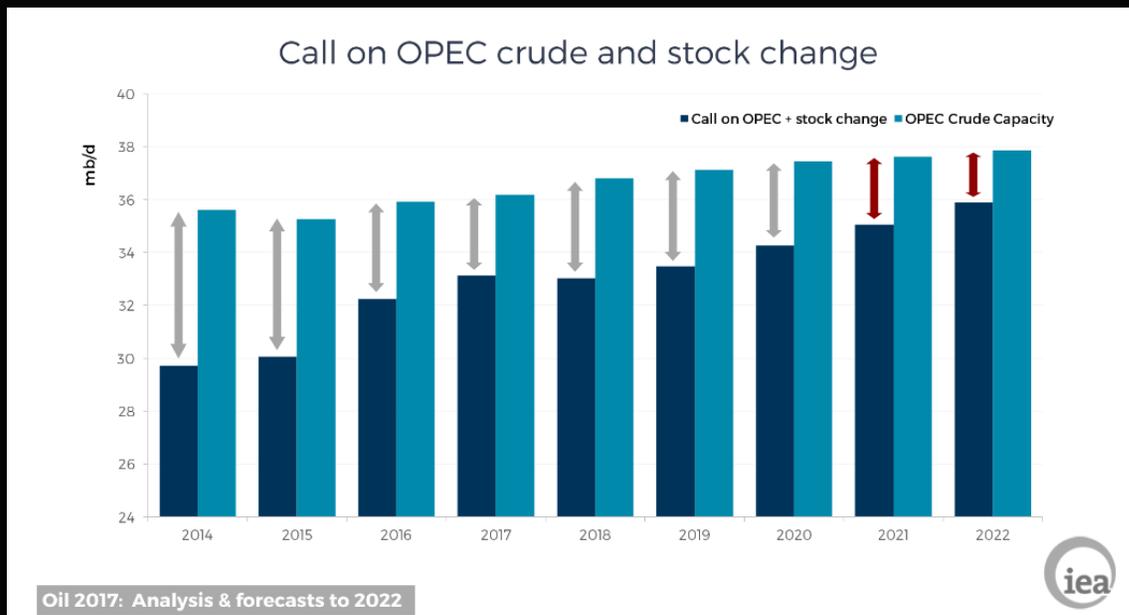


IEA FORECAST SHARP OIL INCREASE -CONTINUED

The Oil 2017 Report, also predicts, oil demand to rise in the next five years, passing the symbolic 100 mb/d threshold in 2019 and reaching about 104 mb/d by 2022. Developing countries account for all of the growth and Asia dominates, consuming about seven out of every ten barrels. India's oil demand growth is expected to exceed China's demand. While electric vehicles are an important factor for oil demand, the IEA estimates they will displace only limited amounts of transportation fuel by 2022.

The outlook is exciting, especially for the US. The IEA expects US light tight oil (LTO) production to make a strong comeback and grow by 1.4 mb/d by 2022 if prices remain around USD 60/bbl.

As for OPEC, predictions show the bulk of new supplies will come from major low-cost Middle Eastern producers, namely Iraq, Iran, and the United Arab Emirates. Others like Nigeria, Algeria and Venezuela will decline. For its part, production from Russia is forecast to remain stable over the next five years.



The report also highlights changes in international oil-trade flows and investments in storage infrastructure. Asia will need to look beyond the Middle East to meet its growing import requirements. With OPEC countries focused on boosting domestic refining capacity to meet local demand and ramp-up exports of refined products, additional crude oil exports from Brazil and Canada will be higher than those from the Middle East.