

ALABAMA-COUSHATTA TRIBE OF TEXAS

Deep East Texas, Polk County Texas

SUMMER NAPE 2020





ALABAMA-COUSHATTA TRIBE OF TEXAS

Principal Chie Chief Skalaab Second Chief Chief Kanica

ALABAMA-COUSHATTA TRIBAL COUNCIL ACITC Resolution #2020-53

PERTAINING, to the Tribal Council exercising its delegated powers under Article VI, Section I Powers, Constitution and By-Laws of the Alabama-Coushatta Tribe;

WHEREAS, the Tribal Council, as the governing body of the Tribe, has the power to exercise its full authorities, rights and responsibilities available under its sovereign nations' status; and

WHEREAS, the Tribal Council seeks to safeguard and promote the peace, safety, morals, and general welfare of the Tribe by approving and entering into relationships that further the social, cultural, legal, economic and other needs of the Tribe and Tribal members; and

WHEREAS, the Tribal Council desires to explore and develop the Tribe's energy resources to promote self-reliance, sovereignty, environmental respect, conservation and economic self-sufficiency; and

WHEREAS, the United States Department of the Interior, through the Division of Energy and Mineral Development (the "DEMD") has requested authorization to provide assistance to the Tribe by displaying Tribal acreage, using marketing brochures, maps and atlases created by the DEMD, at the Summer North American Prospect Expo, a virtual event to be held on August 11-27, 2020, for the purpose of presenting resource development opportunities on the Alabama-Coushatta Indian Reservation, and leaving a positive impression that the Tribe is interested in leasing open acreage for developing oil and gas (collectively, the "Project"); and

WHEREAS, the Tribe is in receipt of a letter from Mr. Stephen Manydeeds, Division Chief of the DEMD, dated July 14, 2020, formally requesting the Tribe's authorization for the Project; and

WHEREAS, the Tribe understands that the DEMD will provide the geology, engineering and printing required for the marketing brochures, maps and atlases to be utilized in connection with the Project;

NOW THEREFORE, BE IT RESOLVED, that the Tribal Council of the Alabama-Coushatta Tribe of Texas herby provides authorization to the DEMD to proceed with and complete the Project, as described above and in the letter from Mr. Stephen Manydeeds, Division Chief of the DEMD, dated July 14, 2020, a copy of which is attached hereto as Exhibit "A" and incorporated herein for all purposes.



CERTIFICATION

I, the undersigned, Chairperson of the Alabama-Coushatta Tribe of Texas, do hereby certify that the Alabama-Coushatta Tribal Council is composed of seven (7) members of whom _______ were present in a Work Session duly called in accordance with Article V of the Tribal ByLaws on July 27, 2020 and adopted this Resolution by a vote of _____ in favor, _____ opposed and _____ abstained.

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Nita Battise Secretary, Tribal Council

eul **Cecilia** Flores

Chairperson, Tribal Council



ALABAMA-COUSHATTA TRIBE OF TEXAS

Culture and History

About

The Alabama-Coushatta Tribe of Texas has the oldest reservation in the State located on approximately 10,200 acres in the Big Thicket of Deep East Texas. The Tribe is a fully functioning sovereign government with a full array of health and human services, including law enforcement and emergency services. There are more than 1,200 members, about half of whom live on the reservation. The Tribe is ruled by both a Principal Chief and a Second Chief who are elected by the people and serve lifetime terms. Today the Principal Chief is Colabe III Clem Sylestine and the Second Chief is Skalaaba Herbert Johnson Sr.

Origins

The tribes lived in adjacent areas in what is now the state of Alabama prior to their westward migration that began around 1763. By 1780, the tribes had migrated into what is now east Texas. Although they were two separate tribes, the Alabamas and Coushattas have been closely associated throughout their history. Their cultures have some differences, but for the most part are nearly identical.

The Tribes Triumph in Texas History

During the Mexican War of Independence from Spain, the tribes fought with the revolutionaries. Their many combined contributions included a battalion of 300 warriors who were instrumental to the capture of San Antonio in the April 1, 1813 battle. The newly formed Mexican government recognized both tribes independently and offered them tracts of land for permanent settlement. Those lands are attributed to the tribes in early maps of the region, including Stephen F. Austin's 1829 map of Texas. In 1836, Sam Houston brokered a treaty with the tribes prior to the Texas War of Independence from Mexico. The treaty provided the title of land between the Neches and Sabine rivers for one community with both tribes in return for assurance the tribes would not side with Mexico. Tribal members served as guides for Houston's army and provided provisions to feed Texas refugees fleeing from Santa Anna's army. Today, Houston's descendants still acknowledge that contribution to the Republic of Texas.

Learn more about Alabama-Coushatta Tribe of Texas:

https://www.alabama-coushatta.com/



Cover photo: Alabama-Coushatta Indians at a Christian Church circa 1905, Government Archives, James James, https://flic.kr/p/2aiQPnq.

Opposite: An early Alabama-Coushatta home, archives, James James, *https://flic. kr/p/PhGTHW*.

Summary

The Alabama-Coushatta Tribe of Texas is located approximately 70 miles northeast of Houston in Polk County in the area locally known as Deep East Texas. The Reservation is bisected by US Highway 190 approximated halfway between the towns of Livingston and Woodville, Texas (see Figure 1).

Drilling History on the Reservation

The first drilling within the Alabama-Coushatta Indian Reservation occurred in 1933 when a well was drilled to a depth of 3,650 ft and was completed as a dry hole after penetrating the top of the Yegua Formation. Six additional wells were drilled to an approximate depth



Figure 1. Location Map of the Alabama-Coushatta Tribe of Texas Reservation Lands.



ightarrow Zones Productive in or near the Alabama-Coushatta of Texas Reservation

Figure 2. General stratigraphic column and major producing zones for the region surrounding the Alabama-Coushatta of Texas Reservation (Modified from Ewing, 2019).

of 4,000 ft to test the Yegua between 1966 and 1971 but ended with similar results. Production was first established in 1983 when a well was completed in a zone in the Midway and another was completed in the Woodbine; neither well produced at commercial rates. Between 1989 and 2007, nine Woodbine wells were drilled and completed within the reservation boundary and have produced in excess of 5.7 MBO and 109 BCFG.



Figure 3. Idealized sand dispersal system in various depositional systems, Wilcox Group, Texas, Fisher, W.L. and McGowen, J.H., 1967.



Figure 4. Diagrammatic dip section showing Woodbine – Eagle Ford stratigraphic relations and location of Woodbine Fields. Not the clinoform beds in the Eagle Ford shale that reflect seaward growth of the slope. (Stricklin, Fred, Jr. 2002)

There has been no recent drilling activity within the reservation boundary.

Geologic Overview and Oil and Gas Plays

Geologically the Reservation lies at the southern edge of the East Texas Basin as it grades into the Houston Embayment. Figure 2 is a general stratigraphic column for the region highlighting the productive zones found in the region. Productive zones range in depth from 3,500 ft to over 15,000 ft.

Lying at a depth of approximately 4,000 ft the Yequa Formation is predominately an oil reservoir and in Polk County, it was deposited in an updip trend of highstand marginal marine sandstones of the Liberty delta system (Ewing, 2019). Reservoir traps within these reservoirs are typically associated with structure related to small faults.

Wilcox production, were developed in the area, is both oil and gas, at depths from around 8,500 ft to 9,200 ft. The top of the Wilcox can be found at a depth of 6,000 ft to 6,500 ft as it dips down to the coast. Wilcox sediments are the result of the Rockdale Delta System. It was the ultimate depositional site of most of the sediments transported through the fluvial system and the principal source of sediments redistributed and deposited in associated barrier bar, strandline, baylagoon, and shelf systems (Fisher, W.L. and McGowen, J.H., 1967). The interplay of these depositional systems created stratigraphic traps in the area (see Figure 3).

The Woodbine has been a prolific producing zone in the area surrounding the Alabama-Coushatta Tribe of Texas Reservation. The Double A Wells Field at an average depth of 14,000 ft-15,000 ft produced 20.229 MBO and 434.189 BCFG through September 2019 from 62 wells (from Enverus Drillinginfo, 2019) since the field was discovered in 1986. The reservoir sandstones are the terminal fill of a submarine canyon, initially 700-800 ft deep and 4 1/2 mile wide, which probably resulted from gravitational failure of oversteepened, progradational shales, seen as clinoform reflections on dip seismic lines, above the buried Sligo Lower Cretaceous (LK) shelf margin (Stricklin, Fred Jr., 2002). Figure 4 is a diagrammatic dip section showing the location of the Double A Wells Field. These sandstone bodies are highly stratified and discontinuous, however, they are more continuous in the dip direction than along strike (Cuzella, 2014).

Oil and Gas Activity in the Region

Limited drilling has taken place on or near the reservation in recent years, with the last Woodbine well drilled on the reservation in 2007. To the north of the reservation in the late 1990s, several vertical Austin Chalk wells were completed and horizontal development occurred in the mid 2000s.



Figure 5. Map showing drilled wells in and surrounding the Alabama-Coushatta Tribe of Texas Reservation. Both leased (yellow) and unleased (pink) acreage is shown.

The most recent drilling of note was a well drilled by Square Mile Energy, L.L.C. in 2017 (see Figure 5). This directionally drilled well was completed in the Wilcox whose bottom hole location is approximately 625 ft off the Reservation boundary. The well started producing in January 2018 and in 21 months has produced 2,325,699 MCFG and 73,404 BO (from Enverus Drillinginfo, 2019). Although the wireline logs from this well are still being held tight by the Railroad Commission of Texas the stratigraphic cross-section A-A', highlights the stratigraphic trap potential in the Wilcox for the area (see Figure 6).

Square Mile also drilled a directional Hockley Formation well from the same surface pad and the first production occurred in January 2019 (see Figure 5). For the first five months of production, the Hockley #1 averaged 41 BOPD and 183 MCFGD from a depth of less than 4,000 ft. Currently, 1,288 acres are available for leasing. Notably, no drilling has occurred in the unleased lands since 1990, nine years before the acquisition of a regional 3D data set that includes reservation lands. Potential productive horizons ranging in depth from 3,600 ft to 15,000 ft exists in the Hockley, Yegua, Wilcox, Midway, Austin Chalk, and Woodbine Formations.

Seismic Coverage and Availability

Multiple 2D seismic surveys were shot over the area in the past. The Knight 3D Survey a 119 sq. mi. was shot in Polk County in 1999 which included coverage over the Alabama-Coushatta Indian Reservation. DEMD currently archives 14 sq. mi. of data at the Lakewood, CO office (see Figure 7). This seismic data can be viewed at the Lakewood office with prior permission from the Alabama-Coushatta Tribe of Texas.

Stratigraphic Cross-Section



Figure 6. Stratigraphic Cross-Section A-A' showing the variable nature of Wilcox sandstones deposited within the Rockdale Delta System. See Figure 4 for the location of the Cross-Section.



Figure 7. Outline of 3D seismic coverage over Alabama-Coushatta Tribe of Texas lands consisting of approximately 14 sq. mi. of data. The data may be reviewed at DEMD offices in Lakewood, CO with prior permission of the Tribe.

References

- Cuzella, Jerry, 2014, ALABAMA-COUSHATTA Polk County, Texas DOUBLE A WELLS FIELD Upper Woodbine Sandstone Production Review & Analysis: Assistant Secretary of Indian Affairs Division of Energy and Minerals internal report.
- Enverus Drillinginfo, 2019, Drillinginfo production allocated, Enverus Drilling info Website, accessed December 2019. https://app.drillinginfo.com/production/#/default
- Ewing, Thomas E., 2019, Yequa Formation (Late Middle Eocene) in the Gulf coast Basin: Search and Discovery Article #11217 (2019), Posted May 27, 2019, website accessed 2019, http://www.searchanddiscovery.com/pdfz/documents/2019/11217ewing/ndx_ewing.pdf.html
- Fisher, W.L. and McGowen, J.H., 1967: Depositional Systems in the Wilcox Group of Texas and their Relationship to Occurrence of Oil and Gas, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 67-4, 125 p.
- Stricklin, Fred L., 2002, Evolution and High Dissolution Porosity of Woodbine Sandstones in a Slope Submarine Fan, Double A Wells Field, Polk County, Texas – A Deep Water Gulf of Mexico Model Onshore: HGS Bulletin V: 44, no. 7, p. 19, 21, 23.



CONTACT INFORMATION

For more information about the Alabama-Coushatta Tribe of Texas and access to geologic data, please contact:

Alabama-Coushatta Tribe of Texas

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Above: Alabama-Coushatta Chief Ti-cai-che (I Throw a Spear), archives, James James, https://flic.kr/p/2bpurnM.

