

CONOCO MUSEUM FIELD EXPERIENCE

MUSEUM ENTRANCE AND CHRONOLOGY



Read and discuss each of the following with your small group. Be prepared to share information after the field trip.

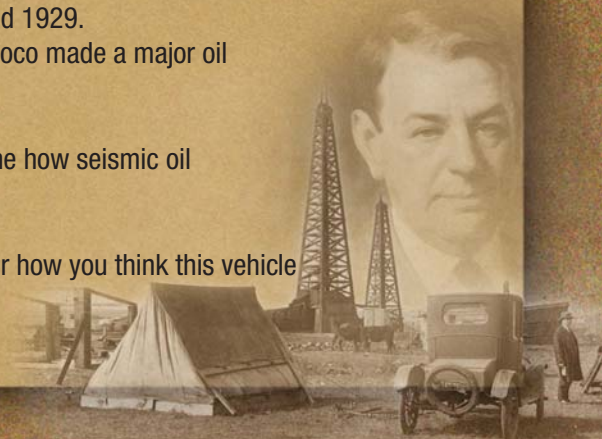
Museum Entrance

1. Locate the quote under the Welcome to Conoco Museum lettering. Interpret what you think it means by, "Starting small but thinking big, Conoco used pioneer grit and western spirit to create a worldwide legacy of remarkable achievements."

Chronology of Conoco

2. Locate and discuss the place in Oklahoma where Marland first discovered oil.
3. Compare how Marland's 101 Ranch Oil Company changed between 1908 and 1929.
4. Research the timeline and locate the name of the foreign country where Conoco made a major oil discovery.
5. Locate the name of the first underwater oil storage tank.
6. The Vibroseis System was developed by Conoco scientists in 1956. Determine how seismic oil exploration changed with this invention.
7. Calculate how many years ago Conoco merged with Phillips Petroleum Co.
8. Examine the Packard tank truck located in the front window display. Consider how you think this vehicle was used to store and deliver oil products.

If time permits, observe and discuss other items of interest.



CONOCO MUSEUM FIELD EXPERIENCE

MUSEUM ENTRANCE AND CHRONOLOGY (ANSWERS)

1. Answers will vary. Answers could include information about how Conoco used perseverance and teamwork in order to accomplish its goals.
2. Marland first discovered oil at the Willie Cry Well southwest of Ponca City.
3. Marland's company changed names from 101 Ranch Oil Co. to Marland Refining Co. to Marland Oil Company and then to Continental Oil Company.
4. Conoco made a major oil discovery in Libya. Oil also was discovered off the coast of Dubai.
5. The first underwater oil storage tank was called Khazzan (Kə zan'). It was developed by Conoco scientists in 1969.
6. Before the invention of the Vibroseis (Vī' brō sīz) System, exploration was done by using explosives. The Vibroseis System was much safer. It allowed for exploration in both populated and environmentally sensitive areas.
7. Conoco merged with Phillips in 2002, and became ConocoPhillips.
8. Answers will vary.

CONOCO MUSEUM FIELD EXPERIENCE

A PROUD HERITAGE



Read and discuss each of the following with your small group. Be prepared to share information after the field trip.

Early History

1. Locate the Early Beginnings display. Name the Ponca Indian chief who gave Marland permission to drill on sacred ground. Explain why the land was sacred.



Brands of Distinction

2. Under the Merger of Mutual Benefit panel, read out loud the different pronunciations of Conoco. Discuss the origin of the Conoco name.

Corporate Headquarters

3. Examine the Marland Boardroom display. Explain the connection between this replica of Marland's boardroom and Ponca City's offices.
4. Browse through the notebook in front of the boardroom. Now study the photo murals overhead. Compare the murals to the pictures in the notebook. Identify the cities in which these two offices are located.

Strong Leadership

5. Find the Honoring Those We Lost panel. Summarize what occurred on Sept. 4, 1991.
6. Observe the portraits of past Conoco presidents and CEOs. Determine which man led Conoco for the most years.

If time permits, observe and discuss other items of interest.



CONOCO MUSEUM FIELD EXPERIENCE

A PROUD HERITAGE (ANSWERS)

1. White Eagle was the Ponca Indian chief who gave Marland permission to drill. The land was sacred because it was the burial ground for Ponca Indian warriors.
2. The Conoco name comes from CONTinental Oil COMpany.
3. The Ponca City Continental Building still houses Marland's office and boardroom on the fifth floor.
4. The photo murals show the Conoco offices in Ponca City and Houston.
5. A Conoco corporate plane crashed in Borneo, Malaysia on Sept. 4, 1991. Twelve lives were lost.
6. Dan Moran held the office of Conoco president for the most years; 1928-1947. Leonard McCollum, president 1947-1964, CEO 1963-1966, leadership for a total of 19 years.

CONOCO MUSEUM FIELD EXPERIENCE

PONCA CITY PROUD



Read and discuss each of the following. Be prepared to share information after the field trip.

Development and Expansion

1. Observe the blue mural titled *Hard-Boiled, Two-Fisted*. Explain the importance of Mr. Dan Moran to Conoco's operations. Describe an unusual money saving technique he used.



Oklahoma's Oldest Operating Refinery

2. Evaluate the method by which Mr. Marland acquired the money to build the Ponca City refinery.
3. Located in the display case find the quote, "Moving 'forward together' and making a difference." Identified is a partnership between two groups. Name the two groups.

Conoco's Other Refining Operations

4. Name the four locations of Conoco's North American refineries.
5. Locate the diesel to hydrotreating fractionation process on the lighted wall. Follow the lights to the vehicle for which diesel fuel is produced. Name the vehicle.

Support During World War II

6. Explain women's involvement in Conoco's operations during World War II and give an example of their efforts.

If time permits, observe and discuss other items of interest.



CONOCO MUSEUM FIELD EXPERIENCE

PONCA CITY PROUD (ANSWERS)

1. By 1937, Mr. Moran helped eliminate the company's \$43 million debt.
One method of savings he used 2,000 sheep to "mow" the grass at the tank farm, saving the company \$10,000 annually.
2. Mr. Marland borrowed money from all of the banks at which he did business.
3. The partnership was between Conoco and Ponca City.
4. Billings, Mont.; Denver, Colo.; Lake Charles, La.; and Ponca City, Okla.
5. A school bus would use diesel.
6. Women replaced men as workers. Responding to an urgent wartime plea from the U.S. Navy, 15,000 drums of aircraft oil (enough to fill 180 railroad cars) were shipped in a record 6 days.

CONOCO MUSEUM FIELD EXPERIENCE

GETTING TO THE FUTURE FIRST



Read and discuss each of the following. Be prepared to share information after the field trip.

Technological Advancements

1. Inspect the items in the laboratory drawers. Describe which items might still be useful in a modern day laboratory.
2. Find the case with the oil exploration equipment. Describe where you could use a seismic detector.
3. Locate the quote by Ray Gilbert on the wall. Explain some advantages of the new technological breakthrough Vibroseis System.
4. Examine the poster that describes winners of the Conoco Mileage Merchant contest. Count the number of different states represented by the \$5 winners.
5. Name a product created with Conoco wax.

World Leaders in Coking

6. Summarize how crude oil is manufactured to produce coke.

If time permits, observe and discuss other items of interest.



CONOCO MUSEUM FIELD EXPERIENCE

GETTING TO THE FUTURE FIRST (ANSWERS)

1. Answers will vary. Answers might include: beakers, test tubes, safety glasses, product samples for testing.
2. A seismic detector would be used on land and in water.
3. Answers will vary. There was no longer a need for the use of dynamite. Could use in rural or metro settings.
4. Twelve different states are represented on the poster.
5. Crayola crayons were made from Conoco wax.
6. The residue from refined crude oil is heated to more than 900 degrees Fahrenheit and creates a solid form of carbon, known as coke.

CONOCO MUSEUM FIELD EXPERIENCE

SETTING THE PACE

Read and discuss each of the following. Be prepared to share information after the field trip.

Expanding the Hunt for Oil

1. Conoco began exploring offshore in 1999 with the Deepwater Pathfinder. Summarize the reasons why this was such a big breakthrough in exploration.

Doodlebugger Display

2. Read and interpret the information about what life was like for doodlebuggers. Evaluate whether you think you would like the lifestyle. Be able to explain your reasoning.
3. Examine the doodlebugger equipment. Discuss what equipment you think the doodlebugger might have needed but didn't have.
4. Examine the red dynamite shooting box sitting near the doodlebugger and read the information. Infer what you think the last CAUTION statement means.

Storage and Delivery

5. Compare the delivery of kerosene, gasoline, and crude oil in the 1870s to delivery in 1998.

Overseas Expansion

6. Find *A Marvel of Technology*. Instead of using pipelines, Conoco saved millions of dollars by standing oil storage on its head. Summarize how it was able to store oil in a tank without a bottom.

If time permits, observe and discuss other items of interest.



CONOCO MUSEUM FIELD EXPERIENCE

SETTING THE PACE (ANSWERS)

1. The Deepwater Pathfinder allowed Conoco to drill down 10,000 feet and explore for oil in the ultra-deep Gulf of Mexico and elsewhere.
2. Answers will vary. Doodlebuggers could have a dangerous job. They typically moved very often. Because of their work, they were able to see a lot of the world. They worked as a family and built strong relationships.
3. Answers will vary. Doodlebuggers might use modern-day technology.
4. If you have one accident with dynamite, you probably would not live to have another.
5. In the 1870s, kerosene was delivered door-to-door by a horse-pulled tank wagon, compared to delivery across the ocean by double-hulled tankers in 1998.
6. Since oil floats on water, it could be stored in a tank without a floor or bottom. The oil always floats to the top.

CONOCO MUSEUM FIELD EXPERIENCE

MARKETING CONOCO



Read and discuss each of the following. Be prepared to share information after the field trip.

Traveling With Conoco

1. Analyze the information in the Touraide Travel Bureau desk area. Explain how Conoco's free Touraide Trip Planning Service would assist travelers.



Fueling the Nation

2. Describe what types of services were offered at Conoco stations in the 1940s and 1950s. Explain how that is different than services of today.
3. Compare and contrast the design of a Conoco station in 1930 to a present day Conoco station.
4. Operate the hands-on gravity fed pump in the small service station. Compare and contrast this pump for the 1920s to the gasoline pumps of today.

JETting Into International Marketing

5. Conoco marketed its Libyan oil through newly acquired JET™ stations. How many JET outlets did Conoco operate? Name European countries where JET stations can be found.

Partnership at Yellowstone

6. Evaluate why Yellowstone National Park would only allow Conoco to be sold inside the park.

If time permits, observe and discuss other items of interest.



CONOCO MUSEUM FIELD EXPERIENCE

MARKETING CONOCO (ANSWERS)

1. This was a travel service offered by Conoco. Touraide provided maps, marked planned travel routes, and even designated Conoco service stations along the way. Other answers will vary.
2. Stations were full-service. Attendants in uniform pumped gas, added oil and water, cleaned windshields, and checked tires. Openings were fun; free Conoco merchandise was given to customers.
3. 1930s – English cottage style buildings; 1990s – Convenience stores.
4. Answers will vary. The 1920s pump has to be hand pumped. You can see the gas. The measurement system is not very accurate. You can only dispense 8 gallons at a time.
5. Sweden, Norway, Germany, England, Austria, Turkey, Denmark, United States, and Thailand
6. In 1917, the Yellowstone Park Transportation Company began replacing its traditional horse-drawn carriages with motor touring cars for tourists. Conoco offered to supply all gasoline and lubricants, which became an exclusive business from the time automobiles were first permitted in the park.