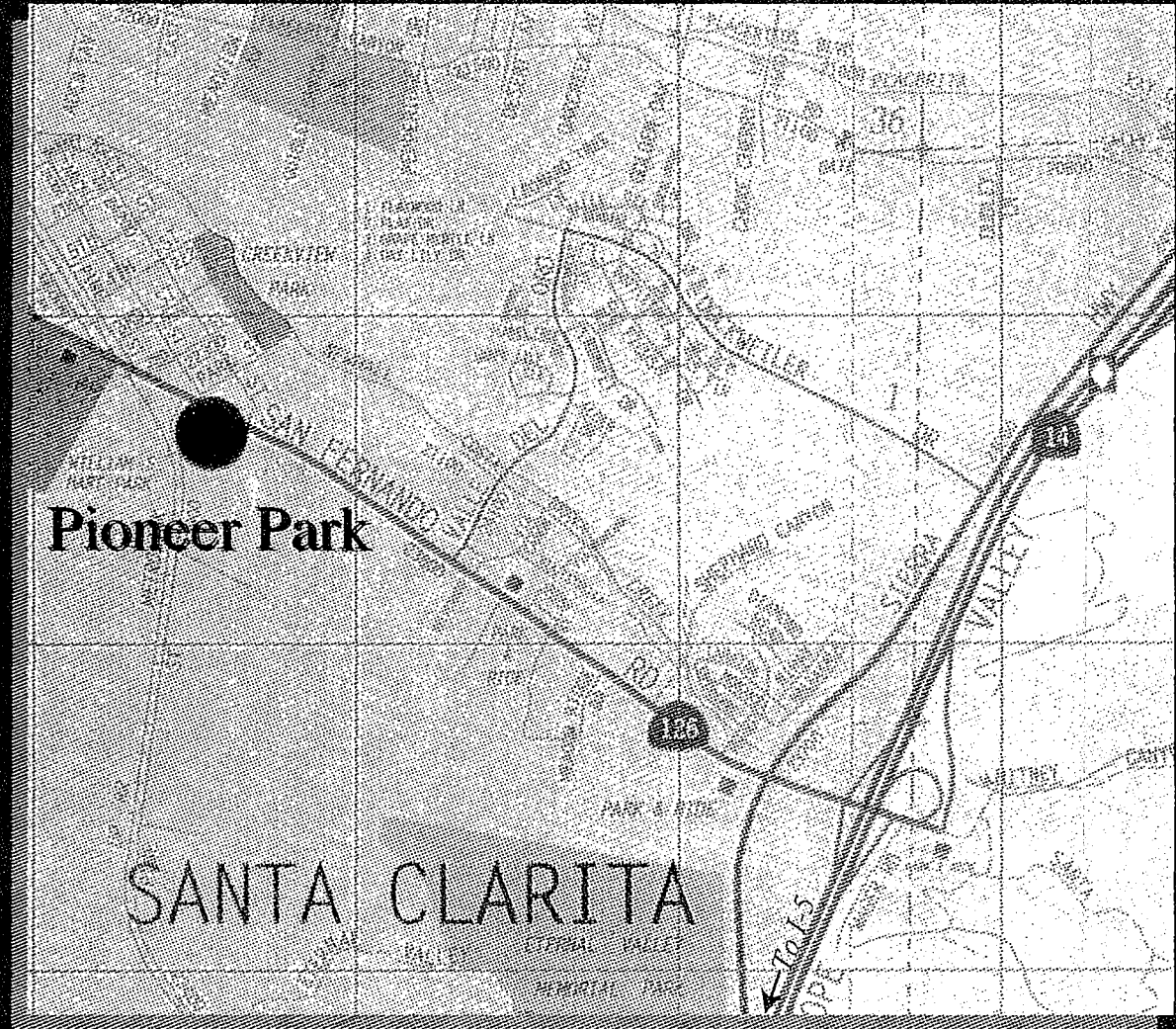


Pioneer Oil Refinery Donation



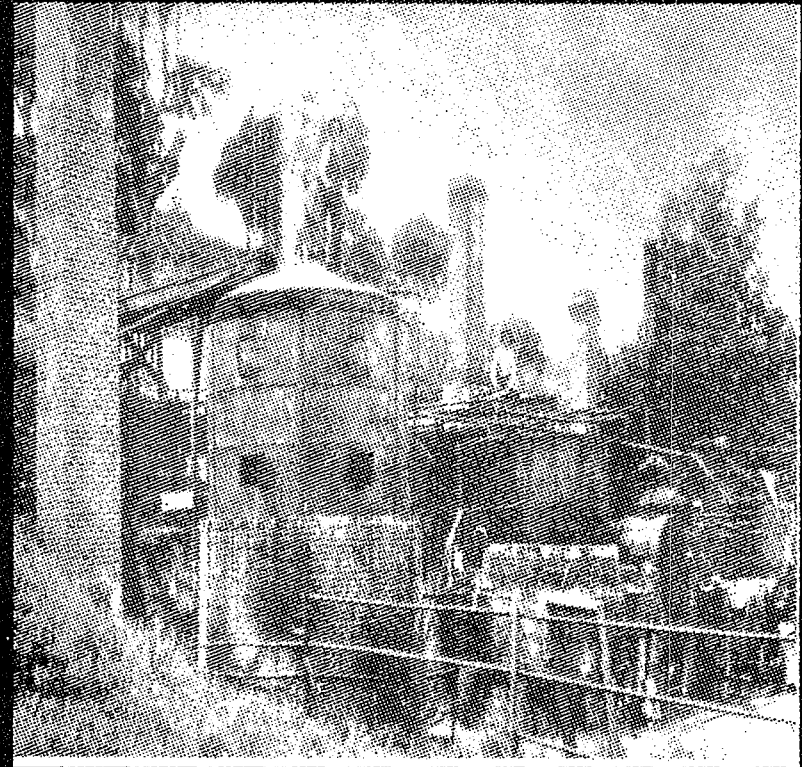
- ◆ Location
- ◆ History
- ◆ Plan the Park
- ◆ Chevron
Action Plan
- ◆ Park Future

Location



General History

- ◆ Pioneer Refinery was built in 1876 to process crude oil from Pico Canyon.
- ◆ The refinery was the first commercial oil refinery in California, and is the oldest refinery in the country, still-standing.

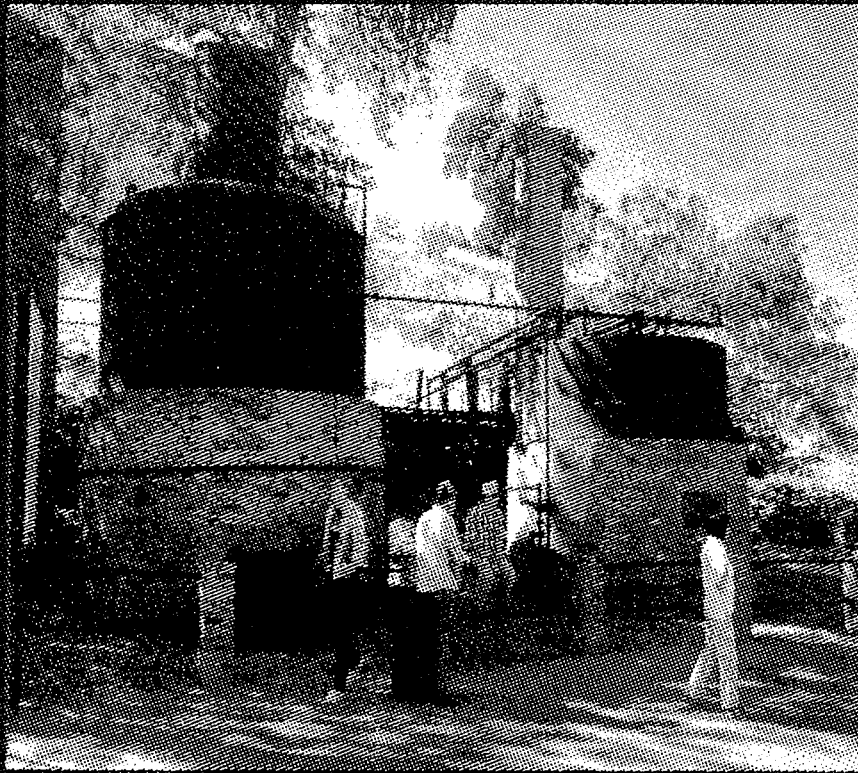


Plan the Park

- ◆ Research Park Development
 - Identification of park elements
- ◆ Research Petroleum Refining
 - Complex refining process
- ◆ Site Layout
 - Trail layout / Placards
- ◆ Initial Project Development
 - Project roadmap
 - Cost estimates

Oil Refining Education

◆ Placards



- 1. Visitation Stops
- 2. History of Pioneer Refinery
- 3. The Refining Process
- 4. Crude Storage Tank
- 5. Water Storage Tank
- 6. Still No. 4 and No. 3
- 7. Rundown Tanks
- 8. Acid Treating Tank
- 9. Wash Tank
- 10. Residuum Tank
- 11. Pump House

Sample Placard

Still No. 4 and No. 3 Crude Oil into Kerosene

2

Vapor was then moved through the cooler.

3

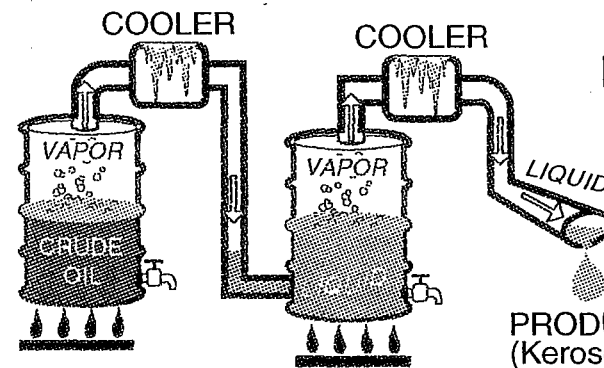
Liquid was produced by cooling.

4

The final product is kerosene.

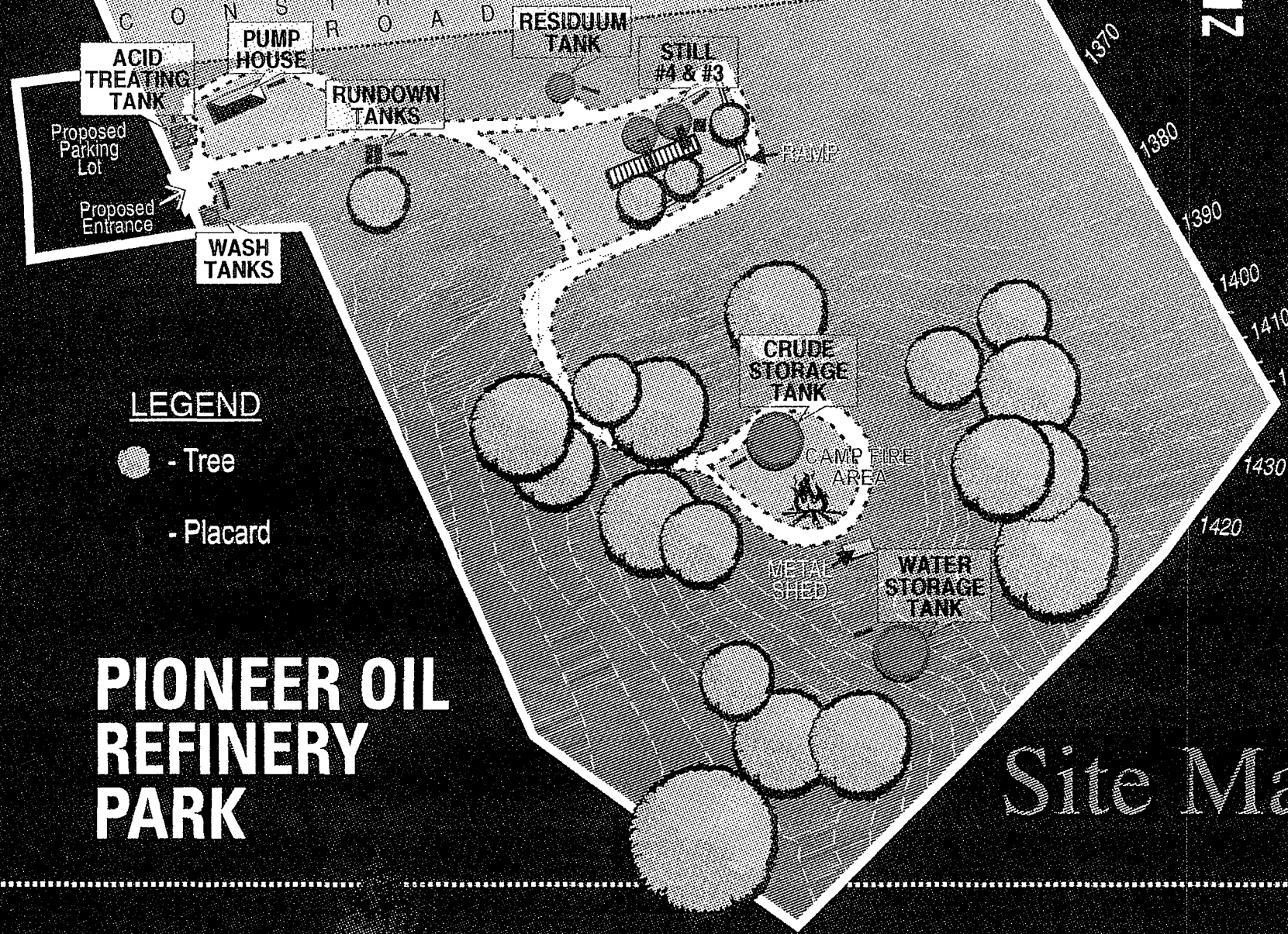
1

Crude oil was boiled until vapor was produced.



Kerosene lamps
are used for
lighting.

C O N S T R U C T I O N



LEGEND

- - Tree
- - Placard

**PIONEER OIL
REFINERY
PARK**

Site Map

Chevron's Action Plan

◆ Project planning, plot plan \$ 8,000

◆ Purchase placards

◆ Install placards

◆ Mark trail

◆ Selective interior fencing

Total

\$15,000

Estimated Restoration Cost

\$300,000

\$250,000

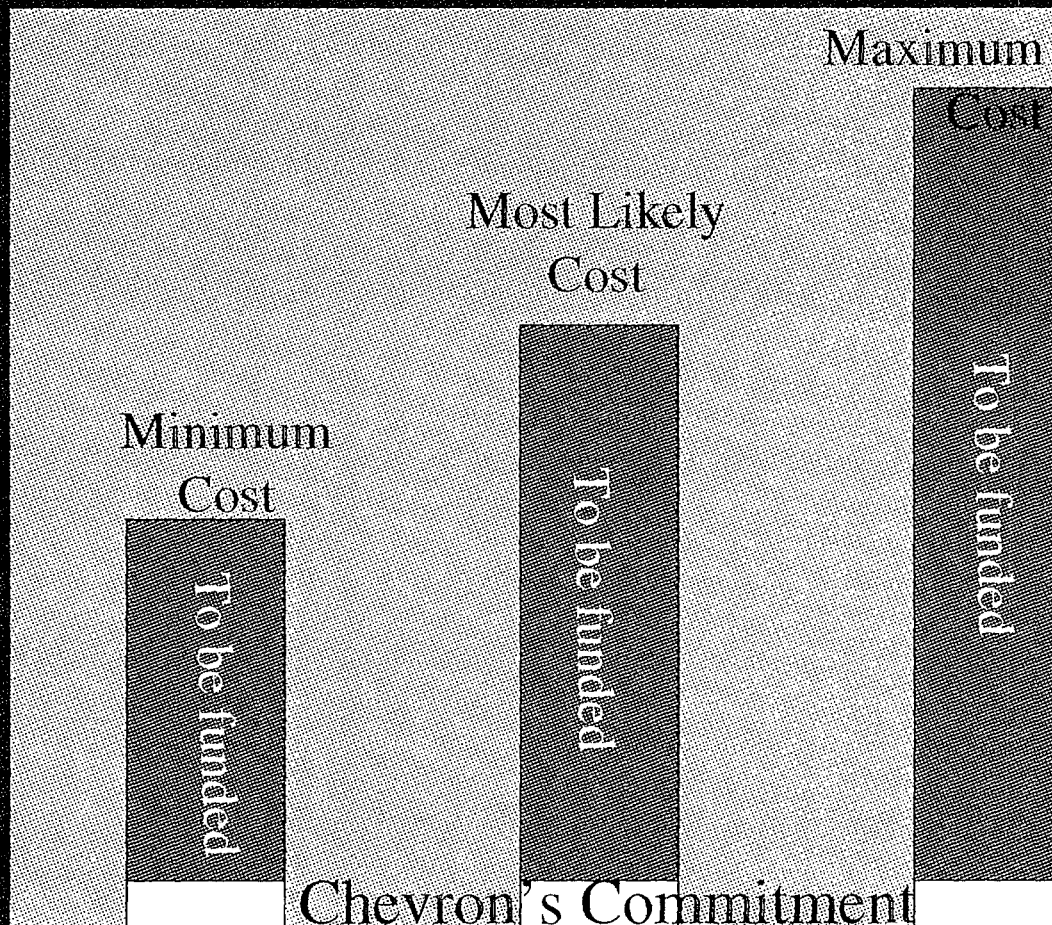
\$200,000

\$150,000

\$100,000

\$50,000

\$-



Chevron's Commitment

Possible Sources of Grants

- ◆ California Office of Historic Preservation
- ◆ California State Parks Foundation
- ◆ California Department of Parks and Recreation

CLOSING

- ◆ Future contacts
- ◆ Acknowledgements
- ◆ Questions

HISTORY OF PIONEER REFINERY

Standard Oil drilled the first commercial oil well in California in the Pico Canyon oilfield. Mentryville became the town where the oil was produced and the workers lived.

Pioneer Refinery was built in 1876 to process this oil. Five miles from Mentryville, this location was chosen because it had a source of water.

The refinery was the first commercial oil refinery in California, and is the oldest refinery in the country, still-standing.

Standard Oil fully restored the refinery in 1930 and opened it to the public. Chevron Corporation donated the site to the City of Santa Clarita in 1998.



THE REFINING PROCESS

Refining is a combination of processes and operations that breakdown crude oil into its many products.

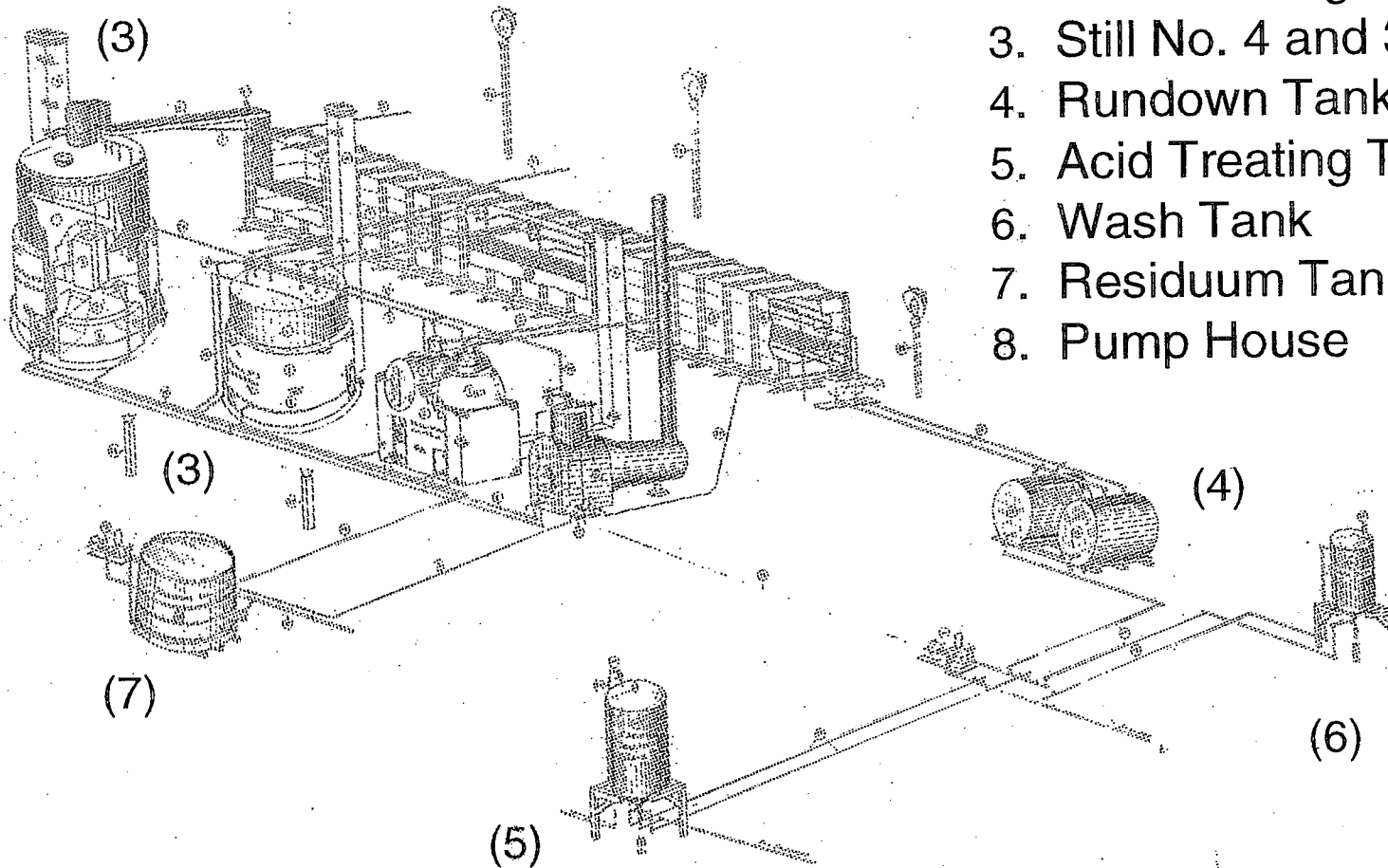
Crude oil is heated until vapor is produced. This vapor is changed into a liquid during a cooling process. The liquid is mixed with an acid and air to improve it's color, odor and stability, then washed with water to remove the acid. The final products produced here were kerosene and grease.



PIONEER OIL REFINERY PARK

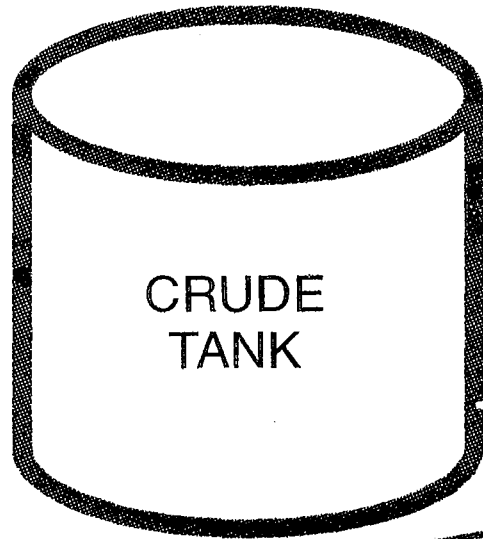
Visitation Stops:

1. Crude Storage Tank (hillside)
2. Water Storage Tank (hillside)
3. Still No. 4 and 3
4. Rundown Tanks
5. Acid Treating Tank
6. Wash Tank
7. Residuum Tank
8. Pump House



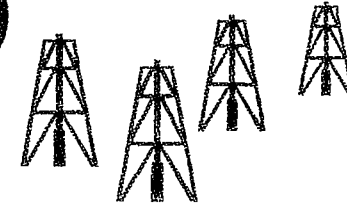
CRUDE STORAGE TANK

Crude oil is unrefined liquid petroleum.



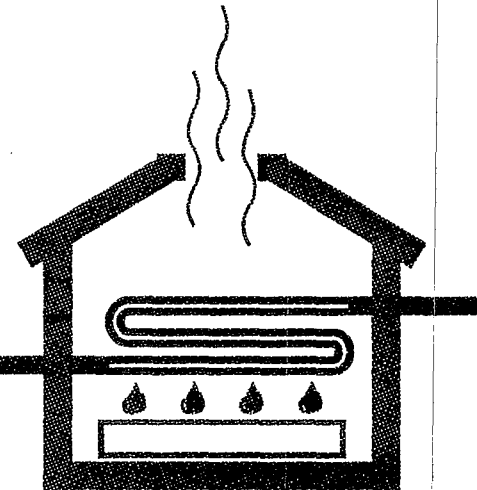
It was hauled from the well to this refinery in wooden barrels and stored in this tank.

1



2

CHARGE PUMP

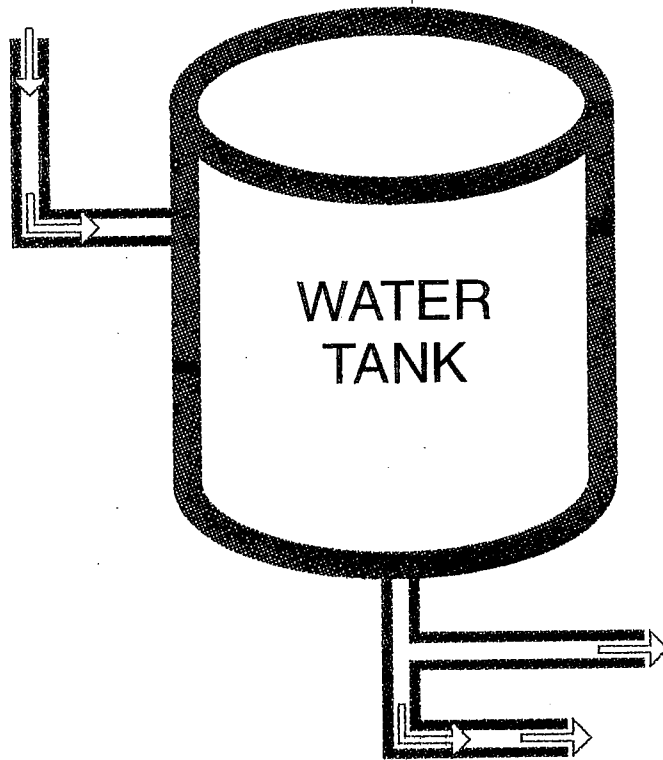


FURNACE

From this tank, it flowed into the furnace (stills).



WATER STORAGE TANK



This water tank supplied water for the cooler (condenser box).

It also supplied water for the wash tank.



Still No. 4 and No. 3 Crude Oil into Kerosene

2

Vapor was then moved through the cooler.

3

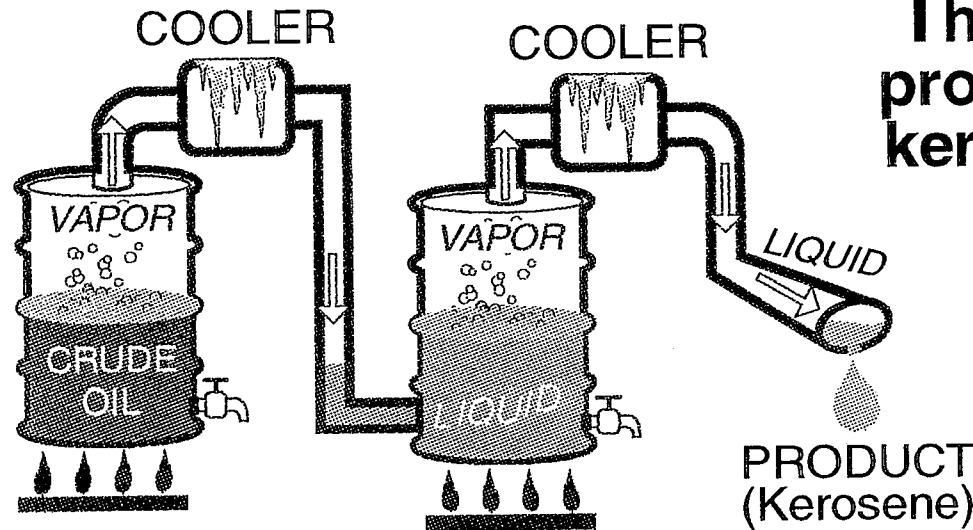
Liquid was produced by cooling.

4

The final product is kerosene.

1

Crude oil was boiled until vapor was produced.

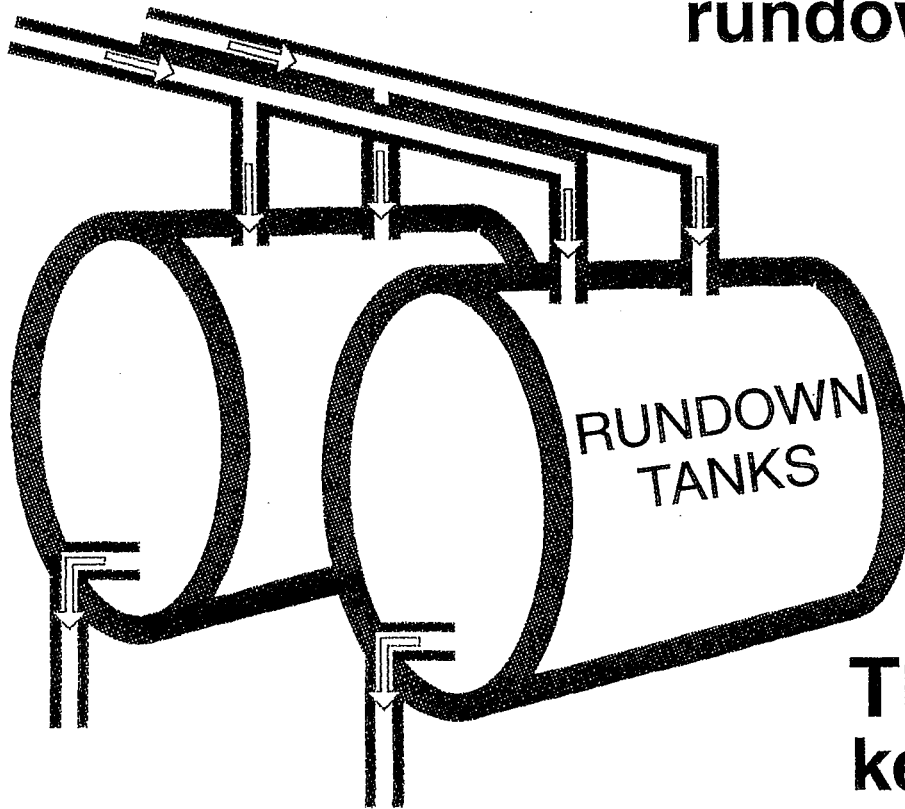


Kerosene lamps
are used for
lighting.

RUNDOWN TANKS

1

The kerosene was transferred into two rundown tanks.



2

The tanks stored the kerosene until it was transferred to the acid treating tank and wash tank.



ACID TREATING TANK

1

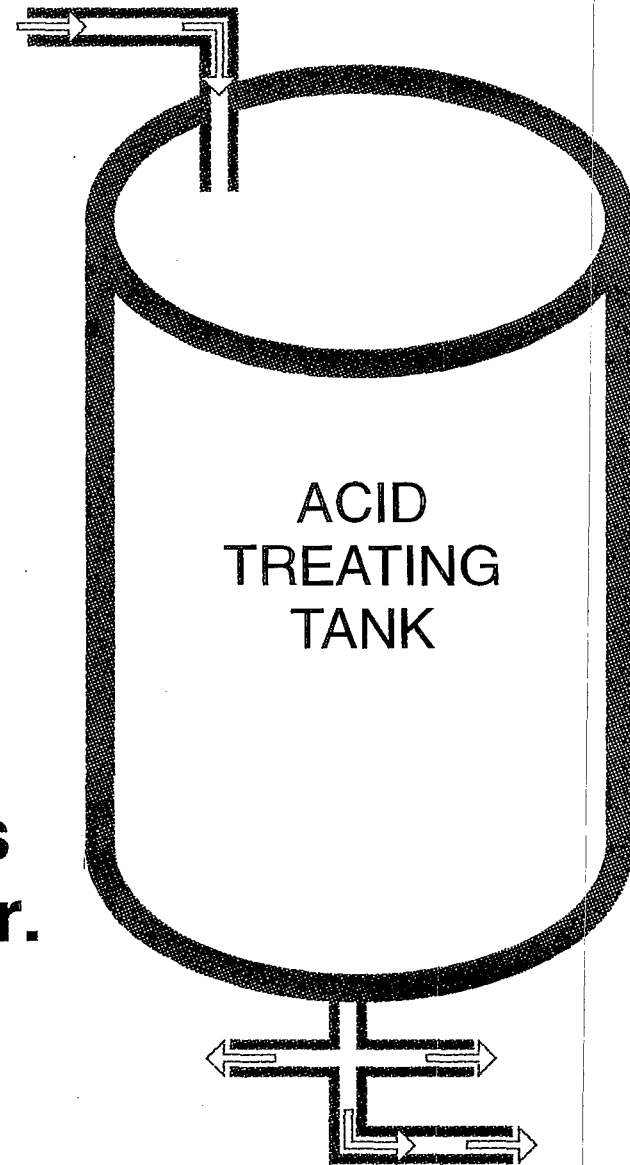
The kerosene flowed into this tank from the rundown tanks.

2

The kerosene was mixed with sulfuric acid and air.

3

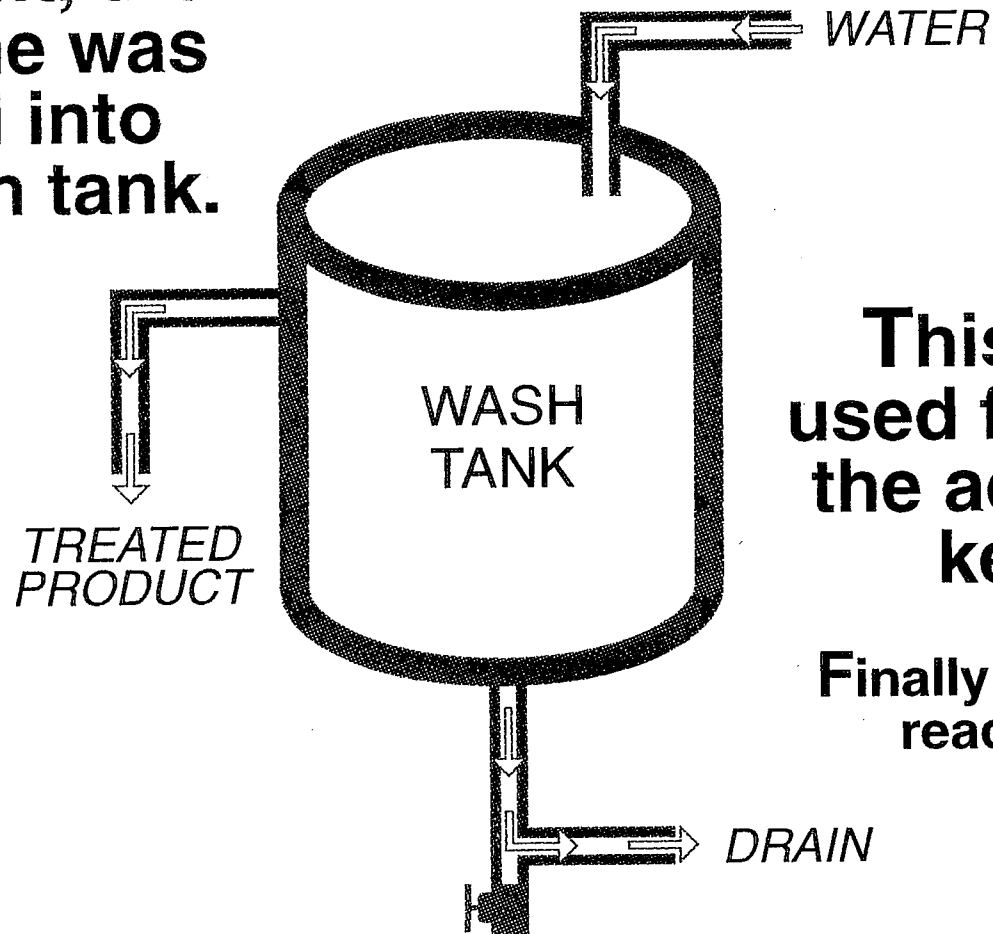
This treatment would improve the kerosene's stability, color and odor.



WASH TANK

1

After the acid treatment, the kerosene was moved into the wash tank.



2

This tank was used for removing the acid from the kerosene.

Finally, the kerosene is ready to be sold.



RESIDUUM TANK “Leftovers”

Grease was what was left over after distillation (the heating / cooling process).

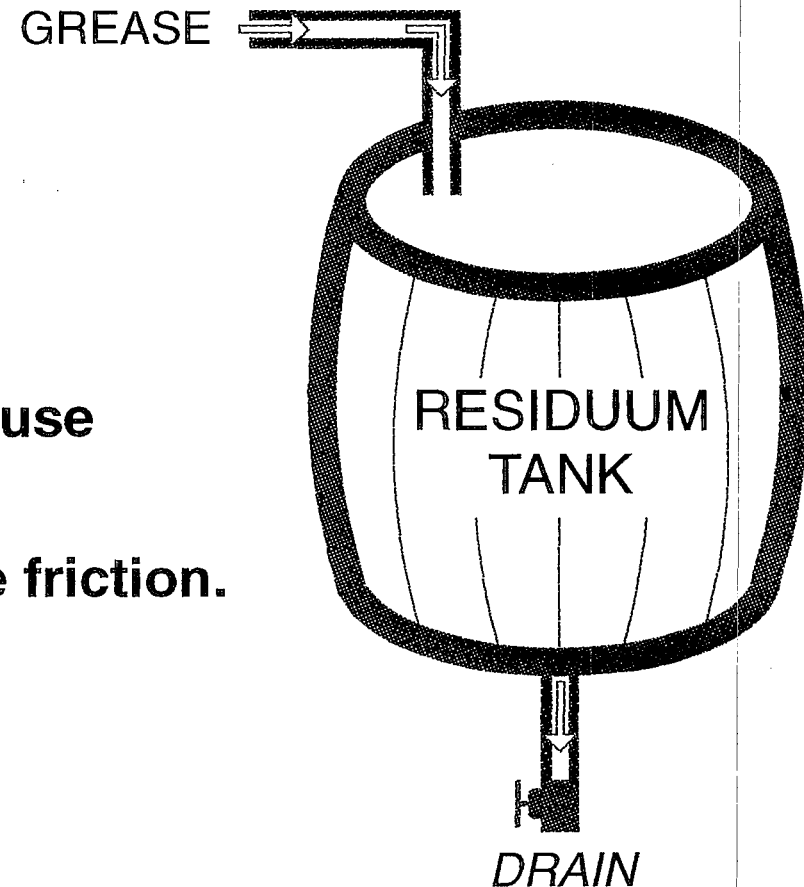
This grease was as thick as maple syrup.

Due to its thickness, it remained at the bottom of the stills.

Then it was
transferred to this
wooden tank.

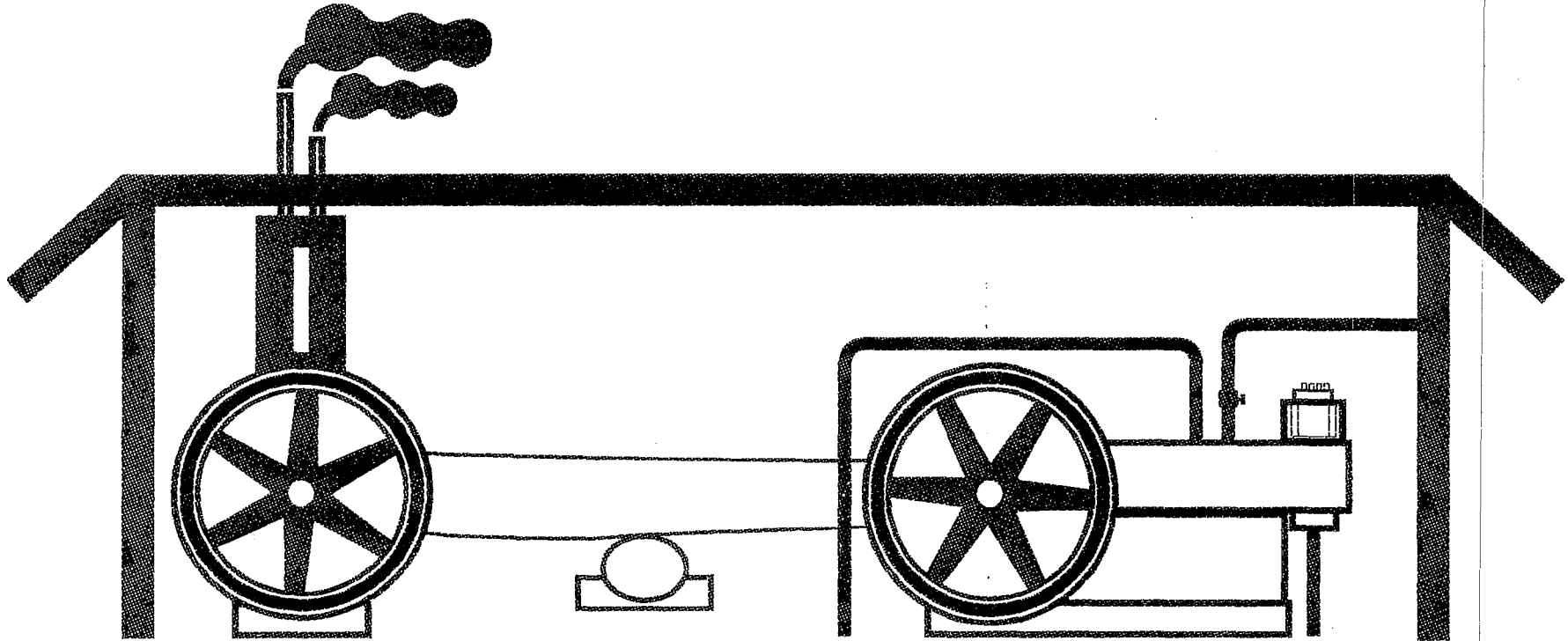
Wagon wheels and machines use
grease as lubricants.

Lubricants are used to reduce friction.



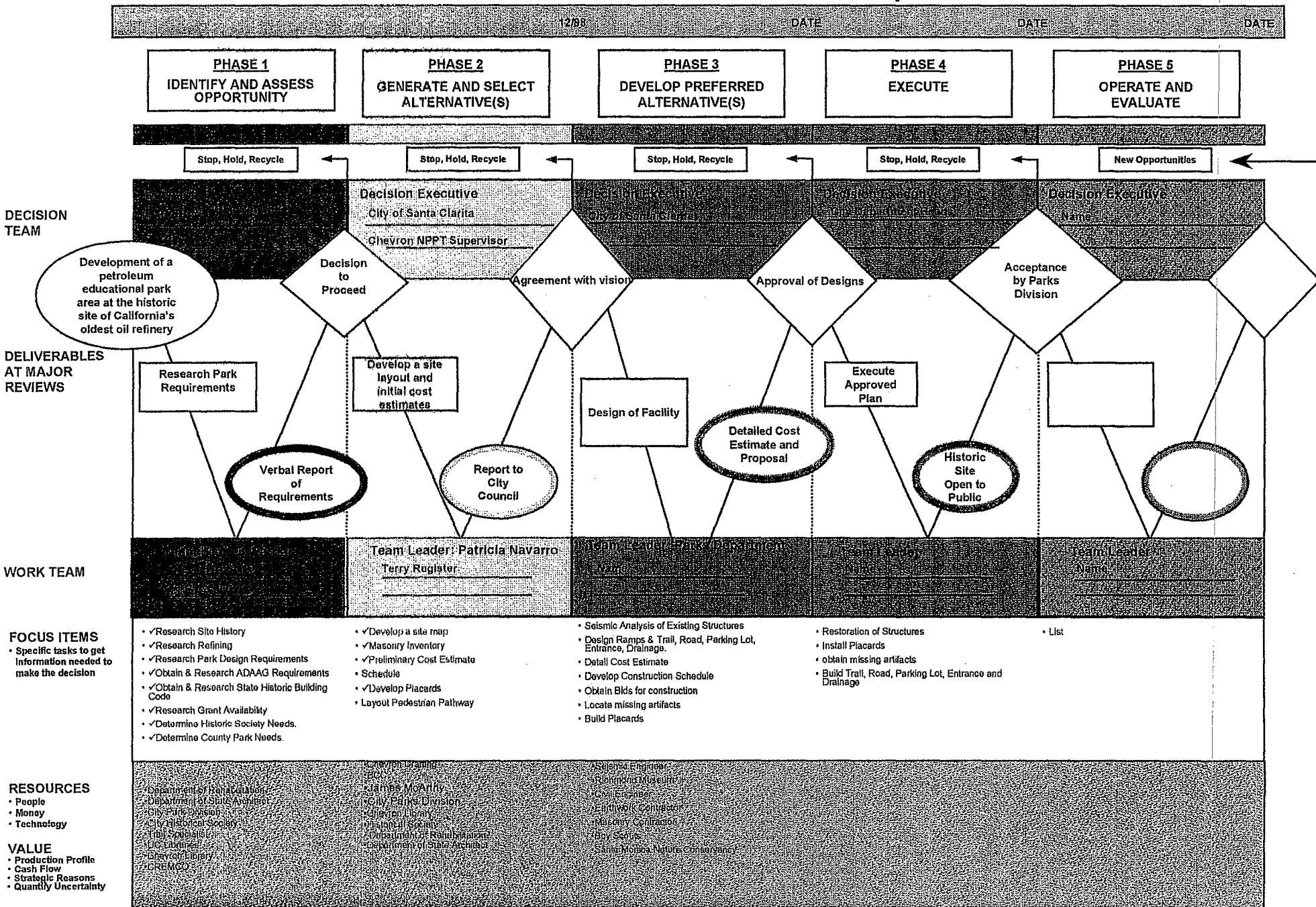
PUMP HOUSE

In the early 1900's the pump sent water to the oil worker's camp at Pico Canyon, five miles away. It was located here because there was a supply of spring water.



PROJECT NAME:

Pioneer Park Restoration & Development



000000001