

IMPORTANT DATES IN THE HISTORY OF OIL AND THE ROYAL DUTCH & SHELL Oil and the Martinez Refinery 1830 - 1949, 1972 – 1992 & 2020

- 1830 Marcus. Samuel begins a small trading company to trade between London and South East Asia. Taking finished goods from England and brings back sea shells and other raw products to England.
- 1846 Abraham Gesner produces Kerosene from the distillation of coal.
- 1850 James Young heated bituminous coal to produce oil, paraffin wax and a paraffin lamp oil.
- 1853 - M. Samuel & Company begins trading between the UK and South East Asia. Sets up an input-export company brings back sea shells, jute and other raw material.
- 1855 Prof. Benjamin Stillman, Jr. head of Chemistry at Yale University issues a report after detailed analysis of samples of Pennsylvania Oil forecasting the major product that can be made from oil. Among his findings he indicates lamp oil for illumination, paraffin wax for candles and the developments of lubricants. This report generates the exploration for oil.
- 1859 Drake finds oil in Pennsylvania after drilling 72 feet. Starts the Pennsylvania Oil boom. Proved that it was possible to drill for oil and find it.
- 1861 First oil well drilled in California at Petrolia in Humboldt County. Oil seepage lead to the drilling of wells near the coast. Very little oil was found, no production and the wells abandoned.
- 1861 - 1863 Near the town of Newhall north of Los Angeles in Pico canyon oil seepage was found leading to the formation of a oil company and setting up a drilling rig and small kerosene refinery still.
- 1863 John D. Rockefeller forms an oil company near Cleveland, Ohio. From this beginning the great Standard Oil Company is born.
- 1874 Marcus Samuels (Sr) dies and his two sons, Marcus and Samuel take over the company.
- 1877 The Nobel brothers (Robert & Ludwig) design and build the first “modern” bulk oil tanker to move Russian oil.
- 1880 Alileo Janz Zijlker, superintendent of a Dutch tobacco plantation in Langkat on the east coast of Sumatra finds a light kerosene like oil floating on an island pool. It is analyzed as 60% lamp oil. He obtains a lease to explore for oil and produce refined product.
- 1881 -1882 Two Batavia banking houses advanced Zijlker finances to begin exploratory drilling in search for oil to determine the extent of the oil deposit Hendrik Deterding, working for one of the banks helped to acquire the loan.
- 1882 Zijlker goes to Holland to raise additional capital. Forms an exploration oil company.
- 1883 Receives a mining concession from the Sultan of Langkat for 75 years to explore and product oil product.
- 1884 Starts drilling in Sumatra and in June of 1885 hits oil at 72 feet, gets 5 BBL/D oil flow.
- 1886 Adrian Stoop, a young Dutch geologist goes to Pennsylvania to study the oil business. Produces important report detailing all aspects of oil from prospecting, to sales, including local laws covering the oil business.

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- 1887 - 1889 Well on Sumatra continued to produce, now reaches 164 bbl/day.
- 1889 Zijlker returns to Holland. On board ship meets N. P. Van den Berg, a banker, who agrees to form an Oil Company.
- 1890 Standard Oil Company invades Europe and South East Asia with cheap Kerosene.
- 1890 On May 8th a new company is formed. Petition King William III of Holland to use the word "ROYAL" in the name of the company.
- 1890 June 16th, the new Royal Dutch company is born.
- 1890 December 27th, Zijlker dies suddenly in Singapore on the way Sumatra.
- 1891 J.B. August Kessler named Assistant President of Royal Dutch.
- 1891 Marcus Samuels (Jr) builds their first oil tanker - The MUREX; after seeing the Nobel designed tanker built to move Russian oil in bulk.
- 1892 First refinery is built in Sumatra based on Pennsylvania design and produces 1600cans (300 bbl) of Kerosene from 800 - 900 bbl's of crude oil. Names the brand "Crown Oil".
- 1892 In May, Kessler becomes chief executive officer of Royal Dutch.
- 1892 July - M. Samuel & Company of London introduces the tanker "Murex" for bulk shipping of oil to the Orient and arrives in the Far East with Russian kerosene.
- 1896 On July 13, Kessler hires Hedrick Deterding as his assistant and sends him to the far east to study the business and the marketing of petroleum products.
- 1897 October 18 - M. Samuel & Company organizes the "SHELL" Transport & Trading Co., Ltd. to organize oil shipments for his company.
- 1897 Deterding starts to build a Sales and Marketing department. Converts the company to bulk shipments, builds tankers and distribution hubs. Believes that there must be ample product near the point of sales.
- 1898-1900 John Tokheim made the first gas pump, has underground storage and volume indication allowing for curbside or island pump location.
- 1900 Kessler goes on a trip to the far East Indies, falls ill and later returned to Holland. On his way on December 14, 1900 dies in Naples - "killed by overwork".
- 1901 Deterding becomes chief executive officer of Royal Dutch as recommended by Kessler.
- 1901 The "Shell" Transport & Trading Company, Limited of London was in a competitive position in the Indies with Royal Dutch.
- 1902 In June 1902 a three - party agreement was signed between the "Shell" Transport & Trading Company, Limited of London, the French Rothchild enterprise and Royal Dutch with Asiatic Petroleum Company, Ltd. established to act as the sole selling agent in the far East.
- 1903 Standard Oil Co. contracts with Asiatic for surplus gasoline in Asia and ships to the Pacific West Coast of the US proving that there is a market there.
- 1907 A merger between Royal Dutch, the "Shell" Transport & Trading Company, Limited of London, and the French Rothchild enterprise forming a new company. Royal Dutch took a dominant role by owning 60 percent of the new holding company. This group of companies

would now be known as the Royal Dutch - Shell Group. They would continue to form new companies under their control as needed.

- 1907 The Oklahoma Petroleum Company is formed and purchases producing companies in the Glenn Pool area.
- 1909 The Union and Tulsa Petroleum Company are formed
- 1910 Standard Oil builds a refinery in Richmond, California and cancels the contract with Asiatic (Shell).
- 1910 Deterding decides to enter the American market to sell Sumatra gasoline in competition with Standard Oil. Selects the west coast of America for the location. Picks San Francisco as sales office.
- 1910 Attempt to form a merger with the Indian Refining Company of Lawrenceville, Ill for their eastern US markets and lubrication oil business and with a possibility to include Gulf Oil Company. Deterding determines that they can bring Sumatra gasoline to US for more than merger would provide. Deal fails and did not complete.
- 1911 The US Supreme Court orders the Standard Oil Company to be broken into 33 separate companies.
- 1911 Deterding planned for the day Shell gasoline would be sold in America.
- 1911 Royal Dutch Shell has now entered markets in Europe, Asia, Australia and parts of Africa.
- 1911 Deterding sends H.R. Gallagher to San Francisco to open a small marketing office under the Name of Indian Refining Company of California.
- 1911 Deterding forms a Marketing company in San Francisco to sell Sumatra "Shell Motor Sprits" gasoline on the West Coast. First named the Indian Refining Company of California.
- 1911 - 1912 Under the management of London base Asiatic Petroleum Company, the Group moves into the Pacific Northwest, builds a bulk terminal and starts marketing Shell products.
- 1911-1912 In September, fifteen acres of land on Suisun Bay at Martinez was purchased from the Frazer family for \$8,500 by the American Gasoline Company for the erection of a deep-water terminal; to provide for a wharf, six tanks, a dormitory and two bungalows. Construction underway before the ink is dry on the purchase.
- 1912 With the failure of the Indian Refining merger, on September 3rd, The American Gasoline Co. was formed in the State of New York. Construction of the Martinez depot underway.
- 1912 September 12 The Roxana Petroleum Company of Oklahoma is formed.
- 1913 June 16th, The tanker S.S. J.B.A. Kessler docks at the new Martinez wharf with the first shipment of "Shell Motor Sprits" from Sumatra.
- 1913 Merlon J. Trumble forms the Tremble Refining Company to license his refining process for the continue production of light product.
- 1913 Gulf Refining made a major improvement in sales of gasoline by opening the first off, the street filling station.
- 1913 August 11th. The American Oil Company purchases the California Oilfields Ltd. Production field at Coalinga along with the neighboring WK & Turner Oil Companies for \$3,000,000 in

cash and \$10,000,000 in stock. The first accusations of oil land in California and America for the Group.

- 1914 After a study of refinery sites in California, it was decided to build at Martinez and construct a pipeline from Coalinga to Martinez.
- 1914 April 16th. The Valley Pipeline Company is formed. In October construction begins on the pipeline to Martinez.
- 1914 Royal Dutch-Shell Group signs a contract with the Trumble Refining Company to use their process throughout the Groups refineries. The first two units are to go in at Martinez.
- 1914 – July The California operation name is changed to Shell Company of California,
- 1914 The British Government confiscates 72 Royal Dutch tankers for use in World War I.
- 1914 In December, Shell acquired 368 acres of land adjoining the Martinez water front depot from the Martinez Land Trust for \$144,000, for construction of its first “modern” refinery in America.
- 1915 Shell designs and begins construction of major refinery at Martinez.
- 1915 Pyzel, a Dutch process engineer is sent to Martinez to review the proposed refinery design.
- 1915 In April after studying the Trumble process and the license, the Group purchases the Trumble patents for \$1,000,000. Pyzel begins to modify the design for the second Trumble unit at Martinez.
- 1915 The Simplex Refining Company was formed in San Francisco to hold the Trumble patents and handle their licensing and plant design for their customers. Forerunner of Shell Development Company. (See 1928 date on SDC).
- 1915 Shell of California acquires the parking concession at the 1915 Pan Pacific Exposition in San Francisco and builds a small gasoline service station in the parking area. The service is a model for future stations. Prefabricated units are ordered and packaged for future sites.
- 1915 A Research Laboratory at Martinez at the leased American Oriental refinery next door at Bull's Head first in California and in operation before refinery completed.
- 1915 Shell establishes first privately owned telephone system with a 200-mile line to Martinez and Coalinga from San Francisco.
- 1916 Also purchased the Guarding Oil Co. at Coalinga.
- 1916 Shell Oil explores the Ventura area for oil properties. In June, Shell acquires whole Ventura field except of 2 parcels for a total area of 13,000 acres. Begins prospecting but no oil found.
- 1917 Glass tops were installed on gasoline pumps so the customer could see what they were buying. Volume was indicated in gallons.
- 1921 Van Senden establishes a Personnel Department at Martinez to aid in filling positions from within the refinery and help workers with promotions or department change.
- 1921 June 25 - Shell brings in Alamitos No. 1 well at Signal Hill (Long Beach area) field becomes a major producer.
- 1921 October 19 - Royal Dutch-Shell Group signs agreement to acquire properties of Union Oil Company a Delaware company.

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- 1922 February 8th - Shell Union Oil Corporation formed as a holding company to take over former Union of Delaware properties. Stock issued 65.7% to Royal Dutch-Shell, 28% to Union Oil and 6.3% to Dundee Corp. (a small secondary investor). Union of Delaware properties divided between Shell of California and Roxana (Oklahoma).
- 1922 March 7th - Gosnell No 3 discovery well at Ventura oil field hits oil after 6 years of drilling and 2 1/2 million dollars. The field developed into one of Shell's most profitable.
- 1923 September 25th - Wilmington Refinery begins operation at 25,000 bbl/D.
- 1925 Shell built two new concrete ground level reservoirs at Martinez. One held 1,000,000 bbl's and the second held 500,00 bbl's to store SJV and LA area crude.
- 1925 Shell purchases leases in San Joaquin Valley and LA area and develops intense oil prospecting operation.
- 1925 Clock faced dials were added to the gasoline pump for better indication of purchase.
- 1926 A third concrete ground level reservoirs is built at Martinez. This one held 1,500,000 bbl's.
- 1927 April 1 - Shell begins operation of 100 miles 4 inch and 6-inch gasoline pipeline from Ventura field to the Wilmington Refinery.
- 1927 At Ventura the Edison #19 hit oil at 7,100 feet to produce 1,600 bbl/d. This was the deepest well drilled to date in California.
- 1927 September 1 - Dominguez Refinery put into operation. Is an extension of Wilmington and both plants operated as one refinery.
- 1928 August 30 - Royal Dutch-Shell Group and Shell Union purchase 1/2 interest in the Flintkote Company manufacturer of asphalt shingles and Cola road coating.
- 1928 October - Shell Development Company organized with the base of the Simplex Company in San Francisco to handle patents. Company build up to do basic hydrocarbon research. Moves into a new Laboratory in Emeryville near the bay between Oakland and Berkeley.
- 1928 In the late '20's Shell begins to sell high quality gasoline as aviation gasoline.
- 1929 January 1st - The name of Shell Company of California is changed to Shell Oil Company.
- 1929 February 18 - Shell Chemical Corporation organized to manufacture chemicals from petroleum by-products using processes designed by Shell Development Company.
- 1929 Acquired an additional 13 acres to the refinery near the water for the new Shell Chemical Company plants.
- 1929 Spring - Shell buys corner lot at Bush and Battery Street in San Francisco for a 29-story new office building.
- 1929 September - Shell's Nersa Well #11 at Signal Hill, Long Beach deepest in the world at 9252 feet.
- 1929 October 24 - Black Thursday on Wall Street, stock market crash.
- 1929 - 1930 Shell Oil in San Francisco sets up an Aviation Department. hired a well-known aviation figure, Captain John A. Macready as manager. Starts work January 2.
- 1930 January 15 - Shell Petroleum in St. Louis hired another well-known flyer, Lt. James H. Doolittle to manage their aviation department.

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- 1930 Several months later Shell Eastern hired Major R. G. Ervin for their Aviation department.
- 1930 April 16 - Sir Henri and Lady Deterding dedicates new 29 story Shell Building in San Francisco. Lady Deterding cuts ribbon and unlocks the front door opening the building.
- 1930 June - Shell Chemical Company purchased 636 acres of land for \$400,000 on the waterfront near Pittsburg, California. The plant area was named 'Shell Point' after the extension of land into the bay.
- 1930 September - Shell Chemical secondary butyl alcohol plant goes on-line at Martinez.
- 1931 The Dubbs Thermal Cracking Unit battle finely settled after a fifteen-year struggle. Patent assigned to Universal Oil Products Company, which is purchased by Shell and four other Oil companies.
- 1931 A Fuel CFR Testing Engine purchased for Motor Lab for \$1,923.61
- 1931 August - Synthetic ammonia plant from natural gas goes into operation at Shell Chemical Plant at Shell Point near Pittsburg, CA
- 1932 A Fuel CFR Testing Engine purchased for Motor Lab for \$1,815.69
- 1933 April - Shell Chemical Martinez plant to make methyl ethyl ketone goes on-line.
- 1933 December - Shell Chemical Martinez plant to make tertiary butyl alcohol goes on-line.
- 1934 The first in pump volume calculator counter was available in gasoline pumps.
- 1935 January - Shell Chemical plant at Martinez begins operation its plant to make isopropyl alcohol and acetone.
- 1936 Shell sell interest in the Flintkote company.
- 1936 June 2 - Shell discovers Ten Section field in the San Joaquin Valley, Calif.
- 1936 December - 258-mile, 10-inch crude pipe line completed from Bakersfield to Martinez following the old Coalinga Valley Pipeline right-of-way.
- 1938 Major Expansion of Shell Development Company in Emeryville.
- 1939 Shell Oil Company, San Francisco, merged into Shell Petroleum Corporation, St. Louis, to form new operating company, Shell Oil Company, Inc. A month later also takes over Shell Eastern properties.
- 1939 Shell, the first oil company to do so, starts to patrol their oil pipelines by air plane for leak searching
- 1939 August 18 - Alkylation plant, second in country, built at Martinez refinery, embodying new process for low-cost production of high-antiknock aviation gasoline components.
- 1940 September 1 - St. Louis and New York executives of Shell oil Company, Inc., combined at New York. San Francisco office remains as a parallel office.
- 1941-45 World War II – Shell replaces some jobs with female workers as male work force is drafted to serve in the war.
- Shell reopens capped oil well at Coalinga to increase oil production for war effort.
- New Cat Cracker goes on-line at Wilmington to increase gasoline production for the War effort.

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Wood River plant first refinery in US to receive the Army-Navy “E” for exceptional war production for 100 octane gasoline.

Shell plants and offices on west coast awarded the US Treasury “T” flags for employee purchase of War Bonds.

Shell Development Company working with Cutter Labs in Berkeley produce a process to increase output of PENICILLIN and reduce production time.

Shell Development Company working for the War effort perfected the fuel additive used in flame-throwers and perfected the flame-thrower for the Sherman Tank. Testing was done at Martinez Vine Hill tank farm area and at Shell Point.

Shell employees War Bond purchases exceed \$10,000,000 for the war effort.

1946 Lt. Gen. James E. Doolittle returns to Shell after the war to become a vice-president of Shell Union Oil Company. Shell purchases the last B24 bomber to be produced from the Army for use by Doolittle to fly around and visit Shell sites.

1948 Doolittle stop flying and transfers his B24 bomber to Shell Development Company and keeps it in Oakland, CA. Bomber is used as a flying lab to study fuels and lubricants for aircrafts engines.

1949 January 1 - Shell Oil New York and San Francisco executive offices combined, top policy-making officials move to New York City.

1949 September 22 - The Shell Union Corporation absorbs Shell Oil Company, Inc., and changes the Shell Union name to Shell Oil Company.

1954 A new Platformer plant was built at Martinez in June 1954 to make a mixture of high-antiknock aromatics.

1972 First process real-time digital computer installed at Martinez. A Foxboro PDP-11 based computer system installed in The Dispatching department to Optimize Gasoline blending.

1975-78 Project developed to install computer monitoring and advisory control at LOP. New building south of the control center. Installed Modcomp real time computers and color graphic display stations.

1980-1982 West of the Rockies (WOR) project develop at Martinez to increase refinery capacity, energy savings and environmental benefits. OPCEN with a new Flexicoker, Hydrogen, Sulfur and Dimerization plants. Constructed a new explosion proof control center. Expanded LOP computer system and building.

1980–1989 Continued work at LOP to improve operation and safety.

1990-1992 A Clean Fuels project was developed to improve energy recovery, improve operation of LOP and OPCEN. One explosion control center combined operations for LOP, Dispatching and OPCEN.

2020 February 3 The Martinez refinery was sold to PBF Energy INC, Parsippany, NJ for 1 billion dollars..

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