WD-40: San Diego's Marketing Miracle

Iris H. W. Engstrand

WD-40 – the formula that is the dream of every person who brands a product.

WD-40 – the blue and yellow can of more than one thousand uses.

WD-40 – the product found worldwide in households of every description.

What was WD-40, a multi-use product, invented to do? Remove rust and

prevent corrosion. It does that very well, but that was only the beginning of its rise to fame and, for some, fortune. What else can it do? Its uses range from taking the sting out of ant bites to removing telltale lipstick from collars. This article explains WD-40's phenomenal history from near obscurity to one of the world's best-known household products.

The history of WD-40 as a multi-use product is the incredible story of one man's conviction that if he kept trying, he could eventually discover the chemical reaction he had imagined possible. Iver Norman Lawson, the person who devised the formula, finally achieved success after 39 tries with his water



Norman Lawson with seismograph, ca. 1965. Courtesy of the San Diego Natural History Museum.

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displacement experiment No. 40. Nevertheless, he not only failed to receive significant recognition for his discovery, but, according to his family, turned over the formula to team members at the Rocket Chemical Company for a \$500 bonus.¹ Lawson was acknowledged at the time, but his name later became confused with company president Norman B. Larsen.²

Norm Lawson (not Larsen as the name is mistaken on the internet and in company materials) was born in Oak Park, Illinois, in 1892. He came to California with his parents at age six, growing up in the Bankers Hill area of San Diego.³ Lawson attended Stanford University but transferred to the California Institute of Technology, where he received a degree in mechanical engineering in 1918. He worked for San Diego Gas & Electric Company and then, in 1928, founded Airtech, a private flying service at Lindbergh Field.⁴ His flying school continued until World War II.⁵

In the early 1950s, Lawson joined some colleagues, one of whom was Cyril E. (Cy) Irving, to form the Rocket Chemical Company. It was first located in Chula Vista and then in National City. One day a naval commander, who was a friend of the Lawson family, asked Norm if he could come up with something to help the US Navy prevent corrosion from ocean salts affecting the gears on the ships. They needed a lubricant—something stable, easy to store, transport and apply.

Lawson experimented in the evenings after work in a makeshift laboratory over his garage at 1048 Myrtle Way.⁶ His house in San Diego's Hillcrest suburb still stands, but the garage where he perfected the formula has been rebuilt. Lawson devised mixture after mixture, much to the dismay of his family, until finally—on the 40th try—it worked! He turned his formula over to Rocket Chemical for marketing and distribution.⁷



House at 1048 Myrtle Way, San Diego, where WD-40 was developed. Editors' collection.

During this period Lawson, who also studied chemistry, was a trustee of the San Diego Natural History Museum, serving fourteen terms as president of the Board from 1951 to 1965. He was instrumental in introducing the Foucault Pendulum into the museum foyer in 1957, where it has remained as one of the most popular exhibits. He also obtained a seismograph to illustrate earth movements in the local area. Norm Lawson died in 1967.

After WD-40 was perfected as a rust preventative, Cy Irving, representing the Rocket Chemical Company, took it to the Union Oil Dock on San Diego's



Sun Europa, one of the tuna seiners where WD-40 was first used. Photo courtesy Andrew Crivello.

embarcadero where the major tuna seiners were serviced. Sam Crivello, owner of *Sun Europa*, was one of the first to recognize WD-40's value in preventing rust. His brother Jack Crivello owned the Sun Harbor Cannery and was also interested. Others involved in either the Rocket Chemical Company or the tuna industry at the time included Cy Irving, Louis de Falco and his son

Eugene de Falco, and Norm Roulette and son Robert Roulette, husband of Cy Irving's daughter Marge.

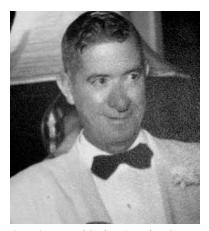
Julius Zolezzi, whose family owned several tuna boats, recalled that Cy Irving brought some WD-40 and a motor to the Union Oil Dock either owned or managed by Sam Crivello. Cy and Sam took the motor and lowered it into the salt water, left



L-R: Sam Crivello; Mario Crivello, age 5; Esther Crivello; Isabella Crivello. Photo courtesy Italian Historical Center.

it for awhile, and then brought it back up and sprayed it with WD-40 and it started right up. Julius Zolezzi's father John was on the dock and told Julius the story. He said the product was amazing. Cy said he was looking for an investor so apparently Sam said he would buy 50 percent of the company, which he did at the time.⁹

Lawson, Cy Irving and several others who had worked at the Rocket Chemical Company in



Cy Irving, one of the founders of Rocket Chemical Co. Inc. Photo courtesy of Marian Barry.

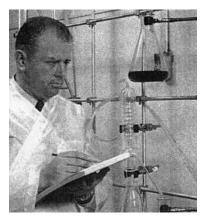
the early 1950s, operated in Chula Vista and National City before moving to a site at 5805 Kearny Villa Road in Kearny Mesa in 1955. In October 1957, they entered the consumer products field and decided to expand into a new plant on Alvarado Canyon Road near Mission Gorge Road. Cy's son Larry worked part time at the chemical company in Mission Valley while awaiting the results of the bar exam. He passed the bar and joined the law firm of Higgs, Fletcher and Mack. In

The president of the Rocket Chemical Company in 1957 and 1958 was Norman B. Larsen, which explains the reason why he is often mistakenly credited with the invention

of WD-40 instead of Norman Lawson. Norm Larsen did, in fact, expand the uses of

the product by repackaging it in aerosol cans. According to *The San Diego Union*, Larsen saw "a big potential in the rust inhibitor." WD-40 could be used to "protect auto chrome, free locks, and check rust on razor blades, guns and fishing reels. Uses are almost endless." According to *Union* reporter Carl Plain,

A dozen prominent San Diegans own stock in the chemical company formed...after Larsen moved here from the Seattle area where he engaged in the industrial coatings business. The firm supplies virtually every Western aircraft manufacturer, plus other



Norm Larsen, Rocket Chemical Co. president, 1957-1958. Photo courtesy of WD-40 Company archives.

customers, with protective coatings and storage of tools, dies, jigs and plaster molds, and a clear sprayed-on film to protect aluminum surfaces from corrosion and abrasion.¹³

WD-40, according to the article, was used to protect the outer skin of the Atlas missile from rust and corrosion and the lubricant's reputation was assured.¹⁴

Rocket Chemical enlarged its Mission Valley plant by 5,000 square feet in January 1958. They had acquired 30 distributors and were expanding both



Rocket Chemical Co. Inc. at 4674 Alvarado Canyon Road. Photo courtesy WD-40 Company archives.

nationally and internationally. Cy Irving was elected to the post of executive vice president and Sam Crivello was elected treasurer, replacing Robert Roulette, who moved into the role of secretary. New directors were Ruel Liggett, Louis de Falco, Fred Brown Sr., Norman Roulette, and John Gregory along with the officers. By this time Larsen announced that the company had

representatives in Puerto Rico, Peru, and Pakistan and that their products had "widespread domestic and commercial applications, including protection of metal parts of fishing vessels, and were used in two missiles, which he would not identify and in Remington Rand's Univac computers."¹⁵

On September 20, 1958, Cy Irving, then president of Rocket Chemical Co., Inc., reported that the dollar volume of the company had more than quadrupled in the previous four months. Rocket was "turning out an average of 8,000 pushbutton spray cans of WD-40 multi-use product daily on a \$20,000 aerosol can-packing line installed recently in the 3,500-square-foot plant at 4674 Alvarado Canyon Rd." and the product was "handled by more than 500 San Diego County retail outlets." ¹⁶

Irving told *The San Diego Union* that distribution programs were being introduced in Hawaii, the Pacific Northwest, and Alaska with some 15 sales representatives working throughout the United States. He said that new uses were being developed daily that inhibited moisture as well as controlling rust. "Popular uses are on auto chrome tools, marine equipment and metal objects in homes and yards" but surprisingly the demand was as great in the "dry Dakotas" as well as places near lakes and oceans.¹⁷ Owners of the company, which consisted of "about 20 prominent San Diegans" were "weighing offers for its purchase."¹⁸

By the end of 1960, Rocket Chemical had expanded into Latin America, Australia, and New Zealand. Irving reported that DeHavilland Aircraft would distribute their products in Australia and New Zealand while Diseños Industriales y Productores of Mexico City were



Advertisement for WD-40 in Spanish. Photo Courtesy of WD-40 Company archives.



WD-40 moved from Mission Valley to 5390 Napa Street in 1964. Editors' Collection.

serving as distributors throughout Mexico. The company planned to ship WD-40 to Mexico in 55-gallon drums for repackaging in cans with Spanish language labels. Sample shipments were also going to Japan and sales were "practically double" from the previous year.¹⁹

Business at Rocket Chemical progressed at a normal pace through the early 1960s until the heavy rains brought by Hurricane Cindy in the Beaumont-Port Arthur area of Texas caused massive flood damage and created an immediate massive demand for WD-40. Previously, in 1961 the company had shipped 36,000 pounds of the rust preventative to communities from Houston to Galveston after Hurricane Carla soaked the area. Emergency supplies of WD-40 were shipped as fast as possible to combat the new damage caused by Cindy in 1963.²⁰

The demand for WD-40 was growing so rapidly that Rocket Chemical began making plans to expand into a larger plant. In January 1964, Irving told *The San Diego Union* that the 40 drums holding 55 gallons each destined for Suntesters, Ltd. of London was "the largest overseas shipment ever made by the San Diego company." Such international success led to the new 6,000 square foot facility at 5390 Napa Street extending to the corner of Riley Street. The reputation of the company's success had become so well known that Rocket Chemical's president Irving received the Try San Diego County First award from the Chamber of Commerce. ²²

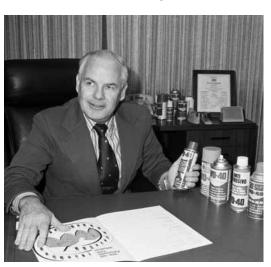
After United States involvement in Vietnam escalated as a result of the Gulf of Tonkin incident in 1964, troops began to occupy jungle areas where rusting of metal was commonplace. One soldier, who used WD-40 to lubricate his gun, wrote that it saved his life. By 1966, production of WD-40 was up by 50 percent as a rust preventative. On July 7, Irving announced receipt of US government orders for 233,000 cans of the rust inhibitor and that the company had supplied about three hundred 55-gallon drums of liquid WD-40 since the Viet Nam conflict

began.²³ Reports of two offers to purchase the company were widespread but Irving assured *Union* financial columnist Frank Rhoades that they had accepted neither. Sales were expected to reach \$5 million in 1966—quite a jump from the \$3,500 when Irving took over as president in 1957.²⁴

The year 1969 saw some important changes in the management of Rocket Chemical. Oscar C. Palmer, a member of the Board of Directors since the early 1950s, took over as interim president and general manager in September, succeeding Irving who retired.²⁵ Two newcomers—John S. Barry and Gerald (Jerry) Schleif—also joined the company in 1969 and both had a lasting influence on the company.²⁶

John S. (Jack) Barry was born August 31, 1924, in Minneapolis. He earned a bachelor's degree from the University of Minnesota, enlisted in the NROTC, and was accepted at Harvard University for naval training. He later transferred to Columbia University and was preparing to ship out for Japan when World War II ended. Barry then earned a master's degree in business from MIT and worked for 3M until recalled to serve in the Navy during the Korean War. After his service his ship returned to San Diego where he met and married Cy Irving's daughter Marian. They moved to Minnesota where John continued at 3M until joining Solar Aircraft in San Diego.²⁷

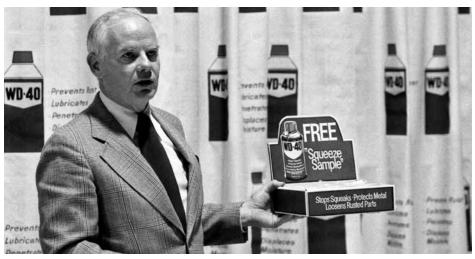
Barry was selected as president and CEO of Rocket Chemical Company in October 1969. He brought his education and marketing experience to the company and increased sales revenue from \$2,131,000 in 1969 to nearly \$91 million in 1990. Retired federal judge Lawrence (Larry) Irving always believed his brother-in-law would have been "a great role model for the nation's M.B.A. programs.



CEO John Barry at his desk, 1973. ©SDHC UT #88:L1416.

He never took on debt and all profits were paid back to shareholders."²⁸ Current WD-40 Company CEO and president Garry Ridge characterized Barry as "straightforward and honest" and "instrumental in turning the company into what it is today."²⁹ One of Barry's first suggestions, after just a few weeks at the company, was to change the name to WD-40 Company since, as he commented, "We don't make rockets."³⁰

From the time that Jack Barry



John Barry demonstrates new packaging, 1975. ©SDHC UT #88:M4222-14.

took over presidency of the company, he continued to expand the plant and move forward with sales, especially overseas and in Latin America. By 1972, M.H. Golden Construction began building new company headquarters to occupy a 49,000 square foot site on Cudahy Place.³¹ Articles in *The San Diego Union* usually began with "WD-40 Co. San Diego-based manufacturer of a spray rust inhibitor-lubricant, yesterday reported sales and earnings increases for the three months and nine months ended May 31."³² Earnings for each quarter had increased with the highest reaching 71 cents a share on sales of \$5,218,000.³³

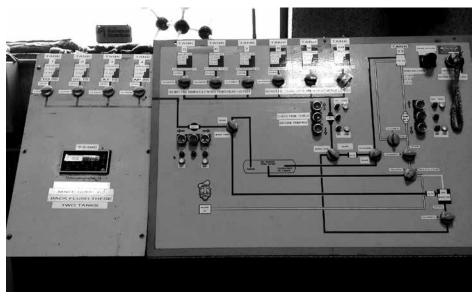
In 1973, WD-40 Company went public on the Nasdaq Exchange while revenue reached \$7,372,000. Generally stock offerings were oversubscribed while WD-40, in its blue and yellow aerosol cans with red tops, continued to be its sole product. Barry told the shareholders at their annual meeting at the Town and Country Hotel that the company was poised to establish new sales and earnings records in 1974. The president modestly announced that they would "just keep on doing our thing with our one product" since they were "not interested in buying any company, nor in merging with any company."³⁴ By that time, however, the company began to hear from the 20-full time employees and random customers that WD-40 had other household uses. The company would need a nation-wide advertising campaign.

In the economically volatile years of the 1970s, the WD-40 Company continued to be strong. In 1975 *The San Diego Union* ran two stories on a single page: "Stocks Dip Dow Down 19 Points," and "WD-40 Company Share Income up." In October 1975 WD-40 Company added dividends and reported, "we have plenty of money. We don't need the funds for growth so we decided we'd give it back to the people who own the company."

Finally a difficult issue arose in this otherwise Cinderella story. Oscar Palmer, former WD-40 Company interim president for three months in 1969, surprised management at the firm's annual meeting by voting his 80,000 shares in favor of his own election. Barry and the other eight board members called a recess to see if they had enough proxy votes to fight the challenge. They were successful and the meeting went on with Barry continuing in his position. He announced plans to ship the product by tank wagon to packagers in Los Angeles, Texas, Georgia, Wisconsin, and New Jersey. Georgia had been added the previous year with no additional capital expense necessary.³⁷ WD-40 was still vital to lubricate the outer skin of Atlas Missiles.

By the mid-1970s, the uses of WD-40 multi-use product had expanded to areas not originally imagined by the company. These included removing road tar and grime from cars, removing crayon marks from walls and flooring, stopping squeaks in electric fans, lubricating prosthetic limbs, removing traces of duct tape and gum residue from all surfaces, loosening stuck zippers, protecting silver from tarnishing, and cleaning guitar strings. Other unconventional uses included keeping flies off cows, pigeons off balconies, removing a python from the undercarriage of a bus in Asia, and protecting the Statue of Liberty from the elements.

Customers continually tried to guess what could possibly be WD-40's secret ingredients. They came up with all sorts of additives to a solvent naptha petroleum base. Solutions included baby oil, the goop inside lava lamps, Vaseline,



Push the right buttons and you have the formula for making WD-40, a multi-use product. Editors' collection.



Marian (Mrs. John) Barry poses by an English cab promoting WD-40. Photo courtesy Marian Barry.

an alkane that was the major product of the red-banded stink bug's scent gland, or one of the most common definitive guesses—fish oil. New multi uses of WD-40 were increasing almost as fast as the product distributors were expanding. Those in charge in May 1974 continued to be Jack Barry, President, with A.P. Schafer and Jerry Schleif as vice presidents in sales and marketing as company headquarters moved once again to its present location at 1061 Cudahy Place.

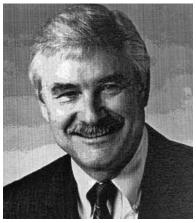
Even as the decade of the 1970s was plagued by an energy crisis that affected major industrial nations worldwide, WD-40 Company prospered. Propellants were switched from fluorocarbon to hydrocarbon in 1976, resulting in unit packaging reductions and increased margins. Between 1977 and 1979, company revenue increased from

\$20,495,000 to \$35,215,000. Vice President Schleif welcomed the decade of the 1980s with optimism. In 1982 he announced:

The word is spreading. Four years ago in certain parts of the country, household awareness of WD-40 was under 50 percent. Today, the product developed several years ago to prevent corrosion of Atlas

missile components is a household word to more than eighty percent of the nation's consumers.³⁸

The WD-40 formula has not been changed over the years—only the variety of uses for the slippery product has increased. As Jack Barry explained, "It is a numbers game—the more shelves we're on, the better the chance a buyer will pick us up—whether it's in hardware or sporting goods." Despite falling demands following the energy crisis in the United States, WD-40 Company in 1983 had a 3 for 1 common stock split. The company



CEO Jerry Schleif in 1990. Photo Courtesy WD-40 Company archives.



Garry Ridge, current CEO of WD-40 Company. Photo courtesy of Rodney Nakamoto.

had "no plans to change the vehicle that has brought it success and it has no plans to bring out any new products."⁴⁰

In July 1985, WD-40 Company opened its own manufacturing plant in England. Marketing Vice President Jerry Schleif traveled across the Atlantic to look for distributors in Europe, Africa and the Middle East and line up wholesalers for the United Kingdom. The new 11,000 square-foot English plant was built in Milton Keynes, a new idea in suburban town building off the M1 highway north of London. The company manufactured WD-40 multi-use product concentrate at the

new plant and had it packaged by a subcontractor.41

By 1993, when WD-40 Company celebrated its 40th anniversary, several key changes had taken place. Garry Ridge had been appointed to head Asia Pacific sales after joining the company as managing director in Australia in 1987. Jack Barry had stepped down in 1990 as company revenue reached \$90,990,000. After successfully leading the company since 1969, Barry left the company in good hands. He had seen the United States sales force transition from a commissioned to a direct sales model in 1989. He had worked closely with Jerry Schleif who was named President and Chief Operating Officer in 1990. Company revenue broke the \$100 million mark and had reached \$108,964,000. *Fortune* magazine in 1991 named WD-40 Company among "100 of America's Best Companies."

WD-40 Company continued to expand under Schleif's leadership. From a technical standpoint, the product's propellant was changed from hydrocarbon to CO2 and the company added two new brands—the historic and ever-popular 3-IN-ONE Oil⁴⁴ and T.A.L. 5, a triple additive lubricant designated as having

"extra-strength." By 1992, as a result of a new sales force in Europe, overseas sales in France, Spain, Italy and the Middle East had reached \$17.5 million while revenue in Australia and the Pacific Rim also continued to climb. 45 By 1997, Jerry Schleif, who had been with the company for nearly 30 years, chose to retire and leave the fast-paced life of a CEO behind.

Garry O. Ridge, a native of Sydney, Australia, was named president and CEO



Sign in front of company headquarters on Cudahy Place, San Diego.



Actor R. Lee Ermey posed for a WD-40 ad campaign to help veterans get hired. Photo courtesy WD-40 Company archives.

of WD-40 Company after a successful run as head of WD-40 Company's Australian subsidiary. An innovative and dynamic leader, Ridge was soon placed in charge of all operations. Under his leadership, the company concentrated both on new product development and its pace of acquisitions. Ridge greatly expanded the firm's portfolio of brands, widening it outside of lubricants; he eventually liked to tell people that WD-40 company was in the "squeak, smell, and dirt" business. The leader also conveyed the firm's strategy during this period as expanding from a "brand fortress" focusing on one product to a "fortress of brands."

Garry Ridge is not a typical CEO of an extremely successful publicly traded company

with a product well known and appreciated around the world. In 1999, two years after becoming CEO, he enrolled in the University of San Diego's Master of Science in Executive Leadership (MSEL) program. Even though his leadership skills had propelled him into a top job, Ridge confessed his reason for taking on the challenge of further education: "I wanted to confirm what I thought I knew and learn what I didn't know." He believes the USD program helped him make changes in the company. "I'd learn it on Sunday and use it on Monday...the model we use in the company now is what I developed through my final strategy class at USD. The model has carried us through the last 11-12 years and we've tripled the size of the company."⁴⁷

Ridge's success in earning a Master's degree led him to co-author the book *Helping People Win at Work*, with MSEL professor Ken Blanchard. Ridge believed that "mutual trust and direct communication with employees helped WD-40 Company earn top marks in sales and earnings during a recession."⁴⁸ Ridge represents the kind of CEO who listens to suggestions and is not afraid to make changes.

In April 2001 WD-40 Company purchased Global Household Brands for a total of \$72.9 million, including \$66.8 million in cash. The company saw this as an effort to add both the "smell" and the "dirt" to the "squeak" and resulted in Ridge's comment about WD-40 Company business.⁴⁹ To fund this acquisition, WD-40 Company had to break with tradition. Known historically for paying out most of its earnings in dividends and for having a very low debt load, the company slashed its dividend by 20 percent while its long-term debt ballooned from \$10.9 million to

\$76.6 million.⁵⁰ Other purchases were made in 2002 that increased the debt load but despite cuts, WD-40 was still paying out about 50 percent of its earnings to shareholders in the form of dividends.⁵¹ Other significant improvements under Ridge's leadership were the Smart Straw, which featured two spraying options and the No-Mess Pen that provided WD-40 in a small portable applicator that has the goal of appealing to women.

During 2007, WD-40 Company opened up a direct sales office in Shanghai and increased its efforts in China and Russia. Despite the Great Recession that lasted twenty months beginning in 2008, WD-40 multi-use product's unbroken record of growth continued. Surprisingly in 2008, for the first time in the company's history, over half its revenues were generated outside of the United States. As WD-40 Company continued to develop and expand its fortress of brands and pursue global growth, company leaders set ambitious financial goals for themselves, including reaching over \$380 million in sales and more than \$40 million in net income by fiscal 2014.⁵²

As CEO Garry Ridge points out, the company relies upon a set of strategic initiatives that have been developed and refined over the years. One of their main goals is to continue as a global leader by leveraging the recognized strengths of



WD-40 cans lined up under an array of various multi-use products. Editors' collection.



U-T San Diego, June 8, 2014, portrays WD-40 as a multi-use product. Used by permission of Brian Crane.

WD-40 Company and its multi-use product. Their philosophy of "continuous improvement by optimizing resources, systems, and processes" has kept them ahead of the competition and illustrates Ridge's commitment to keeping the company in the enviable leadership position it has occupied through the years.⁵³ In addition to successful marketing and distribution, the company's employee retention rate is three times the national average.

The personal philosophy Ridge shares with and expects from his nearly 400 employees is the following: "We treat people with respect, we honor each other. We're here to create memories together, we're here to do good work, we're here to keep promises...That's why we're here." In a broader sense, for brand extension and border expansion in a global market, Ridge has put together a select group called "Team Tomorrow." It is focused on making "tomorrow" as successful as the past in a company that has never been known to move any direction but up.

The history of WD-40 Company, formerly known as Rocket Chemical Company, started with one miraculous product that removed rust, prevented corrosion, and cleaned out residue. Since 1953 an additional thousand or more uses have propelled it into one of San Diego's greatest business success stories. A group of local San Diegans, many of whom are descended from the first investors, are still involved in the WD-40 Company. Their original solvent and water displacing spray WD-40 was honored in 2014 by the San Diego Air and Space Museum

for its use in the US space program begining in the 1950s.⁵⁶ The founders have continued to participate and have seen the company expand under the watchful eye of Australian-born Garry Ridge, who has adopted San Diego as his home. His successful leadership style is all about the people—especially the legions of customers around the world who benefit from the multi uses of WD-40.

NOTES

- Personal interviews with Reeve Gould, whose wife Nancy Lawson and mother-in-law Orma Tackley Lawson witnessed Norm's struggle to obtain the correct formula during the late 1940s and early 1950s. The San Diego Union, July 16, 1967. See also Iris H. W. Engstrand, "The Gould Family of San Diego: Pioneers in Business, Recreation and Community Service," The Journal of San Diego History, 51 (Summer/Fall 2005):114-15.
- 2. Another story about the invention of WD-40 gives credit to two men working at Consolidated Vultee Aircraft (later Convair) who were attempting to find a solution to rust on engine parts. A third "origin story" appeared in the *Costco Connection* explaining that Rocket Chemical gave its three staff members a challenge in 1954 to "create a solvent that would prevent rust, displace water and work as a degreaser, too." See Eva Shaw, "WD-40 celebrates 60 years of slippery success," *Costco Connection*, April 2014, p. 41. Facility manager Ken East, also listed as an "original founder" of the company on an internet article "WD-40 Myths, Legends & Fun Facts," accessed February 28, 2014, insists that he wasn't "that old."
- 3. Norm's father was listed as a rancher living at 3500 Fifth in San Diego in 1903 and later at 2405 First. Norm's uncle, Victor Lawson, was editor and publisher of the *Chicago Daily News* and president of the Associated Press, which he helped organize.
- 4. Lawson designed a glider for Charles Lindbergh.
- During World War II Lawson was a trustee of San Diego's Fine Arts Gallery (today's San Diego Museum of Art), becoming president in 1944-45. The San Diego Union, July 16, 1967.
- 6. The Lawsons built the house in what was called Marston Hills in 1931.
- 7. San Diego Independent, August 29, 1963.
- 8. Norm's mother, Harriet Evelyn (Nichols) Lawson, was president of the Wednesday Club and a member of the Women's 1915-1916 Exposition Board. He and his first wife Angeline [Marlow] were the parents of Nancy Lawson Gould, an eyewitness to the water displacement experiments. After Angeline's accidental death, Norm married Orma Tackley Lawson, who was active in civic affairs, especially the San Diego Museum of Art, the Timken Gallery, and the Wednesday Club. She died in 1996 at the age of 103. *The San Diego Union*, May 14, 1996.
- 9. Julius Zolezzi heard his father tell the story many times. Apparently Sam Crivello lent Cy Irving \$5,000 to make more of the product. Other investors were Norm Roulette and his son Bob Roulette (who was married to Cy's daughter Marge) and Eugene de Falco.
- The San Diego Union, August 25, 1958, noted that Rocket Chemical shared its new plant with Coast Packing Materials Co. and that its principal stockholders were Larsen, president; Robert Roulette, vice president; and Robert Farrar, secretary-treasurer.
- 11. Lawrence Irving, who was eventually appointed to the federal bench, retired from his judicial position in 1991, and became a mediator. His settlement of the resignation of Mayor Bob Filner of San Diego in 2013 made national headlines.

- 12. The San Diego Union, September 20, 1958.
- 13. The San Diego Union, October 3, 1957, A18. Coincidentally both Norm Lawson and Norm Larsen were born in Chicago and were chemists.
- 14. The Atlas missile was designed in the late 1950s and produced by the Convair Division of General Dynamics to be used as an intercontinental ballistic missile.
- The San Diego Union, January 25, 1958.
- 16. The San Diego Union, September 20, 1958.
- 17. Ibid.
- 18. The San Diego Union, September 25, 1959.
- 19. The San Diego Union, December 15, 1960.
- 20. The San Diego Union, September 21, 1963.
- 21. The San Diego Union, January 25, 1964.
- 22. The San Diego Union, February 25, 1966.
- 23. The San Diego Union, June 12, 1966, July 10, 1966.
- 24. The San Diego Union, May 12, 1966.
- 25. The San Diego Union, September 13, 1969.
- Gerald Schleif received his BS degree from San Diego State College in 1957 and directed the marketing department of Upjohn Pharmaceutical Company's agricultural products division before returning to San Diego.
- 27. Personal interview with Marian Barry, May 2014; The San Diego Union-Tribune, July 20, 2009.
- 28. The San Diego Union-Tribune, July 20, 2009.
- 29. Ibid.
- 30. Ibid. Personal interview with Marian Barry, May 2014.
- 31. The San Diego Union, December 17, 1972.
- 32. The San Diego Union, June 20, 1972.
- 33. Ibid.
- 34. The San Diego Union, November 27, 1973.
- The San Diego Union, March 15, 1975.
- 36. The San Diego Union, October 7, 1975.
- 37. The San Diego Union, November 25, 1975.
- Jerry Schleif, "WD-40's Marketing Strategy Pays Off," Auto Merchandising News, October 1982.
- 39. The San Diego Union, November 30, 1982.
- 40. Ibid.
- 41. The San Diego Union, July 13, 1985.
- 42. See pages 263-264 for biographical information on Garry Ridge.
- 43. Heidi Feldman and David E. Salamie, "WD-40 Company," *International Directory of Company Histories*, 2007, Encyclopedia.com, accessed June 20, 2014.
- Developed in 1894 by George W. Cole of Asbury Park, New Jersey, 3-IN ONE Oil serves as a lubricant, rust preventative, and a cleaner.
- 45. All did not always go smoothly, however, as 10 of the 12 distributors filed lawsuits claiming that

the Company had promised job security in exchange for company loyalty. In some complicated legal maneuverings through 1994, the original case plus an additional one were generally decided in favor of the distributors, costing the company \$12.6 million. But profits still outweighed any losses.

- 46. Feldman and Salamie, "WD-40 Company."
- 47. Ryan Blystone, "Ridge's Winning Formula: WD-40 MSEL" Inside USD, June 8, 2012, www. sandiego.edu. (Accessed June 14, 2014.)
- 48. Ibid.
- 49. The Company acquired X-14 brand mildew stain removers and bathroom cleaners, Carpet Fresh rug deodorizer, and 2000 Flushes, a long-duration automatic toilet bowl cleaner. Collectively, these brands were generating \$70.5 million in revenues at the time they were purchased.
- 50. Feldman and Salamie, "WD-40 Company."
- 51. Ibid.
- 52. WD-40 Company 2013 Annual Report. The Annual Report gives an assessment of results in all international areas as well as the US market. For example, in some areas the multi-purpose maintenance products sales grew while household product sales declined. Asia Pacific sales were up by 7 percent while sales in Australia were flat.
- 53. Ibid., p. 5.
- 54. Quoted by Ryan Blystone in "Ridge's Winning Formula: WD-40 MSEL."
- 55. Marc Wright and Karuna Kumar, "How CEO Garry Ridge has made WD-40 a well-oiled machine." Simply-communicate.com/case-studies. (Accessed March 12, 2014.)
- 56. "Top-Flight Inductees at Hall of Fame," UT San Diego, August 25, 2014.



Family group of products illustrating the growth of WD-40 Company. Photo courtesy WD-40 archives.

APPENDIX

CURRENT BOARD OF DIRECTORS

		Director Since
Giles Bateman	Investor; retired CFO Price Club	2003
Peter D. Bewley	Investor; retired General Counsel, The Clorox Company	2005
Richard A. Collato	Investor, retired president and CEO YMCA of San Diego County	2003
Mario L. Crivello	Investor, retired Managing Owner and Master of Tuna Purse Seiners	1994
Linda A. Lang	Retired Chairman and CEO, Jack in the Box, Inc.	2004
Garry O. Ridge	President and CEO, WD-40 Company	1997
Gregory A. Sandfort	President and CEO, Tractor Supply Company	2011
Neal E. Schmale	Board Chair, WD-40 Company; retired President and COO, Sempra Energy	2001