ROBINSON NOBLE

The Origins of Robinson's Geology Shop

By
John B. Noble

Robinson Noble has a heritage founded in the individualism of John Worsing Robinson. It is also built on a heritage of John's dissatisfaction and bitterness, as John perceived things at the time. During World War II John was assigned to the Ground Water Branch, U.S. Geological Survey, Portland Area Office. His boss was Arthur Piper and his colleague and peer was Rubin Newcomb. John was assigned to working in eastern Oregon, then in the Tacoma area. Rube worked on the hydrology of the Columbia River Basalts, and on a regional study of Snohomish County, Washington. Rube was published and favored by Piper. John was not. That may be an oversimplification of the dissatisfaction and bitterness, but there's some truth to it.

Robinson did extensive well scheduling and geologic mapping in the Tacoma area during the mid- 1940s, produced a preliminary open-file report on the area, and became very familiar with the City of Tacoma's water system, their processes, and their personnel. His work with the Survey was later used to a great extent by Walters and Kimmel when they prepared their central Pierce County study for the U.S.G.S. Immediately after the war, Tacoma decided to modernize their ground water system along the South Tacoma Aquifer. John took this opportunity to leave the Survey, where his career was not skyrocketing, and take a job directly with Tacoma where he would manage the new well construction program. And manage it he did.

Instead of writing specifications and advertising for a public works contract, John convinced the City that they would benefit by being their own contractor under his direction. He bought and rented drilling rigs and tools, hired L.B. Richardson away from his own business as a tool pusher for the project, and rented Richardson's rig to boot. He also hired Bob and Gordon Kempe as City employees, and a very noisy Paul Wilcox. They all drilled a number of screened and gravel-packed wells, of modern design, located along South Tacoma Way, essentially replacing an old set of wells, which had to have air-lift pumps to control the sand.

The new set of wells is in use to this day and they are some of the finest wells in western Washington. Robinson's project provided the City with a fully dependable, conjunctive use of a ground water system capable of replacing the primary Green River supply of 72 million gallons per day when required.

In 1947, with the construction project complete, John weaned himself off the City salary to become a private consultant. He got a contract to help Simpson Timber Company in Shelton to replace their wells for modernization of their mill. His agreement with Tacoma was that he would consult for them as needed for the fee of four dollars per hour. He charged Simpson fifty dollars a day. He was now John W. Robinson, Consulting Ground-Water Geologist, and the first to hold that title in the state. The seed was sown and began to germinate.

John was born in 1912 of Elizabeth (Libbie) and Frank Robinson. John was the youngest of five, preceded by Pierpont, Francis, Victor, Vida and Grace. Frank was a schoolbook salesman who worked out of Seattle, but later developed enough independence that he could live where he

wanted. Somehow, he found that he wanted to raise his family in Lilliwaup on Hood Canal so they all left Seattle and live there they did. The older ones grew up with more memories of city life, John grew up in the woods with a family not so well accustomed to the rural life of the Mason County shoreline and the Skokomish Indians. No matter, each and every one returned to Lilliwaup over the years, if not to live there permanently, at least to own a bit of property.

When John was ready for high school he developed an eye problem which resulted in his moving to Seattle with his mother so that he could be closer to medical help. Perhaps there was more to it than that. As a result, John went to Roosevelt High School instead of the much more rustic Shelton High where he would have gone. I believe he lived in Seattle with his mother for the entire four years while his father and older siblings fended for themselves. John's father, being interested in science, encouraged John to take up chemistry which Frank considered to be the prime scientific pursuit. John chose geology instead and entered the University of Washington in 1932 when he was twenty. Because of eye problems before college, and the Depression Era, John took over six years to get his degree in geology.

In college, John was a fraternity brother to Ralph Roberts, Ralph's brother Fred, and Hans Norbisrath. They were important to John throughout his life. He was also a fraternity brother Hollie Cornell, of later CH2M nomenclature. Cornell became a PhD in engineering. Ralph became a PhD in geology and went on to a prestigious career with the USGS, then upon retirement became a legend in the field of gold exploration. Both became rich. Fred became John's partner and Hans became a later employee. Of the lot, Hans had to have had the most character, even if it was a strange one. Hans was one of the most unusual and interesting people I've ever known, and his epitaph comes later. Fred was also unusual but in a sadder sort of way. I admired Fred, but we were never close friends.

When John was still an undergraduate, he became friendly with three young professors who were only slightly older then he. They were John Hoover Mackin, Julian D. Barksdale, and Howard Coombs. When I was at U.W. some twenty years later, Mackin and Barksdale were my most inspirational teachers and Coombs was my department chairman, though not particularly inspirational to me. John's first job as a geologist was with the National Park Service in Olympic National Park where he served as lookout, park ranger, and an independent student of the park's geology. The park was not that far from John's home at Lilliwaup. Neither was it very far from Union from whence came Bessie, aka, Sammie Addleman. Sammie was the youngest of three, the only daughter of her family who were loggers of the Olympic Peninsula. Sammie is six years younger than John. She had gone to Shelton High School from her home in Union. They must have met at some dance or another when they were both in the Hood Canal area.

Sammie went to business college in Seattle while she concurrently worked as a domestic for a rich Jewish family on Three Tree Point south of Seattle. Once when we were all visiting my sister and brother-in-law at Three Tree Point, and were walking along the beach, Sammie pointed out the great house where she had worked and grudgingly related that part of her history. We took it that it was not a happy time, perhaps a bit like servitude when she could have deserved better, but she married John shortly thereafter and started a family of four daughters followed by a son. I doubt if Sammie ever held a 9-to-5 job in the real world. She was John's total office help from the time he left the Survey in 1947 until 1972. During that entire time, the office was in the Robinson home where Sammie and John alternated domestic and business life without doing much injustice to either.

Robinson's consulting business made him a living if not a fat one over the first few years. At least he was his own boss and not dependant on the whims and politics of others, and that suited him fine. He had the City of Tacoma as a solid client with whom he signed an annual consulting contract, and he picked up other clients as he could. The principal sales effort of those days was to convince a potential client that the services of a geologist would be of benefit when the client planned to drill a new well. Most potential clients disagreed because they believed they were paying the driller enough money already without wasting more on intangible results from a consultant. The clients John did develop were commonly wood products mills such as Simpson, St. Regis, Rayonier, Boise-Cascade and West Tacoma Newsprint. These outfits generally had good engineers who sincerely wanted to help, and cheap purchasing agents who didn't like to pay for the engineer's needs.

After a couple years of getting by, John found that expanding to a staff of two would be good, so he hired his old fraternity brother, Fred Roberts. Fred shortly became a full partner and the firm became Robinson & Roberts, Consulting Ground-Water Geologists. The office remained in the spare bedroom of John's house. Fred, the younger brother of Ralph of later geologic and gold mining fame, joined John from the State Department of Conservation where he worked as the only staff geologist under Bob Russell. Bob, in turn, was the first geologist in the Department who was hired to help in the administration of the new ground water law of 1945, which established water rights for wells. Bob Russell, Ralph Roberts, and Fred Roberts all went to high school in Omak, a fact that was no coincidence. A later arrival to Conservation was meteorologist Stu Shumway, also of Omak, and also no coincidence.

Fred has spent a lifetime under the shadow of his super-brother, Ralph. He followed him through high school and later into college. Ralph excelled and Fred got by. The situation kind of drove Fred crazy. Fred got his degree about the same time as John did, perhaps a bit later, but the war interrupted his career start. He went into the Army Air Corps and was fortunate enough to get selected for advanced training in meteorology at Stanford. The Army not only gave Fred a commission but also bought him a master's degree from Stanford. Fred served out the rest of the war as a meteorologist at Roberts Field, of all places, in Redmond, Oregon. After the war he joined up with Bob Russell at the State. Fred's "autograph" still turns up on the older Reports of Examination for water rights applications of those days, his "FBR" appearing with about equal frequency as Glen Fiedler's "GDF", with Glen accepting an engineering position with the Department soon after Fred arrived.

When Fred was still in the Army he married Phyllis, one the kindest and quietest ladies I have known. They started family about the same time as John and Sammie. In short order, Robinson and Roberts hired both John Fryberger and Hans Norbisrath. In late 1964, I joined the firm and for a very short time all of us were concurrently employed although Fred was temporarily seconded to a job in Kuwait and Fryberger was in the process of leaving R&R for a new job. By this time, John had moved his residence to 1315 South 59th in Tacoma, and the office included the entire basement, minus the laundry room. Small though the company may have been, for that short time the office supported John and Sammie Robinson and their five children; Fred and Phyllis Roberts and their four children; Hans and Roberta Norbisrath and their five children; John and Connie Fryberger and their two children; Isabel and I and our four children. As I recount that, the little company supports a population of thirty people. (At writing this, 1992, the company supports a population of 25 including 4 working spouses, based on a staff of ten.)

In early 1964 the company incorporated from the partnership of John and Fred. The incorporation plan was to allow John Fryberger to be able to buy in and be part of the ownership of a

growing company. Fryberger was a bright and ambitious geologist who had come into the business from a uniformed position with the Army Corps of Engineers where he had also been a geologist. John F. was young and eager and a frustrated marketer. John R. had his conservative ways that would not let loose. The little office group nicknamed Robinson as "We'll See", which was his standard answer for any request for something different. At about the same time as Fryberger was becoming frustrated enough to move on, Noble was becoming frustrated with employment at the State Department of Conservation and had requested employment with John and Fred. By the end of 1964 the transactions were made and I sat in Fryberger's chair, no loss to him as he moved on to further his career and ultimately form up another consulting ownership which he recently sold for full enjoyment of his retirement.

I came to the company after four-plus years with the State, preceded by finishing my college education and preceding that with four-plus years with the Air Force. I had the opportunity at the State, thanks to Bob Russell to prepare three major geologic mapping and water resources studies, all published, in Clallam, Thurston, and Mason counties. I also learned the art and science of writing water rights and gained some understanding of water law. I left the State making about $500 per month and was given a $50 raise by John plus use of a company car, less negotiated 2.5 cents a mile for travel to and from work from Lacey. There was no such thing as health insurance, retirement, or any fringes in those days.

My first week with John was to work on a Metro tunnel exploration job in Seattle, but a December extreme in cold shut down the drilling. After a couple of days, after the rain started and before the driller's trucks were allowed back on frozen roads, my first field duty was to hold an umbrella over John while he changed the paper on a Stevens water level recorder at his drilling/monitoring job for Tacoma's Gravity Line well project. I felt a bit like Gunga Din without the potential for heroics. My new trade in private consulting had started.

As the weather broke I got my first opportunity to do rig-site geology as directed by John and Fred who knew the drilling industry like no others. My first job was logging holes along Second Avenue in Seattle with Metro as a client and the hydrology of a proposed sewer tunnel as the project. My counterpart from Metro was David S. Tillson whom I worked with on a daily basis. The contractor was the Gaudio Drilling Company, George Moses, the driller and Dean Bohan, the helper. As the job progressed, Bud Gaudio sent out two rigs and I was assigned to the second at which John Armstrong was the driller. John had just been assigned his first rig by Gaudio in the spring of 1965.

Robinson's business development techniques, which perhaps had to bit to be desired, were greatly enhanced by his association with Bud Gaudio with whom he had worked for a few years. Bud and John genuinely liked and respected each other and did their best to mutually feed each other work. In later years I played the same role with John Armstrong and Ed Story. There was no financial collusion in either case, but simply the knowledge that the project would benefit with a combination of agreeable and competent contractors and consultants. Maybe a tiny bit of money or percs changed hands, but none that anyone could readily prove. The only losers in this situation were L.B. Richardson, Harold Myers, and N.C. Jannsen, all major drilling contractors who tended to want to run thins their way without interference from a consultant. John would and did work with Richardson and Myers as situations demanded, but had an outright dislike for Jannsen, whom John considered dishonest. John also had a competitive dislike for Layne-Western, a very well marketed, nationally recognized company, who was "driven out of the Northwest" to use John's words. Jannsen died a natural death, none too soon for John's taste. Richardson Drilling, run by L.B.'s son, Neil, remains in good health today. M.O. Myer Drill-

ing Co. remains yet alive under the continued hands-on management of Harold who has been drilling since the 1930's and may well be the oldest active driller in the country. Bud Gaudio is long since dead. His protégés, Story and Armstrong, are maturing leaders of the industry, or perhaps I should say aging.

My Metro job on the Second Avenue Tunnel was the last series of such jobs that John Robinson, Fred Roberts, and Hans Norbisrath had done for Metro. The basic goal of these jobs was to predict ground water occurrence when active tunneling began. Construction dewatering of deep structures became a very real interest of John's and he became a true expert in that field although he was never able to develop that market as much as he would have liked. During this time the City of Vancouver, B.C was designing their Highbury Tunnel under the Fraser River delta and dewatering became a major point of interest to the winning contractor. John became the contractor's consultant, and began a subsurface exploration program. His first hire after Fred Roberts was Richard Erdman who was assigned to the Canadian job. Hans Norbisrath was hired about this time too, as was John Fryberger.

The Highbury Tunnel project was the first major job by Robinson & Roberts who were finally developing an honest reputation as consulting ground-water geologists. During the project, on Bill Brown came through, after being let go from Standard Oil in California, and made contact with John and Fred. Bill was a former employee of the Canadian Geological Survey and a co-worker with Jack Armstrong in the early 1950s. He had a lot of charm, and was a natural self promoter, and very quickly became not only the Canadian on the Highbury job, but a partner in the newly formed company of Robinson, Roberts and Brown. John and Fred, with Bill's joining with them, had gone international. Dick Erdman soon left R & R in Tacoma and became an employee of Robinson, Roberts & Brown.

Bill operated a very nice business from his home, much as John and Fred did from John's home. His clientele reached far and wide though British Columbia, and included timber companies, mining companies and towns. I was loaned to Bill several times to help out on field jobs that were the most interesting of my career if for no other reason than their remoteness. Long drives and trips by amphibian airplanes were typical. Jim Carr worked for John for a few months in the 1960s then he was "given" to Bill not unlike Erdman. Jim stayed there for a few years until he married and got tired of the bush assignments. Dick Erdman remains there yet. Bill severed a direct business relationship with John and Fred in about 1970 and became "Bill Brown, Inc.", later, Brown & Erdman. They picked up numerous international projects over the years from Portugal to Timor, with Erdman doing a fair share of the traveling. At this writing, Bill is still plugging on, but slowed somewhat for reasons of health. He is one of the most charming and humorous people I have ever met.

As the Highbury project wound down, business must have slowed to some degree because John went off the payroll to consult directly for USAID in Jamaica. Fred and Fryberger held down the fort for that interim, which was one of John's most memorable projects. By the time I arrived in December, 1964, John was back and Fred was seconded to the Ralph Parsons Company for a project in Kuwait, and Fryberger had given his notice. John's office in the basement was a quiet place. I had worked for John for several months before Hans Norbisrath came out of hibernation and returned for his traditional half year. Hans was a classical geologist who disdained the science of ground water. He was, without question, the most unusual and interesting person I have ever met. He was short, ugly, opinionated to a fault, tyrannical to his family, delighted with nature and wilderness, and exceptionally charming, especially to the la-

dies. He was ill-dressed and generally slovenly. His field books, writing, and directions to the drillers were impeccable. He was a wealth of contradictions. Hans is worthy of another story. Several of the most developmental years of my life were spent while working projects under John Robinson's direction. It was basically a three-man operation then, what with Hans leaving for the winter months and Fred rather coming and going after his Kuwait assignment. These were satisfying years for John because he had enough going to make a good living from his own home and had interesting projects to work on. They were satisfying to Hans because he was able to choose field jobs with per diem allowances and yet get the winter drawing unemployment while hunting and hibernating. They were satisfying for me because I was learning a lot and seeing the geography and geology throughout the Pacific Northwest, as well as working on great water well drilling projects.

During these years of about 1965 to 1969 we provided the only responsible ground water services in the state as private consultants. We took care of Tacoma, Weyerhaeuser, Metro, State Fisheries, State Game, Lakewood Water, State Parks, several King County water districts, Kaiser Aluminum, ALCOA, City of Vancouver, plus varied smaller diverse clients ranging from developers to Alaskan villages. If anyone thought they needed the services of a ground water geologist, and not that many did, they came to Robinson & Roberts by reputation and necessity because that was their only good choice. Fees were tight and much negotiated. For example, John's agreement with Lakewood Water District was to provide the full service for a flat of 9% of the drilling cost. (Today, typical consulting costs on a drilling project commonly exceed 30%.)

Two of the major jobs during this period were for the City of Tacoma. The first was the exploration and development for ground water supplies for what became two of the world's largest fish hatcheries. These were mitigation hatcheries on the Cowlitz River to enhance salmon and trout losses from the construction of the city's two dams on that river. Our exploration work along the river was responsible for the siting of the two hatcheries at Mill Creek and Blue Creek. The second major project was the planning and testing to develop Tacoma's North Fork Green River Well Field which was later written up as being the world's largest well field, rated for 72 million gallons per day, and may yet hold that record.

During the end of this period Hans was sent off to Portugal for a drilling project managed by Robinson, Roberts, and Brown, to develop water for a pulp mill. Bill Brown called on John for a few weeks of field consultation on the Portugal project and both he and Sammie went over there leaving me as the sole representative of the company in the office. Somehow, John's kids maintained the house and I maintained whatever field and office responsibilities there were, including making out my own paycheck. Work was generally slowing down and there were no more major projects. This was 1967- 1968. Robinson was now in his late fifties, had worked hard all his life, and had a position of reasonable comfort that needed no special boat rocking. Then I got a call from Philip Granek, an engineer with the U.S. Navy's Officer-in-Charge of Construction, otherwise the OICC.

John and Sammie had recently returned from Portugal but were temporarily out of the office when I got Granek's call from San Bruno, California. Phil wanted to hire a consultant to manage ground water development in Korat, Thailand, the site of both an Army base (Camp Friendship) and an Air Force Base, both of which were supporting the Vietnam War. He was interviewing prospects on the following day and wanted Robinson to come, John's name was suggested by a mutual acquaintance of each of them. I assured Phil that John would be there and so informed John when he got back in. John, who had done prior work for the Army Corps of Engineers and did not enjoy the red tape involved, said that he wasn't interested. I got on my hind

legs and said that I would be going in the morning even if I had to buy my own ticket. That threat was all that was needed to get John off the dime and he was in San Bruno in the morning.

In San Bruno, John realized that the Navy wanted to hire a civilian for an eighteen-month assignment, and the general needs of the project were explained to him. In his confident way, ignoring all the routine principles of marketing, John advised the interviewing team that they would be ill-served by an individual for the scope of work required, but would be better served by hiring the consulting firm of Robinson & Roberts, John Robinson as Principal Advisor. Two days later, we were advised that we were selected as a company and that selection embarked us on a new, three-year major project. John was contracted to go out to Bangkok in December, 1968 to organize the scope and drilling contract. The support team in Tacoma consisted of me and Hans, with Hans already in a state of annual hibernation. At my suggestion we immediately hired Dave Tillson to come in. Dave was my prior counterpart on the Metro Project and a person that has the proclivity to travel anywhere, as he had already proven by bicycling and hitchhiking, with his wife, from England to Italy, then the entire circumference of the Mediterranean Sea. John perceived the job as an exercise in reverse-rotary drilling which would run on 24-hour shifts, set up a contract specification, selected a contractor (Thai Rock) and came on home with batches of geologic data for him, Dave and I to develop. We prepared a stick model from well log data of the area and had some idea of what we would be drilling in, a Pleistocene gravelly alluvium resting on a peneplain of Mesozoic shale. The surface was a thick laterite, my first and only experience in that odd formation of the tropics.

John returned to Thailand for a short time, then brought Tillson out when the Contractor was ready to mobilize. They then sent for me, and Robinson returned home. Dave Tillson and I were ready to manage this major drilling operation which was planned to run round the clock like a well-oiled machine. Needless to say, it didn't and after I doubled with Dave for two months in which little occurred, I returned home. Slowly and thoroughly the project of four wells, drilled officially for the Royal Thai Army, but for actual use by the U.S. Army's Camp Friendship, were completed and tested with Dave in charge. Dave came back after about a six-month stint for what was to be a two-month job.

The Navy OICC did like our work because the project was successful, even though it ran over the time budget. They then contracted us to return on the following year to drill four more wells for the Air Force side of the base. This time only I went out, we had a new contractor (Asia Wells) and I got a rather good job done in only two months. The Navy was so pleased with this that they sent me up to yet another base in the far northeast of Thailand, Nakhom Phanom, to evaluate their ground water supply. There, with a pump crew from Asia Wells, I redeveloped, tested, rerated and put back in decent order a system of older wells that had been abandoned by the base. The company was such a hero on this job that we were hired for yet a third field season, 1971, to drill more wells for Nakhom Phanom Air Force Base. I did that as well in a final two-month project, by which time I was sick and sorry of the Vietnam War, the military mind that ran the war, and the philosophy of wasted effort for no reasonable gain. But that is a personal story. In 1968 I was a gentle hawk. In 1971 I was a letter-writing raving dove.

Back from Thailand, the company took on a very good job in Alaska for Champion Paper and also started work with PUD No. 1 of Kitsap County. Champion was a good job that extended into two-year project. The PUD job continues to this day. Kitsap PUD has been the most long-standing and profitable client in the company's history. We have served each other well and I hope we will continue to do so.

In early 1972 I was soon to be forty, was an integral part of the company, and realized that I had to get out of John's basement. John needed little encouragement to accept my request to take me in as a shareholder, and as Fred Roberts was presently being bought out, put my name on the door in place of Fred's. In June 1972 we took on a new office with the name of Robinson & Noble, Inc. The employees were Hans Norbisrath when he cared to be there, Dave Tillson, John Robinson and me. We got along, barely, but didn't prosper.

In September, 1974 we got a call from Byron Barber for Bovay Engineers in Spokane. Byron had a previous dealing with Robinson on a Spokane job and John was the only ground water geologist he knew. Bovay had a contract for design of the civil works for the upcoming Trident Submarine Base at Bangor on Hood Canal, the water supply was to be from local wells, and he requested us to plan out a water supply exploration program. The three of us, Robinson, Barber and me, scoped out a four-well drilling project to extend along the center of the base, and with target depths of up to 1,000 feet each. I was overcome with the scope and exclaimed that such a project could readily exceed $100,000. Jon and Bryon just smiled at my concern. This was to be a major government contract and the money I estimated was very small, indeed.

By this time Tillson had quit, having flown off to Manila on the day that Nixon helicoptered out of office. John and I researched the Trident job and I hired a very good field geologist to assist. Harry was my first hire and the only one I ever directly fired. The firing was done on the day that I collected him from the Lewis County Jail, where he had been sent for endangering the public while drunk in the Town of Onalaska while inspecting a brief drilling job. Personnel management was never my strong point. Hans Norbisrath picked up slack when mud rotary began at Trident.

Hans and I watched the drilling which ran on a 24-hour schedule, while Robinson took care of the office, We all had more than we could handle and were doing several other jobs as well. We were still working on the first test well when Dave Abbott, a young graduate from UPS walked in the door on an early afternoon and wondered if there were any jobs available. I told him there was one if he started that night, and I was thereby relieved of the night shift and got a good sleep. Abbot was the first hired of a new group that became the working staff of today's company. During the Trident project the staff grew from three of us to a maximum of thirteen. The project lasted from 1974 to 1982, without question the largest single project in our history. At the peak, we probably were the largest group of consulting geologists in a single company in the state. We still managed to serve the core clients and also took on a four-year project doing a water resource study for the Fort Hall Indian Reservation in Idaho, Don Balmer as a resident geologist.

The Carter-Reagan recession of the early 1980s put an end to all that and the company nearly died. In the meantime, the new call for environmental issues and hazardous waste studies brought in the need for hundreds of groundwater geologists employed by a dozen or more companies that took the lead in the area. Robinson & Noble stayed aloof from that kind of work, but kept to the "clean-water" projects, and watched our colleagues prosper in their unenviable duties. I could never get eager or interested in the "dirty-water" business, and as a result we watched others grow as we stagnated. Perhaps I made the wrong choice, but I don't think that I could have personally done otherwise.

Neither Robinson nor I were destined to direct a major consulting firm as the following anecdote illustrates. One day around 1971, a very bright and appealing young man came into the office in Robinson's basement. He explained his technical skills, which were limited, and his

marketing ambitions, which were great. He thought that we could offer him employment, but John suggested that he might do better on his own. He dropped off a very classy and professional resume for us, simply titled "Ron Hart". In short order Ron had organized a company called GeoLabs, made some money, lost the company, gathered a new partner, and founded Hart/Crowser. The last gossip on Ron's career was that he was considering a buy-out offer of $15 million. If Jon had hired Ron that day, then John would be rich and I would have been elsewhere. So goes minor fate. Another person who did well was Mackey Smith who is an excellent geologist who worked for us for several years, then moved on rather than being frustrated by waiting to move up. Mackey joined a small but growing firm, Applied Geotechnology, which presently vies for size with Hart/Croswer. Mackey will be rich. The rest of us have gone on, more or less happily. In a few days John will be 80, and with my best regards.

John B. Noble
Tacoma, July 1992

[Ed. Note: John Robinson passed away in November 2000. For additional information about his life, his work, and his influence on Robinson Noble, see our Groundwater Reflections newsletter articles, Vol. 2, Issue 1 (2000) and Vol. 2, Issue 2 (2001).]