Faustian bargains in the gas fields of New Mexico,s San Juan Basin
Hanna Nordhaus High Country News Dec. 2006

First, let me say that I use compact fluorescent bulbs. I recycle. I live in Boulder, disdain SUVs and run errands on my bicycle. I do not need convincing about the "inconvenient truths" of climate change, airborne pollutants or habitat loss. I,m fully on board.

But I also own a gas well. To be more accurate, I own royalty interest in oil and gas leases in New Mexico,s San Juan Basin. I inherited this ironic state of affairs from my grandmother, who, on the urging of an Albuquerque acquaintance, purchased a batch of federal mineral leases in 1948. There were untold reserves of natural gas underneath the remote, windswept mesas of northwestern New Mexico, and a spur to the El Paso Natural Gas Co. pipeline was being built to transport that methane to the California market. My grandmother had no plans to drill, so she resold the leases to an energy company, retaining a 1 percent overriding royalty interest.

When she died in 1991, she left that interest to my two uncles, my aunt and my father, and he in turn gave his royalty interest to my brother and me. Because the area covered by the leases lay in slow-flowing "tight sand" formations, the wells drilled on our lease sites produced only negligible income until the late 1980s, when energy companies, spurred first by a lucrative tax credit and then by higher natural gas prices, began to extract coalbed methane gas. Since then, more than 6,000 wells have been drilled in the area, which now hosts nearly 20,000 active wells and expects 12,500 more in the next 20 years.

Anyone who follows the news in the West has heard about the environmental and social costs of the coalbed gas boom: Roads, pipelines and drilling pads tear apart fragile high desert; the extraction process brings to the surface "produced water" laden with salt and pollutants; leaks and spills threaten local wildlife and livestock; and the wells, rigs and service trucks contribute to ozone levels that at times resemble those found in large cities. Because most Western farmers and ranchers hold only surface rights to their land ˜ the mineral rights are retained and auctioned off periodically by the federal government ˜ the gas boom has transformed many rural homesteads into loud, unsightly manufacturing zones.

I had no idea of the controversy surrounding natural gas extraction until 2002, when I learned that a rancher,s wife named Tweeti Blancett had locked the gate to her ranch to protest the practices of the energy companies that operated on her family,s grazing land. While there had been wells on the Blancetts, 32,000-acre ranch ˜ 95 percent of it is federal land, on which the family holds an exclusive grazing permit ˜ for 50 years, the coalbed drilling spree of the last 15 has threatened the very existence of her family,s business. Unsecured holding ponds and leaking, polluted water poisoned their cows, and the tangle of roads and pipelines on her ranch killed forage grass and spread noxious weeds. Blancett, who had served as a local campaign coordinator for George Bush in the 2000 presidential election, soon became an icon of the struggle between the locals and the energy companies ˜ a lifelong Republican transformed by the drilling rigs into an outspoken opponent of the Bush administration,s energy policies.

When I heard about Tweeti Blancett, I tracked down a list of my leases and called the Bureau of Land Management to figure out where they were located. The woman I spoke to told me exactly how to get there. I would take a road until I arrived at a locked gate. A locked gate? "A locked gate." My leases, it turns out, are located on Tweeti Blancett,s ranch, on BLM land where her family,s cows have grazed for a century. The "clean" natural gas that funds my monthly royalty checks, then, also destroys family homesteads and degrades Western watersheds.

So I am an environmentalist-turned-polluter; and Tweeti Blancett is a wise-use Republican-turned-environmentalist. Both of our conversions are unexpected and ironic, random by-products of the cozy relationship between humans and natural resources in the American West.

This summer I decided to go see my wells. I sent Blancett an e-mail, and she invited me to visit. I drove across the Sangre de Cristos and wound through Chama and the Jicarilla Apache Reservation. Shortly after starting my descent into the piñon-and-juniper-dotted mesas of the San Juan Basin, I saw my first gas well. It was fairly inconspicuous, a few green pipes reaching out of the graveled ground, a storage tank, a compressor and a few miscellaneous green-painted structures. It didn,t strike me as terribly offensive. The second well I saw had similar pipes, tanks, pumps and machinery. A few hundred feet down the road, I saw another well. Then another.

I had long stopped counting by the time I reached Blancett,s motel in Aztec. Blancett, an attractive, trim blonde in her early 60s with a million-dollar smile and an eternally harried manner, ushered me into her office, sweeping aside the papers from her various lawsuits against the BLM and the oil and gas producers. She introduced me to her husband, Linn, who leaned against the doorway in a rancher,s hat, boots and jeans. On a map, they showed me the location of my wells. I receive royalties from about 30 of the 600 that sit on her ranch. "Every single one is on my permit," she said.

Although many of the wells have been there since the 1950s, Tweeti told me that the impact on the range land had been limited until the coalbed methane boom of the 1990s. Although the total number of wells in the basin as a whole has not climbed precipitously ˜ older wells go out of production as new wells get drilled ˜ the Blancetts, grazing land sits in the heart of the "Fairway," the most productive coalbed methane area in the region, and producers, spurred by the recent gas price spike, have drilled 200 new wells there in the last two years alone. There are now 1,000 miles of roads on the land. Two years ago, the Blancetts sold livestock rather than continue to struggle with the producers. "They could have drilled responsibly initially, but now the concentration is too great," Tweeti explained. "This is a sacrifice area."

I can,t take credit for all of the wells on the Blancetts, ranch, but I knew that it was the existence of those wells, mine included, that had driven her out of the ranching business and into a state of perpetual conflict. I told her I was sorry that my wells had caused them so many problems. She looked at me like I was nuts. "We have royalties, too," she told me. They lay across the Animas River, on somebody else,s land. "That,s how we,re able to fight the oil and gas companies. You don,t see me giving my royalties back."

Unlike me, of course, Tweeti Blancett has never claimed to be an environmentalist. Until the methane feeding frenzy of recent years made the oil companies a bigger adversary, she considered environmentalists among her biggest antagonists. "They have been some of the strongest lobbyists to get rid of grazing on federal land," she said. But in 2000, she contacted an environmental group in Durango for help with her gas-well problem and soon found herself something of a media darling, a veteran of "plucky-rancher-gone-green" spreads in *People Magazine* and *Vanity Fair*, her personal stand for property rights ˜ a Republican rancher,s bedrock ˜ now enlisted in the national battle over fossil fuels. Still, she describes her relationship with environmentalists as an "unholy alliance" based on mutual need ˜ they provide her with allies, expertise and exposure. And the environmentalists? "We bring them standing," she said.

I couldn,t help but feel that Blancett,s royalties brought me some degree of standing, too. We both have deep roots on, and under, the ground here in New Mexico. Her family has been running cattle since the 1870s; my great-grandfather, who arrived in the state around the same time, owned a huge sheep ranch near Santa Rosa. Although my father jokes that our family patriarch was a pioneer in environmental sensitivity ˜ "he had his sheepherders go after the sheep and pick up the turds" ˜ we all know the environmental costs of large-scale grazing in the West, including erosion, sedimentation, invasive species. In the South, family guilt often points back to slavery. If your roots lie in the West, it seems, there,s a good chance your forebears have had a hand in desecrating the land. Blancett, however, didn,t seem to feel that same burden of history: "What your people did back when has no bearing on who you are today."

Really? I am a freelance writer, and although most of the time I am able to cover my expenses, there are slow times when I count on the money that comes from the wells on Tweeti Blancett,s ranch to make ends meet. I couldn,t support myself on the royalties alone ˜ they fluctuate with gas prices, ranging from $400 to $3,000 per month. Without that monthly stipend from the fossil-fuel industry, however, I would probably have had to find another career.

Shortly before I traveled to visit the Blancetts, I made a trip to my family,s own homestead in northeastern New Mexico ˜ a ranch that my great-grandfather built in the eastern foothills of the Sangre de Cristos, where there is, fortunately, little of value underneath the ground. Like me, many of my family members consider themselves green, and like me, many of them receive royalties from the gas wells on Blancett,s land. Did other family members feel any similar remorse? Should we sell our interest, knowing it will do nothing to clean up the Blancetts, land?

I asked my Uncle Dick, an architect who specializes in passive solar design. "The problem is not royalty owners but government policies that subsidize production rather than encouraging conservation," he said. "I will have much more impact if I use that money to renovate my house to be more energy efficient. All of these concepts would assuage my guilt, if I had any, which I don,t."

I asked my father, who helped draft the 1970 Clean Air Act amendments. "I think you should look at it this way. If they mine and burn coal instead of your gas, it would be even worse, so you,re actually doing the environment a favor," he said, tongue only partly in cheek.

I asked my brother, a longtime environmental organizer, if he thought we should sell. "Selling doesn,t absolve us morally," he said, "but it might be a good economic decision right now."

Turning to less sarcastic sources, I called Jerry Simmons, executive director of the National Association of Royalty Owners, to ask if there is anything I, as a royalty owner, can do to exercise leverage over the production practices of the gas companies. He explained that unless my grandparents signed some sort of environmental stipulation when they first sold the leases, I have no say-so at all, as long as those leases are still in production. Some landowners have recently begun inserting "environmental clauses" into their lease agreements, requiring certain surface protections and accountability guarantees, but back in the ,50s, when my grandparents signed off, there were no such things. "There is no renegotiation," Simmons told me. "You,re living under the terms of the original lease signed, going back to when we didn,t know an awful lot that we know today. There,s nothing you can do."

He did tell me I could stay in touch with the companies and regulatory agencies involved with the property, because although lease agreements haven,t changed, the regulatory environment has. If I visited my wells regularly and understood the minutiae of local regulations, I could, perhaps, moonlight as a citizen surface inspector for the sorely understaffed Bureau of Land Management, calling in reports of leaky wells and holding ponds, as Tweeti Blancett did for many years, with little success. I could do nothing, however, about the cumulative effect of all the wells, roads and pipelines that have gone in, and will go in, on the Blancetts, ranch. Mineral leases are a federal right, explained Dave Mankiewicz, a petroleum geologist and field manager with the BLM, and once the lease is issued, there,s very little you can do to stand in its way. "There,s an impact, and we try to minimize the impact, but it,s hard," he said.

As a last-ditch effort, I contacted Randy Udall, an energy and conservation guru with Aspen,s Community Office for Resource Efficiency. He agreed with my chorus of naysayers: The gas is going to be produced, and there,s not much I can do about that. Instead, I can redirect my energies. "You could do as a Mormon might and tithe 10 percent of your royalties to a noble cause," he said. "These are all major corporations. You could sell your royalty interest and buy shares and go hold up placards at meetings. You could buy shares in solar companies or wind companies. Or you could take a vow of energy poverty." No, the measures wouldn,t nullify my role as a "methane floozy," as Udall took to calling me, but at least they,re in the realm of the possible.

The day after I met with Tweeti Blancett, I drove into nearby Farmington, which was an agricultural settlement before the El Paso pipeline arrived in 1951 and the town,s population grew from 3,600 to nearly 24,000 in a decade. Today, it,s a blue-collar community of rigs and roughnecks. Big trucks barrel down every side street and country road. There are 250 wells within the city limits. In the Yellow Pages, the entry under "oil" runs 15 pages ˜ oilfield service companies, manufacturers, wholesalers. It,s a place where Halliburton ˜ which occupies a modest, low-slung group of buildings on Farmington,s main drag ˜ is a local business, not a dirty word.

I had an appointment at the headquarters of ConocoPhillips, a gleaming, fortified building on the edge of a residential neighborhood. John Zent ushered me into his office and gave me a list of my wells by name and number and a history of the leases, which changed owners eight times between 1948, when my grandmother bought them, and today. Many of the wells went into the ground in the 1950s, after the construction of the El Paso pipeline; others were drilled after the Arab oil embargo of 1973 and the ensuing energy crisis; another large batch was stubbed in the early 1990s, when the coalbed methane tax credit went into effect.

Zent told me that in the years since my grandmother first bought her leases, the environmental management of the gas field has improved continuously. This much is true: There is certainly more oversight than when the early wells went in. States and counties now demand far more careful drilling practices, requiring, for instance, that producers dispose of wastewater and reseed drilling sites. The files for my older wells contain a one-page approval ˜ no stipulations, just drill. The applications for the later wells, such as those drilled in the ,90s, are ten times as thick. "The way we operated in the ,70s and ,80s isn,t sufficient today," said Zent.

But could the producers do better? Zent believes that one reason we hear more complaints now is because of a different "surface owner component" than there was in the ,40s and ,50s. "Back then, they were mostly large ranchers; now it,s all small ranchettes" ˜ subdivisions in the middle of gas fields and residents who aren,t accustomed to oil rigs in their backyard. In response to that new surface owner component, some producers have, in recent years, voluntarily begun to work with locals and environmental groups to incorporate lower-impact practices, from installing emissions-control equipment and noise-reduction technologies to reducing the size of well pads to "green completion" procedures to drilling multiple wells from a single well pad by using more expensive "horizontal" drilling techniques. The only reason all producers don,t use these technologies, said Gwen Lachelt of the Oil and Gas Accountability Project, which fights for better regulation of the gas industry and "best practices" at well pads in the Rockies, is because "they don,t have to yet."

There are limits to these technologies, however; horizontal drilling, for instance, which is perhaps the most promising way to halt the proliferation of new drilling sites, can only work in certain locations and at certain distances. And, says David Fleischaker, who is Oklahoma,s secretary of energy and a third-generation oil and gas producer, "It,s always more expensive. Whether it,s justified depends upon a number of factors," including the type and permeability of the formation, current natural gas prices and mineral ownership. Whether other technologies are too expensive to merit consideration depends on where you are and whom you,re dealing with. "Even within a basin," says Fleischaker, "and certainly as you move from basin to basin, issues vary dramatically, and costs to address those issues also vary."

Fleischaker notes that larger, deep-pocketed companies and longtime producers with reputations to uphold tend to be more inclined to spend the money to voluntarily address environmental issues than some smaller companies. But Tom Dugan ˜ a thickset, unapologetic, independent driller and author of a history of the San Juan Basin gas industry ˜ told me that the economics of his business preclude such measures. Dugan names many of his wells after dead rock stars, but some refer to lesser celebrities: The

"Nordhaus" wells, for instance, were named after my grandfather, who sold his interest in them years ago. I asked Dugan if he thought producers could do a better job. He looked at me suspiciously. "You like that check every month, don,t you?" he said. "We,re jumping through all sorts of hoops. Someday it will cost more to drill a well than the gas you get from it."

But that certainly hasn,t happened yet, if my royalties are any evidence.

Shortly before I headed home, I visited my wells. I drove up a dirt road, past a compressor station, across a cattle guard and past dozens of indistinguishable wells. I climbed a mesa and drove farther than I thought I should until I reached a gate, Tweeti Blancett,s famous locked gate, which was supposed to be closed but, she told me, would undoubtedly have been left open. It was, and only a few yards away, I found one of my wells ˜ San-Juan 32-9, number 23. The well was drilled in 1954, soon after the El Paso pipeline went in. It looked like all the other wells I had seen ˜ with perhaps a larger concentration of green-painted machinery because of its advanced age and declining pressure. It smelled like escaped petrocarbons. The pumping station, terraced into the hillside above the well, let out an ongoing racket, punctuated every few seconds with a disconcerting sigh. These green-painted outposts reminded me of mountain cabins where nobody is ever home; they bring a new sense of loneliness to this already-desolate spot.

Once the gas leaves my wells, it travels through larger and yet larger pipelines until it arrives at a processing plant. There are a number of them in the town of Bloomfield, about 15 miles south of my wells. Most of the plants lie in a low plain crisscrossed by a series of arroyos on the eastern edge of town, on a road known as "Plant Row," where a spaghetti-like tangle of silver and white industrial machinery and pipes plunge in and out of the yellow earth. They separate the liquids (propane and butane) and impurities (such as nitrogen and carbon dioxide) from the gas, add the familiar rotten-cabbage smell, and compress it into one of a number of three-foot pipelines that take the gas to markets east and west.

The lion,s share ˜ about two-thirds ˜ of the gas ends up in California, which imports 85 percent of the gas it uses and gets about a quarter of its supply from the San Juan Basin. Although Californians use far less natural gas per capita than the citizens of many other states, 40 to 50 percent of the state,s electricity currently comes from natural-gas-fired power plants, and that percentage is only expected to grow; the state has long restricted construction of dirtier coal plants within its borders. Last fall, the state also effectively barred local utilities from purchasing electricity from out-of-state coal plants; nuclear plant construction is prohibited until waste-disposal issues can be resolved; the current supply of renewables can,t come close to sating California,s energy appetite; and energy efficiency measures are predicted to meet only half of the state,s projected future demand. Which means that if we decided the environmental costs of drilling in the San Juan Basin were simply too high, and plugged my wells and all the others in the region, "You,d see a crisis, you,d see prices escalating," said David Maul, who retired as natural gas manager for the California Energy Commission last year and now works as an independent consultant.

Indeed, despite a 63 percent increase in drilling rigs between January 2003 and January 2005, U.S. natural gas production has declined by 2 percent. Half of the gas designated to meet expected demand by 2012 is still undiscovered, and the Rockies represent the single largest untapped source of methane in the U.S. The most optimistic estimate suggests that the use of renewables and energy efficiency technology would reduce our natural gas demand in the country by only 19 percent by 2020, and nobody ˜ not even the industry,s most ardent watchdogs ˜ denies the compelling logic of the need for San Juan Basin gas. "It,s important to remember that this is one of the most prolific natural-gas-producing basins in North America," said OGAP,s Lachelt. "It,s an important resource for our country."

And there,s the rub. They drill the gas because we use it. We could be more efficient; they could be more sensitive in their environmental practices. I could ˜ and will ˜ tithe 10 percent of my gas money each year to a worthy cause. But as long as our economy is structured as it is, we are all complicit in the destruction of Tweeti Blancett,s ranch. Think about it: Our most eminent climate-change activists fly on fossil-fuel-devouring jets to get to their next speaking engagements; even the highest-tech "green" trophy homes still use more energy than the smaller, inefficient houses of the previous generation; ardent environmentalists don,t hesitate to strap their mountain bikes to their roof-racks to commune with nature in Moab. "For a while I had utility stocks even as I was bitching about the burning of coal," Udall told me. "It,s a lot easier for me to speak about renewable energy now than before I bought a photovoltaic system. I am contemplating not speaking about climate change unless I got there on a bike. ... This would cut into my speaking fees and my air travel, so I continue on corruptly."

As do we all ˜ and until that calculus changes, my wells are here to stay. As I climbed out of the basin and headed towards home, past wellhead after wellhead, I realized that the sensation I was feeling was something I could no longer call "guilt." Instead, I felt sick to my stomach. It was something about the sheer repetition, the aggregation of wells, the visible incarnation of our invisible economy, of our remorseless consumption. I realized that I felt far more culpable as a consumer than as a royalty owner. This gas field is our Hades, our underworld ˜ the industrial reflection of our shiny lives above-ground.

Earlier, Tom Dugan, the independent gas producer with the "Nordhaus wells," had described the region when he first arrived in the 1950s. It was a place with few roads, poor grazing and little evidence of human passage. "It,s not the pristine place that it was," he told me, "but pristine doesn,t pay a hell of a lot." His justifications made me uneasy, but they were true. All of us, or at least those of us who are still on the grid, depend on his gas, and it is Dugan,s god-given ˜ or state-given ˜ right to profit from the land and the formations beneath it. So this stark, heartrending high desert will remain a sacrifice zone, a reminder of the Faustian bargain we all make, each time we turn on the lights.

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