

RAMBLINGS : Second Issue Our Bovaird and Seyfang Power House

Bovaird and Seyfang Model CJ was designed in 1938. Serial number 1895 was sold to The Bullion Producing Company on August 9th, 1940 along with a direct driven model AX eccentric power serial number 428. The engine is a 40 horse power 2 cycle design. Together they were the heart of a factory turnkey operation installed near Kennerdell Pa. Karl Moody from New York state was the lease owner and operator. It is not unusual to find a particular brand of oil field equipment on a lease far from where it was made but a complete turnkey operation was much more involved than just arranging delivery of a machine. It involved site preparation, extensive concrete work, erecting and detailing a building, plumbing for cooling, gas, exhaust and eccentric lube oil along with dead line anchors and a shackle line support rail with concrete footings that encompassed almost 2/3 of the site perimeter. Such an elaborate project would have taken a modest crew of experienced workmen many days to complete. At first it was a mystery why such an installation would have been contracted and erected so far from the Bovaird and Seyfang factory and foundry in Bradford Pennsylvania but as the story evolved a likely answer became evident. Let's turn the pages back a few years.

Your scribe's first encounter with Mr. Ed Kaylor of Kennerdell was the result of search for a group of three oil field engines that a friend had told me were on a wooded hillside near Kennerdell Pa. My friend had drawn an excellent map from his memory of a grouse hunt a decade earlier. The map showed the location of the three engines and another vertical steam powered Star brand drilling engine along the trail. When I investigated however I became confused because of how things had changed in those ensuing years! A new house had been built on the hillside and the old service road on his map was no longer recognizable from the township road. Neighborhood inquiries led me to Mr. Kaylor. Ed explained exactly where the engines were and who the landowner was. The story of the purchase and retrieval of those gems will have to wait for another day but I had made a new acquaintance in Ed Kaylor who became a treasured friend as time went on. Other purchases were made in the area and some challenging fetchings were accomplished, one of which involved Ed using his backhoe to pull my tractor and engine laden trailer out of a deceptively boggy swamp!

Eventually Ed invited me to see the lease installation out back of his house in the woods beyond his hay field. What he showed me was amazing in it's workmanship and current condition. A very uniquely shaped building contained a large Bovaird & Seyfang engine with a drive shaft from it connected to a massive eccentric power. Everything was just as it was when the pumper left it years earlier. Across a small clearing was a second building, more typical in design but just as well built. The pride of the owner showed in the red window and door trim as well as in other details. Inside was a large Ball engine still belted to a two stage Ingersoll compressor. This was the pressure plant for injecting natural gas into the oil sands 1000 feet below in order to push the oil out to the surrounding wells. Outside on the ground was a chilling manifold made from 3 1/2" pipe which allowed the condensates to be drained from the gas before it was pushed into the injection well.

Ed's wife, Dorothy, said when they first moved there in 1962 the lease was active with the Ball engine running continuously and the Bovaird running periodically for hours at a time. She wondered how she would ever get to sleep but soon became so accustomed to their sound that when they were shut down in 1964 she found herself missing their familiar rhythm.

Mr. Kaylor and other local oil men explained that natural gas was purchased from a gas field a few miles away and piped to the nearby leases. The owner/operator of this particular lease (Karl Moody) had a son who eventually convinced him to switch over to using compressed air to pressurize the injection well instead of buying natural gas. The savings turned out to be short lived however. The constant supply of fresh air resulted in rapid oxidation of all the steel and iron components in the wells and the lease was soon ruined because the cost of replacement far outweighed the value of the oil which could be retrieved. The lease was abandoned and the rights reverted to the land owner, Mr. Kaylor, which included all machinery and structures on site.

A few months later Mr. Kaylor approached your storyteller with an offer. He had promised the section of the farm the engines were on to one of his children but he wanted to insure the engines were preserved while he was still the owner. His offer was a very generous one indeed- if I could sell one of the engines for him then he would give me the other one! I put out some feelers and made up a poster with pictures to display at the June show at Coolspring Power Museum but had no serious inquiries. It was then that I came back to Mr. Kaylor with a counter offer- if I were to buy the Ball engine and compressor myself might he consider donating the B&S equipment to a club? He was receptive to the idea and asked how much I had in mind. I told him how much I thought it was worth and, true to his nature, he replied "Yeah, but you can't afford to do that". I then suggested a price that was just over half of my previous value estimate and the deal was done. Now I needed to find a home for the Bovaird.

I was not yet a member of the ACAEC but was impressed with the grounds and the great job they had done with the Olin lease display and the retrieval of the Reynolds island twin cylinder Fairbanks engine. I put them in touch with Mr. Kaylor and after visiting the site they began to make plans for the extraction. Word of mouth had reached Mike Fuoco of Bradford who was very familiar with the products of the Boviard and Seyfang company including their turnkey installations and he informed us about what we had been offered. It was decided to transplant building and all to the club grounds. (Mr. Fuoco is a widely recognized expert at Coolspring Power Museum and later provided us with page copies from the original factory production ledgers that are stored at CPM and a reproduction brass builder's tag for our engine). Ed Wharton was in charge dismantling the building and Bob Sergeff took charge of the machinery removal in 2014. Several club members pitched in and helped with both facets of the project. Yours Truly was not able to participate due to a full work schedule. Unfortunately Ed Wharton passed away shortly after the building had been dismantled and Mr. Sergeff became very ill. Dave Hill stepped forward as project manager to orchestrate the reassembly of everything at the club grounds and did an admiral job considering that the notes made by Ed Wharton during the dismantling were not available to him. By the fall of 2015 the large one piece concrete base had been poured for the engine and eccentric power, the machines had been set and the exterior of the building was up. Work on the interior and the mechanical refurbishing including installation of accessories was accomplished throughout that winter by various club members. The interior dividing wall and door were eliminated to enable better viewing of the eccentric and building interior. An air starting system was engineered to aid in spinning over the 40 horsepower engine although it had no such device originally. At last the CJ once again came alive after a 51 year slumber!

The area 5 miles north of Clintonville Pa. near the village of Bullion where our engine spent it's production life has a distinguished history itself. A nearby oil well, named the "Big Injun" came in with a whopping estimated free flow of 2500 barrels in the first 24 hours. A mad scramble ensued to capture and control the unexpected output but the oil ran unstopped down nearby Scrubgrass Creek and continued downstream into the Allegheny River before the Big Injun was finally tamed. (The well was still open but had been out of production for a few years prior to being plugged as recently as 2010). The excitement surrounding this event in the Bullion Field contributed greatly to the growth of Summit City which was just across the valley from the Big Injun. The first house in Summit City had been erected in December of 1876 and by June of 1877 it boasted 1000 residents and 180 buildings with hotels, a bank, stores, various saloons and a small one room jail. As with so many other boom towns the oil flow dwindled and fortunes soon waned. By the early 1900s only the jail structure remained. As of this writing the foundation of the jail is still discernible to those familiar with the area and some of the oil wells and in-ground stone water cisterns that served the population have been flagged- perhaps by the Pa. Game Commission.

The site where Karl Moody purchased his lease and established his impressive installation is only about 300 yards west of where the Summit City Hotel once sat right next to what is now Ed Kaylor's house. The broad steps to the hotel are buried just under the road bank a few feet from his porch. Mr. Moody pumped ten wells that tapped into the third Venango Sand at a

depth of approximately 1000 feet, some or all of which were likely original to the boom days of Summit City.

So why was this factory contract building and equipment erected over 100 miles from where it was made? After a review of the ledger pages provided by Mr. Fuoco it was noted that, although the Bullion Producing Company was only listed once, the name Moody appeared multiple times on that single page. It is logical to conclude that Karl Moody was a good customer of Bovaird and Seyfang for his other leases in New York state and they went to great lengths to accommodate him.

In the future we plan to add additional oil well pumpjacks in the area surrounding the Bovaird building and to erect a wooden support rail for the rod lines extending to them in the same manner as was original to the factory installation. Also on the original site was a W.P.A (Work Progress Administration) privy that Mr. Moody had purchased and has since been donated by Ed Kaylor to our club to rejoin the Bovaird & Seyfang exhibit in spite of the fact that he had more than one opportunity to sell it previously. Found inside the outhouse was an April 1960 edition of the Oil City Derrick newspaper proclaiming the passing of the Civil Rights Act. It remains inside but is now framed and displayed as another piece of our great nation's history.

A video of the original site and another of our first show run of the B&S can be viewed on YouTube by searching for "Kaylor Station".

Below are some specifications for our engine:

Bore- 12 1/2"

Stroke- 14"

Displacement- 1924 cu. in.

Flywheel size- 66" dia. with 4 1/2" face

Flywheel weight- 1,300 lbs.

Total engine weight- 7,100 lbs.

Rated horsepower- 40 @ 250 RPM



The weight of the model AX eccentric power exceeds that of the engine at an impressive 10,000 pounds.