

WILLIAM GEORGE ALEXANDER BRODIE

Employment History with Calor Gas

- 1 I commenced working with Calor in 1963, in Glasgow, in Cylinder Administration. I moved to the Accounts Department in 1968. I became a Bulk Salesman in 1972 and remained as such until 1990 when I retired on medical grounds. As salesman, I covered the area within Port Glasgow in the west through the south side of the Clyde to Motherwell and down the A74 to the Borders and west to Stranraer.
- 2 Initially, my training was spread over 10 weeks and consisted of going round various areas together with established salesmen. During my time as a salesman with Calor, I probably attended in excess of 20 training courses. The courses were varied and covered policy, sales procedures, customer awareness, safety etc. As a salesman, I reported to the Direct Sales Manager.
- 3 I can only speak about Calor's sales practices in Scotland from 1972 until 1990.

Handling Prospective Customer Enquiries

- 4 When an enquiry was received from a prospective customer, I would make contact to arrange a suitable date and time for a visit. During this visit, I would invariably be dealing with a decision marker. During the initial detailed discussion with the prospective customer, I would ascertain exactly the manner in which the LP gas (normally bulk propane) would be used, for example, heating, catering, auto gas etc. I would establish if there was a requirement for Calor to supply appliances and how much of the pipework, both internal and external, the prospective customer wished Calor to supply and install, including high and low pressure regulators. This would include regulators and isolation valves. Having noted the exact locations of where the appliances would be sited, the gas input capacities of the appliance burners and their burning pressures, together with pipe run distances

from the appliance burner inlets to the point of entry to the building, the prospective customer and I would go outside to agree the tank site. The prior information was needed before agreeing the tank site in order to calculate the size of the tank and the size of the pipe required. The size and number of tanks required are based on a few factors:-

- The cubic capacity of the vapour off take required from the tank in any given hour to meet the top rated inlet burner requirement in any given hour flowing over a particular distance, at the lowest likely atmospheric temperature and allowing for a minimum four week supply/usage in the tankage. The holding supply might require to be greater than four weeks dependent upon the location and distance from Calor's supply depot at Grangemouth. The required tankage must be a minimum set distance, in the case of a two ton tank this would be 25 feet, from the nearest building, boundary, property line and other fuel sources. There must be adequate access for the crane vehicle delivering the tank, the tanker to full it up and fire service vehicles. The siting distances of tanks and other associated requirements were as laid down in the Health and Safety Executive's publication, I have mislaid my copy so I cannot give you the number.

5 Having agreed the proposed siting of the tank, I would inform the prospective customer that he would require to lay a solid concrete base of the prescribed dimensions on which the tank would sit. In the case of a two ton tank, this would be 12 foot by 6 foot by six inches each tank comes complete with steel legs. As LPG is heavier than air, any spillage would sink to ground level.

6 The prospective customer would then be informed that he must open a trench, a minimum of two feet deep from the tank base to the point of the pipe entry at the wall of the building. At this juncture, I would always impress upon the prospective customer that safety is paramount. Going over the external set-up with the prospective

customer, he would be aware of where the tank would be sited, the tank base set-up, the underground trench dimensions and direction of track. The first stage regulator at tank reduces pressure from 100 PSI to 35 PSI. He would be informed that Calor would deliver and site the tank on to the prepared concrete base and install the vapour off take pipe from the vapour off take valve on the tank terminating at ground level adjacent to the trench where the underground pipe would be laid. The tank is delivered, tested, but empty, onto the concrete base.

- 7 The underground pipe is laid in the trench, nowadays this is polyethylene, however, previously it would have been galvanised steel wrapped in densotape. When the pipe emerges at the external wall of entry, the second stage regulator is installed reducing pressure from 35 PSI to 14 inch water gauge which is the normal low pressure operation of propane. The low pressure pipe can now enter the building. Isolation vales are fitted at the first and second stage regulators and at certain points within the buildings, certainly prior to the gas entering appliance inlets.
- 8 Calor would retain ownership of the tank which would be rented to the customer. All appliances, piping and regulation equipment would be sold to the customer. Calor would only sell tanks under exceptional circumstances. Testing is mandatory on tanks and test dates are displayed on them. By retaining ownership, Calor ensures tanks are tested under their testing regime.
- 9 Once the external site had been considered, the prospective customer and I would return inside and I would sketch and price the work as agreed. I would present the complete package to the customer and, upon agreement and acceptance of the proposal, the relevant Calor contracts would be completed and signed.
- 10 The customer would notify Calor when the base had been prepared and the trench opened. The tank base inspection report submitted by the salesman would activate the tank delivery. The salesman would not necessarily inspect the trench as part of the tank base inspection. If

Calor had been contracted to do so, the Calor fitter would install all the regulatory equipment, pipe and fittings as submitted by the salesman to the technical services department. If part of the pipework was being installed by the customer, the tank would not be commissioned for use until the Calor fitter had soundness pressure tested the complete installation. The extent of the customer's or Calor's liability for the tank and/or pipework would be determined by the contract entered into between the parties prior to the installation. The trench may well have been backfilled before the tank was commissioned possibly due to inclement weather in which case the Calor fitter would not have seen any of the underground pipework.

- 11 Only Calor can fill Calor tanks as denoted on the contract signed by the customer. Safety signs would be located by the Calor fitter during installation and commissioning of the system. By this I mean that there were always signs at the tank saying such things as "volatile fuel, no naked flames" and other things like emergency contact numbers. I cannot remember exactly what they all were. Ventilation is required in the area where LP gas burning appliances are operating. This ventilation must be equally divided between high and low levels. Installation of LP gas burning appliances in basement areas would not meet Health and Safety Executive guidelines.

ICL Plastics Limited

- 12 I have never visited this company's factory in Maryhill, Glasgow. I have had no direct involvement with this site.

- 13 I confirm that the contents of this statement are true.

Witness signature _____

Date _____

William Brodie

1) What was written material given to customer (when installing an L.P.G. tank)?

See sections 9 + 11 of my report.

Customer would be given copy of four page installation agreement detailing :-

- A) The complete installation from tank to appliances.
- B) That part of the installation to be completed by Calor.
- C) If relevant, that part of the installation which was customers responsibility.
- D) Sketch of tank and exact tank siting location.
- E) Sketch of location and track for underground pipe.
- F) Location of 2nd stage regulation (regulator plus isolation valve)
- G) Location of hole in wall for advent of pipe into building.
- H) Path of internal pipe work ,together with isolation valves, up to appliance/s gas inlets.
- I) Internal permanent ventilation requirements.

Also listed was customer delivery point address and, if different, customer account address; cost of installation, including the delivery siting and commissioning of tank/s, price of gas and quarterly rental charge of tank/s.

The customer's site delivery contact person's name was denoted together with all relevant telephone numbers, both customer's and Calor's.

The agreement was signed by both customer and Calor's representative.

A scale drawing of tank and tank concrete base sizes was given to customer.

Calor's standard contract for the supply of tank/s on rental basis and the initial filling and on-going filling of tank/s, including all rules and regulations appertaining thereto, was signed by customer. A copy of this contract would be sent to customer following signing by relevant Calor manager.

All safety signage would be furnished by the Calor fitter at the time of installation. Signs were various but all contained the stringent messages: "No naked flames" – "No smoking" – "Volatile fuel" etc, plus contact telephone numbers in case of incident.

2) What was customer told re corrosion protection of pipe?

See sections-7 + 10 of my report.

Customer would be advised, most strongly, that to comply with safety, Calor should install all underground pipe. However, if customer insisted that this part of the installation was in the remit of their chosen installer, it would be impressed on customer that their installer must be qualified in the installation and usage of LP gas and that all underground steel pipe be wrapped in densotape.

3) If a fitter noted a problem with an unwrapped pipe he would report this to Calor. What would Calor do on receipt of such information?

See section 7 of my report.

The most likely outcome would be for the technical manager to visit the site, with his fitter to resolve the matter.

4) Would 1972 practices spoken to by you at section 3 have been the practices in 1969?

See section 3 of my report.

During my eighteen years as a salesman with Calor, 1972 – 1990, I must state that my company have always been safety orientated, to a very high degree, and that their operational policies have been governed by a "simplistic-explicit" code of practice i.e. "Easy to follow" "Little room for error" I have no reason to believe that pre-1972, Calor standards were not of the same high calibre.

5) What type of complaint from a driver would prompt a visit from the technical manager?

Tanker driver.

- 1) Obvious interference at tank and/or associated pipe work.
- 2) Faulty contents meter on tank.
- 3) Obvious interference on compound gates.

N.B. A compound fence, chain link, may be erected around tank/s. This fence must be six feet high and a minimum four feet from tank surfaces at all points. Fence must have two gates not adjacent to each other, which **must** open outwards and **not** be self-locking.

Fitter.

- 1) As denoted in Question no 3.
- 2) Anything untoward regarding internal pipe work carried out by customer's installer.
- 3) Internal isolation valves, installed by customer's installer, which were not spring-loaded- this to comply with LPgas code of practice.

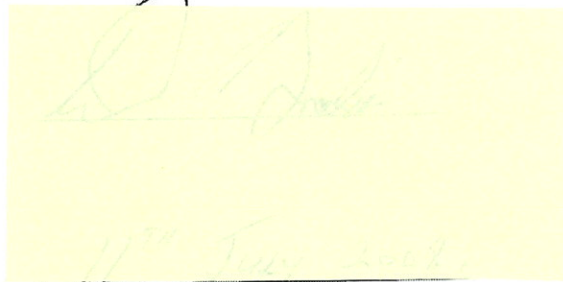
6) When did it become Calor's policy not to connect/disconnect to customer's pipe work?

Unable to answer. Calor's technical services may be able to help with this question.

I confirm that the contents of this statement are true.

Witness signature.

Date.



The yellow area contains a handwritten signature in blue ink, which appears to be "D. J. Smith". Below the signature, the date "11th July 2008" is written in blue ink. A horizontal line is drawn across the bottom of the yellow area, underlining the date.