

Lewisman's scientific success brings First Minister and top world chemical company to Westside

By Fred Silver

The sheer scale of investment and aspirations for the pharmaceutical industry in the Isle of Lewis became clear on December 7, 2012, when First Minister Alex Salmond officially opened the extended BASF Pharma (Callanish) Ltd plant.

Originally built by the former Highlands and Islands Development Board as a fish processing plant, the works at Breasclete were developed as part of the worldwide operations of Scotia Pharmaceuticals, run by the late Dr David Horrobin.

Six years ago, having been reduced to a pale shadow of its former self, it was taken over by Equateq, founded by Adam Kelliher and Dr Horrobin's daughter Cathra, and work began to refine its work and develop its purification technology.

Michael Heinz, who sits on BASF's Board of Executive Directors, told the opening event that when BASF was first told of Equateq's process for creating highly concentrated Omega-3 fatty acids in 2009, their scientists said the process would not work. Two years later, they were convinced and in May 2012, BASF took over Equateq and began an investment programme totalling up to £18 million. The plant now had the most advanced technology of its type in the world, he said.

Guests heard that Angus Morrison, a Lewisman and scientist who started with Scotia after leaving Glasgow University, was now "the world's leading lipid chromatographer" because of his breakthroughs in this field, the exact details of which remain closely guarded.

BASF – the world's largest chemical company which simply describes itself as The Chemical Company in its literature and public statements – is convinced that being the technology leader in lipid chemistry and pharmaceutical omega-3 fatty acid production gives it a commanding position in the international nutrition market.

In the end, there may be as many as 100 jobs on the site, Mr Salmond told the guests at the event, although the more immediate aim is about 60, a tenfold increase in five years. At the time of the opening the total number of jobs was 52.

The event was introduced by Scott Thomson, BASF's Vice-President for Marketing and Customer Development, who emphasised the qualities that had enabled the project to proceed so fast over the past seven months and underly BASF's approach. These are teamwork, attention to details, high ethical values, and a passion to make the project a success. BASF wanted to grow the market for Omega 3 oils and, in doing so, bring their benefits to more people and make their lives better.

Adam Kelliher, founder of Equatec and now the managing director of BASF Pharma (Callanish) Ltd, looked back at the foundation of the company and the efforts of the "A-team" - made up largely of people whose name began with A - that had been the foundation of its revival, and how they had focused on finding some way of



First Minister Alex Salmond officially opening the extended BASF Pharma (Callanish) Ltd plant

producing their product more cheaply. They knew from the outset that "they had an excellent product which no one could afford to buy." Since the BASF deal, they had "done absolutely everything possible to get all the equipment in place in time. Many of you have spent many hours away from your families" and faced "lots of stresses and strains." He commented on the gains from working with BASF which was "filled with amazingly talented people right across the board. To be able to access this level of expertise... has been phenomenal." This was not just for research but also for sales - they had an established sales force all around the world which a small company simply could not match,

He praised the work of Dr Adrian Hughes, head of business development for Omega 3 and Omega 6 fatty acids; of Angus Morrison, the plant's technical manager; and of Magnus Nicholson, the general manager. "He's done pretty well every job in the facility. He has not hesitated. One night he went home at 7.30 in

the morning having worked all night," said Mr Kelliher. He added: "Without his skill-set, we would not be celebrating here today."

Mr Walter Dissinger, BASF's president of the Nutrition and Health Division, explained the success of Equateq as a small start-up company in influencing a giant chemical company, reminding people that Equateq's work was derived from experience over 20/30 years. It had been December 2011 when his colleagues indicated they felt BASF should become involved. They said this could "become the nucleus for creating a new business for BASF within Nutrition and Health. We have created the basis for a fantastic business ...that really supports the health of the whole population." He went on: "I am very impressed with the whole team here at Pharma Callanish. They have made tremendous efforts. We are looking forward to a very interesting and very nourishing future together."

Dr Magnus Nicholson said the pressure of the work in the last few months had made the plant like a piece of Chicago or Düsseldorf.



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Pressure was good for people, he added - it was pressure that turned the carbon of coal into a diamond. He praised the contribution of local architect Stuart Bagshaw to the development of the works.

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Performing the formal opening, Mr Alex Salmond said: "This magnificent facility is a tangible sign of confidence not just in the skilled workforce here on Lewis, but in the future economy of the Western Isles and Scotland as a whole." He pointed out that 90 jobs in the Western Isles were probably the equivalent of 5,000 jobs in Edinburgh. And he pointed out: "These are high value jobs being created today here."

Mr Salmond went on to say that the work of Angus Morrison in achieving 97 per cent purity in the Omega 3 oils "was going to benefit countless millions of people across this planet."

He pointed to the area's pristine environment and the connection between the plant and the sea through the use of fish oil, quoting from Iain Crichton Smith's poem Do Mo Mhàthair which says: "As I grasp what the sea gifts me/ Silver fish slack-jawed with poetry/ I roll the watertight barrels away/Keeping only what is necessary/ Salt strips from frippery/ As I lift life out from decay."

"I am absolutely delighted as First Minister of Scotland to declare open this wonderful new facility," he said.

Highlands and Islands Enterprise committed more than £1 million to support the development at the Breasclete site. Scottish



Before the formalities began... Council leader Angus Campbell, First Minister Alex Salmond, MP Angus Brendan MacNeil, Council Chief Executive Malcolm Burr and Alasdair Allan, MSP

Enterprise also awarded £2.95 million to support the expansion of production capacity at the facility. Lena Wilson, Chief Executive of Scottish Enterprise, said later: "We've worked closely with BASF Pharma to ensure we can support its production facility expansion with a £2.95 million Regional Selective Assistance grant. The chemical sciences industry generates £9.3 billion revenue for Scotland, and exports around £3billion every year, making it Scotland's second top exporting sector."

Equateq's proprietary chromatographic separation methods allow flexible formulation of omega-3 fatty acids at exceptional purity levels. "Equateq's technologies will enable us to customize fatty acid concentrates with variable ratios of EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) at concentration levels of up to 99 per cent purity. This is unique in the market," said Martin Widmann, Senior Vice President, Pharma Ingredients & Services at BASF. BASF believes that highly concentrated omega-3 fatty acids are a global growing market. Increasing consumer awareness of the health benefits of omega-3 will fuel great demand for omega-3 products in the years to come, the company says.

Speaking after the event, scientist Angus Morrison said that the answer to their success in developing successful and affordable separation of the fish oils lay in the fact that they had developed a continuous process, rather than one which worked in batches. This cut both costs and waste, particularly by slashing the use of solvents.

Mr Morrison, from Keose in Lochs, joined what was then Scotia Pharmaceuticals in 1995 after getting a chemistry degree from Glasgow University. The low point "when things looked bleak" came in 2005-6 after Bioletic Pharma, which had owned the plant since 2001 and had taken it in a different direction focused on photo-dynamic drug treatments, closed it down. However, Equateq was already interested and eight staff were re-employed to concentrate once again on producing high purity Omega 3 oils.

It was emphasised throughout the event how the determined commitment of time and resources by Equateq had finally enabled the scientific breakthrough to be made which enabled the achievement of commercial production of a uniquely pure product.

Speaking to EVENTS at the start of January, Adam Kelliher, said: "The launch event on December 7 marked the completion of the physical installation of our expanded facility, and since then, the staff at Callanish have embarked on a validation programme to ensure all the equipment has been installed properly, and functions according to plan. This is a complicated process, but it is all on schedule, and assuming all goes according to plan, concentrated omega oils will be made on our new kit in coming weeks."



Michael Heinz is presented with Highland and Island mementos by First Minister Alex Salmond



Angus Morrison being interviewed by chemical industry journalist Sean Milmo



Michael Heinz, who sits on BASF's Board of Executive Directors, seen left with Scott Thomson, BASF's Vice-President for Marketing and Customer Development