



Drilling For Water ... Caring For Life

Nehemiah Construction Ministries U.K.

Registered Charity No:1129983

Interim report for Zurich Community Trust – May 2019



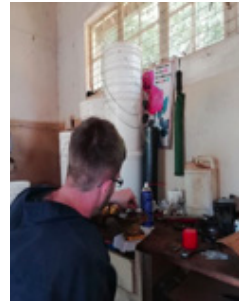
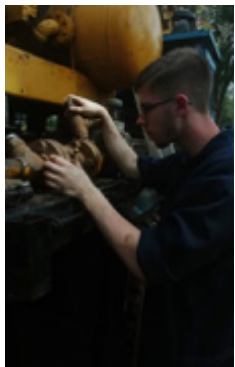
2018-2019 Operations – the year of the Zurich Community Trust Grant

Introduction.

The last 2 trips which Trustee Les Saunders has undertaken in Oct/Nov 2018 and March/April 2019 each of which lasted 6 weeks, have focussed on 2 main areas of development of the work of the Charity – the drilling operations and making more positive partnerships locally and nationally. This report notes the significance of both these visits in terms of these development ie the second is built on the first, the context of which is important to note.

The drilling machinery had been necessarily mothballed and hidden for some months, in a more remote location in North West Kenya for its security, in the disturbing activities during the changes in the political scene.

When it was all returned to the Kitale compound in Oct 2018, it was carefully examined and it became evident that some major work would be required to bring it up to working requirements. This was due to abuse through previous poor local repairs, tampering and the weather during this mothballing. Les was joined by his son David for a week which started inauspiciously – there was no electricity to power the welding machinery! However, once available, David really got stuck into the necessary and serious work, involving major repairs to the drilling rig lorry and support lorry.



The support truck had failed to start, requiring a replacement starter relay/solenoid. In addition, the 25hp diesel motor for the welder was found to be running at about 50% required power which also explained the struggles for the crane and mini compressor to function efficiently. After servicing the injectors and replacing the leaking primer pump, it was still smoking badly and requires new piston rings from the UK. On the main rig vehicle, the mud pump was stripped, serviced and refitted. With the hydraulics awaiting repair, this delayed moving the rig

(with its mast still raised could have damaged power lines!) as a failed valve on the parking brake was jammed on and thus immobilised. The hydraulic system was subsequently refilled and fitted with a new hose. Partway through stripping the rotary head and swivel, all the seals were found to be failed or failing and have had to be ordered for later refitting, along with some brake parts for both trucks.

The main compressor was disconnected from the rig and all 5.5 tonnes of it lifted from the truck. The tachometer was removed and the cable dismantled, the corrosion cleaned out and refitted correctly. Once the cover plate on the governor had been removed, only half a gasket was found, fitted with two incorrect bolts. They and the gasket were replaced by Les' handcrafted replacement gasket, complete with refitted injector pipes, pressure regulating valve, two-way valves and the like. In future, all servicing and repairs will be carried out under Les' direct supervision.

All of this work was carried out by Les, David and Wahungu, a local mechanic recommended by Rick Strickland. Wahungu turned out to be a conscientious and hard worker; he now has a good working knowledge of compressors and mud pump, rotary head workings and will be a real asset to the team in the future. Les has also been dealing with the future lease of the secure compound at Kitale which, on behalf of Nehemiah Construction Ministries U.K., he has been leasing for a number of years. This property has been sold on and the new owner offered a new contract at double the previous rent. This has been renewed for an initial 6 months and Les is now considering with the owner' agents, some aspects of necessary repairs and other renovations under the terms of the new contract. The location, facilities and size of this compound continues to be invaluable for Nehemiah Construction Ministries U.K.

There will be a new drilling team, although we are still very much in touch with Zeddys Sampson who has been the foreman of the team in the past. Les is confident that he will be able to recruit and with Zeddys, train up new suitable team members on his next visit - once he has obtained the necessary parts.



Les took the opportunity to meet with a long-standing friend Rick Strickland, who is our chief local contact in the area, to discuss developments of possible arrangements for Nehemiah Construction Ministries U.K. future well drilling in the Pokot/Turkana on behalf of the local governor and Members of the County Authority (MPs). This matter is still ongoing and awaiting Rick's return. To facilitate this in advance, on his way back through Nairobi, Les met with government departments officials regarding the necessary updated paperwork for future work including vehicle admin matters, work and tax registration, permits and similar official matters.

On returning home, Les was debriefed and a newsletter was sent out to supporters updating them about this progress. Sadly, the planned next trip in the early new year had to be postponed as a suspected DVT in his leg meant he was unable to fly. At the Trustees' meeting in February 2019, the Board was updated as to progress and his future plans outlined. These included anticipated minimal mechanical work on the rigs and compressor with new parts; the recruitment of other drilling team members under Zeddys as a self-employed supervisor and Wahungu as mechanic (only the latter to be on a permanent salary); all the preparatory work and drilling at Pokot and Ol Kalou; renewing contact and formalising a business relationship (MOU) with Rick Strickland concerning drilling boreholes with Taiwanese/local Government funding; continuing to develop contact with the Chief Philip (a recognised leader in the Pokot community) and also the Governor of Pokot; following up the letter the Immigration Authorities about a permanent work permit, the reactivation of the Bank account locally, and obtaining necessary certificates and authorisations for vehicles and waterhole boring.

Les' latest trip to Kenya 1st March – 11th April has all the hallmarks of a series of small but significant skirmishes of efforts to stop or at least slow down the progress of the work of Nehemiah Construction Ministries U.K. Before the end of 2018, we sensed that we were on our way to restarting drilling operations after the necessary mothballing of the equipment for safety. (This had taken place earlier in the preceding time, during the elongated period of national elections which featured serious disruption to the life of the country). In October/November, Les and David had already spent significant time and effort in dealing with serious damage and preparing the drilling equipment to be used on this trip – and so it seemed good that this latest trip would produce the positive results planned for, especially when both vehicles immediately started up in the first days of his arrival. However, as one of the Trustees commented after the first notification a couple of days later that the compressor was not producing sufficient power or volume, "Aaah, the little foxes: I was wondering when they would appear."

There followed several days of further investigation of the whole plant, including hiring a specialist who drove up from Nairobi (with a speeding ticket!), who diagnosed a small but vital corrosion which required further dismantling and cleaning for new small parts, re-assembling and re-testing which yielded some more but still insufficient improvement – and yet more time in investigation which ultimately pointed to a fuel starvation failure by the injector pump for the compressor. More time was spent in finding the suitable and available parts which resulted in Les delivering the governor/pump to the Nairobi agents, who ordered the parts from Dubai which arrived and were discovered to be the wrong ones and had to be returned and re-ordered - with more days of waiting – and then installed and finally returned to Kitale.



Les and Wahungu refitted the equipment and retested the rebuilt pump and governor – great but still insufficient improvement in the compressor. So at the end of the final week of his trip, it was decided to strip and replace the piston rings, valve guides and stems and to reseat the valves to improve the compression of this engine. The work started and was left with Wahungu to complete. A couple of days later, after his return Les heard that the engine (now virtually completely rebuilt!) was idling well and was to be tested under load. Sadly, although the pressure was up by 20%, this was still insufficient for a continuous load-use and so Wahungu (with Les' phone calls) was back to more investigations in 2 areas – the need for possibly new fuel filters and the turbo on the compressor engine to be sent to the

Nairobi agents to be renewed/replaced. A subsequent, update seeking series of calls to Kenya on 100519 has provided the good news that the equipment had been purchased and the turbo refurbished, refitted – and was now working well. 3 days later, after a series of trial drillings – the video was mesmerising - Les received a further call that for both men, Wahungu and Zeddys, the pressure readings were appearing inconsistent. This could be explained by a fault developing in the pressure gauge or that the governor/injection fuel delivery pump is at fault and both are now under investigation. Initial trials suggest this latest purchase and refitting are now yielding very positive readings and final tests will be satisfactorily completed before Les returns early next month.

Reading this – and being aware of the tight timeframes available, one might now begin to understand some of the frustrations and despair which Les and the other Trustees have experienced. Progress certainly doesn't come easy in such an environment and especially whenever there is a breakdown or failure in the smaller details. There may be observers who will want to point to some perceived 'rational' explanations, whilst others may also consider some other 'extra-ordinary' suggestions. It is in the DNA of Nehemiah Construction Ministries U.K. to combine both in an attitude of a continuous mixture of experiential learning, resilient faith and persevering hope, which brings its own benefits and rewards, for which Nehemiah Construction Ministries U.K. , as an organisation is most grateful. However, Les had made the most of this last visit – whilst waiting for parts to be delivered, people to arrive and examination, testing and diagnosis of new parts to finish. Communication has developed internationally, nationally and locally – with good relationships started, maintained and developed – through personal visits, many phone conversations and paperwork completed and delivered.