

29 May 2021
Revised

Re: Attributes and Recommendation for Mr. Roger A. Failmezger

To Whom This May Concern:

I, David K. Crapps, have known Mr. Failmezger ("Roger" in this letter) for many years. He is always pleasant and willing to help any way he can. He is the type of person that always has time to help others.

Education & Experience: Roger has a Civil Engineering undergraduate degree and a Master's in the specialty area of Geotechnical Engineering. It is comforting to know that a person that is well educated and has an understanding of how to run the various tests he offers. He also knows how to apply the data in the proper manner during design. Therefore, he has education and experience in testing, reducing the data and application in design.

As an Engineer: I have had the pleasure of working with Roger on several Projects. I am a firm believer in the obtaining the best when important work is underway. I have found that this philosophy pays off because when a person engages the best at whatever the assignment is, saves time and money when the best is in-charge.

Innovation: Roger is an innovator. He has developed several products which assist him in doing his work to get good data in an efficient manner. For, example, he has developed a load cell which measures the force going into the rods used to push the CPT and/or the DMT (using one of his CPT rigs to push with). He also has developed equipment to push soil exploration devices (DMT or CPT) from the river bottom or it could push from the seafloor. His equipment and techniques eliminate most of the time and expense to minimize or delete structural buckling of the push rods.

Record Holder: Roger has tested the deepest of anyone I know. He holds world records which he can be proud of. He tested over 400 feet below the ground surface with the dilatometer for a nuclear power plant. The record up to that time was about 250 feet. Therefore, Roger exceeded the old record by about 60 percent! He has used innovative methods to achieve new records.

As a Tester: Roger goes out in the field and accomplishes most of his testing without any help! He understands the equipment and how to operate it. He understands the effect of time lost due to delays. He also understands why delays may or may not have an effect on the results. In some cases, delays can give conservative results and sometimes unconservative results. It is important to have the engineer also as the test operator. He knows how to reduce the data (and reduces the data on many Projects overnight); and, how the data should be used.

Important Projects: We have been lucky to be consultants on several projects which have lasted years. Results must be compared to results obtained years earlier. It is important to have a reliable person (and the same person) to do the testing. This eliminates a lot of questions about the uniformity of personnel, uniformity of equipment, uniformity of test procedures etc. For example, Roger has worked with us at the Kennedy Space Center, KSC (as a sub to Jones and Edmunds, Inc, with an office at Titusville, FL and headquartered in Gainesville, FL. Titusville is near the KSC.) NASA is preparing to go back to the moon (estimated in 2024); and, eventually to Mars (projected to be in 2031). The loads are getting heavier and the Crawlerways are getting weaker (due to times between rollouts and launches). Roger has played an important part in the soil testing to document time effects of long delays in rollouts. Such testing will be important to allow predictions of the effects of changes in load on the Crawlerway, Crawler Transporter speed, and time between launches.

Saves Clients Design & Construction Costs: Roger offers soil testing using several different devices (CPT, DMT, pressuremeter etc. He knows what tests should be used and how the data will be used. He is presently writing a paper on the funds saved on several of his projects. The Designer is happy with money saved for the client. He also knows that Roger's experience and knowledge will help make the Designer successful.

Papers: Roger has written a number of papers to share his knowledge; and, to educate others. This sharing of knowledge with others is great for our Profession (Geotechnical Engineering).

Recommendation: He is the only person I know that has the proper education, owns good equipment, knows how to do the testing, reduces the data himself and can help with the design or will advise the client in the use of the data for design. I highly recommend Roger A. Failmezger.

Regards,



David K. Crapps