



# Plan for Success on Drilling Jobs

Whether we're talking about a vacation or your next project, planning is essential to have successful outcomes. Yes, you can wing it to a certain point, but if you take even a couple of minutes to put together a plan, you can reduce stress, and time and money spent!

Most of us do some level of planning mentally when presented with a task or problem. We take inventory of all the things we will need and make a mental map of the process we will follow to complete the task. When it comes to a larger project or event, it is a good idea to make a "formal" written process — including materials needed — to complete the project or event. We all want successful outcomes! Time is money! The proverb "measure twice and cut once" is a good rule of thumb. To put it simply, that means plan and prepare before jumping into something.

When it comes to drilling projects, many of us have been in the business for many years and experienced a range of challenges and outcomes. We all think we have seen just about everything. In many cases, this is a true statement. But there are times when the unexpected happens. Plan for the best, but expect the worst. Having this train of thought will help prepare you for unexpected obstacles. In addition,

**THERE ARE NO UNIVERSAL SOILS AND THERE ARE NO UNIVERSAL DRILLING FLUIDS. BENTONITE DRILLING FLUID IS THE STARTING POINT.**

planning a project is also a tool to help manage your customer's expectations.

So, if you don't lay out a formal plan when preparing a project estimate, you should at least make a mental plan of the following facets specific to drilling. In our mud schools, we emphasize the importance of being prepared.

When planning a project, there are many things to consider. If you actually list all of the items on paper, you would be very surprised at the length of that list. Regardless of whether the project is small or large, the five steps to a successful bore covered here are a basic list of considerations for every project.

### STEP 1 – PLANNING FOR SUCCESS

Do I have all the PPE I will need? Is the site easily accessible? Will the site be saturated? Will my rig sink? Yikes! Have you called 8-1-1 to have underground utilities marked? Identify jobsite hazards. Will the drilling products I need be at the site in time to start the project? Will I have enough manpower at the site or available to get to the site if I need extra help?

### STEP 2 – SOIL IDENTIFICATION

Will I encounter coarse soils and/or fine soils? Do I have the appropriate drilling fluids products to handle the worst case scenario?

### STEP 3 – DRILLING FLUIDS

There are no universal soils and there are no universal drilling fluids. Bentonite drilling fluid is the starting point. From there, we vary the amount

of bentonite (less bentonite for finer soils), and then polymers and additives are added to the drilling fluid to achieve the desired properties to address specific problems inherent to various soil conditions. Where will I get my mix water? What will I have on hand to take care of any loss-circulation issues? Does my distributor have

loss-circulation product on hand in case I need it in a hurry?

### STEP 4 – BITS AND REAMERS

Do I have the appropriate bits and reamers for the expected soil conditions? Are they in good condition? Like fluids, bits and reamers need to be matched to soil types. Reamers should not restrict the pump's capacity or annular flow.

### STEP 5 – VOLUME

Have I calculated the volume of fluid I will need? Calculate drilling fluid volumes based on hole size and soil type. Many drilling fluids companies have calculators online to help. You can

also use the report that is generated as a part of your project submittal. Will I have sufficient volume to maintain a flowable slurry?

There are many nuances to any drilling project. It is always good to get these down on paper to make sure you don't forget them. Boost your odds for success. Utilize drilling fluids as a tool to avoid trouble instead of an aid to get you out of trouble! **ND**

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