

## DIRECT DRILLING COSTS

Drilling techniques, equipment and consumables are not static, and as such, a one-off complete list of direct drilling costs cannot be supplied. However, as a general rule, it will include all costs that are associated during active drilling to produce diamond core, percussion-drilled rock chips, or auger samples.

Table 1. Direct drilling costs. Direct drilling costs have been given according to three categories: Activities, consumables and instruments/equipment (including hire). Where items have a subscript refer to specific notes provided below the table. This list is not exhaustive, if there is an item that you consider to be a direct drilling cost that is not listed please contact the EIS Team to discuss.

Activities	Consumables	Instruments/equipment
Active standby <sup>1</sup> Barrel change Bit change Between EIS hole rig movement <sup>2</sup> Cartage of water <sup>3</sup> Casing operations Metre rate downhole <sup>4</sup> Minimum shift rate <sup>4</sup> Mobilisation Pack up drill site Pulling casing Pulling/running rods Reaming ground conditions Reaming casing Rigging down Rigging up Set up drill site Standby <sup>1</sup> Tramming <sup>2</sup> Water bore drilling <sup>5</sup>	Bit Collar stabilising items (PVC pipe/casing/foam) Collar casing Down hole consumables Diesel <sup>6</sup> Drilling mud additives Foam (for collar stabilization) Grease/tacky PCV pipe (for collar) Potassium Chloride Roll black plastic Water <sup>3</sup>	Axis Champ Gyro Booster Gyro hire/survey Lighting tower (night drilling) <sup>7</sup> Orientation tool Single shot camera Solid returns unit <sup>8</sup> Temporary above ground sump <sup>8</sup>

### Stand-by

Stand-by maybe itemised on some drilling invoices depending on the drilling company invoicing methodology and contract with the resource company. It is acknowledged that stand-by generally has two subsections.

#### Active Stand-by

Active Stand-by is considered to be part of the direct drilling costs.

This is considered to be where the drillers are actively working, but are not drilling to produce diamond core or chips. The active rate is charged at hourly rather than by meter rate. Actions that may be taking place are:

- Running rods to change bits
- Using down hole equipment such as gyros to record the orientation of the hole
- Navi drilling
- Hole conditioning
- Reaming of a hole
- Wedging
- Daily safety/toolbox/pre-start meetings (as required by mining regulations)

## **Non-active (e.g., passive/inactive/non-billable) Stand-by**

Non active stand-by is **not** considered to be part of direct drilling costs under the EIS co-funded drilling agreement.

This is where no drilling activity or associated data collection is occurring. Such costs may include:

- The drill crew waiting for instructions from the Resource company (client stand-by)
- Waiting delivery of replacement parts
- Waiting on delivery of fuel or water
- Weather delay
- Client induction/client safety induction

## **Moving between holes on the project site/tramming**

This cost is where the rig is already on site (not to be confused with mobilisation/ demobilisation) and is moving from the first hole drilled to the next at the project/ prospect site described in the co-funded drilling application. The cost of moving from one hole to the next (sometimes referred to as tramming), is usually built into the **active stand-by rate** and often not listed separately on the drillers invoices.

Also included as direct costs are charges related to the set up of the drill site and pack up of the drill site.

## **Cartage of water**

Where water is required for diamond drilling, the cost of the:

- Water and/or,
- Cartage of the water

is considered to be a legitimate direct drilling cost. **Invoices for all water costs (as above) will need to be submitted to the EIS co-ordinator as proof of purchase.**

## **Metre rate down hole**

Metre rate down hole or minimum shift rate (if metre rate is not met). Rates will vary according to type of drilling and drilling contract between the drilling company and resource company.

## **Drilling of water bores**

Drilling of a water bore is not considered to be a drill hole under the co-funded agreement, in particular where drilling of a water bore has been part of a negotiation with a landholder (lease or freehold).

However, where it can be shown that drilling a water bore **for a water supply to undertake diamond drilling** will be:

- Significantly more economical than transporting water, and/or
- Reduce the ecological impact in a sensitive flora/fauna region (with all environmental approvals granted,

# EXPLORATION INCENTIVE SCHEME

The water bore costs **may be considered** as a direct drilling cost. This consideration **must be** discussed with the EIS co-ordinator before the drill rig is on site. An example of where such a cost was allowed was a drill site in the Kimberley Region had no accessible water supply and would have required a significant track upgrade combined with transportation over 50km through a sensitive floral area combined with creation of a new section of track.

## Diesel

Where the cost of diesel for the rig **has not been included** in the drilling costs/contract, and is delivered to site by a third party, the cost is considered as a legitimate direct drilling cost. However, for it to be claimed, **invoices from the third party must be provided to the EIS Team.**

## Lighting tower for night drilling

Where diamond drilling is occurring across a day/night time (24 hour) drilling schedule and a lighting tower is required this will be considered as a legitimate direct drilling cost. The cost must be itemised on the driller's invoices and logs show meterage obtained against the 'night' time schedule.

## Temporary above ground sump/solid returns unit (SRU) for diamond drilling.

If there are limitations to ground disturbance (e.g. sensitive flora/fauna conservation area; drilling in urban area with city council conditions) and the company cannot dig a ground sump, the cost of hiring a Solid Returns Unit (SRU) **may be accepted** as a legitimate direct drilling cost. This cost must be discussed with the EIS Team before the drill rig is on site.

### Items that are not direct drilling costs

- Administration costs
- Site preparation costs (e.g. sumps and pads)
- Land access and/or Heritage surveys
- Airfares to site
- Daily travel to site
- Accommodation/messing
- Camp costs (e.g., setup/pack up, generator, diesel, lighting)
- Geological core logging
- Core farm delivery
- Tyres
- Downhole scientific surveys (e.g. petrophysics) other than downhole orientation
- Assay under a General co-funded drilling application, or where a Prospecting application<sup>1</sup> is undertaking diamond drilling
- Non-active standby (see section 1)

<sup>1</sup>Prospectors are required to submit geochemical analyses to the department if non-cored drilling is undertaken. In this case it is expected that an equivalent of about 25% of direct drilling costs is spent on analyses. For example, where a grant of \$40,000 (maximum possible) is offered the approximate breakdown will be \$30,000 for drilling and \$10,000 for assays.