

**From:** "Goff, Richard" <Richard.Goff@pacificorp.com>  
**To:** "'Alexander, Jeff - USFS'" <jalexander@fs.fed.us>, "'Haddock, Daron - DOGM'" <daronhaddock@utah.gov>, "'Lloyd, Tom - USFS'" <twlloyd@fs.fed.us>, "'Stephens, Don - BLM'" <don\_stephens@blm.gov>  
**Date:** 6/4/03 8:21AM  
**Subject:** June 4 Well JC3 Progress Update

During the week of May 26 PacifiCorp was able to identify and purchase an alternative pump that eliminates the need to drill below the mine workings and resolves on-going drilling problems. This pump will be delivered to the drill site by July 14. Also, Lang successfully completed drilling of the lower "twin" hole into the mine workings and installed a 24", 3/8" thick casing from the floor of the mine workings to the surface. This completes the drilling phase of the work. Currently, Lang is removing drilling equipment and will off the site June 4. Many thanks to Lang for their persistence, innovation and dedication during the unprecedented drilling challenges.

PacifiCorp plans to complete surface electrical, controls, telemetry, and balance of project construction during the last two weeks of June, which will during a "waiting period" until the pump equipment can be delivered. A meeting with appropriate entities will be scheduled to plan and coordinate this work. Once the pump equipment arrives Lang will remobilize to set the pump, install the column piping, and connect surface piping. Final electrical and control terminations will follow along with system check-out. If all goes well the well could be ready for start-up around July 18-22. A final dress-out will be the last activity on the drill site.

No Contractors will be accessing site during the period of June 4 to about 16.

Richard Goff

> -----Original Message-----

> From: Goff, Richard  
> Sent: Tuesday, May 27, 2003 9:26 AM  
> To: 'Alexander, Jeff - USFS'; 'Haddock, Daron - DOGM'; 'Lloyd, Tom - USFS'; 'Stephens, Don - BLM'  
> Cc: Garritson, Craig; Sharp, Dave; 'Kenzy, George - CFC'; 'Brasher, John - CFC'; 'Hansen, Chris - CFC'; 'Krug, Scott - Lang Exp Drill'; 'Fry, Rodger'; 'Hansen, David - HAL'; Brozovich, Fred; Cunningham, Barry; 'Johnson, Doug - CFC'; 'Maughan, Kent - Wasatch Elec'; 'Bergon, Dave - Wasatch Electric'; 'Weismose, Jay - Saftronics'; 'Hegerhorst, Keith - HPE'; Guymon, Darce; Allred, Cody; 'Mayer, Randy - Lang Exp Drill'; Burton, Carlyle; 'Williams, Jody - HRO'; Conder, Claudia; Bean, Greg; Robertson, Dale; Dull, Debra  
> Subject: Well JC3 Progress Update

>  
> Most of you have probably heard of our recent "twin" hole and below mine  
> workings drilling problems, but on Thursday, May 22, after a review of  
> on-going options we decided that most of the existing hole could be used.  
>  
> So, over the weekend Lang recommended advancing the "twin" hole or bottom  
> shelf (beginning at a angle depth 621') on into the mine workings with

> directional equipment. A 15" diameter hole was successfully completed in  
> the afternoon of May 26. As a result, they were able to remove about 1/2  
> of the dog-leg angle and now feel more confident the 24", 3/8" thick  
> casing can be placed downhole.  
>  
> Currently, they are placing a 9" guide casing, will gravel pack it in  
> place, and begin reaming out the 15" hole using a "wash-over" method, with  
> 31" tools. The penetration rate for this segment will be slow to avoid  
> "twisting off".  
>  
> On Sunday, May 25, Well JC1 stopped running. Thanks to Doug Johnson and  
> Skyline electricians we able to get the motor re-started about 10:35a.  
> Pumping rate is observed at 4,050 GPM. No fault codes were observed.  
> Some concern is mounting as this is the third re-start on the motor in the  
> last two months.  
>  
> Our design team is looking for a fast delivery, alternative pump and  
> motor. This pump will have a much lower NPSH requirement and will  
> eliminate the need to drill below the workings, which was a contributing  
> factor in Lang's concern about finishing the hole. Delivery of this  
> equipment will govern our future schedule.  
>  
> Please reply if you need to clarify this report.  
>  
> Richard Goff  
>  
> -----Original Message-----  
> From: Goff, Richard  
> Sent: Thursday, May 15, 2003 8:50 AM  
> To: 'Alexander, Jeff - USFS'; 'Haddock, Daron - DOGM'; 'Lloyd,  
> Tom - USFS'; 'Stephens, Don - BLM'  
> Cc: Garritson, Craig; Sharp, Dave; 'Kenzy, George - CFC';  
> 'Brasher, John - CFC'; 'Hansen, Chris - CFC'; 'Krug, Scott - Lang Exp  
> Drill'; 'Fry, Rodger'; 'Hansen, David - HAL'; Brozovich, Fred; Cunningham,  
> Barry; 'Johnson, Doug - CFC'; 'Maughan, Kent - Wasatch Elec'; 'Bergon,  
> Dave - Wasatch Electric'; 'Weismose, Jay - Saftronics'; 'Hegerhorst, Keith  
> - HPE'; Guymon, Darce; Allred, Cody; 'Mayer, Randy - Lang Exp Drill';  
> Burton, Carlyle; 'Williams, Jody - HRO'; Conder, Claudia; Bean, Greg;  
> Robertson, Dale; Dull, Debra  
> Subject: Well JC3 Progress Update  
>  
> Here's a little Well JC3 upgrade.  
>  
> First, I thought everyone might be interested in a look at the  
> major electrical equipment in storage at Saftronic's shop:  
> (You'll need PowerPoint to view)  
>  
> << File: JC3 Major Elect 5-12-03.ppt >>  
> Wasatch should be able to get this stuff down nicely.  
>  
> Second, regarding drilling progress, the following short term  
> activities are outlined:  
>  
> \* The driller currently has a 9 7/8" guide casing to a depth of 862'.

> (For reference, the bottom of the mine working is EL 782'.) More  
> importantly, they have drilled to a depth 825' with a 31" bit as of late  
> May 14. Then, the driller "tripped out" (recycled bit and stem) to  
> inspect drill collars and then, repositioned in the afternoon. (About six  
> rods showed collar wear) The purpose for inspecting to avoid "twisting  
> off" again due to accelerated wear.  
> \* Thereafter, the driller will advance the 31" bit an additional 40'  
> to 865' using conventional drilling techniques. During this phase he  
> plans to run 1800 gpm of clean water from JC1 down the hole. Penetration  
> rate is about 3-4 ft per hr. No compressed air is planned. This should  
> be completed May 15.  
> \* Then the driller will trip out, pull the 9 7/8" guide, and re-tool  
> with a 28" bit and drill to total depth 1120' (TD) using reserve  
> circulation method. So once this starts we can start looking for  
> increased inflow into the mine workings. Penetration rate for this  
> segment is anticipated at 5 ft per drilling hr.  
> \* 24" "protective, redundant" casing wall thickness will be limited to  
> 3/8" wall thickness to enable placement. The position in the angle  
> alignment remains open.

> Reply if you have questions or comments. More later.

> Richard Goff  
> PacifiCorp Project Manager

> -----Original Message-----  
> From: Goff, Richard  
> Sent: Monday, May 12, 2003 12:07 PM  
> To: 'Alexander, Jeff - USFS'; 'Haddock, Daron - DOGM';  
> 'Lloyd, Tom - USFS'; 'Stephens, Don - BLM'  
> Cc: Garritson, Craig; Sharp, Dave; 'Kenzy, George -  
> CFC'; 'Brasher, John - CFC'; 'Hansen, Chris - CFC'; 'Krug, Scott - Lang  
> Exp Drill'; 'Fry, Rodger'; 'Hansen, David - HAL'; Brozovich, Fred;  
> Cunningham, Barry; 'Johnson, Doug - CFC'; 'Maughan, Kent - Wasatch Elec';  
> 'Bergon, Dave - Wasatch Electric'; 'Weismose, Jay - Saftronics'  
> Subject: RE: Well JC3 Drilling Update, Inflows to  
> Mine Workings & Schedule

> The following is a report of recent Well JC3 drilling  
> activity:

> \* Late Sunday night, May 11, the driller successfully removed all  
> "twisted-off" tools. For those of you who are counting, this is the third  
> event.  
> \* They are going back in with robust wash-over pipe to depth 755'.  
> The wash-over pipe will arrive on job site about 3p today, May 12.  
> \* Inside, they will place a 9 7/8" drill and 9" drill stem that will  
> function as a future "guide". The 9" will be fit inside the 15"  
> directional bore to the mine floor. When the 9" is positioned they will  
> begin to drill below the mine floor. The 9" assembly will arrive at the  
> job site for assembly about 9p today, May 12. If all goes as planned,  
> drilling below the mine workings, should start about noon tomorrow, May

> 13, with the conventional method at least for the first 100'. This means  
> the driller will be running 2,000 gpm from JC1 downhole until they can  
> switch to reverse circulation.

> \* The oil field flex pipe, as mentioned earlier, will not be used as  
> visual inspection established joint weaknesses

> \* I'm reluctant to speculate too much about our future schedule, until  
> some more drilling progresses.

>

> More later.

>

> Richard Goff

>

> -----Original Message-----

> From: Goff, Richard

> Sent: Thursday, May 08, 2003 9:46 AM

> To: 'Johnson, Doug - CFC'; 'Kenzy, George -

> CFC'; 'Hansen, Chris - CFC'; 'Brasher, John - CFC'

> Cc: Garritson, Craig; Sharp, Dave; 'Krug, Scott

> - Lang Exp Drill'; 'Fry, Rodger'; 'Hansen, David - HAL'; Brozovich, Fred;

> Cunningham, Barry

> Subject: RE: Drilling Update, Inflows in to

> Workings & Schedule

>

> Just when I thought things were looking better -

>

> Lang twisted off last night prior to drilling to

> 767'. They are completing a borehole video will have to pull the drill  
> stem out. Schedule on hold.

>

> Richard Goff

>

> -----Original Message-----

> From: Goff, Richard

> Sent: Wednesday, May 07, 2003 3:50 PM

> To: 'Johnson, Doug - CFC'; 'Kenzy, George -

> CFC'; 'Hansen, Chris - CFC'

> Cc: Garritson, Craig; Sharp, Dave; 'Krug, Scott

> - Lang Exp Drill'; 'Fry, Rodger'; 'Hansen, David - HAL'

> Subject: Drilling Update, Inflows in to

> Workings & Schedule

>

> Scott Krug of Lang updated me on their recent

> decisions regarding immediate drilling plans. (Note some information

> differs slightly from Lang's Russell Carlen report yesterday.) My update

> follows:

>

> \* Last night Lang made a video of the borehole and report our borehole  
> looks very good and feels the directional dog leg is less than  
> anticipated.

> \* They have placed 28" tools in the hole and are currently drilling  
> about 5 ft/hr. They plan to stop very soon at depth 767', just short of  
> the roof @ 772'. As they drill they are running about 425 gpm of clean  
> water into the mine workings. They should stop drilling about 8p tonight  
> and start tripping in a new tool string

> \* The 28" tools went downhole very cleanly  
> \* They plan to trip in to 29" diameter tools with a very stiff  
> assembly and drill into the roof and continue on below the workings.  
> \* They will have to drill the first 40 feet below the workings by the  
> conventional method and will be running about 2,000 gpm of water from JC1  
> down the borehole. So please consider this in your inflow assessment.  
> Drilling below the workings is most likely forecast for Sat, May 10, so  
> I'll keep you updated. (Could be May 11)  
> \* After the first 40 feet they will switch to reserve circulation and  
> at this point we can begin to look for an increase mine inflow. As you  
> know, with the reserve circulation method any water put downhole will be  
> balanced by an equal amount going out. Lang anticipates drilling about  
> 3-5 ft/hr below the workings so this may take a half a day to drill the  
> 40' conventional.  
> \* The water is relatively clean from Well JC1 and Lang's will not be  
> adding a drilling product.  
>  
> Please reply if you need to clarify this report.  
>  
> Richard Goff  
>  
>  
>  
>

**CC:** "Garritson, Craig" <Craig.Garritson@pacificorp.com>, "Sharp, Dave" <Dave.Sharp@PacifiCorp.com>, "'Kenzy, George - CFC'" <GKenzy@archcoal.com>, "'Brasher, John - CFC'" <jbrasher@archcoal.com>, "'Hansen, Chris - CFC'" <CHansen@archcoal.com>, "'Krug, Scott - Lang Exp Drill'" <skrug@boartlongyear.com>, "'Fry, Rodger'" <rcfry@attbi.com>, "'Hansen, David - HAL'" <dhansen@hansenallenluce.com>, "Brozovich, Fred" <Fred.Brozovich@pacificorp.com>, "Cunningham, Barry" <Barry.Cunningham@pacificorp.com>, "'Johnson, Doug - CFC'" <dejohanson@archcoal.com>, "'Maughan, Kent - Wasatch Elec'" <dkmaughan@wasatchelectric.com>, "'Bergon, Dave - Wasatch Electric'" <dbergon@wasatchelectric.com>, "'Weismose, Jay - Saftronics'" <jay@safutah.com>, "'Hegerhorst, Keith - HPE'" <keith@hegerhorst.com>, "Guymon, Darce" <Darce.Guymon@pacificorp.com>, "Allred, Cody" <Cody.Allred@PacifiCorp.com>, "'Mayer, Randy - Lang Exp Drill'" <rmayer@boartlongyear.com>, "Burton, Carlyle" <Carlyle.Burton@PacifiCorp.com>, "'Williams, Jody - HRO'" <williajo@hro.com>, "Conder, Claudia" <Claudia.Conder@pacificorp.com>, "Bean, Greg" <Greg.Bean@pacificorp.com>, "Robertson, Dale" <Dale.Robertson@pacificorp.com>, "Dull, Debra" <Debra.Dull@pacificorp.com>, "Thomas, Charles" <Charles.Thomas@pacificorp.com>, "Mansfield, Mark" <Mark.Mansfield@pacificorp.com>