

ALPHA STATE 1-16
PLUGGING SUMMARY 08/30/13

8/20/2013

1500 psi. FL 2815' from surface. Top perf 6090'

8/21/2013

MIRU Continental Services. RU pump truck and pumped 51 bbls 11.6# kill fluid. Well on vacuum. Started to work bolts on tubing flange. All bolts rusted and hard to break loose. Used saws all to cut bolts. Cut one and replace with new one. After 40 minutes well started to pressure back up. Continued to replace bolts. With all bolts replaced pump 40 bbls kill fluid. Well on vacuum. Unbolted tubing flange and bolt up BOP. Tubing hanger left in casing head. Stabbed 2 3/8" sub in hanger and closed pipe rams on BOP. Tried to loosen lock pins. Could only get 2 of 4 released. Well started to pressure up. Locked pins back in place and secured well. SDFN. Will try to release lock pins in the AM.

8/22/2013

Figured out that the well has 110 jts 2 7/8" tubing approximately 3450' according to old well reports. TP 1450, CP 1500. RU blowdown lines. Blow down tubing to 650 and well started making fluid. Pump 30 bbls 10# fluid down tubing. Blow down casing to 450 and started making fluid. Pump 160 bbls 10# fluid down casing. Shut well in with 850 on both tubing and casing. Will leave well SI overnight and blow down in the AM. Total fluid pumped for job 90 bbls 11.6# fluid and 190 bbls 10# fluid.

8/23/2013

To David Andrews

David,

We have been on the Alpha State 1-16 well for 4 days trying to kill it to pull tubing and proceed with the plugging procedure. At this point we have been unable to kill it with 12# and 10# fluid. We have found that there is about 3,500' of 2 7/8" tubing in the well. Our current procedure is to set 2 CIBP's in the 5 1/2" casing with cement on top. My question is would we be able to just pump enough cement down the tubing and displace into the 5 1/2" casing to fill it from the current open perf @ 6,090 back to the top of the 5 1/2" @ 3,970' or so. We could then get the tubing out and then set a 9 5/8" retainer above the 5 1/2" with cement. If we keep weighting up enough to kill I am concerned about breaking down the old squeeze perfs @ 3,695.

From Jay Krabacher State, Relieving David Andrews

On Aug 23, 2013, at 13:40, "Krabacher - DNR, Jay" <jay.krabacher@state.co.us> wrote:

Carl:

We just discussed this situation, and it is my understanding that you'll wait until Monday (8/26) before continuing to work on this well.

Your plan looks acceptable to me. However, Mr. Andrews will probably have the opportunity sometime this weekend to review this email, and will (no doubt) have additional suggestions, etc.

My cell number is (970) 589-6180 should anything else come up this weekend.

Regards,

Jay K

8/27/2013

To David Andrews

David,

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Per our discussion we will proceed with the below and I will let you know where we are at after getting the 5 ½ cemented and killed to proceed with the 9 5/8".

Again,

Thanks for your help,

Carl

From David Andrews

RE: API No. 081-05352

Carl,

This confirms my verbal approval to proceed. As discussed on the phone, this plan should isolate the upper portion of the Mancos Formation and all underlying completions. I understand that QRI believes that the packer shown on the "Current" WBD, provided with your Form 6 Notice of Intent to Abandon, was previously removed from the well, and the current EOT is at a depth of 3550' (same as reported Mancos Formation top), presumably with cement behind the 9-5/8" casing at that depth (calculated 9-5/8" casing TOC was 2961').

Thanks,

David D. Andrews, P.E., P.G.

Engineering Supervisor - Western Colorado

8/27/2013

0700 started blowing well down to get gas head off.

Tubing Pressure 1350 psi

Casing Pressure 1150 psi

Discuss plans with David Andrews, Stage Engineer about pumping cement down to kill and move on to setting plugs in the intermediate. After going through well files and history of trying to kill well and existence of shallow Mesa Verde perms possibly taking kill fluid he agreed to let us proceed.

Blew casing down from 1150 to 550 psi for 4 ½ hours until started making fluid. Shut in.

Blew tubing down from 1350 to 150 psi in 1 hour until it started making fluid. Shut in.

Current end of tubing per records is about 3550' in 9 5/8th casing with 5 ½ liner top @ 3970'. (Actual 5 ½" casing cut for access to Mesa Verde behind 9 5/8ths intermediate)

Rigged up on tubing with backside choked to separator bypassing fluid to open top. Pumped 5 bbls of FW to establish rate then started mixing 200 sacks of cement mixed at 15.1 #/gal. circulated cement down to within 2 bbls of end of tubing choking backside @ 800 psi. Shut in Annulus for remainder of cement. Annulus pressure stayed level throughout period pumping cement. Displaced Cement with little pressure until within 4 bbls of tubing volume we caught pressure and pumped tubing volume plus 5 bbls with pressure increasing to 600 psi.

Shut down and tied on to 2 7/8th by 9 5/8ths annulus and started pumping 2 bpm @ 900 psi. After 6 bbls we caught fluid and pumped 50 more bbls with pressure in annulus increasing to 1250 psi and tubing pressure increasing to 900 psi. Tubing and casing were shut in and secured. We will check pressures and blow well down in AM. If well is dead we will try to pull tubing.

8/28/2013

0700 started blowing well.

Tubing Pressure 950 psi

Casing Pressure 1350 psi

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Blew casing down from 1350 to 0 psi for 3 hours.

Blew tubing down from 950 to 0 psi in 1 min.

Tried to pump down tubing and pressured up to 1500 psi

Unscrewed pins and unseated hanger. Pulled 30k over expected tubing weight and could not pull tubing.

Landed hanger back in tubing head.

Lined up WL truck to shoot tubing off in AM.

Dug out around wellhead and found top of 9 5/8ths about 4 ft in ground with 11" 5k, 11" 5k X 11" 3k DSA where tubing head is bolted to. Tubing head is 11" 3k bottom and 7 1/16" 3k top. We were able to hammer nuts on DSA loose.

SDFN. If cement is Ok with Stage we will proceed to plug at bottom of surface casing.

8/29/2013

Sent to David Andrews

Dave,

This is the activity over the last 3 days. We just tagged cement in the tubing @ 3550, free pointed tubing between 3420 and 3520. I would like to shoot the tubing @ 3450, pull 1 joint and sett another 100 sk plug then move up to the plug at the Surface Casing toe if you agree. I did find a bond log where they logged the 5 1/2 casing up into the 9 5/8 intermediate in 07. It does show bond up to where they turned off the tool at about 3170.

I will call you do discuss.

Thanks again, Carl

From David Andrews

Carl,

Thanks for the update. As discussed on the phone, please proceed with the surface casing shoe plug and the plug at surface, as previously approved on Form 6, Notice of Intent to Abandon, COGCC Document No. 400390004.

Dave

RIH with WL. Tag cement @ 3550' (TOC)

RIH with Free Point tool

Free @ 3200'

Free @ 3420

Stuck @ 3520

Called Dave Andrews with State with plan to cut tubing @ 3400, pump another 100 sack plug, POOH, perforate @ 850', (50' below surface toe), set retainer, squeeze with 100 sacks, set surface plug and cap.

Cut tubing @ 3400', broke circulation and pumped 100 sack plug. POOH of hole laying down all but 12 stands. GIH with WL and shot holes @ 850', Picked up retainer on tubing, GIH and set retainer @ 788'. Establish rate into perfs 3 bpm @ 900 psi dropping to 650 psi. squeezed with 100 sacks leaving 25 sacks on top of retainer (TOC 721'), and POOH with tubing. SDFN

8/30/2013

Remove wellhead to casing 4' below ground level.

RIH with 120' of poly pipe

Mix cement and pump until we had good circulation of heavy cement

Install labeled capping plate

RDMO rig to cover and reclaim location.