Re: RE: oil/gas ratio at the kink?

Bill.Lehr to Marcia K McNutt 06/03/2010 09:22 AM

Marcia, from preliminary discussions with the other people analyzing the video and what BP gave us, we are getting close agreement to Paul's numbers. I think the discussion may focus on exit velocities and area cross-sections.

----- Original Message -----
From: Marcia K McNutt <mcnutt@usgs.gov>
Date: Wednesday, June 2, 2010 8:14 pm
Subject: RE: oil/gas ratio at the kink?
To: savas@newton.berkeley.edu, pedro.espina@nist.gov
Cc: Bill.Lehr@noaa.gov

> Since numbers in the range 0.25 to 0.29 will give you a lower bound on
> oil, that is probably consistent with the lower bounds reported. If you
> want to use other values in computing the upper bound, until we get a
> hard and fast number, I think that makes sense.
>
> I am not sure that the RITT data was much help, as the yield was tuned
> for oil. Bill - what the average oil/gas ratio was based on that?
>
> Marcia
>
> _____
>
> From: savas@newton.berkeley.edu [
> Sent: Wednesday, June 02, 2010 5:33 PM
> To: "Espina, Pedro I." <pedro.espina@nist.gov>
> Cc: "'bill.lehr@noaa.gov'" <bill.lehr@noaa.gov>; "'mcnutt@usgs.gov'"
> <mcnutt@usgs.gov>
> Subject: Re: oil/gas ratio at the kink?
>
>
> I agree that we must be cautious. I think my report should not be
> distributed untill after the conference tomorrow.
>
> □mer
>
>
> Quoting "Espina, Pedro I." < pedro.espina@nist.gov>:
>
> > □mer,
> >
> > I suggest caution.
> >
> > Prof. Bommers might be right but his estimate is different from 1.
> BP
> > (who knows quite a bit about oil), 2. USCG (who measure it aboard
> the
> > Enterprise during the RITT), and 3. the previously agreed upon value
>
> > by the plume team.
> >
> > If you change the number, that will change the values reported by

> > Marcia McNutt to the press last week. Further, I think that the
> > entire team has to change as otherwise we would be comparing apples
>
> > and oranges.
> >
> > Pedro
> >
> >
> > ----- Original Message -----
> > From: savas@newton.berkeley.edu < savas@newton.berkeley.edu>
> > To: Espina, Pedro I.
> > Cc: bill.lehr@noaa.gov < bill.lehr@noaa.gov>
> > Sent: Wed Jun 02 17:01:05 2010
> > Subject: Re: oil/gas ratio at the kink?
> >
> > Pedro, I have the reposr and see the number. That number is based on
>
> > the unrestrained expansion of methane at the open end. In the riser,
>
> > the pressure is about 155+340~500 atm. I used Bommers numbers, since
> he
> > knows more about oil than I do.
> >
> > Take care
> >
> > □mer
> >
> >
> > Quoting "Espina, Pedro I." < pedro.espina@nist.gov>:
> >
> >> □mer,
> >>
> >> I do not know where Prof. Bommer got that. The USGS number = the BP
>
> >> number is 3000 scf/bbl at sea level. Do the compression to 155 atm
>
> >> and 1 C and you get 0.29 oil/total at spill site. For the report last
> >> week, we used 0.25 □40%. If you see the NIST analysis, this number
>
> >> dominates the uncertainty calculation.
> >>
> >> Please see the team report - I am pulling numbers from memory. Bill
>
> >> Lehr can give you a copy of the report if you don't have it.
> >>
> >> Cheers, Pedro
> >>
> >>
> >> ----- Original Message -----
> >> From: savas@newton.berkeley.edu < savas@newton.berkeley.edu>
> >> To: Espina, Pedro I.
> >> Sent: Wed Jun 02 16:33:13 2010
> >> Subject: Re: oil/gas ratio at the kink?
> >>
> >> Hi Pedro,
> >>
> >> Porf. Bommer just gave me 2/3 oil, 1/3 gas at the kink???
> >>
> >>
> >> Quoting "Espina, Pedro I." < pedro.espina@nist.gov>:
> >>

> >>> mer,
> >>>
> >>> Please see the NIST report section in the team report last week.
> >>> There were two sources: BP and USCG. Those numbers lead to an
> >>> estimate of 0.29 oil/total by volume at the spill site (please see
>
> >>> the report as I am pulling from memory). Others in the team
> estimated
> >>> by other means 0.25, which is the number that the team has been
> >>> using. NIST assigned an uncertainty of 40% base on the poor
> quality
> >>> of the reported measurements.
> >>>
> >>> Hope that helps,
> >>>
> >>> Pedro
> >>>
> >>>
> >>> ----- Original Message -----
> >>> From: savas@newton.berkeley.edu < savas@newton.berkeley.edu>
> >>> To: Bill.Lehr@noaa.gov < Bill.Lehr@noaa.gov>
> >>> Cc: Marcia K McNutt < mcnutt@usgs.gov>; Franklin Shaffer
> >>> < Franklin.Shaffer@NETL.DOE.GOV>; Alberto Aliseda
> >>> < aaliseda@u.washington.edu>; Poojitha Yapa < pdy@clarkson.edu>;
> Paul
> >>> Bommer < pmbommer@mail.utexas.edu>; Espina, Pedro I.; Steven T.
> >>> Wereley < wereley@purdue.edu>; James J Riley
> >>> < rileyj@u.washington.edu>; Juan Lasheras < lasheras@ucsd.edu>
> >>> Sent: Wed Jun 02 15:22:27 2010
> >>> Subject: oil/gas ratio at the kink?
> >>>
> >>> Hello Everyone,
> >>>
> >>> I am almost finished writing my report. I will need your best
> estiamte
> >>> of the oil/gas ratio at the kink on the May 15 videos. Is it
> 50/50?
> >>> 75gas/25 oil, ??/?? ?
> >>>
> >>> Thanks for your help.
> >>>
> >>> mer
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