

From: McAughan, Kelly  
Sent: Thu Jul 08 20:03:11 2010  
To: Harris, Caren; Fisher, Ramsey  
Cc: Sincock, Kevan KJ  
Subject: RE: Rotary to whole core question-- PVC data  
Importance: Normal

If Kevan has something I will take it. If we don't have anything today that is okay. I'll tell Cindy that we don't have any data with sidewall and whole to compare in GoM Miocene. Steve Willson was a great help and I lean towards his expertise on this but we wanted to back up with additional data. We went from 6 E-6 to 12 E-6. Nakika team did about the same for Isabella rotaries approximately upping a factor of 2 gauging from Santa Cruz whole core.

---

From: Harris, Caren  
Sent: Thursday, July 08, 2010 2:54 PM  
To: Fisher, Ramsey; McAughan, Kelly  
Subject: RE: Rotary to whole core question-- PVC data

Ramsey,

I believe the information will be used in a high-level meeting tomorrow, but if models are to be re-run, Kelly will be the contact person for the new inputs.

Would Kevan be the right person to ask about global analogues, if this persists as an action item into next week? Kelly-- can you shed some insight of whether it makes sense to investigate this next week or look into it tomorrow with the UK folks?

Thanks,  
Caren

---

From: Fisher, Ramsey  
Sent: Thursday, July 08, 2010 2:47 PM  
To: Harris, Caren  
Subject: RE: Rotary to whole core question-- PVC data

Caren,

So I don't know where or how often we have done this in past. Very little in GoM Deepwater.

For fields like Atlantis, Mad Dog, Holstein, Nakika virtually all PVC work was done via whole core (sands weakly consolidated and unable to collect via RSWC).

Might think about analogues globally like Angola, Trinidad, Azerbaijan but won't have answers on this by end of the day.

Ramsey

---

From: Harris, Caren  
Sent: Thursday, July 08, 2010 2:34 PM  
To: Fisher, Ramsey; Sincock, Kevan KJ; Nelson, Jennifer L.(HOU)  
Cc: McAughan, Kelly  
Subject: RE: Rotary to whole core question-- PVC data  
Hi Ramsey,



CONFIDENTIAL

BP-HZN-2179MDL05864773  
BPD402-012083

TREX 008777.0001

Stephen Willson is already involved, but we were hoping for additional insights.

Thanks so much!

-Caren

---

**From:** Fisher, Ramsey  
**Sent:** Thursday, July 08, 2010 2:30 PM  
**To:** Harris, Caren; Sincock, Kevan KJ; Nelson, Jennifer L.(HOU)  
**Cc:** McAughan, Kelly  
**Subject:** RE: Rotary to whole core question-- PVC data

Hi Caren,

Probably best to talk with Stephen Willson and Ellen Mallman with EPT here in Houston relative to this subject.

On Atlantis we only did PVC via whole core.

Ramsey

---

**From:** Harris, Caren  
**Sent:** Thursday, July 08, 2010 1:48 PM  
**To:** Fisher, Ramsey; Sincock, Kevan KJ; Nelson, Jennifer L.(HOU)  
**Cc:** McAughan, Kelly  
**Subject:** Rotary to whole core question-- PVC data

**Importance:** High

Hi all,

We are fielding questions from the modelers about the PVC data from the Macondo rotary core.

Do you know of any cases where PVC measurements have been made on both whole core and rotaries?? The engineers are hoping for a conversion factor between rotary and whole core data.

The modelers are using one value of  $6 \times 10^{-6}$  psi<sup>-1</sup> for the uniaxial pore volume compressibility. Do you have any idea how to put some error bars on this?

We have already sent this question to Weatherford, and your opinion is urgently requested by the end of today.

Thanks,

-Caren + Kelly

<< File: BP Macondo Rock Mech Report HH-46949.xls >>

**Caren C. Harris**, Petrophysicist

Eastern GoM Exploration

office 281-366-6329

cell 713-320-2384

CONFIDENTIAL

BP-HZN-2179MDL05864774

BPD402-012084

TREX 008777.0002