

From: bill.lehr@noaa.gov  
Sent: Sunday, April 25, 2010 5:08 PM  
To: Debbie Payton  
Cc: Glen Watabayashi; Christopher Barker  
Subject: Re: [Fwd: Surface oil estimation]

Forget the sheen. That is not where the oil is. Look for the dark oil coverage and use 0.1 mm to 0.01 mm as a thickness estimate.

1000 Sq mi. \*0.003 = 30 sq. mi=80 sq. km.

area \* thickness = (8\*10\*\*7)\*10\*(-4)= 8000 cu. m. or 800 cu. m.

Volume on the surface would range from 56,000 bbl to 5, 600 bbl.

My guess is you have in the neighborhood of 20,000 bbl on the water.

----- Original Message -----

From: Debbie Payton <Debbie.Payton@noaa.gov>

Date: Sunday, April 25, 2010 1:01 pm

Subject: [Fwd: Surface oil estimation]

To: Bill Lehr <Bill.Lehr@noaa.gov>, Glen Watabayashi <Glen.Watabayashi@noaa.gov>, Christopher Barker <Chris.Barker@noaa.gov>

> Bill,

>

> can you double check these estimates - they said they used the oil

> spill

> calculator numbers.

> numbers from our standard sheet sheet would have silver sheen as

> 1.2x10-Sinches (.3 microns)

> and dull sheen as 8x10-3in or 200 microns

>

> thanks,

> debbie

>

>

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

> From Ed Levine <Ed.Levine@noaa.gov>

> Date Sun, 25 Apr 2010 13:04:20 -0400

> To Charlie Henry <Charlie.Henry@noaa.gov>

> Cc "Glen (Bushy) Watabayashi" <Glen.Watabayashi@noaa.gov>, Debbie

> Payton <Debbie.Payton@noaa.gov>, John Tarpley <john.tarpley@noaa.gov>

> Subject Surface oil estimation

> Assumptions and reliability for calculations on oil spill surface volume:

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> Taking the latest overflight observations (4/25/10 @ 0655) we ran the

> Oil Spill Volume Estimator.

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> There is approximately 1,386 square miles [33 X 42] of surficial oil.

> Of that approximately 97% is silver sheen and 3% is dull colored oil.

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> We ran three scenarios with different assumptions - 100% coverage, 50%

> coverage, and 10% coverage.

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> At 100% coverage we estimated the volume on the surface to be 2,316 barrels.

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> At 50% coverage we estimated the volume on the surface to be 1,158 barrels.

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> At 10% coverage we estimated the volume on the surface to be 386 barrels.

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> Using these numbers, we believe that the actual number could be

> somewhere between the 1,158 and 386 barrels.

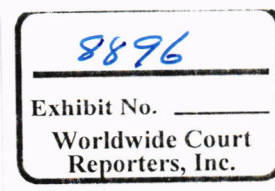
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> From the NESDIS satellite imagery we calculated the area of oil

> coverage to be 683 square miles.



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