
Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [John \[1\]](#) on Sun, 11 Jun 2006 16:45:35 GMT

[View Forum Message](#) <> [Reply to Message](#)

So, it'll be for sale in 200 years. Why isn't he shipping product? When can I get it?

"Bill Lorentzen" <bill@lorentzen.ws> wrote:

><http://www.thetadata.com/common/WaterFuel.wmv>

>

>watch this vid.

>

>

Subject: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [Bill Lorentzen](#) on Sun, 11 Jun 2006 16:47:28 GMT

[View Forum Message](#) <> [Reply to Message](#)

<http://www.thetadata.com/common/WaterFuel.wmv>

watch this vid.

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [Gary Flanigan](#) on Sun, 11 Jun 2006 17:58:46 GMT

[View Forum Message](#) <> [Reply to Message](#)

"Bill Lorentzen" <bill@lorentzen.ws> wrote:

><http://www.thetadata.com/common/WaterFuel.wmv>

>

>watch this vid.

So the question is, how much electricity does he consume to do this? What is the total energy expenditure?

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [steve the artguy](#) on Sun, 11 Jun 2006 18:22:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

Bill-

what's new here? The guy electrolyzes water into oxygen and hydrogen. Then he burns them. We did that in science class thirty years ago. Joseph Priestley discovered oxygen in 1774 and undoubtedly did the same thing. (Or Carl Wilhelm Scheele...)

as Gary points out, what's the energy input? Where does that come from? It looks for all the world like the guy plugs his "machine" into the wall socket. Original power probably coming from oil or gas generators. There's current loss through the wires. Resistance into heat. Net loss.

Are we sure this isn't an Onion report?

-steve

"Gary Flanigan" <gary_flanigan@ce9.uscourts.gov> wrote:

>

>"Bill Lorentzen" <bill@lorentzen.ws> wrote:

>><http://www.thetadata.com/common/WaterFuel.wmv>

>>

>>watch this vid.

>

>So the question is, how much electricity does he consume to do this? What

>is the total energy expenditure?

>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [excelav](#) on Sun, 11 Jun 2006 19:02:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

I've thought this was a great idea for years, but there are some problems with it. The problem is there are idiots in the world that would rather blow up innocent people, than to get along and love their fellow man. You see, there has been quite a few companies over the last twenty years that got the information on how to build a hydrogen generator through the right to know act. NASA built small Hydrogen generators for the Space Shuttle. These companies have already built cars that run on water. There was a test done back in the late 80s were they drove a car from New York to California on 65 gallons of water, so this is not new.

Here's the problem, if you go back to WWII, this is essentially what the Nazi's were doing to create light and heavy water for the atomic bomb. It starts with a process of running a electrical wire through distilled water. In effect, it splits the atom, separating the oxygen from the hydrogen. The oxygen bubbles out of the water leaving water that is heavier in hydrogen. The process has to be repeated hundreds or thousands of times to make the water hydrogen heavy enough to be used in a centrifuge to become fuel.

As I understand it the Hydrogen generator has a centrifuge in it. I was told by the CIO of a large power company, that People would be driving around centrifuges that could be used to make hydrogen and atomic bombs, and the government doesn't want that.

There has been hydrogen powered vehicles around for 40 years. Back in 1975 the city of Lansing MI. was using hydrogen powered buses and trucks. About two years ago, Bush gave the big Three 1.7 billion to research hydrogen powered vehicles. I thought this was a great idea until I realized what this meant.

You see, the government and the Bushes don't want people to be driving cars that run on water, there is no money in it for his oil cronies. They want to turn the gas stations in to hydrogen stations, and charge us high prices for it.

Hydrogen is under high pressure and the fueling systems are dangerous, also the fuel vessels are under pressure, not great in a car crash. The Gov. doesn't want the average Joe getting all blowed up at the pump. So Bush gave money to the Big Three to figure out how to fuel cars safely for their Hydrogen gas stations. That is why this is taking so long to do. The time it will take to convert over the cars and gas stations and the cost is the hold up. They want it to be a big money business, they don't want us to be using cheap water powered cars. They also don't want terrorist making bombs.

I sure hope this guy is on to something, If his way of generating hydrogen is not as dangerous, it will be a huge thing. The other issue is that it takes electricity to generate hydrogen, so it may not be so cost effective in the end???

James

"john" <no@no.com> wrote:

>

>So, it'll be for sale in 200 years. Why isn't he shipping product? When

>can I get it?

>

>"Bill Lorentzen" <bill@lorentzen.ws> wrote:

>><http://www.thetadata.com/common/WaterFuel.wmv>

>>

>>watch this vid.

>>

>>

>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [Bill Lorentzen](#) on Mon, 12 Jun 2006 02:23:29 GMT

[View Forum Message](#) <> [Reply to Message](#)

I've been following the hydrogen fuel enigma for several years and i know there have been 2 probs: 1) takes more electricity to make the hydrogen than the h gives back; 2) hydrogen in a gas tank is very explosive and therefore dangerous.

I am hoping this guy has found the solution - it's got to be out there if we keep after it. Just imagine what having almost unlimited energy could do around the world. I'm optimistic that we will find it.

Bill

"steve the artguy" <artguy@longtimenosee.net> wrote in message news:448c5f82\$1@linux...

>
> Bill-
>
> what's new here? The guy electrolyzes water into oxygen and hydrogen. Then
> he burns them. We did that in science class thirty years ago. Joseph
> Priestley
> discovered oxygen in 1774 and undobtedly did the same thing. (Or Carl
> Wilhelm
> Scheele...)

>
> as Gary points out, what's the energy input? Where does that come from? It
> looks for all the world like the guy plugs his "machine" into the wall
> socket.
> Original power probably coming from oil or gas generators. There's current
> loss through the wires. Resistance into heat. Net loss.

>
> Are we sure this isn't an Onion report?

>
> -steve

>
> "Gary Flanigan" <gary_flanigan@ce9.uscourts.gov> wrote:

>>
>>"Bill Lorentzen" <bill@lorentzen.ws> wrote:
>>><http://www.thetadata.com/common/WaterFuel.wmv>

>>>
>>>watch this vid.

>>
>>So the question is, how much electricty does he consume to do this? What
>>is the total energy expenditure?

>>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [uptown jimmy](#) on Mon, 12 Jun 2006 03:08:22 GMT

[View Forum Message](#) <> [Reply to Message](#)

Indeed, it's a good thing to hope for. It would remove all the excuses.

Jimmy

"Bill Lorentzen" <bill@lorentzen.ws> wrote in message [news:448ccef9@linux...](#)

> I've been following the hydrogen fuel enigma for several years and i know

> there have been 2 probs: 1) takes more electricity to make the hydrogen than

> the h gives back; 2) hydrogen in a gas tank is very explosive and therefore

> dangerous.

>

> I am hoping this guy has found the solution - it's got to be out there if we

> keep after it. Just imagine what having almost unlimited energy could do

> around the world. I'm optimistic that we will find it.

>

> Bill

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG

Posted by [Dedric Terry](#) on Mon, 12 Jun 2006 03:16:29 GMT

[View Forum Message](#) <> [Reply to Message](#)

When talking about growing more corn to general ethanol, the question was raised as to how much water this would take above normal consumption. For western states (Colorado, Utah, etc), this is a significant consideration. One analyst suggested it may just make water more expensive than oil.

Distilling sea water and shipping it may be too expensive too, but that's a guess on my part.

I still hope you are right Bill. A simple, renewable and plentiful solution would be a beautiful thing.

Regards,
Dedric

On 6/11/06 8:23 PM, in article [448ccef9@linux](#), "Bill Lorentzen" <bill@lorentzen.ws> wrote:

> I've been following the hydrogen fuel enigma for several years and i know

> there have been 2 probs: 1) takes more electricity to make the hydrogen than
> the h gives back; 2) hydrogen in a gas tank is very explosive and therefore
> dangerous.
>
> I am hoping this guy has found the solution - it's got to be out there if we
> keep after it. Just imagine what having almost unlimited energy could do
> around the world. I'm optimistic that we will find it.
>
> Bill
>
> "steve the artguy" <artguy@longtimenosee.net> wrote in message
> news:448c5f82\$1@linux...
>>
>> Bill-
>>
>> what's new here? The guy electrolyzes water into oxygen and hydrogen. Then
>> he burns them. We did that in science class thirty years ago. Joseph
>> Priestley
>> discovered oxygen in 1774 and undobtedly did the same thing. (Or Carl
>> Wilhelm
>> Scheele...)
>>
>> as Gary points out, what's the energy input? Where does that come from? It
>> looks for all the world like the guy plugs his "machine" into the wall
>> socket.
>> Original power probably coming from oil or gas generators. There's current
>> loss through the wires. Resistance into heat. Net loss.
>>
>> Are we sure this isn't an Onion report?
>>
>> -steve
>>
>> "Gary Flanigan" <gary_flanigan@ce9.uscourts.gov> wrote:
>>>
>>> "Bill Lorentzen" <bill@lorentzen.ws> wrote:
>>>> <http://www.thetadata.com/common/WaterFuel.wmv>
>>>>
>>>> watch this vid.
>>>
>>> So the question is, how much electricty does he consume to do this? What
>>> is the total energy expenditure?
>>>
>>
>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [DC](#) on Mon, 12 Jun 2006 03:52:42 GMT

[View Forum Message](#) <> [Reply to Message](#)

Someone sent me that video, so I passed it on to a couple of physics professor friends.

Here's what they said:

The problem with any of these systems is that the energy needed for electrolysis is greater than what is provided by burning the hydrogen so you need a free energy source such as wind or solar to provide energy to electrolyze the water.

I didn't look at video though since there is about one of these every week produced on the web.

I think it is a hustle to draw in investors myself, which would explain why there is so little actual data in the movie.

BTW, BMW already has a hydrogen car in Germany. Works great. Runs on hydrogen, not water carried about and converted to hydrogen. It loses a lot of power compared to gasoline, so they use turbos and this and that, and it runs pretty well.

The biggest issue with hydrogen, besides storing it and a supply infrastructure, is that the very best way to make it is a fusion reactor...

I REALLY want to see something to break us free of oil and the politics involved with oil, but this video and the guys behind it, ain't

it.

I am afraid that it will take a pretty big disaster to get the change started away from oil...

DC

"Bill Lorentzen" <bill@lorentzen.ws> wrote:
><http://www.thetadata.com/common/WaterFuel.wmv>
>
>watch this vid.

>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [excelav](#) on Mon, 12 Jun 2006 05:53:45 GMT

[View Forum Message](#) <> [Reply to Message](#)

NPR had a news story about the oil sands in Alberta Canada, they say that there is 12 times the amount on oil in Alberta than there is in Saudi Arabia.

The oil men used to say back in 1965 that the day the oil sands are useable, oil will be at \$5.00 a barrel! They use to think it was a joke, but now they say it is cost effective and the grade is much better than the oil from the middle east. They heat the oil sands and spin the oil out of the sands.

They said they could fuel the worlds oil needs for the next 200 plus years.

The bad part about this is Canada would be come the riches country in the world, and then the canadians would really think they are superior to Americans;
) ...hee hee hee (tung in cheek!)

The state of Montana also has something similar to the oil sands.

They try to tell us that the world was running out of oil to scare the people, it's bull shit! They where saying that the world was running out of oil back in 1972,1973, and 1975. We never ran out of gas, and its 35 years later.

When I was a kid, gas was \$0.26 a gallon. It's not that we are running out, it's not supply and demand, it's that a select group has the power to turn the spigot on and off to create shortages. We really need to find a way, making Saudi Arabia rich is not the way.

I know people that own oil wells, the government wont let them pump them. I think they want a reserve for war.

I hope somebody figures how to fix the problem soon.

Did anybody see this? Somebody engineered a micro organism that eats trash and then turns in to alcohol that can be used as a fuel. I've never heard a word about this since.

Sorry, I'm jumping around. It's bed time!

James

"DC" <dc@spammersonhydrogen.com> wrote:

>
>Someone sent me that video, so I passed it on to a couple of
>physics professor friends.
>
>Here's what they said:
>
>-----
>The problem with any of these systems is that the energy needed
>for electrolysis is greater than what is provided by burning the
>hydrogen so you need a free energy source such as wind or solar to
>provide energy to electrolyze the water.
>
>I didn't look at video though since there is about one of these every
>week produced on the web.
>-----
>
>
>I think it is a hustle to draw in investors myself, which would explain
>why there is so little actual data in the movie.
>
>BTW, BMW already has a hydrogen car in Germany. Works great.
>Runs on hydrogen, not water carried about and converted to
>hydrogen. It loses a lot of power compared to gasoline, so they
>use turbos and this and that, and it runs pretty well.
>
>The biggest issue with hydrogen, besides storing it and a supply
>infrastructure, is that the very best way to make it is a fusion
>reactor...
>
>I REALLY want to see something to break us free of oil and the
>politics involved with oil, but this video and the guys behind it, ain't
>
>it.
>
>I am afraid that it will take a pretty big disaster to get the change
>started away from oil...
>
>DC
>
>
>
>"Bill Lorentzen" <bill@lorentzen.ws> wrote:
>><http://www.thetadata.com/common/WaterFuel.wmv>
>>
>>watch this vid.
>>
>>
>

>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [John \[1\]](#) on Mon, 12 Jun 2006 11:04:34 GMT

[View Forum Message](#) <> [Reply to Message](#)

I don't buy the "this is why it's taking so long". They just don't want us to have it. I'm sure they could deliver a solution by next quarter if they wanted to.

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG

Posted by [Dedric Terry](#) on Mon, 12 Jun 2006 15:36:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

I completely agree. I remember when I was a kid (in the 70's - dating myself) reading about a 60mpg gas automobile engine developed by a guy in the 60's, but bought up by an oil company or major auto manufacturer... still haven't seen one.

I'm sure board room conversations revolve around euphemisms such as "deliberate progress", "cost effectiveness", "feasibility studies", "manufacturing viability", or "legacy support". Okay the last one was when Bill Gates was taking a tour of Ford's headquarters...

Regards,
Dedric

On 6/12/06 5:04 AM, in article 448d4a42\$1@linux, "John" <no@no.com> wrote:

>

> I don't buy the "this is why it's taking so long". They just don't want us
> to have it. I'm sure they could deliver a solution by next quarter if they
> wanted to.

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [DC](#) on Mon, 12 Jun 2006 16:14:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

There's plenty of oil. We need to get it out, drill for it where it is, even if that in means an oil platform in view of some rich scumbag friend of Jeb Bush, and get serious about alternatives. Now.

The idea that we can run cars and more on water, and there are super efficient engines out there but the gummint or big bizznezz is supressing these technologies is simply not credible.

The simple truth is that not one of these schemes has ever panned out. No one supresses them, they just don't work.

BTW, we already have 50+ MPG engines, they're called diesels, and the US has basically outlawed them on environmental grounds. They will be back though.

DC

"James McCloskey" <excelsm@hotmail.com> wrote:

>
>NPR had a news story about the oil sands in Alberta Canada, they say that
>there is 12 times the amount on oil in Alberta than there is in Saudi Arabia.
> The oil men used to say back in 1965 that the day the oil sands are useable,
>oil will be at \$5.00 a barrel! They use to think it was a joke, but now
>they say it is cost effective and the grade is much better than the oil
from
>the middle east. They heat the oil sands and spin the oil out of the sands.
> They said they could fuel the worlds oil needs for the next 200 plus years.
>
>
>The bad part about this is Canada would be come the riches country in the
>world, and then the canadians would really think they are superior to Americans;
>) ...hee hee hee (tung in cheek!)
>
>The state of Montana also has something similar to the oil sands.
>
>They try to tell us that the world was running out of oil to scare the people,
>it's bull shit! They where saying that the world was running out of oil
>back in 1972,1973, and 1975. We never ran out of gas, and its 35 years
later.
> When I was a kid, gas was \$0.26 a gallon. It's not that we are running
>out, it's not supply and demand, it's that a select group has the power
to
>turn the spigot on and off to create shortages. We really need to find
a
>way, making Saudi Arabia rich is not the way.
>
>I know people that own oil wells, the government wont let them pump them.
> I think they want a reserve for war.
>
>I hope somebody figures how to fix the problem soon.
>

>Did anybody see this? Somebody engineered a micro organism that eats trash
>and then turns in to alcohol that can be used as a fuel. I've never heard
>a word about this since.

>

>Sorry, I'm jumping around. It's bed time!

>

>James

>

>

>

>"DC" <dc@spammersonhydrogen.com> wrote:

>>

>>Someone sent me that video, so I passed it on to a couple of
>>physics professor friends.

>>

>>Here's what they said:

>>

>>-----

>>The problem with any of these systems is that the energy needed
>>for electrolysis is greater than what is provided by burning the
>>hydrogen so you need a free energy source such as wind or solar to
>>provide energy to electrolyze the water.

>>

>>I didn't look at video though since there is about one of these every
>>week produced on the web.

>>-----

>>

>>

>>I think it is a hustle to draw in investors myself, which would explain
>>why there is so little actual data in the movie.

>>

>>BTW, BMW already has a hydrogen car in Germany. Works great.
>>Runs on hydrogen, not water carried about and converted to
>>hydrogen. It loses a lot of power compared to gasoline, so they
>>use turbos and this and that, and it runs pretty well.

>>

>>The biggest issue with hydrogen, besides storing it and a supply
>>infrastructure, is that the very best way to make it is a fusion
>>reactor...

>>

>>I REALLY want to see something to break us free of oil and the
>>politics involved with oil, but this video and the guys behind it, ain't

>>

>>it.

>>

>>I am afraid that it will take a pretty big disaster to get the change
>>started away from oil...

>>

>>DC
>>
>>
>>
>>"Bill Lorentzen" <bill@lorentzen.ws> wrote:
>>>http://www.thetadata.com/common/WaterFuel.wmv
>>>
>>>watch this vid.
>>>
>>>
>>
>>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG
Posted by [dc\[3\]](#) on Mon, 12 Jun 2006 16:20:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dedric,

GM is swimming in red ink. They may actually go under. If there was such an engine, they would have it out in a heartbeat, and if they didn't Toyota and Honda would. No one can keep these guys from innovating, which is why GM is in such trouble now.

DC

Dedric Terry <dterry@keyofd.net> wrote:

>I completely agree. I remember when I was a kid (in the 70's - dating
>myself) reading about a 60mpg gas automobile engine developed by a guy in
>the 60's, but bought up by an oil company or major auto manufacturer...
>still haven't seen one.

>

>I'm sure board room conversations revolve around euphemisms such as
>"deliberate progress", "cost effectiveness", "feasibility studies",
>"manufacturing viability", or "legacy support". Okay the last one was when
>Bill Gates was taking a tour of Ford's headquarters...

>

>Regards,
>Dedric

>

>On 6/12/06 5:04 AM, in article 448d4a42\$1 @linux, "John" <no@no.com> wrote:

>

>> I don't buy the "this is why it's taking so long". They just don't want
us
>> to have it. I'm sure they could deliver a solution by next quarter if

they
>> wanted to.
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [Tony Benson](#) on Mon, 12 Jun 2006 17:45:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

I'm going from my sketchy memory here, but doesn't the process also require some pricey metal for the electrolysis? Palladium or something, making the price of the converter extra scary? Also, the water has to be distilled, if I'm not mistaken. Another cost to add in.

Tony

"DC" <dc@spammersonhydrogen.com> wrote in message news:448ce50a\$1@linux...

>
> Someone sent me that video, so I passed it on to a couple of
> physics professor friends.
>
> Here's what they said:
>
> -----
> The problem with any of these systems is that the energy needed
> for electrolysis is greater than what is provided by burning the
> hydrogen so you need a free energy source such as wind or solar to
> provide energy to electrolyze the water.
>
> I didn't look at video though since there is about one of these every
> week produced on the web.
> -----
>
>
> I think it is a hustle to draw in investors myself, which would explain
> why there is so little actual data in the movie.
>
> BTW, BMW already has a hydrogen car in Germany. Works great.
> Runs on hydrogen, not water carried about and converted to
> hydrogen. It loses a lot of power compared to gasoline, so they
> use turbos and this and that, and it runs pretty well.
>
> The biggest issue with hydrogen, besides storing it and a supply
> infrastructure, is that the very best way to make it is a fusion
> reactor...
>
> I REALLY want to see something to break us free of oil and the

> politics involved with oil, but this video and the guys behind it, ain't
>
> it.
>
> I am afraid that it will take a pretty big disaster to get the change
> started away from oil...
>
> DC
>
>
>
> "Bill Lorentzen" <bill@lorentzen.ws> wrote:
>>http://www.thetadata.com/common/WaterFuel.wmv
>>
>>watch this vid.
>>
>>
>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [TCB](#) on Mon, 12 Jun 2006 21:58:34 GMT

[View Forum Message](#) <> [Reply to Message](#)

I'll get back to CD burns in a bit, but none of these kind of 'alt fuels' really work all that well. For now, fuel cells (hydrogen of any kind, liquid, gas, or chemically turned into a solid that can be used to release it) involves massive expenditure of other kinds of energy, usually electricity. In that case in the US it means coal/natural gas/nuclear power. There are only three energy sources that are 'free' and those are solar, wind, and geothermal. In fact, both are eventually related to the sun anyway, but because they are tapped in practically different ways we can think of them as free. In the long run they will have to be used if we want to be energy neutral. We'll also have to stop eating cheeseburgers because a whole lot of methane in the atmosphere (and methane is a much worse greenhouse gas than carbon dioxide) is cow farts.

In any case, for short term solutions there really is just ethanol. It's attractive for a couple of reasons. It's a liquid not too much more volatile than gasoline. It's a nearly a net zero on greenhouse gases (the carbon taken out of the air by the plant that becomes ethanol helps cancel out the carbon produced when it's burned) and it works now. Brazil runs most of their car fleet on ethanol. Lastly, luckily for us corn and prairie grass are very good sources for making ethanol.

Lastly, and this is the one people don't like, is conservation. When Enron

was cornholing California a few years ago people were able to reduce electricity use over 10% without any significant change in lifestyle. But these are the things people don't want, carbon taxes on inefficient cars and trucks, higher prices for carbon emission credits (which mean higher prices), keeping the house at 60 in the winter and 80 in the summer, and so on.

"Bill Lorentzen" <bill@lorentzen.ws> wrote:
>http://www.thetadata.com/common/WaterFuel.wmv
>
>watch this vid.
>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG
Posted by [Dedric Terry](#) on Mon, 12 Jun 2006 21:59:51 GMT
[View Forum Message](#) <> [Reply to Message](#)

Doesn't sound good for GM, but I'm sure they'll pull it out to the tune of 10-20,000 layoffs.

I wonder if the oil companies would chip in part of their multibillion \$\$ profit margins to keep the country from sinking into hard recession like a rock in a bathtub if by chance GM, a few airlines, and a host of "smaller" businesses that are on the edge at the moment go under.

Nah. Not in a million. The price of a gallon of gas would just go up since there is an infinitesimal chance the flood of people at the unemployment office could cause a breeze that might be felt at one or two offshore drilling rigs. I noticed prices went up here over the weekend. Must have been a rain shower in the gulf, or a CEO watched a Discovery Channel special on the odds of an asteroid destroying Earth.

Cynical? Who, me? ;-)

Regards,
Dedric

On 6/12/06 10:20 AM, in article 448d9439\$1@linux, "DC"
<dc@spammersinhell.com> wrote:

>
> Dedric,
>
> GM is swimming in red ink. They may actually go under. If there
> was such an engine, they would have it out in a heartbeat, and if
> they didn't Toyota and Honda would. No one can keep these guys
> from innovating, which is why GM is in such trouble now.

>
> DC
>
> Dedic Terry <dterry@keyofd.net> wrote:
>> I completely agree. I remember when I was a kid (in the 70's - dating
>> myself) reading about a 60mpg gas automobile engine developed by a guy in
>> the 60's, but bought up by an oil company or major auto manufacturer...
>> still haven't seen one.
>>
>> I'm sure board room conversations revolve around euphemisms such as
>> "deliberate progress", "cost effectiveness", "feasibility studies",
>> "manufacturing viability", or "legacy support". Okay the last one was when
>> Bill Gates was taking a tour of Ford's headquarters...
>>
>> Regards,
>> Dedic
>>
>> On 6/12/06 5:04 AM, in article 448d4a42\$1@linux, "John" <no@no.com> wrote:
>>
>>>
>>> I don't buy the "this is why it's taking so long". They just don't want
> us
>>> to have it. I'm sure they could deliver a solution by next quarter if
> they
>>> wanted to.
>>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG problems we face

Posted by [Aaron Allen](#) on Tue, 13 Jun 2006 00:06:05 GMT

[View Forum Message](#) <> [Reply to Message](#)

Tell me I'm wrong, but basically isn't dude making heavy water fuel/bombs?

AA

"Tony Benson" <tony@standinghampton.com> wrote in message news:448da737@linux...

> I'm going from my sketchy memory here, but doesn't the process also
> require some pricey metal for the electrolysis? Palladium or something,
> making the price of the converter extra scary? Also, the water has to be
> distilled, if I'm not mistaken. Another cost to add in.

>
> Tony
>
> "DC" <dc@spammersonhydrogen.com> wrote in message news:448ce50a\$1@linux...

>>
>> Someone sent me that video, so I passed it on to a couple of
>> physics professor friends.
>>
>> Here's what they said:
>>
>> -----
>> The problem with any of these systems is that the energy needed
>> for electrolysis is greater than what is provided by burning the
>> hydrogen so you need a free energy source such as wind or solar to
>> provide energy to electrolyze the water.
>>
>> I didn't look at video though since there is about one of these every
>> week produced on the web.
>> -----
>>
>>
>> I think it is a hustle to draw in investors myself, which would explain
>> why there is so little actual data in the movie.
>>
>> BTW, BMW already has a hydrogen car in Germany. Works great.
>> Runs on hydrogen, not water carried about and converted to
>> hydrogen. It loses a lot of power compared to gasoline, so they
>> use turbos and this and that, and it runs pretty well.
>>
>> The biggest issue with hydrogen, besides storing it and a supply
>> infrastructure, is that the very best way to make it is a fusion
>> reactor...
>>
>> I REALLY want to see something to break us free of oil and the
>> politics involved with oil, but this video and the guys behind it, ain't
>>
>> it.
>>
>> I am afraid that it will take a pretty big disaster to get the change
>> started away from oil...
>>
>> DC
>>
>>
>>
>> "Bill Lorentzen" <bill@lorentzen.ws> wrote:
>>> <http://www.thetadata.com/common/WaterFuel.wmv>
>>>
>>> watch this vid.
>>>
>>>
>>>
>>

>>
>
>

I choose Polesoft Lockspam to fight spam, and you?
<http://www.polesoft.com/refer.html>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIGproblems we face

Posted by [Jamie K](#) on Tue, 13 Jun 2006 03:21:37 GMT

[View Forum Message](#) <> [Reply to Message](#)

DC wrote:

> There's plenty of oil.

There isn't infinite oil, though. And at some point there may not be enough to sustain the type of growth we're used to. Some say we've passed that point. Others put it out a decade or more.

Anyone interested, google "peak oil."

Another problem is that the easy oil is diminishing and the harder to get oil is increasingly what's left. There's talk about going after the oil shale here in Colorado again. Not gonna be easy, efficient or cheap apparently.

> We need to get it out, drill for it where it
> is, even if that in means an oil platform in view of some rich
> scumbag friend of Jeb Bush, and get serious about alternatives. Now.

You're right, getting serious about alternatives is long overdue. In the long term, whatever sacrifices we decide are worth making to get the last drop of oil will only buy so much time.

> The idea that we can run cars and more on water, and there are
> super efficient engines out there but the gummint or big bizznezz
> is supressing these technologies is simply not credible.

The reason it's not such a stretch to entertain claims like this is that things have happened in the past, such as companies buying up streetcar systems and destroying them. For example:
<http://www.moderntransit.org/ctc/ctc06.html>

> The simple truth is that not one of these schemes has ever panned
> out. No one supresses them, they just don't work.

Could be.

I wonder why GM recalled and crushed the fleet of electric cars that they had leased, for a time, to (reportedly satisfied) customers in California (according to recent article in Home Power magazine)? Dumb.

> BTW, we already have 50+ MPG engines, they're called diesels, and
> the US has basically outlawed them on environmental grounds.
> They will be back though.

Not quite following. Outlawed? Diesels engines are in heavy use in over the road trucks, trains and passenger cars. Bio-diesel is popular with the renewable energy crowd.

BTW I have a 55mpg rated car (HW). Straight gasoline. Honda CivicVX. Clever tech from the early 90s.

Cheers,
-Jamie
<http://www.JamieKruz.com>

> DC

>

> "James McCloskey" <excelsm@hotmail.com> wrote:

>> NPR had a news story about the oil sands in Alberta Canada, they say that

>> there is 12 times the amount on oil in Alberta than there is in Saudi Arabia.

>> The oil men used to say back in 1965 that the day the oil sands are useable,

>> oil will be at \$5.00 a barrel! They use to think it was a joke, but now

>> they say it is cost effective and the grade is much better than the oil

> from

>> the middle east. They heat the oil sands and spin the oil out of the sands.

>> They said they could fuel the worlds oil needs for the next 200 plus years.

>>

>>

>> The bad part about this is Canada would be come the riches country in the

>> world, and then the canadians would really think they are superior to Americans;

>>) ...hee hee hee (tung in cheek!)

>>

>> The state of Montana also has something similar to the oil sands.

>>

>> They try to tell us that the world was running out of oil to scare the people,

>> it's bull shit! They where saying that the world was running out of oil
>> back in 1972,1973, and 1975. We never ran out of gas, and its 35 years
> later.
>> When I was a kid, gas was \$0.26 a gallon. It's not that we are running
>> out, it's not supply and demand, it's that a select group has the power
> to
>> turn the spigot on and off to create shortages. We really need to find
> a
>> way, making Saudi Arabia rich is not the way.
>>
>> I know people that own oil wells, the government wont let them pump them.
>> I think they want a reserve for war.
>>
>> I hope somebody figures how to fix the problem soon.
>>
>> Did anybody see this? Somebody engineered a micro organism that eats trash
>> and then turns in to alcohol that can be used as a fuel. I've never heard
>> a word about this since.
>>
>> Sorry, I'm jumping around. It's bed time!
>>
>> James
>>
>>
>>
>> "DC" <dc@spammersonhydrogen.com> wrote:
>>> Someone sent me that video, so I passed it on to a couple of
>>> physics professor friends.
>>>
>>> Here's what they said:
>>>
>>> -----
>>> The problem with any of these systems is that the energy needed
>>> for electrolysis is greater than what is provided by burning the
>>> hydrogen so you need a free energy source such as wind or solar to
>>> provide energy to electrolyze the water.
>>>
>>> I didn't look at video though since there is about one of these every
>>> week produced on the web.
>>> -----
>>>
>>>
>>> I think it is a hustle to draw in investors myself, which would explain
>>> why there is so little actual data in the movie.
>>>
>>> BTW, BMW already has a hydrogen car in Germany. Works great.
>>> Runs on hydrogen, not water carried about and converted to
>>> hydrogen. It loses a lot of power compared to gasoline, so they

>>> use turbos and this and that, and it runs pretty well.
>>>
>>> The biggest issue with hydrogen, besides storing it and a supply
>>> infrastructure, is that the very best way to make it is a fusion
>>> reactor...
>>>
>>> I REALLY want to see something to break us free of oil and the
>>> politics involved with oil, but this video and the guys behind it, ain't
>>>
>>> it.
>>>
>>> I am afraid that it will take a pretty big disaster to get the change
>>> started away from oil...
>>>
>>> DC
>>>
>>>
>>>
>>> "Bill Lorentzen" <bill@lorentzen.ws> wrote:
>>>> <http://www.thetadata.com/common/WaterFuel.wmv>
>>>>
>>>> watch this vid.
>>>>
>>>>
>>>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG
Posted by [Deej \[1\]](#) on Tue, 13 Jun 2006 03:31:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

I've been in the domestic oil and gas business since 1978. Here are some thoughts and info from my experience and point of view. This isn't a solution to anything really, just info on how things work.

First of all, I'm solely involved in the domestic production end of things. There are some parallels to the international production scenario in this though. In a rather large and very simplified nutshell, to develop a *new and unproven* oil or gas reserve in the United states, a number of things must happen.

First of all, a geologist or team of geologists determine where a discovery is likely to be found. This is usually done by analyzing data from previous test wells (called wildcats in unproven areas) or from analyzing seismic data that is collected by huge trucks built specifically for this purpose by companies like Halliburton or Schlumberger. These are incredibly expensive and have a big pedestal that is attached to an offset rotor. This pedestal

is hydraulically lowered until it contacts the ground and then the truck is actually lifted off the ground and the offset rotor is spun. The resulting vibration sends shock waves to the subsurface strata and is then collected by a seismograph machine. Whenever these trucks need to operate in an area where there is not a public road, they must pay the private landowner a fee to cross his land. The company must also pay the state, county and municipal governments a fee for using the existing roads and pay traffic control companies a fee to reroute traffic around these trucks.

There are now even 3D seismographs and also satellite imaging can be used to help determine the location of certain surface features which might indicate subsurface geology that looks promising.

All of this costs money up front with no guarantee of a return. Depending on the size of the field, can cost into the multimillions by the time the decision is made to go to the next step. This is a big chunk of change to lay out for an independent producer and independents do a huge amount of the domestic production.

As in any business, this overhead cost is passed on to the consumer.

Next, the geologists go to the execs and show them the data from a number of possible areas and decisions are made as to which areas look most promising. Once they determine this, they need to know how to go about figuring out how to get permission to recover the oil or gas.

First of all, a meeting is held with the geologists/execs and the area is mapped out. It may be on entirely public land. If this is public land, they must submit their findings to the BLM and the government determines whether or not to put this land up for auction. There are public hearings and every environmental group in existence will object, petitioning the government to deny the auctioning of leases in this area and allowing them somewhere else instead while not taking into account the fact that gas can't be found where it **isn't** .

Since, before any drilling can happen, a drilling operator needs an oil and gas lease for this land and these are public auctions so if they go to public auction and they are outbid by some other operator who didn't even pay the initial costs to accumulate this info and put it in front of the BLM for consideration, then they've pissed away the millions in preplanning and someone else got the lease without paying a penny for the information that made it possible to bid for it. If they win the auction then a lease is drawn up between the company and the federal government. Once this is finalized, lots of regulations will need to be met with the Forest Service, Bureau of Land Management, Bureau of Reclamation etc and/or Bureau of Indian affairs as well as attorneys kept on retainer to fend off the inevitable endless stalling lawsuits by activists who are against any development on public lands. There will need to be archeological and environmental surveys

done as well. To get some idea of how much this can cost, consider the fact that I just completed the permitting of a 40' wide pipeline right of way across federal and state lands in that was about 5 miles long (approximately 24 surface acres). This pipeline right-of-way was in a corridor about 80' wide that had 4 other pipelines in it already. Still, all of this had to be done. It took about 6 months to get permitted and it cost the operator around \$150,000.00. That's about \$6,500.00 per acre for the use of a previously cleared and permitted area.....or roughly \$60,000.00 per mile for a pipeline to carry natural gas across public lands. Now this doesn't even cover the actual construction costs of the pipeline, which may, depending on the subsurface terrain, the cost of gasoline to run the equipment, the availability of the equipment and the size of the pipe, run in the neighborhood of between \$100.00 to \$300.00 per linear foot. As you can see, developing an oil or gas reserve on federal lands can be expensive. If a field is proven there must be quite a few acres used for pipelines, access roads and drill site locations so we're talking absolutely massive upfront cash outlays.

As in any business, this overhead cost is passed on to the consumer.

OK, so there's a (very simplified) scenario for developing an oil or gas reserve on *public* lands. There are some *really* similar scenarios when it comes to working with foreign governments and their various rules and regs, especially when developing new fields and the competition for these is very intense on the international stage.

Now let's look at developing our domestic resources on private lands right here in the USA.. Most of the land in the US is owned by private individuals and most of that land doesn't have any oil or gas reserves, but a lot more than you think does. Some of it is in large tracts (640 acres or more) and some of it is in small tracts of 40 acres or less. I have only done this kind of work in Texas, Oklahoma, Louisiana, Tennessee, Michigan, New Mexico and Colorado so I'm not familiar with the laws of every state in the country, but my particular specialty is analyzing land titles for drill site title opinions in previously undeveloped areas, determining fractional mineral and royalty interests in new and previously developed oil and gas fields, negotiating the leases between the mineral owners and the oil and gas operators and the negotiating surface damage agreements for well locations, pipelines and access roads with surface owners who may or may not be mineral owners of the tracts where the development is taking place. Furthermore, once this is all in place, I often work with the permitting of the wells, and associated pipelines, compressor stations, access roads, injection wells and related environmental mitigation with the state, county and municipal authorities.

So let's say you and I develop a new natural gas field in the United States on privately owned lands, shall we? First, let's say the geologist tells us that the millions his company has spent on preplanning indicates that he

needs us to lease 20,000 acres *here* and pulls out a map of an area that includes several small towns, a few large ranches, some rural subdivisions, some crisscrossing state highways, county roads, municipal streets, part of an interstate highway, a river with adjacent wetlands, etc. Well, the first thing that needs to be determined is what can actually be leased in accordance with federal, state and municipal development restrictions. This takes a bit of it off the table. Then we need to determine whether or not someone else has already had the same idea and has been there first so we're going to need to go to the county courthouse and check this area in the county records for existing leases. We may or may not find them, or we may find that a portion of it has been leased and that the leases are still in force and effect or that they are getting ready to expire. We may also run into one of our colleagues who is there doing the same thing for another client and when that happens things can get really interesting and expensive when two or more operators start leasing in the same area.

We may also find that previous leases that have been recorded are only to a certain depth and the subsurface rights below that depth are open to be leased and my colleague and we may be leasing the same tracts at different vertical horizons to develop reserves at different depths. We take the info we have gathered in this area (something this large usually takes between a week to a few months, depending on what's going on and the size of the area) and if we determine that some or all of this area is *open*, ie not under an existing lease or under an existing lease that is getting ready to expire and the company might want to gamble that the existing lease owner isn't going to develop this lease and will want us to take a *top lease* which will vest them a leasehold at the expiration of the existing lease, we take this info back to our client and they make a determination as to whether or not they want to proceed with the development of the field. We are, due to our possession of some very expensive and sensitive info at this point, usually kept on retainer during this time and guess what.....???.....yep.....as in any business, this overhead cost is passed on to the consumer. :)

Ok so now they have decided that this area should be leased. The next thing to happen is that (switching to first person now since I'm showing you the ropes ;), I'll need to put a crew of guys together that know how to get this done. I will either be running the show or a company representative will be running the show and I will be heading things up in the field and coordinating the leasing of the priority tracts that *we* are leasing or doing it myself. This can get really expensive just to find the personnel to do this because most of us who have extensive experience in this are in our 50's now and it takes a pretty penny to get us to live in a hotel in Bum**** New Mexico, or wherever for the next year or so and to pay for all of our gas, meals and mileage and transportation cost to/from wherever *home is* every couple of weeks, but anyway, I set up this operation in a local hotel. Immediately, the hotel owners call everyone they know and tell them that *the oil guys are in town* and so immediately there is an unofficial town

meeting and the price of leases goes through the roof and within a week there are 10 other spooks from other companies out there trying to grab leases in the areas they think we will want, along with a bevy of environmental *activists* trying to bug our phones, steal our computers and bribe courthouse personnel and title company workers to tell them what areas we are researching. By the time enough of this area has been leased to start development, the costs have quintupled due to the local landowners/mineral owners, environmentalists and their skills trying to get as much \$\$\$ as they can from the *rich oil guys* and the rest of the speculators that have come in to try to get a piece of the action, but we can usually put together a good block of contiguous leases for an operator so that they can justify a drilling budget within a year or less. Keep in mind that they really don't know yet what the eventual costs will be and whether or not they will see another cent out of this.....and, as in any business, this overhead cost is passed on to the consumer..

Over the next year or so, we consolidate the lease block by making agreements with the various landowner holdouts, their skills and companies that came in and outbid us for crucial leases. They are the gamblers who put up huge sums for leases on certain tracts and paid exorbitant royalties to the landowners thinking that they could turn these leases into money if we need them to drill our state designated proration units. Sometimes they win, sometimes they don't. If they win and we buy these, then they get rich and the cost of buying these leases is eventually passed along to the consumer.

All of these leases will have royalty clauses guaranteeing the mineral owner a certain percentage of the revenue from the well (a royalty) if the well is successfully drilled, completed and hooked up to a gathering system. The mineral owner does not have to put up a penny and gets paid a pretty hefty per acre *up front* bonus to boot. This lease also gives the operator the right of reasonable use of the surface of the land for access, pipelines and drillsites. The mineral owner can grant this to an operator even if he doesn't own the surface of the land because state laws recognize the right of the subsurface owner to access the surface in order to develop the subsurface estate.

OK.....so now we're two years out and the price of fuel has escalated and the drilling rigs are scarce and (costs which were anticipated and have already been passed along to the consumer) now it's time to drill an exploratory well. The best place for this well is going to be determined by a geologist. Murphy's law usually dictates that the best location for this well is in an area that is owned by someone who bought his little 40 acres of paradise either from a developer who carried the note and made it *really easy* for this poor guy to get into the deal of the century, or the land was purchased through a realtor and the realtor didn't happen to mention to the prospective buyer that the title company who is insuring the title to this land and is issuing his mortgagee's policy isn't telling him that the land is under an oil and gas lease and he doesn't own the mineral rights. The

title company will not insure mineral rights and in some states they will note the last oil and gas lease found of record. In some states, this isn't required. If you are buying property and you see something like this, it is a HUGE red flag and it is a red flag that realtors and land developers like to hide if possible. So now it's time to drill the well and we contact this poor guy and explain to him what is getting ready to happen. His first reaction is to tell us to go *screw ourselves* and then he calls his lawyer, contacts the local media and every environmental group he can locate to try to put a stop to this. I don't blame him. He's in a hell of a spot. The operator can post a bond and locate the well, road and pipeline anywhere they want within certain state mandated guidelines and if he tries to obstruct this, they can call the sheriff.

Normally though, after sitting down with this individual for a while and getting to know him/her (usually a period of a couple of weeks to a month), we can figure out a way to get the company geologist to relent on his adamant necessity of the *perfect* location, which may happen to be where this poor guy's kids swingset is located, and move the well location to an area that the guy can't use for anything else, which is usually a boggy area or a prairie dog town. We also end up paying him a pretty fair chunk of change, building him a road, new fences and providing all sorts of other *favors* while the contractors are out there with their D9 Cats and other heavy earth moving equipment. This is, of course, passed along to the consumer.

Now that we're about 2 1/2 years into getting this field online and we've acquired the leases and a surface agreement access and drilling permits from the various bureaucracies, we've tested everyone's water wells within 1/4 mile (and will do so again after the well is drilled), we've been excoriated by environmental *activists* at public hearings and now it's time to drill the well. Now depending on how deep this well is, the drilling rig that they will be bringing in to the location will probably rent for anywhere between \$10,000.00 to \$12,000.00 per day if the well isn't a deep one.....but first we need to get it permitted through the oil and gas commission of the state where it is located and make sure that we can build our access road through the swamp or ravine ridden and useless area that the landowner allowed us to pay him to use, even though the evil oil company had the right to put it in an area where it would have been much more economical to build, so after finding a place for an entranceway with an acceptable line-of-sight that will meet state or county requirements for a well access road, we lay down very expensive petromats as a road base and start pouring gravel. The road is going to end up being about 30' wide because we find out that because now that it's starting to snow, the area has become so muddy that a 20' wide road will not support the tonnage of the drilling rig in the mud, so we pay the landowner more money than we are not required to pay for the additional width this road will need and build the road. The road is around 1000 feet long and costs around \$70,000.00 due to the amount of base we have to use because the gravel that we pour just keeps sinking to the

center of the earth and even petromat won't do the job completely. Then the rig starts up. If things go well, the initial drilling is done completion is made within 10 days working 24-7. then the well needs to be frac'ed or cavitated, so there's another 21+- days paying Halliburton, Bechtel and Schlumberger to bring their specialized equipment out to complete and log the well. So now we've spent around \$1,000,000.00 for the rig and the specialized crews and equipment to complete and log the well. This is all passed along to the consumer.

OK.....so it's a good well and there is evidence enough that other wells in the area will be productive enough to pay out within two-to-three years so we drill two more just to make sure of the boundaries of the field. If these look good, it's time to start negotiating for drillistes, access roads and pipelines to get the gas to market. This takes another two to three years and involves accessing and drilling about 20 to 30 more wells and putting together a pipeline infrastructure to get the gas to market. Also there will need to be compressor stations along this route and disposal well facilities purchased and drilled to reinject water back into the water table that is produced (this pertains to methane wells). The outlay for this is in the multi-multi millions before the operator ever gets any revenue from these wells (it's been 5 years now since we got going on this). Now it's time to recover the costs of the wells (payout) before he sees any profit at all in the meantime, the operator has already started up a new 5 year program to get another field on line because he knows that within one year of the initial production of these wells, some of them will be steadily increasing in production for a few years before they go into decline while other will have hit the point of diminishing returns and will be in decline within the first two years. Still others may have not produced anything at all (dry holes/dusters).

The remainder would be relative to politics (especially the disastrous Clinton administration) and how this relates to the decline of domestic production during his administration and how this lost us 8 years and has hastened a scenario that is playing out pretty badly because we needed to put the Sadaam thing to bed in the mid 90's to stabilize oil prices and he just wouldn't do it and he wouldn't do anything realistic to get the domestic energy situation on track so here we are. This was no secret in 1992. We are currently reaping the harvest of the Clinton administration (non-energy) policies.....and I voted for the guy, twice, so I got hosed, along with the rest of the country.....soooo.....I already hear the more socialist minded of us here thinking, hell man, let's nationalize the minerals right now and things will surely get better. I, and every other contractor in this business would likely love this.....but the public certainly wouldn't.

The same services would be needed to keep the domestic end of things afloat until a new generation of bumbling bureaucrats could take the reins. In addition to things that I know that would still be necessary for the new

improved People's Energy CO-OP, right now, I spend a huge amount of my time keeping well access roads, drillsite locations and pipelines out of *your* back yard and out of *your* old growth forests and wetlands. I'm very familiar with the bureaucratic hoops and environmental laws that protect these things. Those laws would probably fall by the wayside if the *People's Geologist* told the *People's CO-OP* that *the people* needed the resources in certain areas so if the industry was nationalized, rather than taking the time to deal with this red tape, *I, the people* could just tell you to **** off and when the *People's Geologist* determined that there was oil, gas, coal, helium, uranium or oil shale on *our* property and since you just happen to occupy *our* land, along with your families, I could just give you a call, tell you "Hey dude.....we need to borrow your space for the remainder of your natural lifetime and we'll be by tonight to talk to you about it" and the locate a *people's* gas well/strip mine etc. in your back yard and use your driveway to get to it.

Hell.....my job would be soooo much easier and I could probably triple my billing. I'll be retiring within 10 years and it would probably take about that long to put together an alternative system that was even marginally efficient enough to keep domestic production going so I'd be damned busy and what ya gonna do if I say I ain't coming in to work today unless you pay me \$2000.00 per day? You gonna throw me and every other person who knows how to actually get this done in jail? We're not going to do you much good sitting there.

I have a friend who just returned from China and this is *exactly* how it works there, and not just with their fledgling gas industry. It also is happening with their burdgeoning road building, skyscraper building and dam building projects. The contractors with the expertise are getting paid millions by the government and the people who live on the land and have no private property rights are just told to get the hell out of the way with no compensation offered at all. It's the same with PEMEX in Mexico and the national oil concerns in Venezuela, Bolivia and Brazil. I've been there and seen how it works up close and personal.

The scenario of nationalizing our mineral resources would be sort of like the reverse scenario of the Soviet bureaucratic apparatchik's taking over private enterprise there after the fall of the totalitarian government.....the private enterprise specialists could take over the bureaucracy and could pay themselves whatever they want with *your* tax dollars, because, after all, it's *your* country. Hell.....people like me could even get someone else to pay my health insurance! ;o)

The very specialized personnel at Schlumberger, Halliburton, Bechtel etc. who know how to recover oil, gas, etc.....would likely love this because they could tell the government exactly what they wanted in order to get this work done (much more than they can do now) and the government (you and I) would have to pay even more for it than we do now because they are the only

ones who know how to keep the industry going. You'd likely have someone like Ken Lay in charge of the whole thing too. Now I guess we could subcontract our drilling operations out to the French, Russians, Venezuelans, Saudi's or Chinese. They would surely give us a break.

I think this is definitely the way to go.

<http://www.humaneventsonline.com/article.php?id=3942>

Power to the people dude!

I have lived in Mexico for extended stretches and have seen this debacle up close and personal.....but seriously.....my point to this is that we would not have cheaper fuel by nationalizing. . I don't like getting hosed at the pump any more than anyone else.....and I apologize for my ascerbic tone. The more you know, the easier it is to get sarcastic about it.

.....but in spite of what you may have read, Clinton lost us 8 years of domestic production. That's a fact. I was there ;o)

"Dedric Terry" <dterry@keyofd.net> wrote in message news:C0B33FF7.1344%dterry@keyofd.net...

> Doesn't sound good for GM, but I'm sure they'll pull it out to the tune of
> 10-20,000 layoffs.

>

> I wonder if the oil companies would chip in part of their multibillion \$\$
> profit margins to keep the country from sinking into hard recession like a
> rock in a bathtub if by chance GM, a few airlines, and a host of "smaller"
> businesses that are on the edge at the moment go under.

>

> Nah. Not in a million. The price of a gallon of gas would just go up
since

> there is an infinitesimal chance the flood of people at the unemployment
> office could cause a breeze that might be felt at one or two offshore
> drilling rigs. I noticed prices went up here over the weekend. Must have
> been a rain shower in the gulf, or a CEO watched a Discovery Channel
special

> on the odds of an asteroid destroying Earth.

>

> Cynical? Who, me? ;-)

>

> Regards,

> Dedric

>

> On 6/12/06 10:20 AM, in article 448d9439\$1@linux, "DC"

> <dc@spammersinhell.com> wrote:

>

> >
> > Detric,
> >
> > GM is swimming in red ink. They may actually go under. If there
> > was such an engine, they would have it out in a heartbeat, and if
> > they didn't Toyota and Honda would. No one can keep these guys
> > from innovating, which is why GM is in such trouble now.
> >
> > DC
> >
> > Detric Terry <dterry@keyofd.net> wrote:
> >> I completely agree. I remember when I was a kid (in the 70's - dating
> >> myself) reading about a 60mpg gas automobile engine developed by a guy
in
> >> the 60's, but bought up by an oil company or major auto manufacturer...
> >> still haven't seen one.
> >>
> >> I'm sure board room conversations revolve around euphemisms such as
> >> "deliberate progress", "cost effectiveness", "feasibility studies",
> >> "manufacturing viability", or "legacy support". Okay the last one was
when
> >> Bill Gates was taking a tour of Ford's headquarters...
> >>
> >> Regards,
> >> Detric
> >>
> >> On 6/12/06 5:04 AM, in article 448d4a42\$1@linux, "John" <no@no.com>
wrote:
> >>
> >>>
> >>> I don't buy the "this is why it's taking so long". They just don't
want
> > us
> >>> to have it. I'm sure they could deliver a solution by next quarter if
> > they
> >>> wanted to.
> >>
> >
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG
Posted by [Jamie K](#) on Tue, 13 Jun 2006 14:33:52 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Deej,

Thanks for your inside view of domestic oil and gas production. It's

always fascinating when you talk shop about that stuff.

Can you recommend any books or web sites that you think do a good job of describing the details and challenges of domestic and international energy production?

Cheers,

-Jamie

<http://www.JamieKrutz.com>

DJ wrote:

> I've been in the domestic oil and gas business since 1978. Here are some
> thoughts and info from my experience and point of view. This isn't a
> solution to anything really, just info on how things work.

>

> First of all, I'm solely involved in the domestic production end of things.
> There are some parallels to the international production scenario in this
> though. In a rather large and very simplified nutshell, to develop a *new
> and unproven* oil or gas reserve in the United states, a number of things
> must happen.

>

> First of all, a geologist or team of geologists determine where a discovery
> is likely to be found. This is usually done by analyzing data from previous
> test wells (called wildcats in unproven areas) or from analyzing seismic
> data that is collected by huge trucks built specifically for this purpose by
> companies like Halliburton or Schlumberger. These are incredibly expensive
> and have a big pedestal that is attached to an offset rotor. This pedestal
> is hydraulically lowered until it contacts the ground and then the truck is
> actually lifted off the ground and the offset rotor is spun. The resulting
> vibration sends shock waves to the subsurface strata and is then collected
> by a seismograph machine. Whenever these trucks need to operate in an area
> where there is not a public road, they must pay the private landowner a fee
> to cross his land. The company must also pay the state, county and municipal
> governments a fee for using the existing roads and pay traffic control
> companies a fee to reroute traffic around these trucks.

>

> There are now even 3D seismographs and also satellite imaging can be used to
> help determine the location of certain surface features which might indicate
> subsurface geology that looks promising.

>

> All of this costs money up front with no guarantee of a return. Depending on
> the size of the field, can cost into the multimillions by the time the
> decision is made to go to the next step. This is a big chunk of change to
> lay out for an independent producer and independents do a huge amount of the
> domestic production.

>

> As in any business, this overhead cost is passed on to the consumer.

- >
- > Next, the geologists go to the execs and show them the data from a number of
- > possible areas and decisions are made as to which areas look most promising.
- > Once they determine this, they need to know how to go about figuring out how
- > to get permission to recover the oil or gas.
- >
- > First of all, a meeting is held with the geologists/execs and the area is
- > mapped out. It may be on entirely public land. If this is public land, they
- > must submit their findings to the BLM and the government determines whether
- > or not to put this land up for auction. There are public hearings and every
- > environmental group in existence will object, petitioning the government to
- > deny the auctioning of leases in this area and allowing them somewhere else
- > instead while not taking into account the fact that gas can't be found where
- > it *isn't* .
- >
- > Since, before any drilling can happen, a drilling operator needs an oil and
- > gas lease for this land and these are public auctions so if they go to
- > public auction and they are outbid by some other operator who didn't even
- > pay the initial costs to accumulate this info and put it in front of the
- > BLM for consideration, then they've pissed away the millions in preplanning
- > and someone else got the lease without paying a penny for the information
- > that made it possible to bid for it. If they win the auction then a lease is
- > drawn up between the company and the federal government. Once this is
- > finalized, lots of regulations will need to be met with the Forest Service,
- > Bureau of Land Management, Bureau of Reclamation etc and/or Bureau of Indian
- > affairs as well as attorneys kept on retainer to fend off the inevitable
- > endless stalling lawsuits by activists who are against any development on
- > public lands. There will need to be archeological and environmental surveys
- > done as well. To get some idea of how much this can cost, consider the fact
- > that I just completed the permitting of a 40' wide pipeline right of way ac
- > ross federal and state lands in that was about 5 miles long (approximately 24
- > surface acres). This pipeline right-of-way was in a corridor about 80' wide
- > that had 4 other pipelines in it already. Still, all of this had to be done.
- > It took about 6 month to get permitted and it cost the operator around
- > \$150,000.00. That's about \$6,500.00 per acre for the use of a previously
- > cleared and permitted area.....or roughly \$60,000.00 per mile for a
- > pipeline to carry natural gas across public lands. Now this doesn't even
- > cover the actual construction costs of the pipeline, which may, depending on
- > the subsurface terrain, the cost of gasoline to run the equipment, the
- > availability of the equipment and the size of the pipe, run in the
- > neighborhood of between \$100.00 to \$300.00 per linear foot. As you can see,
- > developing an oil or gas reserve on federal lands can be expensive. If a
- > field is proven there must be quite a few acres used for pipelines, access
- > roads and drilliste locations so we're talking absolutely massive upfront
- > cash outlays.
- >
- > As in any business, this overhead cost is passed on to the consumer.
- >

> OK, so there's a (very simplified) scenario for developing an oil or gas
> reserve on *public* lands. There are some *really* similar scenarios when it
> comes to working with foreign governments and their various rules and regs,
> especially when developing new fields and the competition for these is very
> intense on the international stage.

>

> Now let's look at developing our domestic resources on private lands right
> here in the USA.. Most of the land in the US is owned by private individuals
> and most of that land doesn't have any oil or gas reserves, but a lot more
> than you think does. Some of it is in large tracts (640 acres or more) and
> some of it is in small tracts of 40 acres or less. I have only done this
> kind of work in Texas, Oklahoma, Louisiana, Tennessee, Michigan, New Mexico
> and Colorado so I'm not familiar with the laws of every state in the
> country, but my particular specialty is analyzing land titles for drillist
> title opinions in previously undeveloped areas, determining fractional
> mineral and royalty interests in new and previously developed oil and gas
> fields, negotiating the leases between the mineral owners and the oil and
> gas operators and the negotiating surface damage agreements for well
> locations, pipelines and access roads with surface owners who may or may not
> be mineral owners of the tracts where the development is taking place.
> Furthermore, once this is all in place, I often work with the permitting of
> the wells, and associated pipelines, compressor stations, access roads,
> injection wells and related environmental mitigation with the state, county
> and municipal authorities.

>

> So let's say you and I develop a new natural gas field in the United States on
> privately owned lands, shall we? First, let's say the geologist tells us
> that the millions his company has spent on preplanning indicates that he
> needs us to lease 20,000 acres *here* and pulls out a map of an area that
> includes several small towns, a few large ranches, some rural subdivisions,
> some crisscrossing state highways, county roads, municipal streets, part of
> an interstate highway, a river with adjacent wetlands, etc. Well, the first
> thing that needs to be determined is what can actually be leased in
> accordance with federal, state and municipal development restrictions. This
> takes a bite out of it off the table. Then we need to determine whether or not
> someone else has already had the same idea and has been there first so we're
> going to need to go to the county courthouse and check this area in the
> county records for existing leases. We may or may not find them, or we may
> find that a portion of it has been leased and that the leases are still in
> force and effect or that they are getting ready to expire. We may also run
> into one of our colleagues who is there doing the same thing for another
> client and when that happens things can get really interesting and expensive
> when two or more operators start leasing in the same area.

>

> We may also find that previous leases that have been recorded are only to a
> certain depth and the subsurface rights below that depth are open to be
> leased and my colleague and we may be leasing the same tracts at different
> vertical horizons to develop reserves at different depths. We take the info

> we have gathered in this area (something this large usually takes between a
> week to a few months, depending on what's going on and the size of the area)
> and if we determine that some or all of this area is *open*, ie not under an
> existing lease or under an existing lease that is getting ready to expire
> and the company might want to gamble that the existing lease owner isn't
> going to develop this lease and will want us to take a *top lease* which
> will vest them a leasehold at the expiration of the existing lease, we take
> this info back to our client and they make a determination as to whether or
> not they want to proceed with the development of the field. We are, due to
> our possession of some very expensive and sensitive info at this point,
> usually kept on retainer during this time and guess
> what.....???.....yep.....as in any business, this overhead cost is
> passed on to the consumer. :)

>
> Ok so now they have decided that this area should be leased. The next thing
> to happen is that (switching to first person now since I'm showing you the
> ropes ;), I'll need to put a crew of guys together that know how to get this
> done. I will either be running the show or a company representative will be
> running the show and I will be heading things up in the field and
> coordinating the leasing of the priority tracts that *we* are leasing or
> doing it myself. This can get really expensive just to find the personnel to
> do this because most of us who have extensive experience in this are in our
> 50's now and it takes a pretty penny to get us to live in a hotel in Bum****
> New Mexico, or wherever for the next year or so and to pay for all of our
> gas, meals and mileage and transportation cost to/from wherever *home is*
> every couple of weeks, but anyway, I set up this operation in a local hotel.
> Immediately, the hotel owners call everyone they know and tell them that
> *the oil guys are in town* and so immediately there is an unofficial town
> meeting and the price of leases goes through the roof and within a week
> there are 10 other spooks from other companies out there trying to grab
> leases in the areas they think we will want, along with a bevy of
> environmental *activists* trying to bug our phones, steal our computers and
> bribe courthouse personnel and title company workers to tell them what areas
> we are researching. By the time enough of this area has been leased to start
> development, the costs have quintupled due to the local landowners/mineral
> owners, environmentalists and their shills trying to get as much \$\$\$ as they
> can from the *rich oil guys* and the rest of the speculators that have come
> in to try to get a piece of the action, but we can usually put together a
> good block of contiguous leases for an operator so that they can justify a
> drilling budget within a year or less. Keep in mind that they really don't
> know yet what the eventual costs will be and whether or not they will see
> another cent out of this.....and, as in any business, this overhead cost is
> passed on to the consumer..

>
> Over the next year or so, we consolidate the lease block by making
> agreements with the various landowner holdouts, their shills and companies
> that came in and outbid us for crucial leases. They are the gamblers who put
> up huge sums for leases on certain tracts and paid exorbitant royalties to

> the landowners thinking that they could turn these leases into money if we
> need them to drill our state designated proration units. Sometimes they win,
> sometimes they don't. If they win and we buy these, then they get rich and
> the cost of buying these leases is eventually passed along to the consumer.
>
> All of these leases will have royalty clauses guaranteeing the mineral owner
> a certain percentage of the revenue from the well (a royalty) if the well is
> successfully drilled, completed and hooked up to a gathering system. The
> mineral owner does not have to put up a penny and gets paid a pretty hefty
> per acre *up front* bonus to boot. This lease also gives the operator the
> right of reasonable use of the surface of the land for access, pipelines and
> drillsites. The mineral owner can grant this to an operator even if he
> doesn't own the surface of the land because state laws recognize the right
> of the subsurface owner to access the surface in order to develop the
> subsurface estate.
>
> OK.....so now we're two years out and the price of fuel has escalated
> and the drilling rigs are scarce and (costs which were anticipated and have
> already been passed along to the consumer) now it's time to drill an
> exploratory well. The best place for this well is going to be determined by
> a geologist. Murphy's law usually dictates that the best location for this
> well is in an area that is owned by someone who bought his little 40 acres
> of paradise either from a developer who carried the note and made it *really
> easy* for this poor guy to get into the deal of the century, or the land was
> purchased through a realtor and the realtor didn't happen to mention to the
> prospective buyer that the title company who is insuring the title to this
> land and is issuing his mortgagee's policy isn't telling him that the land
> is under an oil and gas lease and he doesn't own the mineral rights. The
> title company will not insure mineral rights and in some states they will
> note the last oil and gas lease found of record. In some states, this isn't
> required. If you are buying property and you see something like this, it is
> a HUGE red flag and it is a red flag that realtors and land developers like
> to hide if possible. So now it's time to drill the well and we contact this
> poor guy and explain to him what is getting ready to happen. His first
> reaction is to tell us to go *screw ourselves* and then he calls his lawyer,
> contacts the local media and every environmental group he can locate to try
> to put a stop to this. I don't blame him. He's in a hell of a spot. The
> operator can post a bond and locate the well, road and pipeline anywhere
> they want within certain state mandated guidelines and if he tries to
> obstruct this, they can call the sheriff.
>
> Normally though, after sitting down with this individual for a while and
> getting to know him/her (usually a period of a couple of weeks to a month),
> we can figure out a way to get the company geologist to relent on his
> adamant necessity of the *perfect* location, which may happen to be where
> this poor guy's kids swingset is located, and move the well location to an
> area that the guy can't use for anything else, which is usually a boggy area
> or a prairie dog town. We also end up paying him a pretty fair chunk of

> change, building him a road, new fences and providing all sorts of other
> *favors* while the contractors are out there with their D9 Cats and other
> heavy earth moving equipment. This is, of course, passed along to the
> consumer.
>
> Now that we're about 2 1/2 years into getting this field online and we've
> acquired the leases and a surface agreement access and drilling permits from
> the various bureaucracies, we've tested everyone's water wells within 1/4
> mile (and will do so again after the well is drilled), we've been excoriated
> by environmental *activists* at public hearings and now it's time to drill
> the well. Now depending on how deep this well is, the drilling rig that they
> will be bringing in to the location will probably rent for anywhere between
> \$10,000.00 to \$12,000.00 per day if the well isn't a deep one.....but
> first we need to get it permitted through the oil and gas commission of the
> state where it is located and make sure that we can build our access road
> through the swamp or ravine ridden and useless area that the landowner
> allowed us to pay him to use, even though the evil oil company had the right
> to put in it in an area where it would have been much more economical to
> build, so after finding a place for an entranceway with an acceptable
> line-of-sight that will meet state or county requirements for a well access
> road, we lay down very expensive petromats a road base and start pouring
> gravel. The road is going to end up being about 30' wide because we find out
> that because now that it's starting to snow, the area has become so muddy
> that a 20' wide road will not support the tonnage of the drilling rig in the
> mud, so we pay the landowner more money that we are not required to pay for
> the additional width this road will need and build the road. The road is
> around 1000 feet long and costs around \$70,000.00 due to the amount of base
> we have to use because the gravel that we pour just keeps sinking to the
> center of the earth and even petromat won't do the job completely. Then the
> rig starts up. If things go well, the initial drilling is done completion is
> made within 10 days working 24-7. then the well needs to be frac'ed or
> cavitated, so there's another 21+- days paying Halliburton, Bechtel and
> Schlumberger to bring their specialized equipment out to complete and log
> the well. So now we've spent around \$1,000,000.00 for the rig and the
> specialized crews and equipment to complete and log the well. This is all
> passed along to the consumer.
>
> OK.....so it's a good well and there is evidence enough that other wells
> in the area will be productive enough to pay out within two-to-three years
> so we drill two more just to make sure of the boundaries of the field. If
> these look good, it's time to start negotiating for drillistes, access roads
> and pipelines to get the gas to market. This takes another two to three
> years and involves accessing and drilling about 20 to 30 more wells and
> putting together a pipeline infrastructure to get the gas to market. Also
> there will need to be compressor stations along this route and disposal well
> facilities purchased and drilled to reinject water back into the water table
> that is produced (this pertains to methane wells). The outlay for this is in
> the multi-multi millions before the operator ever gets any revenue from

> these wells (it's been 5 years now since we got going on this). Now it's
> time to recover the costs of the wells (payout) before he sees any profit at
> all in the meantime, the operator has already started up a new 5 year
> program to get another field on line because he knows that within one year
> of the initial production of these wells, some of them will be steadily
> increasing in production for a few years before they go into decline while
> other will have hit the point of diminishing returns and will be in decline
> within the first two years. Still others may have not produced anything at
> all (dry holes/dusters).

>

> The remainder would be relative to politics (especially the disastrous
> Clinton administration) and how this relates to the decline of domestic
> production during his administration and how this lost us 8 years and has
> hastened a scenario that is playing out pretty badly because we needed to
> put the Sadaam thing to bed in the mid 90's to stabilize oil prices and he
> just wouldn't do it and he wouldn't do anything realistic to get the
> domestic energy situation on track so here we are. This was no secret in
> 1992. We are currently reaping the harvest of the Clinton administration
> (non-energy) policies.....and I voted for the guy, twice, so I got
> hosed, along with the rest of the country.....soooo.....I already
> hear the more socialist minded of us here thinking, hell man, let's
> nationalize the minerals right now and things will surely get better. I, and
> every other contractor in this business would likely love this.....but
> the public certainly wouldn't.

>

> The same services would be needed to keep the domestic end of things afloat
> until a new generation of bumbling bureaucrats could take the reins. In
> addition to things that I know that would still be necessary for the new
> improved People's Energy CO-OP, right now, I spend a huge amount of my time
> keeping well access roads, drillsite locations and pipelines out of *your*
> back yard and out of *your* old growth forests and wetlands. I'm very
> familiar with the bureaucratic hoops and environmental laws that protect
> these things. Those laws would probably fall by the wayside if the *People's
> Geologist* told the *People's CO-OP* that *the people* needed the resources
> in certain areas so if the industry was nationalized, rather than taking the
> time to deal with this red tape, *I, the people* could just tell you to ****
> off and when the *People's Geologist* determined that there was oil, gas,
> coal, helium, uranium or oil shale on *our* property and since you just
> happen to occupy *our* land, along with your families, I could just give you
> a call, tell you "Hey dude.....we need to borrow your space for the
> remainder of your natural lifetime and we'll be by tonight to talk to you
> about it" and the locate a *people's* gas well/strip mine etc. in your back
> yard and use your driveway to get to it.

>

> Hell.....my job would be soooo much easier and I could probably triple my
> billing. I'll be retiring within 10 years and it would probably take about
> that long to put together an alternative system that was even marginally
> efficient enough to keep domestic production going so I'd be damned busy and

> what ya gonna do if I say I ain't coming in to work today unless you pay me
> \$2000.00 per day? You gonna throw me and every other person who knows how to
> actually get this done in jail? We're not going to do you much good sitting
> there.
>
> I have a friend who just returned from China and this is *exactly* how it
> works there, and not just with their fledgling gas industry. It also is
> happening with their burdgeoning road building, skyscraper building and dam
> building projects. The contractors with the expertise are getting paid
> millions by the government and the people who live on the land and have no
> private property rights are just told to get the hell out of the way with no
> compensation offered at all. It's the same with PEMEX in Mexico and the
> national oil concerns in Venezuela, Bolivia and Brazil. I've been there and
> seen how it works up close and personal.
>
> The scenario of nationalizing our mineral resources would be sort of like
> the reverse scenario of the Soviet bureaucratic apparatchik's taking over
> private enterprise there after the fall of the totalitarian
> government.....the private enterprise specialists could take over the
> bureaucracy and could pay themselves whatever they want with *your* tax
> dollars, because, after all, it's *your* country. Hell.....people like
> me could even get someone else to pay my health insurance! ;o)
>
> The very specialized personnel at Schlumberger, Halliburton, Bechtel etc.
> who know how to recover oil, gas, etc.....would likely love this because
> they could tell the government exactly what they wanted in order to get this
> work done (much more than they can do now) and the government (you and I)
> would have to pay even more for it than we do now because they are the only
> ones who know how to keep the industry going. You'd likely have someone like
> Ken Lay in charge of the whole thing too. Now I guess we could subcontract
> our drilling operations out to the French, Russians, Venezuelans, Saudi's or
> Chinese. They would surely give us a break.
>
> I think this is definitely the way to go.
>
> <http://www.humaneventsonline.com/article.php?id=3942>
>
> Power to the people dude!
>
> I have lived in Mexico for extended stretches and have seen this debacle up
> close and personal.....but seriously.....my point to this is that
> we would not have cheaper fuel by nationalizing. . I don't like getting
> hosed at the pump any more than anyone else.....and I apologize for my
> ascerbic tone. The more you know, the easier it is to get sarcastic about
> it.
>
>but in spite of what you may have read, Clinton lost us 8 years of
> domestic production. That's a fact. I was there ;o)

>
> "Dedric Terry" <dterry@keyofd.net> wrote in message
> news:C0B33FF7.1344%dterry@keyofd.net...
>> Doesn't sound good for GM, but I'm sure they'll pull it out to the tune of
>> 10-20,000 layoffs.
>>
>> I wonder if the oil companies would chip in part of their multibillion \$\$
>> profit margins to keep the country from sinking into hard recession like a
>> rock in a bathtub if by chance GM, a few airlines, and a host of "smaller"
>> businesses that are on the edge at the moment go under.
>>
>> Nah. Not in a million. The price of a gallon of gas would just go up
> since
>> there is an infinitesimal chance the flood of people at the unemployment
>> office could cause a breeze that might be felt at one or two offshore
>> drilling rigs. I noticed prices went up here over the weekend. Must have
>> been a rain shower in the gulf, or a CEO watched a Discovery Channel
> special
>> on the odds of an asteroid destroying Earth.
>>
>> Cynical? Who, me? ;-)
>>
>> Regards,
>> Dedric
>>
>> On 6/12/06 10:20 AM, in article 448d9439\$1@linux, "DC"
>> <dc@spammersinhell.com> wrote:
>>
>>> Dedric,
>>>
>>> GM is swimming in red ink. They may actually go under. If there
>>> was such an engine, they would have it out in a heartbeat, and if
>>> they didn't Toyota and Honda would. No one can keep these guys
>>> from innovating, which is why GM is in such trouble now.
>>>
>>> DC
>>>
>>> Dedric Terry <dterry@keyofd.net> wrote:
>>>> I completely agree. I remember when I was a kid (in the 70's - dating
>>>> myself) reading about a 60mpg gas automobile engine developed by a guy
> in
>>>> the 60's, but bought up by an oil company or major auto manufacturer...
>>>> still haven't seen one.
>>>>
>>>> I'm sure board room conversations revolve around euphemisms such as
>>>> "deliberate progress", "cost effectiveness", "feasibility studies",
>>>> "manufacturing viability", or "legacy support". Okay the last one was
> when

>>>> Bill Gates was taking a tour of Ford's headquarters...
>>>>
>>>> Regards,
>>>> Detric
>>>>
>>>> On 6/12/06 5:04 AM, in article 448d4a42\$1@linux, "John" <no@no.com>
> wrote:
>>>>> I don't buy the "this is why it's taking so long". They just don't
> want
>>> us
>>>>> to have it. I'm sure they could deliver a solution by next quarter if
>>> they
>>>>> wanted to.
>
>

Subject: Re: OT - Environmental - This could be the answer to a lot of BIG
Posted by [Deej \[1\]](#) on Tue, 13 Jun 2006 14:49:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

Jamie,

There are various sources of information, but most of this stuff is seat of the pants. It's very diversified and involves knowledge of engineering, geology, legal, construction, psychology and plain old good luck/bad luck. Some universities have programs in petroleum land management but no educational program encompasses everything. For an overview of the history of domestic oil production, I would search the internet for books about J. Paul Getty, H.L. Hunt and John D. Rockefeller.

;O)

"Jamie K" <Meta@Dimensional.com> wrote in message news:448ecb89@linux...

>
> Hey Deej,
>
> Thanks for your inside view of domestic oil and gas production. It's
> always fascinating when you talk shop about that stuff.
>
> Can you recommend any books or web sites that you think do a good job of
> describing the details and challenges of domestic and international
> energy production?
>
> Cheers,
> -Jamie
> <http://www.JamieKruz.com>
>

>
> DJ wrote:
> > I've been in the domestic oil and gas business since 1978. Here are some
> > thoughts and info from my experience and point of view. This isn't a
> > solution to anything really, just info on how things work.
> >
> > First of all, I'm solely involved in the domestic production end of things.
> > There are some parallels to the international production scenario in this
> > though. In a rather large and very simplified nutshell, to develop a *new
> > and unproven* oil or gas reserve in the United states, a number of things
> > must happen.
> >
> > First of all, a geologist or team of geologists determine where a discovery
> > is likely to be found. This is usually done by analyzing data from previous
> > test wells (called wildcats in unproven areas) or from analyzing seismic
> > data that is collected by huge trucks built specifically for this purpose by
> > companies like Halliburton or Schlumberger. These are incredibly expensive
> > and have a big pedestal that is attached to an offset rotor. This pedestal
> > is hydraulically lowered until it contacts the ground and then the truck is
> > actually lifted off the ground and the offset rotor is spun. The resulting
> > vibration sends shock waves to the subsurface strata and is then collected
> > by a seismograph machine. Whenever these trucks need to operate in an area
> > where there is not a public road, they must pay the private landowner a fee
> > to cross his land. The company must also pay the state, county and municipal
> > governments a fee for using the existing roads and pay traffic control
> > companies a fee to reroute traffic around these trucks.
> >
> > There are now even 3D seismographs and also satellite imaging can be used to
> > help determine the location of certain surface features which might indicate
> > subsurface geology that looks promising.

> >
> > All of this costs money up front with no guarantee of a return.
Depending on
> > the size of the field, can cost into the multimillions by the time the
> > decision is made to go to the next step. This is a big chunk of change
to
> > lay out for an independent producer and independents do a huge amount of
the
> > domestic production.
> >
> > As in any business, this overhead cost is passed on to the consumer.
> >
> > Next, the geologists go to the execs and show them the data from a
number of
> > possible areas and decisions are made as to which areas look most
promising.
> > Once they determine this, they need to know how to go about figuring out
how
> > to get permission to recover the oil or gas.
> >
> > First of all, a meeting is held with the geologists/execs and the area
is
> > mapped out. It may be on entirely public land. If this is public land,
they
> > must submit their findings to the BLM and the government determines
whether
> > or not to put this land up for auction. There are public hearings and
every
> > environmental group in existence will object, petitioning the government
to
> > deny the auctioning of leases in this area and allowing them somewhere
else
> > instead while not taking into account the fact that gas can't be found
where
> > it *isn't* .
> >
> > Since, before any drilling can happen, a drilling operator needs an oil
and
> > gas lease for this land and these are public auctions so if they go to
> > public auction and they are outbid by some other operator who didn't
even
> > pay the initial costs to accumulate this info and put it in front of
the
> > BLM for consideration, then they've pissed away the millions in
preplanning
> > and someone else got the lease without paying a penny for the
information
> > that made it possible to bid for it. If they win the auction then a

lease is

> > drawn up between the company and the federal government. Once this is
> > finalized, lots of regulations will need to be met with the Forest
Service,
> > Bureau of Land Management, Bureau of Reclamation etc and/or Bureau of
Indian
> > affairs as well as attorneys kept on retainer to fend off the inevitable
> > endless stalling lawsuits by activists who are against any development
on
> > public lands. There will need to be archeological and environmental
surveys
> > done as well. To get some idea of how much this can cost, consider the
fact
> > that I just completed the permitting of a 40' wide pipeline right of way
acr
> > oss federal and state lands in that was about 5 miles long
(approximately 24
> > surface acres). This pipeline right-of-way was in a corridor about 80'
wide
> > that had 4 other pipelines in it already. Still, all of this had to be
done.
> > It took about 6 month to get permitted and it cost the operator around
> > \$150,000.00. That's about \$6,500.00 per acre for the use of a
previously
> > cleared and permitted area.....or roughly \$60,000.00 per mile for a
> > pipeline to carry natural gas across public lands. Now this doesn't
even
> > cover the actual construction costs of the pipeline, which may,
depending on
> > the subsurface terrain, the cost of gasoline to run the equipment, the
> > availability of the equipment and the size of the pipe, run in the
> > neighborhood of between \$100.00 to \$300.00 per linear foot. As you can
see,
> > developing an oil or gas reserve on federal lands can be expensive. If a
> > field is proven there must be quite a few acres used for pipelines,
access
> > roads and drilliste locations so we're talking absolutely massive
upfront
> > cash outlays.
> >
> > As in any business, this overhead cost is passed on to the consumer.
> >
> > OK, so there's a (very simplified) scenario for developing an oil or gas
> > reserve on *public* lands. There are some *really* similar scenarios
when it
> > comes to working with foriegn governments and their various rules and
regs,
> > especially when developing new fields and the competition for these is

very

> > intense on the international stage.

> >

> > Now let's look at developing our domestic resources on private lands right

> > here in the USA.. Most of the land in the US is owned by private individuals

> > and most of that land doesn't have any oil or gas reserves, but as lot more

> > than you think does. Some of it is in large tracts (640 acres or more) and

> > some of it is in small tracts of 40 acres or less. I have only done this

> > kind of work in Texas, Oklahoma, Louisiana, Tennessee, Michigan, New Mexico

> > and Colorado so I'm not familiar with the laws of every state in the

> > country, but my particular specialty is analyzing land titles for drillists

> > title opinions in previously undeveloped areas, determining fractional

> > mineral and royalty interests in new and previously developed oil and gas

> > fields, negotiating the leases between the mineral owners and the oil and

> > gas operators and the negotiating surface damage agreements for well

> > locations, pipelines and access roads with surface owners who may or may not

> > be mineral owners of the tracts where the development is taking place.

> > Furthermore, once this is all in place, I often work with the permitting of

> > the wells, and associated pipelines, compressor stations, access roads,

> > injection wells and related environmental mitigation with the state, county

> > and municipal authorities.

> >

> > So lets you and I develop a new natural gas field in the United States on

> > privately owned lands, shall we? First, let's say the geologist tells us

> > that the millions his company has spent on preplanning indicates that he

> > needs us to lease 20,000 acres *here* and pulls out a map of an area that

> > includes several small towns, a few large ranches, some rural subdivisions,

> > some crisscrossing state highways, county roads, municipal streets, part of

> > an interstate highway, a river with adjacent wetlands, etc. Well, the first

> > thing that needs to be determined is what can actually be leased in

> > accordance with federal, state and municipal development restrictions.

This

> > takes a bite of it off the table. Then we need to determine whether or not
> > someone else has already had the same idea and has been there first so we're
> > going to need to go to the county courthouse and check this area in the
> > county records for existing leases. We may or may not find them, or we may
> > find that a portion of it has been leased and that the leases are still in
> > force and effect or that they are getting ready to expire. We may also run
> > into one of our colleagues who is there doing the same thing for another
> > client and when that happens things can get really interesting and expensive
> > when two or more operators start leasing in the same area.
> >
> > We may also find that previous leases that have been recorded are only to a
> > certain depth and the subsurface rights below that depth are open to be
> > leased and my colleague and we may be leasing the same tracts at different
> > vertical horizons to develop reserves at different depths. We take the info
> > we have gathered in this area (something this large usually takes between a
> > week to a few months, depending on what's going on and the size of the area)
> > and if we determine that some or all of this area is *open*, ie not under an
> > existing lease or under an existing lease that is getting ready to expire
> > and the company might want to gamble that the existing lease owner isn't
> > going to develop this lease and will want us to take a *top lease* which
> > will vest them a leasehold at the expiration of the existing lease, we'll take
> > this info back to our client and they make a determination as to whether or
> > not they want to proceed with the development of the field. We are, due to
> > our possession of some very expensive and sensitive info at this point,
> > usually kept on retainer during this time and guess
> > what.....???.....yep.....as in any business, this overhead cost is
> > passed on to the consumer. :)
> >
> > Ok so now they have decided that this area should be leased. The next thing
> > to happen is that (switching to first person now since I'm showing you the

> > ropes ;), I'll need to put a crew of guys together that know how to get this
> > done. I will either be running the show or a company representative will be
> > running the show and I will be heading things up in the field and
> > coordinating the leasing of the priority tracts that *we* are leasing or
> > doing it myself. This can get really expensive just to find the personnel to
> > do this because most of us who have extensive experience in this are in our
> > 50's now and it takes a pretty penny to get us to live in a hotel in Bum****
> > New Mexico, or wherever for the next year or so and to pay for all of our
> > gas, meals and mileage and transportation cost to/from wherever *home is*
> > every couple of weeks, but anyway, I set up this operation in a local hotel.
> > Immediately, the hotel owners call everyone they know and tell them that
> > *the oil guys are in town* and so immediately there is an unofficial town
> > meeting and the price of leases goes through the roof and within a week
> > there are 10 other spooks from other companies out there trying to grab
> > leases in the areas they think we will want, along with a bevy of
> > environmental *activists* trying to bug our phones, steal our computers and
> > bribe courthouse personnel and title company workers to tell them what areas
> > we are researching. By the time enough of this area has been leased to start
> > development, the costs have quintupled due to the local landowners/mineral
> > owners, environmentalists and their shills trying to get as much \$\$\$ as they
> > can from the *rich oil guys* and the rest of the speculators that have come
> > in to try to get a piece of the action, but we can usually put together a
> > good block of contiguous leases for an operator so that they can justify a
> > drilling budget within a year or less. Keep in mind that they really don't
> > know yet what the eventual costs will be and whether or not they will see
> > another cent out of this.....and, as in any business, this overhead cost is
> > passed on to the consumer..
> >

> > Over the next year or so, we consolidate the lease block by making
> > agreements with the various landowner holdouts, their shills and
companies
> > that came in and outbid us for crucial leases. They are the gamblers who
put
> > up huge sums for leases on certain tracts and paid exorbitant royalties
to
> > the landowners thinking that they could turn these leases into money if
we
> > need them to drill our state designated proration units. Sometimes they
win,
> > sometimes they don't. If they win and we buy these, then they get rich
and
> > the cost of buying these leases is eventually passed along to the
consumer.
> >
> > All of these leases will have royalty clauses guaranteeing the mineral
owner
> > a certain percentage of the revenue from the well (a royalty) if the
well is
> > successfully drilled, completed and hooked up to a gathering system. The
> > mineral owner does not have to put up a penny and gets paid a pretty
hefty
> > per acre *up front* bonus to boot. This lease also gives the operator
the
> > right of reasonable use of the surface of the land for access, pipelines
and
> > drillsites. The mineral owner can grant this to an operator even if he
> > doesn't own the surface of the land because state laws recognize the
right
> > of the subsurface owner to access the surface in order to develop the
> > subsurface estate.
> >
> > OK.....so now we're two years out and the price of fuel has
escalated
> > and the drilling rigs are scarce and (costs which were anticipated and
have
> > already been passed along to the consumer) now it's time to drill an
> > exploratory well. The best place for this well is going to be determined
by
> > a geologist. Murphy's law usually dictates that the best location for
this
> > well is in an area that is owned by someone who bought his little 40
acres
> > of paradise either from a developer who carried the note and made it
*really
> > easy* for this poor guy to get into the deal of the century, or the land
was

> > purchased through a realtor and the realtor didn't happen to mention to the
> > prospective buyer that the title company who is insuring the title to this
> > land and is issuing his mortgagee's policy isn't telling him that the land
> > is under an oil and gas lease and he doesn't own the mineral rights. The
> > title company will not insure mineral rights and in some states they will
> > note the last oil and gas lease found of record. In some states, this isn't
> > required. If you are buying property and you see something like this, it is
> > a HUGE red flag and it is a red flag that realtors and land developers like
> > to hide if possible. So now it's time to drill the well and we contact this
> > poor guy and explain to him what is getting ready to happen. His first
> > reaction is to tell us to go *screw ourselves* and then he calls his lawyer,
> > contacts the local media and every environmental group he can locate to try
> > to put a stop to this. I don't blame him. He's in a hell of a spot. The
> > operator can post a bond and locate the well, road and pipeline anywhere
> > they want within certain state mandated guidelines and if he tries to
> > obstruct this, they can call the sheriff.
> >
> > Normally though, after sitting down with this individual for a while and
> > getting to know him/her (usually a period of a couple of weeks to a month),
> > we can figure out a way to get the company geologist to relent on his
> > adamant necessity of the *perfect* location, which may happen to be where
> > this poor guy's kids swingset is located, and move the well location to an
> > area that the guy can't use for anything else, which is usually a boggy area
> > or a prairie dog town. We also end up paying him a pretty fair chunk of
> > change, building him a road, new fences and providing all sorts of other
> > *favours* while the contractors are out there with their D9 Cats and other
> > heavy earth moving equipment. This is, of course, passed along to the
> > consumer.
> >
> > Now that we're about 2 1/2 years into getting this field online and we've
> > acquired the leases and a surface agreement access and drilling permits from

> > the various bureaucracies, we've tested everyone's water wells within 1/4 mile (and will do so again after the well is drilled), we've been excoriated by environmental *activists* at public hearings and now it's time to drill the well. Now depending on how deep this well is, the drilling rig that they will be bringing in to the location will probably rent for anywhere between \$10,000.00 to \$12,000.00 per day if the well isn't a deep one.....but first we need to get it permitted through the oil and gas commission of the state where it is located and make sure that we can build our access road through the swamp or ravine ridden and useless area that the landowner allowed us to pay him to use, even though the evil oil company had the right to put in it in an area where it would have been much more economical to build, so after finding a place for an entranceway with an acceptable line-of-sight that will meet state or county requirements for a well access road, we lay down very expensive petromatas a road base and start pouring gravel. The road is going to end up being about 30' wide because we find out that because now that it's starting to snow, the area has become so muddy that a 20' wide road will not support the tonnage of the drilling rig in the mud, so we pay the landowner more money than we are not required to pay for the additional width this road will need and build the road. The road is around 1000 feet long and costs around \$70,000.00 due to the amount of base we have to use because the gravel that we pour just keeps sinking to the center of the earth and even petromat won't do the job completely. Then the rig starts up. If things go well, the initial drilling is done completion is made within 10 days working 24-7. then the well needs to be frac'ed or cavitated, so there's another 21+- days paying Halliburton, Bechtel and Schlumberger to bring their specialized equipment out to complete and log the well. So now we've spent around \$1,000,000.00 for the rig and the specialized crews and equipment to complete and log the well. This is all

> > passed along to the consumer.
> >
> > OK.....so it's a good well and there is evidence enough that other wells
> > in the area will be productive enough to pay out within two-to-three years
> > so we drill two more just to make sure of the boundaries of the field.
If
> > these look good, it's time to start negotiating for drillistes, access roads
> > and pipelines to get the gas to market. This takes another two to three
> > years and involves accessing and drilling about 20 to 30 more wells and
> > putting together a pipeline infrastructure to get the gas to market.
Also
> > there will need to be compressor stations along this route and disposal well
> > facilities purchased and drilled to reinject water back into the water table
> > that is produced (this pertains to methane wells). The outlay for this is in
> > the multi-multi millions before the operator ever gets any revenue from
> > these wells (it's been 5 years now since we got going on this). Now it's
> > time to recover the costs of the wells (payout) before he sees any profit at
> > all in the meantime, the operator has already started up a new 5 year
> > program to get another field on line because he knows that within one year
> > of the initial production of these wells, some of them will be steadily
> > increasing in production for a few years before they go into decline while
> > other will have hit the point of diminishing returns and will be in decline
> > within the first two years. Still others may have not produced anything at
> > all (dry holes/dusters).
> >
> > The remainder would be relative to politics (especially the disastrous
> > Clinton administration) and how this relates to the decline of domestic
> > production during his administration and how this lost us 8 years and has
> > hastened a scenario that is playing out pretty badly because we needed to
> > put the Sadaam thing to bed in the mid 90's to stabilize oil prices and he
> > just wouldn't do it and he wouldn't do anything realistic to get the
> > domestic energy situation on track so here we are. This was no secret in
> > 1992. We are currently reaping the harvest of the Clinton administration
> > (non-energy) policies.....and I voted for the guy, twice, so I got

> > hosed, along with the rest of the country.....soooo.....I
already
> > hear the more socialist minded of us here thinking, hell man, let's
> > nationalize the minerals right now and things will surely get better. I,
and
> > every other contractor in this business would likely love
this.....but
> > the public certainly wouldn't.
> >
> > The same services would be needed to keep the domestic end of things
afloat
> > until a new generation of bumbling bureaucrats could take the reins. In
> > addition to things that I know that would still be necessary for the new
> > improved People's Energy CO-OP, right now, I spend a huge amount of my
time
> > keeping well access roads, drillsite locations and pipelines out of
your
> > back yard and out of *your* old growth forests and wetlands. I'm very
> > familiar with the bureaucratic hoops and environmental laws that protect
> > these things. Those laws would probably fall by the wayside if the
*People's
> > Geologist* told the *People's CO-OP* that *the people* needed the
resources
> > in certain areas so if the industry was nationalized, rather than taking
the
> > time to deal with this red tape, *I, the people* could just tell you to

> > off and when the *People's Geologist* determined that there was oil,
gas,
> > coal, helium, uranium or oil shale on *our* property and since you just
> > happen to occupy *our* land, along with your families, I could just give
you
> > a call, tell you "Hey dude.....we need to borrow your space for the
> > remainder of your natural lifetime and we'll be by tonight to talk to
you
> > about it" and the locate a *people's* gas well/strip mine etc. in your
back
> > yard and use your driveway to get to it.
> >
> > Hell.....my job would be soooo much easier and I could probably triple
my
> > billing. I'll be retiring within 10 years and it would probably take
about
> > that long to put together an alternative system that was even marginally
> > efficient enough to keep domestic production going so I'd be damned busy
and
> > what ya gonna do if I say I ain't coming in to work today unless you pay
me

> > \$2000.00 per day? You gonna throw me and every other person who knows how to
> > actually get this done in jail? We're not going to do you much good sitting
> > there.
> >
> > I have a friend who just returned from China and this is *exactly* how it
> > works there, and not just with their fledgling gas industry. It also is
> > happening with their burdgeoning road building, skyscraper building and dam
> > building projects. The contractors with the expertise are getting paid
> > millions by the government and the people who live on the land and have no
> > private property rights are just told to get the hell out of the way with no
> > compensation offered at all. It's the same with PEMEX in Mexico and the
> > national oil concerns in Venezuela, Bolivia and Brazil. I've been there and
> > seen how it works up close and personal.
> >
> > The scenario of nationalizing our mineral resources would be sort of like
> > the reverse scenario of the Soviet bureaucratic apparatchik's taking over
> > private enterprise there after the fall of the totalitarian
> > government.....the private enterprise specialists could take over the
> > bureaucracy and could pay themselves whatever they want with *your* tax
> > dollars, because, after all, it's *your* country. Hell.....people like
> > me could even get someone else to pay my health insurance! ;o)
> >
> > The very specialized personnel at Schlumberger, Halliburton, Bechtel etc.
> > who know how to recover oil, gas, etc.....would likely love this because
> > they could tell the government exactly what they wanted in order to get this
> > work done (much more than they can do now) and the government (you and I)
> > would have to pay even more for it than we do now because they are the only
> > ones who know how to keep the industry going. You'd likely have someone like
> > Ken Lay in charge of the whole thing too. Now I guess we could subcontract
> > our drilling operations out to the French, Russians, Venezuelans, Saudi's or
> > Chinese. They would surely give us a break.

> >
> > I think this is definitely the way to go.
> >
> > <http://www.humaneventsonline.com/article.php?id=3942>
> >
> > Power to the people dude!
> >
> > I have lived in Mexico for extended stretches and have seen this debacle
up
> > close and personal.....but seriously.....my point to this is
that
> > we would not have cheaper fuel by nationalizing. . I don't like getting
> > hosed at the pump any more than anyone else.....and I apologize for my
> > ascerbic tone. The more you know, the easier it is to get sarcastic
about
> > it.
> >
> >but in spite of what you may have read, Clinton lost us 8 years
of
> > domestic production. That's a fact. I was there ;o)
> >
> > "Dedric Terry" <dterry@keyofd.net> wrote in message
> > news:C0B33FF7.1344%dterry@keyofd.net...
> >> Doesn't sound good for GM, but I'm sure they'll pull it out to the tune
of
> >> 10-20,000 layoffs.
> >>
> >> I wonder if the oil companies would chip in part of their multibillion
\$\$
> >> profit margins to keep the country from sinking into hard recession
like a
> >> rock in a bathtub if by chance GM, a few airlines, and a host of
"smaller"
> >> businesses that are on the edge at the moment go under.
> >>
> >> Nah. Not in a million. The price of a gallon of gas would just go up
> > since
> >> there is an infinitesimal chance the flood of people at the
unemployment
> >> office could cause a breeze that might be felt at one or two offshore
> >> drilling rigs. I noticed prices went up here over the weekend. Must
have
> >> been a rain shower in the gulf, or a CEO watched a Discovery Channel
> > special
> >> on the odds of an asteroid destroying Earth.
> >>
> >> Cynical? Who, me? ;-)
> >>

> >> Regards,
> >> Dedic
> >>
> >> On 6/12/06 10:20 AM, in article 448d9439\$1@linux, "DC"
> >> <dc@spammersinhell.com> wrote:
> >>
> >>> Dedic,
> >>>
> >>> GM is swimming in red ink. They may actually go under. If there
> >>> was such an engine, they would have it out in a heartbeat, and if
> >>> they didn't Toyota and Honda would. No one can keep these guys
> >>> from innovating, which is why GM is in such trouble now.
> >>>
> >>> DC
> >>>
> >>> Dedic Terry <dterry@keyofd.net> wrote:
> >>>> I completely agree. I remember when I was a kid (in the 70's -
> >>>> dating
> >>>> myself) reading about a 60mpg gas automobile engine developed by a
> >>>> guy
> > in
> >>>> the 60's, but bought up by an oil company or major auto
> >>>> manufacturer...
> >>>> still haven't seen one.
> >>>>
> >>>> I'm sure board room conversations revolve around euphemisms such as
> >>>> "deliberate progress", "cost effectiveness", "feasibility studies",
> >>>> "manufacturing viability", or "legacy support". Okay the last one
> >>>> was
> > when
> >>>> Bill Gates was taking a tour of Ford's headquarters...
> >>>>
> >>>> Regards,
> >>>> Dedic
> >>>>
> >>>> On 6/12/06 5:04 AM, in article 448d4a42\$1@linux, "John" <no@no.com>
> > wrote:
> >>>>> I don't buy the "this is why it's taking so long". They just don't
> > want
> >>> us
> >>>>> to have it. I'm sure they could deliver a solution by next quarter
> >>>>> if
> >>> they
> >>>>> wanted to.
> >
> >
