

From: BLM_WY_Casper_WYMail
Sent: Wednesday, January 11, 2012 8:27 AM
To: Robinson, Michael D
Subject: FW: Deeply concerned about what LUCA et. al. is promoting to do in Wyoming

From: [E-mail withheld as requested]
Sent: Tuesday, January 10, 2012 7:44 PM
To: BLM_WY_Casper_WYMail
Subject: Deeply concerned about what LUCA et. al. is promoting to do in Wyoming

BLM_WY_Casper_WYMail@blm.gov

Dear Sir / Madam,

Could the BLM answer questions concerning LUCA's application for a microbial methane process in Wyoming. Their process was posted on the internet in December at http://www.blm.gov/wy/st/en/info/news_room/2011/december/06bfo-roughdraw.html.

The reason for this note is because of the information outlined in the Post-Script-email below.

The three (3) questions are:

(1) Is it correct that LUCA has proposed that 1% of the injection fluids would be comprised of their nutrient-mix, which would be approximately 1.8 barrels per day when injecting 180 barrels of water?

(2) Might it be possible that the nutrient-mix that LUCA would dump into the fresh water zones near Gillette would be comprised of milk, fruits, meats, and vegetables as their recipe at the following link seems to propose?

The nutrient-mix that LUCA plans to use are listed below in Table 3-1 and are found on page 19 of 27 pages on the BLM's info link at > <http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/bfodocs/rough-draw.Par.37463.File.dat/PODaddendum.pdf> < .

(3) Is it true that LUCA has proposed that each well would only produce an average amount of methane of 1.6 mcf per day, which at today's prices would be worth approximately \$5 to \$8 per day?

Thank you for your help in this matter.

[Name Withheld as requested]

xc: posted at Gillette News Record blog at

<=> http://www.gillettenewsrecord.com/stories/Luca-wants-to-proceed-on-methane-farming,64677?content_source=&category_id=&search_filter=luca+tech&event_mode=&events_from=&list_type=&order_by=&order_sort=&content_class=&sub_type=stories&town_id= <=>

Table 3-1:

Nutrients used followed by its = Nutrient Common usage analogy

Vitamins and minerals

Calcium (added as calcium chloride) = Milk

Magnesium (added as magnesium chloride) = Vegetables, cereal

Phosphate (added as magnesium phosphate, phosphoric acid, calcium phosphate, sodium phosphate, potassium phosphate, or sodium tripolyphosphate) = Milk, cheese, meats

Potassium (added as potassium chloride) = Milk, fruits, vegetables

Vitamin B-12, niacin, thiamin, riboflavin, biotin, pantothenic acid, folate = Many foods, human vitamin supplements

Multi-nutrients

Casein hydrolyzates = Special dietary foods as a protein source

Yeast extract, brewer's yeast, soy protein, peptones = Food flavorings

Cell vitality enhancers

Glycerol = Many prepared foods

Weak organic acids (and sodium, potassium, calcium and magnesium forms) =

Formic: fruits, honey; Acetic: vinegar;

Propionic: butter, cheese;

Butyric: butter, cheese; Lactic: yogurt, cottage cheese;

Decanoic: added to coat fruits and vegetables

Glyceryl triacetate = Food additive

Ethyl lactate = Wine, fruits, chicken

Polyoxyethylene = Sweeteners

PS The reason for this note is because of the attached email below.

Deeply concerned about what LUCA et. al. is promoting to do in Wyoming

Good Neighbor,

I am writing this note to you since I know you are knowledgeable about how we should all work

'Green' venture.

(Note: 180 bpd X 300 wells X 365 days = 19,710,000 barrels per year)

II.

The additional gas income would be insignificant in comparison to the significant costs of the project, and the additional gas income would be equivalent to one oil well that would produce less than 12 barrels of oil per day from several hundred wells.

A Quote from LUCA's proposal: "The Rough Draw Unit Area contains 283 wells. Of that total 228 are in areas with federal coal and private gas. Based on prior testing of our technology in this area, we expect that in the first year, our technology will increase production from those wells by an average 1.6 mcf/day. A simple calculation of 228 wells x 1.6 mcf x 365 days x \$0.08 = \$10,652. Luca proposes to post \$10,652 as the initial bond payment for this permit to cover the first year's production."

(Note: The 1.6 mcf per day would produce an insignificant \$5.20 per day per well, whenever LUCA could sell this high-H₂S gas at \$3.25 per mcf. The \$5.20 per day per well times the 228 wells would produce income similar to several hundred wells making only twelve barrels per day for all of them, and will never profitably pay for the millions of dollars invested to purchase the wells, especially since a significant number of these wells are apparently currently uneconomic and should be immediately plugged in order to reduce future environmental risks.)

III.

Because Luca's previous 'Green' Bank Loans of over 20 million dollars will never profitably pay for Luca's present salaries, Luca's future golden parachutes, a capital cost of \$360,000 to dump in the nutrient mix, as well as the project's other purchase and developmental and plugging costs, therefore since June of 2011 Luca has been attempting to raise up to \$125 million in an initial public offering of common stock.

Sources:

I. [>From page 19 and 21 of 27 pages at: <>
<http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/bfodocs/rough-draw.Par.37463.File.dat/PODaddendum.pdf> <> Also at page 6 of 23 pages at: <>
<http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/bfodocs/rough-draw.Par.49821.File.dat/Exh2-RD-UICappl.pdf> <]

II. [>From page 1 of 2 pages at: <>
<http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/bfodocs/rough-draw.Par.82263.File.dat/Exh5-bond-amount.pdf> <]

[Name Withheld as requested]

PS. I would welcome a dialog via questions and facts about how we all can work to better protect our drinking water resources.

Attributed to Edmund Burke: “All that is necessary ...”