

ION GEOPHYSICAL CORP  
Form 4  
November 23, 2015

**FORM 4**

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
LAPEYRE JAMES M JR

(Last) (First) (Middle)

2105 CITYWEST  
BOULEVARD, SUITE 400

(Street)

HOUSTON, TX 77042-2839

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
ION GEOPHYSICAL CORP [IO]

3. Date of Earliest Transaction  
(Month/Day/Year)  
11/20/2015

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director  10% Owner  
 Officer (give title below)  Other (specify below)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code V Amount (A) or (D) Price			
Common Stock	11/20/2015		P	389,300 A 0.4712	8,719,645	I	Shares held by Laitram, LLC
Common Stock					1,654,113	D	
Common Stock					10,500	I	Co-Trustee for Children
Common Stock					492,752	I	Joint account with adult

Common Stock	492,752	I	child (J) Joint account with adult child (K)
Common Stock	505,533	I	Joint account with adult child (S)
Common Stock	450,100	I	Shares held by S&J Lapeyre LLC

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474  
(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Owned Following Transaction (Instr. 5)
				Code	V (A) (D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
LAPEYRE JAMES M JR 2105 CITYWEST BOULEVARD SUITE 400 HOUSTON, TX 77042-2839	X			

## Signatures

Rebecca F. Sacco,  
attorney-in-fact

11/23/2015

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

This transaction was executed in multiple trades at prices ranging from \$0.4356 to \$0.5000, inclusive. The price set forth above reflects (1) the weighted-average price per share. The reporting person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer full information regarding the number of shares and prices at which the transactions were effected.

### Remarks:

The reporting person disclaims beneficial ownership of all securities shown as indirectly owned by him.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. while retaining an 85% working interest and operatorship. REFSA will be carried by Gran Tierra Energy during drilling of the Proa.x-1 well. In the event of success, Gran Tierra Energy will be reimbursed for all of the costs incurred during drilling from 50% of the net production assigned to REFSA.

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So as you can see, we've achieved outstanding operational progress and results during the quarter. Successful testing of oil from Costayaco-5 has the potential to significantly add to the total reserve potential of the Costayaco field, which has already grown significantly in size as delineation drilling has shown in the first half of 2008. With our first produced oil on the nearby Azar Block, and the promising testing taking place in the Rio Magdalena Block, and exploration drilling continuing in Argentina, we expect the coming quarters of this year to prove to be very exciting for Gran Tierra.

Moving now to the Solana transaction:

As many of you will recall on July 29<sup>th</sup> we issued a release indicating our intention to bring Solana Resources and Gran Tierra Energy into one company. By coming together we expect the transaction will create a much more substantial company in a consolidating global industry while preserving Gran Tierra Energy's operating leadership. The combination creates a company with a 100 percent working interest in one of the most important oil discoveries in Colombia in recent years. The combined company will have a working interest in 26 blocks of land, 24 of which will be operated by Gran Tierra Energy. This prospective land base will encompass 7.1 million gross acres, or 6.2 million net acres, across three countries - Colombia, Peru and Argentina.

Pro-forma proved reserves, based on YE2007 numbers for the respective companies and the Costayaco mid-year reserve update, will total 18.4 million barrels of oil equivalent, the vast majority consisting of light sweet oil. The anticipated combined production of 15,000 barrels per day by year end 2008, and the potential cash flow growth from the combined companies will fund continued exploration on the resulting company's overall land position, in addition to increasing the capability to undertake much larger and material new venture initiatives in the future. In consolidating our premium light oil asset in Colombia, we launch a substantive, well financed, South American entity with an enviable land position, outstanding cashflow, no debt, and a portfolio of exploration opportunities across the risk and reward spectrum.

In summary you can see we've had a very busy quarter with our activity level and our levels of production continuing to grow.

Before we open the call up for questions, I'd like to take this opportunity to thank all of the staff at Gran Tierra Energy for their hard work; without their dedication, none of this could happen. I would like also like to thank you, our shareholders and associated stakeholders, for your continued support. Our performance in for the first half of 2008 can best be characterized with three words - growth, value, performance. We intend to live by these words throughout the remainder of the year and beyond.

That's the end of our prepared statements. I would now like to open the call to questions. Operator may we have your assistance please?

**Operator:**

Ladies and Gentleman if you wish to ask a question please press "\*" followed by "1". If your question has been answered or you wish to withdraw your question press "\*" followed by "2". Questions will be taken in the order received. Press "\*" "1" to begin.

And your first question comes from the line of Neil Dingman of Dalhman Rose. You may proceed.

**Neil Dingman:**

Good morning guys, nice results. The beginning of my question refers to Costayaco-5, now that you're seeing decent shows up there will you keep drilling the plate more as delineation or, once 6 and 7 are drilled, will you start to go back and fill in. What is the plan after 6 and 7?

**Dana Coffield:**

After 6 and 7 I suspect, most likely, it will be a full blown development drilling campaign. That assumes we figure out how the large the field is at that time. To date because of the permitting for drilling locations we've actually had a mix of development and delineation drilling but we certainly need to define how big this field is as soon as we can so that we can commit to a full field development plan. My expectation is that we'll have it delineated with the next couple of wells and it will be a full field development through 2009.

**Neil Dingman:**

Ok so at that point you would decide how many rigs, etc.?

**Dana Coffield:**

Correct.

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**Neil Dingman:**

Ok, and then obviously the Palmera sounds quite good. You are 40% interest there, is that correct?

**Dana Coffield:**

That's correct.

**Neil Dingman:**

As far as plans after this well, has anything been decided yet?

**Dana Coffield:**

We shot a 3-d seismic program last year on a prospect and the plan is still to drill an exploration well in this coming exploration period. So we are developing plans for an exploration well on the block.

**Neil Dingman:**

Around these Costayaco wells, what is your comment these days on rig availability, tubulars, that sort of thing?

**Dana Coffield:**

Our rig availability remains tight and I expect it will remain tight in the future. As you know, Columbia has generated a huge amount of interest. Exploration activity continues to grow in the country so there will be continuing demand growth for rigs. We do see continuing growth in rigs being brought into the country and we are being proactive in identifying rigs for our future needs. So to date it hasn't been a problem and our intention is, of course, for it not to be a problem going forward. So we are working on that.

**Neil Dingman:**

My last question is how long are any expectations as far as when you'll have the Solana properties fully incorporated? When you start looking at your '09 plan have you decided on which of theirs you would drill versus some of these other blocks that you already had?

**Dana Coffield:**

I expect we'll have the full portfolio of opportunities ranked by the end of this year. Obviously our blocks and Solana's blocks each will have individual work program commitments that we cannot change but above and beyond that, by the end of this year we will be making decisions on which prospects we want to pursue aggressively and which we do not.

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**Neil Dingman:**

Ok guys, sounds like you have a lot to do. Thanks again.

**Dana Coffield:**

Thanks for your call.

**Operator:**

And your next question comes from the line of Ian Macqueen of Macquarie Capital. You may proceed.

**Ian Macqueen:**

Hey guys. Congratulations, good quarter. Just wanted to ask you a few questions. One of the things that has been made public was an exit rate in 2008 of 15,000 barrels a day after royalties. Firstly, can you give us an average royalty? A lot of that is skewed towards Costayaco so it would be in the 8% percent range, but do you have a before royalties number that that would equate to? And secondly can you give us a little bit more guidance on the milestones that have to be achieved to get to that 15,000 barrels a day?

**Dana Coffield:**

I don't have a hard before royalty number but it might be around 18,000. Ballpark, that is not an exact number. The milestones to get there involve... Well, we just completed the pipeline from Costayaco to the existing pipeline system so that will have to be up and running which we expect to happen imminently. We will also have to have truck loading facilities completed at Santana, and unloading facilities at Orito. In addition we will have to have truck loading and unloading facilities at Uchupayaco and Neiva. So I would assume that we have trucking operations in Orito and trucking operations to Neiva completed.

**Ian Macqueen:**

Quickly, how much production a day is going by truck to Neiva?

**Dana Coffield:**

Between 3,000 and 5,000 barrels a day.

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**Ian Macqueen:**

And the rest of it goes through the pipeline and additional trucking capacity going to Orito?

**Dana Coffield:**

Correct.

**Ian Macqueen:**

And that trucking capacity there I believe would be 3,000 barrels a day?

**Dana Coffield:**

Yes.

**Ian Macqueen:**

And is there any potential, aside from average delays and timing on getting things all organized, is there any potential for delays to the exit? What is your biggest risk in not getting to 15,000 barrels a day?

**Dana Coffield:**

It's really the trucking efficiency on the road system. And I believe the Neiva segment would be the biggest efficiency risk. Facilities construction is really not an issue.

**Ian Macqueen:**

Ok, that's good to hear. Following up on Neil's question, I wanted to know with the combined Solana-Gran Tierra companies how many rigs would you actually have under contract?

**Dana Coffield:**

More or less two. There would be one rig in the Llanos Basin and one rig in the Putumayo Basin.

**Ian Macqueen:**

If you needed to you could move both to Putumayo I suppose?

**Dana Coffield:**

Yes we could do that or bring in other rigs.

**Ian Macqueen:**

Ok, that's great. Thanks guys, appreciate it.

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**Dana Coffield:**

Alright, thanks.

**Operator:**

Your next question comes from the line of David Dudleyke of Thomas Weisel. Please proceed.

**David Dudleyke:**

Hi good morning everyone. Once again great results. Couple questions of detail, firstly on operating costs. If my math is correct the operating cost per post royalty barrel for Q1 was of the order of about \$9.90 and change. By my math the operating cost this quarter on an enlarged production basis is about \$12.00 per post royalty barrel. You guys have always been kind enough to provide some operating cost estimates by block in the back of your various presentations. On a weighted average basis the operating costs inferred by your presentations would stand quite a bit lower from that reported in Q2. Could you perhaps provide some color on what I see as an uplift in unit operating costs?

**Martin Eden:**

Yes the average for the quarter combined was \$12.04, that in Columbia was \$8.75 which is a little bit higher than in our presentations. But that was kind of an estimate so this is what we are coming in at. There is a little bit of trucking in there as well, about 70 cents trucking. The rest is the actual costs that we experienced. As we continue to grow we expect the per unit cost to decline.

**David Dudleyke:**

Ok, moving to the tax. This follows on from a previous conversation we've had here with yourself Martin. At a corporate level you've done a great job in terms of reducing the tax rate from what I inferred from Q4 last year and Q1 of this year in the 50% level at the corporate level down to the 37% reported. Can we expect any further modest improvement in the corporate tax rate? Perhaps down to what I believe is the marginal tax rate of 33% in Columbia, given that most of the earnings are coming out of Columbia?

**Martin Eden:**

We are trying to improve our tax efficiency so we will try but hopefully we shouldn't be paying any more than 33%. So we are working on that right now.

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**David Dudleyke:**

You would be comfortable with 33 being used as a forward number or could that be a few percent below what you think you are likely to achieve?

**Martin Eden:**

That is our tax rate but obviously we have some additional tax depreciation in Columbia but we are also subject to U.S. tax. So I would just stick with that rate for the time being.

**David Dudleyke:**

Martin, you made mention of the fact that you have a call option on some warrants and that you said that you made no decision as to whether to force the exercise. I may have missed the number, how many warrants are outstanding in the \$1.05 tranche that you could, if wished, press the button on?

**Martin Eden:**

There are about 13.7 million shares that would be issued on the exercise of those warrants. So that's what we are talking about, about 13.7 million shares.

**David Dudleyke:**

Ok fair enough. Moving to the operations, others have asked about rig capacity. If I recall Solana has a rig drilling the Los Aceites well and I recall that that was on a 1 plus 1 contract. I presume that, assuming the merger goes through, that will be assumed into the Gran Tierra portfolio?

**Dana Coffield:**

That's correct.

**David Dudleyke:**

That's all the questions I've got. Once again, great quarter.

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**Operator:**

And your next question comes from the line of Paul Weiner of Wachovia Securities. Please proceed.

**Paul Weiner:**

Thank you. I have two questions. Can you talk a little bit in detail about the cap on the price of oil in Argentina? How does that work going forward and with that kind of a number what is the attractiveness of drilling in Columbia? That's one question and the second one is: on your Solana acquisition, are a lot of the projects they have there pretty far along in terms of seismic evaluation?

**Dana Coffield:**

So the first question, in Argentina the federal government controls the price of oil, gas, and refined products. And the price of oil is capped so what the producers can receive is capped at \$42 per barrel. So obviously investments in Argentina are not as attractive as investments say in Columbia or other parts of the world. So the bulk of our capital program is in fact going into Columbia. There is a lot of potential in Argentina in terms of resource potential, but at this time it doesn't make sense to pursue that given the current fiscal structure. We expect that at some point in the future the fiscal terms will change and improve given that Argentina is now a gas importer and poised to be net oil importer. Our activity there is essentially maintaining our position and its option value in the company. We have a very large prospective land position there which we hope to capitalize on in the future but at this time it's basically monitoring, or maintaining our position there with the expectation of future improvement in the fiscal environment. I think your second question had to do with Solana and do we have the ability to continue developing those lands....

**Paul Weiner:**

No I want to know how advanced are their other projects?

**Dana Coffield:**

The have a complete suite of different projects at different levels of maturity from prospects that are ready to drill right now to leads and prospects that need some additional seismic to bring them to a drillable stage, as well as some longer term exploration projects that will take more time to mature. So like Gran Tierra's portfolio they have a portfolio of different types of opportunities at different levels of maturity, some ready to go right now for drilling, others that will take more time. So it's a diverse portfolio.

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**Paul Weiner:**

Is there any synergy at all between the properties of both companies? Is there an area that would make the price more interesting to look at first if you both have properties near each other?

**Dana Coffield:**

The number one property in common between the two companies is the Costayaco field which is the vast majority of the value of the two companies. So that's where the major synergy comes from, having one company, one operating team, managing and developing that field. We do have one other common property on an immediately adjacent block, the Guayayaco Block where we had another discovery last year called Juanambu So there will be some efficiency there as well but most of their land is in a different basin, most of their land is in the Llanos Basin in eastern Columbia where Gran Tierra does not have a position. And they have a block in the far north in the Catatumbo Basin and another block in the lower Magdalena Basin, and again Gran Tierra does not have acreage there.

**Paul Weiner:**

So the combined company will have a lot more places to look?

**Dana Coffield:**

Correct. A lot more places to look in Columbia, a much larger land position, and our teams that are in Columbia very much complement each other. We will be bringing their team on board and utilizing their expertise and their basins, our expertise and our basins to continue building the company.

**Paul Weiner:**

Thank you.

**Operator:**

Your next question comes from the line of Brian Cooney of Kingsford Capital. Please proceed.

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**Brian Cooney:**

Thanks, good morning. Dana or Martin I am not sure, if you can just confirm the revenue sharing agreements with the ANH that governs the Chaza Block. If you can just confirm where the break point is in the agreements and what the percentage changes to at that break point.

**Dana Coffield:**

Ok with the ANH contract on the Chaza Block it's a sliding scale royalty. Below 5,000 barrels a day the royalty is 8%, and then from 5,000 to 125,000 barrels a day the royalty increases from 8% to 20%. And then there are a couple of additional step changes, when production is over 600,000 barrels a day then the royalty is 25%. There is a summary of the royalty breakdown in our corporate presentation on our website under the Investor Relations page. And that particular contract would be on page 23. We have fiscal breakdown of each of our increasing assets in the back of that presentation, one page for each asset.

**Brian Cooney:**

Great, I guess the main bullet point there would be the 5,000 barrels per day. I know you're averaging right now around 4,100 from the presentation. Have there been production days so far that have gone over the break point?

**Dana Coffield:**

There may have been individual days. I believe it's a one month average that is used to determine the rate, I believe.

**Brian Cooney:**

Ok great. I guess the second point is on the Uchupayaco pipeline. There was a release from last week, an update that the pipe extension had been completed to Costayaco. I just wondered if there was any update that I was being tested as of last week.

**Dana Coffield:**

The pipeline is finished. What is happening as we speak is the documentation has been submitted to the regulators and we are just awaiting their approval to turn on the taps.

**Brian Cooney:**

Can you speak to the capacity bottleneck that's there? I guess if you can specify where that bottleneck is downstream from Uchupayaco to Santana to Orito. And also how this capacity was increased recently? When this had come up in the past the capacity was quoted as 7,000 barrels per day and we are seeing it now at 8,500. I'm just wondering if you could speak to how the capacity was increased?

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**Dana Coffield:**

There are 3 pieces to the pipeline system. The first you just asked about, from Costayaco to Uchupayaco. The second piece is from Uchupayaco down to Santana, which is where we currently sell our crudes. Then Santana west to Orito would be the third piece. That's the real bottleneck of today, that east-west segment from Santana to Orito. That increase in production you just asked me about is because we actually did some more testing on that line and it was determined that that line actually had more capacity than we had originally suspected.

**Brian Cooney:**

And could you just speak to what production is going towards that 8,500 barrel per day capacity. Which currently producing fields are being sent through that line?

**Dana Coffield:**

All the fields on the Guayayaco Block, all the fields on the Santana Block, the Costayaco field, and there is just one minor field, there is a little bit of truck production from another operator but it's a negligible amount. So the bulk of the production is the Santana Block, the Guayayaco Block, and the Chaza Block.

**Brian Cooney:**

Ok great, so that is where we get the trucking numbers that you were mentioning earlier?

**Dana Coffield:**

We will have to bring in trucks as Costayaco continues to grow.

**Brian Cooney:**

Ok great, thanks very much.

**Operator:**

And our next question comes from the line of Lee Wagner of Wagner Resources. You may proceed.

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**Lee Wagner:**

Good morning gentleman, I'd just like to revisit the pipeline again. There were some discussions before, and it's not your pipeline, but there were some discussions that you are prepared to build a pipeline from Santana to Oritos. What would be the capacity of that line and is there any other further capacity problems going to the discharge points on the shore.

**Dana Coffield:**

Let me answer the second question first. It's our understanding that the spare production capacity that the Trans Andean pipeline, today is about 45,000 barrels a day. And it's our understanding that it can be increased if we rebuild, or put in a pumping station along that system.

**Lee Wagner:**

And how much capacity does that accept from GTE/Solana in the capacity that's available?

**Dana Coffield:**

Well, 45,000 barrels a day.

**Lee Wagner:**

Oh ok, that would be your production that would go through that line?

**Dana Coffield:**

Yes. How much capacity are we going to build? We are still working on that, we don't have a hard number yet. The first segment we just finished building had 25,000 barrels a day of capacity and given the reserve report, clearly that's going to be sort of a base case.

**Lee Wagner:**

So your expectation is that the Santana - Oritos pinch point will be solved by the end of 2009?

**Dana Coffield:**

Yes that is correct, end of 2009.

**Lee Wagner:**

Ok, thank you.

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**Operator:**

And we have no further questions on the line at this time. I would now like to turn the call back over to Mr. Dana Coffield.

**Dana Coffield:**

As before, I just want to thank our audience for their interest in the Gran Tierra story. It obviously continues to evolve over time with continuing drilling success and we appreciate the support of all of our stakeholders. Thank you very much.

**Additional Information**

Shareholders are urged to read the joint proxy statement/management information circular regarding the proposed transaction and the registration statement filed on Form S-3 by Gran Tierra when they become available, because they will contain important information. Shareholders will be able to obtain a free copy of the joint proxy statement/management information circular, as well as other filings including the registration statement on Form S-3 containing information about Gran Tierra, without charge, at the Securities and Exchange Commission's internet site <http://www.sec.gov>. Copies of the joint proxy statement and the filings with the Securities and Exchange Commission that will be incorporated by reference in the joint proxy statement and registration statement on Form S-3 can also be obtained, without charge, by directing a request to Gran Tierra at 1-800-916-4873.

The respective directors and executive officers of Gran Tierra and Solana and other persons may be deemed to be participants in the solicitation of proxies in respect of the proposed transaction. Information regarding Gran Tierra's directors and executive officers is available in the 2007 Annual Report on Form 10-K/A filed with the Securities and Exchange Commission by Gran Tierra on May 12, 2008, and information regarding Solana's directors and executive officers will be included in the joint proxy statement/management information circular. Other information regarding the participants in the proxy solicitation and a description of their direct and indirect interests, by security holdings or otherwise, will be contained in the joint proxy statement and other relevant materials to be filed with the Securities and Exchange Commission when they become available.

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