Reference Letters

Letters, memos, excerpts, references and other relevant documents on Terra Energy & Resource Technologies' exploration industry position
1. Almazy, Ltd. Diamonds, Russia. Statement of acceptance of work.

Statement

of acceptance of the work under the Contract for creation (transmission) of scientific and technical products

27.03.2001

"ALMAZY LTD." (Israel), referred hereinafter as the "Customer" represented by its General Director I. Marelus, on one hand, and Institute of Geoinformational Analysis of the Earth (Liechtenstein), referred hereinafter as the "Executor" represented by __________________________, on the other hand, have signed the Statement to confirm the results of the work performed under the Contract for creation (transmission) of scientific and technical products dated ____________ 2001 r.

The Customer accepts and the Executor passed the following stages of work:

1.1. Valuation of diamonds capacity of Perm region according to topographic bases on the scale 1: 200 000 on the base of the certain mode;

1.2. Adaptation of the certain predicted model to the conditions of Perm region according to topographic bases on the scale 1: 25 000 for prior areas of Vyshersky ore district;

1.3. Predicated valuation of diamonds capacity of Vyshersky ore district (according to topographic bases on the scale 1: 25 000) on the territory of not less than 1 square meter on the base of the adapted model and comparison to the data available;

The substance and the volume of scientific and technical products prepared for the Customer under the indicated stages of the Contract, as well as the terms of the stages satisfy the requirements of the Customer completely.

Signatures of the Parties

The Customer

The Executor
Об анализе участков в Саудовской Аравии

Уважаемый Иван Григорьевич!

Мы благодарны Вашей компании за представленные результаты первого этапа исследований блока А, позволяющие более объективно оценить перспективы нефтегазоносности этой территории.

Для принятия решения по продолжению исследований по проекту Рияд, а возможно и по работам в других регионах, нам необходимы Ваши предложения с оценкой стоимости.

Ио. Вице-президента

А.И. Копесников
Доктору Р. Розенбергу

Об использовании технологии компании Terra Insight Corporation для изучения Блока A, Риад (Саудовская Аравия)

Уважаемый доктор Розенберг!

Наша компания заинтересована в методике и технологии предлагаемых Вами работ на территории Саудовской Аравии. Прошу Вас предоставить нам Ваш вариант прогнозного районирования Блока A, Риад (Саудовская Аравия) с целью оценки и принятия решения о применении технологии вашей компании на изучаемом участке.

Начальник УГИ

С.В. Матышов
Директору компании TERRA INSIGHT CORPORATION

И.Г. Ройляну

No 1603 Date: 27/07/2005 To: Director of Terra Insight Corporation
Mr. Ivan Railyan
Re: Analysis of the Saudi Arabian Parcels

Дорогой Иван!

Мы благодарны Вашей компании за представленные результаты первого этапа исследований блока позволяющие более объективно оценить перспективы нефтегазоносности этой территории.
Для принятия решения по продолжению исследований по проекту о возможно и по работам в других регионах, нам необходимы Ваши предложения с оценкой стоимости.

We thank your company for furnishing us with the results of the fist phase of the block research, which enables us to more effectively estimate the oil bearing perspective of the territory.
In order to make a decision regarding further project research, and possibly regarding work in other regions, we require your price proposal.

Ио. Вице-президента

A.I. Колосников

Acting in Capacity of VP SIGNATURE A.I. Kolesnikov

Исполнитель:
В.Г. Пашков
Тел. 15-55
RESUME

In 2000-2001 the company "Kadada" from Penza city fulfilled practical geophysical researches of the certain part of Penza region in order to discover the hydrocarbon deposits.

The previous prognosis regarding presence of oil-and-gas on the territory of Penza region was made by Institute of Geoinformational Analysis of the Earth under the direction of Mr. V.T.Zhukov, member of the Academy. The work were based on use of the new prospective method of structure-metrical analysis carried out on space photographs got by space satellites of the Earth.

In accordance with the recommendation of Institute there were conducted seismic prospecting works, which were concentrated in two areas. As the result there were found and prepared two structures for the following deep boring exploration.

The surface of the oil-and-gas structures each was equal to 5.5 x 4 km. The amplitude came to 25-35 m juggling by the reflective horizon.

There were determined reef-types structures with volumes of traps, which exceeded 1 mld. cub. meter.

Geological resources of hydrocarbon deposits were confirmed by geophysical researches up to the level of 85-90%.

On the base of conducted researches with the use of the technology presented by Institute we received concrete practical results. That helped us to reduce term and cost of the project aimed at exploration of hydrocarbon deposits as much as in several times. Company "Kadada" believes that this method is very valuable for prospecting of mineral deposits and deserved the wide practical use.
Reference

To whom it may concern

"Kostromageophysika" company was conducted the verification on two geophysical anomalies #15 and #21 in Pensa District in order to make exploration of the presence of gas-and-oil. This work was carried out according to the order of the "Kadada" Company, from Penza.

Basis for making the estimation of the availability of the hydrocarbons deposits in the mentioned anomalies sections was grounded on the conclusion done by the Institute of Geoinformational Analysis of the Earth under the direction of member of the Academy Professor Vladimir T. Zhukov. The Institute recommended the guiding trajectories of researches to "Kostromageophysika" company. As a result, according to the data obtained during the study of the first seismic profile, which was fulfilled in the latitudinal direction through the arch of supposed upheaval, in the beginning of 2001 there was discovered the object of "reef" type, situated in carbonate depositions of Late Devonian. The prospective amplitude of "reef" came practically to 60-100 m. As to superincumbent and underlying depositions there were traced a certain structure (bend) with the amplitude of 10-15 m.

During 2001 "Kostromageophysika" company carried out a detailed work on prospecting profiles in volumes of 340 linear km on the territory of Kamovar.

Seismic prospecting in the western half of the anomalous zone #21 and in the southern part of anomalous zone #15 concerning reflective horizons of Carboniferous, Devonian and the surface of the crystalline basement were resulted in the conclusion that the possible geological resources in total coming to 20-25 mln ton.

"Kostromageophysika" company underlines that thanks to the prognosis made by the Institute they could get a real economy of strengths and expenditures, as well as significantly reduce the term of completing the work.

General director

V.M. Kirillov
June 11, 2007

To: Mr. Ivan Raylyan
Chairman
Terra Insight Corp.

Re: Block 5, Syria

Dear Sir:

This letter serves as a formal farm-out offer to your Company to join Hunt-Middle East Corporation in an oil & gas exploration-development-production project on Block 5 in the Syrian Arab Republic.

Confidential

Last but not the least, Sir, Hunt-Middle East Corporation welcomes the idea of using modern oil & gas exploration techniques developed by your company on Block 5 project, which as we hope should be to the benefit of both parties.

In anticipation of your earliest possible response I remain

Sincerely Yours,

Nelson Bunker Hunt
President & C. E. O.
Objet : Résultat forage sur site de TENGHRADA

En référence aux éléments de compte rendu fourni par le Ministère de Mines et de l’Industrie (MMI), s’appuyant sur le bilan de la mission des experts russes de l’institut d’analyse d’informations géographiques (IG) pour le compte de la société EMIRATIE BELHASSA international, le forage sur le site de TENGHRADA a été réalisé et a donné les résultats suivants :

- Position du forage : 13°00’39’’ W
  20°45’60’’ N
- Profondeur forée : 304m
- Diamètre foration : 12” 1/4 ; 8 et 7” 1/2
- Débit estimé : 30 à 40 m3/h
- Conductivité : 1300 à 1400 µS/cm
- Nature géophysique des éléments rencontrés : grès, grès quartzite très dur
  Perlites aux couleurs différentes.
- 1° venue d’eau à 2.20 nappe alluviale
- 2° venue d’eau à 10m puis arrêt à 13m
- 3° venue d’eau à 73m et très importante jusqu’à 150m

Résultat prélèvement en eau mesuré sur chantier à partir de 250m de profondeur

<table>
<thead>
<tr>
<th>Désignation élément</th>
<th>Résultat obtenu en mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfate (SO₄)</td>
<td>0</td>
</tr>
<tr>
<td>Fer (Fe)</td>
<td>0.4</td>
</tr>
<tr>
<td>Chlore (Cl)</td>
<td>200</td>
</tr>
<tr>
<td>Nitrates (NO₃)</td>
<td>0</td>
</tr>
<tr>
<td>Ammonium (NH₄)</td>
<td>0.001</td>
</tr>
<tr>
<td>Manganèse (Mn)</td>
<td>0.04</td>
</tr>
<tr>
<td>Nitrites (NO₂)</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Echantillonnage en cours d’analyse au laboratoire :
- 1.5 l d’eau
- 250 échantillons de Cuttings prélevés tous les mètres.
Russian Scientists Find Underground River in Sahara Desert

Russian scientists have discovered an underground river in the Sahara Desert, announced Valery Tutykhin, the director of the Institute for Geoinformational Analysis of the Earth, at a press conference today. According to Tutykhin, the Institute was working for an oil and gas concession in Mauritania in North Africa. At the Mauritanian Government's request, the Russian geologists undertook a search for underground fresh water reserves. The drilling was carried out by Mauritanian military engineers.

Tutykhin announced that, at the point identified by the Russian geologists, a hugely powerful underground river was discovered at a depth of 250 metres below a thick layer of volcanic rock. Three diamond drill bits were required to drill through the rock. 600 litres of water flow out of the ground each minute, which adds up to 38 thousand litres per hour. According to Tutykhin, the reserves are enough to meet all the fresh water needs of the nearby town of Atar, which has a population of 50 thousand. The reserves are also strategically important for the republic.

Anatoly Puchko, the head of the research group and deputy director of the Institute, said that the discovery of water beneath hard volcanic rock could be explained by an eruption of lava several thousand years ago, which followed the course of a powerful river, forcing it underground.

© &lt;http://www.rosbalt.com' target= blank&gt;RosBalt

Read more news
Российские ученые нашли в Сахаре подземную реку

Российские ученые с помощью уникальной технологии - дистанционного зондирования земной поверхности из космоса - обнаружили подземную реку в пустыне Сахара на территории Мавритании.

Найденные запасы способны обеспечить все потребности в пресной воде расположенного близ скважины 50-тысячного города Атар, сообщили ИТАР-ТАСС руководитель московского Научно-исследовательского центра геоинформационного анализа Земли Валерий Тутихин.

В конце марта этого года российские специалисты центра, где разработана эта технология, по просьбе правительства Мавритании провели на территории этой североафриканской республики дистанционное зондирование земной поверхности из космоса с целью поиска подземных запасов пресной воды и обнаружили воду в провинции Вараан неподалеку от города Атар.

В июле при бурении в точке, указанной специалистами центра, на глубине около тридцати метров был обнаружен водный поток. "Результат полностью удовлетворил заказчика. Однако мы предложили мавританским коллегам продолжить буровые работы, так как, по нашим прогнозам, на глубине порядка 250 метров, под покрышкой из твердых вулканических пород проходит значительно более мощный водный поток", - рассказал Валерий Тутихин.

Российским специалистам удалось убедить руководителей проекта не останавливать работы и добурить до 250-метровой отметки, несмотря на то, что при прохождении твердых пород были сломаны три алмазные буровые головки.

Практические результаты бурения ошеломили мавританцев. Под толщей вулканических пород был открыт подземный поток колоссальной мощности - 32 тысячи литров в час.

Найденные запасы воды способны не только обеспечить потребности населения Атара, но и имеют важное стратегическое значение для всей страны, большая часть территории которой занята песчаными и каменистыми пустынями Западной Сахары.

Как заметил один из участников проекта, "такой фонтан в Сахаре - это настоящее чудо света".

По мнению российских ученых, нахождение воды под твердыми вулканическими породами можно предположительно объяснить тем,
что в доисторические времена извергающаяся лава обрушилась на русло крупной реки, поток которой вследствие этого ушел под землю.

Каталог NEWSru.com:
Информационные интернет-ресурсы

Досье NEWSru.com:
Наука и технологии // Исследования // Земля

Кто души не чает в чьих, тот и в кризис... не скучет!
www.TeaIaza.com

Уроки Иврита Онлайн
Эффективное, быстрое обучение языку Для дополнительной информации
www.bibleonline.com
7. Mezhregiongaz. Oil and gas, Russia. Memo of satisfaction.

Dear Sirs!

In 2002 - 2003 the Scientific and Research Centre of Geoinformation Analysis of the Earth (Moscow) performed the of assessment of oil and gas bearing capacity of certain prospects of interest to our company in the European region of Russia, using its proprietary technologies involving the processing of remote Earth sensing data.

We confirm that we were satisfied with the outcome of the Centre's work and its economic benefit for our company.

Yours faithfully,

R.N. Baiguzin
To
Institute of Geoinformation Analysis

Dear Sirs

We are glad to inform you that, under our agreement with the Institute, the job performed to Petrobras, 1st stage of a survey based on your own Sputnik Prospecting technology in 2 areas, on shore – Uruçu, Amazon and offshore, Aracaju, Sergipe area, was analyzed yesterday by Petrobras specialists, and preliminarily accepted.

It was recommended to check the results with the available seismic data from both areas. As soon as that task is concluded, Mr. Ivan Raylyan, Chairman, will be invited to come here, for discussing the next step, a contract between the Institute and Petrobras.

Best regards,

[Signature]

Icoplan - Internacional de Consultoria e Planejamento S. A.
Pedro Celestino da Silva Pereira Filho
Diretor Presidente
О методике «Дистанционного зондирования и метрического анализа земли»

28 октября 2003 года в Департаменте недропользования и сырьевой базы ТЭК Минэнерго России специалистами НИЦ ГАЗ была проведена презентация метода «Дистанционного зондирования и метрического анализа земли», разработанная и опробованная в НИЦ ГАЗ.

Были представлены возможности применения технологий, позволяющих использовать материалы дистанционного зондирования земли в интересах топливно-энергетического комплекса, включая оценку запасов, мониторинг, геологоразведку.

Информация принята к сведению и, по нашему мнению, может заинтересовать нефтегазодобывающие компании отрасли.

Руководитель Департамента

В.С. Акимов

Исп. Н.В. Лаевская
710-59-02
Акт № 1 от 02 ноября 2001 г.
сдачи-приемки научно-технической продукции
по контракту № 00853 от 24.08.01 г.

"Обоснование перспектив нефтегазоносности лицензионных участков в Пермской области
и Республике Коми на основе использования методов структурометрического анализа
данных космической и аэрофотосъемки"

Мы, нижеподписавшиеся, представитель Исполнителя, Глава Представительства в
РФ Института Геоинформационного Анализа Земли (Лихтенштейн) Райлян И.Г., с одной
стороны, и представитель Заказчика, Первый Заместитель Генерального директора ЗАО
"ЛУКОЙЛ-ПЕРМЬ" Лобанов В.А. с другой стороны, составили настоящий акт в том, что
Исполнитель сдал, а Заказчик принял предварительные результаты комплексных
исследований структур № 6 и 10 на территории Пермской области (Альбом – схемы и
таблицы – 1 экз.) и лицензионной площади ООО "ПАРМА-ОЙЛ" на территории
Республики Коми (Альбом – схемы и таблицы – 1 экз.), цифровые карты местности (на
CD - дисках) – 6 (шесть) шт.

Стоимость выполненных работ составила 120 000 (Сто двадцать тысяч) долларов
США, в том числе НДС – 20 000 (Двадцать тысяч) долларов США, удерживаемый
Заказчиком на территории РФ.

Работу сдал:
от ИСПОЛНИТЕЛЯ:
(подпись, печать)

Должность Ф.И.О. Ответственного исполнителя

Работу принял:
от ЗАКАЗЧИКА:
(подпись, печать)

Должность, Ф.И.О.,
руководителя подразделения
ЗАО «ЛУКОЙЛ-ПЕРМЬ»,
курирующего работу
To: Terra Insight, 99 Park Ave 16th Floor, New York NY
Attn: Mr. Ivan Raylian, Chairman
RE: Completion of drilling project of prospect delineated by Terra in Yellow Sea

September 25, 2006

Dear Mr. Raylian,

As per your inquiry, this letter is a quick summary of the project following the completion of drilling of the Magpie Well at the well site BL 2-2.

The well located in Block 23 of West Sea Korea, 40 km west of Gunsan Port was spudded on January 4, 2006 in the location suggested by Terra’s technology and reached TD of 2450 m. As you know, the well planned to test six potential hydrocarbon zones.

Unfortunately, we were unable to acquire seismic due to the fishing industry’s restrictions and other regulations. Drilling in these waters is a very seldom occurrence. We had many drilling complications mostly related to the drilling company’s shortcomings. Due to limited stratigraphic and drilling information within this area and for safety reasons, the Chinese government-owned Shengli Offshore Drilling Company used very heavy drilling fluids, which made it almost impossible to detect oil shows. The DST process followed SINOPEC’s standards, which turned out to be improper for the area. Although these circumstances and an enormous pressure from the government, which inconveniently realized we were getting close to potentially making a well, stressed us and made us incur high overruns, the final DST indicated for a high probability of HC’s.

The well was logged by Halliburton Logging Services Indonesia, and several zones, most of which were predicted correctly by Terra as per the cross section you supplied to us prior to drilling, were recommend for further testing.

Halliburton and our geoscientists reported that the hydrostatic pressure higher than the formation pressure, due to heavy mud, was the likely explanation for the lack of oil shows during the drilling.

We did not make the well mostly due to the incompetence of the drilling company and the government interfering with our license for political reasons.

Your prediction was accurate and was of great value, considering the true wild-cat nature of this well.

I thank you very much for the work well done. If you need any references, feel free to supply my contact information.

Sincerely,

Lee, Sang Gu
CEO & President

Gyeon Building 9F, 73-10
Namhun-Dong, Sangoam-Gu, Seoul, Republic of Korea
+82 2 720 3030 (I)
+82 2 3473 0170 (F)
TO: Dr. ROZENBERG Roman / CEO of Terra Insight Corporation
E-FAX: +1.917.591.5988
FROM: Mr. LEE, Sang Gu / President of GAE
Date: 2005/08/20

Dear Sir,

Hereby Geoinformational Analysis of the Earth Co., Ltd. apply for render of consulting assistance in connection with the start of prospecting drilling in area 2-2 on the shelf of Yellow sea under the analytical prognosis executed by the Institute of Geoinformational Analysis of the Earth in 2004.

We would like to ask your favor to conduct additional study of the area and to confirm the point of drilling once again as well as to create a workgroup, which in a real-time mode can analyze and make recommendations on the course of drilling, which beginning is planed for the end of October beginning of November, 2005.

Sincerely,

Sang Gu LEE
President of KGAE
Dear Mister Chairman,

Based on the results provided to us by Institute of Geoinformational Analysis of the Earth, Lichtenstein, our company has decided to move forward with the drilling on Block 2-2, off-shore Kunsan. We would like to ask you to recommend to us a possible contractor to design and execute an off-shore drilling program. We are prepared to provide all necessary information available to date concerning geological and geophysical properties of Block 2-2, off-shore Kunsan after reception of an official request for technical information needed. Also, we are prepared to conduct negotiations with the Institute of Geoinformational Analysis of the Earth for quality control assistance during all future phases of the project.
Dear Dr. Agaian,

Nurmunai Petrogaz LLC has received the extended report and all of the supporting materials in connection with the STEP® analysis of 14,000 square kilometers of our license territories, performed as Phase 1 of the recent service contract we granted to Terra Services, Inc.

Your report was fully accepted by our geological and geophysical staff and its findings were found to be extremely useful. Our specialists and geologists agree with the conclusions of your report and were excited to have noted that it correlates to the extent of as much as 80% with the preliminary in-house geological assessments and data on Nurmunai Petrogas’s license blocks. At the same time the results of Terra’s studies are significantly more detailed as compared to all up to date exploration data obtained by the Company.

We would like to inform Terra Insight Services, Inc. that we are ready to proceed with the second phase of your studies – analysis of the anomalies via your proprietary geochemical technology, as soon as the weather conditions and field staff arrangements permit.

Best Regards,

Sincerely

Zharas Akhmetov

General Director

Nurmunai-Petrogas, LLC
February 10, 2009

MEMORANDUM of APPRECIATION

FROM: Semmous Lion Mining Ltd.
TO: Terra Insight Services, Inc.

Dear Dr. Agaian and Mr. Vilbaum!

Here, at Semmous Lion Mining, we’ve always appreciated and valued our exceptional business relationship with Terra Insight Services, Inc.

By writing this letter I want you to know how pleased we are with the services provided by Terra and thank you for the expert advice we received from your work on our uranium exploration properties in the Republic of Niger.

The greenfield exploration is the most difficult phase in exploration mining --- by using the STeP(R) technology analysis we’ve been able to make a substantial progress in identification of a potential uranium deposit on our 7,000 sq km properties without tremendous amount of field work and excessive amounts of money spent.

The unique methods used in your STeP(R) technology rendered a tremendous merit in our exploration efforts.

On behalf of our shareholders, including the Groupe Atepa's Chairman I’d like to thank you for your proficient expertise, 'always-on' modus operandi and everything else you did to aid SLM's hard exploration work in the Sahara desert.

Respectfully,

Sergey Matveev
CEO, Semmous Lion Mining Ltd.
To: Terra Insight Services, Inc.
99 Park Avenue, 16th Floor
New York, NY 10016 USA

RE: Letter of Gratitude

Dear Dr. Agaian,

In response to the report, which Terra Insight Services, Inc. has submitted to AKTAU-TRANSIT, LLC on the STeP® studies of Tubedzhik and Zhangurshi oil fields, I am enclosing this letter of gratitude for your consideration.

As you know, our oil fields have had very limited shallow production of heavy oil and little, to say the least, upside potential. We came to Terra after having our share of unsuccessful drilling and well stimulation work. Our geologists were in favor your services, and I am excited to say that they were correct.

I would not overstate, if I told you that Terra redefined our oil fields, delineating new and deeper structures, reinterpreting existing seismic, and providing geological justification of our lack of success utilizing your STeP® technology.

I would also like to thank you for your professionalism in providing on-going curatorship of the project. We appreciate your timely good will study of the new drilling location.

Please accept my gratitude and best wishes,

Gulmira Koshakova
15. Jordan Newspapers on Terra’s presentation and work with the Jordanian government

---

**15. Jordan Newspapers on Terra’s presentation and work with the Jordanian government**

**Morale of the Day:**

Jordan’s economy is recovering from the recent challenges and is expected to continue growing in the coming years. The government has implemented several economic reforms to enhance the business environment and attract foreign investment. These efforts have been praised by foreign experts who believe that Jordan’s economy has the potential to become a regional hub for trade and investment.

---

**Newspaper Headline:**

"Jordan’s economy on the rise: reforms to boost growth" (Al-eージا)

---

**Al-eージa Article:**

Jordan’s economy is on the rise, with recent reforms in the business environment expected to boost growth. The government has implemented several measures to improve the ease of doing business, attract foreign investment and promote exports. Some of the key initiatives include:

- **Ease of Doing Business:** The government has significantly reduced the time and cost required to start a business and has improved the regulations governing foreign investment.
- **Tax Incentives:** The government has introduced tax incentives for foreign investors and has simplified the tax system to make it easier for businesses to comply with regulations.
- **Infrastructure Development:** The government has invested heavily in infrastructure development, including roads, ports and airports, to improve connectivity and facilitate trade.

These efforts have been praised by international experts who believe that Jordan’s economy has the potential to become a regional hub for trade and investment. However, challenges remain, including the need to diversify the economy and improve the skillset of the workforce.
المملكة توجه لاستخدام تقنيات الأقمار الصناعية في استكشاف مصادر النفط والغاز والمياه

الخريطة استكشاف النفط في المملكة

نودة تناقش دور الأقمار الصناعية في البحث عن الصادر الطبيعية

بردان: اقتصاد الحكومة للكشف عن النفط والغاز والمياه بالأقمار الصناعية
Statement

Is given to senior analyst Mr. Kondratov, that the research carried out by him on sorbed (adsorbed and absorbed) gases in soil samples from the exploration area of Tuyuntau (South Tajikistan) allowed to evaluate it as non-prospective for oil and gas accumulations.

Drilling results of deep parametric and exploratory wells (1, 2, 4, 5) in the area, which penetrated Paleocene, Lower and Upper Jurassic formations down to the depth of 5,652 meters, showed the absence of oil and gas in the tested section of the borehole.

No prospective sub-salt Jurassic formations have been discovered by drilling.

The Company's geology dept. head V. V. Popov

С П Р А В К А

Дана ст.н. сотрудникну ВНИИНЕОИФОРМСИСТЕМ т. Кondратову, в том, что проведенные им исследования по изучению сорбированных (адсорбированные и абсорбированные) газов пород на поисковой площади Туйунтау (Ю. Таджикистан) позволили оценить ее как бесперспективную на обнаружение нефтегазовых скоплений.

Результаты бурения глубоких параметрических и поисковых скважин (1, 2, 4, 5) на этой площади, вскрывших разрез палеогена, мела и верхней юры до 5652 м (скв. № 2) указали на отсутствие во вскрытой части разреза каких-либо скоплений нефти и газа.

Перспективные подсолнечные юрские отложения бурением не вскрыты.

Начальник геологического отдела объединения V. V. Попов
April 23, 2010

The Honourable Dr. Oteng Adjei
Minister of Energy
Accra

Dear Honourable Minister,

Support for the use of Remote Sensing and Satellite Imaging for Accelerated Development

We write in reference to the Companies Global Scan Technologies based in Dubai, UAE and Terra Energy and Resource Technologies of USA, who were directed to our Centre by your Mr. J Yaw Adjei-Appiah of the Ministry of Energy, on the 20th April 2010.

From our increasing knowledge, it is clear that remote sensing technology and satellite imaging provide significant benefits for Ghana’s emerging oil and gas industry and other sectors of the economy in terms of cost effectiveness, timely delivery of accurate data and information products for oil exploration, environmental monitoring and real time surveillance.

Our interaction with the group highlighted the successfully application of their technologies in Mauritania, Sierra Leone and other parts of the World, and revealed potential areas for cooperation in the oil and gas sector with public and private institutions in Ghana.

In our view, the technology presented by the Group will provide cost effective means for oil exploration with better success rate than conventional methods of gathering seismic data. It also offers the platform for monitoring marine pollution (e.g. oil spill detection), ground subsidence, and real time surveillance of our marine assets.

We consider this technology innovative in its design, and cost effective in its use.

We therefore support any effort to use remote sensing and satellite imaging technology as support systems for oil and gas exploration and for mitigating the negative impacts of its exploitation in Ghana.
In recommending the Group and its technology to the Ministry of Energy for Oil and Gas exploration in Ghana, we wish to state that collaboration with national institutions is essential for building the necessary capacity in country for the Oil and Gas sector.

Thank you Sir,

Yours faithfully,

[Signature]

FOSTER MENSAH
EXECUTIVE DIRECTOR

CC:  The Honourable Minister
     Ministry of Environment, Science and Technology
     Accra

     Chief Executive Officer
     Ghana National Petroleum Corporation
     Tema
Dmitry Vilbaum, CEO
Terra Energy & Resource Technologies, Inc.
99 Park Ave. New York, NY 11375

Dear Dmitry,

With this letter, I would like to give you an update on our project and also to thank you for the wonderful job performed by Terra Energy & Resource Technologies, Inc. on our ruby and gold prospect in Cambodia.

The Millennium has had a long business relationship with Terra as a market partner. We also became a client of Terra, awarding your Company with two exploration contracts in Cambodia (in marble, gold and rubies). The second project in exploration for gold and rubies has really taken off within the last few months of dry season here in Cambodia.

When Terra performed its first phase analysis and outlined the areas of interest, we were encouraged by your assessment of ruby and gold prospectivity and in December of 2009 ordered the second phase of the ruby and gold STep survey, also committing, as per our contract, to the total of 3% overriding royalty as well as a 10% co-investment right to Terra in addition to the cash fee. Only within a few months from the day we ordered the Terra survey, we received very concrete “marching orders” from Terra with the outlines of areas of interest, sampling locations’ coordinates, drillable targets, etc.

Our local geological staff had some reservations about relying on the accuracy of remote surveys. However, we were committed to working with you as a partner, believing in Terra’s capabilities and predictions. Our trust has paid off as Terra has saved us a lot of time, money and effort from years of geological mapping and sampling to simply deploying my geologists directly into the Terra-prescribed locations.

We followed your advice and initially tested the priority areas, which were outlined in your STep Phase 2 report. In the attached field work report, please find our geologists’ conclusions and findings drawn from the sampling and other geological work within the areas perimeters, recommended by Terra. As you can see from the report, our geologists confirm the Terra predictions and believe that the deposit is commercially viable with a minimum five year exploitation life.

We are extremely happy with the results of your work, quality of the report, and Terra’s professionalism. Lastly, it is common knowledge that alluvial deposits are extremely labor intensive, requiring massive amounts of time and effort of geological crews performing field work. We do not believe in existence of other technologies capable of finding alluvial deposits remotely and with such accuracy. We reinforce our commitment to the 3% royalty to Terra. I have been showing your report and promoting Terra here in Cambodia, including several discussions with the government.

I hope to be doing further business with Terra in the future.

Best Regards,

Dr. Robert Q. Lam, Chief Executive Officer
BÁO CÁO KẾT QUẢ CÔNG TÁC CAMBODIA 

1. Mục tiêu, nhiệm vụ: 1. Objectives and tasks - Survey of satellite images to investigate the area recommended by Terra and designated as No.2 (Terra projected highest gold and precious stones prospectivity).

Khảo sát phổ tra các điểm ảnh vệ tinh của Terra thuộc khu vực số 2 (khu vực mà Terra phát hiện có nhiều vàng và đá quý nhất).

2. Thành phần chính: 07 người.

- Vũ ngọc Sơn - Kỹ sư địa chất.
- Anh Đông - Kỹ sư địa chất.
- Trịnh Phước - Phản dịch, ngoại giao Cambodia.
- Bảo vệ: 01 người.
- Lái xe: 01 người.
- Lái máy đào: 01 người.
- Phản dịch, phụ việc: 01 người.

2. Kế quả công việc:
- Từ 23/4 đến 19/5: làm công tác ngoại giao với quân khu 5.

Trong khu vực này, các khu vực người Thái chưa khai thác đến còn nhiều. Các đồi bazan (1-3ha) chứa đá quý sơ bộ đếm được trên 10 đồi. Do thời gian hạn chế mới khảo sát chủ yếu khu vực bờ trái sông.

Một vài đồi thuộc bờ trái sông bị khai thác 1/3 đồi phía bờ sông (thuận lợi khai thác bằng sức nước). phần trên chưa bị khai thác.

Ở một vài vị trí quan sát thấy các thềm sông bậc I cũng chưa bị khai thác.

Trong quá trình khảo sát đã phát hiện một lòng sông rộng có diện tích 7-10 ha còn nguyên vẹn có chứa cả vàng, đá quý ruby. Khu vực này có khả năng có nhiều vàng chưa bị khai thác. Điều này tạo điều kiện cho các khu vực chưa khai thác của Terra có thể được khai thác trong tương lai.

3. Kết quả công việc:
- Từ 23/4 đến 19/5: làm công tác ngoại giao với quân khu 5.

3. Results of work:
- From 23/4 to 19/5: diplomatic work with five military districts.
- From 20/5 to 6/6/2010: universal survey investigating two areas.

Thai people have not untapped this area. The basalt hills (1-3ha) contain gems, preliminarily counted on 10 hills. Due to limited time, the new survey was mainly carried out on the left bank of the river.

A few hills on the left bank of the river represent favorable mining conditions; they have not been exploited. In some locations, the river shelf have not been exploited.

During the course of the survey, an ancient intact river bed (70-10 hectares) with both gold and ruby gemstones was discovered. This area can be mined for at least 5 years by industry standards. Many areas with coordinates recommended by Terra have not been surveyed yet.
In the area designated by Terra as SP2/P3, 20 samples of rubies (1-3mm), 01 ruby sample (3 x 4mm), with consistent content of gold flats (0.02 - 2mm) were found.

In the area designated by Terra as SP2/P3, 20 samples of rubies (1-3mm), 01 ruby sample (3 x 4mm), with consistent content of gold flats (0.02 - 2mm) were found.

Công trình đào tại khu vực SP2/P3 (diểm của Terra) đã thu được 20 hạt rubi (1-3mm), 01 hạt ruby (3 x 4mm), hầu như mâm đài nào cũng có vàng (0,02 - 2mm).

Ruby sample collected in SP2/P3 area

Ruby sample collected in SP2/P3 area
In the area designated by Terra as SP2/P5, 20 samples of rubies (1-3mm), 01 ruby sample (3 x 5 mm), with consistent content of gold flats (0.02 - 2mm) were found.

Mẫu ruby tại khu vực SP2/P5
Ruby Sample of SP2/P5 area
Tại khu vực SP2/P12 (diểm của Terra) - do công trình sập lở mạnh nên chỉ lấy được sái mặt. Dải thu được 04 viên ruby (1-3mm).

Mẫu ruby tại khu vực SP2/P12

Các mẫu vàng được đột này sẽ được chọn và chụp sau (bằng máy chuyên dụng). Sau đây là hình ảnh mẫu vàng của đợt khảo sát trước:

Vàng tuổi cao ở Samlout

Gold Sample
Through a number of documented examinations, the multi-spectral image analysis of Terra is to be trusted. Area No. 2 is the region with reserves of gold and precious stones of high concentration; many areas are still intact, enabling industrial exploitation of the area.

**METAL MINING CAMBODIA CO., LTD.**

Qua một số công trình kiểm tra cho thấy tài liệu ảnh đa phổ vệ tinh của Terra là tin cậy được. vùng số 2 là vùng có trữ lượng vàng và đá quý tập trung cao, có nhiều diện tích còn nguyên vẹn, có thể tổ chức khai thác công nghiệp ngay.

Phần bãi bồi lòng sông có chứa vàng, đá quý có thể khai thác tận thu bằng công nghệ tàu cuốc. Part of the river with alluvial deposits can be exploited via the dredging ship technology.

**Kế hoạch tiếp theo:** The plan is as follows:
- Hợp đồng với quân khu 5 để làm đường vào khu vực 2. - Contracts with 5 military districts to secure area 2.
- Xây dựng nhà xưởng, mua sắm thiết bị. - Construction of buildings, purchase of equipment.
- Ký hợp đồng với các nhóm tàu cuốc. - Sign a contract with the ship.
- Vận chuyển thiết bị từ Việt Nam sang. - Mobilization of equipment from Vietnam.
- Xây dựng bộ máy quản lý của công ty mỏ. - Build management structure of the mining company.
- Làm việc với quân khu 5 để mua lại các thiết bị khai thác của Thái Lan, sửa chữa và bổ sung. - Work with five military districts to purchase exploitation equipment in Thailand.

*Đồi bazan chứa đá quý người Thái khai thác hết 1/3.*
Basalt hills contain Thai gems mining off 1 / 3
Đồi bazan chứa đá quý chưa bị khai thác
Stone content in basalt hills has not been explored

Miệng núi lửa bazan chứa đá quý chưa bị khai thác
Gem content of the crater has not been explored
Ref.:

Thềm bậc I chứa đá quý chưa bị khai thác
Gem content have not been explored

Bề mặt lòng sông có chưa bị khai thác (7-10ha)
The surface of ancient river beds have not been explored (7-10ha)
Công trình khai đào bị sập lở mạnh
Excavation work collapsed

TP. Nông Penh, ngày 08 tháng 6 năm 2010
Người báo cáo

VŨ NGỌC SON

TP. Nong Penh, June 8, 2010
The report put together by:
VU NGOC SON
Conference program

Tuesday 14th June 2011

10.00 - 18.00 Registration of Participants & Decoration of exhibition stands

Wednesday 15th June 2011

08.00 Registration & Coffee

08.30 Participants to be seated for the Opening Ceremony

09.00 Visit of the Exhibition stands

10.00 Opening Ceremony

- Introduction to the conference by the Masters of Ceremonies:
  - Gilbert Temba, President of AZMEC
  - Nathan Chishimba, President of Chamber of Mines of Zambia

**Welcome Speeches: Successful partnerships in Zambia’s Mining & Energy Industries**

- Ian Maxwell, President BHP Billiton minerals exploration
- Kwalwala Lamaswala, Resident Director FQM
- Hon Maxwell M.B Mwale, MP, Minister of Mines and Minerals Development, Welcomes and introduces the President of the Republic of Zambia, Mr Rupiah Bwezani Banda for the opening address.


11.00 Coffee Break Sponsored by: Lumwana Mining Company

11.30 Session 1: investing in Zambia’s growing extractive industries

Chairperson: Trevor Simumba, Head of Africa, Maxwell Stamp Plc

- Zambia’s Investment Climate
- Mines and Mineral Act, the various types of mining licenses and Petroleum (Exploration and Production) Act and policies.
- Investment Incentives: Zambia’s new mining fiscal and regulatory regime
- China’s Importance to the African Resource Sector: Are we Partnering?

Speakers:
Thursday 16th June 2011

09.00 Session 5: Zambia’s Operating Mines: Case studies
- Kagem’s Zambian emeralds: adding a sparkle to the mining sector
- Konkola Deep Mining Project
- Lumwana Mines
- Current and Prospective Developments in the Global Copper Industry

Speakers:
- Ian Harebottle, CEO, Gemfields Plc - DOWNLOAD PRESENTATION
- Don Smale, Secretary General, International Copper study Group - DOWNLOAD PRESENTATION
- Adam Wright, Managing Director, Lumwana Mines - DOWNLOAD PRESENTATION
- David Armstrong, Country Manager, Konnoko Zambia - DOWNLOAD PRESENTATION

10.15 Coffee Break

10.45 Session 6: Zambia’s New Exploration Frontiers: upstream & downstream developments
Chairperson: Senior representative IHS
- The Regional geological setting
- Zambia’s Petroleum Potential : Update on upstream exploration
- The downstream sector developments: petroleum products & storage facilities

Speakers:
- Guy Phiri, Managing Director, Engen Petroleum Zambia Limited - DOWNLOAD PRESENTATION
- Nic J Money, Geologist, AZMEC - DOWNLOAD PRESENTATION
- Dr. Alexandre Agaian, President, Terra Energy & Resource Technologies, Inc - DOWNLOAD PRESENTATION

11.45 Session 7: Transport, Supply Chain & Logistics infrastructure: Projects in development & available solutions
Chairperson: Dr. S. Muradzikwa, Chief Economist, DBSA
- North-South Corridor
- Regional integration transport initiatives

Speakers:
- Prof. Godfrey Lungwangwa, Minister of Communication and Transport - DOWNLOAD PRESENTATION
- Arne Faye D’herbe, Director, SDV Mining, South Africa
- Benjamin Even, General Manager, Railway System

12.45 Questions and Answers

13.15 Lunch Sponsored by: BHP Billiton

14.15 Session 8: Adding value to Zambia’s mining industry: emerging trends and lessons from other developing countries
- How to encourage the local manufacturing of copper products (cables, rods, chemicals)?
- How can international investors assist local entrepreneurs and employees in the field of technology transfer?
- Local added value in mining operations: The Development of Zambia’s copper smelters
- Creation of manufacturing facilities for industrial minerals gypsum, phosphates, bentonitic, clays, fluorite, marble and barite
- How can Zambian entrepreneurs create mining service companies in Zambia

Speakers:
- Greg Hull, Senior Trade Commissioner, Sub-Saharan Africa, Australian Trade Commission - DOWNLOAD PRESENTATION
- Daniel Banister, Regional General Manager, Atlas Copco - DOWNLOAD PRESENTATION
- William Mumbi, Director of Gemstone College - DOWNLOAD PRESENTATION
- Carlo Cabrera, Managing Director, Zamefa Zambia - DOWNLOAD PRESENTATION

15.30 Coffee Break

16.00 BBC World Debate at MMIC
'Global Spending in 2011 on Advanced Oil & Gas Exploration Technologies Will Total $10.17bn,' Says Latest visiongain Research

PR Newswire

LONDON, September 23, 2011 /PRNewswire/ --


The Global Advanced Oil & Gas Exploration Technologies Market 2011-2021 is Visiongain's latest energy report, analysing how this important market will develop over the next ten years. The report quantifies the market in terms of global size and breaks the market down into seven regional markets with forecasts and analysis provided for each regional market from 2011-2021. The report also examines the major drivers and restraints influencing the market over the next decade and explains the major technologies used as well as contemporary innovations. Sub-market forecasts are also provided for the three most prominent exploration technologies. Visiongain research indicates that global spending in 2011 on advanced oil & gas exploration technologies will total $10.17bn.

Oil & gas exploration was once a painstaking, inefficient and time consuming activity. Prospectors looked for surface seepages from underground reserves, which occur only over a small proportion of deposits. Today, technological innovation allows more efficient management of fields and better evaluation of exploration prospects, reducing the need to drill numerous exploratory wells, thus saving money and minimising environmental damage. A combination of high oil prices, improved extraction technologies, increasing global energy demands, and supply concerns including declining production, depleting production fields, maturing reservoirs and increasingly more difficult frontier exploration - deeper, more complex and more remote - is creating new opportunities for growth in the advanced oil & gas exploration technologies market. As the need to find new oil & gas deposits increases, the exploration industry will be relentlessly driven toward the use of more advanced surveying methods, including seismic 2D, 3D and 4D imaging, Controlled Source Electromagnetics (CSEM) and Remote Sensing techniques.

Though the industry will be faced with the restraints of proving the effectiveness of some of the new technologies on a commercial scale, overcoming environmental concerns, and confronting a weak global economy, the advanced oil & gas exploration technologies market is likely to provide substantial opportunities for potential investors.

This report offers an examination of the advanced exploration technologies market over the next decade, providing detailed market forecasts for each of the regional markets and offering in-depth analysis of the opportunities and challenges facing companies in the advanced oil & gas exploration market throughout the world. The analysis and forecasting has been underpinned by extensive consultation with expert opinion. Within the report, you will read full transcripts of original and exclusive interviews with CEOs of two leading advanced oil & gas exploration technologies companies:

- Dmitry Vilaum CEO of Terra Energy & Resource Technologies, Inc.
- Martin Bett CEO of Stingray Geophysical Limited

The report also describes the most important technological changes within the advanced oil & gas technologies industry and assesses their importance for the growth of the market over the short and longer-term. The various drivers and restraints of the market are evaluated in order to provide readers with specific insights into the future direction of the advanced oil & gas exploration technologies market.

Visiongain's The Advanced Oil & Gas Exploration Technologies Market 2011-2021 report details the prospects for this dynamic energy sector with detailed forecasts from 2011-2021. The report will be valuable to those already involved in the advanced exploration technologies market or to those wishing to enter this important market in the future. The Advanced Oil & Gas Exploration Technologies Market 2011-2021 report includes 88 tables, charts and graphs quantifying and forecasting the market in detail, and provides information on the global markets, technology sub-markets and regional markets. In addition, the report offers profiles of 32 of the leading companies involved in the advanced oil & gas exploration technologies industry.

To see sample pages of the report please click on:
RE: Terra Insight Services, Inc.

To whom it may concern,

With this letter, I would like to provide Terra Insight Services, Inc. with a positive reference of Terra’s innovative STeP® and NAGS services. In 2010 and 2011, Petroquímica Comodoro Rivadavia (PCR) has completed the remote sensing STeP® surveys of three license blocks and the geochemical NAGS survey of one area in two provinces of Argentina. The license areas varied in size from approximately 200 to 4,200 km².

Terra’s report and associated digital materials were delivered properly and on-time. During the course of the work, the Company maintained proper communication with PCR’s management and geoscience staff. The STeP® and NAGS reports revealed interesting geological concepts about the areas of interest, which played a significant role in PCR’s understanding and further exploration of the areas.

Terra’s science provided an additional dataset and “another look” at some of PCR’s challenging exploration areas.

Terra’s process is professional and its communication with PCR was prompt and courteous.

PCR recommends Terra Insight Service, Inc. and its STeP® and NAGS technologies to any oil and gas exploration company.

Regards,

Eng. Miguel Angel Torilo
RE: Terra Insight Services, Inc. July 24, 2013

Dear Dmitry,

In response to your request, I am enclosing this letter of reference for your consideration. In July of 2005, the Ukraine-based company Kiev Investment Group (KIG), of which I was a partner and shareholder, ordered STeP® analysis of a license block in the offshore area of the Black Sea near Kerch.

The block was considered prospective, and we had substantial geophysical information. However, KIG planned to assess hydrocarbon prospectivity for the entire block, which would have been costly and would take longer time if seismic was used. Our strategic direction was to partner with an oil company or farmout the entire block completely based on the cumulative information of geology/geophysics and the data provided by Terra.

Your Company provided KIG with a number of substantial anticlinal structures that positively agreed with the seismic information. We were also pleased with your delivery of several unknown previously STeP-delineated prospects. Your survey helped complete our marketing package of the block and assisted KIG to farmout the prospect favorably.

Terra completed the work on time, and its report was comprehensive and professional. I would certainly recommend your organization to other exploration companies who want to supplement their G&G process with a quick and accurate early exploration STeP process.

Regards,

Alex Fedjaev
General Director, Nova-Eco LLC
To: Dmitry Vilbaum, CEO Terra Insight Services, Inc.

Buenos Aires, 12.02.2014

Dear Mr. Vilbaum,

In early 2013, the Joint Venture company of Unitec Energy and Oil M&S has completed the STeP® survey of two of our license areas covering approximately 17,000 km².

All of the deliverables that were set out in the contract were delivered in full and promptly. Moreover, Terra Insight Services, Inc. performed a series of additional services and types of analysis for the benefit of the project.

The license areas surveyed by Terra are geologically complicated with basalt cover and other subsurface conditions related to volcanism. Terra’s STeP® results were positively received by our geoscience staff; the proposed structures positively correlated with the limited seismic data.

Terra also helped map basalt on a 600 km² area as an advisory for seismic data acquisition.

The STeP report was thorough, its findings were correlated with the available geological and petrophysical information, and it was presented to our staff during a two-day in-office meeting.

Terra also assisted in making a MS PowerPoint presentation of the STeP findings, which was successfully presented at the oil and gas regulatory body of the Santa Cruz province. Unitec Energy is satisfied with the report’s deliverables in form and substance. We would highly recommend Terra Insight Services, Inc. to other oil and gas exploration companies.

Regards,

Juan Pablo Freijo
COO

Compañía General de Combustibles S.A.  Honduras 5663 piso 2º  (C1414BNE) Palermo  Buenos Aires, Argentina  Teléfono: +54 11 4849 6100  Fax: +54 11 4849 6131  www.cgc.com.ar
Letter of Recommendation

January 23, 2014

To Whom It May Concern

In December 2013, Terra Energy & Resource Technologies, Inc. (Terra) completed a six-month study for Kuwait Oil Company (KOC) on approximately 200 square kilometers in Northern Kuwait. Terra used its proprietary suite of remote sensing methodologies STeP®. The primary objective of the study was to delineate the areas of HC prospectivity, associated with specific horizons of stacked sands and assist KOC in selecting drilling locations.

Terra's STeP® analysis provided KOC with the mapping of several target areas of high HC prospectivity. Thereafter, and using prior well data on the study area, KOC confirmed that the areas delineated by Terra via STeP® are HC-prospective.

Terra presented its report to KOC and engaged with its geoscientists in a useful discussion on how STeP® results compare with KOC's model.

I would like to commend Terra on a job well done. Terra's STeP® results were accurate and professionally submitted. Terra made a significant contribution to KOC's knowledge of the area prior to additional drilling saving time and money.

Terra completed the survey on time and provided KOC with all the necessary cartographic and report materials.

I recommend without hesitation Terra and its STeP Technology to any E&P company looking for a cost-effective, professional provider of high-quality exploration targets.

Sincerely,

Khalid Ahmed
TPL Specialist Petrophysicist
Kuwait Oil Company (KOC)

Email: Kahlid.ahmed@kockw.com | Web: www.kockw.com
Tel: +965 238 71553 | Fax: +965 23989639
P.O Box 9758 | Ahmadi | Postal Code 61008 | Kuwait

www.kockw.com
March 3, 2016

THE CHIEF EXECUTIVE OFFICER
TERRA ENERGY & RESOURCE TECHNOLOGIES, INC
99 PARK AVENUE
16TH FLOOR,
NEW YORK,
NY 10016
U.S

Dear Sir,

RE: PROPOSAL FOR EXPLORATION SERVICES OF THE VOLTAIAN BASIN BY TERRA ENERGY RESOURCE TECHNOLOGIES, INC. USING ITS STEP® TECHNOLOGY AND ACHIEVING A MORE TARGETED AND EFFICIENT APPROACH AS COMPARED WITH SEISMIC DATA ACQUISITION OR SCOUT DRILLING

We write to thank for showing interest in doing business with us in the oil and gas sector in Ghana.

From your brief introduction, we have no doubt that the use of your Satellite-Based STeP® Technology to survey the sedimentary basins of Ghana will greatly enhance the search for the hydrocarbon potential in Ghana.

However, in order to fully appreciate the potency of the Satellite-BasedSTeP® Technology, we would appreciate if you could make a comprehensive presentation to our Technical Team on Tuesday March 22, 2016 at 10:00 am at the Petroleum Directorate’s Conference Room.

We look forward to a fruitful discussion with your team.

[Signature]

LAWRENCE APAALSE
DIRECTOR, PETROLEUM
for: MINISTER

Cc:
HON. DEPUTY MINISTER
CHIEF DIRECTOR
DIRECTOR PPME
DIRECTOR LEGAL
January 31, 2017

To whom it may concern,

This reference letter lists all the work and the statistics we achieved utilizing the STeP services provided by Terra Insight Services, Inc (Terra).

ATR Energy LLC (ATRE) is mostly a non-operating oil and gas company that screens and evaluates drillable prospects in the Gulf Coast United States onshore. We select oil and gas drilling prospects offered by reputable independent operators based on a rigorous due diligence process that consists of a world-class traditional G&G science and STeP evaluation offered by Terra. The STeP process is carried out only for the prospects and drillable locations that have passed the industry standard checks in order to further de-risk ATRE’s investments into drilling.

ATRE has been utilizing Terra’s STeP services since 2014. Initially, ATRE drilled four wells in Overton County, TN, where Terra helped select four drilling targets in a challenging sub-vertical fractures geological environment. Out of four wells, we discovered oil in one well, found gas in two wells, and one well was dry.

In Texas and Louisiana, we used STeP to evaluate 37 prospects previously approved for investment and drilling by our experienced geoscience team. Out of these 37 drillable prospects, Terra rejected 23 as potentially dry or uneconomic and 14 as positive drilling objectives. Out of 23 prospects rejected by Terra, 8 have been drilled to date, and all 8 wells were dry or uneconomic. Out of 14 wells, approved by Terra’s science for investment, 4 prospects have been drilled to date, and all 4 had hydrocarbons with: 1 well productive, 2 wells sub-economic due to high water cut, and 1 well being evaluated due to drilling complications and surface equipment failure.

Terra’s STeP process helped ATRE save significant funds on unsuccessful drilling (8 for 8 so far). While not all the wells approved by Terra may become commercial due to many factors that are beyond the scope of the Terra process, Terra enabled ATRE to avoid unsuccessful drilling while investing into productive wells.

In summary: I have witnessed Terra delivering consistent, statistically conclusive, and accurate STeP predictions of drilling success and failure that are superior to any traditional G&G norms. I wholeheartedly recommend Terra to any international or domestic company engaged in oil and gas exploration irrespective of the level of information or comfort rendered by the standard geological and geophysical processes.

Kind regards,

Juerg Hatz
Director
Mobile: +41-79-320-2088
info@aristaterra.com

ATR ENERGY, LLC
40 Richards Avenue, Suite 300, Norwalk, CT 06854
Ph: 203.202.7537  Fax: 203.487.7792  Em: info@aristaterra.com
www.aristaterra.com