

"PETROLEUM EXPLORATION AND PRODUCTION OPPORTUNITIES IN ALBANIA" (COUNTRY OVERVIEW)

2nd SE EUROPE REGIONAL UPSTREAM WORKSHOP "Hydrocarbon Exploration and Production in the Adriatic, Black Sea and East Mediterranean" Athens, GREECE 31 October – 1 November, 2013.

CONTENT

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CONCLUSIONS

I. REGIONAL SETTING

Albania is located in the Southeast of Europe.

Albania, by land, is bordered with Monte Negro in the North, Kosovo and "Former Republic of Macedonia" in northeast and east, and by **Greece** in the Southeast and South, whereas in the West it is bordered by the **Adriatic and Ionian Seas.**

Capital: Currency: Official language: Albanian Government:

TIRANA Albanian lek language **Parliamentary** republic, **Parliamentary** system **28.000** km²



It is about

II. LEGAL AND INSTITUTIONAL FRAMEWORK. (1)

The development and regulation of the petroleum sector is based on three main laws:

Law no.7746, dated 28.07.1993"The Petroleum Law (Exploration and Production)", as amended, which is harmonized with the Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons,

Law no.8450, dated 24.02.1999 "On refining, transportation and trading of oil, gas and their by-products", as amended. The provision of this law does not refer to a specific directive but is based on the legislation in force in some countries of EU (e.g. Greece) and in some directives as well.

Law No. 9946, dated 30.06.2008 "On the natural gas sector", as amended which is fully in compliance with: Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas. We have planed to amend this law in order to be fully in compliance with Directive 2009/73/EC of the European Parliament and of The Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC.

II. LEGAL AND INSTITUTIONAL FRAMEWORK. (2)

Concerning the activities in oil and gas sector, there are a number, beside these three main laws, of specific legal acts and secondary legislation that regulate specific aspects of activities related to ensuring:

- international standard on exploration for oil and gas
- more efficient exploitation of the oil and gas fields,
- production and trade of biofuels,
- fiscal policies,
- technical norms and standards for facilities and installations in the petroleum sector,
- regulating the relations for the construction and operation of relevant infrastructure,
- environmental issues
- etc..

If you are interesting for more details look at these web sides address: http://www.ligjet.org , and <u>http://www.qbz.gov.al/</u>

II. LEGAL AND INSTITUTIONAL FRAMEWORK. (3) (exploration and production)

- Law no.7746, dated 28.07.1993 "On petroleum (Exploration and Production)", as amended, created space and a bigger security for foreign investors in the exploration and production activities of hydrocarbons.
- The law recognizes that all petroleum reserves in their natural condition in strata lying, the jurisdiction of Albania, are the exclusive property of the Albanian State.
- The Petroleum law expressly permits Ministry to enter into Petroleum Agreement with any company which has technical capacity and financial one for exploration and production in a area, which has to be approved by the Council of Ministers.
- Contractors are granted exclusive rights for a period not more than 25 years to develop and exploit the petroleum reserves in the area of contract in accordance with the terms of a development plan approved by the Ministry responsible for energy, as well as to renew this right for another period as the agreement provides for.
- The Petroleum law contains other important provisions especially as to the protection of the environment and social rights of the communities in the area where an exploration and production activity is authorized.
- This law provides also for a stability clause which guarantees the contractors that any new law should not impact the economics terms of agreement. 6

II. LEGAL AND INSTITUTIONAL FRAMEWORK.(4)

- In 1994, the Albanian Parliament approved Law no.7811, dated 12.4.1994 "On the fiscal system of hydrocarbons sector" as amended.
- This law, which is a specific law applied only to the contractors operating in the petroleum exploration and production activities, created a greater security for private investors because, based on this law, all contractors were exempted from tax and other fiscal duties imposed by the Albanian state, and they would be subject only to the realized profit tax, it is at the rate 50%.
- Mineral rent tax (Roylty tax), is a tax provided in Law No 9975, dated 28.7.2008 "On national tax", as amended.

The Roylty tax is 10% of the sales revenues

III. GEOLOGICAL OVERVIEW (REGIONAL SETTING) (1)

From the geological point of view,

Albania is part of the Mediterranean Alpine Folded Belt and fits in the Dinaric-Hellenic range, between the Dinarides in the North and Hellenides in the South.

The geological structure constituting Albania is called the Albanides, a term widely used at home and abroad.

The Albanides are divided into - **INTERNAL ALBANIDES.** and - **EXTERNAL ALBANIDES.**



III. REGIONAL GEOLOGICAL SETTING (2)

The Internal Albanides are characterized by developed magmatism and by intensive tectonics which has led to the over thrust and tectonic napes.

The Internal Albanides consist of three tectonic zones, which from east to west are:

- the Korabi zone,
- the Mirdita zone

(the main ophiolite bearing zone),

- and the Gashi zone.

The two post orogenic sedimentary (intermountainous) basins respectively: **Burreli Basin** in the north and **Korca Basin** in the southeastern part of Albania, overlie transgressively the Mirdita zone and partially the Krasta-Cukali zone.



The main structural-tectonic units in Albanides

III. REGIONAL GEOLOGICAL SETTING (3)

The External Albanides on the contrary are characterized by the lack of magmatism and by more regular structural models but which are associated with considerable thrusts.

From east to west, the External Albanides is devided into the following zones:

-The Albanian Alps zone, -The Krasta-Cukali zone, -The Kruja platformic zone -The Ionian Zone and - the Sazani platformic zone

Northwards the overlying **Peri-Adriatic Depression (PAD)** masks the Ionian and, partly Kruja tectonic zones.

Westwards offshore, the Peri Adriatic Depression is unified with the South Adriatic Basin, which overlay the **Preapulian (Sazani zone)** and Apulia Platform.



The main structural-tectonic units in Albanides

III. REGIONAL GEOLOGICAL SETTING (4)

I-IGEOLOGICAL CROSS SECTION IN NORTHERN ALBANIA



I-II GEOLOGICAL CROSS SECTION IN CENTRAL ALBANIA



Geological – geophysical sections on the northern and central part of Albanides.

The relative movements of the Adriatic sub plate and the Euro Asiatic plate from Mesozoic to

Tertiary mainly controlled tectonic evolution of the Albanides where some tectogenic phases have been recorded in the Albanides during the period of time. Geological Cross Section Italy-Albania





The location of main existing oil and gas field in Albania

Albania was established as a Hydrocarbon bearing province as early as Roman times, when **heavy oil and asphalts of Selenica** mine were used for lamps.

In 1918 the first oil discovery was made in Oligocene flysch in Drashovica.

In 1927, 1928 respectively **Kucova and Patosi oil fields** related to Messinian clastic reservoirs were discovered.

Marinza, as the biggest oil field in Albania, related to Messinian-Tortonian clastics reservoirs was discovered in 1957.



Visoka, as the first oil field related to carbonate reservoirs, discovered in 1963, was followed by other discoveries such as: Gorishti (1965), Ballshi (1966), Finiq-Krane (1974), Cakran-Mollaj (1977), Amonica (1980) and Delvina (1987).

With the first Gas discovery (1963) in the Tortonian sandstone layers of Divjaka, other gas fields respectively: Frakulla (1972), Ballaj 1983, Povelca and Panaja gas fields in 1987 and Durresi (1988) were discovered.



Existing Oil and Gas Fields and exploration blocks in Albania

FIELD	DISCOVER	RESERVOIR	RESERVOIR	O/G GRAVITY	SULPHUR
	Y YEAR	TYPE	DEPTH (m)	(API)	CONTENT (%)
Drashovica	1918	Oligoc.flysch	100-200	Oil<10°	?
Patos	1927	Mess-clastics	Surf. To 1200	Oil (12-24°API)	2.5-6
Kucova	1928	Mess-clastics	Surf. To 1500	Oil (13-16°API)	4
Marinza	1957	Mess-clastics	1200-1800	Oil (12-35°API)	4-6
Visoka	1963	Cret/Eoc.Carb	800-1000	Oil (5-16°API)	5-6
Gorisht-Kocul	1965	Cret/Eoc.Carb	1000-2500	Oil (17°API)	6
Ballsh-Hekal	1966	Cret/Eoc.Carb	1000-3000	Oil (12-24 API)	5.7-8.4
Cakrran-Mollaj	1977	Cret/Eoc.Carb	3000-4500	Oil (14-37°API)	0.9
				Cond, 52 °API	
Finiq-Krane	1973	Cret/Eoc.Carb	800-2000	Oil (<10°API)	3.7-4.3
Delvina	1989	Cret/Eoc.Carb	2800-3400	Oil (31°API) Cond, 53°API	0.7
Divjaka	1963	Tort/clastics	2400-3000	Gas &Condens	Na
Ballaj-Kryevidh	1983	Plioc/clastics	300-1700	Gas	Na
Frakulla	1965	Mess/clastics	300-2500	Gas	Na
Povelca	1987	Mess/clastics	1800-3500	Gas &condens	Na
Panaja	1988	Mess/clastics	2500	Gas	Na
Ad-4 (offshore)	1994	Mess/clastics	2500-3100	Biogenic Gas	Na
				& Cond, 54.3 °API	
Sqepuri	2001	Cret/Eoc.Carb	4950	Oil (37°API)	2,3

A summary of the Exploration History in Albania

THE SITUATION OF ORIGINAL OIL IN PLACE AND CUMULATIVE OIL PRODUCED BY OIL FIELDS UP TO JANUARY 01.2013 According to ALBPETROL ESTIMATE (in ton)

	Oil Fields	Object (formation)	Original oil in place (ton)			Oil Production		Pomained
No			Geological	Recovered	Cumulative oil productied up to 01.01.2013	By geological rezervs, %	By recovered rezervs, %	recovered rezervs up to 01.01.2013
1	2	3	4	5	6	7	8	9
1	Cakran -Mollaj	ų	16127983	8144469	4204498.14	26.07	51.62	3939970.86
2	Ballsh-Hekal		19269224	6359844	5012903.56	26.02	78.82	1346940.44
3	Gorisht -Kocul		30500000	14674087	11896552.86	39.01	81.07	2777534.14
4	Karbunare	TO	411212	135700	93017.70	22.62	68.55	42682.30
5	Amonice	IES I	2835849	1503000	693632.40	24.46	46.15	809367.60
6	Visoke - Kolonje	Ž	28362316	6806956	6170990.96	21.76	90.66	635965.04
7	Delvine		335000	134000	19187.39	5.73	14.32	114812.61
8	Finiq -Krane		1027450	154117	9718.00	0.95	6.31	144399.00
9	Drashovica	Flish	80000	24000	8092.60	10.12	33.72	15907.40
	Total Limestone		98949034	37936173	28108593.61	28.41	74.09	9827579.39
1	S. Bubullima		1497393	494140	425576.70	28.42	86.12	68563.30
2	S. Marineza	SANDSTONE	42900000	8481394	8247378.40	19.22	97.24	234015.60
3	S. Driza		193134000	20058400	13886816.40	7.19	69.23	6171583.60
4	S. Gorani		20862520	2086252	590780.00	2.83	28.32	1495472.00
5	Kucove		78331796	11772485.69	4222522.70	5.39	35.87	7549962.99
6	Rase-Pekisht		1970400	197040	16790.50	0.85	8.52	180249.50
	Total Sandstone		338696109	43089712	27389864.70	8.09	63.56	15699846.99
	Total		437,645,143	81025885	55498458.31	12.68	68.49	25,527,426.38

First Offshore Bidding Round

In the offshore bidding round, the Albanian offshore was divided in 5 blocks with a total surface area of 11763 km² which were offered to the international oil companies. At the end of the round, 5 Petroleum Sharing Agreements were signed for 5 blocks offered, respectively.

Block Rodoni-1 to DEMINEX Co. (German) and OMW Co. (Austrian)

Block Adriatiku-2 to AGIP Co. (Italian)

Block Adriatiku-3 to Occidental Co.

(American)

Block Adrialtiku-4 to CHEVRON Co. (American)

Block Joni-5 to HAMILTON OIL Co. (Australiane)

The Albanian offshore was completely unexplored with a total absence of data.

Totol investment 147 Milion USD



R-1

First round onshore (1992)

In 1992, the First Exploration Round for oil and gas onshore was opened for blocks A,B,C,D,E, and F, of a total surface area of 4200 km². This round was declared closed in 1994 with the signing of three exploration contracts with production sharing for four blocks as follow:

- Blocks B and F to SHELL (Dutch)
- Block C
- to Ina Naftaplin (Croatian)

- Block E

to COPAREX International (French)

The studies made in these blocks have identified a series of formations of interest for oil and gas exploration, of which only one well has been drilled by Ina-Naftaplin without the target being reached.

Totol investment 45 milion USD



Second licensed round in Albania (onshore blocks, November 1995)

In following up the policy for the attraction of foreign investments in gas and oil exploration sector in Albania, in 1995, the Government of the Republic of Albania, through the National Petroleum Agency opened the Second Licensing Round for gas and oil exploration and production onshore, for a surface area of 22 400 km².

In conclusion, six agreements were signed in 1998, four of which are from the Second Round blocks and two blocks, A and D, from the First Round.



Totol investment during this round were about 70 Million USD



V. EVALUATION OF EXPLORATION IN ALBANIA (5)

Actually are under operation for the exploration oil and gas the following Petroleum Agreements:

- **Durresi block** offshore, with the company SANLEONE
- Joni 5 block offshore, with the company Medoil, which was bought by Cairn Energy company and the Agreement for this block is covered by the branch Capricorn Albania Ltd
- **D-E blocks onshore**, with company Petromanas Albania
- **Blocks 2-3** onshore, with company Petromanas Albania and SHELL
- Block F with Bankers-Petroleum.
- Block 2-3-4 offshore, with company Emanuel Adriatic Energy company

Until now in this activity is invested about **150 milion USD**



NR.	Company	Block	Effective Data	Investment in Million USD		
				Up to 2010	2011	Total up to 30. 06. 2013
1	San Leone	Durresi	Aug.2004	11,618.00	7,269.00	20.000
2	Capricorn	Joni 5	Aug.2007	9,441.00	188.00	9.600
3	Petromanas	A+B	Dec.2007 (From May 2013 these blocks are free)	4,758.00	887.41	5.600
4	Petromanas	D+E	Dec.2007	9,809.00	1,171.30	12.000
5	Petromanas and SHELL	2+3	July.2009	6,088.00	5,005.76	108.000
6	Bankers Petroleum	F	Dec.2010		1,454.00	5,000
	Total			41,714.00	15,975.47	160.200

Investment by current Exploration in Albania Bllock by the companies

Exploration Summary Blocks 2-3 & Blocks D-E



Blocks 2-3 Petromanas Energy Inc and SHELL

Shpirag-2 well (25% Petromanas+75% SHELL) $\Box 233 \text{ mmboe}^*$ \Box Rig released July 14 \Box Rigging up to test



Molisht-1 well (25% Petromanas+75% SHELL) \Box 142 mmboe* \Box Drilling, spud Aug 20

2D Seismic (25% Petromanas+75% SHELL) □440 km \Box Underway; 65% complete

Blocks D-E Petromanas Energy Inc

Paper-1E well (100% Petromanas)

 $\square 67 \text{ mmboe}^*$

□Awaiting extension approval

For more information please visit the web side http://www.petromanas.com



Albania: Drilling Shpirag-2 (25%)





Seismic Investigation in the Central Albania



Seismic Investigation in the North Albania



Seismic Investigation in the North Albania





Seismic Investigation in the Central and South Albania

2D Seismic line over the blocks 2&3





San Leon Energy Plc. owns a 100% interest in the Durresi Block, offshore Albania, which covers 4,200 square kilometers.

Following the 840 square kilometer Durresi 3D survey acquired in April 2011, San Leon has identified a number of highly attractive and material prospects totaling up to two billion barrels of oil equivalent.



A4-1X summary

The well has been drilled by AGIP/Chevron/Edison Gas at 1993 in offshore Albania. The main objective of the well was to test the HC potential of a buried carbonate hill at the margin of the Apulian carbonate platform. The reservoir rocks are thought to be Upper Mesozoic and Miocene platform margin carbonates. Secondary targets were the Miocene clastic sediments below the evaporitic sequence caused by the Messinian salinity crisis.

HC bearing levels were found in the:

-Post-Messinian (Post-Evaporitic) sequence; RFT results exhibited dry gas and gas (pressure) gradient
-Pre-Messinian (Pre-Evaporitic) sequence; RFT results exhibited light oil and oil (pressure) gradient matches with the oil gradient from the density of the oil sample
-Bituminous oil was noticed in vuggy carbonates from 3133m to 3162 Kb (Burdigalian), but movable oil was not evidenced



Durres Block, owns a 100% interest San Leon Energy Plc. A4-1X & Alban East Prospects (Ready To Drill)



A4-1X Oil Discovery

• 130 MMBO recoverable

• Well tested 55 API oil from Miocene turbidite sandstone package and 40 API oil from Burdigalian carbonate build-up

• Oil is geochemically tied to Upper Triassic carbonate source rock, which has been deposited in an intra-platform basin, under anoxic conditions

• 2011 3D seismic coverage (2012 - depth migrated) indicating dim spot, which conforms to structure contours at the oil accumulation

• Additional potential oil accumulation in the carbonate reef below the proven accumulation, based on strong oil shows in A4-1X well from stratigraphically equivalent non-reservoir facies 77 MMBO





Alban East Flank

• Drill ready prospect – 4.7 TCF mean case recoverable gas with 104 mmbbls of condensate

• A3-1X well penetrated good quality sandstone reservoirs with 50–100 m thick inter-bedded sealing shales

• Up-dip fault seal proven by large pressure difference between Alban Structure and flanks

• 2011 3D seismic coverage (2012 – depth migrated) showing strong amplitude response with down-dip structural conformance

• Shallow biogenic secondary objectives with strong AVO responsed

VI. EVALUATION OF DEVELOPMENT AND PRODUCTION OPPORTUNITIES IN ALBANIA (1)

Concerning oil and gas development and production from the existing oilfields are in operation through the Petroleum Agreement, with Albpetrol, actually state company, the following companies for the respectively field :

•Bankers-Petroleum ALBANIA. On the Patos- Marinza oilfield.

•Stream Oil & Gas" Ltd. On limestone oilfields Ballsh-Hekal, Cakran-Mollaj, Gorisht-Kocul and Delvinë .

•Sherwood International Petroleum Inc. On the oilfield of Kucove

•IEC Visoka Inc. On the oilfield of Visoke.

•Phoenix Petroleum. On the oilfields Amonice, Drashovice, Finiq-Krane, Pekisht-Murris and gasfields Divjake, Ballaj, Pocelçe, Panaja dhe Frakull

In this activity until June 2013 are invest 969 MUSD Capex and 766 Opex.



V. EVALUATION OF PRODUCTION and OPPORTUNITIES IN ALBANIA (2)

1200000

DOMESTIC CRUDE OIL PRODUCTION

for the Year 2013 is planed 1.2 Million Tons





Scope of Activities

- ➢Oil and Gas Exploration in
- exploration blocks in Albania.
- > Oil and Gas Production in existing
- oil and gas fields in Albania.
- Manage Hydrocarbons Agreement

as part on them with forewing companies.

- ➢ Treatments, Transport and Marketing of Crude Oil.
- Equipment productions and maintenance.

For more information please visit the web side **http://www.alb-petrol.com**



PATOS-MARINEZ

LOCATION : SW of PAD SIZE :300 km2

RESERVOIR:

AGE: Upper Miocene Sandstones Series: BUBULLIMA, MARINZA-1 (6layer: MARINZA-2 (2layers), DRIZA (6layersys), GORANI

Depth: 100-1850m Net Pay: 15-28m Average Porosity: 12-36% Permeability: 350-800md Oil Gravity: 9-36°API

Oil RESERVES

Init.Geol.OIP: 195 MMbblo Init.Recov.Gas: 5,4×10⁹ Nm3 W-E Geological Crosis Section - Marinza Field, Onshore Albania



<u>KUCOVA</u>

LOCATION : East of PAD ARREZA OIL FIELD LOCATION : West of Kucova **RESERVOIR**: AGE: Upper Miocene Sandstones named :DRIZA,GORANI,KUCOVA **POLOVINA** Suites in Kucova and ARREZA-1, ARREZA-2 in Arreza 150-1400m Depth: Net Pay: 5-35m Average Porosity: 23-27% Permeability: 70-500md Oil Gravity: 12-22°API

Oil RESERVES

Init.Geol.OIP: Init.Recov.Gas : 81,2 MMbblo 4,6x10⁹ Nm3



VISOKA OIL FIELD

LOCATION : 13km SW Fieri SIZE: 28,3km2 RESERVOIR Cr-Pg2 limestones AGE: Depth: Gross thick: Matx Porosity: Tot Porosity: Permeability: Oil Gravity: **Oil RESERVES** Thit Geol OTP: Init.Recov.Oil: Oil Produced : Rem.Geol OIP: Rem Recov Oil: Oil Recov.Fact.: Gas RESERVES Gas Produced : Rem Recov Gas:

800-1700m 200-300m 3,5-4,5% 5-6% 200md 5-16⁰API

198,5 MMbblo 47,6 MMbblo 37,8MMbblo 160,7 mmbblo 9,8 mmbblo 19%

203x10⁶Nm³ 36x10⁶Nm³







HYDROCARBON OCCURRENCES IN ALBANIA

(OIL & GAS FIELDS)





E

CAKRAN-MOLLAJ

<u>LOCATION</u> : 6 km West of Ballshi town SIZE : 10,7 km2 RESERVOIR AGE: Cr-Pg2 limestones Depth: 2650-3700 m Gross thick: 400-800m Matx Porosity: 1 % Tot Porosity: 2,4 % Permeability: 2-600 md Oil Gravity: 12-37⁰API Oil RESERVES Init.Geol.OIP: 113 MMbblo Init Recov.Oil: 56,9 MMbblo 23,3 MMbblo Oil Produced : Rem. Geol OIP: 89,6 MMbblo 33,6 MMbblo Rem Recov Oil: Oil Recov.Fact.: 20,6 % Gas RESERVES 8x10⁹Nm³ Init.Recov.Gas: Gas Produced : 6,3x10⁹Nm³ 1,6x10⁹Nm³ **Rem Recov Gas:**





GORISHT-KOCUL LOCATION : 20 km East of VLORA town SIZE: 8,6 km2 RESERVOIR $AGE: Cr_2-Pg_2$ limestones Depth: Gross thick: Matx Porosity: Tot Porosity: Permeability: Oil Gravity: RESERVES Init Geol OIP: Init.Recov.Oil: Oil Produced : Rem. Geol OIP: Rem Recov Oil: Oil Recov.Fact.: Gas RESERVES Init Recov Gas : Gas Produced : Rem Recov Gas:

400-1250 m 350-400m 1,08 % 2-2,98 % 300 md 13-16⁰API

213,5 MMbblo 102,7 MMbblo 79,9 MMbblo 89,6 MMbblo 22,7 MMbblo 37,3 %

594x10⁶Nm³ 501x10⁶Nm³ 92.7x106Nm3



DELVINA OIL FIELD

LOCATION :

RESERVOIR: Cr₂-Pg₂ limestones Depth: 2800-3500 m <u>Matx Porosity</u>: 1-6 % Frac Porosity: 0.1 % Permeability: 0,2 md Oil Gravity: 26-62,5°API



PATOS-

PROFILE & STRATEGY OF BANKERS PETROLEUM



Canadian, Public, Calgary-based E&P company with an operational focus in Albania:

Patos-Marinza Oilfield

- Largest onshore oilfield in Europe
 100% W.I. and operatorship
- •214 Million Barrels 2P Reserves

Kuçova Oilfield

100% W.I. and operatorship
24 Million Barrels produced to date
12 Million Barrels – 2P Reserves
Drilling first horizontal well in Q4 2013

Block F Exploration Acreage

Prospective for natural gas185,000 acres

Q3 - 2013 - Average Production 18,541 bopd

2004 - 2012 CAGR 36%



Patos-Marinza Average Quarterly Production



2013 Capital Program



Fully Funded \$247 million budget



For more information please visit the web side http://www.bankerspetroleum.com

V. EVALUATION OF DEVELOPMENT AND PRODUCTION OPPORTUNITIES IN ALBANIA

Stream Oil & Gas Ltd. is a Canadian-based emerging oil and gas production, development and exploration company

•Main Objectives are:

Complete transitioning oilfield operations from development to production operations
Continue geosciences including reservoir modelling to improve understanding
Continue improvements of operations backbone towards execution excellence

Substantial growth opportunity 100% working interest in:

- 3 producing heavy oil fields (Ballsh-Hekal, Cakran-Mollaj, Gorisht-Kocul)
- Producing Delvina gas field with
- 3 sister structures in phase II exploration



Stream's Optionality

For more information please visit the web side http://www.streamoilandgas.com

Achievements



- Increased production, revenue & net operating income
- Completed installation of 15 jet pumps at Cakran
- Continued the Gorisht waterflood commercial pilot projects & well workovers
- Acquired gas reinjection compressor for Delvina
- Executed a gas sales contract for Delvina production
- Advanced work for the drilling of horizontal well in Delvina
- Commenced 2.2MW power plant start up installation (third party)
- Executed a \$20 million prepayment agreement for oil sales

2013 Development Strategy

- Aggressive 2013 Q3 Q4 work program
- Production growth
- Cakran: optimize production from all jet pumps & additional workovers
- Gorisht: finalize water flood commercial pilot & workovers
- Ballsh: full field take-over & workovers
- Delvina: drill gas field horizontal well
- Commence condensate/gas sales (power plant)
- Improve netbacks via increased export shipments

CONCLUSIONS:

• Faced problems and negative exploration results in Albania thrust belts and elsewhere worldwide do not imply poor hydrocarbon perspective.

•On the contrary, many oil and gas condensate prospects exist, but they need more accurate acquisition, processing, reprocessing, integration and interpretation of the all exploratory methods data.

• Surely, geological survey must be in the leading role of the oil exploratory works in the thrust belt regions.

• Seismic and all the other geophysical and geochemical exploratory methods must increase their solution capability carrying out methodical tests before shooting the all works volume.

•Wherever placing of flysch folds is far of thrusting anticlinal belts and tectonic setting is relatively gentel, seismic sections present clearly reflection horizons. In such cases a small amplitude of thrust and a gentle folding asymmetry express the possibility that surface flysch fold reflect respective carbonate structures in depth (Gorisht, Cakran).

• In this region, the presence of the sub-thrust structures with considerable amplitude increase the possibility for new discoveries , that means the region corporation is necessary .

•The cooperation with international oil companies is very importante for Albania for more efficient exploration and exploitation of the oil and gas fields



THANK YOU FOR YOUR ATTENTION

For any further information you are welcome to visit **www.mete.gov.al**

or contact me personally at Ilia.gjermani@mete.gov.al, iliagjermani@hotmail.com