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INTRODUCTION

The Cusiana field is the largest new discovery in the Americas in the last decades and the oil and gas sector is expected to become the cornerstone of the Colombian economy as it already surpasses coffee as Colombia's leading export.

Royalties and transfers from the petroleum industry finance significant portions of state investment in infrastructure and social programs and as a result, the Colombian Government has concentrated on implementing policies to favour exploration, development and downstream linkages.

The objective of this report is to provide an overview of the Colombian oil and gas industry to Canadians interested in pursuing commercial opportunities in this sector.

To achieve this goal this report is divided into three distinct sections: first a brief overview of Colombia and its current economic and political situation; secondly a review of the oil and gas industry itself focusing in turn on its past, present and future; and finally a section dedicated to "how to do business" in this sector.

The annexes to this report contain names and addresses of the companies and organizations active in this sector, and a list of potential agents for new entrants to this market.

The first edition of this report was prepared in the Commercial Division of the Canadian Embassy in February 1986 and subsequently updated in October 1987 and April 1989. This edition reflects a substantive revision and incorporates additional material at a time of considerable changes in this sector of the Colombian economy.

COLOMBIA IN A NUTSHELL

GEOGRAPHY

Colombia is the fourth largest country in Latin America after Brazil, Argentina and Mexico and occupies a land area of 1.14 million square km, slightly larger than Ontario. It is located at the northwestern tip of South America and thus has extensive coastlines on both the Pacific Ocean and the Caribbean Sea. Upon entering Colombia the Andes mountains break into three separate ranges running south to north. As a result of this rugged topography the climate ranges from tropical lowlands and jungle to temperate high plateaus and snow-capped mountains.

Most of Colombia's 34 million people live on the mountain slopes, in the fertile valleys between the ranges, and on the savanna (sabana) of Santafé de Bogotá. Life expectancy at birth averages 67 years and the adult literacy rate is 88%.

The major cities are the capital, Santafé de Bogotá, with a population of six million, Medellín, 2.5 million; Cali, 1.6 million; and Barranquilla, 1 million. For administrative purposes Colombia is divided into 31 departments (provinces); plus the Capital District of Santafé de Bogotá.

POLITICS

The Republic of Colombia won its independence from Spain in 1810. It has a presidential form of government with a division of powers among the executive, legislative and judicial branches similar to that of the United States.

The Executive Branch is headed by a President elected by popular vote for a four-year term. Immediate reelection is constitutionally prohibited. The President appoints Cabinet Ministers. President César Gaviria Trujillo's term of office expires in August 1994.

The Legislative Branch is made up of a bicameral Congress of 102 Senators and 161 members of the Chamber of Representatives. There are two main political parties, the Liberals and the Conservatives. A small third party, the leftist Alianza Democrática M-19 was formed following peace talks between the Government and guerrilla groups in 1987.

Colombia has the oldest history of continuous guerrilla activity in the western hemisphere. Nevertheless, the country seems to have adapted to levels of violence which would be considered unusual elsewhere and its democracy has been relatively stable since the last military government left office in 1956.

ECONOMY

Economic growth in 1992 reached 3.6% while the annual rate of inflation fell to 25.1%; GDP growth of 3.8% is forecast for 1993 with a marginal reduction in the rate of inflation.

Colombia remains the only major Latin American economy not to have rescheduled its external debt (approximately US\$ 17.0 billion at the end of 1992) although access to new foreign commercial bank loans has become increasingly difficult.

Basic Economic Indicators:

Gross Domestic Product 1992	US\$ 43.5 billion
Per Capita Gross Domestic Product	US\$ 1,300
Annual Inflation Rate 1992	25.1%
International Reserves, December 1992	US\$ 7.4 billion

ORIGINS OF GDP 1992

Agriculture	15.7%
Mining	7.6%
Manufacturing	19.8%
Construction	5.0%
Commerce	15.4%
Transport/Communications	10.1%
Electricity/gas/water	2.6%
Government	8.4%
Total including others	100.0%

COMPONENTS OF GDP 1992

Private consumption	67.4%
Government consumption	11.7%
Gross fixed investment	15.5%
Change in stocks	2.1%
Exports	19.3%
Imports	-16.0%
GDP at market prices	100.0%

PRINCIPAL EXPORTS 1992

	US\$ million fob
Oil and derivatives	1,413
Coffee	1,259
Coal	533
Gold	380
Ferronickel	126
Total including others	7,263

PRINCIPAL IMPORTS 1992

	US\$ million cif
Intermediate goods	3,530
Capital goods	2,171
Consumer goods	912
Fuel	344
Total including unclass goods	5,000

MAIN EXPORT DESTINATIONS 1992

USA	39.2%
Venezuela	8.5%
Germany	8.5%
Netherlands	3.9%
Peru	3.5%

MAIN ORIGINS OF IMPORTS 1992

USA	38.5%
Japan	7.4%
Venezuela	6.7%
Germany	6.3%
Brazil	4.0%

A BRIEF SECTORAL HISTORY

Oil exploration began in Colombia in 1905 under a concession system by which the government granted exploration and development rights for promising areas to individuals and oil companies. The nation in returned received royalties ranging from 3.08 to 14.5% of production.

Two major concession contracts were granted in that early period: the Barco concession in the northeastern part of the country along the Venezuelan border, and the De Mares concession in the Middle Magdalena River Valley.

In 1916 the De Mares concession was sold with government approval to the Tropical Oil Company, a subsidiary of the Standard Oil Company of New Jersey. The new operator initiated a very successful production period that extended until 1951 when the contract expired and the area with its production facilities reverted to the Colombian government.

The Empresa Colombiana de Petr leos (ECOPETROL) was established by the Colombian government on January 9, 1951 as a state-owned corporation to assume management and operation of the De Mares concession and to initiate exploration and development programs of its own.

Although Colombia never joined the big league of oil producers it remained self-sufficient until 1976 when it became a net importer due to increasing consumption and an absence of new discoveries to add to its reserves.

Colombia returned to the ranks of crude oil exporters in 1985 thanks to the "elephant" discovery by Occidental Petroleum in association with ECOPETROL in the Cravo Norte field near Arauca on the Venezuelan border. The recent discovery by British Petroleum of the Cusiana-Cupiagua fields in the foothills of the Andes, with estimated reserves of 2 billion barrels will permit to export crude oil beyond the year 2,000.

Colombia dissatisfaction with the concession system led to its replacement in 1974 with association contracts. Under the system ECOPETROL contracts exploration, drilling and production activities with foreign operators in specialized zones. Association contracts are described in greater detail in another section of this report.

In 1987 ECOPETROL introduced a new form of association contract for certain areas called the shared risk contract. Under this type of contract ECOPETROL shares the exploration risk by contributing a portion of the required investment, and in return receives a proportionally larger share of any resulting production. The usual division is 72% (including royalties) for ECOPETROL and 28% for the operator.

ECOPETROL

Ecopetrol is the state oil company of Colombia. The company administration and management is controlled by the President and a four-member Board of Directors appointed by the Colombian government and chaired by the Minister of Mines and Energy.

Ecopetrol operations are divided among eight "districts" or operation centres with their own organization and a certain degree of autonomy. Names and addresses of key Ecopetrol officials in each district at the time of writing are provided in an annex to this report. The districts and their responsibilities are:

BOGOTA DISTRICT: Ecopetrol headquarters which looks after corporate planning and administration as well as some fields near the Bogotá region.

EL CENTRO (SANTANDER) PRODUCTION DISTRICT: It is Ecopetrol's largest oil production area currently producing 38,000 b/d located 15 km away from the Barrancabermeja refinery complex. Secondary recovery is being considered for these field whose production level is decreasing.

BARRANCABERMEJA INDUSTRIAL COMPLEX: Petrochemical complex and refinery with 160,000 b/d capacity which is being increased by 25%.

PIPELINE DISTRICT: Headquartered in Santafé de Bogotá, looks after most crude oil and finished products pipelines over a network of close to 10,000 km.

COLOMBIAN PETROLEUM INSTITUTE (ICP - INSTITUTO COLOMBIANO DEL PETROLEO): Created in 1985 as Ecopetrol's research and development facility, to provide Colombia with a world-class research, development, and training centre oriented towards providing technical and operational assistance to the petroleum industry. The ICP is responsible for the realization of studies with universities and specialized centres, and is also involved with sending Ecopetrol employees on courses abroad.

In May 1993, the ICP moved to a new site in Piedecuesta (near Bucaramanga), Santander. The new installations comprise 7 buildings in an area covering 15,000 square meters (the project cost US\$ 9 million). The institute currently employs 200 professionals with master or doctorate degrees.

The ICP has benefited extensively from the assistance of Canada through the PCIAC and PCIMS programs. It has also been the largest purchaser of Canadian goods and services in Ecopetrol over the last 3 years. The ICP is divided into five divisions: Exploration and Development, Refinery and Petrochemical, Industrial

Promotion and Quality Control, Energy and Environmental Control Development, Administration.

CARTAGENA REFINERY: Refinery (opened in 1957, bought by ECOPETROL in 1974) with a total capacity of 70,000 b/d meeting the gasoline requirements of the northern part of the country.

NORTE-TIBU PRODUCTION DISTRICT: Production facility in north-eastern Colombia near the city of Cúcuta. A new enhanced-recovery project may increase production.

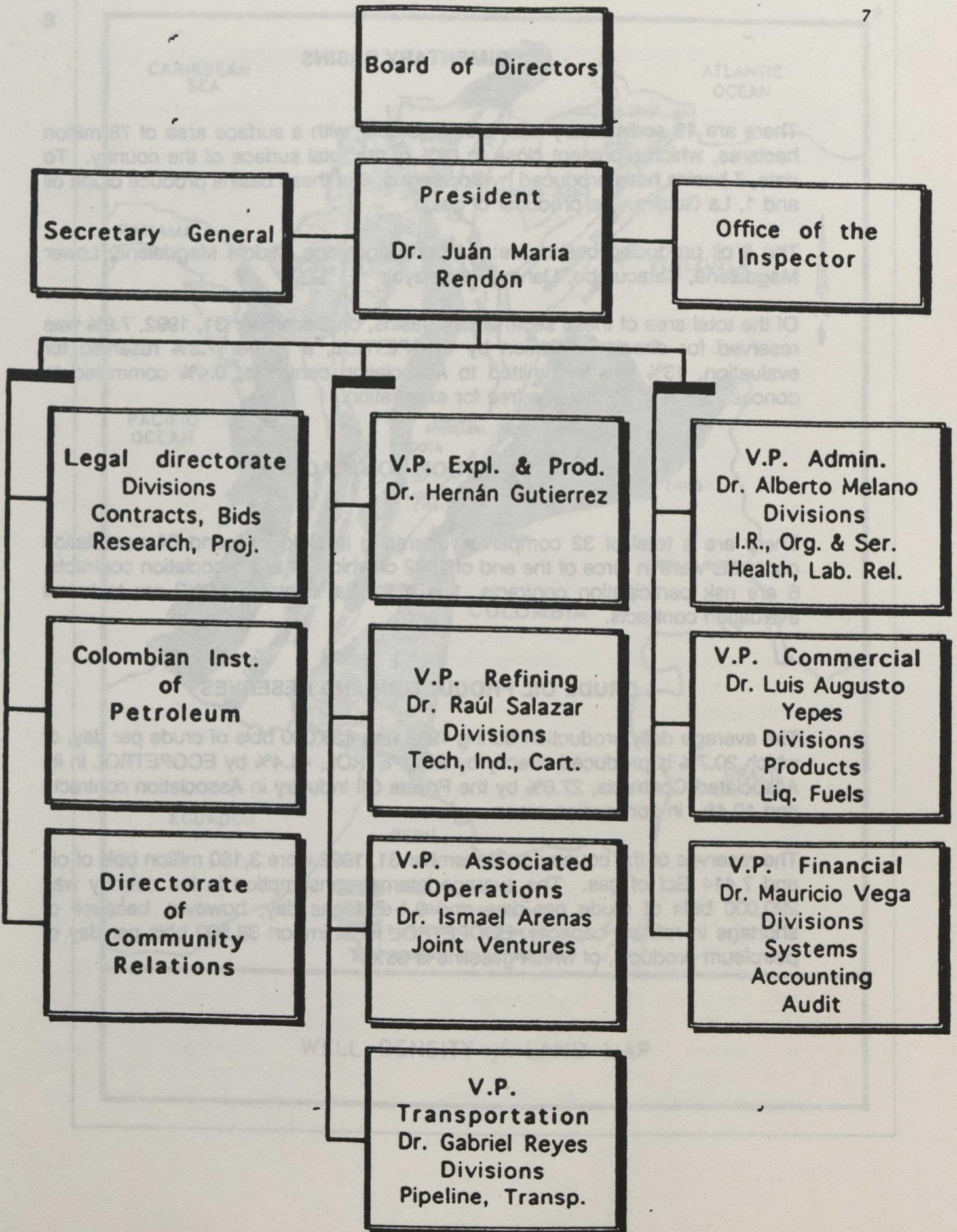
SUR-ORITO PRODUCTION DISTRICT: Production facility in the region of Putumayo in south-western Colombia.

CAÑO LIMON-COVEÑAS DISTRICT: Handles operations of the Caño Limón-Coveñas pipeline which has a capacity of 200,000 b/d used mainly for exports from the Coveñas terminal. It has been the main target of guerilla attacks.

CANADIAN ASSISTANCE TO ECOPETROL

Canada has provided technical support to the Colombian petroleum industry through Petro-Canada International Assistance Corporation (PCIAC). Under an accord signed in November 1985 and renewed twice (March 1987 and November 1988), PCIAC will have provided a total of \$10 million in technical assistance to ECOPETROL. Up to a dozen PCIAC experts at a time have been assigned to work with ECOPETROL in Santafé de Bogotá and with the Colombian Petroleum Institute in Bucaramanga as a result of this agreement.

ECOPETROL ORGANIZATION CHART



SEDIMENTARY BASINS

There are 13 sedimentary basins in Colombia, with a surface area of 78 million hectares, which represent close to 68% of the total surface of the country. To date, 7 basins have produced hydrocarbons; 6 of these basins produce crude oil and 1, La Guajira, is a producer of gas.

The 6 oil producing basins are: Upper Magdalena, Middle Magdalena, Lower Magdalena, Catacumbo, Llanos, Putumayo.

Of the total area of these sedimentary basins, on December 31, 1992, 7.9% was reserved for direct exploration by ECOPETROL, a further 7.8% reserved for evaluation, 13% was committed to Association contracts, 0.4% committed to concessions and 70.0% was free for exploration.

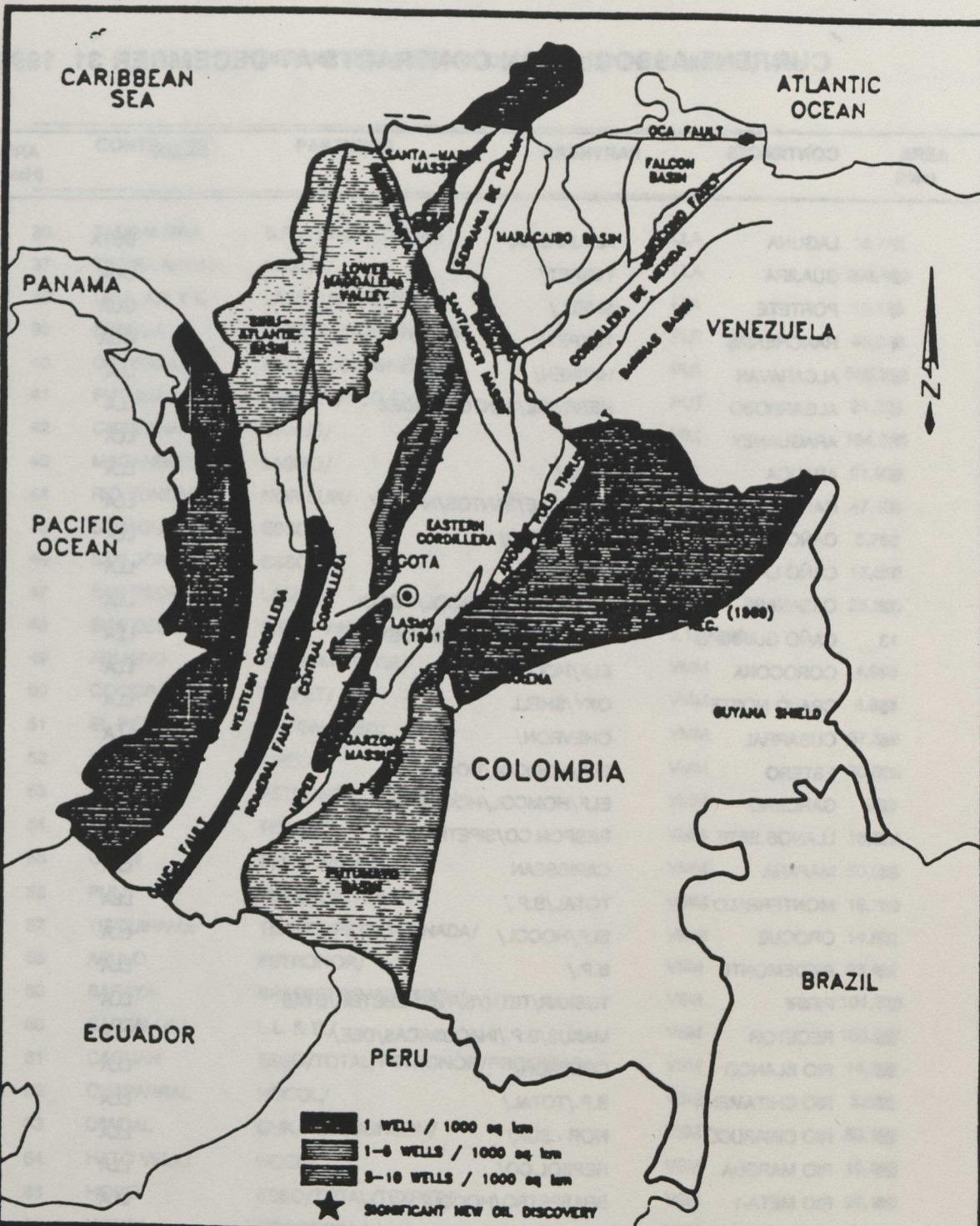
ASSOCIATION CONTRACTS

There are a total of 32 companies operating in Colombia and 84 association contracts were in force of the end of 1992 of which 74 are association contracts, 6 are risk participation contracts, 1 is a special contract and 2 are technical evaluation contracts.

CRUDE OIL PRODUCTION AND RESERVES

The average daily production during 1992 was 438,000 bbls of crude per day, of which 20.7% is produced directly by ECOPETROL, 41.4% by ECOPETROL in its Associated Contracts, 27.6% by the Private Oil Industry in Association contracts and 10.4% in concession areas.

The reserves of the country on December 31, 1992 were 3,180 million bbls of oil, and 7,414 Gcf of gas. The average internal consumption in the country was 290,000 bbls of crude per day, and 0.4 Bcf gas day; however, because of shortage in refining capacity, ECOPETROL must import 38,500 bbls per day of petroleum products, of which gasoline is 86%.



WELL DENSITY / LAND MAP

CURRENT ASSOCIATION CONTRACTS AT DECEMBER 31, 1992

CONTRACTS	PARTNERS	BASIN	AREA (Has)
1	LAGUNA	ALEJANDRA/	BGTA 1,151,200
2	GUAJIRA	TEXPET/	GUA 77,765
3	PORTETE	SHELL/	GUA 265,917
4	RANCHERIAS	TEXPET/	GUA 180,936
5	ALCARAVAN	HARKEN/	LLA 141,680
6	ALGARROBO	HERITAGE/SANTOS/ANDEX	LLA 121,638
7	ARAGUANAY	OXY/	LLA 75,501
8	ARAUCA	ESSO/	LLA 16,074
9	CAÑO CARANAL	HERITAGE/SANTOS/ANDEX/	LLA 100,735
10	CAÑO CUARTELES	BRASPETRO/	LLA 16,825
11	CAÑO LA HERMOSA-1	NOMECO	LLA 1,375
12	CASANARE	ELF/L.L.& E/HOMCOL/HOCOL	LLA 50,112
13	CAÑO GUIRRIPO	HERITAGE/SANTOS/ANDEX	LLA 87,400
14	COROCORA	ELF/HOCOL/	LLA 57,022
15	CRAVO NORTE	OXY/SHELL	LLA 26,656
16	CUBARRAL	CHEVRON/	LLA 19,202
17	ESTERO	ELF/HOMCOL/HOCOL	LLA 22,234
18	GARCERO	ELF/HOMCOL/HOCOL	LLA 26,122
19	LLANOS ESTE	RESPON.CO/SIPETROL	LLA 977,904
20	MAPANA	CARIBBEAN	LLA 50,957
21	MONTERRALO	TOTAL/B.P./	LLA 15,014
22	OROCUE	ELF/HOCOL/	LLA 10,970
23	PIEDEMORTE	B.P./	LLA 287,404
24	PIRIRI	TUSKAR/TETHYS/TURNSECTOR/DYAS	LLA 69,755
25	RECETOR	MAXUS/B.P./INAQUIMICAS/DEE/	LLA 113,707
26	RIO BLANCO	CHEVRON/	LLA 88,434
27	RIO CHITAMENA	B.P./TOTAL/	LLA 4,681
28	RIO CINARUCO	NOR - SUR/	LLA 392,960
29	RIO MARGUA	REPSOL.CO/	LLA 154,923
30	RIO META-1	BRASPETRO/HOCOL/	LLA 10,664
31	RIO PLANAS	AIPCC/	LLA 194,029
32	RIO VICHADA	LASMO/REPSOL.CO/	LLA 1,205,114
33	RONDON	OXY/SHELL/	LLA 10,056
34	SAMORE	OXY/COPECO	LLA 208,934
35	SANTIAGO DE ATALAYAS-1	B.P./TRITON/TOTAL/	LLA 37,783

CURRENT ASSOCIATION CONTRACTS AT DECEMBER 31, 1992

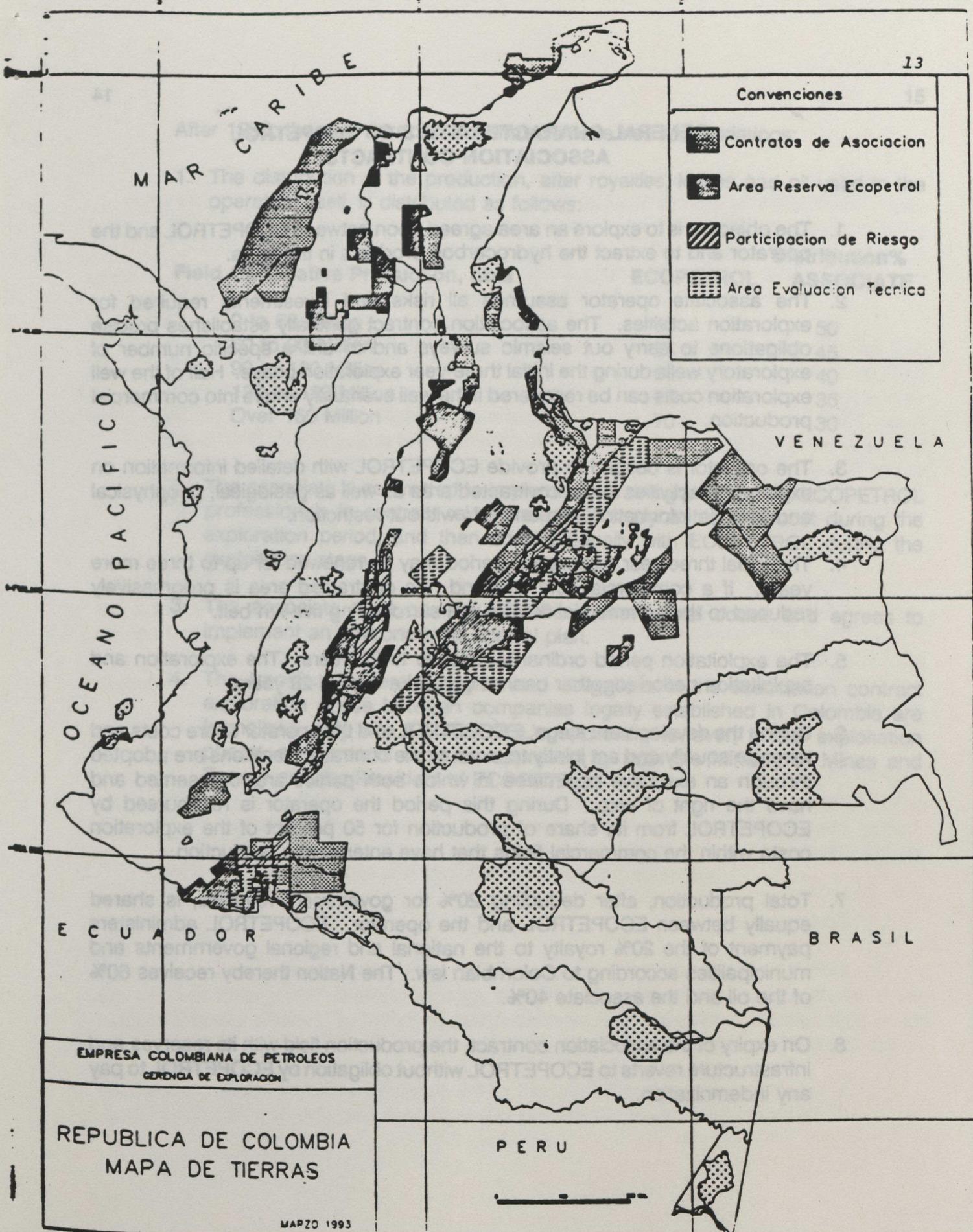
	CONTRACTS	PARTNERS	BASIN	AREA (Haa)
36	TAURAMENA	B.P./TRITON/TOTAL/	LLA	15,742
37	TIERRA NEGRA	MAXUS/	LLA	203,402
38	UPIA, A,B Y C	LASMO/B.P/TOTAL/	LLA	59,176
39	FRAGUA	ARGOSY/NEO ENERGY/	PUT	48,013
40	ORTEGUAZA	REPSOL.CO/SHELL/	PUT	869,262
41	PUTUMAYO O	ARGOSY/NEO ENERGY/	PUT	31,303
42	CHIMICHAGUA	MAXUS/	VIM	164,900
43	MAGANGUE	LASMO/	VIM	91,939
44	RIO FUNDACION	NOR-SUR/	VIM	47,100
45	SAHAGUN	ESSO/	VIM	5,712
46	SAN JORGE	ESSO/	VIM	17,612
47	SAN PEDRO	LASMO/	VIM	25,500
48	SUR DEL CARIBE	B.P./ VIM	2,129,788	
49	ARMERO	PETROMINEROS/	VMM	4,990
50	COCORNA	TEXPET/	VMM	4,828
51	EL PIÑAL	TRITON/LEED/	VMM	57,568
52	LAGUNILLAS	APECC/	VMM	80,636
53	LEBRIJA	PETRONOR/SCIMITAR/	VMM	206
54	NARE	TEXPET/	VMM	16,502
55	OPON	HONDO/OPON/	VMM	50,044
56	PULI	AIPCC/PETRONOR/	VMM	18,760
57	TISQUIRAMA	TEXPET/PETRO-CANADA/	VMM	14,801
58	APULO	PETRONOR/	VSM	23,407
59	BARAYA	BRASPETRO/SIPETROL/	VSM	101,776
60	BARZALOSA	L.L. & E./	VSM	163,057
61	CAGUAN	ESSO/TOTAL/PETRONOR/PROMIGAS/	VSM	14,369
62	CHAPARRAL	HOCOL/	VSM	5,654
63	DIWDAL	GHK/PETROLINSON/	VSM	80,154
64	HATO VIEJO	HOCOL	VSM	19,396
65	HOBO	ESSO/TOTAL/TEXPET/	VSM	29,165
66	HONDA	COCODRILL/	VSM	18,925
67	HUILA	PETROCOL/	VSM	8,121
68	LOS GUACHAROS	HUILEX/	VSM	27,323
69	LOS VENADOS	HUILEX/	VSM	20,134
70	PALERMO	HOCOL/	VSM	28,586
71	PATALO	HOCOL/	VSM	47,374

CURRENT ASSOCIATION CONTRACTS AT DECEMBER 31, 1992

CONTRACTS	PARTNERS	BASIN	AREA (Has)
72	RIO BACHE HOCOL/	VSM	25,858
73	SAN LUIS HOCOL/TRITON	VSM	26,100
74	TOLIMA HOCOL/TRITON	VSM	26,575
			9,895,441
RISK PARTICIPATION			
1	RUBIALES TUSKAR/TETHYS/TURSECTOR/DYAS	LLA	51,300
2	ANDAQUIES REPSOL.CO/SHELL	PUT	163,277
3	SANTANA ARGOSY/NEO ENERGY	PUT	139,129
4	ESPINAL LASMO/SUN/	VSM	207,124
5	VIANI AIPCC/	VSM	75,923
			636,753
SPECIAL			
1	LAS MONAS EUROCAN/SABA/PETROSANT AND/	VMM	17,419
			17,419
TECHNICAL EVALUATION			
1	SYNTHESIS VIM HOCOL/	VIM	5,441,121
2	SANTANDER ESSO/	VMM	1,460,751
			6,901,872
TOTAL CONTRACTS 4			
TOTAL AREA (NO TECHNICAL EVALUATION INCLUDED)			10,549,613

Convenciones

-  Contratos de Asociacion
-  Area Reserva Ecopetrol
-  Participacion de Riesgo
-  Area Evaluacion Tecnica

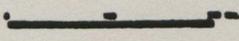


EMPRESA COLOMBIANA DE PETROLEOS
GERENCIA DE EXPLORACION

REPUBLICA DE COLOMBIA
MAPA DE TIERRAS

MARZO 1993

PERU



LAND MAP

GENERAL CHARACTERISTICS OF ECOPETROL ASSOCIATION CONTRACTS

1. The objective is to explore an area agreed upon between ECOPETROL and the operator and to extract the hydrocarbon products in that area.
2. The associate operator assumes all risks and investments required for exploration activities. The association contract generally establishes precise obligations to carry out seismic surveys and to drill a specific number of exploratory wells during the initial three-year exploration phase. Half of the well exploration costs can be recovered if the well eventually enters into commercial production.
3. The operator is obliged to provide ECOPETROL with detailed information on exploration activities in the contracted area as well as geological, geophysical and seismic information and analysis without restriction.
4. The initial three-year exploration period may be renewed for up to three more years. If a commercial field is found, the contracted area is progressively reduced to the commercial field plus a surrounding five-km belt.
5. The exploitation period ordinarily lasts up to 22 years. The exploration and exploitation period together cannot exceed a total of 28 years.
6. During the development stage, ECOPETROL and the operator share costs and revenue equally and act jointly to execute the contract. Decisions are adopted through an executive committee in which both parties are represented and have the right of veto. During this period the operator is reimbursed by ECOPETROL from its share of production for 50 percent of the exploration costs within the commercial fields that have entered into production.
7. Total production, after deducting 20% for government royalties, is shared equally between ECOPETROL and the operator. ECOPETROL administers payment of the 20% royalty to the national and regional governments and municipalities according to Colombian law. The Nation thereby receives 60% of the oil and the associate 40%.
8. On expiry of the association contract, the production field with its reserves and infrastructure reverts to ECOPETROL without obligation by ECOPETROL to pay any indemnization.

After 1990, the new association contracts have had four variations:

1. The distribution of the production, after royalties, losses and oil used in the operation itself, is distributed as follows:

Field Cumulative Production, bbls	Distribution%	
	ECOPETROL	ASSOCIATE
0 to 60 Million	50	50
60 to 90 Million	55	45
90 to 120 Million	60	40
120 to 150 Million	65	35
Over 150 Million	70	30

2. The associate is committed to implement a training program for ECOPETROL professionals in contract related areas of study at his own cost during the exploration period, and then shared equally with ECOPETROL during the exploitation stage.
3. The associate must comply with the environmental codes and agrees to implement an environmental control plan.
4. The transfer of interests, rights and obligations in the association contract exploration phase between companies legally established in Colombia are formalized only with ECOPETROL's approval; however, in the exploitation phase, assignments must be approved by both the Ministry of Mines and Energy and the President of ECOPETROL.

MAJOR PROJECTS AND OPPORTUNITIES

Investment program 1993-2000 (US million)	TOTAL (US Million)	10,000
Investors		
	Ecopetrol	4,000
	Private operators	6,000
Projects		
	Cusiana development	6,000
	Gas massification	3,000
	Exploration and production	600
	Other pipelines and transport	400

CUSIANA

Cusiana is the largest discovery in Colombia's history and the largest in the western hemisphere in the last decades; with 2 billion barrels of crude (double the reserves from Caño Limon) along with 3.2 billion cubic feet of associated natural gas. There are actually two fields involved: Cusiana, with 1.5 billion barrels, and Cupiagua, with 500 million barrels. BP, Total, and Triton are the three partners in the project.

BP arrived in Colombia in 1958. They became lead operating company in the Cusiana project in 1986 and began drilling in 1988; the first find was in 1991 with the Cusiana 2A well. BP Exploration Colombia has 600 full-time employees. From the date of declaration of commerciality of Cusiana, it is expected to have a production period of 22 years.

Commerciality

Cusiana was declared commercial on June 29th, 1993. Commerciality entails the authorization for the associated operating companies and Ecopetrol to make the investments necessary to bring the field into production. Cusiana's total estimated investment through to 1997 will be US\$ 6 billion.

In return for contributing 50 percent of the investment costs Ecopetrol will obtain 40 percent of the crude, 40 percent will be shared between BP, Total and Triton

Development Plan

The BP documents include a two-part plan to bring the field into production. The first phase (1993-1995) (1992-200m, 1993-475m, 1994-420m, 1995-144m 1996-56m) calls for investment of US\$ 1.4 billion in transport infrastructure, making current pipelines suitable to transport additional crude, pumping stations, storage tanks and separation plants to bring production up to 50,000 b/d by 1994 and 150,000 b/d by 1995 from the current test level of 10,000 b/d.

The second phase calls for increasing production to 400,000 b/d in 1996 and finally 600,000 by 1997 through drilling more wells and linking them, making Cusiana the highest producing single field in Colombia's history. Work is now being done on conceptual engineering for Phase II. Production by 1997 could reach 800,000 b/d if reserves are proven to be as high as 2.5 billion barrels. It is currently under consideration whether a new pipeline will be built parallel to the existing Oleoducto de Colombia or whether Cusiana will be linked to the Caño Limon field to make use of its existing pipeline to the port of Coveñas or even potentially a new pipeline through Venezuela.

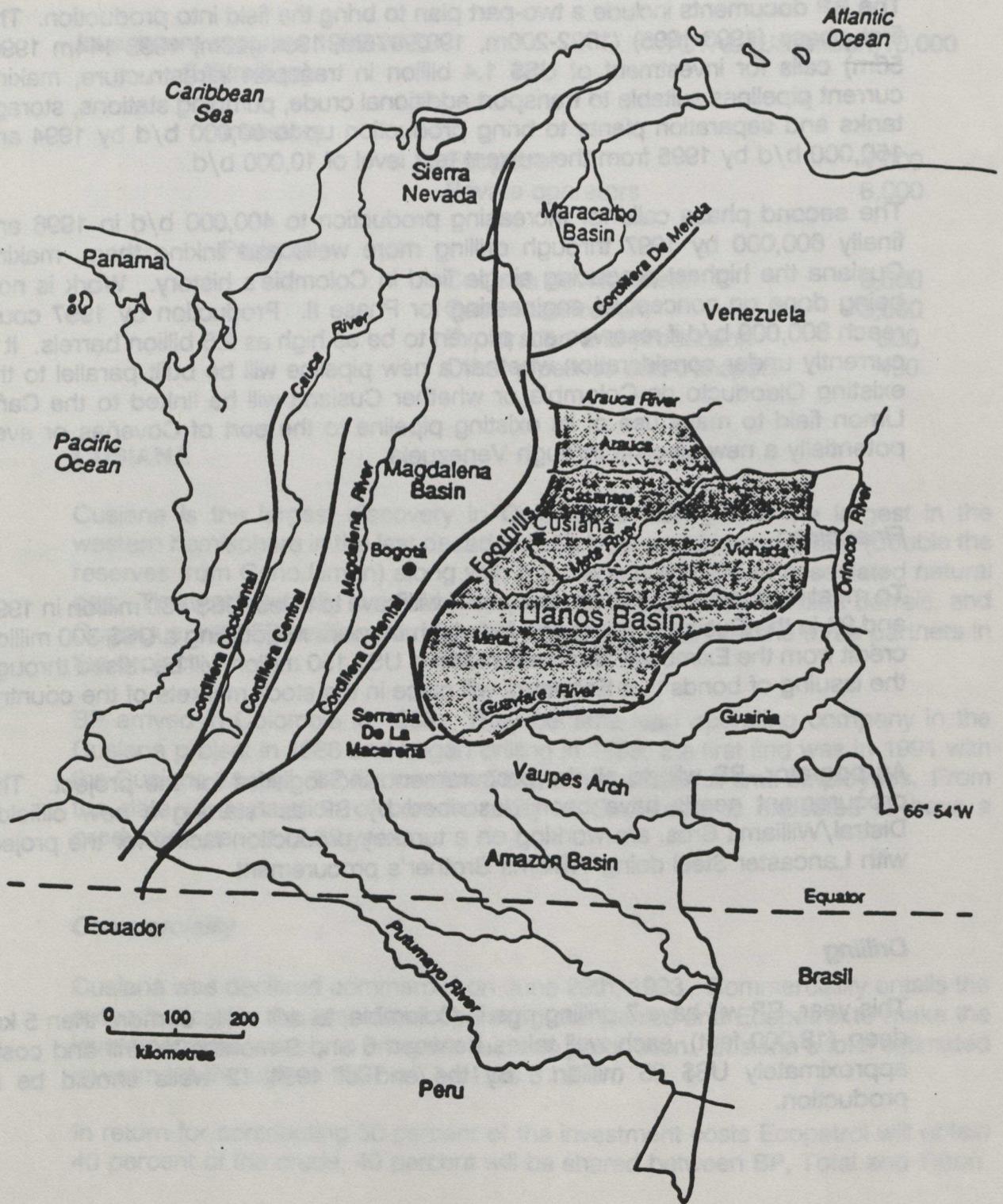
Financing

To meet its share of the costs, Ecopetrol will have to invest US\$ 450 million in 1993 and 94 in the Cusiana project and for which they are negotiating a US\$ 300 million credit from the Eximbank and the remaining US\$ 150 million will be raised through the issuing of bonds that Ecopetrol will place in the stock markets of the country.

As operator, BP will do all the procurement and logistics for the project. The procurement needs have been described by BP as "starting a new oilfield". Distral/Williams Bros. are working on a turnkey production facility for the project with Lancaster Steel doing Williams Brother's procurement.

Drilling

This year, BP will have 7 drilling rigs in Colombia, to drill wells of more than 5 km deep (18,000 feet), each well takes between 6 and 9 months to drill and costs approximately US\$ 25 million. By the end of 1994 12 wells should be in production.



LLANOS BASIN AND CUSIANA

CAÑO LIMON

Caño Limon Petroleum Complex (Department of Arauca) is exploited by the Cravo Norte Association, made up of Ecopetrol, Occidental and Shell. There is a natural decline in production volumes, a phenomenon that will begin this year with a reduction estimated at 9,000 b/d and projections of this decline indicate that by 1995 production will be lower by about 30,000 b/d so by the year 2000 it will barely be 80,000 b/d.

A program of enhanced recovery using water has been initiated in 1993 at a rate of 20,000 barrels a day using residual waters from current production.

GAS MASSIFICATION PROGRAM

Despite the availability of resources, Colombia has traditionally been a modest user consumer of natural gas. The residential use of natural gas only started in 1986 with a gas pipeline between Ballenas and the cities of Barranquilla and Cartagena on the northern coast.

In 1991 natural gas represented only 5% of total energy consumption in Colombia. The current production of natural gas is estimated at 380 MMSCFD and reserves placed at 8.5 TFC. A government decision to increase energy efficiency has facilitated a plan for a gas massification program including an expansion in this service for household, industrial, commercial and electric generation use in cities of Santafé de Bogotá, Medellín and Cali.

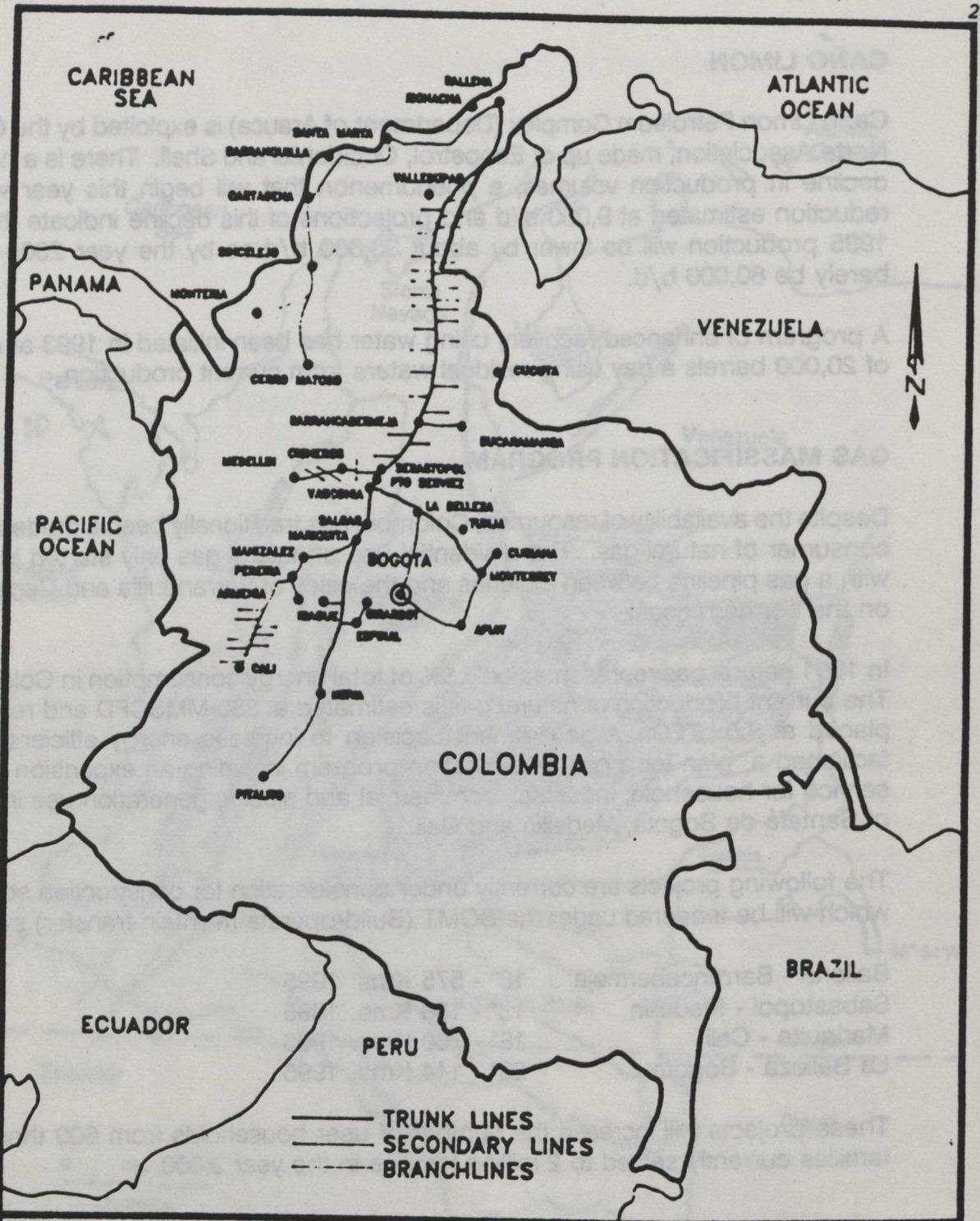
The following projects are currently under consideration for construction some of which will be tendered under the BOMT (Build-operate-maintain-transfer) system.

Ballena - Barrancabermeja	18" - 575 Kms. 1995
Sabastopol - Medellín	12" - 156 Kms. 1995
Mariquita - Cali	18" - 360 Kms. 1995
La Belleza - Bogota	22" - 144 Kms. 1995

These projects will increase the number of user households from 600 thousand families currently served to 2 million families in the year 2,000.

REFINERIES

Ecopetrol is currently placing bonds in the international market to finance the expansion of the Barrancebermeja refinery at a cost of US\$ 300 million. The program was already in process in April 1993 and the capacity of the refinery will be increased by 25%.



CARIBBEAN SEA

ATLANTIC OCEAN

PANAMA

VENEZUELA

PACIFIC OCEAN

COLOMBIA

ECUADOR

PERU

BRAZIL

- TRUNK LINES
- - - SECONDARY LINES
- · · BRANCHLINES

NATURAL GAS NETWORK

ENVIRONMENTAL PROTECTION

Ecopetrol and the operating companies have designed a plan for environmental control that will permit the realization of their technical operations without affecting the environment. This environmental protection program is currently supervised by the Ministry of Health and eventually by the Ministry of the Environment once its formation obtains congressional approval next year.

In the Casanare area 11 wells have been closed since April 15th, 1993 by the regional health authorities who said that the companies were causing severe ecological and environmental damage to the area, mostly contaminating area water supplies.

EMPRESA COLOMBIANA DE PETRÓLEOS - ECOPETROL
 Registro Unico de Contratistas y/o Proveedores
 Carrera 13 No. 35-24, Piso 3
 Santafé de Bogotá, Colombia
 Tel. 233-7553 - Fax: 245-3195

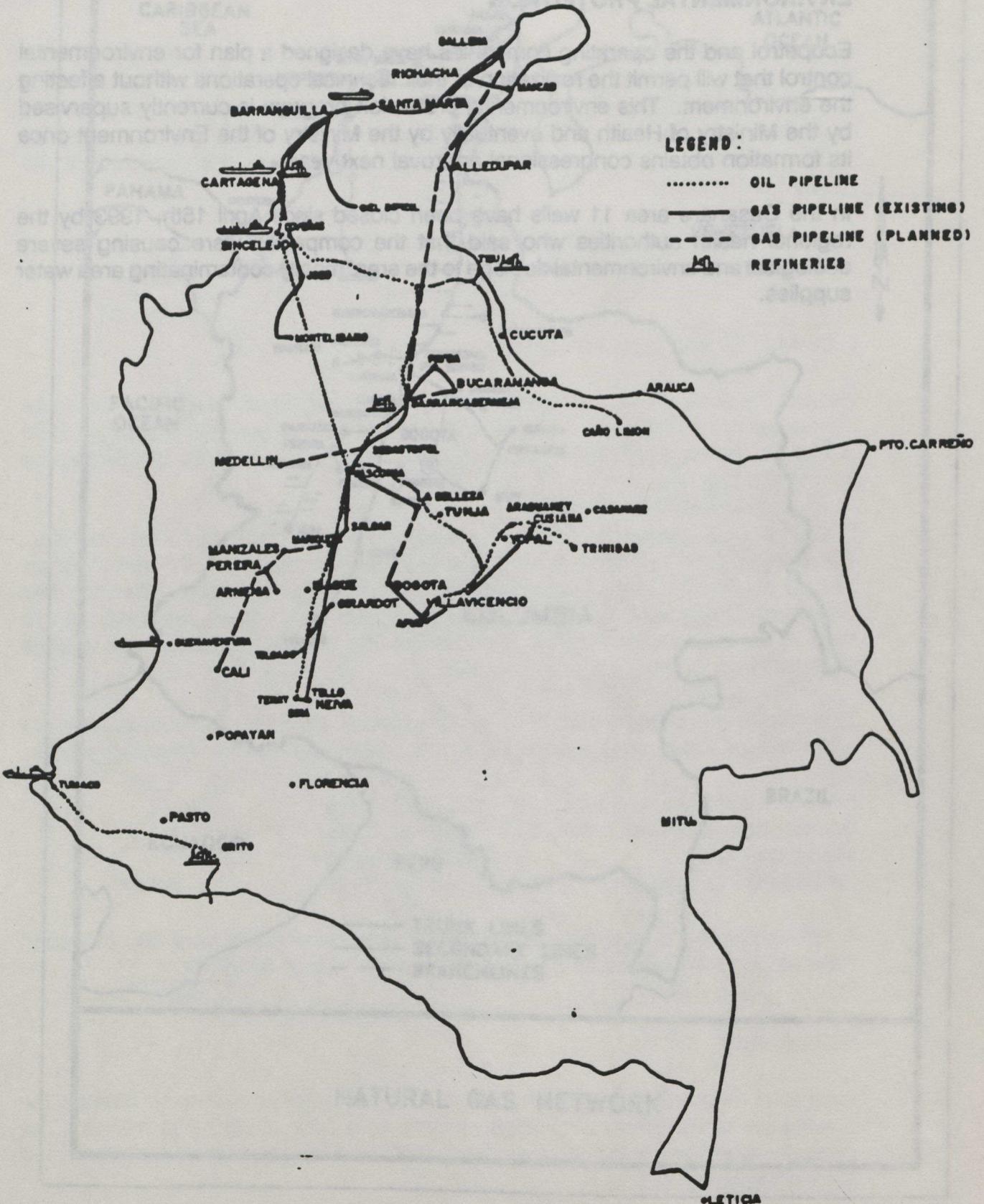
Note the following:

The registration form should be thoroughly completed and the information requested must be furnished in Colombian Pesos.

The balance sheet must be signed by a certified public accountant and his signature attested by a public notary.

The legal documents requested for registration such as a Canadian Charter of Commerce Certificate must be accompanied by a Spanish translation and certified by a Colombian Consul in Canada, by the Colombian Ministry of External Affairs in Santafé de Bogotá, and by the Colombian agent or legal representative of the Canadian company.

Bonds for services from existing customers are required.



OIL AND GAS PIPELINES

HOW TO DO BUSINESS IN COLOMBIA

STEP A: CHOOSING A RELIABLE LOCAL AGENT

Foreign companies are required to have a legal representative or local agent, whose name, address and telephone number must be stated when registering with ECOPETROL.

The Commercial Division of the Canadian Embassy in Santafé de Bogotá maintains regular contact with a variety of agents in this sector and may assist in the selection process. A list of potential agents is provided at the end of this report.

STEP B: REGISTRATION WITH ECOPETROL

Any firm interested in supplying equipment and/or services to ECOPETROL and its associates must be registered in the ECOPETROL supplier and/or contractor index. Normally only registered companies will receive specifications and invitations to bid.

Registration forms can be obtained for COP\$ 60,000 (about CDN\$ 100) from:

EMPRESA COLOMBIANA DE PETROLEOS - ECOPETROL
Registro Unico de Contratistas y/o Proveedores
Carrera 13 No. 36-24, Piso 3
Santafé de Bogotá, Colombia
Tel. 232-7553 - Fax: 245-3195

Note the following:

The registration form should be thoroughly completed and the financial information requested must be furnished in Colombian Pesos.

The balance sheet must be signed by a certified public accountant and his signature attested by a public notary.

The legal documents requested for registration such as a Canadian Chamber of Commerce Certificate must be accompanied by a Spanish translation and certified by a Colombian Consul in Canada, by the Colombian Ministry of External Affairs in Santafé de Bogotá, and by the Colombian agent or legal representative of the Canadian company.

Bona fide certificates from existing customers are required.

A company interested in registering as a contractor must furnish a complete profile of the firm including professional and technical staff (engineers and technicians) with proof of their degrees and professional skills.

Each registration is valid only for a two-year term and must subsequently be renewed.

STEP C: FOLLOW-UP AND PERSISTENCE

The Colombian petroleum sector market cannot be penetrated overnight. Competitors, many from the United States, are deeply entrenched and difficult to displace. Patience and a long-term commitment to this market are essential prerequisites for success. Your agent should receive appropriate support to promote your products or services on your behalf. It is not unusual for a first sale to come only after several years of sustained promotion and repeated visits to potential clients. Inform yourself about financial support available from the Export Development Corporation.

NOTE: The foreign operators do normally have similar registration procedures.

OIL AND GAS INDUSTRY ASSOCIATIONS AND PUBLICATIONS

ACIPET - ASOCIACION COLOMBIANA DE PETROLEOS

(Colombian Petroleum Association)

Carrera 35 No. 106-69, Santafé de Bogotá, Colombia

Tel. 222-8214, Fax 256-1134

President
Publications

Joaquín Herrera
Directorio Petrolero ACIPET
(ACIPET Petroleum Directory)
Boletín Estadístico Mensual
(Monthly Statistical Bulletin)

CIIP - CENTRO DE INFORMACION DE LA INDUSTRIA PETROLERA

(Oil Industry Information Centre - run by the operating companies)

Calle 100 No. 14-26, Oficina 401, Apartado Aéreo 6521, Santafé de Bogotá, Colombia

Tels. 214-6878, 214-6658, Fax 214-6968

President

Executive Director
Publications

José Vicente Rojas (President
of Chevron)
Simón Martínez Emiliani
The CIIP has temporarily
suspended the publication of
its quarterly information
bulletin

CAMPETROL - CAMARA COLOMBIANA DE SERVICIOS PETROLEROS

(Colombian Chamber of Petroleum Services)

Transversal 14A No. 114-25, Apartado Aéreo 92226, Santafé de Bogotá, Colombia

Tel. 213-0132, Fax 612-3515

President
Executive Director
Publications

Carlos Ney
Freddy Castaño
Energía y Desarrollo (Energy
and Development) - quarterly
Semi-annual bulletin

OTHER OPERATING COMPANIES

The larger operating companies active in Colombia (Oxy, Shell, Petrobras) also produce magazine-type quarterly publications.

ACOGAS - ASOCIACION COLOMBIANA DE GAS
 (Colombian Gas Association)
 Carrera 21 No. 41-26, Santafé de Bogotá, Colombia
 Tel. 245-4171, Fax 245-3272

President
 Publications

Enrique Rodríguez
 Revista ACOGAS (ACOGAS
 Magazine) - quarterly

CONSEJO PROFESIONAL DE INGENIEROS DE PETROLEO
 (Professional Council of Petroleum Engineers)

Centro Administrativo Nacional - CAN, Oficina 518, Ministerio de Minas y Energía
 Santafé de Bogotá, Colombia
 Tel. 222-4680, Fax 222-4680

President

Germán Duque

OTHER INDUSTRY PUBLICATIONS

ECOPETROL

Ecopetrol, Departamento de Comunicaciones, Carrera 13 No. 36-24, Oficina 805, Santafé de Bogotá, Colombia
Tels. 285-6400, 287-1128, Fax 285-2175

Publications

Carta Petrolera (Petroleum letter) - monthly
Estadísticas Industrial Petrolera (Petroleum Industry Statistics) - annual

COLSA

Carrera 9 No. 71-17, Oficina 302, Apartado Aéreo 12026, Santafé de Bogota, Colombia
Tels. 212-1021, 212-1031, Fax 212-1031

Assistant Manager

Publications

Jenny Arieta
Directorio Petrolero (Petroleum Directory) - annual
Directorio Minero (Mining Directory) - annual

ENFOQUE PETROLERO

Calle 18 No. 10-32, Oficina 304, Apartado Aéreo 40171, Santafé de Bogotá, Colombia
Tel. 283-4339, Fax 281-2354

Publications

Enfoque Petrolero (Focus on Petroleum) - published bi-monthly by a group of Petroleum Engineers (a private effort, not an "association" publication)

OTHER OPERATING COMPANIES

The larger operating companies active in Colombia (Oxy, Shell, Texaco) also produce magazine-type quarterly publications.

ANNEX A - OPERATING COMPANIES AND KEY CONTACTS

MINISTERIO DE MINAS Y ENERGIA

CAN, Santafé de Bogotá, Colombia
Tels. 222-4555, 222-0068, Fax 222-3651

Minister
Deputy Minister
Secretary General
Head Hydrocarbons Division

Guido Nule
Federico Rengifo
Rafael Anaya
José Darío Velásquez

EMPRESA COLOMBIANA DE PETROLEOS-ECOPETROL

Carrera 13 No. 36-24, Santafé de Bogotá, Colombia
Tel. 285-6400, Fax 285-1531

President
Refining and Transport Vice President
Director of Corporative Planning
Administrative Vice President
Financing Vice President
Commercial Vice President
Exploration and Production Vice President
Exploration Manager
Production Manager
Head of Operations
Associated Operations Vice President
Drilling Department
Manager of Cusiana
Head of Natural Gas and Fuel Division

Juan María Rendón
Raúl Salazar
Felix Betancourt
Alberto Merlano
Mauricio Vega
Luis Augusto Yepes
Hernán Gutiérrez
Mario Yori
Efrén Hernández
Alejandro Rodríguez
Ismael Enrique Arenas
Jorge López
Germán Espinosa
Hernán Díaz del Castillo

INSTITUTO COLOMBIANO DEL PETROLEO

Autopista Piedecuesta, Santander, Colombia
Tels. (976) 55-1001, 55-1090, 44-5420

Director
Exploration and Production Division
Energy and Environmental Division
Refining and Petrochemical Division

Medardo Gamboa Maldonado
Kurt Bayer
Henry Echeverry
José Meneses

ALEJANDRA CONSULTORS INC.

Calle 100 No. 14-63, Oficina 401, Santafé de Bogotá, Colombia
Tels. 218-5995, 257-3887, Fax 218-5518

President

Nicolás Beltrán

ARGOSY ENERGY INTERNATIONAL

Carrera 7 No. 71-52, Torre A, Piso 12, Santafé de Bogotá, Colombia
Tels. 312-0714, 312-0715, Fax 312-0718

General Manager
Legal Representative

Santiago González
Waldo Casas

B. P. EXPLORATION COMPANY (COLOMBIA) LTD.

Carrera 9A No. 99-02, Piso 9, Santafé de Bogotá, Colombia
Tels. 617-0975, 617-0521, Fax 618-0672

President and General Manager
Exploration Manager
Operations Manager
Geophysics Manager
Chief Geologist

Richard Campbell
Anthony Hayward
Phil Mead
George Woodcock
Roger Nunn

CHEVRON PETROLEUM COMPANY OF COLOMBIA

Calle 78 No. 9-57, Piso 12, Santafé de Bogotá, Colombia
Tels. 211-1600, 211-1832, Fax 255-9772

President and General Manager
Exploration Manager

José Vicente Rojas
Gildardo Pérez

COMPAÑIA SHELL DE COLOMBIA INC.

Carrera 7 No. 73-47, Santafé de Bogotá, Colombia
Tel. 210-0100, Fax 211-7590

President and General Manager
Production Manager
Exploration Manager
Operations Manager

Douglas W. Ellenor
Hernando Barrero
Aad Vanzuuren
Gilberto Barcenás

CONSOLIDATED EUROCAN VENTURES LTD.

Calle 78 No. 9-57, Piso 10, Santafé de Bogotá, Colombia

Tels. 210-1701, 211-8983, 210-1771, Fax 235-1673

Manager

Santiago Pacheco

ELF AQUITAINE COLOMBIE S. A.

Calle 71A No. 5-30, Santafé de Bogotá, Colombia

Tel. 255-1211, Fax 255-9772

General Manager

Michel Demargne

ESSO COLOMBIANA LTD.

Carrera 7 No. 36-45, Santafé de Bogotá, Colombia

Tel. 285-2080, Fax 285-4682

President

Production Manager

Drilling Division

Ramón de la Torre

Lloyd Elliott

Ricardo Mojica

GEOPOZOS Y CIA. LTDA.

Carrera 14 No. 87-39, Oficina 301, Santafé de Bogotá, Colombia

Tel. 616-4472, Fax 616-0907

President and General Manager

Administrative Manager

Luis A. Clavijo

Lilia F. De Molano

HOCOL S. A.

Carrera 7 No. 73-47, Santafé de Bogotá, Colombia

Tel. 210-0100, Fax 211-7590

General Manager

Pipeline Manager

Camilo Merendoni

Germán López de Mesa

Hocol also has extensive operations in Neiva: Kilómetro 17 Carretera Neiva a Bogotá,
Apartado Aéreo 395, Neiva, Colombia

Tel. (5788) 74-66-27

Manager of Operations

Hernando Barrero

LASMO OIL (COLOMBIA) LTD.
 Calle 72 No. 8-24, Santafé de Bogotá, Colombia
 Tel. 217-1899, Fax 211-6303

General Manager
 Exploration Manager
 Drilling Manager
 Chief Geologist
 Operations Manager

Anthony Bryan
 William Porteus
 Mike Travis
 Steve Corvin
 Chris Bellis

L L & E COLOMBIA INC.
 Calle 96 No. 9-41, Santafé de Bogotá, Colombia
 Tels. 218-5995, 257-3887, Fax 257-6803

Manager

Roberto Lee

MAXUS COLOMBIA INCORPORATED

Calle 100 No. 8A-49, World Trade Centre, Torre B, Oficina 1018, Santafé de Bogotá,
 Colombia
 Tel. 610-6511, Fax 226-9824

Manager
 Legal Representative
 Drilling Superintendent

Walter Smith
 Sergio Rueda
 Alan J. Broussard

MOBIL OIL COMPANY DE COLOMBIA

Calle 70 No. 7-30, Piso 9, Santafé de Bogotá, Colombia
 Tel. 255-3100, Fax 212-4875

President

Peter Ciaparelli

NOR-SUR RESOURCES, LTD.

Carrera 9 No. 74-08, Oficina 1000, Santafé de Bogotá, Colombia
 Tels. 211-4121, 218-5796, 218-8521, Fax 235-0637

Manager
 Legal Representative

Mario Sánchez
 Héctor Rodríguez

OCCIDENTAL DE COLOMBIA, INC.

Calle 77A No. 11-32, Santafé de Bogotá, Colombia
Tels. 217-1111, 212-8100, Fax 211-6820

President and General Manager
Drilling Manager
Vice President Exploration
Vie President Operations
Materials Manager
Chief Geologist

Stephen Newton
Jaime Ariza
Victor Gabela
Konrad Wottage
Len Corpus
Mario Ochoa

OPON DEVELOPMENT COMPANY

Calle 35 No. 7-25, Piso 4, Santafé de Bogotá, Colombia
Tel. 285-1400, Fax 285-6908

Legal Representative

Sergio Rueda

PETROLINSON & NOMECO LATIN AMERICA INC.

Calle 100 No. 8A-49, Oficina 705, Santafé de Bogotá, Colombia
Tels. 226-8285, 226-8326, 226-8756, Fax 257-9537

General Manager

Norman Rowlinson

PETROBRAS INTERNACIONAL S. A. - BRASPETRO

Calle 73 No. 7-06, Piso 11, Santafé de Bogotá, Colombia
Tels. 310-6467, 310-6482, 310-6490, Fax 310-6334

General Manager
Manager

Pablo César de Oliveira
Pablo Méndez de Mendoza

PETROCOL - PETROLEOS COLOMBIANOS LTD.

Carrera 7 No. 31-10, Santafé de Bogotá, Colombia
Tels. 287-2588, 287-1946, Fax 285-4483

President and General Manager
Legal Counsellor

Antonio Morales
Fernando Caycedo

PETROLEOS DEL NORTE S. A. (PETRONOR S. A.)

Carrera 10 No. 28-49, Oficina 2203, Santafé de Bogotá, Colombia
 Tel. 284-2288, Fax 281-0692

General Manager

Alfonso de Mares

PETROMINEROS S. A.

Calle 72 No. 10-07, Oficina 1003, Santafé de Bogotá, Colombia
 Tel. 210-4514, Fax 210-4538

General Manager

Alvaro Puerta

REPSOL EXPLORACION S. A. SUCURSAL COLOMBIA

Transv. 21 No. 100-20, Piso 8, Santafé de Bogotá, Colombia
 Tels. 257-2300, 257-1911, Fax 218-4092

General Manager

Alvaro Odriozola

TUSKAR COLOMBIA

Calle 100 No. 8A-55, Oficina 615, Santafé de Bogotá, Colombia
 Tel. 218-0211, Fax 610-9606

General Manager

Jock Graham

TEXAS PETROLEUM COMPANY

Calle 100 No. 7A-81, Santafé de Bogotá, Colombia
 Tels. 610-7366, 261-2077, 257-8420, Fax 218-9568

President

Kenneth Knaltz

General Manager

Robert Galbraith

Chief of Engineering

Carlos Sandoval

Drilling and Operations Manager

Luis Sierra

TOTAL DE COLOMBIA

Calle 72 No. 10-03, Oficina 902, Santafé de Bogotá, Colombia
 Tel. 210-0055, Fax 235-8453

General Manager

Jacques Des Boisseson

Technical Manager

Ashley Dodd

TRITON COLOMBIA INC.

Carrera 9A No. 99-02, Piso 2, Santafé de Bogotá, Colombia
Tel. 618-2564, Fax 618-2553

General Manager
Exploration Manager

Iván Fajardo
Darío Barrero

NOTE: The most active operators in exploration and production activities are British Petroleum, Shell, Lasmo, Maxus, Occidental and Texas.

OPON DEVELOPMENT COMPANY

Calle 35 No. 7-25, Piso 4, Santafé de Bogotá, Colombia
Tel. 285-100, Fax 285-100

PETROLIUM INTL CORP & NORTH AMERICA INC.

Calle 100 No. 8A-82, Oficina 812, Santafé de Bogotá, Colombia
Tel. 210-0211, Fax 210-0200

PETROBRAS A. S. LANÇAMENTO SARBORIT

Calle 73 No. 7-00, Oficina 11, Santafé de Bogotá, Colombia
Tel. 244-012, Fax 244-012

TEKSA PETROLEUM COMPANY

Calle 100 No. 7A-81, Oficina 812, Santafé de Bogotá, Colombia
Tel. 210-0211, Fax 210-0200

TOTAL DE COLOMBIA

Calle 13 No. 10-01, Oficina 802, Santafé de Bogotá, Colombia
Tel. 210-0000, Fax 210-0000

ANNEX B - AGENTS AND REPRESENTATIVES

AMBIOTEC

Carrera 16A No. 86A-79, Oficina 302, Santafé de Bogotá, Colombia
Tel. 610-8200, Fax 610-9106

Manager

Germán Gómez

Expertise in environmental protection engineering

ANTONIO CASTRO Y CIA. LTDA.

Calle 61 No. 4-33, Apartado Aéreo 57458, Santafé de Bogotá, Colombia
Tels. 212-1336, 212-1108, Fax 212-6879

Manager

Antonio Castro

Distributes exploration and production chemical and cathodic protection

DIGITRON LIMITADA

Calle 53 No. 27-33, Oficina 602, Apartado Aéreo 57401, Santafé de Bogotá, Colombia
Tel. 310-0030, Fax 310-0192

Manager

Hans Zenke

Represents manufacturers of production equipment

HOLSAN LTDA.

Calle 93 Bis No. 20-61, Apartado Aéreo 76471, Santafé de Bogotá, Colombia
Tels. 257-0947, 218-6855, Fax 218-8996

Manager

Juan Evangelista Sánchez

Environmental protection engineering

IMC COLOMBIA

Interimco Machinery de Colombia
 Calle 24A No. 24-34, Santafé de Bogotá, Colombia
 Tels. 268-3567, 268-0601, Fax 268-2750

Manager

Javier Mario Molina

Representative of foreign pipeline designers and constructors

SISMOCOL S. A.

Carrera 6A No. 34-62, Oficina 202, Santafé de Bogotá, Colombia
 Tels. 288-6711, Fax 285-9906

General Manager

Mario Rodríguez

Seismic and geophisic services

PETROLEUM ENERGY SERVICES LTD. OF COLOMBIA

Carrera 13A No. 35-51, Oficina 501, Apartado Aéreo 50537, Santafé de Bogotá,
 Colombia
 Tels. 288-1482, 282-8334, Fax 288-1459

Manager

Rodolfo Palacios

Equipment agent and distributor

WALTER ROTH LISBERGER & CO. LTDA.

Calle 25A No. 13A-28, Apartado Aéreo 6803, Santafé de Bogotá, Colombia
 Tel. 283-6200, Fax 282-2872

Director Petroleum Division

Eng. Luis Gómez

Equipment and instrumentation agent and distributor

INSTRUMENTOS Y CONTROLES ZACHMANN Y CIA. LTDA.

Carrera 22 No. 85-44, Santafé de Bogotá, Colombia
 Tel. 616-0100, Fax 621-1121

Manager Instrument Equipment

Felipe Guerra

INSURCOL LTDA.

Carrera 22 No. 36-29, Oficina 207, Bucaramanga, Colombia
 Tel. (76) 340-074, 352-644, Fax (76) 35-26-58

Representatives and distributors of laboratory and instrumentation equipment.

INVERSIONES J. P. M.

Carrera 13 No. 90-36, Oficina 704, Santafé de Bogotá
 Tels. 226-9070, 226-9217, Fax 226-8892

Manager

Jorge H. Pérez

Agent and representative of equipment suppliers

KIMPEX LTDA.

World Trade Center Tower A, Carrera 8 No. 99-51, Oficina 805, Santafé de Bogotá,
 Colombia
 Tels. 218-6217, 610-2606, Fax 610-2503

President

Luis Soto

Oil and gas exploration and production and transport equipment agent

NEPOMUCENO CARTAGENA G. E HIJOS

Carrera 15 No. 17-42, Apartado Aéreo 1695, Bucaramanga, Colombia
 Tel. (76) 331-171, Fax (76) 330-928

Gerente General

Francisco Cartagena

Equipment agent and distributor

PANAMERICAN ENGINEERING LTDA.

World Trade Center Tower A - Carrera 8A No. 99-51, Suite 701, Apartado Aéreo
 253.716, Santafé de Bogotá, Colombia
 Tels. 218-4448, 218-1161, Fax 218-4029

Manager

Carlos Orlando Pulido

Engineering and equipment agent and supplier

PETROLABIN LTDA.

Carrera 33 No. 48-109, Oficina 232, C.C. Gratamira, Bucaramanga, Colombia
 Tel. (76) 43-09-15, Fax (76)43-09-15
 Attn. Mr. Juan Pablo Andrade, Manager

Instrumentation equipment agent and representative

GEOLOGS LTDA.

Carrera 31 No. 75-37, Santafé de Bogotá, Colombia
 Tel. and Fax 240-4588

Manager

Fernando Calvache

Geological Services

PETROLCARBON EQUIPMENT DIVISION LTDA.

Calle 78 No. 9-57, Oficina 705, Apartado Aéreo 76063, Santafé de Bogotá, Colombia
 Tel. 255-4530, Fax 217-0591

General Manager

Luis A. Vargas

Engineering and equipment agent and representative

PETROTALENT LTDA.

Diagonal 110 No. 16-47, Oficina 605, Santafé de Bogotá, Colombia
 Tels. 612-1593, 612-1651, Fax 612-1680

President

Mario A. Ramón

Exploration and production services

PETROLEROS ASOCIADOS LTDA.

Calle 43 No. 55B-07, Santafé de Bogotá, Colombia
 Tels. 221-7181, 221-7321, 221-2406, Fax 221-5927

Manager

Jorge Lombana

Engineering and equipment supplier

PETRO-TESTING COLOMBIA LTDA.

Calle 23A No. 27-18, Apartado Aéreo 52903, Santafé de Bogotá, Colombia
Tels. 244-1096, 269-2257, Fax 268-7996

General Manager

Frank C. Kanayet

Exploration and production engineering services

SERPEIN S. A.

Carrera 11 No. 90-16, Oficina 504, Santafé de Bogotá, Colombia
Tel. 218-8893, Fax 218-9132

Manager

Jorge Lizcano, Manager

Equipment agent and distributor

SERPETCO SERVICES S. A.

Carrera 128A No. 22-44, Apartado Aéreo 90897, Santafé de Bogotá, Colombia
Tels. 298-7120, 298-5106, Fax 298-1060
Att. Mr. Jim Stuckey, President

Equipment agent and distributor

TECHNICAL PETROLEUM SERVICES, S. A.

Carrera 9 No. 74-08, Oficina 12-01, A. A. 75234, Santafé de Bogotá, Colombia
Tels. 211-4429, 211-4405, Fax 212-7006

Manager

Gonzalo Pereira

Engineering equipment supplier

TECHNICONTROL

Calle 72 No. 5-32, Apartado Aéreo 2986, Santafé de Bogotá, Colombia
Tel. 235-5555, Fax 249-8351

Marketing Director

Alfredo Wills

Engineering, testing services

**T. EXPLÓRER LTDA.**

Carrera 9B No. 118-68, Santafé de Bogotá, Colombia
Tels. 214-0335, 620-0209

Manager

Carlos García

Exploration services

WASTE (WATER AND SLUDGES TREATMENT ENGINEERING LTDA.)

Carrera 51 No. 131B-15, Interior 104, Apartado Aéreo 21788, Santafé de Bogotá,
Colombia
Tels. and Fax 271-7803, 250-7902

Marketing and Sales Manager

Eng. Edgard Sacristian

Environmental protection services

FOTOGAMETRIA ANALITICA LTDA. - FAL

Transversal 19 No. 59-43, Santafé de Bogotá, Colombia
Tel. 235-5965, Fax 610-0287

General Manager

Augusto Cabrera

Aerophotogrametry, mapping and consulting services

