

Gran Tierra Energy Announces 2009 Year-End Reserves

Another Record Year for Proved Oil and Gas Reserves

CALGARY, Alberta – February 22, 2010 – Gran Tierra Energy Inc. (NYSE Amex: GTE; TSX: GTE), a company focused on oil exploration and production in South America, today announced the results of an independent reserve evaluation of the company's reserves by GLJ Petroleum Consultants Ltd. effective December 31, 2009.

Year-end 2009 Highlights (net after royalties):

- Approximately 5.7 million barrels of working interest oil was produced in 2009;
- Proved oil reserves increased 14.6 % to approximately 22.1 million barrels (SEC compliant);
- Proved plus probable (2P) oil reserves are approximately 27.9 million barrels (no SEC equivalent in 2008);
- Proved plus probable plus possible (3P) oil reserves are approximately 39.4 million barrels (no SEC equivalent in 2008);
- Approximately 0.1 billion cubic feet of working interest gas was produced in 2009;
- Proved gas reserves increased 61.0 % to approximately 1.9 billion cubic feet (SEC compliant);
- Proved plus probable (2P) gas reserves are approximately 3.6 billion cubic feet (no SEC equivalent in 2008);
- Proved plus probable plus possible (3P) gas reserves are approximately 38.1 billion cubic feet (no SEC equivalent in 2008).

All reserves values contained in the 2009 Highlights, provided above, have been calculated using United States Securities Exchange Commission rules. For reserves values calculated in compliance with Canadian National Instrument 51-101 and the Canadian Oil and Gas Evaluation Handbook, see "Reserves Reported in Accordance with Canadian Reporting Requirements" below in this press release.

"2009 was another excellent year for the growth of Gran Tierra Energy's reserve base, fueled in large part by development drilling in the Costayaco Field in Colombia and testing operations in the Valle Morado Field in Argentina," said Dana Coffield, President and CEO. "The focus for 2010 is to grow reserves through an active exploration drilling campaign, with seven exploration wells budgeted in Colombia and four exploration wells budgeted in Peru. In addition, drilling and seismic operations are budgeted to further define the gas potential of our lands in Argentina. We expect this to be funded out of available cash and cashflow from operations, allowing the company to remain debt free."

Reserves Reported in Accordance with United States Reporting Requirements

The following reserves are reported consistent with United States Securities and Exchange Commission rules.

The following table summarizes Gran Tierra Energy's year-end 2009 working interest reserves and net after royalty reserves (with start of month average 2009 oil price). Also shown in the following table are Gran Tierra Energy's net after royalty reserves for year-end 2008 (with constant December 31, 2008 oil price and cost).

Total Company

Total Company	2009 Year-End	2009 Year-End	2008 Year-End
Light and Medium Oil (SEC Compliant)	Gran Tierra Energy Working Interest Reserves	Gran Tierra Energy NAR* Reserves	Gran Tierra Energy NAR Reserves
Reserves Category	MBO **	MBO	MBO
Proved			
Developed Producing	26,606	20,375	8,966
Developed Nonproducing	1,032	899	1,300
Undeveloped	1,037	808	8,972
Total Proved	28,675	22,082	19,238
Total Probable	7,543	5,821	N/A
Total Proved plus Probable	36,218	27,902	N/A
Total Possible	15,093	11,538	N/A
Total PPP	51,130	39,440	N/A

*NAR (net after royalty).

**MBO (thousand barrels of oil).

The increases in proved oil reserves is mainly associated with development drilling in the Costayaco Field in Colombia.

Total Company	2009 Year-End	2009 Year-End	2008 Year-End
Gas (SEC Compliant)	Gran Tierra Energy Working Interest Reserves	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
Reserves Category	MMSCF***	MMSCF	MMSCF
Proved			

Developed Producing	1,391	1,113	1,161
Developed Nonproducing	877	756	0
Undeveloped	0	0	0
Total Proved	2,268	1,869	1,161
Total Probable	2,076	1,739	N/A
Total Proved plus Probable	4,344	3,608	N/A
Total Possible	40,171	34,520	N/A
Total PPP	44,515	38,128	N/A

***MMSCF (million standard cubic feet).

The increase in proved gas reserves is due to workover activity on VM.x-1001 in the Valle Morado Field in Argentina.

Colombia

Gran Tierra Energy's Colombia year-end 2009 working interest and net after royalty reserves are shown in the following table (with start of month average 2009 oil price). Also shown in the following table is Gran Tierra Energy's Colombian net after royalty reserves for year-end 2008 (with constant December 31, 2008 oil price and cost).

Colombia	2009 Year-End	2009 Year-End	2008 Year-End
Light and Medium Oil (SEC Compliant)	Gran Tierra Energy Working Interest Reserves	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
Reserves Category	MBO	MBO	MBO
Proved			
Developed Producing	25,427	19,350	7,832
Developed Nonproducing	968	844	1,061
Undeveloped	794	597	8,788
Total Proved	27,189	20,791	17,681
Total Probable	6,564	4,972	N/A
Total Proved plus Probable	33,754	25,762	N/A
Total Possible	12,496	9,430	N/A
Total PPP	46,250	35,192	N/A

The increase in proved reserves in Colombia is mainly associated with development drilling in the Costayaco Field.

Colombia	2009 Year-End	2009 Year-End	2008 Year-End
Gas	Working Interest	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
(SEC Compliant)	Reserves		MAGOE
Reserves Category	MMSCF	MMSCF	MMSCF
Proved			
Developed Producing	1,391	1,113	1,161
Developed Nonproducing	0	0	0
Undeveloped	0	0	0
Total Proved	1,391	1,113	1,161
Total Probable	815	652	N/A
Total Proved plus Probable	2,206	1,765	N/A
Total Possible	1,735	1,388	N/A
Total PPP	3,941	3,153	N/A

The Costayaco Field 2009 year-end net after royalty reserves are shown in the following table (with start of month average 2009 oil price). Also shown in the following table is a comparison of the Costayaco Field 2009 year-end gross lease reserves (with start of the month average 2009 oil price) to the gross lease reserves estimated in July 31, 2009 (with constant July 31, 2009 oil price and cost).

Costayaco	2009 Year-End	2009 Year-End	July 31, 2009
Light and Medium Oil	Costayaco Gran Tierra Energy NAR Reserves	Costayaco Gross Lease Reserves	Costayaco Gross Lease Reserves
(SEC Compliant)	MBO	MBO	MBO
Reserves Category	MDO	IVIDO	WIDO
Proved			
Developed Producing	18,151	24,016	9,546
Total Proved	18,748	24,810	19,657
Total Probable	4,592	6,133	N/A
Total Proved plus Probable	23,340	30,943	N/A
Total Possible	8,745	11,718	N/A
Total PPP	32,085	42,661	N/A

Argentina

Gran Tierra Energy's Argentina working interest and net after royalty reserves are shown in the following table (with start of month average 2009 oil price). Also shown in the following table is Gran Tierra Energy's Argentina net after royalty reserves for year-end 2008 (with constant December 31, 2008 oil price and cost).

Argentina	2009 Year-End	2009 Year-End	2008 Year-End
Light and Medium Oil (SEC Compliant)	Gran Tierra Energy Working Interest Reserves	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
Reserves Category	MBO	MBO	MBO
Proved			
Developed Producing	1,179	1,025	1,134
Developed Nonproducing	64	55	239
Undeveloped	243	211	184
Total Proved	1,486	1,291	1,557
Total Probable	978	850	N/A
Total Proved plus Probable	2,464	2,140	N/A
Total Possible	2,416	2.109	N/A
Total PPP	4,879	4,248	N/A

The decrease in proved oil reserves is due to production.

Argentina	2009 Year-End	2009 Year-End	2008 Year-End
Gas	Working Interest	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
(SEC Compliant)	Reserves		
Reserves Category	MMSCF	MMSCF	MMSCF
Proved			
Developed Producing	0	0	0
Developed Nonproducing	877	756	0
Undeveloped	0	0	0
Total Proved	877	756	0
Total Probable	1,261	1,087	N/A
Total Proved plus Probable	2,138	1,843	N/A
Total Possible	38,436	33,132	N/A
Total PPP	40,574	34,975	N/A

The increase in proved gas reserves is due to workover activity on VM.x-1001 in the Valle Morado Field in Argentina.

Reserves Reported in Accordance with Canadian Reporting Requirements

The following reserves are compliant with Canadian National Instrument 51-101 (NI 51-101) and the Canadian Oil and Gas Evaluation Handbook (COGEH) (with forecasted oil price and costs):

Total Company

Total company	2009 Year-End	2009 Year-End	2008 Year-End
Light and Medium Oil (NI 51-101 compliant)	Gran Tierra Energy Working Interest Reserves	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
Reserves Category	MBO	MBO	MBO
Proved			
Developed Producing	26,942	19,705	9,194
Developed Nonproducing	1,032	898	1,329
Undeveloped	1,051	784	8,289
Total Proved	29,025	21,386	18,811
Total Probable	7,304	5,410	8,676
Total Proved plus Probable	36,329	26,795	27,487
Total Possible	14,915	11,085	18,599
Total PPP	51,243	37,880	46,086

Gran Tierra Energy's year-end 2009 NAR reserves compared to year-end 2008 NAR reserves (compliant with NI 51-101 and COGEH) are as follows:

Proved light and medium oil reserves increased 13.5% due to development drilling in the Costayaco Field in Colombia.

In addition, Gran Tierra Energy also has year-end 2009 NAR proved gas reserves of approximately 1.9 billion cubic feet (BCF), an increase of 61.0 % from 1.2 BCF NAR proved gas reserves at year-end 2008 due to testing results in the Valle Morado Field in Argentina.

Probable light and medium oil reserves decreased 38% due to changes in reserve category allocation.

In addition, Gran Tierra Energy also has year-end 2009 NAR probable gas reserves of approximately 1.7 BCF, a decrease of 5.6% from 1.8 BCF NAR at year-end 2008.

Possible light and medium oil reserves decreased 41.5% due to negative test results of Costayaco-7.

In addition, Gran Tierra Energy also has year-end 2009 NAR possible gas reserves of approximately 34.5 BCF, an increase of 108% from 16.6 BCF NAR at year-end 2008 due to testing results in the Valle Morado Field in Argentina.

Colombia

Gran Tierra Energy's year-end 2009 Colombia working interest and net after royalty reserves are shown in the following table (NI 51-101 compliant with forecast oil price and cost). Also shown in the following table are Gran Tierra Energy's Colombian net after royalty reserves for year-end 2008 (NI 51-101 compliant with forecast oil price and cost).

Colombia	2009 Year-End	2009 Year-End	2008 Year-End
Light and Medium Oil	Working Interest	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
(NI 51-101 compliant)	Reserves		
Reserves Category	MBO	MBO	MBO
Proved			
Developed Producing	25,725	18,647	8,050
Developed Nonproducing	968	843	1,080
Undeveloped	822	585	8,108
Total Proved	27,515	20,075	17,237
Total Probable	6,322	4,557	7,706
Total Proved plus Probable	33,837	24,632	24,943
Total Possible	12,503	8,980	15,806
Total PPP	46,340	33,611	40,749

The increases in proved reserves in Colombia is mainly associated with development drilling in the Costayaco Field. The decrease in possible reserves is due primarily to the negative test results from Costayaco-7.

In addition to the above proved light and medium oil reserves, Gran Tierra Energy also has year-end 2009 NAR proved gas reserves of approximately 1.1 BCF in Colombia. Gran Tierra Energy had 1.2 BCF proved gas reserves at year-end 2008 in Colombia.

In addition to the above probable light and medium oil reserves, Gran Tierra Energy also has year-end 2009 NAR probable gas reserves of approximately 0.7 BCF in Colombia. Gran Tierra Energy had 0.7 BCF NAR probable gas reserves at year-end 2008 in Colombia.

In addition to the above possible light and medium oil reserves, Gran Tierra Energy also has year-end 2009 NAR possible gas reserves of approximately 1.4 BCF in Colombia. Gran Tierra Energy had 1.9 BCF NAR possible gas reserves at year-end 2008 in Colombia.

The Costayaco Field 2009 year-end net after royalty reserves are shown in the following table (with forecast oil price and cost). Also shown in the following table is a comparison of the Costayaco Field 2009 year-end gross lease reserves (with forecast oil price and cost) to the gross lease reserves estimated in July 31, 2009 (with forecast oil price and cost).

Costayaco	2009 Year-End	2009 Year-End	July 31, 2009
Light and Medium Oil (NI 51-101 compliant)	Costayaco Gran Tierra Energy NAR Reserves	Costayaco Gross Lease Reserves	Costayaco Gross Lease Reserves
Reserves Category	MBO	MBO	MBO
Proved			
Developed Producing	17,398	24,257	9,800
Total Proved	17,983	25,079	19,657
Total Probable	4,153	5,864	10,635
Total Proved plus Probable	22,136	30,943	30,292
Total Possible	8,290	11,718	13,217
Total PPP	30,426	42,661	43,509

Approximately 2.64 million barrels of oil (MMBO) was produced from August 1, 2009 to December 31, 2009. Taking the production volume into account, there is an increase in proved and probable reserves associated with the successful drilling and testing of Costayaco-8, Costayaco-9 and Costayaco-10. The reductions in possible reserves are mainly associated with the failure to test oil in Costayaco-7.

Argentina

Gran Tierra Energy's Argentina year-end 2009 working interest and net after royalty reserves are shown in the following table (NI 51-101 compliant with forecast oil price and cost). Also shown in the following table is Gran Tierra Energy's Argentina net after royalty reserves for year-end 2008 (NI 51-101 compliant with forecast oil price and cost).

Argentina	2009 Year-End	2009 Year-End	2008 Year-End
Light and Medium Oil	Gran Tierra Energy Working Interest	Gran Tierra Energy NAR Reserves	Gran Tierra Energy NAR Reserves
(NI 51-101 compliant)	Reserves		

Reserves Category	MBO	MBO	MBO
Proved			
Developed Producing	1,217	1,058	1,144
Developed Nonproducing	64	55	249
Undeveloped	229	199	181
Total Proved	1,510	1,311	1,574
Total Probable	982	853	970
Total Proved plus Probable	2,492	2,164	2,544
Total Possible	2,412	2,105	2,793
Total PPP	4,903	4,269	5,337

Gran Tierra Energy had no proved gas reserves in Argentina at year-end 2008;

In addition to the above probable light and medium oil reserves, Gran Tierra Energy also has year-end 2009 NAR probable gas reserves of approximately 1.1 BCF in Argentina. Gran Tierra Energy had year-end 2008 NAR probable gas reserves of approximately 1.2 BCF;

In addition to the above possible light and medium oil reserves, Gran Tierra Energy also has year-end 2009 NAR possible gas reserves of approximately 33.1 BCF in Argentina. Gran Tierra Energy had year-end 2008 NAR possible gas reserves of approximately 14.7 BCF.

Current Production

Gran Tierra Energy is currently producing approximately 14,800 barrels of oil per day (BOPD) NAR. About 14,000 BOPD NAR production is from Colombia and approximately 800 BOPD NAR production is from Argentina.

With the production capacity available from existing wells, Gran Tierra Energy plans to maintain its net after royalty production in Colombia between 13,000 BOPD and 15,000 BOPD independent of any exploration success in 2010.

Gran Tierra Energy's net after royalty production rate for Argentina is expected to remain constant at approximately 1,000 barrels of oil equivalent per day (BOEPD) throughout 2010.

About Gran Tierra Energy Inc.

Gran Tierra Energy Inc. is an international oil and gas exploration and production company, headquartered in Calgary, Canada, incorporated in the United States, trading on the NYSE Amex Exchange (GTE) and the Toronto Stock Exchange (GTE), and operating in South America. Gran Tierra Energy holds interests in producing and prospective properties in

Argentina, Colombia and Peru, and has opened a business development office in Rio de Janeiro, Brazil. Gran Tierra Energy has a strategy that focuses on establishing a portfolio of producing properties, plus production enhancement and exploration opportunities to provide a base for future growth.

Additional information concerning Gran Tierra Energy is available at <u>www.grantierra.com</u>, on SEDAR (<u>www.sedar.com</u>) and with the Securities and Exchange Commission (<u>www.sec.gov</u>).

Cautionary Statements:

Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. There is a 10% probability that the quantities actually recovered will equal or exceed the sum of proved plus probable plus possible reserves. The estimate of reserves for individual properties may not reflect the same confidence level as estimates of reserves for all properties, due to the effects of aggregation.

A Barrel of oil equivalent (BOE) is calculated using the conversion factor of 6,000 cubic feet ("6Mcf") of natural gas being equivalent to one barrel of oil. BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf per barrel of oil is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

Forward-Looking Statements

The statements in this press release regarding Gran Tierra Energy's expectations, plans, projections and actions including Gran Tierra Energy's expectations regarding its 2010 exploration drilling campaign and expected funding of the campaign, and expected 2010 NAR production in Colombia and Argentina are "forward-looking statements" within the meaning of the U.S. federal and Canadian securities laws, including Canadian Securities Administrators' National Instrument 51-102 Continuous Disclosure Obligations and the U.S. Private Securities Litigation Reform Act of 1995. Statements containing the words "estimates", "expects", "will", "scheduled", "may", and variations of these words are forward-looking statements. These forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results or outcomes to differ materially from those contemplated by the forward-looking statements. Although Gran Tierra Energy believes that the assumptions underlying, and expectations reflected in, these forward-looking statements are reasonable, it can give no assurance that these assumptions and expectations will prove to be correct.

Factors that could cause results to differ materially from those described in the forward-looking statements include: Gran Tierra Energy's operations are located in South America,

and unexpected problems can arise due to guerilla activity, technical difficulties and operational difficulties which impact the production, transportation or sale of oil and gas; changing prices for crude oil may cause some scheduled projects or actions to become uneconomical, or may change Gran Tierra Energy's focus to other projects or actions which could be of more benefit to Gran Tierra Energy, which could cause projects or actions currently contemplated to be postponed or cancelled; unexpected problems due to technical difficulties, operational difficulties, and weather conditions; and those other risks found in the periodic reports filed by Gran Tierra Energy with the United States Securities and Exchange Commission, including in the section entitled "Risk Factors" in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 5, 2009, and available at the Securities and Exchange Commission's internet site <u>www.sec.gov</u> and on SEDAR at <u>www.sedar.com</u>.

All forward-looking statements in this press release are expressly qualified by information contained in Gran Tierra Energy's filings with regulatory authorities and, subject to its obligations under applicable securities laws, Gran Tierra Energy does not undertake to publicly update forward-looking statements, whether as a result of new information, future events or otherwise.

Contact Information

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