# PETRONEFT RESOURCES Plc

# **ESTIMATED**

FUTURE RESERVES AND INCOME
ATTRIBUTABLE TO CERTAIN

LEASEHOLD INTERESTS IN

LICENSE AREA 61 (TUNGOLSKY)

AS OF

**January 1, 2010** 



# **Petroleum Consultants Report**

Ryder Scott Company Petroleum Consultants 621 17th Street, Suite 1550 Denver, Colorado 80293

# **January 1, 2010**

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1 January 2010

Gentlemen:

### **Executive Summary**

At your request, we have prepared an estimate and net present valuation of the proved and probable reserves, future production, revenue and net income attributable to the 100% ownership of PetroNeft Resources Plc's ("PetroNeft") wholly owned Russian Limited Liability subsidiary company Stimul-T, the sole license holder of License Area 61 (Tungolsky) located in the Tomsk Oblast in Russia. The effective date of the economic evaluation is January 1, 2010. Since the last full reserves report dated 31 December 2008, PetroNeft has optimized the development plan and cut costs to reflect the current economic situation in the Tomsk Region.

PetroNeft has also signed a Crude Oil Transportation and Custody Transfer agreement with Imperial Energy to tie-in to their Kiev-Eganskoye oil field and utilize Imperial's infrastructure under a simplified custody transfer scheme to transport oil to Transneft. The Kiev-Eganskoye field is located 60 km to the southeast of the Lineynoye oil field. This report includes the new drilling and study results, as well as the capital and operating costs associated with the Kiev-Eganskoye tie-in. Turn-key contracts were in place for the pipeline construction and drilling of the initial 9 development wells in 2010 at the end of 2009. First pipeline oil is targeted for 3<sup>rd</sup> quarter of 2010.

This report only includes the expenditures for the evaluation and development of the proved and probable reserves in the Lineynoye, West Lineynoye, Tungolskoye and newly discovered Kondrashevskoye oil fields. In addition, we have prepared an estimate of the potential range of possible reserves for seismically defined structures in the License Area at the Upper Jurassic, Cretaceous and Lower to Middle Jurassic intervals. Finally, we have also prepared an estimate of the recoverable resource potential of 4 other structures in the License Area at the Upper Jurassic level. The income data were estimated using constant prices and costs.

PetroNeft intends to develop License 61 in phases from the north. Phase 1 will consist of the development of the West Lineynoye and Lineynoye oil fields along with a 60 km pipeline to Kiev-Eganskoye and a simplified custody transfer point. Phase 2 is Phase 1 plus the incremental addition of the Kondrashevskoye and Tungolskoye oil fields.

In addition to the base case for each phase, two additional price sensitivity cases were evaluated. The price assumptions associated with those cases will be summarized later in the report. A summary of the results of this study is shown below beginning with Phase 2 broken down into increments:

# Grand Summary Phase 1 and Phase 2 - Case 2 (Base) Constant Prices and Costs

Estimated Net Reserve and Income Data License Area 61

#### **PetroNeft**

As of January 1, 2010

	Total Proved	Total Probable	Proved & Probable
Net Remaining Reserves		<del></del>	
Phase 1 - Oil/Condensate (10 <sup>3</sup> Bbls)	8,407	38,796	47,203
Incremental fields - Oil/Condensate (10 <sup>3</sup> Bbls)	<u>1,992</u>	<u>21,645</u>	23,637
Total - Phase 2 - Oil/Condensate (10 <sup>3</sup> Bbls)	10,400	60,441	70,840
Future Net Income (FNI) (10 <sup>3</sup> \$)			
Phase 1 - (10 <sup>3</sup> \$)	\$105,270	\$ 511,681	\$ 616,951
Incremental fields - (10 <sup>3</sup> \$)	<u>\$ 26,830</u>	\$ 302,664	\$ 329,492
Total - Phase 2 - (10 <sup>3</sup> \$)	\$132,100	\$ 814,345	\$ 946,443
Discounted FNI @ 10%			
Phase 1 - (10 <sup>3</sup> \$)	\$65,532	\$235,518	\$301,050
Incremental fields - (10 <sup>3</sup> \$)	<u>\$13,637</u>	\$121,111	\$134,748
Total - Phase 2 - (10 <sup>3</sup> \$)	\$79,169	\$356,629	\$435,798

The following are the individual case summaries for Phase 1 followed by Phase 2.

# Phase 1 - Case 2 (Base) Constant Prices and Costs

Estimated Net Reserve and Income Data

License Area 61

# PetroNeft

As of January 1, 2010

	Total	Total	Proved &
	Proved	Probable	Probable
Net Remaining Reserves Oil/Condensate (10 <sup>3</sup> Bbls)	8,407	38,796	47,203
Income Data (10³ \$) Future Gross Revenue * Deductions Future Net Income (FNI)	\$331,225	\$1,571,457	\$1,902,682
	<u>\$225,955</u>	<u>\$1,059,776</u>	<u>\$1,285,731</u>
	\$105,270	\$ 511,681	\$ 616,951
Discounted FNI @ 10%	\$ 65,532	\$ 235,518	\$ 301,050

<sup>\*</sup> After deduction of MET

In addition to the Base Case, two price sensitivity cases were evaluated. Case 1 represents a lower price scenario and Case 3 represents a higher price scenario. The results are summarized below.

# Phase 1 - Case 1 (Low) Constant Prices and Costs

Estimated Net Reserve and Income Data License Area 61

# PetroNeft

As of January 1, 2010

	Total	Total	Proved &
	Proved	Probable	Probable
Net Remaining Reserves			
Oil/Condensate (10 <sup>3</sup> Bbls)	8,407	38,796	47,203
Income Data (10 <sup>3</sup> \$)			
Future Gross Revenue *	\$282,634	\$1,338,629	\$1,621,263
Deductions	<u>\$198,211</u>	<u>\$ 943,896</u>	\$1,142,107
Future Net Income (FNI)	\$ 84,423	\$ 394,733	\$ 479,156
Discounted FNI @ 10%	\$ 51,619	\$ 180,715	\$ 232,334

# Phase 1 - Case 3 (High) Constant Prices and Costs

Estimated Net Reserve and Income Data License Area 61

### PetroNeft

As of January 1, 2010

	Total Proved	Total Probable	Proved & Probable
Not Domaining Dogomas	TTOVEU	1 Tobable	<u> </u>
Net Remaining Reserves	0.407	20.706	47.202
Oil/Condensate (10 <sup>3</sup> Bbls)	8,407	38,796	47,203
Income Data (10³ \$) Future Gross Revenue *	\$391,818	\$1,861,926	\$2,253,744
Deductions	\$258,989	\$1,216,002	\$1,474,990
Future Net Income (FNI)	\$132,829	\$ 645,924	\$ 778,754
Discounted FNI @ 10%	\$ 83,814	\$ 300,863	\$ 384,677

<sup>\*</sup> After deduction of MET

Phase 2 of the project is Phase 1 plus the incremental development of the Kondrashevskoye and Tungolskoye oil fields beginning in 2012. A summary of the results of this study is shown below.

# Phase 2 – Case 2 (Base) Constant Prices and Costs

Estimated Net Reserve and Income Data

License Area 61

#### **PetroNeft**

As of January 1, 2010

	Total	Total	Proved &
	Proved	Probable	Probable
Net Remaining Reserves Oil/Condensate (10 <sup>3</sup> Bbls)	10,400	60,441	70,840
Income Data (10³ \$) Future Gross Revenue * Deductions Future Net Income (FNI)	\$409,364	\$2,445,450	\$2,854,813
	<u>\$277,264</u>	<u>\$1,631,105</u>	<u>\$1,908,370</u>
	\$132,100	\$ 814,345	\$ 946,443
Discounted FNI @ 10%	\$ 79,169	\$ 356,629	\$ 435,798

In addition to the Base Case, two price sensitivity cases were evaluated. Case 1 represents a lower price scenario and Case 3 represents a higher price scenario. The results are summarized below.

# Phase 2 - Case 1 (Low) Constant Prices and Costs

Estimated Net Reserve and Income Data

License Area 61

### PetroNeft

As of January 1, 2010

	Total	Total	Proved &
	Proved	<b>Probable</b>	Probable
Net Remaining Reserves			
Oil/Condensate (10 <sup>3</sup> Bbls)	10,400	60,441	70,840
Income Data (10 <sup>3</sup> \$)			
Future Gross Revenue *	\$349,329	\$2,083,255	\$2,432,585
Deductions	<u>\$244,272</u>	\$1,435,381	\$1,679,653
Future Net Income (FNI)	\$105,057	\$ 647,874	\$ 752,932
, ,			
Discounted FNI @ 10%	\$ 61,887	\$ 278,884	\$ 340,771
	,		

<sup>\*</sup> After deduction of MET

# Phase 2 - Case 3 (High)

# Constant Prices and Costs Estimated Net Reserve and Income Data

License Area 61

#### PetroNeft

As of January 1, 2010

Total Proved	Total Probable	Proved & Probable
<del></del> -		
10,400	60,441	70,840
\$484 225	\$2 897 249	\$3,381,474
, -		\$2,193,362
		\$1.188,112
		\$ 554.595
	Proved	Proved         Probable           10,400         60,441           \$484,225         \$2,897,249           \$318,436         \$1,874,926           \$165,789         \$1,022,323

Because of both economic and political forces, there is significant uncertainty regarding the forecasting of future hydrocarbon prices. The recoverable reserves and the income attributable thereto have a direct relationship to the hydrocarbon prices actually received; therefore, volumes of reserves actually recovered and amounts of income actually received may differ significantly from the estimated quantities presented in this report.

Liquid hydrocarbons are expressed in standard 42 gallon barrels. The various producing status categories are attached.

The future gross revenue \* is after deduction of Mineral Extraction Tax (MET). The deductions are comprised of operating costs, export tariff, property tax, profit tax, drilling and completion costs, facility and construction costs, transportation costs and certain abandonment costs.

The evaluation was based on 100 percent ownership of the subject properties (working interest = 100 percent). The net revenue factor is used to compensate for gravity adjustments, processing and line losses.

The discounted future net income shown above was calculated using a discount rate of 10 percent per annum compounded monthly. Future net income was discounted at four other discount rates which were also compounded monthly. These results are shown on each estimated projection of future production and income presented in a later section of this report and in summary form as follows.

Phase 1 - Case 2 (Base) – Discounted Future Net Income (10<sup>3</sup> \$)

	As of January 1, 2010	
Total	Total	Proved +
Proved	Probable	Probable
\$71,538	\$272,145	\$343,683
\$65,532	\$235,518	\$301,050
\$60,221	\$204,768	\$264,990
\$53,348	\$167,330	\$220,677
	\$71,538 \$65,532 \$60,221	Total Proved         Total Probable           \$71,538         \$272,145           \$65,532         \$235,518           \$60,221         \$204,768

<sup>\*</sup> After deduction of MET

Phase 1 - Case 1 (Low) - Discounted Future Net Income (10 <sup>3</sup> \$)
As of January 1, 2010

		As of January 1, 2010	
Discount Rate	Total	Total	Proved +
Percent	Proved	Probable	Probable
0	<b>A W C W C O</b>	<b>#200.202</b>	<b>42.57.072</b>
8	\$56,560	\$209,392	\$265,952
10	\$51,619	\$180,715	\$232,334
12	\$47,256	\$156,576	\$203,832
15	\$41,806	\$127,119	\$168,739
	Phase 1 - Case 3 (F	High) - Discounted Future	Net Income (10 <sup>3</sup> §
		As of January 1, 2010	
Discount Rate	Total	Total	Proved +
Percent	Proved	Probable Probable	Probable
8	\$91,245	\$346,504	\$437,749
10	\$83,814	\$300,863	\$384,677
12	\$77,235	\$262,549	\$339,784
15	\$68,706	\$215,882	\$284,588
	Phase 2 - Case 2 (I	Base) - Discounted Future	Net Income (10 <sup>3</sup> §
		As of January 1, 2010	
Discount Rate	Total	Total	Proved +
Percent	Proved	Probable	Probable
8	\$87,045	\$415,953	\$502,998
10	\$79,169	\$356,629	\$435,798
12	\$72,252	\$307,262	\$379,514
15	\$63,373	\$247,785	\$311,157
	Phase 2 - Case 1 (I	Low) - Discounted Future	Net Income (10 <sup>3</sup> S
		As of January 1, 2010	
Discount Rate	Total	Total	Proved +
Percent	Proved	Probable	Probable
8	\$68,289	\$326,741	\$395,030
10	\$61,887	\$278,884	\$340,771
12	\$56,274	\$239,087	\$295,361
15	\$49,082	\$191,206	\$240,288
10	Ψ12,002	Ψ121 <u>,200</u>	Ψ2 10,200
	Phase 2 - Case 3 (H	High) - Discounted Future	Net Income (10 <sup>3</sup> S
Discount Rate	Total	As of January 1, 2010 Total	Proved +
Percent	Proved	Probable	Probable
8	\$110,403	\$527,554	\$637,956
10	\$100,687	\$453,908	\$554,595
10	¢ 02 145	\$202.594	\$35 <del>1</del> ,373

The results shown above are presented for your information and should not be construed as our estimate of fair market value.

\$392,584

\$318,612

\$ 92,145

\$ 81,163

12

15

\$484,729

\$399,775

#### Introduction

The reserves and resources reported herein conform to the standards of the Petroleum Resources Management System (PRMS), which was prepared by the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE). The document (SPE-PRMS) was reviewed and jointly sponsored by the World Petroleum Council, the American Association of Petroleum Geologists and the Society of Petroleum Evaluation Engineers and was approved by the SPE Board of Directors in March 2007.

The <u>proved reserves</u> included herein conform to the definition approved by the Society of Petroleum Engineers (SPE) under the Petroleum Resources Management System (PRMS). The <u>probable reserves</u> included herein conform to definitions of probable reserves approved by SPE-PRMS using the deterministic methodology and the <u>possible reserves</u> included herein conform to definitions of possible reserves approved by SPE-PRMS using probabilistic methodology. In addition, development cost and price parameters consistent with best practices as described in Chapter 19 of the Listing Rules of the UK Listing Authority and of the Irish Stock Exchange which were in force up until July 1, 2005 and the London Stock Exchange AIM Guidance Note for Mining, Oil and Gas Companies dated March 2006. The definitions of proved, probable, and possible reserves are included under the tab "Petroleum Reserves Definitions" in this report.

The reserves included in this report conform to the following terms for License 61.

The Company's License 61 (Tungolsky) was issued by the Federal Agency for Subsoil Use to the Company's subsidiary Stimul-T for the geological survey, exploration and production of hydrocarbons at the Tungolsky area. The License was registered by the Subsoil Agency on 4 May 2005 under the registration number No. 4060/TOM 13135 NR. Pursuant to the Subsoil Law the effective date of the license is its registration date. The License validity term, as stipulated in the License itself, is until 15 April 2030 which is slightly less than 25 years. Pursuant to the Licensing Agreement Stimul-T has a number of obligations with respect to the exploration and production of hydrocarbons. Some of the most significant obligations of the Tungolsky area include:

- Carrying out of 1,000 km of 2D seismic studies within three years from the date the License is registered;
- Drilling not less than six exploration wells within six years from the date the License is registered; and
- Commencement of production on the Tungolsky area no later than two years from the date of approval of the reserves.

PetroNeft has already met its seismic obligation by acquiring a total of 1,055 km of new high resolution 2D seismic during the winter seasons 2005/2006 and 2006/2007. Also, PetroNeft has now drilled the six required wells and has met all the exploration drilling requirements for the term of the License.

The Regulations on Procedure for Licensing Subsoil Use and the Subsoil Law provide that the designated term of a license may be renewed at the initiative of the license holder and at the discretion of the licensing authorities, provided that the license holder observes the provisions of the license and the deposit still contains extractable reserves.

Each license holder undergoes periodic reviews by the Tomsk Oblast governmental entities responsible for ensuring compliance by subsurface license holders with the terms of their licenses and

applicable legislation. The Company has confirmed that it is in compliance with all terms regarding License 61.

A licensee can be fined for failing to comply with the subsoil production license and the subsoil production license can be revoked, suspended, or limited in certain circumstances.

#### **Estimates of Reserves**

The reserves included herein were estimated by a deterministic analysis. The analysis was also checked by a probabilistic analysis of the volumetric parameters. Proved reserves were assigned to undrilled locations that were direct offsets of wells tested at economic rates. In addition, the proved reserves were limited to primary recovery for those locations. The incremental reserves attributable to water injection were classified as probable. All reserves for locations that were not direct offsets of tested wells were classified as probable. The primary reserves were estimated by a solution gas recovery efficiency of 15.8%. The incremental secondary reserves assigned to the proved reserves were based on a total primary and secondary recovery of from 25% to 30%. Total reserves to the locations classified as probable were based on a recovery efficiency of from 25% to 30% for proved plus probable reserves (15.8% primary and 9.2% to 14.2% secondary).

The general reservoir properties for the discovered fields which includes the recent drilling results as well as the reprocessing and reinterpretation of the well log data by Tomskneftegazengineering is summarized in the following table:

	Genera		
Property	Lineynoye and West	Tungolskoye	Kondrashevskoye
_	Lineynoye		
Reservoir	Upper Jurassic J1	Upper Jurassic J1	Upper Jurassic J1
Depth top Reservoir – m	a.e2,393 m and -2,395 m	a.e2,503.3 m	a.e2,469 m
Porosity	14.0 to 17.4 %	14.4 to 17.7 %	13 to 20%
Permeability – mD	< 2.0 to 38.5 mD	< 2.0 to 43.4 mD	< 2.0 to 46.28 mD
Net Pay thickness – m	1.5 to 15.4 m	12.9 to 15.2 m	3.25 m
Hydrocarbon Saturation	63 to 80 %	49 to 63 %	67%
Formation Pressure – psia	3,777 psia	3,850 psia	3,816 psia
Formation temperature - °C	93 °C	98 ℃	88 °C
API gravity of crude oil	$38^{\circ}$ to $44^{\circ}$ API	40° API	44° API
Viscosity of crude - cP	0.6 cP	0.6 cP	0.6 cP

The reserves included in this report are estimates only and should not be construed as being exact quantities. They may or may not be actually recovered, and if recovered, the revenues therefrom and the actual costs related thereto could be more or less than the estimated amounts. Moreover, estimates of reserves may increase or decrease as a result of future operations.

#### **Future Production Rates**

Test data and other related information were used to estimate the anticipated initial production rates for all undrilled locations. An estimated rate of decline was then applied to depletion of the reserves.

Locations, which are not currently producing, may start producing earlier or later than anticipated in our estimates of their future production rates.

# **Hydrocarbon Prices**

The following table presents oil prices in United States dollars per barrel (US \$/bbl) and the split between domestic and export crude oil sales for the various economic cases:

	Export	<b>Domestic</b>	Export	Domestic
	Market	Market	Oil Price	Oil Price
	(percent)	(percent)	(US \$/bbl)	(US \$/bbl w/o VAT)
Phase 1	'			
Case 1 (Low)	33	67	63.00	34.65
Case 2 (Base)	33	67	75.00	41.25
Case 3 (High)	33	67	90.00	49.50
Phase 2				
Case 1 (Low)	33	67	63.00	34.65
Case 2 (Base)	33	67	75.00	41.25
Case 3 (High)	33	67	90.00	49.50

The Base Case (Case 2) in this report utilized an export price of \$75/bbl and a domestic price of \$41.25/bbl which is after VAT. First oil sales are are estimated to begin in July 2010.

#### Costs

PetroNeft provided a field development plan which included a development drilling schedule and a construction schedule for required infrastructure. The development plan provided for the use of fracture stimulation, electrical submersible pumps and water flooding of the fields to adequately develop the reserves. The plan included the CAPEX requirements for drilling and completion and infrastructure costs. Finally, a cost for abandonment of wells was provided and these costs were scheduled on a well by well cost basis to occur 6 months after the well is depleted. PetroNeft also provided a lifting cost plus fixed costs which included all anticipated G & A costs associated with operation of the project and the Company. All expenses and costs were held constant through the life of the properties. No deduction was made for indirect costs such as loan repayments and interest expenses.

PetroNeft provided the following data:

Transportation (Export)	\$6.02/Bbl
Transportation (Domestic)	\$2.25/Bbl
Export Tariff (Export Volumes)	\$4.00 + (Export Price - \$25.00) *65%
Natural Resources Production Tax (NRPT)	See Description Below
Profit Tax	20%
Property Tax	2.2% of Undepreciated Capex
VAT	18.0%

The current Natural Resources Production Tax ("NRPT") system has been in place since January 2002. NRPT is also commonly referred to at the Mineral Extraction Tax (MET).

The NRPT, with respect to crude oil (dewatered, desalted and stabilised oil), is based on the amount of oil produced. The tax rate applicable from 1 January 2005 until 31 December 2006 is 419 Rubles per ton of crude oil, subject to an adjustment using a special coefficient which reflects the dynamics of the world prices for Urals blend and the Ruble/US\$ exchange rate. This coefficient is applicable on a quarterly basis and represents a ratio in which (i) the numerator is the product of the Ruble/US\$ dollar average quarterly exchange rate and the difference between quarterly average world oil price

per barrel for Urals blend and US\$ 9 and (ii) the denominator equals 261. Currently, the NRPT does not differentiate between oil fields and is the same for all producers.

Starting from 1 January 2007, with respect to the production of crude oil, the NRPT rate has been determined on a monthly basis and adjusted (in addition to the coefficient reflecting the world prices dynamics and the Ruble/US\$ exchange rate) by the regressive coefficient which reflects the actual level of deposit depletion and varying from 1 (if the level of the deposit depletion is below 0.8) down to 0.3 (if the level of the deposit depletion is above 1).

A "0" Ruble NRPT rate will apply to the production of super-high viscosity oil and to the first 25 mil. tons of oil produced in Yakut Republic, Irkutsk Region, and Krasnoyarsk Territory (as far as the term of development of the deposit does not exceed (i) 10 years under exploration and production license, (ii) 15 years under geological survey and production license, and (iii) 10 years under license issued before 1 January 2007 for use of oil fields, where the deposit depletion level does not exceed 0.05).

Starting from 1 January 2009 the government has approved an increase in the cut-off rate from US \$ 9 per barrel to US\$ 15 per barrel in the above equation.

Ryder Scott finds this cost data consistent with data Ryder Scott has used in other Russian Evaluations. Based on the field development plan, approximately 30% of the Original Oil in Place is recovered.

# **License 61 Description**

A discussion of the detailed description of the geology of License 61 is presented. Much of this material was taken from the auction data package prepared in 2004 by the Russian Federal and Territorial Agencies for the Use of Mineral Resources, Rosnedra and Tomsknedra. The material has been updated where necessary based on the seismic and drilling results of PetroNeft.

# GEOGRAPHIC LOCATION, NATURAL ENVIRONMENT AND INFRASTRUCTURE

License 61 is located in the north-west of the Tomsk Region in Alexandrov administrative district (Figure 1). The eastern boundary of the Lease coincides with the administrative border between Alexandrov and Kargasok districts.

# License 61 in Tomsk



<u>Figure 1</u> Map showing Tomsk Oblast and location of License Area 61.

The south-eastern part of the West-Siberian Lowland where License No. 61 is located in a flat, waterlogged plain covered by mixed forest. The absolute elevations vary from 125 - 130 m in the north to 70 - 80 m in the south of the area. The lowest elevations of 50 - 60 m are encountered in the Kievskiy Yegan River in the southern part of the area (Figure 2).

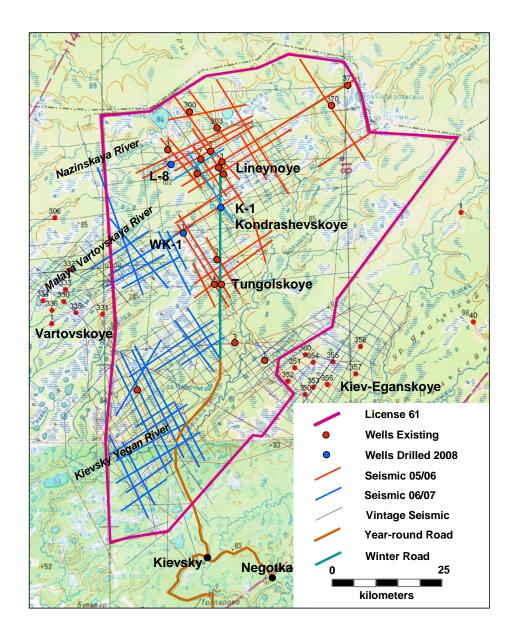


Figure 2 Map showing Natural Environment and Infrastructure of License 61.

The drainage system comprises the Kievskiy Yegan River flowing in the vicinity of the entire south-eastern Lease boundary and upper reaches of the Malaya Vartovskaya, Pikoviy Yegan, and Nazinskaya Rivers. All rivers flow in the south-western direction. There are numerous lakes in the area with the largest ones being Lakes Imemtor, Kievskoye and Sibkrayevskoye in the north and Lakes Bolshoye Vydrovskoye and Yeltsovskoye in the south.

The climate is strongly continental characterized by long cold (as low as -50°C) winters and short warm summers. Blizzards and heavy snowfalls persist from October till April. The average soil freezing depth is 1.2 m. The maximum frost penetration depth in swamps is 0.5 m. The snow cover reaches 1.5 m. The heating season lasts from mid-September till May.

There are no inhabited localities within the limits of the License Area. The distances from the midpoint of the Lease to the regional center Tomsk and to Strezhevoy (along the straight line) are 550 km and 170 km, respectively. The nearest inhabited locality (Alexandrovskoye industrial community) is located at a distance of 150 km away from the Lease. There is an airfield with an earthen runway in Alexandrovskoye as well as a television transmitter and a communications facility.

There is an all year-round road in the southern part of the License Area that connects to the village of Kievsky which is located 15 km to the south of the Lease. There is also a river port at Negotka which is located approximately 30 km south of the License Area (Figure 2). Winter roads are passable only when the swamps are sufficiently frozen and a stable snow cover is in place. The distance to the nearest main oil pipeline (Strezhevoy - Tomsk) is 60 km. The distance to the nearest hard-surfaced road is 90 km. A high voltage power transmission line runs in parallel to the oil pipeline. Seismic acquisition and exploration drilling activities take place in the winter months.

### TECTONIC STRUCTURE

Tectonically, License No. 61 is located in the south-eastern part of the West Siberian Platform. The basement for this platform is the Paleozoic rock sequence overlain by the Mesozoic-Cenozoic sedimentary cover. Lower Mesozoic (Triassic) units are identified in the trough areas between the basement and the Middle Mesozoic/Cenezoic cover.

License No. 61 is part of the Central West Siberian folded system of the Hercynian age containing a series of inverted anticlinorium zones and zones of intermountain troughs of the north-western trend. The Lease is situated within the limits of large-sized structures of the above-referenced system such as Narymsko-Kolpashevakaya basin (in its central part), Ust-Tym basin (southern portion of the area) and Pyl-Karaminskiy anticlinorium (north-eastern corner of the area), see Figure 3. The southern corner of the Lease is located in the north-eastern extremity of Ust-Tym trough rift extending in the same north-eastern direction. Anticlinorium zones are separated from the intermountain troughs by interstructural formational faults which originated at the early stages of the geosynclinal cycle and inheritably developing ever since including the young platform stage. The largest of them are associated with the Ust-Tym trough rift.

License No. 61, at the level of the Mesozoic-Cenozoic cover, is situated in the north of the Ust-Tym basin with its eastern corner extending to the south-western slope of Pyl-Karaminskiy mega ridge (Figure 3). Second order structures identified in the Ust-Tym basin within the Lease limits include Emtorskoye arch in the north and the eastern slope of the Okunyovskoye arch in the west.

The eastern part of the Lease is confined to the northern pericline of the Malochimulyakskiy swell belonging to the Pyl-Karaminskiy mega ridge.

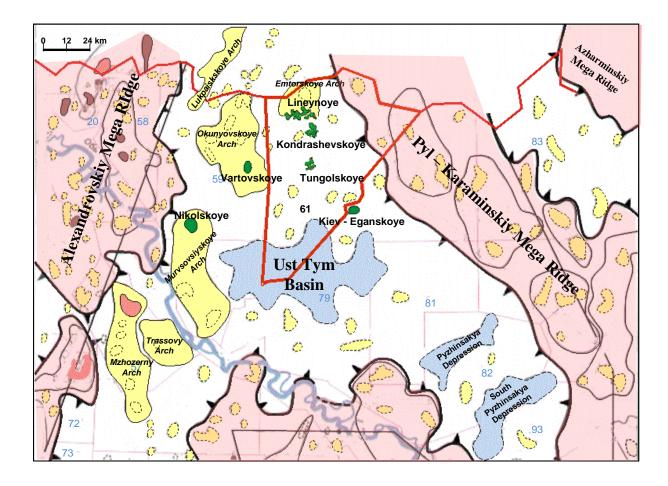


Figure 3 Map showing License 61 in context of regional tectonic features.

Over thirty Upper Jurassic structures have been identified in the Lease. Deep wells have been drilled on nine structures, (note: number shown in front of the name of structure is a number assigned by PetroNeft in Figure 4):

- 1 Lineynoye (Wells 1, 2, 4 and 6)
- West Lineynoye (Wells 3, 5, 7 and 8)
- 17 Sibkrayevskaya (Wells 370, 371)
- 18 Traverskaya (Wells 1,)
- Tuganskaya (Well 1)
- 2 Tungolskoye (Wells 1, 2, 3 and 4)
- 10 Emtorskaya (Wells 300, 303)
- 5 Kondrashevskoye (Korchegskaya) (Well 1)
- 6 West Korchegskaya (Well 1)

A total of 20 wells were drilled including one 3,400 m deep stratigraphic well (Tungolskoye No. 3). The Lease is generally poorly covered by deep drilling, see Figure 4.

Basement deposits of pre Jurassic age were encountered in 15 wells out of 20, while the rest of the wells penetrated deposits of the Tyumenskaya series. The minimum occurrence depth of the basement is 2,701 m in the Lineynoye No. 1 well. The maximum occurrence depth of basement is 3,184 m in the Tungolskoye No. 3 well. The maximum thickness of pre-Jurassic basement drilled is 298 m in the Tungolskoye No. 1 well.

#### LICENSE 61 MAJOR ASSET INVENTORY

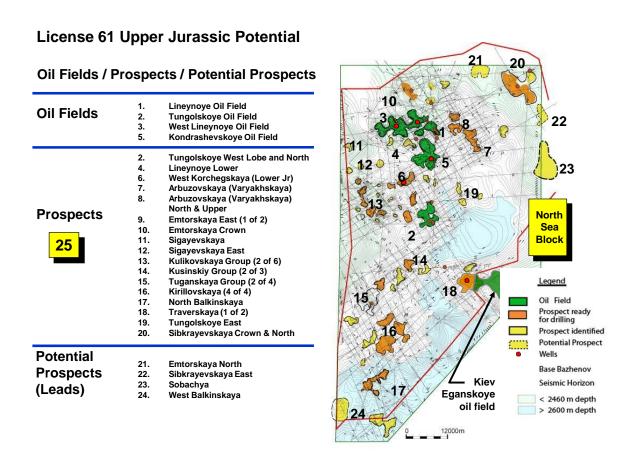


Figure 4 Map showing Upper Jurassic Oil Fields, Prospects and Potential Prospects in License 61

Four oil fields have been discovered in the deposits of the Upper Jurassic sedimentary cover (Vasyugan series,  $J_1$  horizon):

- 1 Lineynoye Oil Field
- 2 Tungolskoye Oil Field
- 3 West Lineynoye Oil Field
- 4 Kondrashevskoye (Korchegskaya) Oil Field

The "Identified Prospects" group includes 25 major structures or groups of structures that are well defined 4-way dip structural closures at the Upper Jurassic Reservoir interval (Base Bazhenov seismic horizon) Potential Resources in these prospects are attributable to the Possible category:

- 2 Tungolskoye West Lobe and North
- 4 Lineynoye Lower
- 6 West Korchegskaya (Lower Jurassic)
- 7 Arbuzovskaya (Varyakhskaya)
- 8 Arbuzovskaya (Varyakhskaya) North & Upper
- 9 Emtorskaya East (1 of 2)
- 10 Emtorskaya Crown
- 11 Sigayevskaya
- 12 Sigayevskaya East
- 13 Kulikovskaya Group (2 of 6)
- 14 Kusinskiy Group (2 of 3)
- 15 Tuganskaya Group (2 of 4)
- 16 Kirillovskaya (3 of 4)
- 17 North Balkinskaya
- 18 Traverskaya (1 of 2)
- 19 Tungolskoye East
- 20 Sibkrayevskaya Crown & North

The remaining four structures belong to the "Potential Prospect" category. These structures require additional seismic data to confirm structural closure. Potential Resources in these features are attributable to the Exploration category:

- 21 Emtorskaya North
- 22 Sibkrayevskaya East
- 23 Sobachya
- 24 Balkinskaya West

#### STRATIGRAPHY

The discussion of the detailed stratigraphy of the License 61 is based primarily on materials presented in the November 2004 Auction Technical Information Package.

The pre-Jurassic section is best covered in the Tuganskaya No. 1 well (298 m) and in the Tungolskoye No. 3 stratigraphic well (216 m). A maximum of one hundred meters were drilled in pre-Jurassic deposits in all other wells. A weathering crust as thick as several dozen meters was encountered in the upper part of the pre-Jurassic basement in almost all of the wells.

The sedimentary cover is composed of cyclically alternating continental and marine layers. The Upper Jurassic -Berriasian and the Upper Cretaceous argillaceous layers corresponding to transgression peaks divide the sedimentary filling of the Mesozoic part of the basin into Jurassic and Cretaceous megabasins. Stable down warping in Mesozoic period largely pre-determined the areal distribution of marine, littoral-marine and continental layers as well as their lithology and geochemistry. Logging and deep drilling data identified the deposits of Jurassic, Cretaceous, Paleogene, Neogene and Quaternary systems in the Mesozoic-Cenozoic sedimentary cover.

*The Jurassic system* is represented by the deposits of Tyumenskaya, Vasyuganskaya, Georgiyevskaya and Bazhenovskaya series. Jurassic deposits overlay the folded basement characterized by a non-depositional hiatus and angular nonconformity (Figure 5).

#### GENERALIZED LITHO-STRATIGRAPHY OF THE JURASSIC-CRETACEOUS SECTION IN THE SREDNEOBSKAYA AND VASYUGAN AREAS

AGE		GROUP	MAIN FORMATIONS  MAIN SUBSTITUTE OB SUBSTITUTE OB SUBSTITUTE OB SUBSTITUTE OB VARIOVSK		IT/SALYM	VASYUGAN ALEXANDROV/ PUDINO		LITHOLOGY	THICKNESS in meters	RESERVOIR ● Oil ☆ Gas	SOURCE ROCKS	DEPOSITIONAL ENVIRONMENT			
			MAASTRICHTIAN		GAN'KINO		Gar	n'kino	G	ian'kino	GAN'KINO : Shales and siltstones	30 - 200			
		l. I	CAMPANIAN	SH	SLAVGORODE				9	Slavgorode	BEREZOVO : Clay and shales				Alternation of marine
		Upper	SANTONIAN	DERBYSHI	IPATOVO		Ben	ezovo	Berezovo	Ipatovo	SLAVGOROD : Clay and siltstone IPATOVO : Siltstone and sandstone	100 - 260	≎		and continental deposits
			TURONIAN		KUZNETSOV		Kuzr	netsov	Kı	znetsov	KUZNETSOV : Clay and siltstone	20 - 120			
			CENOMANIAN	¥	UVAT	~~~			<b></b>	~~~~	UVAT : Siltstone, clay, sand and sandstone	100 - 900	~~~	~~~	~~~~~
	Sn		ALBIAN	POKURSK	KHANTY-MANSIYSK	Upper	P	Pokur		Pokur	POKUR: Sandstone with intercalations of shales and lignite KHANTY-MANSIYSK & VIKULOVO: Fine grained	50 - 120	Ø ● Main gas		Marine, shallow marine shelf and continental deposits
	贸		APTIAN	Я	VIKULOVO						sandstone,siltstone,shale with lignite intercalations		reservoirs		
ပ	ΙAC				ALYMKE	Upper Lower	Al	ymke			ALYMKE : Siltstone, silty sandstone lenses	60 - 300			
-	CRETACEOUS	ě	BARREMIAN		CHERKASHINO		Sangopay	5   5	Vartovsk	Vartovsk Kiyali	CHERKASHINO : Clay, siltstone and sandstone VANDEN : Sandstone and siltstone VARTOVSK : Sand and sandstone KIYAL : Sandstone, silty sandstone and siltstone UST-BALYK : Siltstone and sandstone MEGION : Sandy and silty deposits interbedded				_
2 O	_	Lower	HAUTERIVIAN	ZARECHENSKAYA	UST'-BALYK		Ust'-Balyk					80 - 400	ಘ●		Shallow marine, marine and turbidite
S O				HEN	AGANSKAYA		ıya	호							deposits
ш			VALANGINIAN	ZAREC	TARSK		Sortymskaya	Tarsk	Tarsk  Kulomzin  Bazhenovo		with shales TARSK : Sand and argillaceous sandstone KULOMZIN : Shales, siltstone and sandstone	100 - 400 🌣 🕻		_	Marine and shallow
Σ			BERRIASIAN		KULOMZIN		ß	÷o Kulom egg -zin			ACHIMOVO : Shales, sandstone				marine deposits
		Н	VOLGIAN		BAZHENOVO		Baz	henovo			DATE FUELO DE LA CALLACTA DEL CALLACTA DE LA CALLACTA DEL CALLACTA DE LA CALLACTA	5 - 150	5 - 150 ☆ ●		
		Upper	(PORTLANDIAN)	ò	05000151144		_				BAZHENOVO : Bituminous shale and limestone GEORGIEVKA : Bituminous shale and siltstone	$\vdash\vdash\vdash$		Main	Marine pelagic and shallow marine
		5	OXFORDIAN OXFORDIAN	DANIL	GEORGIEVKA			orgievka		orgievka	VASYUGAN : Bituminous shale, sdst and sltst	80 -100	≎●	source rocks	deposits
		Н	CALLOVIAN		VASYUGAN	Upper Lower	Va	syugan	Vasyuga	n Naunak	NAUNAK : Siltstone, shales and sandstone		☼●		,
	ပ	<u>ه</u> ا	BATHONIAN		MALYSHEVKA						TYUMEN: Alternating sandstone, siltstone and shale which are slightly carbonaceous	300		-	Lacustrine,
	SS	Middle	BAJOCIAN	≴	LEONT'EVSKOVO		Ту	umen	T	rumen	MALYSHEVKA: Sandstone and siltstone LEONT'EVSKOVO: Siltstone, shale and sandstone	to max.	☼●		shallow marine, deltaio and lagoonal deposits
	JURASSIC	Σ	AALENIAN	SKA	VYMSKOVO LAYDA						VYMSKOVO : Sandstone, limestone and siltstone	1,500			
	号		TOARCIAN	ZAVODOUKOVSKAYA	DZHANGODA	Upper Middle Lower	Gorelaya	Kotukhta			GORELAYA: Sandstone, siltstone and shale KOTUKHTA: Sandstone and shale	30 -100	ಘ●	-	Shallow marine and lacustrine deposits
		Lower	PLIENSBACHIAN	8	LEVINSKOVO	Lower									
		2	SINEMURIAN	ZAVC	ZYMNYAYA										
Ш			HETTANGIAN												

<u>Figure 5 Stratigraphic Chart showing generalized Litho-Stratigraphy of Mesozoic Section in Vasyugan area.</u>

Tyumenskaya series (Lower to Middle Jurassic) rock was generally formed under continental conditions and, to a lesser degree, in littoral-marine and, possibly, in vast desalinated water basins. This rock consists of interbedded sandstone, siltstone and claystone (fluvial and lacustrine-boggy deposits with substantial facies and lithologic variability in the horizontal direction and vertically). This layer is characterized by the abundance of coalified vegetable debris and coal streaks. Groups of sandy  $J_{16}$ - $J_{2}$  formations were identified. The Tyumenskaya series within the Lease limits is 126-407 m thick.

Marine and littoral-marine deposits of the <u>Vasyuganskaya series</u> (Callovian and Oxfordian stages of the Upper Jurassic) lie conformably on top of Tyumenskaya series rock. The Vasyuganskaya series comprises the lower sub-series (sub-Carboniferous) mainly composed of claystone, and the upper sub-series (supra-Carboniferous) containing a series of sandy formations, which jointly form a regionally oil-bearing  $J_1$  horizon. Four or five arenaceous formations are typically identified within the cross-section of the  $J_1$  horizon. The appearance of dark gray rock of the Georgiyevskaya series marks the upper boundary of the Vasyuganskaya series, which is from 66 to 124 m thick.

The Vasyuganskaya series is conformably overlain by the deposits of the <u>Georgiyevskaya series</u> (Kimmeridgian stage of the Upper Jurassic) consisting of marine dark gray and black claystone with interlayers and lenses of dark gray siltstone and limestone. The occurrence of these deposits within the Lease limits has a local nature like in other parts of the Tomsk Region. Its thickness varies from 0 to 13 m.

The Jurassic section is crowned by conformably lying marine deposits of the <u>Bazhenovskaya series</u> (Volgian stage of the Upper Jurassic) represented by brownish black bituminous claystone with interlayers of calcareous claystone. The Bazhenovskaya series is a unique source layer, on the one hand, and a geological and geophysical marker, on the other hand. The deposits of the Bazhenovskaya series are from 12 to 21 m thick.

Deposits of the *Cretaceous system* are characterized by substantial facies variability. Multiple activations of tectonic movements and associated transgressive and regressive cycles caused the coastal lines of ancient seas to shift. Cretaceous deposits are divided into several series (from bottom to top) including Kulomzinskaya, Tarskaya, Kiyalinskaya, Alymskaya, Pokurskaya, Kuznetsovskaya, Ipatovskaya, Slavgorodskaya, and Gankinskaya series.

Marine deposits of the <u>Kulomzinskaya series</u> (Berriasian and Valanginian stages of the Lower Cretaceous) conformably overlay the deposits of the Bazhenovskaya series and are comprised of gray claystone with sandstone, siltstone, marl, limestone, and siderite (at the bottom of the series) interlayers. The first sandy horizon lying in the immediate vicinity of the Bazhenovskaya series and containing sandy  $B_{16-20}$  formations was given a name of the Achimov unit. This series is 238 to 287 m thick.

Shallow-marine and littoral-marine deposits of the <u>Tarskaya series</u> (Valanginian stage of the Lower Cretaceous) are represented by interbedded sandstone and siltstone with claystone interlayers. The lower boundary of this series runs along the base of the lower permeable sandstone formation located very close to the Tarskaya series. Top of this series is determined by the appearance in the cross-section of variegated rock of the Kiyalinskaya series. The Tarskaya series is 40 to 135 m thick. Sediments of the Tarskaya series conformably and sometimes regressively cover the deposits of the Kulomzinskaya series and are conformably overlain by the deposits of the Kiyalinskaya series.

Shallow-marine, littoral-marine or lagoonal sediments of the <u>Kiyalinskaya series</u> (Hauterivian-Barremian stages of the Lower Cretaceous) are represented by variegated clay, sand, siltstone,

gravelstone which occasionally contain marl and limestone interlayers. The Kiyalinskaya series is from 356 to 520 m thick. Sandy formations of Groups A and B were identified.

Marine and littoral-marine sediments of the <u>Alymskaya series</u> (Lower Aptian stage of the Lower Cretaceous) consist of interbedded sands and clays, whose overall thickness varies from 18 to 55 m. A thick sandy A<sub>1</sub> formation is identified in the lower part of the series. The upper part is predominantly composed of gray-colored clay.

The Alymskaya series is conformably overlain by continental and littoral-marine deposits of the Pokurskaya series (Aptian and Albian stages of the Lower Cretaceous; Cenomanian stage of the Upper Cretaceous). This series consists of a thick layer of continental and, partly, littoral-marine deposits consisting of gray sand and sandstone with interlayers of gray aleuritic and arenaceous clay, and aleurite. This series comprises argillaceous limestone, marl and argillaceous siderite interlayers as well as coal lenses and streaks. Rock contains plenty of vegetable debris. The Pokurskaya series is conditionally divided into Upper and Lower Cretaceous deposits. The Pokurskaya series is 733 to 868 m thick.

The Pokurskaya series is transgressively overlain (and sometimes with a washout) by the Upper Cretaceous marine deposits represented by Kuznetsovskaya, Ipatovskaya, Slavgorodskaya, and Gankinskaya series (from bottom to top).

The marine deposits of the <u>Kuznetsovskaya series</u> (Turonian stage - Lower Coniacian sub-stage of the Upper Cretaceous) consist of interbedded aleuritic and arenaceous greenish-gray clay with siltstone and argillaceous sand interlayers at the top of the series. This series is 12 to 56 m thick.

The <u>Ipatovskaya series</u> (Coniacian and Santonian stages of the Upper Cretaceous) overlaying the series mentioned above consists of interbedded gray-colored sandstone, siltstone and clay (at the top of the section). This series is approximately 152 to 220 m thick.

The deposits of the Ipatovskaya series are conformably overlain by the sediments of the <u>Slavgorodskaya series</u> (Campanian stage of the Upper Cretaceous) overlain by the Gankinskaya series without washout traces. The deposits of the Slavgorodskaya series have a typically marine genesis. They are represented by gray-colored clay with siltstone, sandstone and sand interlayers. Ipatovskaya and Slavgorodskaya series in the central and southern parts of the West Siberian Lowland are a stratigraphic analogue of the Berezovsksaya series. Their combined thickness is 256-319 m.

The Mesozoic cross-section is crowned by the <u>Gankinskaya series</u> (Campanian and Maastrichtian stages of the Upper Cretaceous; Danian stage of the Paleocene). Marine facies are typical of this series. Gray-colored clay prevails containing streaks of marl and calcareous siltstone. This series is 127 to 178 m thick.

Cenozoic deposits contained in Lease No. 61 are stratigraphically sequenced (from bottom to top) from *the Paleogene, Neogene to the Quaternary system*. The Cenozoic era is characterized by two different sedimentation settings. Marine transgressions during the Paleocene and early Oligocene periods gave rise to formation of a thick stratum of marine sediments, which later on during the Oligocene - Neogene and Quaternary periods were covered by continental deposits. A description of the Cenozoic part of the cross-section for each constituent series is not given herein; yet, it should be mentioned that the overall thickness of these deposits is 455 to 532 m.

#### OIL AND GAS BEARING POTENTIAL

License 61 is part of the Vasyugan oil and gas province and is almost entirely included in the Ust-Tym oil-and-gas bearing region. A small north-eastern portion of the License belongs to "eastern parts" of the Tomsk Region where no division into oil-and-gas bearing regions exists nowadays due to poor geological knowledge. Two oil fields (Tungolskoye and Lineynoye) were discovered within the Lease limits in the deposits of the Mesozoic-Cenozoic cover, where the J<sub>1</sub><sup>1</sup> formation of the Vasyuganskaya (Naunakskaya) series was found to be commercially productive. These discoveries were made in the early 1970's.

There are currently five oil-and-gas bearing sequences (OGS) identified within the Tomsk Region. They include Intra-Paleozoic sequence, oil-and-gas bearing sequence of the contact zone between the Paleozoic and Mesozoic (CZOGS), Lower to Middle Jurassic, Upper Jurassic and Cretaceous (Neocomian) sequences. The extent of exploration of the territory is different for each stratigraphic level. A substantial scope of work (both geophysical studies and drilling) was carried out for the main pay horizon  $J_1$  (Upper Jurassic OGS). The current stage of exploration of the surface of the Paleozoic and Mesozoic deposits that overlie it, in plunged parts in particular, may be regarded as belonging to a phase of regional work.

The Intra-Paleozoic oil-and-gas bearing sequence within License 61 was tested together with deposits of the CZOGS and lower intervals of the Lower-Middle Jurassic oil-and-gas bearing sequence in the Lineynoye Field (Wells Nos. 3 and 4), Sibkrayevskaya area (Well No. 370), Traverskaya area (Well No. 1), Tuganskaya area (Well No. 1), Tungolskoye field (Well No. 2), and in Emtorskaya area (Well No. 300). Two wells (Well Sibkrayevskaya No. 370 and Well Emtorskaya No. 300) produced water at a rate of 2.77-3.3 m³/day. No inflow was obtained from the other wells.

The upper part of the Paleozoic sequence within the Tomsk Region is mainly studied within the limits of the Nyurolskiy sedimentary basin, largely in its north-eastern part. The main targets are erosion-tectonic protrusions (ETP). Plenty of geological features of these protrusions were determined, yet no unambiguous conclusions were made at this point in time due to the extraordinary complex geology. These protrusions are still commonly thought to have a folded-block or block origin. Earlier studies demonstrated that distribution trends of lithologic rock on the surface of the Paleozoic and oil and gas accumulations associated therewith were indicative of the folded-block structure of the protrusions.

A total of 75 oil and gas accumulations were discovered in the basement rock in the Western Siberian Basin either by chance or on purpose. These pools were found in carbonates, sandstone, gravelstone, siliceous-argillaceous layers, quartz-sericitic shale and granite.

Paleozoic rock, separately and in combination with Mesozoic deposits, may serve as oil and gas traps in the contact zone together with various formations of the Tyumenskaya series lying on top of the basement and having no communication therewith. Sandstones of the lower Jurassic horizons are extended areally and together with the Paleozoic reservoirs generate a complex contact zone reservoir when coming in contact with them in some places (G.I. Tischenko, 1988).

The oil-and-gas bearing horizon of the zone of contact between the Paleozoic and Mesozoic deposits was penetrated by nine wells of License 61. The sequence is represented by weathered quartz and felsite porphyry, metamorphosed terrigenous varieties, and weathered effusives. Contact zone rock has a porous-fissured type of reservoirs widely ranging in porosity and permeability. Oil shows in this sequence were observed in Tungolskoye stratigraphic well No. 3: sandstone from the 3,153 to 3,184 m interval had an odor of oil in on a freshly exposed surface.

The deposits of the Lower to Middle Jurassic oil-and-gas bearing sequence (Tyumenskaya series) contain lithologic accumulations sealed by claystone of Tyumenskaya series and Lower Vasyuganskaya sub-series. The oil-bearing potential of this sequence and of the underlying interval of the section within License 61 limits is not yet known. Oil shows while drilling were observed in Well No. 3 in the Lineynoye area (increased gas content in the J<sub>3</sub> formation) and in Well No. 370 in the Sibkrayevskaya area (yellow luminescence and increased gas content (as much as 4%) in the J<sub>4</sub> formation). These targets, as well as the J<sub>2</sub> and J<sub>3</sub> formations in Well No. 5 (Lineynoye area) and the J<sub>2</sub> formation in Well No. 300 (Emtorskaya area), were tested. All of them were found to be waterbearing. Oil has been tested in the Tyumenskaya sequence in the Vartovskoye No. 330 well (648 bopd) located in adjacent block 59 to the west and in the Tolparovskoye No. 1 well (15 bopd) in adjacent block 79-1 to the south.

The main target which adds hydrocarbon reserves on a stable, validated and confirmable basis in the Tyumen and Tomsk regions has been and remains the Upper Jurassic oil-and-gas bearing sequence where commercial oil and gas content was established in the Vasyuganskaya (Naunakskaya) series consisting of interbedded sandstone, claystone and coal. The deposits of this series feature facies variability of the cross-section. Oil pools belong to the sheet, roof and, less often, to a lithologically screened (single-pay) type. They are sealed by Bazhenovskaya series claystone. The oil-and-gas bearing potential of the Vasyuganskaya series is associated with the  $J_1$  horizon represented by facies of marine and littoral marine genesis. These facies are fairly laterally and vertically persistent, yet feature some variations. Reservoirs are quartz-feldspar sandstones. Their porosity varies from 14% to 21% (averaging 15-17%). Permeability is 0-0.2 μm<sup>2</sup>. The catagenesis of the organic matter corresponds to MK1-MK3 stages. The deposits of the Upper Jurassic sequence were tested in all 20 wells of Lease No. 61. The  $J_1^{T}$  formation of the Vasyuganskaya series was found to be commercially oil productive in the Tungolskoye field in Wells No. 1 and 4 and in the Lineynoye field and West Lineynoye fields in Wells No. 1,5,6,7 and 8 and in the Kondrashevskoye Field Well No. 1. Oil shows were encountered in Well Tungolskoye No. 2 (sandstone with oil sweats) and in Well No. 300 in Emtorskaya area (luminescence).

The oil and gas presence in the Cretaceous - Neocomian deposits within License 61 limits is not yet known. These deposits were tested in 3 areas, namely Lineynoye area (Wells Nos. 1, 2, and 3), Sibkrayevskaya area (Well No. 371), and in Emtorskaya area (Well No. 300). Formations of the Pokurskaya, Kiyalinskaya (Vartovskaya), Tarskaya, and Kulomzinskaya series were tested. All of them were found to be water-bearing. As may be seen from the most recent data, the Cretaceous OGS and CZOGS in the Tomsk Region were not studied as it would be required. Yet, it has been already confirmed that in both OGS's the determinative role is played by disjunctive tectonics. The presence of hydrocarbon accumulations in CZOGS with the lack thereof in the upper part of the cross-section is associated with fractures disappearing at the bottom of the sedimentary cover, whereas pay Cretaceous deposits are confined to the recent long-lived fractures dissecting the entire Mesozoic cross-section and even reaching the present day surface. Oil has been tested in a 7 m thick Lower Cretaceous sandstone (1,500 bopd) in the Kiev-Eganskoye No. 361 well in adjacent block 80 to the east of License 61.

The Russian State Reserves structure of License 61 as of December 2008 is shown in the following table:

# Russian Registered Reserves License 61 (metric units)

Field	Recoverable Reserve	Total Reserves thousand tons		
	C1	C2	C1+C2	
Lineynoye (1)	1,724	5,977	7,701	
Tungolskoye	1,010	1,055	2,065	
Kondrashevskoye	219	2,234	2,453	
Total (thousand tons)	2,953	9,266	12,219	

# Russian Registered Reserves License 61 (English units)

Field	Recoverable Reserves	Total Reserves thousand bbls		
	C1	C2	C1+C2	
Lineynoye (1)	13,413	46,501	59,914	
Tungolskoye	7,858	8,208	16,066	
Kondrashevskoye	1,704	17,381	19,084	
Total (thousand bbls)	22,974	72,089	95,064	

<sup>(1)</sup> Russian Experts consider Lineynoye and West Lineynoye to be one field

Table 1 Russian State Reserve Committee approved Reserves for License 61

<sup>(2)</sup> Conversion based on average API gravity of  $43^{\circ}$ 

#### LINEYNOYE and WEST LINEYNOYE OIL FIELDS

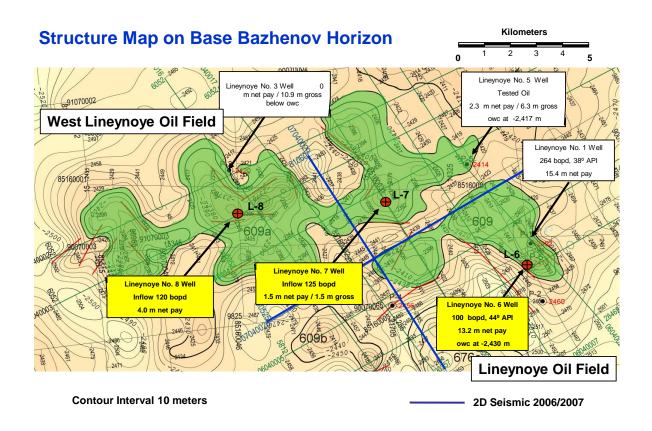


Figure 6 Base Bashenov Struture Map showing Lineynoye and West Lineynoye oil fields.

Lineynoye oil field is located in the north-western part of the License 61. The Lineynoye field is located in the southern part of the Emtorsky dome-shaped uplift – a second-order structure within Ust-Tymskaya Depression between Aleksandrovsky mega-bar on the West and Pyl-Karaminsky mega-bar on the East. The Lineynoye structure was identified and recommended for drilling as a result of single fold seismic data acquired in 1968.

The Lineynoye Well No. 1 discovered oil within the structure in 1972. The well was drilled in the Eastern part of the structure and tested oil from the Upper Jurassic  $(J_1)$  reservoir with a flow rate of 42 cub. m/day on an 8 mm choke. The specific gravity of oil is 0.835 g/cm<sup>3</sup> or an API gravity of 38 degrees. Gas factor is 33 m<sup>3</sup>/m<sup>3</sup>. Reservoir pressure is 257 atm. Testing interval: -2,496 to -2,518 m (actual elevation -2,389.4-2,411.4 m).

The  $J_1$  Layer was penetrated at a depth of -2,498 m (a.e. -2,393 m), and is represented by sandstones, siltstones and mudstones. Number of sand interbeds, which correspond to its effective pays, depends on well location within the structure and general area distribution of fragmentary material. The total thickness of the  $J_1$  interval in Well 1 was 20 m. The net pay thickness was 15.4 m. The net pay included three sandstone interbeds with thicknesses of 2.4 m, 11.2 m and 1.8 m.

In the process of testing of Well No. 1 (the  $J_1$  layer was perforated down to the bottom) no Oil Water Contact (OWC) was found. The oil deposit at the Lineynoye Structure is of a single-pay reservoir and roof pool type. In the same year, the results obtained has made it possible to prove incremental oil reserves within the area, between the absolute elevation of -2,411 m on the East (for lower perforations) and the double production well grid on the West. C1 oil reserves totaled 6,250/2,500 thousand tons (in place/recoverable) and were approved by the State Committee for Reserves in 1972. The study of the discovered field continued in 1973-1975, four more wells – in different geological and structural environments - were drilled. In 1973 wells number 2, 3 and 4 were drilled and in 1974 well number 5 was drilled.

In 1985 - 1986, detailed seismic investigations were made by seismic crews 16 and 18 to update the structural picture including the Lineynoye Structure. Morphologically, the Lineynoye Structure changed significantly. Instead of a unified undulated fold, it turned into a number of separate domes, formed on the dissected slopes of Emtorskoye Uplift, which are united into a Lineynoye Uplift. According to this picture, Well 1 was drilled at the crestal position of the eastern dome of the submeridional direction, which accounts for localization of the oil deposit there. In all other wells in this area, the layer J<sub>1</sub> is reliably correlated with Well 1, and is present as a reservoir; however, it is water-saturated in all of them, except Well 5, where a small volume of oil was produced.

In 2005/2006 the Company contracted with Tomsk Geophysical Company to reprocess and interpret all of the vintage seismic data in the License Area. The Company also contracted Stavropolneftegeofizika to acquire an additional 515 km of high resolution CDP data in the northern portion of the License Area. As a result of this work a new detailed structural interpretation was prepared. It now appears that the Lineynoye Structure is divided into two major closures, each of which contains several domes (Figure 6). The eastern closure represents the Lineynoye Oil Field as defined by the Lineynoye No. 1 well and the western closure defines the West Lineynoye Prospect which is updip from the Lineynoye No. 5 well which tested oil. Two additional seismic lines were acquired over the field during the 2006/2007 survey in order to further detail the structure.

PetroNeft drilled the Lineynoye No. 6 well in 2007 to confirm the results of the Lineynoye No. 1 discovery well. Oil was confirmed and tested in the  $J_1^{\ 1}$  (2 m net pay) and  $J_1^{\ 2}$  (11.2 m net pay) sandstone intervals. The test data indicates that the oil water contact (owc) is at or below -2,530.5 m subsea, which is at least 10 m lower than the previous conditional owc for the field. The well flowed at a stabilized oil flow rate of 100 bopd on a 3 mm choke.

PetroNeft drilled and tested the Lineynoye No. 7 well in 2007 which confirmed a new field discovery at West Lineynoye. Oil was tested in the  $J_1^1$  sandstone interval (1.5 m net pay) at an inflow rate of 125 bopd (raising head methodology). In 2008 PetroNeft drilled the Lineynoye No. 8 delineation well which tested at an inflow rate of 120 bopd and further defined the West Lineynoye field. The density of the oil varies from .803 gm/cm³ to .828.5 gm/cm³.

Electrical submersible pumps were run in both the Lineynoye No. 6 and No. 7 wells and they were placed on long term pilot/test production in early 2008, while winter roads were in place to truck the oil to market. Lineynoye No. 6 tested at a stabilized rate of 245 bopd throughout the period. Lineynoye No. 7 had multiple generator problems and produced at an unoptimized rate of 85 bopd for a few days at the end of the period. PetroNeft re-entered and retested the Lineynoye No. 1 well in 2008. The well tested at a stabilized rate of 273 bopd on a 8 mm choke without pumping or stimulation.

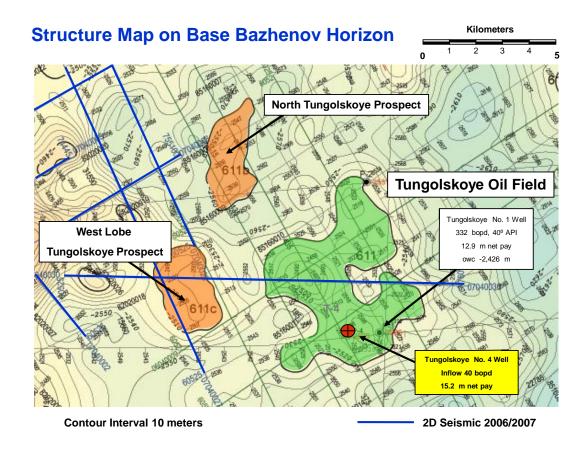


Figure 7 Base Bazhenov Structure Map showing Tungolskoye Field and surrounding area

The Tungolskoye field is located in the center of License 61 Tectonically, the Tungol local high is located within the northern part of the Ust-Tym basin, which is a large-sized First order structure. This structure was initially delineated by seismic data in 1967-68. Additional seismic data was obtained in 1970-71. Along the IIa reflector (Base Bazhenov Horizon), this structure appeared as a pear-shaped anticline of north-western extension. This high occupies as area of 67 km<sup>2</sup> along the -2,520 m contour; it measures 8x12 km and has 70 m of vertical closure.

Deep prospect drilling in this area commenced in 1973. Well No. 1 was drilled in the crest of the high to a depth of -2,760 m. This well was cored while drilling from the deposits of the Kiyalinskaya, Kulomzinskaya, Bazhenovskaya, Naunakskaya, and Tyumenskaya series. Oil-saturated, mediumgrained sandstone was recovered from the deposits of the Naunakskaya series. Drilling stopped in the deposits of the Tyumenskaya series consisting of unevenly interbedding claystone, siltstone and coal without oil shows.

The  $J_1$  horizon of the Vasyuganskaya series was encountered within the -2,604 to -2,683 m interval. This horizon consists of a series of sandy formations ( $J_1^1$ ,  $J_1^2$ , and  $J_1^{3-4}$ ) and shale breaks. The  $J_1^1$  formation was penetrated at a depth of -2,605.2 to -2,609.4 m (-2,505.3 to -2,509.5 m TVD SS). It

lithologically consists of yellowish-gray, medium-grained, medium-solid and non-consolidated sandstone with an oil odor. Logging and field data are indicative of a homogeneous and oil-saturated nature of this formation. The  $\alpha$ sp value within the -2,606 to -2,609.6 m interval is equal to 0.67; resistivity as determined by the combined 40/8 charts is 5.9 Ohms; porosity is 16.8%; oil and gas saturation is 57%. The  $J_1^2$  formation lies in the -2,612.6 to -2,636 m interval (-2,512.7 to -2,536.1 m TVD SS). It lithologically consists of gray, medium-grained, dense and solid sandstone saturated with oil within the -2,612.2 to -2,620.65 m interval. According to logging and field data, this formation is heterogeneous and consists of interbedded permeable and dense interlayers. The negative SP anomaly reaches 75 mV. The top of this formation down to a depth of -2,620.4 m contains water and oil. The  $\alpha$ sp value within the -2,612.6 to -2,615.6 m interval is 0.63; resistivity as determined by laterologging (LL) is 6.5 Ohms; porosity is 16.4%; oil and gas saturation is 53%. This formation within the 2,627.4-2,636 m interval was interpreted as water-bearing.

Production tests of these formations were run while drilling and in a cased hole. When testing the  $J_1^{-1}$ formation by a KII-146 formation tester, a water-free oil inflow was obtained from the -2,604 to -2,610 m interval (-2,504.1to 2,510.1 m TVD SS) after 42 minutes at differential pressure drawdown of 12.0 MPa at a rate of 3.67 m<sup>3</sup>. This was the first well which discovered oil in this field. Two intervals were tested in the cased hole. The first interval (lower part of the  $J_1^2$  formation) was tested within the -2,627 to -2,636 m interval (-2,527.1 to -2,536.1 m TVD SS). According to logging and field data, the SP curve anomaly in this part of the  $J_1^2$  formation reaches 75 mV; resistivity is 2.2 Ohms. Sandstone with coaly streaks, but with no oil shows was found in core samples retrieved from this interval. This interval tested formation water flowing at a rate of 12.7 m<sup>3</sup>/day at an average dynamic level of 369 m. When the second target was tested within the -2,604 to -2,620 m interval (-2,504.1 to -2,520.1 m TVD SS), the oil saturated  $J_1^{-1}$  formation was perforated (9.8 m net pay in perforated interval and 3.1 m net pay not perforated in interval -2,620 to -2,727 m) together with the water-bearing portion of the  $J_1^2$  formation. As a result, this interval tested oil and formation water flowing at a rate of 10.5 m<sup>3</sup>/day and 2.2 m<sup>3</sup>/day, respectively, through a 3 mm choke. The initial flow rate was 52.8 m<sup>3</sup>/day (332 bopd) through a 12 mm choke. Reservoir pressure is 262 atm. Oil belongs to the methane-naphthenic type. The density of the oil is 0.825 g/cm<sup>3</sup> or an API gravity of 40 degrees. The wax content in oil is 5.8%; the sulfur content is 0.36%.

The Tungolskoye structure along the main IIa reflector (base of the Bazhenovskaya series) has preserved its morphological features (a pear-like shape and north-western extension), yet its size along the 2,540 m contour was largely reduced down to 7.6 x 6.8 km. It covered an area of 45 km<sup>2</sup> and its amplitude was - 50 m. Given a high degree of structural imaging reliability ensured by detailed operations, fairly high porosities and permeabilities as well as the productive capacity of the  $J_1^{-1}$  formation, quantification of commercial  $C_1$  oil reserves was undertaken for the first time in 1987. These reserves were estimated within the oil pool limits which were thought to be running along the bottom of the net oil section of the  $J_1^{-1}$  formation in Well No. 1 at -2,509.4 m (TVD SS) in the south and along the second row of development wells in the north. The remaining part of the area within the structural contour at -2,520 m (TVD SS) was thought to contain C<sub>2</sub> reserves. The oil pool belongs to the sheet and roof types. Parameters assumed in calculations. Oil reserves booked by the State Balance Agency are 1,239/520 kT (C<sub>1</sub>) and 1,466/293 kT (C<sub>2</sub>) (OIP/recoverable); TsKZ Protocol dated April 28, 1987. This field was suspended. As a result of acquisition tests run by Seismic Crew No. 10, 1993-1996 the Tungolskoye structure acquired a nearly isometric outline and was delineated by the -2,560 m structural contour; the crestal part was shifted towards the center of the structure in plan view.

PetroNeft reprocessed the vintage 2D seismic data and acquired additional high resolution CDP data over the structure in 2005/2006 and again in 2006/2007. The resulting structural map at the base of the Bazhenovskaya series is shown in Figure 7. The Tungolskoye No. 4 well was drilled on the

structure in 2007. Based on the log and core data the well penetrated 15 m of continuous oil saturated sandstone in the  $J_1$  interval which appears to consist of a thin  $J_1^1$  sandstone interval setting directly above a thicker  $J_1^2$  sandstone interval. PetroNeft had mechanical problems testing this interval and sidetracked the well in August 2007. The sidetrack well also experienced mechanical problems. Further testing of this well will be delayed indefinitely until appropriate equipment is in the field associated with the Phase 1 development to efficiently complete the testing. The well initially tested at an inflow rate of 40 bopd before mechanical problems were incurred. The oil has a density of  $0.8154 \text{ g/cm}^3$ , 0.21% sulfur and 2.3% paraffin.

#### KONDRASHEVSKOYE OIL FIELD

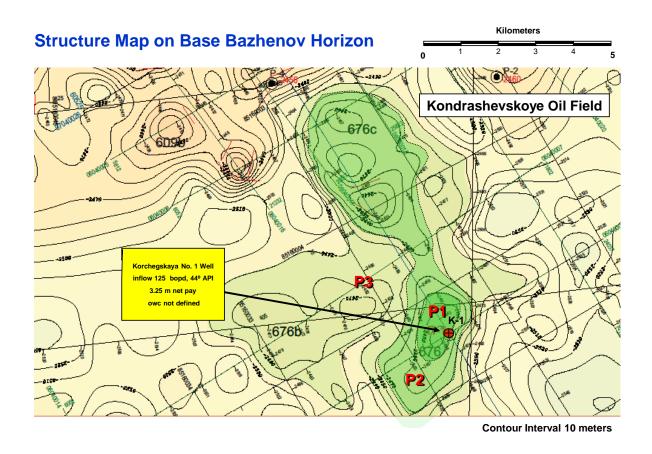


Figure 8 Base Bazhenov Structure Map showing Kondrashevskoye field

The Kondrashevskoye field (formerly Korchegskaya prospect) is located in the north central part of License 61 between the Lineynoye and Tungolskoye oil fields. This structure was delineated and prepared for drilling by seismic data in 1990-91. Additional seismic data was obtained by PetroNeft in 2005/2006 and 2006/2007. The Korchegskaya No. 1 discovery well was drilled in 2008. The well tested an inflow of 125 bopd from Upper Jurassic J<sub>1</sub> sandstones (2,469.35 to 2,473.35 m TVD SS). Core and petrophysical analysis indicates 3.25 m of net pay in this interval. The entire J<sub>1</sub> sandstone was oil saturated in the well and further drilling will be required to define the oil water contact for the field. The oil has a density of 0.790 g/cm<sup>3</sup>.

#### **Possible Reserves**

### **Upper Jurassic Prospects**

A total of 24 Upper Jurassic Prospects were analyzed for potential (Figure 4). The potential of these prospects was classified as possible reserves because multiple seismic lines confirmed 4-way dip closure of the structures at the Base Bazhenov seismic horizon. The potential of these prospects was determined by probabilistic analysis. The probability distribution functions for net pay and area were based on the geologic and geophysical interpretations. The probability distribution functions of the other volumetric parameters were based on data from the four tested oil fields. The range of potential possible reserves is summarized in the following table:

Index	Upper Jurassic Prospects	Possible Re	Possible Reserves (10 <sup>3</sup> Bbls)				
		90%	50%	10%			
2	Tungolskoye West Lobe	3,042	6,025	10,439			
2	Tungolskoye North	2,625	4,963	8,842			
4	Lineynoye Lower	2,277	4,608	8,257			
7	Arbuzovskaya (Varyakhskaya)	8,117	15,802	26,669			
8	Arbuzovskaya (Varyakhskaya) North	3,043	6,026	10,028			
8	Arbuzovskaya (Varyakhskaya) Upper	4,447	9,062	15,608			
9	East Emtorskaya	1,992	3,915	6,962			
10	Emtorskaya Crown (1 of 3)	8,489	15,484	26,944			
11	Sigayevskaya	1,184	2,213	4,145			
12	Sigayevskaya East	1,907	3,556	6,728			
13	Kulikovskaya	2,691	5,139	9,471			
13	Kulikovskaya North	3,886	7,749	13,422			
14	Kusinskiy	2,913	5,227	8,772			
14	Kusinsky North	3,015	5,499	8,975			
15	Tuganskaya East	2,503	4,792	8,320			
15	Tuganskaya South	2,606	4,863	8,689			
16	Kirillovskaya	3,825	7,114	12,343			
16	Kirillovskaya South	8,538	15,846	28,297			
16	Kirillovskaya East	4,959	9,578	16,451			
16	Kirillovskaya West	3,328	6,343	11,154			
17	Balkinskaya North	4,309	8,205	14,908			
18	Traverskaya	3,970	8,204	15,608			
19	Tungolskoye East	1,587	3,002	5,016			
20	Sibkrayevskaya	20,545	44,071	82,931			

PetroNeft believes that the Traverskaya Prospect may be a western extension of the Kiev-Eganskoye oil field located in License 80 to the east of License 61. Approximately 24 km<sup>2</sup> of structural closure exists on this prospect in License 61 above the commonly accepted oil water contact (owc) of -2,530 m subsea (ss) for the Kiev-Eganskoye oil field.

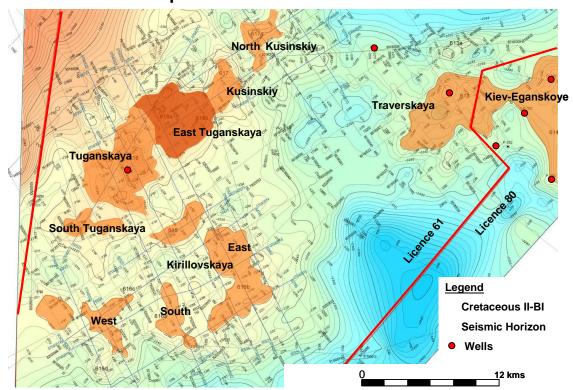
The Traverskaya No. 1 well, located in License 61, drilled in 1987 penetrated approximately 6 m of  $J_1^2$  sandstone at -2,477 m ss. The  $J_1^1$  sandstone was interpreted to be absent in the well, but may be present on the flanks of the structure. Approximately 0.4 m of sandstone was recovered from this interval which contained oil odor and point like bleeding of oil. The interval was tested in the open hole, but did not flow and was characterized as impermeable. Production casing was not run in the well.

The Kiev-Eganskoye oil field is currently being developed on the premise that similar wells have been successfully stimulated (artificial permeability enhancement such as horizontal sections or fracturing) in the Tomsk region and flow at commercial rates.

### **Cretaceous Prospects**

A total of 10 Cretaceous Prospects were analyzed for potential (Figure 9). The potential of these prospects was classified as possible reserves because multiple seismic lines confirmed 4-way dip closure of the structures at the Lower Cretaceous II-BI seismic horizon. The potential of these prospects was determined by probabilistic analysis. The probability distribution functions for area were based on the geophysical interpretation. The probability distribution functions of the other volumetric parameters including net pay were based on data from a report prepared by Tomsk Geophysical Company LLC (TGK) in 2008 regarding the "Re-interpretation of Geological and Geophysical data for Exploration Wells in License 61". This study was undertaken following the successful tesing of by-passed Lower Cretaceous pay (1,500 bopd) in the Kiev-Eganskoye No. 361 well located in adjacent block 80 to the east. TGK is the same contractor that identified the by-passed pay at Kiev-Eganskoye and they interpret potential by-passed Lower Cretaceous pay in both the Traverskaya No. 1 and Tuganskaya No. 1 wells in License 61. The range of potential possible reserves is summarized in the following table:

Index	Cretaceous Prospects	Possible Reserves (10 <sup>3</sup> Bbls)					
		90%	50%	10%			
14	Kusinskiy	4,028	7,383	12,219			
14	Kusinsky North	3,878	7,879	14,406			
15	Tuganskaya	18,227	36,145	67,542			
15	Tuganskaya East	18,014	33,303	56,496			
15	Tuganskaya South	3,725	7,479	12,729			
16	Kirillovskaya	4,512	8,297	14,236			
16	Kirillovskaya South	3,740	6,753	1,682			
16	Kirillovskaya East	15,110	28,309	46,704			
16	Kirillovskaya West	4,958	9,152	15,928			
18	Traverskaya	5,665	11,467	23,774			



# **Cretaceous Prospects in Southern Part of License 61**

Figure 9 Lower Cretaceous Structure Map showing Prospects

# **Lower to Middle Jurassic Prospects**

A total of 11 Lower to Middle Jurassic Prospects were analyzed for potential. The potential of these prospects was classified as possible reserves because multiple seismic lines confirmed 4-way dip closure of the structures at the Middle Jurassic seismic horizon. The potential of these prospects was determined by probabilistic analysis. The probability distribution functions for area were based on the geophysical interpretation. The probability distribution functions of the other volumetric parameters including net pay were based on data from a report prepared by Tomsk Geophysical Company LLC (TGK) in 2008 regarding the "Re-interpretation of Geological and Geophysical data for Exploration Wells". TGK interpret potential by-passed Lower to Middle Jurassic pay in the Traverskaya No. 1, Tuganskaya No. 1 and West Korchegskaya No. 1 wells in License 61. Lower to Middles Jurassic sandstones have successfully tested oil in the Vartovskoye No. 330 well (648 bopd) and the Tolparovskaya No. 1 well (15 bopd) in adjacent blocks to the west and south of License 61. The range of potential possible reserves is summarized in the following table:

Index	Lower to Middle Jurassic Prospects	Possible Reserves (10 <sup>3</sup> Bbls)					
		90%	50%	10%			
6	Korchegskaya West	3,462	7,176	12,727			
14	Kusinskiy	1,558	2,763	4,933			
14	Kusinsky North	1,500	2,644	4,427			
15	Tuganskaya	5,167	10,604	19,590			
15	Tuganskaya East	2,887	5,342	9,982			
16	Kirillovskaya	960	1,634	2,744			
16	Kirillovskaya South	1,487	2,024	4,469			
16	Kirillovskaya East	9,941	16,628	26,549			
16	Kirillovskaya West	3,882	6,674	10,931			
17	Balkinskaya North	1,534	3,133	8,092			
18	Traverskaya	2,397	4,433	7,996			

The Lower to Middle Jurassic reservoirs typically have poor reservoir properties and will likely require stimulation (artificial permeability enhancement such as horizontal sections or fracturing) to flow at commercial rates.

#### **Exploration Resources**

A total of four Upper Jurassic Potential Prospects were also analyzed. The potential of these prospects was classified as an exploration resource because the available seismic lines confirmed a structure but more seismic data is required to confirm unequivocal closure. The potential of these prospects was determined by probabilistic analysis. The probability distribution functions for net pay and area were based on the geologic interpretation. The probability distribution functions of the other volumetric parameters were based on data from the two tested fields. The range of potential recoverable resources is summarized in the following table:

Index Potential Prospects		Exploration Resources (10 <sup>3</sup> Bbls)					
		90%	50%	10%			
21	Emtorskaya North	6,658	12,964	23,501			
22	Sibkrayevskaya East	5,859	11,287	20,757			
23	Sobachya	16,148	31,624	54,758			
24	West Balkinskaya	10,240	18,603	32,387			

#### **Conclusions**

Appendices 1 through 6 present the summary data based on this study in the required disclosure format based on the March 2006 AIM Guidance Note for Mining, Oil and Gas Companies issued by the London Stock Exchange.

Appendix 5 -Tables 1 through 7 summarize our Phase 1 Base Case (Case 2) with an estimated projection of future production, gross revenue, net income and deductions (including expenses, capital investment and taxes) by reserve category and a net present valuation as at January 1, 2010. Appendix 6 – Tables 1 through 11 summarize the same data for Phase 2.

The estimates of reserves presented herein are based upon a detailed study of the properties in which PetroNeft owns an interest; however, we have not made any field examination of the properties. No consideration was given in this report to potential environmental liabilities that may exist nor were any costs included for potential liability to restore and clean up damages, if any, caused by past operating practices. PetroNeft has informed us that they have furnished us all of the accounts, records, geological and engineering data, and reports and other data required for this investigation. The ownership interests, prices, and other factual data furnished by PetroNeft were accepted without independent verification.

Both Ryder Scott Company, L.P, its directors and employees are wholly independent from the Company and the subject properties. Except for the provision of professional services neither Ryder Scott Company, L.P or any employee has any shareholding, commercial arrangement or any other interest with PetroNeft Resources PLC or the subject properties and neither the employment to make this study nor the compensation is contingent on our estimates of reserves and future income for the subject properties.

#### **Professional Qualifications**

Ryder Scott Company, L.P. was formed in 1937. The company is one of the largest, oldest and most respected reservoir-evaluation consulting firms in the petroleum industry. The company performs more than 1,000 consulting studies a year for oil and gas producers—both major and independent—investors, banks, governmental agencies and accounting and law firms. The company has offices in Houston, Denver and Calgary and has 115 employees and almost 70 professional engineers and geoscientists.

This evaluation was prepared by Mr. Larry T. Nelms. He has 40 years of experience in the oil and gas industry and been an employee of Ryder Scott for 28 years and in currently a Managing Senior Vice President. He is a registered Professional Engineer in the states of Colorado, Montana, North Dakota, Oklahoma and Wyoming.

This report was prepared for the exclusive use of PetroNeft Resource Plc. The data, work papers, and maps used in the preparation of this report are available for examination by authorized parties in our offices. Please contact us if we can be of further service.

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Very truly yours,

RYDER SCOTT COMPANY, L.P.

Larry T. Nelms P. E.

Managing Senior Vice President

LTN/sw

# Ryder Scott Appendix 1 (January 1, 2010) SUMMARY TABLE OF ASSETS

# Oil & Gas

Asset (1)	Operator	Interest (%)	Status (2)	License expriy date	License area	Comments
Russian - Tomsk Region - License 61 (Tungolsky)	LLC, Stimul - T	100%	Exploration and Development	15-Apr-2030		Delineation/Exploration drilling programme in progress

- (1) Asset Country, license and block
- (2) Status Exploration, Development or Production Only

# Ryder Scott Appendix 2 (January 1, 2010) SUMMARY OF RESERVES AND RESOURCES BY STATUS Proved, Probable and Incremental Possible Reserves (103 bbls)

### Oil & Gas Reserves - Proved (P1), Probable (P2) and Possible (P3)

	Gross Net Attributable				Operator		
Oil & Liquids reserves per asset From production to planned for development	Proved	Proved & Probable	Proved, Probable & Possible	Proved	Proved & Probable	Proved, Probable & Possible	
License 61 - Tomsk Oblast Russia							
Lineynoye Field (10³ bbls)	5,791	24,289	30,361	5,694	23,883	29,824	LLC, Stimul-T
West Lineynoye Field (103 bbls)	2,759	23,716	29,720	2,713	23,320	29,194	LLC, Stimul-T
Kondrashevskoye Field (10 <sup>3</sup> bbls)	622	8,269	26,581	611	8,122	26,111	LLC, Stimul-T
Tungolskoye Field (10³ bbls)	1,406	15,794	20,009	1,381	15,514	19,655	LLC, Stimul-T
Total for Oil & Liquids (103 bbls)	10,578	72,068	106,671	10,400	70,840	104,784	
Gas reserves per asset From production to planned for development							
License 61 - Tomsk Oblast Russia							
Lineynoye Field (10 <sup>3</sup> scf)	n/a	n/a	n/a	n/a	n/a	n/a	LLC, Stimul-T
West Lineynoye Field (10 <sup>3</sup> scf)	n/a	n/a	n/a	n/a	n/a	n/a	LLC, Stimul-T
Kondrashevskoye Field (10 <sup>3</sup> scf)	n/a	n/a	n/a	n/a	n/a	n/a	LLC, Stimul-T
Tungolskoye Field (10³ scf)	n/a	n/a	n/a	n/a	n/a	n/a	LLC, Stimul-T
Total for Gas (103 scf)	n/a	n/a	n/a	n/a	n/a	n/a	

**Source:** Ryder Scott Company - Petroleum Consultants

Notes:

"Operator" is name of the company that operates the asset

"Gross" are 100% of the **reserves** and/or **resources** attributable to the licence whilst "Net attributable" are those attributable to PetroNeft Resources Plc

Differential from Gross to Net Attributable reflects gravity adjustment and line loss for Proved and Probable reserves

Operator LLC, Stimul-T holds 100% interest in License 61

Operator LLC, Stimul-T is wholly owned subsidiary of PetroNeft Resources Plc

bbls - Barrels

scf - Standard Cubic Feet

#### Ryder Scott Appendix 3a (January 1, 2010) SUMMARY OF RESERVES AND RESOURCES BY STATUS Upper Jurassic - Possible Reserves (103 bbls)

#### Oil & Gas Prospective Resources in Prospect Category - Upper Jurassic - Possible Reserves (P3)

(10 <sup>3</sup> bbls)	Gross	equals Net Attributable f	"Risk Factor"		
Oil & Liquids Prospective Resources	Low	Best	High	Probability of	Operator
Prospects	Estimate	Estimate	Estimate	Success	
License 61 - Tomsk Oblast Russia					
Tungolskoye West Lobe (611c)	3,042	6,025	10,439	0.55	LLC, Stimul-T
Tungolskoye North (611b)	2,625	4,963	8,842	0.55	LLC, Stimul-T
Lineynoye Lower (609b)	2,277	4,608	8,257	0.58	LLC, Stimul-T
Arbuzovskaya (Varyakhskaya) (610)	8,117	15,802	26,669	0.65	LLC, Stimul-T
Arbuzovskaya (Varyakhskaya) North (610a)	3,043	6,026	10,028	0.50	LLC, Stimul-T
Arbuzovskaya (Varyakhskaya) Upper (610b)	4,447	9,062	15,608	0.58	LLC, Stimul-T
Emtorskaya East (608b)	1,992	3,915	6,962	0.52	LLC, Stimul-T
Emtorskaya Crown (608)	8,489	15,484	26,944	0.65	LLC, Stimul-T
Sigayevskaya (674)	1,184	2,213	4,145	0.37	LLC, Stimul-T
Sigayevskaya East (674a)	1,907	3,556	6,728	0.37	LLC, Stimul-T
Kulikovskaya (607)	2,691	5,139	9,471	0.42	LLC, Stimul-T
Kulikovskaya North (607b)	3,886	7,749	13,422	0.42	LLC, Stimul-T
Kusinsky (617)	2,913	5,227	8,772	0.41	LLC, Stimul-T
Kusinsky North (617a)	3,015	5,499	8,975	0.41	LLC, Stimul-T
Tuganskaya East (618a)	2,503	4,792	8,320	0.37	LLC, Stimul-T
Tuganskaya South (618b)	2,606	4,863	8,689	0.37	LLC, Stimul-T
Kirillovskaya (616)	3,825	7,114	12,343	0.40	LLC, Stimul-T
Kirillovskaya South (616a)	8,538	15,846	28,297	0.40	LLC, Stimul-T
Kirillovskaya East (616b)	4,959	9,578	16,451	0.38	LLC, Stimul-T
Kirillovskaya West (616c)	3,328	6,343	11,154	0.38	LLC, Stimul-T
Balkinskaya North (632a)	4,309	8,205	14,908	0.37	LLC, Stimul-T
Traverskaya (613)	3,970	8,204	15,608	0.80	LLC, Stimul-T
Tungolskoye East (611a)	1,587	3,002	5,016	0.38	LLC, Stimul-T
Sibkrayevskaya (1001 + 1001a)	20,545	44,071	82,931	0.81	LLC, Stimul-T
Total for Oil & Liquids (103 bbls)	105,798	207,286	368,979		

**Source:** Ryder Scott Company - Petroleum Consultants

Notes:

bbls - Barrels

<sup>&</sup>quot;Risk Factor" for Prospective Resources means the estimated chance, or probability, that the volumes will be commercially extracted

<sup>&</sup>quot;Risk Factor" estimated by PetroNeft based on individual geologic chance factors: trap, source, reservoir and migration

<sup>&</sup>quot;Operator" is name of the company that operates the asset

<sup>&</sup>quot;Gross" are 100% of the reserves and/or resources attributable to the licence whilst "Net attributable" are those attributable to PetroNeft Resources Plc

Operator LLC, Stimul-T holds 100% interest in License 61

Operator LLC, Stimul-T is wholly owned subsidiary of PetroNeft Resources Plc

#### Ryder Scott Appendix 3b (January 1, 2010) SUMMARY OF RESERVES AND RESOURCES BY STATUS Lower Cretaceous - Possible Reserves (103 bbls)

#### Oil & Gas Prospective Resources in Prospect Category - Lower Cretaceous - Possible Reserves (P3)

(10 <sup>3</sup> bbls)	Gross	equals Net Attributable for	or P3	"Risk Factor"	
Oil & Liquids Prospective Resources	Low	Best	High	Probability of	Operator
Prospects	Estimate	Estimate	Estimate	Success	
License 61 - Tomsk Oblast Russia					
Kusinsky (617)	4,028	7,383	12,219	0.58	LLC, Stimul-T
Kusinsky North (617a)	3,878	7,879	14,406	0.58	LLC, Stimul-T
Tuganskaya (618)	18,227	36,145	67,542	0.81	LLC, Stimul-T
Tuganskaya East (618a)	18,014	33,303	56,496	0.65	LLC, Stimul-T
Tuganskaya South (618b)	3,725	7,479	12,729	0.45	LLC, Stimul-T
Kirillovskaya (616)	4,512	8,297	14,236	0.39	LLC, Stimul-T
Kirillovskaya South (616a)	3,740	6,753	1,682	0.39	LLC, Stimul-T
Kirillovskaya East (616b)	15,110	28,309	46,704	0.39	LLC, Stimul-T
Kirillovskaya West (616c)	4,958	9,152	15,928	0.39	LLC, Stimul-T
Traverskaya (613)	5,665	11,467	23,774	0.81	LLC, Stimul-T
Total for Oil & Liquids (103 bbls)	81,857	156,167	265,716		

**Source:** Ryder Scott Company - Petroleum Consultants **Notes:** 

Operator LLC, Stimul-T holds 100% interest in License 61

Operator LLC, Stimul-T is wholly owned subsidiary of PetroNeft Resources Plc

bbls - Barrels

<sup>&</sup>quot;Risk Factor" for Prospective Resources means the estimated chance, or probability, that the volumes will be commercially extracted

<sup>&</sup>quot;Risk Factor" estimated by PetroNeft based on individual geologic chance factors: trap, source, reservoir and migration

<sup>&</sup>quot;Operator" is name of the company that operates the asset

<sup>&</sup>quot;Gross" are 100% of the reserves and/or resources attributable to the licence whilst "Net attributable" are those attributable to PetroNeft Resources Plc

#### Ryder Scott Appendix 3c (January 1, 2010) SUMMARY OF RESERVES AND RESOURCES BY STATUS Lower/Middle Jurassic - Possible Reserves (103 bbls)

#### Oil & Gas Prospective Resources in Prospect Category - Lower/Middle Jurassic - Possible Reserves (P3)

(10 <sup>3</sup> bbls)	Gross e	equals Net Attributable fo	or P3	"Risk Factor"		
Oil & Liquids Prospective Resources	Low	Best	High	Probability of	Operator	
Prospects	Estimate	Estimate	Estimate	Success		
License 61 - Tomsk Oblast Russia						
Korchegskaya West (677)	3,462	7,176	12,727	0.54	LLC, Stimul-T	
Kusinsky (617)	1,558	2,763	4,933	0.36	LLC, Stimul-T	
Kusinsky North (617a)	1,500	2,644	4,427	0.36	LLC, Stimul-T	
Tuganskaya (618)	5,167	10,604	19,590	0.54	LLC, Stimul-T	
Tuganskaya East (618a)	2,887	5,342	9,982	0.45	LLC, Stimul-T	
Kirillovskaya (616)	960	1,634	2,744	0.36	LLC, Stimul-T	
Kirillovskaya South (616a)	1,487	2,024	4,469	0.36	LLC, Stimul-T	
Kirillovskaya East (616b)	9,941	16,628	26,549	0.36	LLC, Stimul-T	
Kirillovskaya West (616c)	3,882	6,674	10,931	0.36	LLC, Stimul-T	
Balkinskaya North (632a)	1,534	3,133	8,092	0.36	LLC, Stimul-T	
Traverskaya (613)	2,397	4,433	7,996	0.54	LLC, Stimul-T	
Total for Oil & Liquids (103 bbls)	34,775	63,055	112,440		_	

**Source:** Ryder Scott Company - Petroleum Consultants **Notes:** 

"Risk Factor" for Prospective Resources means the estimated chance, or probability, that the volumes will be commercially extracted

"Risk Factor" estimated by PetroNeft based on individual geologic chance factors: trap, source, reservoir and migration

"Operator" is name of the company that operates the asset

"Gross" are 100% of the reserves and/or resources attributable to the licence whilst "Net attributable" are those attributable to PetroNeft Resources Plc

Operator LLC, Stimul-T holds 100% interest in License 61

Operator LLC, Stimul-T is wholly owned subsidiary of PetroNeft Resources Plc

bbls - Barrels

#### Ryder Scott Appendix 4 (January 1, 2010) SUMMARY OF RESERVES AND RESOURCES BY STATUS Exploration Resources (103 bbls)

#### Oil & Gas Prospective Resources in Potential Prospect Category - Exploration Resources (P4)

(10 <sup>3</sup> bbls)	Gross e	quals Net Attributable	for P4	"Risk Factor"	
Oil & Liquids Prospective Resources	Low Best		High	Probability of	Operator
Potential Prospects / Leads	Estimate	Estimate	Estimate	Success	
License 61 - Tomsk Oblast Russia					
Emtorskaya North	6,658	12,964	23,501	0.18	LLC, Stimul-T
Sibkrayevskaya East	5,859	11,287	20,757	0.18	LLC, Stimul-T
Sobachya	16,148	31,624	54,758	0.18	LLC, Stimul-T
Balkinskaya West	10,240	18,603	32,287	0.28	LLC, Stimul-T
Total for Oil & Liquids (10 <sup>3</sup> bbls)		74,478			

**Source:** Ryder Scott Company - Petroleum Consultants

Notes:

"Exploraion Resources" are those resources assigned to potential prospects that require additional seismic data to confirm structural closure

"Risk Factor" for Prospective Resources means the extimated chance, or probability, that the volumes will be commercially extracted

"Risk Factor" estimated by Petroneft based on individual geologic chance factors: trap, source, reservoir and migration

"Operator" is name of the company that operates the asset

"Gross" are 100% of the reserves and/or resources attributable to the licence whilst "Net attributable" are those attributable to PetroNeft Resources Plc

Operator LLC, Stimul-T holds 100% interest in License 61

Operator LLC, Stimul-T is wholly owned subsidiary of PetroNeft Resources Plc

bbls - Barrels





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY
ALL PROPERTIES
TOTAL PROVED RESERVES

23,888

140,741

31,984

TOTAL PROVED

65,532

105,270

тота	AL PROVED RES	ERVES						PROVED		
		REVE	NUE INTERES	TS	PF	RODUCT P	RICES		DISCOU	
	EXPENSE INTEREST		Plant Products	Gas	Oil/Cond. \$/bbl.	Plt. Prod \$/bbl.	I. Gas \$/MCF		E NET INCO	OME - \$000 MONTHLY
INITIAL	INTERCO	<u>condendate</u>			ψ/ ΒΒ1.	Ψ/ ΒΒ1.		8.00		71,538
FINAL								10.00		65,532
REMARKS								12.00	-	60,221
								15.009 20.009		53,348
								20.00	,  —	44,177
	ESTI	MATED 8/8 THS			CC	MPANY N	ET SALES		AVERAC	GE PRICES
	umber Oil/Cor Wells Barrel		oducts Ga	as CF	Oil/Cond. Barrels	Plant Pro Barre	oducts Sal	es Gas //MCF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010		•935	0	<u> </u>	861,310		0	0,000	52.39	
2011	16 1,504	•	Ō	Ō	1,479,180		Ō	0.000	52.39	
2012	16 1,135	,629	0	0	1,116,666		0	0.000	52.39	0.00
2013		,363	0	0	842,062		0	0.000	52.39	
2014		,008	0	0	718,803		0	0.000	52.39	
2015		,127	0	0	650,093		0	0.000	52.39	
2016 2017		,572 ,641	0	0	802,929 641,745		0	0.000	52.39 52.39	
2018		,519	ŏ	ŏ	446,922		ŏ	0.000	52.39	
2019		,148	ŏ	ŏ	356,094		ŏ	0.000	52.39	
2020		,764	ŏ	ŏ	214,133		ŏ	0.000	52.39	
2021		,897	0	0	143, 464		0	0.000	52.39	
2022		,539	0	0	124,421		0	0.000	52.39	
2023	9 9	,756	0	0	9,590		0	0.000	52.39	
2024		0	0	0	0		0	0.000	0.00	0.00
Sub-Total	8,550		0	0	8,407,412		0	0.000	52.39	
Remainder	0.550	0	0	0	0 407 410		0	0.000	0.00	
Total Future	8,550	,207	0	0	8,407,412		0	0.000	52.39	0.00
Cumulative		0	0	0						
Ultimate	8,550		0	0					_	
_		COMPANY FUTU		REVENUE (FG	iR) - \$000			MRT	F0	GR AFTER MRT
Period	From Oil/Cond.	From Plant Product	From Gas		Other	Total	Oil/Cond \$0	000 Gas/P.P	\$000	\$000
2010	45,12	4 (	)	0	0	45,12	4 11,3	L8	0	33,806
2011	77,49			0	0	77,49			0	58,058
2012	58,50			0	0	58,50			0	43,829
2013	44,11		-	0	0	44,11			0	33,051
2014	37,65		-	0	0	37,65			0	28,213
2015 2016	34,05 42,06			0	0	34,05 42,06			0	25,516 31,515
2017	33,62			ŏ	ŏ	33,62			ŏ	25,189
2018	23,41			ŏ	ŏ	23,41			ŏ	17,541
2019	18,65		)	0	0	18,65			0	13,977
2020	11,21	9 (	)	0	0	11,21	9 2,58	34	0	8,635
2021	7,51			0	0	7,51			0	6,037
2022	6,51			0	0	6,51			0	5,426
2023	50			0	0	50		71	0	432
2024		0 (	,	0	U	'	0	0	0	O
Sub-Total	440,46		-	0	0	440,46	,		0	331,225
Remainder Total Future	440,46	0 ( 5 (		0	0	440,46	0 5 109,2	0 40	0	331,225
	,					,				,
		DE	DUCTIONS - \$	000		F	UTURE NET IN			
Period	Operating	Export, Profit &	Development	Transportation	n Tota	_		scounted Cumulativ		Discounted 10.00
2010	Costs 3,617	Property Taxes 13,146	Costs 10,639	Transportation		0,408	Annual <b>3,398</b>		7 <u>e                                      </u>	2,689
2011	3,680	25,651	6,873	5,162		1,366	16,692	20,0		14,369
2012	2,508	19,714	1,013	3,897		7,132	16,697	36,		13,068
2013	1,990	14,523	3,236	2,939		2,688	10,363	47,		7,295
2014	1,711	12,851	410	2,509	7 17	7,481	10,732	57,8		6,876
2015	1,583	10,317	7,250	2,269		1,419	4,097	61,		2,366
2016	2,254	13,678	2,290	2,802		1,024	10,491	72,		5,479
2017	1,704	10,437	273	2,240		4,654	10,535	83,0		5,011
2018	1,407	7,152	0	1,559		0,118	7,423 5,704	90,4		3,193
2019 2020	1,342 857	5,598 2,242	0	1,243 747		8,183 4,947	5,794 3,688	96,2 99,9		2,258 1,303
2020 2021	606	3,343 2,248	ŏ	50:		4,947 3,355	2,682	102,		1,303 856
2022	581	1,939	ŏ	434		2,954	2,472	105,0		713
2023	48	144	ŏ	34		226	206	105,		56
2024	0	0	0	(	)	0	0	105,		C
Sub-Total	23,888	140,741	31,984	29,342	2 22	5,955	105,270			65,532
Remainder	0	0	0		5	0	0	105,	270	(00,002
Total Future	23,888	140,741	31,984	29.342	2 22	5.955	105,270	•		65,532

225,955





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY
ALL PROPERTIES
TOTAL PROBABLE RESERVES

TOTAL PROBABLE

TC	TAL PRO	OBABLE RES	SERVES							F	PROBABLE		
			REVEN	JE INTERES	TS		Р	RODUC	T PRIC	ES		DISCOL	JNTED
		EXPENSE	Oil/	Plant			Cond.	Plt. F		Gas			OME - \$000
INITIAL		INTEREST	Condensate F	Products	Gas	\$/	/bbl.	<u>\$/b</u>	bl	\$/MCF	_ <u>COMPO</u> <b>8.00</b>		MONTHLY 272,145
FINAL											10.00	% -	235,518
REMARKS											12.00		204,768
											15.00 20.00		167,330 121,742
							_				20100		
			ATED 8/8 THS					OMPAN					GE PRICES
Period	Number of Wells	Oil/Cond Barrels	. Plant Prod Barrels	lucts Ga	as ICF		I/Cond. arrels	Plant	Produc arrels	ts Sales MM	Gas CF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010	1	154,1		0	0		151,593		C		0.000	52.39	
2011 2012	8 26	1,670,8		0	0		642,980 308.762		0		0.000	52.39 52.39	
2012	20 38	3,364,9 3,954,0		0	ŏ		306,762 887,977		Č		0.000	52.3	
2014	54	4,015,7	'09	0	0	3,	948,635	5	C		0.000	52.39	
2015 2016	61 74	4,030,7 3,622,6		0	0		963,430 562,155		0		0.000	52.39 52.39	
2017	82	3,546,8		ŏ	ŏ		487,600		ò		0.000	52.3	
2018	84	2,759,1	.89	0	0	2,	713, 118	3	C		0.000	52.39	
2019 2020	87 95	2,204,3		0	0		167,509		0		0.000	52.39	
2021	98	1,926,5 1,696,0		Ö	ŏ		894,325 667,705		Č		0.000	52.39 52.39	
2022	98	1,484,5	558	0	0	1,	459,760	)	C	)	0.000	52.39	9 0.00
2023	107	1,369,6		0	0		346,785		0		0.000	52.39	
2024	97	1,124,2	280	U	U	1,	105,501	L		,	0.000	52.39	9 0.00
Sub-Total		36,924,4		0	0		307,835		C		0.000	52.39	
Remainder		2,530,2		0	0		488,007		Q		0.000	52.39	
Total Future		39,454,7	39	0	0	38,	795,842	2	C	,	0.000	52.39	9 0.00
Cumulative			0	0	0								
Ultimate		39,454,7	'39	0	0								
		CC	MPANY FUTU	RE GROSS R	REVENUE	(FGR)	- \$000			ı	MRT	F	GR AFTER
Desired	-	From	From	From		Other	_	T-1-		0.110	0 (0.0		MRT \$000
<u>Period</u> <b>2010</b>		7,942	Plant Products  0	Gas		Other	0	Tota	942	O <u>il/Cond \$000</u> <b>1,992</b>	Gas/P.P.	<u>- \$00</u> 0	5,950
2010		86,076	ŏ		ŏ		ŏ		076	21,589		ŏ	64,487
2012		173,346	0		0		0	173,	346	43,477		0	129,869
2013		203,691	0		0		0	203,		51,088		0	152,603
2014 2015		206,869 207,645	ŏ		ŏ		ŏ	206, 207,		51,885 52,080		ŏ	154,984 155,565
2016		186,621	0		0		0	186,	621	46,806		0	139,815
2017 2018		182,715 142,140	0		0		0	182, 142,		45,827 35,651		0	136,888 106,489
2019		113,555	ŏ		ŏ		ŏ	113,		28,480		ŏ	85,075
2020		99,244	Ō		0		0	99,	244	22,865		0	76,379
2021 2022		87,371 76,477	0		0		0		, 371 , 477	17,194 12,802		0	70,177 63,675
2022		70,558	ő		ŏ		ŏ		558	10,020		ŏ	60,538
2024		57,918	0		0		0	57,	918	7,042		0	50,876
Sub-Total		1,902,168	0		0		0	1,902,	140	448,798		0	1,453,370
Remainder		130,346	ŏ		ŏ		ŏ	130,		12,259		ŏ	118,087
Total Future	. 2	2,032,514	0		0		0	2,032,		461,057		0	1,571,457
			DED	UCTIONS - \$	000				FUTU			R PROFI	T TAXES-\$000
Period			Export, Profit &	Development	Transpor	rtation	Tot	tal		Undisco Annual	unted Cumulati		Discounted 9 10.00 %
2010		1,509	Property Taxes 3,100	Costs 15,944	Папърог	<b>529</b>		21,082	-	-15,132	-15 <b>,</b>		-14,500
2011		2,500	25,831	22,603		,734	5	6,668		7,819	<b>-7</b> ,	313	6,839
2012 2013		4,853	53,404	26,560 25,064		,548 ,569		76,365 No 202		33,504		191	26,052
2013 2014		6,347 6,510	63,403 63,970	26,391		, 369 , 780		)8,383 l0,651		44,220 44,333	114,	411 744	31,391 28,390
2015		7,658	65,281	16,507		,833		3,279		52,286	167,		30,330
2016		7,937	57,421	23,444		, 432		1,234		38,581	205,		20,364
2017 2018		7,673 8,000	56,617 43,351	3,695 774		,171 ,469		30,156 51,594		56,732 44,895	262, 307,		26,923 19,325
2019		8,248	33,989	500		,565	5	50,302		34,773	342,	011	13,538
2020		8,628	29,467	0		,611		14,706		31,673	373,		11,155
2021 2022		8,803 8,770	25,893 22,491	0		,820 ,095		10,516 36,356		29,661 27,319	403, 430,		9,455 7,883
2023		8,997	20,407	420		,700		34,524		26,014	456,		6,802
2024		8,408	16,147	780		,858		29,193		21,683	478 <i>,</i>		5, 139
Sub-Total		104,841	580,772	162,682	124	,714	07	75,009		478,361			229,086
Sub-Total Remainder		37,811	33,052	5,220		,684		34,767		33,320	511,	681	6,432
Total Future	• 1	142,652	613,824	167,902		, 398	1,05	59,776		511,681	·		235,518





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY
ALL PROPERTIES

	PROPER TAL PV										TOTAL PV & PB		
	• •	=	REVE	NUE INTERES	STS		PR	ODUCT	PRIC		_	DISCOU	NTED
		EXPENSE INTEREST	Oil/ Condensate	Plant Products	Gas	Oil/Cor \$/bbl	nd.	Plt. P \$/bb		Gas \$/MCF	FUTUF	RE NET INCO	OME - \$000 MONTHLY
INITIAL FINAL REMARKS		INTEREST	Condensate	Products	Gas	<u> </u>	<u> </u>	_\$/bb	<u> </u>	\$/NCF	8.00 10.00 12.00 15.00 20.00	)% – )% – )% – )% –	343,683 301,050 264,990 220,677 165,919
		ESTIM	ATED 8/8 TH	S PRODUCTIO	ON		СО	MPANY	NET S	SALES		AVERAC	SE PRICES
	Number of Wells	Oil/Cond Barrels	l. Plant Pr Barre		Gas MCF	Oil/Co Barre			Product arrels	s Sales MM	Gas CF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010	11	1,030,1	L05	0	0	1,012	, 903		0		0.000	52.39	0.00
2011 2012	24 42	3,175,1 4,500,5		0	0	3,122 4,425			0		0.000	52.39 52.39	0.00
2013	57	4,810,3	370	0	0	4,730	,039		0		0.000	52.39	0.00
2014 2015	73 87	4,746,7 4,691,8		0	0	4,667 4,613			0		0.000	52.39 52.39	0.00
2016	103	4,439,2		0	0	4,365			ŏ		0.000	52.39	0.00
2017	111	4,199,4		0	0	4, 129			0		0.000	52.39	0.00
2018 2019	107 110	3,213,7 2,566,4		0	0	3,160 2,523			0		0.000	52.39 52.39	0.00
2020	115	2,144,2		0	0	2,108			0		0.000	52.39	0.00
2021	110	1,841,9		0	0	1,811			0		0.000	52.39 52.39	0.00
2022 2023	107 116	1,611,0 1,379,4		0	0	1,584 1,356			0		0.000	52.39 52.39	0.00
2024	97	1,124,2		ŏ	ŏ	1,105			ŏ		0.000	52.39	0.00
Sub-Total Remainder		45,474,6 2,530,2		0 0	0	44,715 2,488			0		0.000	52.39 52.39	0.00 0.00
Total Future		48,004,9		ŏ	ŏ	47,203			ŏ		0.000	52.39	
Cumulative Ultimate		48,004,9	0 946	0 0	0								
			MPANY FUT	URE GROSS	REVENUE (	(FGR) - \$0	000				VIRT	F0	GR AFTER MRT
Period	0	From il/Cond.	From Plant Produc	From ts Gas		Other		Tota	۱ (	Dil/Cond \$000	Gas/P.P.	- \$000	\$000
2010		53,066	-	0	<u> </u>	C		53,	066	13,310		0	39,756
2011		163,570		0	0	Q		163,		41,025		0	122,545
2012 2013		231,849 247,806		0	0	C		231, 247,		58,150 62,153		0	173,699 185,653
2014		244,527		Ď	ŏ	č		244,		61,330		ŏ	183,197
2015		241,703		0	0	g		241,		60,622		0	181,081
2016 2017		228,687 216,336		0 0	0	C		228, 216,		57,357 54,259		0	171,330 162,077
2018		165,555		Ď	ŏ	č		165,		41,523		ŏ	124,032
2019		132,211		0	0	g		132,		33,160		0	99,051
2020 2021		110,462 94,886		0	0	0		110,	462 886	25,449 18,673		0	85,013 76,213
2022		82,996		Ď	ŏ	č			996	13,894		ŏ	69,102
2023 2024		71,061 57,917		0	0	0			061 917	10,091 7,042		0	60,970 50,875
Sub-Total		2,342,632		0	0	c		2,342,		558,038		-	1,784,594
Remainder Total Future		130,347 2,472,979	(	Ď	0	Ö	)	130, 2,472,	347	12,259 570,297		0	118,088 1,902,682
rotar ruture	•	L, 412, 71 7				·	•	2,712,					
	Ope	erating	Export,Profit &	Development					FUTU	Undisco			TAXES-\$000 Discounted
Period 2010		osts	Property Taxes	Costs	Transporta		Tota			Annual	Cumulati		10.00 %
2010 2011		5,126 6,180	16,245 51,483	26,583 29,476		535 896		,489 ,035		-11,733 24,510	-11, 12,	,733 ,777	-11,811 21,208
2012		7,362	73,118	27,573	15,4	445	123	, 498		50,201	62,	978	39,120
2013		8,336	77,926	28,300				,070		54,583 55.064	117,		38,686
2014 2015		8,221 9,241	76,822 75,597	26,801 23,757				,133 ,697		55,064 56,384	172, 229,		35,266 32,696
2016		10,191	71,099	25,734	15,2	234	122	,258		49,072	278,	081	25,844
2017 2018		9,377 9,407	67,054 50,503	3,968 774				,810 ,713		67,267 52,319	345, 397,		31,933 22,518
2019		9, <del>4</del> 07 9,590	39,586	500		807		,483		40,568	438,		15,796
2020		9,485	32,811	0	7,:	359	49	,655		35,358	473,	593	12,457
2021		9,409	28,141	0		320 520		8,870		32,343	505,		10,312
2022 2023		9,351 9,045	24,430 20,551	0 420		529 734		,310 ,750		29,792 26,220	535, 561,		8,596 6,858
2024		8,408	16,148	780	3,8	858	29	,194		21,681	583,		5,139
Sub-Total Remainder	:	128,729 37,812	721,514 33,051	194,666 5,220		056 683	1,200 84	, 965 , 766		583,629 33,322	616,	951	294,618 6,432
Total Future	, ;	166,541	754,565	199,886			1,285			616,951			301,050





Sub-Total

Remainder

**Total Future** 

15,784

15,784

## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY

	EYNOYE OTAL PR	OVED RESE	RVES								OTAL PROVED		
			REVI	ENUE INTER	RESTS		PF	RODUCT	PRIC	ES	_	DISCOUN	ITED
INITIAL FINAL REMARKS		EXPENSE INTEREST	Oil/ Condensate	Plant Products	Gas	_ C	Dil/Cond. \$/bbl.	Plt. P \$/bb	rod. ol.	Gas \$/MCF	FUTURE COMPOUN 8.00% 10.00% 12.00% 15.00% 20.00%	- - -	ME - \$000 MONTHLY  58,138 53,998 50,307 45,474 38,895
		ESTIN	IATED 8/8 TH	IS PRODUC	TION		cc	MPANY	NET S	SALES		AVERAG	E PRICES
Period	Number of Wells	Oil/Cond Barrels		roducts rels	Gas MMCF		Oil/Cond. Barrels		Product arrels	s Sales	Gas (	Oil/Cond. \$/bbl.	Gas \$/MCF
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	10 10 10 10 10 10 10 10 10	875, 1,354, 813, 570, 434, 348, 290, 247, 215,	935 511 843 330 781 994 125 367	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	1	861,310 1,331,886 800,254 560,806 427,518 343,174 285,273 243,241 211,406 186,530		0 0 0 0 0 0		0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	52.39 52.39 52.39 52.39 52.39 52.39 52.39 52.39 52.39	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
2020 2021 2022 2023 2024 Sub-Total	10 10 9 9	169, 144, 126,	415 435 539 756 0	0	0 0 0	Ę	166,589 142,026 124,421 9,590 0		0000		0.000 0.000 0.000 0.000 0.000	52.39 52.39 52.39 52.39 0.00	0.00 0.00 0.00 0.00 0.00
Remainder Total Future Cumulative	•	5,790,	0	0	0		0 5,694,024		0		0.000	0.00 52.39	0.00
Ultimate		5,790,	-	ŏ	ŏ								
Period		From Dil/Cond.	Prom Plant Produ	Fr	om Gas	UE (FGR		Total			<b>/IRT</b> Gas/P.P \$	_	R AFTER MRT \$000
2010		45,124		0	0		0	45,	124	11,318	<u> </u>	0	33,806
2011 2012 2013 2014 2015 2016		69,778 41,925 29,380 22,398 17,979 14,946		0 0 0 0 0	0 0 0 0 0		0 0 0 0 0	41, 29, 22, 17, 14,	778 925 380 398 979 946	17,501 10,515 7,369 5,617 4,510 3,748		0 0 0 0 0 0	52,277 31,410 22,011 16,781 13,469 11,198
2017 2018 2019 2020		12,743 11,075 9,773 8,727		0	0		0	11, 9,	743 075 773 727	3,196 2,778 2,451 2,011		0	9,547 8,297 7,322 6,716
2021 2022 2023 2024		7,441 6,518 503 0		0 0 0	0 0 0		0 0 0	6,	441 518 503 0	1,464 1,092 71 0		0 0 0	5,977 5,426 432 0
Sub-Total Remainder Total Future	Đ	298,310 0 298,310		0 0 0	0 0 0		0 0 0	298, 298,	0	73,641 0 73,641		0 0 0	224,669 0 224,669
			D	EDUCTIONS	S - \$000				FUTU	RE NET INC	OME AFTER	PROFIT	TAXES-\$00
Period	Op (	erating Costs	Export, Profit & Property Taxes	Costs	Trans	portation	Tota			Undisco Annual	Cumulative	@	iscounted <b>10.00</b> %
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024		3,036 3,312 1,769 1,274 969 842 834 625 626 633 637 598 581 48 0	12,641 22,359 14,262 9,845 7,706 6,009 5,030 3,981 3,392 2,610 2,225 1,939	10,1 1,5	.15	3,006 4,648 2,793 1,957 1,492 1,198 996 849 737 651 582 495 435	28 33 18 13 10 8 8	3,798 2,870 3,973 3,175 0,167 3,049 5,455 4,755 4,229 3,829 3,318 2,955 226 0		5,008 19,407 12,437 8,836 6,614 5,420 4,338 4,092 3,542 3,093 2,887 2,659 2,471 206 0	5,00 24,41 36,85 45,66 52,36 57,77 62,06 66,15 69,67 72,77 75,67 78,33 80,88	08 15 52 52 22 50 52 74 37 74 33 34	4,234 16,795 9,746 6,262 4,238 3,144 2,277 1,943 1,522 1,203 1,017 848 713 56

19,872

11,914

96,089

143,659

143,659

81,010

0 81,010

81,010

53,998





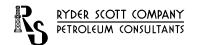
## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY LINEYNOYE FIELD TOTAL PROBABLE RESERVES

TOTAL PROBABLE

	IAL PROBABLE K	LOLITTLO					•	KORABLE		
		REVEN	IUE INTERES	TS	PF	RODUCT PRI	CES		SCOUN	
	EXPENSE INTEREST	Oil/	Plant	Coo	Oil/Cond.	Plt. Prod.	Gas \$/MCF	FUTURE NE		ME - \$000 <b>MONTHLY</b>
INITIAL	INTEREST	Condensate	Products	Gas	\$/bbl.	\$/bbl	\$/IVICF	8.00% -	בט י	151,786
FINAL								10.00% -		134,874
REMARKS								12.00% -		120,526
								15.00% -		102,760
								20.00% -		80,386
	ESTI	MATED 8/8 THS	PRODUCTIO	N	cc	MPANY NET	SALES	A\	/ERAG	E PRICES
N Period of	Number Oil/Cor of Wells Barrels		ducts Ga	as CF	Oil/Cond. Barrels	Plant Produ Barrels	icts Sales	Gas Oil	/Cond. /bbl.	Gas \$/MCF
2010		,170 <u></u>	0	0 -	151,593	<u> </u>	0		52.39	0.00
2011	7 1,638		Ö	Ŏ	1,610,754		Ö		52.39	0.00
2012	16 2,710		0	0	2,665,346		0		52.39	0.00
2013	17 2,718		0	0	2,673,517		0		52.39	0.00
2014	17 1,859		0	0	1,828,424		0		52.39	0.00
2015	17 1,375		0	0	1,352,233		0		52.39	0.00
2016	17 1,086 17 894		0	0	1,068,360		0		52.39 52.39	0.00
2017 2018		,631 034	0	0	879,687		0		52.39	0.00
2019		,026 ,972	ŏ	ŏ	745,375 645,014		Ö		52.39	0.00
2020		,937	ŏ	ŏ	567,298		ŏ		52.39	0.00
2021		538	ŏ	Ŏ	512,836		ŏ		52.39	0.00
2022		,350	0	0	463,479		0	0.000	52.39	0.00
2023	27 528	,320	0	0	519,493		0	0.000	52.39	0.00
2024	27 484	,396	0	0	476,310		0	0.000	52.39	0.00
Sub-Total	16,434	,166	0	0	16,159,719		0	0.000	52.39	0.00
Remainder	2,063		0	0	2,029,484		0		52.39	0.00
Total Future	18,498	,121	0	0	18,189,203		0	0.000	52.39	0.00
Cumulative		0	0	0						
Ultimate	18,498	,121	0	0			_			
-		OMPANY FUTU		EVENUE (	(FGR) - \$000			MRT	FG	R AFTER MRT
Period	From Oil/Cond.	From Plant Products	From Gas		Other	Total	Oil/Cond \$000	Gas/P.P \$000	o	\$000
2010	7,94	2 0	)	0	0	7,942	1,992	0		5,950
2011	84,38	7 0		0	0	84,387	21,165	0		63,222
2012	139,63			0	0	139,638	35,023	0		104,615
2013	140,06			0	0	140,065	35,130	0		104,935
2014	95,79			0	0	95,792	24,025	0		71,767
2015 2016	70,843 55,97			0	0	70,843 55,971	17,769 14,038	0		53,074 41,933
2017	46,08			ŏ	ŏ	46,087	11,559	ŏ		34,528
2018	39,05			ŏ	ŏ	39,050	9,794	ŏ		29,256
2019	33,79		)	0	0	33,793	8,476	0		25,317
2020	29,72	1 0	)	0	0	29,721	6,847	0		22,874
2021	26,86			0	0	26,867	5,287	0		21,580
2022	24,28			0	0	24,281	4,065	0		20,216
2023 2024	27,21 <sup>-</sup> 24,95			0	0	27,217 24,954	3,865 3,034	0		23,352 21,920
2024	24,75	•	•	U	J	27,737	3,034	Ū		21,720
Sub-Total Remainder	846,600 106,32			0	0	846,608 106,324	202,069 9,741	0		644,539 96,583
Total Future	952,93	-		ŏ	ŏ	952,932	211,810	ŏ		741,122
		DEI	DUCTIONS &	000		F117	TUDE NET INC	ME AFTER D	DOCIT :	TAVES \$0
	Operating	Export,Profit &	DUCTIONS - \$  Development	000			URE NET INCO			iscounted
Period	Costs	Property Taxes	Costs	Transporta	ationTota	al	Annual	Cumulative		10.00 9
2010	928	2,595	10,378		529 14	4,430	-8,480	-8,480		-8,178
2011	2,480	25,442	14,244			7,788	15,434	6,954		13,266
2012	4,157	44,497	12,970			0,926	33,689	40,643		26,214
2013	4,901	46,569	3,006			3,806	41,129	81,772		29,142
2014 2015	3,482 2,758	32,353 23,155	1,636 1 584			3,852 2,217	27,915 20,857	109,687 130,544		17,920
2015 2016	2,758 2,855	23,155 18,778	1,584 451			2,217 5,812	20,857 16,121	146,665		12,108 8,468
2017	1,832	14,385	450			9,737	14,791	161,456		7,027
2018	1,930	11,927	399			5,858	12,398	173,854		5,330
2019	2,102	10,155	258			4,766	10,551	184,405		4,106
2020	2,129	8,894	0	1,	980 13	3,003	9,871	194,276		3,476
	2,199	8,036	0			2,025	9,555	203,831		3,044
2021	2,248	7,213	0			1,078	9,138	212,969		2,636
2021 2022							10,594	223,563		2,765
2021 2022 2023	2,986	7,959 7,046	0			2,758 1.955				
2021 2022 2023 2024	2,986 3,247	7,046	0	1,	662 11	1,955	9,965	233,528		2,357
2021 2022 2023	2,986			1,0 56,3	662 1: 397 41:					2,357 129,681 5,193





# PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY LINEYNOYE W FIELD
TOTAL PROVED RESERVES

TOTA	L PROVED RESE	RVES					P	ROVED		
		REVE	NUE INTERES	TS	PR	ODUCT PRI	CES	_	SCOUN	
	EXPENSE INTEREST	Oil/ Condensate	Plant Products	Gas	Oil/Cond. \$/bbl.	Plt. Prod. \$/bbl	Gas \$/MCF	FUTURE NE		MONTHLY
NITIAL FINAL REMARKS								8.00% - 10.00% - 12.00% - 15.00% - 20.00% -		13,400 11,534 9,915 7,874 5,282
	ESTIM	ATED 8/8 TH	S PRODUCTIO	N	СО	MPANY NET	SALES	AV	/ERAG	E PRICES
Nu Period of	mber Oil/Cond Wells Barrels		oducts Ga	as ICF	Oil/Cond. Barrels	Plant Produ Barrels	ucts Sales 0 MM0	Gas Oil/ CF \$	Cond. /bbl.	Gas \$/MCF
2010 2011	6 149,	700	0 0	0	0 147,294			0.000 0.000 5	0.00	0.0
2012	6 321,		Ö	Ö	316,412				52.39	0.0
2013	9 286.		ŏ	ŏ	281,256				52.39	0.0
2014	9 296,		Ŏ	Ŏ	291,285				52.39	0.0
2015	16 312,		0	0	306,919		0	0.000 5	52.39	0.0
2016	19 526,	447	0	0	517,656			0.000 5	52.39	0.0
2017	19 405,	274	0	0	398,504		0		52.39	0.0
	13 239,	519	0	0	235,516				52.39	0.0
	13 172,		0	0	169,564				52.39	0.0
	10 48,		0	0	47,544				52.39	0.0
2021	2 1,	462	0	0	1,438				52.39	0.0
2022		0	0	0	0			0.000	0.00	0.0
2023		0	0	0	0			0.000	0.00	0.0
2024		0	0	0	0		0	0.000	0.00	0.0
ub-Total	2,759,	_	0	O .	2,713,388				52.39	0.0
emainder		0	0	0	0			0.000	0.00	0.0
otal Future	2,759,	475	0	0	2,713,388		0	0.000 5	52.39	0.0
Cumulative	2,759,	0 475	0	0 0						
Jitimate			URE GROSS F	_	3R) - \$000		N	IRT	FG	R AFTER
— Davied	From	From	From	•	•	Total	0:1/01	O/D D		MRT \$000
<u>Period</u>	Oil/Cond.	Plant Produc	<u>ts</u> <u>Gas</u> 0	<u> </u>	Other	Total 0	O <u>il/Cond \$000</u>	Gas/P.P \$000	, —	4000
2010	7,717		0	ŏ	ŏ	7,717	1,935	ŏ		5,78
2012	16,577		0	ŏ	ŏ	16,577	4,158	ŏ		12,41
2012	14,735		0	ŏ	ŏ	14,735	3,696	ŏ		11,03
2014	15,260		Ö	ŏ	ŏ	15,260	3,827	ŏ		11,43
2015	16,079		Ö	ŏ	ŏ	16,079	4,033	ŏ		12,04
2016	27,120		Ö	ŏ	ŏ	27,120	6,802	ŏ		20,31
2017	20,878		0	0	0	20,878	5,237	0		15,64
2018	12,339		0	0	0	12,339	3,094	0		9,24
2019	8,884		0	0	0	8,884	2,228	0		6,65
2020	2,490		0	0	0	2,490	574	0		1,91
2021	76		0	0	0	76	15	0		6
2022	0		0	0	0	0	0	0		1
2023	0		0	0	0	0	0	0		
2024	0	•	0	0	0	0	0	0		1
Sub-Total	142,155		0	0	0	142,155	35,599	0		106,55
Remainder	142 155		0	0	0	140 155	0 25 500	0		104 EE
otal Future	142,155	, (	0	0	0	142,155	35,599	0		106,55
_		DE	DUCTIONS - \$	000		FU1	TURE NET INCO			
Period	Operating Costs	Export, Profit & Property Taxes	Development Costs	Transportation	on Tota		Undiscou Annual	unted Cumulative	-	iscounted 10.00
2010	581	505	525			,611	-1,611	-1,611	- =	-1,54
2010	368	2,292	5,321	51		.495	-2,713	-4,324		-2,42
2012	739	5,452	864	1,10		, 159	4,260	-64		3,32
2013	716	4,678	3,137	98		,513	1,526	1.462		1,03
2013	741	5 1/5	410	1 01		212	4 121	5 502		2 629

	Operating	Export, Profit &	Development		_	Undisco	ounted	Discounted
Period	Costs	Property Taxes	Costs	Transportation	Total	Annual	Cumulative	@ 10.00 %
2010	581	505	525	0	1,611	-1,611	-1,611	-1,545
2011	368	2,292	5,321	514	8,495	-2,713	-4,324	-2,425
2012	739	5,452	864	1,104	8,159	4,260	−64	3,321
2013	716	4,678	3,137	982	9,513	1,526	1,462	1,033
2014	741	5,145	410	1,016	7,312	4,121	5,583	2,638
2015	741	4,308	7,250	1,072	13,371	-1,325	4,258	<b>−778</b>
2016	1,421	8,648	2,290	1,806	14,165	6,153	10,411	3,203
2017	1,079	6,456	273	1,391	9,199	6,442	16,853	3,067
2018	781	3,760	0	822	5,363	3,882	20,735	1,671
2019	709	2,652	0	592	3,953	2,703	23,438	1,055
2020	220	734	0	166	1,120	796	24,234	285
2021	8	22	0	5	35	26	24,260	9
2022	0	0	0	0	0	0	24,260	0
2023	0	0	0	0	0	0	24,260	0
2024	0	0	0	0	0	0	24,260	0
Sub-Total	8,104	44,652	20,070	9,470	82,296	24,260		11,534
Remainder	0	0	0	0	0	0	24,260	0
Total Future	8,104	44,652	20,070	9,470	82,296	24,260		11,534





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 1 AS OF JANUARY 1, 2010

GRAND SUMMARY LINEYNOYE W FIELD

		W FIELD OBABLE RE	SERVES								OTAL PROBABLE		
			REVE	NUE INTERE	STS		ı	PRODUC	T PRICI	ES		DISCOU	NTED
		EXPENSE	Oil/	Plant		Oil	I/Cond.	Plt. F	Prod.	Gas \$/MCF	FUTUR	E NET INCO	
INITIAL		INTEREST	Condensate	Products	Gas	4	\$/bbl.		<u> </u>	\$/IVICF	8.00	% -	120,360
FINAL REMARKS											10.00 12.00		100,644 84,242
KEMAKKO											15.00		64,570
											20.00	% –	41,356
		ESTIM	ATED 8/8 TH	S PRODUCTION	ON		(	COMPAN	Y NET S	SALES		AVERAC	SE PRICES
Period	Number of Wells	Oil/Cond Barrels	d. Plant Pr Barr		Gas MCF		il/Cond. Barrels		Product arrels	s Sales MM	Gas CF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010			0	<u> </u>	0			0	0		0.000	0.00	0.00
2011 2012	1 10	32, 654,		0	0		32,22 643,41		0		0.000	52.39 52.39	0.00 0.00
2012	21	1,235,		ŏ	ŏ	1.	214,46		ŏ		0.000	52.39	0.00
2014	37	2,156,		0	0		120,21		0		0.000	52.39	0.00
2015	44	2,655,		0	0		611,19		0		0.000	52.39	0.00
2016 2017	57 65	2,536,1 2,652,1		0 0	0		,493,79 ,607,91		0		0.000	52.39 52.39	0.00 0.00
2018	67	2,001,		ŏ	ŏ		, 967, 74		ŏ		0.000	52.39	0.00
2019	70	1,548,	336	0	0	1,	522,49	5	0		0.000	52.39	0.00
2020	78	1,349,		0	0		,327,02		0		0.000	52.39	0.00
2021 2022	80 80	1,174,4 1,013,5		0	0	Ι,	154,86, 996,28		0		0.000	52.39 52.39	0.00
2023	80	841,		ŏ	ŏ		827,29		ŏ		0.000	52.39	0.00
2024	70	639,		0	0		629, 19		0		0.000	52.39	0.00
Sub-Total		20,490,		0	0	20,	148,11		0		0.000	52.39	0.00
Remainder Total Future	,	466, 20,956,		0	0	20.	458,52 606,63,		0		0.000	52.39 52.39	0.00 0.00
	•	20, 750,		_	_	20,	,000,03	. 7	v		0.000	J2137	0.00
Cumulative Ultimate		20,956,	0 618	0	0								
O TTT III CT				URE GROSS	_	F (FGR)	- \$000				<b>VIRT</b>	FC	GR AFTER
		From	From	From		L (1 OK)	- ψοσο						MRT
Period	0	il/Cond.	Plant Produc	ts Gas		Othe	er	Tota	al C	D <u>il/Cond \$000</u>	Gas/P.P	\$000	\$000
2010		0		0	0		0		0	0		0	0
2011 2012		1,688 33,709		0 0	0		0		,688 ,709	423 8,455		0	1,265 25,254
2013		63,626		ŏ	ŏ		ŏ		,626	15,958		ŏ	47,668
2014		111,078		0	0		0		,078	27,860		0	83,218
2015		136,800		0 0	0		0		,800	34,311		0	102,489
2016 2017		130,650 136,629		0	0		0		,650 ,629	32,768 34,268		0	97,882 102,361
2018		103,090		ŏ	ŏ		ŏ		,090	25,856		ŏ	77,234
2019		79,763		0	0		0		,763	20,006		0	59,757
2020 2021		69,523 60,503		0 0	0		0		,523 ,503	16,017 11,907		0	53,506 48,596
2022		52,195		ŏ	ŏ		ŏ		, 195	8,737		ŏ	43,458
2023		43,342		0	0		Ō		, 342	6,155		0	37,187
2024		32,964		0	0		0	32	, 964	4,008		0	28,956
Sub-Total		1,055,560		0	0		0	1,055		246,729		0	808,831
Remainder Total Future	е	24,022 1,079,582		0	0		Ö	1,079	,022 .582	2,518 249,247		0	21,504 830,335
		, ,							•	,			,
				DUCTIONS -	\$000				FUTU				TAXES-\$000
Period	Ope C	erating Costs	Export, Profit & Property Taxes	Developmen Costs	t Transpo	ortation	To	otal		Undisco Annual	Cumulativ		Discounted 10.00 %
2010		581	505	5,566		0		6,652		-6,652	-6,		-6,322
2011		20	388	8,359		112		8,879		-7,614	-14,		-6,427
2012 2013		696 1,445	8,909 16,834	13,591 22,057		2,246 4,238		25,442 44,574		-188 3,094	-14, -11,		-162 2,249
2014		3,030	31,616	24,756		7,400		66,802		16,416		056	10,470
2015		4,899	42,126	14,922		9,113		71,060		31,429	36,		18,221
2016		5,081	38,642	22,994		3,703		75,420		22,462	58,		11,897
2017 2018		5,843 6,068	42,234 31,423	3,244 375		9,102 5,867		60,423 44,733		41,938 32,501	100, 133,		19,896 13,995
2019		6,146	23,834	242		5,314		35,536		24,221	157,		9,432
2020		6,500	20,574	0	) 4	4,631		31,705		21,801	179,	408	7,679
2021		6,604	17,856	0		4,031		28,491		20,105	199,		6,411
2022 2023		6,522 6,010	15,278 12,448	420		3,477 2,887		25,277 21,765		18,181 15,422	217, 233,		5,247 4,037
2023		5,162	9,102	780		2,007 2,196		17,240		11,716	233, 244,		2,782
Sub Tata!		64,607	311,769	117,306	. 7/	0,317		63,999		244,832			99,405
Sub-Total Remainder		4,419	6,229	3,600		1,600		15,848		5,656	250,	488	1,239
Total Futur	е	69,026	317,998	120,906		1,917		79,847		250,488			100,644





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY
ALL PROPERTIES
TOTAL PROVED RESERVES

TOTAL PROVED

	IAL FROTED			ENUE INTE	RESTS		PF	RODUCT PE	RICES	•	NOTED	DISCOU	NTED
		ENSE	Oil/	Plant			il/Cond.	Plt. Prod.		Gas		E NET INCO	OME - \$000 MONTHLY
INITIAL FINAL REMARKS	INTE	EREST	Condensate	Products	<u>Ga</u>	<u> </u>	\$/bbl	\$/bbl		\$/MCF	COMPOU 8.00% 10.00% 12.00% 15.00% 20.00%	- - - -	87,045 79,169 72,252 63,373 51,677
		ESTIM	ATED 8/8 TI	HS PRODU	CTION		CC	MPANY NE	ET SALE	s	20100	-	SE PRICES
١		Dil/Cond		Products	Gas		Oil/Cond.	Plant Prod		Sales	Gas	Oil/Cond.	Gas
		Barrels	Ba	rrels	MMCF	<del>o</del> —	Barrels	Barrel	s	MM	0,000	\$/bbl. <b>52.39</b>	\$/MCF 0,00
2010		875,9 504,3,		Ö			861,310 479,180,		ŏ		0.000	52.39	0.00
2012		,369,1		Ō			,346,102		ŏ		0.000	52.39	0.00
2013		,190,7		0			.,170,498		0		0.000	52.39	0.00
2014 2015	22 26	932,7 796,0		0		0 0	916,960 782,474		0		0.000	52.39 52.39	0.00
2016	33	858,7	780	0		0	844,127		Ō		0.000	52.39	0.00
2017	36	936,6		0		0	920,788		0		0.000	52.39	0.00
2018 2019	30 30	710,1 539,1		0		0 0	698,127 530,064		0		0.000	52.39 52.39	0.00
2020	27	422,3		ŏ		ŏ	415,228		ŏ		0.000	52.39	0.00
2021	27	243,9		0		0	239,870		0		0.000	52.39	0.00
2022 2023	14 11	161,8		0		0 0	159,138 35,832		0		0.000	52.39 52.39	0.00
2024		30,-	ō	ŏ		ŏ	0		ŏ		0.000	0.00	0.00
Sub-Total Remainder	10	,578,3	3 <b>93</b> 0	0			, <b>399, 698</b>		0		0.000	52.39	0.00
Total Future	10	,578,3	-	0 0		0 0 10	,399,698		ŏ		0.000	0.00 52.39	0.00
Cumulative Ultimate	10	,578,3	0 3 <b>93</b>	0 0		0 0							
-			MPANY FU			ENUE (FGR	) - \$000			ı	<b>MRT</b>	F0	GR AFTER MRT
Period	From Oil/Con	nd.	From Plant Produ	uctsF	From Gas	Oth	ner	Total	O <u>il/Cor</u>	nd \$000	Gas/P.P	\$000	\$000
2010		5,124		0	0		0	45,124		11,318		0	33,806
2011 2012		7,494		0	0		0	77,494		19,436		0	58,058
2012		0,523 1,322		0	ŏ		ŏ	70,523 61,322		17,688 15,380		ŏ	52,835 45,942
2014	4	8,039		0	0		0	48,039	7	12,049		0	35,990
2015 2016		0,994 4,224		0	0		0	40,994 44,224		10,282 11,092		0	30,712 33,132
2017		8,240		ŏ	ŏ		ŏ	48,240		12,099		ŏ	36,132
2018		6,575		0	0		0	36,575	5	9,173		0	27,402
2019 2020		7,770 1,754		0	0		0	27,770 21,754		6,965 5,456		0	20,805 16,298
2021		2,567		ŏ	ŏ		ŏ	12,567		2,711		ŏ	9,856
2022		8,337		0	0		0	8,337		1,534		0	6,803
2023 2024		1,878 0		0 0	0		0 0	1,878		294 0		0 0	1,584 0
Sub-Total	54	4,841		0	0		0	544,841		35,477		0	409,364
Remainder Total Future	54	0 4,841		0	0		0 0	544,841	-	0 35,477		0 0	0 409,364
			D	EDUCTION	IS - \$000			FL	JTURE N	IET INC	OME AFTER	R PROFIT	TAXES-\$0
Period	Operating Costs		Export,Profit Property Taxe			ansportation	Tota		Annua	Undisco I	unted Cumulative		Discounted 10.00 %
2010		612	13,142		658 116	3,006		),418 —		,388	3,3		2,680
2011	3,	679	25,648	7,	037	5,162	41	,526	16	,532	19,9	20	14,231
2012 2013		839 262	24,043 20,539		771 786	4,698 4,085		5,351 ),672		,484 ,270	37,4 52,6		13,562 10,773
2014		738	15,961		525	3,200		L,424		,566	67,2	40	9,335
2015		718	13,248		246	2,731		,943		,769	77,0		5,617
2016 2017		919 071	13,625 15,579		932 154	2,946 3,214		5,422 3,018		,710 ,123	83,7 96,8		3,504 6,217
2018		770	11,407		273	2,436		5,886	11	,516	108,3		4,954
2019	1,	679	8,451		0	1,850	11	L,980	8	,825	117,1	.83	3,439
2020 2021		543 949	6,508 3,769		0	1,449 838		7,500 5,556		,798 ,300	123,9 128,2		2,395 1,377
2022		666	2,507		0	555		3,728		,075	131,3		888
2023 2024		157 0	<sup>*</sup> 558 0		0	125 0		840 0		744 0	132,1 132,1	.00	197 0
Sub-Total	26.	602	174,985	39.	382	36,295	277	,264	132	, 100	,-		79,169
Remainder	•	0	. 0		0 382	0 36,295		0		0	132,1	.00	0
Total Future	26,	602	174,985	39,	382	36,295	271	,264	132	, 100			79,169





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY
ALL PROPERTIES
TOTAL PROBABLE RESERVES

TC	TAL PRO	BABLE RES	SERVES							F	PROBABLE		
			REVI	ENUE INTE	RESTS		P	RODUCT	PRIC	ES	_	DISCO	
INITIAL FINAL REMARKS		EXPENSE INTEREST	Oil/ Condensate	Plant Products	_ <u>G</u>	Gas	Oil/Cond. \$/bbl.	Plt. P 		Gas \$/MCF	FUTUR COMPOI 8.00 10.00 12.00 15.00 20.00	UNDED % - % - % - % -	MONTHLY 415,95 356,62 307,26 247,78
		ESTIM	ATED 8/8 TH	IS PRODU	CTION		С	OMPANY	NET	SALES		AVERA	GE PRICES
Desired	Number	Oil/Cond	. Plant P	Products	Gas		Oil/Cond.	Plant	Produ	cts Sales	Gas	Oil/Cond	. Gas
Period <b>2010</b>	of Wells	Barrels 154,1		rrels _	MMCF	<u> </u>	Barrels 151,593		rrels	MM/	0,000	\$/bbl. <b>52.3</b>	9 \$/MCI
2011 2012 2013 2014 2015	8 31 52 75 91	1,670,8 3,610,0 5,637,5 6,641,7 6,177,7	385 945 580 772 767	0 0 0 0		0 0 0 0	1,642,980 3,549,508 5,541,753 6,528,210 6,072,443	) 3 5 1	(		0.000 0.000 0.000 0.000	52.3 52.3 52.3 52.3 52.3	9 0.00 9 0.00 9 0.00 9 0.00 9 0.00
2016 2017	106 123	6,183,5 5,374,6		Ö		0	6,077,269 5,282,379			5	0.000	52.3 52.3	
2018 2019 2020 2021	129 132 132 145	4,929,3 3,855,8 3,146,4 2,769,6	327 350 409	0 0 0		0 0 0	4,845,205 3,790,068 3,092,697 2,722,339	5 3 7			0.000 0.000 0.000	52.3 52.3 52.3 52.3	9 0.00 9 0.00 9 0.00
2022	148	2,445,0		ŏ		ŏ	2,403,346			š	0.000	52.3	
2023 2024	157 149	2,208,0 1,916,9	)85	0		0	2,170,413 1,884,23	3	(		0.000	52.3 52.3	9 0.0
Sub-Total Remainder		56,721,7 4,767,7	717 706	0		0	55,754,444 4,686,066	1			0.000	52.3 52.3	9 0.0
Total Future		61,489,4		0			60,440,510	,	,	)	0.000	52.3	9 0.0
Cumulative Ultimate		61,489,4	0 123 DMPANY FU	0 0 TURE GRO	SS REV	0 0 /ENUE (F	GR) - \$000			ı	MRT	ı	GR AFTER
		From	From		From	•							MRT \$000
<u>Period</u> <b>2010</b>		7,942	Plant Produ	o 0	Gas	<u> </u>	Other 0	Tota	942	O <u>il/Cond \$000</u> <b>1,992</b>	Gas/P.P	\$000	5,95
2011		86,076		ŏ		ŏ	ŏ		076	21,589		ŏ	64,48
2012		185,959		0		0	0	185,		46,640		0	139,31
2013 2014		290,332 342,014		0		0 0	0	290, 342,		72,819 85,781		0	217,51 256,23
2015		318,135		0		Ō	Ö	318,	135	79,792		0	238,34
2016		318,388		0		0	0	318,		79,855		0	238,53
2017 2018		276,744 253,840		0		0 0	0	276, 253,		69,410 63,666		0	207,33 190,17
2019		198,561		0		Ō	Ö	198,		49,802		0	148,75
2020		162,026		0		0	0	162,		40,638		0	121,38
2021 2022		142,623 125,912		0		0 0	0	142, 125.		30,762 23,168		0	111,86 102,74
2023		113,709		ŏ		ŏ	ŏ	113,		17,820		ŏ	95,88
2024		98,714		0	1	0	0	98,	714	13, 152		0	85,56
Sub-Total Remainder Total Future		2,920,975 245,504 3,166,479		0 0 0		0 0 0	0 0 0	2,920, 245, 3,166,	504	696,886 24,143 721,029		0 0 0	2,224,08 221,36 2,445,45
		, ,	D	EDUCTION				, ,		URE NET INC	OME AFTE		
Davia -			Export,Profit &			F				Undisco			Discounted
Period <b>2010</b>	C	1,514	Property Taxes 3.098		925	Fransportation 52		tal 21,066	-	Annual -15,116	Cumulativ		<u>9 10.00</u> −14,48
2011		2,500	25,827		439	5,73		8,500		5,987	-9,		5,26
2012		4,793	56,981		349	12,38		8,511		20,808	11,		16,18
2013 2014		7,188 8,2 <b>3</b> 6	90,553 107,255		945 984	19,34 22,78		58,027 74,258		59,486 81,975	71, 153,		42,11 52,33
2015		9,508	99,740		606	21,19		4,047		74,296	227,		43,21
2016		11,050	99,996		760	21,21		8,016		80,517	307,		42,06
2017 2018		10,203 11,395	85,778 78,333		616 095	18,43 16,91		10,032 12,733		67, <b>3</b> 02 77,441	375,: 452,:		32,10 33,29
2019		11,588	60,423		600	13,22		35,838		62,921	515,		24,50
2020		11,885	48,322		500	10,79	94 7	1,501		49,887	565,		17,58
2021 2022		12,341 12,522	42,629 37,527		0	9,50 8,38		54,471 58,436		47,390 44,308	612, 657,		15,10 12,78
2023		12,692	33,554		420	7,57		54,241		41,648	698,		10,88
2024		12,354	28,560		540	6,57		18,030		37,532	736,		8,87
Sub-Total Remainder		139,769 53,616	898,576 64,848	8,	580	194,58 16,35	4 14	37,707 13,398		736,382 77,963	814,	345	341,83 14,79
Total Future	• :	L93,385	963,424	263,	359	210,93	1,63	31,105		814,345			356,62





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY
ALL PROPERTIES

	PROPERTIE								TOTAL PV & PB		
			REVE	NUE INTERE	STS	P	RODUCT P			DISCOU	
NITIAL FINAL REMARKS	EX IN	(PENSE TEREST	Oil/ Condensate	Plant Products	Gas	Oil/Cond. \$/bbl.	Plt. Proc \$/bbl.	f. Gas \$/MCF	COMPOU 8.00% 10.00% 12.00%	;	MONTHLY 502,998 435,798
VEWAKKS									15.00% 20.00%	. –	379,514 311,157 228,180
				S PRODUCT			OMPANY N				E PRICES
	Number of Wells	Oil/Cond Barrels	. Plant P Barr	roducts els <u> </u>	Gas IMCF	Oil/Cond. Barrels	Plant Pro Barre	oducts Sales	s Gas //CF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010		1,030,1		0	0	1,012,903		0	0.000	52.39	0.00
2011 2012	24 50	3,175,1 4,979,2		0	0	3,122,160 4,895,610		0	0.000	52.39 52.39	0.00
2013	74	6,828,2	97	0	0	6,712,251	L	0	0.000	52.39	0.00
2014 2015		7,574,5 6,973,7		0	0	7,445,176 6,854,915		0	0.000	52.39 52.39	0.00 0.00
2016		7,042,3		ŏ	ŏ	6,921,396		ŏ	0.000	52.39	0.00
2017		6,311,2		0	0	6,203,167	7	0	0.000	52.39	0.00
2018 2019		5,639,4 4,395,0		0	0 0	5,543,332 4,320,132		0	0.000	52.39 52.39	0.00 0.00
2020	159	3,568,7		ŏ	ŏ	3,507,925		ŏ	0.000	52.39	0.00
2021	172	3,013,5		0	0	2,962,209		0	0.000	52.39	0.00
2022 2023		2,606,9 2,244,5		0	0 0	2,562,484 2,206,245		0	0.000	52.39 52.39	0.00 0.00
2024	149	1,916,9		ŏ	ŏ	1,884,237		ŏ	0.000	52.39	0.00
Sub-Total Remainder	6	7,300,1 4,767,7		0 0	0 0	66,154,142 4,686,066		0 0	0.000 0.000	52.39 52.39	0.00
otal Future	7	2,067,8		0	0	70,840,208		0	0.000	52.39	0.00
Cumulative Ultimate	7	2,067,8	0 316	0 0	0 0						
		CC	MPANY FUT	URE GROSS	REVENUE (	FGR) - \$000			MRT	F0	R AFTER
Period	Fro Oil/Co		From Plant Produc	Fror		Other	Total	Oil/Cond \$00	0 Gas/P.P :	\$000	\$000
2010		53,066		0		0	53,06			0	39,756
2011		63,570		0	0	0	163,57			0	122,545
2012 2013		56,481 51,655		0	0	0	256,48 351,65			0	192,153 263,456
2014		90,053		0	Ō	Ö	390,05			Ō	292,223
2015 2016		59,129		0	0	0	359,12			0	269,056
2017		62,612 24,984		ŏ	Ö	ŏ	362,61 324,98			ŏ	271,665 243,474
2018	2	90,415		0	0	o	290,41	5 72,839	)	0	217,576
2019 2020		26,331 83,781		0	0	0	226,33 183,78			0	169,564 137,687
2021		55,189		ŏ	ŏ	ŏ	155,18			ŏ	121,716
2022		34,249		0	0	0	134,24			0	109,547
2023 2024	1	15,586 98,715		0 0	0 0	0 0	115,58 98,71			0	97,472 85,563
ub-Total emainder		65,816 45,503		0	0	0	3,465,81 245,50			0 2	2,633,453
otal Future		11,319		ŏ	ŏ	ŏ	3,711,31				221,360 2,854,813
			DI	EDUCTIONS -	· \$000		F	UTURE NET INC			
Period	Operati Costs		Export, Profit & Property Taxes		nt Transports	ition To	tal –	Undisc Annual			Discounted 10.00
2010		.126	16,239	Costs 26,58	Transporta		51,483	-11,727	Cumulative		-11,806
2011		,180	51,476	31,47	5 10,8		0,028	22,517	10,7		19,499
2012 2013		,631 ,450	81,025 111,091	48,120 44,73			53,862 38,698	38,291 74,758	49,0 123,8		29,750 52,884
2014		,974	123,217	36,50			5,683	96,540	220,3		61,666
2015		,227	112,987	36,85			34,990	84,066	304,4		48,828 45 572
2016		,968 ,274	113,621 101,357	33,69 27,77			34,437 53,050	87,228 80,424	391,6 472,0		45,573 38,323
2017	13	,165	89,740	6,36	3 19,	346 12	28,619	88,957	561,0	54	38,244
2017 2018	13	,267	68,874 54,830	60 50			97,818 R1 001	71,746 56,686	632,8		27,946 19,975
2018 2019		120		3U	<i>-</i> 12,		31,001		689,4 741,1		
2018	13	,428 ,290	46,398		10,:	338	70,026	51,690	(71,1	.70	10,403
2018 2019 2020 2021 2022	13 13 13	,290 ,188	46,398 40,034	(	8,9	743 6	2,165	47,382	788,5	58	16,483 13,673
2018 2019 2020 2021	13 13 13 12	,290	46,398	(	8,9 7,7	743 6 700 5				558 948	
2018 2019 2020 2021 2022 2023	13 13 13 12 12	,290 ,188 ,849	46,398 40,034 34,113	42	0 8,9 0 7,7 0 6,9	943 6 700 5 576 4	52,165 55,082	47,382 42,390	788,5 830,9	558 948 182	13,673 11,081





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY LINEYNOYE FIELD TOTAL PROVED RESERVES

TOTAL PROVED

		RI	EVENUE INTE	RESTS		PR	ODUCT PR	ICES		DISCOU	NTED
	EXPENS INTERES		Plant ite Products	Gas	Oi	il/Cond. \$/bbl.	Plt. Prod. \$/bbl.	Gas \$/MCF	FUTUR COMPOL	E NET INCO	
INITIAL FINAL REMARKS		. <u>senaones</u>				ψ, σ.σ	<u> </u>	φ,ο	8.007 10.007 12.007 15.007 20.007	% – % – % – % –	58,858 54,701 50,992 46,132 39,509
	EST	IMATED 8/8	THS PRODU	CTION		СО	MPANY NE	T SALES		AVERAG	E PRICES
	Number Oil/Co		nt Products Barrels	Gas MMCF		Oil/Cond. Barrels	Plant Prod Barrels	ucts Sale:	s Gas MCF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010	10 87	5,935	0	(	<u> </u>	861,310		0	0.000	52.39	0.00
2011 2012		4,511 3,843	0			,331,886 800,254		0	0.000	52.39 52.39	0.00
2013	10 57	,330	0	Č	)	560,806		Ō	0.000	52.39	0.00
2014 2015		4,781 3,994	0 0	(		427,518 343,174		0	0.000 0.000	52.39 52.39	0.00 0.00
2016 2017		,125	0	0		285,273		0	0.000	52.39 52.30	0.00
2017		7,367 5,000	ŏ	č		243,241 211,406		0	0.000	52.39 52.39	0.00
2019 2020		9,701 9,415	0	(		186,530 166,589		0	0.000	52.39 52.39	0.00 0.00
2021	10 14	1,435	Ö	Č	)	142,026		Ō	0.000	52.39	0.00
2022 2023		5,539 9,756	0	(		124,421 9,590		0	0.000	52.39 52.39	0.00 0.00
2024	,	0	ŏ	č		7,370		ŏ	0.000	0.00	0.00
Sub-Total Remainder	5,79	7,732	0	C		,694,024		0	0.000	52.39 0.00	0.00 0.00
Total Future	5,79	7,732	ŏ	č	-	,694,024		Ö	0.000	52.39	0.00
Cumulative Ultimate	5,79	0 0,732	0 0	C							
		COMPANY	FUTURE GRO		NUE (FGR	) - \$000			MRT	F0	R AFTER MRT
Period	From Oil/Cond.	Froi Plant Pro	m F oducts	From Gas	Oth	er	Total	Oil/Cond \$00	0 Gas/P.P	\$000	\$000
2010	45,1		0	0		0	45,124			0	33,806
2011 2012	69,7 41,9		0 0	0		0	69,778 41,925	17,501 10,51		0	52,277 31,410
2013	29,3	30	0	0		0	29,380	7,369	7	0	22,011
2014 2015	22,3 17,9		0	0		0	22,398 17,979	5,617 4,510		0	16,781 13,469
2016 2017	14,9 12,7		0	0		0	14,946 12,743			0	11,198 9,547
2017	11,0		Ŏ	ŏ		ŏ	11,075			ŏ	8,297
2019 2020	9,7 8,7		0	0		0	9,773 8,727	2,451 2,189		0	7,322 6,538
2021	7,4	41	0	0		0	7,441	1,60	5	0	5,836
2022 2023	6,5 5	L8 )3	0	0		0	6,518 503	1,200 78		0	5,318 425
2024	J	ō	Ö	ŏ		ŏ	ő			Ö	0
Sub-Total Remainder	298,3	LO O	0 0	0		0	298,310 0	74,075		0	224,235 0
Total Future	298,3		ŏ	ŏ		ŏ	298,310			ŏ	224,235
			DEDUCTION	IS - \$000			FU	TURE NET INC	COME AFTE	R PROFIT	TAXES-\$000
Period	Operating Costs	Export,Pro			nsportation	Total		Undisc Annual	ounted Cumulativ		Discounted %
2010	2,740	12,3	86 10,	125	3,006	28	,257	5,549	5,5	549	4,755
2011 2012	3,312 1,705	23,3 14,5		552 150	4,648 2,793		,868 ,196	19,409 12,214	24,9 37,1		16,797 9,571
2013	1,115	10,0	28	100	1,957	13	,200	8,811	45,9	983	6,245
2014 2015	803 727	7,4 5,8		0	1,492 1,198		,777 ,729	7,004 5,740	52,9 58,7		4,487 3,329
2016	688	4,9	02	0	996	6	,586	4,612	63,3	339	2,419
2017 2018	603 579	4,2 3,4		0 0	849 737		,667 ,780	3,880 3,517	67,2 70,7		1,843 1,512
2019	579 593	2,9	78	0	651 593	4	,208	3,114	73,8	350	1,211
2020 2021	583 545	2,6 2,2		0 0	582 495		,783 ,277	2,755 2,559	76,6 79,1		970 816
2022 2023	528 44	1,9	59 48	0	435 33	2	,922 225	2,396 200	81,5		692 54
2023	0	1	48 0	0	0		0	200	81,7 81,7		54 0
Sub-Total	14,551	96,1			19,872	142	,475	81,760		7/0	54,701
Remainder Total Future	0 14,551	96,1	0 25 11,	0 927	0 19,872	142	,475	0 81,760	81,7	100	0 54,701





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY LINEYNOYE FIELD
TOTAL PROBABLE RESERVES

TOTAL

TC	TAL PR	OBABLE RE	SERVES							Ī	ROBABLE		
			REV	ENUE INTE	RESTS		F	RODUCT	PRIC	CES	_	DISCOU	NTED
INITIAL FINAL REMARKS		EXPENSE INTEREST	Oil/ Condensate	Plant Products	Ga		Oil/Cond. \$/bbl.	Plt. P \$/bl		Gas \$/MCF	FUTUR COMPOU 8.00 10.00 12.00 15.00 20.00	UNDED % — % — % — % —	ME - \$000 MONTHLY 155,101 137,617 122,844 104,625 81,781
		ESTIM	ATED 8/8 TI	IS PRODU	CTION		С	OMPANY	NET	SALES		AVERAC	SE PRICES
	Number	Oil/Cond	I. Plant F	Products	Gas		Oil/Cond.	Plant	Produ	cts Sales	Gas	Oil/Cond.	Gas
Period 2010 2011 2012 2013 2014 2015	of Wells 1 7 16 17 17 17	Barrels 154, 1,638, 2,710, 2,718, 1,859, 1,375,	170 110 612 918 485	0 0 0 0 0 0		0 0 0 0	Barrels 151,593 1,610,754 2,665,346 2,673,517 1,828,424 1,352,233	3 4 5 7 4		MM 0 0 0 0 0 0 0	0.000 0.000 0.000 0.000 0.000	\$/bbl. 52.39 52.39 52.39 52.39 52.39 52.39	0.00 0.00 0.00 0.00 0.00
2016 2017 2018 2019 2020 2021 2022	17 17 17 17 17 18 18	1,086, 894, 758, 655, 576, 521, 471,	631 026 972 937 538 350	0 0 0 0		0 0 0 0 0	1,068,360 879,687 745,375 645,014 567,298 512,836 463,479	7 5 4 8 8		0 0 0 0 0 0 0	0.000 0.000 0.000 0.000 0.000 0.000	52.39 52.39 52.39 52.39 52.39 52.39	0.00 0.00 0.00 0.00 0.00 0.00
2023 2024	27 27	528, 484,		0		0 0	519,493 476,310			0 0	0.000	52.39 52.39	
Sub-Total Remainder Total Future		16,434, 2,063, 18,498,	166 955	0 0 0		0	6,159,719 2,029,484 8,189,203	9 4	(	0 0 0	0.000 0.000 0.000	52.39 52.39 52.39	0.00
Cumulative Ultimate		18,498,	0 121	0		0 0							
Offilliate			OMPANY FU	_			R) - \$000			ı	WRT	F	GR AFTER
5		From	From	-	From	,		<b>-</b> .					MRT \$000
<u>Period</u> <b>2010</b>		il/Cond. 7,942	Plant Produ	o	Gas 0		ther 0	Tota	942	O <u>il/Cond \$000</u> <b>1,992</b>	Gas/P.P	\$000	5,950
2011		84,387		0	0	)	0	84,	387	21,165		0	63,222
2012 2013		139,638 140,065		0	0		0	139, 140,		35,023 35,130		0	104,615 104,935
2014		95,792		0	Ō		Ö	95,	792	24,025		Ō	71,767
2015 2016		70,843 55,971		0	0		0		843 971	17,769 14,038		0	53,074 41,933
2017		46,087		0	0	)	0	46,	087	11,559		0	34,528
2018 2019		39,050 33,793		0	0		0		050 793	9,794		0	29,256
2019		29,721		Ö	Ö		Ö		721	8,476 7,454		ŏ	25,317 22,267
2021		26,867		0	0		0		867	5,795		0	21,072
2022 2023		24,281 27,217		0	0		0		281 217	4,468 4,265		0	19,813 22,952
2024		24,954		ŏ	Ö		ŏ		954	3,325		ŏ	21,629
Sub-Total Remainder Total Future		846,608 106,324 952,932		0 0 0	0	)	0 0 0	846, 106, 952,	324	204,278 10,003 214,281		0 0 0	642,330 96,321 738,651
				EDUCTION	ic tooo				FUT	LIDE NET INC	OME AFTE	D DDOCIT	TAVES \$000
		erating	Export.Profit			<u>'</u>				URE NET INC			Discounted
Period <b>2010</b> <b>2011</b>		642 2,481	Property Taxe 2,342 25,438	s <u>Cost</u> <b>10</b> ,		ansportation 529 5,622		tal 13,872 47,786		Annual -7,922 15,436	Cumulativ		10.00 % -7,641 13,268
2012		3,964	45,054	13,	234	9,302	7	71,554		33,061	40,	575	25,722
2013 2014		4,086 2,516	47,437 31,734		012 646	9,330 6,381		53,865 42,277		41,070 29,490	81,6 111,		29,099 18,924
2015		2,145	22,585		593	4,720		31,043		22,031	133,		12,789
2016		2,031	18,363		453 453	3,728		24,575		17,358	150,		9,112
2017 2018		1,818 1,653	15,177 12,177		453 402	3,070 2,602		20,518 16,834		14,010 12,422	164, 176,		6,658 5,341
2019		1,747	10,299		259	2,251		14,556		10,761	187,	717	4,187
2020 2021		1,881 1,938	8,929 8,089		0	1,980 1,790		12,790 11,817		9,477 9,255	197,1 206,4		3,337 2,949
2022		1,976	7,300		0	1,617	1	10,893		8,920	215,	369	2,573
2023 2024		2,643 2,748	8,103 7,283		0	1,813 1,662		12,559 11,693		10,393 9,936	225, 235,		2,712 2,349
Sub-Total Remainder		34,269 25,563	270,310 27,594	45, 1,	656 620	56,397 7,083	40	06,632 51,860		235,698 34,461	270,		131,379 6,238
Total Future	•	59,832	297,904	47,	276	63,480	46	58,492		270,159			137,617





#### PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY TUNGOLSKOYE FIELD TOTAL PROVED RESERVES

TOTAL **PROVED** 

INITIAL FINAL REMARKS		EXPENSE INTEREST (	REVI Oil/ Condensate	Plant Products	Gas Gas	Oil/Cond. \$/bbl.	ODUCT PRICE Plt. Prod. \$/bbl.	Gas \$/MCF	COMPO 8.0 10.0 12.0	OUNDED 10% - 10% - 10% - 10% -	JNTED COME - \$000 MONTHLY 11,786 10,483 9,343 7,888 5,993
		ESTIMA	TED 8/8 TH	IS PRODU	CTION	СО	MPANY NET SA	ALES		AVERA	GE PRICES
Period	Number of Wells	Oil/Cond. Barrels		roducts	Gas MMCF	Oil/Cond. Barrels	Plant Products Barrels	Sales G MMC		Oil/Cond. \$/bbl.	Gas \$/MCF
2010			0	0	0	0	0		0.000	0.00	
2011			0	0	0	0	0	(	0.000	0.00	
2012	3	233.56	59	0	0	229,436	0	(	0.000	52.39	9 0.00

3 328,436 0.000 52.39 2013 334,354 ŏ 0.00 2014 0.000 52.39 0.00 333333333 201,728 198,157 0000000000 0.00 0.00 0.00 0.00 0.00 2015 2016 2017 139,755 106,919 86,024 0.000 0.000 0.000 0 52.39 142,273 0000000 52.39 52.39 52.39 52.39 52.39 52.39 108,846 87,575 000 72,915 62,242 54,148 2018 71,623 0.000 61,143 53,188 00 2019 0.000 2020 0.000 2021 47,810 ō 46,964 0.000 0.00 2022 33,878 0 0 33,279 0.000 52.39 0.00 2023 26,716 0 26,242 0.000 52.39 0.00 2024 0 0 0 0.000 0.00 0.00 1,406,054 0 0 0 0.000 52.39 0.00 Sub-Total 1,381,166 0.00 Remainder 0 0 0 0.000 0.00 **Total Future** 1,406,054 0 1,381,166 0 52.39 0 0.000 0.00

0 0 Cumulative 1,406,054 ō Ultimate

	co	MPANY FUTURE	GROSS REVENU	E (FGR) - \$000		M	IRT	FGR AFTER
Period	From Oil/Cond.	From Plant Products	From Gas	Other	Total	Oil/Cond \$000	Gas/P.P \$000	MRT \$000
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	12,020	0	0	0	12,020	3,015	0	9,005
2013	17,207	0	0	0	17,207	4,315	0	12,892
2014	10,381	0	0	0	10,381	2,604	0	7,777
2015	7,322	0	0	0	7,322	1,837	0	5,485
2016	5,602	0	0	0	5,602	1,405	0	4, 197
2017	4,506	0	0	0	4,506	1,130	0	3,376
2018	3,753	0	0	0	3,753	941	0	2,812
2019	3,203	0	0	0	3,203	803	0	2,400
2020	2,787	0	0	0	2,787	699	0	2,088
2021	2,460	0	0	0	2,460	531	0	1,929
2022	1,743	0	0	0	1,743	321	0	1,422
2023	1,375	0	0	0	1,375	215	0	1,160
2024	0	0	0	0	0	0	0	0
ub-Total	72,359	0	0	0	72,359	17,816	0	54,543
emainder	. 0	0	0	0	0	0	0	. 0
otal Future	72,359	0	0	0	72,359	17,816	0	54,543

		DE	DUCTIONS - \$	000		FUTURE NET INC	OME AFTER PRO	OFIT TAXES-\$000	
	Operating	Export.Profit &	Development			Undisco	ounted	Discounted	
Period	Costs	Property Taxes	Costs	Transportation	Total	Annual	Cumulative	@ 10.00 %	
2010	291	252	0	0	543	-543	-543	-523	
2011	0	0	162	0	162	-162	-705	-139	
2012	418	3,948	2,757	801	7,924	1,081	376	726	
2013	509	5,804	490	1,146	7,949	4,943	5,319	3,502	
2014	300	3,484	0	692	4,476	3,301	8,620	2,120	
2015	247	2,372	0	487	3,106	2,379	10,999	1,380	
2016	225	1,845	0	373	2,443	1,754	12,753	922	
2017	189	1,495	0	301	1,985	1,391	14,144	661	
2018	178	1,176	0	250	1,604	1,208	15,352	519	
2019	178	978	0	213	1,369	1,031	16,383	401	
2020	177	837	0	186	1,200	888	17,271	313	
2021	177	741	0	164	1,082	847	18,118	270	
2022	131	525	0	116	772	650	18,768	188	
2023	113	411	0	91	615	545	19,313	143	
2024	0	0	0	0	0	0	19,313	0	
ub-Total	3,133	23,868	3,409	4,820	35,230	19,313		10,483	
mainder	0	0	0	0	0	0	19,313	0	
tal Future	3,133	23,868	3,409	4,820	35,230	19,313		10,483	





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY TUNGOLSKOYE FIELD TOTAL PROBABLE RESERVES

TOTAL PROBABLE

ТО	TAL PRO	BABLE RES	SERVES							F	PROBABLE		
			REVE	NUE INTE	RESTS		PF	RODUC	T PRIC	ES	_	DISCOU	INTED
		EXPENSE	Oil/	Plant	0		I/Cond.	Plt. F		Gas		RE NET INC	OME - \$000 MONTHLY
INITIAL	-	INTEREST	Condensate	Products_	Gas		\$/bbl	<u>\$/b</u>	DI.	\$/MCF		0% -	104,310
FINAL											10.0	0% -	89,495
REMARKS											12.0		77,123
											15.0 20.0		62,137 44,017
											20.0	U/0	77,017
	_		ATED 8/8 TH					MPAN					GE PRICES
	Number of Wells	Oil/Cond Barrels	. Plant P Barı	roducts rels	Gas MMCF		il/Cond. Barrels	Plant B	Production arrels	ts Sales MM	Gas CF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010			0	0	0		0		0		0.000	0.00	
2011			0	0	0		0		0		0.000	0.00	
2012	5	245,0		0	0		240,746		0		0.000	52.39	
2013 2014	14 21	1,683,5 2,626,0		Ö	ő		,653,776 ,579,581		0		0.000	52.39 52.39	
2015	21	1,967,5		Ŏ	ŏ		,932,729		Ö		0.000	52.39	
2016	21	1,364,6		0	0		,340,540		0		0.000	52.39	
2017	21	1,038,2		0	0	1,	,019,922		0		0.000	52.39	
2018 2019	21 21	833,6 693,5		0	0		818,863 681,295		0		0.000	52.39 52.39	
2020	21	591,9		ŏ	ŏ		581,467		ŏ		0.000	52.39	
2021	21	514,9		0	0		505,881		0		0.000	52.39	
2022	22	463,6		0	0		455,456		0		0.000	52.39	
2023 2024	22 24	417,9 399,6		0	0		410,525 392,560		0		0.000	52.39 52.39	
2024	24	377,0	) <b>32</b>	U	U		372,300		·		0.000	32.37	0.00
Sub-Total		12,840,6		0	0		,613,341		0		0.000	52.39	
Remainder		1,547,3		0	0	,	,519,983		0		0.000	52.39	
Total Future		14,387,9	796	0	0	14,	, 133, 324		0	1	0.000	52.39	0.00
Cumulative			0	0	0								
Ultimate		14,387,9	996	0	0								
		CC	MPANY FUT	URE GROS	SS REVEN	IUE (FGR)	- \$000			r	<b>I</b> RT	F	GR AFTER
	F	rom	From		rom	(,	, ,,,,,,						MRT
Period	Oil	Cond.	Plant Produc	cts (	Gas	Othe		Tota		O <u>il/Cond \$000</u>	Gas/P.P.		\$000
2010		0		0	0		0		0	0		0	0
2011 2012		0 12,613		0	0		0	12	0 ,613,	0 3,163		0	0 9,450
2012		86,641		ŏ	ŏ		ŏ		,641	21,731		ŏ	64,910
2014		135,144		Ō	Ō		Ō		, 144	33,896		Ō	101,248
2015		101,256		0	0		0		, 256	25,396		0	75,860
2016		70,231		0	0		0		, 231	17,614		0	52,617
2017 2018		53,433 42,901		0	0		0		, 433 , 901	13,402 10,760		0	40,031 32,141
2019		35,693		Ŏ	ŏ		ŏ		,693	8,952		ŏ	26,741
2020		30,463		0	0		0		, 463	7,641		0	22,822
2021		26,503		0	0		0		,503	5,716		0	20,787
2022 2023		23,861 21,508		0	0		0		,861 ,508	4,391 3,370		0	19,470 18,138
2024		20,566		ŏ	ŏ		ŏ		, 566	2,740		ŏ	17,826
		,						•	•				
Sub-Total		660,813		0	0		0		,813	158,772		0	502,041
Remainder Total Future		79,632		0	0		0	7 40	,632 445	7,605 166,377		0	72,027 574 068
Total Tuture		740,445		•	v		v	140,	, 445	100,577		Ū	5/4,068
			DI	EDUCTION	S - \$000				FUTI	IRE NET INC	OME AFT	FR PROFIT	TAXES-\$000
	Oper	oting								Undisco			Discounted
Period			Export, Profit 8 Property Taxes	Developn Costs		sportation	Tota	al		Annual	Cumula	tive @	10.00 %
2010		291	252		0	0		543		-543		<del>-</del> 543	-523
2011		. 0	0		338	0		1,838		-1,838		,381	-1,577
2012 2013		141 1,782	2,965 26,176	17,1 14,9		840 5,772		1,085 3,671		-11,635 16,239		,016 ,223	-9,038 11,409
2014		3,118	43,890		708	9,003		3,719		37,529		,752	23,866
2015		2,941	32,793		391	6,745		2,870		32,990		,742	19,171
2016		2,521	22,861		310	4,678		1,370		21,247		,989	11,168
2017		2,102	17,340		239	3,560		4,241		15,790		,779	7,512
2018 2019		1,878 1,985	13,146 10,889	1,3	310 70	2,858 2,377		9,192 5.321		12,949 11,420		,728 ,148	5,572 4,444
2019		2,058	9,072		70 349	2,377		3,509		9,313		,148 ,461	4,444 3,281
2021		2,062	7,956	•	0	1,765		1,783		9,004		,465	2,871
2022		2,115	7,150		0	1,590	10	0,855		8,615	161	,080	2,485
2023		2,144	6,393		0	1,433		9,970		8,168		,248	2,132
2024		2,337	5,995		0	1,370	•	9,702		8,124	1//	,372	1,921
Sub-Total	:	27,475	206,878	46,2	295	44,021	324	4,669		177,372			84,694
Remainder		18,501	20,797	1,4	440	5,304	46	5,042		25,985	203	,357	4,801
Total Future	•	45,976	227,675	47,7	735	49,325	370	0,711		203,357			89,495





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY KONDRASHEVSKOYE FIELD TOTAL PROVED RESERVES

TOTAL PROVED

		REVI	ENUE INTERE	ESTS	P	RODUCT PRICE	S	DISCO	UNTED
	EXPENSE INTEREST	Oil/ Condensate	Plant Products	Gas	Oil/Cond. \$/bbl.	Plt. Prod. \$/bbl.	Gas \$/MCF	FUTURE NET IN COMPOUNDED	ICOME - \$000 MONTHLY
INITIAL								8.00% -	2,571
FINAL								10.00% -	2,076
REMARKS								12.00% -	1,660
								15.00% -	1,157
								20.00% -	563
	ESTIM	ATED 8/8 TH	IS PRODUCT	ION	C	OMPANY NET S	ALES	AVER	AGE PRICES

	_	ESTIMATE	D 8/8 THS PRODU	JCTION	CO	MPANY NET SALI	ES	AVERAGE	PRICES
Period	Number of Wells	Oil/Cond. Barrels	Plant Products Barrels	Gas MMCF	Oil/Cond. Barrels	Plant Products Barrels	Sales Gas MMCF	Oil/Cond. \$/bbl.	Gas \$/MCF
2010		0	0	0	0	0	0.000	0.00	0.00
2011		0	0	0	0	0	0.000	0.00	0.00
2012		0	0	0	0	0	0.000	0.00	0.00
2013		0	0	0	0	0	0.000	0.00	0.00
2014		0	0	0	0	0	0.000	0.00	0.00
2015	4	104,280	0	0	102,436	0	0.000	52.39	0.00
2016	4	196,636	0	0	193,152	0	0.000	52.39	0.00
2017	4	118,636	0	0	116,536	0	0.000	52.39	0.00
2018	4	83,668	0	0	82,188	0	0.000	52.39	0.00
2019	4	64,012	0	0	62,880	0	0.000	52.39	0.00
2020	4	51,504	0	0	50,592	0	0.000	52.39	0.00
2021	4	3,396	0	0	3,336	0	0.000	52.39	0.00
2022		0	0	0	0	0	0.000	0.00	0.00
2023		0	0	0	0	0	0.000	0.00	0.00
2024		0	0	0	0	0	0.000	0.00	0.00
Sub-Total		622,132	0	0	611,120	0	0.000	52.39	0.00
Remainder		0	0	0	0	0	0.000	0.00	0.00
Total Futur	е	622,132	0	0	611,120	0	0.000	52.39	0.00
Cumulative		0	0	0					
Ultimate		622,132	0	0					

	CC	MPANY FUTURE	GROSS REVENU	IE (FGR) - \$000		M	IRT	FGR AFTER
Period	From Oil/Cond.	From Plant Products	From Gas	Other	Total	Oil/Cond \$000	Gas/P.P \$000	MRT \$000
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0
2015	5,367	0	0	0	5,367	1,346	0	4,021
2016	10,119	0	0	0	10,119	2,538	0	7,581
2017	6,105	0	0	0	6,105	1,531	0	4,574
2018	4,306	0	0	0	4,306	1,080	0	3,226
2019	3,294	0	0	0	3,294	827	0	2,467
2020	2,651	0	0	0	2,651	664	0	1,987
2021	175	0	0	0	175	38	0	137
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0
-Total	32,017	0	0	0	32,017	8,024	0	23,993
nainder	. 0	0	0	0	0	. 0	0	. 0
al Future	32,017	0	0	0	32,017	8,024	0	23,993

		DEI	DUCTIONS - \$	FUTURE NET INCOME AFTER PROFIT TAXES					
	Operating	Export, Profit &	Development			Undisco	ounted	Discounted	
Period	Costs	Property Taxes	Costs	Transportation	Total	Annual	Cumulative	@ 10.00 9	
2010	291	252	0	0	543	-543	-543	-523	
2011	0	0	0	0	0	0	-543	0	
2012	0	0	0	0	0	0	-543	0	
2013	0	0	58	0	58	<del>-</del> 58	-601	-41	
2014	0	0	116	0	116	-116	-717	-74	
2015	181	1,769	3,245	358	5,553	-1,532	-2,249	-940	
2016	332	3,233	546	674	4,785	2,796	547	1,463	
2017	252	2,022	0	406	2,680	1,894	2,441	902	
2018	230	1,344	0	287	1,861	1,365	3,806	587	
2019	224	999	0	220	1,443	1,024	4,830	400	
2020	220	788	0	176	1,184	803	5,633	282	
2021	16	51	0	12	79	58	5,691	20	
2022	0	0	0	0	0	0	5,691	0	
2023	0	0	0	0	0	0	5,691	0	
2024	0	0	0	0	0	0	5,691	0	
Total	1,746	10,458	3,965	2,133	18,302	5,691		2,076	
inder	. 0	0	0	0	. 0	. 0	5,691	. 0	
l Future	1,746	10,458	3,965	2,133	18,302	5,691	•	2,076	





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY KONDRASHEVSKOYE FIELD TOTAL PROBABLE RESERVES

TOTAL PROBABLE

		REVE	NUE INTER	ESTS	P	RODUCT PRICE	DISCOUNTED		
INITIAL FINAL REMARKS	EXPENSE INTEREST	Oil/ Condensate	Plant Products	Gas	Oil/Cond. \$/bbl.	Pit. Prod. \$/bbl.	Gas \$/MCF	FUTURE NET IN:  COMPOUNDED  8.00% -  10.00% -  12.00% -  15.00% -  20.00% -	COME - \$000 MONTHLY 36,110 28,973 23,231 16,635 9,404

	_	ESTIMATE	D 8/8 THS PRODU	JCTION	CO	MPANY NET SALE	ES	AVERAGE PRICES		
Period	Number of Wells	Oil/Cond. Barrels	Plant Products Barrels	Gas MMCF	Oil/Cond. Barrels	Plant Products Barrels	Sales Gas MMCF	Oil/Cond. \$/bbl.	Gas \$/MCF	
2010		0	0	0	0	0	0.000	0.00	0.00	
2011		0	0	0	0	0	0.000	0.00	0.00	
2012		0	0	0	0	0	0.000	0.00	0.00	
2013		0	0	0	0	0	0.000	0.00	0.00	
2014		0	0	0	0	0	0.000	0.00	0.00	
2015	9	190,650	0	0	187,281	0	0.000	52.39	0.00	
2016	24	1,637,573	0	0	1,608,584	0	0.000	52.39	0.00	
2017	24	1,485,638	0	0	1,459,336	0	0.000	52.39	0.00	
2018	24	975,358	0	0	958,106	0	0.000	52.39	0.00	
2019	24	718,602	0	0	705,889	0	0.000	52.39	0.00	
2020	24	564,777	0	0	554,767	0	0.000	52.39	0.00	
2021	28	502,261	0	0	493,371	0	0.000	52.39	0.00	
2022	28	427,081	0	0	419,517	0	0.000	52.39	0.00	
2023	28	368,529	0	0	362,004	0	0.000	52.39	0.00	
2024	28	323,329	0	0	317,616	0	0.000	52.39	0.00	
Sub-Total		7,193,798	0	0	7,066,471	0	0.000	52.39	0.00	
Remainder		452,890	0	0	444,873	0	0.000	52.39	0.00	
Total Future	•	7,646,688	0	0	7,511,344	0	0.000	52.39	0.00	
Cumulative		0	0	0						
Ultimate		7,646,688	0	0						

	CO	MPANY FUTURE	M	FGR AFTER				
Period	From Oil/Cond.	From Plant Products	From Gas	Other	Total	O <u>il/Cond \$000</u>	Gas/P.P \$000	MRT \$000
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0
2015	9,811	0	0	0	9,811	2,461	0	7,350
2016	84,274	0	0	0	84,274	21,137	0	63,137
2017	76,455	0	0	0	76,455	19,175	0	57,280
2018	50,195	0	0	0	50,195	12,590	0	37,605
2019	36,981	0	0	0	36,981	9,275	0	27,706
2020	29,065	0	0	0	29,065	7,290	0	21,775
2021	25,848	0	0	0	25,848	5,575	0	20,273
2022	21,978	0	0	0	21,978	4,044	0	17,934
2023	18,966	0	0	0	18,966	2,972	0	15,994
2024	16,640	0	0	0	16,640	2,217	0	14,423
-Total	370,213	0	0	0	370,213	86,736	0	283,477
ainder	23,306	0	0	0	23,306	2,546	0	20,760
I Future	393,519	0	0	0	393,519	89,282	0	304,237

_		DEI	DUCTIONS - \$	FUTURE NET INC	FUTURE NET INCOME AFTER PROFIT TAXES-\$00					
	Operating	Export.Profit &	Development			Undisco	ounted	Discounted		
Period	Costs	Property Taxes	Costs	Transportation	Total	Annual	Cumulative	@ 10.00 °		
2010	291	252	0	0	543	-543	-543	-523		
2011	0	0	0	0	0	0	-543	0		
2012	0	0	151	0	151	-151	-694	-118		
2013	0	0	942	0	942	<del>-94</del> 2	-1,636	-662		
2014	0	0	1,884	0	1,884	-1,884	-3,520	-1,198		
2015	185	2,257	21,887	654	24,983	-17,633	-21,153	-10,074		
2016	2,331	24,524	17,624	5,614	50,093	13,044	-8,109	6,553		
2017	2,754	24,905	1,706	5,093	34,458	22,822	14,713	10,876		
2018	2,181	15,457	1,191	3,343	22,172	15,433	30,146	6,651		
2019	2,152	11,266	30	2,464	15,912	11,794	41,940	4,595		
2020	2,142	8,654	151	1,936	12,883	8,892	50,832	3,135		
2021	2,314	7,713	0	1,722	11,749	8,524	59,356	2,718		
2022	2,279	6,538	0	1,464	10,281	7,653	67,009	2,209		
2023	2,241	5,590	0	1,264	9,095	6,899	73,908	1,802		
2024	2,242	4,807	0	1,108	8,157	6,266	80,174	1,482		
Total	21,112	111,963	45,566	24,662	203,303	80,174		27,446		
inder	3,863	6,502	1,680	1,553	13,598	7,162	87,336	1,527		
Future	24,975	118,465	47,246	26,215	216,901	87 <b>,33</b> 6	,	28,973		





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

0 7,172

44,534

20,081

Remainder

**Total Future** 

		W FIELD ROVED RESER	RVES								OTAL PROVED		
				ENUE INTERI	ESTS			ODUCT		ES		DISCOUN	
NITIAL		EXPENSE INTEREST	Oil/ Condensate	Plant Products	Gas	Oil/Coi \$/bbl		Plt. Pr \$/bb		Gas \$/MCF		<b>.</b> –	MONTHLY 13,83
INAL EMARKS											10.00% 12.00% 15.00% 20.00%	, , –	11,90 10,25 8,19 5,61
		ESTIM	ATED 8/8 TH	IS PRODUCT	ION		СО	MPANY	NET :	SALES		AVERAG	E PRICE
Period	Number of Wells	Oil/Cond Barrels		roducts rels /	Gas MMCF	Oil/Co Barr		Plant F Bai	roduc rels	ts Sales MM0		Oil/Cond. \$/bbl.	Gas \$/MC
2010 2011 2012 2013 2014 2015	6 6 9 9	149,7 321,7 286,0 296,2 200,4	786 033 227 160	0 0 0 0 0	0 0 0 0	316 281 291 197	0 7,294 5,412 1,256 1,285 7,109		0000		0.000 0.000 0.000 0.000 0.000	0.00 52.39 52.39 52.39 52.39 52.39	0.0 0.0 0.0 0.0
2016 2017 2018 2019 2020 2021 2022	16 19 13 13 10 10	263,1 483,0 338,5 223,2 147,3 48,3	060 564 241 322 349	0 0 0 0	0 0 0	474 332 219 144 47	3,783 4,987 2,910 9,511 4,859 7,544 1,438		0000		0.000 0.000 0.000 0.000 0.000 0.000	52.39 52.39 52.39 52.39 52.39 52.39 52.39	0.0 0.0 0.0 0.0 0.0
2023 2024	-	_,	0	0	0	•	0		0	ı	0.000	0.00	0.0
Sub-Total Remainder Total Future		2,759,4 2,759,4	0	0 0 0	0 0 0	•	3,388 0 3,388		0	1	0.000 0.000 0.000	52.39 0.00 52.39	0.0 0.0 0.0
umulative Itimate		2,759,4	0 175	0 0	0 0								
		From	From	Fro	m		000				//RT		R AFTER MRT \$000
<u>Period</u> <b>2010</b>		Dil/Cond.	Plant Produ	cts Ga 0	0 -	Other (		Total	<u> </u>	O <u>il/Cond \$000</u>	Gas/P.P :	\$000 <b>O</b>	<b>\$000</b>
2011 2012 2013		7,717 16,577 14,735		0	0 0 0		)	7, 16,! 14,	577 7 <b>3</b> 5	1,935 4,158 3,696		0 0 0	5,78 12,41 11,03
2014 2015 2016		15,260 10,327 13,557		0	0	(	)	15,2 10,3 13,1	327 557	3,827 2,590 3,401		0	11,43 7,73 10,15
2017 2018 2019		24,885 17,441 11,500		0	0 0 0	(		24,8 17,4 11,5	441 500	6,241 4,375 2,884		0 0 0	18,64 13,06 8,61
2020 2021 2022 2023		7,590 2,490 76 0		0 0 0	0 0 0	(		7,! 2,	190 76 0	1,903 538 13 0		0	5,68 1,95 6
2024		0		0	Ō	Ć	Ò		0	0		0	
ub-Total emainder otal Future	,	142,155 0 142,155		0 0 0	0 0 0	(		142,	0	35,561 0 35,561		0 0 0	106,59
			D	EDUCTIONS	- \$000				FUTL	JRE NET INCO			
Period	( (		Export,Profit & Property Taxes		nt <u>Transp</u>	ortation	Total			Undisco Annual	Cumulative	e @	Discounted 10.00
2010 2011 2012		291 367 715	252 2,292 5,548	53 5,32 86	3 5	0 514 1,104	8 8	,076 ,496 ,232		-1,076 -2,714 4,187		'90 397	-1,02 -2,42 3,26
2013 2014 2015 2016		638 636 563 674	4,706 4,995 3,303 3,645	3,13 41 7,38	.0 0	982 1,016 688 904	7 4	,463 ,057 ,554 ,609		1,576 4,376 3,183 -2,453	1,9 6,3 9,5 7,0	349 332	1,06 2,80 1,84 -1,30
2017 2018 2019		1,027 782 698	7,847 5,422 3,497	2,15 27	3 3 0	1,657 1,162 766	12 7 4	,685 ,639 ,961		5,959 5,427 3,655	13,0 18,4 22,1	)38  65  20	2,81 2,33 1,42
2020 2021 2022 2023 2024		564 210 7 0 0	2,265 740 22 0 0		0 0 0 0	506 166 5 0		,335 ,116 34 0 0		2,352 836 29 0 0	24,4 25,3 25,3 25,3 25,3	108 137 137	82 27
ub-Total emainder		7,172 0	44,534 0	20,08		9,470 0	81	,257 0		25,337 0	25.3		11,90

81,257

0 25,337

25,337

11,909





## PETRONEFT RESOURCES PLC ESTIMATED FUTURE RESERVES AND INCOME ATTRIBUTABLE TO CERTAIN INTERESTS UNESCALATED CASE - BASE CASE - PHASE 2 AS OF JANUARY 1, 2010

GRAND SUMMARY LINEYNOYE W FIELD

		W FIELD OBABLE RES	SERVES							TOTAL PROBABLE		
				UE INTERES	TS	ı	PRODUCT	PRICE		_	DISCOU	NTED
		EXPENSE	Oil/	Plant		Oil/Cond.	Plt. P	rod.	Gas		E NET INCO	
INITIAL FINAL REMARKS		INTEREST	Condensate F	Products	Gas	\$/bbl.	\$/bi	ol	\$/MCF	8.00 10.00 12.00 15.00	% – % – % – % –	120,433 100,544 84,065 64,387
		ESTIM	ATED 8/8 THS	BBODIICTIO	N		OMPANY	NETS	AI EQ	20.00		41,301
I	Number	Oil/Cond		lucts Ga	 IS	Oil/Cond.		Products	s Sales	Gas	Oil/Cond.	Gas
Period 0	of Wells	Barrels	Barrels	<u> </u>	<u>CF</u>	Barrels	Ba	arrels 0	MM	O,000	\$/bbl. 0.00	
2011	1	32,7	-	0	ŏ	32,22	-	ŏ		0.000	52.39	0.00
2012 2013	10 21	654,3 1,235,0		0	0	643,41 1,214,46		0		0.000	52.39 52.39	0.00
2013	37	2,156,2		ŏ	ŏ	2,120,21		ŏ		0.000	52.39	0.00
2015	44	2,644,	358	0	0	2,600,19	8	0		0.000	52.39	0.00
2016 2017	44 61	2,094,7		0	0	2,059,78		0		0.000	52.39 52.39	0.00
2017	67	1,956,0 2,362,3		ŏ	ŏ	1,923,43 2,322,86		Ö		0.000	52.39	0.00
2019	70	1,787,7	710	0	0	1,757,87	0	0		0.000	52.39	0.00
2020 2021	70 78	1,412,7 1,230,8		0	0	1,389,16		0		0.000	52.39 52.39	0.00
2021	80	1,082,9		ŏ	ŏ	1,210,25 1,064,89		Ö		0.000	52,39	0.00
2023 2024	80 70	893,3 709,5	310	0	0 0	878,39 697,75	1	0		0.000	52.39 52.39	0.00
Sub-Total	10	20,253,1		0	_	077,73 19,914,91		0		0.000	52.39	0.00
Remainder		703,4	485	0	0	691,72		0		0.000	52.39	0.00
Total Future		20,956,6	518	0	0 2	20,606,63	9	0		0.000	52.39	0.00
Cumulative Ultimate		20,956,6	0 518	0	0							
• • • • • • • • • • • • • • • • • • • •			OMPANY FUTU	RE GROSS R	EVENUE (FG	R) - \$000				WRT	FC	R AFTER
Period		From il/Cond.	From Plant Products	From Gas		Other	Tota		oil/Cond \$000	Gas/P.P	\$000	MRT \$000
2010		0	0			0	Tota	0	<u> 11/Coria \$000</u>	Gas/F.F.	<u>φυο</u> υ	0
2011		1,688	ŏ		ŏ	ŏ	1,	688	423		ŏ	1,265
2012		33,709	0		0	0		709	8,455		0	25,254
2013 2014		63,626 111,078	0		0	0	63, 111,	626 078	15,958 27,860		0	47,668 83,218
2015		136,224	ŏ		ŏ	ŏ	136,		34,166		ŏ	102,058
2016		107,912	0		0	0	107,		27,066		0	80,846
2017 2018		100,769 121,694	0		0	0	100, 121,		25,274 30,522		0	75,495 91,172
2019		92,095	ŏ		Ō	Ō		095	23,098		Ō	68,997
2020		72,778	0		0	0		778	18,254		0	54,524
2021 2022		63,405 55,790	0		0	0		405 790	13,676 10,265		0	49,729 45,525
2023		46,019	0		Ō	Ō		019	7,212		0	38,807
2024		36,555	0		0	0	36,	555	4,870		0	31,685
Sub-Total Remainder	į	1,043,342 36,240	0		0 0	0	1,043, 36,	342 240	247,099 3,990		0 0	796,243 32,250
Total Future	;	1,079,582			0	0	1,079,	582	251,089		0	828,493
			DED	UCTIONS - \$	000			FUTU				TAXES-\$000
Period		erating costs	Export,Profit & Property Taxes	Development Costs	Transportation	n Ta	otal	Δ	Undisco Innual	unted Cumulativ		Discounted %
2010		291	252	5,566		)	6,109		-6,109	-6,	109	-5,797
2011		19	388	8,356	112		8,875		-7,610 -440	-13, -14		-6,425
2012 2013		687 1,321	8,964 16,940	13,825 22,050	2,246 4,238		25,722 44,549		-468 3,119	-14, -11,		-379 2,266
2013		2,600	31,630	24,746	7,400		66,376		16,842		774	10,739
2015		4,238	42,106	9,734	9,075		65,153		36,905	42,		21,325
2016 2017		4,166 3,530	34,247 28,357	6,374 22,217	7,188 6,713		51,975 60,817		28,871 14,678	71, 86,		15,235 7,061
2018		5,683	37,551	3,194	8,10		54,535		36,637	122,		15,727
2019		5,704	27,970	241	6,13		40,050		28,947	151,		11,279
2020 2021		5,804 6,027	21,667 18,870	0	4,848 4,224		32,319 29,121		22,205 20,608	174, 194,		7,828 6,569
2022		6,152	16,541	ŏ	3,716		26,409		19,116	213,		5,517
2023 2024		5,664 5,026	13,467 10,476	420 540	3,066 2,43	5	22,617 18,477		16,190 13,208	229, 243,	931	4,238 3,128
Sub-Total		56,912	309,426	117,263	69,503		53,104		243,139	,		98,311
Remainder		5,690	9,955	3,840	2,414	4	21,899		10,351	253,	490	2,233
Total Future		62,602	319,381	121,103	71,917	, 5	75,003		253,490			100,544