

OIL AND GAS UPDATE



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Welcome to the April 2003 issue of the **Oil and Gas Update**, the newsletter that provides training and activity updates related to oil and gas development in the Northwest Territories. This newsletter is published quarterly by the Department of Education, Culture and Employment in partnership with the Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories.

OIL AND GAS EXPLORATION IN THE NWT

With the arrival of warmer weather in April, the winter exploration season for oil and gas recently came to an end. It was another robust season for drilling and seismic activity, especially in the southern and central NWT. An industry survey in February had 12 drilling rigs fully operational in the north, the highest count in over 15 years. It's estimated that approximately \$160 million will be spent by the exploration companies with nearly 1000 people finding direct employment.

The only downside is that the Mackenzie Delta experienced a decline in the level of oil and gas work after an exceptionally busy year in 2002. There are many reasons for this fall off, including the natural cycle of exploration activity, budget cutbacks within the industry, and uncertainty concerning the proposed Mackenzie Valley Gas Pipeline.

Over the next several months, exploration companies will evaluate the results from their seismic and drilling programs in an effort to determine their plans for next winter. The following lists some of the highlights in the various regions:

Fort Liard

This was an important exploration season in the Liard Valley as most land exploration rights expire after this year.

Chevron Canada completed a deep well in the region and Anadarko conducted an ambitious program that saw nine wells drilled, including seven wells on the Arrowhead property approximately 60 km northeast of Fort Liard. Depending on the results, Anadarko is already planning the construction of a pipeline that will allow gas from these wells to be transported to northern British Columbia.

In an interesting development, two other companies (CNRL and Canadian Forest Oil) have recently begun drilling one well each near Fort Liard. This work will continue through the summer and allow ongoing employment and business opportunities for local residents.

In total, over \$60 million will be spent in the region this year and 350 jobs created.

Cameron Hills

The Cameron Hills are located south of Kakisa near the Alberta border. This winter Paramount Resources drilled five new exploratory wells in the region, re-completed three existing wells and performed a seismic program in search of new reserves. Paramount connected several of its wells to a gathering system that was built last year. The system collects natural gas and transports it along a pipeline to a plant in northern Alberta.

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PIPELINE OPERATIONS TRAINING

The Pipeline Operations Training Committee (POTC) met twice in March and more recently in April 2003. The main focus of the meetings was to review documents that will be included in a POTC Training Program information package and timing of recruitment. Comprehensive information packages for both the **Technical Training Program** and the **Apprenticeship Training Program** were reviewed. These documents provide detailed information on items including: the positions that will be trained for, training dates, locations, tuition costs, funding and academic requirements. The application process is also clearly outlined for potential candidates in the two information packages.

A PowerPoint presentation that will be used for recruitment purposes is currently being developed. The presentation will inform interested parties about the training programs, provide basic information about what pipeline operations is, and who the POTC is and what its goals are. A decision was made early in the development of the training programs to inform interested parties through in-person community visits. Community presentations

will give overviews of each of the programs and will provide people with an opportunity to ask questions related to the training programs.

As part of the application process, potential candidates will be required to get letters of support from community leaders. It is important to the POTC that community leaders, including Elders and teachers, are familiar with the training programs. This knowledge will give them information necessary to allow them to confidently support a candidate they feel would do well in one of the programs.

The Committee decided that recruiting for these programs would begin after a Preliminary Information Package (PIP) has been submitted as the next key step towards a pipeline along the Mackenzie Valley and meets the stated expectations of the regulators.

For more information, please contact Krista Rivet at (867) 920-6384 or Krista_Rivet@gov.nt.ca.

OIL AND GAS EXPLORATION—CONTINUED FROM PAGE 1

The company also constructed a central oil battery to handle the oil reserves that exist on the property. In total, the projects are expected to cost over \$12 million.

Sahtu

The Sahtu region experienced a significant increase in exploration activity this winter. Over 200 km of winter roads were constructed to help transport equipment from Fort Good Hope to drilling locations near Colville Lake. Canadian Natural Resources (CNRL) drilled two shallow exploratory wells in the Colville Hills. The partnership of Apache Canada and Paramount Resources also drilled two wells in the area and completed a seismic program.

It is estimated that over \$25 million was spent on the projects and 170 jobs directly created. Early indications are that next winter will be a busy one

once again in the Sahtu.

Inuvik Region

As mentioned previously, activity levels dropped noticeably in the Mackenzie Delta this winter. Total expenditures are expected to fall from \$300 million in 2002 to approximately \$60 million this winter.

In total, three wells were drilled north of Inuvik by Petro Canada, Devon Canada and Chevron. Further south, in the Tsiigehtchic area, Devlan Resources completed one new well and re-entered three previous wells.

In terms of seismic activity, Encana was the only company active, conducting a 250 km 2D seismic program and a 144 km² 3D program north of Inuvik.

INUVIK REGION

WILDLIFE MONITOR TRAINING

The Wildlife Monitor Training program, held in January 2003, was designed to provide participants with the knowledge and skills required to be successful Wildlife Monitors. This training was offered within the Inuvialuit Settlement Region at the request of the local Hunters and Trappers Committees. The week long training involved instruction from the local Hunters and Trappers Committees (HTCs), Resources Wildlife and Economic Development (RWED) officers, industry representatives and qualified Firearm Safety and First Aid / CPR instructors.

courses was excellent – 28 participants passed the Firearm Safety course (90% pass rate) and 29 passed the First Aid/CPR course (94% pass rate).

Overall, participants were satisfied with each course in the training program. The program was funded through DIAND, Education, Culture and Employment and the Inuvialuit Regional Corporation.

For more information, please contact Robin Fonger at the Joint Secretariat - Inuvialuit Renewable Resource Committees, (867) 777-2828.



Hans Lennie, Vice-Chairperson of the Inuvik HTC discusses HTC expectations with participants.



Aklavik participants familiarize themselves with the firearms to prepare for the practical testing component of the course.

A total of 31 people attended the training in Aklavik, Tuktoyaktuk and Inuvik. The training consisted of an orientation day, Firearm Safety and First Aid/CPR courses. The completion rate for each of the

WINTER PROJECTS IN THE INUVIK REGION

Proponent	Nearest Community	2D Seismic	3D Seismic	Drilling	Other Projects	Budget	Direct Employment
Chevron Canada	Tuktoyaktuk (Langley Island)			1 well (shallow)		\$10M	60
EnCana	Tuktoyaktuk/ Inuvik	250 km	144 km ²			\$12M	80
Petro-Canada/ Devon	Tuktoyaktuk/ Inuvik			1 well (deep)		\$20M	60
Devon / Shell	Tuktoyaktuk/ Inuvik			1 well (shallow)		\$10M	60
Devlan Exploration	Tsiigehtchic			Re-entry of 3 wells 1 new well	150 km winter road	\$10M	60
TOTALS		250 km	144 km²	4 wells 3 re-entries		\$62M	320

TRAINING IN THE INUVIK REGION APRIL 2002—MARCH 2003

Community	Project	Participants	Community	Project	Participants
Inuvik	Oilfield Boiler Course	15	Training-On-The-Job	Seismic	2
	Intro to Welding	9		Kitchen Helper / Power House Trainee	3
	Collision Avoidance	15		Skill for Work	1
Fort McPherson	Class 1 Driver Training	12		Labour Pool Funding	8
Tuktoyaktuk & Aklavik	Class 7 Driver Training	29		Portage Trail Project	6
Inuvik, Tuktoyaktuk and Aklavik	Environmental Monitor Training	23		Accounting Assistant	1
Aklavik, Tuktoyaktuk, Holman, Sachs Harbour	Wildlife Monitoring Course	60		Warehouse Person	1
Regional Training	Small Engine Repair Course	4		Environmental Monitor	3
	Mobile Introduction to Trades Training	96		Skill Development—on-site work program	5
			TOTAL		293

AURORA COLLEGE OIL & GAS TRAINING—2002/2003

Community	Project	Participants	Community	Project	Participants
Fort Providence	Trades Access/Entrance	8	Norman Wells	Wellhead Boom Truck Operator	10
Fort Simpson	Office Administration	5	Aklavik	Standard First Aid CPR 'B'	9
	GIS Modules	9		Chainsaw Safety	4
Hay River Reserve	Class 5 Driver Training	*		H ₂ S Alive	10
Fort Liard	Class 5 Driver Training	15		WHMIS	10
	GIS Modules	*		TDG	11
Hay River	Trades Access	15	Fort McPherson	Chainsaw Safety	4
Fort Resolution	GIS Modules	*	Tsiigehtchic	Chainsaw Safety	6
Fort Smith	Intro to Cooking	7		Standard First Aid CPR 'B'	7
	Pre-Employment Welding	10		TDG	8
Inuvik	Standard First Aid CPR 'B'	69		WHMIS	7
	Internal Resp/Due Diligence	10		H ₂ S Alive	13
	Service Rig Training	11	Tuktoyaktuk	Chainsaw Safety	8
	Class 5 & 7 Driver	9		H ₂ S Alive	24
	Class 4 Driver Training	12		WHMIS	15
	Chainsaw Safety	10		Standard First Aid CPR 'B'	22
	IATA	5		TDG	11
	WHMIS	29	Various communities	Entrepreneurial Tutorial Training Initiative (ETTI)	37
	Special Oilfield Boiler	15			
	TDG	32	TOTAL		487

* numbers unavailable at this time

DEH CHO REGION

WINTER PROJECTS IN THE DEH CHO

Proponent	Nearest Community	2D Seismic	3D Seismic	Drilling	Other Projects	Budget	Direct Employment
Anadarko / Paramount	Fort Liard / Nahanni Butte			1 well (Liard) 7 wells (Arrowhead) 1 well (Bovie Lake)		\$35M	200
Chevron	Fort Liard			1 well		\$6M	50
Canadian Natural Resources (CNRL)	Fort Liard			1 well (ongoing)		\$8M	50
Paramount Resources Ltd.	Cameron Hills		77 km ² (520 linear)	5 wells Re-entry of 3 wells (2 rigs)	Gathering lines, complete Oil Battery	\$12M	120
Canadian Forest Oil	Fort Liard			1 well (ongoing)		\$15M	50
TOTALS			77 km²	17 wells 3 Re-entries		\$76M	470

TRAINING IN THE DEH CHO APRIL 2002—MARCH 2003

Community	Project	Participants	Community	Project	Participants
West Point	Chainsaw Training	8	Trout Lake	Camp Cooking	10
Hay River Reserve	Snowmaking	3		Safety Training	21
	EMR Training	8	Jean Marie River	EOS Intro to Pipeline	3
	Class 5 Driver Training	8		Safety Training	10
	HEO Reserve Road	6		Logging / Slashing	6
	Safety Training	13	Regional	Class 5 Driver Training	17
Fort Liard	Environmental Monitoring	6		Banff Centre Oil and Gas Workshop	50
Fort Providence	Class 3 Driver Training	3		Far North Oil and Gas Conference	14
	Food Safe	10			
	EOS Intro to Pipeline	10	Training-On-The-Job	Rig Training	4
Fort Simpson	Slashing	10		GIS	1
	Safety Training	12		HEO	3
	EOS Intro to Pipeline	6	TOTAL		250
Kakisa	Safety Training	8			

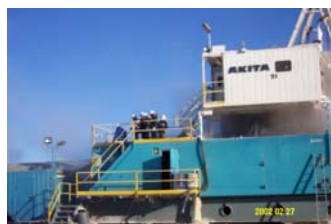
SAHTU REGION

WINTER PROJECTS IN THE SAHTU

Proponent	Nearest Community	2D Seismic	3D Seismic	Drilling	Other Projects	Budget	Direct Employment
Apache / Paramount Resources	Colville Lake	422 km	77 km ²	2 exploratory wells	135 km of access roads	\$14M	120
CNRL	Colville Lake (Lac Belot)			2 exploratory wells	150 km of access roads	\$12M	50
TOTALS		422 km	77 km²	4 wells		\$26M	170

COLVILLE LAKE STUDENTS LEARN ABOUT OIL & GAS

Students from Colville Lake school learned a little more about oil and gas exploration this past winter, when Canadian Natural Resources Ltd. (CNRL) gave them a tour of a drilling rig. Accompanied by an elder, the students received a tour of the rig, including an explanation of its various activities and then learned about various rock samples from a geologist.



This was followed by a meal served in the rig camp. CNRL had committed to do a tour of the rig for any interested community members as it had been a long time since there has been any drilling activity in Colville Lake area.



TRAINING IN THE SAHTU APRIL 2002—MARCH 2003

Community	Project	Participants	Community	Project	Participants
Inuvik	Sahtu Service Rig Course	14	Deline	Pre-Trades Course	15
	Oilfield Boiler Course	2	Training-On-The-Job	Business Development Manager Trainee	1
Norman Wells	“B” Pressure Certificate	2		Industrial Warehouse Person	1
	Silicone Controlled Rectifiers	2		Dispatcher	1
	Oilfield Work Experience	6		Aircraft Maintenance Engineer	1
	Class 1 Driver Training	2		Industrial Insulator	2
	Safety and Work Experience	7		TOTAL	57
Colville Lake	Oilfield Water Truck Training	1			

RWED'S REGIONAL PETROLEUM ADVISORS

Several years ago, the Government of the Northwest Territories (GNWT) recognized that there would be a dramatic increase in the level of petroleum activity in the Liard and Mackenzie Valleys. In response, the Mackenzie Valley Development Project (MVDP) was formed in 1999 within the Department of Resources, Wildlife and Economic Development (RWED).

One of the most important initiatives undertaken by the MVDP was to establish Regional Petroleum Advisor (RPA) positions in each of the four impacted regions. RPAs are currently working out of the RWED offices in Inuvik, Norman Wells, Fort Simpson and Hay River.

The RPAs play a key role in helping northern communities to understand and anticipate the implications of oil and gas activity. As liaisons between various levels of government, industry and the public, the RPAs are able to identify and provide support for employment and business

opportunities and training requirements. They also help to ensure that the interests and concerns of community and Aboriginal groups are understood by the GNWT and resource companies.

Over the past year, the RPAs have conducted community information workshops, assisted Aboriginal organizations with human resource development and administered workplace-based training programs through the Maximizing Northern Employment initiative. They are also currently developing a "Joint Venture Training" workshop to assist northern businesses and development corporations.

The development of oil and gas reserves represents a significant opportunity and challenge for the people of the Northwest Territories. The RPAs are available in your region to assist with any questions or concerns that you might have regarding oil and gas activities or the proposed Mackenzie Valley Pipeline.

For more information, please contact the following RPAs at the RWED regional offices:

Sahtu Region
Mr. Chris Baker
Norman Wells
(867) 587-3505
Chris_Baker@gov.nt.ca

Deh Cho Region
Mr. Dennis Nelner
Fort Simpson
(867) 695-2231
Dennis_Nelner@gov.nt.ca

South Slave Region
Mr. Mike Mageean
Hay River
(867) 874-6702
Mike_Mageean@gov.nt.ca

Inuvik Region
Mr. Ian Butters
Inuvik
(867) 777-7102
Ian_Butters@gov.nt.ca

NEW AIR QUALITY STANDARDS IN THE NWT

In December 2002, updated air quality standards were adopted under the Northwest Territories' *Environmental Protection Act*. These ambient standards are applied as a long-term management goal for air quality. They are used to assess the acceptability of emissions from proposed and existing oil and gas developments, among others, and in the reporting of the state of air quality in the Northwest Territories. In the absence of Northwest Territories standards, standards adopted by the Canadian Council of Ministers of the Environment (CCME) or federal standards are used.

Copies of the air quality guidelines can be downloaded using the Internet at www.rwed.gov.nt.ca/RWED/eps/leg or for more information, contact Graham Veale, Air Quality Programs Coordinator, (867) 873-7654.

The Northwest Territories air quality standards are as follows:

Parameter	Standard (mg/m ³)*	Standard (ppbv)**
Sulphur Dioxide		
1-hour average	450	172
24-hour average	150	57
Annual arithmetic mean	30	11
Ground Level Ozone		
8-hour running average	127	65
Total Suspended Particulate		
24-hour average	120	
Annual geometric mean	60	
Fine Particulate Matter (PM _{2.5})		
24-hour Average	30	

*micrograms per cubic metre

**parts per billion by volume

NWT LABOUR FORCE ACTIVITY – MARCH 2003

For March 2003, Statistics Canada estimates that of the 29,700 residents 15 years of age and older in the Northwest Territories, some 20,400 persons were employed. This represents an overall employment rate of 68.7%. Overall, NWT employment decreased by 300 between February 2003 and March 2003.

For March, there were some 1,600 persons unemployed in the Northwest Territories, which is an increase of 300 from February. The overall NWT unemployment rate stood at 7.3% for March. This compares with an unemployment rate for Canada of 7.9% in March.

On a year to date basis for the January to March period, the number of unemployed persons in the Northwest Territories has been, on average, 333 lower for 2003 compared with the same period in 2002.

Source: NWT Bureau of Statistics. *Labour Force Activity—March 2003*

NORTHWEST TERRITORIES LABOUR FORCE ACTIVITY

	Population 15 & Over	Labour Force	Employed	Unem- ployed	Not in the Labour Force	Partic- ipation Rate	Unemp- loyment Rate	Employ- ment Rate
Mar-03	29,700	22,000	20,400	1,600	7,700	74.1	7.3	68.7
Feb-03	29,700	22,000	20,700	1,300	7,700	74.1	5.9	69.7
Jan-03	29,700	22,200	20,900	1,300	7,500	74.7	5.9	70.4
Dec-02	29,700	22,500	21,200	1,300	7,200	75.8	5.8	71.4
Nov-02	29,700	22,400	21,000	1,400	7,300	75.4	6.3	70.7
Oct-02	29,600	23,100	21,600	1,500	6,600	78.0	6.5	73.0

Source: NWT Bureau of Statistics. *Labour Force Activity— March 2003*
For more information, visit: www.stats.gov.nt.ca

REGIONAL CONTACTS

Career Centres and Canada-NWT Service Centres Education, Culture and Employment

Fort Simpson (Deh Cho Hall)	695-7334
Fort Smith (Sweetgrass Building)	872-7217
Hay River (Courthouse Building)	874-9200
Inuvik (1st Floor Perry Building)	777-7323
Norman Wells (Government Building)	587-2566
Yellowknife (Joe Tobie Building)	766-5100

Resources, Wildlife and Economic Development

Hay River	874-6702
Fort Simpson	695-2231
Fort Smith	872-6400
Inuvik	777-7102
Norman Wells	587-3503
Fort Liard	770-4300
Yellowknife (Scotia Centre)	920-8691



Comments or Questions? Contact...

Krista Rivet—Education, Culture and Employment (867) 920-6384, krista_rivet@gov.nt.ca
Robert Redshaw—Resources, Wildlife and Economic Development (867) 920-8954, robert_redshaw@gov.nt.ca