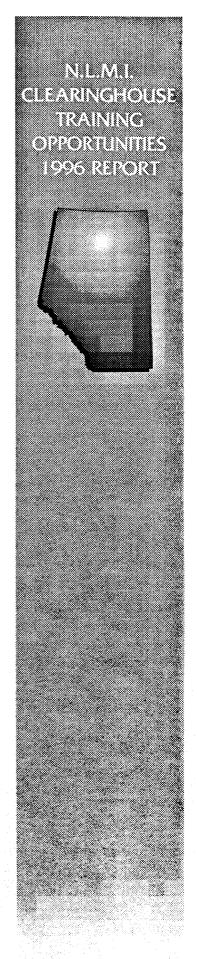


Generated By Petroleum Industry Activity in Northern Alberta

June, 1996

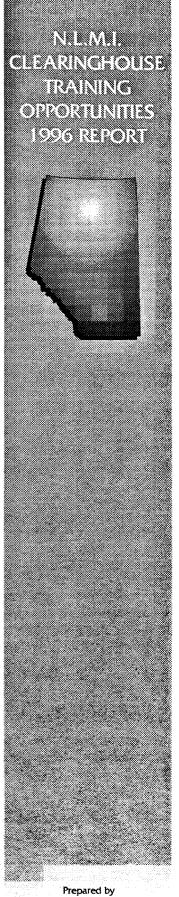


Prepared By Smith Communications Consultants

Calgary, Alberta

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INTRODUCTION

Reason for Report

Smith Communications Consultants Ltd. was requested by the Northern Alberta Development Council (NADC) to prepare a brief overview of the short and near-term employment opportunities being generated by the petroleum industry in the region served by five post-secondary institutions participating in the Northern Labour Market Clearinghouse. The institutions are Keyano College, Lakeland College, AVC - Lesser Slave Lake, Fairview College and Grande Prairie Regional College. The purpose of the assignment was to address short-term employment scenarios in the petroleum industry in northern Alberta to provide information relating to upcoming training needs relevant to programs which might be offered by the Colleges or brokered by other institutions to the Colleges in northern communities.

Focus

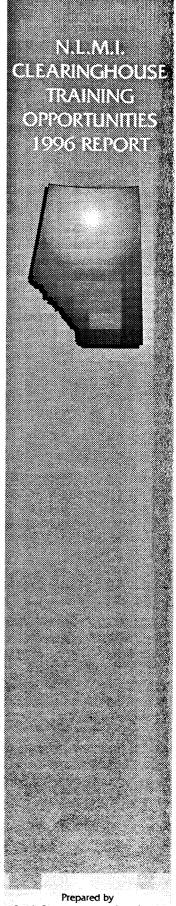
Generally, the focus of the research is on the conventional oilpatch and the service and supply industry relating to that industry. The oilsands sector was omitted on advice from the Council that it would be separately dealt with. The heavy oil sector was addressed as a secondary area of focus primarily because of time and budget limitations.

Method

The work falls into three different areas. The spokespersons at the Colleges were interviewed to discover what oilfield-related courses they currently offer. A cross-section of petroleum companies with field offices in the region was also interviewed to assess levels of activity, certification requirements and other information. Finally, a number of oilfield service companies who might be expected to have activity levels in northern Alberta were also contacted. The questions asked and data elicited are all produced in chart form at the end of this report.

In addition, in depth interviews were conducted with key decision-makers in some randomly selected oilfield organizations to provide a qualitative sense of current preoccupations with respect to employment and training opportunities. Finally, contact was made with senior spokespersons with several key petroleum industry and petroleum service sector Associations to take a reading of their views of the current climate.

The research was helpfully informed by the opportunity we had to review a draft report prepared by Bill Almdal, P. Eng., Senior Associate, the Ziff Energy Group, Calgary, entitled: "Cost Reduction Efforts in the Petroleum Industry in Northern Alberta and the Resulting Training Opportunities." The primary message of this work related to the applications of various kinds of new or recent technologies to enhance productivity in field and service operations and the training implications of these trends.



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KEY FINDINGS

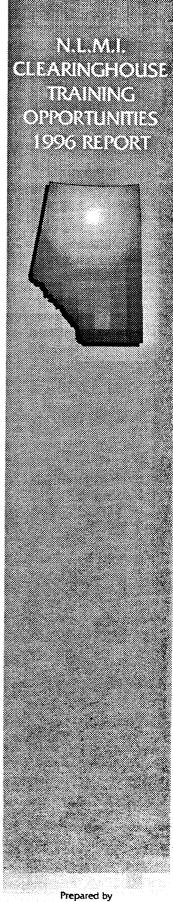
Activity Levels

Virtually all the organizations and companies we talked to indicated that general oilfield activity levels were constant or on the upswing, including northern Alberta.

For example, in the drilling sector, Allen Laws, Coordinator, Economic Analysis for the Canadian Association of Oilwell Drilling Contractors, provided recently revised 1996 drilling rig utilization forecasts for western Canada showing that, during the first quarter of 1996, drilling rig utilization was at 85% or 388 active rigs out of a possible 459 making up the entire fleet. This compares with 73% utilization of the fleet for the first quarter of 1995. The average utilization rate for 1996 is now being forecast at 61% compared to 54% for 1995. Of the 34 petroleum company field offices we contacted in the region, 32 indicated they were expanding or holding current activity levels in general and in Northern Alberta. Similarly, 16 of the 18 service companies we spoke with are either expanding or sustaining current Northern Alberta activity levels. Finally, Roger Soucy, President of the Petroleum Services Association of Canada, confirmed that "levels of activity are now as high as they have been and they have been that way for the past five years."

Major Trends

Technology innovation is having a significant impact on oilfield jobs. Horizontal drilling, 3-D Seismic operations, and automation of procedures are requiring more competency from personnel. None of the five educational institutions serving the region have made significant curriculum development investments in these areas based on our interviews of spokespersons. Both NAIT and SAIT offer programs impacting horizontal drilling and equipment design. Fairview and Lakeland Colleges do offer courses relating to instrumentation technology when appropriate. Emerging developments impacting drilling rig operations include the limited piloting of computerized "tower sheets" on some rigs and the replacement of rotary table engines with "top drive" units on some rigs. Generally, however, the drilling industry seems to be the least impacted in terms of technology impacts. Although safety and other requirements have been tightened, essentially the personnel structures on the rigs and the basic procedures have remained unchanged for the past 20 years.



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The Workforce

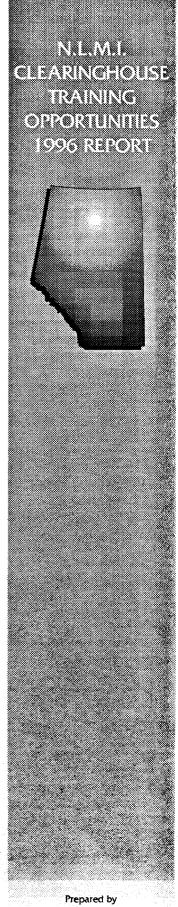
Both the Canadian Association of Petroleum Producers (CAPP) and the Petroleum Services Association of Canada (PSAC) are currently surveying their members to determine current circumstances and future human resources needs.

In the case of CAPP, the study is basically an updating of a 1992 study sponsored by Employment and Immigration Canada and executed by KPMG and the Ziff Energy Group. The updating is driven by a realization by some in the industry that although downsizing has removed the more senior levels of middle management expertise, very little hiring has been done at the bottom end to replace this expertise. According to Len Landry, CAPP's Vice President, Fiscal Policy and Corporate Services, the average age of employees in CAPP's member companies is currently 42. Because of the industry's image as a tumultuous work environment with little job security, it may be difficult to get commitments to it from prospective new employees. CAPP's study should be complete by June 21 and is accessible from Mr. Landry.

The PSAC study is focusing on competency requirements for oilfield service workers and on the service industry needs for technical school graduates. The focus here appears to be primarily on SAIT or NAIT graduates. According to Roger Soucy at PSAC, the service sector of the industry has doubled its activity levels since 1992-93 and yet very few new people have been added to the industry. He sees a need for basic industry skills and basic learning training to be provided to entry level people coming into the industry. "Kids aren't all that well educated coming out of high school." He feels that basic skills should be the focus because companies like Schlumberger, Fracmaster and Nowsco who are active in the oilfield service sectors do a lot of their training in house. His survey report will be available at the end of this summer. PSAC represents 160 companies employing between 10,000 and 12,000 people.

John Scott, Manager of the Employment Centre for the Petroleum Industry Training Service (PITS) in Edmonton, notes that in the last couple of years "there's been a change in the kinds of people seeking pre-employment training in the drilling industry. Several years ago, they hadn't finished high school and were young and tough. The last couple of years, the age of students is climbing—they're in their 20's—and so is their education level. They're better educated. Some men in their 30's are applying for drilling rig jobs, but they find the work physically pretty demanding and the companies aren't sure they're a good fit with the rigours of the industry."

Other comments about workforce changes included references to the disappearance of young people from the agricultural industry as oilfield recruits. Also, it would seem that the oilfield service sector has professionalized its hiring practises for entry level positions, in keeping with the enhanced expectations in the areas of competency and performance.



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KEY OPPORTUNITY SCENARIOS

Employment

In both the petroleum companies and in the service and supply companies that work for them, the most likely areas of employment demand is "operators," a generic term which we will use for the purposes of this research to apply to everything from rig hands to battery operators.

For both sectors, pre-employment training for operating staff consists of high school graduation usually supplemented with technical school training. The nature of the training varies depending on the focus of the employer. In some instances it is an apprenticeship training; in others, power engineering diplomas or steam tickets are desirable; or in some cases, safety training in WHIMIS, H2S Alive, and Transportation of Dangerous Goods or other areas is an asset. NAIT and SAIT are the most frequently mentioned institutions as the sources for pre-employment training for entry level operators, jobs in both the petroleum company and oilfield service sector opportunity scenarios.

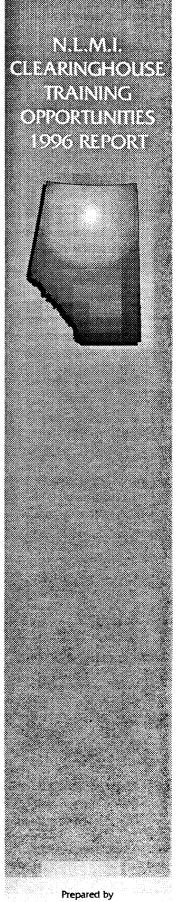
It is interesting that the five post-secondary institutions subscribing to the NADC's Clearinghouse indicated that they were placing graduates primarily with oilfield service companies as opposed to the actual petroleum companies. It may be useful for these institutions to consider a joint approach to the petroleum companies to make them generally more aware of the programs being offered to area residents to qualify them for petroleum industry jobs and possibly to work even more closely than they are with NAIT and SAIT to broker programs into the region.

Although, limitations of time did not permit in depth contact with companies providing environmental services to the petroleum industry, there can be little doubt that, as the industry matures, the opportunities for contractors to perform reclamation and remediation projects for industry is increasing. This is having an impact in two areas. Contracting firms which have been relying on oilfield lease and road construction related to new drilling activity are realizing that they need to refocus their earth-moving and other skills to the reclamation area. Wellsite abandonment and gas plant and battery salvage and reclamation is becoming a big business. These firms have the equipment to do the work, but must provide their services with new skills relating to the environmental quality required for reclamation certificates issued by the regulatory authorities. Future demand for new employees who have the appropriate certifications in this area is very likely.

Training and Retraining

In the pre-employment area, it would seem that there is likely to be on-going demand for College graduates who know how to learn, have some computer literacy and who are able communicators. There is also a need to introduce new graduates to the concepts of teamwork, continuous improvement and strategic alliances which are becoming very influential as structures and processes within the petroleum industry today. Beyond that, the Colleges seem to be offering an appropriate range of pre-employment training for the positions which the contracting companies have available. Relationships with PITS, NAIT and SAIT in this area to optimize brokering opportunities are adding value.

In the area of retraining of existing employees, our research indicates that the bulk of the activity is handled either on the job or in-house. In some cases, companies are using consultants to provide training on company property to reduce costs and time spent away from the workplace by employees. There could be some new opportunities for the Colleges to access new retraining business by assessing their ability to move short-term training programs to employers' premises. Safety training, particularly for the drilling industry which has a major concern with lost-time injuries and fatalities (both of which are statistically monitored by the CAODC), offered at locations convenient to or at drilling sites could be very attractive to drilling companies, providing instructors were credible. Environmental training to the technician level also appears as though it could have some appeal for contractors interested in pursuing the reclamation business. Depending on the competencies identified as being desirable by member companies of PSAC in the survey to be completed this summer, there could be a range of retraining opportunities to which the Colleges could relate.



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INTERVIEWS WITH KEY PLAYERS

To supplement the foregoing overview comments and the statistical tables at the end of this document, it was felt that it would be helpful to interview a random group of senior spokepersons in the industry to provide an anecdotal flavour to the other information provided in this study. Some of the comments from spokespersons at the Colleges are included to ensure that dimension is not ignored.

Derek Tait, Training Coodr., Schlumberger Canada, Calgary (948-6646)

Schlumberger is a major supplier of oilfield production and well work over services to the petroleum industry. A "work over" can be any procedure from recementing, to reperforating a pay zone or acidizing, to repairing downhole equipment which enhances the productivity of a particular well. The company is very active in Alberta and many international jurisdictions. It offers new employees extensive inhouse training programs. Mr. Tait is responsible for this activity in Canada out of the company's training centre in Airdre, Alberta.

"We're basically looking for people who are trainable. They must have a valid driver's license with less than seven demerit points and no impaired convictions within the last five years. Good work references are very important."

Schlumberger provides each new employee with eight days of New Employee Safety Training (NEST). It includes units on hazard alert, drug and alcohol awareness. The Canadian Back Institute provides a half day of instruction on proper lifting techniques, the local fire department provides fire awareness training, there is training on the proper use of overhead cranes, Transportation of Dangerous Goods, WHIMIS, Emergency First Aid, H2S Alive, usage of slings, and Radiation Safety Initiative. The driver training program is a 6-day session including handling crashes and wheel drop offs. There is also introductory training on preventative maintenance. In all, each new employee receives 17 days of training in the first 45 days on the job.

Tait says digital technology is having an impact on jobs in the company. As an example, he notes that you can't repair your own trucks any more because the components are digital.

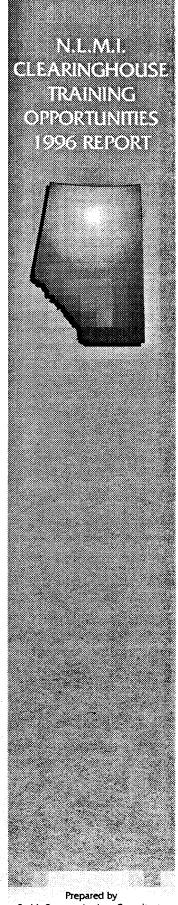
He says that because everyone in the industry continues to strive for efficiency, "head count" is still a sensitive area. Benefits are costly. He notes further that although there are record profits in the oil industry, the service sector is continuing to compete fiercely for work based on price. "The service industry is low balling their pricing," was his comment.

He says Schlumberger is active in northern Alberta. What he described as "open hole work" services required by drilling, as opposed to producing, wells—is cheaper than production work. He noted, for example, that in Grande Prairie, Schlumberger is focused on exploratory work. Local hires are now a possibility. He also noted that sales skills are becoming important.

"Operators, clerks, technicians and mechanics are all local hires. It's wide open."

Mr. Tait implied that he was willing to consider hiring consultants for in-house training programs, providing pricing is reasonable. Team-building, Management by Objectives, Progressive Discipline, and First-Time Managers' Programs are areas of need. Computerbased training is an ongoing need.

Schlumberger has several Aboriginal employees. Tait noted that increases in literacy among all new employees have been dramatic over the past 15 to 20 years.



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Brian Krausert, President, Beaver Drilling, Calgary, 265-6472

Beaver Drilling is one of the smaller but extremely active and professional drilling companies in Calgary. The company currently has rigs active in the Grande Prairie and Valhalla areas.,

Krausert noted that there hasn't been a major growth spurt in the number of drilling rigs in the market. He said somewhere between three and five new drilling rigs should be added next year to the roughly 460 constituting the western Canadian drilling fleet. He noted that four large companies—Precision, Ensign, Akita and Trimac—dominate the industry.

He noted that there are about 20 new rig hands graduating from the PITS training course in Edmonton every three weeks. In contrast to the late seventies and early eighties, Krausert says that turnover of rig crews is low. "People tend to hang around—you don't see the 600% turnover you saw a few years back. They feel more like they are part of the team." He noted that it is now possible to have a career in the drilling industry. There are office jobs for people who have proven themselves on the rigs. He also noted that the industry is no

longer hiring farm youngsters. Krausert says he has about 140 people working on his rigs and last year only 15 turned over.

As far as technology impacts are concerned, Krausert said that they are limited primarily to downhole operations. Procedures on the surface are pretty much as they have been.

Joanne Bryeide, Human Resources, Precision Drilling, Edmonton, 955-7011

Precision Drilling is an example of one of the larger drilling companies active in western Canada. It operates 84 drilling rigs.

Ms. Bryeide indicated that she hires new employees from the PITS three-week rig training program. "We've run out of farm people," she says. "They don't have any experience with equipment and labour."

Ms. Bryeide feels that the industry needs to be approaching high schools to make 18-yearolds aware of the career opportunities represented by the drilling industry.

Rig safety is an important area of focus for Precision and they have recently expanded their company safety department. The company is currently drilling actively in the Peace River and Chinchauga areas.

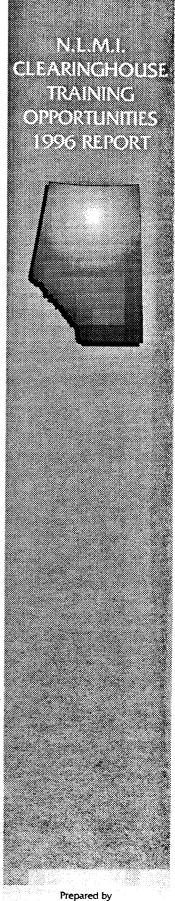
One of the key awarenesses she feels new employees must have is that they have to be mobile. You go where the rigs are. This can have impacts on family.

She noted that satellite well logging is becoming an influential technology.

Les Stach, Stach & Associates Inc. Calgary, 237-7701

Mr. Stach, a former Imperial Oil employee, specializes in consulting relationships between the petroleum industry and Aboriginal communities.

Mr. Stach advised that he is involved in an initiative between several petroleum companies and Maskwachees Cultural College on the Hobbema First Nation community and SAIT called "Petroleum Industry Cooperative Training." The objective is to bring more Aboriginal people into the oil and gas industry. The Program takes Aboriginal students from the Northwest Territories and the Yukon. They must have a grade 11 eleven equivalency. After taking the program offered it is possible to get a Petroleum Technologist's ticket in one year. The Program Coordinator at the College is John Van Deusberg (585-3925).



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Roger Soucy, Pres., Petroleum Services Assoc. of Canada, 264-4195

The major Association for the Service and Supply companies in the industry.

Our industry is currently addressing competency standards so that employees receive recognition for skill and knowledge. There are opportunities for closer relationships with the technical training institutions. The nature and extent of this will become more apparent after PSAC current membership survey is completed this summer.

In the recent past, the industry has been impacted by two major developments:

a) Downsizing

b) Technology

Drilling and production costs have dropped dramatically as a result of these impacts. Mr. Soucy also has the impression that the labour pool is aging, an impression that will be confirmed or denied by the PSAC survey.

In the area of training, many of the service companies have made major investments in training equipment. Nowsco for example, has just spent half a million dollars on simulation equipment. Most of the technology-related training that is job specific is done in-house because the technology is constantly changing.

There is opportunity for pre-employment training in basic industry skills. It's getting more and more critical for people to be able to read and write competently because of all the paperwork involved in the industry. Communication skills are becoming ever more important.

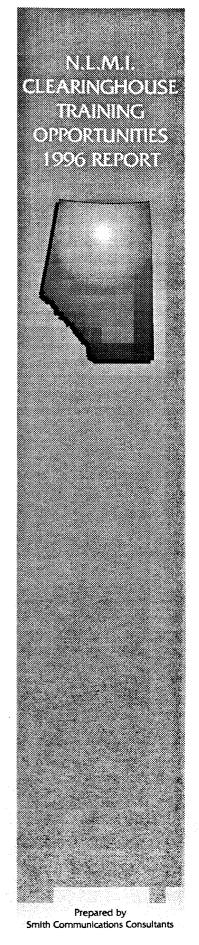
As an example, Mr. Soucy referenced Mullen Trucking which uses satellite technology for positioning its trucking services in Alberta. The truck drivers must understand how to operate this type of equipment. "All of the higher tech companies have computer equipment," he added.

Len Landry, Vice President, Fiscal Policy and Corporate Services, The Canadian Association of Petroleum Producers. 267-1135

Mr. Landry referenced CAPP's current updating of the 1992 Human Resources Study completed by KPMG and the Ziff Energy Group. Currently, member companies of CAPP are being surveyed by two university students for updating purposes and the results are expected to be complete by June 21.

The purpose of the original work was "to explore fully the current and future human resources issues in the upstream oil and gas industry in Canada." Sub-objectives included assessing the impact of trends on human resources needs, develop a profile of current and future employment levels, identify currently required skill levels for various industry occupations, assess if skills possessed by current graduates are meeting needs or not, catalogue training facilities currently available to industry, and identify and examine other key human resources issues.

Because in 1992 the industry was preoccupied with other issues, Mr. Landry suggests that the study did not get the attention from key industry decision-makers it deserved. One of the key concerns mentioned by Mr. Landry is the aging of industry employees. He suggests that the under-30 group has a "minuscule" presence in the current employee mix.



Alex Truseyvitch, Tru Petrophysical Inc., 251-3764

A consultancy specializing in reservoir engineering with an international focus, this company was very helpful in providing direction and access to the production service aspects of the industry.

Mr Truseyvitch noted that today the industry looks to resourcing the service sector with people using more sophisticated techniques than in the past. Most entry level oilfield service jobs require much higher levels of education and awareness than was the case 15 or 20 years ago. In southern Alberta, he noted, many service employers rely on SAIT for pre-employment training.

John Scott, Mgr., PITS Employment Centre, Edmonton, 955-7770

Established by the petroleum industry, the Petroleum Industry Training Service maintains operations and provides services in both Calgary and Edmonton. Historically, it has been known as a trainer of field hands for drilling operations but has recently expanded its offerings to include Service Rig and Production courses. It operates a fully equipped drilling rig in Nisku which is used for hands-on training in drilling operations.

Of the three courses offered by PITS in Edmonton — Drilling, Service Rig and Production the drilling area has seen the largest area of growth. This is despite the fact that government funding for this course has been reduced. The 19-day course now costs \$1775 and can accommodate 14 individuals per session.

Scott explains the personnel hierarchy on a drilling rig as follows:

lease hand/rig hand: general chores

floor hand: makes and breaks stands of drill pipe

derrick man: handles drillpipe halfway up the drilling rig mast

motor man: responsible for operating all of the rig motors (mostly diesel/electric)

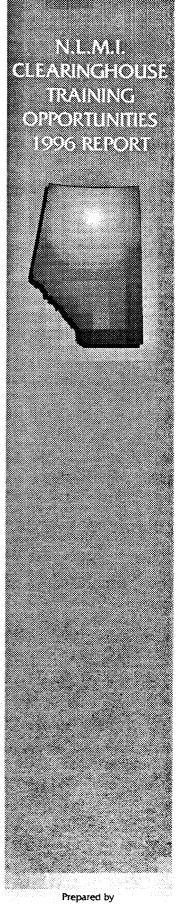
driller: responsible for all of the activity on the drilling rig floor rig manager/tool push: responsible for all operations of a drilling rig

A lease hand currently can expect to earn between \$13 and \$14 per hour while a driller makes between \$21 and \$25 per hour.

Graduates of this program, which is 20 years old, are getting work. Many are hired as they graduate by representatives of drilling companies who are on hand at the Nisku Training Centre as the class graduates.

The Service Rig and Production courses are relatively new. There is more interest in the gas oilfield operators than the oil operators from an employment perspective.

PITS has also entered into arrangements with First Nations and Metis communities to train interested community members in drilling rig operations.



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COMMENTS FROM THE COLLEGES

In addition to being asked about Program offerings, spokespersons for the Colleges in the Region were asked other questions about their interface with the employment and training market in northern Alberta. Below, a random selection of comments are reproduced for the purpose of conveying how they view the prospects in the marketplace and how they are relating to these prospects.

Fairview College

Reclamation is a big opportunity. Regulatory changes in 1992 helped generate some of the demand here. Retaining in the safety area is a major focus for us. Roughly 80% of our graduates are hired by the oilfield service companies. Very, very few are hired by the actual oil companies. There are close relationships with the industry and other agencies like St. John's Ambulance for the safety and first aid area. Short courses in land reclamation are offered at the College with longer ones brokered from Lakeland and Olds Colleges. Fairview also brokers its programs to other Northern region post-secondary institutions. For example, Fairview brokers its oil and gas field maintenance course to AVC Lesser Slave Lake.

Grande Prairie Regional College

Safety training is a major focus for both the petroleum industry and the forestry industry. Most graduates are placed with service companies rather than petroleum companies. A brokering agreement with PITS which becomes effective this Fall will assist the college with more oilfield-related courses in the drilling and mud management areas.

AVC, Lesser Slave Lake

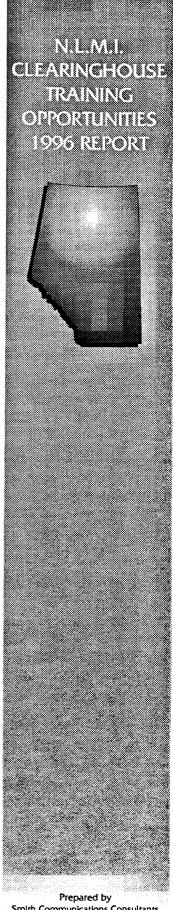
Forestry and oil and gas are "doing well up here." If you're "a good camp cook, you're employed for life." The College is doing a lot of retraining, especially in the safety areas. All CPR courses need to be retaken after three years to maintain proficiency. Virtually 100% of graduates are placed with the service and supply companies. There are a few exceptions where graduates have been placed with oil companies in Swan Hills but this is a very small percentage. Overall, graduates from programs in 94-95 had an 84% employment rate. Brokering with other institutions is actively pursued. Technology impacts are becoming important relative to course offerings.

Lakeland College

Course offerings that relate to environmental technology are big business. The College offers an Applied Degree in this area. The College's safety program has been offered internationally. "Truck drivers get 'instant jobs' whereas environmental people are getting careers." Opportunities are often related to the oil industry. Retraining of oil industry people is a big source of training activity. Most hiring is done by the contractors, not the oil companies. Lakeland is also very interested and involved in brokering processes.

Keyano College

Training in heavy equipment operations and maintenance are key areas of focus. Road and lease construction courses are also popular. The environmental programs are offered in cooperation with Lakeland College. Power engineering, offered in conjunction with SAIT, is a popular program and truck driver training and maintenance is a major area of focus. Gas field work is seen as a major area of opportunity for graduates. The College does both preemployment and retraining training. The employers of graduates are mostly the contractors. Most brokering activity is pursued in the academic, as opposed to the technical, programs.



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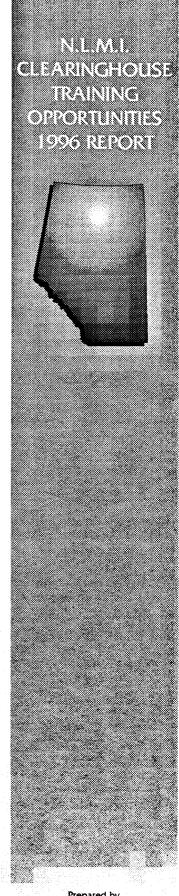
OILFIELD RELATED COLLEGE TRAINING

The following is a table formulated to illustrate the unique curriculum of Oilfield Related programs respective to each individual college

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DRILLING OPERATIONS - RIG HANDS	YES	NO	NO	NO	YES	NO	NO
DRILLING MUD MANAGEMENT	YES	YES	NO	NO	YES	NO	NO
CAMP CATERING & HOUSE KEEPING	YES	YES	NO	NO	NO	YES	YES
SEISMIC OPERATIONS	NO	NO	YES	NO	NO	NO	NO
HEAVY EQUIPMENT OPERATIONS	YES	YES	YES	YES	YES	YES	NO
HEAVY EQUIPMENT MAINTENANCE	YES	YES	YES	YES	YES	NO	YES
ROAD AND LEASE CONSTRUCTION	NO	YES	NO	YES	NO	YES	NO
SURVEYING	YES	YES	YES	NO	NO	YES	YES
SURFACE LAND AGENTRY	YES	YES	NO	NO	NO	YES	NO
ENVIRONMENTAL TECHNICIAN	YES	YES	YES	NO	NO	NO	YES
BATTERY OPERATOR - WELLSITES	NO	NO	YES	YES	NO	YES	YES
POWER ENGINEER - GAS PLANTS	YES	YES	YES	YES	YES	NO	YES
SAFETY ADVISOR	YES	YES	YES	YES	NO	NO	NO
TRUCK DRIVER TRAINING & MAINT.	NO	NO	YES	YES	YES	YES	YES
BLOWOUT PREVENTION	NO	NO	NO	NO	YES	NO	NO

QUESTIONS ASKED OF COLLEGES

- 1. Do you offer employment related oilfield service training in the following area?
- 2. Of these training areas where you do offer programs, where have the greatest area of employment opportunity been in your opinion?
- 3. Are you training mostly prospective oilfield service employees or retraining existing employees?
- 4. Are graduates hired by firms contracting services to oil companies or by the oil companies themselves?
- 5. What role are new oilfield services technologies playing in your course?



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CHARTED RESPONS OIL COMPANIES	es - Pei	KOLŁUM	M & SUPPL	Y AND SE	RVICE COM	MPANIES
COMPANY NAME	ACTIVITY	LIKELY HIRING	EDUCATION	RETRAINING	FOCUS	CONTACT
Alberta Energy Company Ltd. Primrose Gas Plant, Edmonton, 403-250-1000	expanding	Operators	High School Diploma	In-House Training Program	Safety, Operations	Billy Balaban, Lead Operator
Head Office, Calgary, 403-266-8111	Expanding	Operators	High School Diploma Technical School an asset	AVC and In-House "Team Progression Program"	Safety, Operations, Maintenace	Don Smallwood Mgr. Human Resources
Amber Energy Inc. Head Office, Calgary, 403-237-9977	Holding	Operators	High School Diploma	Voluntary	Operations, Safety Awareness	Jan Batting Executive Secretary
Amoco Canada Petroleum Company Athabaska Operating Centre, Athabaska, 403-756-4212	expanding	Technical Craftsmen	High School Diploma 2 year NAIT program	In-House Aprecticeship Program	To acheive Journeyman's Ticket	Randy Relling Senior Field Foreman
West Whitecourt Gas Plant	Expanding & Reducing	Operators, Maintenance	High School Diploma	In-House & Private Consultants	Safety, Instrumentation	Don Cmaeron Operation Superintendent
Anderson Exploration Ltd. Lloydminister Field Office, Lloydminister, 403-875-0514	Expanding	Operators, Electricians	High School Diploma Journeyman's Ticket w/applicable	Voluntary but is reimbursed Lakeland/Vermillion, Lloydminister	Safety, Operations	Doug Moore District Superintendent
Belle Resources Head Office, Paddle Pr., 403-981-2299	Holding	Operators	High School Diploma	Consultants from Oil Companies	Safety	Jean Bellerose Presidnet's Assistant
Cabre Exploration Grande Pairle Office, Grande Prairle, 403-532-1912	Expanding	Operators	High School Diploma Power Engineering an Asset	Local Consultants	Safety, Operations	Brian Kellurn Area Manager
Canadian Hunter Explorations Grande Prairie Field Office, Grande Prairie, 403-539-3007	Holding	Operators	High School Diploma Technical School Preferred	Consultants are brought in or sent to NAIT or SAIT	Safety, Operations	Turk Taylor District Manager
Head Office, Calgary, 260-1000	Holding	Operators	High School Diploma Technical School seen as an asset	Private Consultants when needed otherwise in-House	Safety as required	Bob Ross Supervisor Human Res.
Chauvco Resources Ltd. Swan Hills Office, Slave Lake, 403-551-1417	Holding	Operators	High School Diploma journeyman's Ticket w/appl.	In-House & "SOLUS" at NAIT	Safety, 5 Levels of Operations	Greg Grover Senior Operator
Chevron Canada Kaybob North District Office, Fox Creek, 403-622-3752	Expanding	Operators, Maintenance	High School Diploma Technical School is Preferred	Consultants	Environmental, Machinery	Calvin Urlacher Maintenance Technician
Head Office, Calgary, 234-5000	Expanding	Office Support Staff	High School Diploma	In-House	Personal Team Skills, Computers	Lyle Martinson

Technical School seen as an asset

Prefer a SAIT or NAIT Graduate

Contract Consultants

In-House Training Program

In-House "Cross-Train Program"

In-House & outside conultants

or Lakeland College

in-House

In-House

In-House

In-House

High School Diploma &

High School Diploma

Technical School w/appl.

Technical School an asset

2 year NAIT or SAIT Program

2 year NAIT or SAIT preferred

High School Diploma, 2 year

NAIT or SAIT, ticket w/appl.

Technical School seen as an asset

Technical Training

Better Understanding ofBusiness

Safety, Operations, Computers,

Operations, Safety Awareness

Standard Processing Systems

Safety, Operations

Marketing Impact.

Safety, Operations,

Safety as required

Instrumentation

Instrumentation

Safety

Knowledge Asset Mgr.

Performance Coordinator

George McKay Administrative Supervisor

Bernie Heirick

Lynn Wood

SuperIntendent

Giann Schiffner

IIm Starbacken

Area Manager

Senior Foreman

Michelle Kleine

Ed Erickson

Field Foreman

Training Coordinator

Tim Zelter

Production Foreman

	Dioyominister riela Office, Dioyominister, 403-875-0514			Journeyman's Ticket w/applicable	Lakeland/Vermillion, Lloydminister		ł
	Belle Resources Head Office, Paddle Pr., 403-981-2299	Holding	Operators	High School Diploma	Consultants from Oli Companies	Safety	Ī
	Cabre Exploration Grande Pairle Office, Grande Prairie, 403-532-1912	Expanding		High School Diploma Power Engineering an Asset	Local Consultants	Safety, Operations	
П	Canadian Hunter Explorations Grande Prairie Field Office, Grande Prairie, 403-539-3007	Holding	Operators	High School Diploma	Consultants are brought in or	Safety, Operations	r

Operators, Maintenance

Operators

Operators

Operators

Operators

Level "2" Operators

In Most Cases

Site Specific

Operators

Expanding

Holding

Expanding

Holding

Expanding

Expanding

Holding

Reducing

Head Office, Calgary, 234-5000

Head Office, Calgary, 403-290-2000

Head Office, Calgary, 403-294-8000

Head Office, Calgary, 403-231-0111

Linberg/ElkPoint District Office, Elk Point, 405-724-6500

Valleyview Production Office, Valleyview, 403-524-7272

Grande Pairle Area Office, Grande Prairie, 403-539-1575

Rainbow Lake Area Office, Rainbow Lake, 403-956-3611

Peace River Field Office, Peace River, 403-634-3632

Elan Energy

Gulf Canada

Imperial Oil Ltd.

Norcen Energy

Numac Energy

Murphy Oil Company

Back and the Lad	†					Treid Foretrial
PanCanadian Ltd. Elk Point District Office, Elk Point, 403-724-6100	Expanding	Operators	High School Diploma Technical School seen as an asset	80% In-House 20% outside consultants	Safety Procedures	Rick Patroch Service Rig Coordinator
Enermark Inc. Head Office, Calgary, 403-267-1500	Holding	Operators	High School Diploma Site Specific to Job	Port-A-Train & In-House	Safety, Operations	Pameia Houston Manager Payroll
Pembina Resources Cranberry / Hotchkiss Gas Plants, Manning, 403-836-3309	Holding	Operators	High School Diploma, Power Eng. Degree, Steam Ticket	In-House Training Program with SAIT	Operations, Safety Procedures	Brant Rolling Plant Operator
Head Office, Calgary, 403-231-7665	Holding	Operators, Technicians	High School Diploma Technical Schhol seen as a bonus	In-House training with SAIT	Safety, Operations	Colin Merrick Human Resources Admin.
PennWest Petroleum Swan Hills Field Office, Swan Hills, 403-333-4667	Holding	Operators	High School Diploma	Local Consultants	Safety, First Aid	Terry Haug Field Superintendent
Penzoil Petroleum Zama Fild Office, High Level, 403-683-2201	Expanding	Operators	High School Diploma	In-House, P.I.T.S.	Safety	Dean Bruce
Petro-Canada Kaybob Field Office, Fox Creek, 403-622-3739	Holding	Operators	High School Diploma 2 year NAIT or SAIT preferred	In-House in partnership with SAIT	Safety, Operations, Equipment	Bev james Senior Prod. Supervisor
Whitecourt Area OfficeWhitecourt, 403-778-2281	Expanding	Operators, Technicians	High School Diploma Technical School Preferred	In-House Operational Training Vendors train on Equipment	Safety, Operations	Bill Regan Sup. Northern Alberta Gas
Poco Petroleums Head Office, Calgary, 260-8000	Holding	Operators	High School Diploma Site Specific Certification	50% In-House, 50% Private	Safety, Operations	jane Grimal Corrdinator Human Res.
Renalssance Energy North Area Office, Athabaska, 403-675-4950	Expanding	Operators	High School Diploma 2 year NAIT or SAIT program	All doen by consultants, P.I.T.S.	Safety, Environmental	Peter Duncan N.Area Operations Sup.
Suncor Inc. Sinonette Gas Plant, Valleyview, 403-524-3935	Expanding	Geologists, Engineers	High School Diploma Degree or NAIT, SAIT Ticket	In House, AVC, Safety Boss	Safety, Computers	Ken Fjellner Production Foreman
Head Office, Calgary, 403-269-8100	Expanding	Geologists, Engineers	High School Diploma University Degree	Private consultants with SAIT	Site Specific, Safety Procedures	Pat Cooper Human Res. Coordinator
Talisman Energy Head Office, Calgary, 403-237-1234	Expanding	Operators	High School Diploma & Technical Training	In-House	Safety, Operations, Computers	Brenda McBay Training Coordinator

SERVICE COMPANIES

SERVICE COMI AMES							
COMPANY NAME		ACTIVITY	HIRING	EDUCATION	TRAINING	FOCUS	CONTACT
Canadalan Fracmaster Inc. Grande Pairire, 403-539-4220	Addizing	Expanding	Operators, Divers	High School Diploma Class One Licence	In-House Safety Program Private Consultants	Safety, Equipment	Cam Rowan Coordinator
Rainbow Anchors Ltd. Rainbow Lake, 403-956-3243	Anchors	Reducing	Operators	High School Diploma, Ticket, WHMIS, H2S, First Ald	In-House	Area and Equipment Operations	Alec Barker Owner/Operator
Safety Boss Canada Grande Prairie, 403-532-5666	Blowout Specialists	Expanding	Firefighters, Medical	High School Diploma SAIT Medical, Fire College	In-House and external	Safety, Industrial First aid	Blake Wudeun-Campbell Operations Manager
Hamburg Open Camp Manning, 403-836-9026	Catering / Camps	Expanding	Operators	High School Diploma Cooking Certificate preferred	Minimal In-house	Safety	Ed Hamburg Owner
Canadian fracmanster inc. Slave Lake, 403-849-5263	Cementing	Seasonal	Operators	High School Diploma, WHMIS, First Aid	In-House	Safety	Kevin Sutherland Coordinator
Dowell Ditvision of Schlumberger Whitecourt, 403-778-2161	Cementing	Expanding	Operators, Engineers	High School Diploma, 2 year SAIT or NAIT or 4 year Degree	In-House	Driver Training, Equipment, Safety	Orest Burak Service Supervisor
Baker Hughes INTEG Ltd. Calgary, 403-296-9700	Directional Horizontal Drilling	Expanding	Specialized Operators	High School Diploma, SAIT or NAIT, Bachelor's Degree	In-House	Technical Upgrades Propriatary Tools	Dyan Connolly Human Resources Admin.
Drilex Systems Canada Primrose Gas Plant, Edmonton	Directional Horizontal Drilling	Expanding	Field Persnonnel	High School Diploma Math & Computer Certificates	In-House, In the Field	Company Software, Safety	Allan Voschand Genreal Manager
Jomax Drilling Calgary, 403-265-5312	Drilling Contractors	Expanding	Junior Floor Personnel	High School Diploma P.I.T.S. Petroleum Training	In-House in cooperation with P.I.T.S.	Safety, Operations	Bernie Chenail Genrai Manager
Athabaska Pipelines Athabasca, 403-675-4070	General Contractors	Expanding	Labourers, Trademens	High School Diploma NAIT or SAIT w/appl.	In-House & Outside Contractors	Safety	Noel Majur Manager
Delta Oilfield Services Rainbow Lake, 403-956-3000	General Contractors	Holding	Heavy Equipment	High School Diploma HZS, First Aid, WHMIS	In-House	Safety upgraded as required	jim Pangman Area Manager
Seguin Construction Slave Lake, 403-849-3091	General Contractors	Holding	Operators	High School Diploma preferred	None	N/A	Jim McArdie Controller
Baron Olifield Supply Crande Prairie, 403-532-5661	General Sales & Service	Expanding	Sales, Administrative	High School Diploma	In-House	Management	Colleen Rose Quality Assurance Mgr.
Cavaller Land Ltd. Calgary, 403-264-5188	Land Services	Holding	Land Administation	Land Man Licence, SAIT or NAIT Admin. Program	In-House, on the job	EUB Policy Changes, Computers	Angela Boston Land Admin. Services
Petrolite Canacia Whitecourt, 403-778-6873	Oll & Gas Treatment	Expanding	Sales staff	High School Diploma Petroleum Degree	In-House.	Safety, Chemicals Traetment Sales Presentations	Don Disney Northern Dist. Supervisor
Multen Trucking Aldersyde, 403-240-4678	Oll Service Trucking	Expanding	Trucking Personnel, Maintenance	High School Diploma Site Specific	In-House Training Program with Cooperation of P.I.T.S.	Safety, Operations, Satelilte Communications	Dave Mullen V.P. Highway Division
Champion Technologies Grande Prairie, 403-538-1358	Olifield Chemicals	Expanding	Sales	High School Diploma Petroleum Degree	in-House, P.I.T.S.	Site Specific, Safety	Hilda Fischer District Secretary
Carnwood Wireline Services Edmonton, 403-434-1122	Wireline Services	Holding	Operators	High School Diploma H2S, First Ald	Outside Contractors	Safety	Darryl Reprend Controller
Computalog Ltd. Calgary, 403-539-6400	Wireline Services	Holding	Field Level Postions	High School Diploma SAIT or NAIT would be beneficial	in-House during off-season	Safety, Operations	Tom Graham Director Human Resources

QUESTIONS ASKED OF PETROLEUM COMPANIES

- 1. How active is your operation currently in Northern Alberta?
- 2. What is your most likely area of hiring?

- 3. What are the basic education and certification requirements for new employees?
- 4. Where is the biggest area of demand in retraining existing employees and where are you currently obtaining your retraining services?