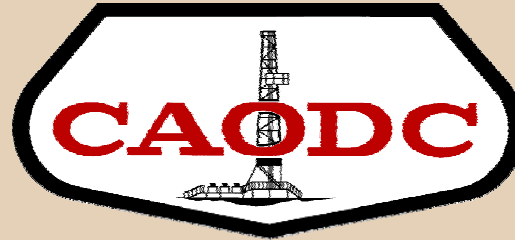




The Rig Technician Trade: Apprenticeship Training for Oil and Gas Drilling Rig Occupations





•The CAODC represents drilling and service rig contractors operating in Canada.

•This sector is a labour intensive segment of the petroleum industry and provides jobs to thousands of Canadians.

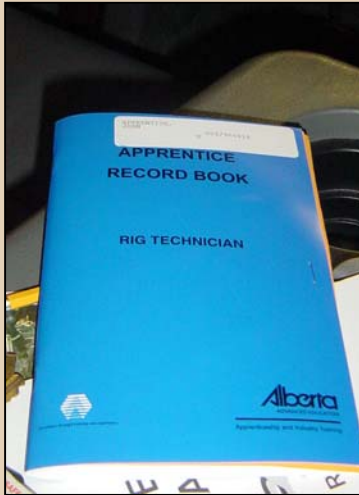
•The Association works on behalf of its membership in government and public arenas.



•Member companies meet through the Association to develop standard procedures for the industry.

• Today's regulatory and performance standards evolved out of the industry's cooperative efforts, made possible through the coordinating role of the CAODC.





The Rig Technician Trade

Designated in Alberta in Fall 2004.

Designated in B.C. and NWT in Fall 2005.

Designated in Saskatchewan in Spring 2006

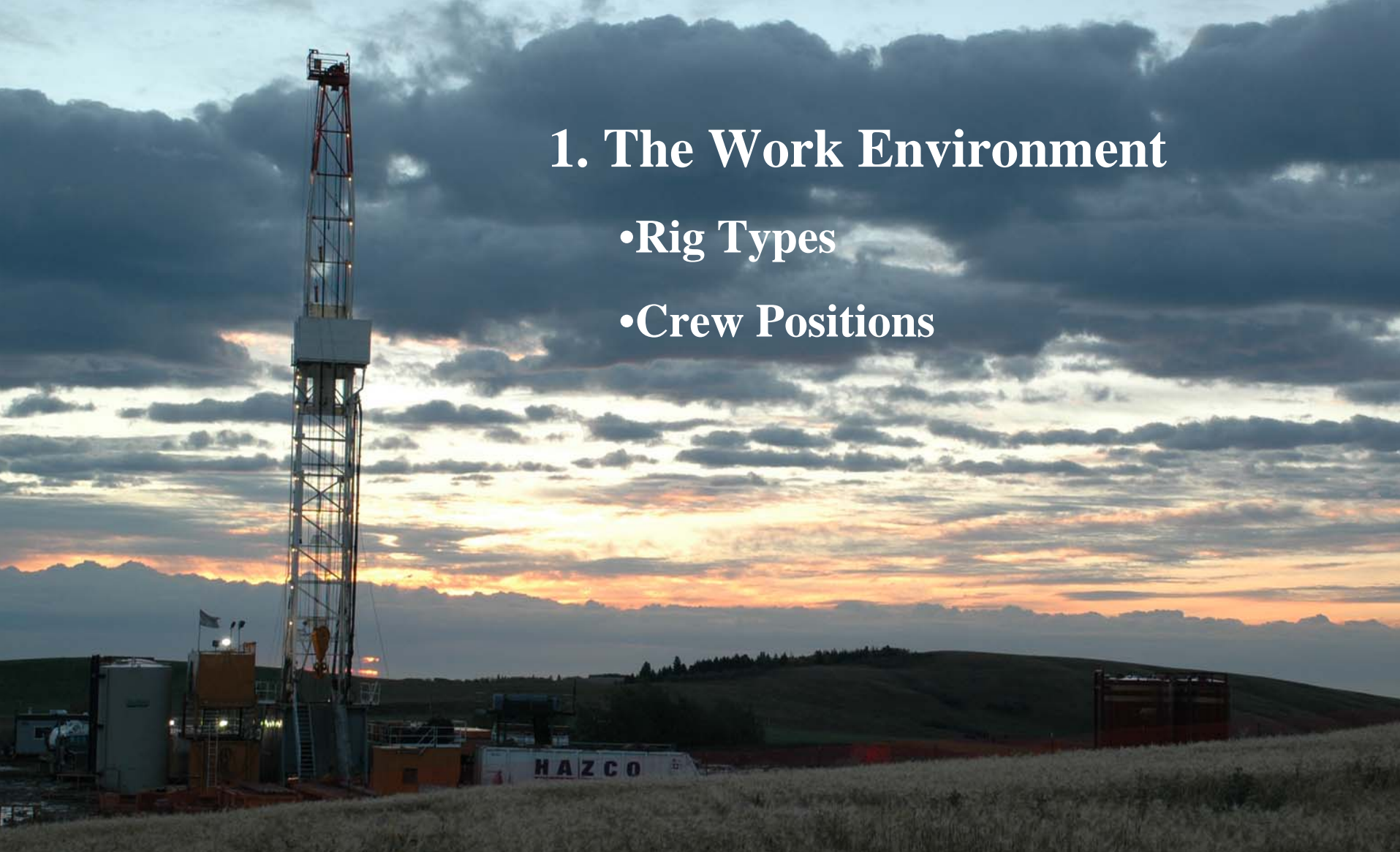
- Result of a coordinated effort between CAODC and Alberta Advanced Education.**
- CAODC has been an important link between industry and apprenticeship divisions in helping to educate the industry about the trades training program.**

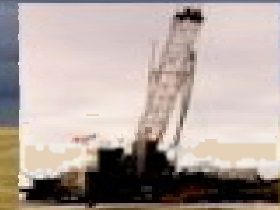




1. The Work Environment

- Rig Types
- Crew Positions

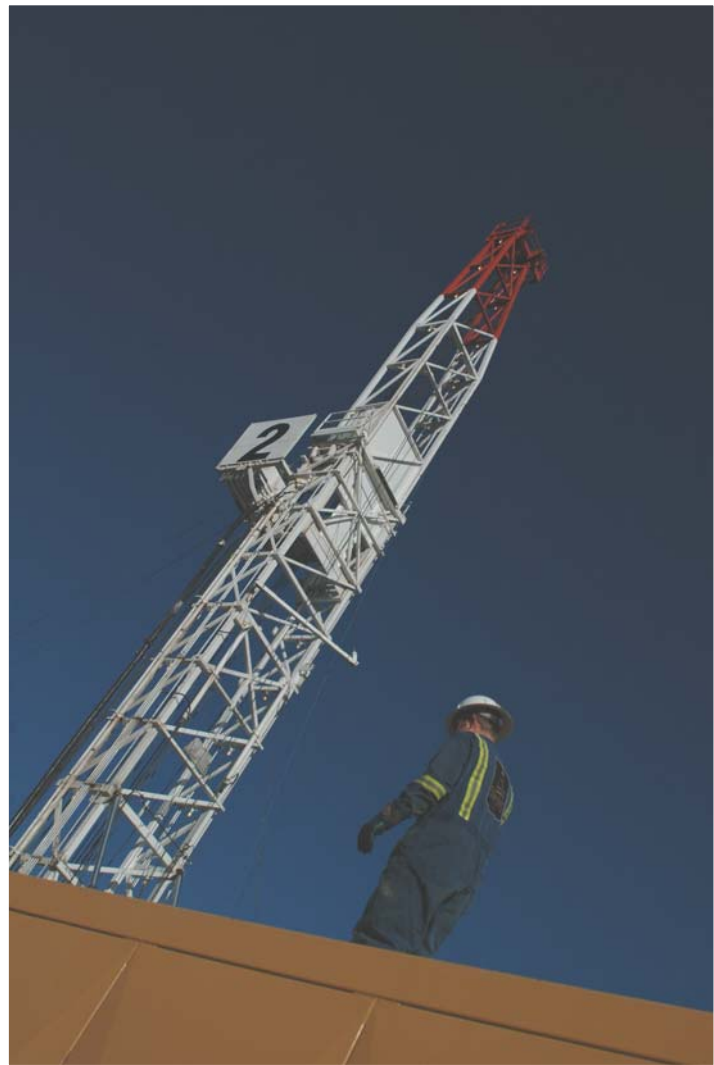
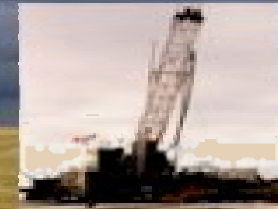




On the Rig

- Well Site Supervisor (Oil Company)
- Rig Manager
- Driller
- Derrickhand
- Motorhand
- Floorhand (Roughneck)
- Leasehand





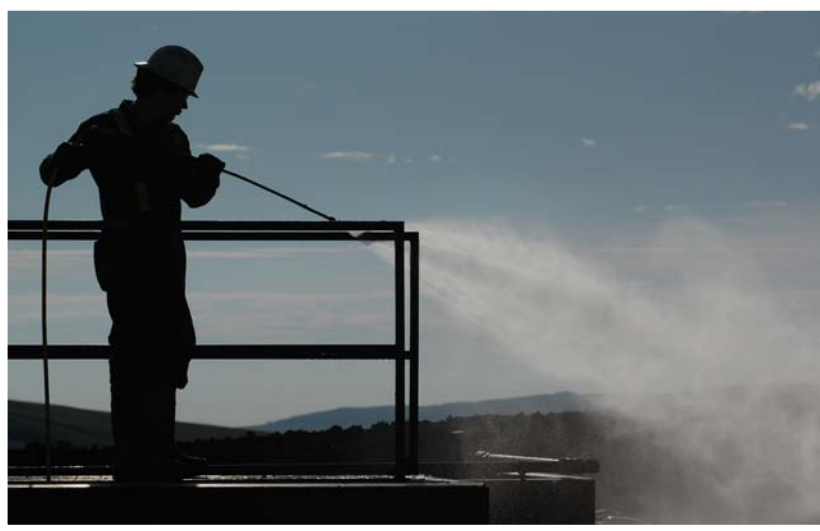
Drilling Rig Types

- Triple (drills with 3 strands of pipe)
 - longer holes (wells)
 - deep well projects
 - slower pace
- Double (drills with 2 strands of pipe)
 - medium holes (wells)
 - medium pace
- Single (drills with 1 strand of pipe)
 - short holes (wells)
 - specialty rigs, shallow wells
 - fast pace



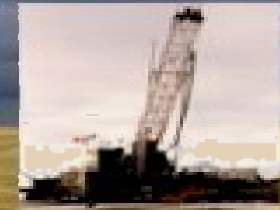


Leasehand



- Assists members of the rig crew as required
- Performs general labour and maintenance tasks
- Drives company vehicle (particularly when crew is working out of camp)





Floorhand



- Maintains the engines and other machinery
- Handles pipe
- Works with the Motorhand when tripping and making connections





Motorhand



- Maintains the engines and other machinery
- Assists Driller with supervision on the rig floor during tripping and making connections
- Trains Floorhands and Leasehands





Derrickhand



- Assists Driller with equipment maintenance
- Maintains drilling fluid (mud) system
- Guides pipes/rods while up the derrick
- Maintains/inspects derrick structure





Driller



- Supervises the crew
- Operates the drilling and hoisting equipment
- Conducts and supervises safety meetings
- Ensures documentation/logs are completed





Rig Manager



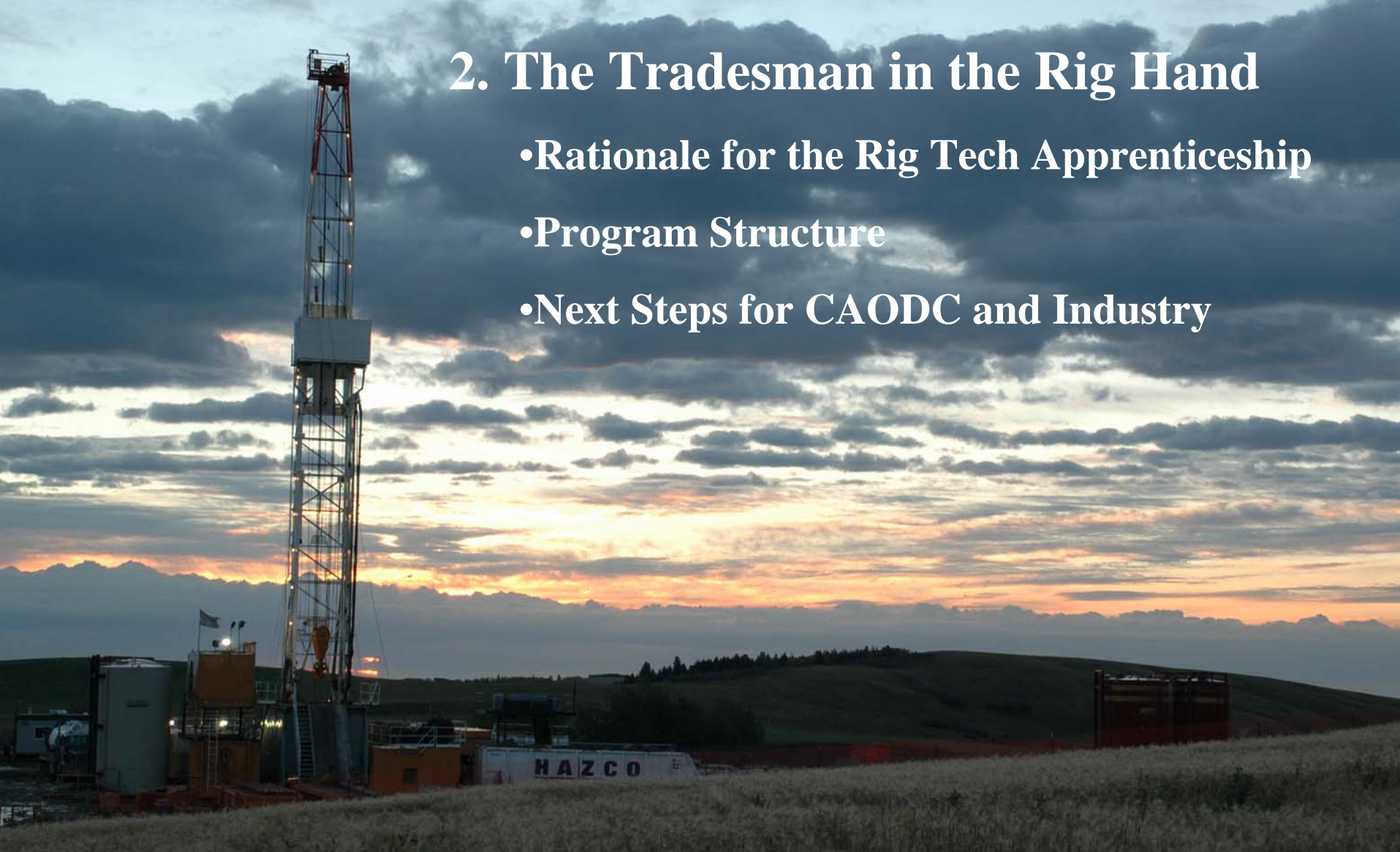
- Directs and coordinates all drilling activities with the oil company
- Coordinates the work of all crews
- Ensures the entire drilling operation runs smoothly, safely and efficiently.





2. The Tradesman in the Rig Hand

- Rationale for the Rig Tech Apprenticeship
- Program Structure
- Next Steps for CAODC and Industry

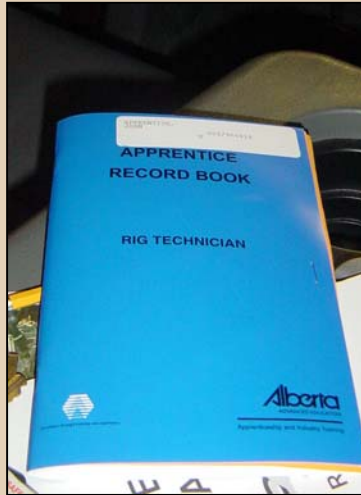




The Rig Technician Trade

Making a safer job site:

- **an industry-wide standard of minimum competency.**
- **an efficient means for assessing competency.**
- **improved communication about experience and training.**

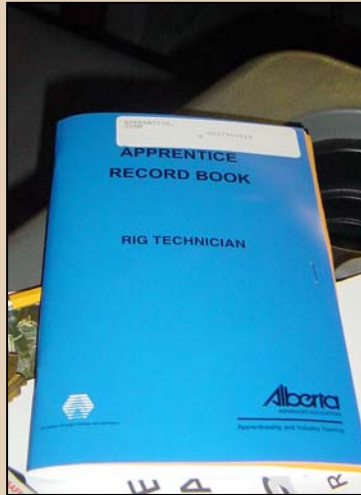




The Rig Technician Trade

Highlighting a rewarding career path:

- **Raise industry's profile and improve the ability to attract new personnel.**
- **Improve industry's ability to retain personnel.**





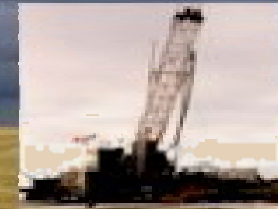
The Rig Technician Trade

Applies to the following occupations:

- Motorhand
- Derrickhand
- Driller

Experience as a Floorhand is required before working as a Motorhand.





The Rig Technician Trade



3 periods of training:

Rig Tech Level 1 (Motorhand)

Rig Tech Level 2 (Derrickhand)

Rig Tech Level 3 (Driller)



Each period consists of:

1500 hours of OJT

4 weeks of Technical Training





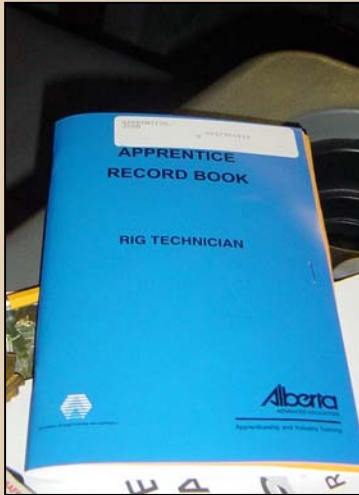
The Rig Technician Trade

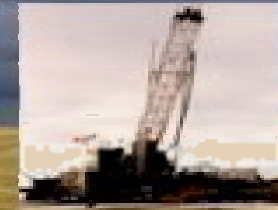
Uniquely structured for this industry:

No minimum education requirement

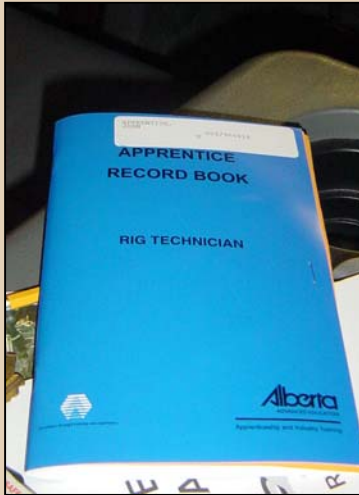
No wage ratio

No journeyman ratio





The Rig Technician Trade



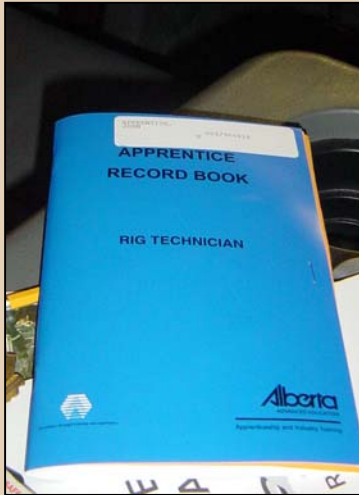
Timeline for Roll-out in Alberta

- June 2006: Motorhands and senior Floorhands are registered apprentices.
- June 2007: Derrickhands are registered apprentices
- June 2008: All working as Motorhands, Derrickhand and Drillers are registered apprentices or certified journeymen.





The Rig Technician Trade



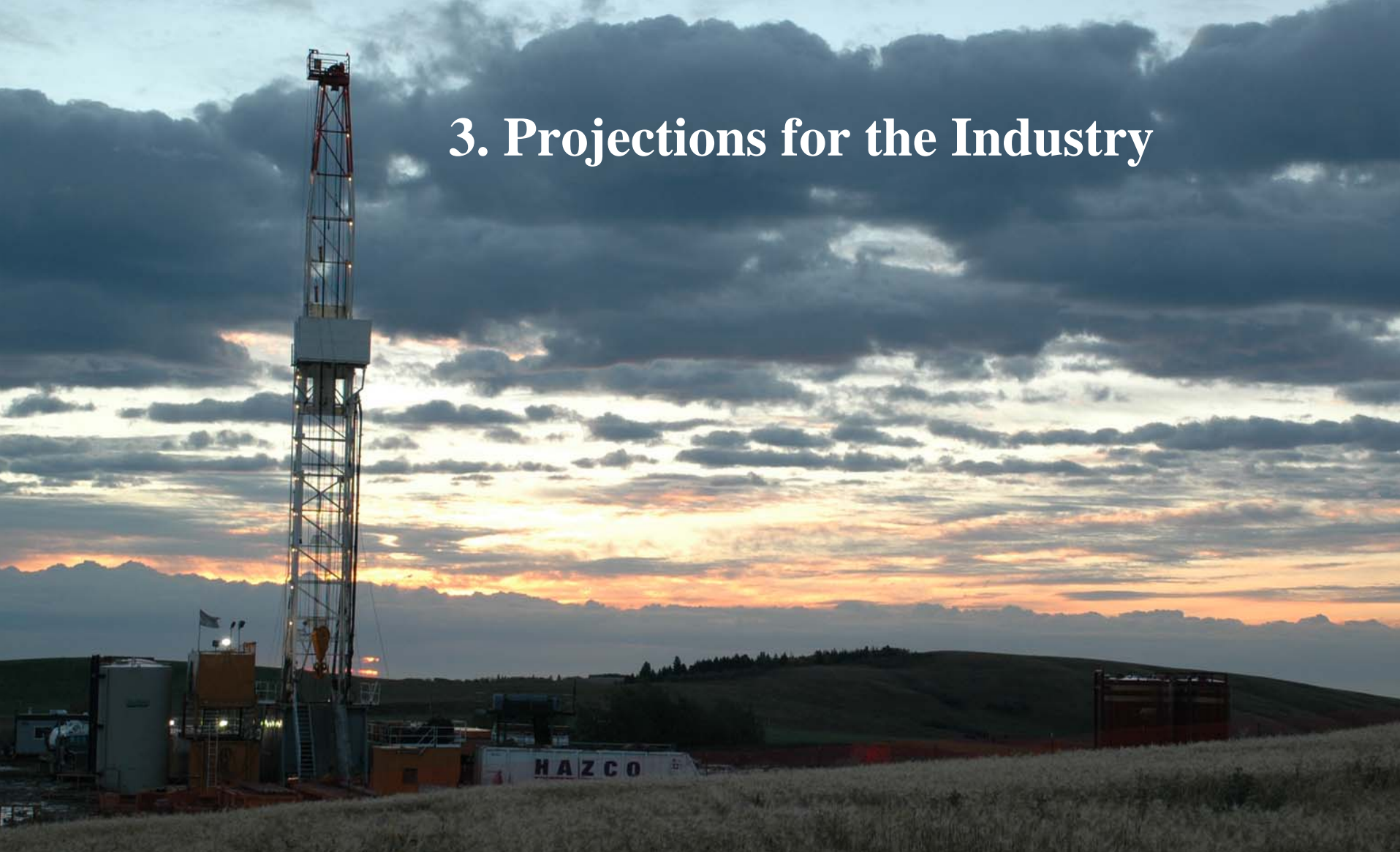
Next Steps:

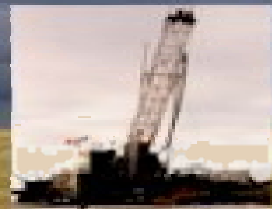
- Industry's goal is to obtain a Red Seal certification for the trade.
- Rigs and employees cross provincial borders regularly. An industry standard is necessary.





3. Projections for the Industry





*



Historical Drilling Activity Levels

*source CAODC

Year	Active Rigs	Fleet	Utilization Rate	Wells Completed
1994	312	432	73%	11,871
1995	274	461	59%	11,062
1996	316	463	59%	12,695
1997	419	509	82%	16,484
1998	284	568	50%	9,744
1999	272	591	46%	10,608
2000	383	598	64%	16,485
2001	391	636	61%	17,945
2002	304	660	46%	14,465
2003	422	672	63%	19,849
2004	433	703	62%	21,671
2005	493	740	67%	24,099





Projections

*source CAODC

Wells to be Completed in 2006	26 070
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Rig Count as of May 2006	814
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Rig Count as by Spring 2007	850
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Information on the Web:

www.caodc.ca

www.tradesecrets.org

www.itabc.ca

DRILLING DOWN:
the Career will move you UP!

