







2004 Winter Field Geotechnical Investigation Program in the Deh Cho Region

Environmental Assessment
Mackenzie Valley Environmental
Impact Review Board

Public Hearings

November 30: Trout Lake, NT

December 1: Wrigley, NT

December 2: Fort Simpson, NT

Developer's Opening Presentation







Program Summary

What do we want to do?

Borehole drilling and excavating to collect soil samples

What will we do with the information?

- Assess the engineering design and construction plans for the Mackenzie Valley pipeline
- Include it in regulatory applications for the Mackenzie Valley pipeline

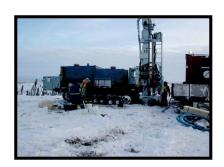
How will we do the work?

- Set up four camps
- Prepare access to the sites
- Drill boreholes to get soil samples for laboratory frost heave measurements
- Drill boreholes at possible sites for river crossings by a pipeline
- Drill boreholes at possible borrow sites to look for gravel
- Excavate small test pits at possible borrow sites to collect granular samples
- Reclaim and restore all sites

How much work will be done in the Dehcho Region?

- Up to 43 borrow sites approximately 236 boreholes and test pits
- Up to 10 frost heave sites approximately 30 boreholes
- 5 water crossings approximately 32 boreholes





Camp Locations

Dehcho North: Blackwater River to Willowlake River

- Near the Blackwater River 65 person camp
- Near the Willowlake River 65 person camp



Dehcho South: Willowlake River to Alberta Boundary

- Near the Trout Lake Road 30 person camp
- At Checkpoint 65 person camp

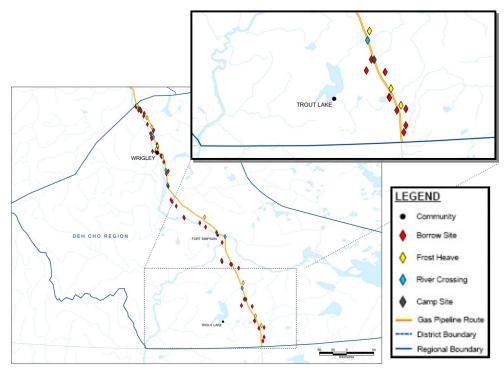
Program Activities near Trout Lake

Activities near Trout Lake

- Part of Dehcho South work area
- 9 borrow sites 72 boreholes and test pits
- 3 frost heave sites 9 boreholes
- 1 river crossing site 4 boreholes

Typical Equipment Used

- Bulldozers, graders, tracked backhoes
- Borehole drilling rigs on tracks
- Tracked personnel carriers
- 4 x 4 pickups
- Tracked fuel carriers
- Brush cutters and hand clearing equipment
- Generators, water pumps, drill pumps
- Helicopters
- Tractor trailers, tandem axle trucks
- 30 person rig camp







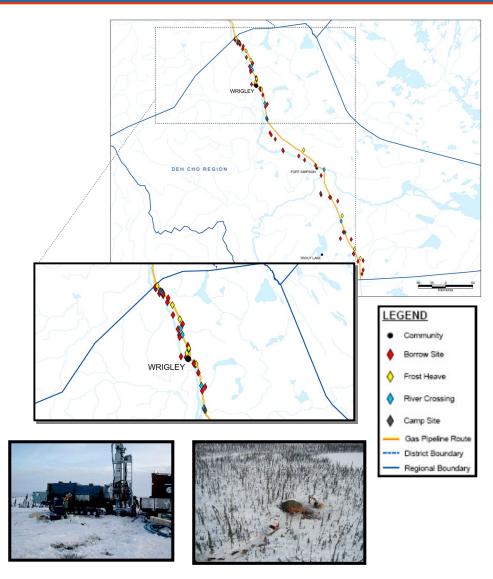
Program Activities near Wrigley

Activities near Wrigley

- Part of Dehcho North work area
- 24 borrow sites 117 boreholes and test pits
- 6 frost heave sites 18 boreholes
- 6 river crossings 24 boreholes

Typical Equipment

- Bulldozers, graders, tracked backhoes
- Borehole drilling rigs on tracks
- Tracked personnel carriers
- 4 x 4 pickups
- Helicopters
- Tracked fuel carriers
- Brush cutters and hand clearing equipment
- Generators, water pumps, drill pumps
- Tractor trailers, tandem axle trucks
- 65 person rig-type camps



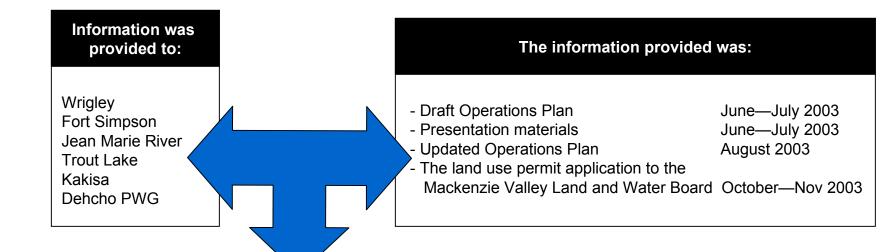
Site Restoration

- Boreholes and test pits are refilled with excavated material
- At end of program and in following summer Investigation sites and access are inspected by community environmental monitor, environmental supervisor and INAC inspectors
- Any restoration deemed necessary will be planned in conjunction with regulatory agencies and communities





Public Involvement Process



Additional Information Provided : June through January 2004

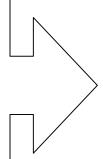
- Presentations and map discussions at Traditional Knowledge work sessions in communities
- Small group meetings in communities
- Individual discussions, in person and by telephone
- Mailout packages
- Information request responses as part of regulatory processes

Imperial Oil Use Only

Public Involvement Improved the Program

Helping the Dehcho Communities Influence the Program

- Participation in reconnaissance flights
- Early consultation using detailed materials
- Early, extended and continuing benefits discussions
- Funding to support benefits discussions



Examples of Program Changes Resulting from Community Input

- Dropped potential borrow site
- Changed access to water sources
- Changed camp locations
- Supported hiring environmental and wildlife monitors by local First Nations
- Held pre-qualifying workshops
- Broke work into smaller work scopes in bid packages
- Preference given to Dehcho businesses in conditional contract awards
- Tendered of work packages early

Protection Plans

Protecting the People

- Workers
- Communities

Protecting the Land

- Land
- Water

Protecting the Wildlife

- Animals
- Fish

Benefits

Dehcho Businesses have Opportunities to Bid on Work

- · Camp and catering
- Geotechnical drilling
- Geophysical surveying
- Geotechnical consulting
- Land surveying
- General services
- Emergency medical services
- Communication systems

Dehcho Individuals can Develop their Skills

- Safe work practices
- Environmental protection training
- Use of tools

Dehcho Companies can Build their Business Capacity

- Preparing bid packages
- Managing staff and equipment
- Monitoring and improving performance
- Using Quality assurance programs

Mackenzie Gas Project Designs in Dehcho Region will be Better

- Designs and construction plans
- Environmental Impact mitigation

Dehcho Knowledge of Local Resources Improved

Borrow sources identified and measured

Dehcho Communities Gain Economic Activity

- Local purchases of supplies
- Local purchases of services

Closing





- Program will allow Imperial to improve the design and construction plans for the Mackenzie Gas
 Project activities in the Dehcho Region
- Program design and operations plan have been developed and improved with consideration of input from the communities
- Program will bring advantages to the Dehcho people and to Dehcho businesses
- Safeguards are in place to ensure that commitments are met

Imperial and its contractors will conduct the program with respect for the people, the land and the wildlife.

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