

# Canadian Petroleum Industry Flaring Regulators

## Manitoba Update on Flaring & Venting

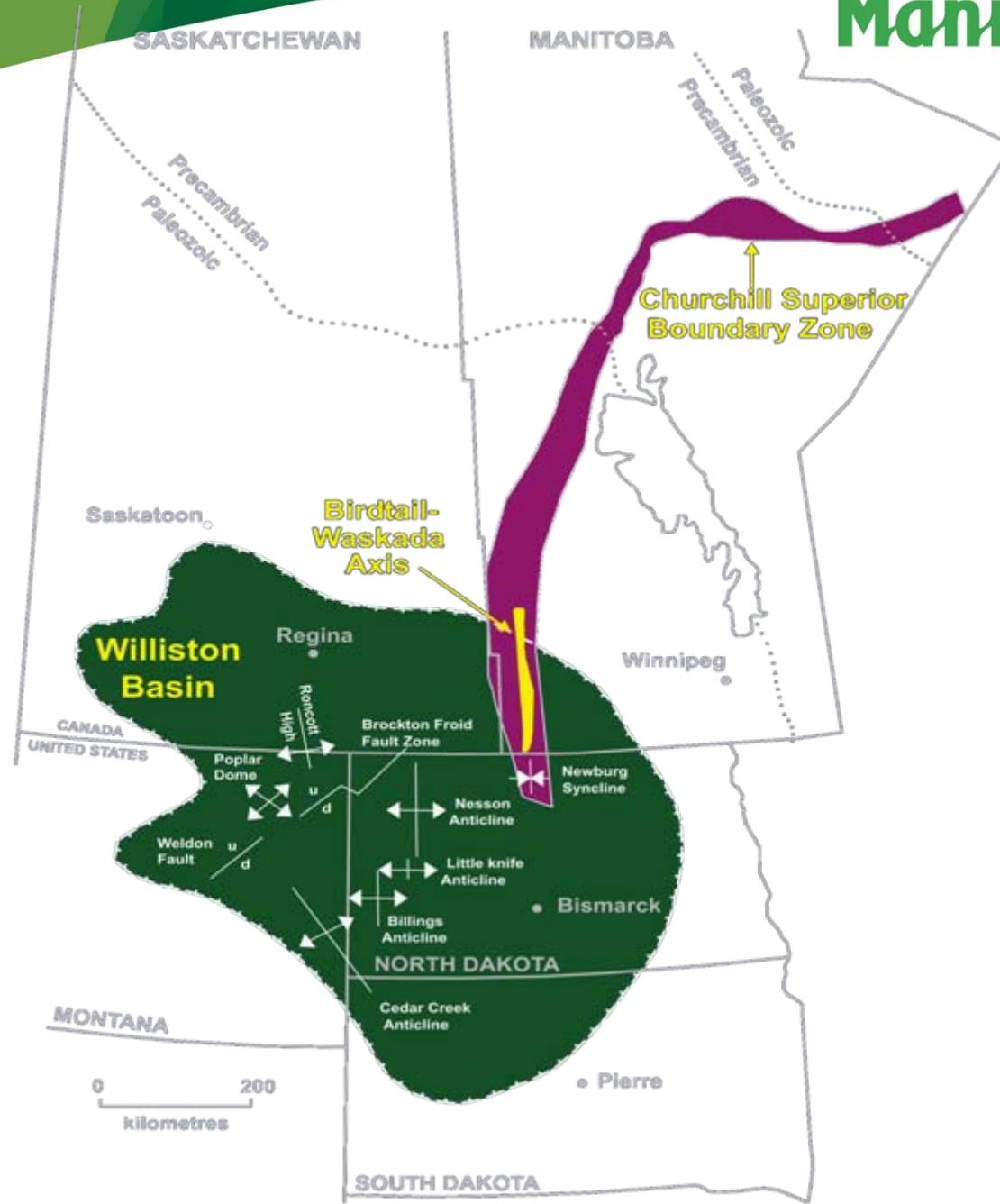
Calgary, Alberta

June 15, 2007

**Manitoba** 

## **Update on Flaring & Venting**

- Provincial oil and gas overview
- 2006-07 oil and gas activity
- Flaring & venting reduction activities



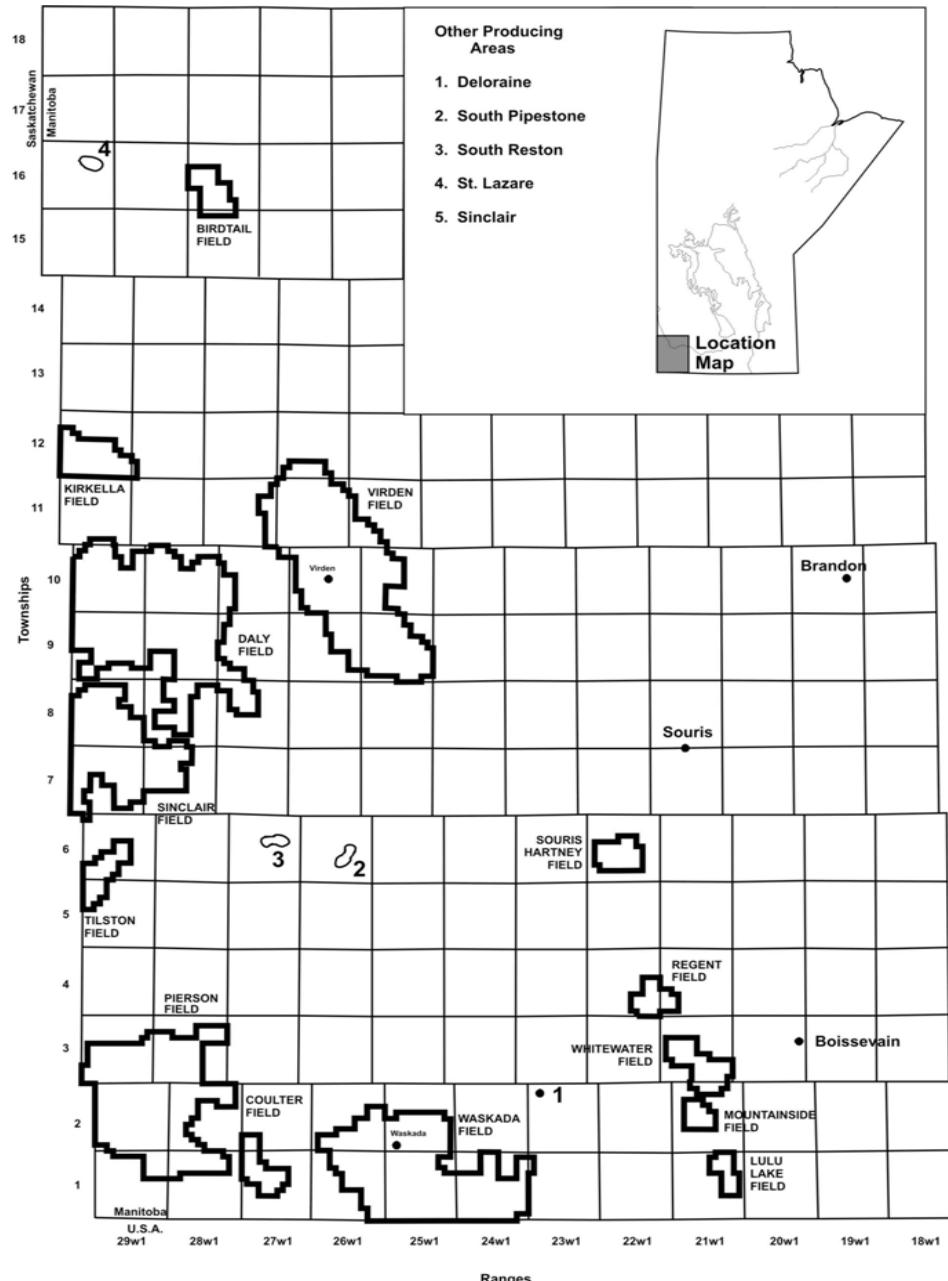
## Manitoba's Oil Fields

Producing wells  
2205

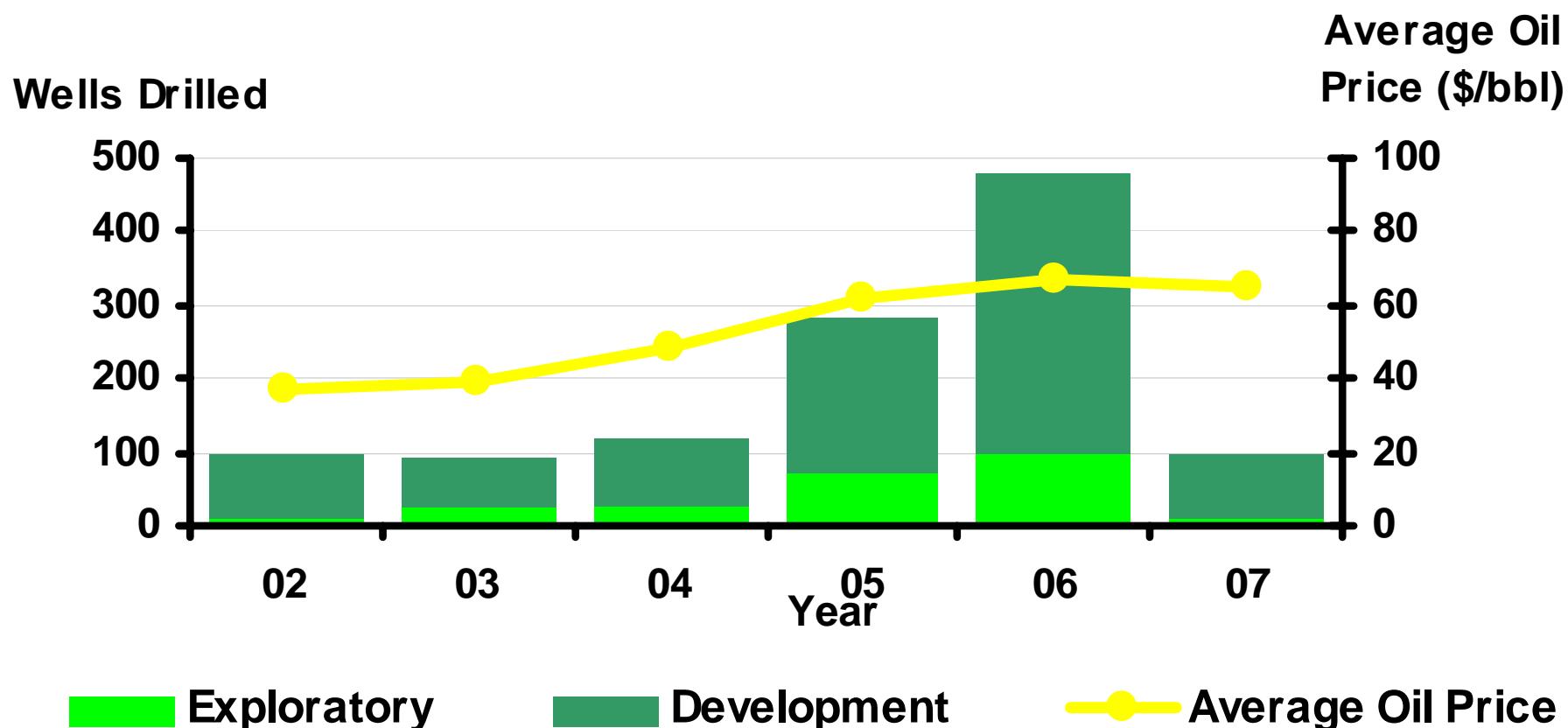
Oil production  
3344 m<sup>3</sup>/d

Solution gas production  
22.1 10<sup>6</sup>m<sup>3</sup>

Industry expenditures  
\$ 400 million



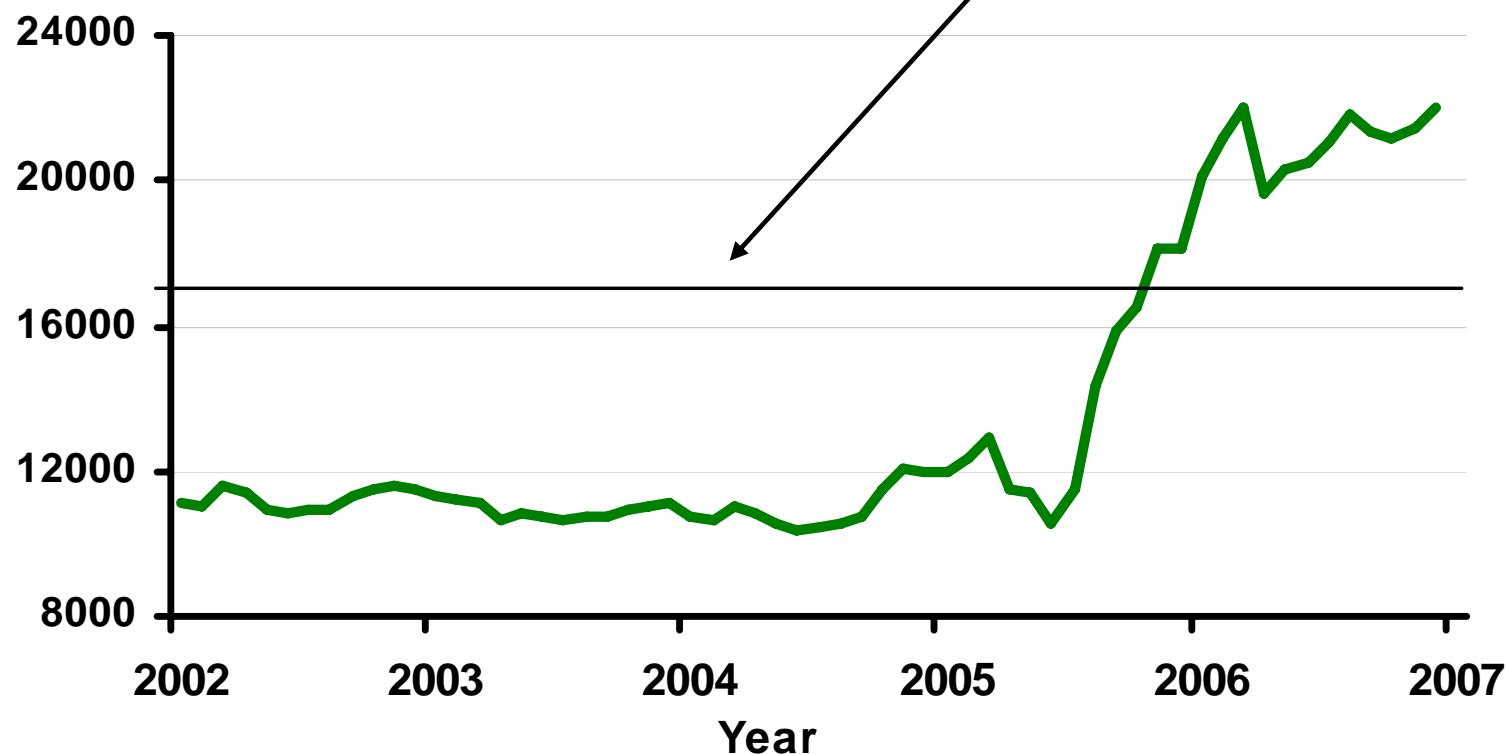
## Manitoba Drilling Activity



## Manitoba Daily Oil Production

Average Daily  
Oil Production  
(b/d)

1969 Production Record



## 2006 Gas Flaring & Venting

- Solution gas production –  $22.1 \ 10^6 \text{m}^3$
- Average GOR –  $18.3 \ \text{m}^3/\text{m}^3$
- Average battery production –  $730 \ \text{m}^3$
- Solution gas disposition
  - Flared –  $13.4 \ 10^6 \text{m}^3$  (60.8%)
  - Vented –  $4.7 \ 10^6 \text{m}^3$  (21.4%)
  - Lease fuel –  $3.9 \ 10^6 \text{m}^3$  (17.8%)

## Flaring & Venting Reduction Planned Activities

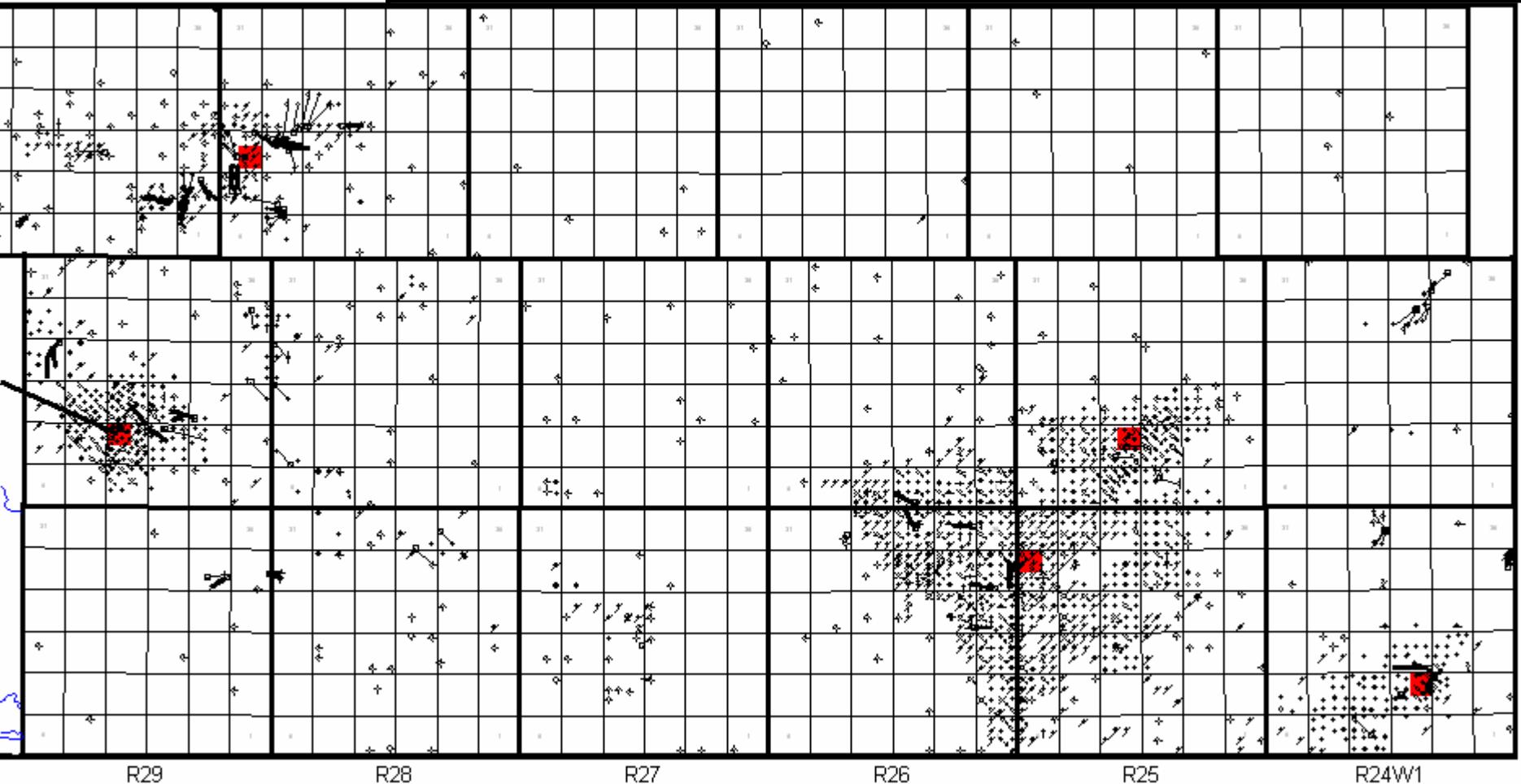
- Battery Permitting & Operating Requirements
- Encourage gas conservation
  - expansion of SE Saskatchewan gas gathering system into Manitoba
  - eliminate any regulatory barriers
  - develop royalty/tax incentives to encourage battery tie-ins
- Reduce vent volumes
  - focus on recovery of stock tank vapours
  - new battery design & modifications to existing batteries

## Pierson Gas Conservation Project

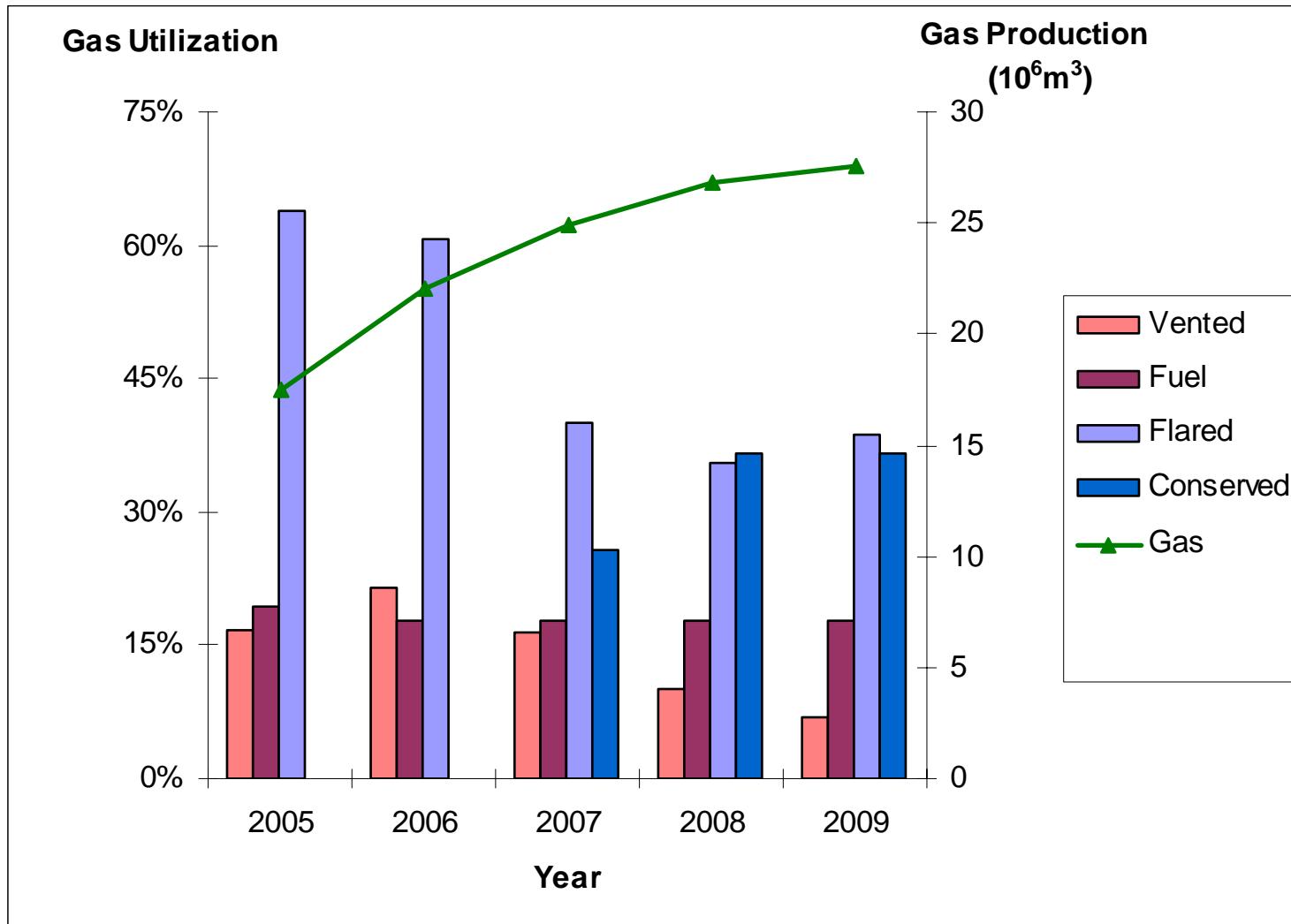
- Manitoba's 1<sup>st</sup> gas conservation project
- ATCO Midstream's Pierson pipeline – NEB regulated
- construction to commence - June 2007
- tie-in CNRL's 14-9-2-29 battery to Nottingham Gas Plant
- battery gas production: 0.7 – 1.4 MMCFD

# BATTERY GAS PRODUCTION

CNRL	14-9-2-29	12.4 $10^3$ m <sup>3</sup>
Tundra	1-18-3-28	4.0 $10^3$ m <sup>3</sup>
Penn West	11-30-1-25	3.5 $10^3$ m <sup>3</sup>
EOG	15-9-2-25	5.8 $10^3$ m <sup>3</sup>
ARC	16-10-1-24	2.4 $10^3$ m <sup>3</sup>



# Manitoba Gas Utilization Forecast





[www.gov.mb.ca/petroleum](http://www.gov.mb.ca/petroleum)