

Canadian Petroleum Industry Flaring Regulators

Manitoba Update on Flaring & Venting

Calgary, Alberta

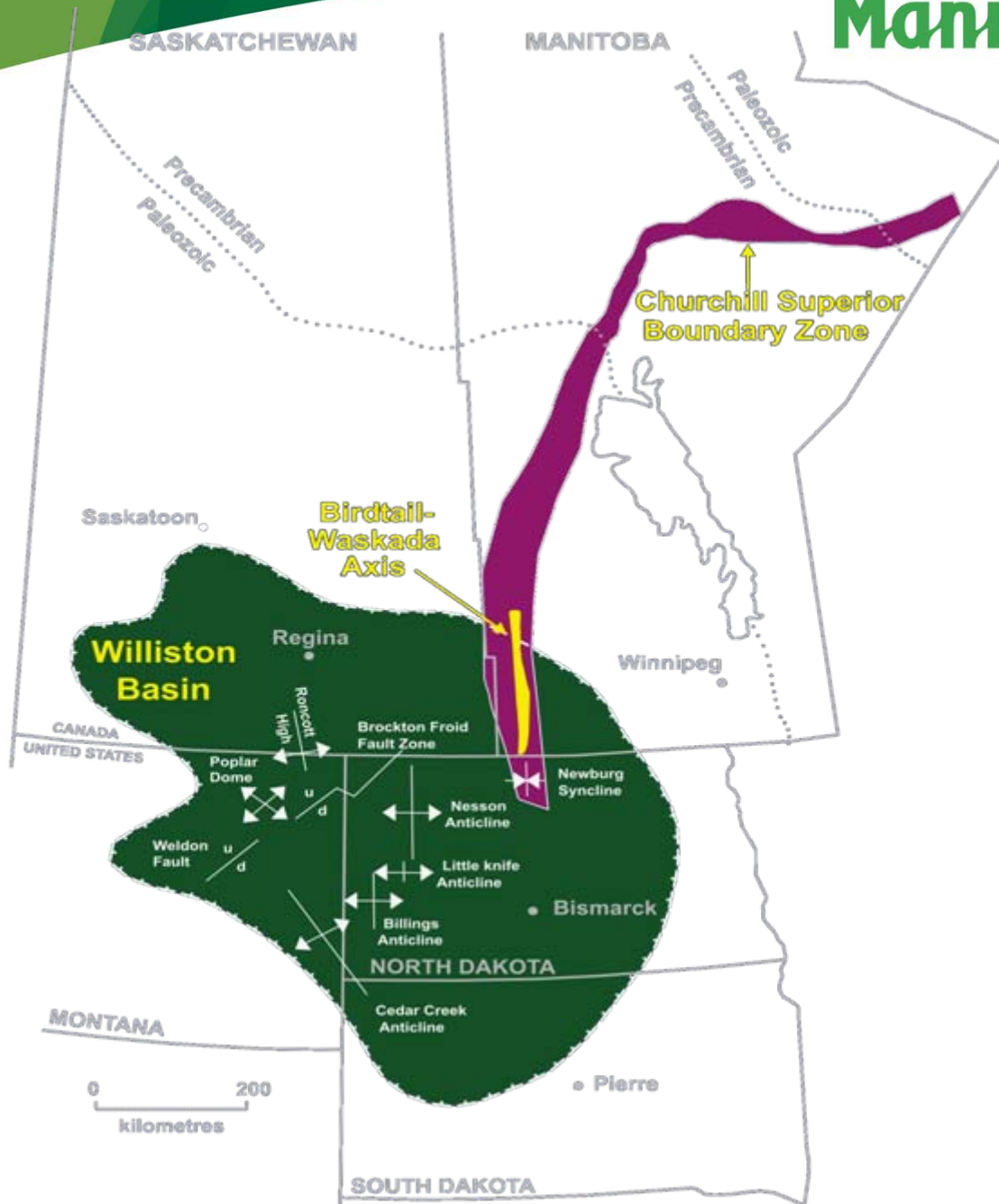
June 15, 2007



Update on Flaring & Venting

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

Manitoba



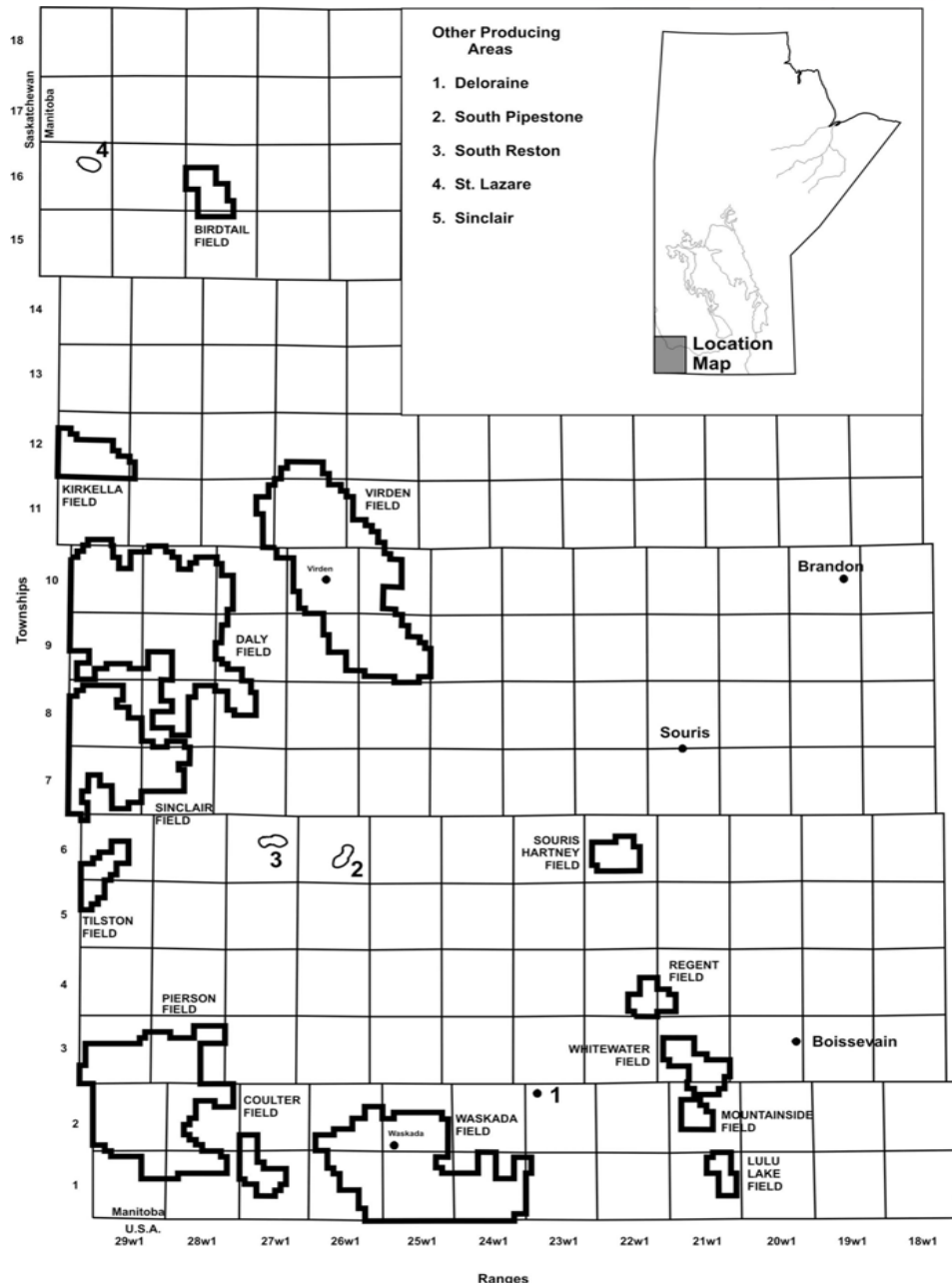
Manitoba's Oil Fields

Producing wells
2205

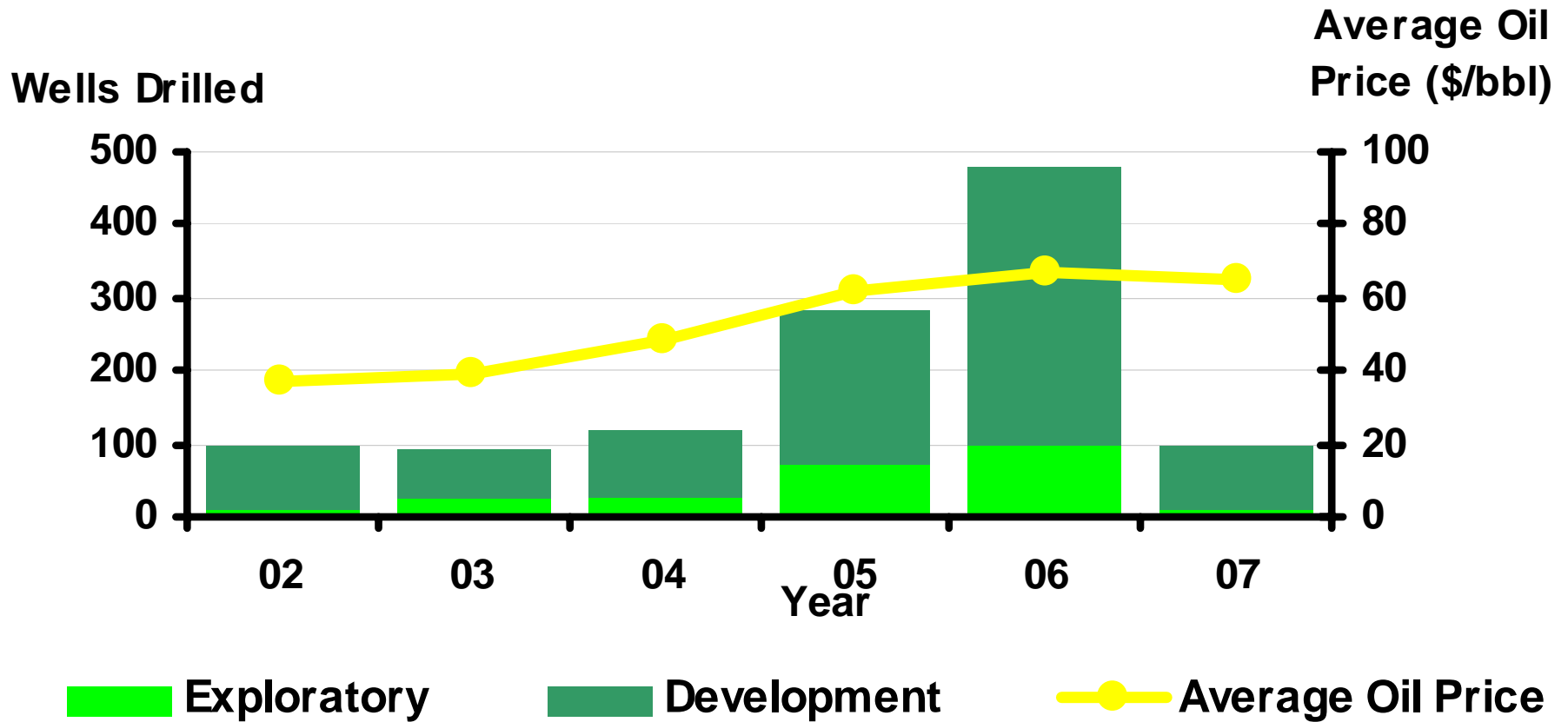
Oil production
3344 m³/d

Solution gas production
22.1 10⁶m³

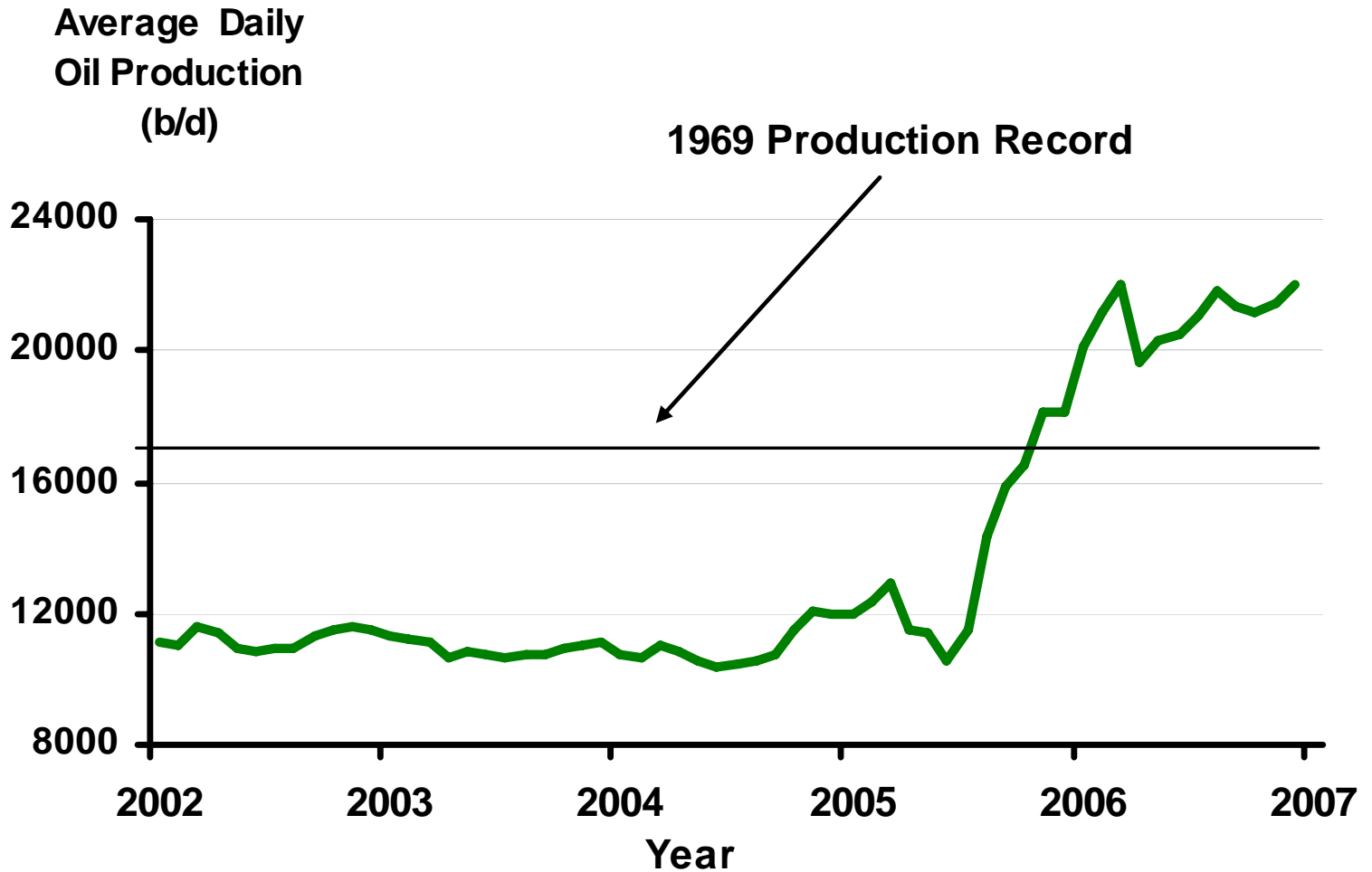
Industry expenditures
\$ 400 million



Manitoba Drilling Activity



Manitoba Daily Oil Production



2006 Gas Flaring & Venting

- Solution gas production – $22.1 \times 10^6 \text{m}^3$
- Average GOR – $18.3 \text{ m}^3/\text{m}^3$
- Average battery production – 730 m^3
- Solution gas disposition
 - Flared – $13.4 \times 10^6 \text{m}^3$ (60.8%)
 - Vented – $4.7 \times 10^6 \text{m}^3$ (21.4%)
 - Lease fuel – $3.9 \times 10^6 \text{m}^3$ (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 1st 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

12.4 10³ m³

Tundra

1-18-3-28

4.0 10³ m³

Penn West

11-30-1-25

3.5 10³ m³

EOG

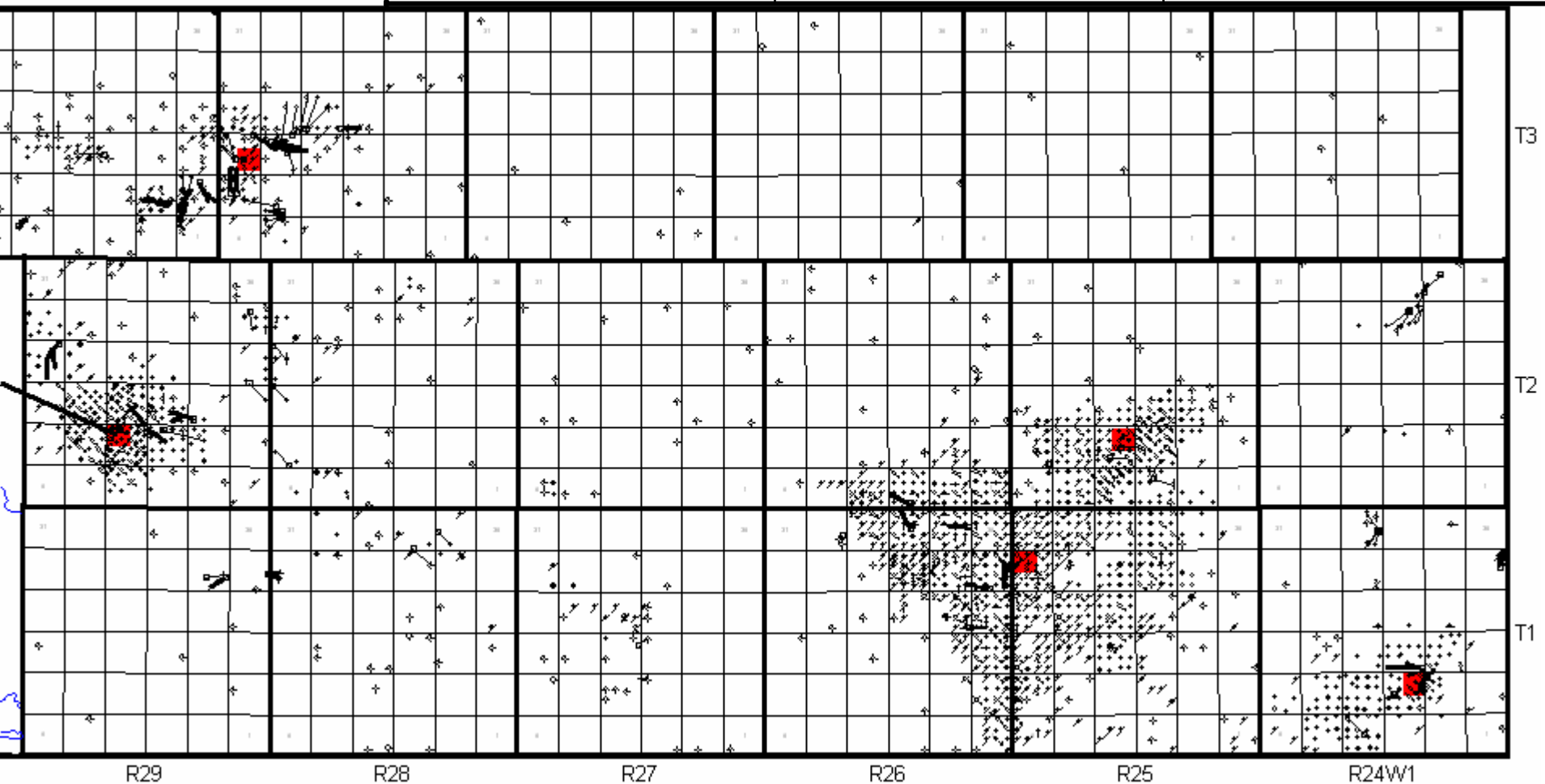
15-9-2-25

5.8 10³ m³

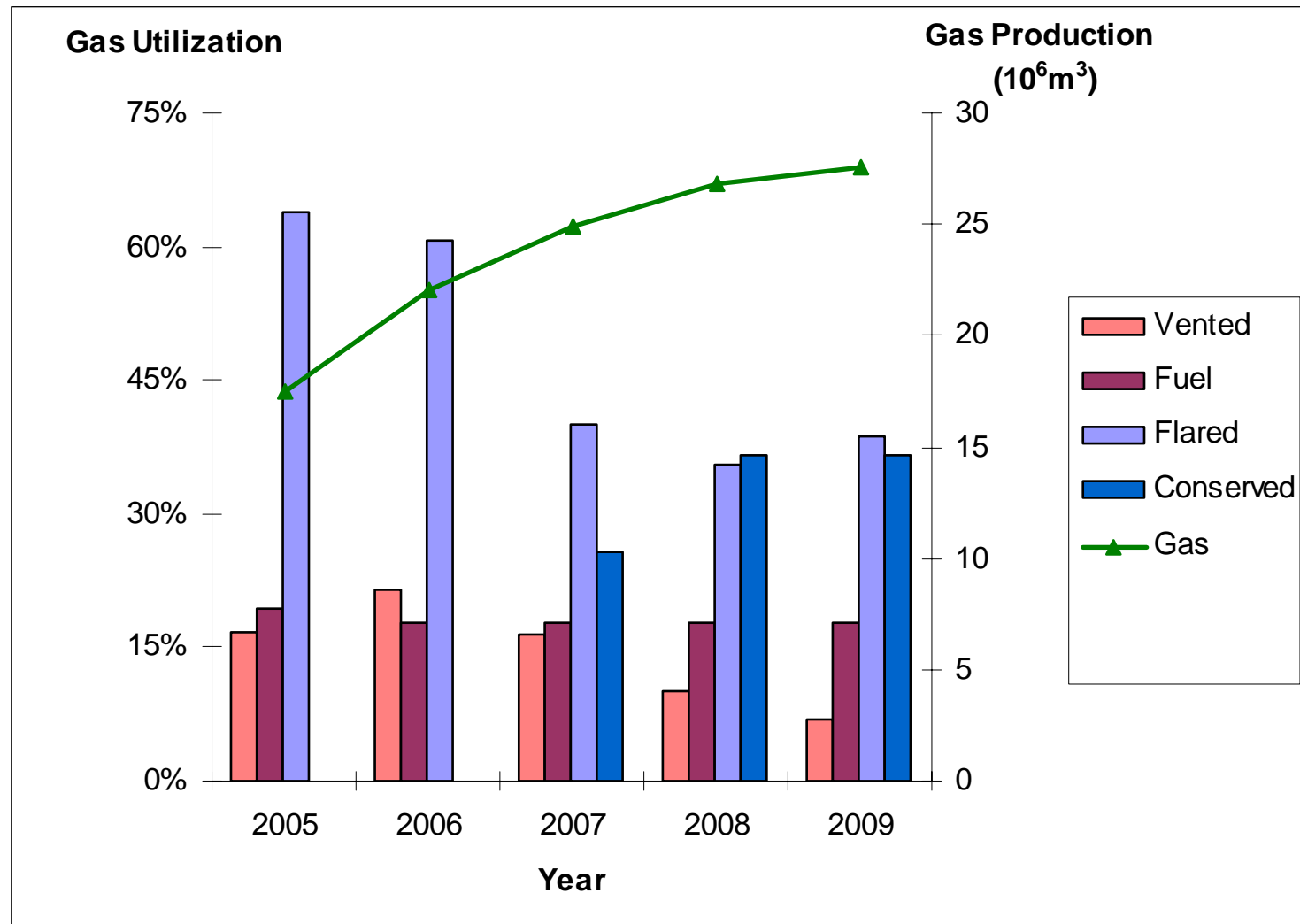
ARC

16-10-1-24

2.4 10³ m³



Manitoba Gas Utilization Forecast





www.gov.mb.ca/petroleum