

Proposed Sinclair Unit No. 7

Application for Enhanced Oil Recovery Waterflood Project

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00/12-09-008-29W1/0
KB 524.6 m
TD: 1020.0 m (TVG)
Mode Prod
TUNDRA SINCLAR 12-9-8-29 (WPM)
2027.5m to next well

00/09-16-008-29W1/0
KB 529.5 m
TD: 1055.0 m (TVG)
Mode Prod
TUNDRA SINCLAR PROV. 9-16-8-29 (WPM)
452.9m to next well

02/12-15-008-29W1/0
KB 526.9 m
TD: 993.0 m (TVG)
Mode Prod
RIDEAU SINCLAR 12-15-8-29 (WPM)
408.9m to next well

00/11-15-008-29W1/0
KB 526.1 m
TD: 993.0 m (TVG)
Mode Prod
RIDEAU SINCLAR 11-15-8-29 (WPM)
408.9m to next well

00/10-15-008-29W1/0
KB 526.1 m
TD: 993.0 m (TVG)
Mode Prod
RIDEAU SINCLAR 10-15-8-29 (WPM)
457.7m to next well

00/09-15-008-29W1/0
KB 524.6 m
TD: 994.0 m (TVG)
Mode Prod
RIDEAU SINCLAR 9-15-8-29 (WPM)
390.6m to next well

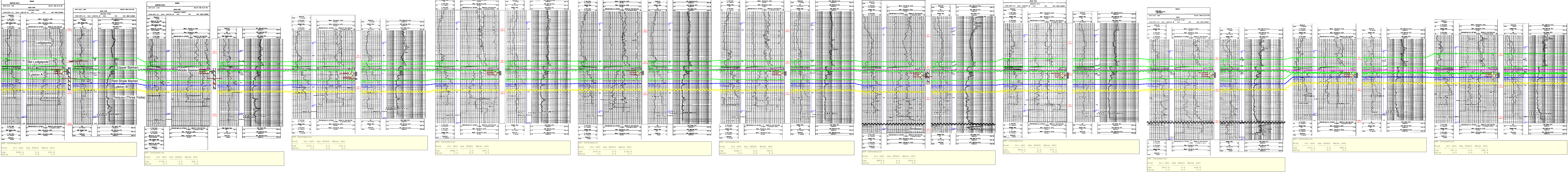
00/12-14-008-29W1/0
KB 518.5 m
TD: 1055.0 m (TVG)
Mode Prod
RIDEAU SINCLAR PROV. 12-14-8-29 (WPM)
355.6m to next well

00/11-14-008-29W1/0
KB 514.7 m
TD: 994.0 m (TVG)
Mode Prod
RIDEAU SINCLAR PROV. 11-14-8-29 (WPM)
418.5m to next well

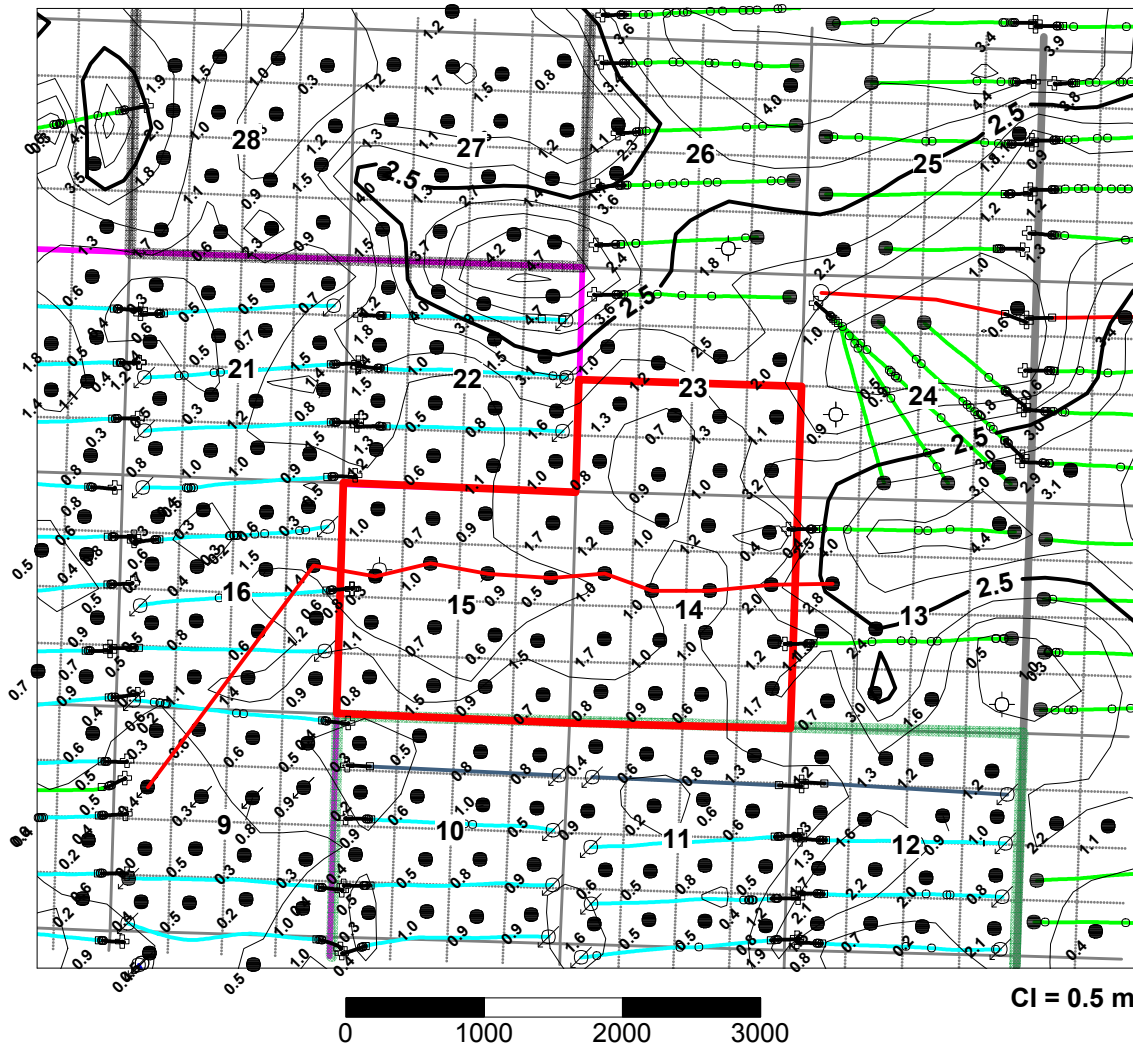
00/10-14-008-29W1/0
KB 509.3 m
TD: 994.0 m (TVG)
Mode Prod
RIDEAU SINCLAR PROV. 10-14-8-29 (WPM)
445.4m to next well

00/09-14-008-29W1/0
KB 511.4 m
TD: 975.0 m (TVG)
Mode Prod
RIDEAU SINCLAR PROV. 9-14-8-29 (WPM)
402.3m to next well

00/12-13-008-29W1/0
KB 514.5 m
TD: 975.0 m (TVG)
Mode Prod
RIDEAU SINCLAR 12-13-8-29 (WPM)
402.3m to next well



Rge 29W1M



Twp 8

CI = 0.5 m

0 1000 2000 3000

Line of Cross section

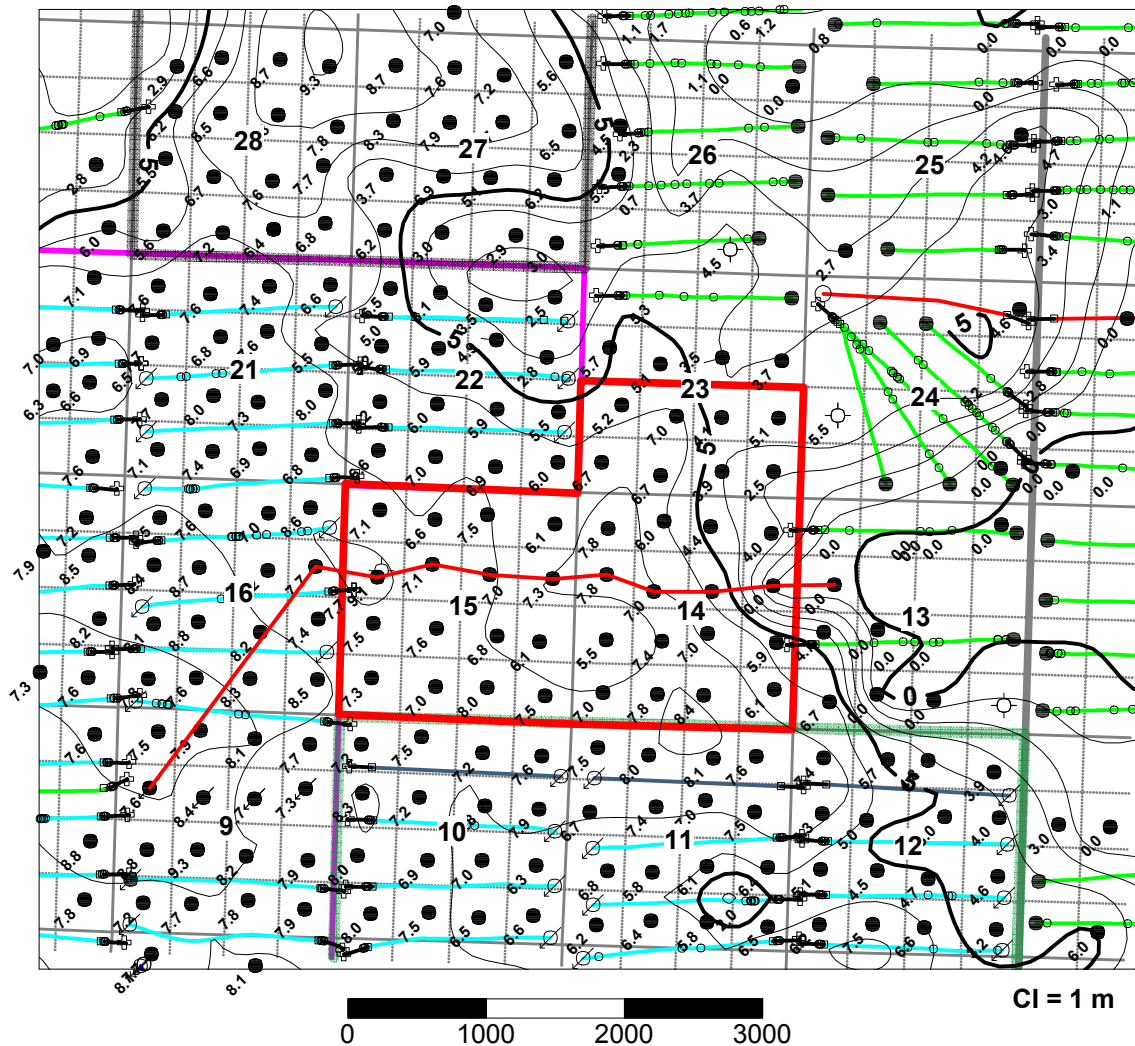
- Oilwell (including producing Hz wells)
- ✦ Abnd Oilwell
- ⊕ Hz Surface
- Intermediate Casing
- Top in Hz wellbore
- ⊗ Injector
- Location

- As Drilled Hz well
- Surveyed Hz well
- As Drilled Hz WIW
- Surveyed Hz WIW
- Unit 7 Boundary
- Unit 1 Boundary
- Unit 3 Boundary
- Unit 6 Boundary

**Proposed Sinclair Unit 7
Middle Bakken Isopach
Appendix 2**

Barry W. Larson
May 15, 2011

Rge 29W1M



Twp 8

CI = 1 m

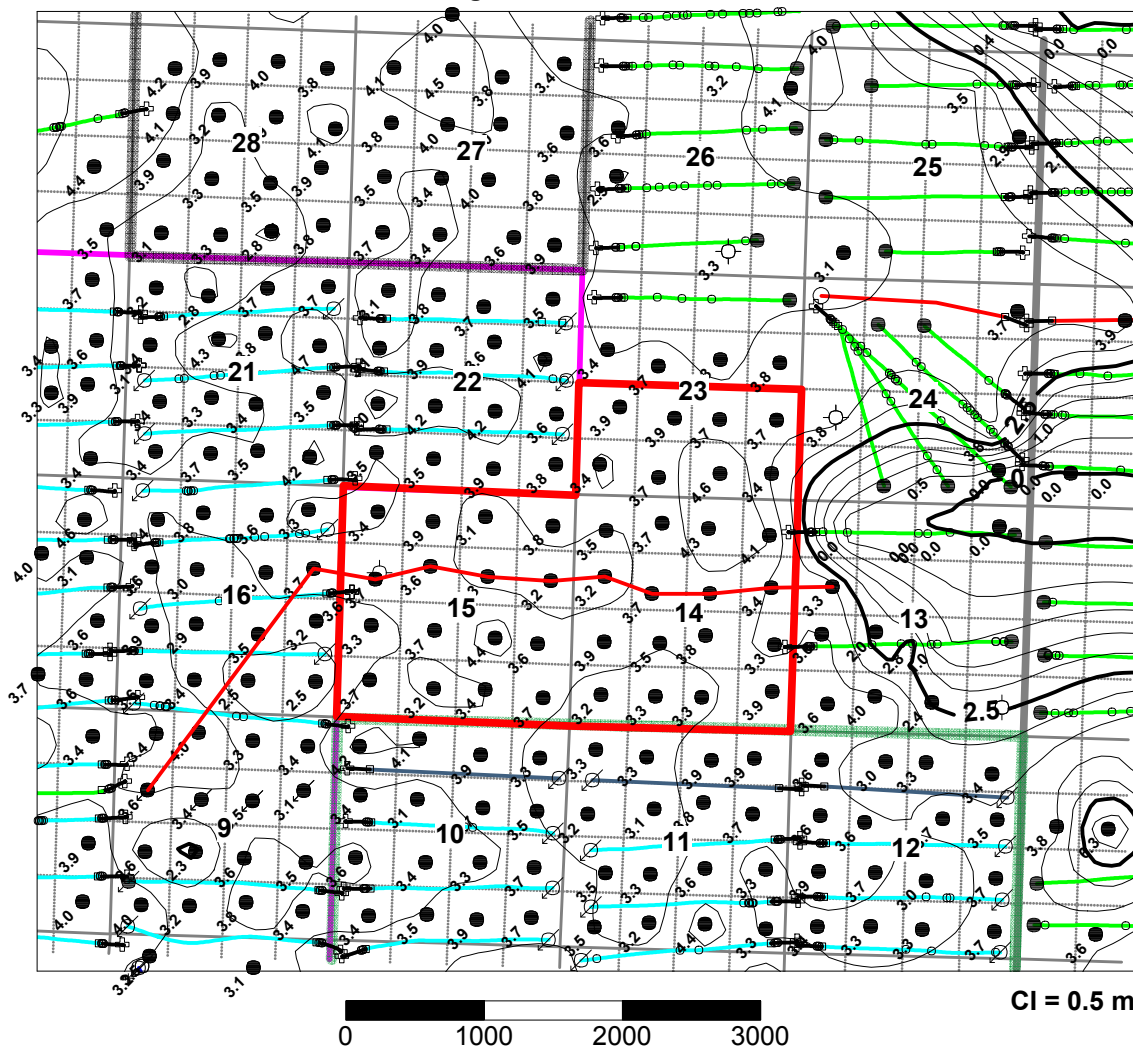
— Line of Cross section

- Oilwell (including producing Hz wells)
- ✦ Abnd Oilwell
- ⊕ Hz Surface
- Intermediate Casing
- Top in Hz wellbore
- ⊗ Injector
- Location

- As Drilled Hz well
- Surveyed Hz well
- As Drilled Hz WIW
- Surveyed Hz WIW
- Unit 7 Boundary
- Unit 1 Boundary
- Unit 3 Boundary
- Unit 6 Boundary

**Proposed Sinclair Unit 7
Lyleton A Isopach
Appendix 3**

Rge 29W1M



Twp 8

CI = 0.5 m

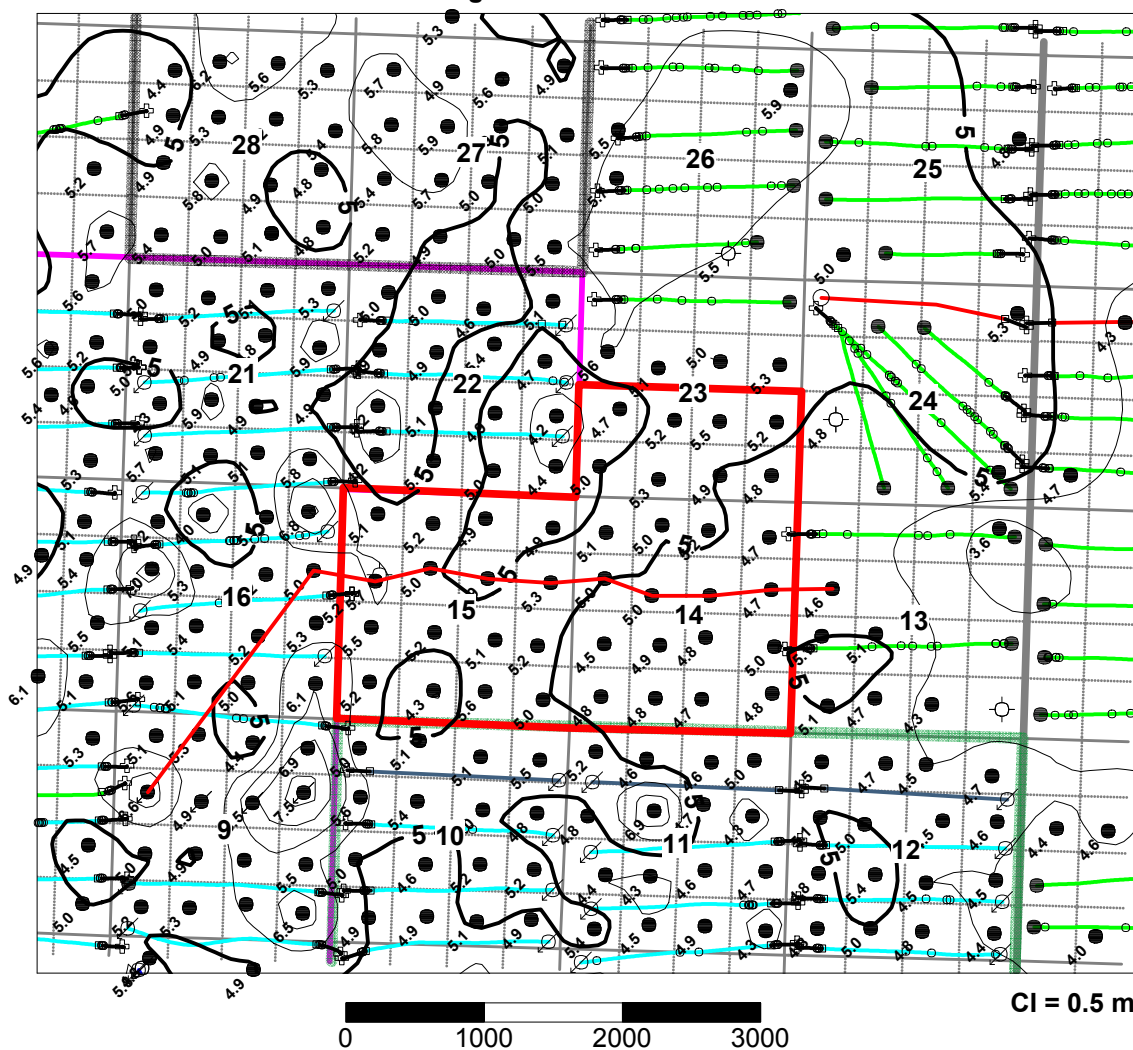
— Line of Cross section

- Oilwell (including producing Hz wells)
- ✦ Abnd Oilwell
- ⊕ Hz Surface
- Intermediate Casing
- Top in Hz wellbore
- ⌘ Injector
- Location

- As Drilled Hz well
- Surveyed Hz well
- As Drilled Hz WIW
- Surveyed Hz WIW
- Unit 7 Boundary
- Unit 1 Boundary
- Unit 3 Boundary
- Unit 6 Boundary

**Proposed Sinclair Unit 7
Red Shale Isopach
Appendix 4**

Rge 29W1M



Twp 8

CI = 0.5 m

0 1000 2000 3000

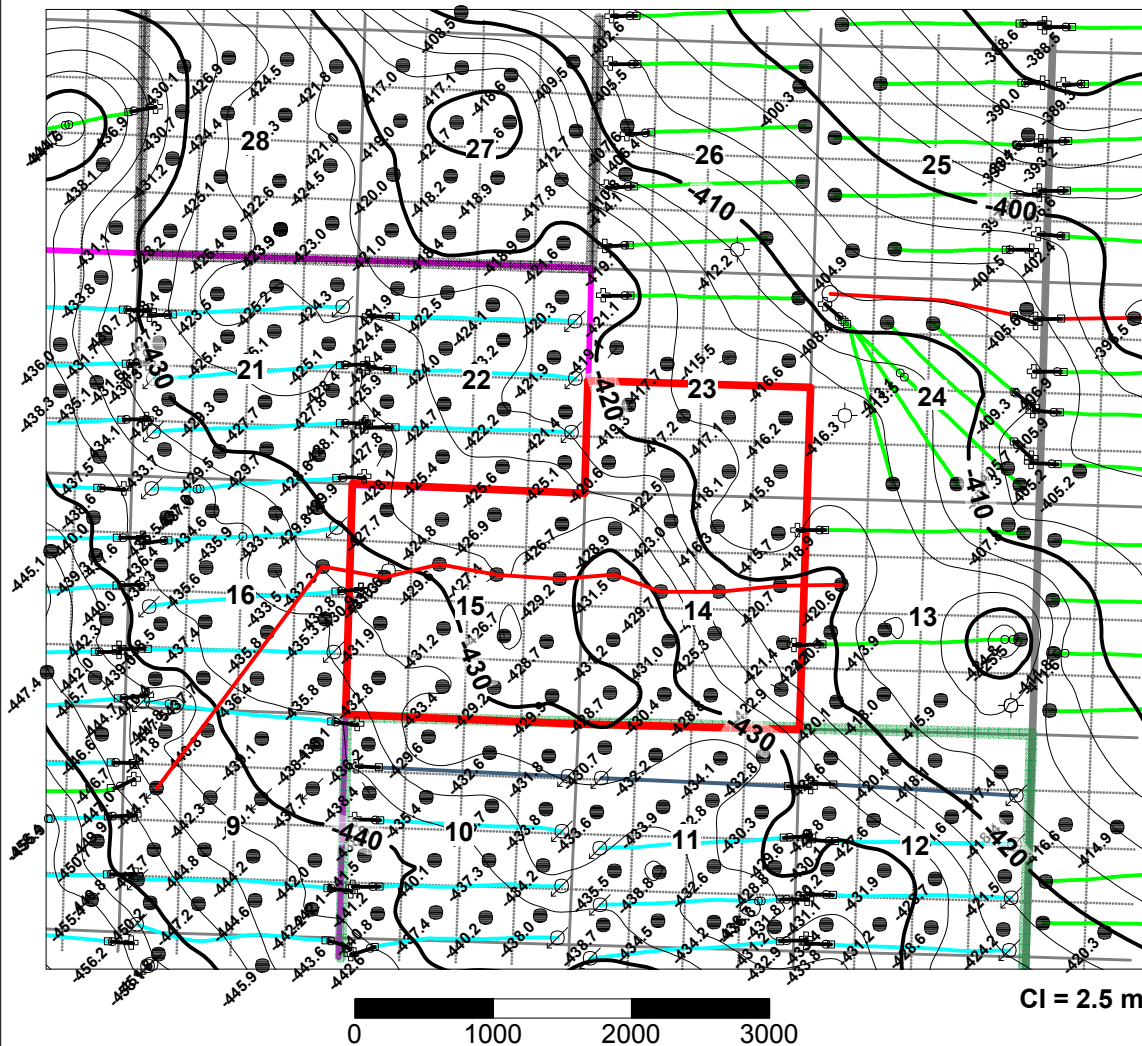
**Proposed Sinclair Unit 7
Lyleton B Isopach
Appendix 5**

— Line of Cross section

- Oilwell (including producing Hz wells)
- ✦ Abnd Oilwell
- ⊕ Hz Surface
- Intermediate Casing
- Top in Hz wellbore
- ⊗ Injector
- Location

- As Drilled Hz well
- Surveyed Hz well
- As Drilled Hz WIW
- Surveyed Hz WIW
- Unit 7 Boundary
- Unit 1 Boundary
- Unit 3 Boundary
- Unit 6 Boundary

Rge 29W1M



Twp 8

CI = 2.5 m

— Line of Cross section

● Oilwell (including producing Hz wells)

— As Drilled Hz well

◆ Abnd Oilwell

— Surveyed Hz well

⊕ Hz Surface

— As Drilled Hz WIW

□ Intermediate Casing

— Surveyed Hz WIW

○ Top in Hz wellbore

— Unit 7 Boundary

⊘ Injector

— Unit 1 Boundary

○ Location

— Unit 3 Boundary

— Unit 6 Boundary

**Proposed Sinclair Unit 7
Top Upper Bakken Structure
Appendix 6**