

MADE at the City of Calgary, in the  
Province of Alberta, on  
16th day of March 2018.



ALBERTA ENERGY REGULATOR

IN THE MATTER of a commercial scheme of Value Creation Inc. (hereinafter called “the Operator”) for the recovery of crude bitumen from the **Wabiskaw-McMurray Deposit in the Athabasca Oil Sands Area** from wells located in the project area outlined in Appendix A to this approval.

The Alberta Energy Regulator (AER), pursuant to the *Oil Sands Conservation Act*, chapter O-7 of the Revised Statutes of Alberta, 2000, orders as follows:

1) The Operator’s scheme as described in

- a) Application No. 1740902,
- b) Application No. 1843056,
- c) Application No. 1884499,

is approved, subject to the *Oil Sands Conservation Rules* and the terms and conditions herein contained.

2) Clause 1 does not preclude alterations in design and equipment, provided that the AER is satisfied that the alterations are compatible with the outline of the scheme, are made for the better operation of the scheme, and do not result in unacceptable adverse impacts.

3) (1) The Operator shall notify the AER of any proposed material alteration or modification of the scheme or to any equipment proposed for use therein prior to effecting the alteration or modification.

(2) Where, in the opinion of the AER, any alteration or modification to the scheme or to any equipment proposed for use therein:

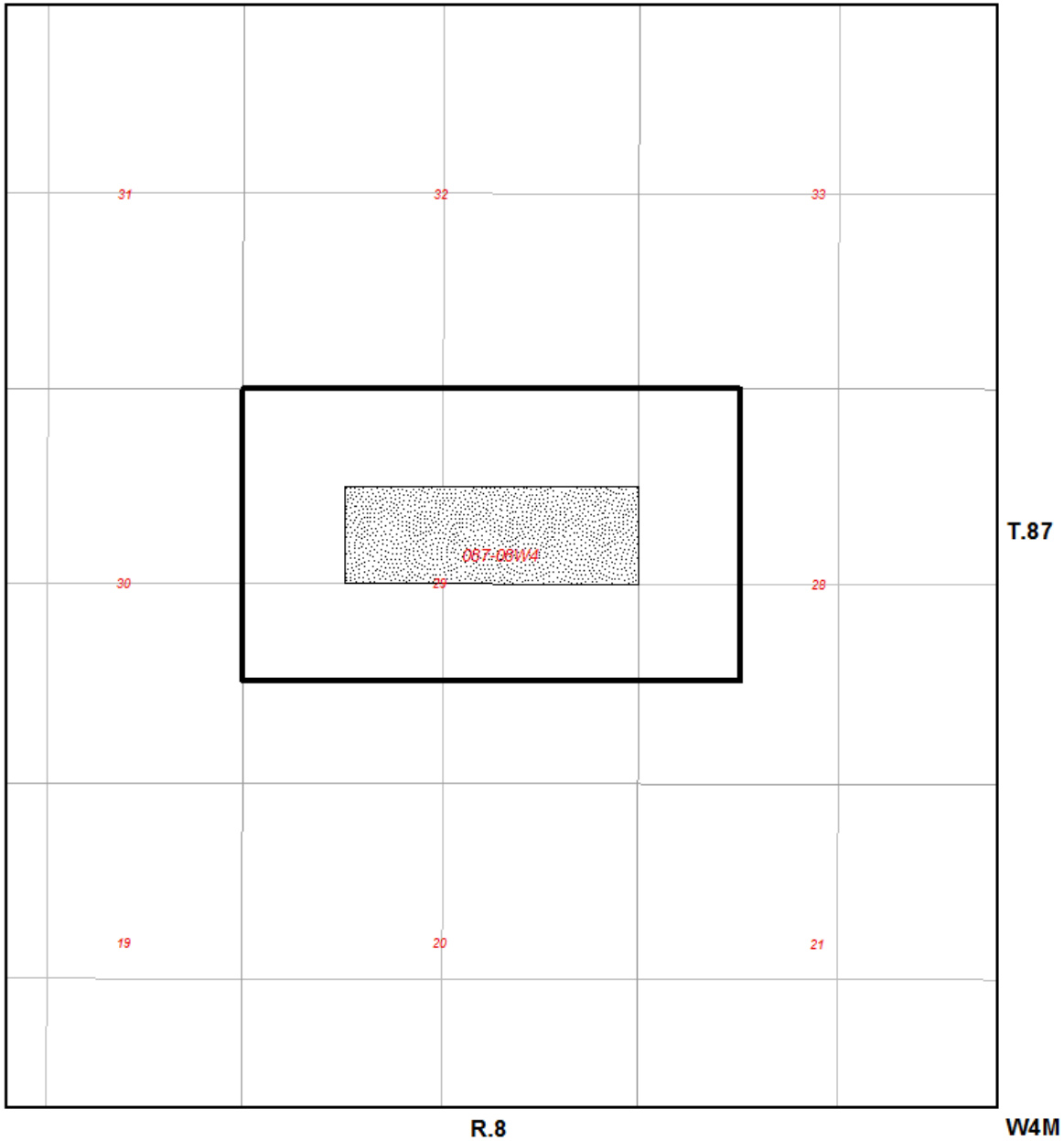
- a) is not of a minor nature,
- b) is not consistent with the scheme approved herein, or
- c) may not result in an improved or more efficient scheme or operation,

the alteration or modification shall not be proceeded with or effected without the further authorization of the AER. The Operator must provide evidence that this major alteration or modification to the scheme or to any equipment will result in a benefit to the scheme or operation and be in the public interest.

4) The recovery process approved for the Scheme is Steam-Assisted Gravity Drainage (SAGD) utilizing only steam as the injection fluid, unless otherwise stipulated by the AER.

- 5) Prior to the drilling SAGD wells in an area, all wells that could be impacted by thermal operations must be completed or abandoned in a manner that is compatible with the thermal operations. The Operator must contact the AER for discussion of and obtain approval for the manner in which to complete or abandon wells not considered to be compatible with the thermal operations.
- 6) The Operator shall ensure that sulphur recovery will be operational at the central processing facilities before total sulphur emissions from flaring and combustion of gas containing hydrogen sulphide (H<sub>2</sub>S) reach one tonne/day per site on a calendar quarter-year average basis, unless otherwise stipulated by the AER *Interim Directive (ID) 2001-03: Sulphur Recovery Guidelines for the Province of Alberta* on the basis of the calendar quarter-year daily average sulphur rate of produced and sour gas streams flared and used as fuel at the central processing facility.
- 7) The Operator shall conduct all operations to the satisfaction of the AER and in a manner that under normal operating conditions will permit:
  - a) the recovery of the practical maximum amount of crude bitumen within the project area outlined in Appendix A,
  - b) the conservation of the practical maximum volume of produced gas at the well pads and central processing facilities, and
  - c) the minimization of flaring to non-routine operations such as start-up, shutdown, emergencies, infrequent upsets, and maintenance depressuring.
- 8) The maximum bottomhole injection pressure must not exceed 1450 kPa (gauge).
- 9) Approval No. 12138B rescinds Approval No. 12138A.

END OF DOCUMENT



**ATHABASCA OIL SANDS AREA  
APPENDIX A TO APPROVAL NO. 12138B**

The AER does not warrant the accuracy or completeness of the information contained in this map and is not responsible for any errors or omissions in its content and accepts no liability for the use of this information.

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**Area(s) of Change**

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