



Application for Modification of Well Spacing in an Oil Pool

1. An application for a change in spacing under section 17 of *The Oil and Gas Conservation Act* shall, for reduced spacing, demonstrate that significant incremental reserves will be recovered which could not be recovered under the existing spacing pattern. For enlarged spacing, the application shall demonstrate that oil recovery will not be significantly affected by larger drainage units. Applications may be subject to a Public Notice in *The Saskatchewan Gazette* soliciting comments or objections. If no objections are received and the department is in concurrence with the application, a Minister's Order will be issued effective on the first day of the month after the review is completed.
 2. A submission in support of an application shall contain, where possible:
 - (a) Performance history for the pool, complete with production history charts.
 - (b) Well productivity data (including productivity index).
 - (c) A map of the area in question showing all wells and their present status (producing, abandoned, etc.).
 - (d) Static bottom hole pressure survey data, including pressure build-up test data and illustrative curves (initial and current pressures).
 - (e) A map of the area in question showing mineral and working interest ownership.
 - (f) Interference test data, including flowing bottom-hole pressures and pressure charts, showing that no interference will occur in varying directions.
 - (g) Areal and vertical pulse tests to determine the horizontal and vertical permeability and reservoir continuity.
 - (h) Detailed reservoir characteristics, including rock and fluid data and probable drive mechanisms.
 - (i) Lithological cross-section and/or fence diagrams based on a subsea datum.
 - (j) A geological study of the depositional environment.
 - (k) Isopach maps of the area (including oil net pay) and a structure map.
 - (l) An isopermeability map (horizontal permeability) indicating approximate average vertical and horizontal permeability, from core analysis.
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- (m) Estimates of original oil-in-place, existing recoverable reserves, and the effect on oil recovery due to the spacing change.
 - (n) If there is an enhanced oil recovery project in the area in question, explain the effect of additional producing wells (reduced spacing).
 - (o) Common operator consensus for spacing change and the reasons if consensus cannot be obtained.
 - (p) An estimate of the number of wells to be drilled and their locations.
 - (q) The results of comparable programs in similar reservoirs.
3. The submission shall be in written and illustrated form, signed by an officer of the company making the application, and appropriately bound.
 4. The applicant shall, upon request, provide additional copies of the submission to any owners or operators directly affected.
 5. Submit two (2) copies of each application to:

Engineering Services Branch
Saskatchewan Industry and Resources
200 - 2101 Scarth Street
Regina, Saskatchewan S4P 2H9
 6. For further information contact Ken Kowal at (306) 787-8584 or Jane McLeod at (306) 787-7622.