Holter Collection Finding Aid

The reports in this collection are divided into seven groups based on the mineral type or broad topic of the reports.

Reports are arranged in the cabinets based on the number assigned.

Mineral Type or Topic of Reports:

	Page #
1. Potash	1
2. Silica sand	8
3. Industrial minerals/rocks	8
4. Slope stability/terrane analysis	9
5. Miscellaneous	13
6. Coal	13
7. Oil and Gas	19

Potash

- Calcium and Magnesium in Alberta Brines (with B. Hitchon);
 Research Council of Alberta Geology Report No.1, 1971.
- 2. Geological Criteria for the Location Of Economic Potash Deposits; CIMM Bull., June 1971.
- 3. Geology of the Prairie Evaporite Formation of Saskatchewan, Canada; *in* Geology of Saline Deposits, Proceedings of the 1968 Hanover Symposium, 1972.
- 4. Composite Geological Logs for Salt Cavern Testholes, Home *et al* Canso Strat No. 3A and Home *et al* Canso Strat No. 4B, prepared for Home Oil Co., 1978.
- Alternatives to Present Potash Mining Practices in Canada; final report by Montreal Engineering Company; for Canada Centre for Mineral and Energy Technology, Energy, Mines and Resources Canada, December 1984.
- 6. Salt Solution Study for Southeastern Saskatchewan A Guide for Oil and Gas Exploration; prepared for non-exclusive distribution, 1984.
 - **6-1.** Normal Area; Standard Listing; Salt Solution Study for Southeastern Saskatchewan, 1984.
 - **6-2. Map:** Figure 1 Location Map, Figure 2 Stratigraphic Table; Salt Solution Study for Southeastern Saskatchewan; A Guide for Oil and Gas Exploration, 1984.
 - **6-3. Map:** Figure 3; Regional Geology; Salt Solution Study for Southeastern Saskatchewan, 1984.
 - **6-4. Map:** Figure 4; North-South Cross Section; Salt Solution Study for Southeastern Saskatchewan, 1984.
 - **6-5. Map:** Figure 5; Total Well Control; Salt Solution Study for Southeastern Saskatchewan, 1984.
 - **6-6. Map:** Figure 6; Well Control for Study, Lines of Cross Section; Salt Solution Study for Southeastern Saskatchewan, 1984.
 - **6-7. Map:** Figure 7; Regional Cross Sections; Salt Solution Study for Southeastern Saskatchewan, 1984.

- **6-8. Map:** Figure 8; Composite Seismic Map on Approximate Top of the Paleozoic Erosion Surface; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-9. Map:** Figure 9; Seismic Contour Map on Approximate Top of the Birdbear Formation; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-10. Map:** Figure 11; Reference Well Imperial Halkett No. I5-7-3-8 Ctr. Lsd. I5-7-3-8W2; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-11. Map:** Figure 12; Devonian Geology; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-12. Map:** Figure 13; Structure Contour Map on top of the Winnipegosis Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-13. Map:** Figure 14; Isopach Map of the Winnipegosis Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-14. Map:** Figure 15; Structure Contour Map on top of the Prairie Evaporite Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-15. Map:** Figure 16; Isopach Map of the Prairie Evaporite Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-16. Map:** Figure 17; Structure Contour Map on top of the Souris River Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-17. Map:** Figure 18; Isopach Map of the Souris River and Dawson Bay Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-18. Map:** Figure 19; Structure Contour Map on top of the Birdbear Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-19. Map:** Figure 20; Isopach Map of the Duperow and Birdbear Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-20. Map:** Figure 21; Structure Contour Map on top of the Bakken Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-21. Map:** Figure 22; Isopach Map of the Torquay and Bakken Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.

- **6-22. Map:** Figure 23; Structure Contour Map on top of the Souris Valley Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-23. Map:** Figure 24; Isopach Map of the Souris Valley Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-24. Map:** Figure 25; Structure Contour Map on top of the Frobisher-Alida-Tilston Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-25. Map:** Figure 26; Isopach Map of the Frobisher-Alida-Tilston Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-26. Map:** Figure 27; Structure Contour Map on top of the Uppermost Mississippian Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-27. Map:** Figure 28; Isopach Map of the Uppermost Mississippian Fms.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-28. Map:** Figure 29; Structure Contour Map on top of the Lower Watrous Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-29. Map:** Figure 30; Isopach Map of the Lower Watrous Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-30. Map:** Figure 31; Structure Contour Map of the Rierdon Marker; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-31. Map:** Figure 32; Structure Contour Map on top of the Jurassic; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-32. Map:** Figure 33; Isopach Map of the Upper Part of the Jurassic; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-33. Map:** Figure 34; Structure Contour Map on top of the Mannville Group; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-34. Map:** Figure 35; Isopach Map of the Mannville Group; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-35. Map:** Figure 36; Structure Contour Map on top of the Lower Colorado Fm.; Salt Solution Study for Southeastern Saskatchewan, 1984.

- **6-36. Map:** Figure 37; Isopach Map of the Lower Colorado Group; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-37. Map:** Figure 38; Isopach Map of the Bakken to Lower Colorado Interval; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-38. Map:** Figure 39; Summary of Structural Anomalies; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-39. Map:** Figure 40; Summary of Thickness Anomalies; Salt Solution Study for Southeastern Saskatchewan, 1984.
- **6-40. Map:** Figure 41; Summary of Seismic Anomalies; Salt Solution Study for Southeastern Saskatchewan, 1984.
- Synopsis of a Salt Solution Study for Southeastern Saskatchewan

 A Guide for Oil and Gas Exploration; prepared for selective sale by:
 Minprobe Consultants Ltd., 1984.
- 8. Hydrogeological Study of the Rocanville Mine (with L.W. Vigrass and K. Hutchence); internal study prepared for the Potash Corporation of Saskatchewan Limited, 1985.
- 9. Reviews of a Potash Exploration Program in the Canning Basin, Western Australia; internal studies prepared for the Broken Hill Proprietary Co. Ltd., 1986, 1987.
- Cross Sections through the Dawson Bay Formation, I.M.C. K-2 Min, Esterhazy, Saskatchewan; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1987.
- Geological Conditions in the Problematic Inflow Area of the I.M.C. K-2 Mine; Esterhazy, Saskatchewan; internal study prepared for International Minerals and Chemical Corporation (Canada) Ltd., 1987.
- 12. Grout Acceptability Factors for the Dawson Bay Formation in the Problematic Inflow Area of the I.M.C. K-2 Mine; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1987.
- 13. Geological Risk Comparison: I.M.C. to P.C.S. Rocanville Mines, Saskatchewan; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1988.

- An Analysis of Drilling Problems in the B and C Inflow Areas, I.M.C. K-2 Mine, Saskatchewan; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1989.
- 15. Drilling, Coring, and Testing Procedures at the I.M.C. K-2 Mine, 1986 to 1988 Inclusive; internal study for the International Minerals and Chemical Corporation (Canada) Ltd., 1989.
- 16. A Review of Core Fracture Analyses, I.M.C. K-2 Mine, Esterhazy, Saskatchewan; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1989.
- 17. Structural and Thickness Features of Strata Overlying the Mining Zone with the I.M.C. Mine Inflow Area; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1989.
- 18. A Comparative Study of Geophysical Survey Results and Geological Conditions; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1990.
- 19. A Review of Potential Shaft Conditions at the I.M.C. Gerald 1c-13-20-32 Test Site; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1990.
- 20. A Review of Potential Shaft Conditions at the I.M.C. Gerald 10d-13-20-32 Test Site *with* Well History and Engineering Report; internal study prepared in cooperation with C.W. Cawston and Associates for the International Minerals and Chemical Corporation (Canada) Ltd., 1990.
- 21. An Evaluation of Alberta Limestones for use as Paper Filler Materials; Alberta Research Council open File Report 1990-11.
- 22. An Evaluation of a Proposed Potash Mining Area East of the Current I.M.C. Operations; Esterhazy, Saskatchewan; internal study prepared for the International Minerals and Chemical Corporation (Canada) Ltd., 1991.
- 23. A Review of Potential Shaft Conditions at the I.M.C. Gerald 5a-17-20-31 Test Site; internal study for International Minerals and Chemical Corporation (Canada) Ltd., 1991.
- 24. Geotechnical Site Investigation of the C and G Timber "North 40" Harvest Unit on Lookout Mountain, Whatcom County; prepared for C and G Timber, Inc., May 2004.

- 25. Summary of Geological Assessment Work on Acron Potash Permits in South Central Saskatchewan; prepared for: JSC Acron, 2007.
- 26. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No. 379 within the Homefield, Saskatchewan Area; prepared for: JSC Acron, 2008.
- 27. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit Nos. KP-423 to -429 Incl. within the Rosetown, Saskatchewan Area; prepared for: Agracity Ltd., 2008.
- 28. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-501 within the Rosetown, Saskatchewan Area; prepared for: 101119529 Saskatchewan Ltd., 2008.
- 29. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No, 380 within the Parkerview, Saskatchewan Area; prepared for: JSC Acron, 2009.
- 30. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No. 385 within the Hanley, Saskatchewan Area; prepared for JSC Acron, 2009.
- 31. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No. 388 within the Clavet, Saskatchewan Area; prepared for JSC Acron, 2009.
- 32. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No. 393 within the Cupar, Saskatchewan Area; prepared for JSC Acron, 2009.
- 33. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No. 401 within the Raymore, Saskatchewan Area; prepared for JSC Acron, 2009.
- 34. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit No. 410 within the Biggar, Saskatchewan Area; prepared for JSC Acron, 2009.
- 35. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit Nos. KP-361 to -370 Incl. within the Davidson, Saskatchewan Area; prepared for: JSC Acron, 2009.

- 36. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit Nos. KP-382 and -383 within the Foam Lake, Saskatchewan Area; prepared for JSC Acron, 2009.
- 37. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-431 within the Yorkton, Saskatchewan Area; prepared for: Agrikalium Mining Corporation, 2009.
- 38. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-432 within the Yorkton, Saskatchewan Area; prepared for: Agrikalium Mining Corporation, 2009.
- 39. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-433 within the Yorkton, Saskatchewan Area; prepared for: Agrikalium Mining Corporation, 2009.
- 40. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit Nos. KP-430 to -433 Inclusive within the Yorkton, Saskatchewan Area; prepared for: Agricity Potash Inc., 2009.
- 41. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-502 within the Rosetown, Saskatchewan Area; prepared for: 101119529 Saskatchewan Ltd., 2009
- 42. A Review of Acron Potash Permit Holdings in South Central Saskatchewan; prepared for: JSC Acron, May, 2009.
- 43. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-430 Within the Yorkton, Saskatchewan Area; prepared for: Agrikalium Mining Corporation, July 2010.
- 44. 43-101 Formatted Technical Report for Potash Subsurface Mineral Permit KP-503 within the Rosetown, Saskatchewan Area; prepared for: 101119529 Saskatchewan Ltd., 2010.
- 45. Geological Assessment of Potash Subsurface Mineral Permit No. 400 within the Outlook, Saskatchewan Area; prepared for JSC Acron, June 2010.
- 46. Geological Assessment of Subsurface Mineral Permit KP-421 within the Round Lake, Saskatchewan Area; prepared for JSC Acron, July 2010.

Silica Sand

47. Gravel and Sand Resources of the Grande Prairie Area; Research Council of Alberta, October, 1972.

Industrial Minerals/Rocks

- 48. Limestone Resources of Alberta, CIMM Bull., March. 1973, also *in* Proceedings Volume on the Eleventh Forum on the Geology of Industrial Minerals, 1974.
- 49. Marl Deposits of the Hand Hills Area; Alberta Research Council Open File Report 1974-36.
- 50. Marl Deposits of the Grande Prairie Peace River Areas; Alberta Research Council Open File Report 1974-37.
- 51. Gravel Resources of the Red Deer Area; Alberta Research Council Report 75-3, 1975. . Q21 .R42A3
- 52. Limestone Resources of Alberta; Alberta Research Council Economic Geology Report No. 4, 1976.
- 53. A Review of Alberta Limestone Production, Marketing, Distribution and Future Development Possibilities; report prepared for the Canada-Alberta Partnership on Minerals program; Canada Natural Resources/Alberta Geological Survey, 1994.
- 54. Summary Review of the Mount Paulson, Nordegg, and Grotto Mountain Limestone Deposits; internal study prepared for Westmin Resources, 1994.
- 55. Assessment of the Limestone Resources of Lot 315, Rupert Inlet Area, Vancouver Island, B.C.; internal study prepared for Western Forest Products Limited, 1995.

Slope Stability/Terrain Analysis

- 56. Preliminary Review of a Proposed Port and Industrial Park Facility at Cherry Point, Whatcom County, Washington; internal study for Cherry point Industrial Park Inc., 1992.
- 57. Mid-Season Status of the 1996 1997 Watershed Restoration Program; internal report, July, 1996.
- 58. A Proposal to Stabilize Road-Induced Slope Hazards with Explosives in the McTavish Creek Area; internal report, September, 1996.
- 59. A Review of Terrain Conditions in the Nicknaqueet River Watershed, MidCoast Forest District; internal report prepared for Ministry of Forests and the Oweekeno Nation, 1997.
- 60. A Review of Terrain Conditions in the Noeick River Watershed; internal report prepared for International Forest Products Ltd., 1997.
- 61. Late Season Status Report for the 1996 1997 Watershed Restoration Program in the MidCoast Forest District; internal report, February, 1997.
- 62. Pre-Layout Terrain Stability Assessment, Nootka Island Proposed Cutblock B201; internal report prepared for Nootka First Nations Forest Products Ltd., 1997.
- 63. Pre-Layout Terrain Stability Assessment, Nootka Island Proposed Cutblock B204; internal report prepared for Nootka First Nations Forest Products Ltd., 1997.
- 64. Post-Layout Terrain Stability Assessment, Bligh Island Proposed Cutblock A201; internal report prepared for Nootka First Nations Forest Products Ltd., 1997.
- 65. Post-Layout Terrain Stability Assessment, Bligh Island Proposed Cutblock A202; internal report prepared for Nootka First Nations Forest Products Ltd., 1997.
- 66. Road and Hillslope Prescriptions for the Call Inlet Area; Internal report prepared for Timfor Contractors Ltd., 1997.

- 67. Road Assessment, Lignite Mainline Proposed Spur 49; internal report prepared for Husby Forest Products Ltd., 1997.
- 68. Terrain Assessments for Selected Watersheds within the Bella Coola Drainage System; internal reports prepared for International Forest Products Ltd., 1997.
 - 68-1. Part 1: Report Outline
 - 68-2. Part 2: Clayton Falls Creek
 - 68-3. Part 3: Salloompt River
 - 68-4. Part 4: Nusatsum River
 - 68-5. Part 5: Noosgulch River
 - 68-6. Part 6: Noomst Creek, McCall Flats
- 69. Terrain Assessments of Cut Blocks A to J, Smith Inlet Area, Midcoast Forest District; internal report, February, 1997.
- 70. A Report on Landslide Rehabilitation Assessment Procedures for the Davidson Creek and Naden River Watersheds, Queen Charlotte Islands; internal report prepared for Husby Forest Products Ltd., 1998. 3 parts:
 - **70-1.** Part A- General Data; A Report on Landslide Rehabilitation Assessment Procedures for the Davidson Creek and Naden River Watersheds, Queen Charlotte Islands;internal report prepared for Husby Forest Products Ltd., 1998.
 - **70-2.**; Part B- Davidson Creek Watershed; A Report on Landslide Rehabilitation Assessment Procedures for the Davidson Creek and Naden River Watersheds, Queen Charlotte Islands; internal report prepared for Husby Forest Products Ltd., 1998.
 - **70-3.** Part C- Naden River Watershed; A Report on Landslide Rehabilitation Assessment Procedures for the Davidson Creek and Naden River Watersheds, Queen Charlotte Islands; internal report prepared for Husby Forest Products Ltd., 1998.
- 71. Detailed Terrain Assessments of the Noosgulch River Watershed; internal report prepared for International Forest Products Ltd., 1998.
- 72. Geotechnical Assessment of the D.A. Gibson Property near Hagensborg, B.C.; private report prepared for D.A. Gibson for submission to the Ministry of Transportation and Highways, 1998.
- 73. Overview (Level 1) Assessment of the Machmell Branch M-100 Project Area, MidCoast Forest District; internal report prepared for Western Forest Products Ltd., 1998.

- 74. Overview (Level 1) Assessment of the Milton-Inrig Watershed; internal report prepared for Western Forest Products Ltd., 1998.
- 75. Overview (Level 1) Assessment of the Sheemahant West Main Project Area, MidCoast Forest District; internal report prepared for Western Forest Products Ltd., 1998.
- 76. Post-Layout Terrain Stability Assessment, Bligh Island Proposed Cutblock A200; internal report prepared for Nootka First Nations Forest Products Ltd., 1998.
- 77. Project Management Report for the 1998 Nicknaqueet Watershed Restoration Program Part 1: Report Text; prepared for Oweekeno Nation, 1998.
- 78. Project Management report for the 1998 Nicknaqueet Watershed Restoration Program Part 2: Addendum; prepared for Oweekeno Nation, 1998.
- 79. Certification Report for the 1998 Road Deactivation Program, Noosgulch River Watershed; internal report prepared for the International Forest Products Ltd., 1999.
- 80. Certification Report for Road Prescriptions for the Clayton Falls Creek Watershed; internal report prepared for International Forest Products Ltd., 1999.
- 81. Interior Watershed Assessment Procedures for the Intlpam Creek Area; internal report prepared for Ainsworth Lumber Co. Ltd., B.C., 1999.
- 82. Post-Layout Terrain Stability Assessment, Phinney Creek, Proposed Cutblock P624; internal report prepared for Western Forest Products Ltd., 1999.
- 83. Post-Layout Terrain Stability Assessment, Phinney Creek, Proposed Cutblock P627; internal report prepared for Western Forest Products Ltd., 1999.
- 84. Post-Layout Terrain Stability Assessment, Phinney Creek, Proposed Cutblock P632B; internal report prepared for Western Forest Products Ltd., 1999.

- 85. Road Deactivation Certification for the 1999 Clayton Falls Creek Watershed Restoration Program; Bella Coola area, B.C.; internal report for International Forest Products Ltd., 1999.
- 86. Road Prescription Certification for the 1999 McCall Flats Watershed Restoration Program; Bella Coola area, B.C.; internal report for International Forest Products Ltd., 1999.
- 87. Road Prescription Certification for the 1999 Noomst Creek Watershed Restoration Program; Bella Coola area, B.C.; internal report for International Forest Products Ltd., 1999.
- 88. Road Deactivation Certification for the 1999 Noosgulch River Watershed Restoration Program; Bella Coola area, B.C.; internal report for International Forest Products Ltd., 1999
- 89. Terrain Stability Assessment of Cutblock 2 in the Owlhead Creek Area; internal report prepared for the Salmon Arm District of the B.C. Ministry of Forests, 1999.
- 90. Terrain Stability Assessment of Cutblock 2 in the Wilson Creek Area; Internal report prepared for the Salmon Arm District of the B.C. Ministry of Forests, 1999.
- 91. Historical Map and Air Photo Atlas of the Nooksack River Delta, June, 2000; internal report.
- 92. Proposed Work Plan for Monitoring of Nooksack River Delta Channels, prepared by M. Holter/G. Dunphy; internal report, 2000.
- 93. Field Observations Boulder Creek Bridge Replacement Site prepared by M.E. Holter; internal report, 2001.
- 94. Photo Monitoring of the Larson's Reach Engineered Log Jams on the South Fork Nooksack River, 2001; internal report.
- 95. Photo Monitoring of the Larson's Reach Engineered Log Jams on the South Fork Nooksack River, 2003; internal report.

<u>Miscellaneus</u>

96. The Oldman Lead-Zinc Occurrence, Southwestern Alberta; Bull. Of Canadian Petroleum Geology, Vol. 25, 1977. TN 873.C2A3

Coal

- 97. Estevan Coal Study by M.E. Holter, 1969.
- 98. Coal Seams of the Estevan Area, Saskatchewan; CIMM Bull., August 1972, also *in* Proceedings of the First Conference on Western Canadian Coal, 1972.
- 99. Geology of the Luscar (Blairmore) Coal Beds, Central Alberta Foothills (with G.B. Mellon); *in* Proceedings of the First Geological Conference on Western Canadian Coal, 1972.
- 100. Coal Analysis from Well Logs (with J. Kowalski); CIMM Bull., June, 1976, *also* AIME Paper SPE 5503, 1975.
- 101. Geology and Coal Resources of the Ardley Coal Zone of Central Alberta (with J.R. Yurko and M. Chu); Alberta Research Council Report 75-7, 1975. . Q21 .R42A3
- 102. Geology and Coal Resources of the Horseshoe Canyon Formation of Central Alberta (with M. Chu and J.R. Yurko); Alberta Research Council Open File Report 1976-16.
- 103. Geology and Coal Resources of Southeastern Alberta by M.E. Holter and M. Chu; Alberta Research Council, 1977.
- 104. Coal Quality Report for the Highvale Mine, Alberta; prepared for Calgary Power Ltd., 1978.
- 105. Evaluation of Sodium Oxide and Potassium Oxide Contents of Coal Ash from the Keephills Area of the Highvale Mine; prepared for Calgary Power Ltd., 1978.
- 106. Geology and Coal Resources of the Wapiti Formation of North Central Alberta by M. Chu; Alberta Research Council, 1978.

- 107. Coal Subcrop Study for the Highvale Mine; prepared for Calgary Power Ltd., 1979.
- 108. Geological Monitoring of Test Burn Pit, Sheerness, Alberta; prepared for Alberta Power Ltd., 1979.
- 109. Evaluation of Coal Resources at the Proposed Site of the Alberta Power Ltd. Thermal Plant, Sheerness, Alberta; prepared for Alberta Power Ltd., 1979.
- 110. Judy Creek North Coal Reserves Coal Exploration Report; prepared for Esso Minerals Canada Ltd., 1978.
- 111. Geological Report for the Bukit Asam Mine, Indonesia; prepared for P.M. Batubara, 1979.
- 112. Surface Mining Evaluation, Point Aconi, Nova Scotia Phase 2 (Geological Contributions); prepared for NOVACO, 1979.
- 113. A Coal Lease Evaluation Study for the South Horseshoe Canyon Coal Area; prepared for non-exclusive distribution, 1980.
 - **113-1. Map:** Depth to Base of Horseshoe Canyon Formation; South Horseshoe Canyon Coal Area.
 - **113-2. Map:** Testhole Control (South Sheet); South Horseshoe Canyon Coal Area.
 - **113-3. Map:** Testhole Control (Central Sheet); South Horsehshoe Canyon Coal Area.
 - **113-4. Map:** Testhole Control (North Sheet); South Horseshoe canyon Coal Area.
 - **113-5. Map:** Oil and Gas Testholes; South Horseshoe Canyon Coal Area.
 - 113-6. Map: Pipe Lines; South Horseshoe Canyon Coal Area.
 - **113-7. Map:** Topography and Access; South Horseshoe Canyon Coal Area.
 - 113-8. Map: Location Map; South Horseshoe Canyon Coal.
 - **113-9. Map:** Coal Lease Evaluation Study Cover Sheet.

- **113-10. Map:** Recreational Areas; South Horseshoe Canyon Coal Area
- 113-11. Map: Coal Mines; South Horseshoe Canyon Coal Area
- **113-12. Map:** Coal Testhole Control; South Horseshoe Canyon Coal Area
- 113-13. Map: Lease Overlay
- **113-14. Map:** Section G-L; South Horseshoe Canyon Coal Area
- **113-15. Map:** Section M-P and Section S-T; South Horseshoe Canyon Coal Area
- 113-16. Map: Section Q-R; South Horseshoe Canyon Coal Area
- 113-17. Map: Cross Sections; South Horseshoe Canyon Coal Area
- 113-18. Map: Section A-B; South Horseshoe Canyon Coal Area
- 113-19. Map: Section 3-4; South Horseshoe Canyon Coal Area
- **113-20. Map:** Section 7-8; South Horseshoe Canyon Coal Area
- 113-21. Map: Section 9-10; South Horseshoe Canyon Coal Area
- **113-22. Map:** Supplementary Cross Sections; South Horseshoe Canyon Coal Area
- **113-23. Map:** Surficial Geology; South Horseshoe Canyon Coal Area
- **113-24. Map:** Bedrock Geology; South Horseshoe Canyon Coal Area
- **113-25. Map:** Shallow Coal Resources; South Horseshoe Canyon Coal Area
- **113-26. Map:** Deep Coal Resources; South Horseshoe Canyon Coal Area
- **113-27. Map:** Isopach Map of Byemoor Zone; South Horseshoe Canyon Coal Area
- **113-28. Map:** Isopach Map of Drumheller Zone; South Horseshoe Canyon Coal Area

- **113-29. Map:** Isopach Map of Clover Bar Zone; South Horseshoe Canyon Coal Area
- **113-30. Map:** Geophysical Log Profiles; South Horseshoe Canyon Coal Area
- 113-31. Map: Mine Analyses; South Horseshoe Canyon Coal Area
- 113-32. Map: Testhole Analyses; South Horseshoe Canyon Coal Area
- 113-33. Map: Core Descriptions; South Horseshoe Canyon Coal Area
- **113-34. Map:** Lease Overlay Central; South Horseshoe Canyon Coal Area
- **113-35. Map:** Lease Boundary Overlay; South Horseshoe Canyon Coal Area
- **113-36. Map:** Lease Overlay North; South Horseshoe Canyon Coal Area
- **113-37. Map:** Lease Overlay South; South Horseshoe Canyon Coal Area
- 114. Coal Quality Evaluation for the Sheerness Coal Field, Alberta; prepared for Alberta Power Ltd., 1980.
- 115. A Coal Quality Evaluation of the Blackfoot Coal Field, Alberta; prepared for Crows Nest Resources Ltd., 1981.
- 116. Geological Evaluation of the Buffalo Hill Coal Deposit, Alberta; prepared for Seagull Resources Ltd., 1981.
- 117. Evaluation of a PanCanadian Coal Property, South Central Alberta; prepared for Gulf Canada Resources Inc., 1981.
- 118. An Evaluation of Alberta Foothills Coal Properties; prepared for Gulf Canada Resources Inc., 1981.
- 119. Ardley Coal Land Sale Evaluation; prepared for non-exclusive distribution, 1981.

- 120. A Drilling Report on the 1981 Lynx Creek Coal Exploration Program; prepared for Home Oil Company Limited, December 1981.
- 121. Drilling Report for the CU Resources Ltd. Coal Exploration Program, Central Alberta; February 1981.
- 122. Drilling Report for the 1981 Coal Exploration Program Buffalo Hill Area; prepared for Seagull Resources Ltd., May 1981.
- 123. Drilling Report for the 1981 Coal Exploration Program Chip Lake Area; prepared for Norcan Energy Resources Ltd., July 1981.
- 124. Ardley Land Evaluation; prepared for Gulf Canada Resources Inc., August 1981.
- 125. Evaluation Records for Testhole 81-17, Buffalo Hill Area; prepared for Seagull Resources Ltd., September 1981.
- 126. Evaluation Report for CU Resources Coal Properties, Central Alberta, 1981.
- 127. An Evaluation Review of the Grassy Mountain Coal Property; prepared for Gulf Canada Resources Inc., June 1981.
- 128. Geological Evaluation of the Lynx Creek Coal Deposit, South West Alberta Foothills; prepared for Home Oil Company Limited, 1981.
- 129. A Report on the Buffalo Hill East Study Area; prepared for Seagull Resources Ltd., May 1981.
- 130. Coal Gas Testing Program, Buffalo Hill Coal Deposit; prepared for Seagull Resources Ltd., 1982.
- 131. An Evaluation of HudBay Coal Properties, Drumheller Area, Alberta; prepared for TransAlta Utilities Corporation, 1982.
- 132. Field Activities Report for the 1982 Buffalo Hill Program; prepared for Seagull Resources Ltd. by: Minco Consultants Ltd., October 1982.
- 133. Geological Evaluation of the Three Hills Coal Deposit, Alberta; prepared for CU Resources Ltd., 1982.
- 134. Geology, Coal Quality, and Reserves of the Buffalo Hill Coal Deposit, Alberta; prepared for Seagull Resources Ltd., 1982.

- 135. Hydrogeological Evaluation of the Buffalo Hill Coal Deposit 1982; prepared for Seagull Resources Ltd. by Minco Consultants Ltd. and Campbell Geoscience Ltd., November 1982.
- 136. Interim Report on the 1982 Buffalo Hill Coal Evaluation Program; prepared for Seagull Resources Ltd., May 1982.
- 137. Northwest Buffalo Hill Coal Evaluation 1982; prepared for Seagull Resources Ltd., August 1982.
- 138. Suggested Outline for a Mine Feasibility Study, Buffalo Hill Coal Deposit; prepared for Seagull Resources Ltd., November 1982.
- 139. Ardley Coal Resources of the Red Deer Area, Alberta; prepared for TransAlta Utilities Corporation, 1983.
- 140. Geological Evaluation of the Mount Klappan Coal Project; prepared for Canadian Utilities Limited by: Minco Consultants Ltd., April 1983.
- 141. A Revised Coal Resource Evaluation for the McLeoad River Area; prepared for Altex Resources Ltd. By: Minco Consultants Ltd., February 1983.
- 142. An Appraisal of the Bengkulu Coal Showings: Sumatra, Indonesia; internal study prepared for Peter Bawden Drilling Ltd., 1987.
- 143. The Origins, Characteristics, and Beneficiation of Sulfur-Bearing Coals; internal study prepared for the British Columbia Ministry of energy, Mines and Petroleum Resources, 1988.
- 144. British Columbia Coal Specifications; an information brochure prepared for the British Columbia Ministry of Energy, Mines and Petroleum Resources, 1988.
- 145. Coal Quality Study of the Magnolia Deposit, Alberta, Technical Report (Vol. 1); internal study prepared for Westmin Resources Limited, 1993.
- 146. Coal Quality Study of the Magnolia Deposit, Alberta, Project Data (Vol. 2); internal study prepared for Westmin Resources Limited, 1993
- 147. Coal Quality Study of the Magnolia Deposit, Alberta, Operational Report (Vol. 3); internal study prepared for Westmin Resources Limited, 1993

Oil and Gas

- 148. An Evaluation of Dome Petroleum Ltd. Mineral Title Lands, Alberta; prepared for TransAlta Utilities Corporation, 1982.
- 149. An Evaluation of the Oil and Gas Potential of Central California; prepared for Torhjelm Oil Corporation, July, 1982.
- 150. Oil and Gas Potential of the Kinuso Area, Alberta; prepared for Interstate Resources Inc., 1982.
- 151. Oil and Gas Potential of the St. Albert Area, Alberta; prepared for Interstate Resources Inc., 1982.
- 152. Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata; Southeastern Saskatchewan, Northwestern North Dakota, and Northeastern Montana; prepared for non-exclusive distribution, 1985.
 - **152-1**. Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata; Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana; Stratigraphic Correlation Table; prepared for non-exclusive distribution, 1985
 - **152-2**. Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata; Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana; Appendix A (1 of 2); prepared for non-exclusive distribution, 1985
 - **152-3.** Geology and Hydrocarbon Occurences of Devonian and Lower Paleozoic Strata; Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana; Appendix A (2 of 2); prepared for non-exclusive distribution, 1985
 - **152-4** Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata; Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana; Appendix B (1 of 2); prepared for non-exclusive distribution, 1985
 - **152-5.** Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata; Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana; Appendix B (2 of 2); prepared for non-exclusive distribution, 1985

- **152-6.** Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, Appendix C (1 of 2) Saskatchewan Well Records, W1; TP. 1 to 5w2, I PL petrofiche system; prepared for non-exclusive distribution, 1985.
- **152-7**. Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, Appendix C (2 of 2) Saskatchewan Well Records, TP. 6to 11w2, I PL petrofiche system, prepared for non-exclusive distribution, 1985.
- **152-8.** Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana (1 of 2) Saskatchewan Well Records, W1; TP. 1 to 5w2; prepared for non-exclusive distribution, 1985.
- **152-9.** Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana (2 of 2)Saskatchewan Well Records, Tp. 6 to 11w2; prepared for non-exclusive distribution, 1985.;
- **152-10. Map:** Figure 1; Location Map; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-11. Map:** Figure 3; Regional Well Control Map; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-12. Map:** Figure 4; Detailed Well Control Map; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-13. Map:** Figure 6; Structural Elements; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-14. Map:** Figure 8; Surface Topography; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-15. Map:** Figure 9; Regional Geology Lower Paleozoic Units; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-16. Map:** Figure 10; Regional Geology Devonian Formations; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-17. Map:** Figure 11; Reference Sections; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-18. Map:** Figure 12; Composite Seismic Map; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-19. Map:** Figure 13; Development Wells; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-20. Map:** Figure 14; Oil and Gas Fields; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-21. Map:** Figure 15; Lines of Cross Section (with County Boundaries); Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-22. Map:** Figure 16a; North-South Cross Section (West Section-North half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-23. Map:** Figure 16b; North-South Cross Section (Central Section-North Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-24. Map:** Figure 16c; North-South Cross Section (East Section-North Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-25. Map:** Figure 16d; North-South Cross Section (West Section South Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-26. Map:** Figure 16e; North-South Cross Section (Central Section-South Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-27. Map:** Figure 16f; North-South Cross Section (East Section South Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-28. Map:** Figure 16g; East-West Cross Section (West Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-29. Map:** Figure 16h; East-West Cross Section (East Half) Devonian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-30. Map:** Figure 17a; North-South Cross Section (West-Section-North Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-31. Map:** Figure 17b; North-South Cross Section (Central Section-North Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-32. Map:** Figure 17c; North-South Cross Section (East Section North Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-33. Map:** Figure 17d; North-South Cross Section (West Section-South Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-34. Map:** Figure 17e; North-South Cross Section (Central Section—South Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-35. Map:** Figure 17f; North-South Cross Section (East Section South Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-36. Map:** Figure 17g; East-West Cross Section (West Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-37. Map:** Figure 17h; East-West Cross Section (East Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-38. Map:** Figure 18; Structure Contours on top of the Precambrian; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-39. Map:** Figure 19; Structure Contours on top of the Deadwood Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-40. Map:** Figure 20; Isopach map of the Deadwood Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-41. Map:** Figure 21; Structure Contours on top of the Winnipeg Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-42. Map:** Figure 22; Isopach map of the Winnipeg Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-43. Map:** Figure 23a; Structure Contours on top of the Red River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-44. Map:** Figure 23b; Structure Contours on top of the Red River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-45. Map:** Figure 24; Isopach Map of the Red River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-46. Map:** Figure 25a; Structure Contours on top of the Stonewall Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-47. Map:** Figure 25b; Structure Contours on top of the Stonewall Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-48. Map:** Figure 25c; Isopach Map of the Stonewall and Stony Mountain Formations; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-49. Map:** Figure 25d; Isopach Map of the Stonewall and Stony Mountain Formations; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-50. Map:** Figure 26a, Structure Contours on Top of the Interlake Group; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-51. Map:** Figure 26b, Structure Contours on Top of the Interlake Group; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-52. Map:** Figure 27a, Isopach Map of the Interlake Group; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-53. Map:** Figure 27b, Isopach Map of the Interlake Group; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-54. Map:** Figure 28a, Structure Contours on top of the Winnipegosis Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-55. Map:** Figure 28b, Structure Contours on top of the Winnipegosis Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-56. Map:** Figure 29a, Isopach Map of the Winnipegosis Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-57. Map:** Figure 29b, Isopach Map of the Winnipegosis Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-58. Map:** Figure 30a, Structure Contours on top of the Prairie Evaporite Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-59. Map:** Figure 30b, Structure Contours on top of the Prairie Evaporite Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-60. Map:** Figure 31a, Isopach Map of the Prairie Evaporite Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-61. Map:** Figure 31b, Isopach Map of the Prairie Evaporite Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-62. Map:** Figure 32a, Structure Contours on top of the Dawson Bay Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-63. Map:** Figure 32b, Structure Contours on top of the Dawson Bay Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-64. Map:** Figure 33a, Isopach Map of the Dawson Bay Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-65. Map:** Figure 33b, Isopach Map of the Dawson Bay Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeast Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-66. Map:** Figure 34a, Structure Contours on top of the Souris River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-67. Map:** Figure 34b, Structure Contours on top of the Souris River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-68. Map:** Figure 35a, Isopach Map of the Souris River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-69. Map:** Figure 35b, Isopach Map of the Souris River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-70. Map:** Figure 36a, Structure Contours on top of the Deperow Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-71. Map:** Figure 36b, Structure Contours on top of the Duperow Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-72. Map:** Figure 37b, Isopach Map of the Duperow Formation; Geology and Hydrocarbon Occurrences of Devonian ad Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985
- **152-73. Map:** Figure 37a. Isopach Map of the Duperow Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-74. Map:** Figure 38a, Structure Contours on top of the Birdbear Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-75. Map:** Figure 38b, Structure Contours on top of the Birdbear Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-76. Map:** Figure 39a, Isopach Map of the Birdbear Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-77. Map:** Figure 39b, Isopach Map of the Birdbear Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-78. Map:** Figure 40a, Structure Contours on top of the Three Forks (Torquay and Big Valley) FM; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-79. Map:** Figure 40b, Structure Contours on top of the Three Forks (Torquay and Big Valley) FM; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-80. Map:** Figure 41a, Isopach Map of the Three Forks FM. (Torquay and Big Valley) FM; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-81. Map:** Figure 41b, Isopach Map of the Three Forks FM (Torquay and Big Valley); Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-82. Map:** Figure 42a; Structure Contours on top of the Bakken Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota. Northeastern Montana. 1985.
- **152-83. Map:** Figure 42b; Structure Contours on top of the Bakken Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-84. Map:** Figure 43a; Isopach Map of the Bakken Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-85. Map:** Figure 43b; Isopach Map of the Bakken Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-86. Map:** Figure 44; Oil and Gas Shows and Production Data for the Winnipeg and Deadwood Formations; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-87. Map:** Figure 45a; Oil and Gas Shows and Production Data for the Red River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-88. Map:** Figure 45b; Oil and Gas Shows and Production data for the Red River Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-89. Map:** Figure 46; Oil and gas Shows and Production data for the Stonewall and Stony Mountain Formations; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-90. Map:** Figure 47; Oil and Gas Shows and Production Data for the Interlake Group; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-91. Map:** Figure 48; Oil and Gas Shows and Production Data for the Winnipegosis Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-92. Map:** Figure 49; Oil and Gas Shows and Production Data for the Souris River and Dawson Bay Formations; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-93. Map:** Figure 50; Oil and Gas Shows and Production Data for the Duperow Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.

- **152-94. Map:** Figure 51; Oil and Gas Shows and Production Data for the Birdbear Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- **152-95. Map:** Figure 52; Oil and Gas Shows and Production Data For the Bakken Formation; Geology and Hydrocarbon Occurrences of Devonian and Lower Paleozoic Strata, Southeastern Saskatchewan, Northwestern North Dakota, Northeastern Montana, 1985.
- 153. A Geological Study of the North Cactus Lake Heavy Oil Pool A Review of Parameters Relevant to Sand Control Problems; University of Regina, Energy Research Unit Contribution No. 106, 1985.
- 154. Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-1.** Study Particulars; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-2.** Appendix A- Alberta well Data Townships 1 to 5; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-3.** Appendix B Alberta Well Data Townships 6 to 10; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-4.** Appendix C Montana Well Data; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-5. Map:** Figure 1 Area of Study, Figure 2 Stratigraphic Correlation Table; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-6. Map:** Figure 3 Well Control Map; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
 - **154-7. Map:** Figure 4 Regional Cross Sections, Figure 5 Structural elements, Figure 6 Surface Lineaments; Geology and Hydrocarbon

- Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-8. Map:** Figure 7 Regional Geology; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-9. Map:** Figure 8 Reference Sections; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-10. Map:** Figure 9 Seismic Coverage; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-11. Map:** Figure 10 Oil and Gas Fields; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-12. Map:** Figure 11 Lines of Cross Section; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-13. Map:** Figure 12 North-South cross Section (West Line) Upper Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-14. Map:** Figure 13 North-South Cross Section (West Line) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-15. Map:** Figure 14 North-South Cross Section (Central Line) Upper Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-16. Map:** Figure 15 North-South Cross Section (Central Line) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.

- **154-17: Map:** Figure 16 North-South Cross Section (East Line) Upper Paleozoic North; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-18: Map:** Figure 17 North-South Cross Section (East Line) Upper Paleozoic South; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-19: Map:** Figure 18 North-South Cross Section (East Line) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata; Southern Alberta and North Central Montana; prepared for non-exclusive distribution; 1986.
- **154-20: Map:** Figure 19 East-West Cross Section (West Half) Upper Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-21: Map:** Figure 20 East-West Cross Section (East Half) Upper Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-22: Map:** Figure 21 East-West Cross Section (West Half) Lower Paleozoic; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-23: Map:** Figure 22 East-West Cross Section (East Half) Lower Paleozoic Strata; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-24: Map:** Figure 23 Structure Contours on top of the Precambrian (Contour Interval: 500 feet); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana; prepared for non-exclusive distribution, 1986.
- **154-25: Map:** Figure 24 Structure Contours on top of the Cambrian (Contour Interval : 500'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.

- **154-26: Map:** Figure 25 Isopach Map of the Cambrian (Contour Interval: 100'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-27: Map:** Figure 26 Isopach Map of the Ordovician Red River Formation (Contour Interval : 100'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-28: Map:** Figure 27 Structure Contours on top of the Devonian (Contour Interval: 100', 500'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-29: Map:** Figure 28 Isopach Map of the Elk Point Group (Contour Interval: 50'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-30: Map:** Figure 29 Isopach Map of the Beaverhill Lake Souris River Formations (Contour Interval : 100'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-31: Map:** Figure 30 Isopach Map of the Woodbend Group (Duperow Formation) (Contour Interval : 100;); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-32: Map:** Figure 31 Isopach Map of the Winterburn Wabamun Groups (Contour Interval : 100'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-33: Map:** Figure 32 Structure Contours on top of the Mississippian (Contour Interval : 100', and 500'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-34: Map:** Figure 33 Isopach Map of the Mississippian (Contour Interval: 100'); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.

- **154-35: Map:** Figure 34 Hydrocarbon Production and Drill Stem Test Results for the Cambrian; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, prepared for non-exclusive distribution, 1986.
- **154-36: Map:** Figure 35 Hydrocarbon Production and Drill Stem Test Results for the Ordovician Red River Formation and Devonian Elk Point Group; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, 1986.
- **154-37: Map:** Figure 36 Hydrocarbon Production and Drill Stem Test Results for the Beaverhill Lake Souris River Formations; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, 1986.
- **154-38: Map:** Figure 37 Hydrocarbon Production and Drill Stem Test Results for the Woodbend Group (Duperow Formation); Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, 1986.
- **154-39: Map:** Figure 38 Hydrocarbon Production and Drill Stem Test Results for the WInterburn Wabamun Groups; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, 1986.
- **154-40: Map:** Figure 39 Results for the Mississippian; Geology and Hydrocarbon Occurrences of Paleozoic Strata, Southern Alberta and North Central Montana, 1986.