

# **Alberta's Oil Sands Projects and Upgraders**

# -- Athabasca --

#### **Project Status**

Operating (37)

Construction (3)

Approved (18)

Application (14)

Announced (12)

## **Upgrader Status**

Operating (3)

Construction (0)

Approved (1)

Application (2)

#### Other Information

Oil Sands Area

Surface Mineable Area Leased Oil Sands Area

Municipality

Urban Development Sub-Region

Y / Hydrography Major Highway

This map excludes active projects with production of less than 1,000 barrels of bitumen in the last six months.

Locations are approximate and may not represent the full extent of project areas. Leased Oil Sands Area information is shown to the nearest quarter section, and therefore may appear to include minerals not owned by the Alberta Crown and/or Minerals Reserved From Disposition.

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Announced: Operator has disclosed intent to construct project.

### SOURCE INFORMATION:

Projects & Upgraders Information:

- Oil Sands Administration & Strategic Information System, Alberta Energy
- Integrated Application Registry, Alberta Energy Regulator - Alberta Oil Sands - Quarterly Update (Summer 2017)
- CanOils http://www.canoils.com/

Industrial Heartland: Alberta's Industrial Heartland Association (AIHA) Leased Oil Sands Area: Alberta Energy (September 2017) Oil Sands & Surface Mineable Areas: Alberta Energy Regulator (AER) Urban Development Sub-Region (UDSR): Alberta Environment & Parks Base Map Data Provided by the Government of Alberta under the Alberta Open Government Licence.

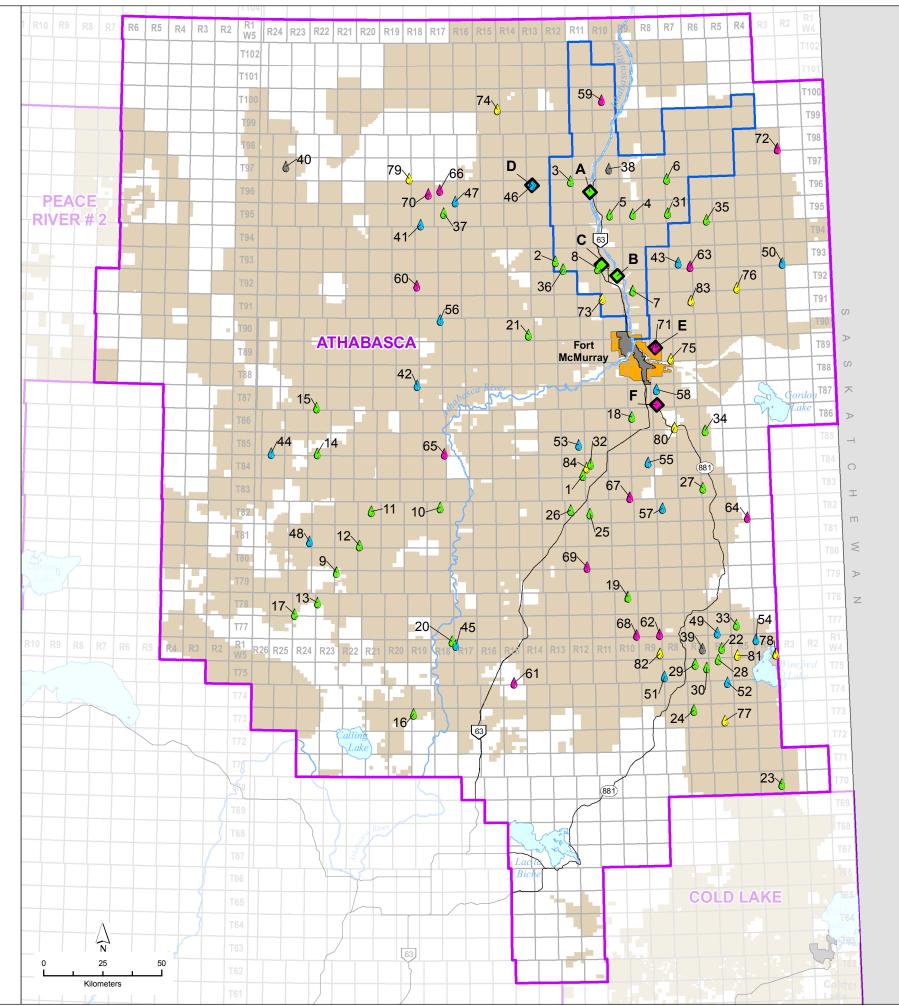
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Author: Oil Sands Operations, Alberta Energy (MD) Produced by: Resource Mapping & Analysis, Alberta Energy (JS)





Upgraders - Athabasca A CNRL - Horizon B Suncor - Base and Millennium Upgrader Operating C Syncrude - Mildred Lake Operating Upgrader D BP P.L.C. - Terre de Grace Pilot Approved Upgrader E Value Creation - Advanced TriStar Application F Value Creation - Demonstration of Excellence (DOEx) Application N-Solv Corporation - Suncor Dover Lease Pilot Experimental Operating 2 Suncor - Dover Demonstration Experimental Operating 3 CNRL - Horizon Mining Operating 4 CNRL - Jackpine Mine Operating 5 CNRL - Muskeg River Mine 6 Imperial Oil - Kearl Operating 7 Suncor - Suncor Oil Sands Mining Operating 8 Syncrude - Syncrude Mine Mining Operating 9 Bronco Energy - Brintnell 9774 Primary Operating Operating 11 CNRL - Brintnell Operating 12 CNRL - South Brintnell 13 CNRL - South Wabasca Primary Operating 14 CNRL - Wabasca North Primary Operating 15 CNRL - Woodenhouse Primary Operating 16 Husky - Ama Operating 17 Husky - McMullen Primary Heavy Oil Operating 18 Athabasca Oil Sands - Hangingstone Operating 19 Athabasca Oil Sands - Leismer Demonstration Project Thermal Operating 20 Black Pearl Resources - Blackrod SAGD Pilot Operating 21 Brion Energy - MacKay River Commercial Project Thermal Operating 22 Cenovus - Christina Lake Thern Operating 23 Cenovus - Foster Creek Operating 24 CNRL - Kirby South Operating 25 Connacher - Algar Operating 26 Connacher - Great Divide Thermal Operating 27 Conoco Phillips - Surmont Operating 28 Devon - Jackfish SAGD Thermal Project Operating 29 Devon - Jackfish 2 SAGD Thermal Project Operating 30 Devon - Jackfish 3 SAGD Project Operating 31 Husky - Sunrise Thermal Thermal Operating 32 JACOS - Hangingstone Expansion Project Operating 33 MEG Energy - Christina Lake Regional Thermal Operating 34 Nexen - Long Lake Operating 35 Suncor - Firebag Operating 36 Suncor - MacKay River Operating 37 Sunshine Oilsands - West Ells Operating 38 Suncor - Fort Hills Oil Sands Project Mining Construction 39 Harvest Operations - BlackGold Thermal Construction 40 Sunshine Oilsands - Harper Construction 41 Athabasca Oil Sands - Dover West Carbonates (Leduc) Approved 42 Husky - Saleski Carbonate Pilot Experimental Approved 43 Oak Point Energy - Lewis SAGD Pilot Experimental Approved 44 Renergy Petroleum - Muskwa Pilot Experimental Approved 45 Black Pearl Resources - Blackrod Commercial Thermal Approved 46 BP P.L.C. - Terre de Grace Approved 47 Brion Energy - Dover Commercial Project Approved 48 Cavalier Energy Inc - Hoole Approved 49 Cenovus - Narrows Lake Approved 50 Cenovus - Telephone Lake Borealis Thermal 51 CNRL - Kirby Expansion (North) Approved 52 Devon - Pike Approved 53 Grizzly Oil Sands - Algar Lake Approved 54 MEG Energy - Christina Lake Regional Project Phase 3 SE 55 Suncor - Meadow Creek East Approved Approved 56 Sunshine Oilsands - Thickwood Thermal 57 Surmont Energy - Wildwood Thermal Approved 58 Value Creation - Demonstration of Excellence (DOEx) Approved 59 Teck Resources - Frontier Mining Application 60 Athabasca Oil Sands - Dover West Sands & Clastics Application 61 CNRL - Grouse Application 62 Grizzly Oil Sands - May River Thermal 63 Imperial Oil - Aspen Application 64 MEG Energy - Surmont Thermal Application 65 OSUM - Sepiko Kesik Application 66 Prosper Petroleum Ltd. - Rigel Application 67 PTT Exploration and Production - Mariana-Hangingstone Application 68 PTT Exploration and Production - Mariana-South Leismer Application 69 PTT Exploration and Production - Mariana-Thornbury Thermal Application 70 Sunshine Oilsands - Legend Lake Thermal Application 71 Value Creation - Advanced TriStar Application 72 Value Creation - Audet Pilot Application Mining 73 Suncor - Voyageur South nounced 74 Athabasca Oil Sands - Birch 75 Cenovus - East McMurray Thermal Announced 76 Cenovus - Steepbank Thermal Announced 77 Cenovus - West Kirby Thermal Announced 78 Cenovus - Winefred Lake Thermal Announced 79 CNRL - Birch Mountain 80 CNRL - Gregoire Lake Announced 81 Devon - Jackfish East Thermal Announced 82 MEG Energy - May River Thermal Announced Thermal Announced 83 Suncor - Lewis 84 Suncor - Meadow Creek West

OPERATOR - PROJECT NAME

Notes:

Primary/EOR - These projects utilize the natural energy available in the reservoirs (in some cases supplemented by non-thermal EOR processes) to produce bitumen.

Thermal - These projects apply thermal energy (usually steam) in situ to produce bitumen.

Mining -These projects utilize open pit mining methods to remove bituminous ore, which is subsequently processed to recover bitumen.

Experimental - These projects operate on a (non-commercial) pilot scale and use innovative methods to recover bitumen. Alberta

# Alberta's Oil Sands **Projects and Upgraders**

# -- Cold Lake / Industrial Heartland --

## **Project Status**

Operating (61)

Construction (0)

Approved (4)

Application (1)

Announced (0)

Construction (1)

Approved (0)

### Other Information

Oil Sands Area

Industrial Heartland Leased Oil Sands Area

Municipality

Hydrography Major Highway

## **Upgrader Status**

Operating (1)





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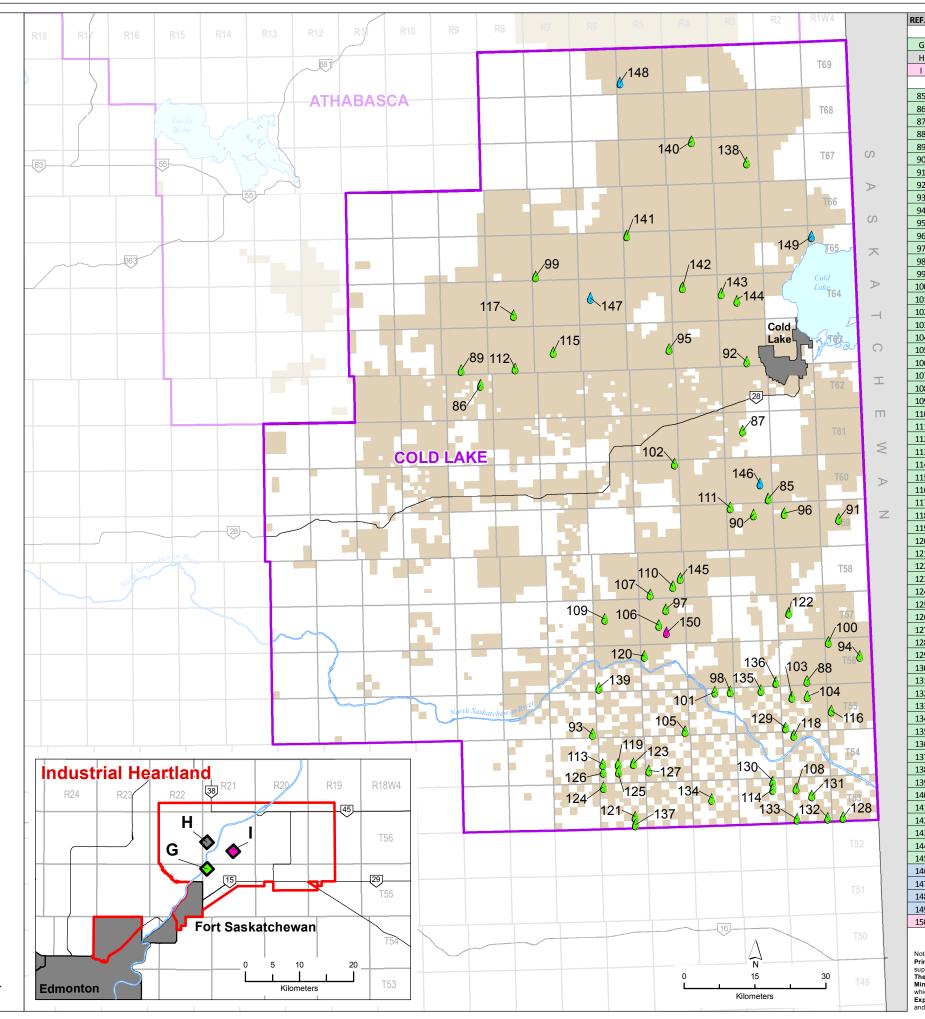
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Upgraders - Heartland G Shell - Scotford Operating Upgrader H North West Upgrading - Redwater Upgrader Construction I Value Creation - Heartland Upgrader Application 85 Baytex - Koch Reita Lake Operating Primary 86 Baytex - Mann Lake East Primary Operating 87 Baytex - Reita Lake (Baytex) Primary Operating 88 Black Pearl Resources - John Lake Primary Operating 89 CNRL - Ashmont Primary Operating 90 CNRL - Beartrap Primary Operating 91 CNRL - Beartrap East Primary Operating 92 CNRL - CNRL Cold Lake Primary Operating 93 CNRL - Derwent 11574 Primary Operating 94 CNRL - East Fishing Lake Primary Operating 95 CNRL - Edward Lake Primary Operating 96 CNRL - Elizabeth Primary Operating 97 CNRL - Elk Point Primary Operating 98 | CNRL - Elk Point Project Primary Operating 99 CNRL - Fire Tower Primary Operating 100 CNRL - Fishing Lake Primary Operating 101 CNRL - Frog Lake Primary Operating 102 CNRL - Ft. Kent Primary Operating Primary 103 CNRL - John Lake Operating 104 | CNRL - John Lake 11428 Primary Operating 105 CNRL - Lindbergh CA Primary Operating 106 CNRL - Lindbergh North Primary Operating 107 | CNRL - Lindbergh Primary Primary Operating 108 CNRL - Marwayne Primary Operating 109 CNRL - Moose Hills Primary Operating 110 CNRL - North Murphy Lindbergh Primary Operating 111 CNRL - Reita Lake (CNRL) Primary Operating 112 CNRL - Seibert Lake Primary Operating 113 CNRL - South Lindbergh Primary Operating 114 | CNRL - West Marwayne Primary Operating 115 Devon - Bonnyville Primary Operating 116 Devon - East Tulabi John Lake Primary Operating 117 Devon - Mann North Primary Operating 118 Devon - Tulabi/John Lake Primary Operating 119 Gear Energy - Lindbergh Louis Primary Operating 120 Gear Energy - Passage Elk Primary Operating 121 Gear Energy - Swimming Primary Operating 122 Harvest Operations - Frog Lake Oil Sands Project Primary Operating 123 Harvest Operations - Lindbergh South Primary Operating 124 Husky - Lindbergh 9873,11822 Primary Operating 125 Husky - Lindbergh 10259 Primary Operating Primary 126 Husky - Lindbergh 10619 Operating 127 Husky - Lindbergh 10812 Primary Operating 128 Husky - Lindbergh 11041 Primary Operating 129 Husky - Lindbergh 11205 Primary Operating 130 Husky - Marwayne 7990 Primary Operating 131 Husky - Marwayne 8655 Primary Operating 132 Husky - Marwayne 10597 Primary Operating 133 Husky - Marwayne 11287 Primary Operating 134 Solara Exploration - Lindbergh 11429 Primary Operating 135 Twin Butte Energy - Frog Lake Primary Operating 136 Twin Butte Energy - Frog Lake 11256 Primary Operating Primary 137 West Lake Energy - Swimming 11191 Operating 138 CNRL - Burnt Lake Thermal Operating 139 CNRL - Elk Point CA Thermal Operating 140 CNRL - Primrose Thermal Operating 141 CNRL - Wolf Lake CA Thermal Operating 142 Husky - Tucker Thermal Operating 143 Imperial Oil - Cold Lake Thermal Operating 144 OSUM - Orion EOR Operating 145 Pengrowth - Lindbergh SAGD Pilot Thermal Operating 146 Baytex - Gemini Commercial Approved 147 Devon - Walleye Thermal Approved 148 Husky - Caribou Lake Thermal Approved 149 OSUM - Taiga Approved 150 Koch - Selina Thermal Application

**OPERATOR - PROJECT NAME** 

PROJECT TYPE STAGE

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# **Alberta's Oil Sands Projects and Upgraders**

-- Peace River --

Other Information

Oil Sands Area

Municipality

Major Highway

Hydrography

Leased Oil Sands

#### **Project Status**

Operating (25)

Construction (0)

Approved (1)

Application (0)

Announced (0)

# **Upgrader Status**

Operating (0)

Construction (0)

Approved (0)

Application (0)



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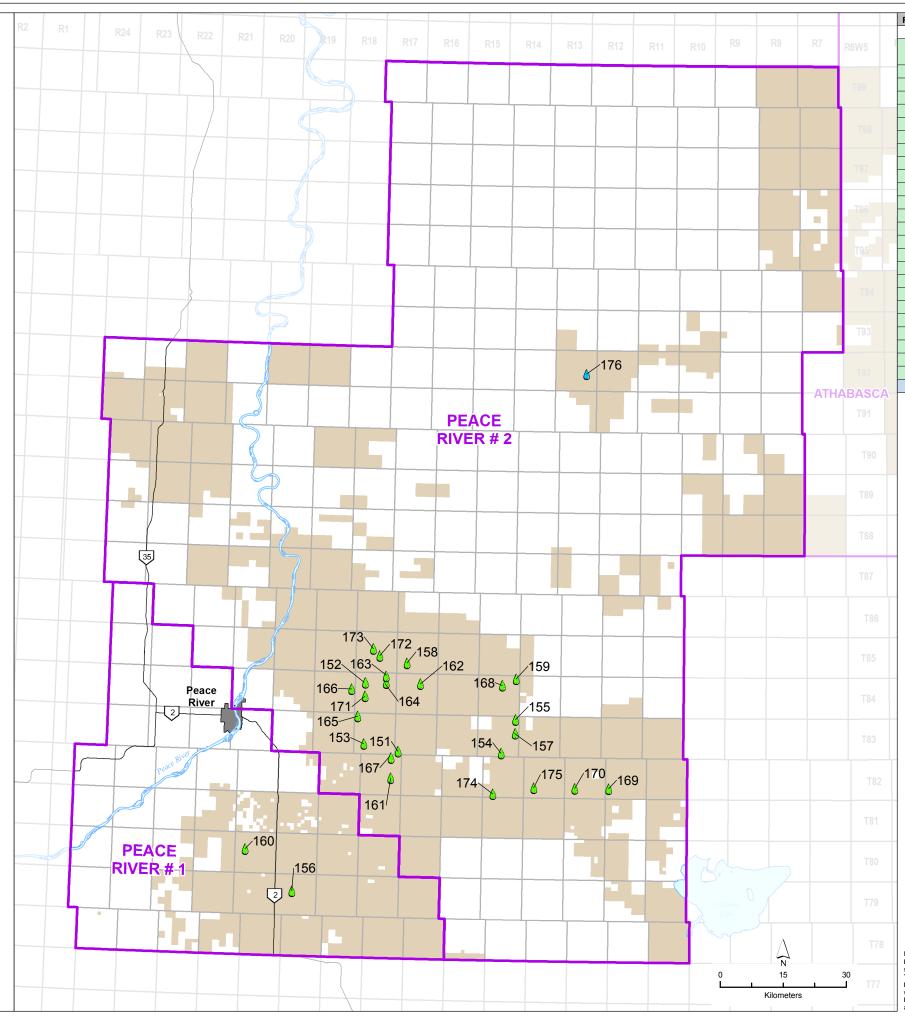
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Date: September 2017

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PROJECT TYPE STAGE REF.# OPERATOR - PROJECT NAME **Peace River** 151 Obsidian Energy - Seal Harmon Valley South Experimental Operating Thermal Pilot 152 Baytex - Cadotte Heavy Oil Primary Operating 153 Baytex - Harmon Valley Bluesky Primary Operating 154 Baytex - Murphy Seal Primary Operating 155 Baytex - Peace River Primary Operating 156 Baytex - Reno Primary Operating 157 Baytex - Seal I Primary Operating 158 Baytex - Seal Cadotte Primary Operating 159 Baytex - Seal-Northern Cadotte Block Primary Operating 160 Baytex - Tangent 11437 Primary Operating 161 Baytex - Walrus Primary Operating 162 CNRL - Cliffdale Primary Operating 163 CNRL - Galloway Primary Operating 164 Murphy Oil - Murphy Cliffdale Primary Operating 165 Obsidian Energy - Harmon Valley Primary Operating Primary 166 Obsidian Energy - Seal Cadotte Operating 167 Obsidian Energy - Seal Harmon Valley South Primary Operating 168 Obsidian Energy - Seal North Primary Operating 169 Prosper Petroleum Ltd. - Chipmunk Primary Operating 170 Prosper Petroleum Ltd. - Chipmunk II Primary Operating 171 Baytex - Harmon Valley - Pilot Thermal Operating 172 CNRL - Peace River Bluesky Thermal Operating 173 CNRL - Peace River Thermal Operating 174 Obsidian Energy - Dawson Seal Thermal Operating 175 Obsidian Energy - Seal Main East Thermal Operating 176 Northern Alberta Oil - Sawn Lake Thermal Approved

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