

Pike 2 Project Summary Table

Proponent Name:	Devon Canada Corporation	Date:	March 23, 2018
Project Name:	Pike 2 Project	Company Contact Name and Information:	Erin Sumner 100, 400 – 3 rd Ave SW Calgary, Alberta T2P 4H2 Phone: 403-213-8146
Name of Company that will hold Approval:	Devon Canada Corporation	Company Website:	http://www.devonenergy.com
Type of Project (e.g., in-situ, mine, quarry, upgrader, etc.):	In situ	New Project, Expansion, Additional Phase or Modification:	New Project
Projected Construction Start (Month/Year):	December 2022	Projected Operation Start (Month/Year):	July 2025
Life of Project (# years, YYYY – YYYY):	Approximately 30 years (2025 – 2055)	Project Location (Legal Land Description and Longitude/Latitude) and Municipality:	The Central Processing Facility (CPF) will be located within Sections 22 & 27, Township 73, Range 5 West of the Fourth Meridian; Latitude/Longitude: 55.346105, -110.678091 The Project Area is located in portions of Townships 73-74, Ranges 4-6 West of the Fourth Meridian Lac La Biche County See attached Project Location map
Total Project Area (ha):	Total Project Area is approximately 12,322 ha	Private, Federal or Provincial Land:	Provincial Land

<p>Nearest Residence(s) (km):</p>	<p>Nearest permanent residence is located approximately 13 km north of the CPF</p> <p>The community of Conklin is 40 km NW of the CPF</p>	<p>Types of Activity (major project processes, components including capacity/size, if available):</p>	<p>Project includes a single phase of development with a CPF.</p> <p>Major processes:</p> <ul style="list-style-type: none"> • Steam generation (19,862 tpd including cogeneration of electricity) • Steam, diluent and fuel gas distribution and injection • Oil, water and gas production, collection, separation, treating and testing • Water de-oiling and boiler feedwater treatment • Process tankage • Saline source and disposal wells and pipelines • Gas treating, diluent recovery and sulphur removal • Gas turbine cogeneration • Above and below ground pipelines • Associated support infrastructure
<p>Feedstocks and design feed rates (maximum daily, annual)</p>	<p>Produced Bitumen (estimated):</p> <ul style="list-style-type: none"> • Stream-day 11,027 m³/d • Calendar day 10,178 m³/d <p>Diluent (at 700 kg/m³; estimated):</p> <ul style="list-style-type: none"> • Stream-day 3,682 m³/d • Calendar day 3,990 m³/d • LACT trim diluent by others 	<p>Products and design production rates (maximum daily, annual)</p>	<p>Sales Bitumen (estimated):</p> <ul style="list-style-type: none"> • Stream-day 11,027 m³/d • Calendar day 10,178 m³/d <p>Sales dilbit volume subject to supplied diluent density and resulting blend ratio</p> <p>Electricity:</p> <ul style="list-style-type: none"> • Pending turbogenerator selection and internal power consumption needs

<p>Byproducts and wastes (specify types, rates and storage capacities)</p>	<p>Liquid wastes:</p> <ul style="list-style-type: none"> • Boiler blowdown water • Spent H₂S scavenger • Used lube oils • Domestic sewage <p>Solid wastes:</p> <ul style="list-style-type: none"> • Drill cuttings • Lime sludge • Domestic solid wastes • Construction related non-recyclables <p>Recyclables:</p> <ul style="list-style-type: none"> • Construction and Operations related recyclables (wood, paper, metal, etc.) 	<p>Product storage facilities and capacities</p>	<p>Onsite Storage will include:</p> <ul style="list-style-type: none"> • Dilbit sales • Diluent supply • Offspec storage • Process water tankage • Vent and drain • Process chemicals • Spent process chemicals
<p>Nearest First Nation Reserve(s) and Métis Settlements (name and km):</p>	<p>Chipewyan Prairie Dene First Nation (IR 194B) is 28 km NE of the CPF</p> <p>Kikino Metis Settlement is 125 km SW of the CPF</p>	<p>Project Products:</p>	<ul style="list-style-type: none"> • Diluted bitumen • Electricity
<p>Power Source (if on site power generation describe quantity (MW) and facilities):</p>	<p>Onsite gas turbine cogeneration capable of approximately 38 MW (subject to unit selection).</p> <p>Approximately 12-18 MW will be consumed onsite with remaining power available for export.</p> <p>Third-party power will be used when co-generation unit is unavailable.</p>	<p>Method of Product Transport (e.g., pipeline, rail, truck, etc.):</p>	<p>Diluent/dilbit transport via pipeline</p>

<p>Average Production Capacity per Year (specify units):</p>	<p>Annual average production of up to 64,050 bbl/d (10,178 m³/d)</p>	<p>Infrastructure Requirements (e.g., roads, pipelines, water intake, storage, tankage, etc.):</p>	<p>Infrastructure includes:</p> <ul style="list-style-type: none"> • Brackish source and disposal water wells/pipelines • Observation wells • Fuel gas supply • Service roads • Onsite Import/Export substation • Field power distribution • Office/shop/warehouse, support systems and buildings • Domestic water well(s) • Domestic sewage handling • Communications <p>Existing infrastructure</p> <ul style="list-style-type: none"> • Primary access roads • Camp (pre-existing) • Aerodrome (pre-existing) <p>Infrastructure (by others):</p> <ul style="list-style-type: none"> • LACT • substation • transmission power • Fuel gas supply meter station
<p>Location of End Market:</p>	<p>Best available commercial market</p>	<p>Expected Types of Air Emissions (e.g., SO₂, NO_x, CO₂, etc.):</p>	<p>Expected air emissions:</p> <ul style="list-style-type: none"> • oxides of nitrogen (NO_x) • sulphur dioxide (SO₂) • carbon monoxide (CO) • carbon dioxide (CO₂) • volatile organic compounds (VOC) • fine particulate matter (PM_{2.5}) • ozone (O₃) • trace metal emissions that result from combustion processes

Project By-Products:	None	Types of Solid Wastes Generated:	<p>Solid wastes:</p> <ul style="list-style-type: none"> • Drill cuttings • Drilling cement • Produced sand/fines • Lime sludge • Domestic solid wastes • Construction-related non-recyclables <p>Recyclables:</p> <ul style="list-style-type: none"> • Construction and Operations-related recyclables (wood, paper, metal, etc.)
Expected Types of Water Effluent Releases (note the water bodies the effluent will be released to):	<p>Potable water supply will be released overland following appropriate treatment and testing to meet AER requirements, as appropriate</p> <p>Sewage effluent will be trucked to Devon Pike camp for treatment</p>	Nearest Waterway/Waterbody (name and km):	<ul style="list-style-type: none"> • Unnamed lake 1.17 km east of CPF • Grist Lake 11.8 km West of CPF • Kirby Lake 11.8 km NW of CPF • Winefred Lake 11.8 km NE of CPF
Waste Disposition / Disposal (i.e., Disposal Well, Salt Caverns, Landfill, or Third-Party):	<ul style="list-style-type: none"> • Process water disposal wells • Third party landfill, cavern or disposal wells • Domestic landfill • Recycling 	EPEA Approval Required (Y/N/Unknown):	Yes
Watercourse Crossings (type of crossing, any Class A to C waterbodies):	<p>Class B, C and D watercourses exist within the Project Area, crossing locations to be determined. Crossings will be Types 1, 2 and 3, as well as underground and aboveground pipelines</p>	Water Act Licence Required (Y/N/Unknown. If yes, purpose, source and estimated volumes):	<p>Yes – domestic/utility/dust suppression use. Volumes and source aquifer to be determined</p>
Regulatory Board(s) (AER/AEP/NRCB/AUC):	AER and AUC	Waterbodies Required (Y/N/Unknown/NA. If yes, # and ha):	No

Water Act Approval Required (Y/N/Unknown. If yes, purpose):	No	Will any of the components or activities associated with the project affect fish and/or fish habitat? (Y/N):	No
Identify applicable sections of <i>Designated Physical Activities Regulation</i> pursuant to the <i>Canadian Environmental Assessment Act</i> , 2012	N/A	Nearest Water Well (km) (Domestic and Commercial):	Registered wells: <ul style="list-style-type: none"> Industrial: 6.8 km NW of CPF (Licence No. 241491; 12-08-074-05W4) Domestic: 5.8 km NW of CPF (Licence No. 1460101; 11-05-074-05W4) Unregistered, field-verified wells: <ul style="list-style-type: none"> Domestic: 2.4 km east of CPF – two wells at Kirby South Camp (07-25-074-05W4) Domestic: 2.4 km ENE of CPF at Kirby South Gas Plant (10-25-074-06W4)
Are any works or undertakings proposed to take place in, on, over, under, through or across a navigable water? (Y/N):	Yes	Access Improvements to Provincial Highway:	None
Nearest Provincial Highway (# and distance):	Highway 881 is approximately 48 km northwest of the CPF	Total Area to be Disturbed (ha):	Approximately 602 ha of new disturbance
Traffic Impact Assessment Required (Yes/No/Unknown):	Yes	Post-reclamation Land Use(s):	Equivalent capability
Identify Existing Land and Water Use(s), Resource Management, or Conservation Plans Within or Near the Project site:	Existing land uses include traditional, recreational and industrial Resource and conservation plans: <ul style="list-style-type: none"> Lower Athabasca Regional Plan Cold Lake Caribou Range 	Reclamation Start and End (YYYY - YYYY):	Progressive reclamation – 2024-2055+

Decommissioning Start and End (YYYY-YYYY):	2055 – 2057	Historic Resources Impact Assessment Required (Y/N/Unknown):	Yes
Unique Environmental or Social Considerations (Describe or None):	None expected. To be determined from the environmental evaluation	Estimated Operation Persons-Years of Employment:	Approximately 6,500
Estimated Construction Person-Years of Employment:	Approximately 1,600	Method of Transport of Employees to Site (Construction and Operation):	Local Traffic – buses, company and contractor vehicles Non-Local – flights and buses
Construction or Operation Camp Required (Y/N/Unknown. If yes, on-site or off-site):	No, existing nearby Devon camp facilities will accommodate construction and operations	Is any part of the project on or next to federal lands?	Yes, the Cold Lake Air Weapons Range is 800 m south of the CPF
Will the project involve the manufacture and storage of explosives (Y/N):	No	Aboriginal Groups Involved in Stakeholder Engagement:	Aboriginal stakeholders include: <ul style="list-style-type: none"> • Beaver Lake Cree Nation (BLCN) • Buffalo Lake Metis Settlement • Chipewyan Prairie Dene First Nation (CPDFN) • Cold Lake First Nation (CLFN) • Fort McMurray #468 First Nation • Heart Lake First Nation (HLFN)
Date Stakeholder Engagement Started (Public/Aboriginal):	Stakeholder engagement in the greater Pike area has been ongoing since 2011 Official Pike 2 Project communication will begin in Q1 2018	Public Groups involved in Stakeholder Engagement:	Public Stakeholders include: <ul style="list-style-type: none"> • Regional Municipality of Wood Buffalo • Lac La Biche County • Various Provincial and Federal Government and Regulatory Agencies • Various Local Area Resource Owners and Users • Registered Trapping Area Holders