Lands Division Sustainable Resource Development

Short Term Pipeline Agreement

OPERATOR: SHELL CANADA LIMITED

DISPOSITION PLA110615

TERM: 4 years

PURPOSE: PIPELINE (OIL/GAS) (HIGH PRESSURE)

THIS SHORT TERM AGREEMENT made in duplicate on the date of approval.

BETWEEN: HER MAJESTY THE QUEEN, in right of the Province of Alberta, as represented by the

Minister of Sustainable Resource Development

(the "Department")

-and-

SHELL CANADA LIMITED

, (the "Operator"),

WHEREAS:

- The lands more particularly described in Schedule "E" and depicted in the plan number and version Α. dated 83607 P, 2011-03-23 , (the "Lands") are public lands within the meaning of the Public Lands Act, R.S.A. 2000, c. P-40 (the "Act");
- B. the Department has authority under the Act and the Dispositions and Fees Regulation, A.R. 54/2000 (the "Regulations") to grant dispositions on the Lands for purposes of one or more pipelines and right of way installations incidental thereto;
- C. the Operator has the right to construct a pipeline, undertake any operations preparatory to the construction of a pipeline, or to operate a pipeline;
- D. the Operator requires access to the Lands for purposes of one or more pipelines and right of way installations incidental thereto; and
- E. the Department and the Operator (the "Parties") have agreed that the Operator should have access to the Lands for the purposes of this Agreement.

NOW THEREFORE the Parties hereto agree as follows:

AGREEMENT, TERM AND RENT:

1. Subject to the terms and conditions of this Agreement, and in consideration of the fees, covenants, conditions and stipulations herein reserved and contained on the part of the Operator to be paid, observed, performed and kept, the Province hereby leases to the Operator the Lands for a term of 4 years commencing on the date that this Agreement is signed by the Department's duly authorized representative unless this Agreement is terminated earlier as hereinafter provided.

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- 2. The Operator shall pay to the Department on the execution of this Agreement the lump-sum consideration calculated in accordance with Schedule "A" (collectively "the consideration") and as compensation for other initial benefits accruing to the Operator.
- 3. In addition to the consideration paid by the Operator under this Agreement, the Operator shall be liable to the Department for damage caused by the Operator in re-entering the right of way in the exercise of the Operator's rights under this Agreement
 - a) after the pipeline or any parts thereof are buried; or
 - b) after the pipeline has been put into operation;

whichever event occurs sooner.

THE OPERATOR HEREBY COVENANTS AND AGREES with the Department as follows:

- 4. The Operator shall at all times during the term, perform, observe and comply with all the provisions, obligations and requirements set out in this Agreement, the Act, and the Regulations.
- 5. The Operator shall pay or cause to be paid to the Department or to such other person duly authorized by the Department in that behalf, the lump-sum consideration, annual rent and other charges hereby reserved.
- 6. The Operator shall enter the Lands and perform the work including, if applicable, preparation, construction, development, operation, maintenance and abandonment and prepare and submit final submissions to the Department in accordance with the time periods and the conditions set out in Schedule "A".
- 7. The Lands and buildings, structures and equipment erected thereon shall be used by the Operator solely for the purposes permitted by this Agreement, the Act, and the Regulations.
- 9. The Operator shall not sublet, transfer or assign the Lands or any part thereof without the prior written consent of the Department.
- 10. The Operator shall at all reasonable times permit the Department's employees and agents access to the Lands for the purposes of inspection and to ensure compliance with the terms and conditions of the Act, the Regulations and this Agreement.
- 11. The Operator shall comply with all applicable terms and conditions in Schedules "A", "B", "C", "D", "E" and "F" attached hereto and forming part of this Agreement.
- 12. The Operator shall comply with all applicable terms and conditions in the Operator's submission documents, the Upstream Oil and Gas Approval Standards for the Enhanced Approval Process, and the Upstream Oil and Gas Operating Conditions for the Enhanced Approval Process.
- 13. The Operator shall comply with all applicable federal and provincial laws and all applicable municipal by-laws, and shall obtain all necessary permits, licences, authorizations and approvals required when performing its activities on the Lands.

THE DEPARTMENT COVENANTS AND AGREES with the Operator as follows:

- 14. The Department accepts the consideration referred to in clause 2 as full compensation for:
 - a) damage to or destruction of the land necessarily and reasonably incurred by the Operator in preparing, constructing and documenting development on the Lands,
 - b) severance,
 - c) injurious affection of other lands of the Department adjoining the land, and
 - d) nuisance, inconvenience and noise caused by or arising from the operations of the Operator on the land.

Acceptance of the above-noted consideration does not absolve or relieve the Operator from its obligation to indemnify the Department against all actions, claims and demands that may arise in the exercise or purported exercise of its duties, rights, powers and privileges granted under this Agreement, and does not absolve or relieve the Operator from liability to remediate and reclaim the Lands. The Operator shall at all times use current and best industry practices to minimize damage, destruction, nuisance, inconvenience and noise in performing its operations on the Lands.

15. Department agrees that the Department has the right to issue this Agreement to the Operator. Subject to the reservations and terms and conditions contained herein, the Operator, if not in default, has the right to occupy and use the Lands without interruption or disturbance from either the Department or any person claiming through or under the Department.

CANCELLATION OR EXPIRY OR ISSUANCE OF A REPLACEMENT AGREEMENT:

- 16. The Department may cancel this Agreement in accordance with either sections 26 and 27 or 81 of the Act if satisfied that the Operator has failed to comply with any of the conditions terms or conditions set out in, or incorporated into, this Agreement, whereupon all considerations, and charges shall be forfeited to the Department and the Operator shall not be entitled to any compensation for work performed on the Lands or expenditures by the Operator made incidental to this Agreement.
- 17. Upon cancellation or expiry of the term of this Agreement, and if the Department chooses to not issue a new pipeline Agreement to replace it, the Operator shall at its sole expense within a time period specified by the Department remove all infrastructure and reclaim the Lands to a condition satisfactory to the Department. If the Operator fails to remove infrastructure and reclaim the Lands to the satisfaction of the Department, the Department may perform the work, or have the work performed, on behalf of the Operator and all resulting charges and costs shall constitute a debt owed to the Crown.
- 18. Provided that the Operator has satisfactorily complied with all applicable provisions, terms and conditions of the Act, Regulations and this Agreement, and provided the Operator has provided to the Department a final submission referred to in Schedule "A" that is satisfactory to the Department, the Department may issue to the Operator a long term pipeline agreement.

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INTERPRETATION:

- 19. The recitals shall form an integral part of this Agreement.
- Any reference to the Act or the Regulations shall include the Act or Regulations as subsequently amended or revised, or any statutes or regulations passed in substitution thereof.
- 21. All provisions of the Act and Regulations that expressly or by implication relate to a Pipeline Agreement apply to this Agreement and shall be read and construed as if the same had been set out and incorporated herein.
- Where any provisions of the Act or Regulations conflict with anything contained in this Agreement, the provisions of the Act, and then the provisions of the Regulations shall prevail over this Agreement.
- 23. All subsequent approvals, amendments or waivers issued by a Department employee responsible for the management of pipeline activity on the Lands must be in writing.
- 24. All Appendices and Schedules referred to and attached herein, and all subsequent approvals, amendments or waivers in writing form part of this Agreement.
- 25. Service of a notice upon the Operator may be given by personal service, electronic facsimile or ordinary mail sent to the Operator at the Operator's last known facsimile number or postal address recorded by the Department. Any notice shall be deemed to have been effectively given on the day delivered or sent by facsimile, or if sent by mail on the fifth day after it was mailed. It is the Operator's responsibility to advise the Department in writing of any change in its electronic or postal addresses.
- 26. This Agreement is governed by the laws of the Province of Alberta.
- 27. The Operator acknowledges that terms of this Agreement, including the name of the Recipient, may be subject to disclosure under the *Freedom of Information and Protection of Privacy Act*, R.S.A. 2000, c. F-25, as amended. The Operator further acknowledges that *Freedom of Information and Protection of Privacy Act* applies to all information and records provided by the Operator to the Crown and to any information and records that are in the custody or control of the Crown, and that by submitting any information and records to the Crown, the Operator thereby waives any confidentiality or privilege respecting such information or records unless the Operator requests, and the Crown agrees, that confidentiality or privilege be noted on a specific document and sets out reasonable and rational grounds for doing so.
- 28. This document is your authority to access the Lands and provides the right to construct a pipeline, undertake any operations preparatory to the construction of a pipeline, or to operate a pipeline in or underlying the Lands. The Operator shall retain a copy of this Agreement on the job site during all phases of activity, including, if applicable, preparation, construction, development, maintenance and abandonment.

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- 29. An original of this Agreement is filed at the offices of Sustainable Resource Development, Land Dispositions Branch, 9915 108 Street, Edmonton, Alberta. The original will be used as the authority should any discrepancies arise in content of the counterparts or subsequent copies of the original.
- 30. By originally submitting its application in which it agreed to be bound by the terms and conditions of any resulting disposition the Operator is hereby deemed to have executed this Agreement and is hereby bound by all terms and conditions set out in, or incorporated into, this Agreement.

SCHEDULE A

Administrative Conditions

- 1. The Holder of the Short Term Pipeline Agreement shall comply with the conditions set out in this Schedule "A":
 - a) The Operator shall pay to the Department on the execution of this Agreement the consideration calculated by the Department in accordance with the Department's processes approved by the Minister under Section 9.1 of the Act (collectively "the consideration") and as compensation for other initial benefits accruing to the Operator.
 - b) Payments required by this document are to be made payable to "The Minister of Finance" and may be delivered to the nearest departmental field office, or mailed to:

Sustainable Resource Development Lands Division Main Floor, Petroleum Plaza, South Tower 9915 - 108 Street Edmonton, Alberta T5K 2G8

- c) The Operator shall not conduct any activity on the Lands where prior rights have been issued without the consent of the holder of these prior rights. A list of prior and subsisting authorizations and dispositions (prior rights) issued on the quarter sections included in this authority can be purchased from Alberta Energy, Crown Land Data Support, Telephone: 780-422-5727, or the Alberta Energy Website: http://www.energy.gov.ab.ca.
- d) Surface rights plot sheets showing active dispositions, and individual activity plans can be purchased from IHS, Main Floor, Petroleum Plaza, South Tower, 9915 108 Street, Edmonton, Alberta, T5K 2G8, Telephone: 780-413-3380, Fax: 780-413-3383 or Website: http://www.petrosurveys.ca
- e) The Operator shall contact the registered trapper, if any trapping areas (TPA) have been issued on the quarter sections included in this authority, at least TEN DAYS PRIOR TO COMMENCING ANY ACTIVITY. This must be done by registered mail and personal communication follow-up is strongly recommended. The trapper's name and address may be obtained from Alberta Energy, Crown Land Data Support (Telephone: 780-422-5727). For other information concerning registered traplines, contact the Client and Licensing Service, Sustainable Resource Development, Edmonton, Alberta (Telephone: 780-427-5185) upon receipt of this approval. The Operator may be responsible for any damage to traps, snares or other improvements.
- f) Where applicable, the Department may, in addition to any other charges, assess a further charge of 50 cents per acre (\$1.24 per hectare) on every acre or part acre in this authority to fund the Trapper's Compensation Program. Classification of lands can be obtained from Alberta Energy, Crown Land Data Support, Telephone: 780-422-5727 or the Alberta Energy Website: http://www.energy.gov.ab.ca.

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- g) The Operator is responsible for obtaining any necessary federal, municipal and other permits and approvals with respect to this authority.
- h) Without restricting the provisions of section 14 of the *Dispositions and Fees Regulation*, the Operator agrees to indemnify and hold harmless the Minister, its employees and agents from any and all third party claims, demands, actions or costs (including legal costs on a solicitor-client basis) for which the Operator is legally responsible, including those arising out of negligence or wilful acts by the Operator or the Operator's employees or agents. This hold harmless provision shall survive this Agreement.
- i) The Operator shall, at its own expense and without limiting its liabilities herein, insure its operations under a contract of General Liability Insurance, in accordance with the *Alberta Insurance Act*, in an amount not less than \$5,000,000 inclusive per occurrence, insuring against bodily injury, personal injury and property damage including loss of use thereof including all losses, damages and harm that may result from the Operator's activities and operations on the Lands. The Operator shall provide the Department with acceptable evidence of all the insured prior to the commencement of the Work and shall promptly provide the Department with a certified true copy of each policy upon request.
- j) The Operator acknowledges that these are the minimum requirements that have been established by the Department. No representation or warranty of any kind is made by the Department as to the completeness or suitability of this insurance and the Operator shall determine and satisfy itself that it has appropriate and sufficient coverage to satisfy its own risk and insurance requirements, and to cover its obligations under this Agreement.
- k) Upon discontinuance of the use of the Short Term Pipeline Agreement and the exercise of the rights hereby granted, the Operator shall at its sole expense within a time period specified by the Department remove all infrastructure and reclaim the Lands to a condition satisfactory to the Department. The Operator may leave and abandon the pipeline or pipelines in place, provided that the Operator acquires the consent of the Department.
- 1) This authorization is granted subject to further amendment by the Department.
- 2. The Operator shall obtain prior written authorization from the department before deviating from an authorized plan and/or standard and condition as identified within this authority.
- 3. The Operator shall not in any way alter or modify this document. The Operator shall immediately advise the Department of any errors or omissions in this document.
- 4. Notification to the Department of entry must occur within 48 hours of site entry.
- 5. A final submission must be submitted to the Department by the Operator within the term of this Agreement.

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- 6. The final submission shall include a final plan in the type and format as specified in the Disposition Plan Types/Formats document. The Disposition Plan Types/Formats document is available on the SRD website. To access the document, search for "Disposition Plan Types Formats" on srd.alberta.ca.
 - a) Where interim submissions have been applied for with the final submission plan requirements, as specified in Disposition Plan Types/Formats document, the final submission shall include:
 - i) An Alberta Land Surveyors Statutory Declaration for those disposition types that require a plan of survey. The form is available on the SRD website. To access the forms search for "Alberta Land Surveyors Statutory Declaration" on srd.alberta.ca, or
 - ii) A GPS Location Plan Statutory Declaration for those disposition types that require a GPS Location Plan. The form is available on the SRD website. To access the forms search for "GPS Location Plan Statutory Declaration" on srd.alberta.ca.
- 7. Charges calculated under Section 5 of the *Dispositions & Fees Regulation* will follow under separate cover.

All licences, authorizations and approvals issued under the *Alberta Environmental Protection and Enhancement Act, Water Act* or *Public Lands Act* should not be taken to mean the proponent (applicant) has complied with federal legislation. Proponents should contact Habitat Management, Central and Arctic Region, Fisheries and Oceans, at the appropriate local office as listed below, in relation to the application of federal laws relating to the *Fisheries Act* (Canada).

- Bow and Parkland Regions (403) 292-5160
- Northern East Slopes and Northeast Boreal Regions (780) 495-4220
- Prairie Region (403) 394-2920
- Northwest Boreal Region (780) 618-3220

Proponents should also contact the Navigation Protection Program, Canadian Coast Guard, 4253-97 Street, Edmonton, Alberta, T6E 5Y7, Telephone: (780) 495-6325, relating to the *Navigable Waters Protection Act*.

SCHEDULE B

Provincial Approval Standards and Operating Conditions Approval Standards

100.1. Land Management

- 100.1.1. Location of proposed developments shall, where practical, be sited as follows, unless alternative siting can be supported by Regulated Industry Standards:
 - a) Use existing disturbances or be located adjacent to existing occupied industrial dispositions.
 - b) New linear developments shall:
 - i) Use existing unoccupied linear disturbances (≥ 4 metres wide).
 - ii) Parallel existing occupied linear industrial dispositions.
 - iii) Apply Integrated Land Management principles http://www.srd.alberta.ca found under Managing Programs > Integrated Land Management in development planning so that parallel roads closer than 250m are not created.
- 100.1.2. Locate wellsites and roads outside of natural forest openings (> 10 hectares) such as meadows when planning development activities, unless justifiable extra-ordinary conditions require alternative siting and are supported by the Energy Resources Conservation Board (ERCB), the Canadian Standards Association (CSA) and/or Occupational Health and Safety (OHS) requirements.
- 100.1.5. Pipeline Right of Way (ROW) widths shall not exceed the limits listed below, unless alternative ROW widths can be supported by Regulated Industry Standards. Variable width is preferred:
 - a) Cross Country
 - i) Conventional Pipelines with an outside diameter ≥ 200 millimetres: the ROW width shall not exceed 20 metres.
 - ii) Conventional Pipelines with an outside diameter ≤ 200 millimetres: the ROW width shall not exceed 15 metres.
 - iii) Multi-pipe installation projects within a single ROW width shall not exceed 20 metres.
 - b) Paralleling Existing Disposition
 - i) Proposed pipelines adjacent to existing linear disturbances will not exceed 10 metres disposition width.

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Provincial Approval Standards and Operating Conditions

- ii) Proposed pipelines adjacent to existing pipeline disturbances will not exceed 15 meters disposition width.
- iii) Effort will be made to gain approval (documented) from the adjacent disposition holder to utilize portion(s) of their disposition for temporary work space.
- c) All pipelines shall be installed consistent with ERCB Directive 056, Energy Development Applications and Schedules at http://www.ercb.ca/ found under Industry Zone > Rules, Regulations, Requirements > Directives, and Alberta Environment's Water Act, Water (Ministerial) Regulation, and the appropriate Code of Practice at http://environment.alberta.ca found under Water > Legislation > Water: Codes of Practice related to pipelines.
- 100.1.6. Where materials are available, rollback shall be applied as follows, unless alternative siting can be supported by Regulated Industry Standards:
 - a) Place rollback across the entire pipeline/easement width for a distance of at least 200 metres from all points of intersection with roads and permanent watercourses.
 - b) Place rollback across the entire pipeline/easement width on all slopes greater than or equal to 10%.
 - c) Rollback on lands under agricultural disposition (grazing lease, farm development lease) will only be applied after obtaining consent from the disposition holder.
 - d) Use dog-legs, directional drilling, or other techniques to retain at least 50 metres of forest cover (where it exists) to block line-of-sight and vehicle access at all points of pipeline/easement intersection with all intermittent and permanent watercourses and roads.
 - No rollback shall occur on wildfire control breaks, containment lines or other designated debris free locations identified in a Wildfire Management Plan or FireSmart Plan.
- 100.1.7. Temporary Work Space (as per the Temporary Field Authorization Guidelines at http://srd.alberta.ca found under Maps, Forms and Publications > Forms > Lands Forms) shown at the time of application for short term disposition shall be valid for the term of the short term disposition.

100.3. **Soil**

- 100.3.1. Permafrost degradation is not permitted.
- 100.3.2. In permafrost areas, the surface shall not be stripped.

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100.4. Watercourse/Waterbody

- 100.4.1. Resource extraction activities on islands and the bed and shore of permanent waterbodies is prohibited.
- 100.4.2. Activities shall not interrupt natural drainage (including ephemeral and fens), block water flow or alter the water table.
- 100.4.4. The following watercourse setbacks for all activities from the edge of site or paralleling linear dispositions shall be followed:
 - a) Intermittent watercourses shall have a setback of at least 45 metres from the top of the break.
 - b) Small Permanent watercourses shall have a setback of at least 45 metres from the top of the break.
 - c) Large Permanent watercourses shall have a setback of at least 100 metres from the top of the break.
- 100.4.5. The following waterbody setbacks for all activities from the edge of site or paralleling linear dispositions shall be followed:
 - a) A minimum setback of 45 metres of undisturbed vegetation shall be maintained on non-permanent seasonal wetlands.
 - b) A minimum setback of 100 metres setback from the bed and shore on semipermanent ponds/wetlands and shallow open water ponds and lakes.
- 100.4.6. Crossings shall be minimized, unless doing so results in greater disturbance (i.e. footprint hectares) and/or negative environmental impacts (e.g. impacting landscape sensitivities) than creating a new crossing.
- 100.4.7. All crossings shall maintain fish passage. Crossings shall be compliant with Alberta Environment's Code of Practice under the *Water Act;* Water (Ministerial) Regulation.

100.6. **Provincial Grazing Reserves (PGR)**

- 100.6.1. Activities are not permitted in fields currently being grazed or in fields scheduled for grazing in the current grazing season, unless the local Land Management Specialist has verified that the activity timing will not interfere with livestock operations.
- 100.6.2. In areas with irrigation fields, developments shall be on non-irrigated areas only.
- 100.6.3. No activities are permitted on flood-irrigated lands at any time.
- 100.6.4. Developments on provincial grazing reserves in the Grassland Natural Region must be sited within existing industrial disturbances, cultivated areas or improved (tame)

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Provincial Approval Standards and Operating Conditions

pastures. If developments do occur on native grasslands, they shall follow all approval standards and operating conditions of the Grassland and Parkland Natural Region identified in Section 100.10 of the Approval Standards and Section 200.10 of the Operating Conditions.

100.6.5. Developments on provincial grazing reserves in forested areas that cannot use existing industrial disturbance must be located outside of improved (tame) pastures but directly adjoining (i.e. immediately adjacent to) the pasture boundary or the PGR perimeter. Where developments are required to be within improved (tame) pastures in forested areas and cannot use existing disturbance, they shall be located outside of, and immediately adjacent to any existing leave areas.

100.8. Wildlife

- 100.8.1. Locate activities away from important wildlife features including mineral licks, raptor nests, active den sites, and hibernacula by a minimum buffer distance of 100 metres. Buffer distances will be greater for identified sensitive species and features (Subsection 100.9.1.).
- 100.8.2. Where an Integrated Resource Plan or a Protective Notation identifies a greater set back, the greater set back shall prevail.
- In areas where limber pine and whitebark pine are encountered follow the following setbacks. High impact activities require a 300 metre setback. Medium and low impact activities require a minimum of a 30 metre setback. A description of High, Medium and Low risk developments referred to can be found in Appendix B of the Approval Standards.

Operating Conditions

200.1. Land Management

- 200.1.1. The disposition holder shall furnish proof that the holder has complied with any and all of the provisions of the holder's disposition in a form and time required by the Minister.
- 200.1.2. Pipeline vegetation removal associated with step-out or wildcat wells shall not start until it is known that the activity is required based on a producing well.
- 200.1.3. Pipeline replacement shall occur within approved Right of Way (ROW).
- 200.1.4. Locate temporary activities (e.g. large camps, remote sumps) adjacent to permanent, all-weather access or to existing industrial dispositions.
- 200.1.9. Any existing improvements (e.g. fences, water control structures, and signage) that were damaged as a result of industry activities on the land shall be repaired and/or replaced to original condition within 30 days or immediately if occupied by livestock.

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- 200.1.11. The application of rollback within FireSmart Community Zones shall be determined through the Consultative Notation (CNT) process in SRD.
- 200.1.12. In addition to the operating conditions in this document, all activities shall be coordinated through Energy Industry Control at (780) 842-5850 for activity on Canadian Forces Base/Area Support Unit, Wainwright, and (780) 573-7206 for activity on Canadian Forces Base/Area Support Unit, Cold Lake.
- 200.1.13 Concurrent construction of a pipeline, wellsite, and access prior to proven results shall only be permitted for in-field wells for unconventional developments where a high degree of production certainty can be demonstrated.

200.2. Vegetation

- 200.2.1. Manage all weeds as per the *Weed Control Act*.
- 200.2.2. Vegetation control (mechanical mowing/brush control) along linear ROWs shall not occur between May 1st and July 31st, notwithstanding the need to comply with the *Weed Control Act* with the following exception: in the Grassland and Parkland Natural Regions, vegetation control between May 1st and July 31st for vehicle access, is limited to mowing no more than a 4 metre area centred on the driving lane.
- 200.2.5. Application of chemical methods shall not occur within 30 metres of any waterbody or watercourse, unless otherwise authorized.
- 200.2.6. All equipment used shall be cleaned to be free of weeds.
- 200.2.7. When reseeding use only seed that meets or exceeds Certified #1 as outlined in the *Canada Seeds Act and Seeds Regulations*. Seed used shall be ergot free or cleaned for removal of ergot bodies. Seed mixes are to be free of the species listed in the *Weed Control Act*. A seed analysis for each species shall be provided, to SRD, upon request.
- 200.2.8. When reseeding with native seed, seed shall be ergot free or cleaned for removal of ergot bodies. Seed mixes shall be free of the species listed in the *Weed Control Act*. Native seed shall not include any of the following agronomic species: timothy, Kentucky blue grass, creeping red fescue, smooth brome, crested wheatgrass, meadow brome, Dahurian wildrye, perennial ryegrass, Russian wildrye, Altai wildrye, alfalfa, sweet clover, Cicer milkvetch, and Kura clover. A seed analysis for each species shall be provided, to SRD, upon request.
- 200.2.9. Revegetation with trees or shrubs within the Green Area shall be consistent with the Alberta Forest Genetic Resource Management and Conservation Standards Manual located on the SRD website at http://srd.alberta.ca Managing Programs > Forest Management Manuals & Guidelines.
- 200.2.10. Merchantable timber shall be salvaged unless a request for waiver is approved by SRD.

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Provincial Approval Standards and Operating Conditions

200.3. **Soil**

- 200.3.1. Activity shall be suspended during adverse ground conditions.
- 200.3.2. Soil and surface erosion and sedimentation shall be prevented and controlled on all disturbed lands.
- 200.3.3. Soil shall not be removed from the disposition unless authorized.
- 200.3.4. Where soil stripping occurs, salvage all topsoil. Soil horizons A and B must be stripped and stored separately. Store topsoil separately from subsoil and woody material, such that it can be distributed evenly over the disturbed area for progressive (interim) and/or final reclamation.
- 200.3.5. For forested lands, where topsoil is less than 15 centimetres, conservation shall include the topsoil plus the B-horizon up to a depth of 15 centimetres unless the B-horizon is considered unsuitable (chemically or physically).
- 200.3.6. Storage piles/windrows shall not encroach into adjacent standing timber.
- 200.3.7. Disposal pits, required in connection with the activity, shall be located in impermeable soil. Where impermeable soil is not available, impermeable tanks may be used to collect all waste and then dispose of at an authorized waste disposal facility.
- 200.3.8. Soil sterilants are prohibited.
- 200.3.9. All spoil material excavated from the pipeline trench shall be returned to the trench in a manner that there is no pooling of water or erosion occurring on the surface. The maximum height of crown (roach) shall not exceed 60 cm on frozen soils and 30 cm on dry or non-frozen soils. Breaks in pipeline roaches shall occur as to not impede water drainage and allow passage of water.
- 200.3.11. Soil rutting shall not occur on minimal disturbance sites.
- 200.3.12. In permafrost areas, utilize snow (natural or man-made) to establish a level surface.

200.4. Watercourse/Waterbody

- 200.4.1. Activities shall not result in the deposition or placement of debris, soil or other deleterious materials into or through any watercourse and/or waterbody, or on the ice of any watercourse and/or waterbody.
- 200.4.2. Keep watercourse crossings free of accumulated debris or ice that could impede the flow of water and subsequently cause erosion.
 - a) Remove ice-dams from culverts. Culverts plugged with ice are to be re-opened to prevent flooding over the road, through the ditch, or around the crossing structure during spring thaw.

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- b) Remove debris that compromises water flow immediately upstream from or under crossing structures.
- 200.4.4. Where crossings have been removed, the bank or shoreline of all affected watercourses and/or waterbodies shall be immediately stabilized and/or alterations or modifications to the bank or shoreline shall be restored.
- 200.4.5. Access for water withdrawal requires a Temporary Field Authorization approval.
- 200.4.6. Bridge abutments shall not constrict the normal watercourse channel. Bridge spans shall extend beyond stream banks and abutment walls.
- 200.4.7. Water from roads, ditches and bared soil surfaces are not to be permitted to drain directly into watercourses. Where vegetated buffers alone do not retard water and sediment movement effectively, appropriate obstructions (e.g. logs, rocks, mounds) or sediment control structures shall be installed to dissipate the flow of water and capture sediment prior to entering the watercourse.
- 200.4.8. Watercourse structures shall be maintained to prevent sedimentation and erosion.
- 200.4.9. Erosion control measures (e.g. silt fences, matting, gravel, and check dams) shall be installed and maintained.
- 200.4.10. A frac containment and clean-up specialist shall be on-site during all boring or directional drilling activities under permanent watercourses. All equipment required for containment and clean-up shall also be present.

200.5. **Reclamation**

- 200.5.1. Conduct progressive reclamation and interim clean-up, including built but not drilled sites, for the wellsite and all associated disturbances (log decks, remote sumps, campsites, borrow sites, etc) of that disposition as per External Directive SD 2010-02 Progressive Reclamation and Interim Clean up found on the SRD website http://www.srd.alberta.ca/ under Maps, Forms & Publications > Directives > Lands.
- 200.5.2. For final reclamation, follow the 2010 Reclamation Criteria for Wellsites and Associated Facilities located http://www.environment.alberta.ca/ under Lands > Program & Services > Reclamation & Remediation > Upstream Oil & Gas as updated or amended.

200.6. **Provincial Grazing Reserves (PGR)**

- 200.6.1. Access is permitted during frozen or dry-ground conditions only.
- 200.6.2. Contact the local Land Management Specialist prior to entry onto the reserve to verify that timing of the activity will not interfere with livestock operations.
- 200.6.3. No activity shall occur during livestock take-in or take-out dates.

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- 200.6.4. Once the field has been grazed, and is no longer scheduled for the remainder of the grazing season, activities are permitted with the approval of the local Land Management Specialist.
- 200.6.5. If the location of an activity prevents livestock access to identified watering facilities, provide permanent or temporary reliable and clean alternate water source(s).
- 200.6.6. All fence line crossings along access routes shall use appropriate structures (e.g. cattle guards, gates) so cattle cannot escape.
- 200.6.7. Fences surrounding oil and gas activities are required in grazing pastures within the PGR as follows:
 - a) All wellsites within pastures, excluding: Bow Island, Lonesome Lake, Hays, Pinhorn, Sage Creek, Seven Persons, Purple Springs and Twin River, unless otherwise directed by a Land Management Specialist.
 - b) During construction.
 - c) Revegetating of the disturbed site.
- 200.6.8. Fencing locations shall be reduced to the immediate surroundings of the infrastructure/ facilities once construction is complete and once the disturbed area is revegetated (interim reclamation).
 - a) Damaged existing perimeter pasture fences, shall be repaired or rebuilt to the asset specification standards of the PGR Fence Specifications.
- 200.6.9. Pipelines shall be bored when crossing Class I, II, & III access routes.
- 200.6.13. Log storage and hauling on tame pasture is allowed only during frozen-ground conditions.
- 200.6.14. Water removal from dugouts, surface ponds, springs, or water wells is not permitted within the grazing reserve unless approved by a Temporary Field Authorization.

SCHEDULE B

Provincial Approval Standards and Operating Conditions

200.7. Rocky Mountains Forest Reserves

- 200.7.1. As per section 21 of the *Forest Reserve Regulation*, allotment holders must be contacted.
- 200.7.2. If the location of an activity prevents livestock access to identified watering facilities, provide permanent or temporary, reliable and clean alternate water source(s).
- 200.7.4. Water removal from dugouts or developed springs is not permitted unless approved by a Temporary Field Authorization.

200.8. Wildlife

200.8.1. All activities shall follow the industrial practices in the <u>Alberta Bear- Human Conflict Management Strategy</u> (Appendix A)

Pipeline Agreement (PLA)

SCHEDULE C

Landscape Analysis Tool Report

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Time: 09:02 08 AM

LAT Number: 0000006A68

LAT Date: 2011-03-21

Project Name: Shell Quest Pipeline - Upper Namepi Crk Crossing

Project Shell Quest Pipeline - Upper Namepi crk Crossing **Description:**

Disposition Type: Pipeline Agreement (PLA)

Activity Type: Conventional Pipelines (CONVPIPE)

Disclaimer:

The information provided within the LAT Tool is a spatial representation of features provided for land use planning. The accuracy of these layers varies depending on the resource value being represented. Ground-truthing is required to ensure that the applicant will meet the applicable Integrated Standards and Guidelines.

SCHEDULE C

Landscape Analysis Tool Report

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Crown Ownership:	Private/Titled	National Parks:	
Green/White Area:	White Area	Ecological Reserves:	
Municipality:	County of Thorhild No. 7	Provincial Parks:	
		Wilderness Parks:	
First Nations Reserve:		Wildland Parks:	
		Wilderness Areas:	
Metis Settlement:		Special Area:	
		Military Base/Training:	
FMA:		DND Air Weapons Range:	
FMU:	LO1	Integrated Resource Plan (Local):	
Provincial Sanctuar	Ties		
Corridor Wildlife:		Game Bird:	
D. History I.A.		Seasonal:	
Restricted Area:		Wildlife:	

SCHEDULE C

Landscape Analysis Tool Report

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Greater Sage Grouse Leks and Buffer: Greater Sage Grouse Habitat and Buffer: Colonial Nesting Birds: No Burrowing Owl Range: Sensitive Snake Species Range: No Ord's Kangaroo Rat Range: Eastern Short-horned Lizard Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Mountain Goat and Sheep Areas: No Sensitive Raptor Range: No Burrowing Owl Range: No Ord's Kangaroo Rat Range: Piping Plover Waterbodies: Endangered and Threatened Plants Ranges: Caribou Zones: Frumpeter Swan Waterbodies/Watercourse: Key Wildlife and Biodiversity Zones:							
Leks and Buffer: Greater Sage Grouse Habitat and Buffer: Colonial Nesting Birds: Sensitive Snake Species Range: No Sharp-tailed Grouse Range: Swift Fox Range: No Ord's Kangaroo Rat Range: Eastern Short-horned Lizard Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Sensitive Raptor Range: No Burrowing Owl Range: No Burrowing Owl Range: Piping Plover Waterbodies: Endangered and Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and							
Habitat and Buffer: Colonial Nesting Birds: Sensitive Snake Species Range: No Sharp-tailed Grouse Range: Swift Fox Range: No Ord's Kangaroo Rat Range: Eastern Short-horned Lizard Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Sharp-tailed Grouse Range: No Piping Plover Waterbodies: Endangered and Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and	No						
Sensitive Snake Species Range: No Sharp-tailed Grouse Range: Swift Fox Range: No Ord's Kangaroo Rat Range: Eastern Short-horned Lizard Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Sharp-tailed Grouse Range: No Piping Plover Waterbodies: Endangered and Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and	No						
Swift Fox Range: No Sharp-tailed Grouse Range: No Ord's Kangaroo Rat Range: Eastern Short-horned Lizard Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Sharp-tailed Grouse Range: No Ord's Kangaroo Rat Range: Piping Plover Waterbodies: Endangered and Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and	No						
Eastern Short-horned Lizard Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Piping Plover Waterbodies: Endangered and Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and	No						
Range: Sensitive Amphibians Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No No Endangered and Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and	No						
Ranges: Other Sensitive and Endangered Species: Grizzly Bear Zone: No Threatened Plants Ranges: Caribou Zones: Trumpeter Swan Waterbodies/Watercourse: Key Wildlife and	No						
Endangered Species: Grizzly Bear Zone: No Trumpeter Swan Waterbodies/Watercourse: Special Access Zone: No No Key Wildlife and	No						
Waterbodies/Watercourse: Special Access Zone: No No Key Wildlife and	No						
	No						
·	No						
Water							
Proximity to Waterbody: Industry will ensure that the Watercourse/Waterbodies standards and conditions as defined within the Integrated Standards and Guidelines are followed. To ensure these setbacks and buffers are addressed and maintained, it is recommended that a pre-site assessment occur.							
Grassland and Parkland Natural Region:							
Grassland and/or Parkland Natural Region: No							

SCHEDULE C

Landscape Analysis Tool Report

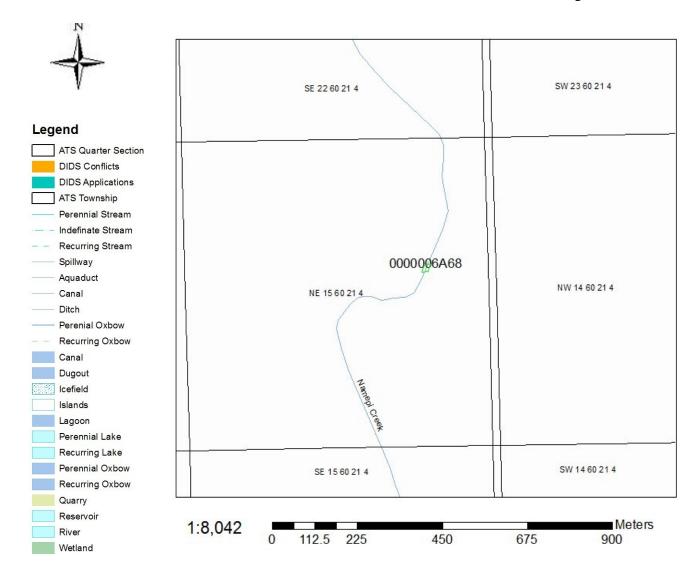
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Quarter Sec	tion Township	Range	Meridian	Sensitive Features by Quarter Section
NE	15 60	21	4	

SCHEDULE C

Landscape Analysis Tool Report

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SCHEDULE C

Landscape Analysis Tool Report

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Sensitivity Approval Standards and Operating Conditions

Form Date: Sep 9, 2010

Schedule D Application Supplement - Pipeline

The appropriate supplement form must be submitted for each surface disposition application. All blanks must either be filled in or ${}^{6}N/A^{7}$ noted where applicable.

Failure to fill out the document and form(s) completely will result in the application being rejected.

Α.	Pipeline Description						
1.	Pipe outside diameter 323.9 mm						
2.	Pipeline product: ☐ Oil ☐ Sweet gas ☐ Sour gas (H²S) ☐ Water ☐ Other Carbon Dioxide (CO2)						
3.	Specify associated developments/dispositions that may be required as a result of this disposition. Description: Compressor						
	☐ Metering Station ☐ Access ☐ Other N/A						
В.	Construction Strategy						
1.	Construction is proposed under the following soil conditions (check the box that applies):						
	⊠ Frozen						
	Non-Frozen						
	Other (If "Other", explain)						
	Construction will occur under frozen conditions. Crossing methods in accordance with Code of Practice for Pipelines and Telecommunication Lines Crossing a Water Body, and Fisheries and Oceans Canada Operational Statements will be employed (open cut when dry/frozen)						
2.	Vegetation removal: Explain Trees felled towards RoW and away from watercourse. Trees that indavertantly fall into adjacent undisturbed vegetation will be bucked into manageable lengths and removed. Trees that inadvertantly fall into watercourse will be removed in a manner that minimizes disturbance to bed and banks.						
	Brush disposal: Explain May include: retention for use as rollback, burning, chipping/mulching or a combination appropriate. Any logs and slash not saved as rollback may be disposed of by burning (with appropriate permits).						
3.	Pipeline installation (predominant method for pipeline ROW, check appropriate boxes):						
	☐ Trench (top of trench width 120 cm) ☐ Plough						
	☐ Above-ground						
4.	Topsoil handling (check appropriate boxes):						
-	☐ Minimal surface disturbance (no stripping) ☐ Stripping						
	☐ Single lift ☐ Two lift						
	Other Explain: N/A						

5.	Topsoil stripping width (in metres), (check appropriate boxes):
	☐ Trench and working side access m ☐ Trench and spoil m
	☐ Entire ROW ☐ Trench only
	If more than one box has been checked, explain: $\underline{N/A}$
6.	When will interim-reclamation/re-contouring of grade/trench occur: 6/30/14 dd/mm/yyyy a) Topsoil replaced on active location (check appropriate box): ☐ Concurrently ☐ Allow trench time to settle
	Concurrently Anow trench time to settle
	b) Rollback of woody debris: ⊠ Yes □ No
7.	Based on the land search of the affected lands, as defined within the Integrated Standards and Operating Conditions, were any Reservations/Notations or Regional plans noted that require additional mitigation?
	Provide any additional mitigation or direction as provided within the plan/notation or from the supervising Area. $\underline{N/A}$
8.	Identify the date that your Historical Resources search was completed <u>04/05/2010</u> dd/mm/yyyy
	If present, what is the Historical Resource Value (HRV) of the affected lands?
	$igstyle \operatorname{Not}$ Listed $igstyle 1$ $igstyle 2$ $igstyle 3$ $igstyle 4$ $igstyle 5$
an	HRV is 1-5, an 'Application for Historical Resources Act Clearance' must be submitted to the Cultural Facilities d Historical Resource Division (CFHRD) of Alberta Community Development.
Da	te submitted N/A dd/mm/yyyy
No	te: Activities on land that has an HRV or 4 or 5 may require a Historical Resources Impact Assessment (HRIA).
C.	Method of Access/Watercourse Crossings
1.	How will the pipeline be accessed? (Check boxes that apply)
	By existing access held under disposition or jurisdiction (If 'Yes', specify disposition number and owner):
	New disposition (LOC)

2. Will watercourses be crossed by vehicle/equipment? \square Yes \square No

Identify within this table below, any watercourse crossings to be installed in relation to this disposition activity that are exempted for notification to AENV as per the Code of Practice for Watercourse Crossings.

Crossing Number	Crossing Method	Culvert/Bridge Size Diameter (mm) x length (m)	Water- course Size Class (1-4)	LSD	Sec	Twp	Rge	Mer	Specify if restricted activity period (dd/mm/yyyy)	Class of Waterbody from COP (A,B,C,D)
	Initial	X							From	
	Final								То	
	Initial	X							From	
	Final								То	
	Initial	X							From	
	Final								То	
	Initial	X							From	
	Final								То	
	Initial	X	X						From	
	Final								То	

Lands Division Sustainable Resource Development

SCHEDULE E

Lands

SRD PLAN NUMBER: 83607 P, 2011-03-23

PURPOSE: PIPELINE (OIL/GAS) (HIGH PRESSURE)

Affected Lands:

Qtr/LS Sec Twp Rge Mer Qtr/LS Sec Twp Rge Mer NE 15 60 21 4

2011-03-23 13:27:13 MDT

NOW THEREFORE the Department has by its duly authorized representative executed this disposition on the date noted below

Assistant Deputy Minister, Lands Division, Alberta Sustainable Resource Development Director, Public Lands Act

UserName: linda.sagan Title: Supervisor

Date: Monday, 04 April 2011, 01:52 PM Mountain Daylight Time

Meaning: Authorization for Land Disposition
