



OGC File: 9636887

May 3, 2013

Pacific Trail Pipeline Management Inc.
1000, 700 – 9th Ave SW
Calgary, Alberta T2P 3V4

Attention: Surface Land Administrator

Re: Geotechnical Investigation - Section 14 over Crown Land, Range 5 Coast District
within 103-I-1, 103-I-2, 103-I-7, and 103-I-8.

Date of Issuance: May 3, 2013
Commission File No: 9636887
Applicant File No: PTP-0001 (88-11-0001)

PERMISSIONS

The Oil and Gas Commission ("Commission") hereby authorizes the holder of permit number 9636887, under section 14 of the *Land Act*, to allow Pacific Trail Pipeline Management Inc. (the "permit holder") to occupy Crown land within the areas described in the attached sketch plan CAN-AM File: N20120170, Revision 3, dated April 4, 2013, as submitted to the Commission in the permit application dated October 2, 2012 (hereinafter referenced together as the "Site"), to conduct appraisals, inspections, analyses, inventories, surveys or other investigations under Authorization Number 940432, subject to conditions set out below.

CONDITIONS

1. The permit holder may use and occupy the Site only for the purposes of investigating the site for potential oil and gas activities and related activities as those terms are defined in the *Oil and Gas Activities Act*.
2. The total disturbance within the Site must not exceed 2.616Ha.
3. The permit holder will indemnify the Province of British Columbia (the Province) and the Oil and Gas Commission against all losses, damages, costs and liabilities arising out of any breach or non-performance of any condition or agreement set out in this Permit and any personal injury, death or property damage occurring within the Site, or happening by virtue of its occupation of the Site, and the amount of such losses, damages and costs shall be payable to the Province or the Oil and Gas Commission immediately.
4. The permit holder will immediately effect, and keep in force while this Permit is in effect, insurance of an amount not less than \$1,000,000 protecting the Province, the Commission and the permit holder (without any rights of cross-claim or subrogation) against claims for personal injury, death, property damage, or third party or public liability claims arising from any accident or occurrence on the Site.

5. The permit holder will restore the site to the satisfaction of the Oil and Gas Commission following expiration or cancellation of this Permit.
6. The authorization to occupy and use Crown land does not entitle the permit holder to exclusive possession of the Site. The permit holder will not interfere with any person found on the Site who has a public right of access over the Site or is using the Site pursuant to a prior or subsequent Land Act disposition.
7. The rights granted by this permit are subject to all subsisting grants to or rights of any person made or acquired under the Coal Act, Forest Act, Mineral Tenure Act, Petroleum and Natural Gas Act, Range Act, Water Act or Wildlife Act, or any extension or renewal of the same, any prior dispositions made under the Land Act, and the exceptions and reservations of rights and interests under Section 50 of the Land Act.
8. The permit holder will acknowledge and agree that any interference with rights granted under this permit by virtue of the exercise or operation of the rights or interests set out in the Sections (6) or (7) above shall not constitute a breach of the Province's or the Commission's obligations under this permit and the permit holder will release and discharge the Province and/or the Commission from any claim for loss or damage arising directly or indirectly out of any such interference. The permit holder will also agree to pay all costs and expenses that arise out of the permit holder's interference with the rights or interests set out in Sections (6) or (7) and that the permit holder will not commence or maintain proceedings under Section 65 of the Land Act with respect to interference with the permit holder's rights arising out of exercise or operation of the rights set out in Sections (6) or (7).
9. The permit holder must pay to the Province, when due, the Fees to the address and in accordance with the instructions set out in the attached covering letter.
10. The permit holder must not assign or sub-tenure this Permit. The permit holder must not transfer this permit without the Commission's written consent, which consent may be granted or withheld at the Commission's sole discretion.
11. This permit expires two years from the date of issuance.
12. The permit holder must notify the Commission 48 hours prior to commencing activities under this permit.
13. An Archaeological Impact Assessment ("AIA") must be conducted for the proposed development area.
14. If an archaeological site is recorded as a result of the AIA referenced in condition 13, above: an AIA report must be submitted immediately to the Oil and Gas Commission and all mitigation measures must be approved by the Commission's archaeology staff prior to conducting activities under this Permit; and all activities conducted under this Permit must be completed in accordance with the approved mitigation measures.
15. If no archaeological site is recorded during the AIA referenced in condition 14, above, an AIA report must be submitted to the Commission as soon as possible as per the Archaeology Process Guidelines.
16. In the event that:
 - a. a heritage site, heritage object or any other feature, place or material that may contain historical or archaeological value as defined by the Heritage Conservation Act [RSBC 1996] Chapter 187; or

- b. any other cultural heritage material or feature

is encountered while conducting activities under this Permit, the permit holder must cease immediately disturbance activities and immediately notify the Commission.

17. Within 60 days of the completion of the clearing phase of the activity authorized, the permit holder must submit to the Commission a Post-construction plan as an ePASS shape file accurately identifying the locations of the overall disturbance within the Site.
18. The permit holder must abide by and comply with all applicable laws, bylaws, orders, directions, ordinances, and regulations of any government authority having jurisdiction in any way affecting its use or occupation of the Site, including, without limitation, the provisions of the *Land Act* and the provisions of this Permit.

CUTTING PERMIT AUTHORIZATION

Pursuant to section 47.4 of the *Forest Act*, the Commission hereby issues Cutting Permit No. 13, under Master License to Cut number M02280, Kalum Forest District, to cut and remove timber from the areas of Crown land within the area within the Site subject to the following conditions:

1. This Cutting Permit expires 2 years from the date of issuance of the Investigative Permit or the revised date should this permit be extended.
2. This Cutting Permit is subject to the terms and conditions in the Master Licence to Cut.
3. All harvested Crown timber must be marked with Timber Mark Number MSZ 839.
4. The felling, bucking and utilization specifications in the Master License to Cut apply to this Cutting Permit.
5. Stumpage under this cutting permit is required to be paid to the Crown and will be determined as per the terms in Master License to Cut number M02280. The amount will be determined in accordance with the Ministry of Forests Coast Appraisal Manual.
6. Timber that is stored in decks or piles must be marked with the correct timber mark before transportation, or at the end of every shift. The marking must be applied to one end of at least 10% of the timber pieces in each deck or pile using a hammer indentation or paint. Marking must be kept concurrent with decking.
7. In accordance with the Master Licence to Cut referenced above, "Within 60 days of completing operations on a cutting permit, the Licensee shall submit to the Commission a map showing all disturbances that have occurred pursuant to that Cutting Permit, at a scale of 1:20,000 or 1:50,000."
8. The utilization of merchantable timber, as defined in the Provincial Logging and Waste Measurements Procedures Manual, is mandatory for this permit.
9. Prior to harvesting, any clearing authorized by this Cutting Permit must be clearly defined on the ground by ribboning or blazing.
10. This permit authorizes a maximum total new cut area of 2.616Ha within the Site.

ADDITIONAL CONDITIONS

1. This permit only authorizes operations on Crown land.

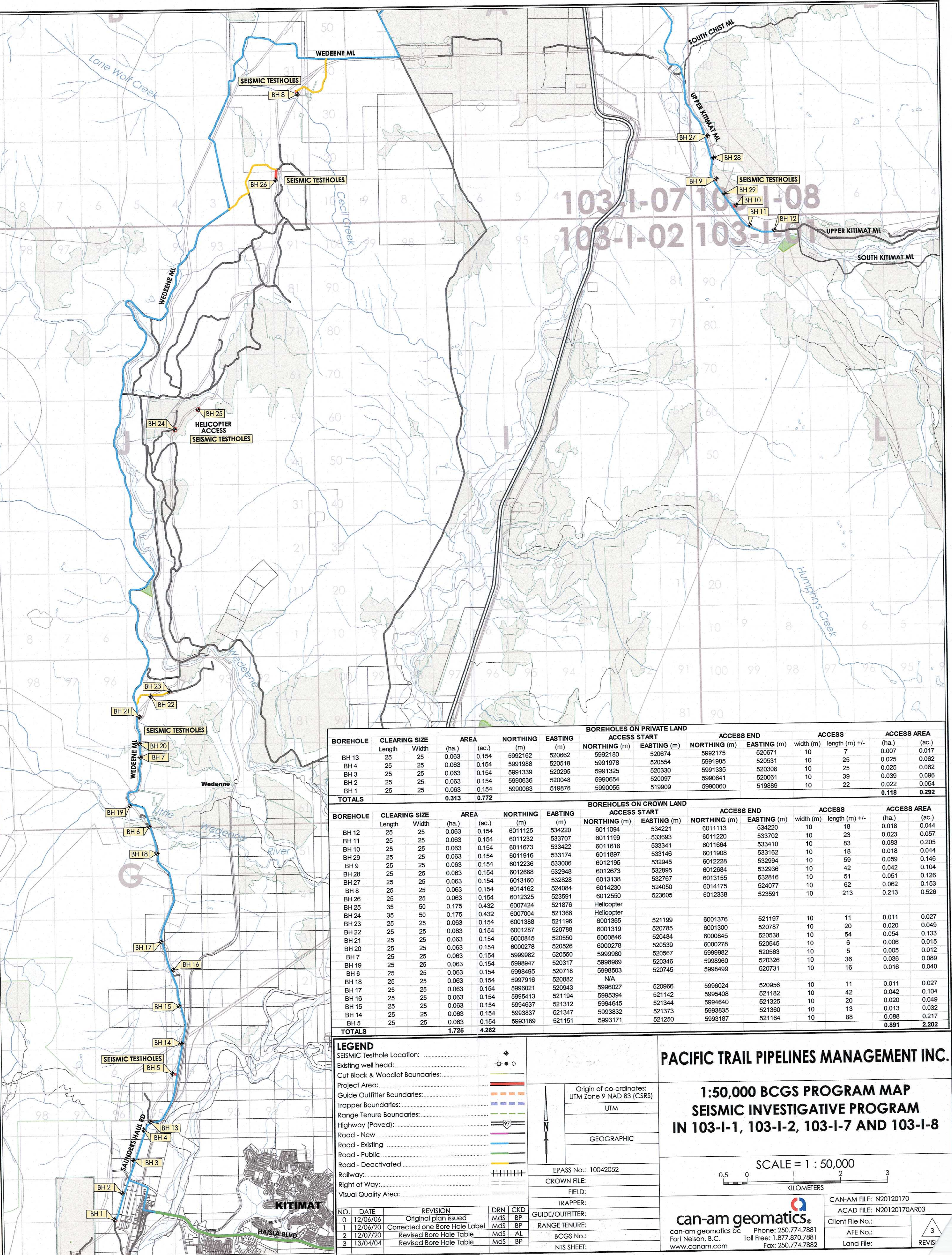
The attached plan(s) form an integral part of this authorization.



Ryan Stark
Natural Resource Officer

pc: FLNRO – Kalum

pc: Haisla Nation, Kitselas First Nation, and Lax Kw'alaams First Nation



BOREHOLES ON PRIVATE LAND														
BOREHOLE	CLEARING SIZE		AREA		NORTHING	EASTING	ACCESS START		ACCESS END		ACCESS		ACCESS AREA	
	Length	Width	(ha.)	(ac.)			(m)	(m)	NORTHING (m)	EASTING (m)	NORTHING (m)	EASTING (m)	width (m)	length (m) +/-
BH 13	25	25	0.063	0.154	5992162	520662	5992180	520674	5992175	520671	10	7	0.007	0.017
BH 4	25	25	0.063	0.154	5991988	520518	5991978	520554	5991985	520531	10	25	0.025	0.062
BH 3	25	25	0.063	0.154	5991339	520295	5991325	520330	5991335	520308	10	25	0.025	0.062
BH 2	25	25	0.063	0.154	5990636	520048	5990654	520097	5990641	520061	10	39	0.039	0.096
BH 1	25	25	0.063	0.154	5990063	519876	5990055	519909	5990060	519889	10	22	0.022	0.054
TOTALS			0.313	0.772									0.118	0.292

BOREHOLES ON CROWN LAND														
BOREHOLE	CLEARING SIZE		AREA		NORTHING	EASTING	ACCESS START		ACCESS END		ACCESS		ACCESS AREA	
	Length	Width	(ha.)	(ac.)			(m)	(m)	NORTHING (m)	EASTING (m)	NORTHING (m)	EASTING (m)	width (m)	length (m) +/-
BH 12	25	25	0.063	0.154	6011125	534220	6011094	534221	6011113	534220	10	18	0.018	0.044
BH 11	25	25	0.063	0.154	6011232	533707	6011199	533693	6011220	533702	10	23	0.023	0.057
BH 10	25	25	0.063	0.154	6011673	533422	6011616	533341	6011664	533410	10	83	0.083	0.205
BH 29	25	25	0.063	0.154	6011916	533174	6011897	533146	6011908	533162	10	18	0.018	0.044
BH 9	25	25	0.063	0.154	6012236	533006	6012195	532945	6012228	532994	10	59	0.059	0.146
BH 28	25	25	0.063	0.154	6012688	532948	6012673	532895	6012684	532936	10	42	0.042	0.104
BH 27	25	25	0.063	0.154	6013160	532828	6013138	532767	6013155	532816	10	51	0.051	0.126
BH 8	25	25	0.063	0.154	6014162	524084	6014230	524050	6014175	524077	10	62	0.062	0.153
BH 26	25	25	0.063	0.154	6012325	523591	6012550	523605	6012338	523591	10	213	0.213	0.526
BH 25	35	50	0.175	0.432	6007424	521876	Helicopter							
BH 24	35	50	0.175	0.432	6007004	521368	Helicopter							
BH 23	25	25	0.063	0.154	6001388	521196	6001365	521199	6001376	521197	10	11	0.011	0.027
BH 22	25	25	0.063	0.154	6001287	520788	6001319	520785	6001300	520787	10	20	0.020	0.049
BH 21	25	25	0.063	0.154	6000845	520550	6000846	520484	6000845	520538	10	54	0.054	0.133
BH 20	25	25	0.063	0.154	6000278	520526	6000278	520539	6000278	520545	10	6	0.006	0.015
BH 7	25	25	0.063	0.154	5999982	520550	5999980	520567	5999982	520563	10	5	0.005	0.012
BH 19	25	25	0.063	0.154	5998947	520317	5998989	520346	5998960	520326	10	36	0.036	0.089
BH 6	25	25	0.063	0.154	5998495	520718	5998503	520745	5998499	520731	10	16	0.016	0.040
BH 18	25	25	0.063	0.154	5997916	520882	N/A							
BH 17	25	25	0.063	0.154	5996021	520943	5996027	520966	5996024	520956	10	11	0.011	0.027
BH 16	25	25	0.063	0.154	5995413	521194	5995394	521142	5995408	521182	10	42	0.042	0.104
BH 15	25	25	0.063	0.154	5994637	521312	5994645	521344	5994640	521325	10	20	0.020	0.049
BH 14	25	25	0.063	0.154	5993837	521347	5993832	521373	5993835	521360	10	13	0.013	0.032
BH 5	25	25	0.063	0.154	5993189	521151	5993171	521250	5993187	521164	10	88	0.088	0.217
TOTALS			1.725	4.262									0.891	2.202

LEGEND
SEISMIC Testhole Location:
Existing well head:
Cut Block & Woodlot Boundaries:
Project Area:
Guide Outfitter Boundaries:
Trapper Boundaries:
Range Tenure Boundaries:
Highway (Paved):
Road - New
Road - Existing
Road - Public
Road - Deactivated
Railway:
Right of Way:
Visual Quality Area:

NO. **DATE** **REVISION** **DRN** **CKD**
0 12/06/06 Original plan issued Mds BP
1 12/06/20 Corrected one Bore Hole Label Mds BP
2 12/07/20 Revised Bore Hole Table Mds AL
3 13/04/04 Revised Bore Hole Table Mds BP

Origin of co-ordinates:
UTM Zone 9 NAD 83 (CSRS)
UTM
GEOGRAPHIC

EPASS No.: 10042052
CROWN FILE:
FIELD:
TRAPPER:
GUIDE/OUTFITTER:
RANGE TENURE:
BCGS No.:
NTS SHEET:

PACIFIC TRAIL PIPELINES MANAGEMENT INC.
1:50,000 BCGS PROGRAM MAP
SEISMIC INVESTIGATIVE PROGRAM
IN 103-I-1, 103-I-2, 103-I-7 AND 103-I-8

SCALE = 1 : 50,000
0.5 0 1 2 3
KILOMETERS

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