



September 3, 2013

Northwest Territories Water Board
P.O. Box 2531
Inuvik, NT
XOE 0T0

Mr. Eddie Dillon
Chairperson

Dear Mr. Dillon:

Unipkat I-22 Abandoned Well Site
2013 Annual Report, Northwest Territories Water Board
Type "B" Water License #N7L1-1831

This letter and attachments constitute the 2013 Annual Report for Northwest Territories Water Board (NWTWB) as per Part B Condition 1 of water license #N7L1-1831. Included are two hard copies of the 2013 Annual Report on behalf of Shell Canada Energy (Shell).

The Unipkat I-22 abandoned well site (the site) is located at latitude 69°11'36.07" N and longitude 135°20'33.88" W in the Mackenzie Delta. The current NWTWB water license commenced on March 16, 2011 and will expire on September 30, 2013. To date in 2013, site maintenance including erosion monitoring and control activities, and soil sampling have been conducted. The Monitoring and Sampling Plan¹ is scheduled to commence during the first week of September 2013. Activities involved for the Monitoring and Sampling Plan will include a visual inspection of the site, river bank erosion measurements, groundwater monitoring and sampling, and collection of thermal data.

Site maintenance activities and soil sampling were conducted on August 17, 2013. Site maintenance involved the relocation of timber debris from the site to the eroding river bank and the placement of fluorescent markers at 5 m intervals from the riverbank to the well center to monitor erosion. Site maintenance included planting two rows of approximately ten willow stakes along the east corner and southern extent of the eroding riverbank to assist with slope stabilization.

A total of six surface soil samples were collected from the area north of the area remediated in 2011 (Figure 1) to monitor surficial soil for petroleum hydrocarbons concentrations and further support a

¹ IEG Consultants Ltd. June 2011. Unipkat I-22 2011 Monitoring and Sampling Plan Proposal for a Type "B" Water Licence N7L1-1831. Proposal dated June 20, 2011.

130903 2013 NWTWB Annual Report.docx

A04025A02

IEG Consultants Ltd. • 500 - 2618 Hopewell Place NE • Calgary AB T1Y 7J7 • CANADA
403.274.3424 t • 403.274.5349 f • www.ieg.ca



Risk Assessment conducted in 2012 by EA Engineering, Science and Technology Inc. The six surface soil samples were collected from 0.0 m - 0.6 m below ground surface and submitted for analysis of petroleum hydrocarbons, polyaromatic hydrocarbons, total metals, and detailed salinity. Results will be reported with the results for the 2013 Groundwater Monitoring and Sampling Program in the 2013 Monitoring and Sampling report.

If you have any questions please feel free to contact me at (403) 730-6809 or at nwills@klohn.com.

Yours truly,
IEG CONSULTANTS LTD.



Nicole Wills, P. Ag.
Environmental Scientist

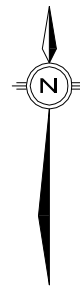
NW

c.c. Water Resources Officer – Aboriginal Affairs and Northern Development Canada
Randall Warren – Shell Canada Energy

Attachment:







Figure 1 Site Plan

Z:\ACGY\Alberta\A04025A02 - Unipikal I-22 Assessment & RAP\400 Drawings\410 Drawings\2013 NMTWB update\ 130903 A04025A02 - FIG 1.dwg Layout=LAYOUT1 Tuesday, September 03, 2013 4:12:58 PM

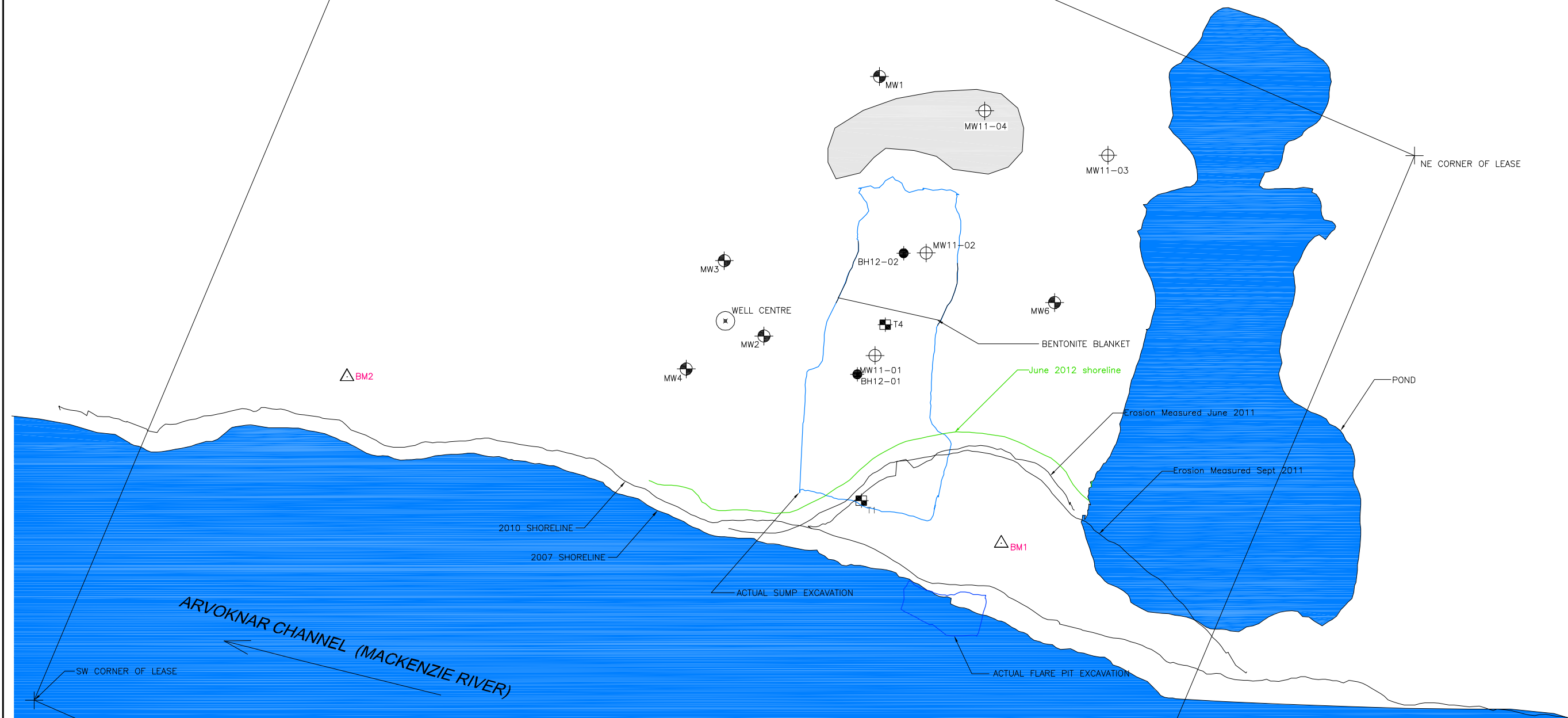


NW CORNER OF LEASE

LEGEND:

-  MW1 2007 MONITORING WELL
-  T3 THERMISTOR
-  BM2 BENCHMARK
-  MW1 2011 MONITORING WELL
-  BH 2012 BOREHOLES
-  APPROXIMATE LOCATION OF SOIL SAMPLES COLLECTED IN AUGUST 2013

NE CORNER OF LEASE



ARVOKNAR CHANNEL (MACKENZIE RIVER)

SW CORNER OF LEASE

SCALE 1:750 0 7.5 15 m

NOT FOR CONSTRUCTION

- PROJECTION NOTES:
1. HORIZONTAL DATUM: -
 2. GRID ZONE: -
 3. VERTICAL DATUM: -
 4. SCALE: -

TO BE READ WITH KLOHN CRIPPEN BERGER REPORT DATED SEPTEMBER 2013

CLIENT



Shell Canada Energy



IEG
CONSULTANTS LTD.

PROJECT		
2013 NORTHWEST TERRITORIES WATER BOARD ANNUAL REPORT		
TITLE		
SITE PLAN		
SCALE	PROJECT No.	FIG. No.
-	A04025A02	FIGURE 1

KCB-FIG-B-1