



4100, 350 7th Ave SW, Calgary, Alberta, Canada T2P 3N9

TELEPHONE 403 781-7800 FAX 403 781-7801 www.mgmenergy.com

October 4, 2007

Mr. Gordon Wray
Northwest Territories Water Board
P.O. Box 1326
4916 - 47 Street
2nd Floor Goga Cho Building
Yellowknife, NT X1A 2N9



COPY	
BOARD	5
G. W.	1
E. A.	1
W. RES.	0/26.
NMDO	1
FILE	1797

Dear Mr. Wray:

**Re: Water Licence N7L1-1797
Broken Thermister String and Modified Depths of Thermister Strings at
the Umiak N16 Sump**

The purpose of the following letter is to inform the NWT Water Board of a broken thermister string and modified depths of thermister sensors at the MGM Energy Corp. Umiak N16 Sump. Recommendations to address these issues have been provided for consideration by the NWT Water Board.

The broken thermister string is likely the result of wildlife interaction with the datalogger and thermister string; although no wildlife sign was observed at the site. The depths of all thermister sensors appear to have been modified shortly after, or at, the time of the initial installation.

Background

On September 13, 2007, during a soil sampling program and the annual Electromagnetic (EM) surveys at the Umiak N16 sump, the PVC standpipe encasing thermister 1728 was observed to be damaged by wildlife. The PVC standpipe encasing the thermister was broken at the base and the thermister string was visible just above the ground (see Photo 1). Upon further investigation it appeared that the thermister string was not adequately anchored in the ground with either sand and/or pea gravel and may not have been logging at required depths specified by Water License No. N7L1-1797. Table 1 illustrates the initial assumed depths and revised depths of the thermister strings based on the observations during the September 2007 site visit. Currently, three years of a five year sump monitoring program have been completed at the Umiak N16 Sump under Water License Number N7L1-1797.

Table 1. Initial and Current 2007 Revised Depths of Thermister Sensors

Thermister Sensor	Initial Depths (m)	Thermister 1725	Thermister 1726 *	Thermister 1727	Thermister 1728
TH1	0.50	-	-	-	-
TH2	0.75	-	-	-	-
TH3	1.00	-	0.17	-	-
TH4	1.50	-	0.67	-	-
TH5	3.00	0.83	2.17	1.14	0.74
TH6	4.50	2.33	3.67	2.64	2.24
TH7	6.00	3.83	5.17	4.14	3.74
TH8	7.50	5.33	6.67	5.64	5.24
TH9	9.00	6.83	8.17	7.14	6.74
TH10	10.50	8.33	9.67	8.64	8.24
TH11	12.00	9.83	11.17	10.14	9.74
TH12	14.00	11.83	13.17	12.14	11.74

Notes:

* Control thermister

- Thermister string is above recordable depth

Discussion

As outlined in Water License No. N7L1-1797, a minimum of eight (8) thermister sensors are required at depths of: 0.25 m, 0.5 m, 0.75 m, 1.5 m, 3.0 m, 6.0 m, 9.0 m and 12.0 m below ground level. There are currently a minimum of eight (8) sensors on each thermister string logging the sump materials at various depths below ground. The most significant effect of the change in depths of the thermister sensors is the intensity of monitoring occurring within the active layer. During the September 13, 2007 site visit, the active layer depth was observed to be greater than 80 cm below ground level. During construction and operation of the sump, drilling waste was placed between depths of approximately 3.5 m - 4.0 m and 5.4 m below the anticipated active layer of the sump cap as indicated in the *Project Description for the Proposed EnCana Corporation Burnt Lake Drilling Program*. Therefore, the sensors on the thermister strings continue to be operational at the depths where the drilling mud is currently located within the permafrost.

Thermister string 1728 is broken at the point it attaches to the datalogger and is currently not logging. At this time, it is believed that the thermister string can be rewired and attached to the datalogger and monitoring can continue.

The remaining three thermister strings (1725, 1726 and 1728) had minor damage potentially due to wildlife; however, they are presently logging. These sensors will require repairs to ensure they do not incur damage from wildlife and will last the duration of the monitoring plan.

Recommendations

MGM is proposing to continue to monitor the sump at the new depths indicated in Table 1 during the remaining two years of monitoring of the five year monitoring plan. MGM will leave the sensors monitoring at current depths within the permafrost and does not propose to reinstall the thermistors at the depths referenced in the Water Licence as that would require mobilizing a rig to the site and drilling , resulting in further surface disturbance to the sump.

MGM Energy proposes the following scope to repair the damaged thermistor string and reduce the potential for wildlife damage on the remaining thermistor strings. The workplan will include:

- Re-attaching the existing thermistor string to the 1727 datalogger. This would allow the datalogger to continue logging at the current sensor depths. If it is not feasible to attach the thermistor string to the existing datalogger, a new datalogger will be obtained and installed, ensuring that the colour coded wires are correlated to the depths of the thermistor sensors.
- Installing new datalogger containment boxes for all dataloggers at a secure height to reduce the potential of damage to the thermistor strings from wildlife.
- Replacing the existing wood posts with metal posts to support all dataloggers.
- Install adequate sand and/or pea gravel support at the existing thermistor strings.

Thank you for taking the time to review our recommendations. We are seeking your approval of MGM's action plan so we can finalize our next steps for this sump monitoring program. Please direct any comments or questions to me by phone at (403) 290-3618 or by e-mail at shirley.maaskant@paramountres.com .

Yours truly,



Shirley Maaskant
Manager, Regulatory & Community Affairs

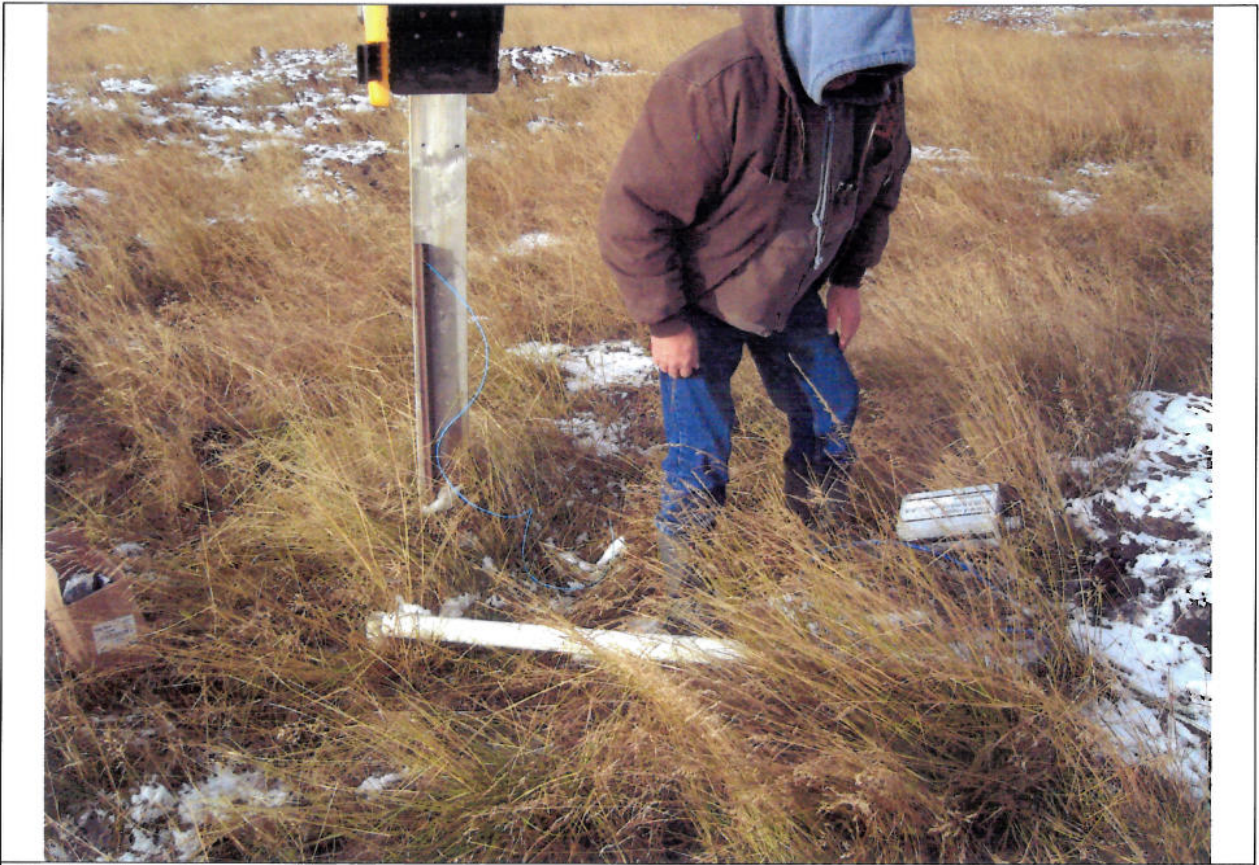


Photo 1. – Broken standpipe