Appendix C

Guidelines for Water Well Test Evaluations for Seismic Programs

Please review the instructions and complete this form thoroughly. As required by legislation, be aware that you, the Landowner, are giving consent for the collection of the personal information on this form for the purpose of conducting and completing a water well evaluation. Water well testing before and after geophysical programs is not a regulatory requirement of the Government of Alberta.

1. The landowner/occupant should be available to be on-site during the evaluation of the water well to reduce possible disruption of water usage. Upon completion of the pre and post water well evaluations, ensure that a copy is provided to the landowner/occupant. This does not apply to chemical analysis.

2. A non-pumping (static) water level should be confirmed to determine if your water well has been in use immediately prior to conducting the evaluation. It is important to establish a static water level at least twice, possibly 15 minutes apart to ensure that it is not continuing to recover. If your well has been in use prior to the start of the test, the static (non-pumping) water level is not accurate. It is recommended that your well be evaluated over a minimum of 60 minutes drawdown and a minimum of 60 minutes recovery (or until original static non-pumping water level is reached).

3. In addition, measurements should always be taken for the full recovery period, not just at 90% of the starting level.

4. Where possible, the flow of water should be isolated to ensure that it is not being diverted to other uses (e.g. cattle waterers). Difficulties commonly arise during winter months in relation to livestock wells.

5. If disconnection from a cattle trough is not possible, the comment section of the water well evaluation form should reflect this and the landowner/occupant signature should acknowledge the occurrence.

6. Pumping rates are usually reported in gallons/minute as Water Well Drilling Reports usually indicate production capacity in gallons/minute. Measurements are usually reported in metric units since most water level probes/sounders are graduated in metric units.

7. When water wells or water distribution systems of questionable integrity are encountered (aged or corroded casing, pipes or connections, well caps welded onto casing, etc.), written notes and photos should be taken and kept as documentation.

8. Water samples should be analyzed by an accredited lab for routine potability (dissolved iron and total iron). Field test kits can be used to determine basic parameters such as temperature, pH, conductivity and TDS (Total Dissolved Solids) at the time of the sample collection. Water samples for analysis should be taken towards the end of the drawdown stage, to ensure that the water collected is from the aquifer not the well bore (document the timing of the water sample). All samples must be properly labelled including the landowner/occupant's name, the date and time of sample, description of the source well, depth, type (domestic/stock), legal land description, and sampler's name. The samples should be kept cool between the time of collection and delivery to the lab.

LICENSEE _____ LICENCE # _____ DATE _____

PROGRAM/PROSPECT NAME _____

LANDOWNER NAME _____ PHONE # _____

ADDRESS _____

LEGAL DESCRIPTION – SEC _____ TWP_____ RGE_____ W_____ M

GPS Coordinates/Elev.(NAD83) _____

DESCRIPTION OF WELL LOCATION ON PROPERTY _____

_____

WATER WELL DRILLER _____ JOURNEYMAN CERT # _____

REFERENCE POINT FOR MEASUREMENTS TAKEN FROM (E.G. Top of Casing) _____

METRIC / IMPERIAL (please circle) WELL DEPTH _____ PUMP DEPTH _____

PUMPING RATE _____ NON-PUMPING STATIC _____

DEPTH WATER SAMPLE TAKEN _____

LAB SENT TO _____

AGE OF WELL _____ CASING SIZE _____CONDITION
_____

DEPTH TO WATER LEVEL ELAPSED TIME_____

HAS WATER WELL DRILL REPORT BEEN OBTAINED FROM GOV? YES_____ NO_____

WELL ID # _____ WATER SAMPLE COLLECTED? YES_____ NO_____

CONFINED SPACE? YES____NO_____

LAB SAMPLE ANALYSIS REQUIRED? YES____ NO ____

PUMPING MIN. RECOVERY

	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	12	
	15	
	20	
	25	
	30	
	35	
	40	
	50	
	60	
	70	

ONSITE OBSERVATIONS

- PRE TEST _____ POST TEST _____
- TIME OF TEST _____ AM _____ PM
- BACTERIA PRESENT, IRON, AND/OR SULFATE (please circle)
- SHEEN? YES_____ NO_____
- GASES PRESENT? YES_____ NO_____
- TANNIN WATER? YES_____ NO_____
- SEDIMENT PRESENT? YES_____ NO_____
- ODOUR NOTED? YES_____ NO_____
- WELL TYPE - DOMESTIC_____ LIVESTOCK _____ OTHER _____
- WELL IN USE - YES _____ NO _____

COMMENTS

_____

_____

WATER WELL SERVICE HISTORY

_____

_____

IF UNABLE TO COMPLETE TEST EXPLAIN BELOW

_____

_____

SIGNATURE OF LANDOWNER AND EVALUATOR REQUIRED FOR ACKNOWLEDGMENT.
PUMPING RATE SHOULD NOT EXCEED WELL CAPACITY FOR PRODUCTION.
USE OTHER SIDE FOR ADDITIONAL COMMENTS.

WATER WELL EVALUATOR _____

Signature _____

LANDOWNER _____