RECOMMENDED GUIDELINES FOR WATER WELL TEST / EVALUATIONS FOR SEISMIC PROGRAMS

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 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. 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.

5. 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.

6 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.

7 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 draw down 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 which should include 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.

INDUSTRY

1. A “chain of custody” should be established for samples requiring laboratory analysis. Sample bottles should be marked with: the landowner’s name, the date and time of sample, description of the source well (depth, type- domestic/stock, etc.) legal land description and tester’s name. Documentation should be kept indicating what transpired with respect to the samples between the time of collection and their delivery to the lab.

2. Alert the landowner to any potential pre-existing water quality, related to health or safety concerns.

3. Record when, why and by whom all prior well servicing was carried-out.

GUIDELINES FOR WATER WELL TEST/EVALUATIONS FOR SEISMIC PROGRAMS

LICENSEE: _____ LICENSE # _____
PROGRAM/PROSPECT NAME:_____DATE :_____
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
WELL DEPTH: _____PUMP DEPTH:_____
NON-PUMPING STATIC: _____ _____PUMPING RATE: _____
DEPTH WATER SAMPLE TAKEN: _____LAB SENT TO : _____
AGE OF WELL: _____ CASING SIZE: _____CONDITION: _____
HAS WATER WELL DRILL REPORT BEEN OBTAINED FROM GOV.: YES _____NO _____WELL I.D. # _____
CONFINED SPACE: YES _____ NO _____

DEPTH TO WATER LEVEL ELAPSED TIME

PUMPING	MIN.	RECOVERY
	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	12	
	15	
	20	
	25	
	30	
	35	
	40	
	50	
	60	
	70	
	80	
	90	
	100	
	110	
	120	

WATER SAMPLE COLLECTED; YES_____ NO _____
LAB SAMPLE ANALYSIS REQUIRED: YES_____ NO _____
PRE TEST _____ POST TEST _____
TIME OF TEST: _____ AM _____ PM
BACTERIA PRESENT, IRON AND /OR SULFATE
SHEEN YES_____ NO_____
GASES PRESENT YES_____ NO_____
TANNIN WATER TES_____ NO_____
SEDIMENT PRESENT YES_____ NO_____
ODOUR NOTED YES_____ NO_____

WELL TYPE :DOMESTIC ____ LIVESTOCK_____
OTHER _____
WELL IN USE: YES ____ NO _____

IT IS VERY IMPORTANT TO COMPLETE THIS FORM THOROUGHLY
COMMENTS:

_____
_____

WATER WELL SERVICE HISTORY:

_____
_____
_____

IF UNABLE TO COMPLETE TEST EXPLAIN BELOW

_____
_____
_____
_____
_____

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

_____
LANDOWNER (Signature)

_____
WATER WELL EVALUATOR (Signature)

ON SITE OBSERVATIONS

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.
*Pre and Post Water Well Testing/Evaluations pertaining to Geophysical Programs are **NOT** a regulatory requirement of the Alberta Government*