# 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.

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

- 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.
- 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 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.

	_ LICENCE # DATE			
PROGRAM/PROSPECT NAME				
LANDOWNER NAME	PHONE #			
ADDRESS				
LEGAL DESCRIPTION – SEC TWP RGE_				
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 SIZECONDITION				
DEPTH TO WATER LEVEL ELAPSED TIME				
HAS WATER WELL DRILL REPORT BEEN OBTAINED FROM GOV? YES NO				
WELL ID # ATER 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	
	80	
	90	
	100	
	110	
	120	

### **ONSITE OBSERVATIONS**

•	PRE TEST	POST TEST	
•	TIME OF TEST	AM	PM
•	BACTERIA PRESENT,	IRON AND/OR SULFATE	(please circle)
•	SHEEN	YES NO	D
•	GASES PRESENT	YES NO	D
•	TANNIN WATER	YES NO	D
•	SEDIMENT PRESENT	? YES NO	D
•	ODOUR NOTED	YES NO	D
•	WELL TYPE	DOMESTIC LIVE	STOCK 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 ACKNOWLEDGEMENT.
PUMPING RATE SHOULD NOT EXCEED WELL CAPACITY FOR PRODUCTION.
USE OTHER SIDE FOR ADDITIONAL COMMENTS.

WATER	WELL	<b>EVALUATOR</b>
WAIER	VVELL	EVALUATUR

Signature

LANDOWNER

Signature