

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 YES _____ 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*