

TAGISH WELL NO. 3

Location: Tagish Well No. 3 is located on the Tagish Recreation Site, at a distance about 64 kilometres southeast of Whitehorse. Within the site, Well No. 3 is located about 140 m (460 m) northwest of Tagish Well No. 1 and about 110 m (360 m) east of Tagish Well No. 2. The Campground Well is located about 165 m (540 m) north of Tagish Well No. 3.

Date of Construction: August and September, 2004

Drilling Contractor: Cathway Water Resources

Driller's Litholog of Sediments:

0.0 - 0.6 m (0 - 2 ft)	Topsoil
0.6 - 4.6 m (2 - 15 ft)	Clay, silty
4.6 - 22.6 m (15 - 74 ft)	Clay; wet
22.6 - 23.8 m (74 - 78 ft)	Glacial till
23.8 - 24.1 m (78 - 79 ft)	Gravel, silty; water-bearing
24.1 - 26.2 m (79 - 86 ft)	Sand, coarse
26.2 - 29.6 m (86 - 97 ft)	Sand and gravel
29.6 - 36.3 m (97 - 119 ft)	Sand, silty; dry
36.3 - 39.3 m (119 - 129 ft)	Clay, sticky and silty
39.3 - 40.8 m (129 - 134 ft)	Gravel, silty to sandy; saturated
40.8 - 45.7 m (134 - 150 ft)	Sand, fine, with clay and till layers
45.7 - 46.0 m (150 - 151 ft)	Gravel, sandy; saturated
46.0 - 49.7 m (151 - 163 ft)	Clay, compact
49.7 - 51.2 m (163 - 168 ft)	Sand, coarse; water-bearing

Diameter: 200 mm (8")

Static Water Level: 4.60 m (15.1 ft) below the 200 mm (8") diameter well casing stickup of 0.61 m (2 ft), prior to the start of the pumping test on September 3, 2004.

Completion: Tagish Well No. 3 is completed with a 1.5 m (5 ft) long assembly, which consists of K-type packer, 1.2 m (4 ft) of 200 mm (8") nominal diameter Johnson stainless steel well screen with 0.508 mm (0.020") slot size, set from 49.7 to 51.2 m (163.3 to 168 ft), and a bail bottom.

Performance: The maximum drawdown in Well No. 3 during pumping at a constant rate of 1.59 lps (21.0 igpm; 25.2 USgpm) on September 3 and 4, 2004 was 31.76 m (104.2 ft), for a specific capacity of 0.05 lps/m (0.20 igpm/ft; 0.24 USgpm/ft). If the trend of the drawdown plot at the end of the 1440 minute pumping test is projected to 10 days of continuous pumping, drawdown is estimated to be about 40 m (131 ft), giving a 10-day specific capacity of 0.04 lps/m (0.16 igpm/ft; 0.19 USgpm/ft).

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Capacity: Based on a projected 10-day specific capacity of during continuous pumping at a rate of 1.59 *lps* (21.0 igpm; 25.2 USgpm), the *theoretical* capacity of Tagish Well No. 3 is estimated to be about 1.28 *lps* (16.9 igpm; 20.1 USgpm), which is less than the test pumping rate of 1.59 *lps* (21.0 igpm; 25.2 USgpm). However, under the prevailing hydrogeologic conditions, pumping continuously at a rate of 1.59 *lps* (21.0 igpm; 25.2 USgpm) to the Tagish truck filling station for a short period of time should be of no concern.

Date: Sept 4/04
 Well Owner: Carcross Tagish First Nations
 Address: Carcross, Yukon
 Phone: _____ Fax: _____

Contractor: Cathway Water Resources
 Address: _____
 Phone: _____ Fax: _____
 Driller: Ron Toews

General Information

Well Location: At owners address Other
Tagish pumping station.
 Water Quality: Good Poor, why _____

Water Analysis: chemical Biological none
 Comments: _____
 Taste: _____

Water use: domestic Stock Garden
 Irrigation Heat pump Industry
 Community supply; number of connections _____
 Other _____

Aquifer: Rock Sand and gravel
 Well Capacity

Capacity: dry hole Inadequate
 Satisfactory for proposed use

Capacity test: Bail test Air lift Pump test
 Length of test _____ minutes Rate: _____

Water level at start: _____
 Drawdown at end: _____
 Estimated well capacity: _____

Was a water sample taken at end of test? Yes No

Final well completion

Cover on casing Welded plate Pitless adaptor
 Aluminium cover Well seal

Casing: above ground In pit In old dug well

Is casing sealed? Yes No
 If Yes, describe: _____

Is site protected from obvious hazards, ie. poor drainage,
 grazing animals, buried fuel tanks, etc. Yes No
 If no, what can be done? _____

If well location cannot be described from a road address,
 please sketch approximate location on reverse side of file
 copy of well record or attach separate sheet.

Well Log		Metres <input type="checkbox"/>	Feet <input checked="" type="checkbox"/>
From	To	Description	
0	2	top soil	
2	15	sandy clay	
15	74	soupy clay	
74	78	glacial till	
78	79	silty gravel w/water	
79	86	cleaner sand (course)	
86	97	silty gravel + course sand	
99	119	course silty sand (dry + hard)	
119	129	sandy clay (sticky)	
129	134	silty, sandy gravel (a little water)	
134	150	fine sand w clay + till layers	

* If drilling is in rock, note depth of fractures which
 make water: 150-151 sandy gravel (some water)
151-163 hard clay
 Well Construction 163-168 - course sand w/water
 Surface Casing: Diameter 10"

Length 20' Stick up 1'
 removed Left in place

Well Casing: Diameter 8"
 Length 165'4" Stick up 2'
 Wall thickness: .250

Casing shoe yes no

Completion: well screen slotted pipe
 open end other

Well screen: stainless galvanized steel
 plastic
 from 168' to 163'9" slot width 20
 from _____ to _____ slot width _____

Design based on: sieve analysis
 estimated slot size

Other screen data: screen has bail bottom + k-packer

Development method: surge bail air
 water jet pump other _____

Static water level below ground: _____
 flowing Rate: _____