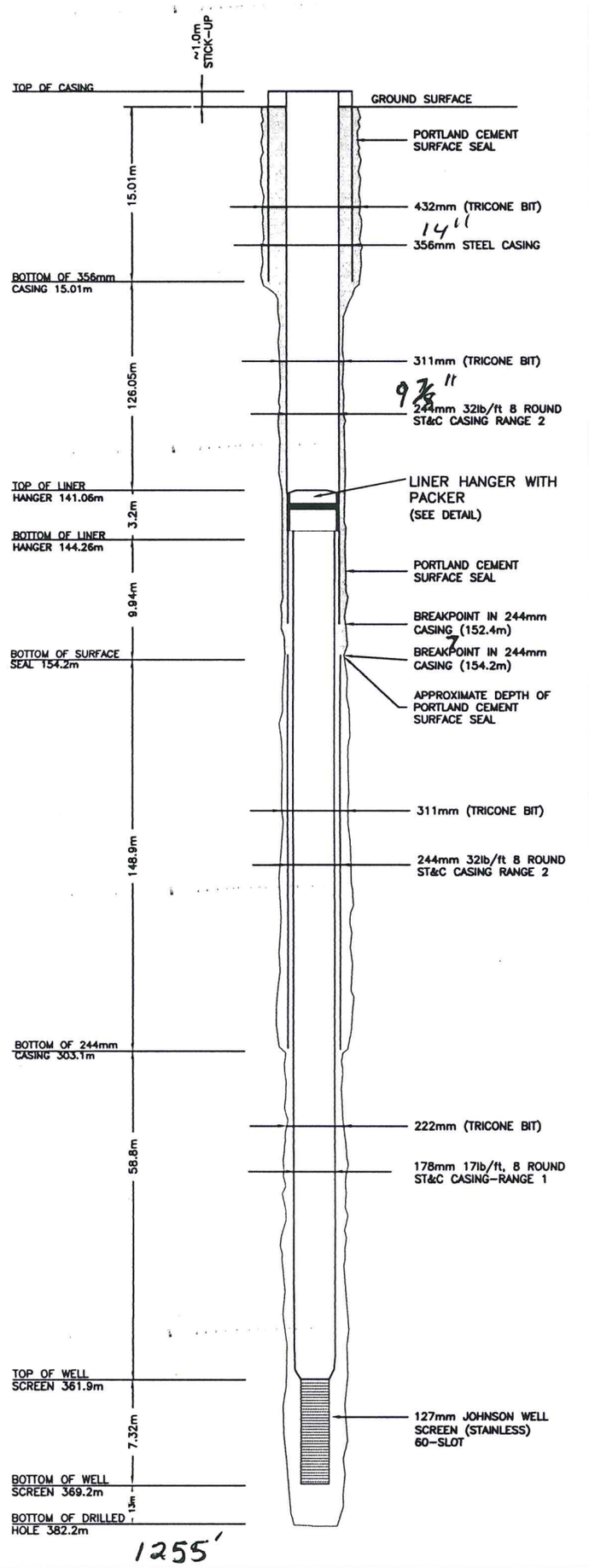
Flowing G.P.M. 80 101130001 Depth - 1255'

Temp: 15°C - 9 7/8" hole & installed 8 5/8" casing to 20°C



WELL COMPLETION NOTES

1) WELL COMPLETED ON: SEPTEMBER 13, 2002

2) WELL COMPLETED USING MUD ROTARY DRILL RIG; 1998 SCHRAMM T685WS

3) INTENDED WATER USE: MUNICIPAL WATER SUPPLY

4) WELL OWNED BY THE VILLAGE OF HAINES JUNCTION

5) LOCATION: E 0362215, N 6738404 (NAD 83) Zone 7
ELEVATION OF GROUNDSURFACE: 608.5 MASL

6) WELL DRILLED BY MIDNIGHT SUN DRILLING OF WHITEHORSE YUKON.
(PRIMARY DRILLER: [redacted])
(SIGNATURE)

7) WELL ID: WELL #5

ALL DEPTHS SHOWN ARE RELATIVE TO THE GROUND SURFACE (ELEV. 0.00m)

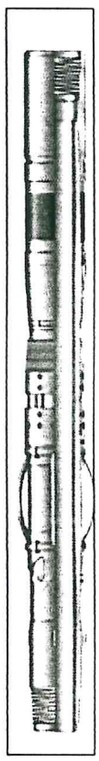
LINER HANGER WITH PACKER

D LINER HANGER/PACKER
Product No. 293-02

The D Liner Hanger/Packer serves as both a liner hanger and packer when the liner is not to be cemented. As the slips hang the liner, the packing element is also compressed to seal against the casing ID. The D Liner Hanger/Packer is available with right-or left-hand set open-bottom J-cage.

The D Hanger/Packer may be utilized as the lower packer on a scab liner to isolate damaged casing. It is typically run below a compression-set liner packer such as a hyflo 3 Liner Packer with hold-down slips. The D is set by right-or left-hand rotation and weight is slacked off to hang and set the packer seal. The setting tool is then released, and the running string raised to expose the packer setting dogs. The upper packer is then set with set-down weight.

The D Hanger/Packer is also commonly used as an injection packer on disposal wells. The D provides the largest ID available for injection packer applications.



FEATURES/BENEFITS

Economical, one -piece hanger and packer for uncemented liners

Automatic J-cage allows hanger slips to return to the run-in position if desired

Low profile slips reduce possibility of damage while running in

T-slot bowsprings eliminate use of set screws in J-cage

Ideal for use as lower packer of scab liner to isolate damaged casing

Can also be run upside-down and pulled in tension for shallow scab liners

Available with optional internal lock ring to maintain setting force

WELL COMPLETION DETAILS

CENTRALIZERS & CEMENT BASKETS ARE LOCATED AT THE FOLLOWING DEPTHS BELOW GROUND SURFACE::

ON THE 244 mm OD CASING	ON THE 178 mm OD CASING
1) CEMENT BASKET @ 3.23m	1) CENTRALIZER @ 140.18m
2) CENTRALIZER @ 40.17m	2) CENTRALIZER @ 186.67m
3) CEMENT BASKET @ 77.05m	3) CENTRALIZER @ 246.16m
4) CENTRALIZER @ 113.93m	4) CENTRALIZER @ 300.48m
5) CEMENT BASKET @ 150.81m	5) CEMENT BASKET @ 321.74m
6) CENTRALIZER @ 190.93m	6) CEMENT BASKET @ 328.29m
7) CEMENT BASKET @ 227.87m	7) CENTRALIZER @ 356.66m
8) CENTRALIZER @ 264.69m	
9) CEMENT BASKET @ 301.57m	

CENTRALIZERS:
TOPCO INDUSTRIES CENTRALIZERS - TYPE 300-WELDED BOW CENTRALIZERS

CEMENT BASKETS:
TOPCO INDUSTRIES BASKETS - TYPE 400-CEMENT BASKET

APPROXIMATE LENGTH OF CASING IN-HOLE

217.6m of 178mm
303.0m of 244mm
15.0m of 356mm

LEGEND

PORTLAND CEMENT SURFACE SEAL

SCALES: Not to Scale

Designed By: [redacted] Drawn By: [redacted]
Checked By: [redacted] Approved By: [redacted]
Date Issued: DECEMBER 2002 Project No.: 22-345

Village of Haines Junction
Box 5339, Haines Junction, Yukon
YOB 1L0

HAINES JUNCTION WELL No. 5
COMPLETION DIAGRAM

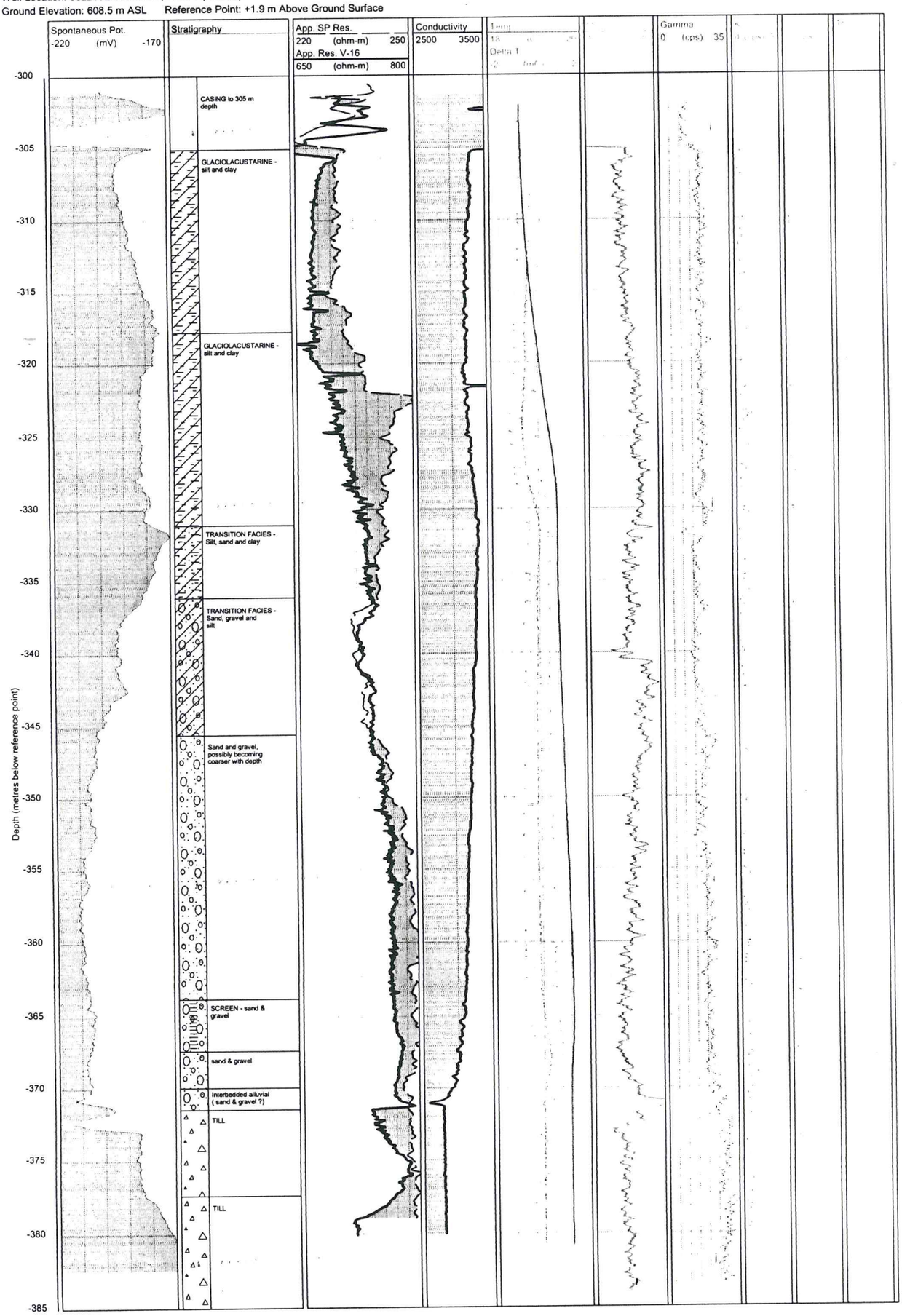
Gartner Lee

FIGURE 5

(N:PROJECTS/2002/22345/2002/acad/22345-1.DWG)

Figure 3. Geophysical and Borehole Log of Well No. 5
Location: Haines Junction, Yukon

Hole Logged By: Aurora Geosciences Ltd., September 9, 2002. Log #3 & #4
Logging Tool: IFG Corp. BFG-06 Multiparameter Probe
Log Prepared By: Gartner Lee Limited, 22-345
Well Location: 362215E 6738404N, Zone 7 (NAD83)
Ground Elevation: 608.5 m ASL Reference Point: +1.9 m Above Ground Surface



indicated significantly lower resistivity in sections where the SP and gamma logs indicated possible clean and permeable beds. This suggested that any mud invasion the occurred after pumping the pill was minimal.

6. Temperature log: The temperature log generally repeated between runs. The maximum bottom hole temperature recorded was over 20 °C during the open hole down run.

The following is an interpretation of the log results based on discussions with [redacted] Interpreted depths are taken from the resistivity log.

Interval	Interpreted section	
305.7 - 331 m	*Clay rich sand / silt*	This section of the log is characterized by higher SP response, relatively higher gamma, lower SPR and 16" resistivity, higher conductivity and an increasing temperature gradient.
331.0 - 332.3 m	*Permeable sand*	Positive SP deflection, gamma decrease (strongest in SP log). Also weak and non-repeated conductivity decrease for 0.5 m in this interval. Section below this has lower gamma response. May correspond to noticeable decrease in sampl clay content noted at sample logged at 329 m (GLL).
332.3 - 341.5 m	*Sand or gravel*	Lower gamma and conductivity response, increasing resistivity. SP response gradually declining. Slight increase in magnetic susceptibility at 340 m. Also note change in temperature gradient near 330 m which repeats in both logs. This appears to be a resistive sand lower in clay than overlying material (<330 m)
341.5 - 343.0 m	*Permeable sand*	Positive SP deflection, immediately above a small gamma increase (sand over clay seam). No appreciable change in resistivity.
343.0 - 345.0 m	*Sand or gravel*	Same response as 332.3 - 341.5
345.0 - 347.0 m	*Dirty sand*	Gamma response increases, suggesting possible minor increase in clay content.
347.0 - 370.0 m	*Gravel*	Gravel reported from drill samples in this interval. Subtle decrease in magnetic susceptibility towards base. Gamma response is flat to very slightly increasing. Temperature increasing with a gradient similar to overlying sand. SP is flat and relatively negative with respect to surrounding strata. Resistivity increases towards base. Conductivity decreases towards base suggesting that the unit may coarsen towards the bottom.

370. 0 - 373.0 m	*Permeable gravel*	Strong positive SP deflection. Positive magnetic susceptibility increase (?lag deposit of magnetic clasts?). Resistivity increases over this interval with a very weak 16" response and a repeated conductivity response which corroborates the resistivity. Gamma response begins to increase at the top of this unit and carries on into the overlying till layer. Temperature gradient changes from positive to negative over this interval suggesting possible inflow of cold water or change in thermal conductivity
373.0 - 384.6 m	*Glacial till*	Marked change in SP response. Increase in gamma response suggesting increase in clay content. 16" resistivity appears to decline over this interval; conductivity does not repeat in this interval. Clay rich glacial till with subangular clasts was recovered from a sample at 378.9 m and similar material was recovered from the temperature probe casing at the base of the logging tool.

It should be stressed that the geophysical log responses are not strong enough to independently estimate overburden composition.

e. Conclusions. The bore hole log results suggest the following conclusions:

1. The drill hole appears to have intersected a sequence of gravel and sand in the interval from 331 to 373 m.

2. There appears to be three zones which are more permeable than the remainder of the section. The lowest interval, from 370 - 373 m appears to be the thickest and displayed the strongest indication of permeability.

3. The warmest water in the drill hole appears to originate from 331 - 370 m.

Respectfully submitted,
AURO[redacted]IENCES LTD.

[redacted]