



Spectrum Wireline Services Ltd.
Red Deer and Peace River
Wireline and Slickline Services

Subsurface Engineering

March 15, 2019

100, 1010 – 8 Avenue SW,
Calgary, Alberta T2P 1J2

Attention: **Sean David**
Re: **Radial Cement Bond Log Interpretation for Subsurface Engineering**
Well: **Strategic hb et al J-62 60 10N 117 15W**

Objective of running logs: **Objective of log was to determine cement bond quality**

Log Run: Radial Cement Bond Log with Gamma Ray and CCL
Well Name: Strategic et al J-62 60 10N 117 15W
Surface Location: J-62-60-10N-117-15W
UWI: 300J62601011715
Field: Cameron Hills
Well License #: 0001158
Date Logged: March 12, 2020
Date Drilled: Not available
Logs Correlated to: Not available
Casing Record: Surface Casing: 244.5mm. 48.1 kg/m. Surface to 524.0m
Production Casing: 139.7mm. 23.1 kg/m. Surface to 1605.0m

Deviation: **Vertical Well**

Cement Information: SURFACE CASING: 244.5 mm, 48.07 kg/m, H-40, ST&C. Landed @ 524.0 m KB. Cemented with 40.0 tonnes 0:1:0 'G'+ 3.0% CaCl₂. No cement returns to surface.

PRODUCTION CASING: 139.7 mm, 23.07 kg/m, J-55, LT&C. Landed at 1605.0 mKB. Cemented with 35.0 tonnes 1:1:2 + 4 KCl. Full mud returns during job. No mention of cement returns.

Fluid Level for logging: Wellbore was full at 14m.

Logged Interval: Main Pass: surface – 1337m. with no pressure applied.
Repeat Pass: 1290m – 1337m. with no pressure applied.



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Evaluation:

1. Fluid level was at 14m.
2. Fluid Level – 425m: No cement indicated, high amplitude readings, wide chevron effect at collars, ringing free. Radial mapping very light suggests no cement.
3. 425m - 780m: No cement indicated, slightly lower amplitude readings then the section of 425 to surface does suggest the possibility of a heavy fluid behind the casing but no cement. High amplitude readings, wide chevron effect at the collars, ringing free.
4. 780m – 1337m: Shows good cement quality and good bonds with low amplitude readings (less then 5 mv), loss of first arrival on the VDL also indicates a good bond. Minimal variation between the minimum and maximum amplitude readings implies good bond all around the pipe.

Log Quality

Main pass and pressure pass comparison are very good, tool repeatability ensures confidence that the tool is recording valid data, as well as monitoring the amplitude values, travel times, and readings in free pipe. The radial bond log's 3' amplitude correlates well with the 5' VDL first arrivals and as well as to the radial map.

Should you have any questions or concerns, Spectrum Wireline contacts can be reached at info below.

Very best regards,

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