

Kelly Bushing Elevation: 24.90
Ground Elevation: 21.10

Casing Flange Elevation: 21.08

All Depths Measured from Kelly Bushing Elevation

Group:	Smithson Group	Era:	Mesozoic
Formation:	Roemer	Series:	Lower
Member:	Main Lambert Sand	Period:	Cretaceous
Boundary Type:	conformable	Stage:	Aptian
Fault Type:	none	Age (Approx):	210 Million years.

	Measured Depth	True Vertical Depth	Subsea	Thickness
Sample Top	445.00	389.30	-364.40	77.50
Log Top	445.00	389.30	-364.40	

Evaluation:

The Main Lambert Sand was encountered fairly close to the prognosed depth at 368.11m (TVD). Intermediate casing was set at 512m (MD) or 381.05m (TVD). The horizontal section of the well extended for 525m and reached a maximum depth of 1037m (MD). The well bore stayed in a fairly narrow window (380.2 to 383.8m [TVD]) for most of the well. The well bore dropped significantly when we were unable to steer (orient) at a depth 960m (MD) when we were at an elevation of 383.8m (TVD) and dropped down to a maximum of 385.74m (TVD) at 1037m (MD). The upper limit of the hole was reached at a measured depth of 664m (MD) or 380.2m (TVD) where we encountered a significant increase in Dolomite. It was interpreted at the time to be close to the top of the Main Lambert Sand and we steered the well down at that point. The interpretation at the time was that we could have crossed a fault with a significant throw. More than likely this was just an increase of cement aggregates or lenses of Dolomite rich zones. Nevertheless the well was steered down. We encountered numerous "sweet spots" and were separated by zones of lesser mud gas and oil shows in the samples. The "sweet spots" have been itemized below:

Depth From:	Depth To:	Amount of Pay:	Depth From:	Depth To:	Amount of Pay:
514.5 m	530.5 m	16 m	815.0 m	850.0 m	35 m
543.0 m	546.0 m	3 m	860.0 m	886.0 m	26 m
556.0 m	559.5 m	3.5 m	893.0 m	905.0 m	12 m
574.0 m	625.0 m	51 m	915.0 m	930.5 m	30.5 m
700.0 m	737.0 m	37 m	964.5 m	969.5 m	5 m
745.0 m	806.5 m	61.5 m	1027.5 m	1037.0 m	9.5 m

These "sweet spots" have been categorized by a total gas of over 1% with good hydrocarbon shows and fast drilling indicating porosity of over 20%. They total roughly 290m out of 525m of open hole or a winning percentage of 55% of the well bore to be in the "sweet zone".

The Main Lambert Sand can generally be divided into two distinct descriptions. The "sweet spots" and the "not so". The good sands are generally light gray, light grayish brown, medium to coarse grained, occasional very coarse grained, moderately well sorted, subangular to subrounded, quartz, common micaceous flakes, trace feldspar, trace chlorite, slight traces siliceous cement, predominantly disaggregated, good estimated intergranular porosity (18-24%), common to abundant brown oil staining, bright yellow fluorescence, good instantaneous streaming milky yellow cut fluorescence.

The other sands or "not so" are generally light gray, medium to very coarse grained, occasionally fine grained, moderate sorting, subangular to subrounded, quartz, commonly micaceous, minor chlorite, trace feldspar, occasional traces dolomitic cement, patchy clay and pyritic matrix, predominantly disaggregated, fair to good estimated intergranular porosity (14-20%), slight trace patchy brown oil staining, bright yellow fluorescence, poor slow oozing milky yellow cut fluorescence.

Conclusion:

The Main Lambert Sand was drilled horizontally for 525m and encountered at least a minimum of 290m of good oil pay zones. These zones should and will produce oil at a significant rate. The porosity overall is quite good and there was no indication of water during any of the drilling of the drain section of this well. This is a zone of much importance and should be further evaluated on downhole logs.