

## Oil & Gas Resource Kit



Core Sample  
Normal looking sample  
Samples are used to see if oil can be found  
Oil is in rock (not pools of liquid)  
Sample goes to a lab for geologists to examine  
Holes in core are a good thing because it has a high porosity  
which means that there is room for hydro carbon to fit



Tool used for cleaning a pipe. Covered in gold paint.



Core Sample  
Slim hole core



Fossilized wood from a tree found at Fort McMurray. The striking thing about this is the preservation has not been altered very much because it was preserved in the tar sands. Typically this tree would have been burned.



Viking Sandstone



Swamp Peat  
- The first stage of coal



Coal and black shale



As you are drilling the rock is continually monitored to see what is coming up

1. This sample consists of gray sandstone with shale particles.
2. This sample consists of light gray – gray very fine grained and well sorted sand stone with some oil stains.
3. This formation consists of 100% gray-dark shale. Sandstone and silt stone are visible in this sample.
4. This sample was found in the coal zone. The sample is showing a fair amount of coal but also contains dark shale, brown shale, sandstone and light gray laminated silt stone.
5. This sample consists of a very fine to medium grained well saturated sandstone, very friable, slightly oil stained. Also consists of dark gray shale and light gray silt stone.
6. Main part of this sample is dark gray fissile shale.
7. This sample consists of light gray shale, light gray silt stone, sandstone, chert fragments, various colors, very hard silica cemented sand grains, clear quartz grains, pyrite and inoceramus fossil remains.
8. This sample consists of nearly 100% of Limestone. White and buff in color and dense, chalky Limestone.

PROVINCE		FIELD		WELL		COMPANY	
Date		Run No.		Field Reading		Log Measured	
Depth		Bottom Driller		Cap. SOC		Cap. Driller	
Mud Fracture		Mud Log		Mud pit		Water Lost	
@ 100'		@ 200'		@ 300'		@ 400'	
@ 500'		@ 600'		@ 700'		@ 800'	
@ 900'		@ 1000'		@ 1100'		@ 1200'	
@ 1300'		@ 1400'		@ 1500'		@ 1600'	
@ 1700'		@ 1800'		@ 1900'		@ 2000'	
@ 2100'		@ 2200'		@ 2300'		@ 2400'	
@ 2500'		@ 2600'		@ 2700'		@ 2800'	
@ 2900'		@ 3000'		@ 3100'		@ 3200'	
@ 3300'		@ 3400'		@ 3500'		@ 3600'	
@ 3700'		@ 3800'		@ 3900'		@ 4000'	
@ 4100'		@ 4200'		@ 4300'		@ 4400'	
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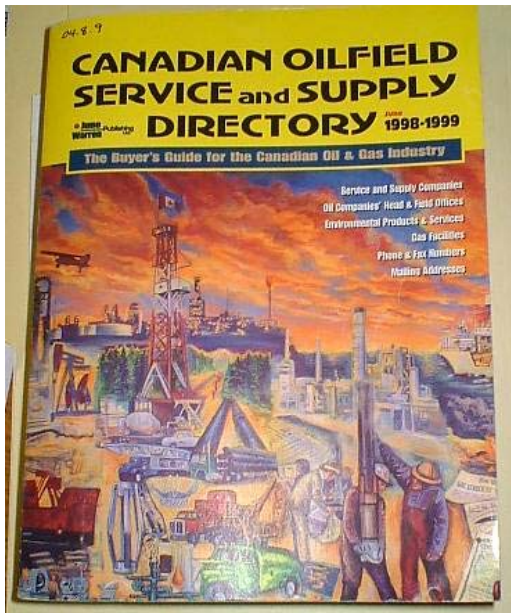
Province of Alberta  
**Schlumberger**  
 SCHLUMBERGER OF CANADA Calgary, Alberta

COMPANY: 21224-210001-0001-100  
 WELL: 21224-210001-0001-100  
 FIELD: 21224-210001-0001-100  
 PROVINCE: ALBERTA  
 LOCATION: 150° 50' W 50° 00' N  
 Permanent Datum: 1000 Elev: 1000  
 Log Measured From: 1000 H Above Perm. Datum: 1000  
 Other Services: CBP

Date: 10/10/98  
 Run No.: 1000  
 First Reading: 01.5  
 Last Reading: 01.5  
 Feet Measured: 20.0  
 Depth Reached: 10.0  
 Bottom Driller: 10.0  
 Log SOC: 10.0  
 Log Driller: 10.0  
 Mud Nature: 10.0  
 Temp: 10.0  
 Mud pit: 10.0  
 Water Loss: 10.0  
 Res: 10.0  
 @ BH: 10.0  
 End: 10.0  
 Time: 10.0  
 Bit Size: 10.0  
 Spacing: AM 16" 16" 16"  
 MS 34" 45" 34" 45"  
 Ind. Type: 6FF40 6FF40 6FF40 6FF40  
 Log. Rig Time: 10.0  
 Truck No.: 10.0  
 Recorded By: 10.0  
 Witness: 10.0

Electric Log by Schlumberger

This is a survey of a well that is run when done drilling a hole. A cable is used that contains electrodes. It can tell you if the well contains water, oil, or natural gas. It is just another tool that is used to tell if this area can be used for oil drilling, just how the core samples work.



Canadian Oilfield Service and Supply Directory



Slabbed Core  
- Glauconitic Sandstone which is oil bearing.



Small broken drill bit



Core Sample

These cores are sliced up for more testing to be done to see how the well will produce

If a core has good porosity and permeability the well will be a good producer.