

#21

Formation:

DEBOLT
UPPER RUNDLE

Interpreted Drill Cuttings Description

Sample Quality: Good

d-A90-G / 094-G-08/00
AKA 00/d-090-G / 094-G-08/00

Well Name: DEVON
Status/RR: N/A
TD Depth/Fmn: N/A
Examined: JUL-2009
JC Consulting Inc.
J Clow, P Geol
403 651-7890
File No: 2009-040

The Cretaceous Sandstone consists of a silt to very fine grained oil stained clay-rich sand with race to common visible porosity, 6-9% and perm in the 0.05-0.5 to pos 1-3 mD range. The Mississippian Carbonates have several dolomitized intervals with excellent intercrystalline and vuggy porosity. No oil stain was observed indicated zone may be wet.

No fracture evidence was observed and no testing/results were reported.

Depth (m)	Grain	Size	Lithology	Porosity		Porosity Type Oil Shows	Perm (mD)		Geological Descriptions
				Total Poros (%)	Estimated Porosity		Visually Estimated Perm	Visually Estimated Perm	
575	Congl v. crs crs med	fine v.fine Silt/extf microxln Clay/crvpto		20	Estimated Porosity		0.01	Visually Estimated Perm	SH: blk, bituminous.
580									
585									
590				6-9%		X	0.05-0.5 mD		SS: silt-vf gr, dk brn OIL stained, fair to good relief, tr carb mat, TR-COM VISIBLE POROSITY, slty, com kao clay, 6-9% por, 0.05-0.5 mD.
595				4-9%		X	0.1-0.5 to pos 1-3 md		CONGL: varicol brkn CHERT pebble frags, tr sb rdd pitted clr qtz granules, MICRO DRUSY QTZ ON A FEW SFCS, infer 1-2 to 3-6% por, 0.05-0.5 to pos 1-2 md ?? DEBOLT LS: lt gy, chalky. CHT: wh, silicified LS, weathered,. SS: vf-l c gr, lt gy ang-sb ang qtz with com glauc, com kao clay, patchy OIL staining, com good vis por, 4-9% por, 0.1-0.5 to pos 1-3 md. LS: cryptxln, com chalky, arg, no vis por. Near-shore/On shore
600				1%		X	<0.05 md		SS: silt-l vf gr, ang-sb ang brn OIL stained qtz grs, tr carb grs, sil, kao, no vis por to tr ctgs with fair to good grn relief & rr vis por, 2-4 to pos 6% micro clay por, <0.05 md.
605				1-2%			<0.02 mD		SH & LS: crypto-microxln, tr vf xln, chalky in pt, no vis por.
610				1-2%			<0.02 mD		LS: micoro-xf xln, grey, sl arg, slty, p intxln por,
615									LS: micoro-xf xln, grey, sl arg, slty, p intxln por,
620				6-10%		X	1-5 to com 50 md		DOL: vf-f & tr med xln, dk brn wi arg mat & bit, no oil stain, flor or solvent cut, ex intxln & vuggy por, com sucrosic texture, 6-10% por, 1-5 to com 50 md.
625						X			
630									
635				2-4 to pos 6%		X	0.02-0.1 to ps 0.5 md		LOST CIRCULATION ZONE, abund calcium chloride, non-representative sample DOL: micro-f xln, med-dk brn, mottled off wh, 2-4 to pos 6% interxln por, fair to poor intxln to tr g intxln por, 0.02-0.1 to ps 0.5 md.
640				2-3 to pos 6%		X	0.05-0.5 to pos 1-2 md		LS: lt gy-wh chalky to micro xln, comly slty-sdy, com chty, tr-com weathered chert, weathered sfc, 1-2 to pos 2- to pos 6% por,
645				6-10%		X	5-10 + mD		LS: lt-dk brn vf-med xln, arg, tr bit, fair to good intxl intxln por, tr recrystalized crinoids, 2-3 to pos 6% por, 0.05-0.5 to pos 1-2 md.
650				20	Estimated Porosity		0.01	Visually Estimated Perm	Is: posilbe OOLITES coated with and cmt'd with micro xln qtz and qtz druse, com GOOD intlxn and void porosity, 6-10%, 5-10 + mD. Com siliceous weathered LS.

