LOG OF SAMPLES FROM SUNNYVALE OIL CO. WELL

Location: SE 1/4 of Sec. 14, T. 16 S., R. 29 E.
Samples submitted by Roy Coleman
(Site not visited by petrographer)

Type	Depth		Description
Cuttings	80'	Megascopic:	Fine-grained dark gray rock with lime on fractures.
		Microscopic:	(Thin section made of small frag.) Mostly feldspar with some pyrite, calcite, quartz, magnetite, etc. Is a fine-grained graywacke. Particles show poor degree of rounding and partial alteration to clay. Little or no porosity.
Cuttings	147-152'	Megascopic:	Smae as 80' darker color.
		Microscopic:	Same as 80'.
Cuttings	230'	Megascopic:	Fine-grained greenish-gray in part limey.
		Microscopic:	Similar to 80', slightly coarser-grained, more pyrite, more chloritic alteration, and no clay alteration.
Cuttings	300'	Megascopic:	Dark gray fine-grained rock, like gray siltstone. Has fracture fillings of limey quartz veinlets.
		Microscopic:	Graywacke with abundant pyrite.
Core	449-455'	Megascopic:	Fine-grained dark gray limey shale.
		Microscopic:	(Thin section) Fine-grained graywacke with considerable calcite, pyrite, feldspar, & mica (Brown). Cataclastic texture in angular poorly rounded and poorly sorted grains. Some magnetite. No porosity.
Core	455-461'	Megascopic:	Very fine-grained limey graywacke like above. Some coarse-grained graywacke with rock fragments and chert grains. Fractures filled with calcite veinlets.
Core	461-471'	Megascopic:	Mainly like above with one small chunk of light gray sandstone unlike the rest appears more porous and has possible micrl fossils(?). May be concretion.

Type	Depth		Description
Core	471-476'	Megascopic:	Very fine-grained dark gray graywacke grading to dark gray to black shale with calcite veinlets on fractures.
Cuttings	750'	Megascopic:	Fine-grained dark gray to black graywacke with few white fragments of calcite probably from veinlets.
Cuttings	755-770'	Megascopic:	Dark-gray fine-grained limey graywacke.
Cuttings	952'	Megascopic:	Much increase of lime. Lighter gray color.
Core	978-983'	Megascopic:	Medium-gray medium-grained graywacke with quartz-calcite veinlets.
Cuttings	1000'	Megascopic:	Same.
Core	1019-1023'	Megascopic:	Fine to coarse-grained graywacke with calcite veinlets. Large rock fragments up to 1/4" in length in coarse-grained rock. Fine-grained shows thin bedding.
Cuttings	1060'	Megascopic:	Fine-grained, dark gray limey graywacke or shale.
Cuttings	1115'	Megascopic:	Same with more lime.
Cuttings	1130'	Megascopic:	Same quite limey dark gray shale.
Cuttings	1140'	Megascopic:	Same.
Cuttings	1150'	Megascopic:	Medium to dark gray fine-grained graywacke with calcite veinlets.
Core	1155-1160'	Megascopic:	Very fine-grained dark gray graywacke some limey. Some shows shearing with pyrite on shears and faint green chloritic alteration.
Core	1160-1168'	Megascopic:	Highly sheared limey dark gray shale.
Core	1168'	Megascopic:	Very fine-grained dark gray graywacke with calcite veinlets to limey dark gray shale. Some of the fragments show shearing and other brecciation.

SUMMARY:

Rocks of the entire hole are similar and probably of marine origin. They are typical of eugeosynclinal environment where rapid deposition of poorly sorted sediments has taken place in a rapidly sinking trough of the sea.

Bedding is generally absent to poorly defined in the coarser-grained material.

The pyrite is authigenic. There is a very slight netamorphism. The lime has become crystallized and migrated into fractures in the form of veinlets. Some of the rocks also show slight chloritic alteration typical of a low grade dynamothermal metamorphism.

REPORT BY: Len Ramp 6/24/58

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