CORE LOGGING AT FARO

NOTES ON ORE TYPE DEFINITION

2G

Defined by > 10% visual $BaSO_4$ which = 6.6% BaO assay.

From the sections logged to date ie 124, 125, 126, 130, 131, 132 it was noted that ore types defined visually as 2G by previous loggers ranged from 5.5% BaO to 30% BaO in assay with a mean of 16% BaO.

Ore types defined as 2D6 or 2E6 had BaO assays ranging fron 4% BaO to 14% BaO with a mean of 8% BaO.

N.B.

1) Pure barite ($BaSO_4$) = 66% BaO
   15% barite = 9.8 % BaO
   20% barite = 13.13% BaO
   25% barite = 16.42% BaO

2) When checking lithologic log against assays believe the lithologic log.

   Since e.g. a 5' sample of 2EO may have a 1' minor component of 2GO (with say ±50% $BaSO_4$) giving the 5' sample an assay of 6% BaO.

   If a 2EO BaO assay is ±6% check the lithologic log for one of three possibilities for change ie 2EO (2GO)
   2E6
   2GO

3) It has been noticed during recent checks that marginal and interbedded 1D4 (2L) has up to 10% BaO noticed so far, possibly indicating remobilisation of Ba fluids during diagenesis, metamorphism or Ba enrichment of sediments during ore deposition.

4) 2G4 > 10% of Pb+Zn assay.

2H

Defined by > 80% sulphides of which > 50% of sulphides is pyrrhotite.

ie ∴ > 40% visual po = ⇒20% po (sol. Fe) assay or 35% Total Fe.

If po assay is > 10% po to < 20% po assay then modifier 7 should be added to 2E, 2G, etc. ie 2E7.

ie > 20% to < 40% visual pyrrhotite - yes it is difficult.

Again believe the lithologic log.

N.B.

1) Caution; some of the older logs which have po, py assays composited over 20' have to be checked with care.

2) Reported under po are also other soluble iron sources essentially Fe_3O_4

$Fe,Ca(CO_3)^2$

$FeOH \cdot H_2O$

Of which the first - magnetite is most common at Faro.

It has been observed during recent assay checks that ore with magnetite ranges from 3% to ±10% po assay but most commonly 6% to 8% po.

3) 2H4 4% Pb+Zn assay.

4) Previous loggers have frequently under estimated the 2H grade generally by a factor of 2 ie estimate 5%, actually 10% - 12% it is most commonly > 8% Pb+Zn.

2EF

Defined as > 80% sulphides - if py is main sulphide

. . 2EO would typically assay ± 32% Total Fe - if no or little base metals.

If high base metals obviously the Fe assay will be less

. . then 2FO ≈ 20% Fe to < 32% Fe assay.

2E4 > 4% Pb+Zn assay ≡ 2FO in grade.

2F4 > 10% Pb+Zn assay.

N.B.

1) Again check lithology log.

2) If 2EO - but assay > 4% Pb+Zn assay change to 2E4 not 2FO.

2CE

50% to 80% sulphides = 25% to 32% Fe assay
but with SiO_2 : py = ± 50 : 50 to ±30 : 70
2CE4 > 4% Pb+Zn assay.

1) If 2C3 is written in lithology log - but assay of ±25% Fe - ok.

2) If 2El is written in litholgy log - but assay of ±30% Fe - ok.

3) Remember to check lithology log.

4) Remember base metal variable.

2CO

Pyritic quartizite < 4% Pb+Zn assay; > 5% Fe to 15% Fe assay.

From 2CE previously noted;

If high pyrite ie. 15% Fe to 25% Fe assay then 2C3.

N.B.

No 2C4

2DO

Pyritic quartzite > 4% Pb+Zn assay; py generally low but > 5% Fe assay.

2D4 > 10% Pb+Zn assay; py generally low but > 5% Fe assay.

1) It has been noted during recent assay checks that 2C has a higher Fe content than 2D.

2) It has also been noted that 2DO is similar to 2B4 as defined by previous loggers in terms of Fe assay.

2BO

Quartizite < 5% visual pyrite ie. < 3% Fe assay.

However 2BO as defined by previous loggers assayed up to 8% Fe with $\bar{m}$ = 4% Fe.

During assay lithologic checks up to 10% visual pyrite estimation for 2BO ie. 5% Fe assay will be accepted.

2B4 > 4% Pb+Zn

N.B.

2B4 during interpretation will in cases probably correlate with 2DO units in other drill holes.

2A

For holes logged in past the following modification will take place after checking against assays:

2AO < 15% pyrite ie < 7% Fe assay, < 4% Pb+Zn assay.
2A3 > 15% pyrite ie > 7% Fe assay.
2A4 > 4% Pb+Zn assay.

IN GENERAL

1) From holes checked to date at Faro footwall 2AO is low grade and low Fe $\approx \pm$4% Pb+Zn, < 7% Fe assay.

2) High level (Anvil Cycle) to Hanging wall 2A is higher in sulphides ie > 4% Pb+Zn, > 7% Fe assay.

*3) Yes we have 2A phyll. at Faro ie Carbonaceous phyllite with 2A texture, rather than graphitic phyllite.

Again in all the preceeding check the lithology logs for any minor components that may effect what might be termed the typical ore type assays.

OQO

N.B.

Quartz veins with sulphides or sulphide veins (generally galena) with grade, are to be noted as OQ9 - with a note in description on the type of vein.

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RST/df