



AI-60 Process Crude Analyzer

Driving ROI Through Real-Time Rapid Crude Oil Assay



IT ALL STARTS WITH CRUDE OIL QUALITY!

The economics and margins of the entire refinery depend on crude oil cost and properties.

KNOW YOUR CRUDE OIL PROPERTIES AT ANY TIME!

Maximum efficiency of the production of high value distillates depends on crude oil properties and the flexibility of the crude distillation unit to handle any type of crude oil feed.

Aspect's AI-60 Process Crude Analyzer provides real-time rapid crude oil assay.

AI-60 Process Crude Analyzer oil analysis includes:

- Specific Gravity (API)
- True Boiling Point (TBP) yields
- Pour points
- TAN
- Water
- Sulfur

BENEFITS

- Multi property analyses with one easy to use system.
- Reduces time of laboratory tests.
- Allows for the verification of crude oil integrity throughout shipping and receiving.
- Allows control of crude feed to the CDU and correlation with distillate yields.

Using the AI-60 Process Crude Analyzer, assay data can be obtained quickly, accurately, and economically. ROI from one month to six months

**customer testimonial*

Crude samples can have a wide range of properties:

- API Gravity (<9 to >50)
- Sulfur (0.3%-7%)
- Pour points (<-30 to > +90 deg F)

Sulfur and API Gravity alone cannot predict crude behavior during Processing. There are low API Gravity crudes with low wax content and vice versa.

For example:

- "Eocene" – 18.6 API, -20 F Pour Point
- "Dulang" - 39.0 API, 86 F Pour Point
- Crudes of the same name change in quality over time.

"Ras Garib": API in 1992 was 25.2, API in 1999 was 22.8. (Source Haverly Assay Data).

**The AI-60 Process
Crude Analyzer
provides real time
rapid crude oil
assays and improves
performance by
eliminating data
inaccuracies
inherent in historical
assay data.**

Applicable Measurements and Accuracies

Parameter Description	Method Used	Reproducibility	Units
API	D4052	1	°c
Sulfur	D2622 - D4294	0.5	Weight %
TBP wt% 38°C	D2892	2.2	Weight %
TBP wt% 105°C	D2892	2.2	Weight %
TBP wt% 165°C	D2892	2.2	Weight %
TBP wt% 365°C	D2892	2.2	Weight %
TBP wt% 565°C	D2892	2.2	Weight %

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