Annotated GC-NPD-95 example files for the transfer of geochemical data

1. Orientation

This document contains an annotated example of a geochemical data file in GC-NPD-95 (version 2) format. It shall illustrate the variability, internal logics and correct use of the format. The example describes fictitious results, obtained from the analyses of some samples from two wells, plus three NGS[1] reference samples.

The analytical workflow is shown and commented in Figure 1 to Figure 3.

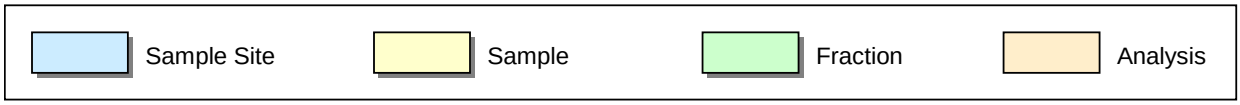
The example file is checked against NPD's validation program and is free of errors as we are aware of. However, there may still be errors that are difficult for humans to spot (which is the reason why the validation program has been developed). For the latest update of the example files check NPD's website www.npd.no.

(This space is intentionally left blank.)

1 Norwegian Geochemical Standard

2. Analytical work flow

Key to Figures 1 - 3:



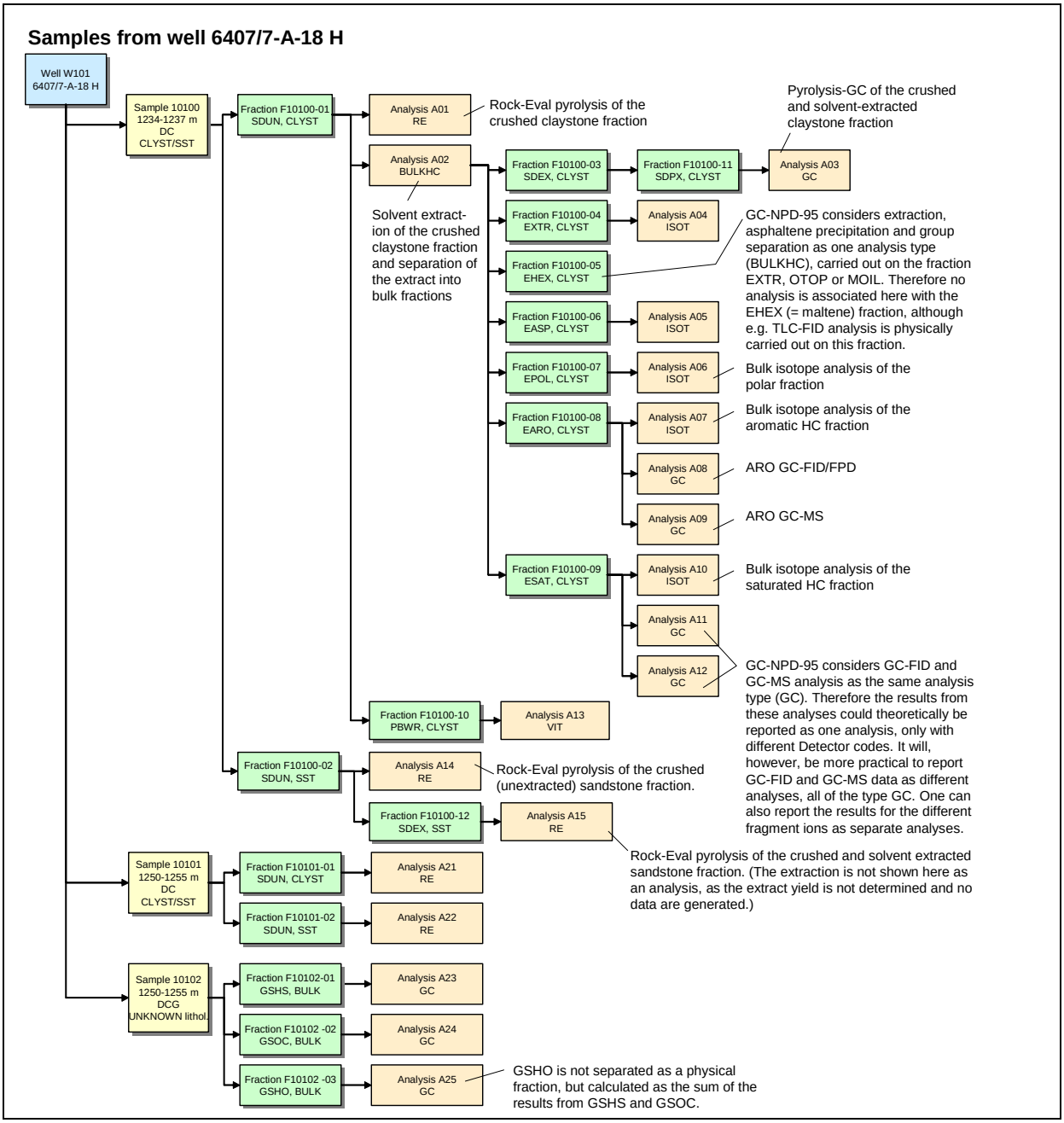


Figure 1 Analytical flow sheet for samples from well 6407/7-A-18 H (SiteID "W101").

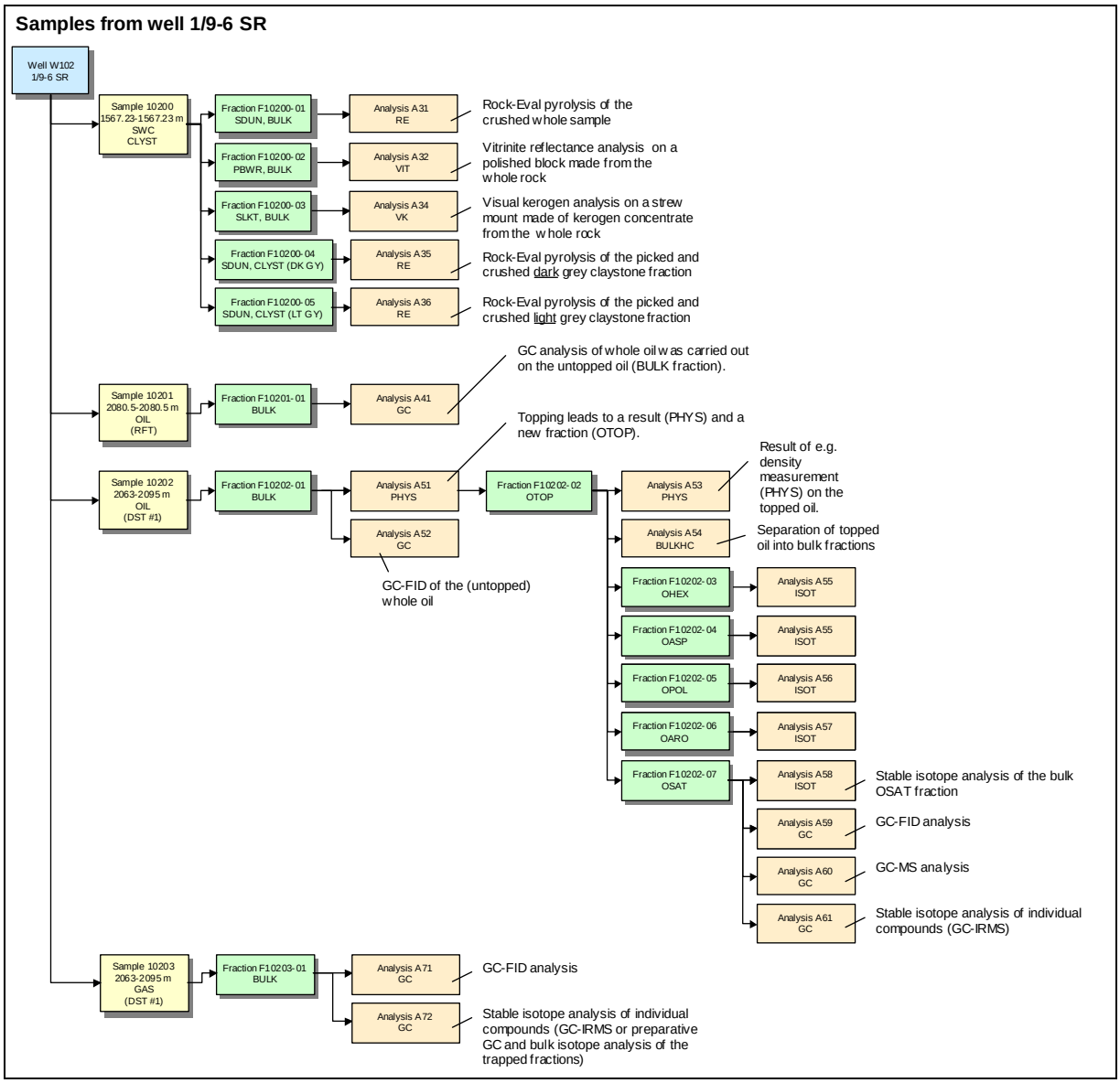


Figure 2 Analytical flow sheet for samples from well 1/9-6 SR (SiteID "W102").

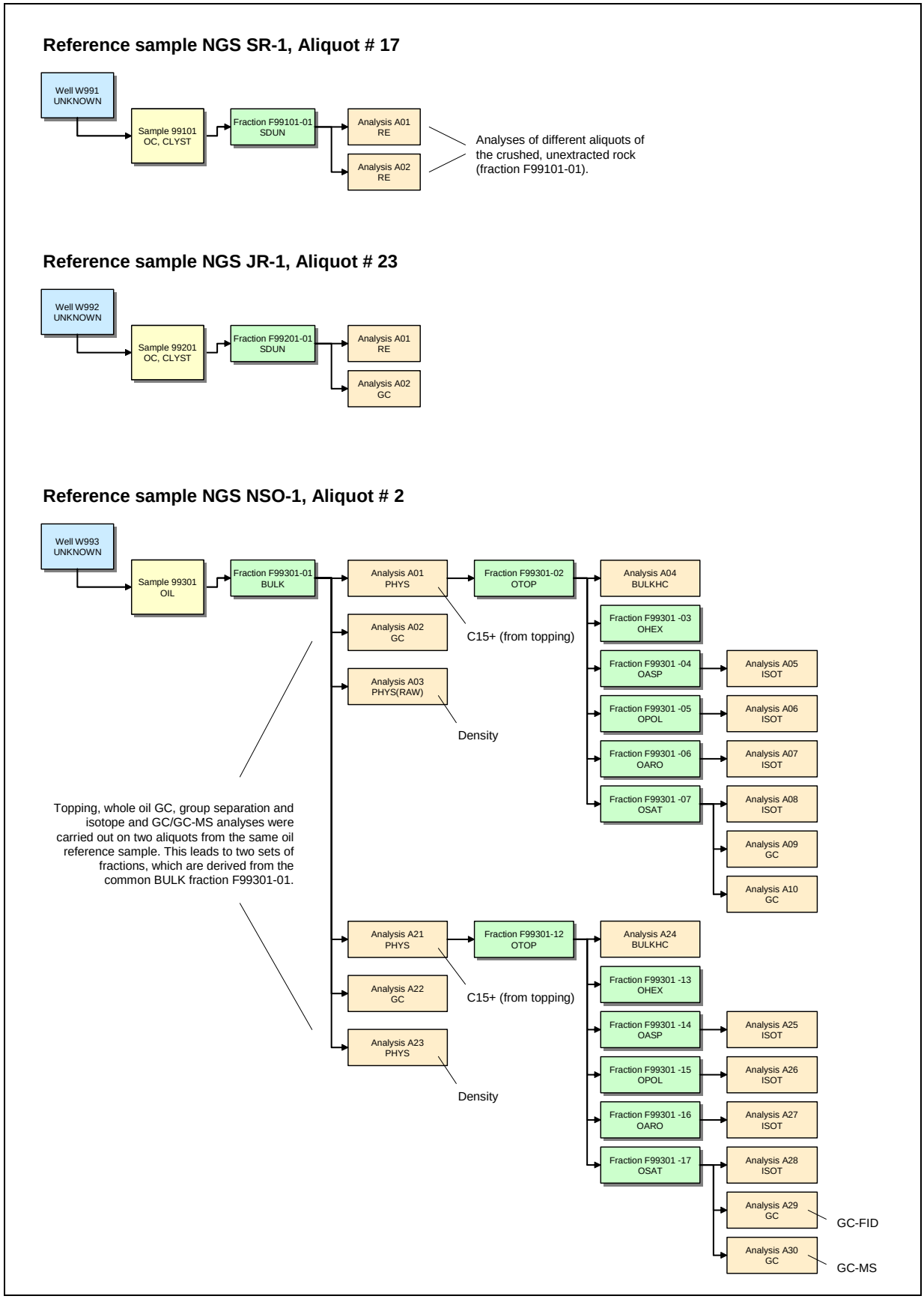


Figure 3 Analytical flow sheet for three NGS reference samples (SiteIDs "W991", "W992" and "W993").

3. File example

For easier orientation all comment lines (starting with //) are printed in blue, all block definition lines in red.

```
// FILE DEFINITION BLOCK: Always in fixed (column-bound) format. All other data
// blocks are in character-separated format.
//..:....1....:....2....:....3....:....4....:....5....:....6....:....7....:....8
// The next four lines should always be placed first in the File Definition Block.
Format          GC-NPD-95
Version         2.0
Dictionary      GC-DIC-V2
Delimiter       COMMA
TransferID      9501051728
DTJStatus       N
TransferDate    15.06.1995
Sender          STATOIL
Contact         Tom Crude, phone 51 00 00 00
Recipient       OD
-----
// Record Definition Block 01
// A record definition block shall contain the data attributes belonging to
// one level in the logical data model. This first record definition block
// define the sample sites included in this transfer
00,DEFINE BLOCK,01,Sample Site (Well/Outcrop) data
L1,TransferID
// TransferID and SiteID are pointers that trace the hierarchy in the data model
// Therefore SiteID, for example, is mandatory also in the next level (block 02)
// in order to trace the samples to their respective sample sites
L1,SiteID
L1,Country
L1,SiteType
L1,SiteName
L1,DatumName
L1,DatumElevation
L1,SSLatitude
L1,SSLongitude
L1,SSComments
// A data block (file definition, record definition, or value assignment) is
// terminated by a line containing 5 consecutive hyphens:
-----
// Value Assignment Block 01
// Each Record definition block has exactly one corresponding value assignment
// block. This first value assignment block assigns values to the
// data attributes for sample sites included in this transfer
01,9501051728,W101,NO,WELL,6407/7-A-18 H,RKB,26.25,,,"turbodrilled 4000m-TD"
01,9501051728,W102,NO,WELL,1/9-6 SR,RKB,24.35,,,""
// Site definitions for Norwegian Geochemical Standard (NGS) samples for control
// analyses are represented in the next three Record Definition Lines.
// Correct reporting of coordinates for sample sites without officially
// registered position is illustrated by the NGS SR-1 sample, which has
// geographical coordinates 78 20 00 N, 18 58 34 E. (See Data Dictionary for a
// full explanation of the calculations)
01,9501051728,W991,NO,UNKNOWN,Teistberget,MSL,,282000,68314,NGS Rock Sample SR-1
01,9501051728,W992,GB,UNKNOWN,UNKNOWN,MSL,,,,NGS Rock Sample JR-1
01,9501051728,W993,NO,UNKNOWN,30/9-B-18,RKB,,,,NGS Oil Sample NSO-1

// Note that missing SSLatitude and SSLongitude for sites without officially
// registered position currently is accepted by the GC-NPD-95 validator program.
// This does NOT imply that correct position may be omitted for e.g. geochemical
// surface survey data!

-----
// Record definition block 02
00,DEFINE BLOCK,02,Sample data
L1,SiteID
L1,SampleID
L1,UDepth
L1,LDepth
L1,SampleType
L1,LabRefNumber
```

```
L1,OpRefNumber
L1,SLithology
L2,SLithologyFull
L3,SComments
-----

// Note that empty lines can be inserted at any place in the file.

// Value assignment block 02
// Samples included in this transfer
02,W101,10100,1234.00,1237.00,DC,90001,S28359,CLYST/SST
L2,"80% Claystone, dkgy, laminated; 20% Sandstone, lt gy, fine-grained"
L3,"Poorly washed sample"

02,W101,10101,1250.00,1255.00,DC,90002,S28360,CLYST/SST
L2,"95% Claystone, dk-med gy; 5% Sandstone, lt gy fine-grained"
L3,

// Note that ALL rock samples MUST have a sample lithology; if not determined,
// use UNKNOWN.
02,W101,10102,1250.00,1255.00,DCG,90003,S28361,UNKNOWN
L3,"Canned sample: can damaged, some gas could have leaked out"

02,W102,10200,1567.23,1567.23,SWC,78665,S28365,CLYST
L2,"Claystone, med gy"

02,W102,10201,2080.5,2080.5,OIL,78665,RFT
L3,"RFT contained 300 ml oil, 250 ml water"
02,W102,10202,2063,2095,OIL,K2784,"DST #1, Separator"
02,W102,10203,2063,2095,GAS,K2787,"DST #1, Bottle A86349"

// NGS reference samples: Note that depth can be UNKNOWN.
02,W991,99101,UNKNOWN,UNKNOWN,OC,H1234,"NGS SR-1, Aliquot # 17",CLYST
02,W992,99201,UNKNOWN,UNKNOWN,OC,H1236,"NGS JR-1, Aliquot # 23",CLYST
02,W993,99301,UNKNOWN,UNKNOWN,OIL,H1235,"NGS NSO-1, Aliquot # 2"
-----
// Record definition block 03
00,DEFINE BLOCK,03,Fraction data
L1,SampleID
L1,FractionID
L1,FracRefNumber
L1,FractionType
L1,FLithology
L1,FComments
-----
// Value assignment block 03
// Fractions included in this transfer
// Fractions for well W101
03,10100,F10100-01,90001-01,SDUN,CLYST,
03,10100,F10100-02,90001-02,SDUN,SST,"Unextracted sandstone, stained?"
03,10100,F10100-03,90001-03,SDEX,CLYST,
03,10100,F10100-04,90001-04,EXTR,CLYST,
03,10100,F10100-05,90001-05,EHEX,CLYST,
03,10100,F10100-06,90001-06,EASP,CLYST,
03,10100,F10100-07,90001-07,EPOL,CLYST,
03,10100,F10100-08,90001-08,EARO,CLYST,
03,10100,F10100-09,90001-09,ESAT,CLYST,
03,10100,F10100-10,90001-10,PBWR,CLYST,
03,10100,F10100-11,90001-11,SDPX,CLYST,
03,10100,F10100-12,90001-12,SDEX,SST,Extracted sandstone

03,10101,F10101-01,90002-01,SDUN,CLYST,
03,10101,F10101-02,90002-02,SDUN,SST,

// Fraction definition data continued ...
03,10102,F10102-01,90003-01,GSHS,BULK,
03,10102,F10102-02,90003-02,GSOC,BULK,
03,10102,F10102-03,90003-03,GSHO,BULK,

// Fractions for well W102
03,10200,F10200-01,78665-01,SDUN,BULK
03,10200,F10200-02,78665-02,PBWR,BULK
03,10200,F10200-03,78665-03,SLKT,BULK
03,10200,F10200-04,78665-04,SDUN,CLYST (DK GY)
03,10200,F10200-05,78665-05,SDUN,CLYST (LT GY)

03,10201,F10201-01,78667-01,BULK,
```

```
03,10202,F10202-01,K2784-01,BULK,
03,10202,F10202-02,K2784-02,OTOP,
03,10202,F10202-03,K2784-03,OHEX,
03,10202,F10202-04,K2784-04,OASP,
03,10202,F10202-05,K2784-05,OPOL,
03,10202,F10202-06,K2784-06,OARO,
03,10202,F10202-07,K2784-07,OSAT,

03,10203,F10203-01,K2787-01,BULK,,-> gas analysis

// Fractions for NGS reference samples
// NGS SR-1
03,99101,F99101-01,H1234-01,SDUN,BULK
// NGS JR-1
03,99201,F99201-01,H1236-01,SDUN,BULK
// NGS NSO-1
03,99301,F99301-01,H1235-01,BULK
03,99301,F99301-02,K1235-02,OTOP
03,99301,F99301-03,K1235-03,OHEX
03,99301,F99301-04,K1235-04,OASP
03,99301,F99301-05,K1235-05,OPOL
03,99301,F99301-06,K1235-06,OARO
03,99301,F99301-07,K1235-07,OSAT
03,99301,F99301-12,K1235-12,OTOP
03,99301,F99301-13,K1235-13,OHEX
03,99301,F99301-14,K1235-14,OASP
03,99301,F99301-15,K1235-15,OPOL
03,99301,F99301-16,K1235-16,OARO
03,99301,F99301-17,K1235-17,OSAT
-----

// Record definition block 04
00,DEFINE BLOCK,04,Analysis
L1,FractionID
L1,AnalID
L1,AnalType
L1,ADescription
L1,ALaboratory
L1,AInstrument
L1,AMethod
L1,AComments
-----
// Value assignment block 04
// Analyses included in this transfer
04,F10100-01,10100-01A01,RE,A,GEOLABNOR,Rock-Eval 6,"Calibrated against IFP standard 55000,
Temp.Progr. 280°C(2 min.)-25°C/min-600°C, Oxidation temp. 900°C",Comments on the analytical
procedure are placed here.
// Note that long records, such as the first record in this block, are formatted (wrapped)
over several lines by the word processor
04,F10100-01,10100-01A02,BULKHC,A,GEOLABNOR,,,
04,F10100-04,10100-04A04,ISOT,A,IFE,,,
04,F10100-06,10100-06A05,ISOT,A,IFE,,,
04,F10100-07,10100-07A06,ISOT,A,IFE,,,
04,F10100-08,10100-08A07,ISOT,A,IFE,,,
04,F10100-08,10100-08A08,GC,A,GEOLABNOR,,,
04,F10100-08,10100-08A09,GC,A,GEOLABNOR,,,
04,F10100-09,10100-09A10,ISOT,A,IFE,,,
04,F10100-09,10100-09A11,GC,A,GEOLABNOR,,,
04,F10100-09,10100-09A12,GC,A,GEOLABNOR,,,
04,F10100-10,10100-10A13,VR,A,GEOOPTICS,,,
04,F10100-11,10100-11A03,GC,A,GEOLABNOR,,,
04,F10100-02,10100-02A14,RE,A,GEOLABNOR,,,
04,F10100-12,10100-12A15,RE,A,GEOLABNOR,,,
04,F10101-01,10101-01A21,RE,A,GEOLABNOR,,,
04,F10101-02,10101-02A22,RE,A,GEOLABNOR,,,
04,F10102-01,10102-01A23,GC,A,GEOLABNOR,,,
04,F10102-02,10102-02A24,GC,A,GEOLABNOR,,,
04,F10102-03,10102-03A25,GC,A,GEOLABNOR,,,

// Analyses of well W102
04,F10200-01,10200-01A31,RE,A,GEOLABNOR,,,
04,F10200-02,10200-02A32,VR,A,GEOOPTICS,,,
04,F10200-02,10200-02A33,VR,A,GEOOPTICS,,,
04,F10200-03,10200-03A34,VK,A,GEOLABNOR,,,
04,F10200-04,10200-04A35,RE,A,GEOLABNOR,,,
04,F10200-05,10200-05A36,RE,A,GEOLABNOR,,,
```

```
04,F10201-01,10201-01A41,GC,A,GEOLABNOR,,,
04,F10202-01,10202-01A51,PHYS,A,GEOLABNOR,,,
04,F10202-01,10202-01A52,GC,A,GEOLABNOR,,,
04,F10202-02,10202-02A53,PHYS,A,GEOLABNOR,,,
04,F10202-02,10202-02A54,BULKHC,A,GEOLABNOR,,,
04,F10202-04,10202-04A55,ISOT,A,IFE,,,
04,F10202-05,10202-05A56,ISOT,A,IFE,,,
04,F10202-06,10202-06A57,ISOT,A,IFE,,,
04,F10202-07,10202-07A58,ISOT,A,IFE,,,
04,F10202-07,10202-07A59,GC,A,GEOLABNOR,,,
04,F10202-07,10202-07A60,GC,A,GEOLABNOR,,,
04,F10202-07,10202-07A61,GC,A,GEOLABNOR,,,
04,F10203-01,10203-01A71,GC,A,GEOLABNOR,,,
04,F10203-01,10203-01A72,ISOT,A,IFE,,,
// Analyses of NGS reference samples
// NGS SR-1
04,F99101-01,99101-01A01,RE,S,GEOLABNOR,,,
04,F99101-01,99101-01A02,RE,S,GEOLABNOR,,,

// NGS JR-1
04,F99201-01,99201-01A01,RE,S,GEOLABNOR,,,
04,F99201-01,99201-02A02,GC,S,GEOLABNOR,,,

// NGS NSO-1
04,F99301-01,99301-01A01,PHYS,S,GEOLABNOR,,,
04,F99301-01,99301-01A02,GC,S,GEOLABNOR,,,
04,F99301-01,99301-01A21,PHYS,S,GEOLABNOR,,,
04,F99301-01,99301-01A22,GC,S,GEOLABNOR,,,
04,F99301-02,99301-01A03,PHYS,S,GEOLABNOR,,,
04,F99301-02,99301-02A04,BULKHC,S,GEOLABNOR,,,
04,F99301-04,99301-04A05,ISOT,S,IFE,,,
04,F99301-05,99301-05A06,ISOT,S,IFE,,,
04,F99301-06,99301-06A07,ISOT,S,IFE,,,
04,F99301-07,99301-07A08,ISOT,S,IFE,,,
04,F99301-07,99301-07A09,GC,S,GEOLABNOR,,,
04,F99301-07,99301-07A10,GC,S,GEOLABNOR,,,
04,F99301-12,99301-01A23,PHYS,S,GEOLABNOR,,,
04,F99301-12,99301-12A24,BULKHC,S,GEOLABNOR,,,
04,F99301-14,99301-14A25,ISOT,S,IFE,,,
04,F99301-15,99301-15A26,ISOT,S,IFE,,,
04,F99301-16,99301-16A27,ISOT,S,IFE,,,
04,F99301-17,99301-17A28,ISOT,S,IFE,,,
04,F99301-17,99301-17A29,GC,S,GEOLABNOR,,,
04,F99301-17,99301-17A30,GC,S,GEOLABNOR,,,
-----
// Below follow the analytical results ----------------

// Record definition block 05
00,DEFINE BLOCK,05,Rock Eval data
// Here Method 1 (explicit) is used to define the parameter names
// (i.e. the L0 line defines where the ParamName is placed in the following
// Record Definition Lines). Avoid this format, if possible.
L1,AnalID
L0,ParamName
L1,ParamValue,TOC
L1,ParamValue,S1
L1,ParamValue,S2
L1,ParamValue,TMAX
L1,ParamValue,PComments
-----
// Note the missing values (nothing or space)
05,10100-01A01,3.36,0.25,12.92,432,TOC from RE
05,10100-02A14,0.32,2.57,0.92,,"TOC from RE, TMAX missing"
05,10100-12A15,0.25,0.01,0.85, ,"TOC from RE, TMAX missing"
05,10101-01A21,2.27,0.38,9.85,434,TOC from RE
05,10101-02A22,0.19,0.25,0.83,523,"TOC from RE, TMAX unreliable"
05,10200-01A31,2.56,1.67,14.34,433,TOC from RE
05,10200-04A35,5.76,2.79,18.53,432,TOC from RE
05,10200-05A36,1.98,1.64,9.13,436,TOC from RE
-----
00,DEFINE BLOCK,06,More Rock-Eval data
// Here Method 2 is used to define the parameter names (no L0 line, ParamName
// directly placed in the following Record Definition Lines). This format is
// preferred.
L1,AnalID
L1,TOC
L1,S1
```

```
L1,S2
L1,TMAX
L1,PComments
-----
06,99101-01A01,2.27,1.05,12.92,435,TOC from RE
06,99101-01A02,2.35,1.16,12.92,437,TOC from RE
06,99201-01A01,11.81,6.76,68.54,431,TOC from RE
-----
00,DEFINE BLOCK,07,Topping and density results (= PHYS)
// Here the parameter names are not defined/reported in the Record Definition
// Block, but in the Value Assignment Block, together with the respective
// parameter values.
L1,AnalID
L1,ParamName
L1,ParamValue
-----
07,10202-01A51,C15plusWt,47.3
07,10202-02A53,DENSITY,0.825
07,10202-02A53,APIGRAV,40.0
07,99301-01A01,C15plusWt,77.2
07,99301-01A21,DENSITY,0.858
07,99301-01A21,APIGRAV,32.6
07,99301-01A03,C15plusWt,80.2
07,99301-01A23,DENSITY,0.862
07,99301-01A23,APIGRAV,33.3
-----
00,DEFINE BLOCK,08,Extraction - Separation of rock extract [BULKHC]
L1,AnalID
L1,TOCEOM
L1,ROCKWT
L1,EOMWT
-----
08,10100-01A02,2.22,5.704,91.3
-----
00,DEFINE BLOCK,09,Extraction - Separation of rock extract [BULKHC]
// AnalID in first record, analytical results in second record
L1,AnalID
L2,EOMPPM
L2,ASPEOM
L2,POLEOM
L2,AROEOM
L2,SATEOM
-----
09,10100-01A02
L2,16000,27.5,13.2,37.8,21.5
-----
00,DEFINE BLOCK,10,Separation of oil [BULKHC]
L1,AnalID
L1,ASPEOM
L1,POLEOM
L1,AROEOM
L1,SATEOM
-----
10,10202-02A54,17.4,18.7,27.6,36.3
10,99301-02A04,2.5,7.4,42.3,47.8
10,99301-12A24,1.9,6.1,38.7,53.3
-----
00,DEFINE BLOCK,11,Isotope data from EOM or oil fractions (ISOT)
L1,AnalID
L1,d13C
-----
11,10100-04A04,-32.3
11,10100-06A05,-28.9
11,10100-07A06,-29.4
11,10100-08A07,-26.6
11,10100-09A10,-31.5
11,10202-04A55,-27.3
11,10202-05A56,-28.9
11,10202-06A57,-32.1
11,10202-07A58,-30.6
11,10203-01A72,-28.5
11,99301-04A05,-27.3
11,99301-05A06,-31.4
11,99301-06A07,-29.3
11,99301-07A08,-28.8
11,99301-14A25,-27.2
11,99301-15A26,-33.5
```

```
11,99301-16A27,-31.9
11,99301-17A28,-29.2
-----
00,DEFINE BLOCK,12,GC analysis of headspace and occluded gas [GC]
L1,AnalID
L1,Detector
L1,PeakProperty
L1,C1
L1,C2
L1,C3
L1,iC4
L1,nC4
L1,C5plus
-----
12,10102-01A23,FID,CNCAREA,162537,2589,1368,672,937,162
12,10102-02A24,FID,CNCAREA,5147,1846,1022,316,428,358
12,10102-03A25,FID,CNCAREA,167684,4435,2390,988,1365,520
-----
00,DEFINE BLOCK,13,Pyrolysis-GC [GC]
L1,AnalID
L1,Detector
L1,PeakProperty
L1,C1_NoUCM
L1,C2toC5_NoUCM
L1,C6toC14_NoUCM
L1,C15plus_NoUCM
-----
13,10100-11A03,FID,NORMAREA,3.95,28.40,51.79,15.87
13,99201-02A02,FID,NORMAREA,2.80,22.92,49.60,24.69
-----
00,DEFINE BLOCK,14,GC analysis of whole oil [GC]
// Here the values are reported in several records per analysis (L1 to L3)
// In addition, the simplified format is used, where all parameter names are
// placed consecutively in the respective Record Definition Line. Note that
// Detector and PeakProperty must be defined/repeated at the beginning of each
// new record.
L1,AnalID,Detector,PeakProperty,iC4,nC4,nC5,22DMC4,nC6,MCyC5
L2,Detector,PeakProperty,Benzene,CyC6,2MC6,3MC6,c13DMCyC5,t13DMCyC5,t12DMCyC5
L3,Detector,PeakProperty,nC7,MCyC6,Toluene,nC8,mpXylene
-----
14,10201-01A41,FID,AREA,0,145,16186,11791,18618,3411
L2,FID,AREA,65183,4582121,24568,35182,116712,13468,1264
L3,FID,AREA,7569,3366,4444,33333,216124

14,10202-01A52,FID,AREA,0,249,11490,14383,19135,1597
L2,FID,AREA,14543,3715575,13795,35555,175555,17555,1795
L3,FID,AREA,6555,5731,5951,36425,157759

14,99301-01A02,FID,AREA,0,434,11350,15314,23448,7961
L2,FID,AREA,85454,4251465,32114,24789,164785,24500,2147
L3,FID,AREA,5146,4974,5266,16916,493776

14,99301-01A22,FID,AREA,0,451,17670,14569,11343,4647
L2,FID,AREA,79211,1225493,18647,21160,144286,10907,1110
L3,FID,AREA,4821,3411,4458,36789,234972
-----
00,DEFINE BLOCK,15,GC analysis of saturated hydrocarbons [GC]
// In contrast to Block 14, all parameter values in Block 15 are placed in one
// single, long record
L1,AnalID
L1,Detector
L1,PeakProperty
L1,nC15
L1,nC16
L1,nC17
L1,nC18
L1,nC19
L1,nC20
L1,nC21
L1,nC22
L1,nC23
L1,nC24
L1,nC25
L1,nC26
L1,nC27
L1,nC28
L1,nC29
```

```
L1,nC30
L1,nC31
L1,nC32
L1,nC33
L1,nC34
L1,Pristane
L1,Phytane
-----
15,10100-09A11,FID,CNCAREA,256.6,286.4,315.2,335.3,365.3,421.1,482.6,511.6,568.5,
484.3,543.7,466.3,522.3,455.8,502.7,433.1,388.2,344.7,268.9,452.8,922.3,646.7

15,10202-07A59,FID,CNCAREA,456.6,456.4,515.2,435.3,465.3,521.1,475.4,411.6,458.5,531.3,443.7,
566.3,422.4,555.6,602.2,533.0,361.1,244.4,168.8,152.4,222.6,146.4

15,99301-07A09,FID,CNCAREA,725.6,278.5,315.9,247.8,365.3,421.1,436.1,311.6,463.5,590.3,547.7,
675.3,345.3,427.9,458.2,321.8,217.4,337.4,245.2,351.5,564.3,237.9

15,99301-17A29,FID,CNCAREA,147.8,286.3,335.4,347.3,275.9,447.5,234.8,852.6,124.5,784.3,423.8,
156.4,584.1,414.5,506.8,444.2,377.8,351.4,248.7,426.1,499.3,208.5
-----
00,DEFINE BLOCK,16,GCMS SAT [GC] Triterpanes (177) (peak height)
L1,AnalID
L1,Detector
L1,PeakProperty
L1,25nor28ab
L1,25nor30ab
-----
16,10100-09A12,177,HEIGHT,0.00,0.00
16,10202-07A60,177,HEIGHT,0.00,0.00
16,99301-07A10,177,HEIGHT,0.00,0.00
16,99301-17A30,177,HEIGHT,0.00,0.00
-----
00,DEFINE BLOCK,17,"GCMS SAT [GC] Triterpanes (191) and Steranes (217, 218) (peak height)"
L1,AnalID
L1,Detector,PeakProperty,233,243,253,244,263,27Ts
L2,Detector,PeakProperty,27Tm,28ab,25nor30ab,29ab,29Ts,30D,29ba,30O
L3,Detector,PeakProperty,30ab,30ba,30G,Detector,PeakProperty,31abS,31abR,32abS,32abR
L4,Detector,PeakProperty,33abS,33abR,34abS,34abR,35abS,35abR,27dbS,27dbR
L5,Detector,PeakProperty,27daR,27daS,27aaS,27bbR,27bbS,27aaR,28dbS,28dbR
L6,Detector,PeakProperty,28daR,28daS,28aaS,28bbR,28bbS,28aaR,29dbS,29dbR
L7,Detector,PeakProperty,29daR,29daS,29aaS,29bbR,29bbS,29aaR
L8,Detector,PeakProperty,27bbR,27bbS,28bbR
L9,Detector,PeakProperty,28bbS,29bbR,29bbS,30bbR,30bbS
-----
17,10100-09A12,191,HEIGHT,867258,522549,642600,241507,467728,362621
L2,191,HEIGHT,1214562,553517,565259,0,1375815,990210,248064,637904
L3,191,HEIGHT,456676,525851,394681,191,HEIGHT,642600,241507,467728,255351
L4,191,HEIGHT,1375815,990210,248064,6379041,214562,553517,565259,0
L5,217,HEIGHT,642600,241507,467728,642600,241507,467728,456676,525851
L6,217,HEIGHT,522549,642600,241507,467728,362621,248064,6379041,214562
L7,217,HEIGHT,241507,467728,255351,990210,248064,990210
L8,218,HEIGHT,990210,248064,553517
L9,218,HEIGHT,565259,1375815,990210,248064,248064

17,10202-07A60,191,HEIGHT,877558,555539,735700,531507,377758,375751
L2,191,HEIGHT,1543575,343517,575559,0,1375815,990510,538073,737903
L3,191,HEIGHT,354677,575851,393781,191,HEIGHT,735700,531507,377758,538351
L4,191,HEIGHT,1275415,995510,538073,7379031,513575,383517,575559,0
L5,217,HEIGHT,734600,534507,377758,735700,531507,377758,357777,555851
L6,217,HEIGHT,555539,745710,531507,775758,375751,538073,7379031,513575
L7,217,HEIGHT,531546,347758,538351,370510,557519,990510
L8,218,HEIGHT,990790,535073,383517
L9,218,HEIGHT,572559,1345855,990510,538073,538073

17,99301-07A10,191,HEIGHT,812258,575549,641600,240087,477528,362751
L2,191,HEIGHT,1214562,563517,512359,0,1375815,994310,248058,631894
L3,191,HEIGHT,456676,524851,394161,191,HEIGHT,642600,271797,457788,275351
L4,191,HEIGHT,1345815,990840,247964,6374941,214117,168544,564849,0
L5,217,HEIGHT,642600,241506,472528,642649,218507,116528,457976,545859
L6,217,HEIGHT,522459,613600,241507,467928,362711,279064,6379041,212542
L7,217,HEIGHT,244607,467488,255315,991710,251474,828210
L8,218,HEIGHT,990210,278064,579517
L9,218,HEIGHT,565279,1377915,985210,245714,218184

17,99301-17A30,191,HEIGHT,867258,522549,642600,241587,467728,362621
L2,191,HEIGHT,1674562,843517,565159,0,1374825,998210,248064,637904
L3,191,HEIGHT,456676,528451,379681,191,HEIGHT,642600,241177,467728,255351
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L4,191,HEIGHT,1374865,990284,248064,6379044,279162,553517,565259,0
L5,217,HEIGHT,642600,241507,467718,642480,241507,467728,456676,525851
L6,217,HEIGHT,245548,497828,456676,548851,553517,565179,0,990210
L7,217,HEIGHT,214707,484728,272351,990210,244464,990470
L8,218,HEIGHT,990267,248844,557317
L9,218,HEIGHT,566489,1375815,990210,248064,248064
-----
00,DEFINE BLOCK,18,"GC analysis of aromatic hydrocarbons [GC, FPD]"
L1,AnalID,Detector,PeakProperty,DBT,4MDBT,32MDBT,1MDBT
-----
18,10100-08A08,FPD,AREA,134589,89415,63435,45789
-----
00,DEFINE BLOCK,19,"GC analysis of aromatic hydrocarbons [GC, FID]"
L1,AnalID,Detector,PeakProperty,2MN,1MN,2EN,1EN,26_27DMN,16DMN,15DMN,137TMN,136TMN,135_146TMN,
236TMN,Biphenyl,Phenanthrene,3MP,2MP,9MP,1MP
-----
19,10100-08A08,FID,AREA,1214562,553517,565259,0,1375815,990210,248064,637904,867258,522549,
642600,241507,467728,362621,456676,525851,394681
-----
00,DEFINE BLOCK,20,GC-MS analysis of aromatic hydrocarbons [GC]
L1,AnalID,Detector,PeakProperty,2MN,1MN,Detector,PeakProperty,2EN,1EN,26_27DMN,16DMN,15DMN,Det
ector,PeakProperty,137TMN,136TMN,135_146TMN,236TMN,Detector,PeakProperty,Biphenyl,Detector,Pea
kProperty,Phenanthrene,Detector,PeakProperty,3MP,2MP,9MP,1MP
-----
20,10100-
08A09,142,AREA,4262148,943147,156,AREA,172225,0,3447991,127892,137878,170,AREA,136197,133747,5
46311,432834,154,AREA,247003,178,AREA,628769,192,AREA,424646,354788,456532,464158
-----
00,DEFINE BLOCK,21,GC analysis of natural gas [GC]
L1,AnalID,Detector,PeakProperty,C1,C2,C3,iC4,nC4,C5plus
-----
21,10203-01A71,FID,CNCAREA,91.3,4.2,2.5,0.2,0.8,1.0
-----
00,DEFINE BLOCK,22,Isotope analysis of natural gas [ISOTOPE]
// Note that D13C and DD are now detector types and are no longer part of the parameter names!
// Also note that isotope analysis of individual compounds now has the AnalType GC, not ISOT!
L1,AnalID,Detector,PeakProperty,C1,C2,C3,iC4,nC4
L2,Detector,PeakProperty,C1
-----
22,10203-01A71,DELTA13C,ISOTRATIO,-45.2,-30.9,-28.9,-26.6,-28.5
L2,DELTA2H,ISOTRATIO,-222.0
-----
00,DEFINE BLOCK,23,vitrinite reflectance - mean data
// The population number attribute (PopnNum) must be specified
// before the first ParamName
L1,AnalID,PopnNum,PopnMean,PopnStdev,PopnRead,VRReliability,VRQuality
-----
23,10100-10A13,1,0.63,0.05,21,good,main population
23,10100-10A13,2,0.32,0.12,17,moderate,downfall?
23,10100-10A13,3,1.20,0.28,5,poor,reworked
23,10200-02A32,1,0.75,0.08,5,moderate,main population
23,10200-02A32,2,0.28,0.10,3,poor,stained vitrinite
-----
00,DEFINE BLOCK,24,vitrinite reflectance - individual measurements
L1,AnalID,ParamName,ParamValue
-----
// The individual values for vitrinite reflectance shall be reported as a text
// string. It is recommended to use the chosen Delimiter (e.g. COMMA) as
// separator between the values within the text string
24,10200-02A32,Roil,"0.21,0.21,1.23,2.89,1.34,0.67,0.2"
-----
00,DEFINE BLOCK,25,VK
L1,AnalID,FA,HA,AL,HE,WO,CO,SCI,VKAbundance,SCIQuality
-----
25,10200-03A34,20,45,5,10,15,5,"3-4, 5-6","Bisaccates: 80% indigenous, 20%
reworked","Indigenous pop. slightly degraded, reworked pop. strongly degraded"
-----
00,DEFINE BLOCK,26,GC-IRMS analysis of saturated hydrocarbons [GC]
L1,AnalID,Detector,PeakProperty,nC15,nC16,nC17,nC18,nC19,nC20,nC21,nC22,nC23,nC24,nC25,nC26,nC
27,nC28,nC29,nC30,nC31,nC32,nC33,nC34,Pristane,Phytane
-----
26,10202-07A61,DELTA13C,ISOTRATIO,-27.8,-27.3,-27.9,-26.8,-27.5,-27.4,-28.1,-26.9,-27.4,-
27.8,-27.2,-27.4,-27.6,-28.2,-27.6,-27.3,-27.6,-27.1,-26.9,-27.3,-27.7,-27.3
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